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INDEX TO ILLUSTRATIONS IN VOLUME XXXVII

ARBORICULTURE.

Abies Excelsa Elata.....85
— — Inverta, Weeping Norway Spruce.....133
Beech, Weeping.....405
Forest, a Russian.....589
Laroh, Weeping.....357
"Palm" Oil.....165
Pinus Ayacahuite.....71
— Cembra.....517
Salix Laurifolia, leaf and stipules of.....453

BIOGRAPHICAL.

Lawes, John Bennet.....821
Mechi, J. J.....585

DAIRY HUSBANDRY.

Barn, a convenient dairy.....757
Dairy Fair, scene at the International.....786

ENTOMOLOGICAL.

Beetles, Carrion.....293
— — and flies at work.....311
Borer, Apple Tree, apparatus for killing.....185
Hessian Fly, various stages of the.....442

FARM ECONOMY.

Grass-Burner, the Mennonite, (3 Ills).....312

FARM TOPICS.

Cellar, ventilation of.....650
Drainage.....422, 451, 538
Drain-Gauges at Rothamsted, different.....471
Draining, ridges for surface....551
Farm, experimental at Rothamsted.....473
— lakes.....661
— life, romance and reality of.309
— scenes, Contentment.....625
Fence (3 Ills.).....326
— for overflowed lands.....184
Gate, a cheap and convenient..363
— — novel and useful farm....559
— latch for.....184
Homestead, sanitary arrangements for the (9 Ills.)..693, 745
Lawes, John Bennet.....821
Plowing.....614
Soil, imperfectly harrowed.....551
— surface heaved by a light frost.....551
— — slit by a deep frost.....551
— well harrowed.....551
Sowing broadcast.....551
— drill.....551
Stake for corn-stalks.....589

FIELD CROPS.

Elusine Coracana.....697
Grass, Hungarian, Setaria Italica.....697
Potato, Beauty of Hebron.....710
— culture (3 Ills.).....310
Millet, Common, Panicum Miliaceum.....697
— Pearl.....693
— — in fruit.....695
Reana Luxurians, "Teosinte".695
Wheat, Defiance.....710
— Spring.....581
— vigorous plant in the fall..551
— young plant.....551

FLORICULTURAL.

Aquilegia Chrysantha.....718
Beaucarnea Recurvata.....249
Carpet bedding.....311
Dicentra Spectabilis, Bleeding Heart.....113
Dipladenia Williamsii.....9
Eryngium Leavenworthii.....712
Eulalia Japonica var. Zebrina .181
Flowers, vase of, after Van Huysum.....69
Geranium Sanguineum.....713
Propagation, summer.....487
Ricious, "Rural Bronze".....720
Yucca Filamentosa.....720

GARDEN.

Melon, "Exquisite".....8
Okra.....294
Potato, Beauty or Hebron.....710
Tomato, Acme.....103
— Golden Rural.....709
Salsify.....247

HERDSMAN.

Barn, a convenient dairy.....757
Bull and Cow, Uncle Tom and Isis, Holstein.....185
— Herefords.....455
— Prize Charolaise.....519
— shown at Paris, Italian.....745
Cattle Show, prize winners at Club.....37
Champion Hereford.....436
Countess and twins.....743
Danish Cow, a prize.....649
Duchess of Genova, 10th.....5
— — Oxford, 21st.....744
Duke of Oxford, 44th.....744
— — — 45th.....745
— — Wetherby, 5th.....743
Gipsy Lad.....455
Jersey Luna.....455
— Golddust, 2134.....437
Lady Carew, 3d.....645
Royal Havoring, 2d.....743

HORSEMAN.

Auburn Horse, the.....182
Bit, a home-made.....118
Cassius M. Clay.....134
George Palmer.....134
Goldsmith Maid.....332
Horse, an Arabian.....485
Stallion, King of the East.....89
White Major.....205
Young Pocahontas.....280

HORTICULTURAL.

Banana, Musa Sinensis.....407
Callicarpa Americana.....710
Euonymus Radicans var.....134
Flowers, structure and function of (5 Ills.).....695
Grafting.....106, 107
Hydrangea Stellata Prolifera.. 25
Kalmia Latifolia.....187
Musa Ensete, flower, seed and fruit.....407
Papyrus Plant, a.....631
Physalis Viscosa.....290
Propagating, Summer.....487
Raspberry, Herstine.....647
— Montclair.....649
Strawberries, the newer.....665
Tea gathering.....217
— plan.....217
— preparation of.....213
Viburnum Plicatum.....600
Vitis Heterophylla var.....710

INDUSTRIAL IMPLEMENTS.

Apparatus for raising dead hogs.....88
— Huying (12 Illustrations)....329
Cooley, Can.....313
— Chest.....313
Corn-Sheller and Feed Mill Combined.....795
Churn, the Union.....361
Drill, Farmer's friend.....489
Elevator, the American Hay...597
Engine, "Boss Clipper," vertical.....408
— Climax, horizontal.....408
Feed-cutter, the Silver & Deming.....683
Fertilizer Attachment.....569
Grinder, the Boss Sickle.....280
— Worcester's Knife.....313
Grist-Mill, ground, plan and elevation.....41
Harrow, an improved.....153
Harvester, self-binding.....407
Horse-Power, Gray's.....377
Horse-Shoe, a sensible (3 Illustrations.....712
Knitter, new Tuttle (2 Illustrations).....740
Level, Sibley's.....453
Mill, an under-running.....297
Mill, cider (3 Illustrations).....233
— Convertible, new.....761
— Giant Corn.....557
— Phœnix Tile.....329
Mower, the Buckeye.....313
Planter, True's Potato.....139
Plow, Diamond Iron.....201
— Improved Sulky.....280
— Syracuse.....185
Press, the Erie.....861
Pump, Babcock.....232
— Fountain.....813
Safety-Power, Eureka.....487
Rake, Miller's Table.....377
Saw-Mill, Farm and Plantation.169
— — Mulay.....761
Spring, Dexter-King.....153
Thrasher, Buffalo, Pitts.....408
— Sweepstakes.....377
Truck, Harris Farm.....651
Vade-Mecum, Teamster's.....241
Wagon, the Conklin.....266
Wheel barrow, a what is it?....118
Works of J. I. Case & Co.....361

INDUSTRIAL TOPICS.

Ostrich Incubating Room, etc.. 261, 262, 263, 264, 265
Tea Plant and Its Product.....213

INDUSTRIAL SOCIETIES.

Fair, Dairy, scene at the International.....789
Exposition, Paris, American Buildings at.....421
— — View of Buildings.....197

LANDSCAPE GARDENING.

Exposition, Paris, Sketch in the Park.....373
Luxembourg Garden, View in Paris.....21

MISCELLANEOUS.

Adirondacks, March in the.....149
Farm on the Trocadero, Japanese.....423
Thanksgiving Illustration.....741

NATURALIST.

Bird, the Humming.....363
— the Lyre.....183
Gorilla, Head and Skeleton of a.....509
Orang-Outang.....597
Porcupine, the Crested.....501
Starlings, Red Winged.....505
Tagnans, Species of Flying-Squirrel.....229
Tigers, a royal family.....325

POMOLOGICAL.

Apple, Winesap, the.....791
Apple, Ben Davis.....727
— Bourassa of Canada.....725
— Canada Reinette.....229
— Crab, Lady Elgin.....725
— — Meader's Winter.....728
— Hecarle of Canada.....728
— Fameuse Sucre.....728
— Funny.....725
— Grand Sultan.....725
— King of the Pippins.....726
— Little Red Romanite.....728
— Northfield Beauty.....728
— Rawle's Genet.....727
— Rhubuonka.....727
— St. Peters.....728
— Tetorsky.....278
— Wealthy.....279
— Yellow Bellefleur.....278
Pear, Beurre D'Anjou.....265
— Beurre Superfin.....264
— Church.....265
— Paul Ambre.....264
— Tyson.....264
Plum, Bassett's American.....39

POULTRY YARD.

Crevecœurs.....810
Dorkings, Gray.....810
Game, Red, Black-Breasted.....807
Houdans.....808
Hamburgs, Golden-Pencilled....808
Incubator House and Nursery.805
Leghorns, Brown.....809
Plymouth Rock "Bob" of Rural Grounds.....807
Poultry House Conveniences for.....806
Polands, Black, White-Crested.805
Poultry Farm in France (2 Illustrations).....711
— Varieties of.....53
Poultry Houses.....521
Spanish, Black.....805

RURAL ARCHITECTURE.

Cottage, a Modern Swiss.....511
— Complete for $3,000.....245, 249
— Costing from $1,500 to $1,700,313
— Summer, Thousand Islands.....774, 775
Home, a thousand-dollar suburban.....613, 615
Homes, Two, a contrast.....605
House, a cheap, convenient.....169
Ice-House, plan for.....797

SCIENTIFIC AND USEFUL.

Laboratory at Rothamsted, interior of J. B. Lawes's....469
Soils, Moisture-Retaining Power, Diagram.....662

SHEEP HUSBANDRY.

Sheep, Horned.....117

SPORTSMAN.

How to Do It.....101
Setter "Lark" native English. 24

SWINE-HERD.

Berkshires, Premium.....297
— Poland Chinas.....408
Piggery, a model.....105

VINEYARD.

Concord No. 1.....679
Gazelle.....677
Golden Gem.....677
Prentiss.....677
Shelburne.....681
Waverley.....679

INDEX TO PRACTICAL DEPARTMENTS.

APIARIAN.

Bee hints for October.....665
— keepers, hints to inexperienced.....696
— — successful.....617
— keeping, prolific.....665
Bees in California.....778
— my.....27
— notes on.....550
— — for August.....520
— our.....106
— wintering.....22, 27
Queen bees, eggs laid by.....7

ARBORICULTURE.

Abies Douglasii.....424
— Excelsa Elata.....85
— — Inverta.....133
Alder, the Japan.....790
Althæas, a plea for.....552
Arbor-Vitæ for hedges, how far apart.....517
— — Siberian.....456
Ash, concave-leaved.....663
Beech, weeping, Fagus Sylvatica pen.....406
Catalpa, Golden-leaved.....632
— Speciosa (?).....760
— Syringæfolia.....459
— the dwarf.....553
Cedar of Lebanon.....616
Cherry, Japan, new weeping...790
Conifer, an interesting hybrid.697
Coniferæ of California.....424
Cornus Brachyobotra.....552
— Floridus.....391
— Stolonifera.....134
Cupressus Macrocarpa.....424
Cypress, the Chinese.....568
— wintering of Lawson's.....391
Diospyros Kaki.....169
Evergreens, a few choice.....57
— time to transplant.....410
— trimming.....486
Elm, weeping slippery.....557
Fir, balsam.....617
— California silver.....617
Forests, Russian.....389
Hemlock, the.....616
Horse-Chestnuts, rusty appearance.....553
Jujube tree, the.....790
Juniperus Californica.....424
Larches.....357, 376
Larix Kæmpferi.....300
Libocedrus Decurrens.....424
Liquidambar Styraciflua.....252
Liriodendron Tulipifera, large leaf of.....680
Magnolia, Chinese.....617
— Grandiflora.....617
— Hypoleuca.....616
— Lennæi.....268
Maples, Japan.....316, 391, 663
Nuts, care of for forest planting.....183
Oak, pyramidal.....85
— weeping.....552
Osage Orange.....71, 76, 121
Palm, the Oil.....165
Pear, Japan, as a lawn tree.....391
Persimmon, Japan.....277
Pine, Chili.....617
— the white.....616
Pinus Ayacahuite.....71, 169, 232
— Cembra, Stone Pine.....517
— Contorta.....424
— Flexilis.....424
— Hastata.....424
— Insignis.....424
— Lambertiana.....424
— Massoniana, Sun-Ray Pine.632
— Massoniana.....134
— Muricata.....424
— Ponderosa.....424
— Sabiniana.....424
— Tuberculata.....424
Retinospora.....57
Retinospora Filifera.....616
— Golden.....134, 576
Robinia Hispida, Rose Acacia 472
Salix Lauritolia (?).....458
— Lucida (?).....458
Sequoia Gigantea.....424
— Sempervirens.....424
Shelter belts.....184
Spruce, Norway.....85, 617
Sumach, Cut-leaved, Rhus Glabra Laciniata.....663
Tamarisk, the.....568
Thuja Occidentalis, Amer. Arbor-Vitæ.....632
Torreya Californica.....424
Trees, arrangement of single..584
— best time to plant.....742
— experiments at Mich. Ag'l College.....391
— forest, how fast young ones grow.....776
— — transplanting of.....424
— large, transplanting from woods.....776
— winter planting for.....776
— near buildings, planting.....55
— planting.....680
— shade.....104
— the Music of the, Poetry....472
— transplanting of.....476
— what shall I plant?..133, 277, 311
Willows, basket.....716
Yew, the Golden.....456
Zizyphus Vulgaris, Jujube tree.664

DAIRY HUSBANDRY.

Buckwheat bran for milk cows.183
Butter and cheese.....58
— brands of.....108
— dairying.....553
— distinguished from other animal fats.....778
— essentials in keeping.....476
— farmers' "bearing" their own market.....697
— for long voyages.....263
— fresh forever.....565
— globules.....409, 778
— ice-cold water for.....550
— making.....778
— — good.....664
— pails and boxes at the Dairy Fair.....793
— sale of gilt-edged.....742
— scalding milk for.....570
— temperature of cellar for.....615, 662
— the grain of.....409
— to color.....198
— — improve rancid.....198
— too much eaten.....504
— washing.....409
— what is.....778
— where to sell good.....108
— why it did not come.....598
— workers at Dairy Fair.....793
— vs. oleomargarine.....58
Cheese coloring.....59
— dairy, a Vermont.....682
— foreign.....792
— — imitation of.....792
— importation of American...697
— makers, an opportunity for.762
— making on a small scale.....583
— oleomargarine.....58
— skimmed.....75
Cheese, Time Improves.....823
Cheese Making, more study given to.....231
Churning by power.....781
Churns at Dairy Fair.....793
Cotton seed for milk cows.....118
Cow-milker, King's self-acting.505
Cream, air in.....409
— the rising of.....778
— witches in the.....409
Creamery, Highland.....522
Dairy barn, a convenient.....757
— how to make profitable.....443
— Fair, the great International.....792, 796
— pasture.....59
— productions the year round .280
— salt, shall dairymen investigate?.....331
— salt for.....59
— selecting cows for.....59
— stock, pumpkins for.....135
— temperature in the.....59
— the best cows for the.....665
— trade, prospects of.....58
— which breed for the.....778
Dairying and dairy cows in New England.....742
— and grain raising.....502
— fallacies.....409
— skilled.....604
— with gardening.....508
Dairymen, Chautauqua Co. butter.....361
Dairy, Which Breed for the....809
Dairy Fair, International, criticism on.....809
Escutcheons, value of.....615
Milk and butter, relative yields of.....778
— — cheese production.....563
— deep setting.....792
— feeding cows for.....59
— record, a.....762
— — of Jerseys.....729
— soda added to.....643
— temperature in setting.....409
— watering of.....668
— yield of, influenced by water.....152
Milking places, necessity of clean.....711
Oleomargarine.....188
— fraud, the.....11
— legislative action.....58
Pumpkin seed for milch cows.. 6, 24, 214, 248
Short-horns, milking.....741
Skim-milk adulterations.....700
Strippings unnecessary.....425

DOMESTIC ECONOMY.

Ammonia, uses of.....752
Apples and Bacon.....800
Asparagus, mock.....544
Ant Exterminators.....272, 326
Baking Powder.....208
Beans Lima.....560
— — and Corn.....544
— — and Pork, Baked.....480
Bed-Quilt pattern.....752
— Ticking, to remove spots from.....196
Beer Cream.....320
— Spring.....301
Biscuit, raised.....736
— Soda.....512
Bread.....122
— Boston Brown,..624, 672, 696 704. 784, 800
— Corn.....240, 252, 736
— From Clawson Wheat.....615
— Ginger.....208
— Graham.....400
— Small loaves.....704
Breakfast Dish, a.....688
Brooms, care of.....576
Brown, to color.....10
Buns.....384
Butter-making.....432, 512
Cabbage, Cold-slaw.....138
— Irish.....10
Cake, ammonia sponge.....496
— Apple Jelly.....42
— Black and white marble....704
— Buckeye.....240
— California.....720
— Cheap Fruit.....10
— Cheap Raisin.....186
— Chocolate.....74
— Cocoa-nut.....180, 240
— — — Cream.....106
— Confectionary.....122
— Corn-starch.....400
Crackers, cream.....816
— Cream.....122, 138, 336
— Fruit.....74
— Jelly.....208, 512
— Layer.....768
— Marble.....90
— Molasses.....352
— One, two, three.....336
— Orange.....42, 122
— Pork, Fruit.....352
— Pound.....74, 336
— Puff.....240
— Soda.....240
— Sponge.....74, 122, 208
— Snow.....528
— Veal.....74, 154
— Wedding.....512
— White.....800
— White fruit.....688
Candles, to harden.....170
Canned Grapes.....514
— Quince.....541
— Strawberries.....301
Carpets, care of.....512
Carpetings, cheap.....752
Carrots for dinner.....800
Catarrh, for.....320
Catsup, Tomato.....592, 672
— Grape.....656
— — A correction.....688
Cauliflower.....544
Cement for Corks.....368
Cheese from sour milk.....186
Chicken Croquettes.....42
— Jellied.....432
— Pickled.....480
— Pressed.....576
Chicken Broiled.....816
— pudding.....816
— cutlets.....816
Chocolate.....170
Cider to keep sweet.....816
Citron, dried.....816
Clam Chowder.....106
— Stew.....480
Coffee.....26
Cold, For a.....154
Cookies.....90, 320
— Ammonia.....496
— Ginger.....320
— Molasses.....26
— Soda.....624
Corn Pone.....592
Corn to can.....288
— to dry.....576
Crackers, Egg.....304
— Round.....304
— Soda.....304
— Sweet.....800
Cream, Bavarian.....42
— Ice.....592
— Strawberry.....288
Crockery, to mend.....416
Croup for.....154
Crullers.....10
Custard.....42
— Raw.....90
Currants, Iced.....384
Curry, cold meat.....74
— Powder.....528
— Vegetable.....544
Custard.....816
Dinners, Sunday.....58
Dressing, Onion.....52
Drops, Cocoanut.....42, 800
— Sugar.....240
Dyes, Leamon's Aniline....288, 432
Ear-ache, remedy for.....224
Egg Plant.....512
Eggs, pickled.....816
Eggs, to curry.....74
— Dropped.....368
— Stuffed.....496
— Sur le Plat.....26
Fish, baked.....400
Fish, boiled.....544
Flavoring Extract, Peach.....560
Float, Apple.....592
Flowers, preservation of.....272
Flummery.....800
Fly Poison.....208
Fowls, grilled.....816
Fowls, to use up cold.....816
Fritters, Orange.....26
— Salsify.....800
— Very nice.....540
Furniture, to polish.....240
Gems, Graham.....384, 512
Ginger Snaps.....288, 624, 736
Grasses, Crystallizing.....58
Greens.....480
Griddle-Cakes, buckwheat.701, 688
— Corn.....432
— Grandmother's.....512
— Green Corn.....560
— Rice.....432
— Strawberry rice.....304
Gruel, rice.....90
— water.....90
Ham, stuffed.....496
Hams, to keep.....768
Head-ache.....592
Hoarseness, cure for.....154
Horseradish.....672
Indigo.....800
Ink, secret.....816
Ink, black.....320
— violet.....720
— Stains from marble.....384
Iodine, to remove stains of.....170
Ironing, shirt.....272
Javelle Water.....180
Jam, apple.....154
— strawberry.....304
Jelly, blackberry.....464
— black currant.....368
— crab-apple.....576
— currant.....384, 432
— lemon.....90
— May-apple.....320
— strawberry.....304
— Tapioca.....10
Jumbles.....336
— lemon.....288
Laundry.....138
Leather, to cleanse chamois ..170
Lemons.....528
Lettuce, fried.....208
Lime water.....320
Marble mantles, stains from....240
Marmalade, crab-apple.....576
— orange.....26
— wild plum.....592
Meat, curing.....761
— force.....752
Meats, cold.....784
Milk, soda to sweeten.....633
Mosquito netting, about.....496
Moths.....154
Muffins.....512
Mush, blackberry.....464
Oat-Meal, and cracked wheat...688
Oil marks on wall paper.....368
Ointment, carrot.....26
Okra and Tomatoes.....544
Omelet.....90
— meat.....688
— tomato.....624
Oysters on half-shell.....42
Paint, cheap for out-houses....720
— milk.....432
— to remove from silk.....170
Parsley, to fry.....138
Parsnips, to boil.....186
Paste, Graham.....672
— home.....352
Pears, baked.....512
Peas, green.....320
— to can.....480
Peaches, skins from.....816
Pictures, varnish for.....592
Pickles, apple.....10
— black walnuts.....480
— cauliflower.....544
— chopped tomato.....560
— chow-chow.....528
— chow-chow, pepper.....592
— chowder.....544
— cucumber, trouble with.....624
— — relish.....496
— German.....624
— grape.....560
— mock olives.....544
— pears.....672
— ripe tomatoes.....544
— sliced cucumber.....560
— — tomato.....560
— tomato.....544
Pie, mince.....816
Pie, blackberry.....496
— cream.....10, 352
— custard.....240
— dehcions.....336
— lemon.....512
— rhubarb.....240
Pie-crust, to prevent soaking..74
— flaky.....138
Point Lace, to wash.....240
Pomade, useful.....800
Pop-corn balls.....816
Potatoes.....42
— old.....368
— snow.....784
— sweet.....688
Pork and Beans, baked.....480
Pork Steaks, fried.....769
Porridge, Oatmeal.....170
Powder, Infant's.....528
Preserves, apple.....544
— citron.....784
— pine-apple.....256
— strawberry.....304
— — Correction.....336
— tomato.....592
Pudding, almond rice.....288
— apple batter.....224
— — rice.....544
— batter.....288
— blackberry.....464
— bread.....224, 512
— cherry.....352
— cider.....106
— corn.....464
— cottage.....592
— cream.....90
— crumb.....400
— date.....224
— egg.....106
— orange.....42
— pathenia.....464
— pine-apple.....256
— — tapioca.....256
— potato.....106
— rhubarb.....224
— rice.....688
Pudding, simple peach.....74
— snow.....42
— tapioca.....10
— white.....106
— Yorkshire.....106
Puffs, corn-starch.....122
— German.....288
Rag-carpets.....736, 752
"Regalia".....592
Rhubarb.....240
Rheumatism, remedy for.....432
Rice and Cheese.....208
— how to cook.....784
Rods, cleaning brass stair.....381
Rolls, French.....640
— Parker-House.....528
Rubber Rings.....528
Sally Lunn.....336
Salt-Rheum.....800
Sauce, apple.....784
— — cranberry.....784
Sausage.....768
Scarlet to color.....74
Scrap-Book, paste for.....154
Shad, planked.....336
Sherbet, strawberry.....384
Shoes, to clean kid.....186
Short-cake, raspberry.....352, 368
— — rhubarb.....240
— — strawberry.....304
Shrub, raspberry.....368
Sirup, strawberry.....304
Smelts, to fry.....138
Snow Balls.....688
Soap.....448
Soup, bean.....122
— beef.....224
— celery.....800
— clam.....432
— corn.....224
— egg.....90
— mock-turtle.....272
— oyster.....752
— sweet corn.....592
— tomato.....496
— vegetable oyster.....224
Sour-krout.....688
Spinach and eggs.....154
Squash, summer.....544
Stained hands.....400
Stoves, to prevent rusting.....352
Stuffed steak.....688
Stye, remedy for.....274
Tart crust.....90
Tartlettes, orange.....26
Tea, beef.....208
— iced.....368
— lemon.....368
— making with cold water.....662
— kettles, crust in.....224
Toast, cabbage.....752
— cucumber.....512
— egg.....138
— French.....696
— milk.....74
— onion.....368
— Queen's.....800
Tomatoes, baked.....496
— on half-shell.....496
— salad.....496
— sauce.....512, 560
— scalloped.....496
— to keep ripe.....544
Tooth-ache, for.....154
Turnovers, apple.....138
Varnish for shoes.....720
Vinegar, celery.....208
— raspberry.....368
Vinegar.....816
Wafers.....800
Wall-paper, varnish for.....720
Washing.....448
— fluid.....720
— method of hanging up.....170
Water-cresses, stewed.....320
Wheat, cracked.....138
Whigs.....720
Wine, Blackberry.....464
Yeast.....90, 528

ENTOMOLOGICAL.

Aphis of Cherry Trees, whale-oil soap for.....491
Apple-Tree Louse, Eriosoma lanigera.....822
— — remedies for.....822
Bark Sitting viewed Entomologically.....170
Beetles, carrion.....203
— — and Flies at work.....341
— Potato.....8, 140, 476
— — Exterminating the Pest..364
— — Is He Played Out?.....467
— — Guinea Fowls eating.....23
— — Paris-green and.....332
Borers, Apple Tree.....247, 486
— — To kill Larvæ of.....185
— Peach Tree.....73
Bupresis Fermorata.....170
Butterfly, Extermination of the Cabbage.....75
Curculio, Conotrachelus Nenuphar.....170
— Death to the.....268
— Precaution against the.....358
Eriosoma Lanigera (Woolly Apple-Tree Louse).....170
Hessian Fly, Cecedomyia Destructor.....412
Insect, a new.....467
— Pests, hints about.....332
Insects, Observing.....247
— Our Preparation for.....410
— What Becomes of Him?....603
Insect Destroyer, a new.....822
Locusts, Flight of.....43
Moth, Codling, Carpocapsa Pomonella.....122, 153
— — Remedies for.....409
— Cotton Ball, Heliothis armigera.....746
Phloxera, French method of destroying.....122
Pieris Rapæ.....75
Plusia, Cabbage.....648
Report of Prof. C. Thomas of Ill.....777
Saperda Bivittata.....170
— — To kill Larvæ of.....185
"Tent" Cattorpillar.....59
— — Death to the.....358
Worms, Canker.....73
— cut, getting rid of.....341, 427
— currant, helleboro for..360, 457
— — Saw Fly.....323
— Peach Tree.....73

EVERYWHERE.

Afton, Iowa.....794
Alachua, Co., Fla.....635
Alice, Grunda, Co., Iowa.....794
Allen Co., Kas.....474, 555
Albany, N Y.....331
Alma City, Minn.....779
Amherst, Mass.....714
Anderson Co., S. C.....618
Argyle, N. Y.....635
Arcadia, Wis.....794
Arkansas, Notes from.....698
Arkansas City, Kas.....680, 794
Atlanta, Ga.....378, 794
Athens Co., O.....635
Attica, N. Y.....714
Augusta, Ga.....779
Baileyville, Ill.....794
Barrington, N. Y.....378
Barry Ill.....555
Bear Lake, Minn.....779
Bellefontaine, O.....639
Belle Plain, Iowa.....763
Belmont Co., O.....11
Bennington, O.....394
Berlin, Ct.....714
Bethel, Ohio.....811
Bewleyville, Ky.....587
Bowdley, Canada.....699
Bloomfield, Conn., Wadsworth Tower.....551
Blowing Rock, N. C.....809
Bluffton, O.....666
Botanic Gardens, Mass.....458
Bowling Green, Ky.....810
Brookenbridge Co., Ky.....507
Brighton, Md.....683
Brooklyn, L. I.....474
Brooks, Me.....90, 202, 235
Brookston, N. C.....249, 378, 394
Broome Co., N. Y.....666
Brown Co., Wis. 347, 394, 490, 618, 666
Brooks, Me.....810
Bryant, Ia.....794
Bryn Mawr, Pa.....169
Burlington, Kas.....187, 794
Burlington, N. J.....810
Burr Oak, Ia.....667
California, Notes from.....106, 188, 154, 762
— Across.....440
— Fruit and Ag'l Notes.....282
— — Gleanings.....314
— Peculiarities of.....774
Cambridge, Mass.....507, 683, 714
Carlisle, N. Y.....169, 315
Carlton, Wis.....11, 347
Carolina, Notes from North..154, 234
Carrollton, Ala.....296
Carrol, Ky.....347
Cedar Mills, Minn.....427
Chapel Hill, N. C.....666
Chatham C., Ga.....634
Charleston, W. Va.....587
Chautauqua Co., N. Y.....11, 410, 506, 618, 762
Chenango Falls, N. Y.....247
Cherrytree, Pa.....154
Church Road, Pa.....555
Clearfield Co., Pa.....747
Clinton Co., Iowa.....490
Clinton Place, N. Y.....523
Cobleskill, N. Y.....321
Colegrove, Pa.....555
Colorado, Custer Co.....344
Colorado, Herdmen's Life on the Plains.....362
Columbia Co., Pa.....618
Corning, N. Y....234, 315, 363, 507, 682, 714, 731
Corry, Pa.....330, 394
Cortland, N. Y.....74, 90
Coshocton Co., Ohio.....249
Cornwallis, N. S.....811
Coventry, N. Y.....714
Crawford Co., Ark.....458
Crawfordsville, Ia.....666
Cumberland Co., Me.....794
Dakota City, Neb.....570
Dallas Co., Ala.....440
Dallas, Tex.....714
Danvers, Ill.....763
Dayton, O.....570
Deer Lodge, Montana.....618
Delta, Pa.....794
Denmark.....90, 202
De Soto Co., Miss., Friend Sams's Mishap.....458
De Ruyter, N. Y.....427
De Witt, Mich.....555
Dodge Co., Neb.....490
Door Co., Wis.....635
Dunsville, Va.....315, 394, 779
East Hamilton, N. Y.....763
Edgerton, Kan.....555
Elbert, Colorado.....248
El Dorado, Cal....11, 42, 74, 169, 410, 235, 570
El Dorado, Cal.....810
Elkhorn, Wis.....27
Elm Point, Ill.....779
Elmira, N. Y.....555
Emigrants, good advice to.....186
England, Trade and Ag'cult'r..714
Essex Co., Va.....490
Fairview, Pa.....265
Fayette, N. Y.....810
Federal Point, Fla.....187
Fell's Mills, N. Y.....249
Florence, Ia.....763
Florida, Notes from.....730
Floyd Co., Ia.....185, 506
Flushing, L. I.....331
Fort Howard, Wis.....570
Foster's Crossings, O.....779
Freedom, Wis.....587
Fulton Co., Ga.....474
Galveston, Tex.....202
Gallion, O.....779
Garden City, L. I.....439
Garrelsville, N. Y.....779
Gaylord, Kas.....555
Geneva, N Y.....74
Georgia, Notes from.....458
Grand Rapids, Mich.....731, 747
Granville, N. Y.....763
Griffin, Ga.....747
Havana Falls, N. Y.....555
Harberton, N. J.....169
Harlan Co., Neb.....346
Harvard, Neb.....236
Harris Co., Tex.....202, 235, 298, 427
Havannah, N. Y.....26
Henrico Co. Va.....187, 762
Henry Co, O.....714
Herndon, Va.....763
Higanum, Ct.....458
Houston, Tex.....42, 507, 651
Howard Lake, Minn.42, 507, 555, 794
Hudson, N. Y.....27
Hugo, Ill.....602, 714
Humboldt, Tenn.....154, 282, 699
Hunter's Bottom, Ky.....330
Huron Co., O.....233, 794
Illinois, Notes from. 265, 506, 522, 790, 790
— — Central.....698, 790
— — Western.....586
Indiana Co., Pa.....747
Iola, Kas.....731, 763
Iowa.....348
Ithaca, N. Y.....586, 666, 779
Janesville, Wis.....217
Jefferson Co., N. Y.....490, 666
Jonesville, N. Y.....42, 683
Jackson, Mich.....714
Kansas, Notes from.....186
— What it Needs.....154
Kanawha Co., W. Va.....730
Kentucky, Notes from..362, 506, 714
Kork, Neb.....714
Lamartine, Pa.....602
Larned, Kas.....747, 779
Lavalle, Wis.....187
Lawrence, Mich.....667
Le Cygne, Kas.....810
Linden, N. J.....330
Little Falls, N. Y.....74, 315
Little Rock, Ark.....666
Lincoln, Ill.....651
Lowell, Ala.....555
Lowville, N. Y.....779
Maine.....10
Marshall, Mich.....169
Marshalltown, Ia.....763
Maryland, Eastern Shore of 42, 346
McIntosh, Geo.....570
Meadville, Pa.....106
Meeker Co., Minn.....490
Melrose, Fla.....779
Mercer, N. S.....507
Mendon, Mich.....699
Middlebury, Vt.....635
Middlesex, N. J.....315
Milford, Mo.....555
Mill Bridge, N. C.....794
Minnesota, Southern.....651
Mississippi, Crop Prospect in N.....362
— Educational Facts from.....359
— Facts from.....154
Missouri, Notes from South.....570
Montgomery, Ala.....249
Montreal, near.....794
Mt. Vernon, O.....810
Muskegon, Mich.....26, 362
Naples, Ill.....635
Nebraska, Notes from.....187
Neosho Valley, Kas.....74, 394, 587
New Market, Va.....330, 699
New Milford, O.....217
Newport, Vt.....347, 699
New Richland, O.....683
Newton, N. J.....555
New York City.....475
— — State, Crop Notes from...762
North Basp Island, O.....122
— Carolina, Colony for.....11
— — Immigration to.....282
— — Fall vs. Spring Sowing in 265
— — Late Among Farmers in..440
— — Notes from....26, 265, 378, 394, 440
— — University of.....42
Northumberland, Ontario.....458
Oakland, Oregon.....138, 794
Offerle, Kas.....731
Okolona, Miss.....602
Oneida Reservation, Wis.....410
Orleans Co, Vt.....730
Oswego, N. Y.....555
Outagamie Co., Wis.....27, 410
Owensboro, Ky.....347, 683, 811
Oxford Co., Canada.....666
Oxford, Mich.....811
Painsville, O.....495, 683
Pasandena Co., Cal.....458
Pennsylvania, Notes from N. Western.....794
Pensacola, Fla.....683
Perkins, Erie Co.....779
Phelps, N. Y.....474
Piedmont Co., Va.....747
Pine Bluff, Ark.....794
Pitcher, N. Y.....458
Pittsfield, N. H.....42
Pike Co., Mo.....810
Plymouth, Mich.....587
Poughtown, Pa.....427
Poquonoc Bridge...154, 474, 555, 667
Prince William Co., Va.....27
Purple Cane, Neb.....187, 555
Quebec, Canada.....11, 363, 440
Racine, Wis.....202, 699
Randolph, Vt.....42, 122, 410
Rusin Center, Mich.....235
Reynolds, Ill.....298
Ridgefield, Ct.....731
Risdon, Ill.....810
Roanoke, Ind.....699
Rochester, N. Y.....474, 602
Rockford, Ill.....770
Rockingham Co., N. H.....
Roselle, N. J.....763
Royalton, N. Y.....235
Rural Farm, L. I.....331, 410, 427
— Grounds, N. J....27, 330, 347, 394, 410, 458, 517, 618
Ryhalla, Miss.....570
Salem, O.....217, 794
San Jose Valley, Cal., Fruit Report.....778
Santa Cruz Co., Cal.....298
Seneca, Kan.....699
Shedd, Oregon.....602
Sherman, N. Y..106, 187, 315, 363, 440, 602, 730
Snowhomish City, W. T.....26
Spaulding Co., Ga.....506
Spartanburg Co., S. C., Rural Criticisms.....314
Speedville, N. Y.....731
South Carolina, Notes from.....187
Southern States, Personal Observations.....10
Springfield, Mass.....378
Starke Co., Fla.....783
Stark Co., Ill.....507, 731
St. Charles Co., Mo.....26
— — Ill.....298
— Clair Co., Ill.....714
— Joseph, Mich.....763
— Lawrence Co., N. Y.....490
— Marks, Florida.....762
Summer Co., Kas.....555
Sunshine, Col.....699
Swan, Ind.....346
Syracuse, N. Y.....42, 182, 217
Texas, Notes from.....138, 378
— Kitchen and Flower Garden in.....360
Topeka, Kas.....570
Trumansburg, N. Y.....507
Unicoi Co., Tenn.....490
Utica, N. Y.....315
Van Buren, Ark.....651
Vollnia, Mich.....235
Walden, N. Y.....779
Walker Co., Ala.....490
Warsaw, Mo.....330
Watertown, N. Y.....74
Watson, Mich.....555
Watsonville, Cal.....570
Waukegan, Ill.....794
Waukesha Co., Wis.....10, 651
Warren Co., N. C....427, 651, 693, 747
Wellington, O.....794
Westborough, Mass.....249
West Jersey, Ill.....202, 315, 794
Westmoreland Co., Pa.....26
West Va.....522, 555
— Young Man go.....457
Wexford Co., Mich.....683
Wheeler, N. Y.....106
Whitney's Point, N. Y..138, 202, 282, 347, 602
Windham, O.....347
Winneshiek, Kas.....347
Winona, Minn.....699
Wood Co., O.....138
Yates Co., N. Y.....249

FARM ECONOMY.

Animals, food for, which is the cheapest?.....246
Beef, dried, more profitable to farmer.....183
Bone, ground.....117
— mills.....118
— Rapid effects of ground.....118
Corn Accounts.....87
Cotton Seed, utility of.....118
Drain.....454
Drainage.....421, 438, 519
— Good Laws on.....684
— Grade of the drain.....488
— Leveling.....465
— Tiles for, size.....422
— Use of system.....470
Draining, shallow, foolish economy.....444
— under.....390
— — cost of.....454
Drains, location of.....488
Farm accounts.....376
Farm, shiftlessness on the.....87
Gates, making in winter.....822
Heap, the compost.....519

Help, hiring, and overseeing work....310
Hurdles on wheels, iron....151
Implements, painting farm.... 38
Irrigation....520, 630
Manure, barnyard, cost of....183
— drawing out.... 246
— hauling....773
— rye for green....262
— spreading direct from wagon.... 340
— waste on the farm....487
Manures, Artificial....293
Maple Sirup, manufacture of....103
Marshes, salt, draining....550
Pasturing Land, increasing in fertility?.... 375
Pay or no Pay.... 6
Plowing by Steam.... 12
Posts and Rails, Allantus for.... 6
Promptness, delays are dangerous....380
Products, raising new....630
Refuse, care of village....487
Roads, bad, utilize the tramp..156
Saving by Handfuls....635
Soils, Exhaustion of—J. B. Lawes....210
Swamp Muck, and Peat-Bed, courage in the....519
Tools and Team, something about....294, 598
Tools, good ones the cheaper..246
Weeds along the roadside....156
— Bad Farming....631
Wood, Lay in Your....23, 644

FARM TOPICS.

Agriculture and education in U. S.... 22, 33, 54, 86, 101
— — trade in England....714
— English vs. U. S....583
— past, present and future ...518
— waste in....504
Agricultural literature....732
— notes from California.... 6
Ashes, coal, use of.... 104
Baru notes....208
Beets, Sugar, vinegar and sugar from....504
Bone-dust, cheap....652
Bones, how to manage in a small way....716
Bridle, how to mend....118
Buckwheat straw, how to get rid of....310
Burdock exterminator....518
Bushel, the number of pounds to the....697
Canada thistle, to destroy....524
Cellar, how to ventilate....650
Cess-pool, the....745
Corn crop, Grange benefits of the....376
— stalks, saving for fodder....523
Crib, a rat-proof....773
Cultivation, how it warms the soil....374
— thorough....439
Drainage....438
— good, laws on....681
— grade of the drain....438
Draining, shallow, foolish economy....144
Draining, under....390
Drains, location of....438
Earth and peat, burned....614
Farm, a visit to Tiptree Hall ...547
— content on the....119
— Houghton....262
— lines....444
— of Australia, a model....549
— poetry of the....358
— on the....422
— profits....630
— reminiscences of Rotham-sted and Tiptree Hall 520
— social life on the....619
— study on the.... 422
— Tiptree Hall....502
— — — Mr. Mechi's statement.502
Farmer, a good....18
— how Ag. papers benefit the.619
— requirments to become a good....613
— what salary does he receive.358
Farmers and fruit growers 204
— Alliance, address of the....630
— Germans as.... 38
— politics for the....140
— why city ones fail....134
— women as.... 39
Farming in Central Ill.... 9
— — England....697
— — Kansas....759
— J. B. Lawes's experimental.469
— mixed....553
— sand....56, 104
— how to make profitable....135
— where is the best locality for....187
Farming, improved....821
Farms, easy method of improving the value of....661
— large and small....598
— self-sustaining....583
Fence for overflowing land....184
— wire, for a door yard....550
Fences....326
— poor, unruly stock....294
— too many....166
Fertilizer, bone.... 86
— bulletin, Connecticut Ag'l Exp. Station...361, 373, 393, 425, 473, 760
— salt as a.... 86
— what is needed....236
Fertilizers, an experiment with.183
— chemical, their effects the first season....364
— use of in Ohio....790
Field, properly drained....538
Gardon, the farmer's....789
Gate, convenient....383
— novel and useful farm....556
Gates: farm....412
Grain raising and dairying....502
— the movement of....764
Grass, dressing for....585
Ground, lumpy....598
Help, farm....181
— hired.... 184
— phases of hired....556
— what kind employed....396
Hogs, work for the....521
Homestead a Texas....760
— sanitary arrangements of the....650, 698, 745
Ice-house, plan for a....740
Ice-houses....638
— cheap....318
— farmer's.... 86
Labor, skilled....780
Land, buy good....119
— treatment of poor....104
— value of....740
Latch, gate....184
Lawes, John Bennet....821
Manufactures, home....630
Manure, application of....214
— applying....102
— bone, pulverized....361
— clover as a....520
— complete.... 86
— coarse....588
— effects of....764
— experiments....201
— hauling....773
— hen, value of....684
— much or little....553
Manures, different.... 28
— farm-yard vs. artificial....572
— private experiment with....188
— Stockbridge....262
— study the requirements of your land....184
— what kind of....616
Market, going to....711
Muck....601
Mulch, buckwheat as a.... 6
Mulching, materials for....232
Pasturing, a remedy for roadside....198
Peat and muck, value of....796
Phosphates, progress of the....697
Plaster and ashes.... 87
— variable effects, why?....300
Plowing, deep or shallow?....214
— the science and practice of.614
Posts and rails, allanthus for .. 6
— handling fence.... 86
— immovable by frosts.... 712
Potato beetle and Paris-green..332
— error in pitting.... 86
Potatoes, when to sell....614
Purchasing vs. producing....524
Rocks, removing from tilled fields.... 55
Roads, care of....598
— country....684
— working....616
Roadside, by the....588
School, the district....630
Seeds, depth for covering..391, 439
— not planted deep enough ...425
Shingling and Shingles....553
Shingles....822
Shirking....588
Sirup, maple, converting into sugar....184
Soils, analyses of....470
Sorrel, about....392
Stables, ventilation of.... 91
— warm.... 24
Stubble, raking, profit from....518
Stumps, blowing up.... 38
— destroying.... 87
— stones, etc....774
Sugar, maple, queries about....198
— — making....166
— beet, raw....232
Spring, value of a....661
Thistles or no thistles....503
Tillage....220
— clean....556
— thorough....583
Wages, discriminating....453
Water-furrows for winter grain....538
Weeding, time for....486
Weeds, best way to manage....245
— and stones, removal of....550
Well, a driven....745
— houses and running water..598
Wheat land, salting....743
Wheat, aged....585
Work, by the job or contract?.. 23
— keeping ahead of....476
— preparing for winter completion....711
Workshop, indispensable on a farm....635
Yard, the back....745

FIELD CROPS.

Artichokes....246
Barley on clover sod....422
— sowing, yield of....246
Beans, growing cheaply....487
— harvesting....615
Root, sugar....59, 599, 681
Broom-Corn, culture of....263, 278
Buckwheat, best soil for....662
— sown too thick....470
Cabbage, liquid manure for....516
Chess, wheat degenerating into.636
Chufas....822
Clover....553
— as a weed destroyer....730
— as hay....358, 730
— benefits of seeding with....662
— for American farmers....730
— how it helps the soil....730
— — to use....800
— manures for....730
— on sandy soil....730
— plowing under....730
— varieties....730
Comfrey, prickly....151, 246, 491, 615
Corn, an enormous crop in Nebraska....713
— and the crows....368
— crop, lessons from last year's experience....757
— — of the U. S., food results of.... 8
— — one hundred bushels....588
— — the reports from various parts of the entire country up to August 24th....535
— — too little attention given to....774
— — value of to small farmers
— crossing....391
— experiments with....43, 729
— fodder....388, 556
— hilling or drilling....321
— hills or drills....352
— husking and thrashing together....774
— Improving....236
— Indian....711
— large crops of....667
— ninety-seven bush. per acre, how raised....775
— planted in drills, largest yield....556
— raising....332
— standing in the field....633
— sweet, Mexican black....268
Corn, seed saving....822
Crop prospects....428
— reports, our....540
— — the latest....491
— root.... 344, 374
Crops, forage, for stock....571
— rotation.... 38
— — benefits of....329
— spring sowing....214
— what all require.... 38
— yield, exaggerated estimates....700
Dioscoren Batatas Chinesa Yam, 87, 691
Flax, raising....472
Flour, wheat for.... 7
Germination, temperature for. 87
Grain, how much to the acre?..343
— in-and-in breeders....664
— in "Corners"....491
Grass, Alfalfa....22, 280
— — on the east of Rocky Mountains....663
— — troubled with Dodder....684
— barnyard....691
— blue....454
— cutting early, why?....398
— Hungarian....694
— orchard, Dactylis Glomerata....473
— — shortcomings of....503
— — worthy of a trial....503
— Poa compressa....454
— — pratensis....454
— timothy....503, 518
— — defects of....503
Grasses, tame, of the West.... 22
— wild of the West.... 22
Hay and hay-making....438
— clover....368
— dusty....358
— early cut.... 7
Mangels, sowing the seed of....374
Millet....743
— and barley....488
— experience with....694
— German....538
— golden or common....694
— Pearl.... 217, 540, 556, 694, 709, 758
— — in Texas....378
— use and cultivation of. 694
— uses of....278
Millets and their allies....694
Oats, cutting with a mowing machine....518
— fall plowing best.... 55
Onions for late keeping....391
Potato, Beauty of Hebron..524, 636, 709, 758, 777
— beetle and Paris-green....332
— culture of the....369
— — sweet....471
— prospect, the....591
Potatoes as a farm crop....758
— as food....491
— growing cheaply....278
— new mode of cultivating.... 6
— preserving....662
— seed....619
— seedling....236
— when to plow for....505
Potatoes on soil, under straw...522
Ramie culture, Boehmeria nivea....487
Rye and oats for winter pasture....377
— its culture, etc....662
— selecting for seed....663
— sown with buckwheat....550
Sorghum, cultivation of....815
Sowing, proper depth of.... 87
Squashes, Hubbard....822
Sugar Cane, cultivation of.... 76
Ruta-baga seed, soaking before planting....473
"Teosinte," Reana Luxurians..694
Tobacco....663
— culture....486
— plants....518
— — selection, fertilizers for.550
— — what kinds to plant....538
Turnips, cheap.... 27
— cultivation....774
Wheat, after culture of....636
— — — planted at R. F....650
— and other grains, keeping...459
— crop....588
— — the fall....551
— Defiance....709
— — and Champlain, tests of.. 582, 615
— depth to sow....606
— Clawson....439, 604
— cultivation of....504
— Fultz....497
— Hessian fly's favorite....376
— how much to sow per acre..603
— lands, improving.... 72
— Odessa or Grass....280
— plant, dangers that menace the.... 551
— preparing ground for....578
— seeding....619
— sowing....550, 582, 761
— spring....419
— — and winter....218, 582
— — best varieties....582
— — Lost Nation....775
— — planting....599
— — varieties of....599
— yield to the acre in England.700
Wheat, Defiance....823

FLORICULTURAL.

Adiantum Cuneatum....648
Agave Americana, American Aloe....780
Annuals.... 40
Aquilegia, a singular....491
— Rural hybrid....710
Abutilon Darwinii....553
Beaucarnea Recurvata....249
Bedding Carpet....311
Bleeding Heart, Dicentra Spectabilis....119
Botanical studies, Mr. Meehan's work....364
Bulbs, Alliums....103
— Anthericums....373
— Bulbocodium....373
— Crown Imperials.... 9
— Cyclobothera.... 57
— Eranthis....393
— Colchicum.... 25
— Crocuses....680
— Erythroniums....680
— Fritillarias....680
— hardy....680
— Hyacinths....680
— Ixias....393
— Jonquils....680
— Lilies hybridized....391
— — Pond....521
— — — Blue, White, etc....585
— — Water, a pretty idea....647
— Lilium, Speciosum, var. Melpomene....600
— — Superbum....491
— Lily, a superb gold-rayed....600
— Narcissus....39
— Ornithogalum....104
— Oxalis....503, 632
— planting them....689
— Schizostylis....168
— Scillas.... 69
— Snowdrops....80, 689
— Snowflake.... 89
— Spring, growing in fall....648
— Squills....680
— Tigridia....231
— Tritonia....373
— Zephyranthes....168
Cactus, the Old Man....759
Cactuses and other succulents..168
Cobœa Scandens, var., Propagation of....913
Cold-Frames....696
Cut-Worms in green-houses....265
Daphne Indica.... 25
Dioscorea Batatas, disguised as cinnamon vine....252
Dipladenias.... 9
Eranthis Hyemalis, Winter Aconite....680
Eryngium Leavenworthii..696, 710
Erythronium, varieties....476
Eulalia Japonica, var., Zebrina. 181, 759
Fern, the best now at Boston...648
Fernery, an out-door....648
Ferns....168, 217
Ficus Elastica....593
Floriculture near the Bay of San Francisco....810
Flower Gardens, varying....632
— pictures.... 69
— pots, soluble....343
— seeds, rare....231
Flowers and Ferns, natives of U. S....645, 508
— changing color....517
— for the house....
— Scarlet, among the grass....647
— Wild....690
— — April....281
Frames....25
— what to plant in....696
Garden Talks and Walks....360
Geranium Sanguineum....710
Gilia Diantholdes....232
Gladioli, best time for planting.217
— experiments with....217
Gladiolus, bulb seedling....510
Grindelia Squarrosa....710
Hibiscus Militaris....710
— Moscheutos....553, 710
Hollyhock....568
— Chater's Lemon....710
— cuttings from....476
Horticultural Hall at Fairmount Park....632
Humea Elegans Purpurea....345
Insects....25
— mealy bugs.... 7
— red spiders.... 7
— scale.... 7
— thrips.... 7
Irises....249, 680
Lobelia, from seed....360
Molucella Lævis, shell flower...181
— — cups skeletonizing....524
Morning Glories....503
Pansies and Poppies....503
Pelargoniums, cross-breeding..134
Petunias....503
Phlox, etc....503
Phyllocactus Ackermanni....517
Plants, bedding.... ....168, 316
— cellar....25
— flowering, for rooms.... 327
— Herbaceous....231
— house, soil for....617
— in flower....231
— — perfection, May 25th....360
— — pots, watering of....152, 168
— Nebraska....104
— potting.... 25
— specimens, how to send....119
— water and bog....216
— wild, as Garden flowers..200, 216
— — color, time of blooming...216
— window....7, 25
Plants, bedding....823
Plumbago Larpentæ....619
Propagation, rooting cuttings in Aug....487
Protection, winter....104
Ricinus, our new Bronze....709
Seed Exchange..9, 40, 70, 168, 182, 232, 249
— — discontinued....764
Seeds....168
Trifomas....232
Vines....104
Worms in flower-pots....57
Yucca Filamentosa....134, 710

GARDEN.

Alkekengi....268
Artichoke, Jerusalem.... 38
Artichoke, origin of Jerusalem.697
— to get rid of....198
Asparagus beds....181, 459
— Conover's Colossal, the best.181
— planting in summer....504
— time for sowing seeds.... 72
Beans, best varieties of.... 8
Beets, ornamental and fancy...517
Brussel Sprouts....168
Cabbage plants, late....428
— transplanting, etc....488
— worms, cayenne pepper for.488
Celery, giant, for private gardens....108
Chufas....39
Cucumber, Tailby's Hybrid....108
Experiment, garden....7, 91
Garden, kitchen and flower in Texas....360
— kitchen, my idea....281
— taking notes and plans for..294
— the farmer's....291
— vegetable, does it pay....247
Gardening, dairying with....508
Gardens and gardening....584
Hot-beds....89, 137
Melons, Miner's musk.... 59
— Musk.... 8
— Peerless.... 39
— stones around the hills....473
Okra....585
— cultivation and use of....294
Onion beds, soil, crop....268
Peas, experiments with green..473
— McLean's little gem.... 281
— notes....441
— planting....236
— planting of early....218
Potato, Beauty of Hebron....572
Rhubarb, run out.... 310
— setting out....198
Salsify....247, 517
— cultivating and cooking....204
Spring work....89
Squashes, increasing yield....461
Tomatoes.... 39
— a chance for fame and fortune....668
— Acme....103, 137
— — best as also earliest....524
— Arlington.... 89
— Canada Victor....89
— Conqueror....88
— Emily....89
— experiments with....88
— Golden Rural....709
— — Trophy....89
— Green Gage....89
— Hathaway's Excelsior....89
— how and when to plant....169
— — cultivated....168
— Little Gem....88
— One Hundred Day....89
— rot of....168
— soil for....168
— sowing and care of....182
— Stakes....428
— Trophy....89
— varieties....168
— when to transplant....167
Vegetable Marrow, English....236
Vegetables, which to plant....137
— winter care of....711
Watermelon, the Voorhis....719
Wire-worms, protect'n against. 6

HERDSMAN.

Animal food and product....454
Animals, what class shall we select?....587
Ayrshire, best family cow....183
Barn, convenient dairy....757
Barn for straw, a.... 5
Bull, an Italian....742
Bull and Cow, "Uncle Tom" and "Isle," Holstien....135
Bull, with velvety skin....774
Calves care and food for young....150
— Chalk for....204
— Feeding of....280
— Meal for....262
— Rations for....280
— Weaning....394
Cattle, Alderney in Shropshire, England....105
— at Dairy Farm....732
— at Elmira State Fair....601
— at Paris, Exposition, Price..549
— at the Oxford Show, prize...455
— Ayrshire, No. 1.... 90
— belted or shorted....150
— covered yards for....552
— different kinds of Dutch....150
— dishorned....584
— exportation of live....396
— feeding, the future of....636
— food for fattening....150
— in South Africa, horns of...748
— of Chillingham, wild....549
— Polled....618
— — for shipment....760
— remedies for vermin on.... 90
— products, exports of....664
— sale of Channel Island.... 75
— — — imported Alderney...218
— — — Jersey....359, 571
— timely hints on care of....711
Champion, Hereford....486
Cows, feeding in Fall....716
Cows, kicking, to prevent....374
Exportation, an unwise....348
Fat stock show at Chicago....437
Herd, Jersey, of Mr. H. S. Parke....437
Herd, Holker, the....742
Horns....652
Individuality and Selection....428
Jersey Cattle, a caution to buyers....748
Jerseys in the West....742
Lady Darew, 3d....645
Live Stock....598
Oil Cake.... 91
Robert Bakewell and his works 392
Sale, the great Holker....681
Short Horns and Herefords....524
Sterility in males....394
Stock, breeding on the farm....188
— care of....486
— cooking food for....371
— farm....218
— — how to organize a.... 5
— feed regularly.... 24
— feeding Indian Meal to....681
— forage crops for.... 571
— husbandry....316
— raising, Kansas for....284
— sugar beets for.... 712
— water for....486
— what they need....761
Tenth Duchess of Geneva.... 5

HORSEMAN.

Arabian Horse....485
Auburn —....182
Bits, hints about....731
Cassius M. Clay....134
Check for high-headed horse.. 22
Confidence.... 121
Driving tandem.... 75
Elecampane root as a tonic....358
Ethan Allen....121
George Palmer....134
Goldsmith Maid....312
Hambletonian strain, history of 56
Horse, Favorite for N. Y. City. 108
Horse sale, Kellogg's prices realized....220
Horses—a new market for....444
— Breast Blankets for.... 102
— Clipped.... 54
— Farm.... 374
— Feet of....214
— Food for working.... 23
— Onion sets for....198
— Purchasing....780
— To keep flies from....518, 584
— Shoeing....56
Lady Thorne....121
Stables, cleanliness of....684
Stallion, "King of the East"... 89
Teamsters' mistakes....158
Trotter's, noted....121, 134, 230
Trotting stock sale of Kellogg's....134
Young Pocahontas....200
White Major....295

HORTICULTURAL.

Æsculus macrostachya.... ...473
Autumn leaves, beauty and usefulness of....616
— — early....572
Azalea amœna....341
— show at Brookline....391
Banana, the....407
— prospects of its culture in Cal....456
Bearing year, how to control...332
Berberis-aquifolium....152
Berberry, the purple....503
Berry culture in Texas....647
Berries for ornament.... 472
Blackberries in California....646
— Snyder, for the West....298
Blackberry, Barnard....647
— cultivation of the....647
— Kittatinny....647
— Lawton....647
Blight, pear....236
— strawberry....373, 443
Botanical studies....700
Botany, teaching....599
Bower a....277
Budding, directions for....508
Callicarpa Americana....710
Canker-worm, to prevent the ascent of....360
Celastrus scandens.... 85
Clematis Apifolia....632
— Gloire-De-St. Julien.... 632
— Miss Bateman....391
— Jackmanni....391
Climbers and Twiners....217
Climbers....823
Colutea Arborescens, Pea Tree.503
Currant cuttings....633
Currants in California....647
Cut-worm, getting rid of the...341
Deutzia crenata, Fl. Pl....710
Dioscorea Batatas, female Pl..588
Clethra Alnifolia....503
Farmers and Fruit Growers....204
Filbert, purple and golden spiræa.... 264
Flowers, structure and function of....695
Forsythia Fortunii, as a standard....391
Fruit, fallacies about....359
— notes, California.... 518
— seedling small....633
Fruits and Vegetables.... 108
— culture of small....518
— selections of varieties to be planted....375
Gooseberries, Downing, one of the best....524
— in California.... 680
Grafting....166
— cleft....167
— side....167
Grounds, ornamental by moonlight....604
Hay-caps....369
Homestead, ornament the....166
Horsechestnut shrub.... 472
Hydrangea Carnescens....472
— Nivea....472
— oak-leaved....503
— paniculata Gran....568, 619, 712
Hypericum sarothra, an old annual....524
Ink, indelible....731
Insects, our preparation for....410
Irrigation, committee to investigate....282
Kalmia latifolia....134
Labels....166
Lawns, seeding and care of....231
Leucothoe Catesbæi.... 152
Mahaleb stock for cherries....182
Malvaviscus Drummondii....791
Mandrake....703
Mixture, a valuable....316
Nursery stock, wintering....121
Nuts for planting, care of....744
— our native....199, 218
Orchards, grass or culture for..342
Papyrus....631
Pea-blight, whitewash a remedy for....172
Physalis.... 296
Plants, frame for....172
— influence of air in growth..201
— patenting.... 60
— sexual action in flowering..695
— uncovering too early....166
— watering during sunshine..491
Prairies, talks upon the....121
Protection, winter, cover late.716
Pterostyrax Hispidum....616
Pruning....486
Quinces, two new Japan....327
Raspberries, from seed....652
— in California....646
— in Rural Grounds....647
— plant in the fall....646
— the newer in Ohio....646
— what others say....648
Raspberry, Belle de Fontenay.646
— Brinckle's orange....647, 744
— Clark....744
— Cuthbert....646, 647
— Davidson's thornless....744
— Doolittle....744
— festival, our....645
— Franconia....744
— Ganargua....744
— Gregg....744
— Henrietta....732, 744, 747, 777
— — origin of....712
— Herstine....646, 744
— Highland hardy....645, 647, 744
— Hudson River Antwerp....744
— Mammoth Cluster....744
— Montclair....645, 647
— Philadelphia....744
— Pride of the Hudson....647, 744
— Thwack.... ..508, 647
Report, Horticultural, Mich. S. A. College....823
Rhododendrons, bushy....616
— grouping.... 8
— Mr. Hunnewell's....455
Roots of a tree, extent of....491
Rose bushes, protection to....619
Rubus Odoratus....503
Sap, freezing of in plants....200
Seed Distribution, our.... 12
— — — free....709, 748
— how produced....635
— experiments, "Our view of it"....182
— planting, practice of....167
— — principles of.... 91
Seeds, adulteration and testing of.... 72
— experiments with corn and radish....680
— not germinating, fault of the plants.... ...631
— testing....759
— — of grass and clover....136
— — — vegetables....616
— tests, our view of it....124
— trial in 1878.... 631
Shrubs....231
— handsome flowering....310, 327
— layering....426, 428
— plants, etc., removing protection.. 262
— pruning of....104
— summer flowering....472
Spiræa crispifolia....456
— golden and purple filbert....268
Strawberries, about....220
— autumn leaves a mulch for. 6
— Boydell No. 30....540
— Capt. Jack for Illinois....200
— Crescent Seedling....572
— good varieties of.... 567
— Great American....520
— how and when to plant....204
— in California....696
— influence of locality....566
— large crops....567
— newer varieties....566
— newest promising well....268
— plant early....360
— protection.... 9
— some of the newer....583
— tested in Rural Grounds....298
— varieties, cultivation....424
Strawberry blight, high cultivation....439
— growers advice to....566
— The Ideal....584
— Notes....443
Suggestions, spring....316
Tea, American....312
— and coffee, Introduction into U. S.... 44
— plant and its product....213
Tent-caterpillar, death to the..358
Thinning and Digging....277
Transplant, best time to....286
Tree agents.... 93
— peddlers....56, 105
Trees, hide bound....71, 167, 633
— law as to sale of....103
— look to your young....204
— planting and transplanting..732
— protection from mice, etc... 12
Trees and shrubs, which to plant....123
— slitting the bark of hide-bound.. 44, 71, 88, 103, 119, 248
— transplanting....204
— wash for, to color....172
— whitewash for....585
Trumpet Creeper, Tecoma radicans, Early Flowering..503
Varieties, improvement of....284
Vegetables, exhibiting at fairs.326
Viburnum Plicatum, Japanese Snowball....600
Vines....104
Vitis Heterophylla....710
Walks, dry in winter.... 76
Weigela....710
— Lavallei....472
Work, early....166
— thorough....166
Yards, the farmer's front....412

HYGIENIC INFORMATION.

Alcoholism, Treatment of Chronic....504
Cellar, look to your....108
— When to ventilate....412
Cleanse....208
Cures, Simple.... 26
Disease, Spread of....140
Drugs as Food and Drink....761
Education Medical....396
Fever, Intermittent....507
Fever, Intermittent, Prevention....507
Fever, Intermittent, Treatment of....523
Fever, Scarlet.... 11
Grindelia Squarrosa for Malarial Fevers....604
Hydrophobia Cured....505
Infectious Rooms....697
Invalids, Texas as a Resort for.232
Milk, How to Eat....780
Plants, are they Healthy in Sitting-Rooms?.... 12
Plants in Rooms.... 28
Pneumonia....298
— Typhoid....208
Poison, Neutralizing....396
Rheumatism, Chronic....345
Sanitary Arrangements for the Homestead....650, 698, 745
Sanitary Precautions....459
Sleeping Rooms, temperature of....823
Stomach and Lungs....587
Water, Polluted....553

INDUSTR'L IMPLEMENTS.

Agricultural Implements at Paris Exposition....520
Apparatus for raising dead hogs.... 68
— haying....349
Binder, wood....473
Binders, wire....569
Butter-worker, a new.... 73
— — Cornish & Curtis's....473
— workers at Dairy Fair....798
Churn, Blanchard....185, 283
— the Union....361
Churns at Dairy Fair....793
Cooley system, the....313
Corn Planter, Albany.... 41
— Sheller and Feed-mill....795
— — Livingston & Co.... 9
— Shellers and Feed-cutters..569
— — and Grist Mills....569
Cow-milker, automatic....442
Dairy Implements at International Dairy Fair....193
Drill, Buckeye, a new fertilizer attachment....569
— the Farmer's Friend....489
— — McSherry....473
Dryer, Zimmerman's portable..250
Engine, American Farm....408
— Syracuse, trial....185
Fan-mill, improved Rockaway.569
Feed Cutter, Silver & Deming..683
Forge for farm use....635
Fruit dryer, the American....442
Gauge, Loomis's level, plumb, etc.... 41
Grinder, the Boss Sickle....280
Grist-mill, French buhr-stone.665
Harrow, an improved....153
— Corn, Bramer's....120
Harvester, Johnston....569
— Self-binding....407
Hay Elevator, the American.. 297
Hay-forks, double or single ropes for....505
Horse-power, a cheap....537
— — Gray's....377
— — Union Railway....521
— Shoe, a sensible....712
— — the Billings'....569
House, Hoffmire portable....329
Industrial implements, a thing or two yet needed....620
— — at N. Y. State Fair....601
— — — Paris Exposition....537
Implements, farmers', why not cared for....
Inventions, Paris awards to American....537
Iron-works....569
Knife-grinder, Livingston....377
— — Worcester's....313
Knitter, new Tuttle.... 40
Mill, a new convertible....761
— an under-running....297
— Feed, the I X L....569
— plan for a....233
— the Big Giant Corn....587
— — Phœnix Tile....329
— Wind....233
Mills, small Grist.... 41
Mower, Buckeye Lawn....313
— Direct Draft Eureka....329
— Double-geared....537
— Lawn, Chadburn & Coldwell....569
— — Philadelphia....377
Mowers, Buckeye....569
— Towanda Eureka....635
Organs, Horace Waters & Sons'.569
Pan, Champion.... 232
Plow Co., Syracuse, liberal offer of....169
— Chilled....569
— Improved Sulky....280
— metal, a new....201
— Steam for farm....185
— Syracuse....185
Plows and plowing....264
Potato Planter, True's....136
Press, the Ertel....361
— — Pacific Rural....635
Printing Press, W. A. Kolsey & Co.... 9
Pump....233
— the Fountain....313
Rake, Table, Miller's....377
— the Contes'....569
— — Reindeer.... 313
— — Thomas....217
Refrigerator cars....169
Safety-Power, the Eureka....489
Saw-Mill, farm and plantation .169
— — Mulay....761
Scale, the Novelty Pocket....569
Screws, Cider Press....569
Separator, Osborn's grain and seed.... 587
Sewing Machines, an improvement in....201
— — Davis'....136
Spring, Dexter King....153
Steam power....329
Thrasher, diagram of Buffalo Pitts....408

Thrasher, Russell & Co.'s....361
— the improved Sweepstakes.377
Thrashers and Steam Engines, Massillon....159
Thrashing Machines, Works of J. I. Case....361
Tools, good and handy....374
Truck, Harris's Farm....641
Vade-mecum, Teamster's....344
Vat, Cheese....76, 185
Wagon, the Conklin....246
— "Coquillard"....217
Wheel-Barrow, what is it?....118
Wind-mill, Iron Turbine....560

INDUSTRIAL SOCIETIES.

Agency, Grange, is it exceptional?....314, 619
Alliance, address of the Farmers'....630
— N. Y. State Farmers'....539
Association, American Dairymen's.... 53
Congress, National Agricultural....136, 150
Exhibition of dairy products.. 193
Fairs, Agricultural, against trotting at....104
Fair, International Dairy, criticism on....809
Fair, get ready for the....572
— fruit at Grand Isle....680
— horticultural exhibit at Nebraska State....718
— Illinois State....650
— International Dairy....636, 716, 792, 796
— List, annual....425, 483
— Manchester, Vt., Town....666
— market, auctions, etc....208
— Minnesota State....539
— National Dairy....524
— N. J. State....619
— — Y. State, at Elmira....601
— Penn. State....650
— Queens Co., L. I....634
— Somerville, N. J....654
— Texas Hort. and Pomological....518
— the great St. Louis....782
— Tolland Co., Conn....651
— Western N. Y....654
Institutes in Mich., Farmers'..166
Meeting, Rochester Horticultural....344
Paris Exposition....197, 343, 374, 421, 441
— — opening....360
Society, Hereford Herd Book..108
— meeting of Western N. Y. Hort.... 73
— Mich. State Pomological....344
— Montreal Hort. Show....634
— N. Y. State Hort....137
— notes at N. Y. Hort....634
— Ontario Entomological....285
— Pomological, and Willard C. Flagg....300
— Western N. Y. Hort., extracts from....342

INDUSTRIAL TOPICS.

Farm Products, Exportation to Europe....406
Labor, hand and machinery....681
Machinery, labor-saving in France....796
Manufactures, encouraging Home....486
Ostrich, The....761
Starch, Buffalo Patent Gloss...409
Sugar-Making, new process for.683
Surveys, State Industrial....637
Tea Culture....533
Tea Plant and its Products....213

LANDSCAPE GARDENING.

Garden, Luxembourg, view in.. 21
Garden, ornamental water spots in....443

MISCELLANEOUS.

Acknowledgments....293
Agriculture, a Secretary of....300
Art and taste, setting examples of....664
Axe-grinders....777
Catalogues and books received, 11, 25, 40, 57, 74, 88, 104, 124, 137, 152, 153, 169, 182, 218, 242, 248, 267, 359, 376, 392, 233, 439, 457, 475, 105, 523, 553, 569, 585, 633, 652, 664, 681, 713, 731, 745, 764, 777, 809
Desert, the great American....602
Fire, destructive....311
Girls, give them a chance....459
Grass-Burner, the Mennonite..312
Hard times....340
Homes, to those looking for...619
Indexes, about....456, 643
Insurance Co., N. Y. Life....137
July, Fourth of, 1878....412
Lime, burning....632
Lumberman's winter....186
Merry Christmas....812
Morals, minor....568
Observation the key to success.764
Paint brushes, binding....364
Papers, preserve your....218
Partisan correspondence....529
Question or so, A....812
Readers, To Our....812
Rust, cleaning from steel....553
Science and practice....391
Signs, foolish....456
Social culture....620
Stove, open grate....120
Suavity or agreeableness....700
Superstitions....663
Thanksgiving....748
Timber Culture Act....201
Trade, learn a....248
Tramps....441
Weights and measures, remedy for unjust....156
White houses and green blinds.521
Work, preparing for winter completion....711

NATURALIST.

Apes, Anthropoid....597
Bird and Fruit Question.... 56
— The Lyre....152
Birds, Food Canary....284
— Humming....263
— Insectivorous.... 27
— Raising Millet for Canary...102
English Sparrows....22, 332, 385
Porcupine, The....591
Starling (Black Bird) Red-Winged....591
Taguans, Species of Flying-Squirrel....229
Tiger, The....325

POMOLOGICAL.

Apple Trees, bearing year of....823
Ben Davis in Neb....729
Apple, Bourassa....727
— Canada Baldwin.... 73
— — Reinette....279
— Cellini....727
— Decarie....72, 727
— Fanny....728
— Fameuse Sucre....71, 727
— Grand Sultan....727
— Grimes's Golden Pippin....153
— King of the pippins....728
— Lady Elgin crab....727
— Maiden's Blush....690
— Meader's winter crab....728
— Mountain Beet.... 72
— Northfield Beauty....727
— Pomme de Fer.... 72
— popular varieties in N. Y. market....726
— Rawle's Genet....279
— Riabinouka....727
— Roseau.... 72
— Spitzenberg....774
— St. Peter's....728
Apple, Strawberry of Montreal. 72
— Stump....727
— Tetofsky....279
— Wealthy....279
— why the most valuable fruit.728
— Winesap....781
— Yellow Bellefleur....279
Apples, a nurseryman's selection....726
— Codling Moth an enemy....731
— Dwarf, Paradise stock for..732
— for home use....558
— for Penn....731
— from Oneida Co., N. Y....732
— hardy.... 71
— keeping....731
— neglect of some fine varieties....726
— new varieties....342
— Paradise stock for....531
— Russian in America....423
— selection and packing....342
— shipping by canal, to N. Y...730
— — trees and fruit, diseases of.... 70
— — bearing alternate years..732
— — grafting....759
— — how far apart.... 56
— — proper distance for planting....759
— — pruning....759
— — to make bear....393
— — and pear trees, pushing late buds....663
— — — — what varieties plant.725
Cherries, list of....633
Cherry trees, a little care of....491
Fruit and bird question.... 56
— belt of Michigan....359
— best quality, creating a demand for....728
— can we have better....279, 245
— crop of Mich....540
— — in Nebraska....713
— culture and the Great Lakes.... 27
— family....568
— growers in council.... 73
— in western N. Y.... 91
— keeping in sand....731
— notes from Nebraska....729
— packing....620, 662
— profitableness of....776
— prospects in Cal....138
— trees and fruit on the farm.726
— — care of....585
— — low tops for....831
— — protection against mice..136
— — slaked lime about....556
Fruitfulness, promoting....731
Fruits of 1877, new.... 73
Orange, Acapulco....552
— Bouquet....552
— Citrus Aurantium....552
— Coolie....552
— Konah....552
— Maltese....552
— Mandarin....552
— Naval....552
— Pumelo....552
— Paramata....552
— Seville....552
— St. Michael....552
Orchard, a North River....633
— an average farm....725
— apple, best soil and management....774
— care of....774
— how it should be planted....725
— in grass....524
— Kansas....102
— lack of timely surgery....791
— Mich. prize plum.... 7
— planting and management..475
— requirements in planting...726
— value of an....726
— straw mulch in....518
— why a light soil for....725
Orchards, Treatment of....822
Peach, Amsden....823
Peach, about.... 72
— Sallie Worrell....779
Peaches, danger to.... 91
— in Neb....617
— twelve good market varieties....729
— under glass....424
— very early....504
— yellows....600
Pear, Bartlett....775
— Beurre d' Anjou....264
— — Superfin....264
— Bonne Du Puits Ansault....728
— Church....264
— culture in Neb....728
— Duchesse on sandy soil....731
— — D'Angouleme....731
— Louise Bonne....731
— Paul Ambre....264
— Seckel paying best in N. Y. market....764
— trees, pruning....791
— Tyson....264
Pears, artificial ripening....552
— autumn and winter....726
— choice varieties....776
— dwarfs, which succeed best.732
— marketing....552
— most salable sorts....553
— packing....552
— profitable....279
— storing....552
— treatment of winter varieties....552
— when and how to gather....552
— trees as oblique cordons.... 67
— — sprouts, whitewash for...343
Persimmon, Japanese, facts about the....759
Plum, Bassetts' American.... 39
— culture in Ohio....247
— the Wild-Goose....680
— winter killing....247
Quince culture....343
— trees, blight of....518
Quinces.... 73
Tree, how an old one was saved....791
— surgery....791
Trees, fruit for ornament....423

POULTRY-YARD.

Bantams eating potato beetles.198
— Golden Spangled Sebright...199
Brahmas, light.... 43
— — an error corrected....266
— origin of....230
— the native country of light..185
Brooders, nests for....806
Caponizing....823
Chickens and dog days....539
— and eggs....443
— feeding....584
— — young....585
— frozen combs of....183
— hatching....218, 742
— neglect of....486
— spring....150
— coops....184
Coops....807
Cochins....805
Dominique, the American....603
Dorking, the....806
Ducklings, feeding young....443
— food for....475
— management of....358
Ducks, Pekin....43, 475
Eggs, how to get the most....507
— to set ducks....310
Eggs, from different breeds....806
Fowls, what kind shall be kept? 805
Fowls for eggs....805
Fowls, French....805
Fowls, winter work for....808
Fowls, Ornamental....806
Fowls, cross-breeds practical farm use....107
— Brahma....136
— for eggs table and hardiness.266
— new breeds of....102
— Spangled Hamburg.... 87
— the best breeds of....742
— ulcers on the feet of....730
Games, the....805
Gape worms, mode of extracting....539
Gapes, assafetida for....521
— a positive cure for.... 40
— remedy for....571
— sour milk for....743
— tobacco smoke for....343, 380
Guinea fowls eating potato beetles....23, 539
— — guard against hawks.... 6
Hen-house, ventilation for....603
— lame, parasites the cause...262
Hens, air-slaked lime for laying....553
— cabbage as winter green food....183
— breaking sitting....618
— nests for sitting....571
— sitting, treatment of....571
Incubators.... 23
Incubator, house and nursery..806
Insects, kerosene and sulphur for....584, 603
— remedy for....236
Leghorns and Plymouth Rocks.777
— brown and white....198
— vs. Plymouth Rocks....681
Perches....808
Pigeon Show at N. Y. Aquarium....107
Plymouth Rocks, breeding....808
Plymouth Rocks....805
Poultry Nonsense....808
Poultry houses and yard, conveniences for....808
Poultry for profit....808
Poultry, why some does not pay....808
Poultry Wintering in the North 807
Poultry versus Pigs....805
Poultry account.... 91
— at Elmira State Fair....601
— does it pay?.... 9
— breeding....485, 507, 551
— care of in winter....107
— farm, a French....711
— food.... 54
— how to feed before killing..571
— house, a cheap....120
— houses....551
— — care of....428
— on a large scale....459
— profitable....696
— profit and losses of raising.. 64
— record....584, 618
— shippers, caution to....156
— show, the N. J....107
— varieties of.... 53
—profit combined with amusement....634
— winter treatment.... 54
Roosts, coal-tar for.... 23
— kerosene oil on....559
Troughs, feed and water....807
Turkeys, buckwheat screenings poisoning....218
Vermin, to rid a hen-house of..618
Vermin, getting rid of....807

RURAL ARCHITECTURE.

Barn, general purpose....231
Contrast, a....695
Cottage....343
Cottage, a modern Swiss....571
— complete for $3,800....245
— summer, Thousand Islands 773, 775
Crib, a rat-proof....773
Dwelling, the most economical form a cube....620, 685
Farm premises, model.... 24
Home, a thousand dollar suburban....613
House, a cheap, convenient....169
Ice-House, plan for a....791
Piggery, a model....165
— Improve the....199
— That model....199, 231
Poultry Houses....551

SCIENTIFIC AND USEFUL.

Air, foul, to expel....585
Clocks....122
Composition and decomposition....427
Fertilizers, experiments with commercial....390
Grain, the chemical constituents of....758
Heliotropism....556
Manure, stable, what a ton contained.... 44
Milk, coagulation of....633
Plants, influence of air on the growth....201
Potatoes, new use for....476
Science....491
Silica....664
Soapstone as a lubricant....761
Soil, Culture as affecting the moisture of....758
— Influence of color upon its temperature....539
— Moisture in the....774
Soils, moisture retaining power of....661, 758, 774, 790
Starch, manufacturing potato..328
Temperament, the unscientific.780

SHEEP HUSBANDRY.

Breeds, improved, hardiness of.742
Ewes, breeding....117
— treatment of....425
Feeding system, necessity for a full....742
Goat raising in California....762
Goats, raising Angora....665
Lambs, how much milk to feed.246
— price of....674
Mutton for exportation.... 11
— growing....638
Sheep, comparison of breeds...823
Sheep, care of.... 55
— do not wash and shear early.108
— fallacies about....518
— farmers should keep more..664
— fed on roots alone....777
— food for....6, 55
— for Kansas....663
— horned....117
— Kansas and Nebraska adapted to....159
— profit in keeping....778
— shelter for....742
— small grain ration for....109
— straw for....156
— unwise management of.... 6
— washing....390
— wintering for their manure.744
Shepherd Dog, training of a... 263
Ticks, "Cresylic Sheep Dip" for....310
Wool-growing and the tariff....263
Woolen interests, the....327

SPORTSMAN.

Bench Show at Gilmore's Garden....232
Dog, management and diseases of the....760
Setter, English.... 85

SWINE-HERD.

Berkshires, some notable....207
Hog cholera and Government..328
Hog cholera commission....524
Hogs and pigs, winter food for.730
Hogs, Berkshire....246
— pumpkins for....662
— soap-suds to scrub....295
— work for the....521
Pig in agriculture, the....663
Pigs, castrating, gas coal tar for.662
— cutting clover for....473
— late.... 24
— management of in summer..393
— — — young....250
— mangel-wurzels for....198
— rye straw for....294
— warm pens for....102
— well-bred easier to fatten...201
Poland Chinas....418
Pork, American....678
Scurf, remedy for....166
Sows, food for breeding....183
Swine, bone meal for....633
— Duroc....475
— Husbandry, book on.... 23
— large or small breeds....199
— refuse milk for....553
Swine, sulphur for....121
— thoroughbred, Herd Books.313

THE QUERIST.

Adams Co., Wis., about....293
Ageratum and Eupatorium, are they the same?....128
Alder, getting rid of swamp or spotted.... 18
Alfalfa....731
— seed....795, 811
Ampelopsis variegata....654
Angle-worms....649
Ant-swarms, to destroy....506
Apple trees, reproductive knarls on....811
Apples, barreling....346
— dried, buying....554
— for Virginia....779
Arbor-vitæ hedge, making....795
Arkansas Valley, about the....293
Artichoke, Jerusalem, about.. 635
Asparagus culture....811
Barometer, where to get a cheap, reliable.... 64
Beans....362
— pulling....779
Beaucarnea recurvata....314
Beech, Weeping....128
Bees, how far North, with profit. 18
— to transfer....554
— without a queen.... 18
Beet culture....176
Beets and carrots on muck soil. 18
Beetle, rhinoceros....442
— the grape-vine flea....474
Bermuda grass....160
Birds, Canary, destroying insects on....714
— — where to buy....234
— song, about....699
Black-leg in Cattle....824
Blue stone, blue vitriol and copperas....293
Bone-dust and barn-yard manure....270
— — in the orchard....811
— ground, etc....667
Bones, about....699
— cows chewing....522
— utilizing....779
Book on Farming....298
Borers, destroying....699
Botany, best work on....192, 426
Brahmas, show points of Light.746
Broom-corn, to bleach.... 83
Bulbs, Dahlia, wintering....362
Butter, flavoring....394
— from new milch and farrow cows....394
— hardening....314
Business College, Eastman's...522
Cabbage, club-root in....667
— insects, destroying....683
— raised from seed....795
Cabbage Fly the....667
Cabinet, a natural history....394
Cage-maker, name of a....234
Calla lily....490
Canary, what ails the....266
Candy, making hard-stick....683
Cape Jessamine, treatment of.330
Capons, making....250
Capon raising, book on....282
Catalpa, seeds of....751
Caterpillers, larva of Cecropia moths....618
— preparing by inflation....394
Cattle, Ayrshire.... 30
— black-leg in....378, 746
— book on diseases of....362
— Jersey, where to procure...160
Celery, keeping in winter....763
— incomprehensible growth...795
Cellar, a wet....394
Check, metal, for canning....234
Chickens, ailing....779
— and eggs of pure Dominique stock....128
Chickens, gapes in....330
Chinese yam, where to procure seed....160, 176
Cholera among poultry....490
Christ plant, the....202
Chufas....314, 426
— where for sale....218
— — to get seed.... 32
Clematis, etc., about....128
— Sophia, propagation of....570
Clock, "Cricket"....298
Clover, Sowing....160
Clubs, to Farmers'....511
Commission house, a reliable..282
Coal ashes mixed with manure.125
Cockerels, caponizing....746
Corn, cut-worms eating seed...266
— Egyptian....667
— for field culture....747
— seed from tips, middle and butts of ears....586
Country life, its beauties, books on....202
Cultivating Fruit under glass...511
Cow leaking her milk, to prevent....330
— Milker, Automatic....499
— troubled with snuffles....426
Cows, drying of their milk....426
— rations for milk....795
— spaying....746
— sucking themselves, to prevent....314
Cow's teat, hole in....795
Cows, the best breed for milk..458
Crab-apple, Red Siberian....192
Cranberries....426, 747
Cratægus Pyracantha....234
Cream, churning....442
Creamery, what it is.... 33
Currant bushes, where to get black.... 61
Cyclamen, unhealthy....231
Dioscorea, how to treat.... 48
Dipladenia Williamsii....160
Dog, an ailing....246
Drill, best seed....112
Ducks, Pekin, about raising....282
— Rouen and Aylesbury....522
Dynamite cartridges....731
— where to purchase....687
Æolian harp....474
Egg food....474
Eggs, Bantam, Silver Spangled.394
— destroying the fertility of..176
— soft-shelled....112
Engine, wind-mill, caloric or steam, which is cheapest for farm purposes.... 48
Eryngium Leavenworthii..144, 667
Estates unclaimed in Europe, catalogue of.... 80
Eulalia Japonica....442, 795
Euphorbia Cyparissias....731
European larch.... 64
Ewes adopting lambs....160
Experiments with Commercial Fertilizers....378
Eyes, diseases, in mare....779
Farming, book on....298
— in the West, small capital..683
Farriery, works on....683
Fence for overflowing land, a substantial....48, 64
Fertilizer, blood as a....234
— bone....362
— salt as a....250
— — on sandy soil as a....763
— soot as a....202
— wheat bran as a....618
Fertilizers, experiments with commercial....378
Fish for stagnant pond....795
Fish pond....779
Fistula....522
Flaxseed boiled, how much to feed a yearling....112
Flowers, queries about....649
— various, treatment....602, 795
— various, wintering....795
Fly, the cabbage....667
Fruit, cultivating under glass..811
— culture, book on....635
— dryer....314, 699
— queries about....602
— small, work on....218
— trees, information wanted..192
Fuchsias....522
Gapes in chickens, remedies for....330
Gas lime.... 80
— — and barn-yard manure...250
Gate-farm....282
— plan for a....192
Geranium, apple....458
Geraniums, flowering of....266
Geranium seed slow to germinate.... 64
Gilliflowers....426
Gladioli and dahlias....570
Glanders....202
Glass factory....202
Glaucium Luteum..128, 144, 667, 778
Goats, Angora....570
— raising and keeping.... 18
Grafting, water sprouts for....234
Grape culture....128
— cuttings, starting....234
Grapes, Aphides on....426, 474
— choice....618
— early Champion and Tolman's....779
Grape-vines, chip manure for..649
— — layering....442
Grafting wax....192
Grass, Bermuda....699
— crab, to exterminate....602
— fowl meadow....554
— meadow soft, (Holcus Lanatus)....699
— Muhlenbergia Mexicana....683
— seed for name....378
— — Hungarian, large yield of.763
— — where to get....113
Grasses....490
— for a permanent pasture....683
— for wet pasture....667
Green-House, a cheap....298
— — cost of a nice....378
Gypsum and lime, applying....234
— — plaster of Paris....128
Hair, coloring, recipe for....681
Hand-Mill for fine flour....160
Harrowing, about....192
Heaves....262
— in horses, remedy for....160
Hedge, honey-locust....522, 570
Hedges....202
Hens, best for winter laying....160
— broody food for chicks....250
Hessian fly....618
Hog cholera....811
Hogs affected with demodex....192
— diseased....160
— what ails the....746
Horses age by his teeth....490
Horse going blind....80, 112
Horses, heavy draught....699
— interfering....747
Horticultural school in Iowa, about....314
House, cheap and convenient..443
— plan for a $200 or $300....314
Hoyas, treatment of....330
Ice-House, an....362
Incubators....266, 443
Indian meal for cows....522
Insect, scale....192
Japan quince from cuttings....554
Lambs—ewes adopting....160
Lands in Virginia....218
Leghorns, are they good layers....426
Lice, how to get rid of....570
— plant, etc....283
— on cattle and hogs, remedy for....32, 112, 779
Life-insurance policies, borrowing money on....795
Lilies, water, wanted....570
Lime, about, will it pay....192
Liquidambar styraciflua....176
Locusts and barberries....378
Machine for clipping horses....202
Machines, thrashing, the best..346
Manure, dead animals as....234
— hen....112, 176, 699
— ingredients....490
— liquid, applying....192
Melon vines, cutting the ends..474
Mice eating harness....426
— white....586
Milk, carbonate of soda to
— rations for Cows....759
sweeten....731
— thick, cow yielding....346
— uniform flow for market....330
Milker, automatic cow....490
Mill-pond, use of a....266
Mole exterminator, is there a..683
Money at two per cent. per annum....731
Morning-glory, killing in field..474
Moth, the beautiful Wood-nymph....474
Mowers, lawn....298
Mowing machine, wanted a strong....234
Muck, the use of....654
— what is....458
Nephila Plumipes, spider....586
Nut grove, treatment of seeds for....795
Oats, Hulless....795
Oil-cake, where to purchase....667
Oil-meal, feeding....795
Oils essential, yield of per acre.202
Oleander, time to cut back....779
— when to bud....554
— white scales on....112
Onions, raising....442
Osage orange hedge, exterminating....795
Peonies, grafting....506
Peony seed, Phlox and Calla Lily....779
Paint, cheap....522
Palms, treatment of, growing from seed....378
Paper for bottoms of ships....763
Paris green, how to use....330
Passion vine....779
Pastures, salt and water in....490
Peanut and sweet potato culture....426
Pear blight....554
Pear orchard in grass or garden truck.... 48
Peat marsh, reclaiming a....176
Pelargonium seed, when to plant....128
Peppermint, spearmint and bergamot....346
Petunia, double-fringed....314
Petunias, cuttings of....570
Phonography and stenography.176
Phosphate of lime and superphosphate....667
Pine seeds, planting white....506
Pink, China....298
Pipe for liquid manure....218
Pita-wood....394
Plants, different, when to procure....298
Plants, effects of colored light on....346
— names of....144, 391, 522
— hedge....234
— house, propagation of....192
— sundry about....234
Plaster Land....160
Plows....586
Potato Digger....112
Potato, Beauty of Hebron....176
— Early Vermont....779
— Harlequin....426
— Seed, raising in a green-house....794
Potatoes, experiments with seed....378
— Irish saving....378
— Seedling....330
Potato-digger of the Future...824
Po'keepsie, something about...314
Poultry and Eggs for market..618
— book....80, 683
Poultry-House for 100 fowls.... 96
Prickly Comfrey....96, 731
Privet Berries....779
Pulvermacher Chain Belts, are they Humbugs?.... 80
Railroads, Elevated....551
Raspberries, planting from cuttings....506
— treatment of....699
Raspberry Hornet, where obtained....128
— Thwack....685
Reaper, Self-Binding....314
Register, how to....667
Roof, to cover with gravel....602
Roofing cheap....570
Root Crops, manure for....314
Rose-Bugs....426
Rose Bushes, trimming....218
Roses about....490
Roses, choice....685
Roup in Poultry, remedies for.394
Rural, bound volumes of....779
Savory, Summer....746
Sea-Wrack....667
Seed-Sower, Cahoon Broadcast Hand....263
Seeds, germination of....683
— how to plant those of F. S. Distribution....763, 795
Self-Binders....699
Setters, training....123
Sheep, best cross for mutton.. 506
Sheep, Leicester and Cotswold.250
Sheep on permanent pasture...268
Sheep Raising, Book on.... 96
Shell Marl.... 80
Ships, paper for bottoms of....763
Short-Horns or Durhams....160
Silk skeins, Dying....635
Smilax, treatment of....714
Snow-drops, planting....112
Solution, meaning of....522
Sorghum, feeding to horses....250
Spruce, Norway, wind-breaks250
— weeping, straighten'g leader.635
Sprain in coffin joint....554
Steamship Companies, N. Y....362
Stencil Plates for marking clothing....618
Stock, Paradise and Doucin....746
Stomach ailments....363
Store-House, Potato....490
Strawberries, when to plant....683
Strawberry and Gooseberry culture book on....602
Strawberry Bed, A Novel....649
Strawberry Mixing....298
Stump Puller....442
Stumps, blowing up with dynamite....266
— saltpetering....458
Subsoiling....160
Sugar making, sorghum....635
Sumach, about....282
Swans and Turkeys, white....346
Swine, Duroc....522
— nasal catarrh in....746
— to fatten....506
Tanks, liquid manure....160
Thistle, destroying the Canada.458
Thorn, white, propagation of..714
Thoroughbreds and Grades....763
Tobacco, hen manure for....814
Tree Wash....192
Trees, pruning pear....522
Trumpet Creeper, Tecoma Radicans....570
Turnip crop, ants eating....667
— — That....202
— the best for stock.... 32
Turkey, cock's harem....522
Turkeys, bronze....346
Vinegar, cisterns for....824
Verbenas, treatment of....667
Walks, cement....699
Warehouse, agricultural....346
Water, indications of, horizontal wells....202
Water Pipes....48, 160
Weight of Animals, live.... 18
Wells, foul air in....506
Wheat, Defiance and Lost Nation....683
— Diamond....522
— grains not forming....394
— insects injuring....394
— salt for....811
— Spring, applying fertilizers to....160
Weigelia, about....458
— spiræas, etc., propagation of....296
Wild Thyme, eradicating....176
Willow, Kilmarnock, when to bud....554
Wire-Worms....202
Wistaria, propagating the....458
Wood Organ, the....192
Worms in Flower Pots, remedy for.... 32
Yards, dry....250

VETERINARY.

Abortion in cattle....198
— — cows....504
Anthrax in sheep....263
— malignant....295
Appetite, poor, in a horse....264
Blindness in a horse, why?....603
Bots....533
Castrating pigs, gas coal tar for....662
Castration, carbolic acid in....166
Choking, to relieve in cows....697
Cow's death from unmasticated food.... 26
— — singular cause of....761
Cuts, gas coal tar for....662
Diseases, imaginary, of animals....375, 538
Docking lambs....358
— of animals....296
Fever, parturition....426
Fistula in horses....426
Hog cholera....761
Hollow horn....539
Hooks, horses or cattle....375
Issues, glands, on hog's legs... 43
Kin-pox....518
Lumpas....375
Lock-jaw in horses....199
Maladies in stock....457
Paralysis in swine....426
Red-water in cows....426
Ring-bone and bone spavin....457
Scratches in horses.... 86
Shoeing horses....328
Sprain in hip, horse....426
Sprained ankle in horse....294
Staggers, blind, in horses....457
Stock, ailing....265
Tender feet, horses'....508
Udder, swollen....633
Vertigo or megrims....569
Veterinary college, Necessity for a national....796
"Wolf-in-the-tail"....539
Wolf teeth....375

VINEYARD.

Champion, early.... 88
Champion, the....154
— what and where?.... 40
Concord No. 1....677
Gazelle....677
Golden Gem....677
Grape, culture of the....634
— diseases, phylloxera, etc.... 40
— grafting for hybridizing....229
— items....679
— notes from N. C....677
— problems in Ohio.... 40
— seedling....684
Grapes, evils of selling unripe..678
— for Alabama....679
— in Michigan, exp. with....678
— in western N. Y....679
— method of cultivating....678
— of southeastern Texas....678
— probabilities of American...406
— Rickett's....677
— T. B. Miner's culture of seedling....
— varieties of....677
— wild species of....678
Grape-vines, bone dust and ashes for....572
— — cuttings from....684
— — effects of frost upon....818
— — farmers failing with.... 39
— — grafting....441, 448
— — instead of cotton for northeastern Alabama....729
— — manures for.... 89
— — protection.... 24
— — select best varieties....173
Lady Grape in Europe....810
Lady Washington....556, 712
Mildew....684
— sulphur for....413
Muscadine....684
— experiments with....678
Prentiss, the....679
Rogers' No. 15....712
Scuppernong....634
Shelburne....679
Vitus Vulpina, Southern Fox..521
Waverly....677

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The Herdsman.

THE TENTH DUCHESS OF GENEVA.

It is just about a year ago that the Tenth Duchess of Geneva died. A sketch had been taken to enable the taxidermist to "prepare her head as a trophy" with some degree of truthfulness, and this sketch, as reproduced by the London Graphic, is copied above. There have been few more famous cows. The Eighth Duchess was actually sold for $40,600, but that was owing to a misunderstanding, and there was some compromise, and though Mr. Campbell got the full sum, the cow really sold for only $30,600. The Tenth Duchess, however, sold for $35,000 cash, which is the highest price ever actually paid for any cow. This cow was the eleventh in direct line from First Duchess by count (145), the cow bought by Mr. Bates at the Calling Sale in 1810 for 183 guineas. Tenth Duchess was sold at the Campbell Sale, at New York Mills, near Utica, in 1873, bought by Earl Bective, and sent to England. She produced in this country the Third Duke of Oneida, the Sixth Duke of Oneida, and Eighth Duchess of Oneida; and after going to England the Duke of Underley, the Duchess of Underley, and Duchess of Lancaster. The last three, with the Duchess of Oneida, are still in the herd at Underley.

The personal and family history of the "Tenth Duchess" is somewhat remarkable. Tradition ascribes the origin of the family to a breed of cattle possessed for centuries by the family of the Duke of Northumberland; but the actual records commence in the last century, when an ancestress of this cow passed into the possession of Mr. C. Colling of Ketton, Durham, England, who was one of the founders of the Short-Horn as a distinct and highly improved breed. In 1804 Mr. T. Bates of Kirklevington, Yorkshire, purchased one of the "Duchess" cows, and recognizing in her excellence and that of her male offspring the superiority of the family over the Short-Horns he had previously owned, he determined to obtain more of the sort, and at Mr. Colling's great sale in 1810, when 47 animals of both sexes and all ages, from 11 years downwards made the then unprecedented average of $700, he gave $925 for the two-year-old heifer "Young Duchess," afterwards called "First Duchess," a daughter of "Comet," ($5,000), and grand-daughter of the cow he had first purchased.

From that heifer, in the female line direct, sprang those "Duchesses" which have at different periods won the chief honors at agricultural shows, and for many years past commanded the highest prices at public and private sales.

Mr. Bates, while practicing to a considerable extent the system of "in-and-in-breeding," crossed his Duchesses, at different times, with other approved Short-Horn families, notably with those of Mr. Colling's Red Rose and Princess, thus combining what he considered three of the oldest and best Short-Horn families in the Kingdom. In 1853, at the Tatworth sale "Sixty-sixth Duchess" was bought, by Pecar & Morris of New York, for $3,670. Her descendants having changed owners in this country were finally dispersed by auction in 1873, when "Tenth Duchess of Geneva" was bought by Mr. Berwick for Earl Bective for the marvelous figure above mentioned.

She had here bred the bulls "Third Duke of Oneida," "Sixth Duke of Oneida," and the heifer "Eight Duchess of Oneida" bought also for Lord Bective, at the same sale, for $15,000. Her progeny in England are enumerated at the opening of this condensed sketch.

HOW TO ORGANIZE A STOCK FARM.

Some people are complete muffs at the undertaking, having no decision of character and no discernment as to the merits of one plan of buildings over another, and no judgment whatever to guide them in the selection of live stock. They will consult with various people, and be swayed one way and then another, till they get a medley of ideas, which produces confusion worse confounded than any in the brain of the hopelessly insane.

Having to purchase the animals of every variety, the first consideration,—after having put all the fences in such thorough repair as to prevent a possibility of any breach being made by unruly cattle, and after having provided good stabling for whatever requires keeping up,—is to select with care the cattle, sheep, etc., required, from such breeds as will answer the purposes for which they are intended. A great deal depends upon this first selection, for, as the ancestors of the purchased cattle or sheep were, so it is probable the progeny will be—consequently there are flocks and herds from which the worst creatures among them would breed better stock than the very best picked out of another lot. In addition to using every caution and being very particular about the foundation of the future herds and flocks, a good sensible system of rotation of crops should be acted on, in which course of cropping there should be every kind of food necessary for the prosperity of the different varieties of stock. Many Americans are totally ignorant of the great advantage attending system and forecast. These are the men who practice what they call economy till their cattle and sheep die of slow starvation, very few farmers here having any knowledge of high farming. But the high feeders who have well-bred stock gain every way, for they save a year in getting their young stock into selling condition, and bring their heifers into milk a year earlier, while their fat stock, being always of No. 1 quality, secures an extra price.

In commencing to run a good farm, it is also wise to choose the best and most trustworthy laborers that practical knowledge can enable a man to select, and then, when all is once straightforward, it is comparatively very pleasant to get along.

Imagine the difference between the condition of a man who has erected his barns in accordance with the opinions of a number of people, who has laid in a stock of cattle and sheep by yielding to the judgment of a man who does not know a thorough-bred from a grade; then picture to the mind another man who has judiciously commenced with horses, cows, sheep, hogs and poultry, of which not one among all the varieties but was undoubtedly descended from a long line of valuable ancestors, and who grows crops to feed so as to bring out every good quality, and who has barns which afford every comfort and convenience. A Working Farmer.

TENTH DUCHESS OF GENEVA.

A BARN FOR STRAW.

W. J. FOWLER.

One of my neighbors, an excellent farmer, proposes to build next season a barn 30x40 feet with 20 feet posts exclusively for storing straw. It will be built where the present stack stands, and he believes that the size named will be large enough to hold most of the straw on his 150 acre farm. What the barn will not hold may be stacked outside as at present. His idea is to keep the straw under cover and thus have it always easily accessible and in good condition for feeding. He believes that it will pay besides being a great convenience for wintering stock. The straw-barn will be set on a wall eight or ten feet high furnishing a basement which will give suitable room for horses and cattle in winter. In the center of the building or at one side there will be a tube, three feet or more square, through which straw may be thrown into the basement.

The upper part will be one room enclosing a solid mass of straw—forming in fact an enclosed stack. An outside ladder with doors on the side of the building at different hights will furnish means of ingress. The straw will be run by the carrier from the threshing-machine through one side of the roof, and be packed by "stackers" inside. Getting the straw inside so high a barn, is probably where my friend will find his chief difficulty. With the basement, the roof will be twenty feet or more from the ground. His barn, however, is on a side-hill, with basement under the grain barn, so that the stock will be on ground twelve or fourteen feet lower than the threshing floor.

With plain heavy wall and no inside compartments to the upper barn, the expense need not be large. The basement should be divided, both for convenience in keeping different kinds of stock and to strengthen the building. Such a structure is adapted to side-hills and sheltered locations, rather than to the level wind-swept prairie regions of the West.

One of its best features—the barn basement—may be secured by building the wall and stacking the straw over it. To save the wall from freezing, it should be protected from wet by a roof or by building the straw well over it. In a cheaper but excellent way, the same advantage is secured by extending straw stacks over rough sheds, furnishing comfortable shelter through the season, though at the expense of the straw. However, in many sections straw is of so little value that this loss is scarcely appreciable.

In some way a good supply of straw may always insure comfortable winter quarters for farm stock, and whoever lets animals suffer while plenty of straw and rough boards are at hand, is inexcusable.

The plan for saving straw in an inclosure built expressly for storing it, is only adapted to localities where straw is scarce.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

BY COL. F. D. CURTIS.

MISTAKES are teachers. When we looked over our sheep early in fall we found five ewes which we thought ought to be turned off. They had been such excellent mothers that they had been kept until two of them had lost their front teeth and the others were fully eight years old. The old ewes were put into a stable and a temporary rack made where they could be fed hay. There was a nice feed box for grain, and with a tub to hold drink, we said to ourselves "now we will fatten our sheep and have some first-rate mutton." We gave them plenty of clover hay,—the best kind of hay for sheep—and kept the tub full of water. No mistake about this. Then we began to feed them barley—about a gill each day. This was well enough, for we knew sheep must be fed only a little at first or they would get feverish and lose their wool, and perhaps get the scours. We had never stall feed sheep before. This was the way we had wintered them often, and they did well. The roots were not gathered or we should have fed them some turnips with the barley. By and by there was a load of corn ground in the ear to feed the pigs, and this meal we thought just the thing for our fattening sheep; so we commenced with the corn meal and as they ate it greedily we increased their feed to a quart each.

In a few days they all had the scours and before they got over it they had lost all they had gained and we lost all our trouble and feed. A neighbor offered us two dollars apiece for the four best ewes and we let him have them. With the one old sheep and a half dozen late lambs, we started another flock and another trial. They have been fed twice a day with corn meal, less than a pint each, all told. The old sheep is getting round and plump and the other day the hired man wanted to know when we should kill her as he wanted a quarter. Dividing the food into two messes, morning and evening, is a most capital idea, as the stomach does not get overloaded and then being a less quantity it is thoroughly digested. An animal will actually fatten sooner on a small quantity fully digested, than on a larger amount crowded into the stomach at one time. A pig may be fed all it will eat of concentrated food, but not so with a sheep or cow; grain must be fed to all ruminating animals in limited quantities. We once had a fat ox thrown into a chronic dysentery from which he never recovered, by being over-fed with corn meal. The man fed him six quarts twice a day, instead of once a day as we told him. Horses can be gradually fed up to a condition that they may be tied up to an oat bin and allowed to eat all they wish without injury, or the grain could be kept in the manger before them and they would only eat what they wanted. We have done so when horses were required to perform severe labor. It is a mistake to keep sheep, however useful they may be, until they are more than six years old. In fact as a rule, it would be better to fit them for the shambles at an earlier age. Old sheep take on flesh much slower than younger ones as the muscles are shrunken, all the tissues are more or less wasted and the blood thin and weak. Nearly the whole animal structure has to be renewed before they will fatten, and this is a cost which may be obviated by fattening when in full vigor. The same is true of old cows. It may be a question whether the advantages to be derived from these animals in the production of young do not compensate for the increased expense in fitting them for the butcher. This can only be so when the ewe is an extra good one. A sheep at four years of age has got its full growth, and after that produces a lighter fleece every year, unless extra care is had, and even then a ewe, after she has passed this age, will produce less wool annually. From these deductions and our own experiences, we are satisfied old ewes do not pay.

Many of our neighbors are letting their sheep run over the field and pick their living. They must be losing in condition, and besides they are injuring the meadows and pastures for another year. Sheep bite very close and when allowed to run in this way, they will eat off the crowns of the clover and other grasses. When this is done, the grass is apt to die, especially if the winter is an open one as this one bids fair to be. They get unruly, too, and next summer they will not forget it.

A box is a capital thing to put over a grapevine or any tender plant to protect it. When dirt is not desirable or handy or the vine is so shaped that it cannot be conveniently covered, a box is just the thing. Evergreen brush of any kind is also good and clean to use about the house.

The Ailantus tree has lost its popularity in the cities. It is not beautiful, but we believe its fame did not rest on this, but on a notion that it was healthy. Why, or how, we do not know. The odor of the blossoms is exceedingly disagreeable, and wherever they fall they make a great deal of dirt. It is a natural habitation for vermin, as silk worms are fond of its leaves. It may have had a charm on account of its oriental origin. We have been looking through all this and imagine we can see practical utility in its rapid growth and pungent wood. It will make good posts and rails. We have brought a score of self-seedlings, pulled up out of a little grass plat before a brown-stone front in New York, and, in an out-of-the-way corner on the farm they are planted. Here we will have an Ailanthus grove and wait and see if our imagination is not something more than a fancy.

We had a big heap of buckwheat straw which had been wet through and was partially rotted. It was in the way and against the warnings of Mr. PACKER and others, we had it scatte red over the rye. They said "it would smother the rye, better to spread it in the barn yard." The rye is on an exposed side-hill and needed, we thought, just this kind of a covering. It cannot smother it this winter and when spring comes why will not the buckwheat straw rot, and after serving as a mulch be so much manure to help the growth of the rye? Then, we save handling it over twice and this is quite an item.

A fine Derking rooster, weighing not less than six pounds, was dragged away by a hawk and killed. There has been a great deal of trouble with the depredations of hawks in the neighborhood this summer. The sly rascals sit quietly among the trees around the farm buildings and, watching their opportunity, swoop down with great force upon unwary fowls, catch them firmly with their claws, and carry them away with their wide-spreading pinions to some secluded spot where they tear them in pieces and feast to their hearts' content. They steal little chickens, and carry them to the tall tree tops where they have their nests, to feed their young. Guinea fowls are said to be an effective guard against hawks. When they see a hawk—and they seem to be more on the alert than other fowl—they set up a fearful screaching which either frightens the marauder away, or so puts other poultry on their guard that the would-be thief loses his game. We have never been without Guinea fowls until the past year, and this may account for the boldness of the hawks. We have now got a pair of Guineas to be prepared for next year.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

WINTER is really upon us hereabouts. The smaller brooks are frozen over, and there is every indication that the change from mud and water is to be a permanent one. Older men prophesy an open winter—constant changes from cold to warm weather, and the opposite. We sincerely trust not; for such weather is very productive of sickness—the prevalence of contagious diseases. With many men who *style* themselves farmers, the season's labor ceases at this time, and during the winter months they surround the kitchen fire nearly all the time, save that required to hurry through their chores and procure fuel—such persons never have a supply furnished before cold weather sets in—and consider that this is all they have to do during the time that mother earth is covered with her mantle of snow. A very erroneous idea it is too. To the practical, painstaking farmer the winter months furnish ample opportunity for the maturing of plans, in accordance with which the campaign of the coming season shall be conducted. He knows when spring opens just what particular grain shall be sown on his land, how many acres he can afford to drain, what fences need repairing or rebuilding, and how many more important improvements can be accomplished. The tools are all overhauled, repaired, and covered with a good coat of oil, the harness is washed and oiled, and missing straps hunted up, or replaced with new ones. He will also look over the year's account of income and disbursements, and on the result base his calculations for the ensuing year. This added to the careful and systematic management of stock, will insure him ample labor for the winter months, and perhaps leave a balance of time in which he can compare notes with his neighbors, and glean many useful ideas from their experience. Such farmers are the ones that succeed, the ones who look upon farming as a profession, not a degredation, who are contented with their lot and happy. They are not the ones who complain that "farming does not pay," who desire to dispose of their farms to remove to town, who remain upon the farm from necessity not from choice, who will never succeed in any business however great their opportunities or advantages, and who are a great drawback to the advance of agriculture in this or any country. We have too many farmers in name only.

Mr. MARCY was telling us, the other day, of an experiment with corn and wire-worms, which,—could we attach as much importance to the experiment as did he—will prove of great worth to us poor mortals who have these wholesale destroyers of the corn-crop to contend with. As a drowning man will catch at straws, so we seize with avidity anything that promises to rid us of this pest. At planting time, the seed was soaked in soft-soap, until the grains were well moistened, then rolled in plaster until dry enough to separate easily. The grains sprouted even sooner than when planted after the old manner. As soon as the first shoots began to show through the ground, a mixture of lime, ashes and plaster, equal parts, was applied, a tablespoonful to each hill, directly upon the young plants. Mr. MARCY assured us that not a hill was troubled or injured in the least, although the ground was full of worms and a field adjoining, planted the year before, had proved a complete failure owing to their depredations. We shall try the experiment next season, ourselves, should we plant corn on ground where wire-worms are known to exist.

During a flying visit through the counties of Tioga and Tompkins, we saw many fields of winter wheat having a very large top for this season of the year. Some pieces were lodged badly, lying as flat as though a roller had been applied; while others had been mown to prevent its jointing this fall. We consider, on the whole, late sown wheat the surest. Many farmers pasture their wheat in the fall, turning on their sheep. This must prove injurious, as no animal is as destructive to vegetation as sheep. While a cow will gather the outside leaves, sheep with their narrow jaws and sharp teeth, take the very heart, and while the broad feet of the former will only, in a measure, disturb the surface, the sharp ones of the latter cut up and destroy many of the plants and transform the field—if suffered to remain long—into a mire-hole, especially when the season has been so rainy as the present one.

We raised a large quantity of pumpkins among the corn this season, and calculated that they would prove beneficial for milch cows, but after feeding nearly all of them, concluded that pumpkins would diminish rather than increase the flow of milk. We ceased feeding, supplying in their place corn-stalks, and the result proved conclusively that farmers should feed pumpkins to their young cattle, but reserve for milch cows all their stalks. A neighbor informs us that his cows went nearly dry before his crop of pumpkins was exhausted, but regained in a measure the accustomed flow when corn-stalks were substituted.

[Were the seeds taken from the pumpkins before feeding them?—EDS.]

A farmer of our acquaintance keeps sheep but to my mind is unwise in his management of them. We have often known them to be placed and left to remain for weeks in a pasture where no living water could be found, and obliged to depend upon the dew for drink—note the consequences. The sheep are poor, small-bodied, and thin-wooled. Those that formerly sheared five pounds of wool now shear two and three. This does not look to me like progress in agriculture. There is no animal—domestic animal at least—which will drink as often as sheep. Plenty of salt, a large range, and fresh water, they must have, to thrive. A barrel of salt secured in the pasture, one head removed, so that the animals can have free access to the salt, is our plan: others of course may think differently. We are safe at least in saying that the man who advocates the doctrine that sheep require no moisture save that obtained from the grass during the night or early morning, should not take upon himself the responsibility of their care. We have found beans to be the best of grain for sheep. They increase the weight and quality, I think.

We have learned a new mode of cultivating potatoes this season. A shallow furrow was plowed, in which the potatoes were dropped, two pieces in a hill, three feet apart. Another furrow covered them nicely. The third furrow from this was planted in a similar manner, and so continued, dropping potatoes in one furrow and leaving three until the field was plowed. They came up rather slowly but grew finely, and this fall showed a good crop. Rather the lazy man's method, some may say, but a very judicious one we think in a dry season. We always have planted and probably always shall plant our potatoes deep. They do not require as much hilling, and are not as liable to rot. A friend has a novel method of heading off the Colorado beetle. He plants alternate rows of corn and potatoes, claiming that the "bugs" cannot find the latter if thus planted. The plan seems doubtful to us, yet he says he is entirely satisfied with the result.

Gather the autumn leaves and mulch the strawberry beds. A little fine manure scattered over them will keep them in place and protect the roots of the plants.

AGRICULTURAL NOTES FROM CALIFORNIA.

WM. C. L. DREW.

NOVEMBER has come and gone, and half of December is nearly among the days that are past, yet the sky remains clear and bright, no sign of storm mars our spring-like days, the air so calm and still, has hardly enough motion for windmill purposes—such is the state of the weather in the home of the writer.

In October and the first week in November we had a few gentle showers, sufficient to lay the dust of summer, to start the plow in the mellow soil, and to cause dame Nature to put on her robe of green. With the first rains the California farmer brings forth his plow, and from that time to the following April it is constantly busy, now at work in the field, then in the garden, a short visit to the orchard, and so on until its work is done.

The grass in many places is nearly strong enough to give abundant feed to cattle: throughout the greater portion of California, the grass remains all through winter, green and fresh. Sowing of grain, principally wheat, barley and oats, commences as soon as the soil can be prepared in the fall, and continues to April or May, all through winter, and while our sister States of the East have on their robes of white. This season has seen an immense amount of grain sown in California. Many farmers looking for early storms, sowed their grain in the dry dust before the early showers; the grain thus sown in many sections of the State is in splendid condition; in many fields it already stands six or seven inches high, a perfect mat of green. Seed sown soon after our first showers, owing to the gentle weather we have since had, has germinated freely and quickly, and is now in splendid condition. The crop harvest of next season will be an abundant one, if the present condition is any criterion of the future.

But not to the farmer alone is this a busy season in California; the horticulturist and florist have also their work to do. Trees are to be transplanted, for this is the most propitious season for that work in our State. Blackberries, raspberries, strawberries and other small fruit must be trimmed and cultivated. To the florist this is a season of work; beds are to be prepared, fertilizers to be applied, perennials to be transplanted, stock to be increased, while many other duties demand his attention.

To make this a happy time, all that is now needed is a real good downpour; for this, however, there is abundance of time. Many complain about another hard season, but a good rain will relieve all apprehension.

El Dorado Cal.

Farm Economy.

FARM NOTES.

S. RUFUS MASON.

PAY OR NO PAY.

DOES such and such a crop pay, or does such a kind of stock pay? has become a standing query. Now Pay is the difference between a certain amount of outlay and a certain amount of income, and it is only when the income is the greater that it is said to pay. In all investments on a farm, it is very necessary to hold the money outlay in check, and make up the deficiency with extra care and brains. The slip-shod mode of management so common, never pays, and all "slip-shoddies"—to coin a new word—say that nothing pays, and it is only from that class that we hear the cry, "farming don't pay." A careful man makes everything pay; he bestows care upon every operation, and during every moment of that operation. His mind is totally given to his business, which he conceives to be to produce the best possible article. It is not the crop or stock that with some does not pay; it is the man that doesn't pay (attention understood, as we used to say in our parsing lesson). The fact is, when anything on a farm doesn't pay, it is because it has had no chance.

The moment a man finds that his labor doesn't pay, let him increase the amount of outlay in that line; that is to say, let him increase his capital by the addition of brains, care, perseverance and courage, and the pay will come.

Producing a great quantity of a thing overstocks the market; but producing a high quality always increases the number of buyers. The

market is short, the prices run up, and then "it pays."

FOUL STOMACHS.

Stock of every description, from overfeeding, want of change of food, and from scanty feed, get out of order, and the condition of the stomach is the first visible symptom. Charcoal is a corrector of all such incipient signs of disease, but in its usual state it is also the least palatable article that can be given to animals. In the North-west, where corn is so cheap as to be freely used as fuel, we have charcoal in a very palatable form. All kinds of farm animals eat it readily, and given once a week, it maintains a sweetness of the stomach of the most beneficial character. Those who burn corn, always have a full supply of part-burned grain of corn in the ashes, which they use as a corrective; but in the East, where corn is too costly for fuel, it will still pay to burn sufficient at times, to be used as a corrective. Poultry and hogs eat it to the last morsel, and thrive well on it.

WHEAT FOR FLOUR.

Many farmers grow only wheat enough to supply bread to their families, finding stock raising more profitable. To such, especially if they have a fancy for extra fine bread, there is a difficulty. Soft wheat does not make the best bread, neither does hard wheat. Now for all such, a mixed crop would seem desirable, as the best flour in all respects is made from the two kinds in about equal parts. The question then arises; what soft wheat ripens at the same time as some good hard variety? The two could be mixed together, and both be ready for the sickle at the same time. As this State only produces spring wheat, that is the only kind here in question.

SWEET CORN.

We are just getting in our crop of sugar corn for feed. We grow about fifteen acres of it, and find it the very best food for milch cows, mules, hogs, and poultry. It is not oily or heating, like yellow corn, is more fattening, and we have not an animal on the place that will touch the yellow if the sweet corn is to be had.

We plant April 25, begin to feed it green to cows and pigs by the first of July, have it ripe by August 1, and use it all the year round in preference to any other. This crop is but little known to farmers, but is the most valuable one grown for home consumption.

EARLY CUT HAY.

Prairie hay is seldom cut before September in this State. Of course, it is fully ripe, and often too old for milch cows, calves and young stock. This year it was convenient to cut about twenty-five tons in June, and although it settled and shrunk heavily, it is without exception the best hay for all purposes I ever saw; and it proves to be so good that the loss in quantity is more than made up in quality. I have also forty-five tons cut in the last of September and beginning of October, but it is not relished as well as the June cut. It will probaly, however, be very useful in the spring for hard-working teams.

THOUGHTS FROM A FARM.

LET THE FARM REMAIN UNKNOWN FOR THE PRESENT AND THE WRITER REMAIN INCOGNITO.

FARM SUPERINTENDENCE.

THINKING over the old truth that "a man cannot serve two masters," it would seem as if no man should arrange his business so that the workmen would have more than one over them. The thinker thinks if a man of means engages an agent to do business for him, there should be no interference with this man in charge, beyond telling him what views the principal takes of the general management, and what arrangements he desires to be carried out, and then let the business be done without any confusion and unpleasant consequences arising from two people giving orders on one estate.

It is thought many gentlemen are brought to be disgusted with farming in consequence of the number of men who endeavor to sponge upon them in the way of buying for them and persuading them to buy. Forty years ago, when the writer was a young man, many men tried to impose on him by this means, but he thought the whole fraternity were a set of leeches and used his own judgment, and in doing so could pick their flocks or herds the same as he would any other. There is not the least doubt about the miserable failure resulting from business conducted in accordance with the opinions of TOM, DICK and HARRY, or of the certainty of being robbed and cheated by drovers, for the cattle they have are almost always those sold by other people for some fault.

Agriculture can never be profitably and easily conducted till markets are established on the same plan as in England. There any man can find what he wants to buy, and there also any man can sell aught; but in the United States a man has to ride round a long way to find what he wants or go to city markets, a long way off, unless he does what is worse—orders or buys of the drovers, who invariably take advantage of farmers by sticking out for extra prices for the worst animals, which are less salable at the end of their journey, while those that are valuable they will tell you are bespoken or sold.

The Apiarian.

EGGS LAID BY QUEEN BEES.

MR. DOOLITTLE said, in his letter on bees, in the RURAL of Dec. 1st, 1877:—"A queen will lay about 700,000 eggs during her life-time, and usually lives four or five years; but under the present system of management we coax the queens to lay all these eggs in two or three years." And he claims that his great success in obtaining box honey is owing to his thus "coaxing" the queen bee to lay "700,000" eggs in two or three years.

Let us see if this can be done. He uses a hive with frames 10¾ inches square inside, and nine frames to a hive. This gives 1,930 square inches of comb, by rating the combs as 10½ inches square, which is all that they should be, practically. Now, it is right to estimate the space in which eggs are laid at *one-half* the superficial area of the combs, at the hight of laying, or 900 square inches; and as laying averages, not over *half* of this space, or 495 inches will be occupied with brood at *one time*. It takes twenty-one days for the brood to mature from the egg, and a full square inch of comb contains twenty-five cells, so that a queen produces, at most, only 13,250 bees in twenty-one days; and the time devoted to laying, in a season, is mostly from about April 15th to August 1st, or time enough to produce five broods, each of 13,250 bees, or, in all, 66,250; and I claim that this number is as much as queens can be made to average, with all the "coaxing" that can be devised. Bees are produced, more or less, from January to November, but as each generation is not of full numbers, the above estimate is a liberal one.

Now, according to Mr. DOOLITTLE, that a queen lays "700,000" eggs in four or five years, she would have to lay about 175,000 a year, as queens seldom lay much after the fourth year; and, on his "coaxing" plan, about 250,000 the first and second years, at least, as she must, under a high "coaxing" pressure, fall off considerably the third year. This great production of eggs I claim to be *impossible* for any queen to lay, under any circumstances, and particularly so in the hive that Mr. DOOLITTLE uses. A good-sized swarm consists of 12,000 to 15,000 bees, and the best average cannot exceed two such swarms. Then, allowing that as many more bees are reared in a season that remain in the hive till they die, we have 60,000 bees as the utmost average limit of annual laying, and about 240,000 during the life of a queen.

Mr. DOOLITTLE has sent me, at my request, a statement of the number of hives that he had each year, from 1873 to 1877, with the yearly product of honey, as follows:

1873, 29 hives	2,153 lbs.	honey.
1874, 50 "	3,691 "	"
1875, 46 "	4,878 "	"
1876, 65 "	3,550 "	"
1877, 67 "	11,177 "	"
257 "	25,222 "	"

According to this statement, he has averaged about 100 lbs. of honey per hive (mostly box honey), for five years, or a cash income of about $25 per hive yearly!

But there is another side to this matter. It appears that Mr. DOOLITTLE has been in the habit of counting in "practically" only his best families of bees. For instance, he admits that in June, 1877, he had 80 hives of bees, but "practically" only 67. Then he puts down his bees in 1876 at 65 families, while he wrote to the Bee-Keepers' Magazine, as per June No. of that year, that he had 99 families!

But I'll drop the subject now, admitting that even if Mr. DOOLITTLE did select only his best families to count "practically," he stands in the foremost rank of successful bee-keepers.

T. B. MINER.

Pomological.

THE PRIZE PLUM ORCHARD OF MICHIGAN.

PROF. W. J. BEAL.

THIS orchard belongs to J. G. RAMSDELL, Traverse City, and contains 700 trees, set twelve and a half by sixteen feet. Two hundred of those have been planted six years. Two hundred have been planted four years; and three hundred have been planted three years. They are all on plum stock. Very little pruning has been done. Some hoed crops have been planted and once a crop of buckwheat on a part of the orchard late in the season. The buckwheat appeared to injure the trees. For a part of the time, about some of the trees, Mr. RAMSDELL had sown half a bushel of hard-wood unleached ashes to a tree. These have produced an excellent effect in the color of the leaves, the growth of the tree, and very likely added to the quality of the fruit. This spring the ground was harrowed once, and then the weeds were allowed to grow except under the trees, where the ground was kept clean to make it easy to pick up the injured plums, as they fell. The owner usually cultivates quite late in autumn to aid in killing the climbing cut worms which are very annoying on his farm. To prevent worms climbing any of his young fruit trees, and eating off the buds, he places a circle of tin like a bottomless cup about the trunk. Each end of the strip of tin has a lock at the end, by which the ends may be locked into each other like two hands. The lower edge of the tin is pressed into the soil and the rest projects two inches or more above. The worms cannot climb the tin and they do not know enough to dig under. The trunks are clean, sound, and handsome. There are a few borers which are hunted with a wire and knife. They are cut out or punched to death. To keep away curculios, the fallen fruit is daily picked up and destroyed. He has tried the chip process, but does not think it worth using on his farm. He runs a hopper-shaped canvas under the trees and jars them with a forked stick placed here and there on the main branches. The jarring is begun as soon as he finds insects, and continued as long as he finds enough to amount to anything. There is no other orchard in the vicinity. He jars only once in about three days. The owner thinks that next year, the curculio may be kept in check, simply by picking up the fallen fruit. The insects work the worst on the thin-skinned plums, but would doubtless destroy all alike if there was no chance for a choice. Of varieties, he has most of Washington and likes it best; next comes Jefferson. If now planting a hundred trees, he would set twenty Washington, twenty Jefferson, ten Lawrence's Favorite, seventeen Bradshaw, seventeen Smith's Orleans, sixteen Lombard, thus selecting about equal quantities of yellow and purple varieties. From the two hundred oldest trees, he took, three years ago, about fifty bushels, the next year seventy-five bushels, this year the estimate was one hundred and fifty bushels on these two hundred trees. The average price at Traverse City, has been four dollars a bushel. The soil is generally sand and gravel, somewhat uneven on account of the hills and rolling surface. The sand abounds in small particles of lime; even the gravel contains a large per cent of limestone pebbles. Near one of the best trees, we dug down four feet, and found a reddish compact sand soon after leaving the surface. It is generally thought that clay on heavy soil is best for plums. Perhaps in the Traverse county with a climate so congenial to the plum, a clay soil is not so important as in warmer latitudes. Time alone will tell whether trees will thrive and bear to a good old age in this soil. There is certainly now every indication of health and proper growth, such as we should look for in trees expected to last for many a year. On another farm, not far away we saw three sound plum trees which we were told had been standing seventeen years.

Horticultural.

LICE ON WINDOW PLANTS.

WILLIAM FALCONER.

GREEN FLIES are extremely troublesome to most soft-wooded plants, as Pelargoniums, Pinks, Primroses, Heliotropes, and the like, as well as to the young and growing points and flower-buds of Roses, Bouvardias, Fuchsias, &c., and how to effectually rid ourselves of this pest, is a desideratum. I commend simplicity and energetic application—washing with soap and water and a sponge. Gardeners fumigate their greenhouses with tobacco trash to kill green-fly, and amateurs sometimes try it too, and scorch their plants; hence I advise ladies and others having a few window plants, not to fumigate them. Neither use whale-oil soap nor any other preparation whatever, because it will do little or no good but, perhaps, much evil. Take the fly-infested plant to the sink, lay it on its side, so that the pot may rest on the wood-work and the crops or plant be over the sink; then place a basin of clean water softened by common soap, under the crops, and with a sponge and plenty of water, remove every intruder. Turn the plant over and over, till it is certain not a fly is left, and if this washing be done carefully, calmly and earnestly, only the work of a minute, it is thoroughly effective and in no way deleterious to the plant. Now that the plant is clean, place it aside, away from the unclean, and take the rest, one by one, and wash them in the same way.

Don't turn on the water and hold the plant under the tap; that is a clumsy, injurious, and ineffectual plan. Neither use your hands as if a cat went a-fishing—afraid to wet your fingers; but roll up your sleeves and go to work with an energy worthy the cause, and in ten minutes you will accomplish as much and better work than you can in an hour by either the tap or clean-fingered policy.

SCALE.

If the plants be infested with scale, the sponge will erase them from the leaves, and a sharp-sided piece of wood or the back of a knife may be used to scrape them off the stems and branches, and a sharp-pointed—with the point a little dull, so as not to scratch—stick to fetch the tenacious vermin out of crevices in the bark and elsewhere, leaf-axils, and about buds. Use the sponge after the scraper. If there be any big brown scales that look dry, and from which, when you displace them, a shower of dust or "meal" (eggs) is scattered, be sure to remove these with the fingers so carefully as not to drop or disseminate an egg, and squeeze all out of existence between your finger and thumb.

THRIPS

are little black insects that suck the life-blood of plants, and do more mischief in a week than the same number of any other "flea" will do in a month. They breed innumerably and in little colonies on the under sides of the leaves. The young ones are green and yellowish-green. Gardeners fumigate them to death, or dip the infested plants in water impregnated with whale-oil soap and tobacco-water. If the mixture be not too strong and the plants be syringed with or dipped in clean water immediately afterwards, the cure is good, and no evil is done; but if the mixture be too strong, then the leaves suffer as if they were scared or blighted. Therefore, for window plants, I must recommend for thrips what I do for green-fly—washing with soap and water and sponge. At the sink this washing is good enough, but in the green-house it won't do, as many thrips would escape to propagate their species and perpetuate their work. Consequently, I would recommend in the case of greenhouses, where dipping or fumigating is not practiced, to bruise to death with the fingers every thrip that can be seen and wash after bruising. When fully matured, they are such hard little customers that the sponge won't kill the half of them.

MEALY BUGS

are known at a glance, and the washing method is the cure for them also. But I must advise that all their nests of eggs be squeezed between the fingers, so that none escape. Mealy bugs often secrete themselves about the leaf-axils, flower-heads, growing-points, or any interstice that may occur between the root and apex; and if there be any stakes or strings used, bugs will be there if they be anywhere. Then the stakes and tiers should be removed and replaced by new ones. The sponge cannot unearth the bugs when they get into crevices and between flower leaves and "down the throat" of some growing leaves, and then a bug-brush is necessary. A piece of stick like a pencil, with some hair wired to it in brush-fashion, is all that is necessary. A little paint-brush is not of much account—the hair is too soft. We want something stiff, like the hair of an old sweeping or hand-brush, to ferret the vermin out of their holes. Tobacco smoke has no effect on them. Diluted kerosene or alcohol is certain death to those it reaches, and in the case of Cactuses, &c., where neither sponge nor brush can sometimes reach the invaders, these liquids may be beneficially used; but for anything else, I denounce their adoption as slow work, and in unpracticed hands, also most dangerous work.

RED SPIDERS

are most minute and destructive insects that increase multitudinously, and voraciously attack Abutilons, Roses, Smilax, and some other plants, and are usually the result of failing health or a dry atmosphere. The cure is repeated sponging; and the prevention is occasional sponging, frequent syringings, and vigorous plant-growth. Gardeners employ powder-sulphur painted on the hot water pipes or on boards, slates, or walls facing the sun—but inside the green-house, of course—to help to destroy this pest, but woe to plants and insects alike, if the pipes get much more than milk-warm.

Now, supposing all our plants are newly-washed and perfectly clean; let the pots be washed too, and any "green stuff" on the surface of the earth they contain be removed, and drooping branches neatly staked and tied; then, after washing the window-sill or stand, replace our plants in position, and we shall be pleased with our hour or half-hour's work.

Cambridge Botanical Gardens.

GARDEN EXPERIMENTS.

I AM especially interested in the RURAL experiments as I have experimented considerably myself. Of a great variety of beans I have decided that the white-seeded German wax and the

Marrow are the best dwarf beans, and Caseknife, and what is here called the Pole Cranberry Bean the best Pole beans. I shall raise no more Early Feejee, Valentine, Black Indian Chief or Giant Wax, because the beans that are left after picking the shells, are not fit for baking dry in my opinion. I have an early kind of Pea Bean that does the best, grown in among the corn. The Yellow Chit sells for two cents higher per quart than any other kind, but it does not yield as well as the Pea Bean in the corn. I can make more money from an old garden and under Apple and Pear trees if beans are planted there, using ashes in the hill. The white and scarlet running beans make a nice show planted together, the white and red blossoms side by side. They yield well too and I consider the white better for use than the Horticultural.

The Golden Trophy tomato here grows large, irregular shaped with the stem sunken deep, few on the vine and a little late. The Green Gage is a small, smooth, yellow tomato, but neither of these or the Conqueror does so well as the Canada Victor with me.

The Early Rose potatoes are running out and I have tried sixteen kinds of new ones to get an early kind to take its place, but I have not got it. Bresee's Prolific, Snowflake, Genesee Co. King yield the best.

Grapes are very abundant this fall worth two cents a pound. The Concord does not ripen every year. I like the Adirondac and Hartford the best.

The Turban is the best fall squash and the Marblehead the best winter one. Splendid weather now, no frost; everything ripening well. G. W. CRANE.

Candia, N. J.

MUSK MELLON.

Two years ago we procured seed of all the novelties which were at that time obtainable, and tested them in the Rural grounds. With the exception of the "Green Climbing" Melon, so few ripened, and these so inferior in taste to old sorts, that we did not attempt any experiments last season.

The Green Climbing is a small, sweet melon, in no way superior to the Nutmeg.

English horticultural journals are at present praising the melon of which the accompanying is a portrait from a photograph.

It is described as being one of the deepest fleshed melons, the seeds occupying the "smallest possible space." The flesh is green, moderately firm, yet very juicy, ripening back to the rind "leaving it no thicker than a sixpence." The flavor is said to be unequaled, the plant vigorous, "the original one the past year having ripened four crops, in all twenty fruits."

We have only to call the attention of our seedsmen to the above novelty as being at least, worth a trial in this climate.

Arboricultural.

UPING RHODODENDRONS.

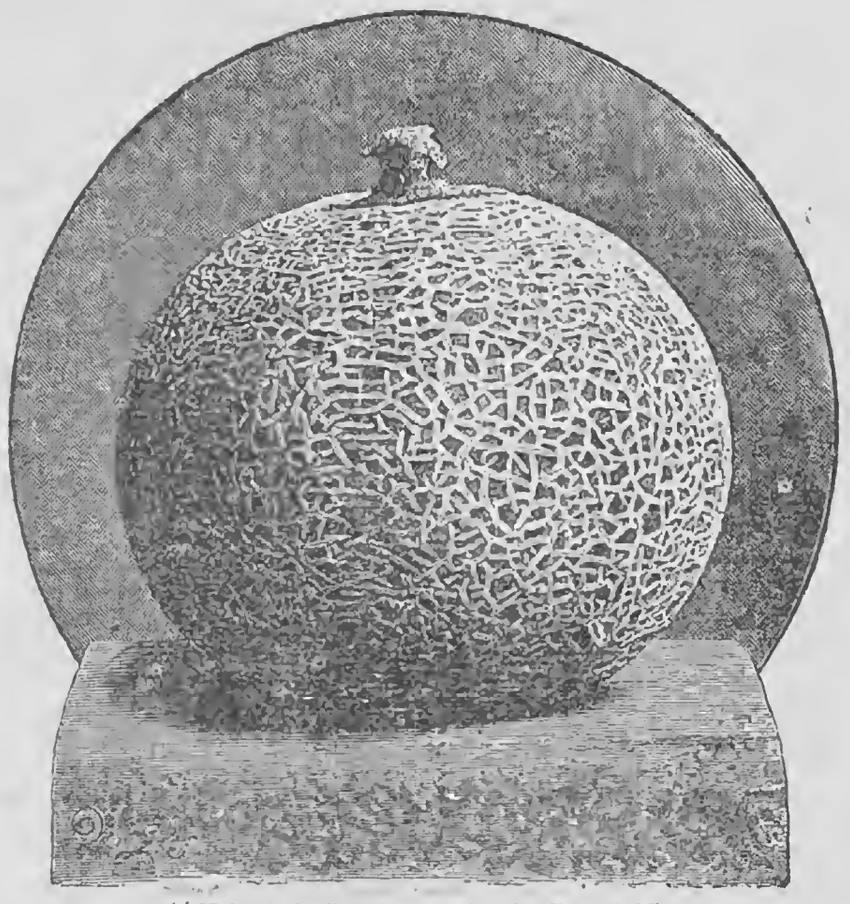
SAMUEL PARSONS.

WE propose to say a word on this apparently simple subject, not because we question the skill of many who execute such work, but for the purpose of correcting some prevailing errors that are apt to mar the result. It is a common remark of people proposing to plant, that they do not wish to crowd their limited space. The answer that a thinning out of overgrown trees and shrubs, after a period of ten or fifteen years, will remove all difficulty and permit enjoyment, during the meantime, of many more plants, does not satisfy. Large trees are wanted at once, and in such limited quantities as will remain at convenient distances for a life-time. We do not say that people are conscious of just such desires, but that their remarks give this impression. As a result of this feeling, trees are planted, hap-hazard all over the grass, without regard to definite plan or tasteful arrangement, and, above all, without attaining those long vistas and sweeps of pleasant turf which no lawn can afford to lose. In a few years, this hetreogeneous mass of foliage requires the sharp use of the ax, and only the greatest judgment and skill can develop graceful groupings out of the existing chaos. Of course, the chief lesson to be drawn from all this is, that the planter must have a well considered plan before commencing his work.

As the subject of general grouping, however, is quite a wide one, we will content ourselves, at present, with making some practical suggestions as to the formation of a very striking and effective group on the lawn, that of Rhododendrons, and indicating thereby something of the manner in which general grouping of trees should be studied. We have all experienced much pleasure, now and then, on observing a charming bit of landscape in an opening or edge of woodland. No analysis of this effect is usually made. We feel a thrill of delight and pass on; but if we will examine more closely, it will appear that the grouping of color and form is arranged on a definite plan of its own, but varied and shaded in a very irregular and exquisite style.

Now Nature does this work so well that we cannot do better than follow her lessons. Our Rhododendron groups in the woods wander down the banks of streams in masses both picturesque and attractive, but devoid of all formality. In a similar manner, the artificial group should be constituted. The outline of the bed should be varied and graceful, and not oval and circular except where absolutely necessary. All tendency to formality and sameness should thus be entirely avoided, and either a bank of foliage and flowers sloped upwards from the eye near a wall or solid background, or a still more irregular mass formed by placing, here and there, a larger specimen in the middle, graduating either way with smaller plants.

A good eye for color and knowledge of the appearance of different kinds will enable any one to contrive an arrangement of various hues that will enhance the beauty of each variety, and improve the general effect. Neither should the plants be huddled together to obtain at once the fullest effect of mass, but placed three or four feet apart according to size, so that, for several years at least, breathing space may be allowed without at the same time losing the compact appearance proper to a group. We have here only made certain suggestions relative to the grouping of Rhododendrons, but there are principles underlying even so limited a subject, that will bear much wider application. Indeed, too little attention is everywhere given to grouping trees on really sound principles of art.



"EXQUISITE" MELON.
(From a Photograph.)

Field Crops.

FOOD RESULTS OF THE CORN CROP OF THE UNITED STATES.

POSSIBILITIES OF BEEF, BREAD, AND OTHER STAPLES FROM THE CROP OF A SINGLE YEAR.

CONRAD WILSON.

IN a former estimate, published in another paper, giving the amount *per acre* of the food staples resulting from corn, I have already shown that the grain of this cereal, as compared with the stalks, is very nearly in the proportion of two to three by weight, and as two to one, in the value per acre; or, in other words, that a bushel of corn weighing sixty pounds, represents a product of stover equal to ninety pounds, and that when the grain is worth eighty cents per bushel, the stover producing it should be worth forty cents. From this it appears that an acre of corn amounting to seventy bushels, would give the following results:

Weight of grain,	4,200 lbs	Value of grain,	$56.00
" " stalks,	6,300 "	" " stalks,	28.00
Total weight....	10,500 "	Total value....	$84.00

Now, if we apply these estimates to the *entire corn crop of the country*, (which, according to the average of the last three years, is equal to abont 1,300,000,000 bushels), it will present the following figures:

Weight of grain	78,000,000,000 lbs
" " stalks	117,000,000,000 "
Total weight	195,000,000,009 "
Value of grain	$1,040,000,000
" " stalks	520,000,000
Total value	1,560,000,000

If we now estimate the entire value of the crop in terms of the grain; in other words, if we take, as in the former estimate, seventy bushels of the grain as equivalent to 100 bushels, when the stalk value is added, we then have 1,859,000,000 bushels, as the measure of value for the total crop, according to the standard of fifty-six pounds to the bushel, at over 1,700,000,000 bushels, on the basis of 60 pounds to the bushel.

Let us now see what amount of each of the leading food staples of this country the yearly corn crop is capable of producing separately, according to the above calculation.

The feeding value of corn, for the purpose of this investigation, may be proximately estimated by taking

1 Bushel of corn as equivalent to	8½ lbs	of Beef
" " "	15 "	Mutton
" " "	15 "	Pork
" " "	6 "	Butter
" " "	120 "	Milk
" " "	120 "	Corn Bread

Without claiming that these figures are rigorously exact, they are still not far from the average experience of farmers. In fact, they are every year surpassed, and some of them greatly surpassed, by the achievements of successful men. But taking the figures as here given, it will be found that the corn crop of the United States, when measured separately by these staples, is capable of producing either of the following food results:

Beef	14,450,000,000 lbs
Mutton	25,500,000,000 "
Pork	25,500,000,000 "
Butter	10,200,000,000 "
Milk	204,000,000,000 "
Corn Bread	204,000,000,000 "

Assuming the population of the United States to be 45,000,000, the above products, if distributed equally among the people, would give to every man, woman, and child in the country either of the following amounts of food: 321 pounds of beef, 566 pounds of mutton, 566 pounds of pork, 4,532 pounds of milk, or 4,532 pounds of corn bread.

Having thus estimated the total corn product separately for each of these staples, let us now suppose the crop to be so divided as to apply one-half of it to the production of beef, and one-eighth each to the production of mutton, pork, milk, and bread. The result would then be a greater variety of food, while the relative proportion of each kind would supply a larger amount of nutriment than either kind separately.

The entire crop, when thus distributed, would be sufficient to furnish annually to each inhabitant the following variety and amount of food: 160 pounds of beef, 70½ pounds of pork, 70½ pounds of mutton, 566 pounds of milk, and 566 pounds of corn bread. Total weight, 1,433 pounds.

Finally, if this food were divided into daily rations, it would be found sufficient to furnish to each inhabitant of the whole country 11 ounces of corn bread; 11 oz. of milk, and 6 oz. of meat, making a total of 28 oz. daily for 800 days.

But the proportion of nutriment contained in this ration is quite beyond the ordinary requirements of an average population. Even in the case of able bodied men, a less proportion of muscle-forming food has been found sufficient to maintain their strength and weight unimpaired. Prof. JOHNSTON has cited the experience of some institutions in Scotland, from which it appears that more than two-thirds of the inmates either maintained or increased their weight on a daily ration of seventeen ounces each, while in the present case, the ration indicated amounts to twenty-eight ounces each for the entire population, including children and infants.

If then, this ration were reduced to the standard quoted by Prof. JOHNSTON, it is perfectly clear that the total food product resulting from our corn crop would feed the people of the whole country, not for 800 days only, but for more than 1,200 days. Is there any other country on the globe in which such an amount of food and of such variety, can be produced in a single year and from a single crop? If there is, the fact is well worth knowing, for the subject is one of more than usual interest, and prospectively important to the human race.

Entomological.

THE COLORADO POTATO BEETLE.

PROF. CYRUS THOMAS.

CARBONDALE, Ill., Dec. 26, 1877.

I HAVE just received from Dr. HAYDEN, the U. S. Geologist, colored figures of the Colorado or Ten-lined Potato Beetle in its various stages, and of its work as it appears to our Dutch friends across the water. It came over in a letter from G. JANSE, conservator of the Royal Society of Zeology, Amsterdam. These figures, although perhaps slightly erroneous in some minor details are nevertheless very good, and sufficient to enable anyone to determine the species. I mention this fact as showing the way they go to work in Europe to prevent the progress of a dangerous insect enemy; to wit, by making it thoroughly known to the people.

And now that I am on the subject of this notorious species, I wish to call attention to a part of its history which appears to have been overlooked by recent authors, even those who claim to give it fully.

On the 7th of July, 1861, Mr. "J. E." (afterwards ascertained to be J. EDGERTON) wrote to the Prairie Farmer, as follows: "Crops of all kinds bid fair to be very heavy, except potatoes in some places are much injured by a striped bug, very much the shape of a grain of coffee, but about twice as large. They made their appearance as soon as the potatoes were up, and soon had a host of grubs, or larvæ to help them, totally ruining many and damaging others. It is something I never saw before."

This was published in the Prairie Farmer of July 18, 1861, and I believe is noticed by one of the numerous writers on this insect; Prof. RILEY omits it in his history of the species. On the 2nd of August 1861, Mr. EDGERTON sent another letter to the editors of the Prairie Farmer, accompanied by specimens of the insects alluded to in the former communication. These with the letter, were forwarded to me for determination, and were received Saturday, August 24th. On Monday following, I returned an answer which, with Mr. EDGERTON's letter, was published in one article of the Prairie Farmer, Aug. 29, 1861. From this I quote the following:

"EDS. Prairie Farmer:—Your box containing some specimens of a species of beetle, with accompanying letter, came to hand last Saturday, and to-day (Monday) I return you an answer. The specimens enclosed by Mr. EDGERTON, belong to Doryphora 10-lineata (Say) and is the Polygramma 10-lineata, Chevrolat, and Melsheimer Catalogue, and P. juncta (Germar)." After this follows a description and other remarks.

Here then is the determination of the species fully a year in advance of any thing by Messrs. WALSH or RILEY, and the connecting link upon which Mr. WALSH afterwards, in part, based the correct theory of their march eastward; yet neither Mr. WALSH nor Prof. RILEY takes any notice whatever of this, really the starting point of the history of the species as a potato-eating insect. The letter of Mr. EDGERTON which is published in the same paper is repeatedly alluded to, but by some strange oversight this part of its history is left blank.

Perhaps it is due to the fact, that although correctly determining the species, I—following our highest authority on Coleoptera—included *juncta* as belonging to the same species. But this furnished no reason for omitting this part of its history, especially when we remember that Dr. FITCH, Mr. WALSH and Prof. RILEY all did the same thing until 1865, when Mr. WALSH called attention to the distinction between the two; Prof. RILEY even bred the Potato Beetle and traced it through its stages as did also Mr WALSH without then even suspecting the error

of confounding the species. RODGERS had in 1856 called attention to the distinctions between the two, but this had been forgotten or overlooked, until Mr. WALSH called attention to it as a means of explaining differences in habits of what was, until then, supposed to be races of the same species.

I presume it is of very little importance to the general public who first identified this species, yet we may as well fill up the blanks in the history of so important a personage as the "Colorado"—or as it in reality was first named by me in January, 1862*—"Ten-lined Potato Beetle;" especially as it is now receiving so much attention in Europe.

*See Transactions of Illinois State Agricultural Society, Vol. 5, pages 437 and 150. The first page gives the name—on the second will be found the date when the essay was received and read—January 1862.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

CROWN IMPERIALS.

THE Crown Imperial or Fritillaria Imperialis is an old-fashioned, stately plant, which should be in every garden. It is a native of Persia, whence it was introduced into English and French gardens over two hundred years ago. Since then, it has remained a general favorite among spring flowers. Being pre-eminently a florist's flower, it is remarkable that it has continued without change. We have to-day the self-same varieties — red, yellow, variegated foliage and double flowered — that grew in Persia two hundred years ago uncultivated and almost unknown.

The construction of the Crown Imperial is in itself a point which should recommend it for cultivation if only for careful examination. It is noted for the drooping habit of the brilliant tulip-shaped corollas which have the appearance of so many highly-colored cups or bells. The interior of the flower is unlike that of any other known species. At the base of the drooping cup, on the inside, there are always found six drops of water resembling pearls. What functions these drops of water perform has never been clearly set forth by any botanist, nor has it been told how they have been formed. They cannot be shaken out of the cups even by the fiercest gale, and if one is removed by some instrument, another will soon form. Another grace which the flower possesses is its golden stigma which an enraptured poet lauds as—

"The dazzling gem
That beams in fritillaria's diadem."

With the first days of spring, before the frost has hardly released the ground from its icy grasp, the stem of the Crown Imperial begins to show its brilliant green. It rapidly ascends until it stands a column three feet high, of the brightest shining green. Near the top of this column is produced the crown of large pendant bell-shaped flowers, from five to twelve in number. These are re-crowned at the very summit with a tuft of glossy, green leaves, rendering the Crown Imperial one of the most conspicuous and ornamental gems of the flower garden. The flowers are produced in April and May, and while in bloom are the chief attraction of all the garden, yet for fragrance they are really not at all desirable; being, in fact, almost repulsive when in the sunshine.

Crown Imperials grow readily in any good garden loam. Plant the bulbs during October or November, about five inches deep and one foot apart. They should remain undisturbed for, at least, three years, when their bloom will be magnificent. For effective display they should occupy a position in mixed borders, in center of bulb beds or in shrubberies. Aurora, orange; Crown upon Crown, red; Rubra simplis, single, red; Rubra plena, double red; Lutea plena, double yellow; Maxima lutea, single yellow; Folia aurea var., with gold-striped foliage; Folia argentea var., with silver foliage and Orange Crown are the varieties in general cultivation.

DIPLADENIAS.

THESE are handsome flowering plants, all climbers, belonging to the Apocynaceæ. They are excellent for the decoration of the stove. If for exhibition, they should be trained upon wire balloon-shaped trellises, but the young growths should be allowed to grow upon strings up to the rafters of the house, and a short time before the blooms open they should be taken down and fixed upon the trellis. They should be treated as follows: put them in a mixture of peat and turfy loam in equal proportions, with the addition of a good portion of silver sand; good drainage is also of particular importance with these plants. They require a moist atmosphere, and a bottom heat, ranging from 80° to 90°, together with full exposure to the sun's light. But although I recommend bottom heat for these plants, I, by no means, consider it desirable that they should be plunged into it; rather let them stand over this heat, and keep the atmosphere moist by sprinkling the stages and paths with water.

Towards the end of summer, after they have done flowering and have finished their growth remove them to a cooler house and fully expose them to sunlight, to ripen the wood. The temperature they enjoy is in summer from

DIPLADENIA WILLIAMSII

65° to 85° with a moderate quantity of water, which must be applied with great care. In winter very little water will be required, and the temperature should be reduced to 60°—65°; from this, if they are wanted for exhibition in May or June, they must be brought, and placed in heat again about the beginning of January. D. Williamsii, the subject of the present cut, is a fine garden variety and quite distinct. It is remarkably free, both in habit of growth and flower. The leaves are stout, oblong, tapering to a sharp point, and upward of six inches long, by about an inch in breadth at the widest part. The flowers are produced in large clusters in the greatest abundance — indeed, a marked feature of this variety is the great length to which the spike reaches, and consequently the greater quantity of blooms. The flowers are large and of good subtance, measuring upwards of four inches across the limb; the lobes are round and full; the color is a soft delicate pink, while that of the throat is a deep rose.

B. S. WILLIAMS,

Victoria and Paradise Nurseries, Upper Holloway, London, England.

Miscellaneous.

WESTERN ECHOES FROM "THE MAPLE SHADOWS."

DR. A. C. WILLIAMS.

As I have before indicated, the farmers in central Illinois are so engrossed in raising corn and feeding it out to hogs, that all other branches of tillage and husbandry have received little or no attention at all, and the farmer who is not straining every nerve, even to over-cropping, to produce corn, and striving to blemish every pig money will buy, with his own individual earmark, is regarded as not doing well, and one who will not be able to cancel the mortgage placed, years ago, on his farm—for we are all mortgaged. There is so much room for improvement in all the avenues of agriculture other than that of producing and feeding corn, that my heart bleeds for the man who dares to make his money in any other manner than the one so prevalent, since I know he will be regarded either as crazy or a fool. Fruit-raising, market-gardening, and horticulture in general, are so little thought of, despite the distrust with which the initial steps will be observed, that there is certainly a good opening in this line here, however unfavorably pioneer operators will be regarded by those wedded to the production of corn, only. The little extra care and interest given to orcharding and gardening by a few, now elicits so much derision, and we are so heartily characterized as trifling and foolishly wasteful of time, as to warrant the opinion and prediction I have expressed.

The week prior to Christmas was one of the most remarkable "spells of weather" ever witnessed in Illinois. The mercury stood at 80° Farh., and all sorts of seeds in the garden and flower beds germinated and sprung up thickly as if it were May, and strawberry plants sent up numerous young tender leaves.

How to give my twenty-five varieties of strawberries ample innocuous winter protection, was a problem with which I began to interest myself early last fall, and it was not until I stood with a forkful of prairie hay, that I came to a conclusion. Some of the sorts were tender, others were expensive, and yet there were others valued because they were given me, and I wished to save all. In all of the half-dozen papers I was taking, were anxious inquiries from those evidently in the same dilemma. Of course, they were told how to use evergreen boughs. I am ashamed to admit that as yet I have no evergreens. I went to the forest and cut off the tip ends of limbs from such oaks as hold their foliage till cast off in the spring by the swelling of the buds. Those limbs were selected which had two or more smaller branches, and I placed them over the plants in such a manner that they held up the hay, and thus prevented smothering. Well! "Eureka," and that is all about that.

So sure as I live, I am going to put out a good evergreen screen around my entire grounds next spring. Eliminate every other consideration—ornamentation, protection, all—and it will pay in the item of boughs alone, used for protecting strawberries, and all such plants as are, or should be, in every lawn and garden, which are the better by judicious protection.

I am experimenting with a dozen peach trees, with a view to fruit next year. I have laid down six, and covered them with litter; the branches of others I have bent down and covered with earth, while others again have several branches either wrapped with straw or old garments. I headed back two or three, this fall, instead of waiting till spring, and shall treat them so several years, and watch the result. When covering strawberries, I found those short, brushy branchs I had taken off, very handy for supporting the straw over the plants.

SEED EXCHANGE.

WHILE traveling among the mountains of northern California, last summer, I gathered the seeds of several interesting and useful plants. Among them are Calycanthus occidentalis, Cereis occidentalis (a beautiful shrub), Ceanothus integrinus (California lilac), Manzanita (red bark), nuts of Pinus Lombertiana (sugar pine), Schinus molle (pepper tree), Escholtzia (California peppy). I also have seeds to spare of Double Pink Hollyhock, Verbenas mixed, all colors. Also, Acrolinium and Xeranthemum, seeds saved from finest specimen plants. Will exchange any of these for Lillium Chalcedonicum, L. auratum, L. longiflorum, L. lancif. album, or other Lily bulbs.

LUTHER BURBANK.

Santa Rosa, Cal., Dec. 12, 1877.

The Poultry Yard.

DOES POULTRY PAY? No. IV.

HENRY HALES.

As eggs sell better in winter than at any other time, it is well to keep such fowls as lay best in winter, and to keep them in laying condition, Hens will not lay unless kept in good order—not too fat but active; combs, bright red; eye, sparkling; feathers, close and glossy; and their whole appearance lively and healthy.

The Leghorns are fowls that answer best for marketable eggs; they respond quickly to extra food and care, and will lay in cold weather, if they have a warm house. The Brown appear to be a little hardier than the White, especially when young, and they are also the best layers. If a cross is preferred, the Light Brahma appears to me to be the best cross. The cross, hardens their constitutions so that they care less about cold. It will not, however, improve their summer laying, but will make many of them want to sit, which the pure-bred Leghorn does not often do, yet I once had four out of seven young hens sit, and after sitting steadily, they made good mothers. But the complaint generally is that they don't sit steadily, often leaving the nest after sitting half their time. The Browns sit better than the Whites.

As I have said, the secret of winter laying lies in getting hens up in a good condition. A practical florist, when he goes into a green-house, can tell at a glance the exact condition of the plants he sees around him, and what they require if out of order; so can the keeper of poultry judge his stock, if he is fit for his business. Fresh air is important. On every warm enough day give the houses all the air you can; have the openings for ventilation close up to the ceiling. Open them when the weather allows, and have them a little way open in all but the extremest cold weather, even at night; but when the wind blows cold, so as to cause a draft through the house, close the windward ventilators.

Cleanliness is the most important consideration in keeping many fowls. The dirt multiplies faster than the comparative number of birds. To take up the droppings every morning (especially if the stock is confined in the house through bad weather) involves some labor; but if this is done systematically, the trouble is much lightened. A broad shovel, and a short hoe or scraper, set in motion with ordinary muscle and locomotion, soon does the job. Keep a barrel just outside the door, a box can be used to carry out the manure to the barrel, when the door cannot be left open; keep the barrel covered and dry, and when filled remove its contents to the manure pile. One thing that requires special attention, when the fowls are weather-bound, is the feeding and watering without getting soil into their food and water. Have their utensils so protected that the stock cannot either step into or roost on them. Besides the food and care recommended in the RURAL, broken oyster shells, should be supplied to every house; the hens crave them; they are also fond of crushed bone, the lime of which enters largely into the composition of egg shell.

Industrial Implements.

A NEW CORN SHELLER.

MESSRS. LIVINGSTON & Co., Pittsburgh, Pa., sent us for trial one of their small Hand Corn Shellers. After six weeks' use on our Experimental Farm, it is reported that the Sheller works very nicely, shelling perfectly, leaving no kernels on the cob, and hence no waste. A clamp is used to fasten the apparatus to any convenient support, and the simplicity and durability of the mechanism make it proof against the rough usage of careless or inexperienced operators. Cheapness in price is not the least of its merits.

W. A. KELSEY & Co. are making a large number of their Excelsior presses for Holiday presents. We are glad to hear of such an appreciative demand. A good printing press always leads to something educating and profitable.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SHALL WE BEND TO OUR WORK, OR BEND OUR WORK TO OURSELVES.?

In the early days of our mothers and grandmothers, it was generally considered by good dames and housewives a most unpardonable lack of thrift for a lady to commence a new piece of work—of sewing for instance—while an unfinished piece lay before her. And, indeed, so decided was my early training in this respect, that I have felt it sometimes to be almost a disgrace when, for lack of strength, I have sometimes been compelled to lay aside for the time being incompleted work for something lighter and more in accordance with my tastes and feelings, at that particular time. Indeed I have practiced humoring my peculiar moods—provided they were not unreasonable—somewhat of late years, and am fully satisfied that it is economy to do so: economy, not only of time and strength, but of good nature, and of general wear and tear of the system. I find that I am not alone in this digression from the ways of our good mothers.

An esteemed neighbor said to me some two years since: "I have done nothing but mend for three days," excepting, of course, her daily household duties. "I used to think," she continued "that my mending must always be done at a certain time, but when Mother was here last Winter, after noticing one day that my mending and I were not at all agreed, and that I could make no satisfactory progress, she said: "Lay it away now, Minnie, and perhaps to-morrow you will enjoy doing such work." "She then gave me a rule," said my friend "which I have adopted, and find that I can accomplish much more, by observing. It is this: "Never, unless it is necessary, punish yourself by doing a certain piece of work when you cannot enter into the spirit of it." I will remark right here, that I hardly think that this rule is applicable, except to energetic, driving people, invalids, and to tired overworked Mothers. There are times when I can heartily endorse this rule. Why, sometimes I could mend, every day for a week, if it was necessary, but I could not do it with pleasure, if I were always obliged to attend to it as fast as the rents were ready for the needle, and I was rejoiced to know that such a good and exemplary woman, in all respects, as was the Mother of my friend, should advocate such ideas, for few women—if any—have accomplished more in a busy, useful life, than she.

And I have additional evidence from another most useful, energetic woman. She is a great Christian worker, a minister's wife, and does her own work for a family of four. Yet, with all this, she finds time to do fancy-work, and of different kinds, from the charming patchwork quilts and embroidered table-covers and Afghans, to some of the most beautiful oil paintings that ever graced a parlor in the West. She loses no time, however, always having some light work ready to do whenever she has visitors or is visiting.

When she showed us some six kinds of work which she had begun and had determined to finish before Christmas, I said:—"You do not follow the teachings of our mothers, to always finish one piece before you begin another?" "No, indeed," she answered, "I never should accomplish much if I did."

After all, I think that our mothers were right in forming such habits of "stick-to-it-iveness" in early life; for after we reach mature years, if a "new departure" seems necessary, it is then soon enough to begin. Hope Evermore.

DOMESTIC RECIPES.

Tapioca Jelly.

Soak three tablespoonfuls of Tapioca over night in a pint of water; place over the fire and let it cook slowly until it is clear; add a cup of sugar, and after it is removed from the fire flavor with lemon to the taste.

Tapioca Pudding.

Prepare the same as for jelly and add one pint of cream and four eggs; stir well and bake until done. Perhaps while eating Tapioca we should some of us like to know what it is, and where it comes from. It is the starch obtained from the root of the Manihot or Jatropha manihot, a native of Brazil. It is separated from the other substances of the root and dried on hot plates which are continually agitated, in this way forming the granulars which we see. The juice of the plant is very poisonous.

Apple Pickles.

Pare and halve the apple, removing the cores carefully, to keep them in good shape; steam them; heat spiced vinegar and pour over them. The vinegar from pickled peaches is very nice, when one has it.

Cream Pie.

Make a crust with cream; line a pie dish; butter the crust; then fill with thick, sweet cream; add one cup of sugar and flour to thicken it a little when done; flavor and bake in a quick oven. Loretta E. Turner.

Cheap Fruit Cake.

Seventeen ounces of brown sugar; five eggs; one pound of raisins: one pound of currants; one-fourth pound of citron; one heaping teaspoonful of soda; one-half cupful of molasses; one tumblerful of sweetened vinegar—I use that from pickled peaches or pears; one tablespoonful cloves; one tablespoonful of cinnamon; one nutmeg; one pound of flour. This will keep one year.

Crullers.

Three eggs; one cup of sugar: butter the size of an egg; a little salt; a very little soda; knead stiff, roll, cut into any fancy shape and fry in hot lard. These are very nice.

Will some one please tell me how to make a good paste for a scrap-book? Mrs. Bart.

Irish Cabbage.

Chop fine a medium sized head of cabbage and season with butter, pepper and salt; add water enough to cook until very tender; then when almost dry add a cup of thick sweet cream and simmer a few minutes longer. This way of cooking cabbage is a little different from anything I have read in the Rural and is one of the many excellent dishes prepared by a professional cook. For those who prefer cabbage with vinegar, a good way is to use half cream and half vinegar, or for those who do not have cream, use milk and thicken with a little flour.

To Color Brown with Cutch.

For five pounds of cotton rags or yarn allow one and one-half pounds of cutch; two ounces of blue vitriol; two ounces of bichromate of potash. Use sufficient soft water to cover the goods; boil until the cutch is dissolved then add the vitriol; stir well: put in the cloth and let it remain over night; rinse in the morning, and put into as much boiling water, in which the bichromate of potash has been dissolved as will cover the cloth; let it remain fifteen minutes and then rinse in cold water. My experience with the recipe is that it will color just as well without remaining so long in the dye and that washing in strong soap-suds turns it a good shade darker and by thus rinsing, half in suds and half in clear water, a shaded stripe can be made. By coloring some rags nankeen buff in a dye made of strong lye and copperas a very handsome stripe can be made of the dark brown, light brown and buff. A. P., Northville.

Everywhere.

PERSONAL OBSERVATIONS OF A "COMMERCIAL TRAVELER."

Having just returned from a business tour through Mississippi, it occurs to me the patrons of your valuable journal would be glad to learn something touching the local and agricultural interests of that State.

Twenty-four years ago, I made an extended tour through Alabama and Mississippi, and from that time for the following eight years, I was a constant traveler through the south, hence my familiarity with the old system of agriculture, and with the practices adopted by planters in those days. Time has wrought many wondrous changes in the South. The rich planter of former years no longer folds his arms and sits at ease upon the soft couch of his stately mansion. The overseer and numerous slaves are no longer to be seen gathered together in the broad field of their master, singing their happy songs as they toil in the cotton patch, or "hoe de corn." To-day we find the planter, driven by force of circumstances, adopting other means by which to sustain himself and family.

Those familiar with the cultivation of cotton, well know how essential it is to have skilled labor at their command, labor which they can control at all seasons of the year, especially in early summer, when grasses grow rapidly and crops are endangered for want of prompt and efficient labor. This has been, and is still, one of the annoyances of a planter's life, to overcome which many are cutting up their lands in patches of twenty-five, fifty, or perhaps one hundred acres, and renting them to the negro who cultivates them on shares. By this means a mutual interest arises in the production of a crop. There are many instances where the negro rents the land at a fixed price. In either case the result may be viewed with favor, as in no other way can the property owner control the labor, or cultivate his lands with any assurance of success. We find, under the present system, the negro is rising to the surface, where he had been under the influence and training of a thorough master in his days of slavery, and thus gained some idea of system and economy; such negroes are becoming, to a considerable extent, the bone and sinew of the country.

While at Crystal Springs, some three weeks since, I was introduced to a colored man who came to town for the purpose of selling his cotton, and in conversation, learned he had made twelve bales of cotton this year, that he was the owner of 260 acres of land, of mules, oxen, wagons and other farming appurtenances, all of which were paid for, and he out of debt, with his twelve bales of cotton ahead. This is one instance of the success of the negro, coming under my own observation.

As I passed from town to town, and hamlet to hamlet, I noticed with peculiar interest and pleasure, the thriving condition of the entire country. The quiet inland town of former days that knew no excitement beyond the usual arrival or departure of a four-horse stage coach, or a visit by some traveling circus, has given place to many thriving towns and villages dotted along the lines of railroads which now skirt the State of Mississippi, from north to south and from east to west. And while many of my commercial traveling companions on the road complain of the hardships they have to suffer, the terrible oppression of railroads taxing them five cents per mile, and extra for all baggage over 100 pounds, I for one consider it a pleasure, and doubt not, if they had been schooled under the old system of paying ten cents per mile, and the privilege of "toting" a rail, they too, would join me in a hearty approval of present facilities.

The railroads of Mississippi have been, and are still a blessing to the State; but while we appreciate them in fact, we cannot but censure them for many local grievances under which merchants and planters feel oppressed.

We are informed the Mobile and Ohio and Mississippi Central railroads will carry cotton from Memphis, Tenn., to New Orleans or Mobile for one dollar per bale, owing to the fact that boats on the river come in competition with them from that point; while from the middle portion of the State, some two hundred miles nearer the seabord, they tax the merchant or planter three to three and a half dollars per bale. This we regard as oppressive, and the planter as well as the merchant should look to his interest in this matter.

Passing up the Mobile and Ohio road from West Point to Okolona, we pass over what may be strictly termed the garden spot of the United States. Here we view the beautiful prairie stretching out on every side as far as the eye can see, and the stranger, as he looks out over the broad fields of cotton (some of which still remain unpicked) cannot help exclaiming, "this is truly a paradise for the farmer!" The soil is fertile, being of a rich black color and adapted, not only to the culture of cotton and corn, but to every plant, shrub, and seed that grows and is adapted to the climate.

In conclusion I will say, if there are farmers at the north, not satisfied with their success as agriculturists, let them emigrate to Mississippi, where lands are cheap, and a sure remuneration for their labors awaits them. [Yet farmers of Mississippi are thronging by railroad, boat and wagon to Texas.—Eds.] D. Snedeker.

FROM MAINE.

The past season has been marked by an unusual and long-continued drought, which began in May and ended in October. Light showers and occasional rains broke its full severity, but did not avert its disastrous effects. As a consequence, the crops have been much reduced and the returns less remunerative than otherwise would have been. The middle of April found the ground bare and the birds returning. This unusually early opening was followed by fine weather, and considerable seed was put in during the month. May followed equally favorable. Planting was a fortnight ahead of the average, and time was thus afforded for putting in greater breadths or for making needed permanent farm improvements. Farmers being ahead of their regular work, the whole season has given them the time to dig rocks, clear up rough places, draining low lands, swamps and meadows, repairing or building fences or buildings, and making improvements generally. More permanent improvements have been inaugurated and carried forward in Maine the last season than for five years—perhaps ten—before.

The crops were light—hay, corn and beans being the best. The hay crop was less than an average. Corn an average, also beans. Potatoes fell off fifty per cent. Wheat nearly the same, other grains more. Apples a failure. Small fruits about an average, except the later ones. Pasturage poor. Stock came to barn in poor condition in many cases.

The three leading things that pay in Maine, and about the only ones that will do to figure Dr. and Cr. upon, are hens, sheep, and cows, in the order named. Pigs in connection with the dairy, will pay a handsome return. Bees cost nothing for pasture or keeping, except care and shelter: they often pay well with us, but our severe climate in winters oftentimes causes severe loss.

The Dairy interest here is important, but at present not well organized, and hence not well conducted. A few years ago Maine rushed into associated dairying with Yankee impetuosity and with sanguine hopes that could not be realized practically. A few years' trial with lowering prices and a falling market—in general with shrinkage of all other prices—disheartened many cheese factory companies, and the factories have been closed or sold out for other purposes. The factories were run by associated effort. At first they were dependent upon Massachusetts, New York or Vermont for their cheese-makers. They had to pay them high wages. Expenses were high, and just as they were getting prepared to run them economically—hence, successfully—the reaction came, and the popular mind turned against them in many places.

No State has better grazing land than Maine. It is peculiarly fitted for a dairy country. It will eventually become a leading dairy State. It must henceforward depend upon the sheep-fold and dairy for agricultural prosperity. The limit of selling hay and potatoes has been almost reached. Wool, mutton, butter and cheese must be its exports. With these two leading branches may be run as auxiliaries the hennery, the orchard and the swinery.

The Maine Dairymen's Association will meet this winter at South Paris, in Oxford Co. It is expected legislative aid will be granted to enable the holding of fairs by this society, and to enable it to better organize our dairy interests.

The winter has been remarkable so far. No sleighing (Dec. 24) and the month has been mild as April last year at this time, and usually, we have a foot or more of snow and zero weather.

Maine is a great lumbering State. Men and teams are going into the woods for their winter's operations in the northern part of the State, and large quantities of logs will be cut. The Kennebec, Penobscot, Androscoggin, Union, Machias, St. Croix, and Aroostook Rivers furnish driveways for the logs, down which they are floated to the places of manufacture upon their banks.

But were I to attempt to give an outline of our varied industries, I should far exceed my allotted space, so I will reserve this interesting recital to future letters. In closing, let me wish you the best of success, and that permanency and endurance warranted by their merits of every department of the noble Rural.

Brooks, Me. J. W. Lang.

RURAL SPECIAL REPORTS.

Waukesha Co., Wis., Dec. 17, 1877.

I am often aided in my business by reading the letters you so kindly print in your very excellent paper—not only aided, but interested. We learn the customs of our fellow-farmers in the different localities they write from: the prosperity they enjoy, etc. It makes us feel a desire to communicate with the paper, too, and give a little of our own experience.

Our home is in Wisconsin, thirty miles west from Milwaukee, on the line of the Chicago, Milwaukee and Saint Paul railroad. Our county is principally oak openings; the soil is a clay loam—excellent wheat land;—there are some small prairies of about three to six miles square. There is an abundance of water for all purposes, both for stock and milling privileges. The county is interspersed with beautiful lakes from a mile to three miles in length, stocked with the finest of fish. Pickerel, bass, and numerous other kinds, excellent for the table, abound.

I spoke of our soil as being adapted for wheat-growing; I should have said spring wheat, as it is only an occasional winter that we are favored with sufficient snow to protect fall-sown grain. Last winter, however, was an exception to the general rule, and the crop of fall-sown wheat was good. We are trying some again this fall; it is looking finely. The same may be said of our rye of which we sow, more or less, every year, considering it a paying crop, especially as we usually seed after it, clover seed catching so much better when sowed on a covering of snow during the month of March.

Prices current in our town are:—Wheat, No. 1, $1.00; oats, 25c.; corn, 40c.; potatoes, 35@40c.; rye, 45c.; barley, 50c. Our market town is Oconomowoc, a thriving place of about 3,000 inhabitants, noted for its superb hotels and beautiful lakes which afford amusement and comfort to many visitors and pleasure-seekers, during the summer months. Being on the line of the Saint Paul railway, we find a ready market for all our stock and produce having a quick transit to our larger cities—Milwaukee and Chicago—and thence to your great metropolis. We would not be called boastful, but we think our butter, cheese, wheat, potatoes, pork, beef and poultry can't be beat. The butter made by some of our good farmers' wives will compare favorably with your Orange County article. Had

I the time, and you the space and patience, I would like to give my brother farmers my plan of housing and feeding stock, and keeping them thriving here in our severe and long winters. [For practical information of this kind there will always be room in the RURAL.—EDS.] We are having remarkable weather. The past two months it has rained, snowed, frozen and thawed alternately, keeping our roads very rough and, at times, nearly impassable for loads and teams. At one time we even ventured to use our sleighs; and now, to-day, my boys are in the field plowing with both teams, the ground working splendidly. I must forward this in haste, or I may have to chronicle a snow-storm. H. F. S.

CHAUTAUQUA Co. N. Y., Dec. 25th, 1877.

THINKING a few lines from this locality might not be amiss, I will pen a few for "Everywhere" in which I am much interested.

The weather here is warm and mild; we have had but two slight falls of snow which did not lie long, and but little frost. Farmers are engaged doing their spring plowing, and cutting wood. There is a strip of country through here running south from Lake Erie, that is usually blessed—or troubled—with very heavy snow-falls during the winter season. But from this place a person may travel in any direction during the winter, from ten to fifteen miles, and find far less snow. Perhaps this may be one reason why we have such a fine apple country here. Indeed, we challenge the world to produce fruit finer in color and flavor, than that grown on these same gravelly hills of old Chautauqua. Thousands of barrels were shipped from this place this fall, for which the farmers received from $1.75 to $2.00 per barrel. But when you come to the raising of grain, there you have us. This is not a good grain country, but a dairy and stock region. Butter-making is the chief means of keeping the farmer from the poor-house. We are slowly improving our cows by the introduction of blooded bulls. Butter now brings 26 cents for choice fall make. The farmer is fast doing away with the middlemen here, by generally shipping his produce himself. Corn is worth 50c.; oats, 25c. potatoes, 40c.; eggs, 20c. per dozen. Good milch cows, $25 to $30 apiece.

A YOUNG WORKING FARMER.

CARLTON, Wis., Dec. 24.

THE weather is the warmest this winter that was ever known here. Generally, by this time the ground is frozen hard and the sleighing good. Now, there is not a particle of frost in the ground. It has rained almost incessantly for two weeks. The roads are almost impassable. Hay is slow at $10 per ton; wheat, $1 per bushel; potatoes, 50 cents; butter, 25 cents per pound. The buds of the trees are swollen, and in places the grass has started. Diphtheria has raged here for the last two months, and in one school district in this town (No. 1) there have been fifteen deaths in less than one month's time. I clipped an article from the RURAL on diphtheria, written by Dr. GOODENOUGH, and had it published in the County papers. The advice he gave was needed here, and it has resulted in doing much good. At present, it is abating somewhat, and we hope the worst is past.

JOHN A. WHITAKER.

EL DORADO, Cal., Dec. 20.

ON the 18th we had a general shower throughout the State. At Los Angeles, 2.15 inches of rain fell in twelve hours, the heaviest rain ever known in that section; here, we had only a small shower. The 19th was clear and bright; to-day we have the appearances of a good storm, so I think California is safe for another year. I tell you, it makes happy faces and hearts. Feed is good; grain looks finely. Sowing continues. In the flower garden, Pansies, Verbenas, Alyssum, Violets, and their companions, are showing their brightest colors. A few days ago I saw a rose bush in full bloom in the country.

W. C. L. D.

A COLONY FOR NORTH CAROLINA.—It is proposed to form a colony to settle in the central part of North Carolina, to be composed of Northern men and women, farmers, mechanics—any and all who desire to better their condition. The climate is fine, soil fertile, land cheap; native people moral, kind, and hospitable. The water, timber, and climate unexcelled; mines of iron, coal, gold, &c., abound. All who desire to join this co-operative colony, may learn more of its prospects, &c., by addressing J. W. LANG, Brooks, Me., who will cheerfully furnish information.

BELMONT Co., Ohio.

THE wheather here is clear and warm. No frost at night. Dandelions in blossom. I have just finished harrowing a corn stubble. The ground is quite mellow. I expect to commence to plow to morrow. I. N. B.

QUEBEC, Canada, Dec. 24.

TO DAY we have no snow. A very heavy hoar-frost has made our orchard and garden a fairy land of the Frost King. A strange season for cold Canada. A. L. J.

Hygienic Information.

SCARLET FEVER.

DR GOODENOUGH.

SCARLET FEVER, otherwise known as Scarletina, is usually classed with small-pox, chicken-pox and measles, among the eruptive forms of fever; but it is distinguished from these by the fact that the eruption appears as a rash, whereas in the other diseases, it assumes the form of vesicles or postules. It is one of the most contagious of maladies, and the infectious material remains for a long time in clothing etc., preserving the power of producing the disease. Children are much more liable to it than adults, and it is rarely contracted under two years of age or over forty. As a rule the disease is experienced only once, but to this rule there are many exceptions. Between the reception of the infection and the manifestation of the disease, the interval is generally short, sometimes not more than twenty-four hours and rarely so long as a week.

Sometimes the disease commences with a chill, and vomiting is generally one of the earliest symptoms, especially in children. A high fever at once sets in, the pulse flutters rapidly, the body often feels burning to the touch, while the temperature under the arm frequently rises to 105° or even higher. In this, as in all other fevers, an extremely high temperature is a pretty sure indication of imminent danger to life, and if it remains for any length of time over 105° death is always to be apprehended. In about twenty-four hours after the commencement of the attack the eruption appears, first in the neck, next on the breast and stomach, and finally on the limbs, covering the entire body generally in a couple of days. The rash is of a scarlet color, and is sometimes diffused over the entire body, while in other cases it is limited to blotches varying in number and size.

As a rule the skin is somewhat swollen, while the rash produces a burning sensation and frequently intense itching. Either before or simultaneously with the appearance of the rash, an eruption very generally takes place in the throat, accompanied with redness, a swelling of the tonsils, and sometimes with severe inflammation and an exudation resembling that which characterizes diphthoria. The glands of the neck also often become inflamed, and in rare cases the inflammation extends to the ear, causing more or less injury to the sense of hearing. Often there is extreme restlessness and sleeplessness, whining, and irritability; sometimes great drowsiness, dry tongue, great thirst, and frequent delirium. Next comes the peeling off of the skin, which separates in the form of branny scales or in large flakes or patches. In some cases the cuticle of the hand may be stripped off intact like a glove. During this process, which in favorable cases usually lasts five or six days, but sometimes considerably longer, the itching is exceedingly annoying.

Scarlet fever is often of an extremely mild type, and in other cases very severe, death resulting sometimes in a few days or even in as many hours, and occasionally before the appearance of the eruption. An affection of the kidneys is often an accompaniment, but oftener a sequel of this malady, giving rise to coma and convulsions, and leading to general dropsy when it occurs as a sequel to the disease.

In mild cases of scarlet fever, it will be enough to lessen the animal heat by sponging the body, giving cooling drinks, and applying such alleviating remedies as the symptoms may suggest. In severe cases the use of the cold bath is highly beneficial, or the patient should be wrapped in a wet sheet and well covered with blankets until perspiration starts, when he should be washed off in milk-warm water. This should be repeated as often as a very high fever sets in; and in case the fever strikes in suddenly, the patient should be sponged in cold water all over. Rubbing the body with fat bacon or some oily preparation allays the itching and, many think, lessens the severity of the disease. If the symptoms indicate a failure of the vital powers, alcholic stimulants should be used. When the patient becomes convalescent, extreme care should be taken to guard against cold, and thus lessen the risk of disease of the kidneys, which as often follows mild as severe cases of this complaint. No visits should be made, especially by children, to houses where the disease is prevalent, the children of the afflicted family should not be allowed to attend school, and so endanger others, and care should be taken to disinfect or destroy everything which may retain or convey the infection.

Sheep Husbandry.

MUTTON FOR EXPORTATION.

GEORGE GARDNER.

IT is useless to try to deceive anyone with regard to the sheep which are generally slaughtered in the United States. Such mutton would not sell at all in England, and Americans are beginning to find out that they like the common grade Cotswolds of Canada much better than Merino grades, and a great many sheep pay the heavy taxes the United States put on the Canada live stock, having been purchased by New York agents for the best first-class hotels and also for some of the private families on Fifth Avenue.

It is not intended to run down Merinos, for they are acclimated and will also bear neglect and hard times better than other breeds, but it is desired to recommend the crossing of Merino ewes with Cotswolds or other rams of mutton breeds, and go on breeding with thorough-bred mutton rams, which will then bring into existence a very fine quality of mutton and good wool, both of which will be salable in any market at top figures.

The exportation of beef and mutton will do a great deal toward the improvement of meat, and very soon the exhausted soils of the Eastern States will be bought up for sheep walks—as also will be the case, even to a greater extent, with all the South-Eastern States. Capitalists in this country are extraordinarily ignorant of the extensive field now opened for speculation in real estate or they would take advantage of the present opportunity to possess themselves of the old cotton plantations, and thereon grow mutton and wool, for they could make ten times more by wool than by cotton and get all the mutton as a second and extra profit.

I am positively certain if I had the control of a large tract of land that, without the aid of a single white man and without any assistance in buying or selling, I could stock these deserted plantations with sheep and put them in charge of the negroes so as to have sheep husbandry established on 40,000 acres, and in twenty years make more money than A. T. STEWART, JACOB ASTOR and the VANDERBILTS combined; for I would extend till millions would be made annually. There would be great advantage here over the English colony of Australia, yet there sheep are more numerous than in this much earlier settled country.

Statistics have proved that in the South during the last three years, wool has paid 60 per cent for growing, while cotton has not paid more than five to seven per cent, and then it must be recollected the sheep have been managed on such a poor, miserable system that double this amount of profit could be made by an enlightened method of treatment, and mutton of the very best quality sold annually, which would enhance profits far beyond anything the present western sheep owners have any idea of; mutton and wool would produce more millions than cotton ever did.

Dairy Husbandry.

THE OLEOMARGARINE FRAUD.

J. M. PETERS.

WHILE there is much to be said on the side of the consumer in favor of "oleomargarine," or any other artificial product that is sweet and palatable, as against poor butter, none, I think, would care to be imposed upon in buying the counterfeit for the genuine, however superior the former might be. Be that as it may, the statute books of this State now contains a very clear law, looking to the prevention of any such frauds; and it is clearly for the benefit of the producer, if not for the consumer, that its provisions be rigidly enforced. Although the law received executive approval early last spring, no steps were taken to enforce it until less than two months ago. Since then an organization of the wholesale butter merchants has been formed here, and competent counsel has been employed for the purpose of prosecuting violators of the law, while detectives have been engaged to ferret out violations. The work done thus far has demonstrated the fact that the law has been more openly and more generally violated than has been believed, even by those who were the most suspicious of the increasing importance of oleomargarine as a substitute for butter. It would now seem as though much of the dullness in the butter market during the past few months, being caused, as it evidently has been, by a decreased home consumption, might be charged directly to the artificial product. There are hundreds of retail stores in this city where scarcely a pound of real butter has been sold for months, and there are many more where the real and the artificial are both kept, and where every effort is made to palm off the latter upon consumers, inasmuch as it affords the more liberal profit. Then there are hundreds of large consumers, including hotels and restaurants who have been supplied with this product direct from the manufacturers, and who have therefore been turned from the consumption of butter. In most cases these persons have been aware of the character of the goods they were handling, and have been parties to the fraud. There are no means of preventing the deception from being practiced by hotel and restaurant keepers upon their customers, though it is no more than fair that the public should be warned of the existence of the fraud that they may be on their guard against it—provided they have any objections to eating "oleomargarine." The retailers, and all others who sell the product, come within the provisions of the statute, and are required to legibly and durably stamp, brand or label every package or piece of the artificial product — "oleomargarine." Many of them have complied technically with the law, but the stamp used has been so illegible as to really not expose the true character of the goods, and, therefore, not strictly fulfill the requirements of the statute. The number of arrests and indictments has already been large, and hosts of convictions are soon promised by the attorney in charge of the suits. These detections and prosecutions are carried on by the trade, through the organization above alluded to, which they denominate an organization for the protection of dairy products. A fund is being raised for carrying out the objects specified, and as the benefits are to be enjoyed very largely by the producers, it will doubtless occur to many of them that they may, with propriety, contribute to the fund, and lend their moral aid toward securing the protection sought by the association, which involves the passage in other States, of a law similar to the one already in operation here, referring to oleomargarine.

There is one class of violators which can be most effectually detected by the producers, and that class is made up of dairymen who use oleomargarine to mix with their butter. If the percentage of foreign matter is not too great, this fraud is very difficult to detect where the product goes into consumption while fresh, and it is, therefore, the most dangerous and harmful of any violations of the law. Dairies and creameries using the artificial product might be readily detected by watchful neighbors: and the prosecution of a few of them would serve to check the fraud at once, although I believe it has already gained considerable headway. At any rate, there are many producers accused of adulterating their butter and it would be for the benefit of State butter-makers generally to have it understood that there was a vigilant watch kept by all honest dairymen upon those producers who showed any disposition to palm off on the public anything but the pure product of the dairy. Much good has already been done here by beginning this prosecution; but it would doubtless be only temporary if the vigilance of the authorities was allowed for a moment to relax

CATALOGUES, &c., RECEIVED.

THE Illustrated Annual Register of Rural Affairs and Cultivator Almanac for the year 1878—containing practical suggestions for the farmer and horticulturist, with nearly 140 engravings. By J. J. Thomas. Luther Tucker & Son., 395 Broadway, Albany, N. Y.

THE Baltimore Sun Almanac for 1878.

ANNUAL REPORT of the Secretary of the Interior on the Operations of the Department, for the fiscal year ending June 30, 1877.

ALBERT HANFORD'S Texas State Register for 1878.

WHEAT CULTURE in Tennessee. By J. B Killebrew, Commissioner of Agriculture, Statistics and Mines. A valuable treatise of 250 pages.

WE are just in receipt of a copy of three lectures on the Science of Agriculture, by our contributor, Dr. FLAVEL S. THOMAS, A. M., of "Major Farm," Hanson, Massachusetts, member of the Plymouth County and New England Agricultural Societies, and founder of the Hanson Farmers' Club.. The topics pithily discussed in these lectures are: "Farmers' Clubs," "Agriculture in Schools," and "Agricultural Bung-holes." and the treatment of these subjects is marked by the sound common sense, ease, and sprightliness, which distinguish his contributions to our columns.

PETER HENDERSON & Co., 35 Cortlandt St., N. Y. New Catalogue for 1878 of seeds, and farm and garden requisites.

Mr. HENDERSON'S catalogues, besides their lists of flower and vegetable seeds, are always valuable for their originality and trustworthiness. This, however, might be expected from one of Mr. HENDERSON'S experience and enterprise.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Tenth Duchess of Geneva, The.... 5
Stock Farm, How to Organize a.... 5
Barn for Straw, A.... 5
Jottings at Kirby Homestead.... 6
Notes from Maplewood Farm.... 6
Farm Notes.... 6
Thoughts from a Farm.... 7
Queen Bees, Eggs Laid by.... 7
Plum Orchard of Michigan, The Prize.... 7
Lice on Window Plants.... 7
Garden Experiments.... 7
Musk Melon.... 8
Grouping Rhododendrons.... 8
Food Results of the Corn Crop of the United States.... 8
Potato Beetle, The Colorado.... 8
Bulbs for the Flower Garden.... 9
Dipladenias.... 9
Western Echoes from the "Maple Shadows".... 9
Seed Exchange.... 9
Does Poultry Pay?—No. 4.... 9
Corn Sheller, A New.... 9
Shall We Bend to Our Work, or Bend Our Work to Ourselves?.... 10
Recipes.... 10
Personal Observations of a "Commercial Traveler".... 10
Maine, From.... 10
Rural Special Reports.... 10
Scarlet Fever.... 11
Mutton for Exportation.... 11
Oleomargarine Fraud, The.... 11
Catalogues, &c., Received.... 11

EDITORIAL PAGE:

The European Outlook.... 12
Are Plants Healthy in Sitting Rooms?.... 12
Was He Successful?.... 12
Protecting Trees from Mice and Rabbits.... 12
Spitting in Railway Cars.... 12
Our Seed Distribution.... 12
Notes—Brevities.... 12

LITERARY:

Poetry.... 13, 15, 16
Her Mother's Secret.... 13
Rosemont.... 14
Beds.... 14
A Daring Feat.... 14
Bric-a-Brac.... 15
For Women.... 15
Training Girls to a Practical Knowledge of Some Profession or Trade.... 15
A Little Trimming.... 15
Needle Book.... 15
A Suggestion about Old Maids.... 15
Reading for the Young.... 16
Letters from Boys and Girls.... 16
Puzzler.... 16
Sabbath Reading.... 16
A Godly Enterprise.... 16
Golden Maxims.... 16
Publisher's Notices.... 17
Various.... 17
Markets.... 17
Answers to Correspondents.... 18
News of the Week.... 18
Personals.... 19
Wit and Humor.... 20
Advertisements.... 17, 19, 20

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THE EUROPEAN OUTLOOK.

At no time during the present European conflict has there been any serious doubt with regard to its issue in the absence of all intervention from other nations. At the outset, it was generally supposed that if the struggle were confined to the actual belligerents, a single campaign would either force the Turks to conclude peace or place the Russian forces in possession or within easy reach of Constantinople. Their unchecked advance through Roumania, the feeble opposition made to their passage of the Danube, and the rapid march of their advance guard, under Gen. GOURKHA, across the Balkans, all confirmed this impression. While the series of reverses they encountered soon after proved that the war would probably be protracted longer than at first anticipated, yet, in view of the vast disparity of the forces and resources of the belligerents, its ultimate issue could scarcely be doubted, even by the most ardent admirers of the soldierly qualities displayed by the Ottoman troops. Indeed, many of the far-sighted friends of the Turks, while proud and boastful of their successes, were secretly apprehensive of their results. Reverses, it was felt, could only urge the Northern Colossus to greater efforts and to the exaction of severer terms at the end; while each triumph cost the Moslems so heavily that there was serious risk of a sudden collapse whenever the accumulated reinforcements of their opponents should enable them to turn the tide of war. The course of recent events goes to prove that these apprehensions were not groundless. So uniformly successful have been the movements of the Russians of late, and so overwhelming the number of troops they have brought into the field, that had not a winter of unusual severity temporarily checked or entirely suspended military operations, it is not improbable that the Muscovite troops would by this time be swarming through the Balkan Passes into Roumelia. Once south of the mountain range, there does not seem to be force sufficient to check their triumphant march on Adrianople.

For years it has been the general opinion across the Atlantic that the final settlement of the Eastern Question would involve an extensive, if not a general, European war. At the outbreak of the present hostilities there was imminent risk that other nations would be drawn into the struggle, and this risk will recur with greater urgency whenever the conditions of peace to be imposed by Russia shall be made public. The interests of every European nation are more or less involved, directly or indirectly, in the settlement of the conflict. It is not likely, therefore, that Russia will be permitted, without vigorous protest or even intervention, to impose on the vanquished Turk terms that would seriously affect the safety or prosperity of other nations.

Great Britain is specially interested in this matter. Between her and Russia there has been for years a growing rivalry for influence and supremacy in Asia. Both have there been extending their empires, the one from the north, the other from the south, until they have nearly come into contact, and British statesmen have long been persuaded that contact there will inevitably mean conflict. Russia, paramount at Constantinople, could at any time impede or block her rival's most direct route to India and constantly endanger the richest possession of the British Crown. It was dread of this danger that led England into the Crimean war, and it may also force her to take a hand in the present struggle. Already she has 80,000 troops ready to be thrown into Turkey within a month, her arsenals at Malta, Gibralter and at home, are abundantly equipped with munitions of war of every description, and although among her politicians and people there is a large element anxious for peace at any price, yet the bulk of the nation are evidently resolved that their possession of India shall not, without a struggle, be endangered by the results of the present conflict. And should Great Britain become embroiled in the conflict it is by no means improbable that other countries will also be drawn into it.

ARE PLANTS HEALTHY IN SITTING ROOMS?

That is, are rooms in which plants are kept more healthful or less healthful than the same rooms without such plants?

To answer this either one way or the other, it would be necessary to know how many and what plants are kept, and how they are kept; the size of the room and the exposure to sunshine and light, and finally, how the room is heated. We believe that plants, as they are generally kept in sitting-rooms, are positively injurious to the health of the inmates. Such plants are never healthy. Scarcely one condition of a healthy existence is provided them. The heat of the room is always changing, to suit the people, not the plants. At night the temperature is generally too low, and oftentimes the air is impregnated with deleterious gases that escape from stoves or heaters that are fixed to last through the night.

Sunshine, the first necessity of their healthy existence, flits by them like a savory odor by a hungry man. The soil of the pots in which they grow, is almost always too wet or too dry. In the former case, they are like so many stagnant pools that no doubt generate, though in minute portions, poisonous exhalations; and the same may be said of the green, slimy substance that too often is permitted to collect upon the pots and remain for weeks at a time.

If plants are healthful in sitting rooms, it can only be because they liberate more oxygen than they consume. But this is true probably only of plants in vigorous growth; and the house plants of which we speak, instead of growing vigorously, are rather in a slow decline that, if permitted to continue long enough, would end in their death. We are fond of house plants. They invest home with an interest that nothing else can supply. But unless the pots are frequently and thoroughly washed, unless they are amply drained and the soil used so "light" that it cannot become "sour," we should answer our question in the negative.

WAS HE SUCCESSFUL?

We know a farmer in a Western State who made $30,000 on his farm by the time he was fifty years of age. How was it done? He bought a large farm when land was cheap. The land was of excellent quality, and he paid for it all. He kept out of debt, or nearly so. He had an ambitious wife who worked hard, raised a large family of children, and died in middle age. The man had a strong constitution, and did the work of two men. He was up early and late, and always took the lead and planned the work well for his men. He cultivated his land thoroughly, and did everything well. He was not very particular about fixing things up in style. The front yard was not expensive. He had a good vegetable garden, a fair orchard, good barns, and a plain, comfortable house. He bought good tools, kept them in repair, had plenty of them, and housed them, even to sled-stakes and hand-rakes. He always kept young stock growing all the time till they got their growth or were disposed of. His boys and all the rest of the family worked hard. When about fifty years of age, he sold his farm, moved to a village, lost $6,000 to $10,000 in some stock companies. He does not want to go back to his farm. None of his boys have any desire to be farmers—they can make money in trading or in other business. After giving the facts, we leave the above question for each reader to decide for himself.

PROTECTING TREES FROM MICE AND RABBITS.

Next spring we shall doubtless have numerous inquiries as to how to preserve gnawed trees. There are several popular remedies to keep rabbits away, and some to keep off the mice; but we know of none better than the following, which we have seen extensively tried, with complete success:

In autumn, wind the trunk of the tree up to the branches or higher, with coarse paper, about which wind a layer of tarred paper, and tie with a string. Heap a conical mass of earth fifteen inches high about the base of the tree, and there will be no danger from mice or rabbits. Tarred paper next to the bark may injure the tree, hence the inner layer of coarse paper which contains no tar. These materials are easily obtained, and the whole cost of labor and material will not much exceed one cent for each tree. The man who will not attend to the preservation of his trees at the proper time, after he has been told a cheap and effective way, does not deserve much sympathy if his trees are found "barked" in the spring. We have known trees to be lost, which had been rubbed with liver, perhaps because the work was not thoroughly done. The same might occur if the trees were rubbed with the blood and flesh of a rabbit.

NOTES.

Our Seed Distribution.—We have worked hard to get all of the seeds mailed to applicants before the New Year and have measurably succeeded. Less than one thousand orders remain unfilled at this time, and these will be attend to in a few days. There is one objection to such arrangements. It is that owing to illegible writing, to carelessness or thoughtlessness on the part of the applicant, we are unable to fill many orders. Of course we are blamed! We have received some addresses (?) without the State—some without the town, several without any name. A number written in pencil, have been so blurred when they reached this office that they could not be read. With such exceptions, we have filled all orders save the thousand above referred to, and those of our subscribers who having applied for the seeds, have not yet received them and do not receive them within the next ten days, will be fair enough to questioning whether the neglect may not be their own. Our next seed distribution to subscribers will be announced within the next six months.

Plowing by Steam experience has proved to be a very economical method of tillage by the large farmers and landowners, not in England only, but also on the Continent. American agriculturists pride themselves not a little on the extensive use of labor-saving appliances; yet steam plowing, despite the successful results of a long series of experiments elsewhere, has still to become a feature in American agriculture. Is this drawback due to lack of capital or lack of enterprise? In view of the large income of some of our Western farmers, we cannot ascribe it to the former cause, and yet our acquaintance with the enterprising spirit of our agricultural friends will hardly allow us to attribute it to the latter.

Spitting in Railway Cars.—In many portions of the West, writes one of our contributors, passenger-cars are often rendered disgusting in the extreme to a person of refinement. The RURAL may give a good hint and help to reform this disgusting practice by printing a copy of a placard which may be seen conspicuously posted in the clean coaches of the Boston and Providence Rail Road. "Passengers using tobacco, or having occasion to spit are requested to take seats in the smoking-car where they can indulge themselves without being a nuisance to the ladies and other decent inmates of this car."

BREVITIES.

DANDELIONS are blooming.

SUBSCRIBERS will do us the favor to bear in mind that the RURAL NEW-YORKER is discontinued after the expiration of the subscription term.

WE call attention to the article of Prof. CYRUS THOMAS on the Potato Beetle, which modestly fills up a little blank in the history of this distinguished American.

Now is a good time to "turn over a new leaf." It is also a good time to subscribe for THE RURAL NEW YORKER. May not two birds be killed with one stone in this way?

PROFESSOR STOCKBRIDGE says that the man who plows adds food to the soil for plants; that heavy soils should be plowed in the fall—light soils in the spring; that in plowing, only an inch or so of the sub-soil should be brought up annually.

AN EXHAUSTIVE TREATISE.—Just as we are going to press, we have received what appears to be an exhaustive treatise on wheat culture in Tennessee, by J. B. KILLEBREW, Commissioner of Agriculture for that State. We have only had time for a cursory glance through its 255 pages, but we shall return to the subject therein discussed when leisure permits us to study it more carefully.

THE northeastern Bee-Keeper's Association will hold its annual meeting at the City Hall, Syracuse, N. Y., on Feb. 6, 7, 8. Among other subjects of importance to bee-keepers which will then be discussed, special mention may be made of an essay on Recently Discovered Parasites of the Honey Bee and their Connection with successful wintering, while the subject of maketing honey will also receive special attention.

IT is usually recommended, after having falls of snow the weight of which bends down and sometimes breaks the branches of evergreen trees, to go about and beat the snow off. If it is very feathery and the individual a very careful workman, this may be a good plan. We have, however, known more injury to be wrought by carelessly brushing off the snow than the snow would have effected, had it been left to itself, through several winters.

THE ILLINOIS INDUSTRIAL UNIVERSITY will hold an agricultural Institute at the University, situated between the cities of Champaign and Urbana, commencing Monday, January 14th, and continuing until Friday evening, January 18th, 1878. The main feature of the Institute, which is a part of the work of the College, consists in a specially prepared course of lectures by members of the Faculty and prominent agriculturists of the State. There will be no charge or fee of any kind. Visitors will have access to the libraries, cabinets, and museum of the University. The hotels at both towns will entertain at a reduced price, and the Illinois Central, Wabash, and the I. B. & W. Railroads will reduce their fares to those wishing to attend the meetings.

FROM the results of Sir JOSEPH HOOKER'S travels in the United States, remarks an English journal, further contributions to our knowledge of the physiology of plants may be expected. And Punch adds: "Yes; and especially from the experience he may be supposed to have enjoyed at New York—a location so celebrated for producing that peculiar class of plants growing, like certain mysterious cryptogams of the toadstool family, in Rings." The Athenæum says: "Sir J. HOOKER is, we believe, of opinion that the key to the botany of the U. S. is to be found in Colorado." To this Mr. Punch remarks: "Of course, the Conservator of Kew Gardens must know where to find the key of Botany. But in the public mind just now, Colorado is less intimately associated with Botany than with a sister science. Between its Botany and its Entomology, however, Colorado seems likely to acquire a scientific importance."

Literary Miscellany.

THE DEAD VIOLET.

WHERE is the hand that gathered it, the violet fresh and sweet,
From its nest 'mid the dewy mosses that clothed the great oak's feet?
Alas for the eager fingers!
They handled the sword-hilt well;
But they could not guard the bright young head
That found a soldier's gory bed,
When the vines were crushed 'neath the guardsman's tread,
And the night over Alma fell.

Where is the smile that welcomed it with her gallant lover's vow,
And placed it amid the golden braids that crowned her fair young brow?
It is carved on the lips of marble
Of the statue that marks her rest,
As she lies alone in her maiden grave
In the great cathedral's solemn nave,
Where the organ's voice, like a rolling wave,
Flows over her virgin breast.

Leave the violet in the volume of the old romantic rhyme—
Pale symbol of love that has passed away, dry pledge of a sweet old time!
What would avail to place it
Again in the soft green grass?
The old oak, felled, 'mid the moss is flung;
The tale is told and the song is sung;
Let it molder the moldering pages among;
So does youth, love, and spring-time pass,

[S. K. *Phillips*.

HER MOTHER'S SECRET.

CHAPTER V.

The Elopement.

[Continued from page 423.]

"IT will be necesssary to follow me carefully in order to understand all that followed.

"We were to meet on the river bank, and go in the boat to a landing, where a close vehicle would await us.

"A female would be in the carriage, and she and I would drive to the spot where we were to be married.

"I sighed deeply as I parted from my poor aunt and Mr. Linton, whom I never expected to see again, and went up to my room.

"I put on a neat traveling-dress, and that is all, going down thus accoutered to the garden, where Arthur Mortimer—as such I knew him—awaited me.

"We entered the boat, and were speedily rowed to where the carriage was posted. A very respectable woman stood near the vehicle, which I entered with her, and was driven off through the night for about an hour, having gone forward on horseback.

"We reached an inn. Now commenced the chief cause of my after perplexities.

"In my terror and confusion—for I was afraid and confused—I thought of nothing. I never heard the name of the hotel we stopped at, nor the town where we were married.

"The ceremony, all being ready, was performed in a church, the door being open, and several persons looking on.

"The minister gave us a copy of the certificate of marriage, which my husband put in his pocket; and, entering a post-chaise, we gave ourselves up to the ecstacies of happiness.

"I knew nothing of the road we took, except that it wound a good deal amid woods and picturesque scenery. Then we reached a small Italian villa, where we found everything prepared by my husband, one female attendant for myself, a cook, and his own man.

"Now commenced a life of happiness, which I must say never changed while we were together.

"My husband was necessarily absent for some time to attend to his regimental duties, and to keep our secret.

"Thus passed six months, when he came home, looking harrassed and pale.

"'What is the matter?' I asked, eagerly.

"'I must leave you for a week! It is an important summons to London. I really cannot make out what it means. Be careful of yourself,' he said, gently and kindly, 'and do not go out until I come back.'

"It was not likely, as I had no acquaintance; but I promised all the same.

"A very handsome present he had made me in the first week of our marriage. It was an inlaid desk, in which I had collected a few hasty notes signed 'A. M.,' some bouquets, and other trifles, which to me were invaluable.

"'Ah, Alice,' he said, rather gravely, 'whatever you do, take care of that! It is more valuable than it looks.'

"I have remembered the words ever since, and thought there was a hidden meaning in them; but I was wrong—the desk only contained what I had placed there myself.

"We parted next day early, I insisting on rising to make the breakfast. He went away, and from that day to this we have never met."

The doctor and Edith looked ominously at each other.

"The days passed, full of hope and joy, when, one day, my servant announced, with rather a peculiar face, that a gentleman wished to see me.

"Thinking he might come from my husband, I bade her admit him. His card bore the name of Major Cameron.

"He entered in a jaunty kind of way, that astounded me at once.

"'Did you come from my husband?' I asked.

"'Husband,' he said. 'What husband?'

"'My husband,' I repeated angrily, 'Captain Arthur Mortimer. I am Mrs Mortimer.'

"'There is no such captain,' he cried, 'and therefore there is no Mrs. Mortimer. You have been deceived by a rascal, who has now utterly abandoned you—whom you will never see again.'

"I stood annihilated, wholly unable to speak, scarcely able to stand.

"'It is false!' I cried at last. 'It is a vile calumny! My husband will return and refute it.'

"'Never!' he said, insolently. 'I have purchased the place as it stands, and I give you until to-morrow to leave—unless, indeed, you like to remain with me.'

"This was said with such unctuous insolence that I could have struck him.

"I bade him stand aside, that I might leave the room.

"Have you no marriage certificate to show?' he asked, not allowing me to pass.

"'None," I replied.

"He rubbed his hands, and let me go.

"'I packed up my few things, especially my desk, and then got from the woman who waited on me some idea of where I was.

"My husband, as I still believed him to be, and as I shall to my latest hour, had left me ample means,

"I procured a fly, drove to the nearest town, where I found a coach that drove through the town where my aunt resided.

"Yes, in my distress, I was going home to my aunt. It was ignorance of the world, it is true; but what else could I do?

"It was night when I reached the old place, and the coach put me down at the door. I gave a feeble knock or ring, and a man put my things in the hall.

"Then the old attendant gave a great scream as she rushed into the parlor.

"'Miss Alice come home!' she cried.

"My aunt appeared on the threshold, and gave me a withering look. She was much aged, and leaned on a stick.

"'Woman,' she said, in a harsh voice, 'what want you here?'

"'Aunt, if I have sinned towards you, I have repented; but I have not sinned——'

"'Begone!' she cried.

"'At least hear me!' I urged, piteously.

"'No; leave my house,' she said, 'or I will have you thrust forth!'

"'Not to-night,' put in a gentle voice, that of Mr. Linton, 'not, at least, until you have heard what she has to say!' And, offering me his arm, he calmly led the way into the parlor, where a cosy tea was laid out, of which he made me partake.

"Then refreshed and encouraged, I told my story, to which he listened without interruption, though my aunt's severity did not relax.

"When I had finished, the excellent man spoke.

"'That the poor child has been married I have no doubt,' he began; 'but the whole thing has been so cunningly managed we shall have some difficulty to prove it.

"'That is what I fear.'

"'You have no idea of the church,' he continued, 'and you are told that this officer and gentleman adopted and assumed a false name. All this can be searched into. But what do you intend to do? he said, addressing himself to my aunt.

"'She cannot remain here,' was the cold reply, 'after what has happened. I should be pointed at with the finger of scorn. As I believe the poor girl has been wronged, I shall provide for her.'

"'That is like my old friend!'

"'But while you are looking for this rascal,' she continued, 'she must live in retirement. The best thing to do will be to assume a widow's garb,' she said, with peculiar significance, 'and a false name. Until she find her husband, I will allow her two hundred a year.'

"'Very good,' said Mr. Linton, stopping any objection on my part.

"'If she never finds him, which is most likely, she shall have an annuity of the same amount.'

"I at once removed to a village at no great distance, where amid sorrow and tribulation, my daughter was born.

"Meanwhile, Mr. Linton had not been idle.

"He had looked far and wide for my marriage certificate, and could not find it.

"Then he searched for the house in which I had lived. He found it, and discovered that the man who had frightened me away had left within half an hour of my departure.

"My husband came home a week after, and heard I had eloped with the Major.

"I presume he believed it of me—Heaven forgive him!—and so forsook me forever.

"Was it a plot of that dreadful man, or was he an agent of the father, who had discovered our marriage?

"How can I tell now?

"But the approach of death often makes us see more clearly, and I believe that I was legally married, that my husband dearly loved me, and that we were separated by some treachery.

"Had we found him, we should have discovered the mystery of the the name. I never saw my marriage certificate, and how do I know what he signed, any more than the name of the church?

"I never saw the license, and I am sure never heard a word of the service, or knew what the parson said to me.

"I shall die in the belief that he intended me well.

"I leave my daughter a thousand pounds invested in good mortgages. Mr. Linton has seen to all that, as he has attended to all my affairs since the birth of my child.

"Once he wanted me to marry him, saying my child would have a father. I declined, first, because I have never loved but once; and second, because my husband may still be living.

"As soon as I am no more, my child must go to London.

"Let her take the inclosed letter to Mr. Linton, and do as he wishes.

"I have brought her up, with the aid of my little means, to earn her own living.

"Should my child ever meet with any one she grows to love, never let her marry clandestinely. Let it happen openly, in the light of day, before his friends and her friends, if she have any."

"Oh, mother!" said Edith, falling on her knees, "I have deceived you very much! I am engaged to be married to Royston Yorke!"

There was a fearful silence for some minutes.

"Give me a strong dose!" cried the anxious mother. "I should like to hear all about it before I die!"

The doctor obeyed, and Edith, with tears and sobs, told her story.

"At all events, no harm is done," she said, with a sigh; "but don't expect much of him, as you have not heard anything. Poor Jack; this accounts for his jealousy, and the coolness of his parents. Finish reading my letter."

"But I wish her, in all things," continued her mother, "to defer to the opinion of Mr. Linton. He will advise her for the best, and be her friend."

"Should Heaven bring you face to face with your father, say I died believing in and blessing him.

"Heaven bless and guard my child, who, since I lost him, has been to me the one earthly blessing.

"ALICE MORTIMER."

"This is a most remarkable history," said the doctor, "and I do believe, my dear madam, that there is some warrant for your confidence. Did you never have a portrait of your husband?" he added, musing.

"He showed me a medallion, which he intended to give me," she faintly answered; "but what he did with it I know not. I was too happy with the original to ask for the faint presentment. And now I will rest."

"You will do the same, Miss Edith," urged the doctor, or we shall have you ill."

"I will not leave her," said Edith, quietly.

And they had to yield to her.

In the morning there was wailing and distress. The spirit of the excellent woman known to the people of Longmead had passed away.

CHAPTER VI.

The Funeral and Departure.

THERE were several persons to call upon Edith—even the Claytons coming, now that she was in sorrow and trouble.

She saw no one but the doctor and the rector.

A week after the funeral, everything being sold up except her personal effects, a few relics and the desk, Edith took her departure into the wide world, accompanied only by Gale, who said she had friends she wanted to see. Of course it was pious fraud to accompany the young girl, but that was the poor woman's business.

On reaching London—which seemed to them a wilderness, a waste—they found a coffee-house, and put up there for the night.

As soon as they thought the hour propitious, they hired a cab, after locking their things up in a room, and drove to Chelsea, where Mr. Linton lived in an old-fashioned house in Cheyne Walk.

A HAPPY NEW YEAR!

He was a connoisseur, a great judge of pictures and such things, and his house was a perfect museum of art. He loved books, too, both for their outsides and in.

He was lonely, poring that morning over some volume of forgotten law, when his "female Cerebus," as he called her, announced a woman and a young girl.

"Who are they?" he said.

"They will not say," she replied, "but the young girl, who is in deep mourning, says she has a letter of introduction."

"Send them in," he answered.

He stood watching; and, as the lithe, sweet figure in deep mourning came into his presence, he started forward as if to take her hand.

"This is a letter from my late mother, Mrs. Marshall," she began, tearfully.

"From Alice Estecourt, at last!" he said, mournfully. "She said it would come soon. Be seated, my dear girl, while I read. Mrs. Gibson, let us have lunch directly."

The letter was soon read, and then he spoke.—[To be continued.

ROSEMONT.

BY PANSY.

BEAUTIFUL, oh, so rarely beautiful! Away beyond the massive iron gates stretches a smooth, level lawn, of the softest, brightest green. Noble elms and sturdy oaks mingled with trees of lighter form, and shrubs of symmetrical build and beauty dot the well-kept lawn, and cast cool, lengthening shadows on the velvet grass beneath. The rustic seats, and chairs of fanciful pattern scattered here and there in shady nooks; the large marble vases holding exquisite plants and rare vines; and the well-kept gravel-walks winding through the lawn, show the owner to be a person of means and cultivated taste. A sharp turn in the walk brings the house in view, and we stop spellbound by the vision of beauty which bursts upon our sight, most fittingly named "Rosemont!"

Before us is a lovely Gothic cottage, almost hidden by the profusion of roses which clamber and limb, twist and twine, around its pillars, porticos, windows, and doors. Roses, roses everywhere—great creamy-white beauties, rich sulphur, pale straw, deep crimson, delicate blush, are Provence, bud, blossom, full-blown of every sort, kind, and in every form. At the right a small fountain flashes in the clear sunlight; in whose marble basin stately callas and strange water plants mirror their green leaves in its crystal water, and myriads of tiny gold-fish dart, dive and sparkle.

A true September haze filled the atmosphere and veiled the far horizon; a sense of peace and quietness pervaded the air, as though nature was resting, secure and contented, from her labors; while the sun seemed to shine lovingly and brightly on this charming retreat.

On the dim, cool, shady verandah, a young girl lies, lazily swinging in a hammock. The soft, perfumed air gently stirs the masses of wavy hair so gracefully arranged around the small, queenly head, upheld by one dainty hand; and the bright, roguish eyes fixed on the fair scene, have in them just now a dreamy, far-away look. "It seems so strange there should be so much sorrow, wickedness and misery in the world—surely, they can never enter our beautiful home! I question if Eden ever could have been more gloriously lovely!" she mused. Little did the happy, joyous girl know of the dark cloud so soon to envelop her in its misty folds.

That NEVA GERMAINE was wondrously beautiful, and that she was as lovely in mind and disposition as in person, no one denied or disputed. Barely medium size, slender and graceful as a fawn, a delicate oval face framed by bands of wavy brown hair; low, broad brow, small Grecian nose, a dainty mouth with dimples shy and sweet lurking in the corners of the full red lips; and a pair of the sauciest, sweetest, softest, most laughing brown eyes you ever saw, completed her picture.

Orphaned at an early age, she was adopted by a wealthy uncle, wifeless and childless, who gave to her the place of his lost idol. Spirited, loving, witty and wise; proud, yet not haughty; tender and true, she won her way at once into one's heart of hearts.

On her return from school, two years before, her uncle fitted up this place for a summer retreat where she, in the joyous calm of her girlish heart, fairly reveled; and to which he turned at nightfall from the crowded city, as a traveler turns from the burning sands of a desert to cooling shades and flowing springs.

Down the long, dusty road, over the hot white sands, clattering and clashing over the stones, a hasty rider dashes to the gate, tosses something into a young lad's hand, and is away like the wind.

Aroused from her reverie by the sound of hasty steps, NEVA slightly raised her head to ascertain the cause. As she did so, the boy approached, and laid in the fair hand, outstretched to receive it, a telegram.

Springing from the hammock, and tearing it open, she read:

"Your uncle is dead. The body will be at Rosemont at 8:30 P. M. L. D. LEWIS."

"Dead!—dead!" she gasped. She gazed around with dilated eyes, into which a horror had swiftly crept; and as the terrible truth burst upon her, she sank down, crushed, silent, benumbed by the overwhelming sorrow which rolled its dark waves over her. For hours she sat powerless, motionless, her loving heart wrung with anguish; until the old housekeeper, coming to ask some question, found her nerveless, calm—the very fountain of her tears frozen by this great grief.

On the following day NEVA, attended by a few old-time friends of her uncle and a motley crowd of the country people, paid the last tribute of love and respect to the memory of her loved uncle, tenderly laying the precious dust in the bosom of our common mother.

Mr. GERMAINE, had intended that his adopted child should inherit his vast wealth but by one of those strange perversities of men about such matters, had delayed the necessary steps until too late. Near the close of the solemn day, the old family lawyer requested an interview with NEVA. He told her briefly that years before her uncle had confided a will to his care and that it was now proper it should be opened and read. NEVA never forgot the dim, old library, lighted by the golden gloss of the brilliant sunset, or the oppressive stillness of the room, broken only by the deep voice of the lawyer, as he told her that she, the loving, cherished, petted child of her uncle, was friendless, homeless—alone,—the beautiful home she loved so well, was a stranger's and she an alien. Gently expressing his sincere regret for her misfortune, and sorrow that the property must pass to a distant cousin, and proffering his aid to her if needed, he left her alone with her redoubled sorrow. Long and lingeringly she gazed over the well-known home, every object telling of the love, generosity, taste, and thoughtful kindness of him who had placed them there; every plant, shrub and flower reminding of happy, joyous hours gone beyond recall. At length she hid her face in the soft velvet cushions, and prayed. What it was that went voicelessly up, to the great, shining Throne, need not be told, but it was full of agony and supplication for help and when the little head was raised again, the eyes were bright and shining, full of hope, and the set lips indicative of a rigid determination and purpose.

Only God knows the terrible anguish tugging at her heart's strings, as she bade adieu to her home with its cherished associations to the mound which covered her more than farther, and turned her way out into the wide world alone. Ah! little did she know of the dark, lonely paths her little feet must tread, the cruel thorns of heartlessness which would pierce the tender hands; the insults and annoyance to which her fatal dower of beauty would subject her. At nightfall she reached a well-known city, and with difficulty found a quiet lodging from which she might search for employment.

At school, her masters in painting united in praising her talent and wonderful skill in that art, her taste for which amounted to a passion. When the first shock of her misfortune had passed, and she began to cast about her for some source of support, she at once determined to turn that talent to advantage by becoming a teacher of her loved art.

In her limited knowledge of human nature, gleaned from the experience of her sunny life of nineteen happy years, she doubted not the willingness of old friends to assist her in her purpose. Day after day, she sought friends of former times, stated her position, and solicited their patronage receiving scorn, neglect, and haughty refusals; finding them indeed "summer friends."

Night after night, footsore and weary she reached home with a discouraged heart, and a sad conviction of the selfishness, and hollow-heartedness of human nature.

Day by day she haunted art galleries, passed up and down the busy thoroughfares searching for something to give her a foothold; receiving jests, jeers and coarse remarks upon her appearance, which shocked her refined nature, and filled her timid, shrinking soul with fear. Months passed. Her money, jewels and clothes were gone; want stared her in the face; starvation, death seemed not far away. The beautiful bloom had fled from her cheeks; great, mournful shadows circled the weary eyes; and a tender, pathetic sadness settled about the perfect mouth, from which the dimples had fled. Shall she despair and give up the struggle? No, never! "Every cloud has a silver lining," and He who wove it, knows just when to turn it out.

Possibly this cloud, impenetrable as it seems, ere long may burst, and through the fissures the golden sun come streaming,—the more welcome, because of its long delay. As a last resort, she called a second time at a popular art-store, and asked for employment. With words of refusal upon his lips, the proprietor turned, when his attention was arrested by the piteous pleading of the beautiful face. Instantly there flashed before his vision the memory of another such face, dear to him, now resting beneath the violets; and briefly putting a few questions, he requested her to call the next morning. NEVA came early the next day. The proprietor led the way to a small studio, and, to test her skill, gave her a small landscape to copy. Nerved by her great need, and aided by a strong determination, she not only finished the copy, but improved upon the original, to the astonishment of the artist himself. Encouraged by the remuneration given, and by the prospect of steady employment, catching faint glimpses of the "silver lining," she began to feel that the deep waters were becoming more shallow, and that she was nearing the shore.

Her enthusiasm for her art caused her spirits to lighten, and she began to think the wheel of fortune might sometime be reversed. Some few months after, a gay party were "doing" the gallery. Apart from the others, lingered a tall, dark man, apparently twenty-eight or thirty. The flashing eye and interested air betokened him more of an enthusiast in art than the others. Traversing the rooms, he came upon a scene which rivaled all others, and held him silent in admiration.

In a small room at his right, upon an easel rested a magnificent Madonna, bright and glowing, with its rich coloring, and apparently just finished. Before it sat a young girl, the artist. The slender form clad in deep mourning was slightly bent forward, and so still, so calm and motionless, she seemed scarcely breathing. The slight delicate hands were resting, closed, upon the lap. The small head thrown lightly back, and on the perfect features a look of mingled mournfulness, and restful peace reposed. A tender, pitying expression crossed his handsome face. Quietly retracing his steps, he inquired the name of the lady, receiving no small shock when the proprietor (an old friend) told him; he recognized a name the owner of which he, for many months, had been engaged in looking for. NEVA having finished her work came slowly down the long gallery, and as she stopped to speak to her employer, the gentleman (NIEL MURRY) asked and received an introduction. Shy and timid as a fawn, she avoided him at all times, and he, with a delicacy equal to her own, did not intrude. Each morning she found on her easel, as proof of this kind interest, a bunch of lovely flowers. Slowly, steadily, he overcame her shy avoidance of him, by his noble, manly bearing, until she learned to respect and esteem him. Unconsciously did he win upon her, until she learned to look to him as a protector, to watch for his coming with pleasure, to listen to his voice; telling her of his utter loneliness in the world, of the death of a far-off cousin who had left a vast property to him, of all his thoughts, hopes and feelings; and in turn winning from her the story of her trials, and at last telling her of the deep, love filling his heart.

Quietly they were married one bright morning in June, and took the cars for his home (a place left him by his uncle he told her). As they neared its vicinity, she noticed familiar landmarks of her old home, and flood of bitter memories rushed upon her, but as they alighted at the familiar station wonder and surprise filled her heart.

Within the carriage, her husband tenderly drawing her closely to him, told her he was the cousin, to whom her uncle had left his property, that he was the stranger who had driven her from her lovely home. Telling her how he had returned, intending to deed all to her, and finding her gone, had searched steadily and unsuccessfully two long years for the missing girl, and at last, accident led him to the art-gallery where he found his reward. Holding her close to his heart, he pressed a long, lingering kiss on the sweet lips, and welcomed her to Rosemont again. During his strange narrative NEVA felt that indeed the cloud had burst, and through the rifts the sun poured in dazzling radiance o'er her; that for all the sorrow she had endured, threefold joy was returned, and a silent prayer went up to the good Father for his wisdom and guidance through the darkness, into perfect day.

BEDS.

ONE of the best riddles in the English language is on a bed:

Form'd long ago, yet made to-day,
I'm most in use whilst others sleep;
What few would wish to give away,
But fewer still would wish to keep.

While all people enjoy their beds, and look forward to them every evening of their lives as a rest after the toils of the day, as a refuge in sickness, a comfort in health, a place to be born in, and a place to die in, how various are beds—how much do people of different habits and different nations differ in their notions of what constitutes a comfortable bed!

It is curious to notice the habits of different nations in regard to beds. However dress, food, manners, cooking, political conditions, may vary in other countries, the beds differ as notably as anything does. In Eastern nations the bed is often nothing but a carpet, and is carried about and spread in any convenient spot, and the tired native lies down in his clothes. I remember a child who used to be puzzled with those miracles of our Saviour, who, in restoring an impotent man, directed him to take up his bed and walk—his idea of a bed consisting in a four-post bedstead, with its pallaisse, mattrass, and featherbed, besides blankets, sheets, and pillows. But even in very cold countries the beds are closely allied to the Eastern carpet. In taking a furnished house in Russia, on inquiring for the servants' bedrooms and beds, it comes out that the Russian servants are in the habit of lying anywhere—in the passage, on the floors, on the mats at the room-doors, or even on the carpets in the sitting-rooms—generally as near as possible to the stoves in the winter season. But in Russia the houses are kept so warm, by the system of stoves through the walls, that much bed-covering is no more required in winter than during the heats of summer.

In Germany the construction of the beds gives one the impression that the Germans do not know what it is to lie down. The bedstead is a short wooden case; there is a mattrass extending from head to foot, but so formed that at the half way, the upper end is made to slope at an angle of considerable elevation, and upon this are two enormous down pillows, which reach from the head of the bed to the half way down to the feet; consequently the occupant of the bed lies at an angle of at least forty-five degrees, and is nearly in a sitting position all night. In some parts of Germany there are no blankets; there is a sheet to lie on, and another over it, which is backed to a quilt wadded with down; and this is the entire covering, with the exception of a sort of bed, a thick eider-down quilt, but not quilted, which is placed on the top, and which, unless the sleeper is very quiet in his sleep, is usually found on the floor in the morning. In hot weather there is no medium; either a sheet is the only covering, or one of those over-warm eider-downs.

As the traveler proceeds more and more northerly, the size of the beds seems to decrease, and the covering provided to be less adapted to the changes of the seasons. Curtains to beds are rarely or never met with in Germany or in Russia.

While the bedsteads dwindle down to the smallest possible size in the northern parts of Europe, in the parts of North Italy near Como and Milan are found enormously large ones.

Beds have been stuffed with feathers, wool, horsehair, what is called flock, which is an omnium gatherum of all sorts of productions, shavings, hay, straw, and in the south of Europe with the soft and elastic dried leaves of maize; dried seaweed has also been used, but, pleasant as it was when perfectly dry, the sea-salt abiding among it attracted the moisture in every direction, from the atmosphere, from the perspiration, &c., and it became damp and unpleasant. In one of the seasons when hops were abundant in England it is related of a farmer that he sold the feathers from all the beds in his house, and replaced them with the hops. In another year or two, when the hops failed, and the price became very high, these same hops were disinterred from their beds, and fetched a considerable sum, far more than sufficient to replace the former feathers. History does not say whether the farmer's family slept more soundly for the hop beds, or whether the hops thus preserved were found to have any peculiarly fine flavor when made into beer.

There is no doubt that a vast number of people in health—we say nothing of invalids—lie too long in bed. It may also be said that they sleep too hot, as well as too long, to be likely to preserve health and live to a good old age. It has been long known that those who have far exceeded the ordinary length of human life, whatever their other habits may have been, have been early risers; also, that very old people who keep their health usually have slept with very little bedcovering. Young children and people with feeble circulations require more clothing than others, but only at first; and when once warmed, they would become too hot, their sleep would be broken or unrefreshed, unless some of the extra clothing were removed.

The exact character of beds, and the fitness of them for the comfortable repose of their occupiers, will much depend on the habits of nations, and what may be held to constitute comfort, which will vary with individuals. A Persian ambassador was once shown into a bedroom, where a grand canopied state bed had been prepared for him. He supposed it was a throne in his audience chamber, received his visitors seated on it, and retired to sleep on the carpet in the corner of the room.

Open windows through the night are by many considered dangerous, and that is a prejudice to some degree founded on truth, that night air is unwholesome.

One may refine to any extent on the luxuries of beds and bedrooms for those who have the means, but, for the good of the whole community, certain correct principles as to sanitary arrangements are fully recognized, and are rapidly coming into use. Each nation will have its own ideas of comfort, but throughout the world health is equally important, and the rules which will preserve it and promote it cannot be too extensively known or more powerfully recognized.

To habitual invalids, still more to healthy, active people confined to bed through some accident, the bed is an important matter, and not only comfort, but health and life may depend on the power of obtaining sleep; and to such the observations in this article are addressed. A healthy man, actively employed through the day, with no cares to agitate, and no irritable nerves, can sleep, and soundly sleep, anywhere; though the shepherd's boy said he never knew what it was to enjoy a good night, as no sooner was his head on the pillow than it was time to get up. R.

A DARING FEAT.

DIRECTLY opposite the Winter Palace, in St. Petersburgh, and one of the most conspicuous objects on the whole line of the Neva, is the citadel or old fortress, and in, reality the foundation of the city. I looked long and intently on the golden spire of its church, shooting towards the sky and glittering in the sun. This spire, which rises tapering till it seems almost to fade away into nothing, is surmounted by a large globe, on which stands an angel supporting a cross. This angel, being made of corruptible stuff, once manifested symptoms of decay, and fears were entertained that it would soon be numbered with the fallen. Government became perplexed how to raise it; to raise a scaffolding to such a hight would cost more than the angel was worth.

Among the crowd which daily assembled to gaze at it from below, was a roofer of houses, who, after a long and silent examination, went to the Government, and offered to repair it without any scaffolding or assistance of any kind. His offer was accepted; and on the day appointed for the attempt, provided with nothing but a coil of cord, he ascended inside to the highest window and, looking for a moment at the crowd below and at the spire tapering away above him, stood on the outer ledge of the window. The spire was covered with sheets of gilded copper, which, to beholders from below, presented only a smooth surface of burnished gold; but the sheets were

roughly laid, and fastened with large nails, which projected from the sides of the spire. He cut two pieces of cord and tied loops at each end of both, fastened the upper loops over two projecting nails, and stood with his feet in the tower; then clenching the fingers of one hand over the rough edges of the sheets of copper, raised himself till he could hitch one of the loops on a higher nail with the other hand; he did the same for the other loop, and so he raised one leg after the other, and at length ascended nail by nail, and stirrup by stirrup, till he clasped his arms around the spire, directly under the ball. Here it seemed impossible to go any further; for the ball was ten or twelve feet in circumference, with a small and glittering surface, and no projecting nails; and the angel was above the ball; as completely out of sight as if it were in the habitations of its prototypes. But the daring roofer was not disheartened. Raising himself in his stirrups, he encircled the spire with a cord, which he tied round his waist, and, so supported leaned gradually, until the soles of his feet were braced against the spire, and his body fixed almost horizontally in the air. In this position he threw a cord over the top of the ball, and threw it so coolly and skillfully that on the first attempt it fell down on the other side, just as he wanted it. Then he drew himself up to his original position, and by means of his cord, climbed up the smooth sides of the globe, and in a few moments, amid thunders of applause from the crowd below, which at that great hight sounded only like a faint murmur, he stood by the side of the angel. After attaching a cord to it, he descended, and the next day carried up with him a ladder of ropes, and effected the necessary repairs. ROVER.

BRIC-A-BRAC.

BY C. H. E. R.

DRESS with as much simplicity as possible, and endeavor to look as if your dress had been no trouble to put on. I have seen ladies exquisitely dressed, everything fitting, everything matching, no more ornamentation than was strictly allowable, every pin in its place, and yet the effect of the "tout ensemble" was marred by the extreme care that had been bestowed. The exceeding exactness, amounting almost to preciseness with which every bow was arranged, caused one to enter into a painful calculation of the labor bestowed. The effect was that of a correct architectural drawing in linear perspective, which one would have willingly exchanged for an artistic sketch.

Paradoxical as it may seem, a woman to be the perfection of fashion must be a little out of it. To be dressed in every minute particular according to the prevailing mode only places her on a level with other fashionably-dressed women; but let her use her own judgment, let her make some slight innovation, adopt some original idea that marvelously becomes her, and she becomes a fashion herself; her idea is copied, not always with success, for imitations are seldom successful.

WOMAN'S LOVE.—A French woman will love her husband if he is either witty or chivalrous; a German woman, if he is constant and faithful; a Dutch woman, if he does not disturb her ease and comfort too much; a Spanish woman, if he wreaks vengeance on those who incur her displeasure; an Italian woman, if he is dreamy and poetical; a Danish woman, if he thinks that her native country is the brightest and happiest on earth; a Russian woman, if he despises all Westerners as miserable barbarians; an American woman, if he has plenty of money; an English woman, if he is manly, affectionate, and true.

IDLENESS is the Dead Sea that swallows up all virtues, and the self-made sepulcher of a living man. The idle man is the devil's urchin, whose livery is rags, and whose diet and wages are famine and disease.

SPALPEEN.—The following explanation of this word occurs in a MS. written, if an opinion from the handwriting can be formed, between 1730 and 1740. It consists of notes taken in relation to Celtic antiquities and customs during a conversation between the writer and a "clergyman in Beaumaris, where I was once cast away in a storm." The reverend gentleman is throughout styled "Doctor," and his communications on Highland dress and games are curious: —

"The poor harvest-men who now pass in troops from Ireland to England are called Spalpeens, with a show of contempt or disrespect in using the word. Anciently the word Spalpeen meant a hero, a champion, or errant adventurer, and took its rise in the British Isles, from the number of younger sons of Irish kings, nobility and gentry, who passed in times of war to England and Scotland with volunteers to assist in defending those nations from the invasion of each other, but more especially of the Danes, when their own country was at rest. Many noblemen and gentlemen are now remaining in both kingdoms descended from these adventurers or Spalpeens. Spalpeena Diublishe is now used, as a synonymous phrase with a clever fellow of strength and activity.

IT may not be generally known that the manufacture of the Sevres porcelain is a government monopoly, and has been so since 1760. Its superintendence is confided to the most eminent scientific men of France, many of the ablest artists of the country being constantly employed in its decoration.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

A WEEK.

BY RENE BLUFF.

ANOTHER six days' work is done,
Another Sunday is begun;
Another week I've struggled through,
Against temptations old and new;
Nor always have the victor been,
When came some trial unforeseen.

This week, so sadly like the last,
Beyond recalling now is past:
And now that it has hurried by,
Another comes my strength to try;
Another week—there may not be
Another week of life for me!

O JESUS, cleanse this sinful heart;
Make me to love that better part
So well that, guided by thy hand,
Through all life's trials I may stand;
Safe then, while to thy cross I cling,
Whate'er the weeks or years may bring.

TRAINING GIRLS TO A PRACTICAL KNOWLEDGE OF SOME PROFESSION OR TRADE.

A. E. S.

THE Jews have this proverb: "Refuse to give your son a trade and you make him a thief." This is probably an ancient proverb, as the Jews are an ancient people and fond of adhering to ancient rites and sayings.

Now, what did the Jews do with their daughters, those fair descendants of Eve, whose desire to be not only an actor on the world's stage, but a prompter to action, has probably been transmitted to us all, whether for good or evil.

They did precisely what we are doing at the present day. They brought them up daintily, taught them a little spinning, and fine needlework, and as an accomplishment, to play on certain musical instruments as did Miriam, and then while yet the strains of the music rang in their ears, they were taught to sit down with folded hands and wait, each individual girl of them, the approach of the coming man, who should arise from the East or the North (or any other quarter of the globe) to marry her. When he came, she entered into a life-long contract with him to tend his house, rear his children, and be in all things faithful and true to him, her lord and master, for which she was to receive food and clothing, the latter she might spin—she had been taught how for that very purpose—while the former she could glean in the fields and grind into meal between two stones furnished her for the purpose.

Now, this in a modified form is just what is being done now-a-days. The education we give our daughter is designed to make her attractive,—not useful. If she fails to attract—and consequently to marry—we have come short of our endeavor, and find ourselves when jogging along the down-hill slope of life, with a *sour* old maid on our hands. Now, that she *is* sour is our fault, not hers. It isn't so much that she wanted to marry and couldn't, as that she did not succeed in doing the only thing she had studied to do. If she had been taught—as all girls, equally with boys should be—some useful trade or profession, and at the same time taught to look upon marriage as something not to be lightly esteemed should it come to her, nor pined for should it not, what a different aspect life might wear for her!

The wonder is, considering the way society is governed at present, that we have so many really contented and useful unmarried women as we do. The secret of it is, they have struck out from the beaten tracks far enough to find something for hands and brain to do. But it is not alone the girls, who from fate or choice, go through life unmated, to whom a thorough knowledge of some trade or profession would be a source of contentment and profit. There are thousands of wives with a mere nothing to do, who would be glad to labor, and to whom an opportunity to eke out the family income might be afforded, had they acquired the mastery of some special work or business. *A woman has no more God given right to depend upon her husband for a living, than he has to depend upon her for his.*

Society stamps woman as the weaker vessel, (and so at the present time she is in some respects), and makes man her provider; but society might bear a reconstruction in this respect, with advantage to both sexes.

Women would gain in self-reliance, not to mention self-respect, and gain in respect for her as his equal, had she the ability—to use a homely phrase—to "hoe her own row" in the world. If, *by nature* woman is the equal of man, if by *nature* she is fitted to occupy a position between a doll to be petted and played with, and a goddess to be adored, she must carve a way thither by her own device.

To stand beside a man as his acknowledged equal, it is not so much that she be equal with him physically or intellectually, as in her capacity to win the bread she eats. It is not enough that she is useful, or that by the service she renders she gives a fair equivalent for what she receives, but she must be able independently and with no resource but what lies in herself to make money. The money-makers are the law-makers and when men and women shall stand side by side in ability to provide for themselves and others, the ballot for women, so much coveted by many, and yet so far away, may be had for the asking.

It is not necessary that woman should do just such work as her brothers in every particular, but she should learn to do what she does well. Skill, not sex, should be the test to determine a person's fitness for position. Women, as a rule, have thus far been content with simply being able to perform what they undertook without caring whether they did it in the best manner or not. One reason for this seems to be the disposition so prevalent, to pay women less than men for the same work. They fail to see that in this half-way method of doing their work they but add to the odds against them in their competition with the *more skilled* labors of men.

Should the practice of training girls to the different trades and professions become general, we should soon have very few destitute widows eating the crusts of dependence. To lose one's husband would not be then, as it too often is at present, the very death-blow to all hopes of a comfortable living for wife and children. No woman

NO. 1 A CRAVAT OF GROS-GRAIN SILK AND LACE.

can afford to be the wife of a poor man, who has not something in the form of trade or profession, to fall back upon in case of need; and as the rich man of to-day may make the poor man of to-morrow, this assertion applies with equal truth to all women, no matter whatever their rank in life. But it may be urged by some in opposition, that the various trades and professions are already overcrowded. This may be true at the present time, especially in large cities; but if the men who hang in idleness about the streets of these cities, cared enough for work to seek it, in the rural towns and villages, they would not seek it long and earnestly without finding it; and even if they should venture *past* the towns and villages, and should take up for themselves a home among the "free homesteads" of the West, society would be none the loser, and they themselves certain gainers. For these idle, always-out-of-work mechanics never would have a home of their own unless it was given them.

Parents, give your daughters a chance to learn a trade; or, if their tastes and your means will admit of it, a profession. Have them set about it as soon as they leave the school-room. Give them *them the most thorough training* in whatever branch of labor is chosen, and teach them to remember this motto, then and always: "There is always room at the top."

A LITTLE TRIMMING.

ANNIE L. JACK.

I WENT down town, the other day, with a comfortable but old-fashioned hat on my head. It was one of those soft, gray felts that are always in style if properly trimmed; but the changes of fashion disturb me so slightly that whether the feathers and velvet were worn back, or front, or sidewise, seemed a matter of small importance. Not so with my companion, who surveyed it with a sparrow-like gaze, and politely suggested that I should cover as much as possible with my veil. On our return scissors were called into requisition, and a little time with needle and thread—a taking off here and putting on there, making here a bow and there a loop—transformed my dowdy hat into a neat and not to be criticised head gear. "Ah," said I, as I put it on, "there is a great deal done by 'a little trimming.'"

Many a time have I thought of this in the garden when, in autumn, the superfluous branches are cut from the gooseberry and currant bushes, leaving them shapely and tidy; when one would think the grape culturist was destroying his future crop, so closely does he prune the twisted vine; when over-grown rose bushes are deprived of dead, unsightly wood, and the clumps of perennials are divided to ornament other corners of the garden; when we cut down the suckers of plum and cherry, and lop and trim our apple trees till the ground looks like a network of branches, and the trees are straight and even,—I think to myself, as I notice the change, "What a difference, and all the work of a short time and 'a little trimming.'"

I went to a church "social" not long ago. It was in a country village where the people are not rich in this world's goods, and all work hard to gain an honest living. The subject under discussion was the building of a new church, and I thought how little the white-handed speakers—who in their hearts had no sympathy with manual labor—knew of the struggle for a comfortable livelihood through which many farmers have to pass, and how few in this climate attain until passed middle life, a free unmortgaged home. God bless the farmers! who toil and sow and reap that other people may eat; but reader, I long to see the day when those hard, sun-burned, toil-stained hands shall hold their own as a power in the land.

As I sat in the church thinking these visionary thoughts and listening to the comments upon its dilapidated appearance, my eyes wandered to that part where I knew the plaster had fallen off. But the deft handiwork of the young ladies had covered all defects. Mottoes of maple leaves gave words of welcome; pine and cedar were interspersed with the bright-tinted autumn flowers, and the defects were hidden by a bower of beauty. "Ah," said I, "there is something after all in a little trimming!"

And when I look around at farmers' homes, and see their hard-working wives and daughters, some of whose lives seem to me so unlovely, with such grand opportunities; when I *know* that the women of this generation are molding the men of the next century, and "as ye sow, ye shall reap," I feel inclined to utter a note of warning. "Better keep one cow less, and have less tucking to your skirts, if it robs you of time for intellectual improvement. The lessons learned weekly in the pages of the RURAL, go to teach us this need, in order that we may keep up to the times, be even with the men and women of our day who lead the van in progress and refinement."

The cheapness of good literature, of family papers and choice magazines, breaks down any barrier that may have been in the way, and yet I know families who take but two papers, a daily and a weekly, and own all the year round that "they find no time to read." The lack is not in time, but the way of spending it, and too many of the hard-working men and women even of this age ignore the fact of their mental needs, while ministering so bravely to the physical necessities. Culture and refinement are the necessary "trimming" to many a beautiful but homely life, that has in it much to be admired, but is wanting in these elements. And all that is required of the farmer is, so to elevate his profession in the eyes of other workers, that his strong, firm hands will be a mark of honor, to give his children advantages to fit them for any sphere, and add beauty of tree and shrub and household adornment to his home.

No man or woman is too busy or too old to study, and every winter to add to their knowledge by the pursuit of some branch of natural science, or political economy, or history. Books of all prices and to suit all tastes make these things easy for us, and tend to elevate our lives. These studies will teach us to revere and honor the Creator more while learning of His works, on this wonderful earth, and to know and admire the clever men who have written, for our benefit, while in our lives these lessons will be for all time "a little trimming."

NEEDLE BOOK.

This needle-book is made on a foundation of two pieces of cardboard, covered with blue silk or satin, and measuring three inches in diameter. The outer sides of the case are ornamented with embroidery, worked with blue and white purse

NO 2.—NEEDLE-CASE

silk, a narrow tatted edge, also worked with blue purse silk, is placed round the edge. Three leaves of white cashamere, plaited at the edges, are sewn inside, and the two covers are sewn together, and tied with blue satin ribbon. Those who cannot tat can substitute a simple crochet edge.

A SUGGESTION ABOUT OLD MAIDS.

IF they have all had their say about "Old Maids," I should like to put in a word. A common term of reproach to apply to a single woman, is to call her a "gossipping, meddling old maid." It is true too often, but is it not a case of talent misdirected which, if rightly employed, would make this same person useful and honored? A woman of ordinary turn of mind who has not married and has no especial business to which she is obliged to attend, is apt to fall into habits of news gathering and become disagreeable. It is quite as often true of married ladies who have small families and plenty of time on their hands, and who, if they had a dairy of ten cows, and as many children as JOHN ROGERS' wife, would make excellent members of society. Plenty of enforced occupation would cure these same meddling old maids of their disagreeable traits. Who doubts that ALICE CAREY, if she had married, would have made one of the noblest of women? It is not the mere fact of married or single life that determines character—it is natural disposition and the circumstances that surround us! S. C. D.

IN reply to a number of inquiries as to what was meant by the "flow" in article on "Opaline Painting," the author kindly sends us the following:

The "flow" is a kind of varnish—the same, I believe, as used by photographers for flowing their negatives.

The moving to and fro over the lamp is simply to dry it, and is accomplished by holding the glass between the thumb and fingers; the heat must not be enough to affect the hand unpleasantly. I find the better way is to pour on the "flow" so as to wholly cover the picture, and then pour it off before drying. In this way the process may be gone through with twice, if necessary, to insure the laying on of an *even* and *good* film of flow; but the first must be thoroughly dry before the second coating is put on. It is several months since I painted my first picture, which to-day is apparently as perfect as when finished.

MRS. J. E. S.

Reading for the Young.

CHARLIE'S STORY.

I was sitting in the twilight,
With my Charlie on my knee—
(Little two-year-old, forever
Teasing, "Talk a 'tory, p'ease, to me,")
"*Now*," I said, "talk' *me* a' 'tory'."
"Well," reflectively, "I'll 'mence.
Mamma, I did see a kitty.
Great—big—kitty, on the fence."

Mamma smiles. Five little fingers
Cover up her laughing lips.
"Is oo laughing?" "Yes," I tell him.
But I kiss the finger-tips,
And I say, "Now tell another."
"Well"—all smiles—"now I will 'mence.
Mamma, I did see a doggie,
Great—big—doggie on the fence."

"Rather similar—your stories—
Aren't they, dear?" A sober look
Swept across the pretty forehead,
Then he sudden courage took.
"But I know a nice, new 'tory,
'Plendid, mamma! Hear me 'mence.
Mamma, I—did—see—a—*elfunt*,
Great—big—elfunt—on the fence!"

[*Springfield Republican.*

LETTERS FRON BOYS AND GIRLS.

A Nice Letter.

UNCLE AND COUSINS:—On this day of good cheer and celebration, with the air warm as in lovely September, and the pleasant balminess of Indian summer, I send you a letter fraught with much "peace and good will," for all our vast army of relations. I wonder how all the cousins are spending this lovely Christmas day? Won't some of you write and tell how it passed with you?

This week the County Institute meets in Washington, and the "pretty school-marm," and the "masters so cruel and grim," turn out in abundance. Those tread our streets, looking like so many cyclopedias, or Webster's Unabridgeds. I often wonder if vacation-time is a holiday to them.

WILD FERN need not look for me among them, for I'm neither "marm" nor "master" yet. And by-the-way, why don't that young lady give us her *real* name? Do you really want to know the name of him (her?) who is only a "flat" JUMPING-JACK?

Allow me here, kind RURAL editor, to return my sincere thanks for the package of seeds sent from the Experimental Grounds. I should have returned thanks, or made acknowledgement sooner, but was unavoidably delayed. The "best laid plans" are often made to go in a different way from that we intend, hence my delay.

I'm now going for a long walk over the beautiful hills and would like the company of W. F., or any agreeable cousins. Will you go along? But that cannot be I know, so I'll content myself with escorting two very nice little ladies out this afternoon. (Exit JUMPING-JACK.) Two hours later and we have returned. Our walk was grand. The sun was slowly sinking in all its traditional glory as we started, and we came home in the fast gathering twilight. This month of December has been a remarkable one with us, from the fact that the weather is so much like early fall. Not one sleigh-ride have we had as yet. But to tell something of our walk. We found clover and vines as green as in spring-time; oak leaves, a rich brown color, mosses green and tufty, nuts fresh and good, sassafras quite spicy, and many things to please the sight and taste.

As I sat on a moss-grown stump, and looked up at the vast network of branches at the tree-tops, at the beautiful grey of the bark, the haziness of the atmosphere, and the beauty all around me, there came to my mind the line: "There is a pleasure in the pathless woods," and I fully realized it at that moment: then the cloud pictures that we saw, seem like great bits of brightness, not easily or soon forgotten. And now, cousins mine, that another year is soon to commence let us not forsake this pleasant column of ours, but endeavor to make it brighter and better than ever before. And let us hope that kind UNCLE TRUE may issue a "Proclamation" again as liberal as the first one was. And with many good wishes for your prosperity, I *walk* this time quietly away. J. J.

December 25, 1877.

How We Prepared For It.

DEAR UNCLE TRUE:—Your beautiful present reached me last evening. I have not had time to read it yet, but am very grateful for it. When the bustle of getting ready for Christmas is all over, I am anticipating a delightful time in reading it. I wonder if you and the Cousins would like to hear me tell of my experience in getting ready for this blessed anniversary? If others enjoy it half as much as I have the doing it, I think you will all like to hear about it. We are going to have a Christmas tree, and we girls are to have the management of it. The boys get the tree and put it in the sitting-room, and then we are not going to let them see a single thing till it is all ready. We have fixed some lovely things with the pop-corn—festoons, crosses, anchors, and balls; they look very nice, so white and pure, in contrast with the dark-green, and they help to set off other things.

We have made lots of pretty things—not costly, but useful and pretty. Grandma has a nice Bible cover, to lay upon the top of her big Bible; and we have made handkerchief boxes of perforated card-board, wrought with worsted; glove boxes to match; letter cases, brackets, love-scales, and baskets made of cigar-lighters, little dolls made of cotton batting, pen-wipers, and so many things that it would try one's patience to enumerate them all. Grandmother says she thinks the CHRIST-child would be better pleased with our gifts if we could make presents to poor little children of things that they need to make them comfortable; but we had rather, by far, make pretty keepsakes for our dear friends. She knits mittens and stockings for all the little cold hands and feet in the village, and I do believe she enjoys knitting. I wonder if I shall love to knit as she does, when I got to be grandmother? It is very nice to see old ladies knit—they look so comfortable and happy—and I do think they enjoy it; but I cannot sit still long enough to make stockings grow. I like to read the letters from the Cousins, and I think UNCLE TRUE is one of the best Uncles in the world.—LILY LEE, *Randolph, Dec.* 22.

That Delightful Mad-Cap Mollie.

DEAR COUSINS one and all, here I am again. Perhaps I am impertinent in coming again so soon, and if so I am very, very sorry! Am I forgiven the offense? Yes, I see I am by the smile on all your faces, the outstretched hands, and oft repeated word, welcome! How kind of you to greet every one then, and to make them feel so welcome. Is it not splendid that we can meet and talk together in this way, but would it not be far better for all to meet in Uncle True's study, and talk face to face. But a wee, small voice whispers: O Mollie, Mollie, how you are rambling from the topic you came to talk on,, so back to the right path you truant. Hush, hush Solomon Sap, none of your grumbling, for I have the floor, and will be heard. I wonder if there is a beam in my own eye, for if there is not I would like to pull the mote from yours, and let you see that we are really a jolly lot of cousins, and in whose society one might find much pleasure if they were not constantly looking for faults. But sir, your egotism is fearful and I challenge you to drop the mask and reveal the gentlemanly side of your character, (for I know you have one,) and I for one will come over to the enemy's side, give you my hand as a flag of truce, and say I'm your cousin and friend, will you accept me as such? I would say to all these girls who are brave enough to join me in that pledge, that I am glad and proud to call you cousins, and would like to know you personally, and to you, dear Snowflake, if you or anyone else think you can find anything interesting in my nonsensical epistles, I shall be delighted to receive and answer any number of letters addressed to MADCAP MOLLIE.

Wanted a Sister for Adoption.

DEAR RURAL: I am quite a small boy. I like to read the letters. I had a real good laugh on the verse about the treeses and the cowses. I guess the boy that wrote it laughed too. I live on a beautiful hill near the Blue Ridge Mountains. My papa has a nice little horse, and I like to ride horse-back, but strange to say, as soon as I mount his back, and tell him to go forward, he will turn to go to the barn again. Can any of my Rural cousins tell me what to do? He minds all but me. I have a nice kitty too, and four years ago I had a nice sister. She is an angel now, I miss her very much. My mamma says she would like to adopt a nice little girl about ten years old to fill my sister's place. She must be smart and know something of music, and I say pretty too, for I want her to go to school with me. If any one who reads this knows of such a little girl, won't they please to let us know where to find her.

This is the first letter I have writen to the RURAL. If I see this in print it will make me want to write another one, better I hope. From your little friend, ARCHIE M. MORRIS.

Westfield, N. J.

The First Snow.

DEAR RURAL AND COUSINS ALL:—I see now, as I sit before my western window, the gentle snowflakes coming slowly to the ground, to remind us that we are once more enfolded in winter's cold embrace; and now for the skates which I aways love to use whether it is the fashion or not. SLAYEROFCONCEIT has once more made his appearance on the field of action, after having so successfully tried to expel YOUNG EDITOR NO. 1, and others from our ranks. SNOWFLAKE'S way of spending the long evenings is very well for a time, but all study is tiresome. I was somewhat surprised to hear WILD FERN say that she first thought me a boy.

I had the pleasure of visiting the great summer resort, Lake Mohonk, this autumn. It was a lovely day, and a more pleasant place I never saw in the mountains, and oh! how I love to sail on the lake's deep waters,

As it ripples and brinkles, and dimples and twinkles,
Beneath the bright lances the sunset has thrown.

It is needless to add that a small party of four enjoyed themselves climbing over the rocks and searching through the caves. I will now close by wishing you all a Happy New Year. Adieu.

IVYREST, N. Y. IVY.

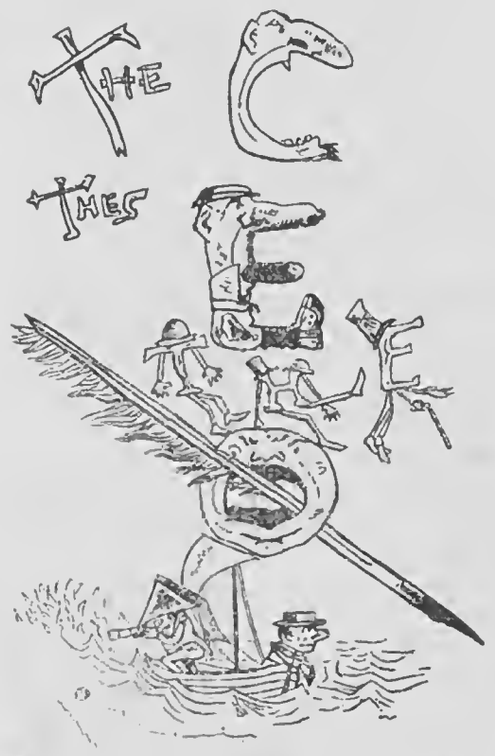
A New Arrival.

DEAR COUSINS—one and all—how are you? I've arrived here at last, (if UNCLE TRUE will let me stay,) and I am very glad to see you. I have been a long time on the way, but you know "it is better late than never." I have often been tempted to write and take arms against—not a "sea of troubles," but SOLOMON SAP, SLAYEROFCONCEIT, etc. They probably never would have recovered from the attack, and they may thank their stars that I pass them by on the other side this time.

I agree with SNOWFLAKE, in regard to being sociable. SLAYEROFCONCEIT had better be careful in giving others too good a "chance to shoot," as he may retire from the field wounded in spirit as well as conceit. I am one of the girls that like to skate, though I do not lay claims to being an expert. Now, Cousins, do be lenient, and not judge me by this first letter. I may not know anything, but please give me a fair trial. Tremblingly I await your verdict.—N. N., *Buffalo, N. Y.*

The Puzzler.

ILLUSTRATED REBUS.



☞ Answer in two weeks. H. W.

MISCELLANEOUS ENIGMA.

I AM composed of 9 letters.
My 9, 5, 6, 6, 8 4 a woman's name.
My 5, 3, 2 an animal.
My 4, 8, 3, 3, 6 to occur.
My 9, 7, 3 part of the body.
My 4, 5, 1, 2 a condition of the air.
My 9, 2, 5, 3 a pile.
My 4, 7, 2 to hasten.
My 7, 6, 8, 6, 2 empty.
My 3, 7, 6, 2 a kind of tree.
My whole is a man's name.

☞ Answer in two weeks. S. C.

WORD-SQUARE ENIGMA.

1. A VERB; spelled another way, it is a part of anything.
2. The name of one of the first men mentioned in the Bible.
3. The name of a certain meat.
4. The name of a girl.

☞ Answer in two weeks. ONONDAGA.

PYRAMID PUZZLE.

1. A CONSONANT. 2. A pronoun. 3. A color. 4. A Grecian gulf. 5. A Swiss lake. Centrals form a grain.

☞ Answer in two weeks. MD.

PUZZLER ANSWERS.—Dec. 22.

WORD-SQUARE ENIGMA.—
V A S E
A R I D
S I D E
E D E N

Sabbath Reading.

"POST HOC EXILIUM."

AFTER this exile; not while groping here
In this low valley full of mists and chills,
Waiting and watching till the day breaks clear
Over the brow of the eternal hills—
Mother, sweet dawn of that unsetting sun,
Show us thy Jesus when the night is done!

After this exile; when our toils are o'er,
And we, poor laborers, homeward turn our feet;
When we shall ache and work and weep no more,
But know the rest the weary find so sweet:
Mother of pity, merciful and blest,
Show us thy Jesus in the "Land of Rest."

After this exile; winter will be past,
And the rain over, and the flowers appear,
And we shall see in God's own light at last
All we have sought for in the darkness here;
Then, Mother, turn on us thy loving eyes,
And show us Jesus—our eternal prize!

A GODLY ENTERPRISE.*

R. E. W.

THERE have been some redoubtable scientific scoffers of the efficacy of prayer, notably TYNDALL and HUXLEY, but precisely in their own country is established an enterprise that ought, surely, to confound them. About fifty years ago GEORGE MULLER was a theological student at Halle, Germany, and was as regardless of true religion as the twelve hundred and sixty other young men there gathered together. But, at last, it pleased GOD to alter his life, and he found the LORD. Soon, thereafter, he went to England as a missionary to the Jews, but after laboring for months among this people, relinquished the task, and turned his attention to the Gentiles. This act severed his connection with the society under whose patronage he was working, and he was left in a strange land without friends or resources. Now, the question was what to do? He thought—"If I only seek to labor for the Lord, if I act only as becomes a servant of Jesus Christ, my gracious Master will surely care about my temporal necessities." "If ye shall ask anything in my name, I will do it." And relying implicitly on this promise he took no thought of the morrow, simply praying to the Lord to relieve his wants. From that time to the present those prayers have been answered, and in the most extraordinary manner. At no time has Mr. MULLER had any salary or emolument for his labor. Occasionally all the provisions in the house were exhausted, in addition to the money having melted away.

Finally his attention was directed to the homeless children roaming the streets, and after earnest thought and prayer he judged God would bless his efforts in their behalf, and on March 5th, 1834, was commenced the work that has since grown to such glorious proportions. The beginning was exceedingly small. The income of the first year amounted to only $620.

In the circular recommending the enterprise to the Community it was distinctly stated that the living God, Himself, was the patron of the institution, and to Him alone should the founder look for aid and comfort. Thus was begun one day-school, one Sunday-school and one adult school, but before a twelvemonth had passed the day-schools had increased to six. In the second year the work was enlarged: a significant incident led him to enter on this last venture. Visiting poor members of the church one day, he was pained to see their extreme necessities, and thinking over it he exclaimed, "Oh! that it might please God to give me more means for myself that I might give more," and scarcely had the words been uttered when the mail brought $300. After having prayed for helpers, suitable premiums and $5,000 to begin the orphan work he rested calm and content, feeling sure his prayer would be answered. The next day came twenty-five cents, then came a piece of furniture. Two days after $500 was received from a poor working girl. Mr. MULLER tried to dissuade her from giving this half of a legacy to which she had just fallen heir, as she was in bad health, and could earn but $1 per day. She insisted, saying that she had well weighed the matter, and rather than the orphan work should not come to pass she would yield up every penny she possessed. Further donations coming in, he was in a position to hire a house.

Everything was now ready—all but the orphans. Mr. MULLER appointed a time when he would be in the vestry to receive applicants. The time came, but no orphans came with it. After two hours he said to himself, "I have prayed for everything but I have never asked God to send me orphans." He had taken for granted that orphans were about the most plentiful product of the British Isles, and articles that would surely come without praying for them. The next morning, after a night of serious prayer the first orphan was applied for, and during the month forty-two were added to the first arrival.

The institution grew apace, another house was rented and yet another, and another until it became advisable to build for himself. After earnest communion with God, Mr. MULLER felt called upon to build a house suitable for 300 orphans and assistants. This would cost $76,000. He had just $7. He prayed for 33 days without visible result, on the 24th came a check for $5,000, and by degrees the entire sum filtered in.

An anecdote concerning the purchase of the land happily illustrates what Mr. MULLER wishes to enforce. He had called twice to see the landowner, alternating between his house and counting-room. We give Mr. MULLER'S words, "Now," I said to myself, "shall I go again to the house of this merchant, or shall I wait until to-morrow?" It appeared to me "Here is the finger of God"; for I was told I should surely find him at 7 P. M. at home; then I am told I should surely find him at the counting-house; I go there and he has just left. The hand of God is in this, and the best for me is to wait until to-morrow." He did so and next morning the owner said, "I have heard, sir, about you. You wish to buy land for an orphan home. During the past night I lay awake, I could not sleep. I said to myself, if this gentleman comes for the land you must sell it to him for $600, instead of $1,000 an acre." And so the work progressed. Five orphan-houses were built at different times, accommodating 5,250 orphans, besides 114 schools were founded, instructing 10,000 pupils.

Not one cent of the great amount of money required to build and conduct these institutions was solicited. When money was required earnest prayer seemed to bring it. It was frequently the case that there was not money enough in the exchequer after breakfast to pay for the succeeding dinner. Yet never was a meal delayed, and never was a cent borrowed. If any more convincing proof is needed of the efficacy of prayer, there must be skeptics indeed!

* Two addresses relative to the Orphan Homes on Ashly Down, Bristol, England, and the other objects of The Scriptural Knowledge Institution for home and abroad. By GEORGE MULLER, New York: A. S. Barnes & Co.

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NEWS OF THE WEEK.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Dec. 25.—Trouble is apprehended from the Bannock Indians in Idaho. The Cuban insurgents are surrendering in considerable numbers. Spain has now in the island three times the number of troops Uncle Sam possesses altogether.

If the weather permits, the Russians will at once attack Rustchuk and Silistria and also push on to the Balkans. An assault of the Servians upon Yatre was repulsed with immense loss. England has already equipments in store for at least two army corps, and is ready, if needed, to take part in the fray. All the republican municipal officials, removed during the late contest in France, have been restored to their positions.

WEDNESDAY, Dec. 26.—Senator Patterson, of South Carolina, has had a relapse and is still in a precarious condition. From all parts of the country come reports of murders and outrages resulting from too much alcoholic Christmas.

Plevna at its surrender was a vast charnel house, dead and wounded heaped and festering together, around the city the bleaching bones of those who had fallen in the numerous conflicts, pestilence and starvation on every side. The Servians, after eight hours fighting, captured Ak-Palanka, on Monday, together with three Krupp guns and a great amount of amunition and provisions. The Russian lines are closing fast round Erzeroum. France will not move from her neutral attitude.

THURSDAY, Dec. 27.—A party of the sixth cavalry pursued a number of Indian raiders into Mexico, killed upwards of sixteen, captured their plunder and ponies and destroyed their camp. The great sensation among politicians is a letter from W. E. Chandler, the New Hampshire member of the National Republican Committee, explicitely charging that Hayes' "Southern policy" is the result of a bargain made with Southern Democratic Congressmen during the electoral count. They were to refrain from opposition to his election in return for his concession to their demands.

Turkish prisoners from Plevna are perishing in large numbers from the intense cold. Thirty thousand Servians, with 120 guns, have invested Nisch and captured Leskovatz with a large quantity of cattle and provisions. The back-bone of the war party in Constantinople is growing stiffer.

FRIDAY, Dec. 28.—There are strong indications that the Republican Senators will be outspoken in their opposition to the President and his policy when Congress re-assembles.

Austria has protested against any Servian action in Bosnia and Herzegovina, and Servia has ordered her military authorities to refrain from hostilities in those provinces. Owing to the snow blockade there is much difficulty to supply provisions to the Russian troops in Bulgaria, especially at Plevna. A Turkish transport with 700 troops has been captured by a Russian war-vessel in the Bosphorus.

SATURDAY, Dec. 29.—Defaulter Owen Murphy is safe in Canada. It is probable that he appropriated $150,000, instead of $50,000, as supposed at first. The extradition treaty does not cover breaches of trust or embezzlement, so that the rascal is safe.

Russian reinforcements just ordered, amount to 250,000 men. An army of the Baltic, 80,000 strong, is being organized. The Czar says:—"England will apparently exercise pressure upon the liberty of our action; but we will not consent to mediation, and are armed against intervention." Russia has ordered 1,200 Krupp field guns. England is preparing for emergencies. Severe snows and cold have suspended operations in Bulgaria. Osman Pasha has arrived at Bucharest.

SUNDAY, Dec. 30.—A judgment for nearly $400,000 for canal frauds has been gained by this State against Dennison and Belden of Syracuse, contractors. The report of Adjutant-General Latta of Pennsylvania, declares that the rioters at Pittsburg were encouraged by public sentiment and the press.

Turkey has appealed to Great Britain to act as mediator in negotiating for peace on the basis of the present condition of facts. Russia claims, and Germany backs her up in it, that mediation unless solicited by both belligerents amounts to intervention, and will be disregarded by her. The Servians have captured Pirot, 35 miles southeast of Nisch, with 20 cannon, 1,000 rifles and 50 prisoners. In London there has been a fierce faction fight between a party of working-men favoring Turkey and another friendly to Russia; the latter were greatly outnumbered and disastrously routed—a straw!

MONDAY, Dec. 31.—At Lynn, Mass., where shoemaking is extensively carried on, the Crispins are on a strike, and maltreating those who venture to take their places. Serious trouble is apprehended.

There is slim prospect of British mediation being accepted by Russia, which insists that Turkey shall treat with her directly. The Russian press scouts the notion that England, while neutral, will be permitted to occupy any Turkish towns as a precautionary measure. A war fever is spreading rapidly through Great Britain. The Russians are approaching Sofia. All the bridges over the Danube have been swept away by the ice, and passage by boat is slow and very perilous. Moukhtar Pasha has left Erzeroum with a small force to act against the Russians in the field. Snow, however, has suspended operations on both sides.

Ex-President Martin Van Buren was made comfortable by the use of Jonas Whitcomb's Asthma Remedy.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Dec. 29, 1877.

THE wholesale markets this week can be dismissed with brief allusion. Holiday week, beyond a few specialties, is always dull, and its observance is becoming almost as marked as it is in Europe. The coming month of January will find the market with a surplus of certain kinds of produce that should have moved freely during autumn and December. Dealers, however, have some hope that the new year may galvanize trade, though much will depend upon more seasonable weather than we have had during the past remarkable season.

BEANS AND PEAS.—Receipts of beans past week, 8,432 bush. Exports, 557 bbls.; since Jan. 1st, 41,979 bbls. The market is quiet for medium beans, with prices well favoring buyers. Marrows not so active, and prices for best marks are shaded. Pea beans nominal. White kidney lower. Red firm for choice. There is little new trade in peas of any kind. Prices only steady.

We quote:—Beans, medium choice, $1.87@1.90; other, $1.80@1.80; marrows, choice, $2.25@2.27; other, $2.00@2.20; pea, $1.75@2.00. White kidney, choice, $2.00@2.25; other, $2.10@2.26; red, choice, $2.60; extra, $2.50; other, $2.25@2.35. Turtle soup beans, $1.85. Lima, $3.00. Green peas, $1.35@1. $1.35. Southern Black-Eye peas, per 2-bush. bag, $3.25. Canadian field peas in bulk and bond, 86c. for prime.

BEESWAX.—Export demand continues, and prices are strong. Sales at 27½@28½c. for Western and Southern.

BROOM CORN.—Offerings are large, and demand is good.

Green brush at 6@7c.; green hurl, 6@7c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Receipts for the week, 15,624 pkgs. The demand is quite equal to this particular time. Western fancy sells higher than State creamery. The recent Western Dairymens' Convention in Chicago showed that Western creameries are to have the future rule of the trade in extra cold weather fresh. The strong prices now current for finest State will certainly help some of the hitherto neglected lines. A very large class of New York consumers cannot afford to pay a profit upon 30@35c. bought butter. Fine Western factory and dairy butter is scarce. We are accustomed to more regular receipts at this season; prolonged pasturage has kept down quality. Exporters are doing comparatively nothing and a large stored surplus is still dragging on the market. Rolls have a wider range, some run poor in the warm transportation.

The best premiums were awarded as follows: First, $100, B. E. Wood Huntley, Ill.; second, $75, A. J. Booth, Salem, Wis.; third, $50, R. S. Houston, Pleasant Prairie, Wis.

We quote State fancy pails 28@30c.; other, 25@30c.; creamery, good to choice, 25@33c.; half tubs, selected, 27@28c.; extra, 25@32c.; other, 21@25c.; Fall Welsh 26@28c.; Welsh tubs, prime, 26@28c.; other, 18@22c.; full dairies, fine, 25@26c.; common, 17@18c.; firkins 23@24c.; poor State, 13@16c.; Western creamery, good to choice, 34@35c.; poor to good 25@30c.; dairy tubs, best, 18@20c.; good, 18@20c.; other, 10@13c.; factory tubs, good to best, 19@21c.; common, 13@15c.; Western firkins, good to best, 10@12c.; other, 9@13c.; rolls, 12@19c.; grease, 6½@7c.

CHEESE.—Shipments for the week have been only 19,300 boxes. This light movement is incident to the holiday week. There is a fair home trade demand. Fancy stock is held firmly.

At the Dairymens' County Convention in Chicago, Herkimer County obtained the first prize. The following were the best awards:—First, $100, Whitman & Burrel, Little Falls, N. Y.; second, $75, J. Coles, Venango, Pa.; third, $50, Towle & Roper, Chicago, Ill.

Fancy factories, 12½@13c.; good and prime, 12@12½c.; fair lots, 11½@11¾c.; poor, 8@10c.; 7@10c. skimmed. Farm dairy, 11½@12½c. for good to prime; 10@10½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 12½@12¾c. for fine 10@11½c. for good; 5@8c. for fair.

Exports past week, 19,825 boxes.

Liverpool cable, 63s. 6d. Gold closes 102¾.

COTTON.—There has been a more active export trade, and a generally stronger market.

Latest prices are for January, 11.25@11.26c.; February, 11.25@11.26c.; March, 11.48@11.49c.; April, 11.61@11.62c.; May, 11.73@11.74c.; June, 11.84@11.85c.; July, 11.91.; August, 11.96@11.97c.

DRIED FRUITS.—Trade is very slow, unpeeled peaches are lower, and hard to sell, apples and other fruits are held as before.

Apples—Old State quarters, 5¾@6¼c.; new, 6¾@6¾c.; Western quarters, old, 5½@6c.; new, 6@6½c.; Southern, new, prime sliced, 6¾@7c.; fair to good, 5c. Peaches—Peeled, new, 11@12c.; unpeeled halves, 4¾@5c.; unpeeled quarters, 4@4½c. Pitted cherries, 15½c. Blackberries, 9@10c. Raspberries, 28c. Plums, 10@16c.

EGGS.—Receipts for the week, 4,500 barrels. The market is weak and lower. The demand is still greatly under the style of winter wants and regular receipts and lots seeking a market from other cities easily cause an overstock. Prime fresh have the most sale, buyers are shy of stored lots. Limed eggs have an undecided position, the weather would have warranted their pickling another month. There is a moderate sale for export.

Near points, 26@27c.; State and Pennsylvania, 23@25c.; Canadian 22@24c.; Western, best, 24c.; other, 21@23c.; Southern, 21@24c.; Limed, State, 17½@18½c.; Canada, 17@18c.; Western, 16@18c.

FEATHERS.—Live white prime Western geese, 45@47c.; mixed, 30@40c.

FEED.—Sales of 40 pounds ave. $18.00@19.00; 60 pounds ave. $18@18.50; 80 pounds ave., $18@19; 100 lbs., $20@21.

FLOUR.—The week's business has been small, but this is largely due to the period, the interruption by the holidays. Receipts have been large, but prices generally steady.

Latest prices are $4.75@5.25 for poor to fancy superfine State; $5.35@5.60 for common to fair extra do.; $5.65@6.00 for good to choice do.; $4.75@5.25 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.35@5.60 for shipping extra do., the inside price for poor, and $5.60@6.00 for good to strictly fancy extra do.; common to choice white wheat extras, $5.85@7.25; fancy do. at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.65@7.25; round hoop Ohio at $5.40@5.75, and trade brands of do. at $5.80@7.00, the latter for choice; St. Louis, $5.60@6.35 for poor to fair extra and $6.35@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.25@8,50); Minnesota clear, $5.50@6.75; Minnesota "straight," common to fancy, at $6.25@7.75, and patent poor to very choice, $7.00@9.25, with a few fancy at $9.50@10; unsound stock at $5.00@6.50; city mill extra at $6.25@6.50 for fair to very choice for West Indies; do. for England $5.50@5.80; do. trade and family extras, $6.75@7.75; do. South America, $6.60@7.50; No. 2 at $3.00@4.25.

Buckwheat flour, $2.40 for common; fancy, $2.75.

Corn Meal is selling at $2.60@3.00 for yellow Western, and $3.25 for Brandywine.

FRESH FRUITS.—Exports apples past week, 2,450 bbls. There has been a fair business in apples, and many stored lots are present for sale, as the warm weather is telling upon them, or owners fear bad results.

We quote Baldwins, $3.50@3.75; Spitzenbergs, $4 00@4.50; Russets and Greenings, $3.25@3.75; prime sweet, $3.25@3.50; Seek-no-further, $3.75; Newtown pippins for export, $7@8; Lady apples, $8@15. Fine grapes scarce and higher—Catawba, 5¼@6½c.; soft berries, 2@4c.; Isabella 2@4c. Florida oranges firm, the demand is not sharp but the stock has run down. Cranberries in fair demand for local use. Peanuts higher—fancy, $1.60; other, $1.45@1.50. Hickory nuts low—75c.@$1 bush. Texas pecans, 8@9c.

FURS AND SKINS.—Market quiet and nominal here. Receipts small—few sorts wanted. Southern quoted 20 ₱ cent. below Western.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@45	40@45
Red Fox	75@80	60@65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and ylgs.	1 00@2 00	1 00@2 00
Florida deer skins	15@18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@90	50@60
pale	50@60	30@40
Muskrat, winter	8@10	6@8
fall	6@7	4@5
Kitts	@2	@2
Beaver, ₱ lb	1 00@1 25	60@75
Raccoon	35@45	35@45
Opossum	3@6	3@6
Skunk, black		40@45
striped		5@20
Wolf, mountain		1 50@2 00
prairie		50@60

GRAIN.—Wheat stronger, and 2@3c. higher and moderately active.

Latest sales are of No. 2 red at $1 48@— ungraded red and amber State, $1 53@1 55; white, $1 56; No. 1 Northwest spring, $1 37; No. 2 Chicago, $1 32½; No. 2 red for January at $1 33; No. 2 Milwaukee spring, $1 38. Rye is a trifle steadier; sales of Western at 74@75c.; State at 76@77c. Barley, 55c for No. 1 Canada; 75@79c. for two-rowed State. Corn is a trifle lower and active. Latest sales are of New York No. 2 at 64@64½c.; steamer mixed, February, 59c. Oats of New York extra white, at 42½c.; do. No. 1, January, 40c.; No. 2 white, 39½@39¾c.; mixed Western, 38@38½c.; white Western, 38@40c.

HAY AND STRAW.—There is a fair business in prime stock, and shipping trade is moderate.

Bale hay, 60c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 40@45c. for short rye, and 40@45c. for oat.

Exports past week, 1,700 bales.

HONEY.—Sales light for the season. Choice white clover comb, 19@20c.; good, 13@16c.; dark, dull and lower; buckwheat, 10@15c.

HOPS.—Exports for the week have been 2,500 bales. This fair movement, together with a good trade for the season from brewers, exerts firm prices.

State choice to fancy, 11@13c.; do., low and fair, 5@7c.; Eastern, new, 8@12c.; Wisconsin, do. 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

OIL-CAKE.—Western is offered at $33 ₱ ton.

POULTRY AND GAME.—Live poultry has sold fairly, while dressed turn out poorly. Prices, however, have kept low.

N. J. chickens, 8@10c.; fowls, 10@12c.; Turkeys, N. J., 10@12c.; Ducks, N. J., pair, 65@90c.; Geese, N. J., $1.50@1.75; Western, $1.12@1.37.

Dressed poultry is doing better, but before the present prices were reached, a great many losses had to be submitted to. Now that the old stock is gone, there is a better opening for fresh-killed. The season, however, must be looked upon as a lost one, and the weather must harden before anything like compensatory prices can be quoted regularly. Canada has been sending some shipments of turkeys, fowls, and geese to England.

Fancy Phila. and N. J. turkeys, 15@17c.; good, 13@14c.; common, 9@10c.; chickens, choice, 15c.; good, 12@13c.; common, 7@10c.; ducks, choice, 14@15c.; other, 12@13c.; geese, fancy, 13c.; other, 7@11c.

Game items are lessening in variety. Prime quail bring good prices. Grouse are easy. Venison is cheap; few care to handle it at 8@10c. for saddles and 3@6c. for while deer.

Hares, pair, 25@35c. Black bear, 25c. carcass. Canvas-back ducks, $2.50@3; Red-heads, 75c.@$1.25; Mallard, 65@75c.; Teal, 40@50c.; common, 25@35c. Quail, 75@80. Partridges, pair, 45@55c.; soft, 15@25c. Grouse, 75@80c. soft, 30@50c. Woodcock, 40@50c. Rabbits, 25c.

PROVISIONS.—Hog products have been depressed and lower. Mess pork $12.6½@12.81½ for spot lots $12.80 for January, $12 85 for February and $12.85 for March. Bacon at 6½@—c. for long clear and 6¾c. for short clear. Lard—Western steam at 8-10c. for spot, 8-10c. for December, 8.10½ for January, and 8.25c. for February and 8.40c. for March. Tallow, 7¼c. for prime. Stearine, 8.02½c. for prime. Beef hams at $16.50. Beef—New extra mess, $13@13.50; new plain, $11@12.50.

SEED.—Grass are lower: clover 8@8¾c. for prime, timothy, $1.37½@1.40.

TOBACCO.—There is a good export and fair home trade demand and prices strong.

VEGETABLES.—Exports of potatoes past week, 3,397 bbls.; of onions, 100 do. A good many potatoes are turning out poorly. Eastern stock brings best prices. We quote Peach Blows, $1.75@2, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Onions are falling off in quality and the market is lower even for best cabbages selling at $1@3 per 100 in winter is a novel range.

Cabbages, 100, $1.00@3.00; red, 3@4. Marrow squash, bbl., 75@87c.; Hubbard do., 87c.@$1.12. Cauliflower, $2.00@3.50 ₱ bbl. Russia turnips, 75@75c. Carrots, 75@75c. Beets, bbl., 62@87c. Red and yellow onions, $1.00@1.25; white, $1.25@1.75. Pumpkins, ₱ 100, $4@7; extra, $6@8. Celery, doz., 75c.@$1.

LIVE STOCK MARKETS

NEW YORK, Dec. 31, 1877.

BEEVES.—Receipts for the week, 6,141 head; do last week, 8,745 do. There has been quite a buoyant feeling in prices during the week, and salesmen have been encouraged by cleared yards almost every day. The advance is about ½c. ₱ ₱. on good medium cattle. A few more lots of fat cattle have arrived, but, as we have before remarked, premium stock has lost its old-time prestige. Retailers now almost exclusively depend upon Washington Market and other wholesale slaughterers. The principal exporters are drawing a good share of the best stock for European use. The range of the late market was as follows: Fair to good steers, 8@9c.; prime to choice, 10@11c.; sales rating in best proportion in the upper prices. A car of bulls sold at 3½c., live. Weather to-day decidedly in favor of trade in live stock.

COWS AND CALVES.—Supply small and demand not calling for much stock. The nominal quotations are at $40@70, with an occasional extra at $80.

VEAL CALVES.—The market closed strong on Saturday, and the cold weather to-day clinches prices. Choice N. J., 8½@9c., live; do. State, 8@8½; other grades, 7@7½c. Hog-dressed calves scarce and higher, selling this P. M. at 11½@12½c.

SHEEP AND LAMBS.—Receipts for the week, 10,932 head; last week, 24,230 do. Supplies have been unusually light, but the market has not noted fancy prices; still the market is firm. Sheep ranged at 4¾@5¾c.; lambs, 6½@7c., the latter for choice Canadian.

SWINE.—Receipts for the week, 29,203 head; do. last week, 31,470. Supplies have been ample for holiday week, and a warm one at that. The latest sale was a car-load of Ohio, 172 lbs. average, at $4.70 per 100. Very little country-dressed in to-day, and the market is firmer. Light pigs, 6¼@7c.; medium to heavy, 5¾@6¼c.

OTHER LIVE STOCK MARKETS.

BUFFALO, Dec. 28.—CATTLE—Receipts, 833 head; for the week thus far, 5,389 head, against 8,619 last week, a decrease of 190 cars; consigned through, 198. No sales to-day; fresh arrivals consigned through 14 cars of through stock in the yards held for shipment to-morrow.

SHEEP AND LAMBS.—Receipts, 1,300 head; for the week thus far, 6,900 head. Market quiet and a shade weaker. Western sheep, $4@4.40.

HOGS—Receipts, 4,200; consigned through, 45 cars. Yorkers, at $4,15; good to best, $4.25@4.45.

CHICAGO, Dec. 28.—[The Drover's Journal reports]: CATTLE—Receipts, 3,900 head; shipments, 2,900. Native Butchers slow; Bulls, $1.50@2.75; cows, $2@2.90; Texans, $2.40@2.75 ₱ 100 lbs. Colorado steers, $3@3.25.

HOGS—Receipts, 29,000 head; shipments, 940; all grades lower. Shipping, $4.15@4.25; mixed packing, $3.90@4.05; light, $4.05@4.10.

SHEEP.—Receipts, 3,705 head, shipments, 1,200 do.;

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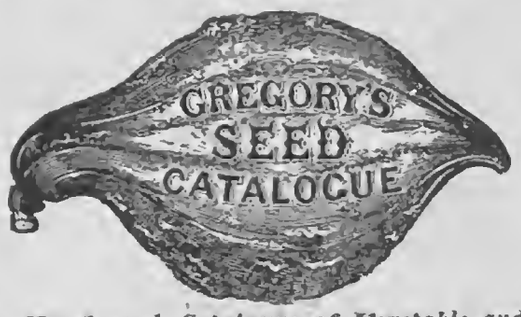

My Annual Catalogue of Vegetable and Flower Seed for 1878 will be sent FREE, in January, to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed sold from my establishment warranted to be both fresh and true to name; so far, that should it prove otherwise I will refill the order gratis. As the original introducer of the Hubbard and Marblehead Squashes, the Marblehead Cabbages, and a score of other new vegetables, I invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.*
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The Querist.

ANSWERS TO CORRESPONDENTS.

Live Weight of Animals.

A. D. Foster.—Is there any rule for finding the weight of an ox by measuring his girth, length, etc.? If so, please state it in the RURAL.

ANS.—For the convenience of this correspondent and two others who have put a like question, we republish, from a back number of the RURAL, the following rule for ascertaining, within a trifle, the live weight of all kinds of stock:

Take a string, put it around the breast, standing square just behind the shoulder blade; measure on a foot rule the feet and inches the animal is in circumference; this is called the girth; then, with the string, measure from the bone of the tail which plumbs the line with the hinder part of the buttock; direct the line along the back to the fore part of the shoulder blade; take the dimensions on the foot rule as before, which is the length; and work the figures in the following manner:—Girth of the bullock, say six feet four inches; length, five feet three inches; which, multiplied together, make 31 square superficial feet; and that multiplied by 23 (this number of pounds allowed to each superficial foot of cattle measuring less than seven and more than five feet in girth,) make 713 pounds. Where the animal measures less than 9 and more than 7 in girth, 31 is the number of pounds to each superficial foot. Again, suppose a pig or any small beast should measure two feet in girth, and two along the back, which, multiplied together, make 4 square feet; that multiplied by 11, the number of pounds allowed each square foot of cattle measuring less than 3 feet in girth, makes 44 pounds. Again, suppose a calf, a sheep, &c., should measure 4 feet 6 inches in girth, and 3 feet 9 inches in length, which, multiplied together, make 15½ square feet; that multiplied by 16, the number of pounds allowed to all cattle measuring less than 5 feet, and more than 3 in girth, makes 265 pounds. The dimensions of the girth and length of black cattle, sheep, calves or hogs may be as exactly taken this way as it is at all necessary for any computation or any valuation of stock, and will answer exactly to the four quarters, sinking the offal, a sum which every man, who can get over a bit of chalk, can easily figure.

The following rules are also recommended by English usage:—(1) Multiply the square of the girth by the length, both in inches. The product, multiplied by decimal .7958, will give the contents in cubic inches, which divide by 576; the quotient is the weight in imperial stones, 14 pounds to the stone. Or, (2) multiply the square of the girth by the length, both in inches, and divide by 7238; the quotient is the weight, stones imperial. Or, (3) multiply the square of the girth by the length, both in inches, and multiply that product by .00013816; the product is weight in imperial stones. Or, (4) square the girth, multiply by five lengths and divide by 21; the quotient will be the weight in imperial stones.

Keeping Goats.

F. G. Webb, West Va.—Will you give us through the RURAL NEW YORKER some information about raising goats? Is there a market for their hides, and could they be made profitable? We have here a vast amount of mountain land which might be utilized by breeding goats, provided it could be done with profit.

ANS.—A satisfactory answer to this question could only be based on previous experience in this country and such an experiment has never yet been made. In many mountainous districts in Europe, especially in Norway and Switzerland, goat-keeping forms an important branch of industry, but more for the cheese and butter made from their milk, generally mixed with equal parts of cows' milk, than for the profits from their skins. Those of the kid and goat, however, are valuable, the former for making gloves, and the latter for the manufacture of the finer kinds of shoes, being soft, elastic and durable. The flesh of the kid is somewhat like venison and that of the goat by no means unpalatable, partaking of the flavor of mountain mutton. The presence of capric acid imparts a slightly peculiar, though not unpleasant odor to the milk, of which a good goat will yield a quart three times a day, and which is richer and more digestible than that of the cow, and in tea is as grateful as cream. About a dozen years ago the Angora and Cashmere breeds of goats were introduced with considerable *eclat* into different parts of this country, notably at Gallatin, Tenn., and in Guernsey Co., Ohio, but of late little is known to the public of the results of the experiments. The chief trouble in keeping goats lies in their exasperating aptitude for getting into mischief, but in the wide mountain range in your neighborhood this source of annoyance would be reduced to a minimum.

J. D. Curtis, East Syracuse.—Will you please inform me, at your earliest convenience, (1.) where and of whom I can obtain "Willard's Practical Dairy Husbandry," (2.) also at what price.

ANS.—(1.) The Orange Judd Co., New York City. (2.) $3.

Swamp or Spotted Alder.

A. E. B.—Can some one tell me, (1,) the best means of getting rid of the common swamp or spotted alder? I have a swamp running through my farm containing 7 or 8 acres thickly grown with alders. I think of sometimes putting a wide, deep ditch through the whole length of it, as a drain, a small brook of first-rate water runs through it. Some say cut them down in the month of August and they will not sprout again. I have tried this but they sprouted some. I have just one more question to ask, although not pertaining to the farm. (2.) Is there the same attraction for the magnetic needle at the South Pole as at the North, if so how does it stand when on the equator.

ANS.—(1.) We know of no better way than to continue to do as you have done. (2.) There are two magnetic poles, one in the northern and the other in the southern hemisphere; but neither of them is coincident with the terrestrial poles. At present the north magnetic pole is situated in the extreme north of the American continent, probably about 400 miles southward of the terrestrial pole, round which it is moving slowly from east to west, completing the circuit in about 650 years. There are multitudinous magnetic influences, arising from terrestrial, lunar and solar influences, which affect the direction in which the compass points, so that its variations or declinations are extremely irregular. It is only along certain lines—called lines of no variation—that the needle points towards the pole. Such a line at present passes near Wilmington, N. C., Charlottesville, Va., and Pittsburg, Pa. On the east of this line the needle points away from the pole towards the west and this variation amounts to 6 degrees at this city, while at Portland, Me., it amounts to 18°. The equator does not mark the line which determines the superior influence of the north or south magnetic poles. This is extremely irregular at any single moment and is constantly varying, so that science has hitherto been unable to determine either the nature or source of terrestrial magnetism.

Jas. K. Booker, Tuscarawas Co., Ohio.—I have several questions to ask the many readers of your paper. 1st. Will bees work well without a queen, a bee-keeper here says they do. 2nd. I have a stony piece of ground, and want to fill up a ravine close by, had I better throw the stones in miscellaneously or form dams across it?

ANS.—(1.) Bees gather but very little honey and pollen when without a queen, if they have no queen cells, or eggs, or larvæ to make one; but when supplied with one of these, they work as well as they do with a mature queen, because they know that they will soon have one. (2.) In filling up your ravine with stones, you had better throw them in loosely, the largest at the bottom, and the small ones into the interstices, so as to allow the water to flow off through them. We see no benefit in "forming dams across it," whether you design to have an outlet or not. You will require, at least, eighteen inches of soil on the top to render it in good condition for cultivation.

Beets and Carrots on Muck Soil.

Van.—Can you or any of your readers tell me through the RURAL whether beets or carrots will grow and do well on muck soil.

ANS.—Carrots can be cultivated with profit on such a soil, provided it is well cultivated and thoroughly pulverized; but of course, they would do much better on a rich loamy or gravelly soil. This kind of soil is also the best for beets, and experience has taught us that when these are grown on ground naturally moist and rich in humus, the roots are watery and very thick, are liable to be hollow in the middle and hard to keep in good condition.

Buckwheater.—Will the RURAL please tell me how far north bees can be kept with profit?

ANS.—Bees are kept successfully as far north as Montreal and Quebec, Canada. Anywhere where bees can gather honey plentifully six weeks in the year, they may be kept profitably.

J. A. Younge.—Twenty-five acres of my farm are river flats and are overflowed every spring, on which account the fences have to be removed every fall and replaced every spring, the ordinary rail fence being used. Would you or any of your readers tell me what is the most substantial, and convenient yet cheapest fence for my purpose.

[Will somebody please answer.—EDS.]

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY DEC. 29TH.

G. G.—W. F. Have attended to your request.—J. L. N.—C. W.—J. J. M. P.—J. N. B.—Mrs. S. V. W. C.—Mrs. S. H. R.—J. R.—"John Rusticus."—E. N.—May Maple.—J. W. L.—T. W.—J. A. W.—A. E. B.—Bessie.—J. M. B.—T. B. M.—H. H.—S. B. P.—W. C. L. D. sent S. plants—C. T.—T. H. H.—F. A.—"Diseases of Apple Trees and Fruit," no name.—Dr. G.—E. S.

News of the Week.

HOME NEWS PARAGRAPHS.

Diptheria is prevailing to an alarming extent in New-Brunswick.

About 125,000 bushels of clover-seed are annually sent from this country to Europe.

The amount of deposits in the Savings banks of the United States is estimated at $1,500,000,000.

Throughout the cotton-producing States, the average yield of cotton per acre is 178⅘ pounds, valued at $19.61.

Of the 270,000 voters in Kentucky, 90,000 cannot read, and more than 40,000 of the men who cannot read are whites.

In Central Georgia the annual average cost per head of keeping sheep is fifty-four cents; average cost of raising a pound of wool, six cents.

Canadian statistics show that a large number of French emigrants of the better class are regularly arriving and settling in the Dominion.

During November, 4,745 immigrants arrived at New York, 1,489 from Germany, 841 from England, 605 from Ireland, and the balance scattering.

Tobacco has been such a profitable crop in Wisconsin this year, that the farmers intend to go into the business more extensively next season.

There are about 70,000 orange-trees in bearing in Louisiana, yielding over 30,000,000 oranges annually, which are worth on the trees about $100,000.

A suit about a yoke of steers has just been decided in Campbell county, Georgia, after fifteen years' litigation, in which the costs amounted to $1,500.

Severe frosts on the 29th and 30th of November solidified the juice in the standing sugar cane in portions of Louisiana, and have caused immense damage.

Tobacco leaves are fatal to cows, as a Kentucky farmer learned a few days ago by losing three valuable animals which ate some of the weed with their hay.

Florida hogs average a value of $2.72. The average hog in Maine is worth $10.11; New Hampshire, $14.99; Vermont, $10 31; Massachusetts, $14.80; Rhode Island, $13.80; Connecticut, $15.74; New York, $10.30.

A physiologist estimates that there are 2,400 disorders to which the human frame is liable, and there are plenty of people who believe they have every one of them.

It is a singular coincidence that all of the United States ships lost in the last ten years were named after Indian tribes, viz., the Saranac, Saginaw, Idaho, and Huron.

A German woman is at work in Meriden, Ct., digging ditches for gas pipes. She does not heed the gaze of the idle but handles her pick and shovel to good purpose.

There are six families in West Middletown, Allegheny County, Penn., that contain sixty-eight children. The smallest family contains ten and the largest fifteen children.

The Tax-Collector's books show that the value of real estate, subject to taxation, in the city and county of San Francisco, is $190,972,880, and the personal property, $63,730,080.

Chinamen have been destroying the fish in Napa River, Cal., by some poisonous compound which kills every form of animal life, and makes the water unfit for household purposes.

A Lewis County, Mo., farmer, sold his wool crop for $3,380, and Missouri farmers generally are beginning to see that there is money in sheep, and are increasing their flocks or starting anew.

Fourteen bushels of chestnuts have, this fall, been sent in small packages by mail, from Merrimack County, N. H., to Helena, Montana. The postage on them was $102.37, or $7.31 per bushel.

A Minnesota farmer's boy brought the village editor an ear of corn which was truly wonderful for size. It measured 11½ inches in length and 10½ inches in circumference, and contained 1,620 kernels.

The Illinois Central Railroad has arranged with the New Orleans and Liverpool steamship line, so that grain can be carried from Chicago to New Orleans, at 40c. per hundred, and to Liverpool for 70c.

The population of Georgia is 1,264,240, and the number of hogs is 1,261,440, or one hog for every person in the State, and 200 hogs left over with which to regale the strangers that may happen within their gates

The farmers of North Alabama find great difficulty in procuring hands for field-work, in consequence of which half the cotton crop remains in the field, and will necessitate a good deal of financial embarrassment.

The returns from the savings banks of Massachusetts for the year show a large decrease in deposits, roughly estimated at $3,000,000 to $4,000,000. This is the first time in the year that there has been a falling off.

The superintendent of a factory in Canada, which manufactures paper from wood, says that the process is now so much improved that the paper can be made ready for use in six hours from the cutting of the tree.

Illinois, this year, is the great corn-producing State. With this grain 8,935,411 acres were planted, which gave an estimated average yield of 38 bushels per acre, aggregating a total product of 340,528,246 bushels.

On the 30th of November, Henry M. Marvin of Boone Co., Ind., sold eighteen fat pigs, thirteen months of age, for $4 per hundred gross, that weighed 818 pounds each, after being driven over a rough road seven miles.

The first prisoner at the Joliet, Ill., penitentiary, was received in 1858, and since that time about 12,000 prisoners have been committed. The largest count was on Nov. 26 of this year, when the inmates numbered 1,865.

The permanent exhibition in Philadelphia has received in all since it was opened, last May, $107,600, and now has a debt of $275 000. Neither opening it on Sundays nor closing it seems likely to save it from bankruptcy and the sheriff.

Connecticut valley tobacco raisers have nearly stripped this year's crop, and report that it is an unusually good one, despite contrary opinions earlier in the season. Prices promise to be lower, the New York strike having had a depressing effect.

Texas made this year 700,000 bales of cotton, from which will be 840,000,000 pounds of seed. This seed, converted into oil, would bring over $14,000,000. The total exports of cotton from the port of Galveston for the season just closed, were 495,814 bales, of which 256,928 went to foreign and 238,866 to domestic ports.

FOREIGN NOTES.

At Glasgow, Scotland, one iodine factory uses up 6,000 tons of seaweed every year to produce this chemical.

The highest price paid in the Egyptian market for the young Nubian women is $500, and for fair Circassians $3000.

Berlin is celebrated for its excellent schools, but teachers there receive only about two hundred and fifty dollars a year.

French statistics record on an average about 200 cases annually of hydrophobia. There are said to be 3,000,000 dogs in France.

It is only lately that the flavor of Wintegreen has been known in Europe, but now it has become all the rage with confectioners.

Beef can be bought in Belgrade at one penny per pound, and forwarded to London by express trains in six days, or less, at a cost of three farthings a pound. Fat pigs can be bought for 2½d. per pound, and lambs at £1 per score.

Milan is preparing for an International Exhibition in 1879. The outlay for the building, which is to be in the London Crystal Palace style, is set at the modest sum of $150,000, two-thirds of which sum have already been subscribed in England and the rest in Italy.

British India is becoming a strong competitor for the tea trade of the world. In 1861 only 1,300,000 pounds were exported from Hindoostan, but the export has now grown to more than 25,000,000 pounds, and the area of land brought under tea culture is increasing even more rapidly.

English experience in dressing well-fed hogs is as follows: The per cent. of pork from a hog, the live weight of which is above 550 pounds, is 87 to 88; a hog live weight 500 to 550, 84 to 86 per cent. of pork; 350 to 400, 81 to 82 per cent.; 200 to 300, 78 to 80 per cent.; under 200 pounds, 75 to 77 per cent.

The Australians are turning to good account the rabbits unhappily introduced to that country, and which have increased so rapidly as to cause wide-spread damage. During the month of August 59,457 rabbits were potted, chiefly for export. Thousands of skins are sent to England for use in making hats.

The following are some of the endowments of colleges and schools in Ireland: Trinity College, $300,000; Queen's University, $200,000; the Royal College of Science, $40,000; the Diocesan, Royal, Irish Society, Erasmus Smith, and other endowed schools, $210,000; and the Training and Model Schools, $285,000.

It seems the English bees imported a few years ago into Australia are on a strike. The perennial Summer of those parts of the country where they were located gave them opportunities for seeking food at any time. Hence, there being no freezing weather to destroy the sources of their food, they ceased storing up honey either for themselves or their owners. Their hives are simply castles of indolence.

Concerning the English wheat crop J. B. Lawes of Rothamstead, states that the average yield per acre in number of bushels is very nearly the same in 1877 as in 1876, but that the quality, as indicated by the weight per bushel, is much inferior in 1877. Thus the average weight per bushel on the selected spots in the permanent wheat fields was 2¾ pounds, and among the varieties of wheat nearly 3½ pounds less in 1877 than in 1876.

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PERSONAL ITEMS.

SENATOR MITCHELL of Oregon, is a little, clean, dark man, as bright as a sparrow.

IT was Goethe who said that modern poets put a great deal of water in their ink.

THE often quoted remark, "Nothing succeeds so well as success," was Talleyrand's.

JAMES GORDEN BENNETT is reported to be engaged to a handsome young French countess residing in Paris.

ADAM CLARKE said the reason the Irish made so many bulls was because they thought so much faster than they spoke.

ROSSINI was insufferably conceited, and declared himself, in a letter to his mother, to be the handsomest man in Italy.

ALVIN CLARK, the great telescope manufacturer at Cambridge, began life as a portrait painter, with a studio in Boston.

THIER'S mother was cousin to Andre Chenier, the poet and Girondist, who suffered death during the French Revolution.

MISS CAMILLA WEBB, once a clerk in the treasury department at Washington, and a beautiful blonde, is now the Countess von Harvre.

BAYARD TAYLOR is a Pennsylvanian by birth. His first published work was "Views a foot; or Europe seen with Knapsack and Staff," in 1846.

INDIAN JOSEPH says:—"I will fight no more forever," but then we wouldn't like to give him a good chance, for all that. Indian nature, you see!

MRS. CHISHOLM, widow of Judge Chrisholm, who was murdered in Mississippi, has been appointed to a clerkship in the Treasury Department.

ROSA BONHEUR wears her hair cut short like a man's, and affects masculine attire. All accord to her the reputation of being the best living animal painter.

RAPHAEL died at the age of thirty-seven, and yet there are at least a thousand "authentic" pictures by him still extant, in public and private collections.

MRS. GENERAL CUSTER is living in New York on the small pension she receives from the Government and her salary as secretary of the Ladies' Art Association.

WILLIAM W. CORCORAN of Washington seems to occupy his whole time in acts of practical benevolence. He possesses the will and the means, like Miss Burdett Coutts of London.

THE Czar is said to be a good linguist. He delights in French novels, plays, and music. He is a man of great goodness of heart, and is said never to have quarreled with a personal friend.

MAGGIE MITCHELL is over 40, though upon the stage she looks to be but about 18 years of age. She was born in the Bowery, New York, and has amassed a fortune of $300,000 by her profession.

MRS. A. T. STEWART, who is now 70 years of age, had a severe fall lately, while descending the marble steps in her Fifth avenue mansion. She was badly bruised and her wrist was fractured.

HON. D. N. LOCKWOOD of Buffalo, is the youngest member of the New York delegation in Congress, having been born in 1844; and Hon. George W. Patterson of the Thirty-third district, is the oldest, having been born in 1799.

MANAGER GRAU, who has just died in poverty in New York, experienced remarkable vicissitudes of fortune. He was once worth nearly half a million of dollars, and was said to have realized $200,000 profit by bringing Ristori to this country.

SENATOR DAVID DAVIS is a great land lawyer. When he did not take land for his fee as attorney he bought land with the money earned until he became a very heavy owner of real estate. He is quite wealthy, but his money is all invested in this way.

MRS. JOSEPH, the sole wife of the Nez Perces chieftain, is a pretty little black-eyed beauty, with flashing teeth, fine arms, and dainty feet. They now have one papoose a year old, their only daughter, a young girl, having mysteriously disappeared the morning of the last fight.

MR. CONWAY says of Forbes the London News's correspondent: "This man whose pen, has really modified the history of Europe, is one of the most modest and amiable of persons. When he entered the field of journalism his sole ambition was to do perfectly what he was required to do, and it has, I believe, been without the slightest effort to accomplish world-wide effects that Forbes has accomplished them."

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A WARNING!

IT having come to our notice that the Manager of the Economy Club is advertising to take single subscriptions for the RURAL at $1.75, being 25 cents less than our regular club price, we accordingly warn those intending to subscribe for this journal that we shall *not* accept *any* subscriptions sent to us by the Manager of this Club. We shall not permit any one to take subscriptions for the RURAL at less that $2 each, and only at this price when sent in clubs of five or more. Our single subscription price is $2.50, and these prices are invariable and must be maintained.

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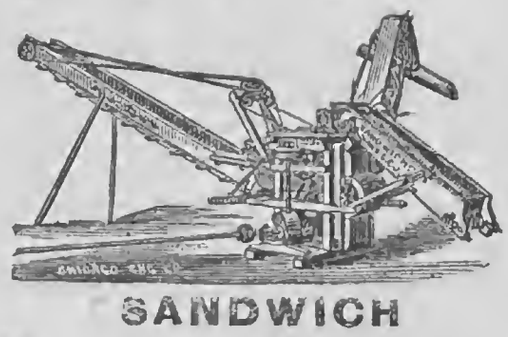

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THE LUXEMBOURG GARDEN, PARIS.

On the left side of the Seine, beside the palace of the same name, in the heart of Paris, are the gardens of the Luxembourg, scarcely inferior in beauty to those of the Tuileries, until the Communists partly despoiled them of their attractions during the revolt in 1871. Covering an area of eighty-five acres, they are still exceedingly interesting and highly instructive to the horticulturist. They are laid out with all the taste and judgment that distinguish the works of the best French landscape gardeners, and are entirely free from the incongruous obtrusions of the purely artistic element which, to the taste of Englishmen and Americans, appear somev hat meretricious on many of the other parks and gardens and around the gay capital of France.

For many years back, they have fortunately been under the management of one of the clearest-headed and most accomplished gardeners in Europe, M. Riviere. Thanks to him, most of the traces of communistic violence are now obliterated, and, like Eleazer's temple of old, it is only those who remember their former beauty who bemoan their present inferiority, while strangers are loud in their praises of the attractions that still render this place one of the most charming spots in the city. Among the interesting relics of by-gone days, yet preserved in perfect health, are a multitude of old Oleanders in tubs. In winter, these are stored in the Orangery, and when placed out-of-doors, in the genial summer time, they often flower as freely as beds of scarlet Pelargoniums. There is also a very excellent collection of orange trees, around which are always congregated a number of curious admirers. A small portion of the garden is devoted to fruit culture, and from the study of this model of its kind, visitors interested in fruit-gardening might learn much in all that relates to the training and cultivation of fruit trees.

The floral decoration out of doors is, for the most part, composed of a mixture of hardy herbaceous and tender bedding plants, the borders being usually gay with spring flowers before those from the conservatories are placed in the open air. Here there is no early summer clearance of the beds, as the plants that succeed each other, are "stolen in" from time to time, so as to allow no trace of bareness after the winter is passed. There used to be here a very large collection of vines, one, indeed, of national importance, but it has lately been transferred to the Acclimation Garden in the Bois-de-Boulogne. The hot-house department is rich in the possession of the best collection of Orchids in any public garden around Paris, and the Camellia-house also is abundantly stocked. The common honeysuckle is grown a great deal in the gardens as a low standard bush, freely cut back in the winter.

VIEW IN THE LUXEMBOURG GARDEN, PARIS.

M. Riviere is an able lecturer on fruit culture, pruning, and the like, and during the winter and spring speaks to large audiences in the Orangery. The custom of lecturing on pure gardening, as distinguished from botany, is common in France, and is the cause of the widespread knowledge of fruit trees and their treatment among the inhabitants of that country. Even amateur workmen and laborers possess this knowledge to a high degree, and, considering the large number of small farmers each of whom has generally an orchard patch, the acquisition is extremely useful. In lectures on such topics here and elsewhere throughout the country, the discourse is abundantly illustrated by living specimens exemplifying the points under discussion, and frequently the professor and class visit some famous garden for a still more effective illustration.

A peculiar charm is imparted to the Luxembourg gardens by stately avenues of graceful trees and secluded walks, shaded by dense masses of odoriferous shrubbery, while fine terraces, here and there, diversify the scenery, and frequent groups of classic and symbolic statuary, half-hidden by umbrageous foliage, embellish the long vistas. This is a favorite lounging-place for the gay Parisians, and groups of promenaders may be seen, at all times, enlivening the smooth asphalt-coated walks, while the numerous seats are occupied by groups of noisy, laughing children, interspersed by their sedate elders smilingly watching the youngsters' gambols or placidly enjoying the beauty of the scene.

In France, horticulture has for ages received special attention. As long ago as the year 786, Charlemagne, by royal edict, established a number of public gardens, prescribing the very plants which were to be grown, and, amidst the multitudinous cares that must have pressed heavily on the absolute monarch of so vast an empire, he still found time to personally see that his orders had been obeyed. Towards the end of the 16th century, Henry IV., of France, had collected in the garden of Montpelier upwards of 1,300 French Alpine and Pyrenean plants.

Farm Topics.

AGRICULTURE AND EDUCATION IN THE UNITED STATES.

PROF. I. P. ROBERTS.

No. 1.

In order to arrive at a full understanding of the principal causes that have produced such marvelous changes and improvements, not only in methods and increased wealth, but in general education and technical knowledge of the rural or agricultural population, it will be necessary to state briefly the conditions and circumstances of the rural classes of Europe in former times. It will not be necessary, however, to go back farther than the seventeenth century as, prior to this period, changes in wages and condition were not of a marked character or in any wise permanent.

Taking 1685 as the period from which we soon see in England permanent improvement, though small both in condition and wages, we find that gross ignorance was the universal rule, and abject poverty the inevitable condition of all the common people. And how could it well be otherwise? For wages were fixed by law in Warwickshire at 4s. a week (16c. per day) without food, from March to September, and 3s. 6d. from September to March.

In some other counties they were fixed at a slightly higher rate—as in Suffolk, 5s. for winter and 6s. for summer. EDWARD YOUNG, in "Labor in Europe and America," from which many of these statistics were taken, states that "Meat was cheap as compared with present prices, but hundreds of thousands of families scarcely know the taste of it."

Wheaten bread was not even thought of, as the average price per quarter for wheat during the last twelve years of CHARLES II. was 50s. The great majority of the people lived almost entirely on rye, barley, and oats. The produce of tropical countries, mines, and machinery—such as sugar, salt, coals, candles, soap, shoes, stockings, and generally all articles of clothing and bedding—were positively dearer than at present. From this time (1685) forward, there appears to have been a steady and permanent increase not only in wages, but in the money value of the products of the farm. Manufacture received a great impetus from the influx of French fugitives which followed the revocation of the edict of Nantes, in 1685. It is estimated that a half million of Protestant French, most of whom were skilled artizans, with a cash capital and effects to the value of upwards of three million pounds sterling, settled in England. This had a marked effect both on wages and products, and evidences of still more increased prosperity quickly followed the peace of Ryswick, negotiated, September, 1697.

Perhaps no period in the history of England shows, all things considered, so rapid progress in diversified industries as the last quarter of the seventeenth and the first quarter of the eighteenth centuries.

The colonies of North America about this time, offered great inducements to immigrants, and they appear to have been successful, for Pennsylvania alone received in 1729, 6,200 immigrants.

The New World was the longed-for land, the ideal paradise to many an oppressed and half-fed laborer of the Old. It was the great subject to be talked of by day, discussed at the little gathering in the evening, and dreamt of by night. All of the causes that conspired to produce the marked advancement in the education, methods, and not results of the tillers of the soil, we may not know; but certain it is that those enumerated had a marked effect; not directly, by giving better methods and imparting technical instruction, but by arousing thought and energy; by creating a desire for, and participation in, more of the comforts of life; by lifting the laborer out of the position of abject servitude which sometimes was worse than slavery, and clothing him with the attributes of manhood.

The discovery and peopling of North America has been of more benefit to mankind directly and indirectly, than any other event that has transpired for the last thousand years. We now come to the beginning of the age of machinery adapted to manufacture, which in time affected very materially the development and improvement of modes and implements of agriculture, and these in turn, a little later, had a great influence on the education and elevation of the food producers.

In 1738 JOHN KAY of Lancashire, invented a new method of throwing the shuttle, by which the weavers were enabled to nearly double the amount of cloth. About the same time, LEWIS PAUL invented a machine for spinning cotton or wool by the aid of rollers.

In 1764, HARGREAVES invented the spinning-jenny.

About 1769, ARKWRIGHT produced the spinning-frame; and these in turn were improved and combined into one machine called "The Mule," by SAMUEL CROMPTON, in 1775. CARTRIGHT, ten years later, produced the power loom.

During this period, great improvement was made by Lord DUDLEY in the smelting of iron with coal, instead of charcoal; this, in turn, stimulated many branches of hardware, notably that of manufacture of nails. Towns were built up rapidly and permanently, and the evidences of thrift and growth were on every hand. The wages of the farm laborer and the profits of the farm were on a steady increase, and agriculture was materially benefited by finding a near and ready market for its products.

The inventions spoken of, and others which for a time appeared to be a universal benefit, proved to be the means, in some instances, of degrading and oppressing a portion of the working classes, particularly the women and children engaged in the factories. We are all more or less familiar with the effectual efforts of Sir ROBERT PEEL, ROBERT OWEN, and others, to induce Parliament to enact laws restricting the hours of labor and prohibiting the employment of children under certain ages.

Meantime, the thirteen American States had acquired their independence, and the war that secured it was another great educator. The British soldiers, on their return, verified many of the stories that before this had only been half credited, of the richness of the soil and mines, of the healthfulness of the climate and, above all, the perfect freedom and equality of the people. Many of the soldiers remained in the New World, or in time returned, and soon came to love and respect a people they had so recently despised and hated. The citizen-soldier of the Colonies had also become better acquainted with his own country, by having seen much of it on his marches and by coming in contact with those of distant localities. Both the British and American, by their increased opportunities for observation and for acquiring a knowledge of a variety of facts—or, in other words, becoming better educated—formed a more accurate conception of the grand possibilities of the future. At the close of the war, many of the soldiers of both armies returned to their farms with a better opinion and knowledge of their powers of mind and body, a tolerably clear understanding of their rights as citizens, and manhood enough to assert and defend them.

JETHRO HULL commenced his experiments on his farm in Berkshire in 1732, but they appear to have had little influence on agriculture until about thirty-five years later, when the most valuable features of his system began to be adopted. The old modes rapidly gave way to new and better ones. Drill culture and rotation of crops were largely practiced; the cultivation of turnips and potatoes increased rapidly; clover was introduced into the rotation largely, and timothy supplemented it at a little later period. Improvements in domestic animals followed quickly. All of these advances in methods and systems required increased knowledge and skill. New ideas were continually being advanced, discussed, pondered over, and adopted or rejected. The same eager desire for more light, increased remuneration, and greater freedom, was seen, to a greater or less degree, on the continent.

My object in writing this article—which is a kind of preface to what is to follow—is to try and point out some of the causes of our rapid advancement in education and material wealth. In order to do this, it appeared necessary to trace briefly the conditions of agriculture and those engaged in it and other pursuits; for even our immense natural resources (formerly undeveloped), our mammoth rivers and inland seas, and our almost unlimited extent of territory, will not account for it all.

We hear much in these days of natural selection, but no illustration on so grand a scale has ever been witnessed as we behold in the United States. Our immigrant ancestors were largely composed of self-selected people of the Old World. The brave, the energetic, the dauntless, the liberty-loving, the haters of oppression, ignorance, and injustice, formed the sure foundation on which they and their children builded so nobly and well.

A nation might be formed under more favorable circumstances, but a nation never was. No such spectacle has ever been witnessed of a nation with territory sufficient for a dozen respectable empires, reclaimed from a wilderness, conquered by the arts of peace, and rising by its wisdom and education from a few sparsely-settled colonies to a position of power, wealth, and refinement, that challenges the admiration and wonder of the civilized world. This selection of the fittest, explains the miracle that has been wrought in our land during the past century.

Cornell University, N. Y.

WESTERN FARM TOPICS.

PROF. EDW. M. SHELTON.

Up to December 1st of this year, we have received, during the eleven months of 1877, a total rainfall amounting to a fraction over 42 inches, which may be called a fair showing for this drought region of the "Great American Desert." Since that date we have had one week of delicious Indian Summer, without frosts nights, the thermometer going up to 65° two or three times. This was followed by two weeks of nearly continuous fog banks and drizzling rains, varied with a couple of sharp thunder storms, just such weather, in short, as I have seen in Southern Illinois at this season; which is saying about as mean a thing of the weather as I am able.

THE WILD GRASSES.

Taking the West as a whole, there is no other single crop that nearly equals the spontaneous crop of wild grasses that annually cover prairie and plain with the densest verdure. I need not multiply arguments to prove this proposition. Let it be remembered that well-nigh all the cattle obtained form the vast grazing regions West of the Missouri River, all the "Texans" "Cherokees" and American cattle of many names, to say nothing of sheep, are "made" on the wild grasses of this region. And yet this immensely valuable product rarely figures among the "available assets" of a State. Even the fervid imagination of the real-estate agent rarely riots among the wild grasses of his unsold lots. Tourists, speculators, and newspaper correspondents, while marveling at the "crops" and the flocks and herds, unite in ignoring the grasses which make flocks and herds possible. Our own farmers are equally indifferent to the importance of this subject. Thousands of acres of prairie land are annually broken up for grain crops, never so sure and only in favorable seasons so profitable as the original prairie grass.

The advantages of these prairie grasses may be summed up in a line: they furnish excellent pasturage, and when cut in the proper season, a good quality of hay; but they are pre-eminently valuable to the Western farmer, because the severest droughts but lightly effect their growth, while neither grasshoppers nor chinch bugs, the twin scourges of our farms, have ever been known to injure them. I certainly do not think of any cultivated plant for which so much as this can be said. Within the past four years I have seen corn selling in our rural towns at $1 per bushel, and wheat and oats an almost total failure the year following, but I have never yet seen the native grasses of Kansas reduced to even a half crop.

But all this is only one side of this question, although it is the side usually overlooked. There is another side to the picture with which farmers are too familiar, but which equally must be told. The prairie grasses are as wild as the Indian and the buffalo, and even less tamable. They endure mowing well, but even when moderately pastured, they disappear never to return. In old pastures, and in the vicinity of towns, indeed wherever the native grasses are closely pastured, the character of the natural herbage changes rapidly, the perennial grasses give place to annuals greatly their inferiors, and in the transition weeds rapidly multiply. Upon the alluvial bottoms adjacent to this city, where only a few years since waved luxuriant grasses "waist high," are now seen dense masses of coarse weeds alternating with patches of feebly growing annual grasses. Moreover, the wild grasses are late in starting in the spring, rarely making good feed before the middle of May in this locality, and the first frosts of the fall end their growth for the season. In this way our winters, so far as feeding is concerned, are lengthened nearly or quite two months beyond what they would be had we the tame grasses.

It will be seen that these are serious defects in the character of our wild grasses, largely offsetting their other sterling qualities; nevertheless, I most earnestly counsel every farmer living west of the Missouri River, who owns a field having a good stand of prairie grass, to allow the invading plow to enter it on no pretense whatever. Such a field should be treasured as the English farmer treasures his permanent pastures, or the Eastern farmer his wood lots.

TAME GRASSES.

West of a line drawn north and south through the city of Lawrence in this State, there are many patches of blue grass growing in door-yards and occasionally a small field may be seen sodded over with some one of the tame grasses, but over all this vast area not one farmer in fifty ever sowed a handful of grass seed, if I except Millet and Hungarian, and there exists a widespread notion that Kansas is not adapted to the growth of the tame species. I shall spend no time in combatting this idea. Few of the people who argue against the possibility of growing the tame grasses here have any conception of the tremendous import of this reasoning; for if it can be shown that the cultivation of the grasses is from climatic or other causes, impossible, then it is proved, as conclusively as moral reasoning can prove anything, that this country is incapable of sustaining a dense agricultural population; that the slovenly scourging system called "pioneer farming" is the highest style of farming it is capable of, and that a large portion of these beautiful prairies must ever be given over to the nomadic herdsman.

But I am abundantly satisfied that even on the agricultural portions of Kansas, Nebraska, Indian Territory and Texas, several of the most valuable cultivated grasses may be successfully and profitably grown. I desire to state briefly a few of the facts of my own experience upon the college farm since 1873. In 1874 I began an experiment with fifty odd varieties of grasses and clovers, and of all these, Blue grass, Timothy, Orchard grass and Alfalfa have proved the most trustworthy. During this same season, although one of the most disastrous droughts ever known prevailed in the State, I cut two tons per acre of excellent Timothy hay, from ten acres of ground. In 1875, another season of severe drought in this locality, this field furnished excellent pasturage although in the sandy portions of it considerable injury was sustained from the dry weather. The year 1876 was a very favorable one in this State for all cultivated plants. During this season I cut over five tons of good Alfalfa hay per acre, at two cuttings, from two acres of ground, and another cutting of fully one ton per acre might have been taken before winter set in.

At this time we have, all told, fourteen acres of mixed Timothy, and Blue grass, seeded in 1875 and now forming as handsome a sward as can be found in Kentucky, three acres of Orchard grass, seeded last spring, and even now almost perfectly occupying the ground, and five acres of Alfalfa, which will easily cut one and a half tons of hay per acre every two months of the growing season.

In conclusion, I earnestly counsel Western farmers to sow grass seeds, and to those living west of the Missouri, I say sow Blue grass and Orchard grass for pastures, Timothy and Alfalfa for mowing; but sow in the spring, preparing the ground thoroughly as for wheat. I have tried this plan four years and have never once failed in obtaining a first-class catch.

Manhattan, Kan.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

BEES are now wintered by our most successful bee-men in cellars. The cellars are kept dark with a direct ventilation out of doors. The ventilator is a wooden pipe so arranged that the current of air passing through it may be increased or limited according to the weather. The cellar should be dry and free from mold. Not three per cent of loss in swarms will happen when bees are wintered in a well ventilated, dry cellar. Bees now do well in this section and are rapidly recovering from the almost total annihilation which was caused by the epidemic a few years since. This disease which was so destructive ran for two years. It was a dysentery which attacked the bees during the winter. Mr. HEATON only saved one hive out of sixty. Our twenty swarms were all swept away. A few hives of bees help to make a farmer's table more attractive, and generally there is a little surplus which may be turned into cash. But few persons are calculated to be successful apiarians on any extended scale. We have only two in town, and they can work among their bees with perfect impunity. There is a sort of bee charm which a few persons have; they are the ones to make keeping bees a business. All others had better keep out of the way. They may take the chances and cover their faces and hands, and endure a few things for the love of honey, but to have all this bother and the stings which many hives would surely furnish, is both an anticipation and a reality which we do not care for.

English sparrows are migrating from the cities into the country. In the village, a mile distant, they have made their appearance this winter, and the homely things are likely to drive away all of the sweet songsters which help to make spring so welcome. It is a pity the enterprise was ever born which brought them to our land.

By accident we have discovered how to manage the check of a high-headed and hard-mouthed horse. Such a horse should be checked up, especially if it pulls on the reins, as the check will relieve the driver. When a horse is checked up tight it cannot kick up so readily nor will it incline to run any. To check and uncheck such an animal, take hold of one side of the rein with one hand and pull the head around towards you and then with the other hand put the check on the hook. It can be done with perfect ease when, if the person should attempt to pull the check directly back to the hook-line, it would be very hard work.

Three spoonfuls of meal are wasted every day when the measure is filled heaping full and in carrying it from the granary to the horses' mangers. A peck of corn ground in the ear is

fed to the working team three times a day. One of them is almost twenty-four years old, and the other is nineteen. Jack, the oldest one, gets hay, and Jim is still eating straw on account of his heaves. They work every day and are doing well, their coats being bright and glossy. A great many farmers think that corn ground with the cob will kill a horse if fed to him. We have found, on the contrary, from experience, that it is a healthy food, and that a team will do hard work on this diet and keep in good condition. If our old team were fed oats ungrounnd, one half of them would pass through them without mastication or digestion. We have tried this to our entire satisfaction, hoping by feeding grain whole, to save the miller's toll. If it is necessary to feed grain whole, it is best to feed corn in the ear. Some horses will eat it, cob and all, but most of them prefer to shell it off and then eat it. A team fed on corn will sweat easier and more than when fed on oats, but this does not injure them any. For hard driving, oats is the best feed, and when fed to old horses, they should be ground. The meal fed to our horses is always weted just before feeding. Then it is sweet and palatable. Corn meal will soon get sour when wet, and on this account should be freshly mixed, as a horse abhors any sour or rancid feed. We commenced this paragraph by speaking about the little wastes in the daily feeding—three spoonfuls a day scattered from off the heaped measure make one thousand and ninety-five in a year; this is equivalent to 27.37 quarts—almost a bushel a year. The same little waste occurs in the grain fed to other animals, which would add at least as much more to the average waste for the year.

Esquire DAVIDSON has just lost a fat cow, which may teach us all a good lesson. The cow was very old and he commenced fattening her early in the season. She did well so long as she could get plenty of green and succulent food. He intended to dispose of her to a butcher before winter set in, but did not succeed in doing so. About a week ago, she refused to eat, and seemed to be in very great pain. Physic was administered with no effect. She has since died, and an examination showed that her paunch, or first stomach, was full of unmasticated food. Not being masticated properly, it had remained in the stomach until it had fermented, producing colic, and resulting in death. Old cows as well as other animals intended for slaughter, should be gotten into condition before winter, as they will fatten much easier on green feed, and the risks can be avoided of dry, unmasticated food, which is liable to produce either scours or colic, as in the case of this cow. A better plan is to turn off all animals before their teeth are worn out and while they are in full vigor.

According to the statements of several of the neighbors, Guinea fowls have a new field of usefulness. The neighbors say they will eat potato bugs and keep the vines clear of them. One man is going to winter twenty-five on the strength of his faith in them. The experiment is worth trying, as they are an ornament to the farm, and their eggs are the best for making cakes, and they are good layers.

A Dorking hen was found dead the other morning under the roost. She was very fat, and unquestionably died from apoplexy, which is a common disease of over-fat fowls. Large breeds are much more liable to this disease than smaller ones. Some of our chickens persist in roosting in the stock-barn on the partitions between the stalls. The cattle in these stalls invariably get lousy, and the pests must come from the chickens. We never could make them roost in the hennery before snow came, and then some of them would make their way back to the stalls, however often they might be carried to the hennery. Such has been our experience for years, and there is no reason to suppose that these chickens will be any more obedient than the others. It occurred to us, that, however they might delight to sit on this roost, they would not like to stick fast, so we have to-day daubed coal-tar all along on the edge of the top-boards, between the stalls, and now we congratulate ourselves that the hens will vacate that roost.

P. S.—Later.—Time has demonstrated the perfect success of the experiment.

There were so few books on swine, and these were so antiquated, that they gave us but a limited idea of the progress in this important industry, and especially in the establishment of American breeds and the more modern ideas which have been developed among swine breeders, that we give a hearty welcome to the recent work on "Swine Husbandry," compiled and written by Mr. F. D. COBURN, of Kansas. The fact that from this infant State, which was an unknown region thirty years ago, there should emanate a valuable and instructive book on the subject is wonderful, but not so much so as the fact that this fruitful commonwealth is now really an empire in production and promise. Mr. COBURN's work brings the history of swine-breeding, and the literature pertaining to this industry, down to the present time. The author has been careful and painstaking, and has endeavored to treat the different breeds of pigs and sections of the country with equal fairness.

Farm Economy.

SOMETHING ABOUT MANURE.

(1.) CAN forest leaves be rotted by the first of next May, and what would be the most rapid process for decomposing them without using horse manure, as I would like to procure an almost pure leaf mold. (2) I am saving, separately, horse, hog, cow and hen manure, and wish to learn for what garden crop each is most suitable according to the latest experiments and best authorities. (3) In saving manure is it well to add ashes in alternate layers, and what is the most rapid method of rotting hen, hog and cow manures, so as to have them ready for use next spring. A. SUBSCRIBER.

Ans. (1.) Yes, sufficiently for use in flower-pots or in the garden: mix with them a small quantity of fine wood-ashes and moisten the mixture occasionally. A layer of powdered charcoal, mold, or earthy matter of any description, spread over the mass, will absorb and retain any evaporating ammonia. (2) It is neither customary nor advisable to keep separate the manure from the various sorts of animals on the farm, except perhaps, that from pigeons and the different species of poultry. Hog, and cow manures are both cold and somewhat slow in decomposing, whereas horse dung is hot and ferments readily, and when composted with the others acts as a leaven to the whole mass. Moreover, when the voidings and litter of the different animals are piled together, new chemical combinations take place, the contents of the whole heap are broken down more thoroughly, made finer, and consequently more soluble and therefore more readily available for manurial purposes; for it should be borne in mind that all fertilizers must be reduced either to a liquid or gaseous condition before they can be absorbed as food by plants. This probably accounts for the fact that no one has hitherto thought it worth while to attempt to overcome the great difficulties in the way of making accurate experiments with regard to the comparative effects of the manure from different animals on various crops.

Just think for a moment of the arduous nature of such an undertaking. The crop to which each sort of manure would have to be applied, must be grown on soil equally favorable to its special requirements, receive relatively the same degree of attention, and experience weather equally conducive to its growth. Moreover, each of these dungs is subject to great variations in efficacy on account of the age of the animal, its treatment, the purpose for which it is used, the amount and quality of the litter, the length of time during which the manure has been kept, the way it has been preserved, and, more than all, by the quantity and quality of the food upon which the animal has been fed. On the last point an experiment made by Mr. LAWES, the celebrated English agriculturist, is highly suggestive. He found that while a given quantity of voidings from cattle fed on cotton-seed meal was worth $27,96; the same quantity produced from carrots and turnips, was worth only 86 cents. Accordingly before a just estimate could be made of the relative values of the manures from different animals upon various crops, so many circumstances would have to be taken into account and provided for, that the result would not repay the consequent expense and labor; and neither practical nor scientific men are likely to incur a great deal of either the one or the other to gratify mere curiosity.

With regard to hen manure, however, experience has shown that it is equally good for strawberries, melons, squashes, sweet-corn, tomatoes, and, in fact, for all bulbs and herbaceous plants. Properly treated this is the most valuable manure produced on the farm. It may be kept mixed with mold, dry muck, or coal ashes, or preserved separate in barrels. In the latter case, when about to be applied, it should be reduced to a powder, and mixed with at least four or five times its bulk of mold, muck, or some other substance, for if applied undiluted, it will burn and kill the seeds and prevent germination. Or, just before placing it in the hill or drill, it may be beneficially mixed with wood-ashes, but care must be taken that fermentation does not take place before the mixture is buried, otherwise there will be a proportionate loss of ammonia. Moreover, to prevent injury to the seed there should always be a layer of earth, a couple of inches thick, between the seed and the poultry manure.

(3.) It is not advisable to mix ashes with decomposing manure, as their action is so powerful as to cause a too rapid fermentation and consequent escape of ammonia. Nothing accelerates the uniform decomposition of all organic substances more than putrid urine, or liquid manure; hence the advantage of a liquid manure tank in the neighborhood of a manure pit. Moreover, by pouring urine over the manure heap, this valuable fertilizer becomes incorporated with the mass, vastly improving its quality, while danger of its being wasted is in this way avoided. The fermentation of dung should not be carried on further than is absolutely necessary, for even with the greatest precaution, the loss by the escape of valuable volatile fertilizing substances cannot be altogether avoided.

SYSTEM IN FARMING.

THERE must be a system in every business if it is to succeed, and whoever ignores a clear foresighted way of conducting farming will soon have no farming; for if he is depending on it for a living he will become bankrupt, or if doing it for amusement, the drain on capital will be so heavy as to cause prudence to step in and end such a losing transaction.

Some men are so opinionated as to imagine themselves competent to manage a farm without any looking forward, and they will make inadequate preparation for winter and have nothing in readiness by the time it is wanted, and if anything goes wrong it is laid at the door of some other than the right person. There is not a more pitiable and contemptible man than the one who thinks himself smarter than any one else, and yet runs around seeking to charge all his shortcomings to others while he alone is to blame.

There are men who are too stingy to make good fences or properly repair those which are rotting or tumbling down, and who yet talk of being stock farmers, and they will buy grade short-horns, grade Jerseys, mongrels of all colors and sizes, and expect the public to admire their animals and believe them to be something superior. Now by using good pure-bred bulls and raising the calves, improvements could be made in these grades, but those niggardly souls will begrudge the trouble to raise the calves, and either sell them for veal or let them go with the cow to a dairy-man.

System would raise all the heifer calves, and by using good bulls each generation would become better. Or, any man with sufficient capital would commence with some really good pure-bred stock, and breed and sell first-class animals, and thus conduct the breeding on a system of continually selling at double and treble the price of common stock and gaining extra profits. System, too, will cause any man of intelligence to have every department methodically conducted, and not to have anything delayed or capriciously changed from the rotation or regular course. But the miserable, shiftless farmer will have a piece of plowing in the middle of a meadow and a field of corn or grain with no fence between it and the pasture, and then every neighbor will be complaining of injury from stock through the bad fences. He will also be so simple as to attempt to fatten, in the winter, cows which have been in milk and have lost their flesh and perhaps some coarse, thin, big-boned steers. A WORKING FARMER.

Miscellaneous.

RURAL TOPICS.

T. B. MINER.

WORK BY THE JOB OR CONTRACT.

WHEN one knows what it is worth to do a thing, as to split a thousand rails, make a certain number of rods of stone-wall or board-fence, put up an outbuilding, or paint a fence or house, it is better to have the work done by contract than by the day, unless the owner has men hired by the month, who can do some of these things, or unless he intends to work regularly with the man or men who are selected to do the work. It is surprising to see how the great majority of mechanics, and others, will "nurse" a job when at work by the day! They will frequently do a piece of work by contract in three days, that they would spend a week on if employed by the day; and there is no remedy for such robbing of an employer, as they keep busy the most of the time; but it is often in trying to see how long they can make the job last. But there are some jobs, as repairing buildings, when one does not know exactly how much is to be done, till he has commenced the work, the condition perhaps of timbers not being known from the first; and all such generally have to be done by the day; and a good way in such cases is, first to obtain all the materials to be used, before the work is commenced, or as nearly all as possible; and then let the owner be "on hand," when the carpenters commence work and see that it is done *right*, and he will often make good wages for himself, in merely letting his men see that he is superintending the work, although he may do no work himself.

Another important point is to have a plain agreement as regards what is to be done in contract work. There is no use in being sensitive in regard to telling a man, "here is what I shall expect you to do, put in writing. I dislike to have any altercation over work after it is done, and I have stated plainly what you are to do, and what I am to do; and then there can be no disputes between us. I take you to be an honest man, but there is no harm in both of us signing this contract to keep us honest." If it be a job of no great importance, no witness will be needed to the signatures; but in case of putting up a barn, or other building, it would be best to call a third party as witness. No man ever lost money or character by being cautious and particular in his business; but many a man has become poor from a neglect to exercise these qualities.

LAY IN YOUR WOOD.

No good farmer will neglect to cut wood this winter, to be used a year hence, as it is poor management to burn green wood; and it is always best to have your wood for your family's use to be under cover, and so connected with the house, that it can be got at from the kitchen without going out of doors. If your wood-house is of ample size, it will afford a place to do many little jobs in rainy weather, and your boys can split the wood under it, and pile it up on wet days. When I see a farmer's wood-pile at his kitchen-door, a lot of logs to be cut as the wood is wanted, and *green* at that, I know his entire character; and I might write it out thus: "This man was brought up from boyhood to be slack in his farm duties, doing nothing but what he could not well omit. He has no idea of there being any benefit in "driving things," and he takes the world "easy." He denies that there has been any progress made in farming since he was a boy; consequently, his farm, dwelling, and general surroundings have an ancient look, just as farms had fifty years ago: and his children are growing up to be "chips of the old block," and his boys will, probably, die as their father will, with a *pile of green wood at their doors.*

If a farmer has no other reason, why he should provide dry wood for his family, except that it is cheaper than green wood, as regards the heat given out, that alone ought to be a sufficient inducement for him to provide it; but the comfort of sitting by a dry wood fire in winter of itself ought to stimulate every farmer to have an ample-sized wood-house, filled with a year's supply of wood, and cut of the size suitable for use, for having to cut and split wood daily, as it is used, is a way of managing fuel that no good farmer should tolerate.

INCUBATORS.

Having received a description of "The Eclipse Self-Regulating Incubator" from its inventor, E. A. SAMUELS Waltham, Mass., I will give my opinion of it, as one of the oldest fowl-breeders of the United States. Over 30 years ago incubators were offered for sale in this county, their inventors claiming that they would hatch chickens cheaper than could be done by hens; and, of course, it was so demonstrated *on paper*. I have closely watched their success since 1815, and have failed to hear of but one case as being a success, out of their inventor's hands, and that was where many thousand dollars were invested in the business.

It may be said, "perhaps your information on this subject is limited, and that there may be many in use, a notice of which has not come under your observation." To which I reply, that for thirty years I have received from twenty to thirty of the leading agricultural and poultry papers; and I claim that if incubators are a success anywhere, I ought to know it.

Now, these incubators can be made to hatch eggs, when in a room heated somewhat by a stove in cold weather; and by devoting *time enough* to attending to them; but the objection is "it costs too much to run them." The changes in our climate are too great and sudden, I think, to render incubators profitable. In Egypt, where the thermometer stands at about 80° the whole year, with no rain, it is easy to hatch chickens, as is done, by the million, and they will live without any special care; but here we may have an incubator in operation at night, in March or April, with the thermometer out of doors at 50°, and in the morning, perhaps, down to zero! Thus when the chickens are hatched, it is not possible to rear them with as good success under "artificial mothers," as under hens.

A young man came to me last winter to ask my advice, as to buying an incubator. I told him that he had better trust to hens to hatch his chickens; but, like hundreds of such young men who think they know a good deal more than they really do, he bought one for some $60, and after a fair trial, he was so disgusted with

its use, that he gave up breeding poultry by all "patent" processes; and he is to-day a sadder, but a wiser man.

FEED STOCK REGULARLY.

All kinds of live-stock should be fed regularly—that is, at certain hours, and about the same quantity daily, not more than they can eat, but just what they need to be kept in good condition. If you feed your cows roots, or meal, with their other feed, let the quantity of each be about the same daily, not a liberal feeding for a few days, and then a half allowance for a while, as that is expensive feeding, because no stock can thrive by it, and especially milch cows. Many farmers seem to think that their young stock can "get along" on the poorest feed they have, and on very little of that. No, gentlemen, that is a mistake, as first-class animals can never be made of half-starved yearlings.

WHIMS AND FACTS.

GEORGE GARDNER.

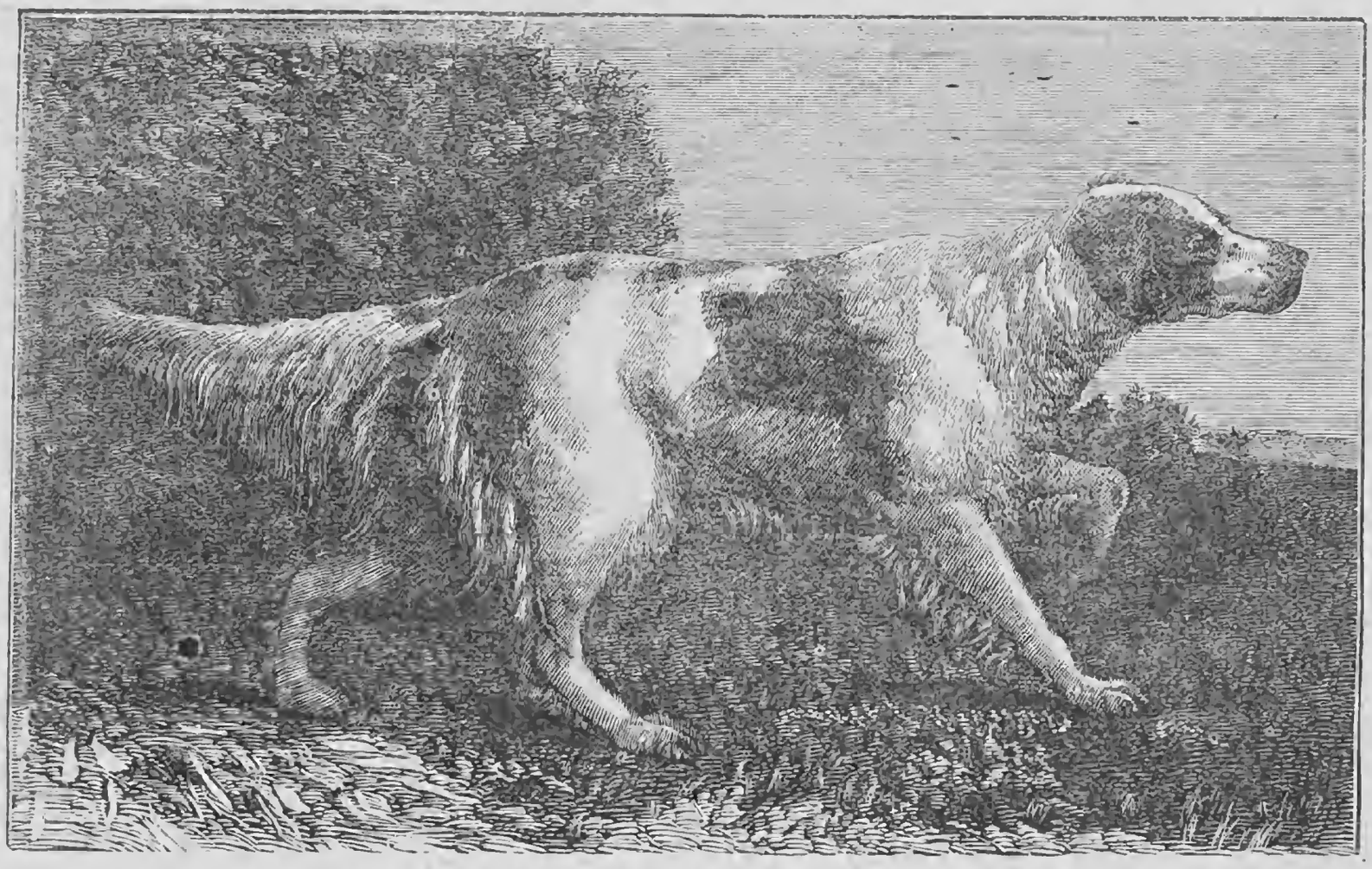
PUMPKIN SEED FOR COWS.

What an ignorant creature I have been not to know that moonshine was worse than the sunshine, yet I really did not know anything on the subject till Mr. Folsom said so in his communication under the above heading. I will give up on this point for the present, for I never proved it, though I may do so next summer by dividing into equal parts a quantity of fish, and putting one part in the moonshine all night and the other in the sunshine all day, and if the latter is sweeter than the former, that will be a pretty good proof of the truth of this lunar or lunatic doctrine.

Now about pumpkin seed: I have repeatedly proved that they are harmless. The first time was about 15 years ago on a farm in Maryland, which was owned by Jerome Bonaparte. I had so many pumpkins among the corn that I sold them by the load for a dollar per horse hauling them away, so that a four-horse load was sold for $4. They commenced ripening very early and, of course, I fed them freely to every thing. Our grass was short and burned up, and the cows (12) had fallen to make but 28 pounds of butter in a week, some of them having been milked above a year. I commenced giving them half a bushel per cow at milking time, and sawed some flour barrels in two, and placed them around the yard so that every cow might eat alone. The butter rose to 50 pounds per week, and then as the pumpkins began to rot in the field I filled every half barrel right up, which was about five pecks, or at any rate, a bushel heaped up, and the butter increased to upward of 60 pounds. At that time, although I had been from England six years, I did not know the seed was objectionable, but in fairness to Mr. Folsom, I state that I noticed the old boss cow in the yard, which would go around after the other cows had nearly done eating, and would lick the bottoms all clean, thus getting a great deal more than her share of the seed, was voiding a great deal of liquid, but at that time I did not know that this was due to the seed. I supposed it was caused by her greediness in eating so much more than her share of pumpkins, but I distinctly affirm the cow gave more milk than any other in the yard, save one, and she had not had a calf but was milked on from the preceding year.

Now, again, as I wish to tell the truth in every way: I noticed the fowls eat a great quantity of the seed which was scattered about where the pumpkins were chopped, and in the yard where the cows had failed to lick them all up, and several were affected by losing the use of their legs and lay fluttering about the premises. We then fed the fowls well with corn and grain and, excepting one or two which died, the sick ones recovered the use of their limbs, and the small quantity they eat did not hurt them. A few years after, I had charge of a Short-Horn herd, and the proprietor was shocked one day on seeing the seeds among the chopped pumpkins. The Hon. Gentleman listened to what I said and proposed a trial of a week without the seed, and there was no difference whatever in the milk or butter or in the cattle. As there was no perceptible injury or benefit, I am therefore justified in saying "I have proved the seeds do no harm &c." At another period of my experience in the United States, I was in Western New York, in Alleghany Co., and I had some seed saved (about a bushel and a half,) and after it was dried in the sun it was put in the tool house and I found some boys who brought their fathers' dinners had daily been eating the seed, and in two or three months nearly a bushel had been taken.

I have just mentioned it to one of my sons who recollects the occurrence clearly, and says he eat some too, also his brother, but as there were only five boys altogether, and some days not so many, they must have pocketed and eaten half a pint at a time or more among them; he says they eat them as if they had been almonds.



NATIVE ENGLISH SETTER, "LARK."—(See opposite page.)

If this is not sufficient, I can bring the man who is now attending to the cows on this farm and he will testify that we gave our cows a wagon-load per day thrown in the fields, and that all through the months of last August, September, October and part of November we did not give any on a Sunday, and in consequence every Monday, we ran short of milk, excepting on two or three occasions when we put some in another field on Saturday so as to be ready on Sunday.

I do not wish to appear ill-natured nor do I desire to set myself up as knowing more than others, for I am ignorant on very many subjects. Mr. F. is right about the good effects of apples, for I have fed them extensively in Maryland for two years, when living six miles from Baltimore, but it does not do to let the cows have free access to orchards, for I did so and a very high wind blew a great many sour apples down, and the cows eat so many that three were downright sick, and in consequence gave less than a fourth of the milk usual for several days. This explains the cause of the error fallen into by some people, that apples dry cows. After this I was careful they did not gorge to satiation, and found fruit beneficial, like other good things.

I don't think I ever misrepresent in writing, for I never go to others for aught to write about, nor do I go to books, for the old ones will mislead as much as old sayings will. Look at the revelations made about hollow horn and tail diseases by intelligent veterinarians, and know that more animals are killed by stupid nostrums and meddling quack farmers than die a natural death. There are lots of men living at this moment who believe the moon in some stages will spoil meat, and they will not put it in pickle then, yet Chicago and other wholesale packing places keep steadily on, in spite of the moon, and it is no wonder, when I find that New England burned and drowned women for witches since the States were free, that I should give ill-natured flings at "kindred absurdities."

If this is not enough, I will next autumn place $100 in the hands of the Rural proprietors against a similar sum from Mr. F: that I will feed any herd of dairy cows with pumpkins and prove that the seeds in the quantity only as they grow in the pumpkins, will do no harm; in fact, I will prove all I say.

Now let all opinionated believers in such nonsense recollect that they are not alone in errors: for on several occasions I have told Americans how, fifty years ago, flaxseed used to be boiled to jelly and fed to cows and horses and they would fatten on it to a wonderful state of obesity, and when I told them the quantity given, they would declare that the amount I said was given to one animal, would kill six on account of its diuretic properties. Diuretic action is not hurtful, for young grass, &c., produce it too.

JOTTINGS FROM MY NOTE BOOK.

Dec. 26.

PROTECTION OF GRAPE VINES.

Several who have written on the subject of protection to grape vines in winter, recommend the use of hay, straw or litter for such purpose. This may do very well for localities where field mice are unknown, but where these pests prevail to any extent, all such substances are objectionable, inasmuch as they furnish just the material to invite them to make warm nests in such immediate proximity to the vines that injury to the latter becomes almost certain. Rarely, in my own experience, have I found it necessary to use any such material for winter covering for either vines or plants. My method is to lay the vines down, as close to the ground as possible, fasten them there with short stakes, driven across to keep them in place, and then protect them from the weather with a covering of loose boards. This I have found to be sufficient in this latitude (43° N.), and safer than any strawy material, and less laborious than covering with earth, which is sometimes recommended. It is not the freezing which injures the vines so much as the sudden and frequent thawings of the frozen wood. If the wood can be kept frozen all winter, no injury will be likely to ensue from the frost, if the vines have been properly laid down. Many persons have an idea that the vines should be especially protected on the north and west sides, while I have found it more important to shield the southerly side from the rays of the sun, in winter, and if the quantity of proper covering material is limited, would be sure to apply it to the southerly side first. No ordinary amount of covering will prevent the vines from freezing in extremely cold weather. My object, therefore, is to *keep* them frozen, or rather to prevent their thawing on a bright, sunny day, to be suddenly frozen again at night. It is well to place the boards on both sides of the vines, inclining towards each other, so as to form something like an inverted V over them, leaving sufficient space at the top, however, for proper ventilation. By adopting this method I have uniformly succeeded in having my grape vines come out fresh and vigorous in the spring, if they are not uncovered before the hard frosts are over. Better leave them down till the buds are considerably swollen. There is an advantage, here, in laying down and protecting every kind of grape worthy of cultivation, however hardy it may be. The growth will be much more vigorous when the proper season arrives, and it commences earlier, thus insuring a more abundant yield of fruit, with an earlier ripening, which, in our northern climate, is an important consideration.

THE "MODEL FARM PREMISES."

The plan for the model farm premises, exhibited in the Rural of Dec. 22, is a decided improvement on the plans of a great majority of the farm premises which we see in passing through almost any portion of the country. Too many of them seem to have been arranged without any plan. But where there is evidently a plan, there is such a diversity of taste exhibited in that, as in many other matters, that a great difference is apparent.

As you do not seem to anticipate that the plan with which you have favored your readers will please all, I trust you will permit me to suggest some alterations in it, which may possibly be of benefit to the novice who contemplates arranging or re-arranging his farm premises. Taking the plan given to your readers, which contains many good points, I would, first, recommend breaking the immediate connection between the house and the barn building, by removing a portion, at least, of those on the two sides of the area between the house and barn. One reason for doing this any insurance agent would be very likely to suggest. Another is, that where the yard in the rear of the house is common for so many purposes as this apparently must be, it is impossible to keep it in that condition of neatness which is desirable in every yard appertaining to the homestead. This could be obviated by removing some of the buildings elsewhere, and filling a portion of the area with shrubbery, or, as you suggest, occupying it as a kitchen garden.

2d. There appears to be no mode of access to the barn with loads of hay, grain or other bulky produce, except by using the drive-way at the south end of the house. It is always objectionable to have much of such loading pass so near the house, on account of the litter and other unavoidable annoyances. It is evident that it is not intended to have such loads pass through the wagon house, C. An improvement would be to have an entrance into the barn from the road in the rear. This could be effected by moving the tank, T, to one side, and making a drive-way between the manure pits, Q and R.

3d. The location of the milk-room is bad, it being in the southwest corner of the house, directly exposed on two sides to the full force of the sun's rays in the hottest part of the day; whereas, it is always advisable to give the milk room a cool location for summer use. Then, again, it is a well-established fact that no substances are more liable to absorb and retain offensive odors than milk and its products, butter and cheese. For this reason the poultry houses and yards are too near it, to say nothing of the sheep-yards, M and N. A decided improvement could be made by reversing the positions of the bedroom, I, and the milk-room, L. This, however, would involve the necessity of changing the location of the water closets from that given in the plan.

4th. I see no advantage in placing the house cistern out of doors. I would have it in the cellar, devoting the kitchen cellar, B, to that use. This would bring it directly under the scullery, N, where it is most needed, and it would always be secure from frost. This change would also allow of the well being nearer the kitchen, instead of being sixty feet away, as in the plan. A place for the kitchen cellar could be found elsewhere, even if one of the *two* cider cellars had to be dispensed with.

5th. One reason for a change of place for the well would be to have it further from the drain-pipes, V, V, leading from the house and privies to the barn tank. As placed, they pass quite too near the well. If we can be absolutely certain that there will never be any leakage from the pipes that can gain access to the well, then, perhaps, their close proximity may be permissible. But who can say, with any certainty, that there never will be any undiscovered leakage—unsuspected, perhaps, till the family or some of its members are taken down with typhoid or other malignant fevers, caused by the use of contaminated well water? All such dangers should be most carefully guarded against.

Finally, I notice it is stated that the whole premises are supposed to be "situated on a slope, inclining towards the south." Now, as the house is also supposed to be situated on the east side of the plot, it would seem most important that there should be a good slope to the *west*, to give a good flow and free passage through the drain-pipes from the house, &c., to the tank in the rear of the barn, some 150 feet or more away.

Clinton.

A WARM STABLE.

S. RUFUS MASON.

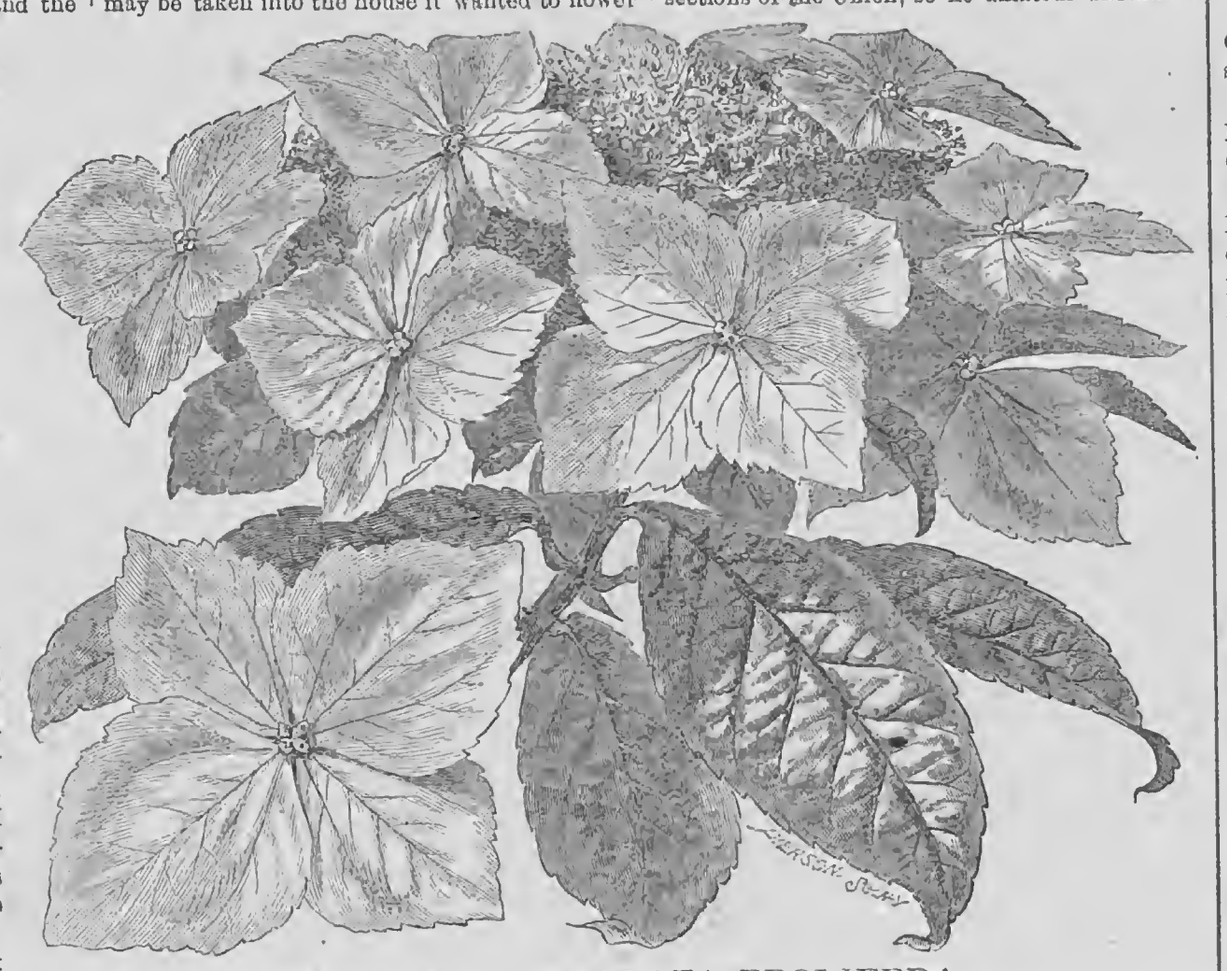
It is probably not known to the majority of your Eastern readers, that Nebraska is entirely under the control of "Rude Boreas,—blustering railer." We have winds of every possible character here, from the gentlest zephyr to the most terrific hurricanes. Our summer winds

in these flat, treeless prairies, are as necessary as bread and meat to enable us to sustain life. A dead calm day in July or August, with a clear sky, would drive every man and beast to shelter, while our winter winds, with the snows as fine as flour sifting through every pin hole, and filling houses and especially stables to suffocation, are a wonder to all new settlers. A warm, tight stable is a *sine-qua-non*. One made of boards is as open as a sieve, and about as warm, as the summer heat shrinks the stuff, and the extreme cold of winter keeps it there. So the inventive genius is brought into play. We set a row of posts in the ground so as to inclose the space required; set another row four feet outside of them, nail on, inside and out, some narrow boards, just so as to hold in the straw, and after putting on for a roof a lot of straight willows, fill in the crib-work with straw packed down close, and cap the whole with a straw roof, say eight feet high at the peak. If this is well done, and windows made on the south side, we have a very warm stable. Not the highest wind ever known here can get in, and it is perfectly warm and from the nature of the straw, not close nor confined like a wooden building.

LATE PIGS.

Pigs coming after the 1st of July unless particularly cared for, are stunted by the cold of winter. By having the shelter very warm, as cold weather comes on, by the most succulent food, especial care in cleanliness, and some little petting, late pigs may be made, as I am now demonstrating daily, equally as forward as those born in April or May. In fact I can see no difference considering the respective ages, between those of March and those of September, but it is due to both breed and care.

I have a long bodied breed of black hogs, which, under my mode of feeding and shelter, do great credit to themselves as well as to me.



HYDRANGEA STELLATA PROLIFERA.

Floricultural.

WINDOW PLANTS.

WILLIAM FALCONER.

You cannot give window plants too much light or sun during this month. Early in the morning they enjoy a sprinkling overhead so that they may dry before the sun gets hot, or they may be sprinkled about two or three in the afternoon, when the sun's heat is on the decline and so that they may be dry before night. Don't sprinkle water on blossoms else they will spot, rot, and quickly vanish. Give lots of water to Carnations, growing Roses, Calla Lilies, Bouvardias, Smilax and other fast growing plants that are in bloom, and if the pots have become well-filled with roots and the soil seems exhausted apply a mulching of thoroughly decayed manure. Weak manure-water is an excellent stimulant, but must be applied cautiously as too much or too strong is ruinous. Guano-water is first-class if judiciously applied, but I would advise amateurs not to trifle with artificial manures unless they know what they are doing. Calceolarias and Cinerarias require the coolest treatment, and are better kept in pits or frames that are well-covered up at night than in the house, so long as frost does not reach them. They like good feeding, and daily syringing, and as they are liable to green-fly, should be looked after in that direction. Cyclamens like warmish quarters and a place close to the glass. Crassulas are very pretty and effective window plants, and they last a long time in bloom, and submit with impunity to any amount of "kicking about." C. lactea, quadrifida and rosularis are now at their best. Nierembergias are budding thickly. Artillery plants are multiplying their guns, and zonal Pelargoniums are promising a famous display. Among other window plants now in full beauty are Libonia floribunda, Chinese Primroses, Cotyledons (Echeverias), Cape Heaths, Epacrises, Roinwardtia trygina, Mignonette, Peperomia, Sweet Daphne, Catalonian Jessamine, Fuchsia arboroscens, Polygala grandiflora, Manettia micans, Rondeletia anomale, etc. India-rubber plants and Dracænas look fresher and are healthier for having their leaves sponged over now and again.

THE CELLAR.

Leave Fuchsias and Lemon-scented Verbenas undisturbed. Look over Dahlia and Caladium roots to cut out any decaying pieces, and rub over the wounds with powdered charcoal to check farther rotting. Keep Century plants, Opuntias and other cactuses in the driest and lightest part; keep them cool and dry, but never admit frost. Immediately on appearance cut out decaying spots for they spread alarmingly. If you have Crocuses, Squills, Hyacinths, or other spring-blooming bulbs potted and bedded in earth, sawdust, sand, or ashes, take out a few of the more advanced and best rooted, and promote them to the window or green-house, gradually inuring them to the light, and in this way keep up a succession. Rhododendrons, Euonymuses, Laurels, Camellias, Oleanders, etc., leave undisturbed, beyond giving them all the light available. The earliest blooming Azaleas may be taken into the house if wanted to flower soon, and a few Deutzias or Lilacs if established in pots can be hastened into bloom if transposed to warmer quarters and sprinkled over head twice a day.

FRAMES.

These should be uncovered every fine day, and in the event of snowy or rainy weather the sashes or shutters instead of being removed had better be tilted up. Over the almost hardy herbaceous plants we winter in frames, we scatter thinly, some rough salt hay, or leaves, so that if the ground in the frames does get frozen, the plants will be protected from a hasty thaw. It is better to uncover early in the morning and shut up early in the afternoon, than let the sun shine on the shutters and set on the plants. Violent thaws and much wet are destructive to frame-plants.

INSECTS.

Wage war on these pests and they will be less troublesome in coming months. Fumigating, dipping in tobacco water, or sprinkling with tobacco powder are destructive to green-fly and young thrips; but if there be only a few plants to clean, wash them with soap and water and a sponge; it is the safest plan. With a sponge and small hair brush erase mealy bugs. The plants infested with red spider should be sponged twice a week till the insects are assuredly eradicated. Kill every wood-louse found about the pots, and show no mercy to worms.

POTTING PLANTS.

Unless you have exceptional quarters for your plants, as a warm, close green-house, don't repot during January. If any accident like pot-breaking occurs, or the roots be washed bare of soil, or the soil in the pots has become so sodden and the drainage so clogged as to prevent the ready escape of water, then repotting may be advisable, and if it should, use the smallest possible pots—that is just no larger than can hold the roots—and poor rather than rich soil. In stoves and warm green-houses, gardeners can repot and grow on young and soft-wooded plants during winter as well as summer, but amateurs do these things with risk.

Botanic Gardens, Mass.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

COLCHICUM.

One of the bulbous plants interesting to the young amateur, is the curious and attractive flower botanically called Colchicum, and commonly known as Autumn Crocus.

This plant has the singular habit of producing its several parts at intervals of about some six months. The leaves appear in the early spring with those of the Tulip and Snowdrop, and in the following autumn we have the Crocus-like flowers in full perfection, but not until the next mid-summer do we find the seed-pods. This peculiar freak makes the plant one of the most singular and attractive to the amateur, professional florist, or botanist.

Each of the bulbs, which in flowering specimens are large, produces from six to a dozen blossoms. It will flower very freely in any situation, so that it may be taken up in the autumn before flowering, and planted in a pot or other convenient receptacle, so as to flower in the house; and so persistent is it in its intent to flower, that even the most indifferent amateur may have no fear of staying its bloom by such a removal. The bulbs are, I believe, hardy in all sections of the Union, so no amateur should be deterred on this account from trying a few, at least, of these curious bulbs.

In the United States there are only two varieties in general cultivation—C. autumnale, also known as C. maximum, which bears blossoms of a delicate pink color, and C. Agrippinæ, of a deep rose-color, checked with a lighter shade. There are, however, four other equally good varieties, viz.,—C. autumnale album, a pure white; C. autumnale plenum, a variegated variety; C. autumnale purpureum striatum, which I have never seen, but judging from the name, would say was a handsome purple, variegated with some other color; and C. veratrifolium, another variety I know but little about. The Colchicum will grow in any light loam.

El Dorado, Cal.

DAPHNE INDICA.

At Bennett's Nurseries at Flatbush, Long Island, one of the most noticeable features at present is the many large and flourishing shrubs of Daphne Indica now loaded with the most deliciously fragrant flowers. These shrubs are planted out in the bed of the camellia house, and grow most robustly. They remain in bloom for many weeks, and there are varieties with reddish purple and white flowers. These shrubs have thick, shining, evergreen leaves, and are of the easiest possible culture, merely requiring protection from frost in winter, and a very little shade in summer, a porous soil, and plenty of water at all seasons. They certainly thrive best when planted in a conservatory border, but are, nevertheless, very applicable as pot-grown plants, as hundreds of little fellows on a side-bench at the above nurseries can testify. Every little plant—from three inches high and upwards, and from those in thumb-pots onwards—have as many flower-heads as they have branches and branchlets, and when there is only one shoot, as in the case of the smallest specimens, that is terminated by a flower-head. These Daphnes blooming in winter,—at a season when flowers are doubly valuable, and lasting in beauty so long—commend themselves to more general cultivation.

CATALOGUES, &c., RECEIVED.

Among novelties in Mr. Peter Henderson's Catalogue, not yet published, will be Hydrangea stellata prolifera, of which a fine engraving will be found upon this page. Of the new white Hydrangea "Thomas Hogg," to which we have often referred, Mr. H. will furnish a colored plate, though a white flower is not the easiest to portray in colors. H. stellata prolifera has flowers (bracts) of a deep pink color. Though of the Japonica class, Mr. Henderson says it is hardy and quite distinct.

Garden Manual. J. B. Root, Rockford, Ill. This is made up of original articles from the pen of Mr. Root, and many gardeners testify to their practical value. Such topics as Storing Winter Vegetables—Drought and How to Meet it—Melons, &c., are treated. The Manual is free to applicants.

Catalogue No. 3. The Lawson Co.'s List of Seedling Forest Trees, deciduous and evergreen. London, Eng.

Report. Thirty-sixth Annual of the Transactions of the Queen's County Ag. Society, Mineola, Long Island, N. Y.

Circular. The Mapes' Formula and Peruvian Guano Co., 158 Front St., N. Y. City.

Pamphlet. Benton Center Nurseries, Yates Co., N. Y. Apple trees four cts. each, at wholesale.

Circular. Eleventh Annual Meeting of the Northern Illinois Hort. Society, at Franklin Grove, Lee Co., Ill., Jan. 23–25.

L. Paillet, Chatenay-lez-Sceaux, near Paris, France. Fruit tree stocks, seedling forest and coniferous trees, seedling shrubs, climbing plants, Roses, Rhododendrons, Magnolias, Clematis, &c., &c.

M. Paillet remarks:—"Apples worked upon Doucin stock grow much more vigorously than on Paradise, but do not give fruit so soon. It (Doucin) is a very good stock for middling or bad soil, where it grows and fructifies as well as Paradise." Again, he remarks:—"The true Saint Julien Plum, from layer, is the best stock to make fine, straight, standard trees.

Vick's Illustrated Catalogue and Floral Guide for 1878, James Vick, Rochester, N. Y. If an inexperienced person wishes to order flower or vegetable seeds intelligently, we know of no more trustworthy guide than the above. Nearly every plant is elegantly and fairly shown in the 300 engravings presented and the cultural details are all that is needed.

Garden Guide, R. H. Shumway, Rockford, Ills., Illustrated list of vegetable and flower seeds for free distribution. Mr. S. says he will guarantee his seeds to be equal to any in America.

Botanical Index, L. C. Case, Richmond, Ind. New, rare, and beautiful plants.

We see Mr. Case offers Dracæna Goldieana, to which plant we called especial attention a few weeks ago.

We are indebted to Prof. Cyrus Thomas for a copy of his first Biennial Report as State Entomologist of Illinois, which seems to us to be of much practical value, as well to the ordinary farmer and horticulturist as to those who have made a study of entomology as a science. Scientific men, as a rule, seem to think very little of adapting their writings to the comprehension of the ordinary reader. The present work is an exception. Part Second begins: "As it is my desire to make this report a 'Manual of Economic Entomology for Illinois, and through it to familiarize the farmers and horticulturists of our State, as far as possible, with insects which destroy their crops, injure their fruit and ornamental trees, and infest their gardens, it is proper that I should first explain the terms used, and give in as plain and simple language as possible the character of the insect class of its larger sub-division."

The Sportsman.

NATIVE ENGLISH SETTER.

(See Illustration on opposite page.)

Many of our readers are interested in high-bred hunting dogs as well as in high-bred cattle.

We have always thought that, aside from hunting purposes, farmers might just as well support beautiful and intelligent dogs as the ill-bred, troublesome, and ofttimes worthless animals so often seen. It costs no more to feed them and they are capable, through kindly discipline, of being made companions to the members of the household, faithful, loving discriminating, and intelligent. In our issue of Aug. 18 were presented portraits of "Jerry" and "Tepper" with some account of their pedigree. We now present an excellent sketch of the native English Setter, "Lark," who was bred in November 1874 by Mr. Brooks' Phil. out of Mr. Raymond's "Dido," both ancestors being fine field performers. He is orange and white with black nose and eyes. He won first prize at the New York Bench show in a class of over sixty of the finest English setters in the country. The Forest and Stream says "Lark," though not coming in direct competition has beaten the best imported dogs in the country, as he beat both "Nip" and "Tuck" who beat "Paris" and "Leicester." At Philadelphia, he won the first prize in the champion class and a special prize offered for the best setter in the show, thus being pitted against some forty prize winners both native and imported, Irish, Gordons &c. As a sire he has never failed to stamp his progeny with many of his best points. Our engraving is from an oil painting.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

MRS. ANNIE L. JACK.

It is one of the problems of domestic economy in hearth and home consultation, "How can we save time?" and yet we go on, wasting the precious hours over things of little moment, and neglect more important duties or pleasures. I often hear ladies say in the short days of winter, "It seems as if we do nothing but cook, the days are so short!" and yet they make no effort to change the order of things. My own household is regulated by the fact that five hours of the day are spent in the schoolroom, where I am teacher to the merry group; and in the intermission at noon, we take lunch—as the children would do if they attended the district-school. This, if practiced in many houses where the children come home at four in the afternoon, would leave a whole day for the duties of the household, and the united family could enjoy a five o'clock dinner to the gratification of the children, whose plate "kept over" is often a burnt and tasteless reminder of the dinner they have missed.

In the matter of cooking, too, I am often struck with the fact that women, in their housewife's pride, spend too much energy on their preparations for a company tea, in rural places. How many of us have hardly found time to sip our tea, between eating our bread and butter, for the added duty of *passing cake* to our neighbors! Not long ago, taking tea at the house of a very near and dear friend, I was called upon to sympathize with her for the misfortune of having "no time to read." The secret was revealed to me when I found myself afterwards passing around to those whose plates were already laden with good things—nine kinds of cake, all homemade. What skill, what energy, what time such a work required! How toothsome each delicate morsel! what an amount of labor expended! Reader, I like cake, but I should feel it the dryest of sawdust if it robbed me of my time for mental improvement. With all the other condiments, no sensible person needs such a choice of cake, and I feel as if I were considered a gourmand when I find it displayed before me. The simple elegance of a tea-table is not in overloading, but in the bright, cheery, well-kept furnishings, with a full supply of whatever dainty dish is set before us.

Speaking of domestic economy in regard to time, I am often called upon to notice the prejudice against labor-saving machines for *women*, that prevails among farmers who procure (and rightly, too,) everything to aid farm work. How many of you can claim as your kitchen aids, a washer and wringer, a clothes sprinkler and mangle, apple parer and corer, potato peeler and slicer, syllabub churn and raisin stoner, a first-class egg beator and carpet sweeper? And yet all these things would not cost as much as the threshing machine so necessary to a farmer who does not like to be considered behind the times. We too often work on in the primitive way, using our old implements, as the farmer might his old flail. But is it economy when *time* is so precious?

Just as I think of changing the subject of my "siftings," one of the crowd comes in with half a dozen new-laid eggs, which he is eager for me to count. I make a rule, as eggs get scarce in winter, to give the children "an apple for an egg," and it is surprising how faithfully they are gathered and kept in count. As an article of diet we value them highly, and even fancy they taste better at this season of the year, when four times the price of the same article in summer. One of MARION HARLAND'S housekeepers is made to say:—"Give me a half a dozen eggs, a few spoonfuls of gravy and as much cream, a spoonful of butter and a handful of bread crumbs, and I can get up a good breakfast or luncheon." One of her tried dishes for these meals is so simple yet so palatable for a hurried time, that I cannot help quoting at closing:

Eggs Sur le Plat.

Six eggs; one tablespoonful of butter. Melt the butter in a shallow baking dish. Break the eggs carefully into it, dust with pepper and salt, and put in a moderate oven until the whites "set." Serve in the dish in which they are baked.

DOMESTIC RECIPES.

Coffee.

I always wash coffee before roasting it and those housewives who do not, would find it a great improvement to do so. Take as much coffee as can be conveniently browned in a kettle and pour boiling water over it. Drain the coffee in a colander, put into the kettle and set on the back of the stove to dry, stirring occasionally.

When dry, set over a brisk fire and stir constantly. It browns evener to add a tablespoonful of butter just as it begins to color. Care and skill are required to keep it from burning. When quite brown try a little in the mill and if it grinds easily and is of a beautiful brown, it is done. Remove from the fire and when *cool* stir in a fresh egg and let the dish remain where there is a gentle heat and the coffee is dry. This, I think, settles coffee as well as to use an egg—or part of one—every day and is less trouble. When I make coffee I grind a small teacupful and pour over it, perhaps, one pint of hot water. Set the coffee-pot where it will steep, but not boil, for twenty minutes, then fill up with as much boiling water as is needed and let it stand a few moments to settle before pouring out. "FARMER'S WIFE."

Orange Marmalade.

Allow equal weights of oranges and white sugar; peel and quarter the oranges—careful to remove the inner thick skin from the yellow peel. Boil the peel in clear water changing the water once, about fifteen minutes after it first boils, to remove the bitter taste. When tender, I boil it slowly for three or four hours, drain in a colander and cut into delicate shreds with a very sharp knife. To prepare the pulp, remove the seeds and white stringy outside part; squeeze out the juice and thin pulp into a bowl and pour over the sugar; cover the pulp with water and boil until tender; then pound the pulp in a mortar, or cut into small bits, and with the water in which they were boiled add, with the shreded yellow peel, to the sugar and juice. Put the whole into a porcelain kettle and boil. When it begins to thicken it must be tried occasionally by letting a little cool in a spoon upon ice. Great care must be taken that it does not burn. When as thick as desired, turn into cups or tumblers, cover with paper wet in brandy and tie down tightly.

Orange Fritters.

Take the peel and white skin from three or four oranges; cut them across into slices; pick out the seeds and dip each slice of orange into a thick batter. Fry until nicely browned and serve upon a napkin with powdered sugar sifted over each slice.

Orange Tartletts.

Remove the pulp from two or three oranges; boil the peels until very tender; beat them to a paste with twice their weight of sugar; add the thin pulp and juice of the oranges with a tablespoonful of butter and beat these ingredients together. Line some little pans with puff-paste; fill with the orange mixture and bake. E. M.

Carrot Ointment.

It is convenient, if not absolutely necessary, to have on hand a sure remedy for burns, flesh-wounds, chapped hands etc. This demand is supplied in many families by patent remedies, in ours by Carrot Ointment made as follows: To one medium sized carrot, well washed and thinly sliced, allow one-fourth pound of freshly churned, unsalted butter. Place them together in a spider or other iron vessel, simmer slowly until the carrot is crisp and brown—taking care not to burn it, then strain through a thin cloth and keep in a tin box or wide-mouthed bottle. As a healer it has few equals. A few applications will cure the worst cases of chapped or cracked hands, provided the hands are well washed with Castile soap and soft water, and well dried, just previous to its application. After applying the ointment rub the hands, warming and rubbing until all is absorbed. It will speedily heal burns after the fire is extracted. Indeed, we use it in all cases where a healing agent is needed.

Molasses Cookies.

One cup of molasses; one cup of sugar; one cup of lard, or butter—if butter is used the cup must be heaped; one cup of luke-warm water in which one large teaspoonful of salaratus is dissolved; one teaspoonful of cloves and one small nutmeg. Cream the sugar and shortening; add the molasses, and spices; then one cup of flour, stirring it well in; then add the water, a little at a time, with flour to make it stiff as you can stir it. Roll one-fourth of an inch in thickness and bake in a quick oven to a light brown. These are nice and moist.

H. L. J.

Hygienic Information.

SIMPLE CURES.

S. B. PECK.

An advertisement in a New York paper lately brought to my mind many cases that had been related to me of remarkable cures by very simple remedies, some of which were taken stealthily without the knowledge, or against the protest of the attendant or nurse, but always gratifying to the palate of the patient. The first I shall relate occurred long ago when cold water was not allowed in fevers. The patient had a person "to watch with him," who was directed to put hot stones to his feet to promote perspiration, but was not to allow him water to drink, "for that would counteract the good effect of the heating process." These stones were heated in the fire and partially cooled in a pail of water kept under the bed. The watcher went to sleep, and the willful patient, regardless of consequences, managed to crawl out of bed and without goblet or cup, drank slyly his fill from the pail, got back to bed and quietly slept himself into a profuse sweat, after which he rapidly recovered. A man sick unto death and nearly given up by his physician, was called on by the latter in the morning, who expressed himself highly pleased with the good effect of the medicine he had left, and congratulated him on his appearing much better. "Yes" said the patient "I have been much better since I drank that stuff in the cupboard." The stuff he had covertly drank turned out to be vinegar from a pickle jar! A little girl whose disease baffled the skill of the family physician, and who grew worse in spite of all his skill was called on by him as the family were sitting down to breakfast, and as the mother was coming to the table with a plate of pickled cucumbers, the child, lying in a crib near by, uttered a shriek which called the mother to her side with the plate of pickles in her hand, from which the child snatched a pickle and ate it before the mother could take it from her—sequel, the child recovered rapidly.

Now I do not think much of cucumbers any way, and never eat them either as medicine, food or condiment, but I do believe in acids when the appetite craves them. I ought not to slander this vegetable, for I used to eat them and they never hurt me, but set gratefully on my stomach. They were fresh from the garden. Now I prefer as a matter of taste the more luscious fruits.

I will relate but one more case of singular cure, though there are others on my mind. This was related to me by Dr. STRONG, an old physician of Hartford, Conn., some fifty years ago, as an occurrence in his practice. A little girl was pining, moaning and shrinking away in flesh, without any other symptoms of disease, when he was sent for. The case perplexed him and he asked the mother if the child had been denied any food or other thing that she seemed to long for. She reluctantly admitted that the child had asked for tobacco. A small quantity was given her which she ate greedily, from which date her recovery was rapid. For the rationale of the case I can only surmise that she had tasted the weed before, and if it then produced nausea and now satisfied her craving, it was not the first case of the kind. Physicians owe much to accidental discoveries, and it is wise and humane in them to note these peculiar cases, not presuming that in all, or even a majority of subjects, the same treatment of apparently similar ailments will produce similar effects. The stomach and all the viscera being beyond our sight, and much of them affected by all that is introduced to them, the causes of many internal ailments, and the effect of food and medicine upon them, will doubtless ever remain mysterious.

Everywhere.

NOTES FROM NORTH CAROLINA.

WARREN CO., N. C., Dec. 31.

We are just now feeding sowed corn fodder and it comes out so sweet and bright and the stock eat it with such a relish that our plan of curing it had as well be told now.

Having tried nearly, or quite, all the ways recommended, I have settled in my own mind that the most important item is, plant early; the object being that the cutting may be done early while we have plenty of sunshine. Twenty years ago the sowing of corn for fodder was delayed until corn planting, road mending, sheep shearing, &c., were done, under the plea that it was just as well late as early, as nothing but stalks was expected. The results were either a lot of half cured, moldy, and half rotten fodder in the mow or stack, or else badly weather beaten in stooks to be hauled as necessity required, only to be eaten under protest by hungry animals. As to varieties, I have been able to see but little difference, but prefer to use such as are adapted to the climate; small, early for the short seasons of the north, larger and later as we go south. Having the land plowed and harrowed with a light, one-horse plow, run off the rows two and one half feet apart, drop the seed about fifteen to each foot, cover by harrowing crosswise or with a cultivator lengthwise, taking out the front tooth, twice in a row with cultivator and again with the plow when 18 inches high, turning the furrows to the corn is all the cultivation necessary; cut when in bloom, leaving it thinly on the ground for two or three days of good weather, then bind in small bundles, not more than five inches in diameter, put up in round stooks of eight or ten bundles, or long shocks after.

I see by your correspondence from "Everywhere" that this has been an autumn and winter so far, remarkable for the mildness of the weather. Down here in Carolina we have had a delightfully warm, dry and pleasant last half of December until yesterday, when we were visited by a heavy rain, and now the soil is thoroughly saturated, roads soft, wind strong from the north, and we are expecting a cold snap. Business has been brisk, as is usual while cotton is on the market and our merchants are rapidly selling large stocks of goods. When this is over then will come a lull until May and June when tobacco comes into market.

A larger area of wheat was sown this year than for many years before; the open weather has given it a fine start. For money we depend mainly on cotton and tobacco, which is all wrong. The farmer, either North or South, should so manage his business that something of his production is ready for market every week in the year. Things look more hopeful in this respect as, year by year, more grain, clover, roots, fruit, cattle, sheep, swine and poultry are grown, and when the present order is reversed and we rear more pigs than puppies, and more lambs than either, we will feel that we are better prepared to compare notes with our brother farmers of the frozen North. M. B. PRINCE.

RURAL SPECIAL REPORTS.

SAVANNAH, N. Y., Dec. 21, 1877.

We have had but little freezing weather yet, and if we did not consult the almanac frequently, we should believe it to be October now. The people who went in debt for farms before the price of land fell, are feeling rather blue now, as it is hard paying for them with produce at the present low prices. If the price of farm labor was reduced in proportion to other things, the trouble would be considerably less; but the majority of laborers are trying hard to keep very near the war prices, not considering that one dollar will go as far towards supporting them now as three would then. The clover seed and apple crops were almost a failure in this section. By waging a continual warfare with the beetles, a fair crop of potatoes was secured—price, 35c. per bushel; barley mostly sold for 60c. per bushel. Oats a good crop, but no paying market for them yet. The best price for wheat has been $1.40; pork, $5 per 100. C. S.

ST. CHARLES CO., MO., Dec. 30, 1877.

The extremes in temperature for the month of December up to date, at 6.30 A. M., have been from 17° to 55°. The first half of the month was very pleasant, giving the farmers an opportunity to finish husking and plowing; during the last half, there has been but very little fair weather; I think but two days; rainy or drizzly all the time, with this exception. The roads are almost impassable, on account of mud. Cows are not doing well for two reasons—bad weather and irregularity of feeding. We could not get the grain to mill to grind for them. This County being almost exclusively used for dairying, the condition of the roads has nothing to do with exporting grain, there being more shipped in than out. This evening the mercury has just touched freezing point, and we are now likely to have a change for the better, as it is clear overhead. J. B. T. W.

MUSKEGON, Mich., Dec. 24.

"'Twas the night before Christmas" still raining! This is the 10th or 11th day of this cloudy, foggy, warm weather with scarcely a frost and no ice or snow. I think there have been, at least, 20 days of successive fall or summer weather. Swamps are full and running over, lumbermen and loggers look blue. How much more of this? Has the clerk of the weather made a mistake? Hope he won't give us sleighing next July. Mercury at 50 at 9 P. M. Dec. 25, Mercury at 48 at 7 P. M., hope rises as mercury sinks. S. B. P.

SNOHOMISH CITY, W. T., Dec. 24, 1878.

We are having lots of rain, but it is warm in the garden. It is nothing uncommon to see roses in full bloom. Hay is low—worth $9@10, and not much sale at that price; potatoes, 50c.; wheat, $1.25; oats, 65c.; barley, 70c.; beef by the quarter, 4½@5½c.; work oxen, $125@175. Times are hard at present, but will be better soon. Logs are selling now at $5@5.50 per M. HARPER.

WESTMORELAND CO., Pa., Jan. 1, 1878.

We have up to this date had no winter here, but very warm weather. The winter wheat looks extra nice, and a large amount of acres, have been sown; it was somewhat injured in the fall by the fly. Last year's crop was only a mod-

erate one; it is now worth $1.25, and half or more gone to market. Corn was not very good; it is worth 40c.; oats, extra good, worth 25c.; pork, 4½c., and dull; cattle and all kinds of stock very low and hard to sell at any price.

D. H. WILLIAMS.

RURAL GROUNDS, Jan. 5.

THE ground, for the first time this season, is quite well frozen, and the Rural Lake skimmed over with ice. But the freezing during the two or three nights past, thaws before noon, and only serves to render the roads and walks slippery with mud. We have already said that this section of the country has never known so pleasant a summer and fall. It seems now as if winter might be added, to make the anomaly extend through three-quarters of the year.

OUTAGAMIE Co. Wis. Dec. 23, '77.

WE have had ten days, from the 18th to the 28th of Dec., without frost, and still it rains and is warm. Regular Florida weather up here in northern Wisconsin. The mud is awfully deep and farmers are obliged to abide under their own vine and fig tree, or rather roof tree.

E. NYE.

PRINCE WILLIAM Co., Va., Jan. 1, 1878.

WE have no cause to complain of the past season hereabouts. The weather has been fine for our stock. Young cattle, sheep, etc., are yet in grass and looking well, and we are still working out-of-doors, plowing, teaming, etc.

ED. KEYSER.

ELKHORN, Wis., Dec. 31, 1877.

No frosts for two weeks, but plenty of rain and mud.

A. D. H.

HUDSON, N. Y., Jan. 3.

FIRST severe cold weather in this region.

K.

The Apiarian.

WINTERING BEES.

T. B. MINER.

THE question in regard to extracting the honey from the central combs of hives in the fall, to allow the bees warmer clustering room, is being discussed in the papers somewhat. Mr. L. C. ROOT, in opposing an advocate of the negative side of the question in the Country Gentleman, says: "When the cluster is formed in cold weather, a bee occupies each cell within the given space, making the entire body of bees even smaller than if the combs did not pass through the cluster." From which he argues that there should be no honey in the combs where the bees cluster, and adds: "If they are obliged to cluster between combs filled with honey, in very cold weather, they will be sure to be found frozen. I have noticed bees so frozen in several hives this present month, even before severe cold weather."

There must be something wrong, I think, besides having sealed combs to cluster on, when bees freeze in November. I kept bees extensively before Mr. ROOT was born probably, and have continued to keep them till the present time; and this is the first case that I have ever heard of their dying in November from any cause excepting the *want of honey*. The following points, I claim, my experience has established:

1. That bees, when left to store honey as they please, generally leave the centers of combs where they cluster, unfilled with honey; but if sometimes they do store too much there from the fall supply, by the time they should go into winter quarters, they have consumed enough of that thus stored to enable them to winter safely, if they are otherwise in good condition.

2. That strong families of bees, if the queen is prolific, and has continued to breed freely up to November, as all should do, will winter safely, without the removal of any honey from the combs where the bees cluster.

3. That the bees *must* have a supply of honey on the same combs on which they cluster, or they will perish, if the weather be so cold that they cannot leave the cluster as often as once a week, or perhaps ten days.

3. That the removal of the honey in the central combs by an extractor in the fall, after the honey-harvest is passed, endangers the safety of the bees, unless they be wintered in a place so warm, that they can pass from one comb to another often enough to supply themselves with food.

But it is to be expected that apiarists will differ in their opinions on many questions pertaining to bees, as men do who are engaged in other pursuits; and I think I am safe in saying, that there is no man living who understands the nature and management of bees *perfectly*. That is, so perfectly that he can learn nothing more. The reason why there are so many different views and theories about it, that bee-keepers take it for granted, in many cases, that a thing is so because some noted apiarist has said it is so; and thereafter a hundred pens may be used to uphold a fallacy. Now, where is the record of any experiments made to test the claim that the extractor should be used to remove honey from combs to secure the bees wintering safely? Who has tried the two systems thoroughly, side by side, for a series of years, and given the result to the world? Nobody, as far as I can learn, but Mr. BETSINGER, whose statements Mr. ROOT opposes as grossly erroneous; and he (Mr. B.) says, that his bees that had honey extracted died, while those that had none extracted wintered safely. Mr. ROOT says that he believes his theory "corresponds with the opinion of every practical bee-keeper, unless it be Mr. BETSINGER." Now, suppose the question were put to "every" practical bee-keeper in the United States, Mr. ROOT would, undoubtedly, be surprised to find that nine in ten never *heard of such a question before*, as but a small portion of the bee-keepers of this country are readers of our journals; and, consequently, the most of them are not informed on what professional apiarists do or do not believe.

MY BEES AGAIN.

LAST year I wrote you about my bees. This year I report again. Last spring I had seven swarms, and sold two of them for $12. The other five swarms I hired a man, who knew more about bees than I did, to transfer into patent frame hives of his own invention, paying him $5 for his patent right, and for the hives which I used during the summer, amounting, in all, to $27. My five swarms increased to eleven, two of which I sold this fall for $12. Now the account stands thus:

CR.

By sale of 160 lbs. box honey, at 20 cts	$36 00
2 swarms bees sold, at $6	12 00
9 swarms bees on hand, at $6	54 00
	$102 00

DR.

To 5 swarms in the spring, worth $6	$30 00	
Transferring, patent right and hives	27 00	— 57 00
Balance profit		$45 00

Also:

DR.

To time and care ..... $——

CR.

By honey used in the family ..... $——

This, I think, would run the total product of honey up to about 250 lbs.

Our honey was extra good this year, being made in the early part of the season, from the white clover and basswood. My stocks are all strong and in good order this fall, and I still think it pays to keep bees.

JOHN RUSTICUS.

WIS., Dec., 1877.

The Naturalist.

INSECTIVOROUS BIRDS.

I NOTICED in a late RURAL, some interesting remarks on insectivorous birds, and it is claimed that while they may be destructive to insects, they also destroy many luxuries that almost every garden affords, such as strawberries, cherries, grapes, and other fruits; and the question at issue seems to be, whether the birds shall be destroyed, or allowed to monopolize the early fruits of the season. Birds are always welcome visitors. We listen for the first modest note of the bluebird to assure us that spring has come, and as the season advances, one songster after another mingles its notes and joins in the general chorus. The various tints of their plumage attract the eye, and their different habits are studies of interest to the close observer. All this is in favor of the birds, and should they take to their wings and leave us birdless, our fields and forests would lose much of their attraction.

Among the birds named as mischievous is the robin, and he seems to be guilty of the charges brought against him, for he is bold, saucy, voracious and persistent. He preys upon the choicest fruits of the season, and a fair trial of the robin for his misdemeanors would doubtless result in a verdict of banishment for life. It is true that we should miss his cheerful notes at early morn during the summer months, but a rich dish of strawberries or cherries would compensate for his absence, for he generally secures his own breakfast before he gives notice that he is stirring. I noticed, the present season, after I had gathered all my grapes except one vine of a small late kind, that the robins, after reconnoitering the garden and finding their occupation gone, sought out the ungathered vine and before I was aware of it, every grape had disappeared.

The writer includes the Oriole as one of the marauders that infest the garden; but he is more cautious and less aggressive, and has some redeeming qualities. His brilliant plumage, modest note and unassuming manners, are attractive qualities which reconcile us to the little mischief he is said to be guilty of, and he can make a meal of what the robins would discard. Of all the insectivorous birds, none have to my knowledge been reported that will devour the hairy caterpillar, to which there seems to be an instinctive aversion by both bird and fowl. Some years since, when caterpillars were plentiful, I observed from the window of the room I daily occupy, an oriole which seemed to be feeding upon something on an apple tree directly in front of the window, which caused me to take particular notice of his movements, and the process was as follows:—He first caught the worm, and placing his foot upon it, seized it by the head, and by a dexterous movement drew it from its coat-of-mail and swallowed the contents, leaving the hairy pelt upon the tree; this was repeated several times before he left the tree. If any of your correspondents has witnessed a similar operation, it would serve to strengthen the testimony in favor of the oriole. The birds should have a fair hearing before judgement is pronounced against them; and a close observation of their habits is the only means of coming to a just decision as to their respective merits.

A SUBSCRIBER.

Pomological.

THE GREAT LAKES AND FRUIT CULTURE.

T. T. LYON.

IN the continuation of our remarks on this subject, from page 322 of your last volume, we are not left to adduce the recent discovery of the capacity of our climate for the purpose, as the sole reason for so sudden and rapid a development of this interest here. Very much is doubtless due to the increasing importance of fresh fruits as an article of diet; and a still more potent cause may, beyond doubt, be sought in the unprecedently rapid settlement of the entire Northwest; with the simultaneous growing-up of large cities about these lakes, and throughout the entire region, with a great collecting and distributing mart at Chicago, where the teeming but perishable fruits of the eastern shore can be laid down at slight cost, and in the finest possible condition, to be taken up and distributed broadcast, over dozens of railways, and hundreds of miles of distance, among the millions of people who vainly seek for a local supply of the luscious wealth of Pomona, which the denizens of the "Fruit Belt" are thus opportunely enabled to tender them.

It should, however, by no means be assumed that Chicago is the only point of distribution for the production of the fruit region; since Milwaukee, and, indeed, each and all the business points along the western shore, contribute their energies to the purpose, in measure only limited by their facilities for the work.

St. Joseph and vicinity has been so long given to this work, that, despite the terrible calamity to the peach interest there, she still maintains a very decided preponderance in the amount of her shipments, over any other shipping point; and, especially so, so far as apples and the small fruits are concerned; although some other localities seem likely to become strong rivals, as rapidly as the difficulties arising from new lands and young, non-bearing orchards, will permit their development.

The following statistics will give some idea of the present extent and magnitude of this interest.

We learn from A. O. WINCHESTER, of St. Joseph, that the shipments of fruit through that port, during the summer and fall of 1877, coming from the northern and western portions of Berrien County, (doubtless including much from the fine fruit region of Van Buren County along the C. & M. L. S. R. R., which passes through St. Joseph), were as follows, viz:

Strawberries, in ½ bush. crates		128,340	or 257,680	pecks
Raspberries,	" "	40,771	81,542	"
Blackberries,	" "	14,876	29,752	"
Cherries,	" "	6,945	13,890	"
Grapes, in peck baskets			243,563	"
" ½ bush. cases		5,731	7,641	"
Quinces, in peck baskets			700	"
Peaches, " "			427,225	"
Apples, in barrels		73,882	664,938	"
			1,526,931	"

From South Haven, during the same period, the shipments have been as follows, viz:

By express, all reduced to pecks	32,447
Small fruits, shipped by line of steamers, 7,453 crates, or	15,906
Peaches, in peck baskets	95,488
Apples, in barrels, 2,918, or	26,262
Peaches, shipped by sailing vessels, estimated	2,000
Apples " " "	13,500
	185,603

From Clapp's pier, (formerly Marks):

Peaches, in baskets of one peck each	7,316
" boxes, (supposed to be half bushels, 666, or	1,332
Berries, in half bushel crates, 100, or	200
Apples, in barrels, 718, or	6,462
	15,310

Saugatuck is the next port as we go north. We have, so far, been unable to obtain a statement of the shipments from this port: and from the best information at hand, we estimate them at about the amount shipped from South Haven, as given above, viz: 185,000 pecks.

We are indebted to C. A. Dutton, of Holland, for a statement of the shipments from that port as follows, viz:

Peaches, in peck baskets	13,827
Grapes " "	5,726
Pears " "	78
Crab apples " "	78
Apples, in barrels, 2,522, or	22 698
	42,407

These give a total of ascertained shipments, (with the exception of the estimate for Saugatuck,) amounting to 1,955,251 pecks of fruit. The shipments, especially of grapes and small fruits, from the port of Grand Haven have doubtless been quite large; but we have been, so far, unable to secure any reliable statement of the amounts. The same is true of the still more northerly ports of Muskegon, Whitehall, Pentwater, Ludington, Frankfort and Grand Traverse Bay; at nearly all of which, important fruit interests are known to exist, although much of the country is yet comparatively new. We are beyond doubt well within the truth, in estimating the total shipments of the ports from Grand Haven, northward, at 1,000,000 pecks; which gives the sum of 2,955,251 pecks, or 738,813 bushels as the total of the shipments from the Michigan "Fruit Belt" during the season now just expired.

This doubtless may be regarded as an extraordinary result, when we consider that the business has almost wholly grown up within the last twelve or fifteen years; and such growth must, no doubt, be mainly attributed to the confidence that our great equalizer of temperatures—lake Michigan—can by no possibility fail us. But that, while broad regions of country may, or do become arid and frosty from the reckless destruction of timber; these broad, restless, unfrozen waters must ever contribute, as now, to the mellowing of the frosts of winter, as well as to the tempering of the fervid heats of summer; their changeless character constituting a sure guarantee that, in the future, as now, the devotee of Pomology shall find, upon these shores, a home alike for himself and his cherished specialty.

The planting of fruits along the entire shore is proceeding at accelerated rates; and when we consider that, with the exception of berries, nearly the entire shipments above enumerated may be said to be the product of orchards as yet only partially in bearing, it will be readily conceived that the increase is likely to be at least fully maintained, for some years to come.

Doubtless one of the most encouraging circumstances connected with the growing of fruits along this shore of the Lake is the fact that even the most delicate and perishable fruits can be left upon the plants till fully ripe—put on board steamers at night, and be laid down in any of the cities upon the Lake, in the early morning, as fresh as when gathered, instead of being subjected to the necessity of being gathered before maturity to enable them to bear the jar and jolt of a car over hundreds of miles of railroad before they can reach the consumer.

South Haven, Dec. 31, '77.

Field Crops.

CHEAP TURNIPS.

HAVING cleared a piece of new land this summer, for winter wheat, I selected about an acre from one end of the piece, shovel-plowed it thoroughly and harrowed it, then sowed it to turnips. For plowing new land we use a strong shovel-plow made for the purpose with a round pointed coulter attached to the point of the shovel, so that when it strikes a root it will pass over and not catch. The soil was loam, and somewhat dry, being a beech and maple ridge. The seed was sown about the middle of June broadcast, and harrowed in among the stumps, receiving no further care until pulling time.

A neighbor harvested the crop on shares, I furnishing man and team to haul it into the cellar. My share measured fourteen two-horse wagon-loads, which we called 350 bushels; his share was about three loads.

Now for the cost which would stand about thus: To three days work, man and team, plowing, harrowing, and hauling, $6.00. By 350 bushels turnips, worth how much? After harvesting the turnips the land was shovel-plowed, and is ready to sow to spring wheat, so, although I fail to get winter wheat on that part of my field, I shall, however, get a crop of spring wheat worth just as much and harvested at the same time as the winter wheat which was sown on the rest of the field.

J. R.

FREEDOM WIS.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Luxembourg Garden, Paris, The ... 21
Agriculture and Education in the United States ... 22
Western Farm Topics ... 23
Jottings at Kirby Homestead ... 23
Manure, Something About ... 23
Farming System in ... 23
Topics, Rural ... 23
Whims and Facts ... 24
Jottings from My Note-Book ... 24
Stable, A Warm ... 24
Window Plants ... 25
Bulbs for the Flower Garden ... 25
Daphne Indica ... 25
Catalogues, &c., Received ... 25
Siftings from the Kitchen Fire ... 26
Recipes ... 26
Cures, Simple ... 26
North Carolina, From ... 26
Rural Special Reports ... 26
Bees, Wintering ... 27
Bees Again, My ... 27
Insectivorous Birds ... 27
Fruit Culture, The Great Lakes and ... 27
Turnips, Cheap ... 27

EDITORIAL PAGE:

The Agricultural Press ... 28
Good Resolutions ... 28
Plants in Rooms ... 28
Notes—Brevities ... 28

LITERARY:

Poetry ... 29, 31, 34
A Chinese Corn-Doctor ... 28
Her Mother's Secret ... 29
The Old Hag ... 30
Sallie, Sister Wants a Chew ... 30
For the Benefit of the Nose ... 30
Recent Literature ... 31
For Women ... 31
Girls and Their "Beaux" ... 31
Home Decorations, etc ... 31
Usefulness of Old Maids ... 31
Answers to Correspondents ... 32
News of the Week ... 32
Publisher's Notices ... 33
Various ... 33
Markets ... 33
Reading for the Young ... 34
The Janitor's Visit ... 34
The Rain-Drop ... 34
Letters from Boys and Girls ... 34
Puzzler ... 34
Sabbath Reading ... 34
Not in Vain ... 34
How About Our Faith? ... 34
Personals ... 35
Wit and Humor ... 36
Advertisements ... 33, 35, 36

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SATURDAY, JANUARY 12, 1878.

OUR readers will not thank us, perhaps, for permitting our Notes and Brevities to be crowded out. The truth is we have never felt so great a pressure upon our space as at present.

WE respectfully call the attention of our readers to the fact that the RURAL NEW YORKER is discontinued at the expiration of the subscription term.

WE particularly call the reader's attention to a series of articles by Professor I. P. ROBERTS of Cornell University, the first of which is presented upon page 22 of the present number.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

THE AGRICULTURAL PRESS.

BUT little over three-quarters of a century has elapsed since, in the year 1800, the Farmer's Magazine, the progenitor of the multitudinous family of agricultural periodicals of to-day, entered on its useful career in the city of Edinburgh. In the succeeding half century the actual productive power of Great Britain, in the article of wheat alone, increased to the extent of supporting an additional population of seven millions. Down to our time this development has continued though, perhaps, at a slower pace, owing to the limits which Commerce has set to the profitable cultivation of the soil of any particular district by bringing into competition with its crops the cheaper productions of other regions. In nearly every other department of agriculture there has been a like advance, and in some, especially in root culture, even a more rapid improvement has been made.

This marvelous development of the agricultural resources of the country, has been mainly brought about by two causes, both of which have been equally beneficial here—discoveries in agricultural science as well as of better methods of tillage, cropping, and breeding, coupled with a speedy and widespread dissemination of these discoveries among those who could utilize them. To the first of these causes of advancement, the agricultural press, here and abroad, has contributed not a little by diligently recording suggestive facts and significant results of various practical experiments as well as by affording to investigators the stimulating encouragement inseparable from a hearty recognition of the beneficent purposes of their researches and the consciousness that their discoveries would be at once brought faithfully to the notice of those who would thankfully profit by them.

By no other means has this been so promptly and efficiently accomplished as through agricultural periodicals. For one farmer who has become acquainted with valuable discoveries in agricultural science or practice by poring over the works in which they are technically described, a hundred have been benefited by them through a more lucid account contained in their family papers. In these, as a rule, not only are all the successive scientific discoveries relating to the occupation of their patrons, described in a popular style and at sufficient length for all practical purposes, but the experiments of hundreds and the experience of thousands of farmers, instead of remaining confined singly to a few in each neighborhood, are made collectively the common property of all. These, if really valuable, are of advantage not only to the present generation, but to all that shall succeed it; for knowledge is cumulative, and each fresh acquisition becomes a permanent addition to the ever-increasing fund that shall bless future ages.

The information in this way obtained is beneficial, not only to the readers of agricultural periodicals, but often, also, to many of their neighbors who still cherish an antediluvian prejudice against what they are pleased to stigmatize as "book farming." It is a well known characteristic of semi-civilized races, that, like the Chinese, they are accustomed to despise the wisdom of outside barbarians, and, similarly, these fast-disappearing relics of the dark ages are apt to consider that each farmer could be benefited by no information on his business beyond the dictates of his own common sense, which often directs his labor at haphazard. Yet, often unconsciously, these wiseacres are influenced in their practice, by the improved methods learnt by their neighbors from suggestions contained in their favorite papers. Generally the editors of these, and always nearly all the contributors to the practical departments, have, themselves, large experience in agricultural pursuits, while the former are ever on the watch for any information from any part of the world, which their experience may tell them might be of service to their readers.

Time was, not very long ago, when it was a reproach and an injury to the tillers of the soil that, while the invention of printing had proved an appreciated blessing to the rest of the community, most farmers would have lost neither pleasure nor profit had FAUST and his co-laborers never lived. Nowadays, however, a habit of reading has been widely developed among the rural population, not a little through the agency of agricultural papers, many of which furnish reading matter which, in valuable information, purity of tone, and variety of interest, will compare favorably with any species of periodical literature.

GOOD RESOLUTIONS.

IT is not necessary to turn the leaves of an almanac, or to consult the signs of the Zodiac to be apprised of the fact that about this time thousands of clever fellows are framing good resolutions whose influences will modify their lives for the next twelvemonth.

This time-worn custom is honored in the observance usually for periods of time varying from fifteen minutes to an entire day. It may be said to constitute one of the limited opportunities that humanity vouchsafes itself to supply its own precepts with an example to match. It has all the fascination of a Chinese puzzle: one knows the pieces are there, but the odds are mainly against the final result being in accordance with the beautifully colored plan.

There are several prominent moral blemishes that, by general consent, are singled out for the especial attention of the New Year reformer. He knows intuitively that they are false gods, and however lustily their priests may cry aloud in their favor, no vocal gymnastics can befog the fact that the cloven foot is as a number nine for prominence. Profanity is the chief, perhaps, of the faults to be obliterated. It is set forth in the preamble that morals and the usages of the best society are inimical to swearing, and it is resolved that the unclean practice be, and is hereby abated. At this point the curtain falls to sweet music, and the first act ends promisingly.

Thus far, the triumph of will over inclination has been so easy and gratifying, that the reformer, emulating Saint Patrick, concludes to drive out all the snakes, while his, so to speak, hand is in. He braces up and issues a pronunciamento against ardent spirits, a ukase against tobacco, and finally runs amuck among an entire schedule of great and little sins, winding up in a fine economic frenzy that attacks the petty cash account, doing agile sums in mental arithmetic that show flattering results three hundred and sixty-five days from date.

After arriving at these conclusions, the reformer rests upon his oars, and standing in "uffish thought" awhile, bethinks himself of the day and its duties. Carefully the swallow-tailed symbol of conventionality is taken from its peg, and by degrees the paraphernalia that metamorphoses a gentleman into the semblance of a head-waiter is spread out, and the art of decoration is practiced in a tranquil state of mind. The reformer stands before a looking-glass that has the defect of showing the left ear on a portion of the cranium antagonistic to all rules of anatomy; at the same time, giving the nose an inquisitive turn into the corner of the right eye that is subversive of good temper. Somehow, the immaculate neck-tie does not fall into those mathematical folds that all are agreed constitute its greatest charm. Another is tried. Impatient muttering recedes before jerky expletives, until at length the vernacular is embroidered with a delicate tracery of profanity. The innocent cause is torn from the neck and wafted into a remote corner before a gale of fluent damnation. Then conscience, in a voice sweeter than the song of the Bulbul, alludes to those resolutions!

It is now necessary to reconsider; but to do this, the nerves should be calmed by recourse to the weed. The effect is sweeter than the honey of Hymettus. Once more the armor of good intentions is girt about his loins, and he makes his first call. It may be termed an undertaking to pay one's respects a thousand times in twelve hours. The descendant of protaplasm yearns for refreshment. He has been proffered, and smilingly consumed gallons of nourishing tea—beef tea. It begins to pall. The palate has improper reminiscences of seductive companions that were boon prior to the era of reform. It sighs for Thomas and Jeremiah, and circumstances conspire to capture preamble, resolutions, and all. The miserable victim wanders home over the sidewalk as if he were describing the pattern of an arabesque, and frames an act to amend an act, against attempting the labors of HERCULES without first cultivating sufficient moral muscle to carry out a scheme that includes the complete revulsion of established habits.

The bull against a comet, so far as known, had no more effect on that erratic heavenly body than good resolutions without persistent endeavor have on bad habits. The reformers must begin *de novo*.

PLANTS IN ROOMS.

IN a few remarks which we made, a week or so ago, touching the healthfulness of plants in sitting-rooms, it was stated that if they were healthful it could only be due to the amount of oxygen liberated and as this amount was quite inappreciable it became a question whether from imperfect drainage and consequent stagnant moisture, the "vapors of decomposition" might not prove a cause of vitiating the air of such rooms. That the amount of oxygen liberated by plants is, even though the room were packed with them, inappreciable is well set forth by MAX VON PETTENKOFER, in the Contemporary Review, in the remark that "the power of twenty pots of plants would not be nearly sufficient to neutralize the carbonic acid exhaled by a single child in a given time. If children were dependent on the oxygen given off by plants, they would soon be suffocated."

PETTENKOFER asked permission of the Royal Winter Garden in Munich to make experiments for several days at various hours of the day and night. He found the result to be that the proportion of carbonic acid in the air in the Winter Garden was almost as high as in the open air. This surprised him, but he hoped at any rate to have one of his traditional ideas confirmed, viz., to find less carbonic acid in the day than in the night, supported by the fact that the green portions of plants under the influence of light decompose carbonic acid and develop oxygen. But even here he was disappointed. He generally found carbonic acid increasing from morning until evening and decreasing from night until morning. He doubled his tests and care, but the result remained the same. This he subsequently found to be owing to the fact that the workmen and others during the day produced so much more carbonic acid than the plants consumed during the same time.

Discarding altogether the idea that plants in rooms have any appreciable power to "purify" the air, PETTENKOFER accords to them hygienic benefits for a quite different reason, viz.,—the impression which they make upon the mind. "The cheerful and happy man lives not only an easier, but, on the average, a more healthy life than the depressed and morose man." He thinks a certain amount of change and recreation is indispensable and, failing others, some seek them by injurious means. There are doubtless some unhappy and morbid creatures who are always discontented—to whom everything comes amiss, and whom it is impossible to help; but the majority of men are easily pleased, find pleasure in little things, though it may be but a sorry life they lead. It is something the same with the pleasures of life as with the pleasures of the table; we must relish our food if it is to do us good. He considers flowers in a room, for all to whom they give pleasure, to be one of the enjoyments of life, like condiments in food, and it is certainly one of the most harmless and refined. We can not live on pleasure alone; but to those who have something to put up with in life, their beloved flowers perform good service. And the same may be said of private gardens and public grounds.

Finally, we think that all the talk about plants being "healthy" in sleeping or sitting rooms "because, you see, they absorb carbonic acid and give out oxygen," may go for naught. There is neither science nor sense about it. In the meantime—while we delight ourselves over their beauty and are pleasantly occupied while caring for them—let us see to it, as we have said, that the earth in the pots be preserved fresh and sweet—that the pots be kept scrupulously clean, lest our plants which we had supposed beneficial to the air, shall prove appreciably injurious.

NOTES.

The Rural's Circulation.—We *must* congratulate our readers as well as ourselves upon the RURAL's prospects for 1878. Up to this time our circulation has so increased over last year that we prefer not to make a more definite statement for the reason that, owing to the storms which prevailed last year at this time, the work of obtaining subscriptions and the mails were delayed. It may be, therefore, that our present increase is in a great measure due to the weather advantage of this year over last, and that much of what we gain now will be lost later. Nevertheless, from overwhelming evidence in great variety, we have little to fear that our circulation for this year will not be greater than it was last. We repeat our assurance to our friends, that we shall do all in our power to please and to benefit them.

MR. J. B. LAWES, the distinguished experimental farmer of Rothamsted, England, closes a letter to us as follows: "I take the greatest possible interest in your agriculture, and can see clearly what an immediate future there is in store for it."

Literary Miscellany.

EVERY YEAR.

ALBERT PIKE.

THE spring has less of brightness
Every year
And the snow a ghostlier whiteness
Every year;
Nor do summer's flowers quicken,
Nor autumn's fruitage thicken
As they once did, for we sicken
Every year.

It is growing darker, colder,
Every year,
As the heart and soul grow older,
Every year.
I care not now for dancing,
Or for eyes with passion glancing,
Love is less and less entrancing
Every year.

Of the loves and sorrows blended,
Every year;
Of the joys of friendship ended,
Every year;
Of the ties that still might bind me
Until time to death resigned me,
My infirmities remind me,
Every year.

Oh! how sad to look before us,
Every year.
While the cloud grows darker o'er us,
Every year!
When we see the blossoms faded,
That to bloom we might have aided,
And immortal garlands braided,
Every year.

To the past go more dead faces,
Every year.
Come no new ones in their places,
Every year.
Everywhere the sad eyes meet us,
In the evening's dusk they greet us,
And to come to them entreat us,
Every year.

"You are growing old," they tell us,
"Every year;
You are more alone," they tell us,
"Every year.
You can win no new affection,
You have only recollection,
Deeper sorrow and dejection,
Every year."

Thank God! no clouds are shifting,
Every year,
O'er the land to which we're drifting,
Every year.
No losses there will grieve us,
Nor loving faces leave us,
Nor death of friends bereave us,
Every year.

A CHINESE CORN-DOCTOR.

KU-YUNG, a city near Nanking, has a remarkable history in connection with the Chinese superstition called "Fung-Shui." The learned as well as the ignorant in China believe that there are good and bad influences in the air, caused by good and evil spirits; and they employ a large number of "fung-shui" doctors to show them how to ward off injurious influences, and obtain good ones.

Early in the Ming Dynasty, about four hundred years ago, one of these doctors discovered that the city of Ku-Yung would produce an emperor, and that all its people would be mandarins or officers. The emperor then reigning, alarmed at the prospect of losing his throne, took steps to have the fung-shui of that city corrected. It was decreed that the north gate, at which the evil spirit entered, should be built up solid and remain so, and that all men of the city should choose of three callings—a barber, corn-cutter or bamboo-root shaver. They were ordered to follow these pursuits because this particular spirit was believed never to come near one who used sharp-edged instruments, and also because an emperor and mandarins would never be chosen from among those who followed these callings.

So the north gate of Ku-Yung has been closed for more than four hundred years, and at the present day no less than seven-tenths of all the barbers in China are from this city; and an equally large number of the corn-doctors, and the dressers of the dried bamboo shoots are known to be Ku-Yung men. These trades are readily granted to them, since it is known to be decreed that they should get their rice in that way. This is a striking illustration of the strong hold which this superstition has upon the minds of both the rulers and people of China.

Our engraving shows one of these corn-doctors following his calling in the open air, after the manner of the barbers, tinkers, pedlars, etc.

HER MOTHER'S SECRET.

CHAPTER V.

[Continued from page 14.]

"I have listened to your mother's distant word," he said, kindly. "I will read her long statement presently. For the present you will stay here. As soon as your servant has had something to eat she can fetch your luggage.

Of course, Edith was only too glad, under the circumstances, to obey. Her grief was too recent, her dejection too great, for her to care about facing the world as yet.

But she meant to do so, and in this fully to carry out her dead mother's wishes. Of love she had had enough and to spare.

Her mother's story had pained her much; and though she had very strong convictions that her mother was right in her estimate of her father, still she could not understand the strange and mysterious circumstances of his marriage and the sudden departure of the officer.

Why had he never sought her out? It would have been easy to apply to the aunt.

But Edith scarcely understood the feelings of a husband who believed that his wife had eloped during his brief absence.

He had wiped her from his heart.

Lunch over, and Martha gone to fetch the luggage from the coffee-shop, the recluse and Edith had a long conference.

CHINESE CORN DOCTOR.

He read the statement carefully, and asked Edith to let him have it to study.

He wanted to read it when alone—this stern old man, who had so loved the young girl, and who revered her memory.

Presently Edith, after some hesitation, spoke.

"My mother wished me to tell you something which I only confessed to her on her death-bed," she faltered. "I promised I would tell you."

"Speak, my dear. I am sure it was nothing very wrong," he smilingly observed.

She told him frankly.

He listened with deep interest, but the name of Royston Yorke startled him.

"He is a distant relation of a friend of mine," he said; "we will make inquiries about him."

"Never!" cried Edith. "I will obey my dead mother. If he had wanted me, and had gained permission to woo me, he would have come long ago."

"I don't know," replied Linton; "but of that we need not speak now. You must rest yourself a little, and then we will see what is to be done."

"As soon as I am well enough," said the young girl, "I will write. In the first place, we must send Martha away," she added, "with a tearful sigh. "I cannot afford to keep her."

"She shall remain with me for the present. I am very short of hands, and now I have a visitor must keep more servants," he added, with a fervor he had not felt for many a day.

Martha returned with the luggage, including the desk, all safe, and was delighted to find herself retained in the establishment.

Edith was at once installed mistress of the house, with the two women and an old man-servant under her. But her hand was light, and the servants soon found the yoke to be so gentle as in fact to be nominal.

Edith was happy in the garden or the library, where she could sit and think. But Mr. Linton who was out a good deal now, insisted on their going out for a stroll on the banks of the river.

Edith was only too willing, as she loved the sight of water, boats, &c., and it distracted her thoughts.

This went on for a day or two, and then Martha particularly noticed that they were followed by a man. He wore a slouched hat, common clothes, and had his face blackened.

At first they thought it an accident, but soon discovered that it occurred on every occasion when they took a walk.

Martha fired up. Edith was uncommonly pretty, and the provincial old lady had heard of such things as young girls being snapped up from under the very eyes of their guardians.

But Edith only smiled, and no one said a word of it to the excellent virtuoso.

When they had been a month in the house, Edith felt so restored that she wished to look out for some work.

"What kind of work?" he asked.

"Teaching," she replied. "I suppose I might set up a school with my thousand pounds."

"No, my dear, that money is sacred," was the eager reply. "It was put away by your mother for a rainy day. Now, listen to me, my dear. I am an old man, and am very rich, with no near relatives. Now, for your mother's sake, let me make you my daughter, adopt you, and leave you my money?"

"You are very kind, generous, and noble," she said; "but I would rather work."

"I never saw such a girl," laughed the old man. "We might find Royston Yorke, and the old man would not refuse my heiress!"

"If Royston Yorke wants me, he will find me," she replied; "but I don't believe he does."

"Then here goes. A man I know something of," he continued, gravely, "by buying and selling pictures for him, has an only daughter the very same age as yourself. She is not polished; she wants the society of a young lady, and she wants you to put something in her head."

"Is she very stupid?"

"Rather stupid and vulgar. She is very good-tempered; but before she thinks of society or marriage, she must have a year's tuition. The price is two hundred guineas a-year," he added. "Will that suit you?"

"Certainly; who is she?"

"The only daughter of Sir Arthur Tressider," he continued. "How he ever married the vulgar city madam, which he did in Rome, is a mystery to me, except that his father loved a fortune. He lived in Rome some time, and then returned to England. He has only this one child, a daughter. To-morrow I will send you there. You are already conditionally accepted."

"I thank you for your kindness," said Edith; and she went out into the garden to think of coming events.

Could she have known!

As she sauntered along, peeping through the railings, she saw the strange man looking at the house.

What could he mean?

As she attempted to retreat, he crossed over in the moonlight, took off his hat, and stood revealed, haggard and pale, Jack Clayton!

She gave a little shriek, and then he was gone out of sight.

She walked slowly back to the house, and up into her bed-room, to collect her thoughts before supper.

The sight of this man had roused thoughts she had believed partially forgotten. Not only did he make her think of dear Longmead, of her mother, and of many kind friends, but it brought before her eyes the trysting oak, and the scenes that passed there.

The night of the attempted murder was again before her, and the sweet awakening to love and hope, and the brilliant vista of the future.

Was it all gone now? All was buried in the grave with her sweet, good mother.

When she went down to supper she was calm and collected, and discoursed with the old man.

"Try and please the Baronet," he said;—"though he yields to his wife and daughter, he is just and good, and will allow no one to be treated below their station in his house,"

"I will try and do my duty," she answered.

"You can do no more," he said.

CHAPTER VIII.

The Baronet's Family.

NEXT day, after taking a farewell of the worthy Mr. Linton and her faithful Martha, Edith started on her journey from Chelsea to Belgravia.

She took only with her her simple luggage, leaving her relics, especially the much-valued desk, in the custody of the virtuoso.

As Edith drove along, she naturally enough speculated in her own mind on what manner of people she was going to live with.

From Mr. Linton's description, she did not expect to lie upon a bed of roses. Whatever might be the good qualities of Sir Arthur Tressider, he would have little to do with her personally. Her duties would bring her chiefly in contact with a vulgar woman and a rather silly girl.

In making his arrangement, Mr. Linton had stipulated that as his young lady friend was of good family and origin, she might be allowed to call herself, in her teaching capacity, Mdlle. Marechale.

The lady thought it odd, but had submitted, especially as the Baronet had at once acquiesced.

"If she is half as accomplished as you say," he remarked, "she is a female Crichton, and may call herself what she pleases."

Her arrival had been fixed for eleven o'clock, and punctually at that time did Edith give her modest knock at the door. She was at once admitted, the footman being civil and obliging as all footmen are when under the influence of a wise and discreet master.

"My lady is in the morning-room," he said; and, opening the door, ushered her in, pronouncing her name as best he might.

A lady was seated in an arm-chair—a lady, fat, fair, and forty; but with a face which, without being repulsive, was hard and unsympathetic.

She slightly bent, and then motioned Edith to a seat, without herself rising.

"You are the young lady recommended by Mr Linton," she said, in a haughty but rather drawling tone, as if it were an effort to speak to anyone beneath her.

"I am Mdlle. Marechale," was the answer, in that quiet, soft voice that in general went to the heart of those who heard.

"That is it; though why anyone should call themselves by such outlandish names, I cannot say," she continued, peevishly.

"You should remember, Beatrice," said a grave and earnest voice, "that that matter has been settled once for all."

Then she saw that there was also present a gentleman of tall and erect mien, a man of about five-and forty, singularly handsome, but with a grave and sad look.

"Welcome to my house young lady," he went on, advancing and giving his hand, "I hope you will find yourself comfortable. Your pupil is engaged"—this with some slight scorn—"in some important millinery transaction. I hope, Beatrice, she will be at leisure shortly."

"I will expedite her," cried Lady Tressider, with an annoyed look.

"In the meantime, Mdlle. Marechele will, I am sure, come to the music-room," continued the husband, speaking with all the respect he would to a duchess, "and let me judge of her powers. Linton has given me such notions——"

"But you can only be disappointed, Sir Arthur," she timidly replied.

She was awed in spite of herself in the presence of this grand-looking gentleman, who seemed to her eyes the perfection of man as he should be.

He opened a door, rang for a servant to take away her wraps, and then led her to the piano.

Edith was always equal to the occasion when music was concerned, and she was soon pouring forth a volume of harmony and melody, which startled the connoisseur.

When she concluded, there was a proud expression on his face, tears were in his eyes, which he covertly wiped away.

"Never, young lady," he said, after a pause, "have I heard such music before. It has thrilled me to the very heart. It sounds like an echo of long ago. You must have had able teachers?"

"My mother only," she replied.

"Your mother——" he began; but at this moment Lady Tressider entered with her daughter.

The latter was very much like her mother, only a smaller edition, with less intellect in the face, and one of those sauve smiles which exasperate the looker-on.

She was well-dressed, and despite her deficiencies in figure, had a certain doll-like beauty about her.

The lady of the house now left with her husband, and the two were alone.

"You play and sing very nicely," said the girl, rather sulkily.—[To be continued.

THE OLD HAG.

M. E. STONE.

I CAN remember, ever since I was a very little girl, hearing the people of my native village make this remark (when anything happened out of the usual order), "As queer as the old hag!" It puzzled me at first, but I soon solved the meaning.

The school-house stood a quarter of a mile outside our little village, and the first time my youthful feet wended their way toward it, I was enlightened by my sister ALICE and another girl, who were leading me.

"You must be a good girl, to-day, METTA," said ALICE, "and not whisper, or the old hag will get you to-night. See" (and she pointed to a log hut in the middle of a field), "that's where she lives."

"Yes," that she will!" exclaimed the other girl; "she's a witch, and once turned a little girl, who was naughty in school, into a great big stone, folks say. JIM CRESSY, he's seen it with his own eyes, says 'she keeps it for a door-step.'"

I was very much alarmed at this harangue, and scarcely breathed a loud word during the whole day. And for months afterwards, if I had committed the slightest misdemeanor in school, I would run with all my might past the old log hut, on my way home, at night.

But, as the years rolled by, I gradually lost all faith in the witch story, and became possessed with the desire to behold this human being, so isolated from the world, upon whom mankind had bestowed the hideous appellation of "old hag."

I had often had stray glimpses of a bent figure, hobbling around the hut. 'Twas rare, indeed, that she ever ventured beyond her domain, which was inclosed by an old, tumble-down rail fence, while I dared risk no nearer approach, not relishing the idea of being turned into—perhaps a hearthstone for an old witch to boil her porridge-kettle on.

I have remarked that, as the years rolled by, my fears subsided, while my curiosity increased. And one bright Saturday afternoon I started out with the secret determination, "live or die," I would make a heroic attempt to get a nearer view of the "old hag," before the day was done.

I took the path through the woods, and after a short walk found myself emerging from the leafy covert, in exact range with the hut, which stood about forty rods distant in the field. Here I stopped and indulged in several sweeping surveys of the landscape, to discern if the coast was clear. No one being in sight, I boldly struck out, and by making swift transits to friendly raspberry bushes, which grew at intervals all along, I felt tolerably certain I had not been observed. Yet it was with a shaky feeling around my heart that I crept into the shadow of a clump of elders and peered through the rails.

My perseverance was not to go unrewarded for soon the door opened, and she appeared on the threshold. Oh, what a sight! to my dying day I shall never forget my first look at her. A poor, bent figure, carrying a great burden on her back, as if the burden of life were not enough. One shoulder being higher than the other gave her a queer, one-sided look, as if just ready to totter over. Her long gray hair hung in straggling locks around the pale, haggard face, which was furrowed and seamed with the marks of age or sorrow. On her left temple just above the eye, as if to brighten the weird affect, was plainly marked a fiery red cross. I can remember this thought dimly presenting itself to my childish imagination: "Was it not a symbol of her life?"

She glanced sharply around her as if in search of some one. I drew back deeper into the shadows in momentary fear of her keen vision penetrating through the thick bushes, to my hiding-place. I was certain she had discovered my approach and had come out for the express purpose of searching for me. There I lay trembling and meditating upon rash plans of escape—vainly wishing sister ALICE was with me; or that I was anywhere else, when I heard a low, musical voice exclaim—"How are you to-day, my sweets?"

Aha! here was a discovery, indeed! Company? I had never known of a single soul who visited her. Who could it be? At the peril of immediate discovery I could not resist the temptation to peep.

Poor, lone soul! looking out of your wretched tenement. Yes, poor, lone soul! whom all the world had forsaken. You were seeking comfort in the Master's lowly gifts.

There she was, that wretched old hag, kneeling in the long grass, caressing lovingly the wild flowers that grew in great luxuriance about the hut.

I heard her say—"Oh, my sweets; my pretty crimson clovers, butter-cups and daisies. You're all out to-day, full blown. I saw you the first thing this morning shaking your bonny heads in the sunshine as the wind went tossing by. And you're here for a whole summer, my precious ones; how came you to come and blossom so sweet just to please old MARGERY? but you ain't afraid of her, oh, no! MARGERY would'nt hurt you, for the world! She only looks at you, and you kinder help her from being all alone. You don't know, my pretties, what an awful thing it is to be all alone; always all alone, with no one to care whether you lived or died. No, you can't know how it is, when you're gone and the wind howls around the hut, or how I keep praying the good Lord to hasten the summer and send you back. 'Twas always so; no one could ever bear MARGERY; her poor old shoulder and the great hump on her back were always against her.

"The old hag," they call me, even the little children, my sweets. I wish they would'nt, for I love them so—why crimson clover, I'd be ready to die to-morrow for very joy if one would come and kiss me, and say how d'ye do, MARGERY?' But oh no! that can't be, they are afraid of me; afraid of me!

Reader, I was a sinless little child then; if I had been older I should probably have stilled under the cloak of pride and selfishness, the noblest impulse of my life. But thank GOD! I did not, for without a moment's hesitation I climbed the fence and with tears of sympathy streaming down my cheeks, I caught the old creature's hand in mine and said, as I bent and kissed her, "How d'ye do, MARGERY?"

Great GOD forgive us! how shall we ever answer for these poor neglected souls that the kiss of a child can so overcome? She gazed upon me for several moments in mute astonishment, then burst out sobbing and laughing alternately, saying over and over to the senseless flowers: "She did it my sweets! just think can you believe? Some one has really kissed MARGERY and said 'how d'ye do!'"

* * * * * * * * *

She has been dead this many a year; the old hut tumbled in ruins long ago; the people of the village have ceased to speak of her. She was always a wonder to them, "the queer old hag." They looked at her outwardly, no one ever dreamed a beautiful soul lay hid in such a rough casket. But I knew it and learned to love her well.

The day she died—oh, such a beautiful day—the daisies, buttercups and clovers how they swung their heads and peeped in at the old door! All day long she lay with one hand locked fast in mine. At sunset, when the yellow rays streaked the crimson banners hung in the west, the angels came (they were not ashamed.) She heard them, the beautiful soul came up and looked out of its prison windows with such a glad look, such as the prisoner wears when, after dreary years of darkness, the iron bars fall and the door of his cell swings back, letting in the blessed sun-light once more.

I dressed the poor, worn body for the grave, smoothed back the tangled hair, filled the tired hands full of her flowers.

In a stony corner of the graveyard, overgrown with briars and nettles, they made her grave. No one had been buried in that part for years, it was so desolate and nothing would grow there, but it was good enough for an "old hag." A wooden mark was erected and many scoffed when I begged them to put MARGERY on it.

I was called away soon after her death and did not return until the following summer. One morning I entered the graveyard for the express purpose of placing a few flowers on the grave in the desolate corner. What was my surprise to behold it! There above, and all around it "her sweets" were growing, tossing their crimson, white and yellow heads, saying plainly "we've followed you MARGERY!" My poor flowers were not needed, I saw in a minute, so I placed them on rich old granny MARKHAM'S grave which looked singularly bare for all the costly monument which cast its shadow over it, thinking to myself, GOD was MARGERY'S only friend while she was on earth. He sent the simple wild flowers to cheer her here, and now He has sent them to cover her grave.

Year after year they come, more luxuriant each time. A sweet-briar rose has been added, blue and white violets peep up, the seeds of rare plants are wafted that way until the desolate old corner is a glowing Arcadia. The birds sing the sweetest there, the sunbeams are the brightest, the children love to play longest near the grave. Once, one more wise than the average, called it "GOD'S corner" and it has borne the name ever since.

SALLIE, SISTER WANTS A CHEW!

BY A TEXAS IMMIGRANT.

WE lived not far from Austin, the capital of Texas. The neighborhood was sparsely settled and there were only three eligible young ladies in the vicinity. MATTIE was the tallest and handsomest, twenty-one, the only daughter of a stock raiser and farmer, and the other two were very jealous of her because she had a city beau. ANNIE was my cousin, nineteen, and the prettiest and proudest of the trio. SALLIE—God bless her!—was the sweetest creature in the country. She was twenty-one, our next neighbor, and the second of three daughters, the eldest being married but still living in her father's house, and the youngest—a little girl not yet in her teens.

Somehow I liked SALLIE, and SALLIE never said she didn't like me. How my face would flush and my heart beat, was a caution, when I'd see that red cape and white sun-bonnet—confound the thing it was so big and so stiff, and always in the way!—a-moving round the rail fence and nearing the gate.

She was a pretty little girl, short and thick-set, with a round face, white skin, gray eyes, heavy eye-brows, and a luxuriant wealth of raven tresses that, fastened with a claret ribbon, in flowing streams depended o'er her shoulders. She had a sweet and winning way about her, so she had. To be introduced was to be enamored, and sure as fate, OLE couldn't help it. Her victims lay around, as plentiful as did dead cattle on the prairies three winters ago! She was lively as a cricket, chatty as a parrot, nimble as a deer, and frolicsome as a spring lamb. She was born in laughter and reared in adventure, and more ready for possum or wild-cat hunting than for Singer's Sewing Machine.

The Mustang's back was more frequented than the cow-hide chair, and walking pace was purgatory.

SALLIE was always with the boys and the boys liked SALLIE. The "niggers" at the shanties said "Miss SALLIE be de best gal in de country; she ain't no common gal, Miss SALLIE ain't!"

Somehow or other, once or twice a week, SALLIE was sure to drop in our way before sundown, and ANNIE would make her stay to supper. By the time the coffee and biscuits, and a bit of bacon or squirrel, and the few cow peas left over from dinner, had disappeared, and the dishes were washed and I had looked over the Galveston News, the sun was down and SALLIE must not go home alone, but so long as I was there she never wanted a willing escort.

Much to my chagrin ANNIE would sometimes proffer to accompany us; I could not refuse her, because she was otherwise so good and considerate of me, but it would do your heart good to see how sympathetic SALLIE would get all of a sudden. She would remind ANNIE of the spell of toothache that succeeded the dance at Stockdale, the time she had with neuralgia after that night at Ralston's, and the probabilities of another attack of the chills, which at this season of the year was sure to be followed by pneumonia; "and just think how many are dying of pneumonia, ANNIE!"

But SALLIE in this respect was just like some other ladies I know of—if there be a wrong road to glory they're sure to take it. Time and again I told her if she wanted to carry her point not to contradict ANNIE for, sure as preaching, any attempt to deny, refute, or threaten that girl, was instantly met by extreme stubborness and determined retaliation. There was no go back to her; but by open-hearted, honest kindness, she was as obedient as a child.

I was given to understand that SALLIE never used tobacco or snuff in any form, but was sternly opposed to it; ANNIE and the neighbors told me so, and I believed them. Such a qualification among the ladies in the neighborhood was a rarity, and I liked SALLIE ten times more for her immunity.

Now, I never smoked a pipe or chewed a quid, and the very sight of the snuff-bottle and stick would almost turn my stomach. No more disgusting sights could meet my eye than the encrusted tracery of tobacco juice along the lips or down the chin; the prominent "snuff brush," or the perpetual moving of the jaws as if a cow or a sheep were chewing its cud. [Oh! that of God's most noble creation. His most lovely workmanship should so degenerate beneath such brutality as "dipping and chewing, and spitting!" Whisky may be the greatest curse upon earth, but "dipping and chewing and spitting"—Oh! filthy abhorrence!]

"Come WILLIE, let's go down and see SALLIE to-night," said ANNIE to me at supper time. Of course, I was willing enough. We found SALLIE and the rest of the family seated and half dozing, half talking, under the Umbrella China trees in front of the house. She bounded to meet us, and after the usual congratulations and pleasantries, we entered the house, the lamp was lit, and we sat down to a game of cards.

The three of us were round the table playing casino, talking freely, laughing merrily, and cracking jokes like nuts at Halloween. SALLIE had three queens, and I the fourth; SALLIE built two, ANNIE took the other cards, and I swept the queens, with "a sweep, SALLIE, you know I love the ladies!"

Just at that moment into the room burst her little sister with "SALLIE, sister wants a chew!" Without a moment's hesitation, SALLIE plumped a half-chewed quid of tobacco out of her mouth into her hand, gave it to her sister, who scampered an exit!

Good heavens! Had a Comanche knife at that instant described the circuit of my scalp, I could not have been more staggered. I looked at ANNIE. ANNIE blushed. I trembled. ANNIE pressed her foot upon my toes.

"Play, Mr. ——," cried SALLIE, "we're waiting for you."

I looked at the table and then at my hand. I asked, "What's trumps?" and "Who played last?"

ANNIE, perceiving my confusion, jumped up with "Euchre, SALLIE, euchre! We've played casino long enough. WILLIE, please fetch me a dipper of water from the bucket at the door. Oh no; draw us a fresh bucketful, please."

I took the hint, and sprang for the well, secretly thanking ANNIE for her presence of mind and assistance.

The consternation was momentary, but the *disgust* was permanent. I returned with the water, and played a few more games, "looking," as SALLIE expressed it, "as sober as if you had staked your Choctaw pony and lost it."

We went home early; but I did not crease the sun-bonnet that evening. I went to bed; but sleep evaded me, and instead, "SALLIE, sister wants a chew!" haunted me. Morning came; but I could not think of anything else. The mocking birds and cardinal birds scorned to twitter anything else but, "SALLIE, sister wants a chew!"

I asked myself why I was so troubled—what business was it of mine if SALLIE did chew? But I could find no answer. A day or two after, I saddled for San Antonio, and was gone nearly a fortnight. I got home in the morning, and SALLIE came to see us in the evening. She was as radiant and brilliant as ever; but every time I looked at her, "SALLIE, sister wants a chew!" echoed in my ear, and the blood flushed to my face.

I was tired and sleepy, and retired early, without even first going home with SALLIE. Somehow or other, I had no desire to go; when I thought of her, a loathsome feeling crept through me. I did not want to see her, far less, think of her; but in either case I couldn't help myself.

Time rolls on, and since that night I have often escorted SALLIE to her father's gate as before, behaving as frankly and as jollily as I could, but every time I saw her, "SALLIE, sister wants a chew!" shot vividly through my mind.

The red cape in the distance, instead of inspiring gladness, bred aversion, and that "confounded sun-bonnet" molested me no more.

SALLIE'S visits to our house gradually became less frequent, and now she is married to a new neighbor, a stranger, from Kentucky. If he likes tobacco, he has got a good wife; for SALLIE is a kind and considerate creature, a most lovable woman, and an excellent housekeeper.

> "But the purest love and strongest
> Love that has endured the longest,
> Braving cross, and blight, and trial;
> Fortune's bar or pride's denial,
> Would—no matter what its trust—
> Be uprooted by Disgust."

FOR THE BENEFIT OF THE NOSE.

BY CAROLUS.

AMONG the most curious revelations made, is an analysis of the Perfumes. The ethereal luxuries, no matter by what awful names they are called are exposed, one by one, to the sight, as it were, of the public, and their competent parts numbered and proportioned. They are usually obtained from flowers, and Mr. Piesse remarks, that "the extensive flower farms in the neighborhood of Nice, Grasse, Montpellier, and Cannes, in France, at Adrianople (Turkey in Europe), at Broussa and Uslak (Turkey in Asia), and at Mitcham, in England, in a measure indicate the commercial importance of that branch of chemistry called perfumery" an importance which will be more readily understood when it is stated, that "one of the large perfumers of Grasse and Paris employs annually 80,000 pounds of orange-flowers, 60,000 pounds of cassie-flowers, 54,000 pounds of rose-leaves, 32,000 pounds of jasamine blossoms, 32,000 pounds of violets, 20,000 pounds of tuberose, 16,000 pounds of lilac, besides rosemary, mint, lemon, citron, thyme, and other odorous plants in larger proportion." There are four modes of obtaining the perfumes from plants—namely, expression, distillation, maceration, and absorption. In maceration, the flowers are put for a certain time into melted deer or mutton fat, which, in consequence of a natural affinity, draws forth the perfume, the fat thus becoming pomade. When olive-oil or ben-oil is used instead of suet, the result is "huile antique" of such a flower.

When mentioning bergamot Mr. Piesse tells us it should be preserved in well-stoppered bottles, and kept in a cool dark cellar; light, especially direct sunshine, deteriorating all perfumes excepting rose. The labor of collecting the exquisite odor of the sweet-briar is so costly, that an imitation is palmed upon the public instead, composed of French rose-pomatum, cassia, fleur d'orange, verbena, &c—surely an excellent perfume in itself. The extract of heliotrope is in the same category; there is no heliotrope in it, but it is nevertheless a very nice perfume. Neither is honeysuckle used as a perfume, but it is well imitated. Jasmine, on the other hand, is much prized by the perfumer. "When the flowers of the "Jasminum odoratissimum" are distilled, repeatedly using the water of distillation over fresh flowers, the essential oil of jasmine may be procured. It is, however, exceedingly rare, on account of the enormous cost of production.

Lily of the Valley is a delightful perfume; but there is no such thing as lily of the valley in it. Rosemary plays an important part in Eau-de-Cologne, and is the principal ingredient in Hungary Water. In both these compositions it is the refreshing and invigorating element. The perfume we call Verbena, everybody knows, is delicious; but verbena is not of its ingredients, the distilled spirit of the plant being too expensive for the manufacturing perfumer. The essence of the violets is rarely genuine, but from a different cause: the demand for it is so enormous, that the trade is as yet unable to keep pace with it.

On coming to the perfumes derived from animals, our author has a curious remark: "In its pure state, civet has, to nearly all persons, a most disgusting odor; but when diluted to an infinitesmal portion, its perfume is agreeable. It is difficult to ascertain the reason why the same substance, modified only by the quantity of matter presented to the nose, should produce an opposite effect on the olfactory nerve; but such is the case with nearly all odorous bodies, especially with ottos, which, if smelled at, are far from agreeable, and in some cases positively nasty—such as otto of neroly, otto of thyme, otto of patchouly; but if diluted with a thousand times their volume of oil, spirit, &c., then their fragrance is delightful."

It may seem remarkable that the odor of any particular flower should be imitated to absolute perfection by a combination of other flowers. Another thing worthy of remark is this: 'The odor of some flowers resembles others so nearly, that we are almost induced to believe them to be the same thing, or, at least, if not evolved from the plant as such, to become so by the action of the air-oxydation. It is known that some actually are identical in composition, although produced from totally different plants, such as camphor, turpentine, rosemary.

Mr. Piesse illustrates his notions regarding the relationship of odors by the recipe for imitating the essence of sweet-pea, which is this: 'Extract

of tube-rose, extract of fleur d'organge, extract of rose from pomatum—and exract of vanilla.' This composition is formed with the idea that the odor of sweet-pea resembles that of orange-blossom, and the imitation is brought still nearer by the addition of the rose and tuberose. 'The vanilla is used to give permanence to the scent on the handkerchief, and this latter body is chosen in preference to extract of musk or ambergris, which would answer the same purpose of giving permanence to the more volatile ingredients; because the vanilla strikes the same key of the olfactory nerve as the orange-blossom, and thus no new idea of a different scent is brought about as the perfume dies off from the handkerchief. When perfumes are not mixed upon this principle, then we hear that such and such a perfume becomes "sickly" or "faint" after they have been on the handkerchief a short time.'

We have now opened, we think, by this little bit of philosophy, a very interesting and elegant subject of inquiry for our fair readers, and raised the toilet-table to something like the dignity of the library table. A perfume to them will now convey an intellectual as well as a sensuous pleasure; and perhaps they may be even brought to listen to the counsel of Mr. Piesse, and *educate* that feature which, even in its present state of ignorance, and by whatever name it may be described—Grecian, Roman or retrousse—is so important to the character of their physiognomy. "Many persons," says our author, "will at first consider that we are asking too much, when we express a desire to have the same deference paid to the olfactory nerve as to the other nerves that influence our physical pleasures and pains. By tutoring the olfactory nerve, it is capable of perceiving matter in the atmosphere of the most subtile nature: not only that which is pleasant, but also such as are unhealthful. If an unpleasant odor is a warning to seek a purer atmosphere, surely it is worth while to cultivate that power which enables us to act up to that warning for the general benefit of health."

Reviews.

RECENT LITERATURE.

The Bar-Rooms at Brantly. By T. S. ARTHUR. Philadelphia: Porter & Coates.

BRANTLY is a delightful Arcadian retreat, free from the vice of intemperance. It has but one inn, presided over by a model inn-keeper. Finally the tempter appears on the scene, and through the medium of a grand hotel scheme, intemperance is introduced into the place, and troubles spring up faster than mushrooms. Here comes in the strong part of the book. Mr. ARTHUR is well known for his temperance principles, and the caustic qualities of his pen are not diminished because dipped in cold water. The horrors of intemperance are painted in lurid colors, and it is clearly shown that the way of the transgressor is hard. Those sufficiently interested in the subject of temperance to take it diluted in poems and novels, will find this book extremely readable. For our part, we are so radical as to be intemperate in our desire to take the doctrine "straight," and never make a "rye" face.

There She Blows! or The Log of the Arethusa. By Capt. W. H. MACY. Boston: Lee & Shepard.

IT is unusual to find a book of adventure by sea that does not paint the life of a mariner in rose colors. Somehow, authors seem to fancy that the nascent ideas of boys must not be rudely shocked with too much reality. Capt. MACY has, in the present work, given an entertaining account of whaling voyages, without omitting the hardships incident thereto, and by making the story a reflex of real life, adds to its interest, while it will dissuade the effervescent young men who long to see the world before the mast, from leaving "cruel" parents in too great haste.

The Red Hill Tragedy. By Mrs. E. D. E. N. SOUTHWORTH. Philadelphia: T. B. Peterson & Brothers.

MRS. SOUTHWORTH is so well known that each new book addresses itself to readers who have already been captivated by her facile pen, and therefore swallow the absorbing stories whole, without pausing to critically taste the flavor of the production. We have no doubt the Red Hill Tragedy, which is issued in attractive form, at a popular price (50 cts.), will be read with great interest.

American Berkshire Record. Published by The American Berkshire Association. Edited by P. M. SPRINGER, Springfield, Mass.

THE second volume of this valuable record is gotten up in strong cloth binding, and printed on toned paper. The classification and arrangement of contents are good. Mr. SPRINGER may be congratulated on the satisfactory way in which he has performed its duties.

Two Years Behind the Plow; or, The Experience of a Pennsylvania Farm-Boy. Philadelphia: Claxton, Remsen & Haffelfinger.

IN this round, unvarnished tale, the author tells all he knows about farming, including his knowledge of the Friends. The book has no reason for being, that we can discern. It is neither instructive nor interesting.

A Woman's Thoughts About Women. By Miss MULOCK. Philadelphia: T. B. Peterson & Bros.

THIS book is composed of essays that appeared in whole or in part in Chamber's Journal. They include subjects of interest to all women, conveyed in a style that is easy, pleasant, instructive.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

IN MEMORIAM.

Our Lost Darling.

HECTOR BERTRAM.

THERE'S a gloom about the fireside,
All is chill to-night:
God recalled the little darling
And we miss the light.
In the spring she came unto us—
Lingered here a while;
Then the angels came and took her,
Robbed us of her smile.

* * * * * * * * *

Often-times we wonder, vaguely,
Does our darling know
That across the shadowy distance,
All our eager longings go?
Does her heart e'er think of "Papa?"
Does she e'er regret?
Or do babes, so young translated,
All of earth forget?

God selects the choicest blossoms
For His home above,
And He glorifies the children
With a father's love.
He, allwise, knows which is safest;
We must not rebel,
Though He calls our richest treasures,
Yet we know "'tis well."

GIRLS AND THEIR "BEAUX."

MARY A. E. WAGER-FISHER.

I HAVE a true story to narrate to the girls—to such of them as accept association with young men whose antecedents they know nothing about. In European countries a history of this sort would be almost an impossibility, owing to the social laws that there govern the intercourse of young men and maidens. In this country,

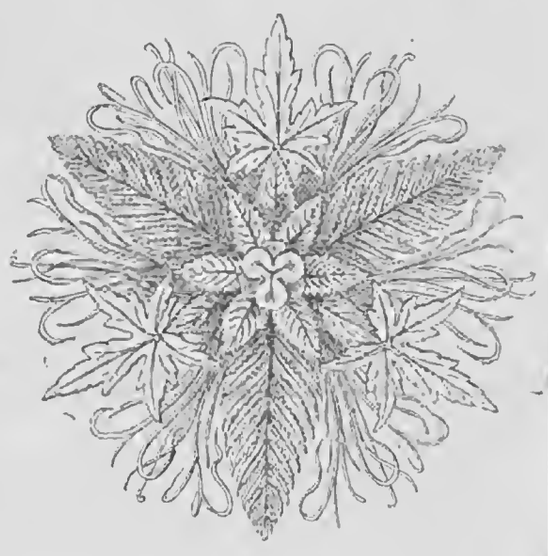

FIG. 1.

where the license of society permits complete liberty of action in regard to such intercourse, many indiscretions are indulged in that result, at times, in very poignant and heart-breaking sorrow.

A young man—good looking, gallant, pleasant, intelligent—comes into the neighborhood. He makes himself agreeable to the girls, and in a fortnight, or month's time, they accept him as escort to ball, party, "night meetings," singing schools, lectures, etc., and this without having any absolute knowledge of who, and what, he is. He has been introduced as Mr. So-and-So, with which vague passport he makes his way into general society and into the sanctity of private houses. But the story is better than any remarks on the subject can be. Every word of it is but too sadly true:

A few summers ago, a young man, apparently a tourist, alighted at the most aristocratic hotel in the beautiful village of I——, in Central New York. While lounging on the front piazza, his attention was arrested by a very pretty young woman whose daily walk led her past the hotel. He inquired who she was, and in a short time had learned from some gossipy co-lounger, that she was ALICE KENT, that her parents were of the highest respectability in the town, and that they had relations living at a certain place in New England. As it happened, the young man knew something about these relations, his own place of nativity having been near their neighborhood.

He had no acquaintances in I——, but being determined to make the acquaintance of Miss KENT, he resolved to introduce himself by forging a letter of introduction to her family from one of the New England relations. This done, he presented himself at Mr. KENT's residence, delivered his letter of introduction, told a plausible story concerning his business at I——, and was received with the courtesy that is usually accorded pleasant people bearing similar credentials. His attentions to ALICE soon became very marked—so much so, as to excite the interest of her parents, who at various times felt inclined to write to their Massachusetts friends for further particulars regarding the young man to whom they had given the introductory letter, but always neglecting so to do. Meantime, ALICE and the young man walked, talked, and rode together, their rides frequently extending to an hour as late as ten o'clock in the evening.

One day, a few weeks after the beginning of this acquaintance, Mr. KENT returned home with the announcement that the young man had suddenly left the village without paying his hotel livery, and other bills; that a telegram and an officer had been sent after him; that an examination of the contents of the trunks left behind him had aroused suspicions of a grave character, etc.

The effect of this news upon ALICE was most alarming. She said little, but it was plainly evident that she suffered intensely. The young man was arrested, brought back to I——, a description and account of him sent to New England where the relatives of ALICE lived, and the information obtained that he had a wife living there, that he was an untrustworthy character, and that his letter of introduction was a forged one.

ALICE's parents, believing that nothing more serious than a "flirtation" and perhaps sincere love-making had transpired between him and their daughter, expressed themselves as being glad "that it was no worse:" when the girl surprised them by sinking on the floor at her father's feet, crying, "Oh, father, it could be no worse!" She then confessed that she had been privately married to the young man a few days before upon one of their long drives in the country, and detailed the persuasions and means he used for wishing that the marriage be kept secret.

The anger of the parents equalled the anguish of their daughter, and a criminal prosecution for bigamy was begun against the young man. It was a useless thing to do, so far as ALICE was concerned, for a power higher than earthly edicts was surely lifting her beyond the terrible result of her folly. She was dying of a broken heart.

The trial resulted in establishing the guilt of the adventurer, and he was sentenced to State Prison for five years. After sentence was pronounced upon him, he was taken, at the earnest request of ALICE, to see her. The jailor led him into her room, where she lay dying, and kept his eye upon the prisoner, as ALICE pleaded with him for the sake of the love she had given him, to reform his life. When she put her thin hands on his and told him what she had suffered because of him—how truly she had loved him—that she was soon to die—that her parents were heart-broken—it was enough to soften the hardest heart. But he stood unmoved, and when the jailor led him away, he sneeringly laughed and made some light remark about the ease with which girls were won. Three days later he was taken, handcuffed, to Auburn, and on the same day the body of ALICE KENT was carried to the graveyard.

What need to add more? No girl wishes to learn discretion through a self-experience like that which broke the heart of ALICE KING. But are you all sufficiently careful of your associations? A suspicious manner and a haughty bearing are neither necessary nor pleasing; one may be civil and polite without intimacy. But it is far better to decline the social advances of persons whom you do not know, than to receive them and afterwards have cause to blush because of your acquaintance with them. Rather than be too easily approached, it would be better to be like the late Judge NICHOLAS of Kentucky.

"Let me make you acquainted with Judge NICHOLAS," said a gentleman to a friend, himself a judge, as NICHOLAS entered the Bank of Kentucky one morning.

"It can't be done," responded the friend, "it has been tried several times."

With him, introduction did not introduce—a very good motto for young ladies who meet with indiscriminate society.

HOME DECORATIONS, ETC.

WE present, at Figure 1, a very pretty design in beech and maple leaves, and grasses, for ornamenting a table-top. For the information of those who have never tried this kind of decoration, the following instructions are given:

Paint the wood black, or very dark-brown, let it dry, and rub it smoothly with pumice; next varnish. While the varnish is still wet, lay your ferns, leaves, and grasses down upon it, following design given. A pin's point will aid you to move and place the fragile stems which will not bear much handling and must lie perfectly flat. As soon as the pattern is in place, varnish again. Thus enclosed in a double wall of varnish the ferns and grasses will keep their places perfectly.

FIG. 2.

FIGURE 2 is a braided initial for a pillow-sham. It is here shown very much reduced in size. Any RURAL ladies who like this style of design may have the same stamped, free of charge, by addressing me. Be careful to state size required.

Long gloves ornamented with embroidery, are at present fashionable for evening wear. They are of white or pale shades, pink or cream kid, embroidered in colors to correspond with the trimmings on the dress.

These gloves, however, if bought already embroidered are costly, so that ladies frequently

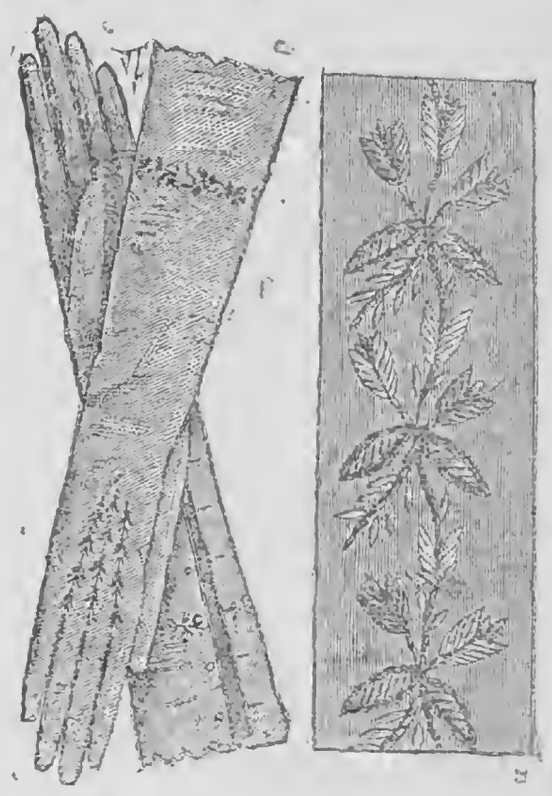

FIG. 3. FIG. 4.

purchase plain gloves, and embroider them with French embroidery silk. The design shown at 4 is suitable for embroidering gloves.

USEFULNESS OF OLD MAIDS.

CLAUDE RAYNOR.

PEOPLE who exist in this latter half of the nineteenth century, are wont to discuss the question of the availability of ancient maidens for useful purposes, with the most absurd gravity; as if celibacy might, of itself, unfit one for the ordinary duties of life, and as if marriage were the only gate to the land of usefulness. But, strange as it may seem, it has been proved that old maids can do a great many things very well. It is evident to all close observers, that woman has been known to cook, sweep, scrub—in short, to perform all the labors and duties of a housekeeper, and that in the best manner, without ever having visited the matrimonial altar. It has also been clearly shown that she can be a first-class milliner, tailor, saleswoman, teacher, book-keeper, telegraph-operator and shown has herself efficient in many other ways that "time would fail me to tell of," without ever saying over, even to herself in a whisper, the marriage formula.

That old maids can win a royal position in literature and art, there is *more* than a hint in the names of ALICE and PHOEBE CARY, FREDERIKA BREMER, CHARLOTTE CUSHMAN, ROSA BONHEUR, HARRIET HOSMER, and very many others.

And yet there are those who, in the face of the record that single women have made in all the past, will ever and anon raise the solemn inquiry, "Is there any place for old maids in the social economy?" Is there any way to utilize them?" They will ask this with the most ridiculous earnestness, as if the old maid were a new kind of bug or animal, discovered very recently, and with haunts and habits wholly unknown.

But perhaps, with them, the question is whether old maids will have a usefulness peculiar to themselves. In other words, do they subserve any purpose which, as married women, they could not?

The case seems a little doubtful, but let us see. There has been much written about the self-sacrificing old maid who yields herself up a willing victim to the demands of numerous brothers, sisters and their little ones, and so manages to annul her natural worthlessness. Well, some of them do that way, and some of them do not, and besides a widowed sister or aunt might do just as effective service in the martyr enterprise, so that does not prove anything.

I can think of but two branches of business of which old maids have the monopoly, and it takes two kinds of spinsters to attend to those. The hatchet-faced, vinegary piece of antiquity may be useful in driving weak, timid souls into matrimony from a fear of being, some day, like unto her; while the gentle, sweet-faced, serene specimens serve to encourage others to be true to their own womanly instincts and walk bravely through a solitary life, rather than do violence to their natures by a marriage based upon anything else than pure affection.

I know of no other mission peculiar to old maids; but as there is such abundant testimony to the variety and importance of their work, it seems rather unfair to ask that they do everything that other women do, and a very great deal besides, to prove their right to "life, liberty, and the pursuit of happiness." And when we ponder the fact that old maids have even trained up children to a maturity of honor and usefulness, it does seriously suggest the idea of an essay or two upon the "usefulness of married women, as such."

L, S.—We cannot recommend the cosmetic you mention. Most preparations for "improving the complexion" are to be shunned, as they contain poisons which in not a few instances have produced paralysis in the face and arms of those who have used them.

The Querist.

ANSWERS TO CORRESPONDENTS.

WILL Mrs. Kate S. Burr please send her address to the Literary Editor, at this office?

Mrs. M. E. Boardman.—My house plants are dying, and I find the dirt in the pots infested with worms, the product of a small fly. Can you tell me the cause and remedy?

ANS.—See the floricultural article by Mr. William Falconer last week.

C. K. C., Beloit, Wis.—Will the RURAL please tell me what it thinks of Edwin Alden's Advertising Agency, Cincinnati, Ohio? The said Alden sent me catalogue of the principal American newspapers, and claims that he inserts advertisements in any paper in the United States at publishers' lowest rates.

ANS.—Our transactions with Mr. Alden have extended over a term of years, and we have always found him to be exact, trustworthy, and obliging.

Subscriber.—If Russell & Co., jewelers, No. 37 Bond St., are not a good house, they are trying to swindle a great many people.

ANS.—It is not too much to say that if these fellows practice any of their swindling methods on readers of the RURAL NEW-YORKER, it will not be because of lack of ample warning on our part. We have on three occasions, given a history of this firm, and we can only repeat, that they should be rigorously shunned.

T. H. S., Va.—Will the RURAL please tell me (1) Where I can get Chufas for seed? I wish to give them a trial. (2) Also peas, to be plowed under in the fall. (3) Which is the best turnips for stock?

ANS.—(1 and 2). From R. H. Allen & Co. of this city, Whitman & Son, Pratt St., Baltimore, or through any dealer in agricultural seeds and implements in the next town to you. (3). The Swedish turnip or ruta-baga, containing less moisture than the other varieties, is more nutritious, but is better for fattening than for producing milk. In England, twenty tons of swedes are considered equal in nutritious value to twenty-five tons of the common yellow sort, or thirty tons of the white variety. On the whole, there is no doubt but this is the best turnip for stock.

Bleaching Broom Corn.

A. S. H.—How is broom corn bleached? Is it done before or after the broom is made? How am I to ascertain what quantity to take to make it look right?

ANS.—Broom corn is bleached after it has been properly dried, but before the brooms are made. It is only necessary to bleach the wrappers. In a small way, this can be done in a hogshead or a dry-goods box, capable of holding, say, enough for forty brooms. Perforate a few holes in the bottom, place it over a depression in the earth containing an iron basin in which is half a pound of sulphur for each bleaching. This can be readily melted by the application of a hot iron or otherwise. The corn should be wet before bleaching, and spread out or hung up so as to expose a large surface, and the receptacle should be covered with a piece of old carpet, to confine the fumes of the burning sulphur.

Remedies for Lice on Cattle.

P., Wayne Co., Pa.—Will the RURAL please inform me of some safe and effectual method for destroying lice on cattle?

ANS.—Lice on cattle are the result, in nearly every case, of a low condition brought on by insufficient food, and the surest remedy, therefore, is to keep the animal well fed, for no application will long protect an emaciated beast. Mercurial ointments, generally recommended as a remedy, are dangerous, and should be avoided by all except those who are very careful. The best method of destroying the vermin is by rubbing their hides well with an ointment composed of cayenne pepper or Scotch snuff, mixed with hog's lard, or any kind of oil, or soft grease. Carbolic acid soaps and compounds are also very safe and effective remedies for these pests and other animal parasites.

What a Creamery is.

A Novice.—Will the RURAL please tell me what is meant by a creamery?

ANS.—A creamery, in the usual acceptation of the word, is an institution to which the farmers of any neighborhood send their milk to be manufactured into butter, just as others send theirs to cheese factories, to be made into cheese. It is owned either by one person who manufactures the product for a stipulated consideration, or by an association of the patrons who appoint a manager or superintendent to conduct its business. The milk is brought either once or twice a day. Some creameries also make skim cheese, while others feed the skim milk and buttermilk to calves and swine. In the former case, it makes little difference whether the milk is brought once or twice a day, as any loss of butter resulting from the delay is compensated for by the extra richness of the skimmed milk, and consequently of the cheese manufactured therefrom; in the latter case, however, it is usually considered advisable that the milk should be brought every morning and evening to insure the greatest possible amount of butter.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY JAN. 7TH.

M. R. B.—A. C. W.—J. H.—J. B. L.—F. W. T.—W. J. F.—G. G.—S. B.—Clinton.—T. G. L.—E. M. S.—F. J., we will try to do so.—"Ermengarde."—I. P. R.—L. R.—J. W. L.—F. E. W.—A. L. J.—"Seymour."—"A RURAL Reader."—J. A. A.—C. H. T.—K. S. B.—T. T. L. thanks.—G. G.—T. B. M.—M. B. P.—J. W. K.—A. M.—M. B. B.—L. D. W.—J. Le R. N.—B. P. M., thanks—L. R. R.—S. B. P.—N. R.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, January 1st., 1878. — The President's silver wedding was celebrated yesterday. So was Mrs. Hayes'! An embargo of mud out West, roads impassible except on horseback.

The Czarowich will remain in Bulgaria, with Todleben in actual chief command. Russia, while ready to listen to direct proposals for peace, doesn't think an intermediary necessary. There are 25,000 sick Russians in Bulgaria.

England has gone to war with the Caffres in southern Africa. There is much danger that the trouble will spread—perhaps as far as Russia. Spain has broken off all relations with the late queen who will never be allowed to return to that country, cause—her recent advances to Don Carlos,

WEDNESDAY, Jan. 2.—The two Houses of the New York Legislature organized yesterday—Husted, Speaker; Vrooman, Clerk. Strong opposition manifested to resumption of specie payment; farmers and lawyers less in number than usual; merchants more.

A junction has been made before Erzeroum of the forces under Gens. Melikoff and Tergukassoff. Russian officers in Bulgaria have orders to receive proposals for an armistice if sent in direct by the Turks. More engines, bridges and cannon ordered by Russia from Germany. Gambetta has gone to Rome to hold consultation with the Italian Government.

THURSDAY January 3.—Two tons of nitro-glycerine exploded at Neegaunee, Mich., while being loaded on a railroad car. Loss seven lives and $2,000. Ex-Governor Bullock of Ga. is on trial at Atlanta on charge of being a cheat, a swindler and a felon. It is supposed that there are some millions belonging to the late Confederacy deposited in the Bank of England, and Uncle Samuel is "after them."

The English vice-consul in Crete has been attacked by a fanatical Turkish mob, and there is talk of England seizing upon the island. A Russian force has crossed the Balkans at Etropol Pass. Suleiman Pasha has fixed his headquarters at Ichtiman, so as to bar all advance from the direction of Sofia. It is probable that Turkey will soon open direct negotiations for peace with Russia. After two cabinet councils the English ministry have resolved to insist on a voice in the settlement of the terms for peace. The British peace party are unusually active. The brave Roumanians are uneasy at the rumor that Russia will reclaim a strip of Bessarabea she was forced to cede at the close of the Crimean war. The King of Italy speaks forcibly on the necessity of having the army in good trim in view of possible complications.

FRIDAY, Jan. 4.—It is probable that some amicable arrangement will be made to heal the split in the Republican party. Several swindling bank directors have been indicted at Hartford, Conn.

Mouktar Pasha has arrived at Constantinople. Gen. Gourkha fought a severe battle at Tashesan on the 31st., losing 700 men, but forcing the Turks to retreat. He is following them closely to Sofia. Several other unimportant engagements.

SATURDAY, January 5.—There has been a severe storm, several shipwrecks and loss of life along the New England coast. The President says that on the whole he is quite content with the results of his policy, and will make no change in his administration. Collector Slade of El Paso reports that the San Elizario troubles were nearly altogether due to the conduct of Howard & Co.

Only 40,000 Turks have retreated across the Balkans; 70,000 more remain distributed among the fortresses of the quadrilateral. They will not attempt to defend Sofia. Erzeroum is now fully invested. Russia talks soothingly to England, invites a frank talk about difficulties, but declines mediation. England insists that she shall have a voice in settling the terms of peace. On this all the English Ministers are in full accord. Greece, too, looking to an acquisition of territory claims a voice in the settlement; but Turkey protests. Several Fenians have been released from prison. There is talk of holding the Conclave for the election of a new Pope at Malta, on the death of Pius IX.

SUNDAY, JAN. 6.—Chandler's charge against the President will probably be investigated. There is trouble between Diaz and our minister, Foster. Great destruction of property along the coast.

Russian reinforcements are constantly crossing the Danube, as if intended to oppose English forces in case of war, or else besiege the quadrilateral, Rustchuk, Silestria, Shumla and Rasgrad. TALK about peace. Gambetta's paper in Paris demands the removal of the present corps commanders of the army on the plea that they were unfavorable to the republic during the recent crisis. There is likely to be war between China and Siam.

MONDAY, Jan. 7.—The entrance of the Ellangowan Colliery, midway between Mahanoy City and Shenandoah, Pa., has been destroyed by fire, loss nearly $100,000, and compulsory idleness for about 300 hands. Pres. Hayes will make no more nominations for Custom-house officers at this city; so ends *that* fight between him and the Republican leaders. Commissioner Hoyt proposes to organize the best men among the Indians into a police force.

Gen. Radetsky is reported to have crossed the Balkans through the Shipka Pass, the Turks having previously abandoned their positions through extreme cold. Sofia was occupied on the 3d inst. by the Russians who only lost 30 men in a preliminary skirmish. Gen. Gourkha has had some fierce fighting at Bogrov, south of the Balkans. Turks repulsed leaving 1,000 dead. Muscovite loss 200. Both armies, but especially the Turks, are suffering terribly from cold, which is killing large numbers on both sides. France has been assured by England that she has no designs upon Egypt. The latter country has sent 5,000 more troops to Constantinople. Russia insists that Turkey must apply to her direct for terms of armistice or peace. The Turkish cabinet are at loggerheads; and the Grand Vizier threatens to resign. Germany and Austria have vetoed the opening of the Dardanelles to Russia only, hence the latter has abandoned the idea altogether. The king of Italy is dangerously sick. Gen. Grant is in Egypt.

HOME NEWS PARAGRAPHS.

In Waco, Tex., pecans sell at $2 per bushel.

The total State debt of Alabama is $9,705,676, and the interest is over $264,000.

"The Northwestern Traveling Men's Association" has 1051 members.

Nebraska raised the past year 25,500,000 bushels of corn and 170,500 hogs.

Song of the apiarist: "Let it ever so humble-bee there is no place like home."

An earthquake made its very unwelcome New Year's call on Virginia on the 2d inst.

The yield of gold and silver in the States and Territories during the year 1877 was $96,500,000.

Kentucky boasts another mammoth cave as big as the one already famous. It is in Wythe County.

This is the age of mire in the prairie regions of the West. But then mirages are not uncommon in that section.

Great Britain produces annually 160,000,000 pounds of wool, besides importing 360,903,270 pounds in addition.

Garland, Colorado, must be a nice, quiet town. It rang out the old year with four murders and rang in the new with one.

New York has paid off her entire bounty debt, amounting to $43,270,337.47, over ten millions of which were paid the past year.

The deaths in this city last year numbered 36,194, against 29,152 in the previous year. The returns show only 25,569 births.

North Carolina contains 1,025 distilleries, the largest of any State in the Union. Kentucky comes next with 754 distilleries.

The number of cattle in Great Britain has fallen off from 10,291,000 in 1874 to 9,734,000, and that of sheep from 34,822,000 to 32,220,000.

A Chicago man who attempted to eat forty quail in forty days, quailed on the sixteenth day and acknowledged himself a goose.

The champion corn shucker this time is from Dodge County, Nebraska, 2,300 bushels; time thirty-three days, and his name is William Dale.

The seventh annual meeting of the Wisconsin Dairymen's Association will be held at Whitewater on Wednesday and Thursday, Jan. 23 and 24th.

It required nearly 15,000 pounds of poultry and 5,000 pounds of oysters to feed the inmates of the public institutions of New York City on Christmas day.

A Maryland peach-grower is said to have shipped twenty barrels of peach kernels to Dayton, Ohio, recently, to be used for "chemical purposes."

The German Savings Bank of Lafayette, Ind., was one of the institutions that did not receive on New Year's Day. It is gone, but, unfortunately, not forgotten.

The highest price ever paid for a thoroughbred yearling is $30,000, Lord Lonsdale having recently given that sum for a brother to Doncaster, the Derby winner of 1875.

The gifts to our Government of articles from the Centennial Exhibition are estimated to be worth $1,000,000, and Congress is asked to provide a new building for their display.

Egypt has 765 non-navigable canals used solely for irrigation, and sixty-two canals used both for irrigation and traffic. Of these canals over 100 have been opened during the reign of the Khedive.

They have got a cotton compress in Texarkana that reduces a bale of cotton weighing four hundred and forty pounds, to a cubic foot in space. The pressure is two thousand pounds.

The New York Assembly of 1878 will contain 39 farmers, 24 lawyers, seven clerks, five journalists, four physicians, and an aggregate of 34 merchants, mechanics and business men, and 15 unclassified.

The imports of Great Britain for the first eleven months of 1877 show an increase of £16,756,000, or 4.9 per centum over those of the same period in 1876, while her exports show a decrease of £2,535,000, or 1.4 per centum.

During December 145 new publications were started, of which 101 were weeklies and 29 monthlies. During the same period the suspension of 51 publications was reported, 40 of them being weeklies. The new dailies number 13.

A steamer plying between San Francisco and Stockton keeps an eccentric and useful sheep on board. The sheep is trained to go out on a gangplank at a landing when a flock is to be loaded, to show that the approach is safe, and to act as a pilot.

The Chief of the Bureau of Statistics furnishes the following statement:—The United States exported in 1790, 144,734 pounds cheese; in 1800, 913,843; in 1830, 638,241; in 1840, 723,217; in 1850, 13,020,817; in 1860, 15,515,799; in 1870, 57,296,327; in 1876, 97,676,264, while in 1877, the total up to a date in December was 107,364,666 pounds. The total amount of cheese exported from this country from 1790 to 1877, both inclusive, was 1,262,952,571 pounds, or over 630,000 tons.

FOREIGN NOTES.

France has had ninety-four cabinet ministers since 1870.

In Great Britain there are 316 packs of hounds, or about 16,000 dogs in all.

Two Breweries, Bass's and Allsop's, in Burton-on-Trent, England, consume as much water daily as would supply a town of 45,000 inhabitants.

A Parliamentary document exhibits the fact of an increase in the exportation of literature. This year the quantity was 77,623 cwts., and the value £826,956, against £799,435 last year.

In Dublin, Ireland, market last month, butter sold as follows:—Firsts at twenty-eight cents per pound; seconds, twenty-six; thirds, twenty-four; fourths, twenty-two; inferior, eighteen to twenty-one.

Japan has 3,691 post offices, which distributed last year 24,000,000 letters and postal-cards and 5,000,000 papers. Postal-cards, stamped wrappers, money orders and savings banks are all included in the system.

Cooking by means of solar rays has been tried successfully at Bombay, India, and an apparatus has been contrived to cook chops and steaks in the open air as well and expeditiously as over an ordinary fire.

With regard to swine the United States head the roll of all nations with 671 per thousand of the population, followed by Spain Denmark, Austro-Hungary, Portugal, Germany, France, Russia, Great Britain, Sweden, Norway and Greece, in the order named.

An official document has been issued in England, showing an increase in the value of beer and ale exported this year compared with the preceding year. The value last year was £1,743,228, and this year £1,750,914. Australia took £453,884 worth of beer and ale.

The number of goats in Norway in 1875 was 323,364 or 179 per thousand inhabitants, as against 913 per thousand of the population in Greece, 279 in Spain, 233 in Portugal, 148 in Switzerland, 63 in Italy, 57 in Germany, 50 in France, 43 in Austro-Hungary, 27 in Sweden, and 8 in Great Britain.

The number of horses in Norway in 1875 was 151,903. There are consequently but 84 horses to every thousand inhabitants as against 227 in the United States, 225 in Russia, 176 in Denmark, 103 in Sweden, 98 in Austro-Hungary, 85 in Great Britain and Ireland, 82 in Germany, and 76 in France. The countries on the Mediterranean are still lower on the list, owing to their general employment of mules, asses, and draught oxen.

The value of the grain and flour imported into France in the first nine months of this year, was $26,200,000, as compared with $34,000,000 in the corresponding period of 1876. On the other hand, the value of the grain and flour exported from France, in the first nine months of this year, was $20,400,000, as compared with $19,200,000 in the corresponding period of 1876. The value of the live stock exported during the same period this year was $5,400,000, as compared with $6,400,000 in 1876; of eggs, in nine months of 1877, $6,240,000, as against $7,800,000 in the corresponding period of 1876.

The number of cattle in Norway in 1875 was 1,016,595, being 564 for every thousand of the population, a proportion exceeded only in Denmark and in the United States, where it is 687 and 651 respectively. Lower in the scale come Sweden with 482, Holland with 395, Switzerland with 388, Germany with 384, Austro-Hungary with 354, France with 325, Russia with 315, and Great Britian with 300 cattle per thousand inhabitants.

Norway had 1,636,806 head of sheep in 1875. The proportion per thousand of the population being therefore, 936, while it is 1,348 in Spain, 1,022 in Denmark, and 969 in England. Among countries where the proportion is less than in Norway, Greece has 818, the United States 808, France, 694, Portugal 676, Russia 647, Germany 609, Austro-Hungary 560, Sweeden 361, and Belgium 112,

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THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Jan. 5, 1878

BEANS AND PEAS.—Receipts of beans past week, 9,150 bush.; same time last week, 8,432. Exports, 616 bbls.; since Jan. 1st, 616 bbls. Medium beans continue dull, and prices are drooping—$1 85 is now extreme for choice. Exportation has fallen off in marrows, and few new orders are expected. Prime, free on board vessels, $2.22½, which is lower. Pea beans quiet—must be extra to bring $2. White kidneys not moving. Red steady; buyers, however, seem supplied for the moment. Black or Turtle-soup beans, dull and easy. Canadian peas unchanged.

We quote:—Beans, medium choice, $1.85@1.85; other, $1.60@1.75; marrows, choice, $2.22@2.22½; other, $2.00@2.10; pea, $1.75@2.00. White kidney, choice, $2.00@2.25; other, $2.10@2.25; red, choice, $2,50; extra, $2 50; other, $2 25@2.35. Turtle soup beans, $1.75. Limas, $3.00. Green peas, $1.30@1. $1.35. Southern Black-Eye peas, per 2-bush. bag, $3.25. Canadian field peas in bulk and bond, 86c. for prime.

BEESWAX.—Trade is slow, and supplies fair, with prices easy. Sales at 27½@28c. for Western and Southern.

BROOM CORN.—Offerings are large, and demand is good.

Green brush at 6@7c.; green hurl, 6@7e.: medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Receipts for the week, 15,050 pkgs. The market for State good to fancy grades, is firm; but trade is not quick and smooth, as holders seem aiming to force strong figures. This they are warranted in doing, as some of the best lines now coming forward have been bought high. Perhaps it would be better if even a slight concession were made to jobbers, as distributors want stock, but rather hang back when an upward tone is given to late prices. Holders, however, contend that a good many pet invoices now arriving cannot be replaced later on, and they will take the chances of their views becoming established. The general volume of local trade is better, being more winter-like, and a fair Eastern demand helps to enliven the market and reduce stock. Shippers have taken a few parcels of State; but what little is doing for export may soon be attracted to Western, as the latter quality is improving with heavier receipts. Western creamery has gone up to 3½c. for gilt-edged. Rolls are in fair demand

Comparative receipts and exports from June 1st to date:

	Receipts. pkgs.	Exports. firks.
June 1, '78	803 839	136,137
June 1, '77	841,202	95,142
June 1, '76	856 560	26,219
June 1, '75	662,441	30,324
June 1, '74	689,761	23,624

We quote State fancy pulls 28@30c.; other, 25@30c.; creamery, good to choice, 25@33c.; half tubs, selected 27 28c.; extra, 29@32c.; other, 21@25c.; Fall Welsh 28@28c.; Welsh tubs, prime, 27@29c.; other, 12 22c.; full dairies, fine, 26@27c.; common, 17@18c.; firkins 23@24c.; poor State, 12@18c.; Western creamery, good to choice, 35@37c.; poor to good 25@30c.; dairy tubs, best, 18@20c.; good, 13 20c.; other, 10@13c.; factory tubs, good to best, 13@21c.; common, 13@15c.; Western firkins, good to best, 10@12c.; other, 8@13c.; rolls, 12@18c.; grease, 6½@7c.

Exports past week, 809 pkgs.

CHEESE.—Exports for the week have been 31,600 boxes. This movement was much freer than expected about the holiday period, and prices have hardened. Some of the fancy lots have sold at 13½c, lines of several thousand boxes reaching that price, and from this quotation to 13@13½c. for average lots of fancy. The prices are:

Fancy factories, 13 13¾c.; good and prime, 12½@12¾c.; fair lots, 11¾@11¾c.; poor, 8@10c.: 7@10c., skimmed. Farm dairy, 11¾@12½c. for good to prime: 10@10¾c. for fair lots: 7@10c. for skimmed; Western factory, cheddar, 12¾@13c. for fine 10¾@11¾c. for good; 5@8c. for poor.

Receipts for the week, 20,450 boxes.

Liverpool cable, 63s. 6d. Gold closes 102.

The export demand is fully up to the expectation of the season. Fancy late makes are becoming scarce, and 13½c. is now quoted.

A recent estimation of stocks is given as follows by the Producers' Price Current: New York, 218,032 boxes; Philadelphia, 33,000 do.; Boston, 22,000 do.; London, 45,000 do.; Liverpool, 87,000 do.; showing no important variation compared with this date last year.

COMPARATIVE RECEIPTS AND EXPORTS FROM JUNE 1ST.

	Receipts, pkgs.	Exports, lbs.
June 1, '77 to Jan. 1, '78	2,159,799	89,460,618
June 1, '76 to Jan. 1, '77	1,855,318	73,426,279
June 1, '75 to Jan. 1, '76	2,131,548	79,240,404
June 1, '74 to Jan. 1, '75	1,811,612	81,337,155
June 1, '73 to Jan. 1, '74	1,869,680	77,642,179

COTTON.—There has been a more active export movement, with for future deliveries prices fluctuating sharply.

Latest prices are for January, 11.29@11.30c.; February. 11.42@11.43c.; March, 11.56@11.57c.; April. 11.68@11.69c.; May, 11.81@11.82c.; June, 11.93@11.94c.; July, 12@12.01.; August, 12.07@11.08c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9¾	9¾
Strict ordinary	10 1-16	10 1-16	10 3-16	10 3-16
Good ordinary	10 5-16	10 5-16	10 7-16	10 7-16
Strict good do	10¾	10¾	10¾	10¾
Low middling	11	11	11⅛	11⅛
Strict low middling	11⅛	11⅛	11⅛	11⅛
Middling	11 5-16	11 5-16	11 6-16	11 7-16
Good middling	11 9-16	11 11-16	11 11-16	11 11-16
Strict good middling	11 13-16	11 13-16	11 15-16	11 15-16
Middling fair	12¾	12¾	12¾	12¾
Fair	12¾	12¾	13	13

Stained.

Good ordinary, 9 7-16c.; Strict ordinary, 10 1-16c.; Low middling, 10 5-16c.; Middling, 10 11-16c.

DRIED FRUITS.—Apples have a little freer inquiry and rule steady in price. Peaches are dull and unsettled. Blackberries and pitted cherries held firmly.

Apples—State quarters, old, 5¾@6¼c.; new, 6¼@6½c.; Western quarters, old, 5½@6c.; new. 6@6½c.; Southern, new, prime sliced, 6¼@7c.; fair to good, 5c. Peaches—Peeled, new, 11@12c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3@4¼c. Pitted cherries, 16@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 10 16c.

EGGS.—Receipts for the week, 4,150 barrels. The receipts are large for the season, and immense for the rate of demand that exists. There seems to be no want that will induce buyers to take stock ahead; and then if there was, Western would miss some of it, owing to the pernicious practice of mixing old with fresh. When Western are guaranteed fresh, they sell as high as Southern. Limed eggs are dull; many lots are injudiciously restricted from placement by owners' limited prices.

Near points, 25@26c.; State and Pennsylvania, 23@24c.; Canadian 20@23c.; Western, best, 23c½.; other, 20@22c.; Southern, 20@23½c.; Limed, State, 17@18½c.; Canada, 16@18c.; Western, 15@17c.

FEATHERS.—Live white prime Western geese, 45@47c., mixed, 30@40c.

FISH.—Is in light receipt and higher. Sales of 40 pounds ave. $21.00@22,00; 50 pounds ave. $20@21; 80 pounds ave., $20@21; 100 pounds, $21@22; and rye at 18@20.

FLOUR.—The business since the first of the year has been very light, while receipts have been large and the position of wheat values unsatisfactory; consequently, there is a slight decline in prices.

Latest prices are $4.75@5.25 for poor to fancy superfine State; $5.35@5.60 for common to fair extra do. $5.60@6 00 for good to choice do.; $4.75@5.25 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.30@5.60 for shipping extra do., the inside price for poor, and $5.70@6.00 for good to strictly fancy extra do.; common to choice white wheat extras, $5.85@7.25; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.65@7.25; round hoop Ohio at $5.40@5.75, and trade brands of do. at $5.80@7.00, the latter for choice; St. Louis, $5.60@6.35 for poor to fair extra and $6.35@7.80 for good to fancy, (with a few brands of very fancy quality quoted up to $8.25@8.50); Minnesota clear, $5.50@6.75; Minnesota "straight," common to fancy, at $6.25@7.75, and patent poor to very choice, $7.00@9.25, with a few fancy at $9.50@10; unsound stock at $3.00@6.50; city mill extra at $6 20@6.50 for fair to very choice for West Indies; do. for England $5.45@5.70; do. trade and family extras, $6.50@7.75; do. South American, $6.60@7.50; No. 2 at $4.00@4 25.

Buckwheat flour, $2.40 for common; fancy, $2.75.

Corn Meal is selling at $2.60@3.00 for yellow Western, and $3.25 for Brandywine.

FRESH FRUITS.—Exports apples past week, 1,769 bbls. Dealers are re-sorting tender varieties of apples. Fine winter sorts that have stood the trying weather, are held very firm; poor or damaged stock is offered low, and sometimes the buyer makes the prices. Cranberries are quiet, as retailers stocked up pretty freely during the holidays. Grapes begin to run poor. Florida oranges have lost their special demand. Light receipts of peanuts and fair demand. Hickory nuts dull.

We quote Baldwins, $3.50@3.75; Spitzenbergs, $4 00@4.50; Russets and Greenings, $3.25@3.75; prime sweet, $3.25@3.50; Seek-no-further, $3.75; Newtown pippins for export, $7@8; Lady apples, $8@15. Fine Grapes—Catawba, 5½@6½c.; soft berries, 2@4e.; Isabella 2@4c. Cranberries, bbls., $4@7.50; crate, choice, $2@2.25, good, $1.75; poor, $1 a 1.50. Peanuts, $1.45@1.50. Hickory nuts, 75c.@$1 bush. Texas pecans, 8@9e.

FURS AND SKINS.—Market quiet and nominal. There are no encouraging features here or abroad,

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and ylgs.	1 00@2 00	1 00@2 00
Florida deer skins.	15@ 18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@ 90	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₱ ℔	1 60@1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		40@ 45
striped		5@ 20
Wolf, mountain		1 50@2 00
prairie		50@ 60

GRAIN.—In wheat there has been very little done for export, and prices have declined.

Latest sales are of No. 2 red at $1 18@—ungraded red and amber State, $1 53@1 55; white, $1 56; No 1 Northwest spring, $1 40; No. 3 Chicago, $1 27½; No. 2 red for January at $1 32; No. 2 Milwaukee spring, $1 38. Rye is a trifle steadier; sales of Western at 74@7 c.; State at 75@77c. Barley, 85c for No. 1 Canada; 75@79c. for two-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 63¾@63¾c.; steamer mixed, February, 53@59c. Oats of New York extra white, at 41½c.; do. No. 1, January, 40c.; No. 2 white, 39½@40c.; mixed Western, 37½@39½c.; white Western, 38¾@40c.

HAY AND STRAW.—For prime hay there is not much inquiry, but shipping lots have a fair sale, and prices generally unchanged.

Bale hay, 65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 40@45c. for short rye, and 40@45c. for oat.

HIGHWINES are lower—$1.09.

HONEY.—The market looks blue for honey. There are sellers of white clover comb at 15c.; dark, 10@12c.

HOPS.—Exports for the week have been 2,500 bales: since Sept. 1, 43,700 bales, against the same period of the previous season, 20,700 bales. There is an active market, the demand being mainly for fair to low grades. Choice are getting scarce, and on urgent orders outside prices are excelled.

State choice to fancy, 11@13c.; do., low and fair, 5@7c.; Eastern, new, 8@12c.; Wisconsin, do, 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 21@22½c. for light, 22@24c. for middle, 22@24c. for heavy, 20@21½c. for good damaged.

OIL-CAKE.—Western is offered at $32.50 ₱ ton.

POULTRY AND GAME.—Live poultry seldom has so good a winter sale as at the moment. Arrivals of dressed have been undecided since New Year's, and some positive buyers have called pretty regularly upon city killers.

N. J. chickens, 9@10c.; fowls, 10@12e.; Turkeys, N.J., 11@13c.; Ducks, N. J., pair, 60@$1; Geese, N. J., $1.50@1.75; Western, $1.12@1.37.

Dressed poultry has sold up to 18c. for turkeys and 17c. for chickens, but as soon as there was any evidence of of fair supplies the market dropped to our annexed quotations, which are now full, although the weather is favorable. Large turkeys sell at a loss. The poultry trade is apt to have a lull after New Year's, but its light use in December may help our trade now, if prices are kept popular.

Fancy Phila. and N. J. turkeys, 15@16c.; good, 12@13c.; large, 10@11c.; chickens, choice, 15c.; good, 12@13c.; common, 9@10c.; ducks, choice, 15@16c.; other, 11@13c.; geese, fancy, 12c.; other, 8@11c.

Game has improved with the weather, and a light supply is bringing high prices. The unsold venison will not be interfered with, though its sale limit expired Jan. 1st. There were about 3,000 saddles and very few whole deer. Quail are above the reach of ordinary buyers.

Hares, pair, 25@35c. Black bear, 25c. carcass. Canvas-back ducks, $2.25@2.75; Red-heads, 75c.@$1; Mallard, 65@75c.; Teal, 40@50c.; common, 25@35c. Quail, prime, $2.75@3; soft, $1.50@2. Partridges, pair, 75@80c.; soft, 40@60c. Grouse, $1; soft, 75c. Rabbits, 30@35c. Hares, 20@40c.

PROVISIONS.—Hog products have been depressed and lower. Mess pork $12.40@12.50 for spot lots $12.40 for January, $12 50 for February and $12.50 for March. Bacon at 6¾@—c. for long clear and 6¾c. for short clear. Lard—Western steam at 8-85c. for spot, 7-95c. for January, 8c. for February, and 8.10c. for March. Tallow, 7 9-16c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $13@13.50; plain, $11@12.50; new packet, $14.50; family mess, $16@17; extra India mess, $25 25.50 for city brands; do. Philadelphia, $23 50@24.

SALT.—Ashton's at $2.50; Higgins', $2.50 and other sack lots at $1.10@1.15.

SEED.—Grass are lower: clover 8@8¾c. for prime, timothy, $1.37½@1.40.

TOBACCO.—There is a good export and fair home trade demand and prices strong.

VEGETABLES.—Exports of potatoes past week, 6,769 bbls. The market is quiet, and were it not for the improved weather, prices would be hardly supported. Many onions have become badly damaged; our rates are extreme for wholeo. Squash and cabbages have advanced. Among the arrivals are California cauliflowers, $6@10 per case of 30 or 10 heads; a few boxes of Bermuda tomatoes, $3 ₱ box; hot-house radishes, $3.50 ₱ 100 bunches; lettuce, 40@60c. ₱ doz., and cucumbers, $4.50@5 ₱ doz.

We quote Peach Blows, $1.75@2, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2.00@3.50; red, 3@4. Marrow squash, bbl., 75@87c.; Hubbard do., $1.25@1.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.00@1.25; white, $1.25@1.75. Pumpkins, ₱ 100, $4@7; extra, $8@8. Celery, doz., 75c.@$1.

WOOL.—The market has been quiet as yet this year but holders look for a revival of demand shortly and name stron prices.

Ohio, Pennsylvania and Virginia—XXX and picklock, 47@50c.; XX, 44@47c.; X, 42@45c; No. 1, 43@46e; No. 2, 38@40c.; common, 35@37c.; combing, 5?@54c.

New York, Michigan, Indiana and Wisconsin—XX, 39@42c.; X, 37@41c.; No. 1, 40@43c.; No. 2, 35@37; common, 34@36c.; combing, 50@54c.

Iowa, Vermont and Illinois—X and XX, 35@38c.; No. 1, 37@42c.; No. 2, 36c.; combing, 48@52c.

LIVE STOCK MARKETS.

NEW YORK, Jan. 7, 1878.

BEEVES.—Receipts for the week, 8,095 head; do. last week, 6,141 do. The market has been steadily active, the entire supply having been closed out before Saturday P. M. A few cars were due for the early trade and they will meet a bare market. Closing rates show a slight advance for the week. Extra quality steers sold at 11@11¼c.; medium to good, 8¾@9¾c.; prime, 10¼@10¾c. For export a number of prime fat steers were received.

The annual receipts of beeves, hogs and sheep at the Union Stock Yards at Chicago for the last twelve years, as published by the Live Stock Reporter, were as follows:

	Cattle.	Hogs.	Sheep.
1877	1,023,151	4,025,970	310,746
1876	1,036,745	4,160,906	364,035
1875	920,843	3,912,110	418,948
1874	843,906	4,258,379	338,155
1873	761,428	4,537,760	291,754
1872	684,075	3,252,623	310,211
1871	542,050	2,380,683	317,053
1870	532,964	1,603,158	349,855
1869	403,102	1,661,869	300,072
1868	324,521	1,706,782	270,875
1867	393,007	933,233	209,737

COWS AND CALVES.—Market quiet; only choice milkers selling. These, when up to the ideas of purchasers, bring $60@70 ₱ head.

VEAL CALVES.—Arrivals of prime live are light, and sales have been quick at 7½@8¼c. for good to choice. These include best N. J. and some river stock. Hog-dressed veal 10@12½c., with a fair sale at West Washington Market.

SHEEP AND LAMBS.—Receipts for the week, 14,366 head; last week, 10,952 do. Trade was moderate; some stock detained. This State sheep sold at 5¾c. ₱ ℔.; from that down to $4.80 ₱ 100. Lambs, 5¾@7c. Mixed sheep and lambs, 6¼c.

SWINE.—Receipts for the week, 26,100 head; do. last week, 29,203. No quotable sale at the close, as a train was behind time and no new prices obtainable. A late quotation was 4¼@4¾c.

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Reading for the Young.

TO MY OLD JACKKNIFE.

RUNE BLUFF.

O GLAD the day, my old Jackknife,
When first I owned you bright and new!
Your glittering beauties to display
Unto my chums I fairly flew.

My bosom swelled with boyish pride
As in my pocket's depths you lay,
I turned you o'er a thousand times,
While morn at school dragged slow away.

I whittled notches on my desk,
And carved my name upon the seat,
Hiding the scraps upon the floor
Till recess-time, beneath my feet.

I notched my hat all round the brim,
And strangely short my pencils grew,
My slate-frame had a warrior's look,
With scars and scratches not a few.

My dog's-eared books were smoothly trimmed,
Corners and edges, round and square;
I carved out "Minnie" on the door,
And watched to see her read it there.

But now, old knife, you're sadly changed,
Your blade is broken at the point,
Your youthful glitter all is gone,
Your back is nearly out of joint.

But though your useful days are past,
I'll keep you for the joy you gave,
And for your service you deserve
The rest and glory of the brave.

THE JANITOR'S VISIT.

BIVALVE.

THE janitor of Rocky Mount Academy is a queer fellow of eighteen; he is fond of playing his jokes and strategies on every inmate of the school—pupils and professors.

Without stopping to enumerate and speak of the many pranks that he has played, I will tell you about the one which has lately occurred.

It was Friday afternoon,—the day for "speaking" and compositions,—and the school had fairly entered into the exercises, when there appeared at the school-room door a gentleman, who, upon entering, said, "I thought I would drop in for a moment or two, to see how the school was getting along, and so forth, and, if it is agreeable, would like to hear the boys recite in the var'us exercises."

The visitor occupied a seat on the platform, and apparently conducted himself with much dignity. The boys eyed him with suspicion, as if he weren't an altogether *new* visitor, and gave vent to their merriment over his appearance in a general titter, which ran around the class.

All this the new comer did not seem to notice, but clearing his throat with a loud "Ahem!" pulling his ponderous overcoat around him, and unloosing his scarf (which garments, together with a false mustache, concealed his features), requested the teacher to be so obliging as to have a recitation in Algebra, putting on a sober look and with a wrinkled forehead.

The Professor obligingly consented, and designating one boy from each of the five long rows of seats to go to the blackboard, he gave out the problems, to the explanation of which the visitor seemingly gave good attention.

After other short exercises, the Professor called upon the visitor to "make a few remarks," and, amid the jollity of the pupils, in a manly tone, with stiff neck and head high, he began and ended thus:

"MY YOUNG FRIENDS AND MR. TEACHER:—I thought I would jist drop in, this afternoon, and see how you all was gittin' along. I have been pleased with the exercises in all the different branches of mathematics, and 'specially the Algebra. Allow me to say, my young friends (raising himself on his toes and coming down on his heels), that you should have the opportunity you improve; or, I mean to say, you should improve the property you have; or, any way, you know what I mean (general laughter and applause). I say—" but just then the stove-pipe fell, and all hands rushed to catch it.

The Professor told one of the boys to tell the janitor to come in at once; but, after much searching, nowhere could that individual be found, and when the boy, who was commissioned to find him, entered and so informed the Professor, the visitor capped the climax by remarking:

"Mr. BOOTH (the teacher), just lend me your ears for a moment: you've been thinking, all the time, that I was your friend SMART, from up the road, but you're mightily mistaken. I am nothing more nor less than DIDYMUS EGO GREEN, the janitor of this school." And so saying he dashed out of the door.

Mr. BOOTH, though entirely surprised, joined in the chorus of laughter that ensued, and regretted that he had stopped the regular recitations on account of that tricky janitor's entrance.

THE RAIN-DROP.

ONE summer morning a drop of rain hung on a thorn hedge. The sun was shining brilliantly overhead, and as it glittered on the globe of water, the water-crystal reflected back a stream of light. It was a borrowed splendor, like the brightness of the moon; and whilst it shone in its glory, the rain-drop thought, "Would I were always as brilliant as I am to-day! I should then be admired and prized as no one ever prizes or admires me now. I am so small that I am useless, and before an hour is past I shall have been dried up by the sunshine. If I could do some good, I should not so much mind losing my present splendor."

The rain-drop was right. Before an hour was past away, the sunshine had dried it from off the hedge, and changed it into a light vapor. All the day it floated through the air, unseen by human vision, wafted as it seemed upon the wings of some playful breeze, until towards the evening it found itself resting on the bosom of a dry and sandy plain. There was but little verdure in the place, and as far as the eye could reach, the country seemed parched and barren. As the vapor thought of its hard lot, it sighed and said, "At last I shall be altogether lost. I shall sink into the sand, and become as useless as the pebbles that lie upon the plain."

But in this it was mistaken. When the sun had set, and the surface of the little herbage there was in the desert had become cool, the moisture in the atmosphere began to condense upon all the vegitation it met with. Now it happened that a tiny plant, with downy leaves and sky-blue blossoms, grew near that spot. All day long it had been exposed to the blazing sunlight, and when the evening came its leaves hung down, and it seemed likely to die. Before long, the vapor of the rain-drop passed near it, and meeting with its cold stalks and tuft of flowers it was condensed, and became a number of little beads of dew. The flower drank the cooling water with delight, and began to recover its strength, and so was able to resist the heat of the following day. And more than this: the plant of the desert yielded a famous medicine; and no long time passed away before it was gathered by a herbalist, who dried it carefully, and sent it to a distant land to be used by the physicians in curing the diseased.

There it was the means of saving a great man's life. He was suffering from a dangerous illness, and it appeared as though all human aid would be of no avail. But some one recommended him a tincture made of the desert plant; and after he had taken it he began slowly but surely to recover his strength.

Thus, had it not been for the rain-drop, a valuable life would have been lost. Such power is often found to be associated with little things.

"I have no influence," says one; "if I had power, or wealth, or beauty, I might do good."

But remember all may help to do a little, even if they cannot do much. He who speaks a kind word may gain a soul, and he who saves "a soul from death" "shall hide a multitude of sins."

LETTERS FROM BOYS AND GIRLS.

A Co-Partnership Letter.

"DEAR COUSINS:—We, two girl chums, enjoy reading the Boys' and Girls' letters very much, and thought we should like to try writing to the RURAL for a novelty.

We girls having known each other all our lives; (there being but little difference in our ages), been in the same school, studied and sat together, have now decided to write a partnership letter to you. Now, introduction is ended, we will tell you about our club composed of eight girls, to which we belong.

This is called the E. E. C., or East End Club. The boys, in opposition to us, organized a club also, the title of which is the B. O. T. We girls never could fathom the meaning of this, it being too deep (?) for girls' wits.

We have two methods of initiating our members, the mysteries of which awful performance will be given at a later date. At one of our meetings when several of the girls were being let into the secret of our society, we suddenly heard a tapping at the window, and rushing to it we caught a glimpse of the Honorable (?) members of the B. O. T. hastily retreating behind the grape-vine arbor.

Now, dear cousins, we have told about our "club," and hope to tell more about our home amusements some other time. Also would like to read an account of yours.

We hope Mr. Editor will not consider this letter so long that it will be slipped into a corner of his waste-basket instead of his paper.

Indiana. KATIE & SUSIE.

About Two Little Girls.

DEAR UNCLE TRUE:—I would like to tell you something about two little girls who have been visiting at our house. Their names were LIZZIE and ANNIE. LIZZIE was all love and kindness, while ANNIE tried to make herself just as disagreeable as possible. Everything that was given her she would take in such a matter-of-course way that we all soon got tired of doing anything for her. You never heard "Thank you," come from her lips, in fact, all that did come from them, was haughtiness and pouting, but LIZZIE was not so. It was a pleasure for you to give and get all you could to amuse and please her; she was all smiles, and did all she could to return your kindness toward her. It is needless for me to say there was a great difference in bidding LIZZIE and ANNIE good-bye when they left us. LIZZIE left an impression with her memory never to be forgotten, while ANNIE no one cared to remember.

Oh, my dear cousins, let us all remember that the spirit of love and kindness will always gain for us friends and acquaintances, while that of haughtiness and pride will make for us enemies. Which shall we try and cherish?

A RURAL COUSIN.

Another Reformer.

I DID not think, of becoming one of the brigade of the RURAL, cousins till I read MADCAP MOLLIE'S letter. It inspired me with zeal to write.

Hurrah for Mollie! Go ahead, and may success attend your efforts. May every young Miss sign your pledge, and keep it. And soon there will be fewer dissipated young men. But, boys, don't let us permit the girls to lead us. While they are getting signers to their pledge, let us get signers to a pledge that we will not go with any girl, who laces, or,

Who ought to wear shoes number four,
Yet tortures herself with twos,
And onward goes with a Boston limp
And the grace of the Kangaroos.

WILD FIRE. *Elk Valley, N. Y.*

The First Attempt.

UNCLE TRUE.—This is my first attempt to write to your valuable paper. I shall be encouraged if my letter is published. I would be much obliged to any of the Cousins who will give me the best plan to trap squirrels alive. I must not make my letter too long or else it may get into that big basket. YOUNG CANADIAN.

P. S.—I do not wish to hurt the squirrels.

The Puzzler.

ILLUSTRATED REBUS.

☞ Answer in two weeks. H. W.

DOUBLE ACROSTIC.

CAROL, ye birds, your sweetest lay,
And sing the bright sun's praise;
Unfold your leaves, ye little buds,
To greet his welcome rays;
And, Fashion, lead thy votaries back
Again to Pleasure's sphere,
Where they are wont to pass a few
Gay months in every year.

Beneath the green trees' chequer'd shade
She dwelt in some fair sylvan glade,
And oft upon the flow'ry mead
Danced to the music of a reed.

'Twas somewhere in "the good old days,"
When George the Third was king,
That all the goodly gentlemen
Thought this was quite "the thing;"
Then it adorn'd the choicest beaux and wits,
And often, too, would decorate "the cits."

It is a woman's hand that must
The regal scepter hold;
It is a woman's brow must bear
The crown of gems and gold.

The old tradition fails to tell
How long ago they made
The ancient edifice that casts
Thy sliver in the shade.

Long since he died, and left behind a name
(Oh what a priceless legacy for Fame!)
That ne'er was for a single virtue known,
But celebrated for its vice alone.

It used to guard the mines of gold,
And to no foes would yield;
They blazon now its image on
The bright heraldic shield.

☞ Answer in two weeks. EUREKA.

PUZZLER ANSWERS.—Dec. 29.

ILLUSTRATED REBUS.—Not for Joseph.

DOUBLE DECAPITATIONS.—1, Slash, lash, ash; 2, Wheat, heat, eat; 3, Shear, hear, ear; 4, Malice, Alice, lice; 5, Mowing, owing, wing; 6, Spawn, pawn, awn; 7, That, hat, at.

ANAGRAMS—STATESMEN AND PATRIOTS.—William Ewart Gladstone; 2, Lord Brougham; 3, Earl of Derby; 4, William Pitt; 5, Sir Robert Walpole; 6, Earl of Chatham; 7, Henry Grattan; 8, George Washington; 9, General Grant; 10, William Tell; 11, Daniel Manin; 12, Andrew Hofer.

DOUBLE ACROSTIC.—Initials, Gin; finals, Rum.

Sabbath Reading.

LIFE LESSONS.

WHO loses self in brotherhood
Forth-giving ever gathers good;
And who for truth or right would die
In falling gains the victory.

The spirit wrought to noble aim,
The thought that sets the mind aflame,
The faith that wins in deadly fight—
Forgetting self, have greatest might.

So wisdom centers at the heart,
Like subtle sense that every part
Moves unperceived in perfect health;
And knowledge thrives in larger wealth.

Set chiefest to the soul perplext—
By doubt or wayward evil vext—
Oppressed with woes or worn with strife,
This whisper opes the gates of life:

Not what thou art, but what he is
In whom thou livest, makes thy bliss;
Count self and its searching loss
Before this wisdom of the Cross.

NOT IN VAIN.

THERE are a great many persons who are discouraged because the labors that they have most honestly undertaken for the good of men seem to have been utter failures. Some of our labors are failures; it is not to be supposed that we are such deft marksmen that we can strike the mark every time. But do not think that you have failed simply because you do not see the result of your work. Men are like apple-trees; some apple-trees ripen their fruit in July: while the fruit of other trees goes on growing and growing, and growing, through August and September; and in October the farmer picks it off, and then it is green and hard; and he keeps it through November and December and January, and into February, when the snow is knee-deep, and the tree has lost its leaves, before it is thoroughly ripe. And many of you are just like these late-bearing trees; you are bearing good fruit; but it will not be ripe till you have shed your leaves and gone into your winter. So be patient!

If there was ever a man who seemed to spend his life for nothing, it was Henry Martyn—a man of an exquisite nature, great power, and a sweet and loving disposition. Taking the highest honors and having the best prospects, he was led by the Spirit of God to consecrate himself to the cause of foreign missions. For that object he sacrificed that which was dearer to to him than life; for she to whom he was affianced declined to go with him. He forsook father and mother, and native land, and love itself, and went, an elegant and accomplished scholar, among the Persians, and spent a few years almost without an apparent conversion. Still he labored on, patient and faithful, until seized with a fever, he staggered. And the last record that he made in his journal was that he sat under the orchard trees and sighed for that land where there should be sickness and suffering no more. The record closes, he dies, and a stranger marks his grave.

A worldly man would say, "Here was an instance of mistaken zeal and enthusiasm; here was a man that might have produced a powerful effect on the Church and in his own country, and built up a happy home, and been respected and honored; but under the influence of a strange fanaticism, he went abroad and sickened and died, and that was the last of him." The last of him! Henry Martyn's life was the seed-life of more noble souls perhaps than the life of any other man that ever lived. Scores and scores of ministers in America, who have brought into the Church hundreds and thousands of souls, and multitudes of men in heathen lands, all over the world, have derived inspiration and courage from the eminently fruitful, but apparently wasted and utterly thrown away life of Henry Martyn. And are there not some of you, that are despondng because you do not see the fruit of your labors, who will receive consolation from, and be revived by, such an instance as this? HOPE.

HOW ABOUT OUR FAITH.

Is faith an essential element in order that we may live a Christian life, and do a Christian work?

We undoubtedly need a fixed principle as a foundation for that work. Method, and a tenacious clinging to that method, may be right and perhaps that very firmness may many times carry us through strong temptations; but though the forms of work may go on, is there not danger right there, if resting too much upon our good works, or if allowing the form and order and method to usurp the place of life. Spurgeon says "I have seen a church carried on by dead men, a dead man in the pulpit, dead men in the Sabbath-school, and dead men in the prayer-meeting."

Is it not sometimes the case that our Christian work goes on after we have lost, in a measure, the living faith and earnestness we ought to have. The steady flame, that burns right on without flickering is well; only let us know of a surety, that we have faith so wrought with our works, that, like Abraham of old, by our works, our faith may be made perfect.

RAY HULBURT.

THE soul shall hear good news from heaven when it is waiting at wisdom's door.

PERSONAL ITEMS.

Mr. Tilden will spend a part of the winter in Georgia and Florida.

On the 1st of January, General Whiskycocktailiski was temporally superseded by General Swearoff.

A farmer, on the fever and ague marshes of New Jersey, has named his daughter "Malaria." She will doubtless be "great shakes" of a girl.

Grant (to Vesuvius)—Do you object to smoking? Vesuvius—Oh, no; not at all. Smoke away. I like it. I'm an incorrigible smoker myself. Puff!

John B. Hartiz of St. Louis, eighty-six years old, and totally blind, teaches music and dancing. It is cheering to see so old a man so young in action. Hartiz in the right place.

Dr. McMurtrey has resigned his position as chief chemist of the Department of Agriculture in order to represent the interests of the Department at the Paris Exposition.

Mr. Evarts compares himself to the Connecticut farmer's stone wall, which was built four feet high and five feet thick, so that if it was blown over it would be higher than before. "I have been patient enough," he says, "to come here on a salary of $5000 a year, and if I am tipped over, I will go back to a practice of $10,000 a year."

It is said that Osman Pasha was a close student of the campaigns of Gen. Lee and Gen. Joseph E. Johnston, and that he had all their reports and descriptions of their military movements translated specially for him; that he delighted to comment on "Stonewall Jackson," and spoke eloquently of Sheridan. But Lee and Johnston were his models.

A picture of Prince Albert and his eldest daughter, then just betrothed crown princess of Prussia, is given in his own words: "I am giving Vicky, every evening, an hour for conversation, in which our chief topic is history. She knows a great deal. I also give her subjects which she works out for me. Her intellect is quick and thoroughly sound in its operation."

Judah P. Benjamin, formely a member of the Confederate Cabinet under Jeff Davis, and now one of the leading lawyers at the London bar, while pleading, began an argument with the adjuration: "In the name of Heaven—" The Master of the Rolls instantly stopped him, saying very quietly: "I do not see that Heaven has much to do in this case, Mr. Benjamin; the proper appeal is to the appellate court."

General "Bob" Toombs, of Georgia, is described as the possessor of a figure that is a model of manly strength and beauty, and a head that Nature left rough-cast. Grizzled, unkempt locks are piled in disorder over and around his broad, high forehead, and the dark skin of his massive features is plowed by deep lines. When excited, his eyes glow, his arms are thrown rapidly and forcibly about, and he speaks in a high, sharp voice.

When Mark Twain lectured recently at a town in Massachusets it was arranged that T. B. Aldrich, the poet, should introduce him. When Mr. Aldrich was about to step forward to perform his duty, Mark checked him. Then advancing slowly to the edge of the platform, while the amazed poet resumed his chair, the humorist remarked: "Ladies and gentlemen, my friend Mr. Aldrich was going to tell you who I was, but I would rather not—he knows me too well."

The Czar of Russia was at Intchenitzer when an officer of the Uhlans brought the news of the fall of Plevna. His Majesty is said to have replied, "But the war is not over, for all that." The Emperor went to the army, greeted the troops, and kissed Prince Charles, calling him cousin. He then embraced Todleben, the chief of the staff, Imeretinsky and Granetzky, commanding the Second Corps, saying to them, "This is all due to you; above all to thee, Edward Ivanhoff Todleben."

A Washington correspondent says Hayes has grown fleshy since his election and his face is that of a man at peace with his dinner and the world. There is a look of greater refinement, too, about him than there was two years ago, as though he were accustomed to better society as President of the United States than as Governor of Ohio. He appears to have lost a certain awkwardness of manner that characterized him then, and his relations with his hands and feet are far more amicable than they used to be.

This is related of the late Mrs. Gen. Hooker: When she was the admired Miss Groesbeck of Cincinnati, she was once at an evening party, when a fashionable young dandy was asked if he would like to be presented to her. "Oh, yes," said he languidly, "trot her out." The lady overheard the remark, and when he was presented, she adjusted her eye-glasses deliberately, and slowly scanned his clothing from boot to collar. The survey finished, she waved her hand and carelessly said, "Trot him back; I have seen all there is of him."

Real Estate.

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1,200,000 ACRES for sale at $5 and $6 per acre, in farm lots, and on terms to suit all classes. Round-trip tickets from Chicago and return free to purchasers. Send postal-card for maps and pamphlet describing climate, soil and products in 16 counties. Call on or address **IOWA R. R. LAND COMPANY, 92 Randolph Street, Chicago,** or **Cedar Rapids, Iowa.**
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PARTICULARLY
FOR THE LADIES!

THE RURAL NEW-YORKER, at the instance of Miss FAITH RIPLEY, conductor of the Department "For Women," offers, as one of the most valuable and acceptable Premiums of the season, a Steel-Plate Engraving, size 24x32.

The subject,

"OUGHT AND CARRY ONE,"

portrays a pretty young girl, gracefully poised, and holding pressed against her side, a slate on which she is "doing sums." The contracted brow, puzzled expression and drawn corners of the mouth, express most comical dismay.

This charming picture is printed from a new plate, the lights and shadows are clearly defined, and this work of art, when nicely framed, is a decided ornament.

Nothing is more refining and elevating than *good* works of art, and we confidently proffer this as something greatly in advance of anything heretofore announced.

We anticipate that this offer will appeal especially to our lady readers, and in order that the picture may be placed within the reach of all, we have scaled the club so low that it partakes more of the nature of a gift than a premium.

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The Centennial Judges having awarded to the Messrs. BOREL & COURVOISIER 2 Prizes at the late Centennial Exhibition for their production, one for extreme accuracy in adjustment and regularity in performance, and the other for display, they are now offering their Watches at a great reduction from former prices, having introduced improved machinery, whereby the production is increased, and the cost of manufacture greatly reduced, and the quality and durability greatly improved, insuring a first-class NICKEL MOVEMENT WATCH within the reach of all. These Watches, so favorably known for the past 18 years, are made of the best material, and have all the modern improvements in watch making having **Chronometer Balances, Breguet Hair Springs, Tempered, Hardened and Isochronised for R. R. Travel, Fine Ruby Jewelled,** and are warranted to perform with the regularity and accuracy of a Chronometer. These Watches are for sale by all our local agents throughout the country, and parties desiring a good and durable time-keeper, are requested to examine them before purchasing those of other manufacturers or home productions.

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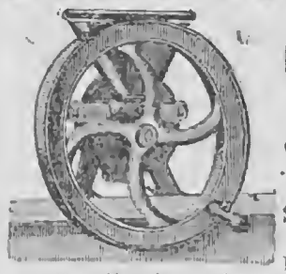

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A WARNING!

IT having come to our notice that the Manager of the Economy Club is advertising to take single subscriptions for the RURAL at $1.75, being 25 cents less than our regular club price, we accordingly warn those intending to subscribe for this journal that we shall *not* accept *any* subscriptions sent to us by the Manager of this Club. We shall not permit any one to take subscriptions for the RURAL at less that $2 each, and only at this price when sent in clubs of five or more. Our single subscription price is $2.50, and these prices are invariable and must be maintained.

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$3 GOLD PLATED WATCHES. Cheapest in the known world. *Sample Watch Free to Agents.* Address, A. COULTER & Co., Chicago.

It is a mistake to suppose that any department of a paper may be slighted. The most important information is to be found, at times, under the guise of an advertisement; and it is agreeable to the advertiser and a courtesy to the publisher to mention the source of your information—in other words, to mention the paper.

Wit and Humor.

SPARKS AND SPLINTERS.

"COLONEL," said Spicer, as a long-winded individual with largo ears finally left the office of the Dealaspare Insurance Company, "that man is a donkey." "Oh, no," said the genial colonel, "not a donkey, only an ear relation."

(ONE of the Kentucky Minstrels is sitting for his *carte* in character.) Operator: "Now, sir. look pleasant—smile a little." (Minstrel smiles.) "Oh? that will never do. It's too wide for the instrument."

THE Orientals are very trusting to each other. "Are you not afraid to go away from your shop without locking it?" a traveler asked an Egyptian up the river. "Oh, no," answered the man ooolly, there is not a Christian within three miles!"

"I DON'T know what you mean by being an Irishman," said a gentleman who was about hiring a boy, "but you were born in Ireland." "Och, your honor, if that's all," said the boy, "small blame to that; suppose your cat was to have kittens in the oven, would they be loaves of bread?"

A PAPER has this advertisement: "Two sisters want washing." Millions of brothers are in the same predicament.

ONE by one the roses fade. It is now boldly denied that men who wear long hair are possessed of any more talent than those who have it clipped close.

MRS. NICKELL, of Kentucky, has just presented her husband with the twenty-first pledge of her fidelity. The region ought to be well supplied with small change.

"QUITE correct, my dear; the natives of South Africa do not require clothes to keep them warm, because they are Hottentots, don't you see? Coolies are a different sort of people altogether. So are the people of Chili."

THE name of a centenarian recently deceased was Lettus Steel. He was no politician either.

A NEGRO insisted that his race was mentioned in the Bible, for he heard the minister read about how Nigger Demus wanted to be born again.

A JUSTICE of the peace in Illinois is named Works. How pleasant to know Justice Works, and works by sight, too!

CONFUSION OF CAUSE AND EFFECT.

MAGGIE. "Oh! Tommy! ! look at that *sweet* little Thing! ! ! I'm afraid it's afraid of *Chimborazo!* Just wag *Chimborazo's* Tail, to put him in a good Temper, there's a good Boy!"

TO WHICH THE READER'S ESPECIAL ATTENTION IS CALLED.

We earnestly request that all letters containing money, or any communication intended for the Business Department of the paper, be ADDRESSED to the EDITOR, or to THE RURAL NEW-YORKER, and NOT to any INDIVIDUAL. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money received.

The free seed distribution, announced in our issue of Nov. 10, was discontinued at the end of the year, having been extended beyond the original term announced. It was intended for the benefit of our old subscribers, and not to induce new ones.

As has already been stated, we are thus early making preparations for our next annual seed distribution, which we believe will please our horticultural friends as well as anything that has ever been offered gratuitously.

As it is the desire of the proprietors to subserve the interests of the readers of this journal in every way, we respectfully invite them to communicate with us freely upon all topics respecting which they desire information.

We would state that our lowest club price (five or over) is $2; single subscriptions, $2.50. Any agent offering the RURAL NEW-YORKER for less, has no authority for doing so, and his subscriptions will be promptly rejected.

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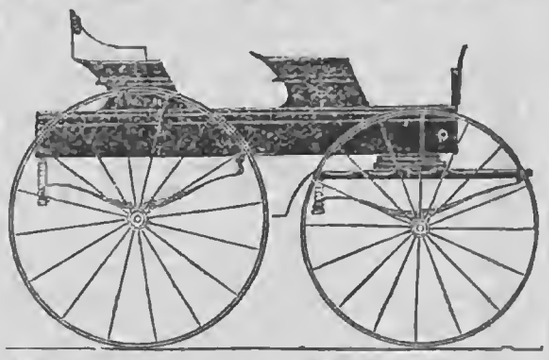

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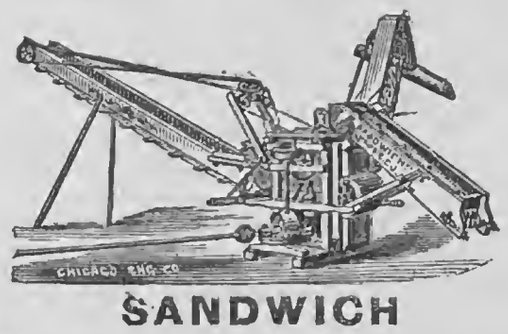

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MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 3.
WHOLE No. 1460.

NEW YORK CITY. JAN. 19, 1878.

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$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1877, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

PRIZE-WINNERS AT THE SMITHFIELD CLUB CATTLE SHOW.

Farm Topics.

AGRICULTURE AND EDUCATION IN THE UNITED STATES.

PROF. I. P. ROBERTS.

No. 2.

In my last I pointed out some of the influences and circumstances that energized the people of the Old World, and made them long for greater freedom and knowledge, especially the latter. The desire for freedom seems to have been of slower growth than that for education; and of necessity must be, for unless the latter precedes, the former cannot be lasting. The desire and longing for something better and higher were not lost by those brave and dauntless people who left the Old World to find a home in the New, but rather intensified.

It is not strange then that among the first acts of the Colonies we find provision for the instruction, not only of the children of the well-to-do, but of the poor and the servants. WILLIAM PENN'S first plan for his proprietary government, drafted before he left England, made provision for public schools, and the rewarding of authors of useful sciences and laudable inventions. Schools were established at New Amsterdam in 1633, and at the time of the surrender to the English, 1674, schools virtually free, existed in nearly every town and village in the Colony.

In 1635, the people of Boston established a school, and one year later the General Court authorized an appropriation of £400 for the establishment of a "Schoole or Colledge, whereof £200 to be paid the next yeare, and £200 when the worke is finished, and the next Court to appoint where and what building."

In 1683, an island in the Delaware, opposite Burlington, was set apart for educational purposes, the revenue derived from the rent or sale to be a perpetual fund; and this, it is believed, was the first school-fund established in America. In 1795, Governor GEORGE CLINTON, it is said, laid the foundation of our common school system of New York. The need of education appears to have been as clear to him, as that of connecting the great lakes with the seaboard. But space will not permit to mention a tithe of the laws enacted or donations bequeathed by Government and individuals for the benefit of education.

Government has granted some 140,000,000 acres for that purpose exclusive of the grant of 1862. No country on the face of the globe has equaled ours, in the amount of private and public gifts for the promotion of knowledge. When we look over these three million square miles of territory transformed from a wilderness into fruitful fields dotted with homes bursting with plenty; when we behold the innumerable thriving villages and cities on every hand, connected and bound together by strong bands of steel, common parentage and interests; when we see science striving with laudable efforts to enhance the fruits of toil and alleviate suffering; when we see forty millions of people actuated by one common purpose to make the next generation more wise, more happy, more virtuous than the present one, truly we may exclaim "What hath GOD wrought?"

With all the evidences of strength on every hand that go to make up an enduring and prosperous nation, we still have those among us who can see but the comparatively few scamps and improvident poor, and therefore predict that we are about to become a *nation* of thieves and tramps. Can it be possible that we who are the children of people noted throughout the world for courage, independence and an unquenchable thirst for knowledge; noted for their hatred of oppression and wrong, for their law-abiding and GOD-fearing principles, have so degenerated, have so disgraced our noble ancestors? No: it is not possible; it is not so. The little clouds that are so magnified will soon be dispelled, and we shall steadily advance to greater prosperity and usefulness; and education has been, and will still continue to be, the great balance wheel that will overcome all resistance and keep us steadily striving for the good and the true. The tillers of the soil are not a separate class, only as their occupation leads them to common interests. They are an integral part of the whole, with like aspirations and desires for more knowledge and grander opportunities.

As the years passed by and many of the industries and professions, through education, rose to a prominence and power far exceeding their former conditions, it was readily seen by a few active and thoughtful minds, that unless something was done for Agriculture it would fall into disrepute and decline, that the bread-raisers would be unable to cope with the better educated in other callings, and that the time was not far distant when the educated would own the land, and the uneducated farmers till it. Michigan occupying a part of, and lying adjacent to the vast fertile prairies, with its restless, energetic, and advancing population, caught the inspiration first, and in 1855 established a college near Lansing for instuction in Agriculture and kindred branches. This attracted but little attention for some time, but it did good work and therefore grew and prospered, and when its graduates went forth to active duty, their ability was recognized and what was looked upon at first as only a doubtful experiment was pronounced an assured success. So much faith had Senator Morrill in the new methods of education, during Buchanan's administration, that he introduced a bill granting large tracts of the public lands to the various States and Territories, the income from which should form a perpetual fund for the advancement of technical instruction.

This bill passed both Houses, but was vetoed by the President. It was again introduced in 1862 with some modifications, passed both Houses, and received the signature of President LINCOLN. The originator of the bill appears to have had a very clear understanding of the wants and needs of the rising generation, but its wise provisions appear to be but imperfectly understood. It provided for the issuing of land scrip to the amount of 30,000 acres for each Senator and Representative in Congress. It also provided that each State or Territory claiming the benefit of this act, should within five years from its passage, "Provide not less than one college which should receive for its endowment, support, and maintenance, the interest of all moneys derived from the sale of the aforesaid scrip or lands, and that:

"*The leading object of these colleges should be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to Agriculture and the Mechanic Arts; in order to promote the liberal and practical education of the industrial classes, in the several pursuits and professions of life.*"

You notice that "other scientific and classical studies" were not to be excluded; as it turns out, this provision is a very wise one, for if the student is to receive no general culture, he is only half-educated, and the officers of schools organized and conducted under this law, find that it is necessary, in order to reach the best results, to teach several branches formerly considered of little value to students in Agriculture and the Mechanic Arts.

The provision for instruction in military tactics is one that should not be ignored or passed over lightly. Though frequently lost sight of, I believe it to be of great importance, both to the nation and the individual student. Nothing appears to give him that manly dignity and bearing, that respect for law and authority, so rapidly and effectually as Military Drill. And the instruction and discipline are of value to the recipient in times of peace, but how much more so in times of great commotion! In case of a great war, I can see the untold benefits that would accrue to the nation from having scattered over the States several hundred trained men who, from their education and previous military instruction, could, on short notice, be made into efficient officers. I would like to see this provision of the law carried into execution more generally than it has been, as I deem it one of the wisest, if not the wisest provision of the act.

At the close of 1875, 2,889 students were receiving instruction in Military Science in the colleges organized under this grant. Estimating that at the present not less than 3,000 young men are being taught and drilled by experienced and competent officers without any cost to the Government, we can readily see that it is getting more work done in this one direction for this grant, than it could have done, had it sold the lands and invested the money at six per cent. and expended the interest for instruction in Military Tactics. Not far from 10,000,000 acres were granted. This at Government price ($1.25) would give $12,500,000; this at six per cent. yields $750,000 in interest; dividing this by 3,000 (the number of students now taught) it would give $250 as the cost of instruction per year for each one; less than one-third of what it does actually cost the Government schools to give instruction in Military Tactics.

It may be said that the instruction is not so extended and complete in the colleges as in the national schools. This is true; but after making all possible allowances, we find the gift is a paying and a wise one.

I desire now to call attention to the last clause of the law, "In order to promote the *liberal* and *practical* education of the *industrial* classes in the *various pursuits* and *professions* in life."

Could anything be more comprehensive? more liberal? more just? None to be excluded on account of color, sex, age or previous condition, and, while it was desirable that the leading objects should be the promotion of Agriculture and Mechanics, yet all must be welcomed and free to choose that course of study from which they could derive most benefit.—[To be continued.

RURAL TOPICS.

T. B. MINER.

ROTATION OF CROPS.

A GOOD farmer is known by his judicious rotation of crops, because all crops do not draw from the soil the same relative amount of its fertilizing constituents. Probably there is no better rotation than to begin with corn on a grass sod; and the question may arise, "Is it best to plow the land early in the spring, and give the sod the more time to decay, or should it be plowed at the time of planting the corn?" I think that it is decidedly the best way to plow and plant immediately, so that the corn may be up before the grass has grown much. I have seen fields that were plowed for corn two or three weeks before it was planted, so full of grass that the corn had a hard struggle for life till the grass was subdued.

The next crop after corn may be potatoes, barley, or oats; and in the fall put in winter wheat and seed down to timothy, and sow the clover-seed in the spring, in March, while the surface of the soil freezes at night and thaws by day, which opens the soil and lets the clover seed into the numerous little cracks. Another way is to sow the clover seed in April, and run a fine-toothed harrow over the land both ways. If the soil is light, the harrowing will benefit the wheat, eradicate the weeds and cover the clover seed.

But this rotation requires an application of manure to each crop in order to produce good paying crops, as a general rule. There is no use in farmers in the old States trying to keep their farms in a fertile condition without manure; and they should keep enough live stock to supply what dung *must* be applied to their lands, and this can be done the most profitably by keeping *first-class* milch cows. No farmer who owns ten or twelve cows that yield a pound of butter a day on an average of nine months in the year, need fear to see the village constable call on him, as he will have no summons to serve on *him;* but he will have one for his neighbor who keeps but two or three cows, and of a kind that are sold "cheap"—the poor "critters" that one finds at auction sales, and which would be dear at $10 a head.

WHAT ALL CROPS REQUIRE.

Every kind of crop or plant can be grown in perfection, if we apply to the land potash, phosphoric acid and nitrogen, the land and air always supplying what else is needed. Stable dung contains no other fertilizing constituent of much importance. Every fertile soil contains enough of the above-named constituents to bear one good crop, or more in most cases; but every crop taken off the land lessens the supply, till at last we come to *worn-out* soils; what has taken place at the South with millions of acres, which were cropped with cotton or tobacco for many years without applying any manure. A good farmer has learned that land must be fed, somewhat on the same principle that he feeds his cows, but only once a year; and in some cases, once in several years is enough, or just before seeding down to grass. I hear some one ask: "How shall we feed our land—with stable dung? or with commercial fertilizers?" I reply with stable dung; and if you can obtain, or make enough of it, leave the commercial fertilizers as a last resort. A writer says: "Each crop must have its own peculiar food, and in proper proportion, too." When a man talks that way, he is getting into the subject beyond his ability to advise farmers profitably; because, as I understand him, he is coming to the theory that all a farmer has to do to raise good crops, is to say to his land "Doctor" (vender of fertilizers,) "I want fertilizers for such and such crops;" and the "doctor" prescribes for each, according to the tables showing how much potash, phosphoric acid and nitrogen each crop draws from the soil. This theory is being revived in this country, after a long repose; but it is not reliable. In some cases it may work well; but generally the crops grown on this principle have not been satisfactory to anybody but the land doctors, because it is not possible for anybody to know the relative proportions of potash, phosphoric acid and nitrogen, that is in the soil *before the fertilizer is applied.* Analysis cannot give solutions of such questions, that are reliable, as every field, and perhaps every square rod in a field have different degrees of fertility.

BLOWING UP STUMPS.

It has been demonstrated that stumps can be blown out of the ground much cheaper than pulled out. In an experiment lately tried, five stumps were operated on, the first being oak. A hole was punched under it between two projecting roots. Then a cartridge of dynamite about two inches long, and an inch in diameter, was inserted in the hole, which was made with a crowbar; and on being fired, the stump was blown out. Next, a chestnut stump was served in the same way; and it was blown, as the report says, "to atoms." Other stumps which would have cost a dollar each to remove in any other way, were thrown out skyward. A charge was put under a rock of about two tons weight, and it was thrown from its bed and shattered to pieces. With larger charges, stumps were blown 125 feet. Dynamite was also shown to be a powerful agent in breaking up rocks, by drilling holes in them from six to twelve inches deep; and charging them with dynamite, which is put up in packages of oiled muslin, in shape like a candle, and impervious to water. One end is opened when used, and a hole is made in the powder with a stick to insert a percussion cap an inch long, and loaded half its length with fulminating mercury. Then a fuse is inserted in the cap, which, with other appliances, renders the successful use of this powerful explosive powder a thing to be carefully learned, or something might be "blown up" besides stumps and rocks.

PAINTING FARM IMPLEMENTS.

I suppose that there are many farmers who never used a paint brush; and I can imagine how their old rusty wagons, plows, etc. look, the wood-work badly cracked, and going to ruin rapidly. It is of as much importance to keep farm implements well painted, as it is to paint a house; and every farmer should have an "outfit" of painting materials on hand, so as to be prepared to do any job in that line that may be necessary. All that is necessary, is a two-gallon oil-can, a couple of brushes of different sizes, and the necessary paint; but that can be bought as wanted, yet it is better to buy a 25 pound keg of white lead, and a can of oil (half boiled and half raw) as they will keep a long time. For plows, harrows, and the running-gear of wagons, you need only red lead and oil; but for other colors you will require the white lead. If you want a common black paint, use lamp-black and oil; but for a carriage body get black coach paint at the wheel-wright's, also some varnish to finish with. You would be surprised to see the nice work that you or the "boys" can do after a little practice; and when you get in the way of doing your own painting, your keg of lead won't remain on your hands long. Why, there is *money in paint*—actually bank bills, and gold, and silver dollars! For instance, you buy a new farm wagon, and and keep it well painted, and under cover when not in use. Now, your neighbor buys one at the same time, and doesn't paint at all for ten or fifteen years; and what is the result? Worn out, decayed wood-work, split and cracked, must be thrown aside as "used up," while *yours is as good almost as when new.* You have found a hundred dollars in your paint; but your neighbor, poor man! has got, perhaps, to stint his family in the necessaries of life to pay for a new wagon.

Linden, N. J.

WESTERN ECHOES.

FROM THE "MAPLE SHADOWS."

DR. A. C. WILLIAMS.

A VERY common mistake, West, is that of running land too long to one sort of crop. A field is selected, supposed to be the choicest soil for wheat, and it is set apart for that cereal, and expected to furnish the family with bread, year after year, with little or no manuring, and when the yield necessarily falls off annually, the actual cause is overlooked, and the season regarded as unfavorable, not sufficient seed planted, or the variety of wheat "run out," Other portions of the farm are run in corn in the same manner and, sooner or later, foxtail, cockle-burrs, "Spanish needles" and "lambsquarter" are a little "corny" in spite of all that can be done. The judicious rotation of crops is one but little understood, and seldom practiced. The disposition of the straw after the grain is threshed, is the most striking instance of extravagance and waste to be seen. It is a rare case to find a farmer who carefully stacks and feeds his straw, or makes any effort whatever to have it returned to the soil whence it came. If sufficient help is secured to get it away from the machine, no further thought is given it, more than to see that a match is applied before it would fail to burn. A boy, a horse, a fence rail, with one hand to help him load, is considered sufficient, and the straw is hauled and scattered over an acre or two of the field, and it makes a fire that delights the farm boys very much. I know of one or two farmers, however, who save their straw.

The best farmers we have in our neighborhood are Germans. They have taken land that everybody else regarded, before their advent, as entirely worthless, and now have the finest farming lands in the country, every acre of which is in the highest state of cultivation. They grow wheat largely, understand the benefit of draining their lands thoroughly, and know how to make money. The rapidity with which large stumps have vanished from their fields, has been a matter of wonder to those who are more careful about laying out their strength.

I begin to entertain great fears that the generality of our farmers will never receive much

benefit from the grape. They seem to be utterly unable to manage their vines skillfully, or at least sufficiently to secure paying crops. I am surprised to see the condition of vines, when called upon occasionally to inspect some old, sturdy farmer's vines, which have failed, with his treatment, to yield him fruit. I find, generally, one or two difficulties are all that are in the way to a moderate crop, yet they make a good many mistakes if a large yield were desired. The first mistake, and it is universal, is trying to secure fruit before the vine has been allowed to make a sufficient amount of root growth. Farmers are very much discouraged if they get no fruit the first year, and if little or none the second, they get out of all patience. Another trouble is that of pruning, or rather not pruning, as they seem to think that the more cane, the more fruit, and therefore fail to prune their vines at all.

Late this fall I dug and worked in around my grape vines from two to four bushels of well rotted manure, ashes, anvil cinders, and am giving them all the soap-suds on washing days. I expect a wonderful yield next season.

Hugo, Ill., Jan. 5.

Farm Economy.

THOUGHTS FROM A FARM.

LET THE FARM REMAIN UNKNOWN FOR THE PRESENT AND THE WRITER REMAIN INCOGNITO.

WOMEN FARMERS, ETC.

THE winter season with its long evenings, gives ample time for reflection on the past and thought for the future; consequently, the past, the present, and the future are before the mind, the latter partaking of foreboding in some respects. Thoughts are hidden by all designing minds, and almost all niggardly dispositions endeavor to hide their intentions because, if known, the knowledge might interfere with the carrying of them out; and moreover, all stingy, dishonest, and overreaching men, are somewhat ashamed, and defer the exposure of their meannesses till the last moment possible. It is, therefore, thought by the world "smart" to be reticent; many however, are naturally so, having always from childhood been reserved, allowing others to do the talking; and this is very fortunate, for a taciturn person escapes many little difficulties and some serious ones sometimes, by habitual silence. Yet, when a man who is not silent by nature endeavors to mislead people and uses speech for the purpose of hiding his thoughts, it is pretty nearly certain he is far from being an honest, straightforward man.

It is supposed a great deal of good is done to agriculture by the correspondence carried on in a newspaper like the RURAL; but much more benefit would accrue to farmers if they would be particular to curb all prejudice and be sure they are right before condemning any course of husbandry, before they decry any breed of animals, and also before recommending any new kind of cultivation of soil, or any steaming of food and expensive cutting of chaff, &c.

As the best farmers in England, and those likewise who make money and win the prizes of the Agricultural Society as the occupiers of farms which are in the best possible form and condition, are all high feeders of stock and thus feed the land till they succeed beyond all other farmers, it is thought to be a fact beyond contradiction that high feeding of animals of every description must be the only road to prosperity as an agriculturist where the situation prevents the purchase of manures. It is likewise believed that as women are winning more premiums in proportion than men, that the old feeble-minded trash about so much bodily labor being indispensable, is really nonsense of the worst kind, as it leads to so many farmers placing dependence on working alone, so that it is seen that men of this class moil and toil till they are thin as a bean pole, and their wives are, poor things, worn out, and die of broken constitutions, through the worry of a farmer's home.

Here is proof that

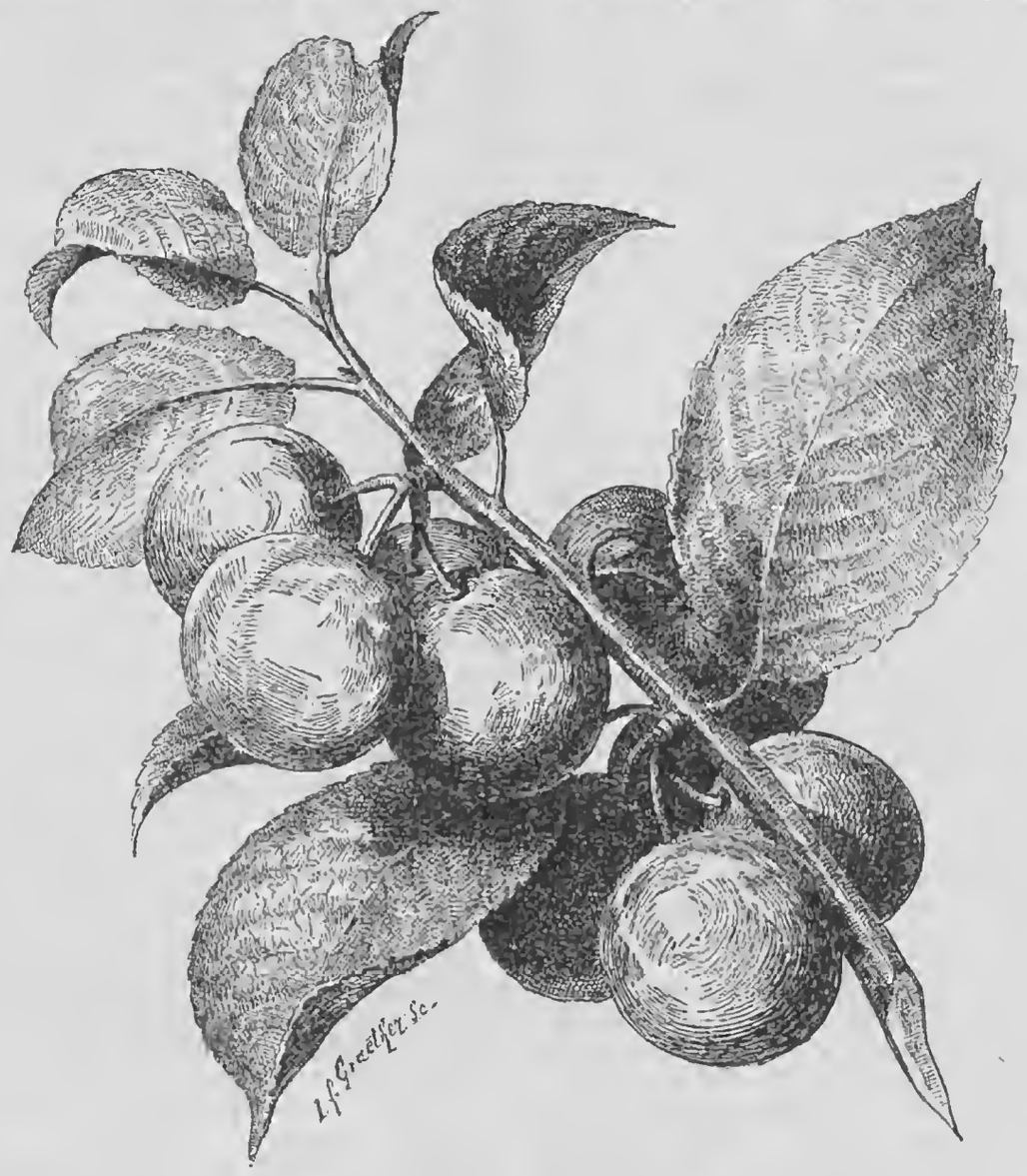
> "He who by the plow would thrive,"
> Need neither hold the plow nor drive;

for these lady farmers certainly never touched the plow, and nobody can be foolish enough to argue that they ever said "come along, boys," or that they did carpenter's work, or painted their implements, or did all errands at night, after the sun was down.

But these farmers in petticoats more than made up for the loss of their husbands by looking forward and well considering the results following abundant use of oil-cake and other forcing food, and these liberal-minded widows, although only renting the 300 or 400 acres by the year, feed thus freely for the sake of the rich manure thereby made and continue to do it annually; but here, in the United States, the farmers would term such a generous diet for the young stock and the sheep and cows, profusion and extravagance. Sheep, especially in England, are highly fed and forced to be ripe mutton at an early age and there is no doubt of sheep paying as well in the United States only the poor trembling gentlemen farmers as well as all the rest are afraid of good feeding, and cannot be made to understand that it will not do to shut breeding ewes and ewes with lambs in barns, stables or sheds and keep them there for months.

A woman when she farms is not craven-hearted. She hears or reads of good farmers who purchase oil-cake and feed it to their stock, and she buys great quantities and thereby fattens her beef and mutton to a first-class quality and she hastens the maturity of all the young stock saving a year's slow feeding, and also she gains in wool. But her gains do not stop here, for she has made her calculations and she doubles her crops of grass, grain and roots by the exceedingly rich manure she obtains by this high feeding; so that she is a gainer every way, and the much coveted prize is gained over the heads of the other sex at the Royal Agricultural Society.

Thinking over these facts and knowing that many herdsmen and shepherds are valued most highly because of their being able to manage all fattening animals so as to keep their appetites sharp, that in short, those are the best "carters" "cowmen" or shepherds who can contrive to make the animals eat most, it is odd that here, in the United States, instead of trying to make the animals eat as much good feed as possible without being cloyed, one man steams the buts of corn stalks to save feeding more costly food, a second has the cobs of corn ground with the corn, a third cuts rough, weedy herbage into chaff, a fourth will cook all the food, and a fifth deprives full grown cows of every kind of food excepting three quarts of meal for feed, or some such ridiculous quantity. And men believe cows will live all winter on such short allowances! But it cannot be and what the object of those who make these assertions can be it is very difficult to imagine. There are many extraordinary statements made relative to agricultural subjects, most of which are errors; yet, probably in some instances, although notoriously erroneous they are implicitly believed in by a few families. Even now, in 1878, there are old women, not in petticoats, who still think there is a baleful influence on meat, or vegetables and on the blood &c. at certain stages of the moon, and that cows with horns have diseases which polled cattle cannot have &c.



BASSETT'S AMERICAN PLUM.

Pomological.

BASSETTS' AMERICAN PLUM.

THE only successful method of fighting the curculio is that of jarring the trees and collecting the insects upon sheets spread under them. This must be commenced at the time the fruit is the size of a pea, and continued, daily, until it begins to ripen. As effectual as this method may be, and as desirable as it is to raise this beautiful and delicious fruit upon one's own premises, few there are who are willing to give the necessary time and trouble to applying the remedy with the regularity and thoroughness needed to render it effectual. Either in localities where this mischief abounds we must abandon the cultivation of the finer varieties of the plum, or we must content ourselves with varieties so thick-skinned that they are proof against its attacks. Bassett's American Plum, of which we furnish an engraving from life, is said to be curculio-proof, and although of inferior quality, it is yet possessed of merits that highly commend it to general cultivation. For culinary purposes it is perhaps as good as any, while its productiveness seems to be measured only by the size and strength of the branches.

Messrs. HANCE & SON of Red Bank, N. J., presented us with two of these trees last spring. Their growth has been something remarkable during the past season, and the leaves were retained fresh and green long after those of other varieties had fallen.

The Garden.

TOMATOES.

GEO. E. DRAKE.

THE interesting communication to the RURAL of the 29th ult. by your esteemed correspondent, Prof. BEAL, was brimful of meat without any shells, and an excellent example for contributors to follow.

My experiments have run through a dozen seasons and included about twice that number of varieties. The results differ somewhat from the Professsor's, probably owing to a different character of soil and climate. I commenced with the Yellow Plum and the Smooth and Large Reds. The former was early and excellent for eating uncooked and for making into figs. The Gen. Grant was popular when first introduced, it being quite smooth, prolific and medium, or second early, but not an equal of many newer kinds, and the Canada Victor may be mentioned as its superior and in every way desirable, but not excelling all others either in earliness, smoothness or prolificness. The Trophy is truly "a memorial of victory" as a late variety and for general cultivation, but is a long way from perfection in ripening. Yet every year it improves in this respect when due care is exercised in selecting specimens for seed. Hathaway's (Excelsior) is a desirable variety, but needs judicious management, and I imagine that the reason of its not coming up to Prof. BEAL'S expectations was the lightness of his soil. A heavy and highly manured soil must also be avoided, in which case it produces too many leaves and stalks at a sacrifice of fruit. But when the soil is a happy medium and the season favorable, this is second to no late variety for quality and quantity. It is smooth, solid, deepred but not so large as specimens of fruit from Trophy plants. The Conqueror is very early, but not smooth, or solid, being in those respects inferior to its parent, Gen. Grant. It produces fruit of different sizes and shapes, and a careful selection of seed specimens can make either a small smooth, or a larger creased variety of this. Had I not received my seed direct from the originator, I should have thought it was mixed, there being so much difference in the fruit. The Little Gem is the earliest variety now before the horticultural community, but E. S. BROWNELL, who shares with the originator of the Little Gem, the modern honors of potato hybridization, claims to have an unintroduced variety earlier than it. Although it is small, I prefer the Gem to its parent the Conqueror, and the reader of Prof. BEAL'S article will see it is much earlier, as he sowed the seeds when the Conqueror was transplanted. The Golden Trophy is large, late and prolific, and when grown in land under a high state of cultivation, there will be an enormous growth of stalks and fruit. But the latter will be very uneven in surface and like three other yellow varieties I have tested, I do not consider it a desirable acquisition to the list of tomatoes, although they may add to the beauty of the table when served with the red varieties.

For successive use in a family, I would select Little Gem, Canada Victor and Trophy, adding Hathaway's Excelsior for the fourth kind and substituting it in place of the Trophy, whenever the soil is adapted to its cultivation.

CHUFAS.

Having cultivated chufas or ground nuts two years, and there being slight indications of a "fever" on them, I would advise farmers not to let their ideas run too high on this subject, for they are nothing new, and, although very prolific and edible, are not delectable. The great labor incident to harvesting will prevent their being extensively produced for swine or poultry, and when estimated in bushels Artichokes will exceed them in yield. Frost kills their germinating powers.

Merrimack Co., N. H.

PEERLESS MELON.

IN the RURAL of June 9, 1877, page 359, your able correspondent, W. H. WHITE, contributed a very practical article on "The Melon—Its Culture and Varieties."

In the list of Watermelons he mentions only Black Spanish, Mountain Sweet, Ice Cream and Citron Watermelon, all of which I have cultivated, and Phinney's Early Black Italian, Goodwin's Imperial, and other kinds to the number of nearly a dozen. The most of those varieties were tested several years ago, and the Mountain Sweet selected as the best and the one with which to compare novelties as they were introduced.

In 1875 I procured a package of Peerless Melon seed, and all who ate of the fruit pronounced it vastly superior to the Mountain Sweet, and ever since then the Peerless has been without a peer in my estimation. The introducers of the melon give the following description of it:—"This is unquestionably the best Watermelon in cultivation. Of medium size, thin rind, light, mottled green; flesh, bright scarlet, solid to the center, crisp, melting, and sweet as honey. Our stock of this variety all came from one melon selected several years ago."

With me the melons grow to equal the size of any other variety I ever tested, and have proved to be quite early. The seeds are white and, as a rule, are rather inferior. G. E. D.

Merrimac Co., N. H.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

NARCISSUS.

THE oldest bulbous plants in cultivation are without doubt the Narcissus. For many hundred years they have decorated the flower gardens of the world. To tell the present advanced floricultural world, that, 200 years ago, there were more varieties of these favorites in cultivation than we now have, would astonish many, yet the records which time has left behind prove that, with the exception of the Tazetta group, such was the case.

In examining into the records of the Narcissus, I find that according to the best botanical authorities there are over one hundred varieties now in cultivation. Many of these must, to an inexperienced amateur, appear to be one and the same. In systematizing the Narcissus, botanists have divided them into three groups, Narcissus proper, including the single and double or *flore pleno*, also the old-time Daffodil; Narcissus Tazetta, including the double and single Polyanthus Narcissus, the third group being the old-fashioned and still popular Jonquils, both double and single, great and small.

These groups are distinguished by their habits of growth, and shape of flowers. In color their

is very little variety throughout the family, pure white and shades of yellow being the only colors found.

In making a selection of Narcissus for the garden, a dozen good varieties will be sufficient for quite all of our American amateurs; yet they will find described in all the floral catalogues, from thirty varieties upwards, which they may be induced to think necessary to a grand display. This mistake must not be committed, for if the uninitiated were to get such a collection, they would find three or four without apparent difference, and disappointment would follow.

But whatever kinds are selected they will certainly be of easy culture and perfectly hardy; and what is far more to the point—very, very handsome.

The Polyanthus Narcissus are the palm-bearers of the family and those to which we would invite special attention. They are better adapted for culture in pots and dishes of water than the others, a point that should not be forgotten. Unlike other Narcissus which only bear one to two flowers on a single stem, these produce from ten to twenty on a stem from each bulb. When desired for house culture in water or pots treat as you would Hyacinths, and they will repay you ten-fold for your trouble.

Of the Polyanthus Narcissus possessing special merits, we would mention the Golden Eagle, a handsome yellow flower, for a brilliant golden yellow. Grand Soleil d' Or, a pure white color, Bouquet sans-pareil and White Pearl.

Of the single Narcissus of special merit the Poeticus takes the lead, than which nothing can be purer or more beautiful. Close to it we find Incomparable and Moschatus. Of the double varieties Poeticus flore pleno, Phoenix and Pumilus are extremely fine.

In cultivating, plant in light, rich loam; set bulbs three inches deep; when once planted do not disturb for three or four years, as they will then flower much stronger.

El Dorado, Cal.

ANNUALS.

BY WILLIAM FALCONER.

No country in the world is richer in beautiful annuals than is the United States, west of the Mississippi, notably California and Texas. In the Eastern States our supply is somewhat limited, but once in possession of seeds of the Western species, it is our own fault if we ever afterwards be without them. They are admirably adapted for cultivation in our gardens, as they grow readily, bloom freely and persistently—at least most of those I mention do and ripen seeds in quantity—some species like Leptosiphon androsaceus—a pretty little Californian annual, last in beauty but a short time, while Drummond Phlox, Eschscholtzia Californica, Gaura Lindheimeri, Chrysopsis pilosa, and Gaillardia Amblyodon, bloom uninterruptedly throughout the summer and autumn. Collinsias and Nemophilas are prettiest in spring and early summer, and Eryngium Leavenworthii, Aster tanacetifolius, and Amblyodon setigera, are in greatest perfection during fall.

Many sorts as Cercopsis, Eschscholtzia and Euphorbia hexagona and marginata, are so hardy as to "self-sow" themselves freely; but it is a neater and better method to gather the seeds and sow them when and where required.

Nemophila insignis and maculata, Collinsia bicolor, Whitlavia grandiflora, Clarkias, Lupinus nanus and densiflorus, and such like California annuals grow stronger and stubbier, live longer, and bloom more substantially and lavishly, if they be sown in the fall, September or early October, rather than in the spring. So far north as New England it is better to sow in a cold frame than in the open garden, and get the seedlings nice and stubby before severe weather sets in. In winter cover up a little and transfer to the open ground next spring. Over-crowding is extremely hurtful to annuals, it chokes them, spindles them, kills the half of them, and curtails the continuity of those that are left. Therefore, thin rigidly and timely, that is, when the seedlings are very young. For fall-sowing light unmanured ground gives the seedlings the hardiest constitution, but for spring-sowings rich soil is preferable.

Besides true annuals I have included a few plants, as Eschscholtzia and Gaura Lindheimeri that are perennials but best treated as annuals or biennials, in our northern gardens. Besides those already mentioned, the following are worthy of notice:

Callirhoe pedata; Cassia Chamæcrista, Partridge Pea; Centaurea Americana, Texas Star Thistle; C. A. var. Hallii; Eucharidium concinnum; Gilia coronopifolia, Cypress Gilia; Godetia grandiflora; Limnanthes Douglassi; Vesicaria gracilis.

SEED EXCHANGE.

My sister and I have a few flower seeds that we should like to exchange with some of the RURAL ladies. I will give a list of the different varieties we have:

Phlox (mixed), Portulaca (single), Marvel of Peru (red and yellow), Balloon Vine, Cacalia, Calliopsis, Antirrhinum, Acroclinium. Would like in exchange:—Verbena, Petunia, Gourds, Dianthus, Catchfly, Chinese Primrose, Bouquet Aster, Ten-Week Stock.

Please accept our thanks for the seeds you sent. We were much pleased with them.

M. E. A.

Box 2, Union Springs, Cayuga Co., N. Y.

CATALOGUES, &c., RECEIVED.

E. MOODY & SONS, Lockport, N. Y. Semi-Annual Wholesale Trade List of the Niagara Nurseries, for Spring of '78.

They call special attention to the fact that their stock of standard pear and apple trees is unusually heavy.

The Vineyard.

THE GRAPE PROBLEMS IN OHIO.

M. B. BATEHAM:

As it was generally known that the subject of grape diseases and phylloxera would be pretty fully discussed at the meeting of our State Horticultural Society the past month, a number of vineyardists in various States have written me, desiring to be informed as to any new facts of interest on these topics, which may have been elicited at the meeting. Among these letters is one from the Consul-general of Germany residing at New York, referring to the grave importance of the phylloxera question to his nation, and the desire of the vineyardists to learn more about the ability of American vines to withstand the ravages of the root-lice.

An interesting letter was also read at our meeting, from Dr. G. L. AUSTIN, now a resident of Cambridge, Mass., who has spent nearly five years among the vineyards of Germany and France, and two in California where his father-in-law has been for many years, the owner of a large and prosperous vineyard. This letter was not written for publication, but I trust I shall be pardoned for giving the following portion, on "Phylloxera in Europe:"

"A year ago, this fall, I was among the vineyards of the Onarontes, in France, and in company with M. BOITEAU, made a pretty thorough examination of the devastation there going on. Since then, M. BOITEAU has written a masterly *brochure* on the subject, in which he takes the theory that I am prone to accept, that in France at least, over-cropping and neglect of the soil have contributed in no small degree to the present state of things. In the district where we were, 310 millions of gallons of wine were produced in 1875, and yet the great majority (seven-eighths) of these vineyards have never had a cent's worth of manure for upwards of a decade of years. The ground was full of old and decayed roots, and where the oidium had been the most prevalent, there was found to be the greatest degree of injury by the phylloxera.

"The baneful results of the insidious workings of the insect, were most noticeable in the month of September, for then the struggle which through the summer had been waged between the vine and the phylloxera, seems to end in a complete victory for the latter; and on a sudden the vegetation stops, the leaves curl up, and the vine is as dead as if the stem had been cut off from the roots.

"I learn by a letter recently received from M. P. A. MAONEN of La Grande Marque of Cognac, that at the present time, public opinion among the French vignerons is divided—some advising the importation of American native vines as stocks on which to engraft European varieties, while others oppose such practice, and claim that the phylloxera was brought to France on vines imported from America. The subject is a very interesting one, and I propose to publish an article on it, with illustrations, prepared for me in France, in an early number of the Popular Science Monthly."

There were quite a number of Ohio vineyardists present at our meeting, and in accordance with the request of the Secretary, they had made particular examination of the roots of the vines, especially where rotting or mildew had occurred the past summer, to see how generally, if at all, the phylloxera were present, and whether there was any evidence that the insects were the cause of disease, as had been suggested by Professor COOK.

The reports given showed that in many parts of Ohio, as elsewhere, much injury had been done by the rot and some by mildew, as usual; and it was also shown that the phylloxera was more generally present in our vineyards than had been supposed, but rarely so abundant as to seemingly affect the growth and vigor of the vines; nor could large numbers be found on any of the roots, though some of them had considerable of the warty appearance which is evidence of the presence of the lice. In fact, it appeared that, as a rule, the most rotting occurred where the vines were of rankest growth, and no phylloxera were discoverable on one-half of the vines which suffered badly from rot, while some which had phylloxera did not have any rot.

Prof. COOK was present, and gave an interesting lecture on phylloxera, with illustrations. He also stated that he found in the vineyard at Grosse Isle, an almost total failure of the crop from the rot, and the phylloxera on the roots of the vines so in proportion to the rotting of the fruit, as to convince him that the insects were the chief cause of the disease; though it might be that wet weather and the lack of perfect drainage, had something to do with it.

Reference was made to the records of the seasons, as made by Mr. HUNTINGTON of Kelley's Island, years ago, and his conclusions therefrom, as stated in the RURAL NEW-YORKER of Nov. 24, that the rot invariably followed much rainfall in June, while a dry June caused exemption from the disease. Some remarks were made confirmatory of this theory, and a decided majority of the grape growers present seemed agreed in the opinion that wet weather was the chief cause of rot, and that phylloxera had little to do with it.

Mr. G. W. CAMPBELL read an interesting essay on new varieties of grapes, and their ability to withstand diseases and insects. In speaking of phylloxera, he said he thought this insect was doing more harm in many cases than people supposed, and that by weakening the health of the vines, mildew and rot might be induced. He imagined that the rot, as well as mildew, was caused by a parasitic fungus, the spores of which were floating in the air and vegetate when resting on the foliage or fruit, whenever the atmosphere was in the right state as to warmth and moisture. He was convinced that *sulphur* was an effective remedy or preventive of mildew when applied sufficiently early and often; and he had been told that some vineyardists had found it beneficial in lessening the amount of rot. But on the whole, he said, he was in a better condition to receive information than to impart it, on these perplexing topics.

Much of the failure of the grape crop in Central and Southern Ohio, the past season, was owing to the injury done to the vines by the cold weather in March, following a mild February. As similar damage is often done by the winters in this and more northern climates, the advice was given to prune the vines in autumn and then bend them down to the ground, covering with a little earth to hold them in place for the winter. It was also recommended that young vines be planted where old ones show disease, and that the driest locations be selected, or very thorough drainage given.

Painesville, O.

THE EARLY CHAMPION GRAPE.

WHAT, AND WHERE IS IT?

G. W. CAMPBELL.

I HAVE reason to believe there are three or more grapes which have been introduced to the public under the above name, and the object of the present inquiry is to find out, if possible, which of them is entitled to it; and which, if any of them, are worthy of general cultivation.

The first grape bearing the name of Champion, that I remember to have seen, was at one of the meetings of the American Pomological Society, several years ago, at Rochester. This was, however, a red grape, but so coarse and foxy in character that I regarded it as of no value, and I think it has never found a place in the catalogue of any prominent vine-grower. Another, a black grape, said to have originated in Western New York, called Talman, or Tolman's Seedling, closely resembling Hartford Prolific, but ripening a week earlier, is also catalogued as Early Champion; but which name it *properly* bears I cannot find out. Now comes another Champion, or Early Champion, claimed to be distinct from the above, sent out by R. J. DONNELLY of Rochester, N. Y., and said to ripen *two weeks earlier* than the Tolman Champion. One would think this was enough in the *Early Champion* line; but I find there is still another from New Orleans, La., reports about which seem very much "mixed." President WILDER, at the session of the American Pomological Society held in Boston, in 1873, inquired about the "Early Champion," which he found earlier than any other grape, and with little pulp; but did not know whence it came. Dr. SWASEY replied that a grape called Early Champion originating in New Orleans, was fifteen days earlier than the Hartford, and one of the best grapes in cultivation. Mr. SAMUEL MILLER says he procured this New Orleans Champion, and has fruited it; and others in Missouri have done the same, but all find it so nearly like *Ives' Seedling* as to be undistinguishable from that variety. On the contrary Mr GARBER of Pa., says this New Orleans Champion is in every respect an *Isabella* only some two weeks earlier, and a very good grape.

Now, I hope some of your correspondents may be able to clear up this matter. And the grape which first received the name of Early Champion should be entitled to retain it; while the others if worthy of name or perpetuation, should be renamed, and all left to stand upon their own merits.

Delaware, Ohio.

Industrial Implements.

THE NEW "TUTTLE" KNITTER.

THIS machine as shown in the illustrations here given explains its peculiarity and its points of difference from the ordinary circular knitters.

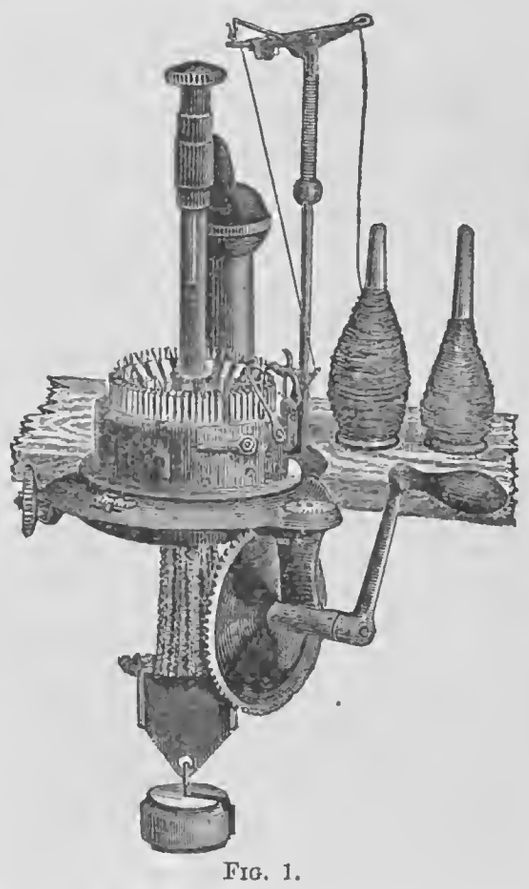


FIG. 1.

The machine has one perpendicular needle cylinder, used as a base, into which is introduced a conical needle cylinder held in position, so that by the rotation of the perpendicular cylinder, the needles in the cone cylinder are made to cross these in the straight cylinder while both are knitting, thereby producing a hand-rib stitch. This cone cylinder, when introduced into the perpendicular cylinder, is supplied with needles (being self-operating) taken from the perpendicular cylinder without removing the stitch from the same, thus turning the outside stitch which was knit on the perpendicular cylinder on to the inside of the work, precisely as in hand knitting. The inside or conical cylinder is so arranged that no more rib stitches are made than are desired; for instance, if it is required to knit just a few rib or seam stitches on the instep of the stocking, this can be done and the machine immediately changed back to plain work at the will of the operator.

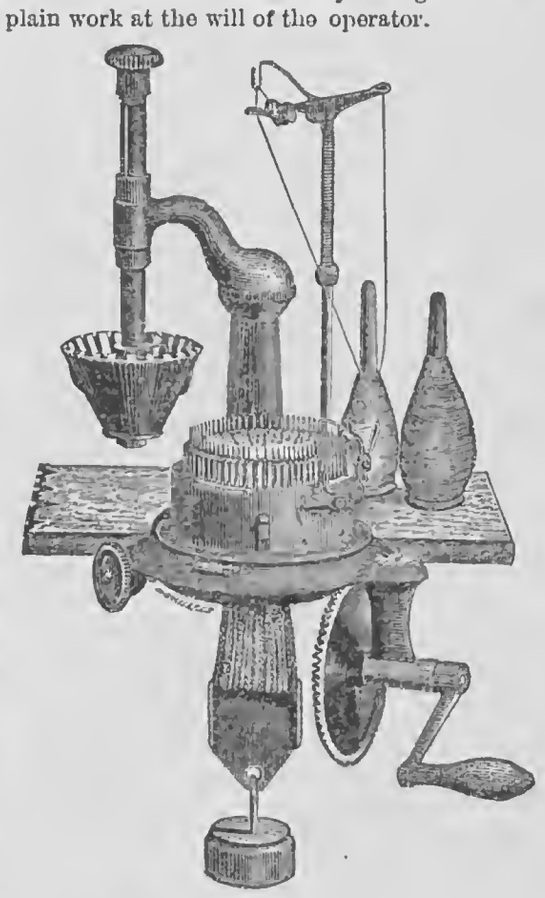


FIG. 2.

The usual mode of knitting rib top hosiery on this machine is to remove every other needle (or as many as desired) from the outside or perpendicular cylinder and place them in the conical cylinder and knit as far as may be required for the top of the stocking, and then change or return the needles from the conical to the perpendicular cylinder swing the cone out of work and go on with the plain stitch for the leg. When

the ankle or instep is reached the conical cylinder may be returned to work and the ribbing performed, either upon one side or all the way round at pleasure. It will be readily seen that the ribbing may be continued all the way down the leg or foot. Very unique and fanciful styles can be produced in this method of ribbing by alternating the plain and rib stitches. Mittens can be made with rib on the back of the hand and plain in the palm of the hand, and *vice versa*.

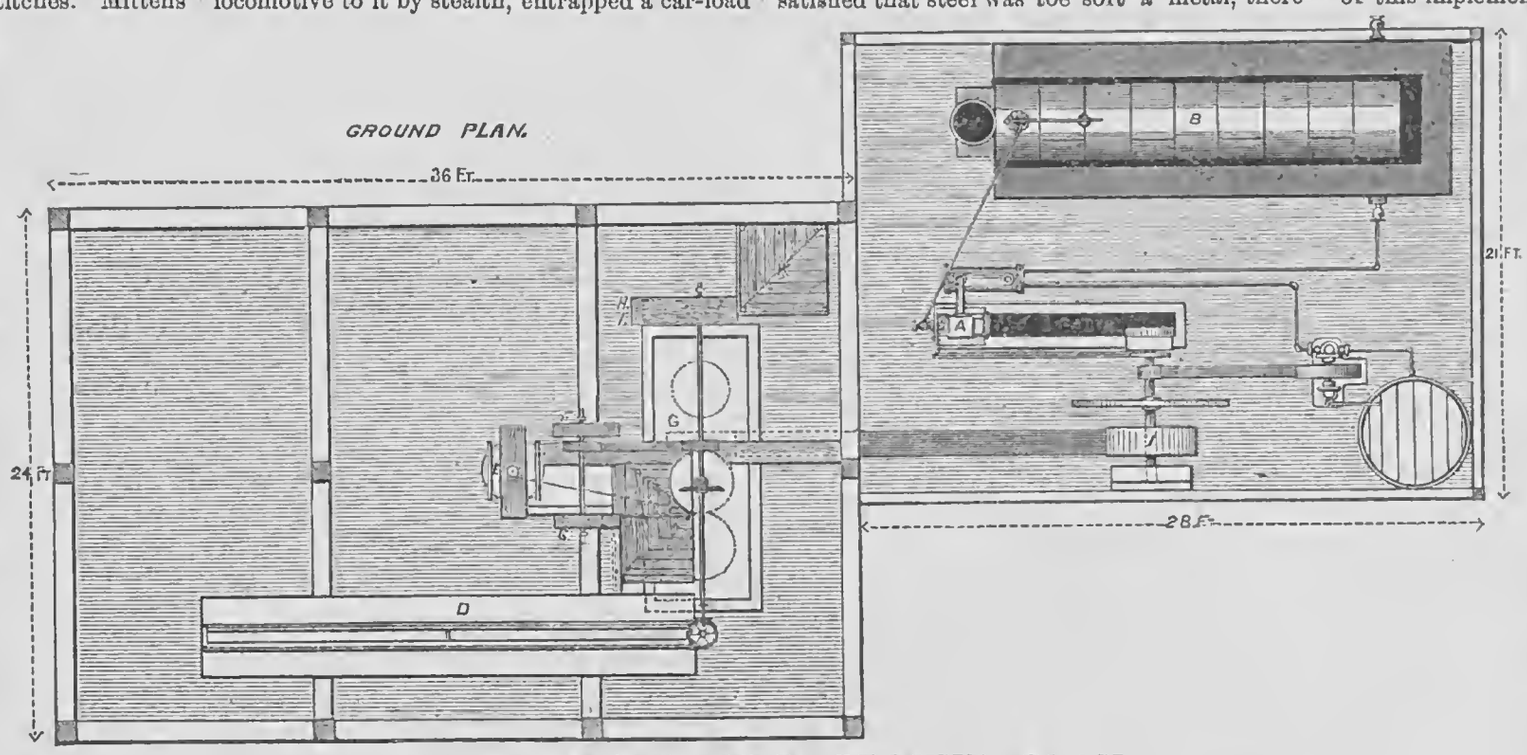
This machine has a compound motion and can be run either way, backwards or forwards. Thus the work may stand still while the cylinders revolve, or the work revolve while the cylinders stand still. Each machine is provided with a register which accurately counts every full revolution of the machine whether turned either way. Fig. 1 shows the conical cylinder or ribber in the work, Fig. 2 the ribber when thrown out of work. It is interesting to note that this is the first machine invented that successfully imitates hand ribbing work, and as usual when hand work is imitated by machinery, the product is superior to that done by the original method.

The manufacturers say that they ask the most thorough investigation of the merits of the knitter, and judging from the sample of socks shown us (and they will send a sample to any address for inspection) we think a valuable implement is offered the family. The Lamb Knitting Machine Co., Chicopee Falls, Mass., are the makers.

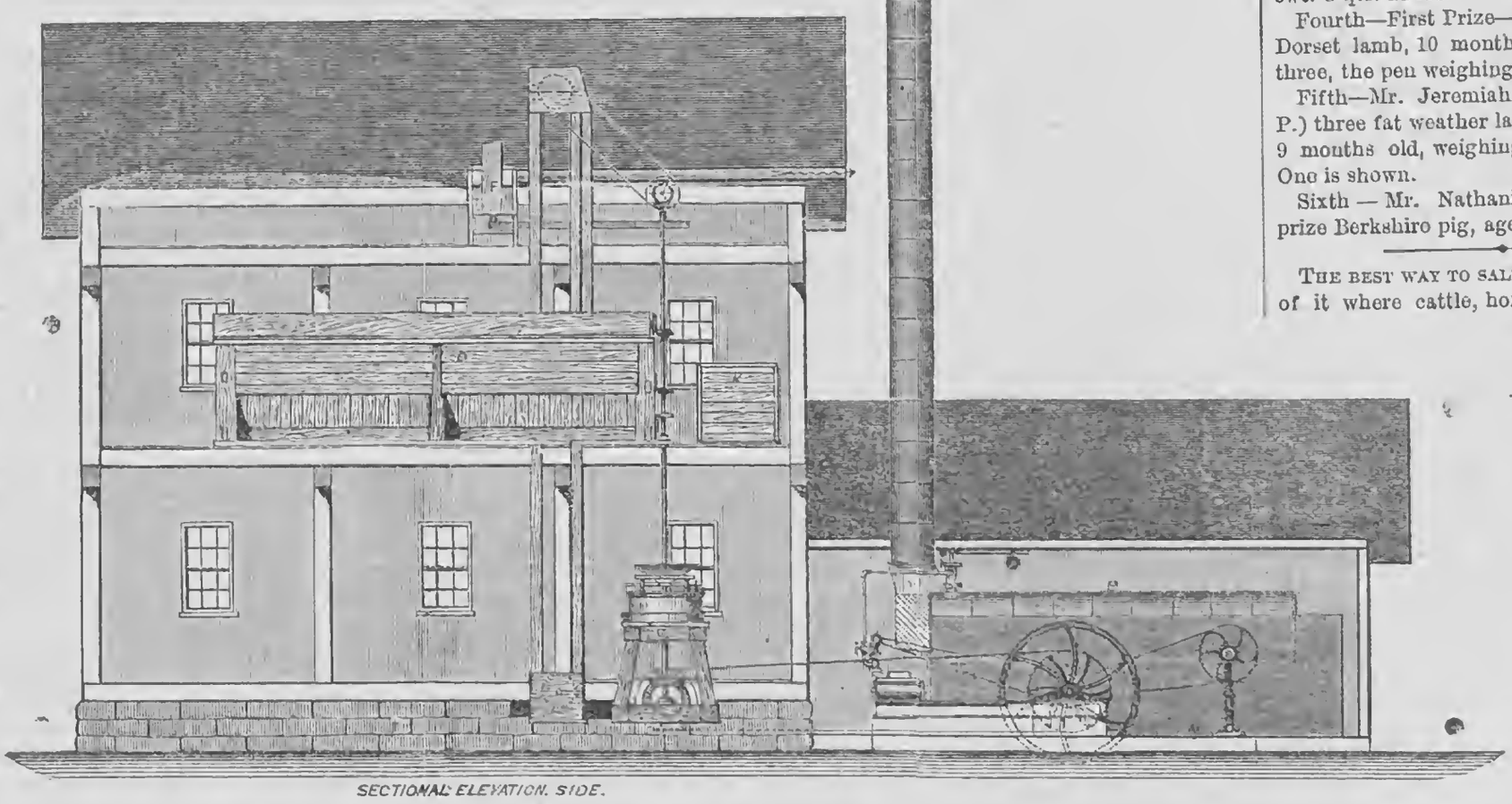
SMALL GRIST MILLS.

More or less inquiry has been excited by our series of barn plans, model farm premises, and dwelling house plans. Criticism has been active, and just sufficiently adverse to stamp the plans as these having merit. About the least anticipated request was in the line of grist mills, but we have secured the best available plan, and present in this number sectional elevation and ground plan of a steam grist mill. Those capable of forming a correct judgement will admit that the structure is well adapted for its purpose. The length and breadth are given in this plan. The hight is: foundation (stone) 3 ft. 6 in; first floor (superstructure) 12 ft; second floor 10 ft; to eaves 3 ft; to peak of roof 6 ft. 8 in; making a total hight of 35 ft. 2 in. The mill is a wooden frame structure, with an adjoining boiler and engine house, so placed in connection with the main building, that the driving belt from the engine shall connect through the center of the mill, with the two run of buhrs, the extent of the capacity of the mill. The fitting of the appurtenances will be easily followed by a reference to the letters and figures. It should be borne in mind that the side elevation as well as the ground plan does not fully show the proportions of the furniture, and their relations to each other as well as would an end elevation. We must omit the latter, however, because of pressure on our space.

The steam-engine and boiler A and B as also the water-tank occupy the small building. C represents husk, buhrs, and gearing. The smutter and separater is near the top of the main shaft. F and G, wheat and flour elevators. I and J, corn and corn-meal elevators. D, bolt and gearing to drive it. K, corn-stock hopper. The pulley on driving shaft in leash, makes 174 revolutions; upright shaft, 140; horizontal shaft 61; upright shaft driving belt, 39. We are under obligations to the Bradford Mill Co., Cincinnati, Ohio, for the plans from which these cuts were made, but the estimate of cost, which we are assured is very low, was forgotten, and up to time of going to press not received.



SMALL GRIST MILL—GROUND PLAN.



SMALL GRIST MILL—ELEVATION.

A NEAT LITTLE PLOW-WOW.

One Dickson, front initials H. B., who lies in wait about Indianapolis to sell good plows to those farmers who have been frugal and saved their money, was recently attacked by an idea. He sent out a summons to about all the plow agents he knew, and whose appetites he could rely on, to meet him at a certain time, and he would do something to them This wily, bad man then craftily secured a palace car, hitched a locomotive to it by stealth, entrapped a car-load of friends, and seating Mr. E. C. Murphy, assistant manager of the I. P. and C., on the safety valve, started for South Bend, Ind., as if he had a note to meet.

Arrived at South Bend, the astonished company saw a train of 30 cars containing 5000 chilled plows, representing $50,000 at manufacturer's prices, and all designed for the Indiana trade alone. Mr. Dickson, (the general agent for Indiana), introduced everybody to everybody else, and agents of the "Oliver" plow had their ideas in the manufacture of plows enlarged, as they traversed the most extensive plow-works in the world. By this time the company were thoroughly "chilled," and they assembled to discuss an ample bauquet. At its conclusion speeches were made. The speeches were—well, we will not expatiate on the subject. One gentleman had the good fortune to corner Mr. Oliver, the inventer of the plow, and heartlessly drew from him the following, explanatory of his earlier struggles and final magnificent success. He said:

"I was born at Roxborough, Scotland, in 1823. I came to this country in 1835, settling in Geneva county, New York. In 1836 I came to St. Joseph county, and settled in Mishawaka, where I followed my trade of molding. I continued the business, largely increasing the capacity of my first foundry, until 1855, when I was convinced that South Bend was a better point for manufacturing, and in the spring of that year moved to this city and laid the foundation of what is now the South Bend iron works."

"In 1861 my foundry was burned down, but it was soon rebuilt, and in 1864 everything was for the second time swept away."

"For 25 years preceding 1870, experiments had been made in chilling iron, and they were very successful so long as they were confined to small pieces of metal, but when the dimensions exceeded six square inches of surface it was marred with blowholes and soft spots, which rendered it entirely unfit for the use intended. I became satisfied that steel was too soft a metal, therefore I determined to experiment with chilled metal until I was able to produce a surface perfectly chilled, large enough for a plow mold board."

"I was able to produce a mold by casting in two parts and uniting them together. So you see I had fought and gained half the battle, and determined to continue the experiment."

"My first success was secured when I adopted the plan of using hot water in the chills, which dried the moisture within the flasks and prevented the blow holes. My next was a method of ventilating the chills by grooves along the face of the mold, which allowed the gasses that form within the flask, when the melted iron is poured in, to pass out, and the liquid metal to come in direct contact with the face of the chill, all over its surface; this removed all the soft spots in the mold boards and left the surface smooth and perfect."

"But the crowning success was the discovery of the annealing process, which deprived the metal of its brittleness, and then, for the first time, I could cry "Eureka."

"For a number of years we did a general foundry and machine business, until 1871, when we commenced to abandon all other branches, a new company was formed and a specialty made of the manufacture of the "Oliver Chilled Plow." Since 1873 the entire works have been employed exclusively in the production of these plows."

Mr. Pine the courteous secretary of the company, was bristling with statistics, but we are not willing to put on record the number of plows that are to be made for this year's trade, because the announcement may induce farmers to buy a chilled plow, and this would disturb the calculations of the company. Some people are just sufficiently obstinate to attempt to spoil well laid plans. One would think that the company had all they could attend to in the plow line, but they are irrepressible, and now we have to welcome among the new comers, "Oliver's Review" which tells all that it is necessary to know about the great plow.

THE ALBANY CORN PLANTER.

Our old subscribers knew the main features of this implement from the description and illustration given in the Rural of May 19th, 1877.

Since then the planter has been enhanced in value by the addition of an improvement which inables the farmer to sow corn perfectly both ways. A slide in the tube through which the corn passes (worked by a spring attached to the right-hand handle of the planter,) enables the operator, after marking off his feed one way, to drop his corn exactly in hills. This planter is, we believe, the only low-priced implement that can sow both ways. Notwithstanding improvement, prices for 1878 have been reduced. O. H. P. Cornell, proprietor of the Albany Agricultural Works, Albany, N. Y., is the manufacturer.

The Dexter spring is something entirely novel and good. We would suggest that our readers examine its claim to superiority carefully. The circular sent free by the company is, of itself, a work of art.

H. G. Loomis, Hartford, Conn., has invented a combined Level, Plumb and Engineer's Gauge which is quite convenient for use in laying drains, determining levels and making gradients for building purposes, and laying out roads, setting fences, etc. It is as efficient in inexperienced hands as the surveyer's level.

The Herdsman.

PRIZE-WINNERS AT THE SMITHFIELD CLUB CATTLE SHOW.

(See Illustration on first page.)

Our first page engraving represents several of the animals to which prizes were awarded at the eightieth show of the Smithfield Club of London. We should like to see some of our own cattle exhibitions patronized as is the Smithfield in England. On one day nearly 45,000 persons paid for admittance (one shilling.) Our illustration, which is reproduced from the Sporting and Dramatic News of London, shows—

First—The Duke of Roxburgh's second prize Scotch Highland ox, 4 years 11 months old; weight, 18 cwt. 3 qrs. 12 lbs.

Second—Champion prize (72 catalogue): Mr. Catchpole's of Ipswich Pride of Thorndale, 3 years 7 months old; weight, 18 cwt. 0qrs 22 lbs.

Third—Mr. S. Plummer's first prize West Highland mountain sheep. Only one is shown in the sketch, but the pen of three weighed 5 cwt. 3 qrs. 24 lbs.

Fourth—First Prize—Mr. Herbert Farthing's Dorset lamb, 10 months 3 weeks old. One of three, the pen weighing 4 cwt. 2 qrs. 14 lbs.

Fifth—Mr. Jeremiah James Coleman's (M. P.) three fat weather lambs, South Down breed, 9 months old, weighing 3 cwt. 3 qrs. 13 lbs. One is shown.

Sixth — Mr. Nathaniel Benjafield's second prize Berkshire pig, aged 14 months 5 days.

The best way to salt stock is to keep a tub of it where cattle, horses and sheep can have access to it at all times whether they are in the pasture or in the barnyard. Then when the appetite calls for a little of it the animals can go straigh and get it, just when it is needed, and when it will exercise the best influence on digestion, or any part of the system. When cattle are salted only occasionally there is often a great rush to obtain it, when they really feel the need of it, and an animal will injure itself by consuming at one time enough to have satisfied its natural appetite for several days, could it have the salt when it wanted it. Experience has shown that by the plan suggested really less salt is consumed than when the animals have access to it only once or twice a week. If the salt is thrown on the ground, much of it is trodden under foot and wasted.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SUNDRY SUGGESTIONS.

When a house is being plastered, if the floors were previously covered to the depth of half an inch or more with sand, a great deal of extra work in removing stains and cleaning could thus be avoided. Straw, although sometimes used, will not answer the purpose, but sawdust will, I think. When plastering, the wood-work is always more or less spattered with lime or mortar which it is tedious to remove, unless one knows the easiest way, which I have found to be by rubbing it after it becomes dry with coarse sand-paper and then with a finer quality—washing is then unnecessary.

With a pair of scissors trim the frayed edges of Arctic overshoes every week or two, and they will be much more presentable.

Housekeepers who have never used a covered dish of any kind for roasting turkeys, chickens, and other meats as well as beans, can little realize what a blessing to housewives are the covered bakers now in use. I see no reason, however, why they should be held at such exorbitant prices as are those of one particular patent, as they are very simple, such as any tin-smith can make. Many of us can remember with pleasure the savory dishes prepared by our mothers or grandmothers, and baked in the old-fashioned Dutch oven before the fire-place, and will hail with delight the advent of the covered bakers which possess the merits of the aforesaid oven while being applicable to stoves.

Julia M. Wheelock.

DOMESTIC RECIPES.

Orange Pudding.

Three pints of milk; seven heaping tablespoonfuls of sifted corn-starch; yelks of four eggs; salt, flavor and sweeten to taste. Peel six oranges; cut into fine pieces and remove the seeds; lay in the bottom of a deep pudding dish; sift over as much sugar as required; when cool pour over the oranges the corn-starch; beat the whites of the four eggs; add two tablespoonfuls of sugar, flavor, spread over the top of the pudding; place in the oven until the meringue is of a delicate brown. Although this recipe seems simple it requires care in putting the ingredients together. First, let the milk come to a boil; add the corn-starch which has previously been dissolved in a little cold milk; boil until it thickens; take from off the fire and stir in the well-beaten yelks, the sugar and flavoring; return to the back of the range for a few minutes—stirring constantly; when again taken from the fire, beat the corn-starch until it is cool enough to pour over the oranges. This constant beating prevents the corn-starch from being lumpy. The meringue should not be made until the pudding is ready for it to be spread over the top and placed in the oven.

Orange Cake.

Two cups of sugar; the yelks of five eggs; the whites of four; one-half cup of water that has been boiled—it must be cool when used; one-half teaspoonful of soda and one of cream-of-tartar; the grated rind and juice of one orange; two cups of flour. Bake in layers.

Jelly.

Beat the white saved from the cake to a stiff froth; add powdered sugar until like a stiff icing then stir in the juice and rind of one orange. Over the top layer rub lightly with the white of an egg and cover quite thickly with powdered sugar.

Mrs. D. Snedeker.
Brooklyn.

Chicken Croquettes.

One large chicken; two sweet-breads; two ounces of butter; one wine-glass of milk; one loaf of stale baker's bread; pepper, salt, parsley, onion and two eggs.

Boil the chicken and sweet-breads separately until tender—saving the chicken broth. Chop both together very fine; season with pepper, salt, parsley and one teaspoonful of grated onion. Grate or rub bread until you have equal quantities of crumbs and chicken. Take as much chicken broth as will moisten the crumbs; add the milk, butter and let boil; then stir in the crumbs, mix with the meat and when sufficiently cool, stir in the two eggs, well beaten. Mold into croquettes; roll in crumbs or Indian meal and fry in lard.

Oysters on the Half-Shell.

Put one pint of oysters with liquor into a stew-pan; add a gill of water; let come to a boil; take off from the fire and strain through a colander. Into a sauce-pan put two tablespoonfuls of butter; two and a half tablespoonfuls of flour; place over the fire and stir until the butter melts; pour in half the liquor from the oysters and stir until it thickens; take from off the fire and break into it two eggs—one after the other quickly; season with pepper, salt and a teaspoonful of parsley; mix well; add the oysters and remaining liquor; boil one minute. When cool put on the half-shells; sprinkle with cracker-crumbs and bake until nicely browned.

Potatoes.

One and one-half pint of mashed potatoes; yelks of four eggs; a small piece of butter; one-fourth pint of milk; season with salt, pepper and stir in the well-beaten whites of the four eggs the last thing. Bake in the oven until brown.

Snow Pudding.

One-half box Cooper's gelatine soaked ten or fifteen minutes in four tablespoonfuls of cold water; then add a pint of boiling water, the juice of two lemons, and one cup of sugar. Strain it and set away to cool. When cool—not stiff—add the well-beaten whites of three eggs; mix thoroughly and pour into a mold and cool.

Custard.

Take the yelks and about one pint of milk and make a soft custard; sweeten and flavor to taste, and when the pudding is turned out of the mold pour over the custard.

Bavarian Cream.

Dissolve one ounce box of gelatine in one and one-half pint of milk slowly; when scalding hot, stir in the well beaten yelks of three eggs, four tablespoonfuls of sugar; let it boil ten minutes, then stir in the whites beaten to a stiff froth; add a little vanilla. Let it cool slowly in a mold. Eaten with wine, milk, or cream.

Apple Jelly Cake.

One cup of sugar, two tablespoonfuls of butter; two eggs; one-half cup milk; one-half teaspoonful soda and one of cream-tartar; two cups flour, and a little salt. Bake in layers.

Jelly for Cake.

Two apples pared and grated, one cup of sugar, juice of one lemon, beaten white of one egg.

Cocoanut Drops.

Grate the cocoanut; weigh it; take half the weight in fine sugar; mix together and form into little balls. Bake them in a hot oven; when they begin to brown, they are done. Before baking, dip the bottoms of the balls into flour.

Brooklyn. Mrs. Williams.

Correction.—One-half pound of butter was omitted in Mrs. Bart's recipe for "Cheap Fruit Cake" in the Rural of Jan. 5.

Everywhere.

EASTERN SHORE OF MARYLAND.

J. W. KERR.

MISTAKES OF NEW SETTLERS.

Denton, Md., Jan. 3, 1878.

In the Rural of two or three weeks back, an article from one of its able Western correspondents, Dr. Williams, presents a graphic pen-portrait of the manner of procedure of immigrants from the North and East, that I have seen the twin-sister of here, and that, too, with feelings mingled with deep regret.

Many persons coming here to settle from Northern and Eastern States, where the price of land ranges much higher than here, are far from content with buying what a portion of their available capital will pay for. The renovation and improvement of a run-down farm are, in their estimation, a matter of trifling importance—the greed of acquisition blinds their vision, and instead of purchasing one farm and paying for it, *two* will be bought, half of each paid for, and the balance mortgaged. Situated thus, with a lot of poor land, no cash, no means to improve, and the time approaching for payment of mortgages, the inevitable result soon stares them threateningly in the face.

Two or three years of hard toil, followed by withering mental anxiety and remorse, and they return to their friends, wiser and poorer than when they left them. In some instances, failures of Northern families here are attributable to other causes. For example, there is the hard-headed, practical farmer who settles among us; he will tell us this book-farming is nonsense, "the men who write it hardly know a calf from a Guinea pig," etc., etc. He brings his heavy Northern plow along, and gives this thin, light soil such a thorough (?) plowing as it never had before. If there is any clay in the subsoil, he has the benefit of four or five inches of it on top. The corn he plants is differently educated, and stubbornly refuses to make oars under the treatment; but, says Mr. Hard-head, "my plan is right, and I'll stick to it; this lazy, half-way plan of farming I never liked." And thus he argues by word and work, until a depleted purse arouses his affections for his former home, and disgusted with the country and inhabitants, he quietly makes his exit.

Now I believe in thorough and modern farming, as practiced by the educated, skillful, and successful farmers of the North and East, and at the same time I frankly own that the greater portion of this Eastern Shore of Maryland, is many years behind the North in point of agricultural improvements and practice; but for this there *was* a cause; that cause is removed, and our farmers have procured tickets for the car of agricultural improvement and all its fascinating concomitants. Some are already seated in the substantial vehicle, others on the way to the station, while some are only donning suitable apparel to make them passable in the crowd; but "improvement" is the inspiring watchword of all, spreading, prolific, contagious improvement.

RURAL SPECIAL REPORTS.

Syracuse, N. Y., Jan. 4th, 1878.

Old January is singing,
And his voice is hoarse with cold;—
But, hark, to the joyous ringing
Of that merry shout and bold,

'Tis the wild, free-hearted laughter,
Of a merry group at play;
The music that followeth after.
The toils of the studious day."

Winter appears to have come at last! Yesterday morning the thermometer stood at six degrees below zero. To-day at noon—it stands at 22 above, wind east, and snowing fast. There is a fair prospect of sleighing, which is highly desirable as the roads are in a horrible condition, and in consequence business is not lively. Up to the 28th of December, the weather, was mild with only slight, occasional frosts. This shortens our winter materially, which is a great benefit to poor people. If farmers are not prepared for winter now, it is due to their own neglect, as the season has been most propitious, This is a very important season of the year, financially to us all. Payments come due, and interest—which "draws harder than a blister"—must be provided for, taxes must be paid, subscriptions to the paper, especially for the Rural renewed, church rates paid, insurance policies attended to, yearly dues to the Masonic, and other benevolent orders, settled, extra winter clothing bought, and last but not least, holiday presents for family and friends procured. Verily, it needs all of one's wits as well as a good share of one's spare cash to meet all these obligations, coming as they do in a lump. I think farmers generally are able to settle all the bills with a cheerful countenance, as the past season has been an uncommonly fruitful one. N. R.

Howard Lake, Minn., Dec. 29, 1877.

Minnesota has of late, changed her weather tactics very materially; for contrary to her established rule for winter—which is snapping cold weather, and plenty of it, with much sunshine and few clouds, and an abundance of snow—she has been giving us mild, foggy weather, with much wind, mud and rain, and as a consequence, the roads are anything but good. So frequent were the rains, that the week before Christmas—much to the disgust of housekeepers—it was impossible to dry clothes in the open air during the entire week, and many washings remained wet on the line for ten days, except as they were taken into the house to dry. Such continuous rain has never been known here before at any season of the year. There may be, after all, a blessing in disguise in this warm weather, as the seeds of weeds and other hardy plants are springing up in abundance, as if it were spring-time, and just so many less will the gardener have to contend with another year. Farmers here generally are prosperous and happy, and realized good crops of grain and vegetables, though to secure them they had a desperate fight, last spring, with young grasshoppers. Apple crop not so good as last year. Only a few varieties raised here. This town is situated in the Maple woods, nearly forty miles west of Minneapolis, on the St. Paul and Pacific R. R. January 3, 1878, our mud is frozen and a light snow has fallen. B.

University of N. C., Jan. 8.

After a mild autumn and December—a few days excepted—we are at last realizing that it is winter. So far we have had only a sprinkle of snow, but it has been exceedingly cold for two days. The ice is an inch and a half on the ponds to-day, and the lovers of skating have had the first sport of the season. Owing to the wet season, the farmers were unusually late in sowing wheat. This may not prove a loss. Some years ago I began about the usual date and finished sowing but a little while before Christmas. The first and last pieces were about equally good, and both much better than the others. The experiment showed that the soil and culture were more important than early or late sowing.

As an item of general interest, I will state that our Department of Agriculture purposes to issue a special number of its organ, the Farmer and Mechanic, on the 17th inst., in behalf of immigration to this State. They will publish 12,000 extra copies, for distribution in the Middle and New England States. The Governor, the State Geologist, the State Chemist, and other distinguished gentlemen will contribute articles.

Our State Chemist, Dr. A. R. Ledoux of New York, has recently brought his excellent and accomplished bride from your city; and they, each and both, have taken a warm place in the hearts, and a high place in the esteem of all our community.

May a kind Providence crowd the New Year with blessings to you and your readers!

A. W. M.

Syracuse, N. Y., Jan. 5, 1878.

I was highly pleased with the editorial, in Rural of Dec. 15, entitled "When to Stop." We are troubled with the same class of people in this vicinity. When one of these long-winded persons does finally stop, one feels like exclaiming in the language of the poet:

"The speaker's voice is hushed at last—
There was no more to tell,
And from the weary audience
There arose a grateful yell."

But there is another class of speakers, just as objectionable and provoking. I mean those persons—not hard to find—who seem to sit with their feet well under them, ready to spring up and speak upon the slightest provocation. They remind one of a "Jack-in-a-box," so constantly are they bobbing up and down. I lately attended a meeting of a State organization—no need to say what the organization was, or when held—where a man of this class—whom for convenience I shall call Mr. H.—made himself conspicuous.

Notwithstanding the fact that there were a score or two of good speakers, whom all wished to hear; this irrepressible gentleman managed to occupy about one-third of the time. No sooner did a speaker resume his seat, than up sprung Mr. H., quicker by at least half a minute, than any one else in the room, with a "Just one word Mr. President," or; "I wish to drop a single thought right here." Presently down he would sit again, but always ready for another spring, until some one else had spoken, then up he would come again, with one more thought, or just another word; varying the programme by rising to explain what he had previously said, "for fear that some one in the room had misinterpreted his meaning;" or to "suggest" that another name be added to some committee, etc. etc. etc. No question was, or could be raised upon which he could not throw some light no subject started that he could not instantly comprehend. It is simply astonishing how much he knew—taking him at his own valuation.

It is hard to be compelled to sit and listen to one of those interminable talkers, but this *can* be endured; while one of these "Jumping-jacks," who is upon his feet one half of the time, and who rarely says anything worth listening to, provokes me beyond my powers of endurance. Nelson Ritter.

Jonesville, Saratoga, Co. N. Y., Jan. 4, 1878.

The weather in this vicinity has been remarkable for two months past. I think that the oldest inhabitants do not remember having seen so warm a December. Until within a few days the ground has been frozen but slightly. Dec. 25-26-27, 1877, will be long remembered as the days of a "Frost storm." The wind was northeast; the sky cloudy; the trees, grass and ground covered with white frost, and frozen vapor actually falling, even during the day, upon the earth. The prevailing wind for three weeks past has been northeast. Jan. 1, 1878 was a beautiful day, the sun shining, and the weather warm. Yesterday, January 2, snow fell to the depth of four or five inches. This morning Jan. 3, was the coldest of the season, thus far, the mercury standing at 4° below zero.

Prices of farm produce as follows: Oats 35 cents and 40 cents; rye 75 cents; corn 70 cents; hay $10 to $12 per ton; potatoes $1,25 and $1,50 per barrel; butter 25 cents per lb. The apple crop was a total failure, hardly a farmer has apples in his cellar. Generally crops of the last season were abundant. F. B. W.

Pittsfield, N. H., Jan. 5, 1878.

The weather was very mild and rather moist during the latter part of the year just closed. Mercury did not go below ten degrees but once in that time, In central N. H. there was not snow enough for good sleighing, and some farmers have kept stock in the pasture all the time excepting two days. All young stock and sheep having the choice of filled racks and pasture, have invariably chosen the latter, during the day, which has materially aided those farmers whose quantity of fodder was small. The outlook for the hay crop next season is good. Live stock sells low. Lumber business is improving a little. No change otherwise. 1877 died a lamb, 1878 was born a roaring lion. Two snow storms and mercury six degrees thus far.

G. R. D.

RANDOLPH, Orange Co., Vt., Jan. 7, 1878.

The New Year has brought a plentiful snowfall; December was a glorious month; it seemed like delightful October, with the sunshiny, yellow days, and genial atmosphere; but we are having a decided change. The thermometer to-day is 12° below zero, and on the streams went down to 30°, making pretty stinging, winter weather. The farmers are getting ice into their ice-houses and it is much better than that of last year; there are no bubbles in it, so it will be likely to keep well. Produce of all kinds is very low in market, and no prospects of brighter days, at present. The season is very healthy, there are no epidemics of any kind prevailing, and as health is a great promoter of happiness, every one should be happy. R.

ELDORADO, Cal., Dec. 27, 1877.

The blessed rain came at last, rain fell all over the State Saturday and Sunday varying in places from ¼ to 1½ inches. Apples are rotting fast, (perhaps decaying would have been better); those happy enough to have a small quantity on hand are disposing of them at fair prices as fast as possible. Tree planting has commenced. From now to April it will be all "the go." By the way, one man of our town says he doesn't like Eastern trees; they have a habit of getting up and walking off, roots and all. If you see any stray trees walking about, chain them down until a warrant can be sent after them, as some of his may have gone back. W. C. L. D.

HOUSTON, Texas, Jan. 6, 1878.

For about three weeks, until New Year's eve, we had quite warm weather with copious rains, thermometer ranging from 65° to 75°. Since New Year the "northers" have prevailed, and bring us occasionally night frosts. The ground is so soggy that not much can be done in preparing the land for planting. This is the time when generally the first potatoes are put in the ground. Sometimes they will freeze down after they are up, but they usually sprout out again if the seed-tubers are not cut too scant, For spring-planting, we use exclusively Northern raised potatoes. G. M.

Veterinary.

VETERINARY.

FLAVEL S. THOMAS, M. D., F. M. M. S.

ISSUES ( )

I KNOW that I am not doing as I promised I would, but if you will allow me one article more I feel quite sure that I shall be ready to take up diseases and treatment of domestic animals. I have so much fault to find that I can't put it off. In fact I may call this my first article on diseases of animals.

It seems to me very strange, when we hear so much about the "issues" on hog legs, that anatomists have not studied these glands more than they have. They were found or first spoken of by MULLER but that was many, many years ago, and I have found no description by him that shows a thorough dissection. He was a German, and his writings are mostly contained in archives with no index, so it is hard to say just what he has done, until it is hunted up, which would be an immense work, as there are quite a number of volumes containing articles on zoology, anatomy of vertebrates and invertebrates, with no index and without classification. OWEN, in his Anatomy of Vertebrates, TODD in his Cyclopedia of Anatomy and Physiology, MIVART in his work on Anatomy of Vertebrates, HUXLEY in a similar work, all have long articles on glands, and glands of this nature especially, yet none of them seems to know that there is such a one as this of which we are now writing. CHAUVEAU just mentions it but does not seem to be at all acquainted with it. He speaks as if he had read that there was such a gland, but had never examined it himself. In no work on Veterinary Medicine or Surgery have I seen anything about it, and I have studied thoroughly WILLIAMS' Medicine and Surgery DODD and others. But I will make one exception—In COLE'S little book, the American Veterinarian—he speaks of the Issues and their Treatment. He says:—"They have issues on the inside of their fore-legs, just below the knee, which are porous like the top of a pepper-box." This is quite a good description, only they are above instead of below the knee, and to say that they look like a pepper-box is hardly in my mind correct, as they are an oblong oval in shape and have only from one to four openings placed apparently at haphazard, irregularly over the surface. I intend making the anatomy and physiology of this gland a subject of study, and work out what seems to be nearly wholly unknown. Any one knowing of any writings on the subject will greatly oblige by sending me word.

I have spent some time on it now. I find it to be from three-quarters to two inches long, one-half to one inch wide, stands out about one-third inch from the surrounding surface. It is easily detected on removing the skin, as it is of a yellowish-brown color and has a glandular appearance. I don't care to make further statements until I have completed my investigations.

But why I spoke of this, at all, was to beg owners of hogs not to allow any one to clear the "eyelet holes" of their hogs with knitting-needles. A fine probe can be thrust but a short distance into these openings yet the "neighborhood cattle doctor" will thrust a needle two or three inches through the substance of the gland and the flesh to clear the "eyelets." If you wish to clear them, do it with soap-suds and a cob, rubbing the skin over the gland well with this. It is supposed that hogs don't sweat as other animals do but that the perspiration passes off wholly by these glands. I am not prepared at contradict this. I will admit that it looks as if the stopping of them does produce sickness. I hope within a year to be able to make known the results of my investigations and trust that they may guide us hereafter in the diagnosis and treatment of diseases peculiar to swine.

The Poultry Yard.

THE LIGHT BRAHMA FOWLS.

T. B. MINER.

As the origin of the Light Brghmas, and their original native country, are questions of interest to fowl-breeders, I will say that the statements of Mr. WALLACE, in the RURAL of Dec. 29, cannot be considered as proofs of his allegations. He says, "I saw a pair of Light Brahmas fifteen months before the original pair came to the United States," which would have been in June, 1846, the first ever seen in this country being found on board an India ship in September 1847. He says that the pair he saw in 1846 were in possession of "a Captain Stewart of Sea Mount, Ireland." Now, not a "Brahma" fowl existed in the whole world of that *name* till 1852, having been called "Chittagongs" mainly in the United States, excepting a few breeders, who called them "Gray Shanghaes," which was a gross misnomer. The Chittagongs somewhat resembled the Light Brahmas, and as they had no name when originally introduced, they were so called till in 1851 my old friend, Dr. J. C. Bennett of Great Falls, N. H. conceived the idea of naming them "Brahma Pootra." I urged him to lop off the "Pootra," after his name had become pretty well established, and also strongly advocated this change in my paper, the Northern Farmer, published in Utica, N. Y.; and by 1855 I succeeded in causing the name to be simply "Brahma."

Now, it would be interesting to know what name Captain Stuart's "Light Brahmas" had in 1846—five years before the name existed! In the spring of 1862, Dr. Bennett sent the first pair of light Brahmas to England ever seen there, or in any part of Europe, according to his claim, which I have never seen *authoritatively* contradicted. This pair were sent to Mrs. HOSIER WILLIAMS, Eaton, near Shrewsbury; and the Doctor sent me her acknowledgments of the receipt of the fowls, which letter I published in my Domestic Poultry Book, which I was then compiling. In closing she said: "I am, indeed, not a little proud to be the only possessor in *Europe* of this breed of fowls." This, please note, was five years after Mr. WALLACE says that he saw a pair of Light Brahmas in Ireland!

A few months later, in 1852, Mr. G. P. BURNHAM, then of Roxbury, Mass., sent his famous eight specimens of Light Brahmas to Queen Victoria; and from that time onward, there was a great excitement in England in regard to "Brahma Pootra" fowls, it being much more difficult to change the name there than in this country. Orders for this breed came in with a rush from England at enormous prices. I received one order myself for a trio at *five hundred* dollars! The English papers, as well as all the poultry fanciers of that time, admitted that the only fowls of that breed ever seen in that country *came from the United States*. Now, what was "Captain Stuart" doing all these years with his genuine "Light Brahmas," if he had them? Is it reasonable to suppose that he could have had them, while all England and Ireland were making such a noise about them, and paying from $100 to $500 a trio to our American breeders? I say *no;* it is not reasonable to suppose that "Captain Stuart" had any pure Brahmas. He, probably, had the Chittagongs, which are quite as large as Brahmas, and resembled them in some respects.

Well, how about the Rev. Frenchman's "book of travels," and Dr. Hastings, "of the British army of India," whom Mr. WALLACE quotes to prove that Brahma fowls exist throughout China, India, and Siam? What do they *prove?* Nothing at all. They do not, according to the quotations adduced, even mention the name of "*Brahmas.*" Nor do they *describe* this breed in the least. Of what value is a man's testimony in regard to a breed of fowls in India or China, when he gives no evidence that he *knows the breed when he sees it?* Why, there are scores of fowl-breeders in this country to-day, who don't know the difference between the old Chittagongs, and the Light Brahma; and what evidence is there that these men, to whom Mr. WALLACE refers, ever saw a pure Light Brahma? French clergymen, and British army officers, are not to be supposed to be good judges of any breed of poultry; and much less to be able to give reliable testimony in regard to a breed of fowls, that for ten years went under a misnomer, in this country and in England. Nor, does Mr. WALLACE state the *year* in which the "book of travels" etc., were published; and from the tenor of his remarks, I am led to infer, that he quotes from memory, not having (I infer) the books in his possession.

It is very singular, if what Mr. WALLACE says is true, that the poultry press of the United States and England, during the last thirty years, did not come in possession of the alleged facts! Who ever heard, till the RURAL made the announcement, that "a Captain Stuart" of Ireland had Light Brahmas fifteen months before any appeared in this country, and that Mr. WALLACE *saw them?* And who ever saw quotations from the aforesaid French clergyman's "book of travels," and the writings of the officer "in the British army," in any American or English publication, showing in regard to Light Brahmas what Mr. WALLACE claims? If Mr. WALLACE will send me any book, French or English, that proves what he claims, I will publish the full text in this paper,—admit that I am "wrong," return the book, and send him five dollars for the use of it one week. My address is Linden, Union Co., N. J. The origin and "native habitat" of Light Brahmas have been much discussed in this country and England, and it is everywhere admitted that they were first bred in the United States, so far as their history has been revealed by any reliable authority; and all that now exist in the world, owe their origin to the pair obtained in 1846 by a Mr. CHAMBERLAIN of Hartford, Conn., through the clerk of the propeller "*Sachem*," from on board a ship at the dock in New York, the full details of which I published about twenty-five years ago; and I stand ready to *prove* their origin to be thus, against the world.

In regard to "Dark Brahmas," no satisfactory pair of them were heard of in any country, till the Light Brahmas had existed here about ten years, according to the current accounts of them (the Darks) in this country and England. Mr. G. P. BURNHAM claims to be the originator of them, and poultry breeders have never disputed his claim; and yet, Mr. WALLACE says, that in 1846 a pair of Dark Brahmas were brought into Ireland—ten years, at least, before any existed, according to their history, as published from reliable authority!

PEKIN DUCKS.

THIS variety of duck is a great acquisition, not only to the farmer or poulterer, but to the country at large. They occupy a position relative to other ducks similar to that the Asiatic or China fowls do to our small breeds of poultry. At their first introduction—a very few years since—a decided attack was made on them by many writers to poultry papers as the last new bubble or humbug. There can be no question but that those critics were generally persons who had not tested their merits, or some persons, perhaps, who expected too much of them; for, unfortunately for us all, we must keep our expectations within bounds with all animated nature, for, like ourselves, none of them are perfection. Even the goose that laid the golden egg didn't lay fast enough for her owner. Yet, on the other hand, there have been those who have exaggerated the qualities of these birds for the sake of selling the eggs and ducks at large prices, and in this eagerness for gain many Pekins have been crossed with other white ducks, and so palmed off for genuine Pekins.

The true-bred Pekin bird is of a peculiar shape; the body is heavy and well down behind, the legs carried back further than those of other domesticated ducks, while their tails are set up in a nearly vertical position. This heavy hinder-part of the body, naturally makes the bird carry its head and shoulders high, making its neck look long. The head is not quite as flat as that of the Aylesbury, while in size and color they resemble each other, being almost pure white, but the Pekin shows a tendency to a delicate, creamy, lemonish-yellow shade in its under feathering. The bill is of a bright orange color; the legs still deeper, almost bright red. Its weight should reach six to seven pounds in ordinary adult birds, but they are often exhibited much larger.

In habit this duck is much more domestic than any other, and shows less inclination to stray far away or to remain out all night. They come home very regularly, lay more eggs than any duck I have ever kept, and feed more on grass. They do not, however, grow as fast as Aylesburys, while very young, but catch up to them when three or four months old. I make most of these comparisons to Aylesburys, simply because that breed is most like them, and at the same time, next to them, has more merits than other ducks, as far as my experience goes, and I have kept other kinds for the purpose of comparison. HENRY HALES.

Field Crops.

EXPERIENCE WITH CORN.

JUST a few words about my experience with corn. Last year I bought three varieties new, at least to me.

Of Lawson's Early Yellow Field I planted one peck, the last week in April and first week in May, on land that was broken up and had been planted with corn the year before. It was plowed, dragged, and holed out by hand. From 3 to 3½ shovelfuls of hog and cow manure that had been drawn out the previous fall, were put in the hill. Wire-worms eat up one-fourth of it. The stalks grew large and the ears set from 1½ to 2 feet from the ground on long stems. Two-thirds had two ears on a stalk, a good many ears being from 12 to 15 inches long—eight-rowed. Cultivated and hoed twice; cut up the second week in September, when it yielded 75 bushels of shelled corn to the acre—no soft corn and almost no nubbins.

Of Improved Early Yellow Canada Field I planted three quarts on land that had been broken up the fall before, dragged in the spring, holed up and manured in the hill, the same as the other. Cultivated and hoed twice; planted the second week in May; showed the tassels by 25th of June; ears by 9th of July: picked a trace ripe 15 of August; yield at the rate of fifty bushels to the acre—all of it sound and ripe.

Of Longfellow Yellow Field I planted three quarts, the same time as the last; manured and cultivated the same as the above; stalks would average ten feet in hight. The ears, starting four feet from the ground, grew close to the stalk—the handsomest ears of any corn I ever saw; eight-rowed; from eight to ten inches long; most of it capped over; a good many ears smaller at the but than at the top. Ripened two weeks later than Canada; yielded at the rate of 70 bushels to the acre.

Mass. A. W. HINSDALE.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

ALLEGANY CO., N. Y.

A YEAR ago we received from you one package of seed of Green-gage Tomatoes, and one of Hybrid Pelargoniums, with request that we report success. Tomato seed was sown the same day with seed of Hathaway's Excelsior—and we gathered the first ripe fruit from both on the same day, but the Excelsior has a little the advantage as it has been our favorite for a number of years, and as we always save the first ripe for seed (it ripens earlier than when we first got them). But we liked the Green-gage better than any other yellow tomato we ever raised and have saved seed of it. I have at this time thirteen fine, thrifty Pelargonium plants from that package of seed; but only about one-half of them have bloomed. In color, they are from pale rose to brightest scarlet—two now in bloom have borne the largest single flowers I ever saw; they're beauties! The remainder came up too late to bloom this year. And now I'd like to ask if the seed is always slow in germinating? Mine were all the time from the middle of March until June, coming up; and in the time I scratched out a number and picked them to pieces trying to find out what was the matter. With many thanks and my hearty good wishes for the success of the old RURAL, and the Experimental Grounds.

Dec. 10, 1877. MRS. F. M. BEYER.

OUR report on Locust investigations will be very full and will bring out quite a number of new and interesting facts and will show some important laws in relation to their history and habits. We have a very large amount of material in reference to flights. That for 1877 will show, I think, that but comparatively few ever succeeded in reaching their original hatching grounds in that year, but that the greater portion were driven to and fro until they finally perished. There is, I think, very good reason for believing that swarms often fly so high as to be invisible and also frequently at night, which will explain their often mysterious appearance when nothing could be heard of their approach. This will also explain the difficulty of tracing individual swarms. I have my next Entomological Report ready. It will be devoted chiefly to Plant-lice, Corn-insects and the Oak Tortrix, and will equal in size the one you have received. CYRUS THOMAS.

Normal University, Carbondale, Ill.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Agriculture and Education in the United States —No. 2 ... 38
Topics, Rural ... 38
Western Echoes from the "Maple Shadows" ... 38
Thoughts from a Farm ... 39
Plum, Bassett's American ... 39
Tomatoes ... 39
Melon, Peerless ... 39
Bulbs for the Flower Garden ... 39
Annuals ... 40
Seed Exchange ... 40
Catalogues, &c., Received ... 40
Grape Problem in Ohio, The ... 40
Grape, The Early Champion ... 40
Knitter, The New "Tuttle" ... 40
Grist Mills, Small ... 41
Plow-Wow, A Neat Little ... 41
Corn-Planter, The Albany ... 41
Prize Winners at the Smithfield Club Cattle Show ... 41
Sundry Suggestions ... 42
Recipes ... 42
Eastern Shore of Maryland ... 42
Rural Special Reports ... 42
Veterinary ... 43
Brahma Fowls, The Light ... 43
Ducks, Pekin ... 43
Corn, Experience with ... 43
Correspondents' Letters, Extracts from ... 43

EDITORIAL PAGE:

Slitting the Bark of Hide-bound Trees ... 44
Value of Thought ... 44
Concerning Advertisements ... 44
A Ton of Stable-Manure ... 43
Whether they do or not ... ? ... 44
Notes—Brevities ... 44

LITERARY:

Poetry ... 45, 47, 50
Her Mother's Secret ... 45
Magdalen's Love Story ... 46
Repartee ... 47
For Women ... 47
Letters in Cross ... 47
Grandmother Speaks ... 47
"The Combat Deepens" ... 47
Talks on Timely Topics ... 47
Answers to Correspondents ... 48
News of the Week ... 48
Publisher's Notices ... 49
American Dairymen's Convention, Proceedings of ... 49
Various ... 49
Markets ... 49
Reading for the Young ... 50
John Gubbins' Dog School ... 50
Our Christmas Festivities ... 50
Puzzler ... 50
Sabbath Reading ... 50
Treeless Judea ... 50
The History of Church Pews ... 50
Personals ... 51
Wit and Humor ... 52
Advertisements ... 49, 51, 52

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

SLITTING THE BARK OF HIDE-BOUND TREES.

It would seem that years of experience ought to have determined whether the slitting of hide-bound trees is advantageous or otherwise. As we stated, four or five weeks since, our own experience is against the practice, but as others of greater experience think differently we have taken some pains to ascertain the views of several of our most prominent pomologists. Mr. CHARLES DOWNING writes:

"I have had very little experience as to the slitting the bark of trees that are hide-bound; it was practiced somewhat thirty or forty years ago and I think with success; at any rate I never saw or heard any bad effects from it. A preventive and a better way is to keep the trees in a growing, healthy condition, by good cultivation, and wash the bodies and large branches with soap annually at the opening of spring."

In a valuable essay (one of our series) by Professor THOMAS J. BURRILL of the Illinois Industrial University of Urbana, which we shall shortly publish, occurs the following:

"Under the impression that the trees were "bark bound," men have ruthlessly slit the covering of the trunk from top to bottom, and seeing the cut gaping wide from the shrinkage of the tissues, the diagnosis is considered sustained and the savage treatment vindicated. Had they noticed that all such slits, even more marked in the healthiest trees, were followed by the same results, and especially had they bethought themselves that this shrinkage is a necessary consequence of the fundamental laws of structure and growth, the demonstration would not have appeared so satisfactory. It is, however, more surprising to see the process recommended in a recent publication by one who certainly ought to know something of vegetable physiology. The fact is, cuts and wounds are serious things, and should be avoided except for well-considered reasons to the contrary."

PROF. BEAL answers our inquiry as follows:—"I do not think I ever saw a tree which I thought was benefited by slitting the bark. I do not believe in *hide bound* trees. The difficulty is somewhere else, generally at the roots. I confess, though, that I have not given very careful attention to the subject."

Other communications bearing upon this subject will be presented next week. Meanwhile, we shall be pleased to hear from those whose experiments in this matter entitle them to an opinion.

VALUE OF THOUGHT.

IT is not the intense thought of the philosopher and inventor—that thought which has created civilization and revolutionized industry—that is here referred to, but the head-work of which every man is capable in the ordinary affairs of every-day life. The capacity for such thought, however, is seldom a measure of its practice, for thousands who *can* think, *don't*. This widespread thoughtlessness is the fruitful parent of blunders, errors, loss, improvidence, blighted hopes, regret, and too often alas! of crime; for evil comes from want of thought as well as from lack of sense. How often are mishaps and disasters, due mainly to our own heedlessness, excused or bemoaned with reflection, "I never thought," or, "Oh, that I had thought!"

It has been well remarked, that the main difference in mental processes between man and the rest of animal creation, is the inability of the latter to foresee that certain results will follow certain causes. Although raised high above the remainder of animated nature by the gift of this faculty, yet we, through our inconsiderateness, too often fail to realize the fact, with sufficient vividness to influence our daily lives, that nothing is more inexorable than cause and effect. Hence plans thoughtfully matured and wisely laid and carried out are, barring inevitable mischances, sure to turn out well; whereas the schemes hastily undertaken and executed without reflection, have a happy issue only by accident.

There are few occupations whose conditions are so favorable to calm reflection as farming; and it is doubtful if there is any in which it can be more beneficial and profitable. Many of the labors of the farm soon become well-nigh mechanical, allowing the mind to dwell on other matters; and it is of great importance, not only to the increase and even preservation of intelligence, but also to success in life that, under these circumstances, these self-communings, instead of being muddled, vague, or trivial, should be clear, definite and serious. Nor need a farmer go beyond the limits of his own acres for interesting subjects of profitable thought. Not only do the methods of tillage, manuring and cropping best adapted to his land and circumstances, afford him topics of remunerative reflection, but also the choice of the modes most economical in trouble, time, and outlay, of accomplishing his necessary labors. The science, also, as well as the art of agriculture, should find frequent place in his thoughts, not merely on account of the interest every intelligent man must feel in investigating the causes of the effects which are either a benefit or injury to him; but also because a clear perception of the principles of his art will enable him to escape many errors and to discover fresh opportunities for their application. It is conceded on all hands, that the greatest advance in agriculture has been made since its principles have been made the subject of careful study; and what is true of the occupation of the farming community at large, is also true concerning that of each of its members.

Pre-eminent success in farming is always the result of diligent thought, and its outcome, careful system. Of two men, one remarkable for sprightly intelligence and a large fund of general information, the other greatly his inferior in capacity and acquirements, we frequently see the latter eminently successful in pursuits in which the former has either disastrously failed, or is barely making a livelihood. Careful study of the conduct of both will always show that, despite the disparity of their mental endowments, the measure of their success is invariably proportionate to the thought and system each has introduced into the conduct of his affairs. What higher proof could be adduced of the value of thought?

CONCERNING ADVERTISEMENTS.

THE advertising pages of a journal should be as interesting to its readers as any portion of its contents. The announcements in those columns presuppose wants on the part of subscribers, which the advertisers are prepared to satisfy, and the press is, or ought to be, the most trustworthy vehicle for publishing the fact.

It is undeniably true that publishers are not as careful to scrutinize the matter printed under the head of advertisements, as are editors to supervise the material which goes to make up what is known as reading pages. The reasons for this carelessness need not be stated. Occasionally undesirable advertisements creep in through inadvertence. A case in point is the announcement of Mr. LIVINGSTON that appeared in our last issue. The advertiser is well known to us, and we believe him to be responsible, but we cannot permit any one to word announcements so that the impression will be conveyed that the RURAL has any part in the business of the advertiser. This trick has been much in vogue of late. It should be discouraged because it is deceptive,

It is our earnest intention to supervise our advertising columns with the utmost care, permitting nothing to appear therein that shall mislead or work injury to our readers. We believe this due to ourselves as well as our readers. Our aim is to make the RURAL a model in its class, and we certainly shall rigorously supervise all matters that take advantage of the confidence reposed in us by our readers to secure their patronage. This policy has caused us to refuse a large amount of objectionable advertising whose money value would have been a serious loss, had not our financial position been assured. We deem it a moral duty to make the contents of the entire paper unobjectionable, and we are so circumstanced that we can afford to do it. For this reason our columns become all the more valuable to those advertisers who are trustworthy and disdain competition with spurious or deceptive wares.

NOTES.

A Preliminary Requisite.—Among the numerous subjects on which the Commissioner of Agriculture is displaying a great deal of enthusiasm, is the introduction into this country of the cultivation of coffee and tea. The stock of personal enthusiasm and serviceable energy, at the disposal of the most zealous is too limited to admit of its being frittered away on impracticable schemes, and we cannot escape the conviction that the profitable cultivation of tea in this country must, at present, be considered in this category. It has already been tried unsuccessfully, under favorable circumstances, in Florida and California, and even if the plants should be found to thrive well in any part of the country, the cost of manipulating the leaves would, now-a-days, be an insurmountable barrier to its remunerative culture. Of Chinese immigrants we have already, perhaps, enough, and even if more were introduced they could hardly compete with the cheap labor they left behind them in the Flowery Kingdom. Should the Commissoner, however, be endowed with an inventive faculty, this difficult object of his wishes might yet be accomplished, for the invention of a machine capable of superseding hand work is an indispensable preliminary requisite.

A Ton of Stable-Manure.—An average ton of stable-manure contains twelve pounds of nitrogen, eight pounds of phosphoric acid and eleven pounds of potash—thirty-one pounds in all. So states the great Rothamsted farmer, Mr. J. B. LAWES. The balance of the ton is of no fertilizing value. When this manure alone is used for grain, much potash is wasted being in excess of the needs of such crops. In this connection we call the reader's attention to the articles of Professor STOCKBRIDGE, published in the RURAL, a few weeks since. Mr. LAWES gives the following conclusions as some of the results of his life-time experience: Superphosphate alone has produced good crops at Rothamsted for thirty years. Soluble nitrogen and phosphoric acid are good for grain crops. Potash is best for root crops, grass and potatoes.

The Weather.—The weather is at all times a timely topic (a very good alliterative sentence, by the way); but, if we judge from our correspondence from all sections, never before—in ten years at least—has it made itself so extremely interesting as at present. No crops, so far as we are aware, have thus far been injured by its amiable conduct—yet, if this calmness is the precursor of terrible storms, great damage may yet be effected. We should watch with unusual interest the trustworthiness of the old proverbs, such as

If January calends be summerly gay,
'Twill be wintery weather till the calends of May.

If the grass grows in Janiveer
It grows the worse for 't all the year.

March in Janiveer
January in March I fear.

Whether they do or not!—From our own experiments recorded in these columns, and from those of others, it has long been our opinion that moles not only do not feed upon vegetables, but that they cannot subsist upon them. We are not prepared to state any opinion as to their degree of usefulness in destroying worms and insects—but we *do* know that they riddled our lawns and upset our plants last summer to an extent that made us wish that this irrepressible creature had never been born.

BREVITIES.

How many Champion Grapes are there, and which is THE Champion?

IT is rarely the case that a gratifying success is the result of anything but intelligent effort.

THE annual meeting of the N. J. State Agricultural Society will be held in the State House, in Trenton on Wednesday, Jan. 16, at eleven o'clock.

OUR readers will bear in mind that winter is slipping quietly by, and that spring will soon be upon us. Are you doing all you can to lighten the burden of spring work?

IS it true that what is innocence in a pretty girl is frivolity in a homely one? Rail against it as we will—beauty is a power, the wide world over. We sometimes think that herein lies one of the elements of the RURAL'S success!

EUCALYPSINTHE is a new French preparation distilled from the leaves of the Eucalyptus. This is said to be highly grateful to the taste as well as exhilarating and yet quite harmless. It is being largely made and consumed in Marseilles.

WE judge from what we read that the RURAL is not alone in its increase of circulation for the new year. It is a good sign. When agricultural papers thrive it is evidence that farmers are, as a class, doing well and this gives a promise of better times to every other branch of industry in the near future.

MR. MARTI writes us from Texas—"Eastern seed-potatoes sell from $1 to $1,25 per barrel higher than Western ones of the same variety and quantity. It is a well-known fact, corroborated by every experienced potato-grower here, that Eastern potatoes produce more and better tubers, and set them earlier, while Western ones grow more into stalks, and do not set the potatoes until the later stage of their growth.

WESTERN New York Horticultural Society will hold its twenty-third annual meeting in the city of Rochester (Common Council Chamber) commencing on Wednesday, January 23d, and continuing two or three days. The farmers of Western New York should be well represented at this meeting, as the discussions, &c., will appertain to subjects in which they should have a deep interest. All are cordially invited to attend.

TREES shipped by ELLWANGER & BARRY to Australia, after a voyage of 15,000 miles and being 153 days on the way, were received in safe condition. Only three in 160 were dead," MARSHALL P. WILDER'S address. This venerable gentleman desires to impress on packers and shippers of fruit to foreign lands, the great importance of especial vigilance in seeing that no inferior fruit ever crosses the ocean, thus preserving the reputation of our nation for the superiority of our fruits.

OUR New York Hort. Society held its first meeting of the new year—third anniversary of its existence—the afternoon of the 4th inst., and was attended by many horticulturists of this city and suburbs. It was presided over with much dignity by Mr. Paterson, whose good executive abilities promise to render the meetings more interesting than heretofore. Now, let all who love flowers lend their aid to this society, and let us have an enthusiastic support which will raise it to the position it ought to hold—the first of its kind in America.

BUSINESS NOTICES.

SEE Mr. MINER'S adv't of White Grapes and other fruits—something new and valuable.

Literary Miscellany.

A SISTER'S PLEA.

FAR from the shelter of the town,
A little lass and lad
Towards the shore come stealing down.
Why should a look so sad
Touch his sweet face with pensive grace.
And hers, which should be glad?

Among the rocks they rest anon
In silence; then the maid,
"Now, *you'll* not be a sailor, John,
And leave me?" softly said.
The wistful gaze she did upraise
More strong than language prayed.

"I would have been a sailor, Nell,
Had it not been for you.
Our father toiled both long and well
Upon the boundless blue;
And though he sleeps five fathoms deep,
I'd be a sailor too!

"But mother told me as she lay
Upon her dying bed,
That I must keep by you alway,
And work for you, she said,
When she was gone, and we alone,
And win your honest bread.

"And so, my dear, I shall obey
Our mother's last command,
For I shall keep by you alway,
Yet have a helping hand
Ready to lend that hapless friend.
Whose bark may get astrand."

HER MOTHER'S SECRET.

CHAPTER V.

[Continued from page 28.]

"WILL you show me what you can do," asked Edith, "that I may judge how to begin?"

"I know nothing," the other cried, "and I don't want to learn. I had better explain at once that I am too old to have a governess, and don't mean to learn!"

"But, Miss Tressider——" observed Edith.

"I am willing to be friends, but you must let me do as I like," the other went on, pettishly. "You can play and sing as much as you like; but I cannot, and will not, be treated as a schoolgirl!"

"Then I must resign my situation at once," said Edith, in a grave tone; "I cannot take money under false pretenses."

Blanche colored and bit her lip. She had thought to govern and mold this gentle girl at will. She found it would be no easy task. Yield she must, as her father had given this alternative, or a strict boarding-school for a year.

"I have been foolishly lenient hitherto," he had said, "and now something must be done. You can never come out at all unless you receive some polish."

"I will try," continued Blanche, after some moments hesitation; and going to the piano, she selected some easy music, which she began to play without much regard to time or tune.

"Allow me," said Edith; and slowly and correctly she played it for her. "Now, Miss Tressider, try it again."

She did; and, after trials, found herself improving at once. And so it was with everything.

A little before two, Miss Tressider retired to dress for lunch. Her studies were to be only during certain hours, and not interfere with her drives and mamma's one particular visit, in which her daughter always accompanied.

Edith had made a slight change in her toilet, when a girl came to the door of her room—a very excellent one—and invited her to follow, as lunch was waiting.

Edith supposed this was another word for dinner with the housekeeper. Her astonishment may be conceived, therefore, when she was ushered into the room where lunch was laid for the master of the house.

He was walking up and down in rather a perturbed way. Lady Tressider was looking very sullen and defiant; Blanche only surprised.

"Md'lle Marechale," said the Baronet, courteously, "whenever you hear the bell ring for meals, please to come down. You are one of the family."

"Really, Sir Arthur," she faltered, "this is more than I deserve."

"Pray be seated," he answered, handing her to a chair.

And thus was Edith's situation in the family assured. The Baronet showed her chivalric respect, and every day evidenced more tenderness of manner. There was something about the girl which had completely fascinated him.

Lady Tressider hated her with all the virulent hatred of a low, vulgar, and vindictive nature. The restraint she had to put upon herself galled her to the quick.

"How you can be commonly civil to that two-faced, cunning doll!" she snappishly cried to her daughter, "is more than I can imagine."

"In the first place," said Blanche, laughing, "I must obey papa's orders. You know that he will be obeyed. And then she takes great pains with me. I am improving."

"And then the girl is so very beautiful. If your father insists on her being present when the season begins—at all events, when we are down in the country—we shall have all the young men running after her," she continued.

"She is very beautiful," sighed Blanche: "and am I so very ugly?"

"Ugly!" cried the mother, warmly; "no, my dear. But the men somehow rave about these bold beauties."

"I don't know much about it," said Blanche, and went to her lesson.

A month passed, and preparations were made for the country. Parliament was up long ago, the season was well over, but Sir Arthur had some business in town which detained him.

The second dinner-bell had rung, and Edith, more carefully dressed than usual, went down stairs quite happy. She was beginning to like Blanche. Sir Arthur was more kind every day, treating her more like a daughter than anything else; while Lady Tressider ignored her altogether, which was about the best thing she could do.

On this occasion, Edith, fancying herself late, entered the drawing-room hurriedly, but would have retreated on seeing the tall figure of a gentleman, slightly turned from her, in conversation with Sir Arthur.

"Come in," said the latter. "This is my nephew."

"Heavens!" cried the well-known voice of Royston Yorke; "have I found you at last?"

Edith reeled, and would have fallen but for his supporting her.

"Pardon me, uncle," said the nephew: "this is the young lady I was speaking of,"

"I really am ashamed of my emotion," began Edith; "but I knew this gentleman in happier day's before my sad bereavement."

"Perhaps Mademoiselle would like to retire," began Lady Tressider, white with rage.

"Nonsense!—only a surprise," said the Baronet, pleasantly. "Take my arm, and come in to dinner."

The Baronet thus put the girl at her ease, and the dinner passed off pretty well, though the lady of the house smiled significantly several times.

After dinner the ladies retired; Edith going to her own room, utterly bewildered at this amazing discovery. Doubtless he loved her still, while his uncle had shown no displeasure at his familiarity.

But what did all this avail to her, the almost nameless orphan?

While she was still thinking, she was summoned to join the party in the drawing-room.

CHAPTER VIII.

A Declaration.

"Well, sir," began Royston Yorke, as soon as the gentlemen were alone, "what do you think of her?"

"Charming!" replied the Baronet. "And I am assured by Mr. Linton, who recommended her, of excellent family, though poor."

"Her mother was a true lady. I am sorry to find she is dead. It was this that caused my search to fail," he answered. "Then if the young lady has not changed her opinions of me, sir, I am free to win her?" added Royston.

"Yes," was the emphatic reply. "I should rejoice to see so fair, so noble a girl, the future Lady Tressider."

"I am delighted you are pleased, sir."

"I suppose she does not know that though to please that old miser you took his name, you are still a Tressider?" asked the Baronet.

"I told her nothing, except that I loved her, and must come up to town to consult my uncle," said Royston.

"Well, you can tell her all now; and the sooner the better," replied the Baronet, rising, and joining the ladies in the drawing-room.

Edith was at once sent for, and came into the room, pale and thoughtful.

Royston rose and took her to a seat, where she sipped her coffee, and joined in the general and ordinary conversation.

After coffee, Royston proposed a game of chess for which purpose he took her to the extreme end, of the room, quite out of hearing.

"I am very sorry," he said, kindly and tenderly, "that you have suffered so severe a loss since I saw you last."

"It was a great loss to me," she answered, her voice quivering a little; "left, as I thought, without a friend in the world."

"You have found many," he added.

"Many; and I am thankful for it," she answered, and making a move, seemed absorbed in chess.

"I dare say you believed me both fickle and false?" he asked, gently.

"I thought you had changed your mind, as every man has a right to do," she continued; "and then my trouble came, and I had enough to think of.

"My dear Miss Marshall—my dear Edith, I will say—I was neither fickle nor false. On reaching town I found my uncle absent, and started a long journey in search of him. On the way I was taken very ill; my wound had been hastily and imperfectly cured, so that I lay a long time between life and death," he said.

"I never suspected that," she said, kindly.

"Of course not. As soon as I arrived I saw my uncle, obtained his consent," he added significantly, "and went off to find you. Your mother was dead, and none knew your address. I suspect the doctor did; but if so, he refused to satisfy me. I sought you everywhere, and then returned home to find you in the most unlikely of all places."

"It was strange," said Ethel, musing.

"Not so much so as you think," continued Royston, with a dry smile. "Did you mention my name to Linton?"

"I told my mother all about you on her deathbed," was the grave and pained reply, "and at her request repeated everything to Mr. Linton."

"And he, kind, good, generous friend," the other went on, "knowing I was Sir Arthur's nephew, sent you here. He knew first that you must win my uncle's heart, and that sooner or later, we must meet."

"If that was his motive," said Ethel, bitterly, "it was a very unwise act. Better we had never met again than that we should so soon part again. I must leave here!"

"Why?" was his amazed question.

"I may be respectable, good enough for a hired menial of a superior grade, but not to be daughter of the house!" was her firm reply. "I am not a lady, that I know of. My parentage is doubtful," she added; "but I am not called upon to reveal family woes and sorrows."

"Let us speak no more now" said Royston, gravely. "My uncle is satisfied—unequivocally satisfied. But you are agitated. Will you play music instead of talking?"

"Yes," answered Edith, glad to get from the room, and be a little more alone.

Blanche had gone to sleep on a couch, weary for want of gossip.

"On what footing will that young person be placed in my house in future?" asked the lady of her husband.

"Of the future Lady Tressider—future mistress of Longmead, which I have so long abandoned through your prejudices, but to which, in three weeks, we go," was the reply.

"Then in future," the other went on, "she will be placed on a footing of equality with my daughter?"

"No," said the Baronet, gravely; "above your daughter, as the wife of my future heir. They will be married as soon as her time of mourning is up."

The Lady Tressider sat choked with rage as he coolly said these words.

"That vulgar chit placed above my child?" she cried. "Never!"

"She is a perfect lady, which is more than ever could be, or will be, said of yourself or daughter," he remarked, himself white with rage, he knew not why,

But it galled him to hear her insulted—the child whom he loved as his own flesh and blood. Hence his departure from his usual earnest courtesy.

He said no more, but went from the room to look on at the happy lovers, listen to the music, and dream.

Lady Tressider remained behind, to battle with her anger. She knew her husband well, and that he never departed from his given word. Besides, he possessed a power over the lady whom he called his wife, which the world little suspected.

Waking her daughter suddenly, this young person sat up, and stared wildly about.

"What is the matter?" she asked.

"The matter, silly fool! That this girl has already stolen away your sweetheart! But for her, you would have been Lady Tressider, owner of Longmead, and a rich heiress," cried her mother.

"And now?" the other asked again.

"You will probably remain Miss Tressider to the end of the chapter. You will be neither a lady nor chatelaine of a grand house, nor will you have much of a fortune to attract a husband—just my fortune and what your father chooses to give you."

Blanche was up in arms now, and white with rage. She had passion, after all.

"And this white-faced girl has done all this?" she said, in a low tone.

"She has. Your father has just told me that in future she will stand higher than you in the household, as the future wife of the future Sir Royston Yorke Tressider."

"I will kill her!" said Blanch, now completely roused. "I hate her!"

"You had better not let your father hear you say so, or you will be sent to school."

Blanche leapt from her chair.

"What is to be done?" she said, hoarsely.

"Bide our time! Heaven knows what may happen!" was the cold reply.

No more was said; and after some little time, the others returning, a tray was brought in, and then all went to bed.

CHAPTER IX.

Explanations.

AFTER brekafast that day, Edith asked permission to pay a visit to her friend, Mr. Linton.

"My dear," said the Baronet, warmly, "in future you are my guest. A carriage is always at your orders, and you will only join Blanche in her studies when you are so inclined."

"That will be never, if I am asked," was Blanche's incautious reply.

"You know the alternative," said the Baronet, coldly—he never made any show of tenderness to this girl; "and unless you show proper respect to Miss Marshall, my adopted daughter——"

How the blood rushed to Edith's cheeks!

"I must find a school-mistress who will be a strict disciplinarian, and who, while she informs you in accomplishments, will also teach you to behave like a lady."

Blanche quivered, bit her lip and was about to make an answer that would have sealed her fate, but that she caught her mother's warning eye.

"I am really sorry to encroach on your kindness," said Edith, quite humbly, and confused at causing any quarrel or dissension. "I really do not deserve——"

"I should think not!" muttered my lady.

A SISTER'S PLEA.

"I insist upon your allowing me to know best!" he answered. And so, after breakfast, she drove off in Sir Arthur's carriage, leaving my lady and her daughter stupefied.

"I wish we knew more about the dear girl's family and antecedents," said the Baronet, almost mournfully. "Somewhere have I seen the face before, but it is as it were in my dreams. It awakens memories, as does the voice, and yet I cannot give them a name."

"You suspect nothing wrong?" asked Royston.

"No, nothing. That noble brow reveals a soul within glorious and good; those eyes beam with truth and beauty," he went on; "and strangely do they move me!"

Royston stared at his uncle. He had never seen his usually phlegmatic and grave relative so excited. That he was pleased with the girl of his heart was most agreeable, but he could not understand the curious and extraordinary interest he took in her.

Meanwhile, Edith Marshall had driven to the house of Mr. Linton, who was delighted to see her, and appeared no way surprised at the carriage.

"And so, sir," she said, assuming a playful mien, "you knew that Sir Arthur was Royston Yorke's uncle?"

"So you have found it out!—what then?" he answered, with a chuckle.

"Was it fair?" she answered, in a tone of gentle remonstrance, "to thrust me on them? The uncle might have thought me a scheming, designing adventuress, who went there to curry favor, win his regard surreptitiously, and then marry his nephew."

"As you knew nothing of the matter," he answered, "he cannot blame you. Does he know all?"

"He knows all, and wishes me to marry his nephew—to supplant his own daughter; and, in the days to come, be Lady Tresseder," she sighed.

"All of which you will be," he said.

"Never!" was the quiet reply. "I will enter no family under false pretences. Knowing what he thinks he knows, patronized by you, he takes everything for granted; but, knowing the truth, he would refuse me with scorn."

"But he never must know," replied the man of the world; "it would be moral suicide."

"He must know all, and that this very day!" was her firm answer.

"You are a noble girl," he said, fervently, "and shall have your own way. But hear'ee, girl; if you will tell your mother's secret, oblige me in one thing—mention no names. I have reason for keeping out of it. Tell him a story——"

"Yes; if he finally asks for the names?" she argues.

"You must give them to him," sighed the other, "and refer him to me for farther explanation."

Edith agreed; and, in a hurry to end all doubt and perplexity, hastened back to Eaton Square.

Mr. Linton rubbed his hands together.

"Now, we shall know at last! Truth is mighty and will prevail!" he said.

Edith hastened back, and reaching the house, asked to see Sir Arthur alone. She was at once ushered into the library, where the Baronet was reading. Royston had gone to his club; the ladies had visitors.

"You want to speak to me," he said, gaily.

"I do, Sir Arthur," she replied, accepting a proffered seat near him.

She had found great difficulty in mustering courage to tell the tale. It was her mother's secret, but she could not enter a family under false colors.

"You have spoken kindly to me—very kindly; you have admitted the addresses of your nephew; you have"—low, sweetly, tenderly, she said this—"treated me like a daughter."

"I regard you as such," he said, kindly. "But why all this preamble?"

"You know nothing of me. Will you let me tell you a story?" she asked.

"If it pleases you, my child," he went on.

"I do not even know my father's name," she began, never looking up once; "and hence not my own."

It was well for her she did not see the nervous start he gave, or she could not have gone on.

"There once lived a young lady," she continued, and told her mother's story.

Not once did her eyes see the listener, whose agony was terrible as the words worked their way into his brain, fixing themselves there in marks of fire. But he never spoke until she had quite finished.

"Girl," he said, in a voice so hollow and far off, she started up, and saw an agonized man staring at her with eyes that nearly started from his head, "in mercy give me the names!"—To be continued.

MAGDALEN'S LOVE STORY.

VIOLET FULLER.

"Now hush, my dearie, there's a man; your mother's a poor creature, but she can take care of her little lad yet. It will never be *she* that will sit by and see him thrashed, not for all the LANGLEYS in England!"

The speaker sat in her cottage kitchen in an armchair by the fireside, plaiting straws—a feeble, sickly woman, with a peevish expression on her thin face. She had fretted herself into ill health two years ago, when her husband died, JACK MARSDEN, the Tramley fisherman, who had lost his life coming round the headland one wild night, with his boat heavily laden with fish.

On a stool at her feet, sat the boy whose unmerited whipping she bewailed, his small face disfigured by abundant weeping.

The room had also one other occupant, a beautiful, dark-eyed girl of nineteen or twenty, who sat sewing.

She let her work fall on her lap as MRS. MARSDEN spoke, and said in a low, intense tone, "Mother, I could not help it"

"You didn't try to help it;" the other retorted. "You wouldn't care if LANGLEY broke every bone in his body—as he nearly has done, bad luck to his ugly face!"

"O hush, mother! please," said the girl, imploringly.

And yet few others, men and women, in the parish of Framley, would have been much concerned had a far greater amount of blame fallen on the head of HUGH LANGLEY, the village schoolmaster. He had come to the place a year ago, to be master of the "rector's school," as it was called. High testimonials had procured him the appointment, and indeed his attainments were all that could be desired and more than were needed for the post. But he was not a popular man with the people, being violent-tempered, haughty, reserved, and independent. He was no favorite therefore, with either rector or scholars. He was, however, of gentle birth, and had the misfortune to lose both parents at an early age. But for this perhaps, HUGO, as his Italian mother called him, might have been different in mind and manners. As it was, he seemed to be at war with all the world, having quarreled at eighteen with the uncle who was his guardian, leaving the house utterly without resources and utterly friendless. He was clever, ambitious, and determined; and yet, in twelve years, in spite of his talents, he had risen to no higher post than that of a village schoolmaster.

MAGDALEN MARSDEN had been appointed mistress of the girl's school some three months after the arrival of HUGH LANGLEY, although she was young for the position. But the death of her father had thrown the care of the family on her shoulders, and the rector, thinking her sufficiently well qualified for the situation, gave it to her on the death of the former mistress. She, like the new master, was clever and ambitious; and he soon became aware of the fact, and offered to assist her in her studies.

Perhaps the beauty and grace of the girl had something to do with this offer, as she possessed a natural refinement quite at variance with her surroundings. She thankfully accepted the offer, and HUGH found his pupil quick, earnest and unwearied in her efforts to learn. To her, he became a patient and gentle master; so these natures, so dissimilar, suited each other in this respect.

It was a lovely June evening, and the children had been dismissed for some time. The boys' room was open, and at his desk the master sat, alone. His dark, resolute face, with its handsome eyes—the only beauty of his countenance—wore a softened expression as he sat waiting for his pupil, who generally came at this hour. He was probably thinking of the beautiful girl who, for six months, had been his almost daily companion.

She came at length, in her plain stiff dress, which showed every curve of the young, graceful form, and flushed like a June rose, as the master turned and looked at her.

"You are late," was all he said, although his eyes were fully conscious of every grace which she possessed.

"Yes, I was detained at home—"

She opened her books on the desk before him, and the lesson began, but the master saw that her attention wandered. At last he laid down the book.

"You are not well, to-day?" he asked.

"Oh, yes, I am quite well," she said, quickly.

"What are you thinking of, then? Not of your lesson."

She hesitated.

"No," she said, at length.

"What of then, tell me?" he asked.

"I want to speak to you, Mr. LANGLEY," she said, suddenly. "You were very angry with my brother this morning."

"Well?" was the reply.

"You hurt him very much."

"I meant to hurt him."

"But he is so young!" she pleaded.

"Young, or old, he did *wrong*." And Mr. LANGLEY leaned his face on his hand as he spoke. There was a pause.

"Well," he asked, at length.

The girl's cheeks flushed as she answered—"could you not be a little more gentle with them, Mr. LANGLEY. TOM deserved punishment I know, but when you are angry every one misunderstands you, and if you only knew what they all say of you!" The tears sprang into her eyes as spoke.

"I can't attest to all the fools'-talk that goes on in Tramley," he answered scornfully. "If *you* stand by me I don't care who is against me."

"But could you not bear with them?" she pleaded. "They can harm you because they send all their complaints to the rector; even now, there are people who say you will not be here much longer."

"Ah, are they saying that?" and he laughed, "well, perhaps it is true."

She gave him one sad look, and then sat with bowed head and clasped hands. Presently, large tears ran down her cheeks and dropped on her lap, but she never moved; she did not wish him to know that she was weeping, he would only despise her for it. But he was conscious of every tear she shed. He silently watched the glittering drops as they fell over the fair, round cheeks; then he bent and whispered:

"If it should come to that, if I am to live here no longer, MAGDALEN, will you let me leave Tramley as poor as when I came?"

She started, but neither answered nor looked up. At length he spoke again.

"I have never loved a woman before; you are my first love, MAGDALEN, my pupil. Will you be my wife?"

She looked up. "What am I that you should ask me this?" she cried. "I am nothing but a poor, ignorant girl. *Your* wife must not be such a one as I.

He stooped closer; "MAGDALEN," he whispered, "Look at me!" The passionate tenderness of his deep voice drew her face up like a call. What need was there for words? He took her in his arms, and held her to his heart.

For three months they were infinitely happy. They told no one of their engagement, and no one suspected it. During these months everything went well at the school. MAGDALEN'S power over Mr. LANGLEY was very great; one word, one look, or one touch from her hand would subdue him in his angriest mood. But she could not be always by his side, and one day the peace came suddenly to an end. HUGH quarreled with the rector. The rector was in the wrong, and HUGH, forgetting the deference due to one in the rector's position, stood up before him as an equal, and the end of it was, that when the school-house was closed in the afternoon, the key went into the rector's pocket.

MAGDALEN did not reproach HUGH, although she knew that they must part. They met that evening for the last time at the foot of a cliff beside the sea, which had witnessed many a meeting of their's before this.

"It must have come to th's sooner or later," said HUGH, as they stood hand in hand, with the great mass of water stretching away at their feet. "Do not grieve for it, my darling," he went on; "I was wasting time here; now that you have made a better man of me, I am worthy of better things. And going now will bring me back to you the sooner."

She looked up wistfully in his face.

"The future is all so dark!" she cried. "I feel as though I were holding the last link of a golden chain; and to-night, it will have fallen from me."

"No, it will *not* have fallen," he answered. "Your hand grasping one end, mine holding fast the other, it will remain stretched out between us, until I come back. I will work for you, struggle for you, and rise for you. And *you* must wait for me, for no power save that of God shall keep me from coming back!"

"I will wait," she answered; "I will wait years and years. If I die before we meet again on earth, I will wait until we meet in heaven!" Thus were their farewells spoken.

MAGDALEN kept her secret for two years, hearing from her lover at long intervals, and living on in silent trust in his truth and faithfulness.

After these two years were ended, one bright summer afternoon, Mrs. MARSDEN stood at her cottage door, shading her eyes from the sun, as she looked eagerly towards the school-house, whence the children were swarming, and whence presently MAGDALEN came, with a slow step, but a glad light in her sweet eyes, which had long been absent from them.

"Dear me, what a time that school does keep you!" said her mother, in a vexed tone, as she drew near. "Such a state as I have been in all day! My poor head's just worn out with thinking. MAGGIE, what do you think the postman brought me this morning?"

The girl's face flushed. "What was it, mother?" she asked eagerly.

"Oh, you'll never guess. He brought a letter from your Uncle JACK, in America, who might have been dead and buried, for anything I've known these ten years; and he has sent us money to go out to him,—every one of us,—and he'll keep us, as long as we live. Just think of that! Why, MAGDALEN! GOD bless us! Are you going to faint?"

"Mother, come in and shut the door," said the girl in a faint voice as, white and trembling, she followed her mother into the kitchen. Here she grasped the old woman's hands, and said, in a hurried, constrained voice, "Mother, don't be angry; I cannot go with you—I cannot leave England. Please don't look at me like that. I have had news too, to-day. O mother!" and she broke down suddenly, and clasped her mother's hands to her breast. "Speak kindly to me, dear mother. I am going to be HUGH LANGLEY'S wife!"

Mrs. MARSDEN dropped her daughter's hands, and took her by the arms. "You are going to be what?" she cried.

"I am going to be his wife," she answered triumphantly. "I promised him, long before he went away. And he has written to me now, to tell me that he is able to marry, and he is coming for me!" she cried, the light of a great gladness flashing up into her face. It was the last flash of joy that irradiated the fair face for many a day to come.

MAGDALEN had told her cherished secret, and a storm of reproaches followed—reproaches and a flood of tears so violent, as to exhaust Mrs. MARSDEN'S small stock of strength, and force her to take to her bed, where she sobbed and moaned all night, making herself so ill that when morning came her daughter could not leave her to attend to her duties at the school.

For two whole days this went on and MAGDALEN bore it all in silence, bore the wailings and passionate entreaties not to go away from her, to stay with her poor mother, to whom she owed more duty than to a strange man. The girl's heart died within her. What should she do? Oh that God would show her where her duty lay! For two days the struggle went on, and no light came. She looked at her mother on the evening of the second day, as she lay with closed eyes and lips, utterly spent and worn out with fretting, and felt that she must give HUGH up. Give him up? her love, her life. But she dared not leave that poor sickly invalid, who needed all her care. Her duty was clear.

She bent over her mother as she made the resolve, and whispered a broken-hearted promise, that she would go to America. Her reward came in the answer:

"Could you not have said as much in the beginning? Instead of doing your best to kill me. But it's always the way, you never think of any one but yourself!"

The promise was given, and by the end of the week all was in readiness for departure. HUGH'S letter, announcing his arrival, had lain on her heart, unanswered all that dreadful week, and on their last night in England she sat down alone, to answer it, as best she might.

"Do you remember," she wrote, "What I told you on that evening when we parted, that I felt as if I held the last link of a chain? And now it has fallen from me!"

She told him how she was forced by the duty she owed to her mother to give him up, and begged his forgiveness.

"What am I to do?" she broke out wildly at the end.

"How can I live all my life without you? If I could only have seen you once before I go, I could bear it better. But to part thus! Oh, HUGH, write to me, and forgive me, or my heart will break!"

To this appeal she received a hard and cruel answer.

"I trusted all my happiness to you, and you have wrecked it," he said. "From your solemn promise to wait, until I should come and claim you, no power on earth had right to set you free. You have broken these promises of your own weak choice. If you had been faithful I would have loved you, as never man on earth will love you. I worked for you, have thought of nothing else since we parted, and you have chosen your lot apart from mine. And I——"

The letter broke off here, there was nothing added but the bitter cry "MAGDALEN, MAGDALEN."

A summer day, in southern latitudes. In a pleasant room with windows opening on a terrace and commanding a view of a pretty garden sloping to the sea sat a lady reading. Presently she dropped her book and turning her head slightly, remarked to a younger lady, who was seated at a table in a distant part of the room.

"I forgot to tell you Miss MARSDEN that my sister, Mrs. ROSS, expects some company this evening, and wishes my daughters and yourself to be there; you will like it I think as there are some foreigners to be present. Please be ready at eight o'clock as Mrs. Ross wishes us to be early."

Miss MARSDEN bowed in acquiescence of the proposed visit, and went on with the writing on which she was engaged.

MAGDALEN is changed, but her face has gained rather than lost in beauty during the nine years which have passed since we last saw her. The rounded comeliness of former days has gone, but her dark eyes have a deep, tender look in them, and intellect sits enthroned on the broad, white brow. She has wrought her way out of the great anguish of her youth. The love that caused that bitter suffering has been the leading star, the refining element of her life. She has striven to be what HUGH would have had her be, and has succeeded. No fairer, more intelligent, or more elegant woman, in manners and appearance, will enter Mrs. Ross' luxurious parlors to-night than Miss MARSDEN, the governess of Mrs. TRACY, whose husband is a rich, retired, Southern merchant.

MAGDALEN is alone in the world now. The uncle who brought her over is dead. The sickly mother is dead too, and her daughter had her reward for her self-sacrifice in being with her in her last moments, and receiving a blessing for her goodness. Her brother TOM is seeking his fortune in California.

At eight o'clock MAGDALEN and her two pupils, impetuous Southern girls devoted to their English governess, took their places in Mrs. Ross' parlor. They sat at a side table strewn with books, and MAGDALEN whiled away the time in looking them over, for but few guests had yet arrived.

At length the room filled, and a small sofa near her was taken possession of by Mrs. TRACY and a gentleman who seemed a stranger.

"By the way," said the lady, in the midst of their talk, "where is Mr. LANGLEY? And who is he? A foreigner, of course?"

"LANGLEY? He is in the other room, I believe. He is quite distinguished in political circles in England. At present, he is Secretary of Legation at Washington."

MAGDALEN started. "It cannot be HUGH," she thought: "there are other LANGLEYS in the world beside him." And she bent again over her books.

"How beautiful your open sea is here!" said a voice behind her. "It reminds me of a place where I once lived by the sea, a little village in the south of England."

She did not move; but she knew the voice, those deep rich tones which had so often breathed the story of love into her ear.

At this moment a hand was laid kindly on her arm. "Come with me," said her hostess; "you look very pale; this is too hot for you. Come out with me, and let us take a walk upon the terrace."

Away she went as in a dream, from the only presence the world held for her, out on the dimly-lighted terrace. But she could not walk—she could scarcely stand. "Let me sit down," she cried, as she leant against a pillar near her; "let

me sit down, Mrs. Ross, here, where there is no light." She seemed almost beside herself.

"My dear, there is no seat; just wait a moment," and the lady hurried into the house. She returned in a few moments, but not alone. Another hand brought the chair she had gone to seek, and another hand set it down by MAGDALEN'S side.

"Thanks, Mr. LANGLEY. Now, my dear, sit down; the fresh air will revive you."

She sat down helplessly, without uttering a word.

Mr. LANGLEY did not return to the house, but deliberately took his place against the pillar where MAGDALEN had leaned.

The light from the windows fell on his dark face, as he stood, and MAGDALEN saw him clearly, but he gave no sign of recognition. "We shall never teach this Northern snowdrop to bear our Southern warmth" said Mrs. Ross. "Are all Englishwomen so hard to accustom to new climates?"

He turned and looked at MAGDALEN in the dim light, but no change of expression followed the look. "English snowdrops can stand a good deal sometimes," was his answer.

"You are not at all like a snowdrop, Mr. LANGLEY, although you are a country man of Miss MARSDEN'S," continued the lady.

"I am scarcely English, my mother was an Italian," he answered with a perceptible tremor in his voice, as he thought of the beautiful Southern face which had watched over his cradle."

"Was she? I did not know that. Have you lived in Italy? Tell me about it all, especially Rome and Venice. I long to go there?"

He obeyed her, and talked as MAGDALEN had never heard him talk of the far-famed cities of sunny Italy. It all seemed so unreal, so dream-like. The southern summer nights, the softened lights, and yet in the midst of it stood the center star of MAGDALEN'S life. And how changed! As the deep voice talked on, enriching every subject that it touched upon, she saw how the dark face was softened, refined, yet with its old expression of strength and determination.

"And now, after all your wanderings, you have come here," said Mrs. Ross.

"Yes, I have at last come here but not to stay"

"You do not leave at once I hope."

"I may leave to-morrow." MAGDALEN raised her head at the words, and met his dark eyes fixed upon her with no stranger's gaze.

"Why, Mr. LANGLEY, you will have seen nothing." Mrs. Ross went on.

"I shall have seen what I came to see," he replied.

"Oh, well, of course, you know best about that and — here is Mrs. TRACY, singing," as a sound of music came through the open windows. "Mr. LANGLEY you must come and hear her, and Miss MARSDEN?"

But MAGDALEN chose to sit still, and watched the two figures, as they went together towards the door. At length one of them returned and stood before her in silence.

"I have come along way," he said at length "to ask your forgiveness for certain harsh words of mine written long ago. It will cost you little to grant it, I know," he went on in a slow cold voice: "When the pain of a wrong has ceased we can forgive the wrong doer easily."

She sprang from her seat, and stood one moment shivering, then all her love rose in wild defense, and out of her long silence, leapt this cry: "It has not ceased—O, HUGH, the pain is here still!" And she pressed her trembling hands over her wildly beating heart, and then hid her face in them with one low piteous sob.

"MAGDALEN," whispered a deep voice in her ear, and a strong arm held her in passionate embrace. "Ah, MAGDELAN mia, forgive me, I have been faithful through all, and I come to claim my reward."

She lifted up her face and saw in the dim light his dark eyes fixed upon her with the old tender gaze, yet full of new adoration, as he saw in her a new and a more perfect loveliness than had been hers of yore.

"HUGH, I have waited for you," she answered softly, then between them there was perfect silence, as they stood heart to heart, with the great sea stretching away at their feet, as it had done years before in their quiet English home.

REPARTEE.

IT was said by the London Times that the best repartee on record was one made by a homeopathic physician. It was elicited in this way: A homeopathic physician, practicing in London, published a pamphlet commending the theory and practice of HAHNEMAN. An allopathic physician published an answer. The wordy controversy through the press became warm and personal, and it so happened that the disputants met on the street, and then, from words, soon came to blows. The homeopathist, being the weaker man of the two, was thrown to the pavement, and while down the allopathist stepped over him, and uplifting his cane said to the prostrate homeopathist, "now beg for your life!" No, said the threatened, "not until I am your patient." The anger, and the uplifted club, had no terrors compared with his medicine.

Highly commended as this repartee is by the "Thunderer" we think that SYDNEY SMITH made one fully its equal. SYDNEY had been holding an argument with a county squire, and quite to be expected, soon got the best of it, when the squire, having lost the argument became personal, as most men do in such cases, and then said "Mr. SMITH, if I had an idiotic son, half witted, I would make a clergyman of him." SYDNEY replied, "You may think so, but you father did not."

J. ORVILLE TAYLOR.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

DECKING THE CROSS.

IN Naples, on a Christmas morn,
A priest the cross was dressing
With opening buds and flowers new-born,
When, all her sins confessing,
A beggar girl drew softly near,
And on the cross she dropped a tear,

"Ah!" said the priest, "my flowers are sweet,
But, child, thine eyes have given
This blessed cross an offering meet
To the dear King of heaven;
For I can place no garland here
So sweet as thy repentant tear!"

Boston Transcript.

LETTERS IN CROSS-STITCH.

FIG. 1 is a monogram worked in cross and Italian stitches, (Italian stitch is merely working a

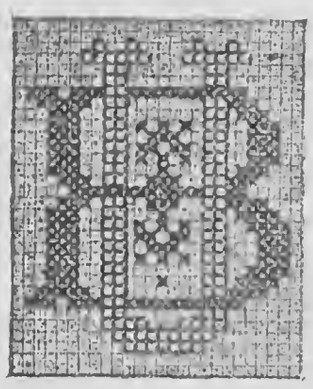

FIG 1.

straight stitch at the edge of four threads each way), with ingrain cotton of two colors. It is suitable for marking table and house linen.

FIG. 2 is Alphabet in cross stitch for marking napery of all kinds.

GRANDMOTHER SPEAKS.—No. 1.

WELL, well! there is no reason that I know of, why I should not speak occasionally. Old ladies have a good deal of time to think; they are not occupied with the pomps and vanities of the world; they have lived long enough to see the folly of a great many things, and if young people would only be advised, they might save themselves a great deal of sorrow and pain; but no, they are bound to rush along, and see the folly for themselves, and then they are convinced. Experience is a good school and a rough one too; but lessons learned there are apt to be remembered. I have made up my mind, that young people are not as happy now-a-days as they were fifty years ago. They have so much puffing and frizzing, and flouncing and furbelowing to attend to that they do not get time to enjoy themselves as thoroughly as girls used to.

When they go anywhere, it takes such an everlasting time to get ready, that they are quite exhausted before the operation of dressing is completed, and are tired enough to go to bed and rest. It is a great wonder to me what they are about; two hours, at the best calculation, to dress for a party! I expect before they get through life, they will be glad to have a little of the time they squander away in fixing themselves for a fashion figure.

Folks do not look, act, or talk as they used to do. I suppose people are made up very much as they used to be; but somehow, the world or the folks in it have got badly twisted. Even babies don't look as they did. Little darlings! how I pity them! Laid away in their cribs, with a glass bottle substituted for their mother, and fed according to fashionable rules, instead of being snuggled in their mothers' bosoms, as GOD meant they should be. No wonder so many of them die or grow to a maturity of weakness and ill health. It ain't according to nature, to bring babies up in such a way, and it is a sin to do it. But fashion has got ahead of nature and humanity both. Mothers used to take comfort, cuddling their babies in their arms, and were real happy with them; but it is so different now. I suppose it is all in the march of progress. Then, too, we used to have sweet little girls and boys, full of life and fun, and mischief too; but that class of human nature is out of fashion now. There is no such thing as girlhood or boyhood in these days. They are ladies and gentlemen, and they are as full of affectation as the older folks. They make smart speeches and do remarkably pert things; and if they should act as children used to behave, they would get lectured for their outlandishness. No, I don't believe in bringing up children in the present style. I don't think they are as happy, or as good either, as they used to be. They are trained up to be deceitful and hypocritical. The first lessons they are taught, are to put on a smooth exterior and appear better than they are. I presume many will disagree with what I have said. I expect they will; and if they think I am mistaken, they should say so. But I really believe what I have said is too sadly true.

"THE COMBAT DEEPENS."

I HOPE I am duly grateful for the interest which at least two of the superior sex manifest in regard to my unpretending articles. True, that interest appears to assume rather a pugnacious character—still, when we recollect that any mention of the much-ridiculed question of "womans' rights," almost invariably awakens in the masculine breast a feeling akin to that which is aroused in the males of some other species, by displaying before them a scarlet cloth—we cannot wonder at it, I will quote from Sword Stick's article of Dec. 22d, "I charge the woman of to-day with a love of ease and display, and a desire to shirk the responsibilities of her sex, which cannot fail to destroy the sacredness of her position, and the power to mold men." Now, oh, valorous Sword Stick, had you said that such women might occasionally be found, especially in fashionable society, I should have been compelled to agree with you, more's the pity—but as you include the whole sex in your charge, I must say that I consider it either a great mistake on your part, or worse still—the outward expression of that contempt for women in any capacity, except that of a *child's nurse, housekeeper*, or *toy*, which is so prevalent among gentlemen, especially *very young* gentlemen, with unformed minds—whose knowledge of the sex is limited to their mediocre female relatives, and to a few shallow school girls. You are pleased to assert that mothers sacrifice their offsprings to fashion, and money. This is true only of the women belonging to what are termed the "upper classes," and probably of a comparatively small proportion even of them.

With nine-tenths of woman-kind their own personal ease and comfort are the last thing considered, and, when the welfare of their families seems in a measure to require it, they cheerfully make sacrifices, which, were they demanded of husbands and fathers, would be groaned over, and considered unendurable. Of course, there are exceptions to this rule as to every other. When, in rare instances, we see a woman indifferent to the moral and physical well-being of her family, we are likely to look upon her as a sort of monster, whereas nobody is surprised to see a husband and father deliberately deny his wife and children the comforts and luxuries to which they have a right equal to his own, in order that he may indulge himself in what he doubtless considers necessities, but which, instead of benefiting him in any way, only have the effect of making him every day a little more of a brute.

I know men (men, too, who occupy a good position in society, and in the Church and who consider themselves irreproachable as husbands and fathers) who, day after day can, evidently without self-reproach, see a delicate, sickly wife wearing herself out in performing unaided duties which only a strong, robust person should think of attempting. They accept this sacrifice of strength and life as their right, in their supreme selfishness, never, perhaps, stopping to think that the sum which they squander weekly in that vegetable abomination, tobacco, would be sufficient to hire a little help occasionally to lighten the burdens, and prolong the life of her whom they have sworn to cherish and protect. You say "there be many, in whose presence men may well uncover the head, and bow, in loving and reverent homage;" very true—but, the women who inspire that respect are *not* the soft, pliant, submissive nonentities, who sit in "the quiet corner," discoursing on household matters. Now, while pitying those insignificant corner

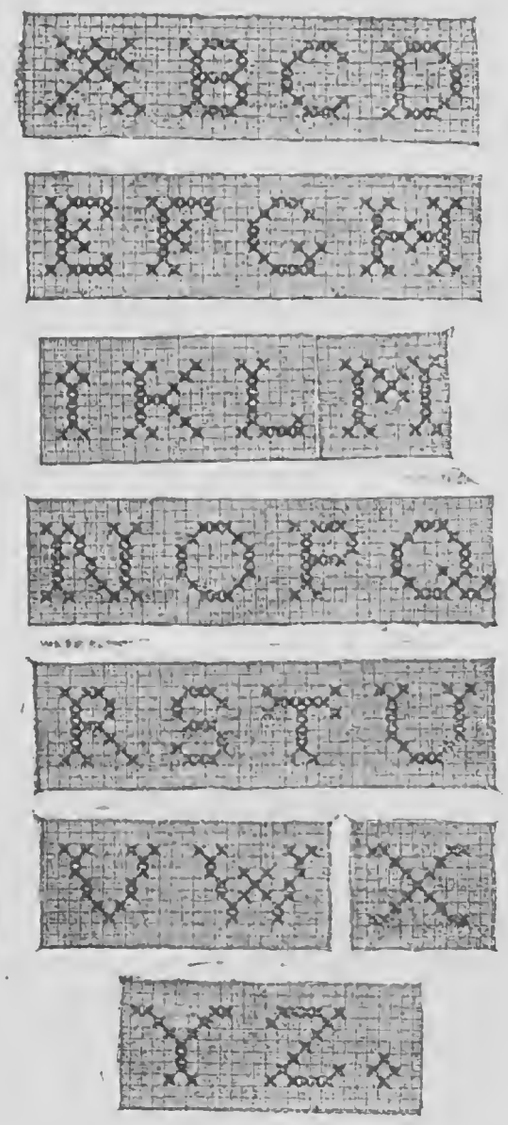

FIG. 2.

divinities, and admitting that their mental and physical weakness and littleness are owing to generations of systematic training and pruning, to make them fit nicely into that snug niche, which is recognized as woman's legitimate place, I would say that not in them lies the hope for better things for our sex.

A class of women is arising in our land, to whom, in the future, men will, indeed, "gladly uncover their heads," for they will have proved, not only to their own joy, but to the perfect, though, perhaps unacknowledged satisfaction of their would-be oppressors, that they are intellectually, morally and physically qualified to stand side by side with their brothers, working with head, heart and *voice*, for the good of the nation. *Onward*, is the watchword! One university after another opens its doors to the noble girls who are no longer content to call their education "finished," at a stage where their brothers' is just commenced. Most of the professions are admitting into their ranks women who will be to them an ornament and a crown. Of *such* material is the mother of the future. *Her* sons will not call her "the old woman," and listen to her words with an insolent smile and undisguised contempt for her opinions.

A better day is at hand—yes, even now, in the East, we can see the first faint streaks which tell of its coming! Ah, brave, but mistaken foe! Cannot you see how vain are all those fightings against what is inevitable? You may strive to block the way of reform—you, and others of your ilk, may play your little games of literary battledore and shuttlecock—but, you can no more stay the tide of progress than a boy could drown the thunders of Niagara with a penny whistle. And so, with armor unpierced, though battered, and soul undismayed, back to her "quiet corner" goes

ERMENGARDE.

TALKS ON TIMELY TOPICS.

The Household Library.

ROSE GERANIUM.

PRAY do not pass judgement against us and rise up in rebellion when we declare that the book-shelves of the average farmer are the most neglected spots in his dominion! Of course, there are very many exceptions, and yours, dear sir, may be one. However, by way of sobering your deliberations you might just get a pencil and paper and briefly catalogue! Facts are stubborn things and we will rejoice with you if they place you beyond the reproach of this accusing pen! We do love beauty as a child loves a butterfly. We joy, in all bright and graceful things, and we hold they are, each in its place, ministers of inspiration.

We like to watch a pair of hopeful young home builders, busy as May-robins, lighting up their pretty domicile with bits of color; tempering it with shade, hallowing every whit by the impresses of loving self-sacrince and dear, careful fingers! We are glad when the marble-topped center-table arrives; when the Brussels carpet, and velvet rug are laid down. We rejoice over the rep-cushioned chairs and the silver tea-service. But withal, there is a sore spot in our hearts unless we can perceive that the library is filling up!

We want to see a new book sandwiched between every two purchases, and newspapers and magazines drifting around so thickly that the very order of the sitting-room is imperiled. We never knew anything worse than intelligent sons and daughters to grow out of such untidiness.

However, there has never been a time calling for such careful discrimination on the part of purchasers as the present. There is no such thing as a simply innocent publication. Literature is either helpful or hurtful.

To avoid the uncompromisingly evil and vicious, is an easy task. When the enemy defiantly hoists his flag, there is no mistaking him. We can, in this case, pass by on the other side; and if we are even wanting, as many must be, in intelligent judgment, our literature of to-day has so many gifted friends and generous advisers, that we need not go far astray.

To go to housekeeping without a family Bible and an Unabridged Dictionary ought to be elected a criminal offense. Here are the beginnings of wisdom and intelligence, and even in the event of all prosperity running backwards, the ill-fated victims need not be left without a tangible basis for respectable knowledge. Indeed, with only these two volumes for text-books, one may be quite fairly equipped for a battle with existence. Yet we only offer this as consolation for the poor and not as an apology for the rich. We should add modern history to ancient, poetry to science, SCOTT and DICKENS to theology. We should know the opinions of the best minds of to-day, upon all questions of social life, of philosophy, of agriculture.

We have known famous business men, keen financiers, to grow out of bookless homes, but never the great-hearted and tender souled. *They* come from retreats where, if poverty precludes more, there may, at least, be found a well-worn Bible! And they come with yearnings for knowledge which will not be silenced until they are fed.

Parents, take a half-hour and glance over your libraries to see if there be not some vacancy to fill up with a volume which will add to the cheer of the windy winter nights. Get for the boy a book of history or travels; for the girl a copy of TENNYSON, or LONGFELLOW, or BROWNING—some sweet poet who sings along the quiet vales of life in notes we all can understand! Win them to read aloud around the evening lamp, and most unconsciously their young souls will be drawn out to follow after those who call—to follow, and sing, and be glad!

For such is the power of influence. Your child will be molded by the companions you select. As you value its happiness and the honor of your name, see that they are noble!

The Querist.

ANSWERS TO CORRESPONDENTS.

A Gurner.—I wish to ask a few questions through your valuable paper: (1) I want to lay about a mile of water-pipe—what is the best and cheapest pipe to lay, and where can it be obtained. (2) How much fall is necessary in order to have the pipe clear itself of any dirt or sand that might get into it. (3) Have you a commission house for selling butter, cheese and farmers' produce in general, connected with your business. If not, please refer us to some good responsible company in New York City, and oblige a subscriber.

Ans.—To obtain a satisfactory answer to a question it is absolutely necessary to be particular in shaping the inquiry. Here neither the object of the work, the size of the pipe, nor the lay of the ground is mentioned, nor is it stated whether the drain or pipe is to be laid in a continuous line—all important considerations in giving beneficial advice. Tiles are, on the whole, the most serviceable for draining purposes, as well as for conveying water for long distances under ordinary circumstances. Of these, experience has shown that the best is the most economical, and that the best hetherto invented is the pipe or round tile and collar. Round tiles of all sizes for drainage purposes should not be laid without collars, as these hold them perfectly in place, prevent the settling in of dirt in laying, and give twice the space for the intrance of water at the joints. They are from twelve to fourteen inches long with an interior diameter of from one to eight inches, and a thickness of wall of from one-quarter of an inch to more than an inch. After allowing for breakage, it will take about sixteen tiles and sixteen collars to lay a rod in length of drain, the cost of which will depend in a great measure on the nearness of a tile-kiln and the expense of transportation. Ordinarily they should not cost, delivered, more than eight dollars per thousand for 1¼ inch tiles, and four dollars per thousand for the collars, making a total of twelve dollars, equal to nineteen cents per rod. The laying of the tiles should not cost more than two cents per rod, based on a skilled man laying 100 rods daily, and receiving two dollars per day.

(2) Whenever practicable, without too great a cost, it is desirable to have a fall of one foot in one hundred feet, though six inches the same length will be quite sufficient, if the work is carefully executed. The least rate of fall which it is prudent to give to a drain, is three inches in 100 feet, and to make this effective requires very careful work. The danger that, unless properly laid and made, drains may become obstructed by silt—earth washed in with the water of the soil—by vermin or by roots is great, and the expense of removing the obstructions, by taking up, clearing out, and relaying the tiles, is often nearly as heavy as the original cost. The best precaution against such a misfortune is that the fall, along the whole length of the drain, should be at a uniform rate, lest the diminished velocity at any part should cause a disposition of silt to choke up the tile, an effect likewise produced by a single badly laid tile or imperfect joint. In *increasing* the fall, curves in the pipe are always advisable, but whenever it is absolutely necessary to *decrease* it, so as to continue the drain with the least possible fall over level ground, the change should be made by an angle. By making an absolute angle at the point of depression, the silt can be caught there in a chamber—in size, proportionate to the quantity of water flowing through the pipe—and removed as occasion may require. We are not acquainted with any dealers in drain pipe in your vicinity, and it is a matter of importance that the pipe should be purchased as near as possible to the place where it is used, as considerable saving of freight can in this way be effected. You can readily ascertain who are the manufacturers nearest to you by inquiries in the next town.

(3) We have no other business besides than that of publishing the Rural. In connection with this, we used to publish works on agriculture and kindred subjects, but this branch of the business has for some years been abandoned, as we found it advisable to devote our entire attention to the production of a first-class family paper. Walter Carr & Co., Pearl street, N. Y., are a reliable Commission House, for the sale of butter &c.

I. A. Young.—In the Rural of January 5th was an inquiry under the above signature, about a cheap and substantial fence which can be removed every fall and replaced every spring, on bottom land subject to overflow. I have found a fence of the following kind useful in a similar situation, and also in other places where a portable fence has been needed. Take four or five boards, 1 by 6 inches, and from 12 to 16 feet long, then two pieces 1 by 4, five feet long; nail together within six inches of the end, just as if making a gate; then take another piece 1 by 3 inches and so long that if nailed even at the top it will come down 12 inches below the bottom board; sharpen its lower end with an axe and sink it into the ground to strengthen the middle of the boards. Then take a length of pine, or other convenient timber, five or six inches in diameter, lay it on the ground and make a notch two inches wide, in the middle; slip the end of each pannel into notches of this kind, and fasten together with a nail. Then take two pieces 1 by 1½ or 2 inches and five feet long, and nail the upper ends of these, one at each side, to the piece 1 by 4, at the top, just under the top board, then nail the other end to the post lying on the ground for a brace. A very strong and convenient fence of any required length can be made in sections of this kind. Here wood is cheap and plentiful; and, of course, modifications must be made in accordance with local conditions in other places, but the principle is excellent. When required to be moved, the sections can be loaded in a wagon and hauled anywhere.

Mich. W. B.

M. V. B. S.—Which is the cheapest, all things considered, for farm purposes, wind-mill, caloric or steam engine.

Ans.—The question of M. V. B. S. cannot be satisfactorily answered as he puts it. There are some uses to which a steam engine can alone be put, while on the other hand it can perform the work of all other farm motors as commonly understood. Caloric engines we consider of no account—noisy, pounding affairs that give no power in proportion to their bulk. If the farm is conveniently situated for the use of a wind-mill you have one of the cheapest and best powers devised for farmers' use. They have been brought to such a state of perfection by recent improvements and attachments, that they will pump, grind, and do almost all ordinary work very satisfactorily at the minimum of expense and risk. We would suggest that "Inquirer" look into the subject carefully before deciding. Data which he has at hand will enable him to judge more correctly than we can advise.

Mrs. G. H. A., New Haven, Conn.—Returns her grateful thanks for the seeds sent, and feels a little puzzled how to treat the little Dioscoreas (1) Should they be kept like seeds, or put in the cellar, or placed in some dry earth till spring? (2) Will you please tell me which is best for hard wooded plants, a light or dark cellar. Also for Geraniums and the like. Please answer in notices to correspondents.

Ans.—(1) The bulblets of Dioscorea very soon shrivel unless kept in sand. If you can, it would be best to plant them now. (2) If it is desired to keep them dormant, a dark cellar is to be preferred, withholding all moisture.

Mendham, N. J.—Please inform me through the Rural which is better for an eight-year old pear orchard that has always been cultivated with garden truck, to continue doing so or put it down to grass. S.

Ans.—We should prefer to continue the garden truck.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY JAN. 14TH.

C. T.—H. H.—A. C. W.—A. W. H.—L. E. K. T.—F. S. T.—L. H. R.—G. W. C.—W. F.—H. F. P.—"Canada."—G. F. P., we never sell seeds or plants—G. C.—T. B. P.—R. G.—W. J. F.—A. W. M.—G. K.—M. A. K.—W. F.—A. L. J.—M. W.—F. S. T.—L. B, C.—R. M. C.—K.—A. M. C.—Subscriber, not at present—Amateur—B.—D. B.—G. B. K.—W. J. M.—W. J. B.—S. B. L., thanks—C. A. G. T., will reply as best we may.—S. B. L.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

Tuesday, January 8.—From present appearances, there seems a strong likelihood that the Electoral Count will be investigated either by the Senate or the House, malcontents of both parties uniting in the support of the measure. Some of the Mexican newspapers—they have such evidences of civilization *even in Mexico*—are bragging of the ease with which the "greasers" could put Uncle Sam to rout. The report just made by the Board of Inquiry into Indian Affairs, is a record of fraud, inefficiency and favoritism.

The left lung and pleura of Victor Emmanuel are affected, in addition to his having malarial fever. Same symptoms as in 1872. Accounts of his condition conflicting; "no danger" some say; "great danger," others. Russia insists that her sacrifices and successes have given her the right to deal directly with her enemy, though she magnanimously concedes to others the privilege of being pleased or displeased with the terms she may exact. On the capture of Sofia, the Russians found therein 8,000 wounded Turks.

Wednesday, January 9.—The New York Legislature has re-assembled after holiday recess. The liquor dealers are pressing for the passage of an excise bill favorable to their interest, and Tweed's counsel is trying hard to secure the release of the old reprobate from prison. Good news! That foul, dishonest Department—the Indian service is about to be purified by the dismissal of a number of corrupt officials. Capt. Eads having complied with the requirements of his contract, in making a channel 22 feet deep and 200 feet long at the mouth of the Mississippi, is to be paid another installment of $500,000.

The Turks report two severe defeats of the Servians. The Russian forces, despite the intense cold are still advancing, having just occupied Slalitza and Petrichovo. War is a cruelty even to the victors. England has advised the Porte to sue direct for a truce. Victor Emmanuel is still in danger though the pleuritic pain has almost ceased. His sons, Humbert, heir-apparent, Amedeus, ex-King of Spain, and his daughters, the Queen of Portugal and Princess Clotbilde, wife of Prince Napoleon, are hastening to his bed-side. Diaz has opened negotiations with France for a resumption of diplomatic relations suspended since the death of Maximilian.

Thursday January 10.—Congress reassembled yesterday; much anxiety as to attitude of parties towards the President. The plan for making the Government the depository of savings, by issuing small bonds purchasable at the Post-offices is being pressed, in expectation of thereby popularizing the four per cent loan.

Victor Emanuel, first monarch of United Italy since the days of the Cæsars, is dead, having been born on March 14th, 1820. On his death-bed friendly relations were re-established between him and the Pope, and they are reported to have always admired each other personally. Humbert, I, is now king of Italy—a younger counterpart, it is said, of his father. The Turks, acting, on England's advice, appointed Mehemet Ali to arrange an armistice with the Russians. The latter have captured the Trojan Pass in the Balkans. Gourkha has 55,000 men south of that mountain range. Roauf Pasha will probably replace Suliman Pasha in command of the Turkish forces. The Cretans are in arms against the Turks, and England has sent a man-of-war to look after her interests there.

Friday, Jan. 11.—Geo. H. Pendleton has been nominated Senator by the Ohio Democracy, to succeed Stanley Mathews; nomination equal to election. Senator Conkling has secured the passage of a resolution to investigate the cases of Kunkle and Draper restored, as it is claimed, illegally by the President to their former ranks in the army and navy respectively, from which they were expelled for misconduct—the former under Grant's administration, the latter during the war—considered a move still hostile to the President. Senator Edmunds has introduced an amendment to the Constitution, prohibiting any religious test being required for office in any State, from any one on account of religious belief, and also forbidding all municipal or State aid to any denomination.

The Russians have gained a crowning victory by the capture of all the Turkish forces and material in the Shipka Pass, thus securing a safe passage across the Balkans and isolating the quadrilateral—the Turkish forces in which are besieged by detachments of the Muscovite army. This gives them immense advantage in negotiating terms of armistice or peace. English support is claimed to be impossible, and would be ineffectual if given. Turkey has asked a six weeks' truce, and the Grand Duke Nicholas has referred the matter to St. Petersburg, but still keeps pressing on vigorously. Despite reports of the conclusion of the actual armistice, there is not much hopes of one, at least until further Russian triumphs shall enable them to dictate terms. There is fear that the Russian military party may prove too strong for the diplomats, and continue the war until Constantinople is captured. Suleiman Pasha has been deprived of his command and summoned to Constantinople. Gambetta counsels extreme moderation for the French Republicans until 1880, when McMahon's term of office expires. Gen. Garnier, favorable to the Republic, has replaced Gen. Ducrot, Bonapartist, in command of the Eighth Army Corps. The Government warehouses have been destroyed by fire in Honolulu; loss, $250,000.

Saturday January 12.—Senator Edmunds has written a letter on Civil Service appointments favorable to the views of the President, and there are hopes that he will become the leader of the President's party in the Senate. A Committee of the House has been appointed to investigate all the Governmental Departments. Severe gale and many disasters along the Coast.

Recent Turkish defeats prove pretty conclusively that the Ottoman power of resistance is completely broken down. England appreciates now this unexpected disaster, and the war fever there is red hot. A few days will tell whether Great Britain feels that any force she can send to the support of the Turks can prevent final defeat; distrust of success can alone restrain her in her present alarm. On the capture of Shipka Pass, 28,000 men, 1,000 horses, 12 mortars, 12 seige guns and 80 field-pieces fell into the hands of the Russians. At the Trojan Pass 300 dead Turks were left in the works The Russians have occupied Eski-Sagra and Jeni-Sagra. The Servians have captured Nisch and 8,000 men, 90 cannon and 12,000 rifles. The Montenegrins have taken Antivari and are pressing on towards Scutari. Greece is at fever heat. The Russian military authorities, feeling confident of speedy and complete triumph, are opposed to peace or an armistice. No definite terms for either have been yet agreed upon. Turkey wants a *statu quo*, Russia insists on the surrender of Adrianople, and a strip of northern Roumelia. All agree that severe conditions will be imposed by the victors. Victor Emmanuel's remains will be probably interred in the basilica of Santa Maria Maggiore at Rome, instead of in Milan, with those of his ancestors. His last words were of respect for the Pope, personally, and of his adherence to the Roman Church. The Pope is in excellent health, and surprised that the King, so much younger and stronger, should have been taken before him.

Sunday, Jan. 13.—The strong-minded women have had a glorious time of it the last two days, urging upon the U. S. Senate the passage of an amendment to the Constitution granting female suffrage. The strongest reason for their demands seems to be that they have been unsuccessful elsewhere.

The Turks have burnt the town of Ichtiman, and intend to burn all other towns they are forced to abandon. Hitherto they have never injured the country they abandoned, although military considerations would have led them to lay it waste, especially as it belonged to a hostile population; and Russia in a well-known case set them such an example. Throughout Turkey there is a great panic. Although Adrianople can hardly be defended, civilians have been ordered to quit it, and 10,000 of them are on their way, through the snow, to Constantinople.

Monday, July 14.—The Grand Duke Nicholas is at Gabrova on the point of crossing the Balkans, and has sent word to the Porte that he is willing to see envoys at Kaserlik to discuss armstice conditions, but declines to mention what they may be although insisting that the Ottoman envoys should have full powers to treat. The Porte has appointed two plenipotentiaries to try and arrange a truce on the best obtainable conditions. Germany and Italy have warned England that if her fleet opens the Dardanelles by going to Constantinople, theirs will go also. Accordingly, the only way England can now help Turkey is by actually going to war. A transport with troops from India and another on the way out, have been detained at Malta, and it looks not a little as if Great Britain would take a hand in the conflict, for it can hardly be supposed that she is trying "bluff." The Pope has removed all ecclesiastical difficulties in the way of the burial of Victor Emmanuel in the Pantheon and ordered requiem masses to be celebrated for the deunct monarch.

HOME NEWS PARAGRAPHS.

For the manufacture of Bessemer steel there are now ninety-seven forges, with 317 converters, eleven forgers and two converters in this country. They can produce 3,170,000 tons of steel annually, but only one-half of the amount is needed.

The sixteen starch factories of Aroostook County Me., used, this fall, from 20,000 to 100,000 bushels of potatoes each, the price paid at the factory being from twenty to twenty-five cents a bushel. Many farmers in the county have from 500 to 1,000 bushels stored in their cellars.

The average steer in Texas is worth $9.24. Suppose he can be reared at a nominal cost, it seems he is worth but little when matured. The average steer in Massachusetts is worth $40.81; in New York, $33.15; hence the Eastern farmer can afford to feed and house his cattle.

Nearly the worst managed financial concern thus far is the Miners' Trust Company of Pottsville, Pa. One cent on the dollar is all that is left. But a bank in this city beat this hollow, as the receiver used up all the assets, and, in addition, has presented a bill for services rendered.

The failures for the year in this city were very heavy, in all, 874, with liabilities amounting to nearly $55,000,000 and assets about $21,000,000. Manufacturers, numbering 41, head the list, followed by 35 bankers and brokers who went down under a heavy load of more than $6,000,000.

The record of the Coroners' office, in this city, for the past year, is a dismal one, although, fortunately, not as bad as in 1876. In all 1,166 cases were brought under its supervision as against 1,239 the preceding year. The suicides, 162, were ten more than in 1876, and the deaths from accidents, 552, fourteen more.

The Georgia farmer who has carried off the palm this year is Mr. James H. Booker. He raised sixty bales of cotton, twelve hundred bushels of corn, five hundred of potatoes, a thousand of oats and wheat, and twenty-five hogs. The newspapers chronicle this as the greatest harvest by any one man since the war.

It is estimated by British authorities that one-half their stock of sheep is annually slaughtered for food, numbering at least 16,000,000 animals, averaging fifty-six pounds per head. This gives an annual supply of nearly 1,000,000,000 pounds of mutton through the home supply, in addition to which, 1,000,000 imported animals give about 50,000,000 pounds more.

A three-master, the Ritchie, is now loading at New Orleans, for Boston, which attracts much attention by the beauty of her lines. She is the old revenue cutter Harriet Lane. In 1862 she was captured by the Confederates at Galveston, then became a blockade runner, and finally, being given up by the Spanish authorities in Havana, was sold and converted into a merchant vessel.

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address Pulvermacher Galvanic Co. Cincinnati, Ohio.

Dairy Husbandry.

PROCEEDINGS OF AMERICAN DAIRYMENS' CONVENTION.

JANUARY 9, 1878

MR. J. H. REALL of New York offered the following resolution, which was adopted:

Resolved, That a committee of eleven be appointed to organize a National dairy fair, to be held at some central point during the present year; that said committee shall have full power to select place, raise funds, pay premiums and make all arrangements necessary to the largest success of the undertaking; that said committee shall adopt rules for its government and have power to fill vacancies in its own members.

Mr. Frank Moulton said:

Gentlemen and Members of the Association:

I am glad that this matter has been brought up at this stage of the proceedings. I have just been conversing with a merchant from New York City, who has been an attentive listener through all the sessions of this convention. He said that if a dairy convention is held in the city of New York, he will give one hundred dollars toward defraying the expenses. Now I want to say a word in regard to this committee, and its appointment. It commends itself to my reason as well as to my feelings. Coming, as it does, from such a convention as this, it carries no uncertain meaning or emphasis. I am a new hand at these dairy conventions, although I have had something to do with other conventions. But this convention, it seems to me, transcends them all in the spirit which actuates those who govern and present their ideas to it. There is a spirit manifested, and an intellectual power exhibited, that commends itself to our highest admiration. When such men as Mr. Curtis, Professor Arnold, Professor Stewart, and many others (I do not wish to make any invidious distinctions)—when we see such men as these giving their time and talents to the discussions of this convention, certainly more than ordinary importance ought to be attached to the appointment of this committee.

The committees generally appointed by your Dairy Conventions have had a professional and literary significance, on account of the character of the men who have given direction to your conventions; but their business significance has generally not been valued, for no effort commensurate with the importance of the interests represented, have been made to impress the business community. I hold that every effort should be made, now and henceforth, to make upon the business community that impression justly due to the extraordinary commercial values of the ideas enunciated and the practical thoughts suggested.

The idea of circulating only 500 copies of Prof. Arnold's report of the proceedings, considering its value and importance to the country, is preposterous. A very little effort will circulate 5,000, and if proper effort is made in the representation of the business interests involved, 10,000 could be circulated with the greatest advantage. New York is the proper place to hold the American Dairy Fair, to secure for it that continental and world-wide significance that should attach to the industry it represents.

Your committee should not come with distrust to the work before it. Its importance is worthy of the utmost attention which the best merchants of the country can give to it. Your influence should not be like the murmuring brook over a meadow, but flow with the rush of a river, and make an ocean that should wash all the shores of the world. [The above was crowded out of our practical pages.—EDS.]

THE delicate structure of the skin renders it sensitive to the slightest obstructions, whether arising from sunburn, dust or the changing air and wind. **Burnett's Kalliston** is prepared expressly to remove these.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Jan. 12, 1878.

BEANS AND PEAS.—Receipts of beans past week, 2,000 bbls.; Exports, 875 bbls. Medium continue weak; receipts are liberal and parcels on the truck can be had 5c. below our last outside rates. Marrows toned up slightly early in the week but have dropped back again. Exports moderate. White Kidneys dull; if West Indian trade were active their present price might send some abroad. Red Kidneys quiet. They retail in small quantities and grocers soon supplied. Blank beans largely in overstock; the production of last year was largely above the moderate special call they have, as an ingredient of Turtle soup. Green peas are dull at $1.30@1.35. Canadian peas show light trade; 4,000 bushels exported for the week; quoted 85c. So. B. E. peas scarce and firm at $3.25@3.00.

We quote:—Beans, medium choice, $1.80@1.85; other, $1.60@1.75; marrows, choice, $2.22@2.22½; other, $2.00@2.10; pea, $1.75@2.00. White kidney, choice, $2.00@2.25; other, $2.10@2.25; red, choice, $2.50; extra, $2.50; other, $2.25@2.35. Turtle soup beans, $1.75. Lima, $3.00.

BEESWAX.—Trade is slow, and supplies fair, with prices easy. Sales at 27@23c. for Western and Southern.

Exports past week, 2,277 lbs.

BROOM CORN has a fair inquiry from consumers, and is steady in price.

Green brush at 6@7c.; green hurl, 6@7c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Receipts for the week, 15,094 pkgs. The market is taking a natural course. Fancy table stock is scarce enough to hold or sell; in either case, full decided prices are quoted. This sends a good many first-class buyers to look for something "good enough" among the little pet dairies of tubs and tops of long lines. Fine reserved State dairies, that have been reserved for the possibility of strong winter rates, are well supported by the present phase of the market; some extra Delaware have touched 30c., but 28c. is the more general figure, and stock must be faultless at that. Welsh tubs are running in fair to good quality; receipts this season lack the high grades in large packages that are so acceptable to retailers. In shipping half-tubs, avoid the use of other than oak wood for covers. Low grade of State are dull. Western butter is somewhat improved in quality, but trade would be brisker if the grade were still higher. Old Western dull and low. Roll butter is abundant, but the common is neglected, while the best is quoted at 18c. The week's trade has been broken by several days of bad weather.

We quote State fancy pails 28@30c.; other, 25@30c.; creamery, good to choice, 25@33c.; half tubs, selected 27 28c.; extra, 30@31c.; other, 21@25c.; Fall Welsh 26@28c.; Welsh tubs, prime, 27@29c.; other, 12 22c.; full dairies, fine, 26@28c.; common, 18@26c.; firkins 20@26c.; poor State, 12@18c.; Western creamery, good to choice, 26@30c.; poor to good 25@32c.; good, 16@19c.; common, 8@11c.; rolls, 12@18c.; grease, 6½@7c.

Exports past week, 880 pkgs.

CHEESE.—Exports for the week have been 24,278 boxes; this shows some falling off in the export development, but receipts have shown a corresponding decline, and the market is fully as strong as last week. Strictly fancy factories have brought 13 ½c., and the range for fancy is 13@13½c.

Fancy factories, 13 13½c.; good and prime, 12½@12¾c.; fair lots, 11¾@11¾c.; poor, 8@10c.; 7@10c., skimmed. Farm dairy, 11½@12¾c. for good to prime; 10½@11c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 12¾@13¾c. for fine 10½@12c. for good; 5@8c. for poor.

Receipts for the week, 19,650 boxes.

Liverpool cable, 63s. 6d. Gold closes 102¼.

COTTON has been quite active, and fluctuating sharply.

Latest prices are for January, 11.36@11.37c.; February, 11.45@11.46c.; March, 11.58@11.60c.; April 11.72@11.72c.; May, 11.83@11.85c.; June, 11.98@11.99c.; July, 12.04@12.05; August, 12.10@11.11c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9¾	9¾
Strict ordinary	10	10	10¼	10⅛
Good ordinary	10¼	10¼	10¾	10¾
Strict good do	10⅝	10⅝	10¾	10⅝
Low middling	10 15-16	10 15-16	11 1-16	11 1-16
Strict low middling	11 3-16	11 3-16	11 5-16	11 5-16
Middling	11¾	11¾	11¾	11¾
Good middling	11¾	11¾	11¾	11¾
Strict good middling	12	12	12⅛	12⅛
Middling fair	12⅛	12⅛	12⅜	12⅜
Fair	13	13	13⅜	13⅜

Stained.

Good ordinary, 9¾c.; Strict ordinary, 10c.; Low middling, 10¼c.; Middling, 10⅝c.

DRIED FRUITS.—Apples are dull, only the choicest sliced and quarters wanted. Peaches are hard to sell; small fruits generally are scarce. Prices throughout are steady and unchanged.

Apples—State quarters, old, 5¾@6¼c.; new, 6¼@6½c.; Western quarters, old, 6@6½c.; new, 6@6½c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 11@12c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 4@4½c. Pitted cherries, 16@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 16c.

EGGS.—Receipts for the week, 4,659 barrels. The dull and uninteresting state of the egg market is still a subject of surprise among receivers. From the light trade it would almost seem that some substitute has been found for eggs as formidable as oleomargerine has been to cheap butter. Only the freshest from any point receive attention and then sellers have to humor buyers in quotations. Limed are never without leading to increased business.

Near points, 22@23c.; State and Pennsylvania, 20@21c.; Canadian 18@19c.; Western, best, 20½c.; other, 17@19c.; Southern, 19@20c.; Limed, State, 16@17c.; Canada, 15@17c.; Western, 14@16c.

FEATHERS.—Live white prime Western geese, 45@47c., mixed, 30@40c.

FEED.—Is in light receipt and higher. Sales of 40 pounds ave. $21.00@22.00; 60 pounds ave. $20@21; 80 pounds ave., $20@21; 100 pounds, $21@22; and rye at 18@20.

FLOUR.—Receipts have been large, export and home demand light, and prices lower and unsettled. Latest prices are $4.35@5.10 for poor to fancy superfine State; $5.10@5.45 for common to fair extra do; $5.45@5.75 for good to choice do.; $4.35@5.10 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.10@5.45 for shipping extra do., the inside price for poor, and $5.45@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@7.25; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.45@7.25; round hoop Ohio at $5.25@5.85, and trade brands of do. at $5.75@7.00, the latter for choice; St. Louis, $5.50@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.25@8.50); Minnesota clear, $5.25@6.25; Minnesota "straight," common to fancy, at $6.00@7.05 and patent poor to very choice, $6.85@9.10, with a few fancy at $9.25@9.75; unsound stock at $2.75@6.50; city mill extra at $6 20@6.60 for fair to very choice for West Indies; do. for England $6.25@6.35; do. trade and family extras, $6.55@7.75; do. South America, $6.50@7.50; No. 2 at $2.75@4.10.

FRESH FRUITS.—Exports apples past week, 2,200 bbls. Our best demand now from exporters, who are paying pretty full prices. Local parcels are firm. Spitzenbergs are out, commercially.

We quote Baldwins, $3.75@4; Greenings, bright, $3.50@3.75; scalded, 2@2.50; Talliman and other prime sweet, $3.25@3.50; Roxbury Russets, $3.75@4; common Russets, $3.00@3.62; prime shipping lots of apples, $3.50@3.75. Cranberries have only a moderate movement, but good stock is firm. Sweet apples will help them later on. Cranberries, bbls., $4@7.00; crate, choice, $2@2.25, good, $1.75; poor, $1@1.50. Grapes dull—but few good enough to bring 6@7c. for Catawba; soft berries, 2@4c. Extra Florida oranges, $5 ₱ case; others, $3@4; sellers advise that choice should be stem-cut and wrapped in papers. Peanuts dull; high prices restrict buying—$1.45@1.65 for Virginia. Hickory nuts, 75c.@$1 bush. Texas pecans, 8@9c.

FURS AND SKINS.—Quotations are only nominal and the present outlook does not indicate an early settlement of values.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and ylgs.	1 00@2 00	1 00@2 00
Florida deer skins.	15@ 18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@ 90	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₱ ℔	1 00@1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		40@ 45
striped		5@ 20
Wolf, mountain		1 50@2 00
prairie		50@ 60

GRAIN.—All articles have been depressed and lower, on the look of affairs abroad, and but little export demand.

Latest sales are of No. 2 red at $1 37@— ungraded red and amber State, $1 53@1 55; white, $1 56; No 1 Northwest spring, $1 40; No. 3 Chicago, $1 27½; No. 2 red for January at $1 32; No. 2 Milwaukee spring, $1 33. Rye is a trifle steadier; sales of Western at 74@7 c.; State at 75@77c. Barley, 85c for No. 1 Canada; 75@79c. for two-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 53¾@53¾c.; steamer mixed, February, 56@57½c. Oats of New York extra white, at 41½c.; no. No. 1, January, 38c.; No. 2 white, 39½@40c.; mixed Western, 37½@39½c.; white Western, 38½@40c.

HAY AND STRAW.—Receipts have fallen off, and prices harden a little.

Bale hay, 65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 40@45c. for short rye, and 40@45c. for oat.

Exports last week, 1,475 bales.

HIGHWINES are lower—$1.09.

HONEY.—The market is merely nominal.

HOPS.—Exports for the week have been 3,700 bales. This steady good movement to the other side exerts a steady feeling as to prices, but no advance made.

State choice to fancy, 11@13c.; do., low and fair, 5@7c.; Eastern, new, 8@12c.; Wisconsin, do. 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 21@22½c. for light, 22@24c. for middle, 22@24c. for heavy, 20@21½c. for good damaged.

OIL-CAKE.—Western is offered at $32.50 ₱ ton.

POULTRY AND GAME.—Live poultry sells almost as well as dressed, but neither has the activity that should attend the date. Tom turkeys are now rejected.

N. J. chickens, 9@10c.; fowls, 10@12c.; Turkeys, N.J., 11@13c.; Ducks, N. J., pair, 60@$1; Geese, N. J., $1.75@1.87; Western, $1.25@1.50.

Dressed poultry took a good start, but the weather has turned provokingly adverse to business. Prices have dropped to discouraging rates, and there is some danger of an overstock. Heavy turkeys are not wanted at all: should be utilized at home, if possible. Ducks are about the strongest item in market, and these are not quoted profitably. Western is turning out badly and is hard to sell. Cold weather at one end of the route and a thaw at the other are bad for perishable produce.

Fancy Phila. and N. J. turkeys, 12@13c.; good, 10@11c.; large or thawed, 10@11c.; chickens, choice, 13c.; good, 11@12c.; common, 7@9c.; ducks, choice, 12@13c.; other, 9@11c.; geese, fancy, 10@11c.; other, 7@9c.

Game is rather plentier, but the mixed quality causes unsettled prices. Prime stuff is ruling high—higher than ordinary demand will warrant. Grouse scarce. Hares and rabbits unusually firm. It is common to see them begging a customer at this part of this season. Venison is closing out at 7@10c. for best saddles.

Hares and rabbits, pair, 49@50c. Black bear, 25c. carcass. Canvas-back ducks, $1.50@2.25; Red-heads, 75c.@$1; Mallard, 65@75c.; Teal, 40@50c.; common, 25@35c. Quail, prime, $2.00@2.25; soft, $1.50@1.75. Partridges, pair, 90c.@$1.00; soft, 70@80c. Grouse, $1.15@1.25.

PROVISIONS.—Hog products have been depressed and lower. Mess pork $12.40@12.50 for spot lots $12.40 for January, $12 50 for February and $12.50 for March. Bacon at 6¾@—c. for long clear and 6¾c. for short clear. Lard—Western steam at 7-67½c. for spot, 7-67½c. for January, 8c. for February, and 8.80c. for March. Tallow, 7¾c. for prime. Steamne, 7¼c. for prime Western. Beef hams at $16.50, Beef—New extra mess, $18@13.50; plain, $11@12.50; new packet, $11.50; family mess, $16@17; extra India mess, $25 25.50 for city brands; do. Philadelphia, $23 50@24.

SALT.—Ashton's at $2.50; Higgins', $2.50 and other sack lots at $1.10@1.15.

SEED.—Grass are lower: clover 8½@8¾c. for prime, timothy, $1.37½@1.40. Rough flax, $1.55.

TOBACCO.—Offerings of desirable lots are small, and export movement is restricted. Prices generally are strong.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3¾	4 @ 4½
Good lugs	4 @ 4¾	5 @ 5¾
Low leaf	5 @ 6¾	6½@ 7¾
Medium leaf	7 @ 8	8 @ 9
Good leaf	9 @10	10 @10½
Fine leaf	10½@12	11 @12½
Selections	—@—	13 @15

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @25
medium	12½@14
selections	27 @35
seconds	8½@11
Fillers	5 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	12½@22½
wrappers	20 @50
New York assorted lots, common to medium	7 @ 8
Good	10 @12
Ohio assorted lots	6¾@12
Wisconsin assorted lots	6¼@ 9

VEGETABLES.—Exports of potatoes past week, 7,500 bbls. The market for potatoes is quiet and prices are quoted to their limit. Few sweets wanted. The exportation of onions has revived and prices are firmer. The advanced season gives a strong and better tone to miscellaneous truck.

We quote Peach Blows, $1.75@2, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1 25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2 50@4.50; red, 4@5. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1.

WOOL.—There is a stronger demand for Western fleeces and California stock, and altogether an improved feeling.

Ohio, Pennsylvania and Virginia—XXX and picklock, 47@50c.; XX, 45@47c.; X, 42@45c.; No. 1, 43@46c.; No. 2, 38@40c.; common, 35@37c.; combing, 50@54c.

New York, Michigan, Indiana and Wisconsin—XX, 38@42c.; X, 37@41c.; No. 1, 40@43c.; No. 2, 35@37; common, 34@36c.; combing, 50@54c.

Iowa, Vermont and Illinois—X and XX, 35@38c.; No. 1, 37@42c.; No. 2, 36c.; combing, 48@52c.

LIVE STOCK MARKETS.

NEW YORK, Jan. 14, 1878.

BEEVES.—Receipts for the week, 9,925 head; do last week, 8,005 do. The market has ruled easier, several rainy, bad days for slaughtered stock having lowered the purchasing feeling. At the close 10¾@11c. were incidentally made, but 10¾c. was looked upon as a big price for wholesale quantities. Ordinary to good steers brought 8¾@10¼c. Fat, handsome stock reserved to a considerable extent for export. The droves chiefly from Illinois, with no Cherokee or Texas.

COWS AND CALVES.—Receipts are larger and there is a variety of prices. Strictly prime milkers bring $65@70; others, $20@50 for poor; fair to good, $40@50.

VEAL CALVES.—Prime live veals quoted dull at 6@9c.; the extreme for fine N. J. Grassers are dull and low, 2½@3½c. Hog-dressed calves slow with soft, souring weather; 9@11c.

SHEEP AND LAMBS.—Receipts for the week, 27,163 head; last week, 14,366 do. The market has been dull, receipts very heavy, and there have been losses on prime stock. Common light sheep, 4½c.; prime Canadian, 5¾c.; good Kentucky, 6c.; choice lots, by the car-load, $6.25@6.30 ₱ 100 lbs. Lambs, 7@7½c. for best; fair, 5¾@6¼c.

SWINE.—Receipts for the week, 41,420 head; do. last week, 26,100. The market has been active; none of the heavy supply left unsold. At the close light averages held at $4.75; killers bidding $4.50 ₱ 100. Country-dressed pork, 5@6c. for heavy to light; Western dressed, 6@5½c.

INDEX TO NEW ADVERTISEMENTS.

Agricultural Insurance Co.
Ayer & Son—Manual for Advertisers.
Bunnell, C. S.—Young Jersey Bull for Sale.
Carson, Wm. H.—Garden and Farm Seeds.
De Cou, Sarah H.—Valuable Farm at Public Sale.
Dexter Spring Co.—The Celebrated Dexter Buggy Spring.
Engle & Co.—First-class and Extra Tuberoses—all Double.
Estey & Co., J.—Reed Organs.
Gregory, James J. H.—Annual Seed Catalogue of Vegetable and Flower Seed.
Henderson & Co., Peter—Catalogue of Everything for the Garden.
Hill, John—Best Strain Hereford Cattle.
Jayne & Son, Dr. D.—Dr. Jayne's Expectorant.
Jones of Binghamton—Five-Ton Wagon Scales.
Josselyn, Geo. E.—High-Class Poultry.
Lamb Knitting Machine Co.—The Tuttle Knitter—Latest and Best for Family Use.
Merrimac Machine Co.—The Monitor Seed Sower.
Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.
Minkler & Co., J.—30 Mixed Cards.
Monitor Washer Co.—Agents Wanted.
Quinche & Krucler—First-class Watches.
Roiker & Sons, August—Flower, Field and Garden Seeds.
Stoddard, H. H.—The Poultry World.
Thorburn & Co.—J. M.—Vegetable, Agricultural, Flower and Tree Seeds.
Watertown Spring Wagon Co.—The Watertown Platform Spring Wagon.

BUSINESS NOTICES.

Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.

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Fifty per ct. extra for unusual display.

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Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

New Advertisements.

***My Annual Catalogue of Vegetable and Flower Seed for* 1878** will be sent FREE, in January, to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed sold from my establishment warranted to be both fresh and true to name; so far, that should it prove otherwise I will refill the order gratis. As the original introducer of the Hubbard and Marblehead Squashes, the Marblehead Cabbages, and a score of other new vegetables, I invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain. New Vegetables a Specialty.*

JAMES J. H. GREGORY, Marblehead, Mass.

50,000 TUBEROSES First-Class and Extra, per 100, $3; per 1,000, $22. Second Class, Flowering Bulbs, per 100, $2; per 1,000, $12. Guaranteed all double. Sample sent. ENGLE & BRO., Marietta, Pa.

Have Your Own Way

but always weigh on our 5 Ton Wagon Scale, which we deliver, freight paid, for $50. All iron and steel; brass beam. No pay till tested. Free Price List.

JONES OF BINGHAMTON.
BINGHAMTON, N. Y.

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THE "POULTRY WORLD," Hartford, Conn., is a success in its way, beyond precedent. Vol. 7 begins January, 1878. Order this best of poultry monthlies. It is original, fresh and practical, always. $1.25 a year. Only 75 cts. extra gives every subscriber **12 splendid fowl Chromos**, annually! Every poultryman should have this excellent Monthly. Now is the time to subscribe for 1878!

The new **Weekly "American Poultry Yard"** is also just out. $1.50 a year (52 numbers) post-paid. Or, both papers to same address $2 only.

H. H. Stoddard, Hartford, Conn.

KNOW THYSELF A new medical Treatise "THE SCIENCE OF LIFE, OR SELF-PRESERVATION," a book for everybody. Price $1, sent by mail. Fifty original prescriptions, either one of which is worth ten times the price of the book. Gold Medal awarded the author. The Boston Herald says:—"The Science of Life is, beyond all comparison, the most extraordinary work on Physiology ever published." An Illustrated Pamphlet sent FREE. Address DR. W. H. PARKER, No. 4 Bulfinch Street, Boston Mass. **HEAL THYSELF**

It is a mistake to suppose that any department of a paper may be slighted. The most important information is to be found, at times, under the guise of an advertisement; and it is agreeable to the advertiser and a courtesy to the publisher to mention the source of your information—in other words, to mention the paper.

Reading for the Young.

THE VOICES OF THE NIGHT.

I.

I stood on the stoop at midnight,
When the gutter was freezing hard.
And a chorus of howls quite deafening
Came from the near back-yard,

II.

I heard the frightful clamor
From the nearest high woodshed :
Like a chorus of fifty demons,
It pierced into my head.

III.

And far in the sleety distance
Of that cruel winter's night,
The music was re-echoed
From roof-trees clothed in white,

IV.

Along the great high fences
Some wavering shadows lay,
And the screams that came from the darkness
Seemed to rise and bear me away

V.

And at those yells, uplifted
Into the evening air,
A sickly shudder went through me
That made me clutch my hair.

VI.

How often, O how often,
In the nights that had gone by,
Had I listened to that chorus
Until I wished to die.

VII.

How often, O how often !
I had wished as I did just now,
That I had a brickbat handy.
To stop the infernal row.

VIII.

O for a good breech-loader!
O for a bushel of bats !
To lull them to sleep forever—
Those————————cats! [*Puck.*

JOHN GUBBINS' DOG SCHOOL.

When John Gubbins came home from the war, with only one leg and a great big hole through his shoulder, he wondered what work there could be for him to do, with only a part of himself left, and that old and rusty. For many days he looked down-hearted, and hobbled up and down the village street, peering into the shop-doors, and over the fences, where holly-hocks and lilies stood up like gay young soldiers.

John Gubbins had a dog that looked enough like him to be his own son. Towser Gubbins limped on one leg and had one ear half bitten off—the work of a bloodthirsty old pig that thought he was after her young ones, one day. John had taken a great deal of pains in teaching Towser, and he was one of the "most knowledgeable dogs," as Patsy Burke sa'd, that anybody ever knew. Towser could open a door as well as any one. He stood up on his hind legs, held the handle by one fore paw, and struck the latch with the other. Open flew the door, and in walked Towser Gubbins. Then everybody laughed except Towser.

Sitting in his door one dark day in spring, poor John Gubbins felt very low-spirited ; his hat was old, his coat torn, and his stump of a leg bothered him more than ever. He said to himself that he wasn't good for much anyway, and he might as well be a clam and done with it. John had no wife, so he kept house for himself in a little bit of a shell that wasn't much larger than a dry-goods box; and there he did some wonderful cooking, and a kind of washing and ironing that would have amazed any child in Belleville. Just before he sat down in his door he had done up his breakfast work ; that is, he had wiped off his plate with a bit of newspaper, had fed a square inch of mutton-bone to Towser, and had put his army blanket wrong side out and bottom side up on his lumpy straw bed. Therefore, John had nothing more to do, so he sat down by the door and thought.

Close in front of him sat Towser, looking up in his face, and now and then cocking up his ears smartly, as if to hurry John along and make him talk.

"Towser," said John, "you're a pretty fair beast in your way, and we've got to do something to get our bread and mutton; now, suppose we teach a dog school?"

Up jumped Towser, wagged his tail, took a little walk around in a place not larger than a wash-bowl, and sat down in the very same spot. It was plain to be seen that Towser liked the plan.

"The first thing," said John, "is to get our scholars, and the next, to keep you from chawing them up; for there's a bit of bad blood in you, Towser Gubbins."

Up jumped Towser, and putting his forepaws on John's one knee, he ran his tongue out and smacked his lips as if he already tasted a terrier.

"Down!" said John, "and let's go and hunt up our academy."

So out they went, John hobbling along with his one leg and crutch, and Towser running and skipping on three legs as gracefully as he could, for fear the village dogs would laugh and say he made a dreadful "botch" of it. All day long they walked the town, John and Towser Gubbins, and next morning four of the village boys came to John's little house to talk about the new school for dogs.

Tommy Watson had a pink-eyed, soft, white poodle, which wore a blue ribbon around her neck, and drank weak tea with sugar in it. She was washed every day, and always cried when her ears were rubbed.

What this dog could learn John did not know, but he told Tommy that, judging by her looks, she wouldn't be able to open doors and climb ladders like Towser, because she looked too lady-like. However, Pinky Watson joined the class at twenty cents a week.

Next came Harry Nelson's dog—a sober-looking Spitzberger fellow, fond of his ease, and more than fond of ice. He had been known to lie down on a piece in front of the kitchen door, and stay there until the ice melted and the water ran down the path to the garden. However, Spitzy joined the class, too, and was to be brought every morning at nine o'clock precisely.

Then came Neddy Fowler's greyhound, a long-legged, light-brown fellow, with a sharp nose, and a body that was all breast and no stomach. John thought he would be a credit to the academy, so he took Lueth at fifteen cents a week, intending to make a tight-rope performer of him.

Then arrived Walter Lester, leading a long, low-bodied dog, with splay feet and great bulging eyes, whose name was Turk, and who looked as if all he cared for was to eat and to sleep. Old John did not care to undertake Turk, for he was sure he would never learn anything, and would have to be whipped quite frequently. But Walter loved Turk dearly, so John couldn't say "no," and Turk Lester entered the school at twenty cents a week, and the privilege of being whipped for the good of his class. Then the boys all went away and left their dogs in charge of John and Towser Gubbins.

That the scholars might see what a dog had learned, and so not be discouraged, John first showed what Towser could do. The learned dog walked across the floor on two legs, opened the cupboard door and helped himself to a bit of meat; whereupon all the dogs opened and shut their mouths in a hopeful manner, and looked as if they might learn that much very soon. Then Towser jumped through John's arms, back and forth; then he turned round and round on his hind legs, while John whistled a tune; and that, all the dogs knew, was dancing. Then Towser put his forepaws against the wall, and turned his head down and shut his eyes. There he stood like a stone until John shouted "A-men!" and then he leaped up and down, until John gave him a piece of meat, and said he was "the plousest dog which lived."

Just as Mr. Gubbins expected, the poodle did not know anything whatever; and the moment John tried to make her stand on her hind legs, (which almost any dog can do,) she whined, and sniffed, and cried, and drew herself all up into a ball, and finally crept under the cupboard, while Towser, with his waving tail and great big eyes, stood close by, ready to seize her the moment she came out.

John thought he would try the Spitz next; so Spitzy stood up and begged for his dinner, and jumped over a stick very nicely. So far, so good. Then John called Lueth, the greyhound; who, not liking the looks of things, took one long leap over the table, and out of the window, and retired home without delay. John reached to the door, but the scholar was out of sight; so he went back and put a big black mark against the name of Lueth Fowler.

Turk Lester was next called up; but, on being told to stand up, he sat down all in a heap; and so like a great coward, that John got a stick and gave him a hint that school-teaching was strict business, and he had better mind his master. But the moment John struck Turk, he showed his teeth and growled, and when he took him by his forepaws and told him to walk along, "left—right," "left—right," Turk flew at the school-teacher and tore his coat. This was too much for Towser Gubbins. He leaped from his place by the closet, and taking Turk Lester by the neck, he gave him a fearful thrashing.

The Spitz dog barked with fear, and the poodle under the cupboard cried aloud. It was Bedlam at the academy. John with his slippery wooden leg, had the greatest trouble trying to get the dogs apart; and when he did, he saw that Turk's nose was bleeding, and his tail was bent to one side, and he was the worst-looking dog he had ever seen in many a day. The poor fellow crept behind the door, nor would he eat a cold pancake that John had been saving for a week; but there he crouched, crying and trembling for fear of Towser.

It was nearly noon now, and John Gubbins was getting tired. "This won't do," said he; so he took a stick and poked the poodle out from under the cupboard. Out came poor Pinky, squealing and all drawn up in a cowardly bundle, and it so enraged Towser Gubbins to see a dog behave in such a miserable manner, that he at once fell upon poor Pinky and shook her until her tail nearly dropped off. John shouted at Towser, but Towser thought he was cheering him on, and saying "sic 'em—sic 'em;" so the harder he shook, till at last the foam ran out of Towser's mouth, and Pinky's voice was not to be heard. Then John Gubbins got frightened; so he took his crutch and beat Towser until he dropped poor Pinky Watson, who lay like a wilted fluff of wool upon the floor, just as if she were dead. John took her up and bathed her head, and wet her nose, and rubbed her paws, just as he saw some people do when a lady fainted away one day, and, by and by, Pinky "came to." And how sorrowful she did look! John offered her a cup of water and a cold potato, but Pinky only whined as if nothing could do her any good; and so she kept perfectly still, brooding over her troubles. Towser sat close by, looking at poor Pinky as if he wouldn't be that kind of a dog for all the world—so gentle, but so very weak.

When twelve o'clock came at last, John Gubbins let all the dogs go home; but he took Towser by the collar and whipped him soundly, and afterwards he shut him up. * * *

"I've made up my mind," said he to Towser that night, "that nobody can do a money-making business with such a dog as you are; but somehow or other I haven't the heart to kill ye, and nobody will take ye as a gift; so we'll go along just as we were, old boy, a couple of poor old cripples, begging a living from folks that's better off.

And so there wasn't any school for dogs in Belleville after all; and John and Towser Gubbins never got rich, but they lived together and enjoyed life comfortably.—*F. H., in Domestic Monthly.*

OUR CHRISTMAS FESTIVITIES.

Some one proposed we should give an account of the good times we had Christmas and as our's was a "new departure" from the old stereotyped Christmas Tree, I thought I would venture to tell you about it. It was at the church and was for the benefit of the Sabbath-school scholars, but all who chose took part in it. I am not sure though but some would have chosen to take presents that did not get them.

There was a platform erected at one end of the church, and a house, made by nailing a frame-work of boards together, and covering with evergreens, placed on the platform. There was a chimney, and the roof appeared to be covered with snow, which had fallen in flakes at the side. On close inspection this proved to be cotton batting. Some tiny posts were put up around the platform and strings of pop-corn were festooned around them to represent a fence covered with snow. They were supposed to be Santa Claus' premises.

After some very fine singing of appropriate pieces, and the recitation of several essays by the little people, a committee of little girls was appointed to visit Santa Claus. They rapped at the door but received no answer. Rapped again but still no one appeared. They consulted among themselves and concluded to go around the house and see if his reindeers were gone.

Just then a couple of tiny boys, dressed with tall paper hats and grotesque costumes rushed from behind the house and wanted to know what they wanted. The little girls said they wanted to see Santa Claus. The little boys said that Santa Claus had been out all the night before and could not be disturbed. He was asleep. (This was Christmas night.)

Little girls: "The children of Fairfield have not had their presents, and he must come and bring us some." They rap at the door again and after a time Santa Claus sticks his head out of the chimney. They all shouted "Santa Claus!" especially the spectators who were not expecting this.

Santa Claus asked them what they wanted, that they should wake him up when he was so tired.

Little girls: "Why, the children of Fairfield have not had their Christmas presents!"

Santa Claus asked his boy attendants if there were any presents left and they said only a few, so he called to the Fairies to bring him some. Some tiny little girls, dressed as fairies, came from the house bringing presents, and Santa Claus read the names attached to each gift, as larger girls, dressed in white, carried it to the person for whom it was intended.

One thing I had forgotten in its proper place. Santa Claus asked the little girls where the children's stockings were. "Why they are on our feet," was the reply. "Can't you take them off so I can put the presents in them," said he. "Why, we can't go barefoot, please give us the presents in our hands, this time."

We really had a very nice, enjoyable time, and I think the older people enjoyed it as much as the children. We took pains that none of the children were slighted, but each one received some sort of a present. Loretta.

The Puzzler.

ENIGMA.

Village maid and lover meet
By my shady, cool retreat;
I'm what timid people take
When they chance upon a snake;
In a gun, in many a lock,
You may find me in the clock;
Painted, ever young and fair,
Fragrance greets me everywhere;
Of a rat-trat part am I;
In a bed concealed I lie;
With velvet couch or easy chair;
I am deceptive—so beware!

☞ Answer in two weeks. Bell.

PUZZLER ANSWERS.—Jan. 5.

Illustrated Rebus.—The sea, the sea, the open sea.

Miscellaneous Enigma.—Zephaniah.

Word-square Enigma.—

H A V E
A B E L
V E A L
E L L A

Pyramid Puzzle.—

W
S H E
G R E E N
L E P A N T O
C O N S T A N C E

Acknowledgments.—Solutions have been received from M. H. Haigh, Utica, N. Y.; "Our Baby," Monticello, Iowa; R. W. Church, Cincinnati, Ohio; Herbert G. Bell, Brooklyn, N. Y.

Sabbath Reading.

AT THE BAR.

"Who speaks for this man?" From the great white
Throne,
Veiled in its roseate clouds, the voice came forth;
Before it stood a parted soul alone.
And rolling east and west and south and north.
The mighty accents summoned quick and dead:
"Who speaks for this man, ere his doom be said?"

Shivering he listened, for his earthly life
Had passed in dull, unnoted calm away;
He brought no glory to its daily strife.
No wreath of fame, or genius' fiery ray;
Weak, lone, ungifted, quiet and obscure,
Born in the shadow, dying 'mid the poor.

Lo, from the solemn concourse hushed and dim,
The widow's prayer, the orphan's blessing rose.
The struggler told of trouble shared by him,
The lonely, of cheered hours and softened woes;
And like a chorus spoke the crushed and sad,
"He gave us all he could, and what he had."

And little words of loving kindness said,
And tender thoughts, and help in time of need,
Sprang up like leaves by soft spring showers fed,
In some waste corner, sown by chance-flung seed;
In grateful wonder heard the modest soul,
Such trifles gathered to so blest a whole.

O ye, by circumstance's strong fetters bound,
The store so little, and the hand so frail,
Do but the best you can for all around;
Let sympathy be true, nor courage fail;
Winning among your neighbors poor and weak
Some witness at your trial hour to speak.

[*All the Year Round.*

TREELESS JUDEA.

The only trees one meets are the olives, which however, are by no means plentiful in Judea, and mostly old and stunted-looking. In Samaria we saw several considerable plantations of them, but yet that country is also sadly deficient of trees. Where now is the oak tree on which Absalom hung by his bushy locks? There is, I believe, only one remaining sufficiently large for this; and yet we read that the "Wood of Ephraim," where he was defeated, destroyed more men than did the sword. And where is the sycamore tree upon which Zaccheus climbed? I doubt if there be one such within many miles; and yet we know that Jericho was once richly clothed with trees and verdure, and called the "City of Palms." Indeed, that Palestine generally was once extremely fertile, and rich in woods and verdure, is evident from the meaning of many of the Scriptural proper names * * There is along almost every little water-course a number of what are called trees, but they are generally willows or mere copses of brush wood. A tree of any description, of size sufficient to make an ordinary beam for building purposes, is quite a rarity—such are only to be found miles apart. The vine, so much alluded to in the Bible, is somewhat rarely seen; but that it was extensively grown is evident by the traces of terraces upon the steepest hills still abundantly visible. Then, as to the flowers—"The Rose of Sharon" and the "Lily of the Valley" cannot be found. There are many wild flowers certainly, but generally they grow out of a "dry ground," and have, with very good blossoms, almost no green foliage. "Thorns and briers" are abundant, but very little foliage also, and seem useful only for burning. The fig-trees even are few and far between, and the orange, apricot, and almond still more so. The fields are not enclosed, except in some rare cases, where a wise husbandman has gathered the loose stones into piles around his border. Hedges are rare, but when seen they are generally formed of large cacti covered with dust, and having in the twilight a somewhat weird look. Cultivated lands in Judea are very rare, and even in Samaria are much covered with stones, making ploughing with the miserable piece of crooked wood, a very superficial operation. We felt surprised and ashamed oftener than once to see our dragoman (who frequently rode considerably in advance) lead his followers right through a field of growing corn, without the slightest compunction, or any consideration for the husbandman, merely to save a few minutes' time in going to see some object, or reach some desired path. The inhabitants seem so accustomed to submission under any and every Turkish oppression that no complaint or opposition was offered.—*The East, by W. Y. Martin.*

THE HISTORY OF CHURCH PEWS.

In the early days of Anglo-Saxon and some of the Norman churches, a stone bench running round the interior of the church, except the east side, was the only sitting accommodation for the visitors. In 1819 the people are represented as sitting on the ground or standing. A little later the people introduced low, three legged stools promiscuously over the church. Soon after the Norman Conquest wooden seats were introduced. In 1387 a decree was issued in regard to the wrangling for seats, so common that none should call any seat in church his own except noblemen or patrons, each entering and holding the one he first found. From 1540 to 1580 seats were more appropriated. In 1608 galleries were introduced, and as early as 1614 pews were arranged to afford comfort by being baized or cushioned, while the sides around were so high as to hide the occupants—a device of the Puritans to avoid being seen by the officers, who reported those who did not stand when the name of Jesus was mentioned.

PERSONAL ITEMS.

Speaker Randall has appointed as his private secretary a son of Beverly Tucker.

General Alphonso Ferraro La Marmora, a well-known Italian General and Statesman, is dead.

Speaker Lord, of the Main Legislature, is but 30 years old. Hannibal Hamlin filled the chair when only 28.

Lord Dufferin's successor, as Gov. General of Canada, the Duke of Manchester, is married to an American lady.

George Law, forty-five years ago, was a common day-laborer on the docks, and now counts his fortune at something like $10,000,000.

Thirty-seven wives are waiting for Osman Pasha in Constantinople—enough to reconcile him to a winter in the neighborhood of Moscow.

Marshall O. Roberts, of New York, is the possessor of $4,000,000 or $5,000,000; and yet until he was twenty-five, he did not have $100 he could call his own.

Long John Wentworth, of Chicago, a man of great wordly experience, says no bank is solid that has anything to do with religion, politics or real estate.

Alexander T. Stewart first bought a few laces at auction, and opened his way to success in a dingy little shop in Broadway near the site of his wholesale establishment.

Daniel Drew, in his early life, was a cattle-driver at the munificent rate of seventy-five cents a day, and he drove himself into an estate valued at from $25 000,000 to $30,000,000.

The proprietors of the London Daily News have sent Mr. Forbes a check for £1,000 as an acknowledgment of his great services to their journal in connection with his war reports.

Horace B. Claflin, the eminent dry goods merchant, worth, it is estimated, from $12,000,000 to $15,000,000 commenced the world with nothing but energy, determination and hope.

Gov. Connor of Maine says: "Men are finding out that it is better to seek the sure rewards of the farm than to trust to the uncertainties of the crowded towns for a living."

Robert L. and Alexander Stuart, the noted sugar refiners, in their boyhood sold molasses candy, which their widowed mother had made, at a cent a stick, and to-day are worth probably $5,000,000 apiece.

When old Jubal Early heard of Lee's surrender he was lying in an ambulance, racked with rheumatism; he swore like a pirate for a moment, and and then turned in his uneasy bed with a groan and exclaimed. "Blow your horn, Gabriel!"

Mrs. Hayes has a genuine liking for the White House, old-fashioned as it is. She took an old friend through it the other day, showed him the great rooms, and exclaimed; "No matter what they build, they will never build any more rooms like these!"

Cornelius Vanderbilt began life with an old pirogue, running between Staten Island and New York, and carrying garden stuff to market. With two or three thousand dollars raised from that source, he entered upon steadily increasing enterprise until he amassed the enormous sum of $95,000,000.

Olive Logan writes to the Cincinnati Enquirer, that Mr. John Russell Young, manager-in-chief of the New York Herald, has been stricken down in a very alarming way with what it is feared is paralysis of the brain. He now goes, by command of his physicians, to Egypt, for a favorable climate, and where he can have the most intense quiet—the only thing that can save him.

Senator Gordon, of Georgia, is forty-six years old; his grandfather was a Revolutionary soldier; at the battle of Gettysburg a bullet went through the Senator's left cheek; altogether he was hit by seven bullets; he is the political hero of Georgia, and, according to Redfield, "Gordon has war record and lots of it, so much so that a little more would have been all record and no Gordon."

New Advertisements.

BROWN'S BRONCHIAL TROCHES

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"Brown's Bronchial Troches" will allay irritation which induces coughing, and gives immediate relief in Bronchitis, Catarrh, Influenza, Hoarseness, Sore Throat, and Consumptive and Asthmatic Complaints. The Bronchial Troches have been steadily winning their way into public favor, until they are known and used nearly all over the world.

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For sale by private treaty: Yearling Bulls of the fashionable "Cronkhill" and other well-known tribes, possessing great scale and heavy flesh, with abundance of good hair and grand character. In healthy, growing condition, and not pampered for show. Also, a few choice Cows and Heifers. For full particulars, apply to the breeder, JOHN HILL, Felhampton Court, Church Stretton, England.

PARTICULARLY

FOR THE LADIES!

THE RURAL NEW-YORKER, at the instance of Miss FAITH RIPLEY, conductor of the Department "For Women," offers, as one of the most valuable and acceptable Premiums of the season, a Steel-Plate Engraving, size 24x32.

The subject,

"OUGHT AND CARRY ONE,"

portrays a pretty young girl, gracefully poised, and holding pressed against her side, a slate on which she is "doing sums." The contracted brow, puzzled expression and drawn corners of the mouth, express most comical dismay.

This charming picture is printed from a new plate, the lights and shadows are clearly defined, and this work of art, when nicely framed, is a decided ornament.

Nothing is more refining and elevating than *good* works of art, and we confidently proffer this as something greatly in advance of anything heretofore announced.

We anticipate that this offer will appeal especially to our lady readers, and in order that the picture may be placed within the reach of all, we have scaled the club so low that it partakes more of the nature of a gift than a premium.

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Switzerland to America Greeting.

The Centennial Judges having awarded to the Messrs. BOREL & COURVOISIER 2 Prizes at the late Centennial Exhibition for their production, one for extreme accuracy in adjustment and regularity in performance, and the other for display, they are now offering their Watches at a great reduction from former prices, having introduced improved machinery, whereby the production is increased, and the cost of manufacture greatly reduced, and the quality and durability improved, insuring a first-class NICKEL MOVEMENT WATCH within the reach of all. These Watches, so favorably known for the past 18 years, are made of the best material, and have all the modern improvements in watch making having **Chronometer Balances, Breguet Hair Springs, Tempered, Hardened and Isochronised for R. R. Travel, Fine Ruby Jeweled,** and are warranted to perform with the regularity and accuracy of a Chronometer. These Watches are for sale by all our local agents throughout the country, and parties desiring a good and durable time-keeper, are requested to examine them before purchasing those of other manufacturers or home productions.

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SPARKS AND SPLINTERS.

THE first thing in the boot is the last.

TRUE to the last—A well-made boot.

A KNIGHT of the bath—Saturday night.

A QUACK doctor is not a "duck of a man."

FOOLS and their back hair are soon parted.

A GOOD thing to put in practice—A young lawyer.

"CAN marine animals talk?" Certainly; seal skin.

A DEAF man must go away from home to hear the news.

How to make a catfish—Leave her alone in a room with an aquarium.

PHILADELPHIA has just had a cat show. Here cats don't get any show whatever.

MAY not the venerable editor who prefers old to new jokes be called an old saw sage?

"WHAT an idle fellow you are, Fred! You do *nothing!*" "Because there's no time to do *anything!*"

"LIFE is made up of sunshine and shadow"—about five shaddos to one sunshine.—*Josh Billings.*

IT's a wise child that knows its own father, and a wise cask of vinegar that knows it's own mother.

MINCE pies cover a multitude of sins, as the deacon's wife said when he brought home the demijohn.

THE heart of the Russian army ought to beat very high, it has been so often re-pulsed.

THE old ten-cent paper currency is fast disappearing. A friend of ours is keeping a sample as a memento, and already calls it a dime, novel.

"CHARTER OAK stoves," says an advertisement. Most people would prefer to charter iron ones for practical purposes.

HE wasn't a first-rate French scholar, or he'd never have said that Tilden's Sam-singing is all confined to "*sang fraud.*"

MRS. SMITH, of South Boston, is so stingy that the only things she is known to give away are shoos to her neighbor's chickens.

THE Lowell Courier has discovered that Cleopatra was a needle-woman. Perhaps so. But there Antony doubt she had other asp-irations.

FRENCH dame to the family physician—"Doctor, I want my husband to take me to Nice for the winter. Now, what is the matter with me?"

A YOUNG upstart undertook to insult a widow, and she smote him over the head with a stove shovel. He went off rubbing his head as if he was dissatisfied with the widow's smite.

THE papers relate an anecdote of a beautiful young lady who had become blind, having recovered her sight after marriage. It is no uncommon thing for people's eyes to be opened by matrimony.

A GENTLEMAN had occasion to correct his daughter, aged four, recently. After it was over and she had sat a while, she went to her mother and inquired, "Don't you think it would do papa good to go out doors?"

"MADAM, did you ever lift a dog by the tail?" "Why, no, you cruel thing, you!" "I didn't know, because I saw you carry your little child across the gutter by one arm; a dog's tail is a good deal stronger than the ligaments of a baby's shoulder."

EYE SUPPOSE SO!

OLD WOMAN—"What a lot o' eyes these 'taters have got!"
OLD MAN—"I specs they's extra, so as to look arter the Colorado beetle."

THE LUNGS are Strained and Racked by a persistent Cough, the general strength wasted, and an incurable complaint often established thereby. Dr. Jayne's Expectorant is an effective remedy for Coughs and Colds, and exerts a beneficial effect on the Pulmonary and Bronchial Organs.

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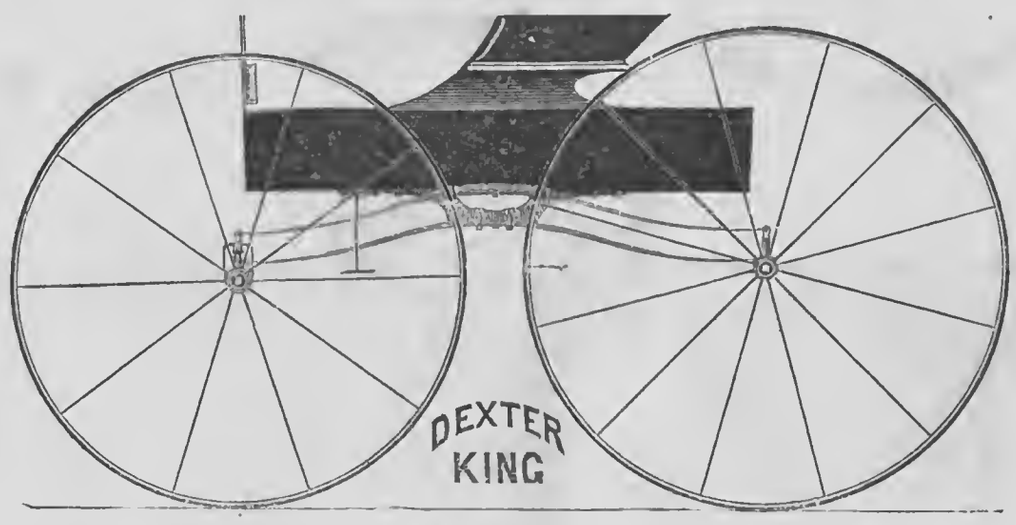

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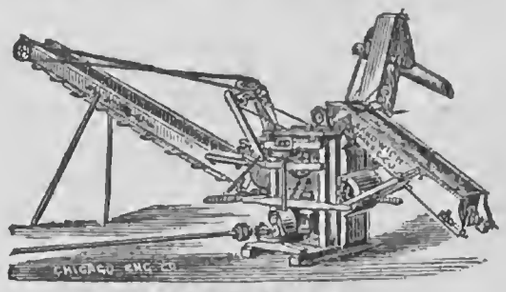

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WHOLE No. 1461.

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The Poultry Yard.

VARIETIES OF POULTRY.

We introduce in this picture a few of the leading varieties of domestic poultry. In the center of the group stands the father of all domestic fowls, the stately Game-cock. With his bold carriage, erect bearing, bright glossy plumage but cruel eye, he is dauntless and courageous to a degree that is not surpassed by any animal on earth.

On the left hand is the big, heavy Brahma of the light variety; his large, heavy, feathered legs are well adapted for carrying his weighty body; his plumage is thick and fluffy behind, making him look even heavier than he is; his wings are tucked up so tightly that he scarcely shows them, the ends being entirely covered with his saddle feathers. The eye of this bird is of such a soft, mild appearance that it shows at once his gentle, docile disposition; for although his comb and wattle are small, yet he does not look fierce or restless.

Over his back is seen the head of that beautiful bird, the Hamburg. Although there are five varieties of this breed, their forms are all alike; their fine, rose combs and brilliant dresses give them a prominent position among poultry, especially where fowls are kept for beauty as well as profit.

Between these two last birds at the bottom of this picture, is seen the bright little game bantam—the embodiment of all the qualities of his "big brother," but done up in a smaller parcel. He, however, does not know that, and thinks himself equal to any emergency.

Behind the central game cock stands the dark Brahma, fully as large as his creamy-white brother; but his colors are very different, as he has a black breast; steel-gray and black are the principal colors of his body, supported by his huge legs.

Facing us, to the right, is the round, large top-knot of a Polish hen, as round as a base-ball, with the two pretty horns of coral-like comb. There are several varieties of this breed, but the pure black, with white top-knot, are much the handsomest.

In the top right-hand corner, is the head of the massive Cochin. Like his Brahma brethren, he can stand our severe winter (if well fed) with seeming indifference; the hens laying all through winter.

Below him we see the beautiful French Houdan. He, too, has a coral-like comb and top-knot, the latter of which is not so large as that in the Polish; but, see his fine large breast! There is something worth breeding for the table, especially as it happens to be of delicious quality! His colors are spangled black and white; he has five toes, and clean legs.

At the extreme lower right corner, we have the sauciest of all fowls, the consequential little Seabright Bantam. His walk is so proud that he seems as though he did not like to touch the ground with his feet; he struts about on his toes with the proudest gait; and well he may be so proud, for he boasts of the prettiest, delicate, lace-like plumage of rich gold color, with green-

VARIETIES OF POULTRY.

ish-black lines on the tips and edges of all his feathers. A flock of these on a green lawn is a very pleasing sight.

THE PROFITS AND LOSSES OF RAISING POULTRY.

JOSEPH WALLACE.

NO. 3.

Poultry writers differ about which is the best breed of fowls to keep. Some are influenced by motives best known to themselves. Others have "axes to grind," and a few have their likes and dislikes. Farmers, and novices in the poultry business are at a loss to know which breed is best adapted to their wants. They read in poultry journals glowing descriptions of this or that breed of fowls. They see the most extravagant, ingenious and exaggerated statements about excelsior strains—newly imported breeds from the northern province of China—or perchance from the jungles of India, and winding up as a rule with the same stereotyped three to six dollars a "setting" for eggs, and five to fifty dollars a pair for these *rare birds*.

I have heard many complaints the past year from parties in the West who had patronized some of these unscrupulous dealers, and the same old story is reiterated about non-impregnated eggs, and the *pedigree fowls* were sickly, wretched specimens of in-and-in-breeding. However, it is well that there is a class of such Shylocks in the country, for honest poultry breeders who charge moderate prices for their eggs and fowls will always command ready sales.

Poultry raising to be profitable, requires a thorough knowledge of the business on the part of the keeper. First, he should be located near some city, town, or railroad station. He should procure one or two or more good breeds. Secondly, he should provide clean, comfortable houses for them in winter and airy roosting places in summer. Thirdly, when the two former *essentials* have been attended to, he should give his fowls, cooked, parched, and raw grain food regularly three times a day, with a plentiful supply of fresh water. He should feed chopped meat scraps, vegetables cut fine or cooked with some kind of ground feed a few times a week during the winter months. He should provide pulverized oyster or clam shells, chalk, bone, or old slaked lime, also boxes of coarse sand or gravel for their use. Fourthly, he should clean out his fowl houses every day, whitewash every week, and fumigate every month. He should not crowd too many hens into a house—forty are enough. He should colonize them if possible, and be careful to avoid in-and-in-breeding, no matter how valuable the breed. And by following these rules he can make poultry profitable; if he neglects them, he will find fowl raising an "up hill work," and a non-paying business.

Rock Co., Wis.

TO MAKE POULTRY PAY.

HENRY HALES.

WINTER TREATMENT.

For hens to lay in winter, it is necessary that they should be supplied with all the requirements of food, egg-shell matter, cleanliness and care, to keep them in a high state of health and condition. Good feeding is all that is required by nature for egg producing. This substance is better supplied by giving them sound, sweet food liberally, than by any artificial condiment or preparation sold for the purpose. The high price of such preparations, however good they may be, puts them beyond reach of the farmer to get a profitable return for the outlay. A trifle invested in a few simple things, such as pepper, pulverized charcoal, sulphur, and cayenne, answers all the purposes of keeping the birds in health. Even these should be used sparingly once or twice a week. When a fowl is found to be ailing, it must be separated from the others and treated with proper medicines for the disease. Such are now pretty we understood by practical breeders and poultry keepers.

Some years ago, hardly anything could be done for a sick fowl; but care and patience have found antidotes even for the most stubborn diseases, which, if taken before the bird sinks too low, will generally effect a cure. A farmer, however, cannot afford to spend much time on a hen, though valuable fowls are worth the trouble. Yet, when he finds any appearance of disease in his flock, he must make an effort to stop it at once, and not, as many will insist upon, leave them to their fate. In most cases, the spread of disease is easily prevented, if taken in time. After removing the diseased ones, a little sulphur and cayenne mixed in their soft food, a teaspoonful of sulphur and half as much of cayenne to four quarts of food given for two or three days, will generally arrest an ordinary trouble. The sulphur should be stopped, but the cayenne may be continued to be given as the birds recover. Indeed, it may be given to advantage once or twice a week all through the winter. Iron is a great tonic for ailing fowls, when first noticed to be out of condition. It is generally used in a simple preparation known as "Douglas' Mixture." It is sulphate of iron, common copperas eight ounces, and sulphuric acid one-half fluid ounce. These, put in a bottle with a gallon of soft or rain-water, are ready for use as soon as the iron is dissolved. All keepers of poultry should have this and other medicines on hand before any sickness is discovered, so that no delay occurs when promptness is required. Of special diseases I shall treat hereafter. I have in former articles spoken of disinfecting the house and the necessity for the dust-bath, and of a supply of bone and oyster-shell.

The food should consist more of other grains than of corn. Although all kinds of poultry seem to prefer corn to other grain, yet corn has been proved by a great many poultry-men to be inferior as an egg producer to wheat, barley, &c., and occasionally to buckwheat and oats. Corn may be given sparingly with advantage, but corn alone makes hens too fat and lazy. So fed they lack animation and vigor, especially the Asiatic breeds, which are more prone than other strains to this fatness that seems to border on disease. Their intestines become encased in one mass of fat, and to stint fowls to any given quantity of food especially when confined, is quite impracticable. Soft food given once a day in winter, is very beneficial, particularly during spells of severe weather. It promotes laying. It should consist of ground grain, as corn, buckwheat, barley, wheat or oatmeal, varied at times, with some vegetable and animal food. I make up mine by boiling a lot of potatoes or turnips, pouring the hot water (in which they were boiled) upon some meal in another vessel, with ground beef scraps added twice a week and a little cayenne. Make this into a stiff paste. Mash the vegetables and add meal enough to make this also into a stiff mass. Mix them together and feed when just warm. Most breeders recommend this to be done for their morning meal, but this will often keep the stock waiting hungry too long. Have light grain for them always, early every morning, and feed with the soft food by noon if not sooner, and all the grain they will eat for evening meal.

If these directions, with former ones in the Rural, do not make poultry pay, the fault lies in some other cause.

Farm Topics.

AGRICULTURE AND EDUCATION IN THE UNITED STATES.

PROF. I. P. ROBERTS.

No. 3

Having indicated in my last, the work that is accomplished yearly by the Agricultural and Mechanical schools in the direction of instruction and drill in military tactics, I will pass to the consideration of their work in other branches.

The larger part of what follows is condensed from an article written by me, and published in Kiddle and Schem's Cyclopedia of education.

At the close of 1875 there were 27 colleges or departments of colleges, organized by virtue of the grant of 1862, and several others in process of organization. The date of their organization and the places of their location are as follows. Arkansas, Fayettville, '71; Alabama, Auburn, '72; California, Oakland, '69; Connecticut, New Haven (Scientific School,) '46; Georgia, Dahlonega—; Illinois, Champaign, '68; Indiana, La Fayette, '74; Iowa, Ames, '68; Kansas, Manhattan, —; Kentucky, Lexington, '66; Maine, Orono '69; Maryland, Hyattsville, '68; Massachusetts, Amherst, '67; Michigan, Lansing, '55; Minnesota, Minneapolis '68; Missouri, Columbus, '70; Nebraska, Lincoln, '72; New Hampshire, Hanover, —; New Jersey, New Brunswick, —; New York, Ithaca, '68; Ohio, Columbus, '73; Oregon, Corvallis, '68; Pennsylvania, State College; Rhode Island, Providence—South Carolina, Orangeburg, —; Tennessee, Knoxville, '69; Vermont, Burlington, '65; Virginia, Blacksburg, '72: Wisconsin, Madison, '68. It will be noticed by the dates given, that all of these colleges or departments are of very recent origin, with the single exception of the one in Michigan. [New Haven? Eds.]

All of these colleges received their proportion of the scrip mentioned in the preceding article. The issuing of such a large amount of it, caused its market value to fall to a very low figure; and even could it have been sold at the rate of $1,25 per acre, the fund derived, in most instances, would have been totally inadequate for the maintenance of even a second-class institution. This fact made it necessary in several cases to give the scrip to some old and well-equipped college, only requiring that they should organize and equip a department for instruction in Agriculture and Mechanics.

The wisdom of this policy (at least in some instances,) cannot be questioned, for it was simply choosing between a department in a well-established college or nothing. As to whether these old colleges have fulfilled their contract is another thing. Without making any distinction, let us see what provision for teaching they have collectively made in this brief time, and also what they have accomplished.

At the close of 1875, there were 300 professors and instructors actually engaged in teaching, and 5893 students being taught such branches of learning as relate to Agriculture and Mechanics, either directly or indirectly. So far as reported, 361 students had graduated after a full course in Agriculture. Allowing the usual proportion of freshmen to graduates this would indicate that 1444 had pursued that course for a longer or shorter period.

The number of *graduates* who have pursued studies relating to Agriculture and the Mechanic arts is 669; making the total number who have entered the courses for a longer or shorter period, 2676.

The number who have graduated in the last two years, or the number who are now registered in these courses, I am unable to state; but if the increase in the other colleges has been anything like that at Cornell University, (which had 17 in Agriculture in 1875 and now has 38) it would appear that the work already accomplished is not inconsiderable, and that the prospects for the future are encouraging.

EQUIPMENTS.

The number and equipment of Laboratories, Workshops, etc., (in 1875) that serve to illustrate and teach, are as follows: Mechanical laboratories and workshops, ten; all of which are furnished with necessary appliances for working in wood and iron: physical Laboratories, sixteen; most of which are furnished with apparatus for illustrating the subjects of Mechanics, Electricity, Magnetism, Heat, Acoustics and Optics.

All, with one or two exceptions, have well equipped chemical laboratories and several of them furnish facilities for instruction, not excelled in any other institutions in the United States. Nine Anatomical, twelve Geological and fifteen Botanical Laboratories are already equipped for student practice. Eight of these colleges have green-houses in operation, and nearly all have draughting rooms with necessary tables and models for illustrating the subject taught. Some ten colleges have large collections of models of farm implements and machinery, engravings, photographs, charts and drawings, together with numerous specimens of grains, grasses, and other plants; geological and mineralogical specimens, collections of insects and skeletons of domestic and other animals.

The aggregate number of acres used for general and experimental farming is 5081 added to which there are 142 acres of orchard, 92 of vegetable garden, 29 of small fruit, 1360 of native timber, 438 of planted timber, and 580 used as college grounds. We also find 500 head of neat cattle, 236 of which are thoroughbreds representing nine distinct breeds. The horses and mules number 129, only 3 of which are thorough-bred; with 233 sheep of which 58 are pure-bloods of various breeds, and the swine exceed 500, including about 400 pure-bred animals, representing nearly all of the well established breeds. This aggregation of laboratories, workshops, museums, greenhouses, orchards, gardens, farms and domestic animals, is furnished and provided for the express purpose of affording not only the means of illustrating the subjects taught, but actual experience and skill in those processes which require that the judgment, eye and hand, as well as the intellect, should be trained. At least twelve appear to have kept careful and separate accounts of farm receipts and expenditures, but since we have no reports of the amount of increase in the valuation of farm stock, implements etc., it is impossible to state the exact profit or loss; but I am assured from reliable sources, that at least six of them show a fair profit, exclusive of cost of experiments and for aught I know all of them may. The gross receipts of the twelve farms as reported for 1874, was $64,329,00. The total expenditure for *experiments* on eight of them was $8,143,00. This indicates that farm experiments are not carried on to so great an extent as we could desire, as they are effective auxiliaries to the class-room instruction, and the only thing that can prevent their more general use is the heavy cost.

The common idea that the farm must be so conducted as to attain the greatest pecuniary profit, is one which if carried out to its legitimate results, would defeat most of the objects for which it should be used. The better idea is this; conduct the farm under two heads or accounts—where it is large enough—general and experimental.

If the general farm cannot be made to pay a fair profit, then sell it; but it is simply nonsense to talk of pecuniary profit in numerous and extended experiments. As well might you expect a great university or college to be run on the same principle.

COURSE OF STUDY.

Below will be found a list of the subjects taught in the full course of four years in Agriculture (in some cases a few are omitted or added), but those mentioned will serve to show what studies are now generally considered applicable and necessary. Those printed in italics are now actually taught in this course at Cornell University, and two or three other subjects of a more general nature are frequently added at the option of the student.

(1) *Algebra*; (2) *solid, plane* and analytical geometry, *trigonometry* and calculus; (3) *rhetoric* and *composition, declamation* and *English Literature*; (4) *drawing, free-hand* and *linear*; (5) *surveying* and *mapping*; (6) book-keeping; (7) *botany, general* and *agricultural*; (8) *horticulture, floriculture,* and *general market,* and *landscape gardening*; (9) history, which may comprise one or more of the following: American, English, Roman, French, *agricultural,* and history of civilization; (10) *physiology, hygiene* and comparative anatomy; (11) *zoology* and *entomology*; (12) *veterinary anatomy, physiology, medicine* and *surgery*; (16) *chemistry, general* and *agricultural*; (14) French and *German*; (15) *physics, geology,* mineralogy and meteorology; (16) *constitutional* and municipal law and *political economy*; (17) *mechanics applied to agriculture*; (18) *strength* and *preservation* of *materials*; (19) *rural architecture.*

The subjects treated under the head of applied or practical agriculture—with slight changes—are as follows:

(1) *Stock-breeding, including the laws of likeness or similarity, variation and atavism; the influence on the subsequent progeny of the dam by the first fruitful connection, in-and-in and miscellaneous breeding, the government of sex, the relative influence of sire and dam on the progeny, pedigrees and their value, the history, formation, and charisteristics of breeds and families*; (2) *the selection, breeding, feeding, and general management of domestic animals, each species and race being treated separately*; (3) *animal nutrition*; (4) *the education, shoeing, driving, and care of the horse*; (5) *drains,—their material and construction, and the effect of drainage on health, soil, climate and plants*; (6) *soils—their classification, character, mechanical division and preparation for the cereals and grasses*; (7) *the preparation and selection of seed*; (8) *sowing, planting, cultivating and harvesting*; (9) *the nutrition of plants*; (10) *insect enemies and fungi*; (11) *the culture of roots, and their value as food for man and beast*; (12) *forage plants—their culture, use and value*; (13) *weeds—their habit of growth, time of seeding, and mode of eradication*; (14) *the effects of air, water, heat and light, on the fertility of the soil, and the growth of plants*: (15) *the care, cultivation, and use of natural and artificial forests*; (16) *fields—their number, shape and size*; (17) *fences—their material, construction, and durability*; (18) *farm-yards and buildings*; (19) *water privileges*; (20) *farm accounts*; (21) *the manufacture, preservation and application of farm manures*; (22) *the rotation of crops*; (23) *farm machinery and tools*; (24) rural law.

The subjects of instruction, as far as possible, are illustrated by diagrams, cuts and models. The lectures are supplemented by field practice, varying from five to fifteen hours per week and sometimes even more. Visits are frequently made to adjoining farms and herds. The lectures and practice in practical Agriculture usually extend through at least one year.

Cornell University, Ithaca, N. Y.

*Errata.—In No. 1 read JethroTull for Jethro Hull.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

We used to think that clipping horses was a cruel practice. This decided opinion was established from seeing so often in the streets of New York clipped carriage horses shivering in the streets, uncovered, while the lazy grooms sat tucked up in robes and muffled to the very eyes. Perfectly comfortable themselves, what cared they if the horses were freezing, while the ladies called, or shopped? We say "we used to think," clipping horses was cruel and so it was and is when they are to be left to the mercies of such drivers. We knew it was less work to clean them, but this did not offset the exposure to the cold, sweeping winds of New York, and the danger of colds and sickness. There is no necessity for clipping the carriage horses of any city, as the work demanded is not severe enough to require it. With trotting horses and those driven long distances it is different. The owner of a fine pair of carriage horses, who, at most, only takes a turn in the park, is a foolish man, if he allows his groom, in order to lessen his labor, to have his team shorn of the natural protection they need in winter and most emphatically require for the work he desires them to do. Perhaps a farmer ought

to keep silent, as the more horses that are killed by this sort of management the better market there will be, but farmers are humane and they have sense enough to see how, in many instances, a pretentious coachman would recommend having the horses shorn as an advantage to them when it was not, but only enabled him to keep them clean much easier. This is one of the reasons for clipping and, for ordinary city service, the only one. In the country, where horses are often put to severe use, and driven long distances, it may be an advantage to denude them of their coats, especially if they happen to have very long and thick ones; yet it seems as if they would not have a thick warm coat unless they required it. This peculiarity in some horses may be accounted for by the manner in which they were raised when colts. A colt wintered out of doors will naturally have a much thicker and longer coat than one well protected. A natural propensity to grow a thick coat may be established in this way, which in after years is unnecessary owing to the care given to it and may be cut off so that the animal's condition may really be equal. We never knew a thorough-bred horse to have a long shaggy coat, and this goes to show that the thick coat is not so much a necessity for a horse as it is the natural result of the conditions which surrounded him. If this is so, then there is no force in the argument that a horse's coat is suited to its particular or peculiar temperament and nature. The fact probably is that any horse if exposed to the elements when a colt, would have a shaggy coat without any regard to its temperament. All animals in cold climates have thicker hair or fur. Put one of these animals at work where its temperature is very much increased, and the coat suited to the frigid zone is a burden, so if a horse happens to have a thick, heavy coat of hair and hard work is required of him, it is well to remove the burden. He will perform his task better. When the work is done or he is left standing in an exposed place, he should be immediately covered. The practical advantages of clipping horses in the country have been found to harmonize perfectly with the above theory. Twenty horses have this year been clipped in this vicinity and mostly owned by farmers. Last year only three. This large increase demonstrates the practical utility of clipping as against any theory in the minds of country people. But one horse in this vicinity out of the above number has ever been sick and this one took a severe cold The owners of these animals insist that their horses can do more work and do it with less fatigue than before they were sheared. They claim that they eat better and perspiring less, keep in better condition on the same amount of feed. There is no doubt but that with a free evaporation, the skin being clean and the body free from scurf, there is less itching and less danger of fever and kindred diseases. One horse which pulled its blanket off after being driven and warmed up because of the itching, after it was shorn never disturbed the blanket. About a bushel of hair is taken from each horse, although some of them turn off a bushel and a half. It would be a good plan to shear a heavy coated horse early in autumn, and then the hair would start out before winter and with a half coat he would do well. The change would not be so great as if he was denuded of his winter covering just as cold weather set in. A horse when clipped does not heat so much, and not getting so hot is less liable to get a cold. They are also not so subject to scratches. A horse with a heavy coat, if used every day, will not be dry all winter, as it takes from twenty-four, to forty-eight hours for the hair to dry. With a hand machine costing eight dollars, a horse can be shorn in a half a day. With the larger machines requiring two men to work them, three horses may be clipped in a day. The general price now is three dollars for clipping each horse.

We have two bull calves which, on account of close keeping last spring, became pot-bellied, which injured their looks very much. They are now large and strong and in good condition and, except for the excess of stomach, would be first-class in every respect. Three days ago, we put them up in a box stall and commenced a system of dieting which we expect in a few weeks will completely change their appearance. In the morning they are fed a peck of turnips cut up with four quarts of meal. At noon they each get a single handful of hay and at night turnips and meal, the same as in the morning. The meal consists of two parts of flint corn ground in the ear and one part of wheat bran. They get no water as the turnips supply all that is necessary. They manifest no discomfort or uneasiness, but on the contrary, seem to be quite satisfied with the shortened and condensed rations. We like to see a good-sized stomach on a cow, as it is an evidence of capacity to consume and assimilate a large amount of food, but in a male it is a blemish, as it destroys the symmetry and proportion of the body. A cow with a small stomach is generally a poor one.

The other day we called over to neighbor VANGUYSLINGS and found him halting between two opinions. It was a question of lightning-rods and shade, *versus* dirt and sunshine. Three tall and handsome Locust trees stood so near the house that they were natural protecters against lightning, and at the same time shaded a considerable portion of the house, as the branches stretched out over the roof and reached beyond the ridge boards. On the other hand, the blossoms in early summer and the leaves in autumn filled the eave troughs with dirt, which was carried into the cistern. He had come to the conclusion that sunshine on the house was more healthful than shade, and the only doubt in his mind was whether the dirt from the trees was not so much of a nuisance that it more than offset the protection which he might have from the lightning by the lofty trees which reached so far above the house. The dripping from the trees stained the clap-boards and siding, and so they were condemned. We regretted the conclusion and thought how much better it would have been if these noble trees had been set a little farther off. We have made the same mistake ourselves in planting trees in not taking into the account the fact that when they grow larger they will be much nearer together and much closer to a building than when they are small. There are several orchards in this vicinity in which the trees are so close together that the branches interlock, and the trees are not more than half grown, every other row will have to be cut down. How many gardens are spoiled, too, by planting so many trees in them. As soon as they grow up they shade the ground and its usefulness as a garden is destroyed. We have made this mistake, and had to abandon one garden entirely. Last spring we had to choose between several Rogers' grape-vines and a favorite apple tree. That law of natural philosophy learned in our youth that "two bodies cannot occupy the same space at the same time," comes back to us with practical force, and the apple tree was cut down. In thinking where to set new trees, all these things must be considered, or else in many instances just as they begin to bear the fruit we have waited for, they will have to be destroyed, or as they grow up they will destroy other plants, or damage the buildings. Every tree wants the sunshine and plenty of it to do well.

Farm Economy.

THOUGHTS ABOUT WINTER FEEDING.

WM. J. FOWLER.

How long shall we feed fattening animals? At what time during the fattening process is there the greatest gain for the food consumed? These are important questions, and deserve much more attention than they generally get. Quite often farmers do not regard them at all. They feed till their surplus grain is exhausted, and then they kill, or else feed till a certain date which they had decided on as butchering day. Very often, by this loose method of doing business, animals are kept long after the date of profitable feeding has passed. Sometimes, though less frequently, they are sent to the shambles too soon.

When the animal is fairly fat, the gain from further feeding will rarely pay the extra expense. The increase in gain falls off rapidly as the animal becomes thoroughly fattened. For home use, this is not all loss, as the very fat beef, or mutton, or pork, is richer and better than that only partially fattened, which contains a greater proportion of water, and thus wastes in cooking. But in this country the buyer rarely makes any difference in price. English consumers have learned the difference, and they demand the very best. As our foreign market for American beef and mutton increases, farmers and stock feeders must learn to adapt their wares to English tastes and English markets.

One of the greatest wastes in fattening is in the use of soft corn or nubbins, thrown in the ear to fattening hogs. It is a slow, wasteful and costly mode of fattening pork. Too often these nubbins are looked upon as valueless, and if the farmer gets his year's supply of pork from them, he easily fancies that it costs him nothing. In fact, much of the corn thus wasted is ripe and sound, and needs only to be well dried to be ready to shell and grind, and thus be worth, for feed, at least three or four times as much as the farmer makes from it. If really unripe, it should be fed early to cattle which will eat cob and corn together. In its green state, there is considerable nutriment in the cob, and if any corn passes through the animals only partly digested, it can be saved by having store hogs kept in the same yard. There is great advantage in feeding green corn early. After freezing weather comes, the nubbins become hard as ice from frozen sap, and make the animals which eat them, sore-mouthed.

Feeding of any kind of animal should begin early, and be well advanced before cold comes. In this way the greatest amount of flesh and fat can be laid on at least expense for food. Hogs especially, should be got out of the way early. If properly kept, they will be half fat all the time, which is only good, thrifty, growing condition, after which a few weeks' feeding on cooked corn meal will complete the fattening, and make the flesh firm and solid. If possible, have them butchered as early as December, as cold weather rapidly diminishes the capacity to lay on fat.

It may be urged that early slaughtering will glut the market. But there is no need for selling pork as soon as butchered, especially when the price rules as low as now. Money is usually made by pork packers, else they could not continue the business. The farmer who has grown and killed the pork is better able to hold it than any one else can be, and he may as well have the profit as anybody. Very often several barrels of well-kept pork may be sold in the farmer's neighborhood to those who failed to provide a supply. Pork in the barrel gains in weight by the salt it absorbs, thus making a double profit in keeping it. At present low prices of pork, farmers who have facilities for packing it, may do so with little or no danger of loss.

The only kind of stock which it is profitable to fatten in cold weather is sheep. If kept dry they will thrive, no matter how low the temperature, and with plenty of water and good feed, they will eat more heartily in severe weather than when it moderates. In a barn basement or a close shed, a flock of fattening sheep will usually keep the temperature above the freezing point.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

It is poor policy to endeavor to raise early lambs when you have no warm, sheltered place for the ewes, away from the rest of the flock. True, early lambs bring fancy prices for early mutton, yet a farmer who has no suitable place for them during the cold storms of March, cannot raise them to advantage. We have known men to lose two-thirds of their lambs from no other cause than that they had no suitable quarters for them. When lambs are not dropped until warm weather fairly sets in, they thrive much better, and there is scarcely ever a loss, provided the ewes have received suitable care. Sheep, especially breeders, should have ground grain through the winter and in the spring, when the lambs come late. Some years ago, we were an [illegible] of the family of a Michigan farmer who, every morning, gave a flock of forty sheep the meal from about twelve quarts of corn, dry. They ran out through the day, and at night were shut up in a warm stable and supplied with plenty of good hay. This hay and meal constituted the entire feed each day, save what they could pick about the stack pen, yet I never saw finer sheep, and at any time during the winter any or all of the flock were in first-rate condition for mutton. A *little* grain is of more real benefit to sheep than to any other animal; and speaking of ground grain, it is, in our opinion, injudicious to feed whole grain to any animal. A neighbor's fattening pigs, fed on corn in the ear, shrunk materially the last few weeks that he kept them, simply because their teeth became so sore, from eating the hard grain, that it was impossible for them to grind a sufficient quantity to keep them in condition for butchering. Cooked, it might be better; but ground and then cooked, you get the full benefit of its fattening qualities. Every farmer should have a large kettle or steamer in which to cook grain for all his stock, horses not excepted. A warm feed of meal would be far more acceptable to them, during the cold weather, than the hard, flint-like corn and hard-shelled oats that many feed. In our last article, we spoke of beans as the best grain for sheep, and stated that the use of them would "increase the quantity and quality"—of the wool, of course, we meant, not of the sheep. Much cruelty is inflicted upon lambs by leaving them for castration until they are two or three months old. The operation should be performed immediately after birth, removing the entire scrotum with a sharp knife. This, to some, may seem more cruel than the other, but we do not so consider it. Too many inferior sheep are kept by farmers. They are not profitable. It costs no more to winter a fine grade than a mongrel, and it is much more encouraging to remove from a sheep a fleece of seven or eight pounds than one of two or three. Some may say none but a fancy breeder can obtain this result. We can refer such to a farmer of this locality whose flock of fifty sheep *averaged* seven pounds to the fleece during the past year. They were fine sheep, however, and handled with consummate care.

We have a few acres of land that, for several years, has been bungled over and half worked, until it has become so poor we can think of only one crop to apply the coming season, namely, buckwheat. Where buckwheat will not grow there is no use sowing any other grain, yet, like other cereals, it does the best on good ground. The piece referred to is situated on the summit of a steep hill, making it, not impossible, but quite impracticable to enrich the land with barn-yard manure. We propose to seed thick with large clover, and clover alone. We shall probably get buckwheat enough to pay for plowing, and the clover will form a valuable coat of manure, the roots even of the growing plant serving to enrich the land. We think farmers make a mistake in sowing so much timothy seed. Nearly every one of our neighbors in seeding uses timothy alone. When asked their reason for so doing, they answer:—"We cannot sell our hay as well if our customers find clover in it; we know that it is injurious to the ground, but in order to sell our hay at anything like the usual price, we must sow timothy alone." Now, we cannot consider this the best of reasoning. Is it profitable to raise grass which we acknowledge is an unnecessary drain on the productive properties of our land, when it will only bring six and eight dollars per ton? Really, is it profitable to sell hay at all? Many claim that timothy possesses more nutriment than clover. Perhaps, bulk for bulk, it may, but then we cannot produce as much from the acre of the former as of the latter. Usually we sow eight quarts of timothy and four of clover. This gives hay of good quality for feeding, and our land is not impoverished by the crop. Some may dissent from the remark that timothy alone will steadily draw the richness of the soil until it is unfit for any crop. These have only to see the lands in this vicinity that have been "timothyed to death," to be convinced.

Fall plowing for oats is most essential. There is no grain, probably, so much affected by being sown on land turned in the fall, and left exposed to the action of frost, as this. They require early sowing, and by plowing in the fall this can be accomplished much sooner in the spring, than when left unplowed until seeding time. Our heavy, hill lands dry out much quicker, if this plan is followed. A few years ago we began plowing a field of six acres, going around the whole. The frost came too soon, and stopped our plowing for that fall, when we had only about one-third of the piece done. In the spring we commenced where we had left off, and finished the piece. The whole was harrowed once, with a sharp-toothed harrow, before sowing, and twice after sowing. Mark the result: The crop on the whole field was very abundant, yet that in the center, or on just so much as we had turned in the spring, lacked nearly a foot in hight at harvest, and was not nearly as well filled. We believe that we would lose nothing by plowing in fall, and crossing in spring. At least, a shovel-toothed cultivator should be applied before seeding. The seed-bed must be light and mellow, if we expect full remuneration for our labor. Whatever grain we raise, we must study the peculiarities of that particular grain, in order to be successful in its production. A neighbor has always calculated, every spring, to sow a certain number of acres, at all events; as a consequence, his farm is completely worn out.

Mr. COLE informs us that he has raised, the past year, fifty bushels more oats, from three acres, than he has ever raised on the same ground before. The reason he ascribes for this success is the fact that the ground was all subsoiled. No doubt, on heavy land this practice would prove most beneficial. A subsoil attachment has been used by some successfully, though we think the draft must be rather heavy for a light team. Many do not plow their land until seeding time, and then think they have no time for subsoiling, as it requires twice more time than the usual way. On some land it will pay to subsoil; on others the result would be doubtful; while, there is no doubt, that on others it would be pernicious.

REMOVING ROCKS FROM TILLED FIELDS.

There is not usually much profit in grubbing big stones and rocks from the farm; by which remark I mean to say that the profit lies rather in getting land where such work is not needed. But if a good farmer has a few such nuisances disfiguring his cultivated fields, by all means let him have them out as soon as he can. It will pay him a good percentage above the money return in the satisfaction of being able to plow and reap and mow without encountering these old-time enemies to good tillage. The work can be done at seasons when labor is cheapest and thus may be really almost no money expense. The hole which a deep-lying rock has occupied may be filled to within two feet of the surface with smaller stones, thus doing two good jobs at once. The digging and stirring of the soil around the rock required to move it, are also beneficial. I have often noticed that such places show the good effects on the crops for years after.

W. J. F.

Miscellaneous.

THOSE TREE PEDDLERS.

S. B. PECK.

HAVING met with some vexations in purchasing vines and trees, I have thought that a relation of a few of the cases might be interesting, if not edifying, to some younger experimenters. My experience commences about thirty years ago, when I had only a single vine each of Isabella, White Sweetwater, and Clinton. An ablebodied man in a farmer's honest garb, appeared with grape vines to sell of greatly improved varieties, none other than the "Magnum Bonum and the Scotch Gray." The names being new to me, although I had read a good deal, excited my suspicions, and I took the precaution to take down his address, and to question him how these new varieties compared with the Isabella and Catawba, which he seemed to know all about. Well, they were a great deal larger, sweeter, and earlier, so I invested fifty cents for one of each variety. The second or third year they bore Isabella and Catawba grapes; and the next year there appeared at our town fair, many splendid specimens of Magnum Bonum and Scotch Grays, all of which failed to get a premium on account of their bogus names.

Years after, I purchased—not of a tree peddler, I was too wise for that—direct from a large nursery—now I think extinct—largely of fruit trees, grape vines and currant bushes. Of the latter were five varieties, all nicely bunched up and labeled. In planting them I was very particular, for I expected to propagate from them for sale. In due time they bore all the varieties named as near as I could tell; but instead of each kind being by itself as I planted them, the rows when the berries ripened, looked like variegated flowers. I had seen people shuffle cards, which I supposed was for the purpose of mixing them, and the first idea I had when these currants began to ripen was, that they had been shuffled.

In 1865 I planted thirty-five apple trees of nine varieties, selected out of a thousand from the same nursery. They were very carefully planted and recorded in a book, but up to this time they have not borne a single specimen of either of the varieties supposed to be planted. This is not the whole of my experience with a single nursery; there is much more of the same kind. There are other nurseries, too, where I believe the owners were and are honest; but they have been unfortunate in raising very obstinate trees that have utterly refused to bear such kinds as they ought to. I have bought several thousand fruit and ornamental trees and grape vines that were stone-dead when they reached me and others that were diseased and died gradually for years, without bearing. But, in justice to the fraternity of nurserymen, I must admit that there have been honorable exceptions. It is bad enough to plant and nurse a worthless tree, or to watch for years the development of a favorite variety, and meet with one which you do not desire; but I have been unwittingly a party to fraud, for many of the trees I have bought have been sold and paid for before the fraud was discovered.

SAND FARMING.

S. B. LOOMIS.

SAND FARMING depends upon how much sand there is. If pure sand, then follow the advice given in the Loudon Punch by DOUGLAS JERROLD to one about to get married, "Don't!" If properly mixed with vegetable matter, a modicum of clay, and sufficiently carbonized to give the soil a dark color, then for most crops in the latitude of Wisconsin, choose all the "law will allow" or your means permit, always remembering for *particular* crops.

Pure sand, or nearly so, is sought for in the valley of the Wisconsin River to raise watermelons upon, the crops, in ordinary seasons, being immense; netting to skillful salesmen and raisers from fifty to seventy-five dollars per acre; but this crop is an exceptional one, being a luxury rather than a necessity. In planting this crop there is no manure used, and as but few weeds will grow, the labor is only trifling; but no other remunerative crop can be raised upon the land.

The foundation crop on such sand land as it will pay to own, is clover and its necessary accompaniment, gypsum. This crop mown by the 10th of June, in this climate, and the second crop plowed down when part of the heads are filled with seed (the earliest formed), manures the soil sufficiently during the ensuing season for such crop as may be placed upon it. If the chinch bug is not troublesome, wheat will sometimes return a reward for labor expended, but corn will never fail to do so richly. Should wheat be chosen, the seed plowed under will be sufficient to give a good stand. Next year the process of mowing and plowing may be repeated, or if the soil be sufficiently fertile, the second crop may be saved for seed which upon sand soil will yield abundantly, never forgetting that where clover is there should be gypsum or land plaster.

Clover is always necessary as a pasture where the farmer raises hogs. Corn, here at the West is cheap, but clover is cheaper and better, being healthy food in the summer time. The past season I fenced off an acre and a-half of clover, and when just coming into bloom, placed in the inclosure thirty-one hogs half-grown and kept them upon the same without other food until some time in September. They grew, were contented and well prepared to appreciate the fattening process, quickly growing fit for the slaughter pen. A field of forty acres would carry a fabulous number and after that, such corn as the best acres can carry!

The most satisfactory results on sand soil are had here from clover, corn, and feeding these to swine, modified, of course, or controlled by the markets. This has been the result of experience. Still I apprehend that were wolves and curs destroyed, and sheep employed to feed down the clover in summer and consume the corn in winter, they would improve the land more and return as much and *cleaner* money, than the plan heretofore pursued.

A sand farm is not the best for dairying purposes, as the grasses adapted to permanent pastures delight in a cooler soil and one not so porous. Could the average farmer, however, bring himself to the soiling process and carry feed to his fold instead of driving his stock to the field, the sand farm would always equal, and in most seasons exceed the clay. The ease with which large crops of corn, clover, and particularly roots, are grown upon sandy soils would place them at an advantage—but while labor is dear and land cheap soiling will await the increase of population. The ease with which the soil is worked, coupled with the fact that none but the heaviest rains will stop the plow—which sometimes makes a difference of two weeks of time in the busiest season of the year as between sand and clay—these advantages, when both soils are to be sown to the cereals, will place the difference to the credit of the former.

Sand soils develop seeds with more uniformity than clay. The grass seeds will be in greater quantity, but the forage will be less; corn will have less stalk and leaves on sand, but will not want in grains; oats, barley, and wheat like clay soils best, still an average crop of these may always be expected from sandy soils and, some seasons, will be superior on the latter, but rarely. Farming on sand soils has not as wide a range as other soils will permit, but by keeping closely to the line indicated by both soil and climate, raising everything except wheat, to be consumed upon the land and carried off on the hoof or in wool, a competence can be had as pleasantly and with less labor than upon heavier soils and with more diversified industries.

Richland Co., Wis.

SUNDRY TOPICS.

S. RUFUS MASON.

THE BIRD AND FRUIT QUESTION.

I NOTICE that Prof. BEAL gives his testimony against the birds. Thirty years ago there was but little complaint, while now amongst fruit growers there is a growing feeling that the birds take far more than their share of the fruit. I think the difficulty lies in the constant destruction of our forests. Formerly, insects found sufficient food and shelter among the trees of the forest; but as these are cut away, their feathered occupants are driven to orchards and fruit gardens, and possibly finding the new pastures more congenial to their taste, and as they are also less exposed to their enemies, they have increased beyond former precedent.

The birds, also driven to the orchards, have formed a predilection for fruits more than is natural to them. Thus the destruction of our forests causes both birds and insects to seek new haunts, and to become doubly destructive. The proposed plan or remedy (to destroy the birds), will only increase the evil; we shall then be totally given over to the rapacious insects. If the birds are removed, human computation is absolutely inadequate to number the insect increase after one generation. What would, in such a case, protect man himself from extinction within five years' time? Even now the birds are too few to be of much help in maintaining the balance of power. We have but two remedies: Either increase the number of birds or restore the forests, both slow in execution; but the latter the only possible means of accomplishing the former.

INSECTS ON THE FARM.

A vast, an unknown amount of loss is suffered every year by the depredations of insects. Many farmers, when they see a crop melting away before the attacks of these pests, are struck nerveless, and make no efforts of prevention. There is no part of creation that understands the "value of peace and quietness" so well as the predatory insects: being "let alone" is their life and main dependence.

It is a maxim in war, always do that to your enemy which he least desires and least expects. Constant disturbance of the soil or their haunts, prevents their increase, and makes their life uncomfortable. Here is the ounce of prevention, ready for use at once.

MAKING SPRING WHEAT.

I have read somewhere that winter wheat can be transformed into spring wheat, by sowing it in the spring for two or three seasons. If this is the case, then the Northwest can supply itself with new varieties at little cost. If any one has any experience in this line, I should be glad to hear from him through the RURAL, stating name of variety tried, soil, time of sowing, ripening, &c., &c. Seed wheat in this country, where threshing-machines travel from farm to farm, soon becomes badly mixed; but I think a new variety of real merit would induce our farmers to insist upon a thorough cleaning of the separator before use.

The Horseman.

HISTORY OF THE HORSE, Etc.

HAVING noticed, in a late issue of the RURAL, an article by GEO. GARDNER, describing what he saw in the horse region of Orange Co., N. Y., I wish the RURAL would tell us about the history of the horse, and especially of the Hambletonian strain.—H. H., *LaFayette Co., N. O.*

ANS.—Among modern physiologists, there exists no doubt but that all our contemporaneous breeds of horses are descended from an extinct perissodactyl mammal belonging to the solidungulate division or equidæ family, and in scientific nomenclature known by the name of HIPPARION. From an examination of the skeletons of this genus found in the later tertiary deposits of Europe, Asia, and America, the inference is inevitable that—— but we are really sorry that the modest space here at our command prevents us from complying with the very reasonable request of our correspondent by giving an exhaustive history of the equine race, and forces us to limit our remarks to a short notice of the Hambletonian breed. The original imported Hambletonian was foaled in 1791, and after his importation to this country, had varied success as a racer, but as a stallion became distinguished for the elegance and finish, as well as for the speed and endurance of his get, equally for the saddle, harness and trotting course.

Far more celebrated, however, among modern horsemen, is the Rysdyk Hambletonian, foaled on May 15, 1849, got by Abdallah, son of Membrino, by imported Messenger, and bred by JONAS SEELEY of Chester, Orange Co., N. Y. Abdallah, his sire, was out of Amizonia, of unknown blood. The dam was got by imported Bollfounder, second dam by Hambletonian, son of Messenger; third dam by Messenger; so that both sire and dam were rich in the highly-prized Messenger blood. The dam and foal, afterwards famous as Rysdyk's Hambletonian, were sold by Mr. SEELEY to WM. M. RYSDYK of Chester, for $125. At two years of age he was bred to four old mares, from which three foals were begot, one of which was ALEXANDER'S Abdallah, the sire of Goldsmith Maid. When three years old he was taken to Long Island, and after a test of a mile in 2.48, it was decided by his owner to use him as a stallion rather than on the trotting track. In this capacity he proved eminently profitable having, it is estimated, brought Mr. RYSDYK $100,000 during the twenty-five years he owned him, his services for some years being worth $10,000, the fee to insure a colt having been as high as $500 during the later years of his service. He was the sire of nearly 1,300 foals, of which 1,225 are known. No less than fifty-eight of his descendants have made records of 2 30, the most celebrated of which are Dexter and Goldsmith Maid. From the marvelous speed and endurance of so many of his progeny, he is undoubtedly entitled to be considered the great progenitor of trotting horses. He was a large horse, but without a particle of grossness. In color he was a rich mahogany bay, with a small star, two white ankles behind, dotted below the coronets with dark spots, and hoofs mainly dark. His head—according to an accurate description in a former issue of the RURAL—was large and bony; jowl deep; eyes large and prominent; ears large; neck short and heavy at the throat-latch, but thin and clean; shoulders very deep, oblique and strong; withers low and broad; back short, coupling excellent; croup high, and enormous length from point of hip to hock; legs broad, flat and clean, with tendons well detached from the bone; hock well bent rather than straight; the pasterns long and elastic; and hoofs splendid.

SHOEING HORSES.

IN shoeing horses, two methods are practiced here:—One is to pare the wall of the hoof only; the other, to pare the wall, and then with a drawing-knife to cut out the sole at each side of the frog until the shoer feels it yield under the pressure of the thumb. Which is the right way? or is either of them right?—*A. W. H.*

ANS.—The advisability of paring the sole of a horse preparatory to shoeing, is a question upon which very excellent veterinarian authorities differ. The practice is supported by such experts as YOUATT, MAYHEW, JENNINGS, WAGNER, MCCLURE, and FRANK FORRESTER, and reprobated by MURRAY, CLARK, LAFORCE, (one of the most eminent French veterinarians,) and many others. The former claim that in his natural state, the sole of the unshod horse would be worn down in traveling, and that, as its undue thickness is owing to the artificial protection afforded by man's handiwork, several evils resulting therefrom are best remedied by paring it down occasionally; the latter, on the other hand, insist that nature will get rid of any excess of horn, and that not a few of the ills from which horse-flesh suffers, are due to this pernicious practice. As it is an immemorial usage, there can be little doubt but that, when properly done, if not beneficial, it can, at any rate, be but very moderately hurtful; and that the chief objection to it is the abuses to which it is subject. Not a few farriers are equally ignorant of the principles of their art, and conceited with regard to their imaginary knowledge of the best methods of practicing it. These are the fellows who either pare down the sole until it yields under even a slight pressure, or are guilty of the brutality of cutting away until blood oozes through every pore in the structure; and all for no better reason than that some dolt as ignorant as themselves, had done so before them. To avoid some of the evils which this tribe, unchecked, are pretty sure to inflict on his animals, every horse-owner should bear in mind a few important points in connection with horse-shoeing, and firmly insist that due attention should be paid them by the horse-shoer. Briefly: never allow the frog to be touched with knife or rasp: if you do, it will soon become ragged, dry up, and shrivel and become a fruitful source of navicular and other diseases. Never allow the hoof to be rasped above the clinches, and as little as possible below. The outer covering of the hoof is exceptionally hard, and like the enamel of the teeth, acts as a protection to the softer and more porous inner part; injuring it, therefore, by ignorant rasping, is a frequent cause of dryness, brittleness, and sand-crack. Never allow an attempt to be made to shape the hoof to what the blacksmith may consider should be the right shape for the shoe; this should be fitted to the hoof, not the hoof to it. Never allow the bars to be cut at the sides for the purpose of "opening out the heels," as the effect is only temporary, and will inevitably result in weakening the bars and the ultimate contraction of the heels. Of these errors, for which many farriers have a partiality, the evil consequences are serious and more or less permanent; of their less noteworthy blunders, want of space prevents an enumeration just here.

Horticultural.

HOW FAR APART SHALL WE PLANT APPLE TREES?

PROF. W. J. BEAL.

THERE is a great difference of opinion on this subject. When the land is poor and thin the roots will be less numerous and must spread for long distances in every direction to get the nourishment needed. On poor soil it is very necessary to give the trees plenty of room. Our densest forests and thickest turf grow on soil which is very rich.

In planting an apple orchard, as in most other operations, it generally pays to do the work well. When properly taken care of, after twenty years, many varieties of apple trees will spread twenty feet in each direction, and some spread further as noticed in the orchard of Mr. BAILEY, a few weeks ago. The rapidity of growth and the longevity of the trees depend much on the soil and climate as well as on the variety of fruit. I have several orchards in mind in which the trees were planted closely together within fifteen or twenty feet of each other. Some of these were so planted because the owners had a theory that the trees would the better stand the rigors of severe cold winters and hot summers. One of the orchards was set twenty years ago on sandy land. The trees grew well for a few years, till they shaded all the ground. They were well cultivated but never bore very well. After shading the ground they began to run up for more air and more light. At present the orchard is of no value and never will be except for fire-wood. It was a poor investment,

chiefly because the trees were planted too near each other.

One of the other orchards was planted on good, rich land. The trees behaved much as in the previous case, though they bore good fruit in considerable quantity for some years, when they crowded, died or split down, and to-day, when only about twenty-eight years old, the orchard is of little value. On a neighboring farm with similar soil, another orchard was set at the same time. The latter has borne the most fruit and is still apparently good for many more years of profit to the owner.

In ordinary good loamy soil, or in poor light soil, the roots of an apple tree, when fifteen years old, extend at least twenty-five or twenty-eight feet in all directions. This is not a theory but a fact, as I have repeatedly seen the roots as described while putting in tile or while digging for the purpose of examining the roots. The feeders of the roots—the root-hairs—are renewed every few weeks during the growing season. The small roots from which the root-hairs grow are also often renewed. I mean these die, and others take their places or other places not far away. In this manner roots are all the time feeding on new ground. Doubtless, after a time, much ground is fed over again and again. Roots do not search for food as animals search for it, but they grow where they find the best soil and they will there multiply in the greatest abundance.

For long-lived trees and the best results, I am satisfied that large varieties of apple trees should not be planted nearer than forty feet, if they are set in squares. This gives not a whit too much air and light for the tops and, as has been shown, the roots will soon occupy all the ground and make good use of it. While the apple trees are young, if desired, other crops may occupy the intervening spaces. I prefer to set trees in squares because it is the simplest plan, and because it is easier for the cultivation. As mentioned, the roots will run all through the soil, even crossing one another at long distances between two trees.

If the trees are of varieties which do not grow fast or become large, they may be planted nearer together than forty feet. If, like the Wagener, they begin to bear young and are allowed to bear and get ready to die by the time they are fifteen years old, they may be planted only twenty or twenty-five feet apart. Trees are often injured by planting too closely, seldom by having too much room. One tree does not protect another by growing very near it. On the contrary, one robs the other. Our strongest, finest ornamental and forest trees grow in open spaces where there is plenty of room and where the soil and climate are suited to their natures.

PEAR TREES AS OBLIQUE CORDONS.

Gen. H. W. Sargent, at Fishkill Landing, N. Y., has a large number of these cordons bordering the quarters of his kitchen garden. In this way an immense variety in a small space is under complete control as regards pruning, disbudding, thinning the fruit, &c. The General remarks:—"It is not quantity, but quality I want. During the pear season there is an abundance of other fruits, so that I can afford to grow but a few pears on each tree, and have them of the very best quality."

As many of your readers may be unacquainted with "cordon training," I will endeavor to explain. In the United States our excellent sunny summers ripen the fruits on standard trees so thoroughly and satisfactorily, that artificial training of the trees for a maturing end, is seldom needed and not often practiced; but nevertheless, such training has its advantages. Well then, oblique cordons are trees of one stem trained at an angle of 55° to 75°—as suits the grower—to a trellis, as is often done with grape vines. The trees are planted eighteen to thirty-six inches apart, the one leaning, as it were, over the other thus—////.

Thus it will be seen, a great many kinds, if required, may be grown in one row, and they are as much under command as a currant bush or grape vine would be. If all the fruits they "set" were allowed to ripen, the trees would soon be ruined and the principle of the system abused; only a few—say one to six, according to the size and strength of the tree, should be permitted to remain to mature, and depend upon it, those will be fine. To take any sort of a pear tree and make a cordon out of it, would be buying experience dearly—at the loss of time, care of tree, and the misery of disappointment in the bargain. I would advise those who wish to try the system, to purchase one-year-old trees for oblique cordons directly from some responsible nurseryman, and see that you get strong, healthy, well-rooted plants.

Plant them at your chosen distance, cut back the stem for one-third or one-half its length, to a plump wood-bud facing front, and tie the stumps in position. Several shoots will start into growth, but as soon as they grow four to five buds long, shorten them all (but the top one, and that don't touch,) to the third joint; and if they grow again from these lateral spurs, shorten again to one leaf, and if necessary, pinch the point of the main or top shoot. In September, cut back the end shoot to one-half or two-thirds its length, and finish whatever pruning is necessary on the spurs. Proceed in this way till the desired hight is attained, then cut over the end shoot and cast all vigor into the fruit-spurs. Never allow a side-shoot to grow.

In after years, instead of continuing this "fore-shortening," "disbudding" will be mostly resorted to; that is, when sufficient fruit-spurs are secured, instead of pinching, as in earlier years, the shoots had better be rubbed off when they grow about an inch long.

Cordons are most applicable to amateurs who are interested in fruit trees, and who have only a small town lot or suburban garden in which to develop their hobby. This system is much practiced in France and Britain. W. F.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

CYCLOBOTHERA.

The Cyclobotheras are new introductions among the bulbous plants, which, for genuine beauty, leaving out the question of fragrance, have no superiors among that class of plants.

They are natives of the State of California where among the foot-hills of the Sierra Nevada, they grow in the greatest luxuriance. When in bloom, none of our many wild flowers are so highly prized as the chaste Cyclobothera, and none are so easily gathered by the exulting botanist or frolicksome child.

The bulb, which is small in all the varieties, is in form and outline like those of the Tulips; the neck is very fine and small, swelling towards the center, where at its greatest circumference, it is from a quarter to a half an inch in diameter, varying in depth from three-quarters of an inch to an inch. The bulbs, although so small, are always found very deep in the ground, never less than four inches, but often eight to ten inches, at which depth they flourish the best. As the varieties differ considerably, it will be necessary to describe each separately.

Cyclobothera elegans is a variety more abundant than any others. It grows from six to ten inches high; the leaves are of a dark, metallic green color, averaging in length one foot. Each bulb produces from three to eight cup-shaped flowers, the perianth being composed of three large petal-like, and three smaller sepal-like appendages, the larger ones being thickly covered with short hairs which give them a velvety appearance. In color, the flower is bright, shining yellow throughout, being one of the most intense yellows I have ever beheld in the floral world. It grows in common soil, doing best in slight shade. It flowers from April to June, coming earlier than Snowdrops and lasting much longer.

Cyclobothera alba is the gem of the family. It grows from one and a half to three feet high, the leaves are a bright shining green, from one to three feet long. The flowers are produced along the stem, each of the latter producing from four to twelve blossoms. The flowers are in shape like those of C. elegans, but instead of being erect as in that variety, they are of a drooping habit, like those of the Crown Imperial, which they resemble. In color, they are pure, pearly white. They are about one inch long and the same in diameter at the mouth. They grow always in the shade of trees, liking moist, rich soil in which they luxuriate. If I could have only one choice between these and the royal Hyacinth, I would take Cyclobothera alba three to one. Can I give it higher praise? Flowers from May to July.

Cyclobothera purpurea has similar flowers to C. alba, but in color, while of a pure white on the outside, they are purplish within, otherwise it resembles alba.

C. pulchella is a scarce variety, resembling C. elegans. In color the flowers are delicate cream. It grows one foot high.

C. rubra is the least known of all varieties; it is very scarce; color, a clear rose tinge throughout. It grows one and a half feet high. A charming variety only to be seen to be coveted.

If you want a flower for bouquets, for garden decoration, for lawn decoration, for vase, or for cemetery purposes, try the Cyclobotheras.

WORMS IN FLOWER POTS.

WILLIAM FALCONER.

Earth-worms do frightful mischief in flower-pots. They turn the soil out or break the roots, deposit humus in impermeable and sour masses, clog the drainage, and thus prevent a healthy percolation and ready escape of water. Their presence is easily detected by the upraised excrements on the surface of the soil, by which can be known whether the worms be big or little fellows. If they be big worms, I would water the plants—that is the soil in the pots—in the morning, and in the afternoon turn it out of the pot, preserving the ball intact; most likely the worm will be visible on the outside when it should be firmly caught hold of and pulled out slowly. If it be done with a jerk you are likely to break the worm, for as soon as it feels itself caught it pulls back. A better way perhaps is, after watering the plants, to tap the pots on a table, bench, or anything else that is solid till the intruders come to the surface to reconnoitre, which they will soon do. Don't clutch at the worm immediately you see it, else it may give you its head but retreat with its body; but let it get half way out and then catch it.

A little lime-water applied now and again to the soil, makes the depredators uneasy and leave, but in the case of Camellias, Rhododendrons and some other evergreens, lime is almost as destructive to plants as to worms. A little soot-water answers the same purpose and is not objectionable to most plants but, on the contrary, it acts as a stimulant.

If the earth in the pots be so perforated and the drainage clogged, as to render the mass unhealthy, it is best to turn the plants out of the pots, remove the worms and a goodly portion of the sour earth, and re-pot, using a comparatively small but clean and well-drained pot. Flower-pots containing plants, stood on the ground out of doors, are a certain trap for worms. Pots should always have a piece of slate or wood, some coal ashes, or other preventive of ingress, right under them. Worms are also often introduced in the soil to the pots, particularly so in the case of manure or leaf soil; therefore, in re-potting your plants, be careful to pick out and discard every living creature you find in the earth you are about to use.

Arboricultural.

A FEW CHOICE EVERGREENS.

SAMUEL PARSONS.

The depth of winter would seem hardly a suitable time for selecting evergreens; but the appearance of the lawn owes, at this season, so much to evergreens and there is so much leisure now to look up the matter that we feel inclined to briefly call attention to the subject. Of course, the solid frame-work of lawn groupings must be constructed from the cheaper, more rapid growing and massive pines and spruces. These, arranged in belts, the individuals of which fill up the vacant spaces of either row in alternate fashion, will serve to shelter from winds, protect more precious plantations, and early give character and effect to landscape viewed as a whole. All this is, however, generally studied in constructing any well arranged lawn. The evergreens which we wish to notice just now, possess a more marked individuality and lasting nature. They neither lose their beauty in a few years, nor occupy after a time so much space on the lawn as to make them relatively monstrosities. Many such varieties may be selected of decided beauty and value, but it will be found after all that but two or three varieties of each species really possess the desired qualifications. Nor would we embrace every well-known species of evergreen in this selection, for neither the Yew nor the Chinese Arbor Vitæ fall quite within our category.

Experience, thus far, decidedly indicates the Conical spruce as entitled to the highest rank among popular evergreens. And it has become popular not from an extreme pre-eminence in beauty, but from the possession of a high average of useful and attractive qualities. Every one, moreover, knows the Norway spruce and values it; the Conical spruce, therefore, independent of its own intrinsic value, obtains a certain favor at once from its being simply a symmetrical Norway spruce of dwarf, permanent habit. The Weeping spruce is quite as valuable a tree as the Conical spruce, and is only less popular, because less familiar in its forms, which also, though picturesque and graceful, fail in that charm possessed by perfect symmetry for the popular eye. These forms, however, weeping and hugging the stem in the most irregular masses, must always constitute it one of the best of drooping evergreens.

The Oriental spruce is the very best of all spruces, if people did but know it. Unfortunately while young, it resembles the Norway, lacking somewhat of that spruce's early vigor. As age increases, it develops more rapidly, and finally in no great time towers into a solid mass of dark, lustrous foliage possessing a very peculiar beauty and marked character on the lawn. It is, moreover, extremely enduring and hardy.

While the spruce is perhaps the most invariably enduring of evergreens, the Piceas or Silver Firs excel all in beauty. For solid grandeur, and unfailing attraction the Nordman's Silver Fir is almost without a peer. Very symmetrical, with shining dark-green foliage, revealing light-blue shades on the under sides of the leaves, it wants but one quality to render it the finest of evergreens, and that is the power of retaining unaided a general shapeliness through life. The central leader will push up with a rapidity that is apt to destroy a proper and well filled base. An occasional pruning of the rampant leader will, however, curb this injurious tendency.

The Weeping Silver Fir is not as picturesque in its forms as the Weeping spruce, because it is rounder and more compact, but much surpasses it in perfect curves and shining rich foliage.

The Dwarf Silver Fir is the hardiest of a species the other members of which scarcely equal in hardiness those of the spruce family. Its compact form and rich foliage are also most attractive.

The Retinosporas, not long fairly introduced to America, are worthy of very particular attention. Their forms and colors are most varied and their fern-like grace is unsurpassed. Quite hardy and of compact habit, it is strange they are not better known. Chief among them are pisifera and obtusa. One, termed plumosa aurea, (said, however, to be simply a form of pisifera), has great value for its rich golden hue retained and even deepened throughout the fall and winter. The queen of all evergreens is the Weeping Hemlock. Its graceful sprays have a permanent beauty that we only see equaled, in a fleeting way, by some stray form of common hemlock. Not less striking, in its way, is the broad-leaved Hemlock, the dark, massive foliage of which contrasts finely with the Golden Retinospora.

These meager notes are not intended to indicate by any means a complete list of desirable evergreens, but only such as no lawn can afford to be without. It is to be hoped that the taste for acquiring full collections of fine evergreens may continue to grow in the future as it has in the recent past. We may then expect to eventually see even the humblest homes intelligently decorated with trim, graceful evergreens properly adapted by nature to the size and character of their surroundings. Few realize the attraction that might in this way be lent to many a place now forlorn with ragged spruces and pines, and unkempt flowering shrubs.

PAMPHLETS &c. RECEIVED.

Mr. T. C. Evans, Boston, Mass., has issued his hand-book for 1878. It is very attractively gotten up, the list appears conveniently arranged, and the press work so neat that it must prove of great benefit as a reference book. Mr. Evans' long and successful experience as an advertising agent has been utilized in the book before us, and we cordially recommend it to advertisers seeking trustworthy mediums.

Union Meeting of Farmers.—Arrangements are in progress for a general agricultural meeting on Wednesday and Thursday Jan. 30 and 31 at the City Hall, Manchester, N. H.

The design of the originators of the meeting is to include all horticultural and agricultural organization in the State, Granges, Farmers' Clubs, Town and Local Associations, County and State Societies, the Board of Agriculture, and the Agricultural College.

W. W. Sharpe & Co's. Catalogue of newspapers, magazines, &c. The fifty-five pages of well arranged lists of periodicals between the covers of this hand-book embrace about all the information an advertiser can reasonably ask for. In view of such books as the one under notice, it would seem strange that a business man could spend money in advertising injudiciously. As to the firm, a long and pleasant business experience enables us to indorse them heartily. They are as courteous as their estimates are reasonable, and if they err, it is on the side of generosity.

E. C. Williams the recording secretary of the New Jersey State Hort. Society informs us that the Third Annual Meeting will be held in Geological Hall, New Brunswick, Feb. 6th and 7th, at 10 o'clock, A. M. The following subjects have been proposed for discussion:

Pear culture, in its present condition as a profitable pursuit; Pear blight, results of another season's observation; Raspberry culture, best methods and varieties; Tree planting, for shelter and the roadside, and best trees for the purpose; Our small birds, is their destruction justifiable; Peach culture, and best varieties for New Jersey; Our native nuts, their cultivation and commercial value; Upland cranberries, has their cultivation proved profitable; Old-fashioned flowers.

All who are in any way interested—if only to the extent of a city lot—are cordially invited to be present and take part in the proceedings.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

PITHS.

Never use a fine comb.

Apply lemon juice to corns.

Hellebore will kill roaches.

Never eat too much—never go hungry.

Carpets having small figures are fashionable.

Kitchen floors, when oiled, will not show grease.

May-weed blossoms put into alcohol make a superior liniment.

The sick-room should be the lightest and brightest in the house.

Pure orris-root powder is a harmless and agreeable tooth-powder.

Raisins are rendered quite digestible if boiled or steamed before using them in cakes or pies.

A delicious sirup is made by melting one pound of maple sugar with two pounds of white sugar.

To sweeten the breath, pour a few drops of tincture of myrrh into a wine-glass of water and gargle the mouth thoroughly with it.

An Idea for Mothers: Baste a piece of needle-work on the bottom of children's cloaks; this takes the place of a white dress in the street, and is far more easy to do up.

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

THE SUNDAY DINNER.

The "Kitchen Club" held its meetings at our house yesterday. It is an informal gathering to talk over domestic matters, and is dubbed "*kitchen*" because no fancy work, or anything outside of the real work of everyday life is allowed in its discussions. "Thoroughly practical" is our motto. Sometimes we take for our subject the troubles of the kitchen fire, and plans for preventing smoke, or bad regulating. At other times the various ways of preparing our simplest meals. This week, the subject was Sunday dinners, and there was such a variety of opinion that the summing up was as hard as it would be to pick out the prettiest pattern in a patch-work quilt, made of a traveler's samples.

Mrs. John Jessup advocated that as Sunday was a day of rest, cooking should not be done on that day. Cold pork and beans, with plenty of pie, were good enough for any Christian. Mrs. Ronald Rutherford went to the other extreme and stated that as the Sabbath was a day of rest from labor and from play, both husband and children had more time to digest a good dinner than on any other day in the week. With our good cooking conveniences, no one need be kept from church to prepare the dinner, if the fire was kept up by the person remaining in charge of the house; a good joint would cook partly through, to be basted and finished off while the vegetables were boiling. There was nothing pleasanter than a good warm dinner in cold weather, when the family can gather together with leisure to eat it, and quietly enjoy each other's society, without any of the haste of every-day life.

"But," spoke up little Mrs. Lennox, "we are as busy on Sunday as any other day; what with Sunday-school and the two services, and prayer-meeting afterwards, we see less of our family than on any other day." Then Delia Dewell rose and gave her opinion. "I am an old maid, I suppose," said she, "and not supposed to know much about such matters. But I often think when I see the hurry of the Lord's Day in many families, even though it be crowding in a *good* cause, that we cannot, as a people, lay off our restless hurry and enjoy the day as we ought."

It had been settled at the last meeting that I should give on paper, details of a good, warm, easily-prepared dinner, which could do away with the cold pork and beans of Saturday, and yet take only as long to finish after church as is usually allowed for table-setting, and other small, but necessary preparations. So I give my readers the benefit of the bill of fare, merely stating that the *pudding* recipe was given by me to the "Dining-room Magazine," nearly two years ago.

My ideas read as follows: "Take a good roast of beef, sirloin is best; pour over it a cup of boiling water when placing into the oven, which will check the escape of the juices if your oven is really *hot* as it should be. If the fire is kept even and a quarter of an hour allowed to the pound, you will know how early to put it in. Half an hour before the time for dinner, put on your potatoes, which are none the worse if peeled the night before, or early in the morning; and allow five minutes less if you boil a Hubbard squash, which, however, is very sweet and wholesome when *baked* slowly in the oven all morning. Served with good pickles, horse-radish, or other condiment this forms a very good, substantial dinner, with cheese and apples and our favorite pudding.

Put into a deep dish enough apple sauce (or if none is at hand, a jar of canned fruit) to fill it about half full. Make a batter of flour with a little baking powder and salt, and as much cream slightly sour as will make it rather stiff. Beat smooth, and pour over the fruit. It will bake while the potatoes are cooking, and it is extra nice in summer when fresh fruit can be used, although apple sauce will be found very palatable." Such was the plain dinner submitted to the "Kitchen Club," and approved by them. It has been tried many times in our own house, with economy in time and trouble.

All these things, my fellow *Domestic Economists*, are of vastly more importance to our happiness than many of the small *nearnesses* we are apt to call by that name; and I found from the opinions of the "Club" that no subject calls forth such opposite opinions as the regulation of The Sunday Dinner.

CRYSTALLIZING GRASSES.

Dissolve one and one-fourth pounds of alum in one quart of water by heating and stirring, set off until cooled to "blood-heat," then dip in a small handful of grass, for a moment and take out; if not quite as you would like, dip again. If the solution should be a little too warm when you begin, it will soon cool. It must be watched closely, as one ought to be able to dip three or four bunches of grass before reheating the solution. Heat as many times as desired and let each succeeding bunch remain a few moments longer at each dipping, as the alum decreases.

After obtaining all the white crystals you care for, add a very little indigo or other coloring material, that you may have a variety of colors. After all this, one can add more water and heat the mixture, then drain through a cloth, and use for children's stocking yarn or carpet rags, if you wish to color red, and do not wish to throw away the alum. Some grasses are much prettier for crystalizing than others, but this can be told by experience only. If I know the names of the many wild grasses of our State, which I think are more interestingly beautiful than those I have seen in any other State, I could tell what kind are best for that purpose. I, however, reject "timothy"—not wild—wheat, and the wild grasses which resemble wheat, and do not often try oats. There are several kinds which resemble Briza maxima, some of the largest of which are exceedingly lovely crystalized, while the smaller ones are marvels of beauty when colored and mixed with the former. Grasses should always be well dried beforehand, for this purpose, and all the blades removed at the time of picking, as one will break many stems if left until dry.

Aunt Flora.

Minnesota.

Dairy Husbandry.

AMERICAN DAIRYMEN'S ASSOCIATION. THIRTEENTH ANNUAL CONVENTION.

BUTTER AND CHEESE.

Cleveland, Jan. 8-10, 1878.

The Thirteenth Annual Convention of the American Dairymen's Association was held at Cleveland, Ohio, January 8, 9, and 10, in connection with the Ohio and Western Reserve Associations. It was admitted, on all hands, to have been the best meeting of the kind ever held in this country. There was an unusual amount of scientific knowledge as well as practical experience and business energy embodied in the men who took active part in the proceedings. The only noticeable defect in the convention was in the comparative smallness of the number of dairy *farmers*, as compared with that of cheese and butter makers and those engaged in the dairy trade.

It was a sad mistake of the farmers who stayed at home, on the supposition that the discussions and addresses would be but of little interest to them; whereas, in fact, much of what was said was designed for their especial benefit—and nearly all the topics were such as they ought to be more familiar with. It is such neglecting of opportunities for gaining information that keeps farmers perpetually in the background.

BUTTER VS. OLEOMARGARINE.

This was one of the first and most interesting topics discussed. Mr. Reader, a member of the Pennsylvania State Board of Agriculture, commenced the discussion, speaking of the growing magnitude of the manufacture and sale of oleomargarine, and of the effects of the sale of the spurious butter in depreciating the price of genuine, and the difficulty, on the part of common people, in distinguishing between them. He read extracts from of. Arnold and Dr. Mott, showing that these two articles differed somewhat in their chemical ingredients, and especially in the essential oils which gave flavor; though prominent physicians had pronounced the oleomargarine a healthful article of diet. He thought the main question was, "What shall we do to protect ourselves, as dairymen, from this form of competition?" As far as he was concerned, he was willing that each article should stand on its own merits, only protecting the consumers from deception in the matter.

The next speaker was Dr. H. A. Mott, Jr., of New York. He said he was not in any way connected with either of the manufacturing establishments of oleomargarine, though he had had much to do in perfecting the methods and apparatus for the patentees of the invention. He then went on in defense of oleomargarine, showing from chemical analyses, that the fat of steers from which it is made, is essentially the same as that in milk or butter; and that when the manufacture is rightly conducted, the product is as pure and wholesome as dairy butter, and as acceptable to the taste of the majority of consumers—even more so than the average quality of the butter sold in our cities—and it could be afforded at half the average price. Hence, he could not see why there should be any popular outcry against the article as an imposition on the public.

He claimed that the nicest chemical analyses had shown that the kinds of oils or fats in butter made from milk were all found in the fat of beef; but there was probably some difference in their proportions which analyses had not yet explained. He said the export demand for our beef was lessening the supply of dairy butter, and consequently the price of this product was becoming too high for the mass of our city people to buy; and now this new article was stepping in to supply the demand, and the people were showing their willingness to accept it; hence dairymen might as well make up their minds to endure the competition, and perhaps it will be as well for some of the dairy farmers to give their attention to raising beef cattle, instead of killing off all their calves. He said the New York and New Jersey Companies had used over eight million pounds of fat up to March 3, 1877, and in the year 1876-7 they sold in one contract 3,295,000 pounds of the artificial butter. In 1877 contracts were offered to them but not accepted, for 3,000,000 pounds annually for five years; and large offers are now pending.

LEGISLATIVE ACTION.—OLEOMARGARINE.

At a subsequent stage of the proceedings Mr. R. P. Cannon, President of the Ohio Dairymen's Association, made a motion that the dairymen of Ohio petition the legislature of that State to pass a law similar to that recently enacted in New York, and that is also asked for in Pennsylvania, requiring the manufacturers and dealers in Oleomargarine to so mark of brand the packages containing this article, that purchasers and consumers can know what they are getting—and to impose a fine on those who may sell the artificial compound as dairy-butter. This gave rise to quite a lively debate. Professor Arnold had no objection to the proposition on the part of the Ohio dairymen, but hoped it would not be regarded as the action of the American Association. Mr. Straight and others of Ohio said they were quite willing the spurious butter should come into fair competition with the genuine, and they believed it would have the effect of stimulating the dairy butter-makers to furnish a better quality for the markets; but they wished to have every tub stand on its own bottom, and they knew that at present much of the spurious article was palmed off as genuine butter, and prices of the latter were thereby reduced. Dr. Mott said the manufacturers only complained of such legislative action because it was calculated to create public prejudice against their product. They were quite willing the article should stand on its own merits, as it could certainly do. They would only ask as an act of fairness, that in the passage of such laws as proposed, a clause should be appended preventing the dealers in poor dairy butter from labelling it Oleomargarine.

The motion asking for action on the part of the Ohio legislature was passed by a large vote. It was stated that a company with large capital is about starting a manufactory of Oleomargarine at Cleveland, and also at Cincinnati.

PROSPECTS OF THE DAIRY TRADE.

Mr. J. H. Reall, well known as a leading butter and cheese dealer of New York, gave an excellent address on the past, present and future of the butter and cheese trade. It was quite hopeful in tone as to the future of the dairy business in this country, but reflected severely upon the course of many of the cheese-makers, especially of Ohio, in that they had lowered the standard of quality of their cheese for the sake of a little temporary gain, by resorting to skimming the milk so generally for butter, then making a second-rate cheese, not suited for the foreign markets, and at the same time discouraging home consumption. He urged the cheese-makers to skim less, or none at all, and also to use all the best appliances and knowledge for the purpose of improving the quality of their cheese. He said there was a gradual increase of the foreign demad for good cheese, and he was sure the home consumption would also increase if a good and wholesome article was generally furnished. He said "If consumers of all classes understood that cheese at any price under double the cost of meat, was a third the cheaper while much more wholesome and nutritious, treble the quantity would be used in this country. Unfortunately, through avarice, we have always given the most inferior cheese we produce to the home trade, going so far as to practice this short-sighted policy with the very people who furnish milk from which the cheese is made—hence it is only from sheer compulsion that our own nation eat any cheese at all. If we gave them the best, which, by the way, the foreign consumer gets as cheaply as our own people do the rejections, we should soon have such a demand for cheese in America, that we should not depend so largely upon the foreign trade for a market. Our people like fine, full-cream cheese as well as do our English cousins, and they should no longer be put off with skimmed and half-skimmed goods. If we give them a fine article, they will soon learn that cheese is a most digestible food, and that it is a want of quality which makes the kind they have been used to eating, lie like grindstones upon their stomachs."

OLEOMARGARINE CHEESE.

Of the new process of making cheese by skimming off all the cream, and substituting a little beef fat, Mr. Reall said it was the invention of Mr. Henry O. Freeman, hence called Freeman's Process. The milk is set in the usual way, where creamery butter is made, at about fifty degrees temperature, and held from twenty-four to thirty-six hours, when it is skimmed, heated to a temperature of ninety-two degrees, and sweet, clean beef suet raised to the same temperature is substituted for the cream, and sufficient rennet is used to cause coagulation in from ten to twelve minutes. Every particle of the cream is taken from the milk, that it is possible to obtain, and the fat is used to enrich the then almost useless curd. The product is a good, wholesome article of food, and I regard the process as one of great value to the public, since a larger supply of fine butter is imperatively needed, while the milk would otherwise be worthless, for when made into cheese it has only a commercial value of from two to four cents per pound, and none as food. It is by this process converted into a palatable and nutritious cheese, worth double to quadruple the price it would otherwise command. The product meets with favor both in this country and in Europe, but is mainly exported. As there is no adulteration or deception practiced, I approve the system, and favor radical skimming, if skimming must be done, but I give the preference at all times to full-cream cheese. The owners of this process do not claim to make as good an article as fine, full-cream cheese, but to greatly enhance the value of skimmed milk."

CREAMERY VS. DAIRY BUTTER.

After speaking of the low prices of butter during the past season and the reasons therefor, Mr. Reall said we must produce more fine butter and market it while fresh, and by increased attention to winter dairying, which has proven the most profitable branch, be prepared to supply it fresh at all seasons of the year. The preference for fresh butter has become so great that in the winter, when the stock cannot be had sufficient for all, the masses take into made butter, however characterless, in preference to the finest early made New York dairies, which formerly commanded much the highest price, in winter, of any kind. The time when New York dairy butter would bring from five to fifteen cents per pound more in the winter than in the summer when made, has gone by, and instead of yielding a profit by holding it, generally produces a loss. The time to market butter, therefore, has come to be when it is fresh.

The creamery system of making butter must supplant the dairy plan to a very large extent, and the result will be a great saving in waste and labor to the milk producer, besides yielding him a larger return.

The price of creamery butter last year will probably average thirty cents per pound; New York dairy, say twenty cents, and all dairy not over fifteen cents; for the poor farmer of the far Western States only realized ten to twelve cents for his product throughout the summer. It will thus be seen that there is a large difference in prices in favor of creamery butter; but, beyond all this, is the fact that all classes of our people should have the opportunity to obtain first-class food of all kinds at reasonable prices.

On the subject of churning the entire milk instead of cream only, Dr. Mott quoted the opinions of several authorities in its favor, but admitted there was need of more facts as results of actual experience. He said:—"In my opinion, the views advanced are at best only theoretical, as they are not based on actual trial. I

do not find recorded any statements against churning the whole milk, except by persons who have never practiced it; but on the contrary, by those who have experimented, all agree that the yield of butter is greater and the flavor and odor far superior to butter made by other methods. I fully agree with Mr. Curtis, who says that more experiments ought to be made with churning the whole milk, for from a scientific standpoint I believe it will be found that the whole milk churning will produce a butter having an odor and flavor far superior to butter churned from cream, other things being equal.

ON TEMPERATURE IN THE DAIRY.

This was the topic of an instructive essay by Prof. Caldwell of Cornell University. After giving the lessons of science and results of experiments, his most practical conclusion was, that in setting milk for cream, it should be cooled as quickly as possible to a low temperature—say 36° to 40°, or near to freezing. So far as the results of experiments go, they show very plainly the separation of the cream is more rapid and complete at low temperatures, in the region of 40°, than higher. A French chemist, as the results of numerous experiments, found that when the milk was quickly cooled to 36° in small vessels, almost the entire cream was separated in one hour; but in a vessel of forty quarts, it took twelve hours to effect as complete separation, while at the temperature of 66°, it required thirty-six hours to effect the same with the same quantity of milk. Nothing was gained in the amount of cream by letting the milk stand longer than twelve hours at the low temperature. Prof. C. approved the plan of setting milk in metallic vessels placed in a bath of cold water and not resting on the bottom, but so that the cooling should affect the bottom more than the top; for if the cooling proceeds fastest at the top, it creates a downward current of the milk which hinders the rising of the cream.

On the subject of testing milk with a view to the detection of any adulteration with water, Prof. Caldwell and others said no easy method had yet been devised, except by the use of the little instrument called the lactometer, and this is not in all respects satisfactory. The average specific gravity of pure new milk is 1 029 by the instrument—water being 1.000; but cream being lighter than milk, it follows that milk which is very rich in cream, will show by the instrument the same as milk that has been slightly watered, and skim-milk mixed with water may be of the same specific gravity as new milk.

ON FEEDING COWS FOR MILK.

"Milk Production" was the topic of an excellent address by Prof. Stewart, editor of the Live Stock Journal. He regarded the cow as a machine for making milk, just as a steam-engine is a machine for producing power; and it is as vain to expect the cow to give milk without sufficient food of the right kind, as to expect the steam-engine to afford power without sufficient fuel and water; but people are all the time vainly trying to make something from nothing! It is vain to give a steam-engine only enough fuel to keep the water warm; and so it is to give a cow only enough food to keep her from starving or freezing. If milk is desired, she must have a surplus of food beyond the other wants of the system, or all the rest is a loss. About two-thirds of all an animal eats, is needed to maintain its existence; all the profit comes from the other one-third, and this is often withheld entirely. He advised soiling cows with green food during dry times in summer, commending for this purpose a mixture of peas and oats, cut when both are green; also Hungarian grass and sowed corn, and more use of roots for winter, where the soil will permit. He did not approve of corn meal alone or with corn fodder for cows; would prefer at least part bran or middlings, the latter having a good share of the albuminoids, while the corn is mostly carbon. Corn and oats ground together, is excellent for cows. He did not think it paid to cook food for cows unless a large number are to be fed; but in feeding a large herd with a good deal of corn fodder, he found it of great advantage to cut the stalks finely by steam power, then mix with meal and bran, and steam the whole. All is done with the use of very little manual labor.

Mr. Bateham of Ohio, said this method of feeding was exemplified on a large scale by Hon. A. C. Wales of Massilon, who feeds annually about 1,000 sheep and fifty or more cattle and horses, without any hay; but grows from fifty to seventy acres of sowed corn, and uses his straw by cutting and steaming the whole, after adding meal or bran, and finds it cheaper and better than feeding with hay. Mr. B. advised farmers who were interested, to go and inspect the machinery and methods of Mr. Wales. Mr. W. had offered to contract to feed several hundred dairy cows through the winter, and have them in first-rate order in the spring, for $8 per head, if time was given for him to grow the fodder.

"WHAT LACK I YET?"

was the suggestive title of an able address by Hon. H. Lewis of Herkimer County. He urged every dairy farmer and manager to ask himself this question, and make all possible efforts to discover the answer, then attain the thing lacking, whether it be in himself or in external appliances for his profession. Most of the hints given in the line of needed improvements are such as are familiar to the readers of agricultural papers, hence need not be repeated here.

SALT FOR THE DAIRY

was the subject of a spirited speech from Mr. F. D. Moulton "Our Mutual Friend" of New York, who is agent for the sale of the Ashton English dairy salt, the superiority of which he set forth in eloquent terms, and backed up his arguments with numerous certificates from American dairy firms. It was then urged that as an act of comity in return for the large amount of our dairy products imported into England without duty, the duty imposed by this country on English salt ought to be repealed; and accordingly a resolution to that effect was adopted by the convention.

Prof. Englehart of Syracuse then followed with a scientific essay on salt and its uses, and showed by chemical analyses that the Onondaga dairy salt is the purest known in the trade, and he also gave a number of testimonials in its favor, as being equal to any imported. So the salt question remains unsettled; the convention favoring free trade and free opinions.

PASTURE LAND AND GRASSES.

Dr. N. S. Townsend of the Ohio Agricultural College, had been appointed to adress the convention on this subject, but being unable to be present he sent a brief letter, setting forth the importance of improvement in this direction; to increase the fertility of dairy pastures by plowing, manuring and draining, and then seeding with a variety of grasses, instead of timothy alone as is the common practice, leaving other varieties to come in with the weeds.

Mr. M. B. Bateham of Painesville being invited to speak on this subject, said he had inspected many of the dairy pastures in different counties of the Western Reserve the past summer, and he found that most of them were fast declining in productiveness so that without a radical change on the part of the dairy farmers they would soon fail of support and the foundation of this whole business would be giving way. He said the assessors' returns of the dairy counties in Northeastern Ohio showed a decline in the productive capacity of pasture lands amounting to one-third or more, the past ten years; and on account of this decline dairy farming was becoming unprofitable. He said the lands were originally quite fertile, but not deep, and the vegetable matter at the surface had been all exhausted; and no plowing or means of restoration being used, the clay soil had become very compact from treading while wet, and the grasses killed out by constant feeding off or over-stocking—then worthless weeds came in. He said the old pastures would have to be broken up, and enriched in some way, and when seeded down, a mixture of grasses should be used, in accordance with the English plan, though he would not recommend using as many varieties. The following he believed would be found adapted to most of the clay lands, and would form a good mixture for dairy pasture. Timothy, Red-top, Blue grass, Orchard grass, Meadow Fescue and English Rye-grass. White clover might be added with advantage, where it is known to flourish.

ON SELECTION OF COWS FOR THE DAIRY.

a good deal was said, not in favor of any particular breed, but that the farmers should take more pains to raise or procure good milkers of common or grade stock. Mr. Horr of Wellington, O., gave some telling facts from the records of his cheese-factory, and his own farm experience, contrasting the annual yield and profits of different cows and dairies, showing that some cows were worth three times as much as others for dairy purposes, and that the difference in this respect was often so great between different herds as to make all the difference between a fair annual profit and actual loss to the farmer.

USE OF DAIRY REFUSE

was the subject of an essay from Mr. Vanduser of Elmira. He gave some useful hints on the use of whey and buttermilk as food for calves and swine, giving preference to the latter animals, as the most profitable and convenient for creamery or factory men; but, adding that the profits from this source were generally less than the dairy farmers imagined. M. B. B.

Coloring cheese is often necessary to insure a fair price, for while the improvement of the article is confined to its color, the prejudice of the purchaser is thus conciliated: Pure annatto alone should be used for this purpose, and a good recipe for cutting it is the following: Take four pounds of best annatto; two pounds concentrated potash, five ounces saltpeter, pound and a-half of sal-soda, and five gallons boiling water. Put ingredients in a tub and pour on the boiling water. Inclose annatto in a cloth and, as it dissolves, squeeze it into the liquid. Two ounces of this liquid to 100 pounds of curds and proportionately.

Entomological.

A LITTLE WINTER WORK.

B. PICKMAN MANN.

Every farmer will, or ought to know for himself, whether he is troubled in summer by the presence of "tent-caterpillars" in his apple and cherry trees. If he was troubled last summer, he is likely to be troubled next summer, unless he is wise enough to prevent the hatching of the caterpillars by his foresight and activity during the winter months.

But there are more kinds than one of tent-caterpillars which attack apple trees, and the winter season does not afford us the opportunity of providing equally against the ravages of all.

Especially are there two kinds of apple tree tent-caterpillars, called so, not because they attack apple trees alone, but because they give very noticeable trouble on these trees. One of these goes more generally, and it may be more properly, under the name of tent-caterpillar; the other is known sometimes as the fall web-worm, or fire-worm. Against the latter (*Hyphantria textor*) nothing of importance can be done in winter; but it is worth while to give some account of it in order to institute a comparison between it and the other species, so that farmers who are troubled only by one or by the other, may more readily recognize either and be prepared to act accordingly.

I have not observed the fall web-worms before the third week of July, but it is stated that they appear sometimes two or three weeks earlier. There seems to be but one generation in a year, yet for some reason the offsprings of the several individuals appear at quite distant times; and the last of them, it is stated, do not hatch until the middle of August. They hatch from eggs deposited in a cluster upon the surface of a leaf. As soon as they are hatched they cover the upper surface of the leaf with a silken web, which is the result of the "united labors of the whole brood." Between this web and the leaf they feed in company, eating the upper skin and soft green tissue of the leaf, leaving the veins and lower skin of the leaf uneaten. During the early part of their lives they are not known to eat any leaves before they have enclosed them in their web. As they increase in size they spin larger webs, extending the threads from tip to tip of the leaves, and attaching the threads to the branches so that they are completely enveloped. The first webs are made near the ends of the branches, and the enlargements extend toward the trunk of the tree, and sideways in every direction.

Finally, if the caterpillars have not been disturbed, the enclosing web becomes too large to make an armful for a man. The remains of the leaves wither and turn brown; the webs are so thin as to be transparent; and the branch seems to have been scorched with fire, from which appearance the popular name of the caterpillar is derived. After some three or four weeks (the time has not been properly observed) the caterpillars leave their webs, and change their habits. Formerly social, or more probably only gregarious, and feeding upon the leaves of trees, they live separately hereafter. Scattering over the gardens and feeding almost indiscriminately upon vines, shrubs and other lesser vegetals. I have found them in the first week of October.

The apple tree tent-caterpillar which is more generally indicated by the name, or in other words the American Lackey caterpillar (*Clisiocampa Americana*) is a more abundant and destructive insect than its ally described above. It appears with the unfolding of the leaves of the apple trees in the latter part of April or the early part of May.

As soon as the caterpillars are hatched they descend to a convenient crotch made by two small branches of the tree, and spin a closely-woven web from branch to branch. Beneath this web they pass their time, when resting, or when driven to shelter by cold or disagreeable weather. They sally forth from it at morning and in the afternoon, returning at noon and at night. As they increase in size they spin new webs, of the same firm texture, and in layers parallel to the former exterior of the nest, leaving only space enough between the layers for convenient passage to and fro. Wherever they go on the branches they spin a thread of silk, by which they keep themselves moored to a tree, so that ordinarily they cannot be shaken off. These threads aggregate, in course of time, to large cords, or even sheets, completely spanning or even enveloping the bare branches and the stems. The nest, at its largest size, makes only a few handsful. When fully grown the caterpillars leave their nest, and seek a place for the formation of the cocoon. They do not tarry to feed on their journey towards a resting-place. By the end of the second week of July, the full-grown caterpillars have all disappeared.

Thus, having defined some of the differences between these two kinds of caterpillars, so that the intelligent farmer may know when he is to act I come to the point of advising what is to be done.

The eggs of the Lackey Moth, three or four hundred in number laid by one female, are placed in a broad band around the smaller twigs, near the ends of the branches, and are covered with a thick coat of brownish water-proof varnish. Each band is about two centimeters wide, and one or one and a-half centimeters in diameter; that is, as wide as the breadth of a thumb, and as large as the end of a little finger. These bands are formed in July, and contain the living insects until the following April. After the leaves have fallen from the trees, until the leaves appear again, these bands are readily visible to any person with good eyesight, standing under the eaves of the trees, and looking at the branches projected against the sky. A little experience in finding the bands of eggs will make the hunter an expert, and in a short time, during the slack days of winter, the eggs can be destroyed, which would otherwise give birth to the dreaded caterpillar at a season of the year when farmers are crowded with work. The branch should be bent downward, and the eggs cracked off with a knife, or with a thumb nail.

Field Crops.

THE SUGAR BEET.

University of N. C., Jan. 14, '78.

The State Chemist of North Carolina, whose labratory is at this place, has completed his experiments on the Sugar Beet, grown in the State; and the following partial analysis of his report may prove of interest to many readers of The Rural New-Yorker:

In 1747 a German chemist discovered that there was cane sugar in the white and red beet. In 1796 the first factory for making beet sugar was erected in Prussia. With much expense experiments multiplied in Europe. To-day nearly one-third of the sugar used in the civilized world is from the beet. French and German agriculturists succeeded by improved culture, in raising beets that would yield an average of, at least, 8 per cent. of sugar. The beet grows wild, as a native, on the Mediterranean coast. The best sugar varieties are the result of cultivation and hybridization.

As to this country, David L. Child of Northampton, Mass., in 1838, made 1300 pounds of sugar from beets raised on his farm. In 1863, Gennett Bros., from Germany, started an experiment at Chatsworth, Ill., but being discouraged, in 1870 moved to Freeport, Ill. They made 200,000 pounds of sugar in 1870, at reasonable profit. Their factory is thought to have been closed recently. Two manufactories have been built in Wisconsin; one in 1867 and one in 1870. The largest and most successful experiment was in California. At the factory at Alvoado, in 1871, 1,000,000 pounds of sugar were extracted from beets that measured 15 tons to the acre. The industry is attracting capital and growing in popularity on the Pacific Coast.

During the past season, under the auspices of the Department of Agriculture, somewhat extensive experiments were projected for the varied soil of North Carolina. The seed were the French and Silesian or "Imperial." The time at which the seed were distributed was one unfavorable accident. They were sent to about 100 farmers, in over 30 counties, in different parts of the State. There were embarrassments in several cases reported, such as the ravages of insects. Altogether, the experiments are not encouraging. The following are the results:

	Per cent.
In Morgantown, the most elevated locality, being in the hills of the Piedmont district	5.91
In Morehead City, the most eastern, being directly on the Coast	5.12
At Raleigh (1) 4 55 per cent. (2)	10,97
At Egypt, in Chatham County	11.23
At Lockville " "	10.83
In Granville County	11.46
At Hillsboro, in Orange County	10.24
At Chapel Hill " " 3.35—4.55	7,61
Other localities, from 4.30 to 7.14	

The report encourages the farmers and the Department to be ready to make more intelligent and promising experiments next year.

A. W. M.

MUSK-MELONS.

Several years ago, our correspondent Mr. T. B. Miner, received a variety of nutmeg melon from France, but being rather late in ripening, he commenced an experiment in crossing it with an early American variety, and in this way succeeded in producing a new variety of excellent quality and far superior, he thinks, to any other known sort. Its flesh is of a golden color, solid, and the melon ripens with him (Linden, N. J.) about August 15th. He calls it Miner's Hybrid Melon, the first time we ever knew him to use a word which he himself has condemned as not applicable to a cross between the same species.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Poultry, Varieties of..... 53
Poultry, The Profits and Losses of Raising..... 54
Poultry Pay, To Make..... 54
Agriculture and Education in the United States—No. 3..... 54
Jottings at Kirby Homestead..... 54
Feeding, Thoughts about Winter..... 55
Notes from Maplewood Farm..... 55
Tilled Fields, Removing Rocks from..... 55
Tree Peddlers, Those..... 57
Sand Farming..... 57
Sundry Topics..... 57
Horse, Etc., History of the..... 57
Horses, Shoeing..... 57
Apple Trees? How Far Apart Shall We Plant. 57
Pear Trees as Oblique Cordons..... 58
Bulbs for the Flower Garden..... 58
Worms in Flower Pots..... 58
Evergreens, A Few Choice..... 58
Pamphlets, &c., Received..... 58
Piths..... 58
Siftings from the Kitchen Fire..... 58
Grasses, Crystallizing..... 58
American Dairymen's Association..... 58
Winter Work, A Little..... 59
Beet, The Sugar..... 59

EDITORIAL PAGE:

Country Life in Winter..... 60
What Did It Live Upon?..... 60
Editorial Blandishments..... 60
Patenting Plants..... 60
Midwinter..... 60
A Year of Fraud..... 60
Brevities..... 60

LITERARY:

Poetry..... 61, 63, 66
Her Mother's Secret..... 61
The Gold Robber..... 62
A Female Detective..... 62
Cassius, a Cynic..... 63
For Women..... 63
The Carrick Polonaise..... 65
Some Picture Notes..... 63
Shall We Dance?..... 63
Jottings from My Note-Book..... 63
A Pretty Trifle for the Toilet..... 63
The Right to a Living..... 63
Answers to Correspondents..... 64
News of the Week..... 64
Publisher's Notices..... 65
Various..... 65
Markets..... 65
Reading for the Young..... 63
Poor Kate..... 66
Letters from Boys and Girls..... 66
Puzzler..... 66
Sabbath Reading..... 66
Cynicism..... 66
The Salvation of Society..... 66
A Little Child Shall Lead Them..... 66
Personals..... 67
Wit and Humor..... 68
Advertisements..... 65, 67, 68

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

THE considerable space which we give to our report of the American Dairymen's Association, crowds out several articles which we desired to publish this week.

A NUMBER of our subscribers have written us that they have seeds of the Shell Flower (Moluccella laevis) raised from the seeds which we sent them. We would feel obliged to such subscribers, if they would state the quantities they have, and the prices at which they may be purchased.

THE seed distribution is now complete. The last packets are mailed to-day. The next free seed distribution will be announced as soon as it is possible for us to determine upon varieties and utities. We shall endeavor to so provide ourselves in quantity as to be able to send all the varieties originally announced.

COUNTRY LIFE IN WINTER.

THOUGH the farmer's life during the busy summer season is one of severe manual labor, there may and should be in winter a time for corresponding relaxation and mental improvement. Books, newspapers and social festivities may make the farmer's winters seasons to be looked forward to with pleasure instead of being so irksome that all are glad when active labor is resumed. That the last is the true picture in too many places is a fact as painful as it is evident.

"Farmers are too isolated." But with good horses and sleighs or carriages there is no necessity for isolation. It is often easier for the farmer or his sons to hitch up and drive two or three miles with good sleighing and jingling bells to a lecture, sociable or concert than it is for city residents to walk a quarter of that distance. Unless the isolation is in the farmer's thoughts there is nothing in his position which need prevent him and his family from associating with his fellow men and women. Farmers' sons find no insuperable difficulties to prevent them from seeking society unless they are unfortunately old before their time. And society is just as important for farmers and their wives as for their children.

The Grange has done an excellent work in bringing together the people of rural neighborhoods. The social features of the order are without doubt those of greatest importance. It has doubtless added dignity to the farmer's calling; but it has done this chiefly by arousing his social nature, stimulating his intellect and thus making the farmer more deserving of public approbation. It is idle to say that the people ought to seek from the farm their representatives in high official station. When farmers prepare themselves for public duties, the fact is not likely to be long overlooked. They can only do this by performing all the duties of their present positions—not only on the farm but in society, in the church and in the political assembly. Thus they will be men among men and if they are qualified for public station the fact will not long be overlooked. That high offices are so poorly filled is chiefly because so few really fit men present themselves. It does not disprove this that many able men keep in the background: that is just what such men should not do.

Winter is the time to consider these facts and act thereon. If there is a really good Grange in your neighborhood, lose no time in joining. If not, plan at once some suitable means of improving yourselves and families morally, intellectually, and socially. Farmers' clubs are excellent, but they alone are insufficient. They discuss mainly questions which inevitably occupy the farmers' thoughts. Besides, it is rare that the ladies will turn out in large numbers to hear discussions. Debating societies and reading circles are more needed. The habit of public speaking should be acquired by every young man, and many farmers in middle life will find talking in debating societies much easier after a little practice than they had expected. The reading circle should, if possible, be in connection with a reading room, where the best magazines and periodicals not generally taken in the neighborhood, may be seen.

It is unnecessary for every family to subscribe for all the periodicals which its members may wish to read. Taking a few of the purest and best for the family circle, a good supply additionally may be had by interchanges among neighbors, or by joint subscriptions of several neighbors to the higher priced monthlies and reviews. For a magazine which comes once a month, four families at least can have the reading before next month's issue is due. In very many cases, one or two copies of such magazine will supply the people of a neighborhood or a town. This is not a suggestion to induce people to take fewer periodicals; but to introduce some of the best literature of the day where it would otherwise rarely be seen. Once introduced, the habit and love of reading will grow, and very soon largely increase the subscription list of all worthy periodicals.

WHAT DID IT LIVE UPON?

FIVE YEARS, the coming spring, we purchased a Yellow Bellefleur and planted it upon a sloping though rather springy piece of ground. It bloomed the first season, and formed flower-buds every succeeding season profusely. We have never seen an apple tree of its size and age so full of blossoms. Seeing that it made no growth; that some of the terminal twigs were dead every spring, and that it decreased rather than increased in size, last fall we set about examining the roots, to ascertain, if possible, the cause of such singularities. The roots as well as the stock up to the graft insertion, were found to be quite dead, with the appearance that they had been dead for a long time, as the roots were partly decayed and had evidently made no growth since their removal from the nursery grounds.

After the second year, we supposed that the tree had so exhausted itself by profuse blooming—as is not unusual with this variety—that it had no power to form new wood, for which reason the blossom buds were pinched out the third season as soon as they could be determined. But no improvement was visible in its wood growth. Had the tree been weighed when first set, and when it was taken up last fall, it would probably have been found to weigh less at the latter than at the former time.

No doubt that in many instances when fruit trees blossom well but set no fruit (as in this case) and seem in tolerable health, if the roots were examined, similar disturbing causes would reveal themselves and we should be entertained with fewer learned speculations respecting "impotency of pollen," "sterility of the pistils," the fine distinction between "vigor" and "vitality," etc., etc.

We said that the roots of the Bellefleur tree had evidently made no growth, and that they had been dead for a considerable time—perhaps from the time of transplantation. The tree itself (graft) must therefore have lived in part, upon the decaying nutrient particles of the stock—or, did it draw its sustenance from the atmosphere alone?

EDITORIAL BLANDISHMENTS.

No one undertakes larger contracts in good intentions than publishers of newspapers. They are an imaginative race, and it is not to be wondered at that their schemes are more comprehensive than is their ability to execute the details. Commonly, about the beginning of the subscription season, many knights of the pen dream a dream, and a vision appears to them. It is a perfect newspaper. Such a one as they would like to make and own. When the time is ripe for an annual prospectus to subscribers, the ideal paper occupies the most prominent niche of the brain, and it is only human nature that the Mss. page should take its coloring, not from what it is to be, but from what it ought to be—if the means were only in proportion to the undoubted ability of the writer.

It comes to pass, then, that more extended plans for the new year, are heralded than can be executed, and readers mourn promised features, as the year drags its slow length, whose announcement filled them with gladness. The editor is not, perhaps, remembered in the family prayer as the spirit of a just man whose promises have been made perfect. Speaking for ourselves, however, as we recall all of our promises, we have no desire to retract or to retrench any one of them. And this we say quite independently of the fact, that our circulation continues, up to this date, to increase over that of last year. Had it been otherwise, we are not aware that we have made a promise or held out a hope that we are not prepared to fulfil. Let us see.

NOTES.

Patenting Plants.—We shall be glad when those good people who advocate the protection of new plants by letters patent shall have had their say and become convinced of the absurdity of the scheme. Ought not he who spends a life-time or a year in producing, creating, obtaining, manufacturing, (will any kind reader name the proper word?) a new and superior variety of fruit, flower or tree, be rewarded as well as any other person who, by his labor or ingenuity, improves upon the best article of its kind previously existing? When tastes no longer differ; when our knowledge and perceptions of color, flavor, vigor, hardiness etc., shall have assumed definite relationships and the soil, situation and season no longer affect the same plant differently and all can understand the source of the pleasure which the old lady derived from "kissing the cat," then we might join in advocating the protection of new varieties of plants. Until that time, however, we say to those who do not deem the benefiting of the human race a strong enough reward for their labor and pains in creating, producing, inventing (here again we want that word) a new green pea, or a rose, or an apple—we say to them, "Why not confine your talents, dear Sirs, to the production of something that *can* be patented?" Now answer that!

A Year of Fraud.—In the history of this country there has probably been no year that has equalled the last in the amount of official peculation and mercantile fraud which has shocked the moral sense of the public and brought unmerited suffering and ruin on thousands of innocent heads. A list of the more prominent instances of notorious fraudulent criminality during the twelvemonth, foots up a trifle over $30,000,000, and of the dishonest rascals who have brought such opprobrium on the age and country and such suffering on a large number of the poor, scarcely half a dozen are behind the prison bars which should shut in the whole of them. A public sentiment healthily severe, and a vigorous enforcement of all legal penalties, are the most effective means of putting an end to such a sad display of knavery.

Midwinter, the proverbially lazy season for the farmer, is so only to the lazy farmer. The grand trouble with industrious people, no matter what their occupation, is that they always have too much to do. Industrious farmers need the hints of agricultural papers only as they may lay before them the work which had best be attended to. For the others, the best advice is: shake off your laziness and go to work. There are hundreds of things to be attended to and you know it! If you don't, sell your farm and hire yourself out to those who do.

BREVITIES.

ENGLAND wants more sunlight—it is a trifling request to be sure.

WE sowed upon the Rural Farm, last fall, five acres of Clawson wheat, which is now in fine condition. Wheat sown earlier in the same section has suffered severely from the Hessian fly.

WE hope our farmers will try, as an experiment, if they have not done so before, planting corn in drills next spring. The experiment can be tried without addional cost, and may prove a source of additional gain.

HENRY M. STANLEY, the now famous African explorer, is having a triumphal journey, indeed, *en route* for London. Among his truest admirers was the late King VICTOR EMMANUEL, who left a medal that Mr. STANLEY says he would treasure through life as one of his happiest souvenirs.

THE advantage of the supposed hybrid cotton plant (Gossypium and Hibiscus), is that it produces "pods in the axils of the leaves instead of branches" so that on the same area of land nearly twice as many plants can be grown as with the old varieties. The cotton is said to be of good quality.

IN all localities where the weather up to within a few days has been so warm, that the ground has not been frozen to any depth, trees, shrubs, strawberry beds etc., may now be covered with manure or straw, with the same good effects as are usually experienced from similar mulching six weeks earlier.

THE editor of the Germantown Telegraph remarks that the Albemarle pippin looks very much like its progenitor, the Newtown pippin, and is about the same size, but in point of excellence it far excells it, in his estimation, as it does every other apple he has ever tasted. A pretty good compliment, we should say, for the Albemarle pippin.

WE were pleased to receive a call from Mr. WM. WELD, the editor of the Farmer's Advocate, London, Ont. Mr. WELD travels a good deal, and says he can glean so many new ideas in this way that it well pays for the time and expense. The advantages of travel are partly secured by attending Farmers' clubs, Hort. and Ag. Societies and the like.

MANY of our friends ask the question—Shall we plant Geranium (Pelargonium) seeds now or wait until spring? If they have greenhouses or even sunny windows, we say, plant now. The seedlings transplant easily and will bloom earlier. That is, if planted now, they will bloom the latter part of next summer. If sown not until late in May or the first of June in the open ground, they will not bloom until next winter.

THAT clipped horses perspire less is offered as an argument in favor of clipping. It seems to us a good argument against it in that other organs are obliged to perform the excretory function of the skin, or diseases or a quicker liability to diseases will be the consequence. We regard clipping horses as a practice that proves the owner who orders or suffers it to be done as either extremly cruel or extremely ignorant.

WE hope our readers who may want fruit or ornamental trees or plants of any kind the coming spring, will send for the catalogues, the receipt of which we announce from time to time, and compare them carefully. There is time to do it now. These catalogues are full of trustworthy information, the pithy teachings of years of experience. It is the rule of this office to mention every catalogue received. But we shall take care to praise none but those of establishments with which we have had dealings or some personal knowledge.

Literary Miscellany.

ANNI FUGACES.

Oh, pilfering years, whose fingers light
O'er form and feature play,
And, half in frolic, half in spite,
Bear every grace away;
Heed not this foolish burst of tears,
Your silent task fulfil;
Yet let me keep, O gentle years,
My heart's fresh impulse still.

Yes, quench the love-light from the eye,
And thin the clustering hair;
I yield to thee, with just a sigh,
Whatever charm was there.
But, oh! the fervor and the truth,
The strength to do and will,
The pure, unsullied heart of youth,
Kind robbers, leave me still.

[Frederick Langbridge.

HER MOTHER'S SECRET.

[Continued from page 45.]

"My mother's name," she answered, overcome by his manner,' was Alice Estcourt; her old lover, Linton; and the man who married her called himself Arthur Mortimer."

"Arthur Mortimer Tressider?" he said, with a groan "I am your wretched father! Oh, what a tale of shame and woe must now come before the world! My child!"

He held out his hands, but his sight failed him, and he fell forward, with a deep groan in a fit.

Edith rang the bell, and then, despite her agony at the words which had escaped her father, she stooped and began unfastening his cravat.

When the servants came in, she bade them summon Lady Tresseder at once, as their master was ill.

She hastened to come with Royston and a doctor, who was among her usual morning visitors.

"A slight attack of apoplexy," said the medical man; "let him be put to bed at once, and I will see what is to be done."

CHAPTER X.
The sick-Bed.

Edith went away stunned and horrified. This, then, was the man who had deceived and betrayed her mother. It not only must be so, but he must have been married at the time, as Blanche was the same age with herself.

And the noble-looking man, so kind and generous, so sweetly fatherly to her, was, indeed, her parent, and yet she was doomed to hate him.

But not while he was sick—almost dying.

She waited with welling tears, bated breath and deep anxiety for news. She was on her knees.

Meanwhile all had been done for Sir Arthur that could be done, and after the remedies had been applied, the physician expressed an opinion that he would do well. He had a very excellent constitution, and they were of opinion he had received a sudden shock or surprise.

"I have no doubt of it," said Lady Tressider, with a strange smile.

A nurse had been sent by one of the medical men, and she was to remain up all night with the sick man.

Royston would remain smoking in the library, to be within call.

Lady Tressider intimated her intention of lying down in her clothes.

Dinner was announced, and as one must go through the duty in times of sickness, and death, every one joined the table, except Edith.

Royston, however, gravely sent for her, and as he might in a few hours be master, neither of the ladies dared interfere. But their satisfaction was unbounded when a message came that she was altogether too ill to come down, but would take a cup of tea in her bedroom.

"Won't some one see her?" asked Royston.

"After dinner," was the cold reply.

But after dinner Royston sent up a note by a maid, and begged Edith to come down to the library for half an hour. He would not detain her longer. Edith came, looking very ill, with tearful eyes and swollen cheeks.

"My darling, what is the matter?" he said, caressingly. "Has your illness anything to do with my uncle's sudden attack?"

"Yes; something I told him," she faltered, "gave him a great shock, and made him ill. But I cannot, without his permission, repeat a word of it. He is better?" she gasped.

"Oh, yes; and will, I believe, get quite well," he answered. And so, in talk, more than half an hour passed away.

While they were yet talking, the butler entered, and informed them that Sir Arther was quite calm and collected, and wished to see him alone.

"I will come at once," said Royston.

"Oh, my lost love!" said Edith. "Now you will know all, and we shall be parted for ever! But go—ask me no questions!"

And Royston was obliged to be satisfied with this, as he could not keep his uncle waiting.

He went to the room, and found his uncle to all appearance alone. He had sent away the nurse.

"Close the door," he said, in a low tone; "and then give me a cordial. I must not say much. But now fasten the door. We must keep the fearful secret as long as possible."

"Uncle," said Royston, kindly, "you are agitating yourself. Wait until the doctor comes."

"No; right must be done," he insisted: "and I want you to do it. So now you must start for Longmead, and make certain researches. If what Edith told me can be substantiated, she is my only daughter and heiress!"

"Great Heaven!" cried Royston.

"Yes, it is wonderful. But the wrong, if there was one, was no doing of mine," he went on. "I have been deceived."

"But as her mother only died six months ago, what about Lady Tressider?" urged Royston.

"My supposed present wife is simply Widow Baker," groaned the crushed man, "and I am a bigamist! How is the poor girl?"

"Utterly overcome," he answered. "Evidently she looks at things from the dark side."

"I fancy," the other answered, "she has nothing to fear. If Mrs. Marshall can be identified with Alice Estcourt, there is an end of the matter. If I live, I can prove the identity of Arthur Mortimer with Arthur Mortimer Tressider. Besides——"

"But what do you want me to do now?" asked his nephew.

"Take down the names of a few places—the place where we were married, the place where we lived; then visit the doctor at Longmead, to whom she told all, and who signed her statement," he went on again, sipping his cordial. "Then come back, and I will tell you what to do."

"Everything shall be as you say," was the nephew's reply. "Edith, my cousin!"

"And my heiress," the other went on; "you will have only the entailed estates."

"And her, more precious than all!" answered Royston.

"I hope so, my dear boy. Now send back the nurse, and I will sleep," said the Baronet.

The nephew hurried away, and had scarcely gone ten steps when a ghastly figure came from the head of the bed. It was Lady Tressider. She crept out of the room with extreme caution, and going along the passage, entered Edith's room. She rose hastily, as the mistress of the house entered.

"Is anything the matter? Is Sir Arthur worse?" she gasped.

"Your father is better," was the cold response. "Be not astonished, girl. I know that this disgraceful discovery has been made.

"How can you know it?" faintly said Edith.

"No matter—I know it. Either you are the offspring of a wicked intrigue between my husband and some other woman, and then you have no right to remain an hour in my house," she went on pitilessly; "or you are his lawful daughter—in which case I shall leave the house to prefer a charge for bigamy!"

Edith shuddered.

"Fancy his honored name bandied through the streets!" she said with a hollow laugh. "But he married me with a wife and child living. He will be sent to prison for seven years—a pretty ending for Sir Arthur Mortimer Tressider!"

Edith did not hesitate one moment. In either case, her presence in the house was not right. For her own part, she saw no likelihood of her mother's marriage proving legal. How could the matter be proved after all these years?"

"I will go at once," said Edith, quietly, "and you shall not hear of me again! Let one of the maids call a cab, while I pack up."

Her luggage was put into a vehicle while Royston smoked in the library.

She had plenty of money, and she bade the cabman drive to a respectable quiet hotel near the railway station. There was no name on her boxes, and she gave the name of Estcourt.

Meanwhile Lady Tressider had gone to her daughter's bedroom.

"Girl," hissed the mother, "we must be up and doing. If your father lives, we are ruined! Edith is your elder sister and the only legitimate heir to Sir Arthur. Let her right be proved, and we are outcasts. You know how your father loves us!"

CHAPTER XI.
Twelve Events.

When, next morning, Royston entered his uncle's room, he found that gentleman very calm and collected. He had enjoyed a good night's rest.

"Well, Royston, my boy," he said, in quite a cheerful tone, "are you quite ready to go?"

"Yes, uncle, answered the young man; "but, before I leave, I must convey to you some rather unpleasant intelligence. Miss Edith has left the house."

"What can it mean?" exclaimed the Baronet, in a tone of deep irritability. "She must be found. How did it happen?"

"Well, sir, I have held a strict investigation, and by threatening the household in your name, have learned part of the truth," he said. "It is not pleasant," he added, in a hesitating kind of way.

"Tell me all. Time is everything!" cried the other.

"Just as I left you, Lady Tressider was seen to leave your bedroom, whence she went to Miss Marshall's," he continued; "then my aunt went down and ordered the cab to be sent for, in which she shortly after went away."

"Send a messenger to Linton's at once," said the Baronet, anxiously; "probably she has gone there!"

The man took a cab, with a note from Royston, but no tidings had been heard of her. Most likely his young friend would write.

"Go," said the Baronet, sternly, "and let right be done. Satisfy me that Edith is my child, and I will publicly own her, come what may. Be not long gone; spare neither trouble nor expense."

"Leave all to me," replied Royston, and hurried out without seeking an interview with either aunt or cousin. He need not have troubled himself; they were out.

When they returned, they asked for Royston Yorke, and found that he had taken his departure.

The two eminent doctors who came twice a day had, on the second occasion, an interview with Lady Tressider, who was very anxious.

While they sipped their wine, the question was discussed.

"Then he is progressing well?" she said, after they had made a favorable report.

"Yes, my lady," replied one. "Unless something very unexpected happens, he will be up and doing as well as ever in a week. His constitution is excellent."

"That is good news," was the reply.

"She seems really anxious about her husband," said one of the doctors, as they went down stairs. "I did not think it of her."

"His death would make Royston Yorke the Baronet," answered his friend, drily.

"Something in that," remarked the other.

Lady Tressider entered her boudoir, and sent for Blanche. She was very pale and haggard, some might have thought from sorrow, while keener physiognomists might have suggested fear. Blanche entered, looking weary and anxious.

"How will it all end?" she said pettishly.

"If your father lives, badly for us. As things stand at present, I have a rich jointure, my own fortune settled on me—on you after my death, while Sir Arthur has left you a rich legacy. I have seen his will, and since he knew that Royston would not marry you, he has added some more, showing me the will. But if this woman steps in, we are lost; the will is null and void."

"But surely my father would not let me fall into poverty?" pettishly cried Blanche.

"He is not your father," she answered, in a low, hushed whisper. "You were born one year before we were married. My first husband was your parent. You are two years older than you think."

"Why this cruel deceit?" huskily asked the girl, utterly crushed and overcome.

"Your father and I were traveling in Rome when he was killed by an accident. I had a young baby, but I kept it out of sight. I met Sir Arthur, who was fretting himself to death about the death of his first wife, he told me.

"Some one had told him that she had eloped with a certain major; but that person being found, proved that he had been employed by the then Baronet to make believe with the girl that she was not his wife; that, maddened by this discovery, she had escaped to the river and drowned herself.

"The Baronet was susceptible; I was an interesting young widow, and obtained unlimited power over him. We were married, and traveled about for years.

"When we took you from a school, I persuaded him, as we had no children, to adopt you as his heiress.

"To a certain extent, he did; but never gave you out as his child. He allowed the inference to be drawn."

"Then I have the honor to be Blanche Baker!" said the girl, with savage bitterness.

"Unless we can crush this girl," was the savage response.

"How is that to be done?" asked the girl. "Do you expect me to slay or poison her?"

"You might do worse," was the response whispered in her ear. "But here is a man who has a formidable attack of apoplexy, who was considered dying. We stand on the verge of ruin. No one can prove the identity of the two women of different names but Sir Arthur. He will, if he recovers, do so."

"What then?" asked Blanche, gloomily.

"He must die!" was the answer of this modern Borgia, speaking in a hollow tone.

"Mother," said the girl, after some reflection. "I understand many things that I did not before. If Sir Arthur has not shown me the deep affection of a parent, he has treated me well and kindly. I will do nothing against him. If he dies, well and good; but I will have no hand in it."

"You would betray me?" gasped the mother.

"No; only let me know nothing, and then I cannot speak," was her answer.

With which she walked away.

Lady Tressider looked at her for a few minutes in silent contempt, and then followed.

Not another word did she say of the project which she had ventured to unfold. She kept it within her seething and teeming brain. But she was determined not to fall from such a hight without a struggle.

The day passed slowly. Many called, but no one was admitted except the doctor. Mr. Linton sent round to say that he had heard no tidings of Edith, but he had privately issued a description of her to every police-station and offered a considerable reward.

As soon as Sir Arthur was well enough, he would pay his respects. He was very anxious to know why Mademoiselle Marechale had left, and hoped there was no fault on her side.

When this message arrived, the intimate family physician, Dr. Wilcox, was in the house, and Sir Arthur got him to write these lines:

"Dear Linton:—The poor girl left under a very sad misapprehension, which I will explain when I see you. A. M. Tressider."

One of the servants sat with the Baronet while the nurse took her meals and got a little sleep. She came on again at eleven, when, if need be, she slumbered in her cosy arm-chair. She was a very excellent woman as nurses go, and only gave way to slumber when compelled by utter exhaustion.

This woman, sent by the doctor, was, in a word, shrewd and faithful. She saw that the Baronet was comfortable, smoothed his pillow, gave him his dose, and then composed herself.

"If I should dose off just a little, sir," she said, respectfully, "just pull that white cord"—she had tied it to the head of the bed and to her own arm—"and I'll be up in a minute."

"Very good," said the sick man, and closed his eyes in search of much-needed sleep.

No sound was heard but the ticking of the watch on the table, of the breathing of the nurse, and Sir Arthur prepared for slumber. There was an anodyne in his draught, and he would probably sleep sound.

He dozed, and then went off, as she believed, into a deep, sound slumber. Then he dreamed; yes, dreamed, oddly enough, that he was in the same room, but rather under somewhat changed circumstances.

The nurse appeared to have disappeared, and another woman had taken her place. She was taller, and dressed in white, and moved along the floor without making the slightest sound.

Then she leaned over a chair, and he knew it was that in which the real nurse slept.

Then she gazed at the bed with a fixed glance. Her eyes were like coals of fire, and a steam seemed to come from her mouth.

"Her hair was perfectly dishevelled, and from her bosom she took something—a bottle.

This she held over a small glass on the table—a glass from which he usually drank—and into this she dropped—something.

Then she turned and fled noiselessly away, with a white, scared face and quivering lips.

Then Sir Arthur Mortimer Tressider knew that he was awake, and had seen his wife.

"Wretched woman!" he said to himself; "she somehow knows all, and wants to poison me before I can prove the rights of my child. Heavens! if she were to succeed I could never do justice to my poor Alice, murdered by my cruel father. And yet it is a temptation. Well, it must be thwarted."

And he pulled the string, at once awakening the vigilant nurse.

"Anything the matter, sir?" she cried.

"Oh, no; only I cannot sleep, and it is nearly my time for another dose," he said. "Nurse," he added, "you are a discreet person, and will allow me to do what I wish without asking questions. Put the glass in the cupboard at the head of my bed, just as it is, and give me the key."

The woman started, but obeyed, noticing as she did so, there was sediment in the glass.

She selected a clean glass, rinsed it, and gave the Baronet his medicine.

Shortly after he slept nor waked until dawn. He was calm and collected, but stern beyond his usual manner. When Doctor Wilcox came, the medical man saw the Baronet was agitated.

"Send the nurse away," said Sir Arthur, "and now fasten the door. You have done so? Well, take this key, and take a glass from out the cupboard there—my medicine glass."

Wondering excessively, the physician obeyed, and brought the glass out.

"Don't waste that," the Baronet went on, sarcastically; "don't waste a single drop, but when you go home test it for poison, and let me know how many doses it would take to kill me."

"My dear friend——" began the physician.

"Come back at four o'clock," said the Baronet, querulously; "and then we will talk about the matter. I have much to say."

The doctor saw to him, gave the nurse some fresh instructions, one of which was at his own request, that he should not be disturbed under any pretence whatever, even by his own wife

This excited no comment, as it is very usual to be excessively cautious in such cases.

At four he returned, with a very white and serious face, which made the Baronet smile.

"Was I right, Wilcox? Is there a prisoner in the house?" he asked.

"There is! Four doses taken four consecutive nights would have killed you, and left no trace under the circumstances," he replied, solemnly; "but, in the name of Heaven, how did you discover it?"

"I saw it done," was the reply; "and bade the nurse, whom I awakened, put it under lock and key."

"But, my dear friend, do you intend to do nothing?" said the doctor; "it is your bounden duty."

"I shall do nothing until the time comes," was his sorrowful reply. "The fact is, there is a great domestic tragedy going on in this house. If I recover, there will be great changes; but I want all my intellect and thought to do justice. But now I am only on my guard I shall know what to do."

"But will you not warn the evil-door?" said the doctor; "it should be done."

"I wish to have the evil-doer wholly in my power," was the sad reply; "it may save much trouble."

As the master of the house was obstinate, and could not be controlled, Wilcox yielded, but took the precaution to put a powerful antidote in his sleeping draught.

That evening, the nurse still fast asleep, and the sick man awake, but pretending slumber, the awful vision of the night before again appeared, and the same performance went on over again.

Once more the small glass was locked up, and this went on for four nights more.

Doctor Wilcox affected to believe Sir Arthur

was much worse, and in her guilty soul the woman rejoiced.

CHAPTER XII.

The Return.

On the sixth morning after his departure Royston Yorke returned and presented himself before his uncle.

The good doctor had come with him and was quite ready to repeat, word for word, the dying statement of the lady.

"But she gave it to her daughter," he added, "in my presence, to take up to Mr. Linton."

"Very good. That is so much gained," said the Baronet; "but how about the certificate?"

"I have a copy of it," replied Royston; "but that proves nothing."

"Exactly so," said the Baronet. "I want the original copy that was handed to my wife, and which I put in my pocket, which she ought to have had."

"That is most mysterious," mused the Baronet, "and it must be somehow explained. My poor head is not so clear as it was; but I remembered something very particular about that certificate."

"If you could only remember," urged Royston.

"I will try," said the Baronet, whom anxiety and other matters had rendered very weak.

"Can I do anything more?" asked the doctor politely.

"Oblige me by being my guest for a day or two," said the Baronet, heartily. "My nephew, my more than son, the discoverer of my daughter, will entertain you. I have need of you," he added.

"Then I will stop," replied the doctor.

"Now, Royston," continued his uncle, "oblige me by taking the doctor down to lunch, and sending my man up to me."

The man came, and was surprised by his master's first order.

"Dress me," he said.

"But, sir——," he replied, really believing that the Baronet was going mad.

"I am not nearly so ill as I look," he said, more peremptorily, and got out of bed without any assistance.

The man saw at once how great a change there had been for the better.

He dressed his master carefully, and then shaved him, so that he looked himself again, only thinner and paler. Then he took some refreshment, which seemed considerably to revive him. This done, he wrote two letters, which he dispatched by special messengers, and waited.

His countenance was deeply agitated, but he otherwise kept down the outward manifestation of his anxious soul.

The first to arrive was Doctor Wilcox, and, as soon as he came, he sent to ask Dr. Williams to join them. He came at once, and was duly introduced to his professional brother.

"Now, Wilcox," said the Baronet, "have you brought the test for that poison with you?"

"I have brought several tests," was the cautious reply, and he placed a small chest on the table.

"Now," said the Baronet in continuation, pointing to four wine-glasses in a row, "take one of them at random, examine it, and then test for poison."

Doctor Williams looked very grave, but at once went to work, and after some little time, turned to Wilcox with a look of wonder on his face.

"This is a very rare and little known poison," he said, "and very difficult to detect or defeat."

The other doctor mentioned the name.

"That is sufficient. Put it away, and now summon my nephew," continued Sir Arthur. "I wish him to come up now. I expect some one else shortly."

Royston was soon in the room, and then the conversation became more general until Mr. Linton arrived. He was gladly welcomed by the Baronet and by Royston.

"No news of Miss Marshall?" asked Royston, eagerly.

"Not any whatever. She has left London," replied Linton, "or is in secure hiding. She is tolerably well provided with money, unfortunately. But may I ask why you are so interested in her?"

"Heavens, Linton!" cried the Baronet; "but, there, you don't know it. Edith Marshall is my daughter and heiress—and, furthermore, she is Edith Tressider."

Linton fell back as if struck.

"Are you Arthur Mortimer," he said sternly, "who eloped with my darling, my affianced wife, and then deserted her?"

"I ran away with your affianced wife," was the grave answer, "but I never deserted her. We were duly married, as Royston is able to prove; but the identity is the same. Have you the statement with you which Edith told me in brief?"

"I have," was the cold reply of the man, who was for the first time face to face with the robber of his peace and love.

"Will you kindly read it?" said Sir Arthur, gently; "slowly—not omitting one word."

The other obeyed.

Suddenly Sir Arthur leaped up.

"My dear sir—my dear sir!" cried the doctor.

"Have you that desk?" said the Baronet, in accents of agonized dread.

"I have," was the quiet reply.

"Then send for it. By Heaven, it is a miracle! Now I can make it all clear," said the Baronet. "Do not hesitate. I am my daughter's guardian until she is of age. Believe me, Linton, all shall be cleared; "and, by Heaven," he added, in a stern voice, "justice shall be done! I will send a man, and do you write to Martha to bring it."

"I will," replied the virtuoso, overcome by the other's dignity of manner.

The note was written, and despatched by a messenger in a Hansom cab.

Meanwhile, Lady Tressider and her daughter were below. As far as they could make it out, there was a consultation of physicians, which proved that he must be worse.

CHAPTER XIII.

Waiting for the Desk.

"I may as well," said the Baronet, as soon as the statement of his wife was finished—a statement which, towards the end, made him weep bitterly,—"while we wait for the desk, give some explanation.

"Very dependent on my father, I had to be careful in my actions. Without his assistance, I had very little more than the portion of younger sons.

"He gave me permission to marry whom I pleased so that she was rich; but poverty was to be my portion if I married a poor woman.

"Hence all the precautions I took to conceal my marriage.

"They were useless. In the hight of my happiness I was found out. But my father took care not to let me know anything about the matter.

"He summoned me to town on pretence of asking my signature to some documents, and when there he detained me some time.

"As soon as I could get away—I noticed a disagreeable smile on his face—I darted off in search of my darling. I could find her no where; but they said she had eloped with a man whom, on their description, I knew. I went at once to town.

"I met my man—that is, I went to his lodgings. With a pistol in one hand, and a horsewhip in the other, I asked him news of my wife.

"He had none to give me.

"'I am a desperate man, I said. 'Life has no charm for me. Take me where she is, or I will shoot you like the dog you are!"

"'She is dead!' he replied coolly.

"'But—how dead?' I frantically cried.

"'Your worthy father found out your little affair. He paid me handsomely to go down and break it off. In want of cash, I went down, saw the lady, and told her you were a scoundrel—had not married her at all. On which the foolish lady ran to the river, jumped in, and was carried away by the current.'

"As a similer story was told down there by some one, doubtless paid by him, I believed; and after giving him a good thrashing, I went to my father's house.

"He saw by my face I knew all.

"'So you did not find her!' he said, with a diabolical sneer I never have forgotten.

"'I have not, sir," was my cold reply. 'My wife died, murdered by you! Well, it shall not serve you, as I shall never marry. Never, too, on this earth do we meet again. You have taken, in cold blood, the life of my wife, and I can never forgive you!'

"He began humbly to beg my pardon at first; but when I flatly refused, he flew into such an awful passion, that he dropped down, and before medical attention could be called, he was dead.

"I was sorry, but my own sorrow had made me callous; and as soon as the funeral was over, and I had taken possession of my empty honors, I left England, leaving my poor darling in the belief that I was faithless and false.

"I should not have believed the lies, but spent thousands to have found her.

"I traveled more like a madman than a sane person, and in Rome met a widow—a vain, vulgar English woman, with money.

"As a satire on my father, I married her, though, after some months, I heard things said of her that made me inclined to shudder.

"But I did not believe the reports; they were falsehoods, calumnies—anything.

"Well, at last we came to England, with her child, which, having none of my own, I allowed her to call ours.—To be continued.

THE GOLD ROBBER.

It was on a November evening that we all sat round a cheerful fire after dinner. Uncle John, who had come home from Australia a week before, was giving us various bits of information about the climate, people, &c., in that favored country. He paused for a while, so I asked him, "Couldn't you tell us a story of your adventures, or something that happened to you, uncle?"

"Well," he answered, "I've had so many adventures, small and great, that it's hard to pick out one; but suppose I tell the first that happened to me,—will that satisfy you?"

We all declared we should be delighted to hear it; so, giving the fire a poke, and all of us drawing near the blaze, he began the following:

"You know, when I first went to Australia, there was a great excitement about the gold that was being found in several places; and, like a great number of people, I was seized with gold mania, and went to the diggings. You all know, also, that I was very fortunate there,—but of that I have nothing to say now, as I am going to tell you what befell me one night, about a fortnight after my arrival at the diggings.

"Your uncle Tom, who was with me, was up the country for a couple of days with an old schoolfellow, whom he had found in that remote region; so I found myself on this particular night the sole occupant of our hut. I had retired to my hammock rather early that night; but I could not go to sleep, but kept tossing about for a long time. At last I opened my eyes wide, with the conviction that sleep was not within my grasp for that night; and I began looking round the hut, but at such objects as the remains of the fire made clear enough to be seen. As I looked round, a dark object in one corner arrested my attention; it was a corner not lighted by fire, so that I took some moments to make out what it was; but at last I came to the pleasant conclusion that there was some one else in the hut besides myself.

"Now this was a particularly inconvenient thing, to say the least of it; for I knew nobody personally who lived about us; but I knew very well that as a general rule, they were a coarse low lot of ruffians, a great many of them convicts, and men who had to fly from their countries for various reasons best known to themselves, so you may perhaps form a slight idea of my feelings. I knew it was not my brother, for he would not be back for two days; besides, why should he come in so silently, and stand there so mysteriously. But what puzzled me most was how any one could get there, for I had most carefully fastened the door before retiring to rest. I thought my eyes might be deceived, but on looking more intently at the dark object, I distinctly saw the outline of a pair of shoulders and one arm, but it was impossible to see the head or feet, as the shade was so heavy in the corner.

"Now, in this very corner we had a chest, in which we brought various clothes and other necessaries, and in which we meant to put any gold we might find—I say meant, because we had not got any up to the present time—so I, of course, concluded that my visitor was examining this chest with a view of robbery, and I thought the best thing I could do would be to remain quiet for the present; but I spoiled my plan by turning on my side so as to watch the robber better, and in doing so I made what seemed to me a great deal of noise. I now thought there was no use in concealment, so drawing a revolver, which I always kept under my head at night, I called out, "Come forward at once and show yourself, or I'll blow your brains out."

"I made as much noise as I could in cocking the revolver, so as to give my threat more weight; but the gentleman in the corner seemed to take notice, for he remained perfectly quiet. I was undecided what to do till the thought struck me that the robber might at that moment be meditating shooting me from where he was, and this thought made my blood run cold, for I thought of the friends and relations I had left at home, and of the state they would be in when they heard I had been shot in Australia; so I again called out, 'Whoever you are, I'll give you but one chance; I'll count three, and if at the third word you don't come forward, I'll fire.'

"I told you I could not see the man's head, so I aimed at where I thought it ought to be, and counted slowly, 'One, two, three!'

"At the word 'three' I fired four shots in quick succession, for I thought that in the almost total darkness my aim might not be very good; but they seemed to have taken effect, for when the smoke cleared away, I looked in vain for my midnight visitor. I could not summon courage to get up and look for his body; not that I was exactly afraid, but I had a horrible feeling of having shed a human being's blood, which I had never done before, and I firmly believe I would almost rather have been shot by the robber than have the fearful thought on my mind that I had killed him.

"Never did I spend such a dreadful night. I could not get rid of the one thought of having deprived a fellow creature of life, especially while he was in the act of robbing, and perhaps intending murder; but more horrible than all was the idea that I might possibly have been the means of sending him to a fearful eternity. In vain I tried to persuade myself that it was to save my own life I had done it; this seemed to me a poor excuse. However, I at last fell into a disturbed sleep, which lasted till morning; but the moment I awoke the dreadful night recurred to my mind, although I felt rather more calm. I thought I had had a horrible dream, but on examining my revolver I found four chambers discharged. I rose and looked about the room, but in vain I sought the body of the intruder. This, however, relieved me greatly, as I thought he could not have been killed, but only wounded, and had escaped out of the hut while I was asleep; but on going to the door I was more perplexed than ever, for the door had evidently not been opened, as it was securely fastened on the inside.

"That day I could not bear to do anything but sit at my fire and think over my adventure, and try to solve the mystery, for mystery I concluded there certainly was; but I could come to no satisfactory conclusion with regard to it.

"The next day my brother came back, but I thought it better not to say anything about my visitor to him—at all events not until I found out who or what the intruder was.

"That evening I returned to the hut after my day's work. I had found my first nugget, which, however, was a very small one, and was entering the door, when I saw my brother sitting on a stool, with a coat across his knees, which seemed to perplex him very much. When he saw me he called me, and asked me if I could account for two holes which were in the back of the coat he was examining. Of course I knew nothing about them. He said he had left the coat hanging in the corner, and had just found it down behind the chest, and with those two holes, which he thought very like pistol shots, through the back.

"The explanation flashed across my mind immediately: my midnight robber was nothing else than my brother's coat hanging on the wall! On examining it further I found the loop by which it hung was cut, evidently by one of the shots, and this accounted for its falling.

"I need scarcely say what laughter it caused when I told my brother this; but, small adventure as it seems, I shall never forget my night with the gold robber." F. V. O.

A FEMALE DETECTIVE.

A strange, not to say sinister, character has recently passed away from among the dark dens of crime, which she haunted with unflinching persistence. This extraordinary woman was as peculiar in her appearance as in the nature of her avocations. Short, thick-set, with the arms of a prize-fighter, and features which might perhaps be compared with those of a bull-dog, but certainly bore no resemblance to the ordinary countenance of "gentle-women," this creature could not fail to inspire a sense of repugnance in those even who were disposed to admire her courage and acknowledge the utility of the services she rendered. There are but few persons, however, who were ever acquainted with the secret of her life. In Blackfriars there lives an artisan, much respected by his neighbors, whose voice is not without influence at election times, but who is also notorious for his republican, not to say revolutionary, views. Some years ago his children and wife were seized with scarlet fever. Helpless and alone, with all his family dangerously ill, the father rushed wildly about for assistance, and when the woman, whose appearance has been but faintly described, came forward and offered her services as a sick-nurse, he at once accepted her help. She was known in the neighborhood as an experienced nurse, and had often been recommended to poor patients by the parish doctor. The nurse subsequently confessed her real character. In a word she was a police detective. Nursing was but a pretext; it was an excellent excuse for gaining admittance into suspected households, and doubtless the police had their eye on this republican.

The female detective in question was not, as a rule, employed on political missions. Her chief duty was to discover criminals, and those of the lowest and most dangerous type. For this purpose her appearance was more an advantage than otherwise. No oath was too loud, blasphemous, or coarse for her to utter; there was no vulgar turn of speech that she ignored, and she was ever ready to greet the most revolting jokes with the heartiest laughter. Her manners were also apparently so loose and low that little restraint was observed in her presence, and her reports forwarded to Scotland Yard were thus rendered all the more valuable. As a monthly nurse she welcomed into the world the children of notorious criminals who were ultimately destined to become her prey, while as a sick-nurse she extracted from her half-unconscious and debilitated fever patients the confession of some dark deed, and hints as to the whereabouts of confederates in crime. Such was the general plan of action observed by this extraordinary woman; but this was rather a slow process, and at times it was necessary to fall at once on the wrongdoer.

On one occasion, for instance, the police received information that there was a gang of false money makers in a certain street; but notwithstanding every effort they were unable to ascertain in which house the coiners worked. The services of the female detective were thereupon requisitioned, and she was despatched to the street in question to see what could be done. After walking up and down a little while she noticed a child come out of one of the houses, whose face indicated a kind disposition. Seizing hastily this opportunity the detective feigned illness, and begged to be taken indoors for a moment. Forgetful of her parent's warning, the child in her excitement, seeing nothing but a woman apparently in great agony, at once and without giving alarm, admitted the detective into the house. The sudden entrance thus obtained enabled the detective to hear the metallic sounds proceeding from the coiners' workshop, before the latter were aware that any stranger was in the house. They were not long in discovering their danger.

Before the detective had time to leave the premises the chief of the gang rushed up from the cellar, where he was at work, and, in his fury, hurled a ladle full of melted lead at her head. Fortunately the poke bonnet that she wore saved her life; the burns she received were not fatal, though they destroyed her hair and its roots. The police arrived in time, on hearing the alarm, to arrest eighteen coiners. The chief, who was first aware of the surprise, was able to escape, but he was subsequently captured in France, and there sentenced to eighteen years' servitude in the galleys. It might have been imagined that if anything could make a woman abandon her particular calling it would be the loss of her hair; but with the detective it only increased her love of what she called sport. She considered that it would now be more easy for her to dress as a boy, and in this, her favorite guise, she penetrated many a thieves' den. On one occasion, however, she was discovered. A brawny thief asked her to speak—that is to say, to give the pass-words and to use certain slang expressions known only to the particular gang whom she was spying. This she was unable to do. The thief then inquired whether any one had seen her enter the house, and, on her answering in the negative, coolly informed her that she would never be seen to go out again. This was the signal for execution, and after brandishing an iron bar, he struck a terrible blow at the detective's head. She had just time, however, to dash her hand through a window-pane and spring a rattle, and the police stationed outside rushed to the rescue. They found the detective lying insensible on the floor, with her skull fractured, and it was been her boast that this adventure cost her fourteen small pieces of bone extracted from the wound. Still

undaunted, and so long as health lasted, the detective continued on the scent, encountering adventures at every step, always in danger, often indulging in hand-to-hand fights, and selecting indiscriminately for her foes both men and women, proving on either her skill in the "art of self-defense." She constantly received subsidies from Scotland Yard, and was armed with the magic whistle, rattle, and number, given her by the authorities, and which insured the assistance of every policeman, stranger or not, whose service she might find it necessary to call for. Sickness at last subdued this turbulent spirit, and the thieves on the Surrey side need no longer fear the visits of the female detective.

CASSIUS, A CYNIC.

L. H. CLEMENT.

CASSIUS was a cynic. A keen, far-sighted man, yet, with all that, he was a selfish, morose fellow. He was a slave to his business, but a tyrant at home. He could be courteous, too, when he saw he could gratify his selfish purposes by it. He flattered Brutus because he expected to be benefited by it. "The learned pate ducks to the golden fool." His logic and his sophisms won him a reputation among his countrymen and purchased for him a place in the front ranks of political demagogueism. But his "lean and hungry look" was against him. He thought too much, and was too silent and surly. His sallow face sent a sensation to the heart of Cæsar that was somewhat akin to fear, and produced in his bosom a wonderful partiality for fat men; those who have sleek heads and who sleep well at night. Cassius was not one of your fiddling, fluting fellows, and he was never seen at a theater in his life. Shakspeare tells us that he scarcely ever smiled at all, and when he did, it was in such a dry-grin sort of a way

"As if he mock'd himself and scorned his spirit
That could be mov'd to smile at anything."

What a surly companion he must have been around a domestic fireside! With no word of kindness for any one, he must have made his home one constant scene of sneers, sour looks and angry speeches. Many, many must have been the sobs and heartaches he wrung from the woman whose very name he dishonored and whom he never addressed save with a growl or a sneer!

Moroseness and selfishness are always inseparably blended. His "itching palm" led him into all kinds of ugly little money transactions with his neighbors. We take it, that by his unscrupulous love for money he filled his own coffers, but, in so doing, brought misery and privation into many a poor man's cottage. Cassius is dead; but he has left his counterparts all over the world. We meet this sallow-faced Cassius at every corner of the street. A snarling monster in the shape of man, who is day by day manufacturing more misery, and causing more heartaches than the drunkards themselves, because this class is more numerous, and then too he is everlastingly growling and making other people unhappy. His home is the home of the cynic. It looks comfortable enough outside, but within there is a deceptive hollowness which bespeaks anything else than comfort. The affections are necessary to brighten any home scene. What little affection he ever had has been given to his money and his business. But there is his wife—where are her affections? Alas, his indifference and brutal words have crushed them out years and years ago!

Everybody abhors and justly abhors the character of a cynic. Yet we all are acquainted with plenty of men who answer the description of one in every single particular, or, in other words, who fill the bill exactly. But it is such a detestable term we are loth to apply it. There is something in his very manner that is forbidding. He is the last person in the world from whom you would expect a generous act of kindness. Somehow or other you don't feel comfortable in his society. You are constantly expecting him to say "good evening," and are heartily wishing he would. If he is not grumbling he is doggedly silent, and by his sullen looks and bitter retorts he checks the flow of other people's spirits. Strangers say he is in good circumstances. His neighbors say he is "close-fisted." Somehow or other you have heard that he stints his family, and that his children have on more than one occasion been publicly humiliated by it.

But the cynic causes most misery where he is best known, viz., at home. How many homes are made wretched by his intolerable ill-temper! How many pale, broken-hearted women there are all around us who are daily trudging on in the position of slaves, trying to brighten the fireside of the tyrant whom they serve and from whom they never receive one word of tenderness! How many daughters are snubbed and sneered at because they are caught looking over the fashion-plates or indulging in some other foolish freak of "girlish nonsense!" And even the little boy who comes down stairs in the morning, with a face radiant with health and happiness, whistling his gay little tune, receives some hard angry word and a short impatient command which at once banishes the tune from his lips and the gladness from his heart. Let us have men about us that are fat, jolly, good-hearted fellows. Away with these chaps who are "of such vinegar aspect,

That they'll not show their teeth in way of smile,
Though Nestor swear the jest be laughable."

Let the next crusade the women undertake be against this Cassius of the home circle. Let the war be waged against all cynics and their everlasting croaking, growling, grumbling, snarling, fault-finding and abominable selfishness.

For Women.

[CONDUCTED BY MISS FAITH RIPLEY.

LOVE'S FLOWER.

Translated from the Russian of Khovansky.

[The infant poetical literature of Russia had its birth but yesterday. In due time it will ripen; and it will then be an interesting task to compare the mature charms of Sclavonic Song with these its earliest years.—Sir John Bowring, 1821.]

WHEN the calm and quiet gloaming
Lit the woodland's tangled bowers,
Through their leafy alleys roaming,
Gathered I Love's votive flowers;

And for one who sways my bosom
Twined a chapel in the grot:
But one sweet suggestive blossom,
Seeking still, I gathered not.

Wandering all that tranquil even
Through the forest's floral ways,
That wee bud, as blue as heaven,
Still escaped my anxious aze.

Disappointed, disenchanted,
Home I wandered through the night;
When, behold! the flower I wanted,
By the rill-side met my sight.

And I learned no more to question,
Weary though awhile my lot,
By that flow'ret's sweet suggestion—
It was Love's Forget-me-not!

[*Maurice Davies.*

THE CARRICK POLONAISE.

AT Fig. 6120 we give the Carrick Polonaise. The addition of the Carrick cape (from which the garment receives its name lightens the stylish effect of the polonaise.

6120

It can be made of any kind of dress goods and trimmed with galloon, folds, or braids. The model here shown is of camel's hair, trimmed with bone buttons and machine-stitching. Price of pattern thirty-five cents. When ordering, please give bust measure.

SOME PICTURE NOTES.

MRS. J. E. S.

To remove photographs from their cards; immerse in warm water, letting them soak until they can be removed freely. Clean warm water does not injure the picture in the least. After being removed, place the photograph upon a sheet of clean paper, and sponge off the surplus water carefully, with a soft linen cloth, from the face side of the photograph. Use linen because it leaves no lint.

As a number of readers of the RURAL seem to have difficulty in obtaining the Flow (a flowing varnish) used in Opaline Painting, I would say it can be obtained of BONTA & CURTISS, Photographers, of Syracuse, N. Y., at fifty cents per bottle, if not of any photographer.

SHALL WE DANCE?

MRS. POTIPHAR.

YES, and why not? But my dear Madam do you not know that there is in progress a crusade against dancing, headed by no less a personage than Mrs. GENERAL SHERMAN and that a famous book has been published in the interests of the crusade entitled "The Dance of Death," and knowing all this, do you advocate dancing?

As for your book, if report speaks truly, I should hesitate before reading so immoral a production, and if by any chance I should read it, I'd be exceedingly shy about making a confession of having done so. I have too much respect for my purity of mind to sit down to such a feast of nastiness. In my opinion a publisher who would issue a work so full of low suggestions and indelicate allusions should be indicted. And Mrs. SHERMAN'S indorsement of the reform doesn't incline me favorably toward it. Far be it from me to go out of my way to disparage a woman, but this one (Mrs. SHERMAN) has been so persistently thrust to the front during this dancing controversy, that I very naturally fell to wondering what manner of woman this was, the mere fact of whose championing a cause is urged as a reason why all should indorse it. I can gather nothing from her public acts that inspires me with any confidence in her judgment or her ability to be a leader among women. Quite the contrary. On two or three occasions she has conducted herself in a manner which reflected little credit on her courtesy or her good taste. Let me instance one. The lady it is understood, considers dancing as highly indecorous, not to say absolutely immoral, and yet whilst holding such extreme views, we find her attending a ball given at Washington in honor of PRINCE ALEXIS, where of course dancing was the most prominet feature of the occasion. But you say she was in a measure compelled by her position to be present. Granted, but does that excuse hold good for her allowing her daughter to attend so "immoral" an exhibition? This same daughter on being courteously invited to dance, rudely refused, assigning as a reason that her Church forbade her indulging in such pastimes.

About as consistent as for a man to hang around a bar-room for four or five hours, and to resent as insults all invitations to drink!

If gracefully gliding to the sound of sweet music is such a ghastly sin, why, oh! why, did the fair MINNIE countenance such naughty proceedings by her presence?

Again; what could possibly exceed the vulgarity of the display made on the occasion of Miss SHERMAN'S wedding?

6120

The mother who would not permit her daughter to dance in respectable society, was quite willing she should make an exhibition of herself in a metropolitan church on the LORD'S day, and be stared at and jostled by a rabble so lost to all sense of decency, that the very priests at the altar had to reprove them for their unseemly conduct. I prefer to weigh questions for myself, rather than blindly follow the leadership of one who has shown herself so conspicuously lacking in the cardinal attributes of a lady!

If dancing is abolished, what is proposed as a substitute? Conversation parties are usually lamentable failures. Cards are apt to suggest and to lead to the milder forms of gambling; and games——well, they are mostly of the osculatory class, and are hardly to be commended as conducive to pleasure or morality. Dancing is a healthful, graceful amusement, and while public balls are perhaps to be condemned, there can be no possible objections urged against dancing at private entertainments, unless it be on the score of late hours.

JOTTINGS FROM MY NOTE BOOK.

CLINTON.

I DO not often read an article which gives me more satisfaction, or which so clearly expresses my sentiments on the subject of which it treats, than does the one on page 329 of the RURAL of Nov. 17, 1877, headed "Two Girls." I would that every female in our land could be induced to read it, and to ponder its lessons well—and to profit by them. No greater mistake was ever made by the young ladies of our country than to suppose that any deformity of their persons that may, for the time, be required by the mandates of foolish fashion, can, by any possibility, render them more agreeable or attractive to the eye or sense of those of the opposite sex whose opinions are of the least appreciable value.

It is most emphatically true, as the writer of the article puts it, that "no man worthy of the name, ever loved or honored a woman because either her waist or her feet were small." Silly, senseless dandies, and artful, designing flatterers will of course *pretend* to be captivated by them, but I would that our females had more sense than to allow the pretended admiration of the classes to which I refer, to govern their action in this or any other matter. I speak with much positiveness when I assert that that form, and those features which the Almighty Creator, in His infinite wisdom designed for woman—His "last, best gift to man," as being best adapted to her position, in rendering her not only most attractive to man, but being best adapted to her use in the proper performance of her varied duties in life—when, I say, this perfect form is, in obedience to the mandates of foolish and tyrannical fashion, distorted and deformed, her natural beauties despoiled, and her bodily health seriously imperiled, if not destroyed for life—then, indeed, a grievous wrong is perpetrated, not only to the individual herself, but to that society which it was intended that she should benefit and adorn.

It is true that any natural defect in the features or form which is noticeable as being a marked deviation from the general rule, may, in some cases, be improved, and perhaps happily corrected. This is surely permissible. Not so any attempt to *deform* that perfect form with which the Creator saw fit to endow the last and most lovely of the works of His creation.

Dec. 3, 1877.

A PRETTY TRIFLE FOR THE TOILET.

LORETTA E. K. TURNER.

TAKE three pieces of Bristol board each nine inches square, and one piece of gilt paper the same size. Pink them around the edges, and make up into cornucopias, using the gilt paper to line one of the white ones. For another one, crochet some zephyr, as a cover for it as near the color of the gilt paper as possible, and use it as a hair-pin receiver.

For the other, use gold-colored silk and make a tiny pincushion, which will just fit in the top of it. Join the backs of them all together and fasten with cords and balls between each of them. The balls for all such toilet articles may be made by splitting common or double zephyr, and winding it over the finger until there is enough for a ball. Then take a needle and stout thread, tie the two ends of the thread together pass the threads around the zephyr after you slip it from your finger, and slip the needle between the threads at the knot. Draw up as tightly as you can and sew through the ball once or twice. Sew the cord fast, and with a pair of sharp scissors, cut the zephyr where it is joined together, and trim into proper shape. The ball looks much more fuzzy when the zephyr is split. This is a much quicker way than to make over paste-board, but unless one is quite skillful the pasteboard is better. Pasteboard balls are made by cutting two rounds of pasteboard, the size you desire the balls, and cutting out the center of them. Place them together and sew them through and through passing the zephyr around the pasteboard until they are filled. Then with a sharp knife cut the zephyr at the edge of the pasteboards; draw a strong thread between them and tie firmly. Pull out the pasteboard and trim. To finish up the triple cornucopia, ornament the fronts of them with embossed pictures. The same style of article is pretty made of black perforated card-board, embroidered around the edge with scarlet and hung with scarlet balls and cord. Very bright or light pictures are required with black foundation.

THE RIGHT TO A LIVING.

GERALDINE GERMANE.

THE writer of a prize article on "Training Girls to a Practical Knowledge of Some Profession or Trade," says, in italics, "A woman has no more God-given right to depend upon her husband for a living than he has to depend upon her for his." What of the women who spend all their time, health and strength in "tending the house, rearing the children," waiting on hired men and making butter and cheese for their "lords and masters?" If they ask for the smallest pittance from their united earnings, the husband "bristles up" and says, "Why, what do *you* want of money! Don't *I* provide everything you need?"

If those who, longing to enter into some other occupation than housework, with a faint hope down in the despairing hearts, that there *will* be *some* way in which they can work at something more congenial, broach the subject to their "lords," they receive the withering answer. "Madam, *I* can find plenty of work for *you*. *My* house is to be kept in order, *my* meals to be cooked, *my* clothes to be cared for, and *you* ought to be glad and contented to do it, instead of sighing for other employment. A woman's place is in the house, working for her husband and children." Or how can those who are "broken down" in the service of their "masters," engage in work of any kind, the more especially as the law denies them the right to the disposal of their earnings?

And, finally, how many women with families, especially farmers' wives, have time or strength to earn their own living outside of their domestic duties? And have not those who toil the hardest, suffer and endure the most, a "God-given right to a living?" or is it only a man-given right?

I wish "A. E. S.," or somebody posted on the subject, would inform me.

The Querist.

ANSWERS TO CORRESPONDENTS.

A. L. W.—Will the RURAL in its answers to questions tell me where I can get a cheap reliable barometer. Is the one advertised as being that used by the Government in the signal service a reasonably reliable instrument? And, is it really used as advertised.

ANS.—The barometer advertised as being used by the Government, is not, we are informed, so used. It is, however, a very fair cheap instrument. MCALLISTER, New York, will supply you with something trustworthy.

Mrs. F. M. B.—I would like to ask if the seed (Geranium) is always slow in germinating. Mine were all the time from the middle of March until June, coming up.

ANS.—This is just our experience. Some will germinate after lying in the ground a week—others not in three months.

S. D. Rathbun, Wrights Co., Ind.—I wish the RURAL would give a description of the European Larch and say whether it would be a good kind of tree to grow on the Western prairies.

ANS.—The accompanying sketch, which was published in the RURAL, several years ago, will give a better idea of the European Larch than a mere verbal description. This is a pendulous variety, though in other respects the same. It is one of the most valuable trees for timber and has been quite extensively planted on the Western prairies with entire success, so far as can now be judged.

J. A. Younge inquires how to fence his flats that overflow every spring. He can do it by making a board and post fence. I use boards 12 feet long, 6 inches broad; bats 3½ feet long 2x3. Nail them about 16 inches from ends of boards and hook them to posts by means of a hook in the post. If there are hard winds two hooks are better. This makes a good fence and is handy, for you can take off a pannel and pass through anywhere.—A. B. B., *Sus. Co., Pa.*

Old Subscriber.—In Women's Department of this issue (Jan. 26) you will find answers to your queries about photographs and opaline painting, under head of Some Picture Notes.

S. T., New Bedford, Mass.—In RURAL of Dec. 22, one of your correspondents, N. R. of Syracuse, N. Y., speaks of setting in black currant bushes. I am very partial to them and would like to learn through the RURAL where I can get a few good ones. I have never seen any advertised in any of the catalogues. Perhaps your correspondent or some other will inform me how to get some.

ANS.—You may send to any nurseryman and he will supply them.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, JAN. 21ST.

J. W.—E. M. S.—T. B. M.—Violet—J. L. N.—H. H.—J. B. O.—M. L. G.—S. R. M.—W. C. L. D.—May Maple—F. D. C.—B. P. M.—J. M.—R. G.—T. B. M.—"Grandfather"—A. C.—E. C. F.—T. H. H.—D. M. J.—Mrs. D. W. B.—W. C.—M. E. S.—T. T. L.—W. H. W.—K.—M. A. B.—Mrs. F. B. M., M.E.S.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

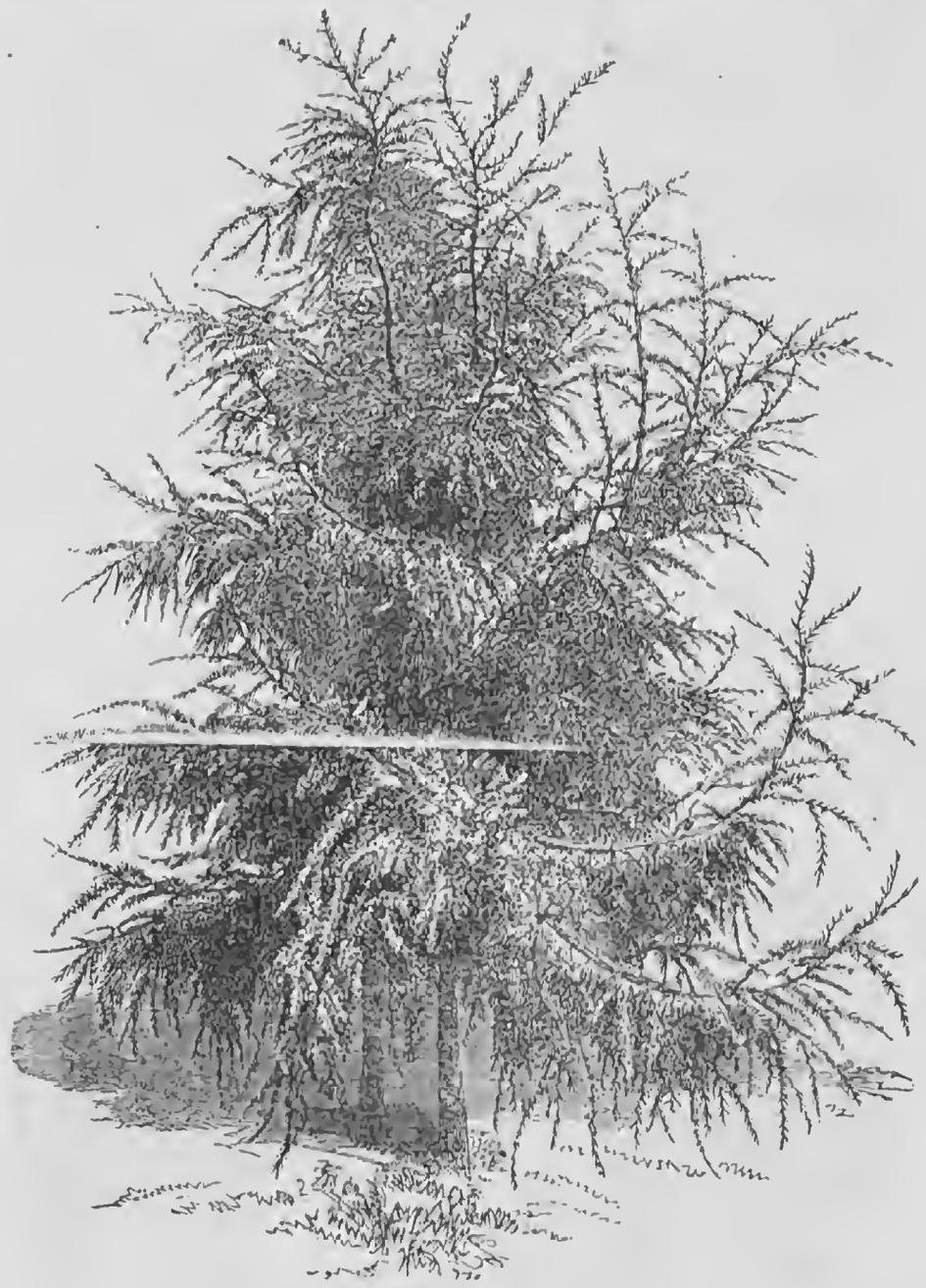
TUESDAY, Jan. 15.—Some of the "boss" shoemakers at Lynn, Mass., have yielded to the demand of their men on strike. The latter have been very orderly, and are hopeful of a favorable issue to the present dispute. Italians all over the country are holding meetings of condolence in honor of the late King of Italy.

French Consuls have been instructed to ascertain the sentiments of the people of Great Britain and Ireland in regard to the Eastern question. Widdin offers to capitulate, the garrison to be allowed to depart with their arms. The Servians have taken Vranja and Gen. Blimarkovich is marching on Prishtina. Server Pasha, Minister of Foreign Affairs, and Namyk Pasha are the envoys appointed to negotiate with the Grand Duke Nicholas. They have been invested with full powers to treat for peace. At least 20,000 fugitives from Roumelia arrive weekly in Constantinople, mostly in a destitute condition.

WEDNESDAY, Jan. 16.—Senator Voorhees made what opponents of the measure concede to have been a very able speech, in the Senate, yesterday, in advocacy of unlimited silver. Gen. McClellan was yesterday inaugurated Governor of New Jersey with such unusual pomp and ceremony that most folks think it a strong hint that an effort will be made to make him Democratic candidate for President at next election.

Erzeroum is an hospital and charnel-house; 100 soldiers die there daily, and two or three are frozen to death every night. The Turkish fleet has shelled Sebastopol and other Russian seaboard towns. The Grand Duke Nicholas has been invested with full powers to make peace. If England engages in the Eastern war, she fears that Germany will seize upon Holland and Belgium and thus secure a seaport in her immediate neighborhood on the Atlantic. Servia insists on making a separate peace, claiming independence, the cession of Old Servia and an indemnity.

THURSDAY, Jan. 17.—Two engines attached to a long train containing about 600 visitors to the Moody and Sanky exercises at Hartford, Conn., broke through a bridge over the Farmington River on the Connecticut Western Railroad, and



EUROPEAN LARCH.

the engines, together with the four cars, plunged into the frozen river. Loss, so far as known, sixteen lives, at least twenty seriously injured and many others, more or less severely. Cause, a culpable weakness of the bridge. Samuel Bowles, editor of the Springfield Republican, and one of the foremost journalists of America, died at his home in Springfield, Mass., at 11 o'clock last night.

Ismail Pasha has offered to surrender Erzoroum if permitted to retire with his troops. A more friendly feeling seems to be springing up between Russia and Great Britain, the former having assured the latter that she will not threaten her interests, and that Constantinople ought not to belong to any great Power; Russia's attitude towards Austria is also conciliatory.

FRIDAY, Jan., 18.—The working men and hoodlums of San Francisco have organized to exterminate the Chinese. The mayor has enrolled a number of special police while the entire military force in the city, has been placed under arms, and several arrests made of the ring-leaders among the conspirators. Ex-Gov. Bullock of Ga., has been acquitted, at Atlanta, of all the charges brought against him.

The Russian loss at Shipka Pass was 5,464 men. If armistice negotiations fail, Turkey will declare a sacred war, and hoist the flag of the Prophet. There is a report of a fierce battle near Philippopolis, between the forces of Suleiman Pasha and the Russians, the former repulsing his enemies, and continuing his retreat towards Adrianople. Since the capture of Shipka Pass, Russia's terms have become severer, and her attitude more independent of the wishes of other Powers. The British Parliament was opened yesterday. The Queen's speech, read by the Lord Chancellor, was of a peaceable nature, and declared England neutral but watchful. Supplies were asked for only on a peaceful basis. The remains of Victor Emmanuel were buried yesterday in the Pantheon at Rome with the greatest honors.

SATURDAY, Jan. 19.—A strong effort is being made to force Secretary of Interior, Schurz, out of office. Geo. Williamson has been nominated Collector of Customs at New Orleans, a place for which ex-Gov. Packard was pressed by Republicans. State Senator John Morrissey has been dangerously sick at Jacksonville, Fla., but is now reported out of danger.

Suleiman Pasha, having with him the Division he brought from Bulgaria, the garrisons of Sofia and other towns up to Nisch, and Chakir Pasha's army, on the 15th, partly burnt Philippolis, which was occupied by Skobeloff on the 16th, since which time nothing certain has been heard of Suleiman, and the Russians under Skobeloff, Gourkha, and others, are closing in from all sides on his line of march. It is said that the armistice conditions are too harsh to be accepted by the Turks. The Turkish envoys and the Grand Duke Nicholas have met.

SUNDAY, Jan. 20.—A strong effort is being made to secure the admission of Utah as a State into the Union. The House Committee of investigation into the Naval Department is of the "smelling order," as no charges have been made, and the members are merely "smelling" about, to find some patriility.

The Russian scouts are in sight of Adrianople, and the garrison, with arms and baggage, are retreating towards Constantinople. Suleiman Pasha has not been lately heard from, and it is feared he may be cut off by encircling Russians. The Porte has issued an Irade, ordering the enrollment of all males. The mortality among Turkish prisoners is awful. The Bulgarians massacred the Turkish peasants who remained behind in the villages within the region abandoned by the Ottoman forces. At Paris, the Geographical Society has given Henry M. Stanley a magnificent banquet, at which all the French celebrities were present, to do the intrepid explorer honor. Specie is flowing from England to this country, $1,000,000 having been shipped yesterday at Liverpool.

MONDAY, Jan. 21.—A vote on Senator Mathews' resolution, advocating the remonetization of silver is expected to be forced in the Senate to-day.

Mouktar Pasha has been appointed to command the army for the defence of Constantinople. Colossal exodus of refugees from Roumelia. Before quitting Adrianople the Turks burned their provisions, and blew up their ammunition. The Russian advance guard have entered the city. An insurrection in Thessaly and Macedonia is fostered by Greece, the latter having just ordered a portion of her army to the frontier. An armistice will probably be signed to-day—(Monday) at Adrianople, as a preliminary to negotiations for peace. The Turkish envoys are said to have full power to settle the terms of peace, despite the expressed wish of Great Britain and Austria to take part in the settlement. As these won't go to war to aid Turkey, she seems resolved to do the best she can independently, having already suffered severely by her reliance on promises or hopes of foreign aid.

HOME NEWS PARAGRAPHS.

Canada mutton is largely used in New York city.

The balance of trade in favor of this country for the last year is $120,000,000.

The wealth of Iowa, equally divided, would give $501,78 to every person in the State.

Horses are fast taking the place of oxen even in the roughest portions of New England.

Pennsylvania supplies one-fifth of the rye produced in this country, or 3,577,641 bushels out of 16,918,795.

The gold product of the Black Hills for 1877 is thus estimated; From quartz, $1,500,000; placer mining, $1,000,000; total, $2,500,000.

When a tramp arrives at Dallas, Texas, he is taken in charge and put to work on a farm which the city has bought for the purpose.

In 1877 there were 1,690 insolvents in Canada with $25,000,000 liabilities, being three millions less than in 1876, when 1,968 merchants failed.

According to the Governor's message, Kentucky owes only about $180,000, and ample provisions have been made to meet this debt on its becoming due.

Of the fifty millions of our population, the ten millions who are heads of families, are taxed less than ten cents a day for the support of the Federal Government.

As a rule the quality of the buckwheat raised in the Atlantic States is much better than last year. At the mills the price ranges from $2.50 to $3 per hundred pounds.

Last year a Chicago dealer failed, among his assets being $600 worth of ice. The marshal kept watch over the estate till it melted away, and then brought in a bill for $674 for doing so.

From trustworthy figures just compiled regarding the liquor traffic, it appears that there are nearly twice as many drinking saloons in New York as in any other State. The exact number is 23,934.

The entire mass of tobacco which is annually consumed in smoking, snuffing and in chewing on the earth is 4,000,000,000 pounds—manifestly too high an estimate for from 1,200,000,000 to 1,500,000,000 of inhabitants.

A correspondent of the Toronto Globe recommends licensing horse-shoers. He takes the ground that thousands of horses are ruined every year by improper shoeing, and that the only way to correct the evil is to license shoers,

Cranberry culture is worth more to Cape Cod than are the fishing and whaling interests, which have greatly declined in the last five years. Cranberries can be easily cultivated by using the proper means, where they are not indigenous.

The Hussey Hill gold speculators intend to make a search for the "Cave of Ninety-nine," which is supposed to be in the Shawangunk mountains. This cave was named after an old Indian chief and is said to contain an immense amount of treasure.

William Black, the celebrated novelist, says of Nebraska:—"The wooden houses were stuck down anyhow on the grassy plain; without any trace of the old-fashioned orchards, and walled gardens, and hedges, that bind as it were an English village together."

The culture of coffee in Southern California is becoming profitable. The plant grows as vigorously as in the coffee countries of South America, and yields a bean of a strong aromatic flavor. The central and southern portions of the State are the regions peculiarly favorable.

Mr. P. T. Barnum writes to a friend that he will undertake no new enterprises. He says he is now sixty-eight years of age, and is doing the work of ten men. He adds:—"I am setting my house in order, and shall be ready to pass in my checks whenever required."

Since the 1st of January last year until the 1st of January this year, there have been exported 102,148,504 pounds of fresh beef at a value of $10,063,302, and of 20,057 head of cattle at a value of $2,987,540, making a total value of beef exported amounting to $13,040,842.

Snook's boy heard him say the other day that there was money in hens, and he proceeded to investigate the old man's poultry-yard. He had gone through a dozen fine specimens when the old gent descended upon him, and the boy now wonders if there is a balm in Gilead.

A California paper says: James English is still at work on the Redwood tree he felled at Russian River Station some months ago. He has already made from it 250,000 shingles, 1,000 fence posts 6,000 stakes, lumber for dwelling house and outbuildings, and has lumber left for 300,000 more shingles. The tree was fourteen feet in diameter.

The expenses of Stanley's great African journeys, just concluded, have been about $115,000, borne equally by the New York Herald and London Telegraph. These expenses have been heavier than those of any previous African expedition, private or governmental, but the discoveries have been more important than those of any other.

Free labor is doing a good deal more for the South, already, than was ever accomplished in an equal time by slave labor. In the eight years preceding the rebellion slave labor produced 28,797,841 bales of cotton; in eight years since the rebellion, from 1869 to 1877, free labor has produced 31,570,212 bales, showing an increase of 2,772,371 bales. During the same time there has been a large increase in the grain production of the South.

The annual reports of the Commissioners of Emigration shows there arrived at this port last year 54,536 alien passengers (or 17,729 less than during the previous year), and 42,685 persons who had previously been in the United States making the total arrivals during 1887, 97,221 persons. Germany furnished 17,753 aliens; Ireland, 8221; England, 6652; Sweden, 3710; Italy, 2832; Bohemia, 2325; Russia, 2391; Denmark, 1801; Norway, 1485; Scotland, 1400; Switzerland 1323, and France, 1121. The following table shows the decline in immigration at this port during the last few years: 1866, 233,418; 1867, 242,731; 1868, 213,686; 1869, 258,989; 1870, 222,179; 1871, 226,639; 1872, 294,581; 1873, 266,818; 1874, 140,040; 1875, 84,560; 1876, 71,265; 1877, 54,536.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC CO., Cincinnati, Ohio.

FOREIGN NOTES.

Wrecks on British coasts last year, 3,757.

There are 154 sects in England, six having been added during the last year.

Seventy-nine per cent. of the productive area of Ireland is in grass and forage.

Paris eats a thousand horses every month, and hippophagy is gaining ground in the large towns of France.

It is stated from Belgrade that Russia is paying the Servian Government a monthly subsidy of 1,000,000 roubles.

The amount of sugar annually consumed in Great Britain is 900,000 tons, being about sixty pounds for every one of the population.

The English feed for fattening sheep consists of cotton-seed and turnips. They claim that it will put on the most fat, is the safest feed, makes the best mutton at a less cost, and produces the best and strongest manure.

From 1870 to 1874 the Austrian Government realized nearly $35,000,000 from the public lotteries; the ticket-holders won $16,500,000. In Italy the net receipts of the Government lotteries in three years reached $40,500,000 while the sum won by the people was $20,000,000.

The number of emigrants who left the ports of Ireland during the quarter ending September 30th last amounted to 11,656—6,235 males and 5,424 females—being 1,158 more than during the corresponding quarter of 1877, but 4,379 under the average in the third quarter of the last ten years.

A terrible famine is now desolating the north of China and the Corea, and the inhabitants are dying by thousands. The famine is principally due to a host of grasshoppers which have ravaged the plantations for two hundred miles inland, and the plague has come to aggravate the existing horrors.

Canada is doing an immense business in shipping lobsters to England. Lately one ship from Halifax took $83,000 worth in cans for London, which represents something like 655 000 lobsters, and a few days before a shipment worth $72,000 was made. Frank Buckland is warning the Canadians against thus destroying a fishery that in future years will be even more valuable than now.

Last year there was expended for telegraphs in the countries of Europe, $15,400,000, at an average of thirty-two cents per message. In this expenditure Great Britain led the list, with nearly forty-three per cent. of the whole; France came next, with about twenty-two per cent.; no other country exceeded four per cent. The length of wires in Great Britain very slightly exceeds that of Germany, and is nearly a fourth more than France; in this particular, Switzerland takes the lead of the smaller European States.

M. Gartiaux has published some curious statistics on the dangers of traveling by land in France. He says that in the *diligence* days a man had one chance of being killed in 300,000 trips, and one chance of being injured in 30,000. On the railway between 1835 and 1855, there was one chance of being killed in 2,000,000 journeys, and one chance of being injured in 500,000. From 1855 to 1875, one chance of being killed in making 6,000,000 journeys, and one chance of being injured in 600,000. Now the chances of being killed are as one to 45,000,000, and of being injured one to 1,000,000. Consequently, a person traveling ten hours a day at the rate of forty miles an hour, would in the first period have had one chance of meeting destruction during 321 years; during the second period in 1,014 years; and between 1872 and 1875 in 7,439 years.

Asthma.—Thousands of the worst cases of Asthma have been relieved by using JONAS WHITCOMB'S REMEDY. In no case of purely asthmatic character has it failed to give relief.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Jan. 19, 1878.

BEANS AND PEAS.—Receipts of beans past week, 5,760 bbls.; Exports, 488 bbls. Medium beans have still no easy lots; round parcels can be had lower. Reasonably cheap potatoes and a mild winter spoils the local demand. In marrows there is some sort of a hitch in exporters, contracts and prices are lower with a diminished demand. Pea beans have declined, Choice White and Red Kidneys are firm under grades easy. Ordinary use will not consume the stock of Black (turtle soup) beans and prices are weak. Green peas are lower $1.30@1.35, but now held with some firmness; Southern H. E. peas are scarce and peddle out at the high figures $3.20 per two bushel bag. Canadian held in bulk and bond have declined to 83@83½c.; some extra in store held higher.

We quote:—Beans, medium choice, $1.75@1.80; other, $1 60@1.65; marrows, choice, $2.15@2.20; other, $1.95@2.05; pea, $1.75@2.00. White kidney, choice, $2.00@2.25; other, $2.10@2.25; red, choice, $2.00; extra, $2 50; other, $2.25@2.35. Turtle soup beans, $1.65. Lima, $3.00.

BEESWAX.—There is a light inquiry from shippers. Sales at 27@28c. for Western and Southern.

Exports past week, 3,950 lbs.

BROOM CORN.—There is very little inquiry.
Green brush at 5@7c.; green hurl, 6@7c.; medium green, 5@5½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Holders of fine butter have the market at their command, as most of the fine State dairies and lots are owned here, and the quantity will not exceed the remaining wants of winter. Our extremes are generally asked, and a class of trade is forced to support them in half-tubs and fine Welsh, or pay the high rates quoted for Western creamery. There is a noticeable improvement in the under grades of butter to this extent only: the really good tubs pickings from some heretofore quiet grades are 24@26c.; stock below that merit continues dull and uncertain. One of the local phases of butter here is peculiar—the times never seem to become hard enough to make the poorer part of the population accept very common stock, regardless of cheap rates. Trade in full dairies has been good, though not more than one or two entires go to buyers these days. It looks like a small business when the old war times are brought into comparison, when a buyer would jump in and take a dozen long lines. Western factory butter is dull, owing to medium quality as much as anything else. Shippers make some offers—generally 2@3c. under sellers' views. Extra fresh Western dairy would bring as much as as a good grade State. Our merchants begin to decline to make advances on any stock of a trashy character. Rolls have accumulated, and are lower. We notice that what ought to be a worn-out deception—putting of old in rolls—is still practiced. This method always makes bad butter worse, in the views of retailers.

We quote State fancy pails 28@30c.; other 25@30c.; creamery, good to choice, 25@31c.; half tubs, fine, 28 30c.; extra, 33@35c.; other, 22@27c.; Fall Welsh 27@29c.; Welsh tubs, dairy, 24@26c.; other, 20 24c.; full dairies, fine, 26@28c.; common, 20@24c.; firkins 20@26c.; poor State, 12@18c.; Western creamery, good to choice, 38@40c.; poor to good 25@32c.; Factory, choice, 18@20c.; good, 16@18c.; common, 7@11c.; rolls, 12@17c.; grease, 6½@7c.

Receipts for the week, 21,950 pkgs.
Exports past week, 15 pkgs.

CHEESE.—Exports for the week have been 21,332 boxes. The market has not changed through the week. Receipts have fallen off, and the impression prevails that the assortments back in the country are limited. Holders of some special factories practically keep them off the market, 13½c. having been refused; the more general prices for average fancy lots are 12½@13½c. Medium or good grades have most attention from shippers just at the moment.

Fancy factories, 13 13½c.; good and prime, 12½@12¾c.; fair lots, 11½@11¾c.; poor, 8@10c.; 7@10c., skimmed. Farm dairy, 12@12¾c. for good to prime; 10½@11c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 5@9c. for poor.

Receipts for the week, 21,079 boxes.
Liverpool cable, 61s. 6d. Hold closes 101¾.

COTTON.—There has been a very irregular and feverish market, closing weak.

Latest prices are for January, 11.20@11.20c.; February, 11.23@11.23c.; March, 11.38@11.38c.; April 11.52@11.53c.; May, 11.66@11.67c.; June, 11.79c.; July, 11.84@11.85; August, 11.91c.; September, 11.63@11.65c.; October, 11.46@11.45c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9¾	9¾
Strict ordinary	9¾	9¾	9¾	9¾
Good ordinary	10¾	10¾	10¾	10¾
Strict good do	10⅝	10⅝	10⅝	10⅝
Low middling	10 13-16	10 13-16	10 15-16	11 15-16
Strict low middling	11 1-16	11 1-16	11 3-16	11 3-16
Middling	11¾	11¾	11¾	11¾
Good middling	11⅝	11⅝	11⅝	11⅝
Strict good middling	11⅞	11⅞	12	12
Middling fair	12⅜	12⅜	12¼	12¾
Fair	12⅞	12⅞	13	13

Stained.

Good ordinary, 9⅝c.; Strict ordinary, 9¾c.; Low middling, 10¼c.; Middling, 10⅝c.

DRIED FRUITS.—Best sliced and quartered apples have a fair inquiry, and they are at strong prices. Peaches and small fruits generally are quiet.

Apples—State quarters, old, 6¼@6¾c., new, 6¾@6¾c.; Western quarters, old, 6@6¾c.; new 6@6¼c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 11@12c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 4@4¼c. Pitted cherries, 15@17c. Blackberries, 10@10c. Raspberries, 27c. Plums, 16c.

EGGS.—Receipts for the week, 7,157 barrels. Eggs show a marked decline, and the low rates annexed have been current most of the week; many dealers fear that bottom has not been touched in prices. The markets are full of cheap stuff, and the weather will not give eggs their special demand. Grocers are afraid to stock up heavily enough to make the low figures an advantage. Limed eggs are dull and decidedly lower.

Near points, 17@19c.; State and Pennsylvania, 16@—c.; Canadian 12@15c; Western, best, 15@16c.; ordinary 12@13c.; Southern, 10@12c.; Limed, State, 12@13c.; Canada, 12@13c.; Western, 10@12c.

FEATHERS.—Live white prime Western geese, 45@47c., mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $20.00@20.50; 60 pounds ave. $19.50@20; 80 pounds ave., $20@21; 100 pounds, $20.50@22; and rye at 19@20.

FLOUR.—Lower prices for wheat, and the expected early termination of the trouble abroad has exerted a pressure to sell, which has led to steadily declining prices. At the close there is rather more steadiness.

Latest prices are $4.25@5.00 for poor to fancy superfine State; $5.10@5.45 for common to fair extra do; $5.45@5.75 for good to choice do.; $4.25@5.00 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.00@5.45 for shipping extra do., the inside price for poor, and $5.45@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@7.25; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.25@7.10; round hoop Ohio at $5.25@5.55, and trade brands of do. at $5.75@7.10, the latter for choice; St. Louis, $5.50@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.00@8.25); Minnesota clear, $5.00@6.50; Minnesota "straight," common to fancy, at $6.00@7.65, and patent poor to very choice, $6.75@9.00, with a few fancy at $9.25@9.75; unsound stock at $2.50@6.25; city mill extra at $6 10@6.35 for fair to very choice for West Indies; do. for England $5.25@5.35; do. trade and family extras, $6.65@7.75; do. South American, $6.60@7.50; No. 2 at $2.50@4.00.

Buckwheat Flour—Quoted at $2@2.60. Corn meal is selling at $3.00@3 for Western yellow and $3.20 for Brandywine.

FRESH FRUITS.—Exports apples past week, 2,900 bbls. The market is strong for prime apples, though few dealers will reap a benefit from the small supply.

We quote Baldwins, $4; Greenings, are firm at $3.75. We shall soon have to draw more largely upon Russets. Selected sorts, $3.50@4; fancy small lots $4.50; fair to good, $2.50@3; common, $2@2.25. Cranberries, have a fair outside call and dealers think the supply will go out well, though city wants are light, the demand being chiefly from bakers. Fancy lds., $5.75@7.50; crate, choice, $2@2.25, good, $1.87; poor, $1@1.62. Grapes have only a special quotation 6@7c. for Catawba. Florida oranges, $3@3 50 box. Speculators are holding peanuts firmly, but there are other sellers at inside rates and the market is not quite so firm under a limited demand, handpicked, $1.60@1.65; $1.35@1.50 for Virginia. Hickory nuts selling better; Texas pecans, 8@10c.

FURS AND SKINS.—There has been little trade in ordinary manufactured goods this season, and that fact alone is a weakening one for the raw stock. Few lots of the latter arrive, with the present unattractive prices, and it is unlikely that European rates will give much stimulation.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₩ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and yigs	1 00@ 2 00	1 00@ 2 00
Florida deer skins	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 90	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₩ ₩	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 5
Skunk, black		40@ 45
striped		5@ 20
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

GRAIN.—The impression that the war on the other side is not likely to continue long, and the depressed condition of the general markets there for breadstuffs generally, have led to free offerings, through which a sharp decline in prices has occurred. At the close, the feeling seems to be that bottom has been touched, and prices are steadier and a more vigorous speculative demand.

Latest sales are of No. 2 red at $1 41@— ungraded red and amber State, $1 10@1 37; white, $1 41; No 1 Northwest spring, $1 32; No. 3 Chicago, $1 26½; No. 2 red for January at $1 26; No. 2 Milwaukee spring, $1 34. Rye is a trifle steadier; sales of Western at 71@7 c.; State at 72@77c. Barley, 38c for No. 1 Canada; 36@36c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 53½@55½c.; steamer mixed, February, 53@55½c. Oats of New York extra white, at 41½c.; do. No. 1, February, 37c.; No. 2 white, 36@36½c.; mixed Western, 37@38½c.; white Western, 33@39½c.

HAY AND STRAW.—Supplies are fair, but demand has quickened, and prices are firm.

Bale hay, 65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 40@45c. for short rye, and 40@45c. for oat.

Exports last week, 100 bales; since Jan. 1, 2,475.

HIGHWINES are lower—$1.09.

HONEY.—Almost too dull to quote. White clover, 2-comb boxes, has sold down to 11c.

HOPS.—Exports for the week have been 2,358 bales. Prices remain unchanged, notwithstanding the stronger country advices.

State choice to fancy, 11@13c.; good to prime, 9@10c.; do., low and fair, 5@7c.; Eastern, new, 8@12c.; Wisconsin, do. 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 21@22c. for light, 22@23c. for middle, 22@23c. for heavy, 20@21c. for good damaged.

OIL-CAKE.—Western is lower at $32 ₩ ton.

POULTRY AND GAME.—Live poultry is low; a good deal of trade is stopped by the enforcement of the law upon Jewish buyers, which prevents them from keeping stock on their premises. The market for live can hardly recover while dressed is selling in most cases quite as cheap.

N. J. chickens, 7@10c.; fowls, 10@11c.; Turkeys, 9@10c.; Toms, 7@8c.; Ducks, N. J., pair, 60@$1; Geese, N. J., $1.50@1.62; Western, $1.10@1.25.

Perhaps the hardest market that dressed poultry ever suffered has occurred during the past season. Dealers count upon at least two good days in winter after January sets in; but the light demand thus far leaves a surplus that prevents prices from improving. "Cheaper than meat" fails to rally the large army of consumers, and fine-grained turkeys and bright, fresh chickens are passed by, from day to day, regardless of the remarkably low quotations. Should the weather again become soft, some more large losses will be added to a season already rough enough.

Fancy Phila. and N. J. turkeys, 11@13c.; good, 8@10c.; large or Toms, 6@7c; chickens, choice, 11c.; good, 9@11c.; common, 6@8c.; ducks, choice, 12@13c.; other, 9@11c.; geese, fancy, 10c.; other, 6@9c.

Game has only a chance trade—some days high and then reversed. At the moment supplies are light and prices are firm. No sale for partridges after Feb. 1st. Present prices are better than they were early in the week. Wild pigeons are in stock.

Hares and rabbits, pair, 30@40c. Canvas-back ducks, $1.00@1.25; Red-heads, 75c.; Mallard, 65@75c.; Teal, 50@40c.; Quail, prime, $1.50@1.75; soft, $1.00@1.25. Partridges, pair, 40c.@$1.00. Grouse, 80c.@$1.12.

PROVISIONS.—Hog products generally stronger and active. Mess pork $12.25@13.50 for spot lots $12.20 for January, $12 50 for February and $12.45 for March. Bacon at 6¾@—c. for long clear and 6¾c. for short clear. Lard—Western steam at 7-85c. for spot, 7-85c. for January, 7-87½c. for February, 7.95c. for March. Tallow, 7¾c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $13@13.50; plain, $11@12.50; new packet, $14.50; family mess, $16@17; extra India mess, $27@28.00 for city brands; do. Philadelphia, $23 50@24.

SALT.—Ashton's at $2.50; Higgins', $2.50 and other sack lots at $1,10@1.15.

SEED.—Grass are lower; clover 8¼@8¾c. for prime, timothy, $1.37½@1.42½. Rough flax, $1.55.

TOBACCO.—Export movement fair, and prices generally are strong.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	4 @ 4½
Good lugs	4 @ 4½	5 @ 5½
Low leaf	5 @ 6¼	6½@ 7½
Medium leaf	7 @ 8	8 @ 9
Good leaf	9 @10	10 @10½
Fine leaf	10½@12	11 @12½
Selections	—@—	13 @15

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @25
medium	12½@14
selections	27 @35
seconds	8½@11
Fillers	5 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	12½@22½
wrappers	20 @50
New York assorted lots, common to medium	7 @ 8
Good	10 @12
Ohio assorted lots	8½@12
Wisconsin assorted lots	6½@ 9

VEGETABLES.—Protracted dull trade has weakened the potato market and much of the later trade is at inside rates. Some dealers look for a decline before stock is diminished to expected price-supporting firmness. Few Easterns coming. Onions are steady for choice; some poor stock is being pushed on the market. Cabbages are higher and squash show a large advance.

We quote Peach Blows, $1.75@2, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1 25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2.50@4.50; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1.

WOOL.—The market displays more activity, and prices generally are firm.

Ohio, Pennsylvania and Virginia—XXX and picklock, 48@52c.; XX, 41@46c.; X, 42@43c.; No. 1, 35@46c.; No. 2, 33@40c.; common, 35@37c.; combing, 5@38c.

New York, Michigan, Indiana and Wisconsin—XX, 38@42c.; X, 37@41c.; No. 1, 42@45c.; No. 2, 35@38; common, 31@36c.; combing, 50@56c.

Iowa, Vermont and Illinois—X and XX, 36@40c.; No. 1, 38@42c.; No. 2, 36c.; combing, 48@52c.

LIVE STOCK MARKETS.

NEW YORK, Jan. 21, 1878.

BEEVES.—Receipts for the week, 8,958 head; do. last week, 9,920 do. The droves this week were not so entirely from one section; even Cherokee and Colorado stock were included in the offering. Prices have fallen off a shade since our last; trade has been sluggish, and the lighter supplies came near proving oppressive. Very fine quality has not been largely included in the receipts, but the few extras at the close did not exceed 11c.; from that grade down to prime the range went to 10¾c.; really good, selected stock was thought to be well sold at 10c.; good cattle in wholesale lots, 9@9¾c., the lower price for Colorado and Cherokee; under-grade stock, 8@8¾c. About 500 heifers were held for export from Saturday's receipts. Bulls quoted at $3.70 ₩ 100, live weight; rough oxen, 7¾c.

COWS AND CALVES.—Choice milkers are scarce and high; $75@90 for first-class; a good grade can be quoted $60@65. When cows are below good quality it is difficult to sell them at any price.

VEAL CALVES.—The market is dull and somewhat perplexed by the appearance of "bobs." These are quoted at $2.00@2.25 per head. Two to four-weeks' growth, 5@6c. ₩ lb.; fair stock, 5½@7½c.; prime to choice, 8@8½c. Hog-dressed veal, at West Washington Market, 8½@10½c. Grass calves not wanted; slow at 2½@3½c. ₩ lb.

SHEEP AND LAMBS.—Receipts for the week, 19,601 head; last week, 27,163 do. Colorado sheep are altogether too poor for our market. Ordinary to choice sheep quoted at 4¼@4¾c. A few car-loads of extra sheep held for 5¼@6c. Choice Canadian lambs sold at 7¾c.; other, 5¾@7c.; do. ewes, 5¼c. Market closed dull.

SWINE.—Receipts for the week, 37,813 head; do. last week, 41,420. Market rather steadier than it has been during the week; an improvement in city-dressed helped the tone. Quoted at 4¾@4¾c. ₩ lb.; a few pigs, 4¾c. Country-dressed pork, 5@6c. for heavy to light.

INDEX TO NEW ADVERTISEMENTS.

Agricultural Insurance Co.
Allen & Co., R. H.—Farm Implements and Seeds.
Ayer & Son—Manual for Advertisers.
Benson, Burpee & Co.—Illustrated Catalogue of Seeds and Blooded Live Stock.
Brown & Sons, John I.—Brown's Bronchial Troches.
Bunnell, C. S.—Young Jersey Bull for Sale.
Carson, Wm. H.—Garden and Farm Seeds.
Cortland Wagon M'f'g Co.—The Cortland Platform Wagon.
Goodspeed & Co., H. S.—Prof. Schem's History of the War in the East.
Jayne & Son, Dr. D.—Dr. Jayne's Hair Tonic.
Jones of Binghamton—Five-Ton Wagon Scales.
Jesselyn, Geo. E.—High-Class Poultry.
Millers Falls Co.—New Lester Saw.
Millar & Son, Charles—Cheese and Butter-making Apparatus.
Post, C. C.—Galvanized Metallic Sap Spouts and Bucket Hangers.
Quinchie & Kreuler—First-class Watches.
Ruiker & Sons, August—Flower, Field and Garden Seeds.
Sandwich Manuf'g Co.—Adams' Patent Self-Feeding Power Corn Sheller.
Shehlon, John—Genesee Valley Farms for Sale.
Starr, N.—Iron and Steel Reversible Harrow.
U. S. Auger Co.—Foot-foot Well Auger.
Vick, James—Illustrated Priced Catalogue.
Wells, Richardson & Co.—Leamon's Aniline Dyes—Leamon's Black Dye.
Wells, Richardson & Co.—Perfected Butter Color.

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New Advertisements.

FARM IMPLEMENTS & SEEDS.
Call on or write to R. H. ALLEN & CO., New York, for whatever you want of the above.
Address 189 & 191 Water St.

SUGAR MAKER'S FRIEND
PRICE, $4.50 per hundred.
More Agents wanted to canvass for the sale of Post's Patent GALVANIZED METALLIC EUREKA SAP SPOUTS and BUCKET HANGERS. Samples, Circulars and Terms sent post-paid on receipt of 20c. C. C. POST, Manuf'r and Patentee, Burlington, Vt.
Call for these Spouts at your hardware stores

BUTTER. OUR PERFECTED BUTTER COLOR is far better than carrots, annatto or any other color, at one-fourth the cost, and no work to use. It gives a pure, handsome color and never turns red or rancid, but tends to improve and preserve the butter. Warranted to add 5 cents per pound to its selling value. Thousands of testimonials from the very best dairymen. Descriptive Circulars telling where and how to get it, free. Sold by druggists.
WELLS, RICHARDSON & CO., Burlington, Vt.

Lightning Rods Free
Are not as cheap as our Five-Ton Wagon Scales at $50. All iron and steel; brass beam. Delivered freight paid. *No pay till tested.* Send for Free Price List of all sizes of Scales.
JONES OF BINGHAMTON,
BINGHAMTON, N. Y.

DYE COLOR BLACK. your old clothes, or any article of silk, wool, cotton, feathers, etc., with Leamon's Aniline Dyes. Warranted the best and cheapest Dyes for all family and fancy dyeing. Sold by druggists, or any color sent by mail for 5c, except black. Almost any article of clothing after having been used until faded or dingy can be made as good as new by being colored black with Leamon's Black Dye. The expense is trifling. It is the easiest and surest Dye known, and always gives a rich, deep jet black. Give it one trial. Price 25c. Send for book and beautiful samples of colors, free. Wells, Richardson & Co., Proprietors, Burlington, Vt.

TO PRESERVE THE HAIR,
Stimulate its Growth, and render it soft and glossy, use Dr. Jayne's Hair Tonic. This unequaled dressing for the hair, being free from all deleterious substances, exerts a beneficial influence on the scalp, removes dandruff, and in most cases causes new hair to grow.

Reading for the Young.

DARLING'S QUESTION.

"WHERE does the Old Year go, mamma,
When it has passed away?
It was a good Old Year,
I wish that it could stay.
It gave us spring and summer,
The Winter and the fall;
It brought us baby sister,
And that was best of all.
Where does the Old Year go, mamma?
I cannot understand."
"My love, it goes to join the years
Safe folded in God's hand."

"From where will come the New Year,
When the good Old Year is dead?
Now all my birds and all my flowers
With the Old Year have fled,
I do not think that I shall love
This new New Year at all."
"Yes, dear, it too will bring the spring,
The summer and the fall."
"Where will it come from, mamma?
I do not understand."
"It comes from where all coming years
Are hidden in God's hand.

[*Scott Campbell.*

POOR KATE.

BARBARA SEMPLE.

A MORE plain-looking little girl could scarcely have been seen than the orphan niece of the niggardly Mrs. Scatterby. Her complexion was of that sort which never looks clean, her mouth was unusually large, and she had a great quantity of dry sandy-colored hair of so unmanagable a character that it would have required the daily care of a skillful hair-dresser to make it presentable. Kate was clumsy in person too, and her natural ungainliness was further increased by the oddity of her dress, which consisted of Mrs. Scatterby's cast-off gowns. These garments were altered to fit the little girl, it is true; but the fashion in which they had been originally made was retained, it being too great a trouble to alter them in that respect. Thus attired, Kate usually presented so ridiculous an appearance that it was no uncommon thing for her to be followed by a crowd of street boys who mocked her, and even at times threw stones at her. So timid was the little girl, that she had not even the spirit of the proverbial worm that is said to turn on its oppression. At home Kate was a domestic drudge. She was not pretty enough for the parlor, and not clever enough for anything but the commonest work, her aunt said. And indeed every one thought her stupid, because she was crushed in spirit and did not dare to call her soul her own, as the phrase is. Ah, well, what matter whether she dared call it her own or not, so long as it was her own?

Mrs. Scatterby occupied the second floor of a house, and the kitchen in which her despised niece spent many hours of the day overlooked a pretty garden. Here she frequently saw a delicate child carried in the arms of his father. When she opened the window she could hear the gentleman talking lovingly to his little boy. Occasionally he would put him down to look at the flowers. If the little fellow smiled, his father's face brightened; if he coughed or moaned, a look of tenderest pity overspread the face of the fond parent. Other children this gentleman had, and to all he was an affectionate father; but none seemed so dear to him as the little ailing boy. To watch this parent and child constituted the greatest pleasure and perhaps also the greatest pain of Kate's life. She had no remembrance of her parents, nor indeed of any one who had ever loved her. She had no recollection of ever having been kissed. Love was to her a mystery. All dusty and begrimed as she was, she looked down into the beautiful garden at the father and child till a great yearning for an affection she had never known made her cry as if her heart would break. Then at night, when the shutters were closed and the gas was lit, Kate would in imagination put herself in the the sick boy's place and fancy that she was encircled in the arms of a loving father. Oh, how willingly would she have borne any pain for such sweet solace as that.

Usually it was Katie's part to remain at home on Sunday morning and make the dinner for her aunt, who always kept up appearances by going to church. One Sunday morning, however, a slight indisposition rendered her unable or unwilling to observe her usual custom; so she decided to remain at home, and sent Kate instead. In her usual subdued cheerless manner the little girl dressed herself and proceeded to church; and oh! what an odd little creature she looked sitting alone in her aunt's otherwise empty pew.

"Like as a father pitieth his children, so the Lord pitieth them that fear Him," read the preacher.

A change has come over the queer child that sits alone. Her large and old-fashioned bonnet is pushed back, and her eyes, which are beautiful, are fixed intently on the preacher as she listens with awakening hope. Pity is precisely the aspect of love which she has learned to esteem the most divine, and it is hers, if the minister speaks true; and if the book out of which he reads deceive not.

Eagerly she attends to the sermon; for she is most anxious to know what it is to fear the Lord. Ah! now she understands. It is nothing more than the fear of every loving heart, the fear to offend. The ugly face becomes beautiful as it is irradiated first with intelligence, then successively with hope, faith, and love. Joy at length overpowers her. She weeps, she sobs. Then a hand is laid on her wrist and she is led gently out into the churchyard.

"What is the matter, my dear?" asks some one. The voice is pleasant and not unfamiliar. She looks up in the speaker's face, and, to her surprise, finds that she is addressed by the kind papa who walks in the garden with his sick boy. Regarding him not as a stranger, but as a friend, Kate frankly tells how the sight of him and his little boy awakened in her heart a great longing for love which is now satisfied.

"I have a Father who pities me. I used to make believe that I was your little sick boy, and that you were my papa; but I don't need to do that any more," she observes, with a look of heavenly joy.

LETTERS FROM BOYS AND GIRLS.

Another New Cousin.

DEAR RURAL COUSINS—If so a stranger may call you, I have been watching Editor, Grandmother, Cousins, and all, with considerable interest for some time, but "Slayerofconceit," in issue of July 21, brought me to the speaking or writing point. Now "Slayer," don't be frightened—I'll not harm you; but do let me exclaim, "in an oratorical voice," what a good-natured, quarrelsome company of Cousins you are! Hence my wish to join you: not to quarrel, however. For I'll promise to be good, if you will let me in.

Firstly, that naughty Editor goes for that dear old "Grandmother"—says she has switched off the track. Do you not see, she is a very good illustration of the mother she speaks of, who went to church and left the boys? Only "Grandmother," poor old lady, is fretting over all creation, in place of three little boys. Pray don't disturb her, she is improving.

And then comes "Slayerofconceit." How he does pitch into the women! Wonder if he speaks from experience? Oh, my! don't he write as though he had never inhabited anything but a lemon-rind all the days of his short, uneventful life? Speak back, little Cousins, and ADEL W—— in particular. Give him plenty of room, and he will soon complete the business of knocking the conceit out of himself, if out of no one else.

To MATTIE F.'s question, "Where is the command given in the Bible to 'Trim the garments with blue ribband?'" I answer, she will find it in Numbers 15: 38.

What a solemn letter "Solomon Sap" has written on that very solemn subject, "The Oyster!" —HATTIE A., *Chippewa Co., Wis.*

A Touching (?) Incident.

DEAR RURAL COUSINS:—I have just returned to my dear country home to spend my vacation, and with the permission of Mr. Editor, I would like to tell you of an incident that occurred a few days before I left school.

It was on Monday morning and all the largest girls were together in the drawing-room, when Mrs. W., the principal's wife, came in and said, "Girls, I am in a worry this morning. Mary, my washerwoman, is sick, and I know not whom to get to do my washing. All my other help have more than they can attend to, so they cannot do the washing." We all sympathized with her, and asked if such and such a person in the neighborhood could not be procured, when Laura Hawthorn, the loveliest and most advanced pupil in school, and one whom we all looked up to as our leader said, "Mrs. W. I will do your washing for you this week." For a moment there was silence in that room, when Mrs. W. broke it saying, "My dear Laura, you have always been a kind-hearted and intelligent girl, but you have never, no never, made such an impression on my mind and heart, as you have this morning. Since you have entered this institution you have won the esteem of both my family and your school-mates, but this morning by your kind and loving spirit you have taught me a lesson I never can forget." Then, turning to us girls she said, "Girls, this is a lesson for all." It is needless for me to say that the example was not thrown away.—COUSIN MAUD.

Ambitious to be a Dialect Writer.

MR. EDITOR:—With yure purmishun, I will step intu the "Kuzens' Curkle" a moment, to chat with the gurl labeled AMELIA. Du you suppoze the artikle heded "Old Bachelors" (that wuz red by the boys, and laffed at by the gurls,) iz tu be shuved around the curkle unansered? A shout like the rore uv the tempust ansers No! Thare iz, az yu say, wunce in a while an Old B. But it iz hiz own folt. He cood hav been a hen-pecked huzband, with teath nocked out, and his hare komed oph, &c. Thare ar sutch kases. So sez history. But it iz when thay married Old Mades, tho. If Old Bachelors wur invented befour Old Mades, I must say the latter is knot muteh improvment. I cood deskribe wun, but it might raze the ire uv sum uv the gentlur seeks. AMELIA'S Old B. must hav ben "pekulyor." But the trubble wuz, I gess he wuz only flurting, and left hur for sum uther gurl for a change. Hents the terrybul "ink sling" at Old Bachelors in genral. You ma think I am wun; but I am a good-nachured, blu-ide yooth uv nineteen awtums. But, gurls, giv the Old Bachelors fitts if you kan. I hoap yure efforts will be krowned with sucksess. And now, ladiz and gentlemen, I will bid you adoo.—YANKEE BILL.

An Experiment With Cat-Birds.

DEAR MR. EDITOR.—I have not written to the RURAL in so long a time that I hardly know what to write about; but am so anxious to write that I cannot wait longer.

Since my last letter I have been to school and enjoyed it. Am now having my vacation; I study just the same as if I were going to school. I must tell you about my brother's experiment.

My little bird, Nip, died, so WALLIE and BERTIE thought I would like some little Cat-birds. They took Nip's cage and put a nest of young Cat-birds in it, and allowed the mother bird to go into the cage and feed them till they were nearly ready to fly. Then they closed the door and hung them on the porch. Now the mother-bird feeds them through the wires, and we are very careful not to frighten them, and they seem quite contented and happy. If, after a time, they seem discontented, we shall let them go free. Their names are Muff, Puff and Ruff. Your friend,

Otisville, N. Y., Aug. 5, '77. LOTTIE KING.

Rocky Mountain Joe Once More.

DEAR COUSINS:—I think perhaps you will be somewhat surprised to see me back again, thinking I had fled for good; but not so. WILD FERN asks if boys sew with thimbles? I can, for one, and can also do housework and wash dishes as well as any of the girls. I would like to ask WILD FERN what she can do in the line of out-door work, or is she one of the kind of girls that dwell in the parlor, pounding on the piano, while mother is in the kitchen doing the work? I sincerely hope she is not.

One word to A. W. Have the "Murphys" been your way with their blue ribbons? I wear the blue ribbon, and do not drink, chew or smoke. How many of the readers of the RURAL can say the same? I hope all can. I would like to keep up a private correspondence with some of the Cousins.—ROCKY MOUNTAIN JOE.

Tries It Again.

DEAR RURAL COUSINS.—As the editor was so kind as to print my other letter, I thought I would try again. This is a fair, pretty morning and therefore I felt like writing. I agree with Cousin ALLIE about all of you writing oftener, for I like to hear from you all, and get more and more interested in our columns. I think the boys have a rather hard opinion of the girls (especially SLAYEROFCONCEIT, and SOLOMON SAP.) I think they had better look to themselves and not find fault with the girls all the time. I would like to hear from PRAIRIE JIM again. MOLLIE.

Barnesville, Ohio, 1877.

The Puzzler.

HIDDEN BIRDS.

1. WE have lost riches and gems.
2. Pigs wallow in the mire.
3. Do you wear black, Birdie dear?
4. I crave new cider.
5. In yonder wood cockatrice eggs were found.
6. You must go, Adolphe, as Antony is very ill.
7. It is part rid, George, and you hide the rest.
8. She is a fast snip, even in frolic.
9. He bought a game cock at Oolong, China.
10. Do you burn wood, Peckeredge?
11. Papa roqueted his billiard ball.
12. Chuscue Koover is an Austrian.
13. In her dress of blue, Birdie looked sweet.
14. See the thorn Billie got into his throat.
15. Do dogs go mad in winter?
16. You may go, Shaw. Kate has sent for you.
17. Sweet Pet relied upon me.

☞ Answer in two weeks. LITTLE ONE.

ENIGMA.

AN ear-splitting instrument, noisy and loud,
Tho tocsin of troops, the joy of a crowd;
An empty, a hollow, a profitless thing,
Ever storming and staring and blustering.

A scene at "My Lady's"—squeeze, clamor and heat;
A good deal to drink, and but little to eat;
For thus rules stern Fashion—her slaves must obey—
Keep awake all the night, lie in bed all the day.

A part of our system that oft is annoyed
By organs and bands, at street corners employed;
What with bagpipes and banjoes, by violins backed,
'Tis a wonder 'tis not very often quite cracked.

☞ Answer in two weeks. MD.

CHARADE.

As void of my first as the flower in the breeze
She looked as her fingers flew over the keys;
And she wore rings of pearl and carbuncle.
Could she do second than make e'en seraphs despair,
As whole she sang the sweet, heart-touching air,
"Now Tommy make room for your uncle?"

☞ Answer in two weeks. MAY.

BURIED ENGLISH CITIES.

1. SELL only on security; but even then beware.
2. May Roger send over Bob at half-past one with part of the ox for dinner?
3. Tell either Mary or Kate to get the hamper the boy left lately.

☞ Answer in two weeks. D. B.

PUZZLER ANSWERS.—Jan. 12.

ILLUSTRATED REBUS.—Strike while the iron's hot.

DOUBLE ACROSTIC.—Initials, Spring; finals, Season.

Sabbath Reading.

SMALL THINGS.

DESPISE not thou small things;
The soul that longs for wings
To soar to some great hight of sacrifice, too oft
Forgets the daily round,
Where little cares abound,
And shakes off little duties while she looks aloft.

God has sent some below
Who must their all forego,
And at His bidding give their loved, the best;
The lot of some, like thine,
Is small things to resign, [blest.
Yet, if thou giv'st that little, then thou too art

Thou tread'st a lonely way,
Be willing day by day
To give up little comforts at God's call;
That thou may'st ready be
To yield up cheerfully,
When he shall crave thy dearest and thine all'

[*Sunday at Home.*

CYNICISM.

THE Presbyterian is responsible for the following:—To this day the cheapest way in the world to get a reputation for great depth and strength of mind is to set up as a cynic. The method is easy. All that is necessary is to stand off and grumble. In every realm of thought and action we find a large class of people who make this their occupation; and even in the Church there is a prevalent way of looking at and talking about things which plainly deserves to be called cynical. The people who indulge in it (for their evident gusto shows it to be an indulgence) have a profound conviction that the world is "going to the bad"; that vice is rampant to an unparalleled degree; that "the chasm" between science and religion is wider than ever before, and that almost everybody is on the wrong side; the Church, especially in other denominations and foreign countries, is corrupt and renegade; that missions do not seem to do much good, and that total depravity has risen to the top in every one except themselves.

They look back and sigh for the good old times, or they look forward to some "golden year"; and, lost in reverie, forget the work which alone can transform the present into that higher future. The cynic exclaims, with Hamlet:

"The time is out of joint; O cursed spite!
That I was ever born to set it right,"

and then sit down to wait for some great opportunity, some revolution, in which he may become the savior of his country, or the reformer of his Church. The future may bring some such grand mission; for the present he will content himself with dignified growling.

Constant carping and disgust with the world react on the soul, and stiffen it into dead misanthropy. Contempt for humanity is fatal to that spirit of charity which implies and vivifies all good works. For this reason it is true that people who are always moaning or snarling about the dreadful state of things in the Church are the last ones to take part in any labor to make it better. Take, for example, those who are so very cynical on the subject of the Church's neglect of the poor; how many of them are willing to do mission work of any kind, or to welcome some ragged brother to their comfortable seat in the synagogue?

THE SALVATION OF SOCIETY.

As of every species, depends on the maintenance of an absolute opposition between the *regime* of the family and the *regime* of the State. To survive, every species of creature must fulfill two conflicting requirements. During a certain period each member must receive benefits in proportion to its incapacity. After that period, it must receive benefits in proportion to its capacity. Observe the bird fostering its young, or the mammal rearing its litter, and you see that imperfection and inability are rewarded; and that as ability increases, the aid given in food and warmth becomes less. Obviously this law, that the least worthy shall receive most, is essential as a law for the immature; the species would disappear in a generation did not parents conform to it. Now mark what is, contrariwise, the law for the mature. Here individuals gain rewards proportionate to their merits. The strong, the swift, the keen-sighted, the sagacious, profit by their respective superiorities—catch prey, or escape enemies, as the case may be. The less capable thrive less, and on the average of cases rear fewer offspring. The least capable disappear by failure to get prey, or from inability to escape. And by this process is maintained that average quality of the species which enables it to survive the struggle for existence with other species. There is thus, during mature life, an absolute reversal of the principle that ruled during immature life.—HERBERT SPENCER.

A LITTLE CHILD SHALL LEAD THEM.

THE Rev. Dr. Milnor was brought up a Quaker became a distinguished lawyer in Philadelphia, and was a member of Congress for three successive terms. Returning to his home on a visit during his last Congressional session, his little daughter rushed up to him exclaiming, "Papa, papa, do you know I can read?" "No," he said, "let me hear you." She opened her little Bible and read, "Thou shalt love the Lord thy God with all thy heart." It was an arrow in his own heart. It came to him as a solemn admonition, "out of the mouth of babes." God's Spirit moved within him. He was driven to his closet, and a friend calling upon him found he had been weeping over the "Dairyman's Daughter." Although forty years of age, he abandoned politics and law for the ministry of the gospel. For thirty years he was the beloved rector of St. George's church, in Philadelphia, the predecessor of the venerated Dr. Tyng.

PERSONAL ITEMS.

Bismarck says if Turkey is the sick man of Europe, England is the sick woman.

The wedding presents made to the Duke of Norfolk cannot be worth less than $5,000,000.

If Pope Pius IX. lives until next June, he will have reached, according to tradition, the years of the Pontificate of Peter in Antioch and Rome.

Darwin's father and grandfather were atheists. The grandfather had a seal engraven with the legend, "Omnia ex conchis"—everything comes from shell-fish.

Carlyle is a moderate eater, rarely exceeds two glasses of wine daily and smokes a clay pipe. He is eighty-three years old, and his tall form is but little bent when he walks.

Gen. John O'Neill, who led the Fenian incursions against Canada at Fort Erie, Ont., in 1866, and at St. Albans, Vt., in 1870, died in an hospital at Omaha, on the 8th inst.

Gen. Cushing is in his seventy-ninth year. He entered Congress in 1835, during Jackson's presidency, and is one of the very last survivors of the first-class men of those times.

Senator Beck of Kentucky is very large and has crisp, curly hair. He shows his Scotch derivation in temperament and expression. He is solid, square-cornered and emphatic.

Senator Rollins of New Hampshire looks dyspeptic, and probably is. Most of the New England Congressmen are inclined to stomach weakness from lack of care in their diet, and also because of their excessive mental activity.

The incomes of the leading surgeons in London are enormous. Sir Henry Thompson performs the operation of lithotomy ninety times a year, on an average. His fees range from $1,000 to $2,500, and amount to about $150,000 per annum.

Prince Iturbide of Mexico, the adopted son of the Emperor Maximilian has just sailed for England, to become a military student at Woolwich. He is a clever, intelligent young fellow of fifteen, and seems perfectly able to take care of himself.

Baron Rothschild rides to his business in the omnibuses, and recently presented to each of the drivers and conductors of one of the London lines a hare, a pheasant, and a bottle of wine in testimony of his appreciation of their courtesy and good conduct.

A Madrid special says Don Alfonso is to be married to Princess Marie Mercedes on the 23d, by Cardinal Wavarette. Ambassadors from England, Germany, France, Austria, Belgium, Denmark, Sweden and Norway will be present, but neither Italy, Portugal nor Russia will be represented.

Mercedes, future Queen of Spain, will be one of the most beautiful sovereigns in Europe. She is a very pretty young woman of the pure Spanish type, with very black eyes and hair, fine features, and a full figure. She receives from the Duke de Montpensier, her father, a dowry of $5,000,000, a great quantity of diamonds, and a magnificent trousseau.

The relative wealth and income of the three most opulent men living—the Duke of Westminster, Rothschild, and Mr. Mackey the Bonanza King—have been reduced to gures as follows:

	Duke of Westminster.	Rothschild.	Mackey.
Capital,	£16,000,000 00s.	£40,000,000	£55,000,000
Per year,	$80,000 00	2,000,000	2,750,000
Per month,	60,000 00	170,000	200,000
Per day,	2,000 00	5,000	7,000
Per hour,	90 00	200	300
Per minute,	1 10	4	5

SENATOR CONKLING, when at college, is said to have had manners so reserved that they provoked his fellow students to tease and torment him. He was then a tall, slender youth, and not strong, and feeling his inability to protect himself properly, he quietly procured a teacher in the art of self-defense, and soon became an expert boxer. After he had held a few emphatic interviews with divers aggressive students, they concluded it was the better part of valor to let him alone, and he finished his college course with no more molestation.

"Mark Twain," whose real name is Samuel L. Clemens, is a man of middle hight; solidly built, but not stout; his features are all of a clear massive modeling, and the prevailing expression seems to be resolute courage and determination. His upper lip is covered with a thick brown mustache, and the broad territory of his forehead is usually encroached upon by his brown curly hair. His eyes are small and keen, but are by no means lacking in kindliness and humor. In his whole bearing there is a frank cordiality which is very winning.

The new King of Italy, upon whose head the crown has fallen, is in his thirty-fourth year. He proved himself a good soldier in his early manhood. He has the reputation of being highly educated and naturally intelligent. Married to his cousin Margarita, who is now twenty-six years old, and one of the loveliest women in a land of beauty, he is moral and domestic. His patriotism has always been a marked characteristic, and his basis is what in a sovereign is called "determination," while in a subject it is known as "obstinacy."

Longfellow has five children. Onslow, the eldest, is married and a man of business in Boston; Ernest is a rising young printer studying abroad. Alice, the eldest of the girls, is a pleasing writer, unincumbered by matrimonial bonds; Edith is a golden-haired young lady of twenty-five, who has just united her life with that of the third son of the noted Richard H. Dana Jr., and Anna is another who leans to the pen of the authoress rather than to a penchant for conjugal felicities. The mother of the great poet's household died long ago.

PARTICULARLY

FOR THE LADIES!

THE RURAL NEW-YORKER, at the instance of Miss FAITH RIPLEY, conductor of the Department "For Women," offers, as one of the most valuable and acceptable Premiums of the season, a Steel-Plate Engraving, size 24x32.

The subject,

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portrays a pretty young girl, gracefully poised, and holding pressed against her side, a slate on which she is "doing sums." The contracted brow, puzzled expression and drawn corners of the mouth, express most comical dismay.

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EXPLANATIONS.

At church I sat within her pew—
O pew!
But there I heard
No pious word—
I saw alone her eyes of blue!

I saw her bow her head so gracious—
O gracious!
The choir sang,
The organ rang
And seemed to fill the building spacious.

I could not hear the gospel law—
O law!
My future bride
Was by my side;
I found all else a mighty bore.

And when pealed forth the organ's thunder—
O thunder!
I fixed my eyes
In mute surprise
On her whose beauty was a wonder.

To me that maiden was most dear—
O dear!
And she was mine—
Joy too divine
For human words to picture here!

Her love seemed like a prayer to bless me—
O bless me!
Before she came
My life was tame;
My rarest joy could not oppress me.

The service done, we sought the shore—
O shore!
And here we walked,
And sadly talked—
More sadly talked than e're before.

I thought she was a type of goodness—
O goodness!
But on that day
I heard her say
Plain words, whose very tone was rudeness.

We strayed beyond the tide-mill's dam—
O dam!
She jilted me,
And now I see
That woman's love is all a sham!—[*Hawkeye.*

SPARKS AND SPLINTERS.

A sweet thing in combs—honey.

A YANKEE belle remarks that "Boston girls are not so well educated as the boys, but they know more."

NEVER write letters to a widow. She always takes down the old box and compares yours with the other man's.

LET the whirligig of time spin and spin until it creates a hat box, and it cannot bring the hair trunk into fashion again.

IN Switzerland donkeys have bells on their necks. In this country it is not unusual to see them with belles on their arms.

HAWTHORNE says: "We live in dead men's houses." Perhaps we do; but isn't this preferable to dying in live men's houses?"

GUM camphor placed around the haunts of mice will drive them away; before going they sing in chorus: "O, gum, gum away."

FOND PARENT to a son.—"What's the capital of New Jersey?" Son.—"Hain't any. They've spent it all for quinine!" (Sensation.)

ELNORA—Both of your poems are wrong in metre, and we think that you will discover that two wrongs don't make one write—poetry.

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"Rude Words! Tell me a few, Mummy, and then I shall know, you know!"

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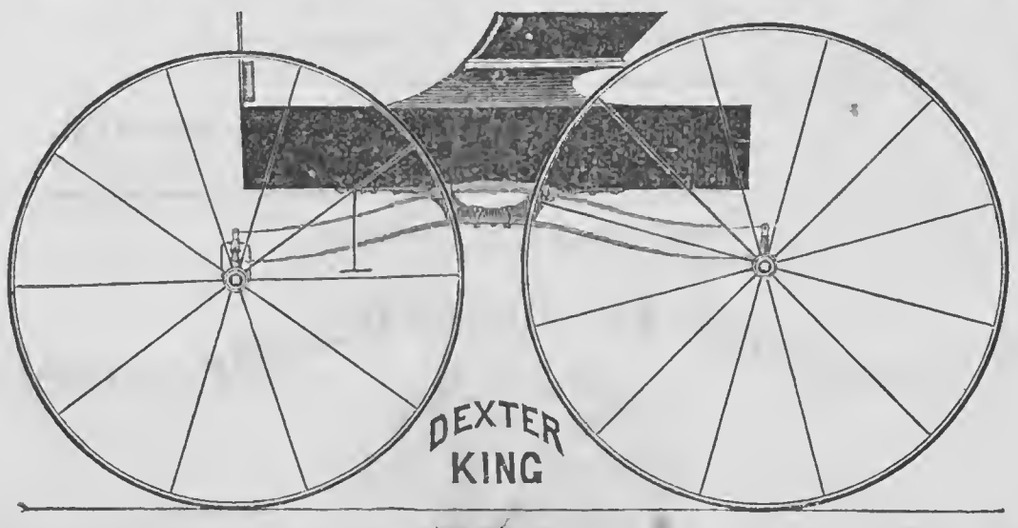

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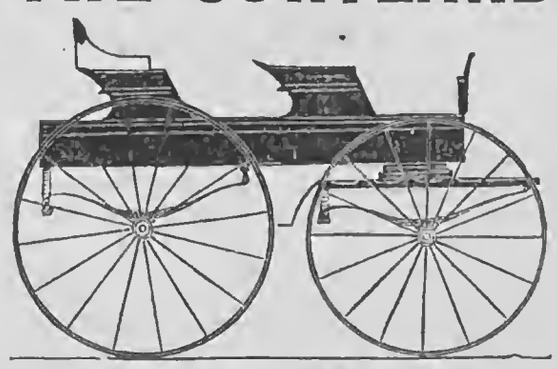

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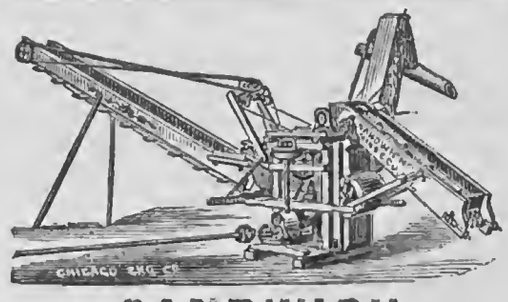

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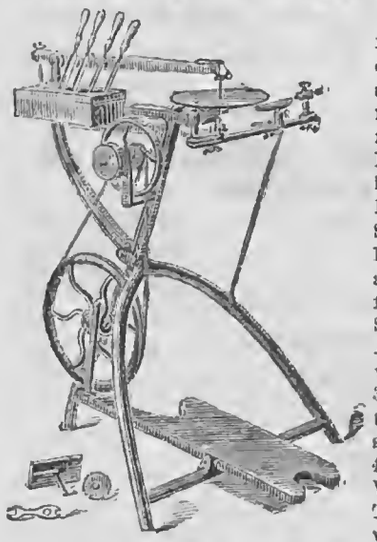

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 5.
WHOLE No. 1462.

NEW YORK CITY, FEB. 2, 1878.

PRICE SIX CENTS
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Floricultural.

FLOWER PICTURES.

Not only does the living substance of flowers, bright, variegated, and odoriferous, in the garden, the greenhouse, the window, or the bouquet, afford a refined pleasure to the taste and senses, but even their counterfeit presentment in paintings and engravings, possesses a peculiar attraction. Besides the satisfaction arising from a fine representation of an exquisite object, the pleasure produced by such pictures is probably due, in part, to an often unconscious sense that by this means, those floral charms proverbially almost as fleeting as the sweet strains of music, have been in a great measure perpetuated.

Frequent as are such sources of pleasure to-day, it is less than a couple of centuries since flowers were considered to be in themselves unworthy of the limner's subtle skill. The artists of Holland, influenced doubtless by the love of gardening universal in that country, were the first to paint these living jewels for their own sake, for their beauty of color and their natural graces.

In the art schools of Italy, France and Germany, it is true, flower-painting had previously been skillfully practiced, but almost exclusively as an agreeable adjunct to some other work, to which the flower-feature was quite subordinate. However graceful the grouping, free the penciling or harmonious the coloring of floral treasures, their introduction was always either as a foreground of a picture, an enrichment in colored decorations, or as a pleasing feature in ornamentation of the panels, walls, or ceilings of rooms.

Among Dutchmen, Jean van Huysum—who was born in 1682 and died in 1749—was the first to gain a European reputation for his treatment of floral compositions, and especially of roses, for which he cherished a warm partiality. Brought up among artistic decorations, his love of flowers was founded on a pure worship of Nature which he strictly copied in all his labors. Although previous flower painters in their decorative treatment, were in the habit of arranging their floral groups with artistic symmetry, van Huysum disdained such conventionalisms, and never tried to add a grace of his own to the profuse groups of gorgeous flowers which he was accustomed to depict just as they were gathered early in the morning, with the dewdrops still sparkling upon them. In our present illustration of one of the finest of his floral groups, the artist has not sought to trim, and balance, and guide, but to reproduce purely and simply, and free from all fanciful elegancies of mere art. Roses, Auriculas, Larkspurs, Carnations, Hyacinths, and Tulips, are blended gracefully together just as they were plucked, without any attempt at artistic composition. Insects, birds'-nests, and other objects associated with gardening, were also lovingly treated by the cunning pencil of this charming artist, and frequently introduced, as in the present instance, into his floral representations.

ROSES, POPPIES, CONVOLVULUSES, TROPÆOLUMS, Etc. — AFTER VAN HUYSUM.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

SCILLAS.

What can be more charming than the handsome, delicate little Scilla? They are the hardiest, prettiest, and brightest of any of the spring-flowering bulbs with which I am acquainted. I have grown nearly all the varieties of spring bulbs, and I would part with none with more regret than with the Scilla. They are all hardy on this coast. In the Northern States, I believe the variety known as S. Peruviana, will not succeed in the open ground; but with this exception, they are well adapted for open ground cultivation in the North and East.

The Scillas commence to throw up their spikes of bloom as soon as the frost has left the ground, many of them blooming before their leaves appear. Each bulb produces from three to five spikes, one after another, thus prolonging the flowering season for many weeks. The flowers are produced on spikes or racemes, of from six to twelve florets each. Their general hight is six inches, although in good soil I have had them grow ten inches. In color we have them in many shades of blue and pink, also in pure white; in all the shades, they are delicate and pleasing to the eye.

CULTURE.

In planting these bulbs, it will be found to give the greatest satisfaction where a dozen or more of each color are planted in clumps. The bulbs in nearly all the varieties are small; in shape they differ in the several varieties. Plant in October or November, in light, rich loam, setting the bulbs never more than two inches deep. To obtain a good display, set the bulbs one to two inches apart. With few exceptions, the leaves do not appear until the blossoms have withered: they should not be bruised or cut away or the future blooming of the bulb will be greatly injured, if not totally destroyed—at least such has been my experience.

VARIETIES.

Of the Scilla there are over fifty quite distinct varieties in existence.

S. Siberica is a perfect gem; it is also known as S. amœna; it grows six inches high, and is in color the richest, shining metallic blue. It is the earliest of the family to bloom, blooming with me in March.

S. Peruviana is very handsome. For house culture in pots, they are charming; they are in two colors; S. P. cœrulea, rich blue, and S. P. alba, snow-white.

S. campanulata has pretty flowers, in shape like Canterbury bells. Of S. campanulata we have 12 varieties:—S. campanulata, a deep, rich blue; S. c. alba, pure white; S. c. compacta, white, with very dwarf, compact spikes; S. c. carnea nova, a pretty, flesh-colored variety, with close spikes; S. c. corymbosa, pure white—flowers in a corymb-like spike; this variety has a very large bulb, over two inches in diameter; S. c. hyacinthoides in four colors—white, blue, rose, and crimson—is very pretty; S. c. major is a dark-blue flowered variety of good growth; S. c. minor is the lowest growing of the Scilla, sky-blue color. The S. campanulata blooms

in March, and keeps up a succession of bloom to the warm days of June.

S. bifolia is among the early flowering varieties, blue, with a purple tinge.

S. cernua we have in four colors—rose, crimson, deep-blue, and a lighter shade of blue.

S. Japonica is reported to be an extremely fine, new variety. I do not know it; does any of the RURAL readers? [We do not.—EDS.

El Dorado, Cal.

SEED EXCHANGE.

EDS. RURAL:—Wishing you a Happy New Year and much success to the old RURAL, of which I have been a reader for many years, I will permit you to make known the following offer, and agree to stand the consequences:

Having saved a quantity of a few choice strains of flower seeds, greatly in excess of my individual needs, I will be pleased to send a small package to any lover of flowers who may be a subscriber to the RURAL, provided he sends to me a post-paid addressed envelope.

Milan, Ohio. W. B. DIMON, JR.

Horticultural.

DISEASES OF APPLE TREES AND FRUIT.

PROF. THOMAS J. BURRILL.

THE outline given below of the diseases and injuries, to which the apple, in tree or fruit is more or less subject, may not be scientifically arranged, nor altogether correct, as it certainly is not fully comprehensive; but it will serve the purpose of convenience here sought, and will aid in an appreciation of the numerous ills that these orchard trees are heir to. Thanks to the vigor and hardiness of the fruit in spite of such a struggle for existence, we still gather, and may hope to gather, choicest sun-blushed treasures, and richest golden harvests. This formidable showing, luckily for us, does not augment the number of, or increase the danger from, diseases, though it may open our eyes to thus take in at a glance the hazardous gauntlet through which tree and fruit have to run.

If desirable in any way, it would be manifestly impossible, in such an article as this, to enter into detail upon all or upon any considerable number of the subjects here indicated. None are new. Each and all have in various places and divers ways been discussed. Causes have been assigned and remedies proposed, hence, it may be, the less need of treatment now. Indeed, an apology is here made, for venturing to the length of this paper without more of the sweet and peculiar flavor of the fresh and the original, yet, unless distinctly mentioned to the contrary, no statement is made at second-hand. Right or wrong as these statements may be, they are all founded upon personal observation and experiment, though no one can be more conscious than the writer of the necessity of very much further investigation.

OUTLINE OF CLASSIFICATION.

Diseases and injuries caused by

I—MAN—1. By improper planting and improper cultivation. 2. Injudicious pruning. 3. Ignorant selection and propagation. 4. Willful or irresponsible trickery and fraud.

II—HARMED ANIMALS.—1. Rabbits: gnawing the bark. 2. Rats and mice: gnawing the bark. 3. Stock, cattle, horses, &c., breaking and otherwise injuring the trees, tramping the soil, &c.

III—BIRDS,—4. Sapsuckers (Sphyrapicus varius): pecking rings of holes in bark of trunk and branches.

IV—INSECTS (*a*) ON ROOTS.—1. Apple-root plant-louse (Erisoma pyri): forming potato-like swellings upon, and finally causing decay of the roots. 2. White grubs (Lachnosterna fusca, &c.): cutting off small roots and gnawing the bark from larger ones. 3. Seventeen-year cicada or locust: sucking sap from roots and afterwards boring the twigs to deposit eggs. (*b*) ON TRUNK AND BRANCHES. 4. Flat-headed borer (Chrysobothris femorata): boring under bark, then deep into wood. 5. Round-headed borer (Saperda bivittata): boring from near the beginning in the wood, usually near or below surface of the earth. 6. Bark lice (Aspidiotus conchiformis and Harrisii): scale insects sucking sap. (*c*) ON LEAVES. Far too many to be enumerated here. The following are the more commonly injurious. 7. Canker-worms (Anisopterix vernata): often in great numbers and entirely defoliating the trees. 8. Tent caterpillars (Clisiocampa Americana): making webs in the trees and eating the foliage. 9. Fall web-worms (Hyphantria textor): same damage as preceding, but appearing later in the season. 10. Leaf-crumpler (Phycita nebulo): rolling balls of leaves which are tightly fastened to the twigs, feeding thereon and transforming therein. 11. Handmaid moth (Datana ministra): collecting in companies, but without webs, feeding on leaves. 12. Tarnished plant bug (Phytocoris linearis): piercing swelling buds and tender leaves (and probably fruit) causing peculiar black patches and death. 14. Plant lice (Aphidæ): leaf hoppers and mites: causing, by sucking or otherwise, a yellowish, sickly appearance of the leaves. (*d*) ON FRUIT. 15. Codling moth (Carpocapsa pomonella): "worms" in and around the core, causing many apples to fall prematurely and spoiling others. The scientific names here given are not all such as a punctilious entomologist would give but are those best known.

V—FUNGI.—1. White mildew (Erysiphe communis and a Phylactina): especially on seedlings, but often on twigs of older trees, causing leaves to drop or wither, and young stems to decay. 2. Leaf scab (Roestelia lacerata): causing blistered and discolored spots ultimately swollen or thickened, and slow death to leaves. 3. Black mold (Spilocæa pomi, &c.): forming dark cloudy patches on the skin of the fruit, very common; associated with other species on the leaves and twigs; possibly causing twig blight. 4. Fruit scab (Malanconei): burrowing beneath the epidermis of the fruit, and slowly enlarging the discolored scar, with distortions of growth. 5. Fruit rot (Penicillium and Mucor species): usually following bruising, breaking of the skin, as by the "scab," insects, &c. 6. Rotten root (Polyporei): a more or less felted whitish envelope causing disease and decay of roots, probably spreading from rotting wood. 7. Leaf blight (Sphæriacei): causing spots on leaves in which may be noticed minute conical black points, the leaves often prematurely dropping—different from the white mildew previously mentioned. 8. Bitter rot, probably.

VI—CLIMATIC INFLUENCES.— (*a*) 1. FROSTS. Winter-killing by hard freezing under certain conditions of growth, ripeness, &c., usually first affecting the heart wood. 2. "Sun scald." Freezing of cambium, especially of leaning trunks, after being started to grow by the heat of sun's rays. 3. Winter-killing of flower or leaf buds by intense cold. 4. Killing of flowers, &c., by late spring frosts. 5. Ice freezing on branches and breaking by weight or otherwise injuring buds, &c. (*b*) HEAT AND DROUGHT. 1. Exhaustion by over-evaporation. 2. Destruction of root fibers. 3. Prematurely checking growth. (*c*) WINDS. 1. Breaking tops. 2. Loosening roots. 3. With wet preventing fertilization of flowers. 4. Shaking off fruit. (*d*) RAIN AND CLOUDS. 1. Weakness from over-absorption and want of assimilation. 2. Tendency to fungus growth.

VII—SOIL AND SITUATION.—Too wet or too dry, too rich or too poor, too little or too much shelter, too flat and level, or too much inclined and bad exposure.

VIII — CONSTITUTIONAL PECULIARITIES. — 1. Not "hardy." 2. Want of root development. 3. Want of foliage development. 4. Want of flower development. 5. Want of fruit development. 6. Tendency to over-fruitfulness.

This list, long as it is, might, without doubt, be considerably extended; but, for the most part, such additions would be correlatives of those mentioned, as indeed it may be noticed, some of these are of each other. Leaving any omissions that may have been made, we turn to examine a few of the topics suggested.

An interesting inquiry, and one worthy of attention, is the injury man himself often does while meaning to benefit or improve. When results are not directly traceable to their cause, such well-intentioned but mistaken effort is much more liable to occur. Learned and conscientious physicians, not long since, drew blood from patients in the hope to cure, but really, in many cases, by so doing, helped to kill. Under the impression that the trees were "bark bound," men have ruthlessly slit the covering of the trunk from top to bottom, and seeing the cut gaping wide from the shrinkage of the tissues, the diagnosis is considered sustained and the savage treatment vindicated. Had they noticed that all such slits, even more markedly in the healthiest trees, were followed by the same results, and especially had they bethought themselves that this shrinking is a necessary consequence of the fundamental laws of structure and growth, the demonstration would not have appeared so satisfactory. It is, however, more surprising to see the process recommended in a recent publication by one who is supposed to know something of vegetable physiology. The fact is, cuts and wounds are serious things, and should be avoided except for well-considered reasons to the contrary. Selecting, in our first division, only the second topic, a few words are offered in regard to pruning, considered with reference to the healthfulness of the tree.

Shortening in the tops at the time of transplanting is generally beneficial for the purpose of reducing the leaf surface and thus preventing undue drying of the tissues before the roots are able to supply an abundance of water; but as leaf buds are mostly on the twigs of the last year's growth, uniformly shortening these is much better than cutting here and there large limbs. Aside from this, until trees become quite old, it is best to limit pruning to securing proper hight of head and proper shape, and this by attention to the young trees and small limbs. If much pruning must be done, see to it that it is before the buds expand, that wounds are not horizontal, and that large ones, if any, are painted or varnished. Beware of severe "summer pruning to induce fruitfulness," and put up with a little difficulty in gathering fruit rather than sever large limbs. Beware also, of root-pruning by spade or plow, and remember that the roots of thrifty apple trees, forty feet apart, soon occupy the whole ground. An enthusiastic advocate of root-pruning, as a preventive of the "fire blight" of pear, directed the operation in several orchards some years ago, giving such a shock to the trees that they have never recovered. Under some conditions the injury was not fatal, even good results may have followed; but the general effect was bad, only bad. It was fashionable at one time in Illinois to ridge land for apple trees by back-furrowing, planting the trees on the ridges. One such orchard, seven years planted, was leveled in the spring of 1876, and in so doing, many roots were broken by the plow. The injury was not severe enough to show itself much during the summer, yet a large number of these trees were injured by the sudden November freeze following, while others in the same orchard not so treated, escaped. Pruning tops or roots may be useful, and advantageous, but we shall be much better cultivators when we learn to practice it just as medicine should be taken—for a well-considered purpose and under competent direction.

II. A very little protection, as by sticks, cornstalks, or even dry weeds, keeps off rabbits as do grease or blood, but these favor rather than otherwise the attacks of rats and mice. The best protection in the orchard is tarred building paper, and this may be useful in other ways. Hundreds of trees, three to four inches in diameter, were killed in Illinois last winter by rats, which were very numerous in the fields. In the nursery, shoot, trap, or feed these animals. If well-killed off, and the stragglers fed with corn when the snow covers the ground, trees may be saved.

III. Shoot the sapsucker without mercy, but be sure you know the bird. Two other woodpeckers winter over with us and much resemble the enemy here spoken of, but these are friends, picking insects from crevices and cocoons with wondrous instinct. All these birds have a red-crested head and a black-and-white speckled body above, but the harmless ones are white beneath, the other yellowish. It, too, eats insects, but the orchardist will not profit by sparing it.

IV. We pass here the whole subject of insect depredations because they have been so often written up and for want of space, merely stating our conviction that orchardists should be thorough practical entomologists at least so far as their special insect friends and foes are concerned.

V. Here we have to acknowledge the opposite of the remark in the previous paragraph. No one has ever given us anything like a complete history of the fungus parasites affecting apples, neither do cultivators appreciate the real and often serious consequences of their injuries. Fungi are looked upon as the productions of peculiar states of the atmosphere; conditions of growth of the plant etc., while to the botanist a "mildew" is as much a distinct and specific plant as the apple-tree itself. Each is the product of a germ, each is subject to certain conditions and laws of growth, each lives, secures food in its own way, develops and dies. Among animals some crop the herbage and are content; but others, usually minute creatures, lice, intestinal worms etc., only exist by parasitism. So with plants, some use as food inorganic substances, while others are wholly dependent upon the living or dead bodies of other plants and animals. The whole class of fungi (mushrooms, toadstools, molds, mildews, smuts, etc.) belong to the latter category and some of them exist only upon living subjects. Some of these last can be as successfully sown and propagated artificially as wheat or corn, notably, for example, the mold (Oidium) upon growing peaches.

It is true, many of them become seriously destructive only under certain condition of the host or of the weather etc., but this argues nothing against the active cause of the resulting disease being the fungus parasites. But, however specific the action of these agents, we know little of specific remedies. The best of all preventatives are wise cultivation and management so as to secure vigorous growth and well-matured wood. Wheat rust — a fungus — is mainly avoided by early seeding; so seedling apple-trees may escape mildew if great care is taken to get them early and vigorously started. Besides this, plant in open, sunshiny ground, not as has been advised in half shady positions. No application of chemicals has yet been found practically useful. The disease here called Leaf Scab is not very common, I believe, on cultivated trees, but frequently occurs on the wild crab-apple. An orchard of several varieties was seriously injured by it in August 1877 in Southern Illinois. No remedy known.

Various forms of black molds or mildews prey upon apple trees and one, at least, affects the fruit, forming dark, cloudy patches upon the skin, which it does not penetrate. This upon the fruit does not appear injurious except in spoiling the appearance of the apples. Sometimes it shows itself in minute black spots clustered together, especially conspicuous on yellow surfaces. The same fungus spreads over the twigs and leaves, though not so often noticed in these situations. In all cases the cloudy patches are formed of closely-jointed, irregular, black threads variously woven together. It has been known under the name of Spilocæa pomi Fr., but doubtless is a form of some other species having more definite fruit. It is quite probable that strong solutions of potash would remove it, could these be applied to the growing apples. Smoke, especially of tobacco, is another probable antidote and by the use of some kind of a hood for the tree might become a practical remedy.

Twig Blight of the apple is almost certainly the same as "Fire Blight" of the pear and both of fungus origin. In both the blackening of the bark is preceded by myriads of moving corpuscles in the cambium resembling the products of Fungi and Lichens, known to botanists as spermatia, which have recently been proved to be germinating bodies. After the death of the twig similar germs are found in conceptacles like little pimples raising and finally rupturing the epidermis. Other much larger spores in similar conceptacles are also found a few days after the twig dies if the weather is damp. These have long since been classed in the genus Dipledia, but whether or not they have anything to do with the disease is still unknown. It is more probable that the black sooty mold which appears to survive the winter on the twigs and is known as an Antennaria is the destructive agent, under, in summer time, another guise. The life history of these molds is exceedingly intricate, but we may hope before long to fathom their mysteries and find remedies for them.

The scab on apples is certainly the work of a fungus, but it is fairly probable that its first introduction is due to the puncture of an insect. It may be that Aphididæ or lice do more damage in this way than in any other. At all events the scab when it first appears is a mere point which afterward enlarges from this point as a center. The threads of the fungus, quite dark in color, burrow under the healthy epidermis and soon give rise to a crop of once-divided spores, closely seated on the vegetating threads. As the parasite advances it dies behind, so that the surface of the flesh of the apple, devoid of its epidermis, is left exposed, the fungus existing in a ring which constantly increases in size. The exposed tissues afterward forms a thin corky coating which in some cases becomes much like an epidermis again. If this happens early enough in the season the part generally outgrows the remainder of the fruit and forms an obtuse hump or elevation having a somewhat different texture from the rest. If the corky covering is not sufficient, as is always the case when the fungus continues its growth until the fruit is gathered, common molds (Penicillium, Aspergillus and Mucor) gain an entrance and cause premature decay of the fruit. This is by no means the least of the injuries of the "scab." It is probable that this mischievous parasite lives in some form upon the tree, twigs or leaves.

The unbroken epidermis of the apple is an excellent safeguard against decay, being all but impervious to water and germs of fungi, without which germs rot, as we know it, would probably never occur. For this purpose it is sometimes wise to select such varieties, Ben Davis for example, as have a thick compact skin, however much this may be thought a fault for eating.

In some localities trees of all ages die and upon examining the roots, they are found covered with a papery, or even leathery, felted, fungus production often capable of being peeled off in flakes or sheets. This is the mycelium of a fungus which in this situation bears no fruit or spores, but which is quite certainly some kind of Polyporus so common upon decaying wood and forming hard, shell, or hoof-like excrescences on the surface while the active vegetating threads (mycelium) are busy in the work of destruction inside. It is probable that this spreads from decaying wood to the living roots and if so the remedy is plain. Apparently good results have followed digging a large hole when preparing for transplanting and making a fire in the hole before setting the tree, taking care not to fill in chips etc. Chip-dirt used as mulch may have bad effects.

The word "blight" is used for many diseases of plants, though the diseases themselves are

very distinct. Sometimes in midsummer, even while the tree is loaded with fruit, the leaves drop, leaving the branches almost naked. The pear is more subject to this malady than the apple, but the latter occasionally suffers severely. The cause cannot be definitely stated, but the spots on the leaves with the black papillæ therein, show the presence of minute fungi which may be responsible for it. I am not aware that the matter has been thoroughly investigated.

Bitter Rot is probably, but not positively, due to some similar parasite. Here again nothing has been proved. That certain varieties are more susceptible to it than others tells us nothing as to its cause in these.

The rest of the diseases and injuries named in the table must be dismissed with a word. The tarred paper heretofore recommended as protection to the trunks, is also useful in preventing "sun-scald." Mulching with straw etc. to retain frost in the ground, does not materially delay the swelling of the buds in spring, but trees on a northern slope are later than upon a southern one. Trees on relatively high ground often escape spring frosts which destroy the blossoms on lower lands. Mulching or frequent surface cultivation aids the tree to withstand drought or heat. Wind-breaks of quick growing trees, at least in prairie countries, are valuable upon the south and west sides of an orchard but not on the north. Sometimes evergreens distributed among the trees do good service. Select, if possible, land naturally very deeply drained, remembering that standing water will kill the tree, or so weaken its vitality as to render it a prey to the depredators indicated above. Proceed with caution in the selection of varieties, always preferring those that have been proved in the locality to any others, no matter what the agents say of their value elsewhere. Correct over-bearing by hand-picking soon after the fruit is set. Better one good, fair fruit than half-a-dozen half-developed ones. Thinning over-laden trees also gives them a chance to bear the following year.

SLITTING THE BARK OF HIDE-BOUND TREES.

T. T. LYON.

Nature has assuredly provided all needful means for the expansion of the outer covering of plants, as well as of animals. In the case of what are known as hide-bound trees, my inference, (or theory, if it is preferred to so designate it,) is that the difficulty is to be sought, not in the refractory character of the outer covering of the trunk, but rather in *demoralization* at the root—possibly in some disease, or parasitical robbing of those essential organs of nutrition; or, quite as likely, in some deficiency or incompatibility of the soil—it may be excess, or possibly even lack of moisture, or the presence of some unfriendly constituent.

In the absence of any clearly indicated cause for such disease, if disease it should be called, my first search would be at the root, for indications of disease there; and next, I would resort to the culture and amelioration of the soil, and the free use of suitable manures, if thought desirable, feeling assured that while "slitting" can by no means induce growth, in the absence of nutriment, the wonderful digestive apparatus with which every plant is provided will, beyond doubt, greedily assimilate all the food supplied by the root—providing its own means of "slitting the bark" whenever and wherever space may prove too narrow for its accommodation.

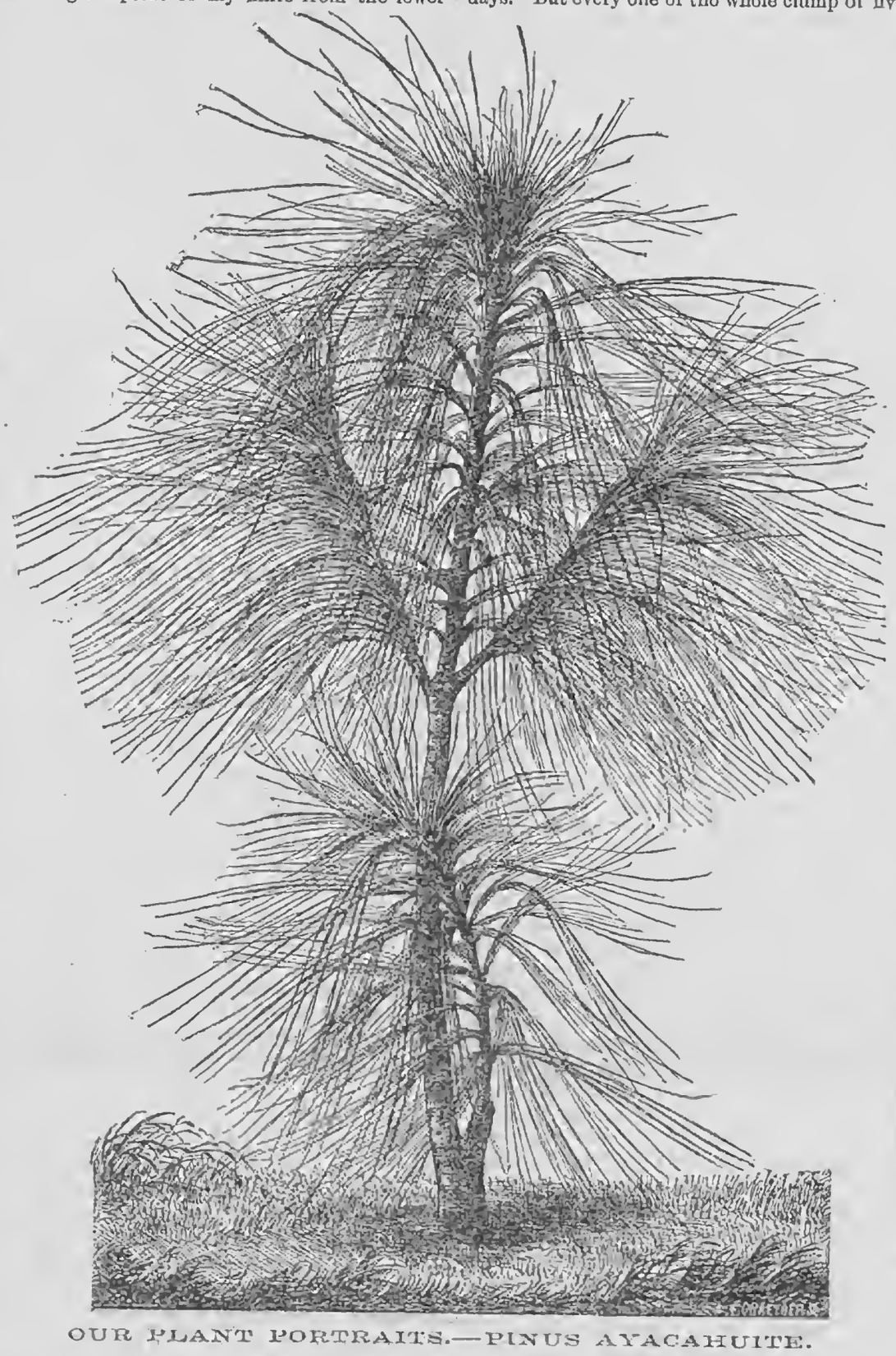
That this "slitting" process may and does result in the more rapid enlargement of the portion of the tree so operated upon, we are by no means disposed to question. But what is gained? The trunk will, if left to itself, appropriate its proper share of the nutriment supplied; while we gain nothing, but rather lose, by increasing its size at the expense of the other members. Slitting the bark is, with more propriety, resorted to, in the case of crooked growths, where a slit or two upon the inner curve will, by increased enlargement at such point, hasten nature's effort to supply the defect. The process should, however, be always employed with care and discretion. Especially is this the case with the stone fruits, such as Cherries, Plums, and Peaches; for the reason that, if the knife should run too deep, or be employed for this purpose at an improper stage of growth, there is danger of the exudation of gum from the wound, which, under the trying climates, and with the rich soils of the West, is very likely to result in the annual enlargement of the wound, and the premature death of the tree.

It is believed that one of the most fruitful causes of this condition of trees will be found in the wrenching or swaying of their trunks by the force of the wind, and the consequent breaking loose of the fibrous roots from the soil; thus cutting off the chief sources of nutrition, and leaving the plant in a semi-starved condition—a condition likely to be continued indefinitely on account of the liability to an occasional recurrence of the cause, operating to prevent the renewal of the connection. We hardly need say that the remedy for this difficulty should be sought in the careful staking of the trees; or, still better—may be prevented by branching very low—at or near the ground.

South Haven, Mich., Jan. 17, 1877.

ABOUT SLITTING "HIDE-BOUND" TREES.

It is more than thirty years since I tried slitting the bark of plum and cherry trees that were said to be "hide-bound." This was done by drawing the point of my knife from the lower



OUR PLANT PORTRAITS.—PINUS AYACAHUITE.

branches along the trunks down to the ground, cutting through the tough, stringy, outer bark a sixteenth of an inch deep, perhaps. As I cut, the bark opened and spread an eigth of an inch wide, and the opening followed my knife as though the bark had been too tight. Then I certainly thought I had done a good thing. My mother set me at the job and showed me how to do it. Afterwards, at her suggestion, I took interest enough in the trees to put some fine scrapings from the barn-yard around them, on a circle of five or six feet, and spaded it in. The trees grew for a few years but are dead and gone long since. Whether mother really thought at the time that the slitting was necessary for the trees or that it was something that a green boy with a jack-knife would probably like to do, is more than I can tell. About that time we were engrafting a good many seedling horse-plums about the house with larger sorts and the cions were very apt to out-grow the stocks, making the need of slitting more apparent. With such a boy and such a lot of trees on hand one might work them off together in that way. It couldn't do much hurt and it might be a good beginning for the boy in lack of more exact science. The children must be started in business if parents and teachers don't know so much. I remember the slits made ugly scars on the trees, that showed plainly enough in the bark when they were cut for firewood. Afterwards mother and I both gave up the practice—being led thereto, probably, by something we learned of the nature of tree growth in the rather meagre agricultural prints of the time. Now-a-days, I would no sooner cut the bark of a tree to let it grow than I would cut the skin of a "hide-bound" calf to let it grow. Vegetable assimilation and the economy of animal life will elaborate materials to swell and enlarge the bark or skin as fast as new layers of fat or sap-wood need more room. I have been tempted since then to slit the backs of Misses' waists that were pinched too tight, as such artificial integuments are not so likely to grow with the form. The white birch, we know, is always "hide-bound," as the thriftiest plums and cherry-trees are. There was a bunch of stunted birches near our garden at the time we began to grow market fruit. When horses or oxen were waiting for any cause they were hitched by the birch, so its roots often got a little manure. Directly it began growing, till now, after five years, it has become a very showy tree indeed, and gives a welcome shade on hot days. But every one of the whole clump of five birches is as "hide-bound" as it can be. This you may prove for yourself by sliting the bark of any birch ever so little after it has commenced growing in spring. J. B. Olcott.

My experience has been considerable in slitting the bark of hide-bound trees. I have never known it to do harm. With regard to young trees that have been neglected, or grown in poor soil, before cultivating and manuring them, I think slitting is a benefit. The back of such trees seems indurated, offering an obstruction to the free flow of sap. This constriction is relieved by slitting the bark on the trunk and larger branches. F. H. Hoskins.

Arboricultural.

PINUS AYACAHUITE.

The life-like engraving of this Pine, which we here present to the reader, is sketched from a specimen scarcely two feet in hight. We had supposed, before soliciting the experience of several of our best-informed writers upon such topics, that it would prove quite hardy, even north of New York. As will be seen, there is some conflict of opinion upon this point.

Mr. Josiah Hoopes writes us as follows:—"It is a Mexican species, attaining the hight of about 100 feet, and found on the mountains at an elevation of from 7,000 to 8,500 feet. In general appearance it resembles the P. excelsa, although, wherever it has been tested in this country, there has been no evidence of the disastrous blight that has destroyed the Bhotan Pine. It is closely related to our northern White Pine (P. strobus), but with longer, drooping leaves, and much larger cones and seeds. After several years' experience, I have no hesitancy in pronouncing it quite hardy in the Middle States."

Ellwanger & Barry say:—"Some twenty or more years ago, when we were collecting conifers from all quarters, we got from Europe the Pinus Ayacahuite, which is a Mexican Pine, something like our White Pine, but it was not hardy, and, with a host of others not suited to our climate, was abandoned."

Mr. J. R. Trumpy of the Kissena Nurseries, Flushing, N. Y., says:—"I have known this Pine for twenty-five years; it is very hardy here, although a Mexican species. It belongs to the Strobus section, or five-leaved Pines. Sometimes, however, you will find six leaves or more near and around the terminal buds. It may be propagated from seed, or by grafting on P. strobus or any other of the five-leaved Pines."

THE OSAGE ORANGE TREE.

This tree recently referred to in the Gardeners' Chronicle as being difficult to get a stock of in England, is among the cheapest articles in some of our nurseries. In Western nurseries it is grown for sale in immense quantities, as it also is by other Eastern nurserymen. The price varies according to the quantity and quality bought, from two to five dollars per thousand plants. It is our best hedge plant for the Western States, where it grows readily and rapidly, is particular neither as to soil nor situation, bears pruning with impunity, and makes a most unassailable fence.

I know nothing about its hardiness in England, but I should consider that it won't be more particular in Europe than it is in America. I lately saw a couple of big trees of it in the gardens of General H. W. Sargent, Fishkill Landing, N. Y. They were growing luxuriantly right up alongside of some Hickories, where anything else would starve. The ground around them was thickly strewn with their fallen fruits. These trees almost annually suffer a zero frost.

Sir Joseph Hooker, while on his recent visit to our country, was particularly interested in these Osage Oranges in Gen. Sargent's garden; and, if I remember rightly, remarked that they were the first fruits of the kind he had seen maturing in the open air. The General tells me Sir Joseph recounted to him the occasion of the Osage Orange tree having ripened fruit in one of the glass-houses at Kew, and a basketful of the oranges were sent to Queen Victoria. By mistake they were served as dessert on the royal table! A not very complimentary appreciation accompanied the acknowledgement of their receipt. W. F.

Pomological.

SOME NEW HARDY APPLES.

DR. T. H. HOSKINS.

In my article upon "Iron-Clad Apples," I spoke of a number of new and mostly unpropagated varieties recently discovered through the exertions of the Montreal Horticultural Society, to which my attention was drawn during my attendance at their exhibition last fall.

These varieties I speak of as new, and they are so in the sense of being new to pomologists. But many of them have been long known among the French population of Canada, and grafts of most of them have been more or less distributed up and down the lower St. Lawrence Valley. There is a great fondness for good fruit, and not a little appreciation of choice kinds among these French peasantry; but they are very clannish, and indisposed to communicate the good things they possess to their English-speaking and Protestant fellow-countrymen. Those who have many trees of these choice varieties, absolutely refuse to allow cions to be taken from them. I have been endeavoring for months, with the aid of leading members of the Montreal Horticultural Society, to obtain trees or cions, but with almost no success at all. I can procure specimens of the fruit, for these are offered for sale in the markets, but that is all. I mention this fact, not only as curiously illustrating a trait of character in a large class of people, but also that my readers may be spared the trouble of sending in vain for cions. If a way should be opened for procuring them, I will make it known hereafter.

The first varieties I shall mention seem to be of the Fameuse type, and give the idea at once of being seedlings from that variety. They are all of medium size or under, strongly colored, with the color penetrating the flesh, sometimes to a very remarkable degree.

Fameuse Sucre.—This is an inviting, blackish-red little dessert apple. It is of the same size as Fameuse, but much darker in color than the reddest of that very variable variety in respect of color; form roundish, or slightly ob-

late; flesh white, deeply stained with red; very crisp, yet tender, at once mildly sub-acid and sugary, with an aroma of a most peculiar, penetrating and enduring quality, more like that of some spicy foreign grape than of an apple. I am bold to say that no known apple equals Fameuse Sucre in delicacy and piquancy of taste. It is a true revelation, in apples, of a capacity for flavor, which we might look for in some rare tropical fruit, rather than in an apple from the extreme north. It is not a *sweet* apple; it is a deliciously *sugared* apple, as its name indicates, with a distinct aromatic acidity beneath the saccharine, like, yet unlike, the highest-flavored strawberry. The season of Fameuse Sucre is from the middle of September until the last of October, or later. The tree seems as hardy as Fameuse; it is upright in growth, it spreads but gradually, its branches bear the bright gloss of health. Like Fameuse, it bears light and heavy crops alternately. Those who have it, say it equals Fameuse in yield.

ROSEAN.—This is not the Rosean of any of the books. The fruit is of oven, medium size, oblate, basin wrinkled; color, a very dark red; flesh white stained with red, crisp, juicy, subacid, high flavored. Season, September. Tree, hardy and long-lived, a moderate grower, with an upright close head; an early, yearly, moderate bearer.

MOUNTAIN BEET.—This is, in some respects, the most singular apple I ever saw. It is of medium size, roundish-conical, very dark-red, almost black, yet with the clear red shining through. But the curious thing about it is its flesh, as deeply red to the core as a blood-beet, with a red juice, staining the fingers like that of a strawberry. The fruit has the aroma, but not the sugared quality of the Fameuse Sucre—a sort of "country cousin" of that variety. This tree is in the hands of at least one nurseryman, is regarded as productive and hardy, and is being set for profit in the well-known fruit growing town of Abbotsford, P. Q. It is the only variety in this list of which I have yet been able to procure cions. Season of fruit, October and November.

CANADA BALDWIN.—Fruit, size of Fameuse; roundish-oblate, overspread with streaks and splashes of dark over light-red, with many distinct gray specks. Flesh white, often much stained with red, tender, crisp, juicy, mildly subacid. Keeps till May or June. The tree is a vigorous grower, with a somewhat upright, though gradually spreading head. It has fruit-spurs distributed evenly along its branches, and bears as young as the Fameuse, in alternately heavy and light crops. This variety has got out of the hands of the French, and is propagated and planted to some extent at Abbotsford. It has the fault, on light soils, of sun-scalding upon the bark, but is otherwise hardy. Would probably do well top-grafted.

POMME DE FER.—This is the late keeper of the Province of Quebec. There is a tradition that it was brought from Philadelphia over a hundred years ago by the Seigneur of Chambly; but this is improbable, as it is not recognized as much resembling any American apple, while its seedling, the Canada Baldwin described above, is of the distinct Canadian type. Tree, fairly hardy, a moderate bearer. Fruit, above medium, roundish to roundish-oblong, dull-red, with many very distinct gray dots, somewhat like the Flushing Spitzenberg. Flesh yellow, very firm, moderately juicy, mildly sub-acid, somewhat aromatic. This apple keeps till June or July, but is not highly recommended by the Montreal Society.

STRAWBERRY OF MONTREAL.—This is none of the "Strawberry" apples of the books. The tree is extra hardy, and its stout and vigorous growth and clean, glossy bark, show it to be especially adapted to the cold north. It is erect in growth, without having a dense head. Fruit above medium in size, sometimes large, roundish-conic, yellowish, mostly splashed with red. Flesh yellowish, tender, moderately juicy, mildly sub-acid. It ripens with the Duchess of Oldenburgh, but is a better dessert apple. Placed by many growers among the best five for profit. It has been propagated to some extent by the Messrs. LACOMBE, BIGARREAU and DESMARCHAIS, Cote des Neiges, P. Q., and I recommend it to the attention of your readers in the cold Northwest.

DECARIE.—Regarding this apple, I make the following extract from the invaluable report of the Fruit Committee of the Montreal Horticultural Society for 1876:—"What, if a seedling, was the 'original' tree, producing this noble apple, stood in JEREMIE DECARIE'S orchard in Coteau St. Pierre, east of the Cote St. Luke road, which orchard is now owned by his grandson of the same name. It was cut down a few years ago. It was then about a hundred years old, had a butt as large as a flour-barrel, and was of a hight so remarkable as to be compared to an elm. The tree is a vigorous grower, and forms an erect head, which spreads but very gradually, so that though it attains great size, yet it may be planted fairly close. We have seen eighty, if not one hundred of these trees, planted fifteen years ago on the Coteau, and growing in sandy loam, and from these we judge the tree to be hardy and healthy. It bears light and heavy crops alternately. We once saw seven barrels under one tree which had been fifteen years planted. Mr. LORTIE, after marketing them for many years, says they are very profitable. Fruit, on trees grown in grass, even when they have suffered from want of drainage, large; but when the soil was cultivated, very large, and commanding marked attention. Form, roundish-conic to oblong-conic, often deeply ribbed, with a deep, narrow, russety cavity, and a basin which, though medium in depth, is wrinkled and obscurely ribbed. Color, light or dark-red, sometimes very dark all over, and covered with a beautiful bluish-white bloom, with many medium-sized gray dots. Flesh whitish, rather firm, juicy, with, says DOWNING, a slight and peculiar quince-like flavor. Season, September 15 to October 1."

Thus I have redeemed my promise with regard to these Canadian apples which magnetized my attention and excited my unbounded admiration when seen and tasted for the first time last fall. Though living within 100 miles of the localities where they grow, they were entirely unknown to me, who am an orchardist and tree grower. I feel sure they will be equally new to most of your readers. I shall keep track of them, and hope soon to rescue myself and others from the present Tantalus-like condition of wanting without being able to obtain them.

Newport, Vt., Jan. 16, 1878.

ABOUT THE PEACH.

PROF. A. W. MANGUM.

A BOOK entitled "The Natural History of North Carolina," was published in Dublin in the year 1737. The author was JOHN BRICKELL, M. D. He does not restrict his account to Natural History, but adds a sketch of the trade, manners, and customs of the inhabitants, both Indian and Christian. Some of his statements are interesting to the reader of to-day. His article on the Peach suggests a comparison of that delicious fruit in that day, with the product of the orchards of the present. He names the following varieties: Queen's, Nutmeg, Newington, Grand Carnation, Black, White, Roman, and Indian Peach; and states there were many other kinds. He says: "These fruits thrive to admiration, coming to perfection without any pains or trouble—a peach stone being planted or dropped on the ground, will grow and bring forth a peach tree that will bear in three years or sooner." The young trees sprang up so thickly as to form a perfect wilderness of trees; and the farmers pulled them up like weeds. The weight of the fruit often broke large limbs. The dried fruit was considered a tonic, and "grateful to the stomach." The people made "a liquor of them which is very cooling and good in fevers." The flowers were used as an aperient, anthelmintic, and to "open obstructions."

The Indian Peach was "common amongst the Indians," claimed as their own, and as being in America before the Europeans came. The tree grew as large as any apple tree, the fruit not generally larger than the common yellow peach, and more downy. It was "an extraordinary good fruit; very soft and full of juice;" would freely part from the stone, which was larger than in the yellow kinds. The Indians that were remote from the whites had no other variety. It was less subject to injury by the northeast winds. Vinegar was made from it, and it was sometimes called the vinegar peach. The author does not give full credence to the theory that it was a native of America, because he could not learn that it was ever discovered growing wild.

Several thoughts are suggested by this peculiar description. Is it not a faint intimation, through an unsuspected medium, of the ancient "Home-laud" of our aborigines? Is not Western Asia the only land to which the Peach is indigenous? May not some of the first wanderers have brought, by accident or design, the seed of the Persian fruit, and dropped it in the soil that proved so well adapted to its growth?

It is worthy of note that we still have what is known as the Indian Peach. It was always remarkable for its size. It is distinguished by its downy surface, its abundant juice, its blood-red color under the skin, and its marble-like texture when divided with a sharp knife. Those that I have seen, at least most of them, are what are commonly called "cling" instead of "free" or "clean-stoned." They appear to thrive longer under neglect than other species. I noticed this in a declining orchard that I visited during the past season. One of this description is called here, the Georgia Peach.

Even in those old times, the peach tree would break with its burden. Did it never occur to you that such a peculiarity indicates the natural demand for pruning? Is it not a process of natural self-help? I am quite sure that the peach tree needs more trimming than it gets. During the great fruit season of the last year, the trees were seriously injured by the loss of large limbs. Some fine trees looked as if they had been crushed by a tremendous sleet. If the limbs had been shortened so as to throw more of the weight on the trunk, the damage would not have been done. Under the advice of an experienced nurseryman, I have sometimes shortened the limbs of the trees in February, or a short time before the bloom opens. His theory was that it delayed the blooming and thereby gave a better chance to escape the frosts. I think it is desirable to shorten them at any time, with a view to the strength and symmetry of the tree.

An old nurseryman in this State, some years ago, finding that the trees of a Peach orchard were failing—they being rather old—fell to work with his saw and cut off all or nearly all the limbs, to so short a measure that all his neighbors thought he had completely ruined every tree. On the contrary, the orchard renewed its growth and yielded abundantly. From observation I am inclined to the opinion that the *better* varieties of the Peach tree are commonly more brittle than others. Has this any connection with their holding their good qualities, or even improving?

University, N. C.

Farm Topics.

ADULTERATION AND TESTING OF SEEDS.

PROF. W. J. BEAL.

WITHIN a few years, various European countries have begun to make quite a stir on this important subject. The more the subject is investigated the worse it appears, and the more extensive does the practice appear of selling worthless seeds. Old seeds or those killed by boiling or baking are mixed with good seeds. Some seeds are dyed. Quartz ground and colored, is used to adulterate seeds of clover and other plants. Some old seeds are dressed in oil or smoked with sulphur to improve their appearance. There are many experts in the business of doctoring seeds. In all old countries seeds are liable to be adulterated with seeds of vile weeds. Seeds can be tested by placing them between layers of moist flannel or thick woolen paper and keeping them in the proper temperature.

EXPERIMENTAL STATIONS.

These are becoming quite numerous and very popular in England, France and Germany although it is only about twenty-five years since the first one was started. For testing seeds the oldest station is not yet ten years old. In this country we learn that something has been done the past season, at the experimental station in Connecticut. Last spring at Michigan Agricultural College the writer began some experiments in testing seeds. We know that the rascals do no not all live in Europe. Who can beat our corrupt rings and the extravagance of our insurance companies. We have our basswood hams and wooden nutmegs, our adulterated teas, spices, coffee, candy. We might extend the list indefintely, showing that almost everything we eat, wear, or use is often counterfeited in some way or other. Under this state of things, shall we expect that all the seeds which are sold in this country are genuine? Are the seedsmen alone, above all men honest and beyond reproach?

The past summer, during the month of June, I purchased seeds at different stores in Adrian and in Lansing. These were sold in small packages. I counted the seeds myself and planted them as well as I knew how in nice soil which was very slightly screened from the sun. In nearly all cases, I planted fifty seeds of each variety. In case of beets I planted fifty fruits, each one of which contained from one to three or four seeds.

DETROIT SEED COMPANY.

	Seeds planted.	Seeds came up
Salsify	50	2
Yellow Danver's Onions	50	17
Early York Cabbage	50	17
Curled Silesian Lettuce	50	14
Large Orange Carrot	50	15
Early Blood Beet	50	34
Long Dutch Parsnips	50	26
Long Green Cucumber	50	25
Hubbard Squash	20	2

CHICAGO SEED CO. OF DETROIT.

Hubbard Squash	50	5
Long Green Cucumber	50	30
Danver's Onion	50	27
Curled Silesian Lettuce	50	42
Large Drum-head Cabbage	50	36
Long Orange Carrot	50	7
Long Dutch Parsnip	50	6
Salsify	50	10
Early Cluster Cucumber	50	23
Early Blood Beet	50 fruits	49

D. M. FERRY & CO. OF DETROIT.

Long Orange Parsnip	50	26
Hubbard Squash	50	4
Hubbard Squash	28	4
Early York Cabbage	50	16
Long Green Improved Cucumber	50	37
Simpson's Early Lettuce	50	30
Salsify	50	9
Hollow Crown Parsnip	50	33
Early Blood Beet	50	51

BRIGGS & BROTHERS OF ROCHESTER, N. Y.

Long Dutch Parsnip	50	8
Danver's Onion	50	4
Long Dutch Parsnip	50	0
Long Green Cucumber	50	32
Early Curled Silesian Lettuce	50	24
Hubbard Squash	50	13
Hubbard Squash	28	11
Long Orange Carrot	50	5
Long Blood Beet	50	3

Look at the above figures. They are worth thinking about.

Of the seeds sown from Detroit Seed Company about 37 per cent came up.

Chicago Seed Company	about 47 "	"
D. M. Ferry & Co.	" 49 "	"
Briggs & Brothers	" 23 "	"

Weak seeds produce weak plants. The vigor of the plants in the above trials was not taken into account. It would have added force to the above tests, if I had sown at the same time, the same quantity of seeds which I knew to be good, or those which we had grown and collected. To a limited extent, I have done this.

On May 20th, I sowed in small boxes in a cold frame two lots of forty seeds each of onion seeds of the following companies.

	Came up
Of those of D. M. Ferry & Co.	14
" " "	14
Briggs & Brother	21
" "	16
Crosman Brothers	20
" "	25
Chicago Seed Company	19
" "	16
Seed Grown at this College	34
" "	39

In the last experiments with the onions, the College seeds produced plants, which, at the age of three weeks, were fully twice as large as those from the papers bought of the groceries. The plants were not allowed to mature. Something of the fairness of the first experiments may be seen by comparing the results of the onion seeds with those of the last experiments. The seeds of each firm, in each case, were from the same lot.

At two or three different times, last spring, packages of seeds of carrots and parsnips were sent for trial. They had been prepared in some way and had been rolled in a light colored powder. It was claimed that the seeds thus prepared would come up in a few days, and that the gardener would thereby gain a good deal in his fight with the weeds. I am sorry I have lost the name of the person who sent the seeds, but perhaps it makes no difference.

PREPARED SEEDS.

July 13 I planted 20 seeds, in 13 days 2 were up.
" 18 " 50 " 12 " 11 " "
" 25 " 30 " 6 " 26 " "
35 " 10 more were up.

SEEDS OF J. R. ROOT.

July 13 I planted 20 seeds, in 13 days 17 were up.
" 18 " 50 " 12 " 28 "
" 25 " 30 " 6 " 30 "

Comment is unnecessary, you see the inferiority of the prepared seeds in every case tried.

It is impossible for me to learn how much was paid for garden seeds such as are put up in small papers and sold at the groceries. The trade is quite large, however. In Lansing, Michigan, a town of about 9,000 people, one grocery sold last year of these papers to the amount of eighty-two dollars; another a little over one hundred and four dollars. We all know groceries are very numerous in every town. Testing seeds as to their adulteration and germinating powers is a subject which will receive further attention the present year.

WESTERN FARM TOPICS.

PROF. E. M. SHELDON.

WHEAT GROWING.

BRIGHT sunny days, and sharp frosty nights—the frost culminating a week ago, when for two nights in succession, the mercury dropped to within three degrees of zero—have characterized the weather of the two weeks last past. Within this time corn picking has been pushed with an energy that even the holidays have scarcely interrupted. The more closely the corn crop of 1877 is examined, the plainer it becomes that the quality is greatly inferior to that of 1876. The cob is large and the grain chaffy and loosely set. From almost every quarter of the State, the cry comes that the quality of the present crop is fully ten per cent. below that of the year previous.

IMPROVING WHEAT LANDS.

In almost every rotation wheat is the objective point; the culmination of the course of cropping. It is, moreover, of all crops in general cultivation, the safest one by which to judge of the effects of a given system upon the soil. If the yield of wheat is increased or even maintained from year to year, it is safe to conclude that our system of farming is, at least, doing no injury to the soil. Wheat is a plant of Epicurean tastes, a delicate and fastidious feeder. It riots, indeed, in the new soils of all countries; and because they contain in abundance, those subtle combinations of organized and mineral matters in which it delights, it laughs in full harvests at the slovenly cultivation it so often receives. But when from any reason the soil becomes lacking in the elements of fertility, the wheat crop is the first to hang out the white flag. The

wheat plant well repays generous cultivation, but a good soil enables it to endure without complaint, much neglect of this kind.

In reply to Mr. MASON'S inquiry, in the RURAL of Dec. 22, I would say in the first place, that the soil he describes—the bottoms "a medium, heavy, slightly sandy loam, three to four feet deep, resting on a sandy, porous subsoil," the uplands, "of the same general character but with a greater proportion of sand"—comes very far short of being typical wheat land. Such soil as this, will require careful handling; it will become easily "run down," and when once down, it will need skill and patience to bring it into condition again.

The best way to grow wheat, is not to grow it—if I may be pardoned the Hibernianism—upon land such as that described above. Wheat ought not to grow on such land oftener than once in four years, and during the intervening three years, it ought to grow one hoed crop, which should have been heavily manured and thoroughly tilled. The two remaining crops, whether of forage or grain, should be wholly consumed upon the farm. If clover or the tame grasses are safe crops, the farmers of Dodge Co., have a remedy within easy reach. If this land can be laid down to clover or some one of the tame grasses, and pastured for two years, a long stride will have been taken in the direction of its regeneration. As to the possibility of employing commercial fertilizers in the growing of wheat, I question much if anywhere west of the great lakes they can be profitably employed for this purpose. These are very simple directions, and they have a strong flavor of old fogyism, it may seem; nevertheless, there is no "hocus pocus" in the business of farming; there is no such a thing as satisfying the wants of a hungry field with the contents of one's vest pocket; no possibility of making condition powders, pills and drugs satisfy a soil exhausted by a long round of dissipation. What such a soil needs is plant-food, like in character to that which it has so freely yielded the thriftless husbandman, and this will be best obtained by the farmers of the whole country, by growing largely of forage plants, grains and grasses, for consumption upon the farm.

Mr. MASON and his neighbors will do well to beware of the error so often made by improvers, in supposing that a greater variety and a better arrangement of crops, are alone sufficient to increase the fertility of the soil. A farm may be utterly ruined while tilled to the letter of the most approved rotation. The whole secret lies in returning to the soil what has been taken from it in crops sold from the farm; and whether this is done by feeding stock upon the farm, by green manuring, by summer fallowing, or by the use of commercial fertilizers, must be determined by the surroundings of the farmer.

ABOUT WHEAT GROWING IN GENERAL.

In the letter referred to above, the writer, after stating that wheat is the staple crop for export in his State, goes on to say: "the result is, the whole country is under mortgage for borrowed cash, store, machine and other debts and taxes." So far as I have observed, mortgaged farms are the necessary concomitants of every distinctively wheat growing country. The reason of this is not far to seek. While wheat brings a large and quick return in cash, per acre, it requires a large outlay, *in cash*, to produce it. In the first place, the considerable wheat grower must own a drill (cash or note at 12 per cent.,) then he must procure a harvester, (cash or note as before,) and hire harvest hands, paying the highest wages (cash); then comes threshing (cash,) with the summer's waste that always attends this operation. Compare the growing of wheat with that of corn. The growing of the latter crop entails upon the farmer not a single expensive operation. The entire labor of the corn field, from turning the first furrow to cribbing the corn, may be performed by the farmer unaided, and when the crop is harvested it may be turned to half a dozen uses from which wheat is debarred by its very nature.

To grow wheat in a new country is generally a necessity to the pioneer, and often it is a profitable crop, but if after this time, wheat growing is allowed to attain to anything like a specialty, it is pretty certain to bring upon the farmer a long train of evils, among which are "mortgages," which will only be "lifted," when he adopts a course of mixed husbandry,

Manhattan, Kas.

Industrial Societies.

FRUIT GROWERS IN COUNCIL.

Discoveries and Suggestions of 1877.

THE twenty-third annual meeting of the Western N. Y. Hort. Society held in Rochester Jan. 23–25th was altogether one of the most interesting and profitable in its long and successful experience. A great mass of facts elicited from discussions, and in the papers and addresses, and some of these are of great importance.

In calling the meeting to order, President Barry congratulated the Society on the progress made during the past year. Small fruits have been unusually abundant and low priced. The partial failure of the apple and pear crops has alone prevented a more serious depression in prices. But the American market is extending; Western New York is near the sea-board cities, and of winter fruit it is now generally conceded that Western New York apples will keep better than those of other localities. Hence we are reasonably sure of a good market for all the *good* fruit which can be grown. He would advise the planting of apple orchards under proper conditions and in suitable localities, as confidently now as at any time during the last twenty-five years. Work in fruit-growing is sure to be well paid, provided always the work is well done.

The election of officers and appointment of committees were the first business, and resulted in the choice of the following officers for 1878.

President—P. Barry.

Vice President—J. S. Woodward, H. E. Hooker, A. C. Younglove.

Secretary and Treasurer—P. C. Reynolds, Rochester.

Executive Committee—James Vick, Rochester; I. H. Babcock, Lockport; H. H. Farley, Union Springs; E. A. Powell, Syracuse; D. H. Henry, Geneva.

STANDING COMMITTEES.

On Native Fruits—J. J. Thomas, Chas. Downing, Wm. C. Barry, E. Moody, G. Zimmerman.

On Foreign Fruits—W. R. Lazenby, George Ellwanger, T. C. Maxwell, H. N. Langworthy, C. A. Green.

On Nomenclature—Chas. Downing, P. Barry, J. J. Thomas, D. W. Beadle, George G. Atwood.

Entomology—J. H. Comstock, C. D. Zimmerman, E. W. Sylvester, H. T. Brooks, Wm. Saunders.

Ornamental Trees and Plants—George Ellmanger, C. M. Hooker, T. C. Maxwell, George Moody.

Garden Vegetables—E. S. Hayward, John Craine, C. H. Crosman, J. W. Gray, T. W. Lay.

Ornithology—H. T. Jones, Henry Harrison, E W. Chapin.

Botany—W. C. Barry, Geo. T. Fish, W. H. Coleman.

Chemistry—Prof. G. C. Caldwell, C. H. Mann, Joseph Harris.

Flowers and Bedding Plants—James Vick, F. B. Lewis, Henry B. Ellwanger, E. Bronson.

There have been about 150 members the past year, including the leading fruit growers and horticulturists of the State. The Society has issued a report of its proceedings and papers, and the treasurer's report shows a balance of $28.35 on hand.

There were some notable articles on exhibition—specimens of dried fruit preserved by the Reynold's Evaporator and exhibited by E. J Potter of Medina, attracted much attention. There is an evident profit in this process whenever the fruit-market is glutted. The evaporated fruit is white and preserves the natural taste of the green fruit. Hence it brings a higher price than fruit dried by the usual process. Mr. E. Ruhleman of Lockport exhibited a coil of tin two inches wide which he uses as a collar around celery plants to keep their leaves from spreading apart. It makes the cultivation of celery a very easy process. Messrs. Ellwanger & Barry exhibited seventeen varieties of winter pears, and ten varieties of apples. Mr. Heath of Genessee, Co., also exhibited specimens of winter apples of fine quality.

Probably the most practically useful article on exhibition, and one which attracted much attention was a box containing about 150 specimens of insects injurious to farmers and fruit growers, and also the parasites which prey upon the same and are thus the fruit grower's friends. The insects are finely mounted and some of the specimens are very rare. This box was prepared by Charles D. Zimmerman of Buffalo, and presented to the society. Mr. Z. promises a similar collection next winter, an excellent example for young men.

The apple crop in Western New York in 1871 was not a large one, and a peculiarity of its growth is that the largest crops have been in localities which have not heretofore produced largely. Chautauqua county sells this year fully 200,000 bbls. of apples, at an average price of $1.50 to $1.75 per barrel, a loss of at least two hundred thousand dollars from lack of information as to the value of fruit. Surely, here is a waste which would pay for a good many agricultural and horticultural journals.

Mr. Julius A. Kuck, of Kucksville, Orleans County, has an old orchard of 149 trees, set sixty years ago, which has for many years been cultivated and heavily manured without cropping. The plowing is always done in May—and the soil is left loose through the season. In the last seven years this old orchard has produced apples which have sold for $7,871.25, or something more than $1,100 per year. The manure made on the farm is mostly applied to this orchard.

The discussions chiefly ranged around the subjects prepared by the Business Committee.

Quinces.—Considerable time was devoted to this fruit, justly considered the most profitable for the localities where it succeeds. It is not entirely hardy, especially in the roots. Hence, it needs deep planting, and is better kept in grass if the grass is shaven and left as a mulch, and the soil highly manured. No fruit will bear higher manuring. Salt is excellent, and should be applied in the spring at the rate of a quart per tree, spread under the branches as far, or a little farther than they extend. The quince should not be cultivated, as its roots are tender and easily injured. A heavy cool soil, and if moist none the worse, is best for the quince. The borer is less troublesome on heavy soils. In sand or gravel, quince trees are usually failures. The Orange quince, and Rea's Mammoth were the two varieties most highly recommended. Quinces bring from $4 to $8 per barrel in the New York market. Dr. Sylvester sent them in bushel crates, and got $3 per crate for them.

Peach Tree Worm.—This is a new enemy which eats the heart from the terminal shoots of peach trees. It is most destructive in nurseries. Prof. J. H. Comstock, of Cornell University, described this enemy. The only known remedy is to cut off the twigs which appear injured and burn them. This should be done in June or July, before the worm escapes.

The Peach Tree Borer.—Placing leached ashes around the base of trees was recommended as a means of preventing the beetle which lays the eggs from depositing them. The ashes were first applied as a manure, and this effect was accidentally discovered.

Peach Yellows—It was seriously questioned whether this disease had appeared in Western N. Y., unless in a few trees procured from New Jersey. Good culture with manure, careful watch for the borers and destruction of all found will keep Western New York peach orchards in thrifty condition. Some peach trees suffered severely from the intense cold of the winter of 1874. Such trees are popularly supposed to have the yellows; but if examined it will be found that their roots are injured by the cold.

A worse difficulty in growing peaches, is from cold in winter and frosts in spring. In level localities a sheltered spot should be selected. In hilly regions elevated sites are preferable. Timber screens are beneficial on the east and west, and sometimes on the north. With a little care in selecting good localities peaches, may be profitably grown all through Western New York.

The Canker-Worm.—This pest of the apple tree may be headed off by winding strips of paper around the trees and coating them heavily with coal tar and lard, the latter to keep the tar from hardening. If some falls on the bark of the tree it scales off and does no injury. Another remedy suggested, is to have troughs around the base of the tree filled with crude petroleum, which will prevent the ascent of the female moth. This remedy is liable to the objection that the petroleum if spilled may injure the tree.

Fertilizers for Fruit Trees—There is nothing better than stable manure, but not enough can be had. Muck is good if we get the right kind, fibrous and not too much decomposed. It may be profitably composted with stable manure, six or seven loads to one of the latter, with ashes and with salt. The coarse grass which grows on muck swamps, if piled up with it, helps decomposition, Salt was recommended as a good fertilizer for all kinds of fruit trees. It helps to decompose plant food. Ashes are good, and leached ashes, 300 bushels per acre, are excellent on sandy soils, helping mechanical texture, and furnishing needed manurial elements.

Utilizing Surplus Fruits.—The only new answer to this consisted in the new processes for preserving them, either by drying or in cold ice-houses. It pays to send only the very best fruit to market. In that way the use of fruit is encouraged and its market extended.

Frauds!—A good deal of a scare was raised by a report of a legal decision that seedsmen and nurserymen are liable for damages when plants untrue to name are sent out. It proves, however, that the decision applies only where there was fraudulent representation of the facts. Nurserymen are not liable for the results of their many mistakes and may go to bed without fear of awakening as bankrupts. The Society adjourned Friday noon after the customary votes of thanks to officers and others. It will meet in Rochester again next year, that being the most convenient place for delegates from all parts of Western New York to assemble.

RURALIST.

NEW FRUITS OF 1877.

IN the discussion by the W. N. Y. Hort. Society on new varieties of fruits, the old new varieties of Peaches, Early Beatrice, Rivers' and Early Louise were commended by Mr. MOODY. President BARRY said that Briggs' Red May, a California peach, was at the present the earliest variety known. Dr. SYLVESTER spoke highly of his seedling, the Richmond, which proves on testing all the good qualities originally claimed for it. It is hardy and productive, a little later than Early Crawford, and of higher quality.

In grapes there was a large number of new and promising varieties named. Messrs. HOAG & CLARK of Lockport have a white seedling produced by inbreeding Concord and Martha. It has all the hardiness and vigor of the Concord, excels it in productiveness and is far superior to the Martha or any similar white grape. "As good as the Rebecca, and as vigorous and productive as Concord," is praise which gives assurance that a white grape "for the million" has been secured.

The Lady was considerably discussed. Its quality is superior to that of the Martha, and it has the advantage of being the earliest grape, with the possible exception of the Champion. This for a white grape is a novelty, and will give the lady a permanent value without regard to its quality.

MESSRS. GREEN of Clifton, Monroe, and HANDY of Orleans County, described new seedlings in bearing, which promised to be valuable. Not much is known of them, and they require further testing.

Pres. BARRY spoke of Moore's Early, a Massachusetts variety, as of the highest promise. He also described a seedling which he had been testing several years—one of two selected from several hundred, all the others being thrown aside as of no value. The one most promising is a Cross of Diana on Delaware. It is thrifty, productive, and of the highest quality. The delay in sending it out, is only because it has the fault of dropping its berries; but it very rarely does this, and never until dead ripe, and it is unexceptionable in every other respect.

The Brighton Grape was very highly spoken of. It is succeeding in a variety of situations and in quality ranks as "best." It is hardly a new variety.

The difference between Worden and Concord is very slight; but the Worden is a few days earlier, and of a little better quality. Its skin is thinner than Concord's, and it cracks, unfitting it for shipping long distances.

In new Raspberies, Mr. HANDY of Orleans Co., described a new red Raspberry, of Black-cap habit which promised to be valuable. Its fruit is firm and a very good quality. Its color is a dark red, and appears to be a hybrid between the Red and Black-caps; but differs from the Ganargua.

Mr. ODELL, of Monroe, described some wild, red Rasperries which grew on the plains at the West after being burned over. It seemed to him to be worthy of cultivation. The local name is Salmon berries. There is another kind of Raspberries called Sallal berries which grow on these Western plains. They grow in clusters, three to five in a bunch, and are as large as cherries. The flavor is excellent, sweet, and somewhat peculiar. Undoubtedly something will come from these Western varieties.

President BARRY warmly commended the new Strawberry named Sharpless, which is now being disseminated. The Great American, and Parmlee's Crescent Seedling were inquired about, but none of the members had fruited them.

W. J. F.

Industrial Implements.

A NEW BUTTER-WORKER.

A NEW butter-working machine has been recently put before the agricultural public, that combines some novel features that we think are good. The implement is a circular revolving table, placed on a stand of the necessary hight, which is turned by a crank fitting into cogs that encircle the outside of the table. Attached to the crank is a grooved "worker" of a peculiar shape, and not to be intelligently described without the aid of the pictorial art. The axle of one end of the "worker" is fitted into a pin that projects up through the middle of the circular table, so that in operation the worker covers a section of the table extending from its center to the circumference. The butter is emptied on to the table, and as soon as the machine revolves, the peculiar shape of the "worker" coming in contact with the concave and sloping bottom of the table, gives a gentle downward direct stroke, *pressing* in its action. The expressed milk runs away to the center of the table where it escapes through an opening prepared for it. The worker more closely resembles hand treatment than any machine we have yet seen. It comes to pieces easily and may be cleaned with the least trouble.

There can be no reason why butter should not be improved when worked in this machine. The grain is not injured. HENDERSON & Co., Philadelphia, Pa., own the patent and make the machines.

JONES, FAULKNER & Co. of Utica, N. Y., have purchased the patents of the late WM. RALPH and are now the sole manufacturers of the Oneida Cheese Vat. This Vat has long been favorably known to our readers as one of the best for single dairies and small factories.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

"THE cows keep up their milk well," said WILLIE, as with an air of pride he brought in and strained the evening's supply. "And the butter is of a good color too," said one of the "girls," while WILLIE added, "Oh yes, that is because we feed them *corn-straw*." It is a good thing to teach little boys to milk, and our lad of ten can attend to two cows as well as a man, and understands the duty of rinsing the pans, straining carefully and putting into the milk-room without troubling his sisters if they are otherwise engaged. This article of milk I think is not sufficiently appreciated by farmers, and I often wonder to see so many half-grown boys and girls fond of their cup of tea, and owning to a disregard for milk from having too much of it, as the Scotch would say, "Among their hands." Milk is the type of all food, and one pint from a good cow contains two drachms of mineral salts, six drachms of sugar, half an ounce of butter, six drachms of cheese (caseine), and nearly fourteen ounces of water. It is the only article on which adult, as well as infant life can be supported exclusively, unaided by any other aliment. For a delicate stomach it is also easy of digestion either hot or cold, boiled milk requiring two, and raw milk two and a quarter hours for that purpose. As a supper for growing boys and girls, nothing is better than good, wholesome bread scalded, but not boiled, in plenty of sweet milk. While in daily use but few people stop to think in how many ways this wonderful fluid is used and if it were valued, and always upon the table as a beverage or in some pleasant form of food, we should see far more rosy cheeks and bright eyes among our pallid young people. A very nutritious and easily prepared dish for lunch or tea is as follows:

Milk Toast

Toast stale bread quickly and a delicate brown; take off the crust, and dip each slice, while hot, into boiling water; salt slightly and lay in a covered dish. Boil some new milk in a saucepan, adding a little salt and a tablespoonful of sweet cream; pour over the toast and cover closely. It will be ready to serve by the time you are all seated and ready to pass the first plate.

DOMESTIC RECIPES.

To Dye Scarlet

One and one-half ounce of muriate of tin; one ounce of cochineal; one ounce of cream-of-tartar. To one pound of cloth or yarn allow three gallons of water; when blood-warm, add one ounce of cream-of-tartar; increase the heat a little and add one teaspoonful of the pulverized cochineal and three-fourths of an ounce of muriate of tin; wet the goods in warm water; put into the dye and boil one hour, turning often; take out and rinse in cold water; then add the remaining cochineal and tin liquid to three gallons of warm water; put in the goods and proceed as before. This recipe for scarlet is the best I have ever known. It does not fade or turn dark when washed with soap.

Fruit Cake

One and one-half pint of milk; one cup of cream; two cups of sugar; one-half cup of butter; one-half pint of molasses; one and one-half cup of hop yeast; add flour to make a thick batter and let rise all night. In the morning add one cup of butter; six cups of sugar; five eggs; one tablespoonful of soda; one-half cup of wine; seven pounds of raisins; spice to taste; stir to a thick batter; put into tins and let rise again; bake as you would bread.

Sponge or Jelly Cake.

Two eggs; one cup of sugar; five tablespoonfuls of water; one and one-half cup of flour; one and one-half teaspoonful of baking powder. For jelly cake, bake in layers.

Mrs. MAPLE: Those who use the pen so much can have little idea how hard it is for one who handles the broom, mop and dish-cloth continually to take pen and ink and write her thoughts upon paper. How I wish that it might come to pass that farmers' wives could use their hands less and their brains more! All that I know is to work hard from morning until night with scarce time to read a newspaper, while those who have time for mental improvement seem to care nothing for it MRS. D. W. JOHNSON.
Gowanda, N. Y.

To Prevent Pie-Crust Becoming Soaked

Having myself received much information from the "Domestic Economy" department, I should like to tell my RURAL sisters of an excellent way to prevent pie-crust from becoming soaked or "soggy," which is as follows:—Rub over the under crust well with the beaten white of an egg, before filling the pie. Should the upper crust be brushed with the egg, it will do no harm. If pie-crust is mixed with good, sweet cream, and prepared as above, I can see no reason why it is not perfectly healthy.
Linn Co., Mo. MRS. F. M. BEERS.

Pound Cake.

Eight eggs beaten separately; not quite one pound of butter; one pound of powdered sugar; not quite one pound of prepared flour, or flour with two heaping teaspoonfuls of baking powder. Beat the yelks, sugar and butter together, then add the beaten whites and flour by degrees, alternating until both are stirred in; flavor with lemon.

Chocolate Cake.

Two cups of sugar; one cup of butter; four eggs; one cup of milk; scant three cups of flour; two heaping teaspoonfuls of baking powder; bake in layers. For the chocolate mixture: Grate one cake of sweet chocolate; beat the whites of two eggs to a stiff froth and add a cup of powdered sugar. MRS. ISAAC CARMAN.
Hempstead, L. I.

Veal Cake.

Cut slices of cold roast veal and boiled ham, very thin—there should be as many again slices of veal as of ham; cut three or four hard-boiled eggs into slices; chop a few sprigs of parsley fine; butter a mold, and put in alternate layers of veal, ham, eggs and parsley—seasoning each layer with pepper and salt; fill up with good stock, and bake in a brisk oven about one-half hour; when cold, turn out and garnish with parsley. This is nice for tea.

Curry of Cold Meat.

Cut thin slices of cold roast beef into rather small pieces; slice thinly, and fry an onion in about two tablespoonsfuls of butter until nicely browned; then pour in as much good broth as required for the gravy; add a little salt and a tablespoonful of curry powder; let boil up and add the beef; stir constantly for ten minutes; make a border or wall of boiled rice around a dish and pour the meat and gravy in the center.

To Curry Eggs.

Wash and slice thinly an onion; fry to a nice brown in two tablespoonfuls of butter; add a tablespoonful of curry powder: one pint of good broth, and a little salt; let cook until the onions are tender; thicken one-fourth pint of cream with a little corn-starch, and stir into the other ingredients; let simmer a few minutes; then add twelve hard-boiled eggs cut into halves; warm through and arrange the eggs upon a platter with the gravy poured over them.

Simple Peach Pudding.

Split open milk crackers and butter slightly; put a layer of crackers upon the bottom of a pudding-dish; then a layer of *hot*, stewed peaches with plenty of juice, and sweetened to taste; thus alternate the layers, leaving a layer of fruit for the last; make a meringue, flavor with lemon and spread over the top of the pudding; let brown in the oven for a moment. To be eaten when cold. E. M.

Everywhere.

RURAL SPECIAL REPORTS.

NEOSHO VALLEY, Kan., Jan. 9.

WHILE reading the RURAL, I find a good many pieces from different parts of the country, but it is not often that I see anything from Kansas, and thinking the readers would like to see notes from this section of the country as well as I do from other sections, I send you a note or so.

I live about seventy miles south of Topeka, eight miles from Burlington, the country seat of Coffee County, which is on the line of the Missouri, Kansas and Texas Rail Road, and is the terminus of a rail road that is being built from Kansas City, Missouri, and is to be completed by March 1st. It is just what Neosho Valley has been in need of for a long time—a direct outlet to the East for its products. The crops were very good the past season. Oats extra good. Corn is worth 20c.; oats, 16c.; wheat, 80c.@$1.00; pork, $3.25 per 100 pounds; hay, $2.50 per ton. Stock raising is the principal occupation of the farmers in this section. It is well watered by creeks, and there is excellent range for thousands of head of cattle and sheep. Coal underlies nearly the whole county.

E. C. F.

CORTLAND, N. Y., Jan. 15.

SNOWING and growing colder again. We have had good sleighing for the past week. The second annual show of the Cortland County Poultry Association opened here to-day. We have a fine exhibition, the largest that has ever been held in this section, over 400 coops are in—and it promises to be a financial success. In the show, Asiatics take the lead with a large exhibit of Games and Bantams. All the prominent varieties are to be seen with some exhibits of very fine birds. Plymouth Rocks, which seem to be the coming fowl in this region, are largely represented. A fifty pound pair of Geese attract a great deal of notice as does also the fine exhibit of fancy pigeons made by Messrs. WHITE and the Sanlsbury Co. The Association is in a prosperous condition. Poultry is quite an item in the products of this county; one of our large raisers shipped over twenty tons to market this last season. K.

EL DORADO, Cal., Jan. 7.

WE have had the coldest weather ever known in this section, for the last ten days—frost every night, and on several nights ice formed on water, over half an inch thick. In many places water pipes were burst open from the effects of the frost. To-day it looks like rain. It is predicted by an old Mexican that we are going to have a flood that will destroy all the grain in low sections, while on high places and the foot-hills we shall turn out the best harvest ever known. Apples are decaying badly. Fruit trees are being set out. Sowing and plowing are in rapid progress.

WATERTOWN, N. Y., Jan. 14.

WE had some cold weather and snow the early part of the month, but it has moderated again—and this is our fourth day of rain; mud is shutting off all communication with the country. Farmers cannot get their produce to market, and hauling logs is out of question. This is the most remarkable winter we have ever had in this region. W.

LITTLE FALLS, Jan. 21.

WEATHER here warm and pleasant. Snow nearly all gone from fields and it looks more like first part of April weather than January. There has been scarcely any sleighing here during the winter, which is most remarkable as the snow generally falls early and deep:

X. A. W.

GENEVA, N. Y., Jan. 21.

WE have had a very open winter. Thermometer to-day, at noon, stands at fifty degrees. There is a larger acreage of winter wheat here than usual: it looks well, the Hessian fly having done but little damage in this section. Nursery stock is in good condition. W. L. C.

Miscellaneous.

HOW SHALL WE EXPERIMENT?

WE have been favored with MSS of portions of the report of CHAS. W. GARFIELD, the accomplished Secretary of the State Pomological Society, Grand Rapids, Michigan, to be issued next month, and from it we are glad to make the following interesting extracts:

Our people want facts that are the result of careful observation and experiment. These they can take hold of and incorporate into their own methods. One may, however, start out with an honest intention of conducting a careful experiment, and after following it for a time, the final result seems so evident that the temptation to "run across lots," thus gaining time, is too strong, and a portion of unexplored territory remains behind. The great majority of "I believes" among farmers and fruit-growers are made up of just such experiments and nearly the whole of them are entirely worthless, because of the lack of the connecting links of careful observation that were lost by "running across lots" or in other words jumping at conclusions.

It is the fact that there are experiments without end—as seen from the records of agricultural papers—and so little real progress as the result of them all, that gives emphasis to our leading interrogation. The fact is that the larger portion of these so-called experiments are worth nothing—worse than this, their value is a minus quantity because they are calculated to mislead. They are nearly all of very short duration, and they are thrown upon the public to be swallowed by open mouths—yes, so very wide open that the eyes are shut against the theory that dangles to each one and that goes down too.

Glancing over the papers that have come to my table the past week, I find three remedies for pear blight, the result of careful experiment. For each is claimed originality, perfectly satisfactory results, and each is recommended to pear culturists everywhere as a discovery long sought and finally found. Two of these startling disclosures are made after one year's trial, the other has had double that time to prove its worth. All of them to my certain knowledge, have been in print before and were lost sight of because valueless. Other experiments of a similar character have been the use of nut lime to drive away the codling-moth, burning coal tar to drive away the curculio, and sprinkling salt on the garden to destroy the cut-worm.

So much for the literature of experiments. Let me say further, that I scarcely go anywhere but that I find men are experimenting, in their way, and are constantly arriving at valuable results, that guide them in their practice. This is their own statement of the case. These results are generally sources of continual error, and act as a snare rather than an assistance in the operations of the farm and garden. The worst of it is that they have obtained such a firm hold upon the people, that there is no possibility of loosening it. Advancement is thus checked, and production decreased rather than augmented.

The removal of prejudice is one of the happy results of thorough and well-directed experiment. The power of facts is supreme. The believer in the transformation of wheat to chess may doubt your reasoning, when you tell him the impossibility of it in nature's economy; but when he brings you a sample of this chess and you show him, after carefully washing the root, the original chess kernel from which it sprang, he will not doubt his own vision.

Experiment, well directed, helps people to understand the necessity of going to the bottom of processes and methods before too general an application. Surface indications are soon seen to be very untrustworthy, and it is found to be more satisfactory to know a little, and *know it*, than to believe a great deal, with only a shadow for a foundation. Satisfactory experiment requires

ABSOLUTE SIMPLICITY IN METHODS,

for two prominent reasons:

1st. Any complication is liable to divert observation from the real work, and the result will be a warped judgment and worthless decision. For instance, if one is pruning a tree, at different seasons, to observe the relative rapidity with which the wounds heal, he must not, at the same time, be pruning that tree with the idea of producing wood on one part and fruit on the other. Nor should he try the effect of thinning the fruit on that tree, with the expectation of watching the result and getting at some principle. All this complicates the first experiment so much as to render the decision at the end of it questionable.

2d. There is danger, in trying to establish too many facts at once, that we shall get hopelessly lost in a labyrinth of testimony, and give the theory up in disgust. In experimenting, one may be skillful in watching a simple process for a negative or positive result; but when he so places his experiment as to be perturbed to a considerable extent, he may be far from sufficient to get at a correct judgment.

Again: Proof positive upon never so small a point is worth a good deal, as a stepping-stone to other judgments of more sweeping application; hence there is great value in absolute certainty of little decisions, the result of experiment in reaching out after facts of greater import.

WHAT IS NEW?

To be a successful experimenter, one needs to have some knowledge of what has been accomplished in the department he takes up for investigation, since the history of any branch of agriculture or horticulture will show that a great many things have been tested over and over again by persons ignorant of each other's work. Glancing over agricultural papers, in one there is a "new method of cultivating wheat" that attracts the attention. It may be new to the author, but to the world it is old as the Christian era, for VIRGIL describes the same process in detail. A scientific man who can lay claim to a large amount of general information, is giving in one of our papers "A new theory of tillage," and still, after a careful perusal, one who has a good library of agricultural works from JETHRO TULL down to WARING, can open to places, here and there, where he will find, not only this same theory carefully given, but great quantities of facts upon which the hypothetical method rests.

In learning what has been done, we fit ourselves for better work; for we can profit by the mistakes of those who have entered the field in advance of us. Several men moving across a marsh at intervals, will not be liable to all sink in the same hole. Those coming later will avoid the place where their predecessors sank through. So in experimentation; accurate knowledge of former experiments may save us a great deal of time and expense, and may aid us to strike more quickly at decided results.

The fear that the requirements are such as to forbid ordinary persons from experimentation, need not deter any one from work of this character. Many simple, yet important experiments can be performed by any one in connection with the work of the farm and orchard; while the more elaborate ones must be undertaken by those who are drilled for it, and who have the ability, time, and money to expend.

The knowledge we desire to obtain is both scientific and practical, and one sort should not be sought to the exclusion of the other. We want to know the truth first of all, and in all our in-

vestigation, it is of the highest importance that we eliminate every possible source of error from our methods. A fact in science must be a fact, not a supposition or a guess; and after we have established it, our next desire is to find its practical bearings on the work we have in hand, out of which we gain a livelihood.

Then, in answer to the interrogation of where we should look for new questions to solve, or old ones that are not yet settled, I will say that in the production of new varieties of flowers and plants for the green-house and border; new and hardy improved vegetables for the garden; new and hardy fruits for the orchard; new and better adapted grains for the fields, there is an opportunity of originating things that are really new to the whole world. And when it comes to the adaptation of methods of culture and kinds of fertilizers especially suited to these new things, we may be working upon an old principle, but our detail of facts will be new.

Probably the richest field for discovery in horticulture to-day is in the production of new varieties adapted to special systems of culture, or to peculiarities of climate and situation that in themselves are unchangeable.

REQUISITES IN EXPERIMENTING.

As to just the method to pursue in carrying on these experiments, I can condense in a few sentences my own convictions.

1st. There must be a basis of knowledge from which to work; that is, one must know something of what has been done—and how to go to work upon the case in hand; he must understand how to so simplify his work that the results shall not be rendered nugatory by complications.

2nd. There must be a distinct purpose in view. I do not mean by this a point to prove, for this in itself would so warp the experiment as to render its results worthless. He who closes an experiment by the comment on the results, that he knew it would come out so, was not fit to perform the experiment at all. By a definite purpose I mean that one should have a clear notion of what he is at work upon, so as not to be led off from careful observation in the direction of his experiment.

3d. An experiment needs to be performed with great care. It must not be put off or shoved aside for anything else when it demands attention. If it is worth attempting, it is worth all the care necessary to make it perfectly satisfactory.

4th. In performing an experiment there should be absolute honesty. The moment we doubt the veracity of one who experiments, we lose confidence in any result he may give us. It will not do to think a certain result is seen—one *must know* it. There is nothing that is to be done in this world that requires a greater degree of veracity and honesty than this matter of experiments; and when one prominent experimenter fails in this regard, we are apt to distrust others even more than when a minister falls from the path of rectitude.

5th. Experiments should be performed with liberality. I refer now more particularly to horticultural experiments. They should be the property of all who will be benefited by them. The time, money, and thought put into them should be donated freely for the good of the world.

Entomological.

EXTERMINATING THE CABBAGE BUTTERFLY.

B. PICKMAN MANN.

THE winter months afford the best opportunity for the extermination or at least the very great lessening of the numbers of the Cabbage-Butterflies (Pieris rapæ.) This butterfly is probably very well known in a general way to all the persons in the Northern United States, who have had occasion to work in gardens where cabbages are grown or who are at all observant of the insects that fly about our fields and roadways. It is of a white color, with a black dash at the tip of the fore-wings and a black spot on the front edge of the hind-wings above, and with two black spots on the underside of the fore-wings. Besides these spots, the male has *one* in the middle of the fore-wings above, and the female has *two*. The spring butterflies are much whiter than those produced later in the season and sometimes lack some of the black spots; occasionally bright yellow males are found and almost never yellow females. The full spread of the wings is about five centimetres. With a very little care there will be no danger of mistaking the common yellow clover-butterfly (Colias Philodice) for this.

The caterpillars are pale-green, finely dotted with black, with a yellowish stripe lengthwise along the back, and with a yellow stripe, formed of small, yellow spots, along each side. When fully grown, they are two and a half or three centimetres long. They may be found from April to October, of all ages, feeding on the leaves of cabbage, mignonette, stock, nasturtium and other members of the mustard family. They are supposed to have four or five generations in a year, the last generation passing the winter in the condition of chrysalids. At this stage of their lives they are exposed to view or can be discovered with ease, and it is at this time they can be destroyed with the least expenditure of work.

It is the habit of the caterpillar, when its time has come, to leave the cabbage-heads and seek a convenient place for the formation of its chrysalis. For this purpose it crawls into the corner formed under the copings of fences or under the projecting edges of clapboards, or hides under stones or boards or in a crevice in a fence or wall. Here it spins a loose mass of silk in which it entangles its hindmost feet. Holding the body horizontal it then spins a thread of many strands, which forms a loop inclosing the body and attached by both ends to the board above. The shedding of the caterpillar skin soon follows, and the chrysalis appears.

The chrysalids are about two centimetres long, sharp-pointed at the head and tapering at the opposite end, with a sharp ridge on the back of the fore-part of the body and a saddle-shaped hollow just behind this ridge. They are light-brown in color. As will be seen by what I have said above, the pupas are not inclosed in any cocoon or concealed in any way. It is true they may be formed within a pile of boards or in some similar place where they are difficult of access, but the presence of such resting-places and the absence of others will be a sufficient indication to the intelligent gardener of the searches he will need to make.

The destruction of the pupas by fire or crushing is simple enough, but now comes a further consideration, showing that practical entomology fails to be practical if it is divorced from the more technically scientific entomology. A large proportion of the pupas are attacked by a minute parasite (Pteromalus puparum,) which is four-winged, of a golden or coppery red color with a green head, and is three millimetres long with a wing-stretch of four or five millimetres. Fifty or more of those parasites find food and shelter within one pupa of the butterfly. In destroying the infested pupa, therefore, a great number of the best friends of the gardener are also destroyed. It is difficult to separate the infested from the uninfested pupas; at any rate it's not worth while to attempt to do so. A device may be adopted which I recommended to the Brazilian government in 1871, when employed by them to devise measures for the protection of coffee-trees from destructive insects. This is, to place the gathered chrysalids in a wire cage, out of doors, so that when the parasites hatch, they may escape freely, but when the uninfested butterflies hatch they may not be able to escape. For this purpose, any box, however rude, covered on one or more otherwise open sides with a wire netting of centimetre meshes, will answer. As the chrysalids put into this box would necessarily lie one upon another in an unnatural manner, they should not be allowed to get wet by rain or snow, so as to be in danger of molding or rotting; they should be placed under cover and not more than two or three layers deep. At the same time they should not be exposed to artificial warmth, for not only might such warmth be injurious to the parasites, but it would be very likely to hasten their development, and bring them to maturity while there was no proper opportunity for them to deposit their eggs.

Entomologist, Cambridge, Mass.

Dairy Husbandry.

AS TO THE SKIMMER.

J. M. PETERS.

I HAVE never known a man to meet with much success in his efforts to discourage another from carrying on a business which he found profitable, and so long as a dairyman finds, or thinks he finds, profit in making butter and cheese from the same milk, it will undoubtedly be a difficult task to completely stop the manufacture of skimmed cheese. It is possible, however, that the greatest profit is not to be realized from skimmed milk by manufacturing it into cheese, and if this fact can be demonstrated, the most ardent advocate of skimmed cheese would, I presume, be willing to give up its manufacture.

Prof. ARNOLD, in an address before the dairymen of St. Lawrence Co., the other day, introduced the subject of skimming and his recently patented improvement in the manufacture of butter and cheese from the same milk, by stating how much substance was thrown to the hogs and "wasted" when butter alone was made from milk, and went on to explain how this "waste" might be saved and the profits of dairymen greatly increased by the proper manufacture of two products. But he failed to produce any showing of the difference between "wasting" skimmed milk on hogs, and making it into cheese for the "home trade." St. Lawrence Co., dairymen have during past years, strenuously opposed the use of the skimmer in cheese factories, and the manufacture of cheese from skimmed milk. As compared with other sections of the State where different notions have prevailed, their profits have been large, and they are now uniformly thrifty, with a world-wide reputation for the excellence of their cheese. These are facts. During the past season a very few cheese-makers in that county practiced skimming, and as the make of skimmed cheese in the whole State was smaller than heretofore, it realized a little better prices and made fair returns to the makers, if they do not count the loss of reputation worth anything. I find, however, by conversation with the intelligent dairymen of that county that those who have made butter and have fed their skimmed milk to the hogs, have made more profit than those who have made two direct products out of their milk. Had I not been hurried, it would have been possible to make an exact showing of results to substantiate this statement which, I respectfully suggest to Prof. ARNOLD, is opposed to his idea that milk fed to hogs is wasted. Equally good results have been realized also from feeding to calves, and so long as the meat supply of the country is so scant, and its cost to the consumer so high as at present, these must be the most profitable uses to which skimmed milk can be put.

The manufacture of skimmed cheese is the curse of American dairying, and if the makers in figuring the profits they have realized from its production, will offset the account with the losses they have sustained through a diminished home consumption and the injury to their reputation in every foreign market where a skimmed cheese has been sold, they will find the balance to "profit and loss" very much increased and transferred to the other side of the account. And even if there be an increased temporary profit, it does not require much reasoning or foresight to see the position into which competition will ultimately drive our dairy interests, if a constant effort is not made to maintain the highest possible standard for our products.

The Horseman.

TANDEM DRIVING, &c.

GEO. W. GARDNER.

IN England this manner of driving, with one horse harnessed before the other instead of, team-fashion, side by side, is confined to sporting men and gay young gentlemen, more of it being seen in Oxford than in any other city in England. There the collegians who are, many of them, sons of the nobles, being restricted to short leaves of absence, and wishing to have a frolic, generally travel around Oxford in this fashion with fast horses to be clear of the proctors and spies, and so go quickly many miles and have time for their fun.

I have seen them 20 miles out of Oxford, though seldom so far; and two racing thoroughbreds will run over the country in this style at a flying pace. The accomplishment of driving so as to go at the rate of 20 miles per hour safely, is soon learned, and it is wonderful to see them turn a corner at such a rate that one would think they must inevitably tip over. In fact, after taking wine freely at their rendezvous, they will often drive recklessly and carelessly and go over at nearly every turn, but according to the general rule in such instances, Bacchus must have shades employed to care for his devotees, as it is seldom any of these wild young fellows is seriously hurt.

In Canada East, especially all around Quebec, there are no horses to be seen side by side on the farm—going to market or elsewhere it is one horse with a light vehicle, or two, one before the other. So rarely is a pair of horses seen side by side that when the writer's son drove into Quebec, the people in the villages on the way, would come outside of their houses to look at them. There would often be 20 to 30 tandem teams going to a wedding and nothing thought of it. At funerals also they are common especially during sleighing time, for the roads are then covered with snow for six or seven months to a great depth, and are safely firm and hard only for a certain width, so that a couple of teams with the horses in each side by side could not pass when they meet without sinking in. Use is second nature: everybody, boys and women too, can take the reins and drive along with all confidence.

French Canadians are the lightest hearted race in the world and, although they can do nothing on their farms for months together on account of the snow, I have heard them, night after night, driving home from their parties, balls, &c., singing so happily and also so musically, often accompanied by instruments, that it made me believe these Canadians are decidedly the most contented and cheerful people to be met with. The way to become a good driver of a team, tandem fashion, is, first of all to sit behind some horses which have long been accustomed to run in this way, and any one can soon understand all about handling the horses and driving either from practice or from lessons given by a professor. Any one having leisure and means might take a trip to Quebec, and by hiring a team from a livery stable, he would be completely at home in driving in a week, and in two or three weeks would be as good a "whip" as one of 20 years standing. This, of course, is meant to apply to anyone who has been a horseman in other respects before.

Now, about four-in-hand: the driving of four horses that have been used to be driven so, is very easy, and is also very safe for there is no danger of their turning short, or coming back, as one horse is a check on the other. There are thousands of four- and six-horse teams in Pennsylvania and Maryland and my eldest son, when only 16 years old, has driven five and six into and through Baltimore many times. Throughout the whole of a very large district in those two States four and six horse or mule teams are used, the teamsters sitting on the near hind horse, and having merely a single rein running to the near side leader. These common farm teams are only mentioned to show how easy it is to break horses to go steadily and safely, for these have no check on them but the single rein.

A gentleman by practicing can readily "get his hand in" so as to drive four at any pace he chooses up to full speed. When I was a very little boy there was a Captain PINFIELD who, living on an estate near Newport-Pagnel in Buckinghamshire, used to amuse himself by driving four-in-hand along the turnpike road leading from there to Northampton. He had three of the best trained four four-in-hand teams in England or, I should say as good as any, for at that time there were horses much better fitted than our present animals for traveling long distances and hard riding. Captain PINFIELD would overdrive and get a team rather shaky and then he would let them do light work on his farm till they became clear and all the puffs had disappeared. There were coaches at that time in all directions and the Captain would run his four-in-hand team round a coach, time after time, as it was going along at its usual pace of about ten miles an hour. This was the same neighborhood where a gentleman named Osbaldiston who kept a pack of fox hounds rode 200 miles on horse-back in ten hours. This was done around a race-course by changing horses every four miles, about 15 horses having been used, one of which was ridden as many as seven or eight times.

The Herdsman.

EDWARD FOWLER'S SALE OF CHANNEL ISLAND CATTLE.

A REMARKABLE sale of Channel Island cattle took place at Harkness' Bazar, in Philadelphia, on the 10th of January. EDWARD FOWLER, an old importer, and one of the largest buyers of Jersey cattle for the English market, brought over eleven Jersey cows and heifers, two Jersey bulls, and six Guernsey cows and heifers, and these were sold at auction, realizing the sum total of $7,685, or an average of $384.25 for the nineteen animals. One fine Jersey heifer, fully equal to the average, died on the passage. One had brought a bull calf, which was sold separate from the dam, for $95, but is included with her in the above total and average. The Jersey females alone averaged $436 36. The two bulls sold for $500 and $200, respectively, and the Guernseys averaged $364 16.

Bids were made in a reckless sort of way. Two or three times a bidder raised upon his own bid, but was honorably protected by the auctioneer. A heifer, to all appearance barren, sold for $375. An old cow, over ten years old, but a really excellent one, sold for $340. The heifer which had calved showed a fine bag and teats and, though offered without her calf, brought $560—more than several equally good or better animals, which were near calving, brought; and yet, the chances were even that these would produce heifer calves.

The buyers were none of them of especial note as breeders, and the highest prices were not paid for the best animals, except in the cases of the bulls and the Guernseys. It is clear that a good many people have been desirous of buying good imported Jerseys, and so were willing to pay prices considerably above what equally good animals could be imported for. So shrewd a buyer as EDWARD FOWLER paid not more than £30 a head, on an average, for the lot. The cost of setting them down upon the dock in New York was not over £20. When reliable parties, good judges of these breeds, experienced as importers and as breeders, stand ready, at any time, to import to order, or go out and fill orders by personal selection, at a profit to themselves of $30 or $40 a head, it seems wild to pay such prices. It is certainly not too much to say that an equally good average lot of twenty animals, of either breed, may be landed here at about $300 each.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Flower Pictures 69
Bulbs for the Flower Garden 69
Seed Exchange 70
Apple Trees and Fruit, Diseases of 70
Slitting the Bark of Hide-bound Trees 70
Slitting "Hide-Bound Trees," About 71
Pinus Ayacahuite 71
Osage Orange Tree, The 71
Apples, Some New Hardy 71
Peach, About the 72
Adulteration and Testing of Seeds 72
Fruit Growers in Council 72
Fruits of 1877, New 72
Butter-Worker, A New 73
Siftings from the Kitchen Fire 74
Recipes 74
Rural Special Reports 74
Experiment? How Shall We 74
Cabbage Butterfly, Exterminating the 75
Skimmer, An to the 75
Tandem Driving, &c 75
Edward Fowler's Sale of Channel Island Cattle 75

EDITORIAL PAGE:

A Move in the Right Direction 76
What Makes the Difference? 76
Osage Orange 76
To Bridge Over 76
Western N. Y. Hort. Soc 76
For Discussion 76
Brevities 76

LITERARY:

Poetry 77, 79, 81
Her Mother's Secret 77
On the Kattenaese 77
Ancient Modes of Embalming the Dead 78
Respect for the Aged 78
Prosperity and Adversity 78
Bric-a-Brac 79
For Women 79
Vest, Collar and Cuff 79
The Baby Show 79
Dancing 79
Chaos 79
Answers to Correspondents 80
News of the Week 80
Publisher's Notices 81
Various 81
Markets 81
Reading for the Young 82
Playing Cards 82
Letters from Boys and Girls 82
Puzzler 82
Sabbath Reading 82
God's Book Infallible 82
Bashan—Shepherds Leading their Flocks 82
Personals 83
Wit and Humor 84
Advertisements 81, 83, 84

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

A NUMBER of our subscribers have written us that they have seeds of the Shell Flower (Moluccella laevis) raised from the seeds which we sent them. We would feel obliged to such subscribers if they would state the quantities they have, and the prices at which they may be purchased.

WE announce to our readers with unusual satisfaction that B. PICKMAN MANN, the distinguished Entomologist of Cambridge, Mass., will contribute regularly to our entomological columns. Since his return from Brazil, where, with AGASSIZ's recommendation he was commissioned by the Emperor to investigate the injury caused to the coffee plantations by insects, he has devoted himself to Entomology as a profession, and his connection with many of the foremost societies of this country, has given him exceptional opportunities of keeping a-breast with the latest developments of that science.

THE MSS. of "Horticulture and Education," by Prof. I. P. ROBERTS, No. IV., reached us too late for publication this week. We present our readers, therefore, with the essay of Prof. THOS. J. BURRILL, upon Diseases of Apple Trees and Fruit, already alluded to. This is the tenth of the essays, announced last year, by the Professors of our Agricultural Colleges, which we have published up to this time. It is valuable alike to the scientific and to the practical farmer.

A MOVE IN THE RIGHT DIRECTION.

WHILE confident of the excellence of a man's intentions, it is a thankless task to point out their impracticability, as we had reluctantly to do of late with regard to the project of cultivating tea in this country, advocated by our enthusiastic Commissioner of Agriculture. Another subject on which he is even more earnest, is a more extensive cultivation of sugar-cane in those districts adapted to its growth. In this matter we fully sympathize with his efforts, and very sincerely trust they may be successful. There is within the limits of the Gulf States an area suitable for the profitable production of this crop, large enough to yield not only a sufficiency for our domestic wants, but to furnish a considerable surplus for exportation. To utilize this, will keep in the country the vast sums now exported to enrich other nations by the purchase of this necessity of modern civilization, afford a remunerative investment to much of the capital now lying nearly useless, and needed employment to thousands of the starvelings now compulsorily idle in every part of the country.

Presidents, Senators, and Representatives from time to time, graciously avow that the agricultural interest of this country, is the most important interest in it—important alike to its progress and prosperity; and having patronizingly made this concession, these official worthies seem to think they have generously done all the agricultural community has any right to expect from them. For years the lawyer, the banker, the railroad speculator, and the politician, have shaped the policy, controlled the offices, and expended the revenues of this country mainly for their own interests, while the farmer has borne in silence and without influence, the heaviest part of the burden, and will continue to do so until he asserts his own manhood, and insists as a matter of right, upon an influence in governmental matters proportionate to the importance of his avocation.

The Commissionership of Agriculture, the RURAL has more than once insisted, should be a Cabinet Office, as it is in the most advanced European countries. Indeed it is not improbable that the attention of the nation would have been long ago directed to the necessity for this, had the incumbents of the office been men of energy and resolution. Despite some minor failings, we are glad to notice that the present Commissioner is zealous and earnest, that he seems to have a just appreciation of the position his office should hold, and while his efforts are as untiring as they seem to be of late, we shall not cavil at small blemishes, but heartily aid him to promote the best interests of the body he represents.

WHAT MAKES THE DIFFERENCE?

SOME persons often express surprise that their neighbors are enabled to succeed better than they do. SMITH complains that he works as many hours in the day and as many days in the year as JONES does, but somehow things don't seem to get ahead with him, while JONES evidently keeps his farm and buildings in as good condition, and saves money every year.

If we will observe these two men a single day, we shall doubtless be able to discover the screw that is loose—for certainly there must be something wrong somewhere.

If we visit JONES' tool-house, we find everything in good order and in its proper place. When he is ready to commence his day's work, he can lay his hand at once upon ax, shovel, or hoe.

SMITH has no tool-house; when he wants anything, he tries to remember where he left it when he last used it, and the half hours he spends in this way, amount to many full days in the course of the year; and beside, there is a great difference in the condition of the tools when found. One set is bright and sharp—the other rusty and dull. With his sharp ax, JONES will fell a giant of the forest in much less time than SMITH can with his dull one, and with the expenditure of much less strength.

JONES makes intelligent observations of the weather. If it promises to be dry, he plows low lands, and if wet, he makes calculations accordingly. He determines what crop to plant or sow with judgment, and after mature deliberation; he never makes a move for which he cannot give a reason.

SMITH works mechanically and with little judgment. He plants and sows without regard to present state of the market or the prospects for future demand, and wonders how it is that some folks are always lucky. He is a believer in fate or fortune, while JONES works in the belief that Providence helps those who help themselves.

Has JONES a quantity of fruit to prepare for market, he selects the choicest and ships that by itself and the less desirable, in another lot after rejecting entirely the poorest. In this way he receives quite as large a price for his second rate, as SMITH does for any, while his best being extra, bring the highest rate the market commands. He has learned by experience that a few small, inferior apples in a barrel give a bad repute to the rest, and that it is more profitable to feed them to stock or even to throw them away, than to use them to help fill the barrel—and it is the same with everything. JONES finds the time spent in keeping things neat and in order, most profitably employed. SMITH thinks it time wasted. The result is, everything about the one place is attractive and pleasant while the other is slovenly and neglected. The neighbors see why it is that JONES is successful, while SMITH, with as good advantages, accomplishes so little with much more labor.

It is not the horse that takes the most steps that travels furthest in a day, nor the man who labors the most hours that accomplishes the greatest amount of work. A little energy properly directed often attains results sought in vain by muscle without mind, and a little judicious planning is of more real service in overcoming obstacles to success, than the mere worker has any idea of. When intelligence and physical force come in competition it is easy to predict which will win.

TO BRIDGE OVER.

WALKS about the house and through the garden, to the barn and to all much frequented places are of as much consequence as anything else that adds either to comfort, tidiness, utility or beauty. It is of little consequence how well arranged or elegantly kept everything else is out-of-doors, there is that about soft walks that disturbs the best of tempers and, though the sun shines brightly and the air is bracing, one takes to the house as, between it and the muddy walks, the lesser evil.

Dry walks in the winter are dependent upon conditions which cannot always be controlled. If the land slopes from the house in every direction, they may be formed at a small cost. Sand or gravel or both, with enough of coal siftings to bind, are the main requisites. But if the land is flat or nearly so, a system of drainage is the first necessity and even then the walks, to be dry in winter, had better be dug out to a depth of a foot or so and filled in according to directions which have often been published in these columns.

At this time we had it in mind simply to suggest to those who are begirt with muddy walks now that little can be done to better them, that hemlock planks laid double, side by side, leaving two or three inches between and placed upon cross-pieces two or three inches square, will bridge over the difficulty at a very small cost. In the spring, after the ground has become settled, they may be utilized according to the needs of the premises.

OSAGE ORANGE.

MR. FALCONER, in one of his articles this week (p. 71) mentions that Osage Orange trees in the gardens of Gen. SARGENT are growing luxuriantly where anything else would starve. We have them growing in parts of our grounds which are so sandy and dry that the grass burns in early summer and, though but three years planted in their present positions, they promise to eke out a comfortable existence. Such facts are worth remembering. We know of grounds upon which large sums have been expended in the purchase of trees and shrubs in great variety, a considerable proportion of which—in spite of the best of care—have died, are dying or are so dwarfed and distorted that they are not worth the ground they cover. Had the proprietors known at the time of selecting and planting what trees were suited to a sandy, bottomless situation, the expense and trouble to that extent might have been avoided.

To the lover of shrubs and trees, it is a sad sight and a provoking one to find after planting and years of waiting and watching and pruning and doctoring and hoping, that there is naught to show for it. It lessens his interest in the home he tried so hard to beautify.

Better an Osage Orange that will respond to one's labors than a Purple Beech or a Golden Oak that, after one or two blinks of promise, is snuffled out by the first relentless drought.

NOTES.

Western N. Y. Hort. Society.—We have given in our practical columns a liberal space to the report of the recent meeting of the Western New York Horticultural Society and have only to regret that we could spare no more, as the proceedings were of unusual interest. President BARRY remarked that instead of being discouraged by the obstacles to fruit culture which seem to be constantly increasing, we should simply be incited to greater vigilance. "If fine fruits could be grown without effort, they would soon be of little value." This is true, but it is also plain that the cost to make the needed efforts must not be greater than the value of the fruit when so produced. But after reviewing the ravages of Doryphora upon the potato—of the Hessian Fly upon the wheat crop, etc.—he concludes that the horticulturist and fruit-grower have no more than their share of obstacles to contend with. He thinks the prospects of the orchardist in Western New York were never more encouraging than at the present and advises the planting of the apple, "under proper conditions" with as much confidence as ever.

For Discussion—Sanitary laws for our homes—What farmer's gardens are and what they should be—Small fruits for family use—Trees for the lawn, the farm, the roadside—The adaptation of fruits to soils—The best evergreens for home decorations—The best trees for small grounds—The value of experiments in the farm and garden—The value of botanical studies to country children—are among the topics which we think worthy of discussion at our farmers' clubs, agricultural and horticultural conventions, and in the family circle.

BREVITIES.

GEN. GRANT noted during his ascent of Vesuvius that, when the lava had rested for a long time, and become mingled with the soil, "good crops sprang up."

THE Herald says that Vesuvius smoked a little during Gen. Grant's call upon it, which was the only honor paid our ex-president by the haughty volcano.

QUAIL served on toast, cost a restaurant proprietor twenty-five dollars, a day or so ago. We wish that the fine for supplying game out of season were twice as much, and that those who eat it might be fined as well as those who sell it.

WE regret to hear of the death of Mr. Horace Gilbert of Auburn, N. Y., who died of heart disease. He was one of the most efficient agents the RURAL had in the locality, and was esteemed and respected by an unusually large circle of friends.

WHEN a seedman offers his catalogue free to all applicants it is a very good guarantee that he at least has faith in it. WM. H. CARSON, 125 Chambers street, T. M. THORBURN & Co., 15 John street, both of New York, and J. B. MINER, Linden, N. J., thus offer their catalogues and we advise our friends to avail themselves thereof.

MR. CRUZAN'S article upon the much discussed Chinese Yam (Dioscorea batatas) shows how widely tastes and experiences differ. Very few of the many who have given it a trial, entertain any other opinion than that it is valuable chiefly to the amateur who does not measure very carefully the relationship between labor and its results. For ourselves, we can only say that we value it highly as an ornamental vine.

WE think that all good Christians — even though they were holding grain in anticipation of an appreciation in the price, on account of the Russo-Turkish war, should give thanks that terms of peace have been arranged. It has not been a feather in the hat of our Christianity that we have talked less of the terrible sufferings that this war has caused and entailed, than of the effect it was likely to have upon our grain markets.

MR. H. B. ELLWANGER, in an address before the Western N. Y. Hort. Soc., very aptly puts the irrepressible longing after novelties, manifested by many lovers of flowers: "Among the devotees of Flora, there is a class of people of a restless, enthusiastic nature, who, not content with the good things they already have, are ever craving for something new: they are not satisfied with adding to their store, from time to time, such novelties as have been subjected to trial and found valuable, but are ever ready to be off with the old love and on with the new." But there are other devotees, besides those of Flora, who are too ready to give up their old, tried friends in favor of those they know little about.

BUSINESS NOTICES.

SEE Mr. MINER'S adv't of White Grapes and other fruits—something new and valuable.

Literary Miscellany.

MISTAKEN.

JOHN HARDY.

I was only a little broken-hearted
Yesterday,
When he and I so coldly parted
On our way.

I had thought his words of kindness.
Some meaning bore;
It was all my foolish blindness,
Nothing more!

I do not think that I shall sorrow—
Not much, at least;
I shall meet him on the morrow,
My love dream ceased.

One of my foolish fancies only
Passed away:
And perhaps I feel a little lonely—
Just to-day!

HER MOTHER'S SECRET.

[Concluded from page 62.]

"AFTER a while, I became more habituated to her and the girl, and began to like her. Then I took up the idea of marrying her to my nephew.

"But he settled that by choosing for himself—my own daughter.

"Hark! the messengor has returned," he cried and truly, in a few minutes, Martha entered, carrying the desk.

The Baronet snatched it from her like a famished wolf. She would have remonstrated, but Linton took her on one side, and whispered, "Her father!"

"Heaven save us!" said the poor woman.

The Baronet wanted no keys. He opened the desk without difficulty, emptied all its contents on the table, and then, setting to work for a few minutes, produced a secret drawer.

"See," he continued, tearing open an envelope and producing a medallion of himself; "this is the portrait I showed her, but which I did not leave about while my father lived, and this is my marriage certificate, *her* copy, which I put for safe keeping here."

All looked amazed.

"Read it out, Royston," said the Baronet; "every word."

He did until the end, when the signatures proved to be Alice Estcourt and Arthur Mortimer Tressider, with the address Longmead House.

"Forgive me, Sir Arthur," cried Linton, humbly, "I have done you great wrong."

"Say no more," continued the Baronet, quietly; "and that we may find my daughter, summon my so-called wife."

This was done, and Lady Tressider came hurrying in, to see her husband, not dying, but seated in a chair, surrounded by gentlemen, and with papers before him.

"Be seated," said the Baronet, calmly. "I have a very important communication to make to you, and a very disagreeable one. Nay, you need not speak; you will have plenty of time presently."

Lady Tressider smiled scornfully.

"I am sorry to say that when I married you my first wife was living. She only died six months ago," he went on; "and that the young lady whom you persuaded to leave this house under false pretences is my only daughter and heiress. Under the circumstances, it is you who have no business here."

"My business is in the police-court!" she cried, rising furiously; "and to one I shall go to get a warrant against you for bigamy!"

"Hush, woman!" said her supposed husband, sadly and coldly. "If any warrant is to be obtained, it will be one against you for attempted poisoning. Behold!" he cried, pointing to the five glasses which had been suddenly put on the table; "into every one of these I saw you put the deadly drug which was to take my life. Two have been analyzed, and the poison is known. Shall I send to a police-court for you?"

"Mercy! Mercy!" she cried.

"Or shall I send you to Rome, give you up to the Italian police, and have the body of your first husband exhumed?" he continued.

"I have nothing more to say," was her sullen reply. "Give me over to the police."

"No; but leave my house—pollute it no longer by your presence," he added; "and never let me see you again."

She turned as if at bay, but the words died upon her lips. She was utterly crushed and beaten.

Half an hour later, after collecting all her jewelry and her banker's book, she and her daughter slunk away, to be seen no more by any one in that house.

Sir Arthur had to retire to bed, but in two days more he was again about.

CHAPTER XIV.
The Search.

Now began a thorough search for the poor unfortunate girl, who in the very spring-time of her happiness had fled none knew where. The police were unanimously of the opinion that she had changed her name and fled abroad, when they might as well search for a needle in a bottle of hay.

Advertisements were tried; but, as is well known, these never serve the purpose unless they are expected.

But, stimulated by the almost fabulous reward, the detectives kept on.

Sir Arthur grew thin, but refused to go to Longmead until his daughter was found.

We may here mention that Longmead Hall was the mansion of the village in which our narrative commences; but, by some fatality, Sir Arthur never visited it. The second wife's time was given wholly to Paris or London.

Otherwise, one accidental meeting might have prevented much misery.

Royston Yorke became moody and irritable. He frequented the most unlikely places, places where certainly no one like Edith would hide.

But he was sullen and miserable, and tried walks through every quarter of London.

Wrapped in a loose great coat and slouched hat, he traversed every thoroughfare, and often looked so close into women's faces that he was threatened with the police.

But the police began to know him.

One evening he was going up a street in St. Giles's near St. Martin's Lane, when a cab dashed by with great velocity, knocking down a man.

Some rushed after the cab, but Roystsn helped to assist the man into a surgeon's. He was a poor, wretched-looking being, but the heart of our hero was always open to the poor and the outcast.

"Is he dangerously hurt?" asked Yorke.

"We'll see. He'll want some mending," was the half careless reply. "He's a fit subject for a hospital—such as he is."

"But it's only a fractured leg," said the young man. "I'll pay all expenses if you'll get a room and see to his wants."

Money in St. Giles' goes a long way, and the poor fellow was soon comfortably housed and attended to, five pounds being handed to the surgeon.

Now, Royston Yorke was very good-natured in all cases, but here he had a motive. He had recognized in the unfortunate man his quondam rival and attempted murderer, Jack Clayton.

He went away musing on the instability of things, and then returned home.

Next day he called to see the patient.

"Well, and how are you now?" asked Royston.

"You!" gasped the patient—"you not dead? Don't say you put me here—that you saved me from the hospital?"

"I recognized your face at once," answered Yorke.

The man could not speak, and the surgeon coming in, the conversation dropped.

"Sir," said Jack Clayton, humbly, "will you come back this evening, and I may have something to tell you you may wish to know?"

Royston Yorke promised, and going away, returned at a later hour.

The room was poor, but clean and well lighted up. Jack Clayton was no longer the same being.

"I have always thought you were dead," he said, "though I might have known different for the asking. But as it is, I have led the life of a hunted murderer."

"Very foolish," replied Royston.

"I see it now; but I always was a mad fool," he went on. "Now will you tell me, in a few words, the truth about Miss Emily Marshall? I have heard tell and want to know."

With a bounding heart, Royston Yorke told all, and at great length.

"Then she is the daughter of Sir Arthur?" he asked; "and you, his nephew, really mean to marry her when you find her?"

"That I do!" cried Royston.

"There!" said Jack, thrusting a paper into his hand; "take that, and ask for Miss Wilson. Say you come from Jack, who is hurt."

Royston Yorke gave one bound, and was down stairs, where he read the address of some obscure street in Islington. He reached the place by a cab, and found himself outside a small shop.

He went in as calmly as he could, and seeing a middle-aged woman, said he had an important message from Jack to Miss Wilson.

She pointed to the back parlor, and Royston darted in just in time to see Edith trying to retreat.

"My darling," he said, catching her in his arms, "you escape me no more! Come, put on your shawl and hat; your father is dying to see you: come!"

Well, it was not very easy to resist, and probably she did not try much.

Away—away, in a cab, to alight at the old familiar house in Eaton Square. But the ride was long, and Royston was able to tell all in outline. But that we know.

She explained that knowing herself to be looked after by policemen, and seeing rewards offered, she had determined never to go out until the hue and cry was over.

"I thought it all came from your generous love," she said, tenderly; "I little suspected the truth. Ah! how happy I am to know my father is a good and honorable man, as my mother believed him!"

"But what about Jack?" asked the lover.

"Well, he was simply very devoted, and I used him as a messenger; let him run errands."

"And never spoke about me?" he asked, reproachfully.

"I did not like to," she answered.

"And let him think himself a murderer?" was the farther reproach.

"I daresay I am a very bad girl, and not worth thinking about!" she said.

The meeting between father and daughter is too sacred to be recorded. They were left an hour alone, and then Royston was admitted.

A few days later they all started for Longmead, taking Jack Clayton with them.

He had sown his wild oats, and was gladly welcomed back by his delighted family.

Soon a handsome tomb was seen, recording the virtues of Alice, Lady Tressider.

Before Christmas, her daughter Edith became Mrs. Royston Yorke Tressider, and the future Lady of the same name.

But that event has not come off yet. The Baronet lives happily surrounded by his children's children, and thanks Heaven every day that he discovered "Her Mother's Secret."

ON THE KATTENAESE.

BY CAROLUS.

I was sitting one afternoon some summers ago *unter den eichen* (under the oaks), near a little wood lying at the foot of the hills, and skirting the road that leads to the village of Harzburg, in which spot I was spending my vacation, and persuading myself that I was regaining health and strength from its weak saline baths. It was four in the afternoon—a hot, sultry day. All nature seemed enslumbered; promenaders were few and lazy. The shopmen, in their rustic booths, looked indolent, and unmindful of purchasers; the band treating us for the second time that day to the overture to "William Tell," played about a score more wrong notes than was their wont. As for myself, I was leisurely sipping a cup of coffee, idly amused by watching the mountain stream that runs through the wood and the village. The brooklet was gushing merrily past, hopping and skipping over small and large stones, forming here and there miniature cascades, gurgling, murmuring, leaping along; kissing the pine-roots that struggled into its waters, playing with the rushes on its bank. It seemed the only animated thing around.

Looking up, I saw a girl approaching the place where I sat. She was tall and well built, wore the usual peasant dress and neat print bodice, scrupulously clean, and a short woolen skirt, and carried on her back a long, broad basket, called in the Harz a *kiepen*, which enables the bearer to carry burdens without fettering the hands. She seated herself next me, took the *kiepen* off her back, and sighed deeply, as though she had got rid of some heavy burden.

I turned to look at her. It was a fine face, noble in expression; her hair, which seemed luxuriant, was twisted in coils of rich brown plaits around her head, and one was laid across the front, forming a coronet that made her clear, well-defined features stand out in good relief. Her exhausted, heated aspect struck me when, a few moments later, she bent down to the brook, catching some of its water in her hollowed hand. I said, "Do not drink water—you look warm. Let me offer you a cup of coffee."

She raised her head, surveyed me wistfully for a moment, and then, seeing that my offer was sincere, rose and said, curtseying, "If the Herr really means it."

"Certainly," I replied. While she was drinking, I said, "You are tired and warm. Have you been far to-day?"

"Nearly half way to the Brocken, Herr," she replied. "I have been getting food for our cow; the poor thing is ill, and cannot get it for herself. Everything is so scorched here in the valley that we must go far up the mountains before we find fresh food."

Suddenly a heavy hand was laid on my shoulder from behind, and a deep masculine voice, choked with passion, said, hoarsely, "Have I found you at last, you villain? If you are not too great a coward, meet me at the Kattenaese to-is afternoon; we shall be alone and undisturbed there."

Before I could reply the speaker was gone, and a second later I saw, from between the trees, a wagon driving along the high road at a furious rate. I turned to the girl at my side. She had risen, and was readjusting her *kiepen*; her

WINTER SPORTS.

face was aglow, and her eyes filled with tears.

"Do you know that man?" I asked, as soon as utter amazement would let me find words.

"It is my *schatz* (sweetheart)," she replied, simply, struggling to speak without agitation.

"Ho, ho!" I thought. "The fool sees me sitting here under the trees next his love, and immediately thinks I'm paying attentions to her!" The idea quite tickled me. Very many years had fled since I had been considered dangerous.

"Tell him when you see him," I said, "that he is wrong in being jealous, as I suppose from his conduct he is. Say an old man offered you a cup of coffee. Go and say so, my girl."

"He is doing his master's work," she answered; "I may not go to him now. Besides, Herr, he has hardly spoken a kind word to me for the last week, and just now he glared at me so fiercely."

At these words she fairly broke down, and burst into tears. I tried to console her, but an old fellow like me is not clever in love affairs. Presently she grew calmer; and, wiping her eyes with her apron, she once more curtseyed, and bade me "Good morning, and good thanks, Herr." To turn the current of my thoughts, which at that time were not of the pleasantest description, I determined to ascend the Burgberg, the mountain nearest the village, the view from which well repays the slightly fatiguing ascent.

When I had seen my fill of the view, I rose and surveyed the remains of the castle that stood here formerly, and the site of which is now occupied by an elegant hotel; and then, recollecting that I had ordered my supper early, determined to retrace my way.

I had gone but a few steps downward, when I came to cross roads, and saw a signpost whereon was inscribed the direction to the various points accessible thence. On the board to the left was written, "Zur Kattenaese."

"Kattenaese!" I repeated to myself, reading the words; was not that the name mentioned by that man this afternoon? I had forgotten all about him till then. I wonder what the Kattenaese is, I thought. It had never for a moment occurred to me to go and meet the girl's lover; I hoped the matter was long since cleared up between them. But, now that I saw the name, it tempted me to go. It was not far. I wanted a walk. Perhaps the man might be there, and I could clear up his mistake.

Then, too, I remembered to have seen some large weird rocks jutting out at the top of a mountain within view of my sitting-room window; and when I asked my landlady about them, she said they were the Kattenaese. I was half-way already and could not know when my old and lazy bones would carry me up here again, so I turned in the direction indicated.

The walk led between tall pines along a moss-grown path, and I exulted and delighted in its beauty and in the fragrant odor emitted by the trees. The silence was intense, and grew oppressive at last; the heat, too, was great. Presently I felt some drops of rain; it must be a very heavy shower, I knew, that could penetrate these clustering trees; but seeing from another signpost that I was not far from my destination, I determined to proceed.

At last I emerged from out the sheltering trees, came on to a large open space, and saw two large rocks about a hundred yards ahead of me. These then, were my destination, but although so near it seemed very doubtful whether I should get to them, for it was raining heavily.

Unwillingly, and with a kind of relief, I turned to leave the spot and regain the valley, by descending the mountain's shapely sloping side.

Hardly had I commenced my descent when I fancied I heard sobs. At first, on standing still to listen, I held it to be the wind's soughing; but, on listening more attentively, I distinguished a human voice. To leave some poor fellow creature—perhaps suffering pain—alone here in the storm was beyond me; so I began to search for the spot whence the sounds proceeded, and, following their direction, came after a few seconds upon a little knoll of pines, where a man in working clothes was seated. His face was buried in his hands, his powerful frame shaken by sobs. He did not notice my approach, and I hesitated whether I ought to break in upon his grief. He was praying—praying aloud, and his words were full of agony.

"Oh, great Heaven," he said, "take her not from me—mine own, my only treasure! Let not a David rob me of my sweet ewe lamb. Pour better feelings into my heart. O, Lord, let me not bear him malice; but oh, let him not do me wrong! Preserve her to me—to me, kind Heaven—to me!" Here sobs and tears choked further utterance.

The rain continued to pelt down; the water was pouring in small streamlets down the mountain side; I wished to continue my way, and yet could not leave this man in the midst of his misery. He might do himself an injury. From the wording of his prayer, too, it might be the man who had proposed to meet me here. I approached gently, and touched him on the shoulder.

"My good fellow," I said, "you are getting wet. Come down into the valley with me; we are having a frightful storm, and this soaking is enough to make one ill."

"None would care if I were," he replied, without raising his head. Then after a few moments, during which I stood immovable, he said, "Why don't you go? I never asked you to wait for me. I don't know who you are. If I die that will be the best thing for me, and one may perhaps be glad." His head, which he had lifted wearily, and with a half-vacant expression as he spoke the last words, fell again into his hands.

"Who will be glad if you die?" I asked. "None, I feel sure."

"Who are you that you can be sure?" he said, fiercely. Then, suddenly starting to his feet, he cried, "Perhaps you are the man I came to meet: if so, it is well. Ha, ha! Heaven favors quarrels to-day. Tell me, how have you dared for some time past to pay such marked attention to my girl? Nay, do not try to deny," he said, as I was about to speak. "I know it all, though I did not see you myself. Hans Herden told me of your conduct; and though I never used to love or even trust Hans, I now thank him greatly for this warning. You shall pay with life for your daring! "I will——" and he raised his arm to strike.

"Stop!" I said, as gently and softly as I could, laying my hand on his. "You are mistaken, my friend—you are indeed."

"Mistaken! how?" he cried, shaking free his arm—an easy task, for he was a far stronger man than I.

"I am the man you came to meet," I began.

"Did I not say?" he shrieked, his wrath rising threefold.

"But," I added, once more detaining his uplifted arm, "not he who paid your girl attentions."

At that moment a fierce, dazzling flash of lightning shot across the gloomy heavens, and a long, loud crash of thunder followed. The man trembled.

"Let us go down," I said, again placing my hand on his trembling one, and he yielded. "I never saw the girl till this afternoon," I explained, as we descended; "I then offered her a cup of coffee, for she was warm and tired. Look at me. See, I am an old man—old enough to be her father. Acknowledge your mistake."

"Hans Herden said it was a gentleman that courted her," was the answer given while eyeing me incredulously.

"If I give you my word of honor as a gentleman that it was not I, will you then believe?" I asked.

"I could not misdoubt that," he replied.

"More still," I said; "if I promise to aid you in your search for the real culprit?"

"Sir," said the man, turning an astonished, grateful glance upon me, "you are good. I do not deserve such goodness: I was a brute to you. But oh, Herr, I love Margarete so dearly, and although all prospect of our marriage seems yet far off, the thought that I was losing her was more than I could bear."

"Why can you not marry?" I asked. "But come, walk faster while you talk; this rain is fearful, and the storm increases in violence."

"Ah, Herr, it is money I need," he replied; "that old and constant complaint. If I had a few hundred thalers, ah then—— But till I have saved so much years must pass."

"What is your work?" I asked.

"I am a waggoner," he replied. "When I have a waggon, horses, and house of my own, then I can marry."

I pitied the poor man from my heart. All the way down the mountain he poured out his griefs to me, and as he did so his wrath cooled. I forgot even the inclement weather in my interest for Johann (that he told me was his name). His deep love to his betrothed was touching; and it seemed to me, from his narrative, that he had been perfectly goaded into jealousy, as until lately he had the firmest trust in her faith.

"You shall hear from me again," I said as we parted; "that is to say, if I survive this rain."

After exchanging my wet garments for dry and warm ones, and partaking of my retarded supper, I caused my landlady to come to me, and questioned her as to the man and woman I had met that day. She could not speak in terms laudatory enough of their faith, honesty and worth.

"And who is Hans Herden?" I asked.

"A driver at Herr A——'s," she replied; "and between ourselves, Herr, I think a bit of a scamp. He's been far too polite to Margarete lately, but she's the right one; she'll soon teach him his place."

I made a mental vow here, dismissed and thanked my hostess, and retired to rest.

Next morning, while sitting in the pretty garden before the house I lodged in, taking my breakfast in the true Continental style, *al fresco*, Margarete passed and I beckoned to her.

"Is it all right between you and your intended?" I asked.

She hung her head and replied—"He says, since it is not you, it must be some one else—that Hans Harden told him so, and that he will find it out. He hardly gives me a kind word. But I must go to work," she said suddenly, after a moment's pause.

I readily forgave her the little falsehood. I saw that she could not control her tears, and for that reason wished to escape.

After she left I went to Herr A——'s, and, through his kind intervention, obtained a private talk with Hans Herden. The man was dogged at first—I could get nothing from him; and he constantly questioned my right of interference—in which respect I felt he was not quite in the wrong. I was an old busy-body, after all, though a well meaning one. Threats availed little—a sense of shame seemed unknown to the man; only a bribe of money was at last successful in drawing a confession from him.

It was as I had thought—the man admired the girl himself, and hoped, by stirring up his comrade against her, to break off the match then he would endeavor to win her for himself. His only chance lay in such means, as he well knew her faith and integrity. He was a horrid man—the most obnoxious I had come across for many a long day. But I did not rest satisfied with the confession given to me—I forced him to go to his fellow-worker, and in my presence repeat it. At first he appeared disinclined to do this, but the sight of some bright thalers in my hand decided him.

The lovers must soon have become reconciled, for that evening I saw them walking together arm-in-arm *unter den eichen* in the moonlight. They were far too absorbed in each other to see me; and I, who had been *deus ex machina* in reuniting them, was alone—unnoticed—forgotten. Heigho!

Next day I went to Brunswick, where I employed my time in making purchases, and returned a few days afterwards, when I heard that both Johann and Margarete had several times been to call upon me, to thank me as they said. I told my landlady to say, should they call again, that there was no cause for thanks; but, before they could do so, I visited them at a time when I thought it likely that Johann would be at the house of Margarete's mother. I drove up to the cottage door in a strong-built blue cart with bright red wheels, drawn by two stout bays. Inside the cart I had caused household furniture, the fruit of my late purchases, to be packed.

They both exclaimed with joy when they saw me alight, and the old woman pressed me to take some supper with them. I accepted their offer, ordering the cart to wait.

We had a cosy little meal of simple, frugal fare. Before parting I lifted my well-filled beer glass in my hand, and said, rising, "This to your happiness, Johann and Margarete! Think of me sometimes—a lone old bachelor, who knows no joy like yours." Then, emptying the glass, I bade them follow me, and once outside the door, I showed them the cart and its contents. I explained to them that it was all for their future household, and, turning to Margarete, and pressing a thousand-thaler check in her hand, I said, "This is for your dowry."

Before they could recover from their mute astonishment I was gone. Vainly they called after me—I would not hear. I rushed to the railway station, and departed by the next train. The sight of their happiness had overpowered me, and I did not wish to receive thanks, which I knew were inevitable should I stay longer in the place.

I wrote to my landlady to forward my luggage, which she did, sending at the same time a letter from the happy lovers, full of the deepest gratitude, in which they called me their benefactor, and prayed me to come back once more. But I had not strength enough for this: I could not. It is a great happiness to help others on the road to joy, but, if one can never learn that joy oneself, it is better not to witness it, for it only makes the pang keener and sharper.

ANCIENT MODES OF EMBALMING THE DEAD.

Herodotus and Diodorus tell of three modes of embalment prevalent in Egypt. The first was very costly, answering to about $2,000, exclusive of such gems, jewels, and gold, as love or prodigality might lavish upon the dead; the second, $300; the third, within the reach of all. As to the extent to which gems and jewels were wound up in the cerecloth to deck the dead, there is the instance of the queen lately found at Thebes, whose ornaments were shown in an exhibition of 1860. They are now in the Pasha's Museum. Their intrinsic value alone—that is, to break up and melt down—is about $10,000.

It is curious, in reading the two historians' accounts of the Egyptian embalmer, to observe in divers matters the foreshadowings of the modern undertaker in his ways. The different degrees of woe were then, as now, sounded according to the depth of the purse. Just as it is now, when the furnisher will undertake for you any gradation of sorrow from the simple elm coffin and pauper funeral up to the flourish and parade of plumed hearse, weeping mutes, and prancing steeds, so with the Egyptians. Only the manner was different.

When a bereaved mourner, they tell us, went into one of these Egyptian shops, the functionaries would show him different models in wood highly and artistically finished or otherwise, to represent the mummy and coffin. There were painted patterns of mummies in their multicolored cases to choose from. The various costs, according to pattern, were then stated. The customer chose his model, and the bargain was struck. He then went home and sent back the dead body, and the body remained with the embalmer until the whole process was completed. The number of days requisite for embalming was, as we gather from both historians, seventy or seventy-two, and this tallies with the Scripture account—Gen. 1-3; for doubtless the immediate process only occupied part of the time, the rest being given to the ritual of mourning.

The processes for embalment are related very categorically. In some things they hardly commend themselves to our present sentiment of what is respectful to the dead. The chief secret seemed to consist in certain chemicals injected into the veins and body; in certain washings and steepings in natron, and in the filling up of the cavity of the body with myrrh and other balsamic substances and spices. The brains were drawn out through the nostrils. Sometimes the face and hands were gilt. Certain jewels were laid on the breast under innumerable swathings of linen. And then a kind of pictured shell received the body—a sort of close-fitting case made to open and shut lengthwise after the fashion of a violin-case.

But when the mummy was sent home, what then? The family did not immediately part with it. On the contrary, they often kept their dead relative for a long while, a guest in his own house. A room was set apart. The mummy, standing upright as in life, was enshrined in a kind of painted cabinet, a tabernacle starred over with innumerable hieroglyphics, and protected with great painted scarabæi and multicolored cherubim, with their overshadowing wings spread athwart the chest. Hither, then, at intervals, the family would come to hold communion with the dead. They would bring fresh lotus flowers to enwreath their silent relative, or strew about the ground blossoms of asphodel and papyrus.

Numberless paintings in the tombs of Egypt picture this affecting scene—a mother and her children kneeling in circle with the dead in their midst, or a wife with plaintive face and dishevelled hair embracing the placid-looking mummy of her husband. Listen to what Diodorus says: "A clever embalmer," he writes, "would send back the body perfectly preserved, even the hair of the eyelids and eyebrows remaining undisturbed; the whole appearance so unaltered, that every feature might be recognized. The Egyptians therefore, who sometimes keep their ancestors in magnificent apartments set apart, have an opportunity of contemplating the faces of those who died long before them, and the light and figure of their bodies being distinguishable, as well as the character of the countenance, they may enjoy a wonderful gratification, as if they lived in the society of those they see before them."

RESPECT FOR THE AGED.

NELSON RITTER.

Some one has truly said, that "To ridicule old age, is like throwing cold water in the morning into the bed in which we must sleep at night." Old people have a right to demand that they be treated with respect; but are they not under great obligations to be pleasant, agreeable, and—as far as possible—cheerful? Failing in this, is it any wonder that neglect and disrespect sometimes follow? Old people should be held in reverence by the young, especially if there is anything worthy of reverence about them; but each man and woman should see to it, that as they grow old in years they do not grow out of all sympathy for their children and grandchildren. No person, because he is old, has a right to be selfish, sullen, and morose.

Said a little boy, "Ma, will grandpa go to heaven?"

"Yes, my son, I hope so; but why do you ask that question?"

"Because, ma, if grandpa goes to heaven, I don't want to go there. He would say, 'Whew! whew! what is this boy bothering around here for?"

A short time since I read a long article, written to show that it was our duty to love old people. The writer described her great love for an aged grandfather, and proceeded to give a minute description of him, investing him with so many virtues that not to love him—or any other person such as described—would be an impossibility. I thought that to love such a person would be more of a pleasure than a duty. Every neighborhood has its old person who, although bowed down with weight of years, still has a warm heart for the young and a kind word for the children.

No need for the word "duty," to cause such people to be sincerely loved and respected. Again, every neighborhood has its representative, from whom the children instinctively spring away, as from a plague. Persons that little girls are afraid to meet, whom the boys give a wide berth to, and whom no person desires to encounter. Even a long newspaper article, in which all the changes are rung upon the word "duty," will fail to cause such unsympathetic people to be respected, much less loved.

Let us all, therefore, resolve that whatever be the number of our years, we will be true to the right, kind and sympathetic to all, especially towards the weak ones of earth, whether they be in their first or second childhood. Doing this faithfully, we shall be loved and respected all along the pathway of life. And when the end comes, may it be said of us, as says Sir Walter Scott in his vivid description of "King Rene:"

> "A mirthful man he was; the snows of age
> Fell, but they did not chill him. Gaiety,
> Even in lips closing, touched his leeming brain
> With such wild visions as the setting sun
> Raises in front of some hoar glacier,
> Painting the bleak ice with a thousand hues."

Syracuse, N. Y., Jan. 4, 1878.

PROSPERITY AND ADVERSITY.

Years of each have been the lot of many, and it would be hard to say which, in some cases, is the most dangerous to a man's welfare, even in this world.

The first mentioned often causes a man to hurt another's feelings. As he prospers he begins to study his own interests, ignoring the comfort of every one whom circumstances have placed under his control. He begins to order about like a great commander, and thinks it very smart to shift his employes from job to job, and giving them no reason for doing so. He will be tyrannical wherever he can, and he is often even so in his own family. He thinks he is a superior kind of a being, and many crafty, cunning, but dishonest-hearted men, will humor this assumption, and pander to his conceited notions for the purpose of cheating him, which they will easily do, until they become too venturesome and too covetous; or one in the ring of confederates proves treacherous and shows up the other to get first chance himself.

These prosperous men then begin to distrust

everybody and their own judgement: but pride holds them back from acknowledging weakness. They are miserable: and many another man in adverse circumstances is far happier, and enjoys better health, sleeps better at night, and lives to enjoy life years after the other had left his wealth to be squandered by his heirs.

It is well when one of the few "live and let live" men prospers, for then he is happy himself and tries to make others so. As men of this good disposition makes a sunshiny existence for many of those who are brought in contact with him, and he has the good will of everybody, while the selfish, miserable man who wants to take advantage of everybody, is hated and detested beyond measure. The man in adversity moves lower down than formerly, but having once got settled into the lower grade, finds himself much more comfortable than he expected, and if he does not unfortunately, get placed in a situation under one of the opinionated, smart, domineering class, he comes round in time to be a respected member of society, and enjoys peace of mind and long life. Sometimes these prosperous men become so wretched, and feel the pangs of remorse to such a degree, that they will end their lives by their own hands.

How much better then it must be for any man who has fortunately commenced to make money to let the poor enjoy some of it, and instead of beating them down in their wages, to pay them well and have their love instead of hate!

S. B. P.

BRIC-A-BRAC.

BY C. H. E. R.

SHALL I not be forgiven for repeating good Fuller's words, even though they may jar a little upon some wedded ears? "Deceive not thyself by over expecting happiness in the married state. Look not therein for contentment greater than God will give, or creature in this world can receive—viz., to be free from all inconveniences. Marriage is not like the hill Olympus, wholly clear, without clouds. Remember the nightingales, which sing only some months in the spring, but commonly are silent when they have hatched their eggs, as if their mirth were turned into a care for their young ones."

WE have seen many beautiful tributes to lovely woman, but the following is the finest we ever read: "Place her among the flowers, foster her as a tender plant, and she is a thing of fancy, waywardness, and folly—annoyed by a dewdrop, fretted by the touch of a butterfly's wing, ready to faint at the sound of a beetle, or the rattling of a window-pane at night, and she is overpowered by the perfume of the rosebud. But let real calamity come, rouse her affections, enkindle the fires on her heart, and mark her then! How strong is her heart! Place her in the heat of battle—give her a child, a bird or anything to protect—and see her, in a relative instance, lifting her white arms as a shield, as her own blood crimsons her upturned forehead, praying for her life to protect the helpless. Transplant her in the dark places of the earth, call forth her energies to action, and her breath becomes a healing, her presence a blessing. She disputes inch by inch the strides of a stalking pestilence, when man, the strong and brave, pale, affrighted, shrinks away. Misfortune haunts her not, she wears away a life of silent endurance, and goes forward with less timidity than to her bridal. In prosperity she is a bud full of odors, waiting but for the winds of adversity to scatter them abroad—pure gold, valuable but untried in the furnace. In short, woman is a miracle, a mystery, from which radiates the charm of existence."

IT has always seemed to me that the wedding ring has not been developed to its full capabilities. It should always bear on its inner surface some neat and appropriate inscription. It is best to put it on the inner side because friction will gradually obliterate the letters, just as the mental friction, will efface the sentiment, the longer the devoted couple remain together. It is seldom she calls John Anderson my Jo John, when his locks are like the snow, but rather lassoes him with a string of complaining epithets, whose burden is that there is no wood in the house, and he sits around doing nothing industriously while the ax is rusting in the shed. Now in the Middle Ages, and to the close of the 17th century, it was the custom to embroider love with written sentiment. Here are a few models that may be modified for use at the present time:

"Pray to love, love to pray" (1647).

"Divinely knit by grace are we:
Late two, now one; the pledge here see" (1657).

"Ever love; love the giver,"

"My promise past shall always last;
In Christ and thee my comfort be."

"Happy in thee has God made me."

"Most yn myud and yn myn heart,
Lothest from you for to depart.
My heart and I until I die."

"If I think my wife is fair,
What need other people care!"

"I did commit no act of folly
When I married my sweet Molly."

"I cannot show the love I O."

"Let him never take a wife
That will not love her as his life;
Love one little, but love one long."

"First love Christ, that died for thee;
Next to Him love none but me."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

MY QUEEN.

ALFRED SULLY.

QUEEN of my life,
Upon my heart's most guarded wall
The sentry waits thy royal call;
For thee the gates wide open swing,
For thee the bells their welcome ring,
For thee—"The Queen!"
For thee, my love, my life, my queen!

Queen of my love,
With royal grace of tenderness,
Thy sweet lips speak alone to bless,
Each passion of my nature stands
Obedient to thy loved commands—
For pure, serene,
Thou reign'st of all my life the queen.

Queen of my home,
Thy castle, though too mean for thee,
Holds treasures worth a kingdom's fee,
Enthroned in thy womanhood;
In all things pure and sweet and good,
Thou reign'st serene—
My children's mother and my queen!

VEST, COLLAR AND CUFFS.

FIGURES 1 and 2 represent an arrangement which is like a *plastron* vest, with cuffs to place on outside the wrists of long coat sleeves. The

FIG. 1.

vest is made of Italian lace insertions joined together with a very tiny Hamburg insertion of Swiss muslin, and a narrow Hamburg is also upon all the outer edges. A ruffle of Italian edging passes about it and the center of the front has a ruffle arranged on each side of the Hamburg insertion to form a cascade or *jabot*. The closing edge which is underneath has tiny buttons upon it and little button-holes are made in the strip which is ornamented, but both the buttons and

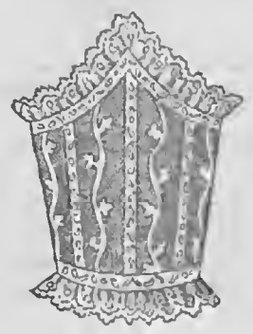

FIG. 2.

button-holes are invisible, because of the drooping of the laces. The back of this vest may be pointed or somewhat square like a sailor collar or Pompadour, that is narrowest at the lower edge. To make it, cut a model of stiff or firm paper and baste the insertions to it, beginning with the outer one and permitting the others to be cut as required. Baste the seams carefully, with the parts upon the paper, and then remove and stitch them with a machine. The edges beneath the cascade may be of Swiss muslin, if the Hamburg insertion be not abundant. The insertion which is folded into the required shape at the back; must be neatly overhanded afterward and the double part cut away on the under-side. A wider lace upon the edges adds much to the elegance of the vest.

FIG. 3. FIG. 4.

At Figs. 3 and 4 are shown collar and cuff of double cambric or linen, with embroidery in English wheel-work upon their edges. Some ladies who cannot accomplish this work rapidly, purchase an edging that is pretty serviceable, and then transfer it to the collar and cuffs which have been cut to a shape which fits and pleases them. To do this, cut away the cambric, but not too closely to the wrought figures, baste it firmly to the position where it is wanted to be, and overhand or buttonhole the inner line of the work to the outside of the article. After this is done, cut away any rough edges of the cloth, which still attach to the ornamental part, and also cut away the undesired projecting portions of the collar and cuff material, that still remain underneath. Linen collars that are made and turn over *a la* BYRON, or those in English style, are equally popular. Both forms are worn with outside cuffs or inside straight cuffs, and also cuffs that flare.

Neckties of shaggy silk and embroidered ties of silk, muslin, and lace, are fashionable.

THE BABY SHOW.

MRS. POTIPHAR.

IF it had not been demonstrated, one would hardly have conceived it possible that there could be found in this age women so lacking in self-respect as to exhibit themselves *as mothers*.

There are those who profess to be shocked at woman's asking for a right to the exercise of the elective franchise. Whole tomes have been written about the indelicacy of woman's going to a polling place to deposit a vote—where she would attract no more attention than she does now in public conveyances, in church, or the theater. These same sensitive people have been further outraged by woman's practicing law, and their rage attained the superlative degree when, in defiance of St. PAUL and more modern ecclesiastical authorities, she has asserted her right to act as CHRIST'S ambassador and *tell* the gospel message from the heretofore zealously-guarded pulpit. On all sides she has been denounced as unsexing herself, as coarse, wanting in delicacy and utterly destitute of modesty, because in these various ways she has sought to prove her right to be the peer of her brother in the kingdom of mind. In all this she asked to be considered as an intellectual being, and men have derided her.

Where were these fastidious folks during the baby-show epidemic? They uttered no protest, and it is consequently fair to suppose that these sticklers for modesty in women saw no impropriety in these shows. I put it to you candidly, which is the more indelicate—exhibiting one's-self and one's offspring *as animals*, or carrying CHRIST'S message of pardon to a sin-stricken world?

The mere fact of a woman's giving birth to a child, entitles her to no special consideration or respect. The females of all created things share this power with her. It has nothing to do with her intellectual or spiritual life. It pertains solely to her lower or animal nature. What ennobles and refines motherhood, are the all but God-like qualities that are developed in the woman—the infinite tenderness, the utter self-abnegation, and it is because of my profound admiration and respect for the motherhood of the world that I am indignant at women prostituting what should be the most sacred and the holiest relation of life by exposing themselves and their innocent children to the ribald jests of miscellaneous crowds.

Any woman possessed of the least possible delicacy, must have been grieved at the tone the daily papers assumed in reporting the baby-shows. The exhibited—mother and child—were talked of much as though they were cattle. The press, however, was not to be blamed. The women voluntarily made of themselves targets for all the jokes and the not always chaste allusions that were made.

Setting aside the question of delicacy, what good is accomplished by these displays? Cattle and dog shows are made to serve a useful purpose. The visitors have an opportunity to compare the different modes of breeding, and the result is a more intelligent care of stock. Will any one pretend to assert that the next generation of babies will be any the better born or bred for the shows of to-day?

Imagine the withering scorn with which one of the exhibiting mothers would meet any such suggestions: and yet, if they chose to put themselves and their infants on a level with dogs, cats, and cows, it hardly behooves them to grow indignant when people very naturally fall to instituting comparisons.

DANCING.

[From the New York World, Jan. 14,]

ALMOST without exception, New York physicians agree that dancing, inclusive of the waltz, is *per se* harmless. Almost as unanimously they condemn certain of its common accessories or some of the physical conditions under which it is done. The indigestible midnight supper is bad, but not the dancing; the foul air and draughts are bad, but not the dancing. As to the immorality, they don't believe in it. The views of several clergymen are presented also and speak for themselves.

The venerable Dr. Erasmus E. Marcy, of No. 1 West Thirty-fourth street, N. Y., said that he was in favor of all kinds of innocent recreation. "There is no doubt," he continued, "that the conditions which surround dancing are sometimes the cause of serious physical injury. Especially is this true of the exposure of thinly clad women to drafts and the cold air. But this evil is not directly chargeable on dancing, since ladies go to the opera and the theatre and to dinner parties in full dress. As for dancing *per se* I think it an innocent and healthy recreation. I have always said that we did not have half enough recreation in this country. People will insist upon working too many hours a day and devoting too little time to recreation. I think that billiards at home, dancing, sociables and all similar pleasures are the greatest need of the nation. In many years of practice I have found the people who have attained an advanced age, are the people who have always been happy and jolly, and while taking good care of themselves have at the same time been given to pleasant recreation. I look upon every one who encourages the introduction of English sports, such as riding and shooting and walking, in the light of public benefactors. I think, in short, that if you were to put it to the vote of the physicians of this city you would find a very large majority of them were in favor of dancing.

"I think that, as far as the idea that the contact of the sexes in dancing gives rise to improper thoughts is concerned, it only exists in the prurient imaginations of the people who write the books containing such suggestions, and that the only people who could indorse such work must be those who retain the old Puritanical notions which existed in New England when I was a boy. All the dancing I have ever seen has been done with delicacy and propriety."

Dr. M. H. Henry, of No. 157 West Thirty-fourth street, said that dancing was not injurious in itself; it only became so under certain conditions which surrounded it, and in its accessories. But these accessories might be more properly spoken of as belonging not to dancing especially, but to all evening entertainments. "There are times," he said, "when taking an extraordinary amount of exercise is injurious, but this is equally true of walking or riding to excess as well as dancing, except it be that the latter presents greater temptations to the taking of such exercise than the others. American women are poorly nourished improperly fed as a rule, and they are improperly dressed, although in that respect there has been some improvement lately. For these reasons they are not strong. Then there are certain periods when a women is totally unfitted for taking any exercise whatever. At such times French women and English women very largely go to bed and stay there, while American women go out and dance and walk to excess. The walking is as bad as the dancing, and both are very injurious. Then there are the suppers which are furnished to people at dancing entertainments—ices freezing cold, greasy salads, coffee boiling hot, and the like. These of course, are injurious to anybody. I have not read the book on dancing entitled 'The Dance of Death,' but I have read extracts from and reviews of it, and I think that such books are likely to do more harm to their readers than dancing will ever do them. I think, to sum the matter up, that dancing in properly ventilated rooms is a healthful exercise."—Concluded next week.

CHAOS.

LILY HEMLOCK.

THE RURAL gentlemen seem to admire the "quiet corner," but is there any prospect of peace while "Lances" and "Sword Sticks" are so freely used? My limited acquaintance with human nature has proved such weapons unnecessary, at least in Ruraldom.

We admire "Sword Stick's" *nomme de guerre*; it suits the article admirably—improves it. He says "Ermengarde" is guilty of ridicule.

Medecin, guerts-toi toi-meme!

"Sword Stick" imagines the ladies to be a composition of flowers and feathers, laces and silks, generally, and fashion plates in particular. I'll leave the gentleman to wrestle alone in his might with the products of fancy, while I attempt to deal with realities—the something beneath the dry goods that is made of better material; something that *can* and does train children to lives of usefulness and honor; and that provides for them the necessaries of life while the father, *who needs to make no excuse for his faults*, is squandering his children's bread and his wife's earnings at the dram-shop or gambling table.

On the other hand, the "bread winner" deserves much more respect than "Jacquelina" gives him. The "staff of life" must be earned or obtained in some way, and if "Jacquelina" could know how hard were the struggles, and how noble the impulses in the heart of him who wins it honestly, she would not only surrender the "coolest corner" in her home to him, but the warmest place in her heart, and deem the offering inadequate, and be thankful that the sacredness of a comfortable home shielded her from the temptations, the anxieties and the uncertainties of business. "Each for the other and both for the Master," Jacquelina.

"Sword Stick" says: "It is a glaring fact that, after marriage, many wives are more intent upon avoiding a family than upon preparing for the physical advancement of another generation." But is it not a glaring fact that, after marriage, many men are more *intent upon having families than upon providing for them.*

But this habit needs no excuse!

"The clothing of our children depends upon the fashion." Only too true. Look at school-girls! Who ever thought of sending boys two miles to school in winter, with such shoes as the girls wear. Preposterous! If farmers did not get boots for their boys the State would.

But the girls! They can't wear boots—they are too heavy! It seems to be beyond human comprehension that girls need something to wear as well as boys do.

Parents have money to pay Professors and M. D.'s to talk about "Sex in education;" time to read articles upon "Insanity among farmers' daughters," etc.; but they have not the courage to get proper clothes for their girls, nor the time to think that the only wonder is that girls have minds at all, when so regardless of health.

The Querist.

ANSWERS TO CORRESPONDENTS.

Shell Marl.

T. G., Naples, N. Y.—Draining a piece of swamp land, a few weeks ago, I found, about twenty-four inches below the surface, a bed of marl (that is, a decomposition of small shells), containing, I think, many thousands of tons. Will the RURAL please to give me some information in regard to the following points, viz.: (1.) Is this marl of any commercial or manurial value? (2.) Will it improve muck land, if put on in its natural state, or is it necessary to have it burnt? (3.) Can you tell me of some easy or inexpensive way to burn it?

ANS.—1. Yes. Such deposits of shells are often nearly pure carbonate of lime, and frequently contain, in addition, animal and vegetable remains and soluble salts. They also generally contain silicious matter, chiefly derived from the shells or sheaths of infusorial animals, which absorb silica from the water in which they live, instead of lime. This is the most valuable kind of marl.

2. If applied alone to muck land, its effect is beneficial, as it acts chemically upon the semi-decayed vegetable matters, which contain crenic and gallic acids, giving the woody fiber highly antiseptic properties. The alkaline matter of the marl neutralizes these acids and thus hastens decomposition. Generally, on exposure to the air, marl of this description soon falls into very fine powder, like slaked lime, and can, therefore, be at once incorporated with either muck, sandy or clayey soils, or else advantageously composted with manure.

3. It is only rarely that shell marl is burnt or caloined, and then it resembles quick-lime in its action. But as all the valuable organic matters are lost during the calcining process, this mode of preparation is only advisable where shell-marl is intended to be used as a substitute for quick-lime, which is not generally the case. Probably as cheap a method of burning it as any, would be by the construction of an inexpensive little lime-kiln for that purpose.

Gas Lime.

H. S. H.—Would the lime that is used by gas-works be of any use as a fertilizer? I have asked a number of farmers; they tell me it is of no use. They claim that the sulphur that gets in the lime from the gas passing through it takes all the good qualities out of it. Please tell me through the RURAL whether it still retains any fertilizing properties?

ANS.—As with many other fertilizers, the value of gas lime depends on the manner of using it. As it leaves the purifier it is a mixture of sulphuret of calcium, with carbonate of lime and a variable quantity of unneutralized or caustic lime. In this condition it is mischievously injurious to vegetation and should, therefore, never be employed in a fresh state. By exposure to the air the sulphuret of calcium absorbs oxygen and becomes sulphate of lime or gypsum, in which state it is innocuous, and may be beneficially applied under the same circumstances in which the application of plaster-of-Paris would be advantageous. In all cases it should be allowed to remain exposed to the air at least three months and turned over occasionally. If composted for a few months with refuse matter, such as weeds, sods, leaves, chips, or other porous matter, chemical changes take place that will render it of considerable value. Applied to stiff, clayey soil it is mechanically beneficial by opening it up. In no case, however, can it be more than about half as valuable for agricultural purposes, as freshly burned lime; and this should be taken into consideration before incurring the expense of purchasing and carting it.

WILL "A Victim" send his name and address? not for publication, but as a guarantee. We cannot seriously consider charges made anonymously.

Subscriber, Lynchburg, Va.—I see very many valuable and interesting answers to questions in your paper. Can you give me any preventive or cure for a horse that is gradually going blind? He is a young horse—only four years old—and has never been injured by work in any way, and seems to be quite healthy in other respects. His sight is not gone very much yet. Can you tell me the cause of his losing it while so young?

ANS.—The colt has not had sufficient exercise, and had too much feed. Feed less but regularly, and give it regular and plenty of exercise.

D. C. P.—I was told by an acquaintance that there was a catalogue published in New York City of all unclaimed estates in Europe. Can the RURAL give me its name and the address at which it is published?

ANS.—The Herald Almanac has always published a list of heirs wanted, and as most of such announcements appear in the advertising columns of that paper, the list is generally pretty complete and is probably that referred to. At any rate we know of no other.

N. E. M., Morris Co., N. J.—What book on poultry can you recommend as a full and complete guide to an amateur who is investing in poultry as a business just to make money. I would prefer a recent work if as full and reliable.

ANS.—We have answered the above questions several times within the year, and now again say that the work of Mr. STODDART advertised in our columns, is as good as any with which we are acquainted.

N. B.—L. F. Abbott would oblige editor by sending his address.

L. P. Moore, Danville, Pa.—Can the RURAL give me the P. O. address of its correspondent, G. R. Drake?

ANS.—We do not feel privileged to give the addresses of our correspondents. This is inserted so that Mr. Drake can comply with the above request.

John Parkhill, Fayette Co., Pa.—Can the RURAL give me any information in regard to Pulvermacher Chain Belts or Galvanic Co.—are they a humbug or not? Their address is 212 Broadway, corner Fulton St., N. Y.

ANS.—The Pulvermacher Co. is quite trustworthy, and we believe the belt is a good thing; it is said to be so by good doctors.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, JAN. 28TH.

Van's Views—E. H., rather hard to answer, but will try—Carrie H.—L. H.—W. C. L. D.—R. W. H.—E. C. L—X Y Z.—"John Hardy"—"Carolus"—S. W. C.—Subscriber—W. H. N.—S. P.—E. M.—A. B., the questions are not of general interest, and it would require half a day to obtain the information and answer by letter—G. M. C.—"From the Mountains"—J. D.—W. H. W.—J. P. R.—C. F.—L. A. R.—G. D.—W. J. F.—Mrs. V. D. C—F. H. D.—W. J. P., not yet received—A. L. J.—J. J. W.—"Vielle"—G. T.—S. B. P.—"Alonzo"—"M. S. S."—"Hector Bertram"—F. D. C.—R. H. C.—B.—C. H. T—C. B.—Ed. E. K.—L. R., thanks always—K.—"Rye"

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Jan. 22.—The House refused to pass a Bill to pay the Customs in greenbacks. Mr. Hewitt proposes to abolish the diplomatic service, assigning the duties of Ministers to Consuls. Long discussion in the Senate about remonetization of silver.

Trains from Adrianople are overcrowded with Moslem fugitives. The Servians have captured Pristina and Kurschumli—Turkish loss, 400 killed and wounded and 450 captured. In the latter town 24 Servian soldiers and two officers were found impaled. The Turkish peace plenipotentiaries have at length arrived at Kezanlik.

WEDNESDAY, Jan. 23.—A grand Requiem Mass was celebrated at Washington, for the soul of Victor Emmanuel. The President, Cabinet, and Diplomatic Corps, and many Senators and Representatives were present. A part of the Nez Perces are reported to have again started on the war-path. Some more murders on the Rio Grande by rangers and unknown outlaws.

Austria is satisfied with the Russian terms of peace, and has waived her objection to a Muscovite occupation of Constantinople. There is a general panic in the latter city, and it is said the Turks have resolved to accept any terms that may be offered, regardless of British and other outside interests. Suleiman Pasha has arrived at the seacoast at Drama, with the bulk of his army, and will thence embark his forces for Gallipoli, which he will defend to the last extremity. The Russians have gained a considerable victory near Erzeroum in Armenia. Up to January 10, the Russian loss amounted to 82,195 men. The Chinese have captured Kashgar. More English troops are needed to suppress the revolt in South Africa.

THURSDAY, Jan. 24.—Grave charges have been made against Mr. Seward, Minister to China, by Meyer, late Consul at Shanghai, and these have been referred to the House Committee on Foreign Affairs. Gen. Sherman has written a very complimentary letter to J. Q. Smith, ex-Commissioner of Indian Affairs, saying that he has proved the most efficient officer in that position during the last ten years. Schurz, who has just removed Smith for inefficiency is by no means pleased.

Peace parleying has begun at Kezanlik, but the Russians have postponed stating their conditions until Tuesday. They are reported to have arrived at Keshan, 26 miles from Gallipoli. The Italian fleet has been ordered to the Levant. Germany and Austria are evidently in substantial accord with Russia. The Grand Duke Nicholas, will be in Adrianople on Sunday. The marriage of King Alphonso with Mercedes, third daughter of the Duke of Montpensier, was celebrated with great splendor at Madrid yesterday.

FRIDAY, JAN. 25.—Senator Lamar delivered yesterday a very able speech against the remonetization of silver. Ex-Secretary Bristow was given a complimentary dinner last evening by Pres. Hayes. Numerous bankruptcies and merchantile suspensions, notably of leather dealers in Philadelphia.

Russia has submitted the terms of peace to Germany and Austria, and exacted a promise from Turkey not to disclose their nature. England is highly indignant at having been excluded from the confidence. If the Russians attack Gallipoli or Constantinople, England will certainly go to war, to prevent the capture of those points. Austria is satisfied that her interests will not be endangered, but believes that those of England will be affected sufficiently to cause her to interfere, and therefore is urging a modification of terms. In the event of certain information of the Russians advancing against Gallipoli, the commander of the British fleet in the Mediterranean has been ordered to land enough of marines and sailors to save the town from capture. In the late battles Gen. Gourkho captured 2000 wagons and 97 guns belonging to Suleiman Pasha's army, and split this force of 40,000 men in two. One part under Faud Pasha, fled into the mountains, and the other under Suleiman Pasha, retreated towads Baskol pursued by Gen. Skobeloff and Karzoff. Great commotion in England, and indeed throughout Europe.

SATURDAY, Jan. 26.—The Mathews Resolution, favoring the remonetization of silver, passed the Senate by 43 votes against 22.

The Turkish delegates have been ordered to sign peace preliminaries. Besides an addition of territory, Russia claims $100,000,000 or its equivalent in territory. The Earls of Carnarvon and Derby have resigned from the British Cabinet, on account of its belligerent attitude. Resignation of former accepted, that of latter withdrawn. In spite of England's bluster, there is little prospect of her going to war.

SUNDAY, JAN., 27.—Anderson, Kenner and Casenave, of the La., "Returning Board," who some days ago took refuge in the New Orleans Custom House to avoid arrest for their action in returning the election of President Hayes, have been surrendered to the Sheriff by order of Attorney-Gen. Devens and are now lodged in prison: Wells is not to be found. Talk, talk, talk, and nothing else in Congress.

The British fleet having been ordered to Constantinople, received a counter-order on reaching the mouth of the Dasanelles, and has returned to Besika Bay. No news of an armistice yet. Austria and Germany intimate that the peace conditions should be submitted to the European Powers, as all are interested in them. The Greeks are clamoring for war, as they now feel that had they gone to war earlier they would now receive an increase of territory. An appalling famine is raging throughout four Provinces in the north of China. Nine million people starving. Children publicly sold in the market places for food. Assistance begged.

MONDAY, January 28.—A United States force has been invited by a Mexican officer to pass over into Mexico in pursuit of cattle thieves.

The preliminaries of peace between the Turk and Muscovite have been signed. Terms: Bulgaria to have a governor appointed by the Porte, forces of latter to be withdrawn to stipulated localities; independence of Roumania; local autonomy of Bosnia and Herzegovina; independence of Servia, with compensation of territory; Montenegro to retain all she has gained during the war. Russia to possess Batoum, and receive an indemnity in money or territory. British Ministry still persists in asking for £6,000,000 supplementary credit to prepare for eventualities. The Pope is again prostrated.

HOME NEWS PARAGRAPHS.

There are over 300 artesian wells in Santa Clara Valley, Cal.

Vermont has 75,200 horses, valued at $5,329,429,-00. Average valuation, $70,86½ each.

The French trials have resulted in giving General Fremont a complete release from all obligations.

A hog was killed at Beloit, Wisconsin, the other day which weighed nine hundred and sixty pounds.

Throughout the cotton-producing States, the average yield of cotton per acre is 178½ pounds, valued at $19.64.

One cent per bushel makes a difference of $10,-000,000 in the value of the annual crop of corn in the United States.

The Legislature of Washington Territory has a young lady engrossing clerk. She engrosses not only the bills, but the attention of several susceptible legislators.

Agricultural labor occupies 306 women in N. Y. State; one woman is a bee-raiser; 49 are dairy women; 2,139 are farmers on their own account; 58 are florists and 60 are gardeners.

At a recent farmers' meeting in Massachusetts, a speaker gave a receipt for making farming pay, as follows:—"Have but one business and get up in the morning and see to it yourself."

The Murphyites have taken the town of Louisiana in Missouri by storm. Over 2,000 persons, half the population of the town, have donned the blue ribbon, and still the work goes on.

The value of the ore reduced and marketed in the Black Hills in 1877 is estimated at $1,500,000. The yield of the placer claims has been less than last year, and will not probably exceed $1,000,000. This makes the total product of the Black Hills for 1877 about one-fourth as much as that of California.

It was Rochefoucauld who said "The common folbie of women who have been handsome is to forget that they are no longer so." And the same cynical philosopher advised: "Treat your friend as though he might one day become your enemy, and your enemy as if he might one day become your friend.

There is said to be a difference of opinion between General Sherman and his wife on the subject of dancing. The lady cannot convert him to her opinions. When he goes to balls he dances incessantly and merrily. But it is not asserted that he indulges in the waltz, otherwise than the "dance of death."

During the past year the consumption of cotton reached the highest point ever attained in the States, while the value of the cotton fabrics exported has, despite low prices, increased $6,000,000 within two years, or from $4,000,000 for the fiscal year ended June 30, 1875, or $10,180,000 for the fiscal year ended June 30, 1877.

After the failure of the Sprague of Rhode Island, about four years ago, for $8,500,000, the creditors accepted notes bearing interest, and payable in three years. The interest was paid for two years, but since then the creditors have received nothing. They have formed an association for the purpose of concerted action.

Of the 88,239 arrests made by the police of New York City last year, 64,955 were males and of these 44,261 were unmarried. The ripest age for disorder and crime with both sexes, was from twenty to thirty. Persons between those extremes arrested, numbered 29,256, against 21,599 under twenty, and 20,218 between thirty and forty.

Governor Wade Hampton has written to Colonel Lee Crandall, president of the National Immigration Bureau, of this city, commending that enterprise as far-reaching in its scope and one that cannot fail to be of great service. He says "It should be fostered by the agricultural bureaus of every State and Territory, and I shall endeavor to keep it before the people."

A statistical report to the Montgomery County, Ohio, Horticultural Society, on the 12th inst., shows that 880,000 acres in the State are in apple trees, yielding an annual average of 12,000,000 bushels; that the State averaged 100,000 bushels of pears annually; and that 10,000 acres are in grapes, producing an annual average of 9,000,000 pounds, yielding 700,000 gallons of wine.

The imports at New York for 1877 were $329,800,-000, or about $34,000,000 advance on last year's, but less than for any other year of the previous six, and a hundred millions less than for the year 1872. The imports of specie were $15,000,000 against $26,000,000 the previous year. The exports were $326,431,000 for the year, an increase of about $8,000,000. The export of specie was $27,500,000, against $43,000,000 in 1876, and $67,500,000 in 1875.

From 1850 to 1871, 215,000,000 acres of public lands were granted by Congress to States and corporations for railroad purposes; 150,000,000 of this to the Pacific roads, and nearly 5,000,000 acres have been granted for canal purposes; for the Pacific roads a debt of $24,000,000 was assumed, now swollen to $92,000,000, and promising to exceed $150,000,000; and the largest grantee proposes to pay the government by practically borrowing anew from it.

The United States Senate gains another handsome man in General J. S. *alias* "Cerro Gordo," Williams, Kentucky's new Senator-elect. He is fifty-four years old, six feet four in hight, and large in proportion, carries himself with a certain careless grace, and is the picture of a dashing cavalier. Though a Union man before the rebellion, he joined the Confederacy immediately on the outbreak of the war, and became a Brigadier-General. His oratorical powers are highly commended.

FOREIGN NOTES.

When Victor Emmanuel became Sovereign of Sardinia in 1849, his territory had an area of 28,76 square miles and a population of 5,167,542. He has left a kingdom whose area is 114,295 square miles, with a population of 26,801,154.

Mr. Mecht, the famous scientific farmer of England, estimates that fifteen hundred sheep folded on an acre of land for twenty-four hours, or one hundred sheep for fifteen days, would manure the land sufficiently to carry it through a four years rotation.

Lieut.-Col. Playfair, British Consul-General in Algeria, reports that the changed condition of Tunis is due to the extensive destruction of forests which has taken place since ancient days Vast plains now covered by arid sands were formerly well wooded.

The "blue glass" mania has reached England, and rages fiercely. There are the usual number of wonderful stories of cures, especially of the insane. As in this country, one species of insanity is very quickly cured by a few trials, and that is the blue-glass lunacy itself.

"Hog-guessing" is an amusement which has recently broken out in the rural districts of England. It differs greatly from the crude guessing at old-time slaughterings. Then dumb-luck ruled. Now it is reduced to a science, the guesses being made from computations based on careful measurements and records kept of the weight of animals previously slaughtered, and even the matter of the kind of feed the hog may have been fattened on, is taken into account. The best guess wins the hog.

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC CO. Cincinnati, Ohio.

VARIOUS.

It is asserted that, notwithstanding the unusual rains, the sugar crop in Cuba will exceed the last crop in quantity and quality.

The husk of wheat contains as much as six per cent. of oil, whereas fine flour contains scarcely more than one per cent.

One hundred parts of wool are chemically composed of 50.65 carbon, 7.03 hydrogen, 17.71 nitrogen, and 24.61 parts oxygen and sulphur.

Corned mutton is extensively used in foreign countries. There is no good reason why it is not in general use here. For cooking with vegetables there is no meat superior to it.

The dressed carcass of a calf weighing 150 pounds contains 93¾ pounds of water, and 56¼ pounds of dry substance; the latter quantity is made up of 6¾ pounds of mineral substance, 2¾ pounds of dry nitrogenous substance and 24½ pounds of fat.

In these days of bank failures it is safest for the farmer to make his deposits in banks of rich soil and more manure: buy improved stock instead of bank stock, and the only shares he should indulge in should be to share with his wife and family the comforts of a good home.

The production of tobacco has recently become a very important agricultural interest in Pennsylvania. It is asserted that the State now produces more tobacco than the Connecticut Valley, and it is believed that in a few years its crop will be larger than that of Connecticut, Virginia and Missouri. The yield of Lancaster county last year was 18,400,000 pounds,

In South Holland a good cow will produce, during the summer months, about twenty-six pounds of butter. In the high pastures of Scara, in Switzerland, the yield during the ninety days of summer is about forty pounds, or less than half a pound per day. In Holstein and Lunenburg 100 pounds is considered a fair return; and even in England, 160 to 180 pounds annually, or from eight to nine ounces per day, for ten months in the year, are accounted an average produce.

Premature Loss of the Hair, which is so common nowadays, may be entirely prevented by the use of BURNETT'S COCOAINE.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Jan. 26, 1878.

BEANS AND PEAS.—Receipts of beans past week, 9,869 bbls.; Exports, 1,253 bbls. The season continues decidedly averse to trade in mediums, and prices are again off. Marrows still quoted at the late decline. There is considerable objection to the lack of uniform quality in marrows; this is a severe drawback to steady export business. White kidneys are easier, in sympathy with marrows. Red ones firm for moderately sized lots. Pea beans dull and much lower. Black beans dull and much lower. Black beans nominal at $1.50. Green peas are down to $1.30 as a selling figure. Canadian field in bulk and hand quiet at 83@83½c.; some extra in store held higher.

We quote:—Beans, medium choice, $1.75@1.75; other, $1.50@1.65; marrows, choice, $2.15@2.20; other, $1.95@2.05; pea, $1.60@1.85. White kidney, choice, $2.00@2.20; other, $2.95@3.05; red, choice, $2.55@3.60; other, $2.35@2.40. Turtle soup beans, $1.50. Limas, $3.

BEESWAX.—There is a light inquiry from shippers. Sales at 27@23c. for Western and Southern.

BROOM CORN.—There is a fair inquiry, and prices firm.

Green brush at 6@7c.; green hurl, 6@7c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Fine lines or lots of State have a steady if not active movement. While the fancy or picked-out portions have a settled position that is unlikely to be interrupted until the season closes. Some buyers object to the advance that has attended good table grades, following the new gilt-edged prices. They contend that buyers of highest quality have an outlet that is disinterested in prices. While they as less pretentious distributors have to shape retail prices in accordance with the times. Useful stock is becoming broken up a good deal in order to make a duplicate grade of previous purchases, and sellers insist on compensation when they permit extra trying. Some dairies are quoted at 3c. but there are not enough of them regular quotations, 28c. is still a good quotable extreme. Western factory is in good supply, chiefly selling at 18c. for prime a few selections bring 20c. The baking or packing demand is very moderate this winter and the fact adds to the stagnation that has so long prevailed in common qualities. By the term packing demand we refer to dealers for West Indian use. English shippers are calling only for actual wants, paying 14@18c. for stock that is all right and might be useful here. Fresh Western dairy made could be placed at 25@27c. if faultless. Rolls in large supply and dull.

We quote State fancy pails 28@30c.; other 25@30c.; creamery, gold to choice, 26@33c.; half tubs, fine, 28 30c.; extra, 33@35c.; other, 22@27c.; Full Welsh 27@29c.; Welsh tubs, dairy, 24@26c.; other, 20 24c.; full dairies, fine, 26@28c.; common, 20@24c.; firkins 20@26c.; poor State, 12@18c.; Western creamery, good to choice, 28@30c.; poor to good 25@32c.; Factory, choice, 18@20c.; good, 16@18c.; common, 7@11c.; rolls, 12@17c.; grease, 6¼@7c.

Receipts for the week, 17,658 pkgs.

Exports past week, 1,303 pkgs

CHEESE.—Exports for the week have been 31,013 boxes. The export demand is fair, and on some of the selections an advance has been made; 13½c. can be made easily for fancy factories, and some selections reach 13¾c.

Fancy factories, 13¼ 13¾c.; good and prime, 13@13¼c.; fair lots, 12¾@12¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12@12¾c. for good to prime; 10½@11½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 5@9c. for poor.

Receipts for the week, 33,467 boxes.

Liverpool cable, 63s. 6d. Gold closes 101¼.

COTTON has been unsettled, and closed steady.

Latest prices are for January, 10.35@10.37c.; February, 10.38c.; March, 11.13@11.14c.; April 11.27@11.28c.; May, 11.40c.; June, 11.52c.; July, 11.60c.; August, 11.6?@11.67c.; September, 11.37@11.45c.; October, 11.18@11.20c.; November, 11@11.05c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8¾	8¾	8¾	8¾
Strict ordinary	9¼	9¼	9⅝	9⅝
Good ordinary	9⅞	9⅞	10	10
Strict good do	10 6-16	10 5-16	10 7-16	10 7-16
Low middling	10⅜	10⅜	10⅝	10⅝
Strict low middling	10 15-16	10 15-16	11 1-16	11 1-16
Middling	11⅛	11⅛	11⅛	11⅛
Good middling	11⅜	11⅜	11⅜	11⅜
Strict good middling	11⅝	11⅝	11⅝	11⅝
Middling fair	12⅛	12⅛	12⅛	12⅛
Fair	12⅝	12⅝	12⅝	12⅝

Stained.

Good ordinary, 8¾c.; Strict ordinary, 9¼c.; Low middling, 10c.; Middling, 10¾c.

DRIED FRUITS.—There is a fair jobbing business, and prices generally steady.

Apples—State quarters, old, 5@6¼c.; new, 6¼@6½c.; Western quarters, old, 6@6½c.; new, 6@6¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 11@12c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 4@4¼c. Pitted cherries, 15@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 16c.

EGGS.—Receipts for the week, 5,486 barrels. The market ran down seriously during the week, and the decline led to better business. The unsold surplus of old accumulations form a severe pressure upon the market. Retailers will not risk them, and will not deal liberally in fresh fearing they may be what is expressively termed "shuck" with detrimental quality. Just as soon as consumers suffer inconvenience in their kitchens by unreliable eggs they at once reduce purchases. Poultry and meats have ruled remarkably low and even cheap eggs have had to give up some of their current business.

Near points, 17@18c.; State and Pennsylvania, 16@—c.; Canadian 12@13c.; Western, best, 15@16c.; other, 12@13c.; Southern, 10@12c.; Limed, State, 12@13c.; Canada, 10@12c.; Western, 9@11c.

FEATHERS.—Live white prime Western geese, 45@47c.; mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $20.00@20.50; 60 pounds ave. $19.50@20; 80 pounds ave., $20@21; 100 pounds, $20.50@22; and rye at 19@20.

FLOUR.—Prices have been reduced leading to a more active market on export and home account.

Latest prices are $4.00@4.75 for poor to fancy superfine State; $5.10@5.45 for common to fair extra do; $5.45@5.75 for good to choice do.; $4.25@5.00 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.00@5.45 for shipping extra do., the inside price for poor, and $5.45@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@7.25; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.25@7.00; round hoop Ohio at $5.25@5.65, and trade brands of do. at $5.75@7.00, the latter for choice; St. Louis, $5.00@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.00@8.25); Minnesota clear, $5.00@6.50; Minnesota "straight," common to fancy, at $6.00@7.65, and patent poor to very choice, $6.75@9.00, with a few fancy at $9.25@9.75; unsound stock at $2.50@6.25; city mill extra at $6 10@6.35 for fair to very choice for West Indies; do. for England $5.25@5.35; do. trade and family extras, $6.65@7.75; do. South America, $6.50@7.50; No. 2 at $2.50@4.00.

Buckwheat Flour—Quoted at $2@2.50. Corn meal is selling at $2.60@3 for Western yellow and $3.20 for Brandywine.

FRESH FRUITS.—Apples have dwindled to a very small stock of really prime, and prices are very firm. Shipments are restricted by the high prices—only 800 barrels taken for the week.

We quote Baldwins, $4.50; Greenings, are firm at $3.75@4.25. Russets, selected sorts, $3@4; fancy small lots, $1.50; fair to good, $2.50@3; stock that would have to be repacked, $2@2.25; few lots reported in the interior. Cranberries are firm—supply in few hands. Fancy bls., $6.75@7.50; crate, choice, $2.25; good, $1.75@2; fair, $1@1.50—offerings nearly all of New Jersey. Grapes have only a special quotation—6@7c. for Catawba. Florida oranges are turning out well—$3@5 ₩ box; some beautiful natural show fruit, picked with stems and leaves. Peanuts are easier, late receipts going on the market. Picked, $1.00; $1.30@1.40 for Virginia. Hickory nuts selling better; Texas pecans, 8@10c.

FURS AND SKINS.—At Leipzig the market was neglected. London sales showed a decline 25 per cent in market, 10@20c. in beaver; 10c. in opossum below the low rates of August last. Home rates unchanged.

	No. 1 quality. Nor. & East.		West & N.W.	
Otter, ₩ piece	$3 00@	4 00	$2 00@	2 50
Gray Fox	40@	45	40@	45
Red Fox	75@	80	60@	65
Black Bear	5 00@	6 00	4 00@	5 00
Brown cubs and yhgs.	1 00@	2 00	1 00@	2 00
Florida deer skins	15@	18		
Fisher	5 00@	6 00	4 00@	5 00
Mink, dark	85@	90	50@	60
pale	50@	60	30@	40
Muskrat, winter	8@	10	6@	8
full	6@	7	4@	5
Kitts	@	2	@	2
Beaver, ₩ ₩	1 00@	1 25	60@	75
Raccoon	35@	45	35@	45
Opossum	3@	6	3@	6
Skunk, black			40@	45
striped			5@	20
Wolf, mountain			1 50@	2 00
prairie			50@	60

GRAIN.—All articles have been fluctuating as the news from the other side came Pacific or otherwise in regard to the eastern questions; at the close there is a weak feeling.

Latest sales are of No. 2 red at $1 57@—ungraded red and amber State, $1 10@1 37; white, $1 41; No 1 Northwest spring, $1 52; No. 3 Chicago, $1 26½; No. 2 red for January at $1 25; No. 2 Milwaukee spring, $1 36. Rye is a trifle steadier; sales of Western at 73@7 c.; State at 70@73c. Barley, 86c for No. 1 Canada; 80@86c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 59¾@60c.; steamer mixed, February, 56@56½c. Oats of New York extra white, at 41c.; do. No. 1, February, 37c.; No. 2 white, 36@36½c.; mixed Western, 37@38½c.; white Western, 37@39½c.

HAY AND STRAW.—Supplies and home demand continue fair, and prices are firm.

Bale hay, 65@70c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 40@45c. for short rye, and 40@45c. for oat.

Exports last week, 1,109 bales; since Jan. 1, 1,585.

HIGHWINES are lower—$1.09.

HONEY.—Continues dull. White clover, 2-comb boxes, has sold at 14c., and good dark at 9c.

HOPS.—The English advices have been less favorable, and there is diminished business here, with prices, however, unchanged,

HIDES.—Exports for the week have been 2,358 bales. Prices remain unchanged, notwithstanding the stronger country advices.

State choice to fancy, 11@13c.; good to prime, 8@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 21@22c. for light, 22@23c. for middle, 22@23c. for heavy, 20@21c. for good damaged.

OIL-CAKE.—Western is lower at $30@31 ₩ ton.

POULTRY AND GAME.—Live poultry is still low; sales to regular buyers still limited thorough causes noted last week.

N. J. chickens, 7@10c.; fowls, 10@12c.; Turkeys, 9@10c.; Trios, 6@7c.; Ducks, N. J., pair, 55@$1; Geese, N. J., $1.50@1.62; Western, $1.00@1.25.

Dressed poultry during the past day or two has had an improved demand but prices are still in an unsatisfactory scale for both seller and producer. There was quite a surplus of old early in the week but holders pushed it out as fast as they could at almost any price to peddlers and the cheap buyers. It is thought that fresh stock will have a better future. This will very probably be the case with near point raised, but when the West has to depend upon freight instead of express transportation, as it has this season owing to low rates here, much will depend upon the weather for the success of far western shipments.

Fancy Phila. and N. J. turkeys, 12@13c.; good, 8@11c.; large or Toms, 6@7c.; chickens, choice, 13c.; good, 9@11c.; common, 6@8c.; ducks, choice, 12@13c.; other, 9@11c.; geese, fancy, 11c.; other, 6@9c. Capons large 15@20c.; small and slips, 15@16c.

Game is as fully represented as the demand requires. Quail steady for choice. Inferior birds of any kind are not saleable. Ohio wild pigeons are of better quality than Missouri the latter have an acorn-fed bitterishness of flavor,

Hares and rabbits, pair, 30@35c. Canvas-back ducks, $1.00@1.25; Red-heads, 75c.; Mallard, 65@75c.; Teal, 30@40c.; Quail, prime, $1.50@1.75; soft, $1.00@1.25. Partridges, pair, 75c.@$1.50. Grouse, 70c.@$1.00.

PROVISIONS.—Hog products closed weak and fairly active. Mess pork $12.00@12.00 for spot lots $12.00 for January, $11 90 for February and $11.95 for March. Bacon at 6@—c. for long clear and 6¼c. for short clear. Lard—Western steam at 7-7c. for spot, 7-77c. for January, 7-87½c. for February, 7.97½c. for March. Tallow, 7 11-16c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $13@13.50; plain, $11@12.50; new pocket, $14.50; family mess, $16@17; extra India mess, $27@28.00 for city brands; do. Philadelphia, $23 50@24.

SALT.—Ashton's at $2.50; Higgins', $2.50 and other sack lots at $1.10@1.15.

SEED.—Clover, 8¼@8¾c. for prime: timothy, $1.37½@1.42½. Rough flax, $1.55.

VEGETABLES.—Exports of potatoes past week, 7,972 bbls.; since Jan. 1, 22,853; last year to date, 18,705. With a reopened supply demand, partly for Southern seed, the market for potatoes is more unhouled, and prices are firmer than for some time past. Sweets are nominal. Onions pretty firm. Florida green peas have sold at $7 ₩ crate.

We quote Peach Blows, $1.75@2, bulk and double-heads, Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2.50@4.50; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1.

WOOL.—There has been a very slow market, but prices are not changed, and generally holders are confident.

Latest sales are of X Ohio fleeces at 44c.; X and XX at 43@46c.; low Wisconsin, 41c.; Ohio combing, 54@58c.; Georgia, 30c.; Utah, 20c.; fall California, 16½@26c.

LIVE STOCK MARKETS.

NEW YORK, Jan. 23, 1878.

BEEVES.—The market eased up a shade in prices on Monday last, but has run rather steady ever since, cattle showing no important fluctuation. Very extra quality steers have brought satisfactory prices; a few fancy may be quoted 11½c. Choice, as a general rule, however, were covered by 10¾@11c. The range is under, this week, owing to the mixed condition of the later droves. A good many natives were in market—scrawny, rough, and poor enough to have made thin Texan choice, had they been here. Michigan and Missouri steers, 7½@8c.; fair to prime stock in lots, 8¾@10½c.; very common, 7c. Fat steers were reserved for the English market at 9¾@10¼c.

COWS AND CALVES.—Few wanted, and it is hardly worth while to send extras here. Hardly a fifth of the receipts find buyers. The nominal range is $40@70 for common to choice.

VEAL CALVES.—There is a fair demand for prime live; in fact, they bring more than dead stock; good to best, 6¾@8¾c.; common, 5@6c. Grassers don't pay at 2¾@5½c. Hog-dressed veal, at West Washington Market, 9@11c., and somewhat stronger.

SHEEP AND LAMBS.—Shippers have lost money for the past fortnight, as the demand cannot be regarded as an encouraging one. Stock has sold at 6¾c. for prime State lambs. Sheep, 4½@6c., including very good at 4¾@5¾c. A car-load of fancy Kentucky wethers, 161 lbs. average, brought 6¾c., will probably go to England. The price ought to make buyers here for such elegant quality.

HOGS.—There have been no sales of live for the past two days; market now indicates firmness; light receipts expected. Last sales about 4½c. Dressed hogs—Western, 4¾c.; country pork, 5@6c. for heavy to light.

INDEX TO NEW ADVERTISEMENTS

Allen & Co., S. L.—Allen's Planet Jr. Hand Seed Drills and Wheel Hoes.
B. & Co., Box 1314, Cincinnati, O.—Salesmen Wanted.
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Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.
Minkler & Co., J.—30 Mixed Cards.
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BUSINESS NOTICES.

Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.

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FITS CURED.

Dr. Brown's great prescription for Epilepsy having now been tested in over 10,000 cases without a failure, he has made up his mind to make the ingredients known to all sufferers free of charge. Address DR. O. PHELPS BROWN, 21 Grand St., Jersey City, N.J.

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My Annual Catalogue of Vegetable and Flower Seed for* 1878,** rich in engravings, will be sent FREE to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed *warranted to be both fresh and true to name*; so far, that should it prove otherwise I *will refill the order gratis.* ***New Vegetables a Specialty. As the original introducer of the Hubbard Squash, Phinney's Melon, Marblehead Cabbages, Mexican Corn, I offer several new vegetables this season, and invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.*
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Cough that will not yield to ordinary remedies, may be thoroughly cured by Dr. Jayne's Expectorant, a most effective remedy for all Bronchial and Pulmonary Disorders.

Reading for the Young.

THE MYSTERIOUS DUSTMAN.

AT night when children's bed-time comes,
I've heard my granny tell,
An unseen dustman goes his round,
With ne'er a cart or bell;
And wheresoe'r that dustman goes,
In bright young eyes his dust he throws.

The children forthwith rub their eyes,
And strive to keep them open wide;
The younger ones grow peevish soon,
And hang about their mother's side;
She knows what all these symptoms mean,
And says: "I see the dustman's been."

Nurse comes: the children wish good-night:
But ere each rests within his bed.
"Why can't we see that dustman come?"
Inquires some little puzzled head.
"Because," says Nurse, with look so wise,
"The dust is thrown into your eyes."

[*Little Folks.*

PLAYING CARDS.

WHILE I do not in the main approve of playing cards because of the pernicious uses to which they may be put, yet on the other hand, properly used, they are sources of innocent amusemet. That cards are intrinsically useful as a means of amusement is evidenced by the manner in which they have maintained their hold on people from remote antiquity. It may be interesting and instructive to tell you something about their history.

The origin of playing-cards, like the origin of most other things, is involved in considerable obscurity. One learned doctor maintains with much tenacity that seven hundred years before the Christian era they were known to the Egyptians—a nation which, like the Chinese, is generally adduced, though with doubtful results, to show us that there is nothing new under the sun. Another authority tells us that they formed one of the amusements of the Lydians during a great scarcity of corn which pervaded their country, when, according to Herodotus, they invented various games, "playing a whole day that they might not be in want of food, and on the next eating and abstaining from play." The famine

Fig. 1.

Fig. 2

lasted for eighteen years, and it is certainly possible that during this period the Lydians may have invented cards amongst their other sources of diversion.

But to descend from the region of speculation, the best authorities seem to be agreed that cards were known in the fourteenth century; and if the ultimate test of the truth of an opinion be the number of its advocates, we may safely follow the popular assertion that they were invented to amuse the madness of CHARLES the Sixth, the Well-Beloved of France.

In the French figures, from which ours seem to have been derived—though the names of the spades have come to us through the Spanish—curious men have discovered an esoteric signification. The hearts, "cœurs," or "gens de chœur," seem to them to denote the choirmen or ecclesiastics. Spades, the French "piques," of which, as before mentioned, we have borrowed the figure but not the name, were the military class. Clubs are the French "trefles," trefoil, or clover grass—the figure being taken from the French, the meaning from the Spanish. These represented the laboring class, or agriculturists. Diamonds are the French "carreaux;" the figure is again taken from the French, and it would appear the primary meaning also, which is that of a square, or rather rhomboidal figure. These represent the "bourgeoisie," or citizens, whose dwellings were generally at that time "carrelees," or inlaid after the fashion of mosaic.

The kings are said, moreover, to represent, and in fact, in French cards, bear the names of the great heroes of the Jewish, Grecian, Roman and German dynasties—that is, David, Alexander, Cæsar, and Charlemagne. The queens are Rachel, Judith, Pallas, and Argine—the last name being supposed to be an anagram for "regina," the queen of the name of Argine being known. These in the transcendental system represent beauty, piety, wisdom and hereditary right. The knaves or "valets"—terms which in both languages have fallen from their high estate and original signification—were the companions of the kings. The two names, Hogier, Labire, were those, we are told, of famous knights of the period. Another reason for assigning a French derivation to our cards is the frequent "fleur de lis" which occurs in the garments of the so-called "court cards."

Thus we see that while our cards, in all cases, follow the French in figure only, our "hearts," and we may say "diamonds," follow the French in name; while our clubs and spades are nominally corrupted through the intervention of the Spanish.

German cards of the seventeenth century have these suits: "bells," "hearts" or "red," "green" or "leaves," and "acorns." They appear as fruit upon a tree, like a genealogical tree, having its roots sometimes in a flower-pot, sometimes in a gentleman's head or stomach. In some cases the device has a very curious appearance. The seven of acorns is represented by a tree bearing seven specimens of that fruit symmetrically arranged; on the left-hand side of the tree, appar-

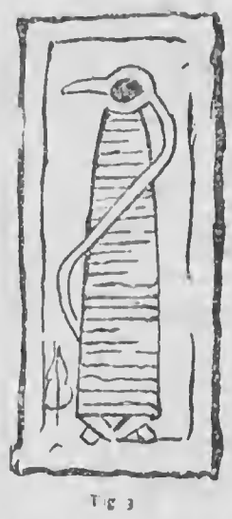

Fig 3

Fig 4

ently enjoying the acorn's shade, a shepherd is seated on a hilly ground shearing a sheep with an immense pair of shears; on the right is a portion of a residence, probably belonging to the shepherd, with three windows and an adjoining bush. The seven of bells shows, likewise, seven bells hanging upside down. The curious fruit arises from a flower-pot, containing, it would seem, a rose-tree, from a flower of that description being seen in the center.

The bells and acorns are not peculiar to German cards. They are also seen in the modern Portuguese cards; but they do not seem to exist in other nations. It is very difficult to establish any plausible connection between these names and those of the French, to which it is most probable they were anterior. The first certain notice of cards in England occurs in the time of Edward the Fourth. On the application of the card-makers, an Act was than made against the importation of playing-cards (A. D. 1463).

A few words on cards in China. They in common with everything else, appear to have been known very early in that enlightened "center of the universe." There is a tradition that they were devised for the amusement of the harem of Seun-ho, in 1120. Cards are called in Chinese "che-pae," which, being interpreted, means paper-tickets. Those most commonly used are called "tseen-wan che-pae," a thousand times ten thousand paper-tickets. Notwithstanding this name of legion, the pack only contains thirty cards—three suits of nine cards each, and three superior, or as we call them, court cards. The names of these cards are a "thousand times ten thousand," "the red flower," and "the white flower;" the suits are shells or money, cakes, and chains.

Figs. 1 and 2 represent the shells or money. Fig 3 is one of the suit of chains, and Fig. 4 is a court card. Fig. 5 is a fac-simile of the oldest card extant—a Queen of Hearts. Fig. 6 is the old German Three of Bells. The size of the Chinese cards is very nearly the same as that of the illustration given, exclusive of a narrow margin of white paper.

With respect to the first of the common names ace, deuce, and tray, much learning has been expended. The deuce and tray are the Latin cardinal numerals, two and three, coming through the French.

The invention of chess is generally allowed to have preceded that of cards. Pere Menestrier, a

Fig 5

Fig. 6

learned Jesuit, who has written voluminously on the subject, distinguishes them as the game of war and the game or peace. UNCLE TRUE.

LETTERS FROM BOYS AND GIRLS.

A Sly Puss.

DEAR MR. [EDITOR: I wrote to your paper a few weeks ago, and being very kindly received by the Cousins, I concluded that I would follow the old motto, and "try again." In one of your papers was a letter from Slayerofconceit, and he spoke in such a manner of all the girls in general, and a few that write to your valuable paper in particular, that he aroused my ire. But upon letting my anger cool, I happened to think of the good old maxim, that "Barking dogs are not apt to bite," so I do not feel very much afraid of him.

And now, dear Cousins, I am Puss by name, and Puss by nature, and it depends upon circumstances whether I am a scratching puss or not. But if Slayerofconceit happens to come around to the town where I live, I will then show whether I am a scratching Puss or not.

Before I close, I would like to remind him that "charity begins at home," and that I would try and be quite certain that I did not have any conceit before I went to rooting out that branch of evil from other people.—PUSSY CAT, *La Porte, Indiana.*

Not Satisfied.

DEAR RURAL: Hoping that I shall be accepted as one of the cousins, I now write to the RURAL. The last time I wrote, Uncle True got my letter, but I hope he will not get this one. I think that in the last RURAL there was quite a saucy cousin. She gave her name as Barney Blackstone.

I would like to know who likes the continued story by the name of Pauline? I am sure I don't. I agree with E. G., about Solomon Sap being impertinent. I will be thirteen a week from tomorrow. I can sew, and do some housework, but I don't intend to brag about myself and have all the cousins laughing at me. I think Slayerofconceit as bad as his name, I havn't seen one letter in favor of him. What do you say girls, do you not agree with me? I guess I have said enough, and I dare say B. B. thinks so too. Does any one know the verses of "Over The Hill to the Poor House!" If so, I would be obliged to any one who would send them to me through the columns of this highly prized paper. Please print this, and oblige—HIGHFLYER.

[The poem is Will Carlton's, and it will give me pleasure to print it for you, at some time in the near future,—U. T.]

Ecclesiastes; Or, The Preacher.

THE spring time is a beautiful season when the trees and fields are green, when the flowers are a-bloom, and all nature is radiant.

But what a change there is wrought within a few weeks. Bleak December days appear. The forests are sere and gloomy. The flowers are gone. So it is with man! In youth and middle age they are all activity. But in a few years what a change is wrought! The harvest comes, the work is ended, and where, oh were, is mortal man?

He has been carried to the dark and silent tomb, whence no weary traveler ever yet returned to bring the tidings thereof.—SABIN.

In His Fashion.

As is my fashion to do in other places, I step boldly in here, and speak a few words to you.

It appears to me that if it were not for piecing bed quilts, and cutting one another up, and fault-finding, a good many of the cousins names' I see every week in the RURAL would not appear there. But I like to read them very well, just to see who gets the worst of it.

And every week some new one steps in, to meet with a very different reception to what he expected. Perhaps I am not alone in my views. Perhaps you will not call me cousin.—CRITICISM.

The Puzzler.

MISCELLANEOUS ENIGMA.

I AM composed of 75 letters:

My 49, 15, 27, 2, 7, 19, 8, 33, 47, 16 unlawful.
My 5, 6, 58, 10, 46, 4, 3, 48 a musical arrangement.
My 31, 13, 21, 58, 43, 9, 4, 49, 12, 27, 49, 18 the time of the year when a plant puts forth its leaves.
My 36, 25, 24, 30, 29, 35, 40, 71, 32, 22 an owner of land in fee simple.
My 62, 75, 64, 11, 14, 39, 34, 55, 42 one addicted to adulation.
My 67, 1, 40, 75, 17, 8, 51, 4, 23, 61, 52 a military adventurer.
My 28, 38, 26, 37, 45, 63, 56 to that place.
My 44, 60, 70, 65, 6, 20, 72, 51, 53, 54, 49 pertaining to the healing art.
My 59, 57, 68, 69, 12 a tax.
My 73, 74, 50, 40, 19, 10, 3, 41, 27 transgression.
My whole is a text of Scripture.

☞ Answer in two weeks. LITTLE ONE.

DOUBLE ACROSTIC.

1. 1101 us. The food of love.
2. 1001 near A. A province of Asiatic Turkey.
3. 550 O yes N. R. A celebrated painter.
4. 1 Turk. A Siberian river.
5. 550 near U. A town in England.
6. 50 bee. A German river.
7. 500 a burn. A Scotch town.
8. 50 an age. A city of Illinois.
9. 301 enter. Singularity of disposition.
10. 600 W. took 50. A town in England.
11. 57 ore. A French entomologist.
12. 51 reason. A character in "Love's Labor Lost."
13. 1001 not. A play of Shakspeare's.
14. 650 ah the brews. A Prussian town.

☞ Answer in two weeks. MATTIE.

PUZZLER ANSWERS.—Jan. 19.

ENIGMA.—Spring.

Sabbath Reading.

A MOTHER'S PRAYER.

S. A. C. D.

FATHER of Heaven, our strong Defence,
My children see;
Thou hast given them to me,
And taken their earthly father hence,
Keep them in Christ-like innocence,
And lift their hearts to Thee!

Dear Saviour, everlasting Son!
My only boy
Is on my heart a care and joy;
Teach him like Thee his race to run,
And for Thy glory, blessed One,
His talents to employ.

O Elder Brother; may Thy love
The sisters twain
Keep pure from every earthly stain!
Send down Thy Spirit, Heavenly Dove,
Truth, hope and joy in Thee to prove,
And in Thy grace maintain!

O Triune God, by faith confessed,
My children three
I long to consecrate to Thee,
That finally, Thy mercy blest
May bring them to Thy perfect rest,
Eternal Trinity!

GOD'S BOOK INFALLIBLE.

IT is impossible for God to lie (Tit. i. 2); therefore every statement made by God must of absolute necessity be infallibly true.

Upon the authority of the Lord Jesus, the Old Testament is inspired.

1. Jesus frequently mentions some of the writers by name. In Mark x. 3-8 He speaks of Moses; in Matt. xiii. 14, 15, of Esaias; in Mark xiii. 14 of Daniel; in Luke xx. 41, 42, of Daniel; and He also quotes others as furnishing the words of God. (See Matt. xii. 7, xxvi. 31; Mark xii. 26, 27.)

2. Jesus often asked His hearers, "Have ye not read?" (Matt. xix. 4) "What is written in the law? how readest thou?" (Luke x. 26) intimating had they searched the Scriptures they would have known the will of God.

3. Jesus divided the Old Testament into three parts, viz.—the law of Moses, the prophets, and the psalms (Luke xxiv. 44, 45). He opened the understanding of the disciples that they comprehend the Scripture; consequently the whole of the Old Testament must have been inspired by God, or it may have been supposed that they would have comprehended its meaning without supernatural aid. (See also I Pet. i. 10.)

4. Jesus asserts that He came to fulfill the law and the prophets (Matt. v. 17). If sinful man were the originator of the law and the prophecies, Jesus, who is perfectly holy (Acts iv. 27), would not have come to fulfill them; hence God inspired each and every prophecy.

5. Jesus resisted each temptation in the wilderness by quoting from the writings of Moses (Deut. viii. 3, vi. 13) and from the psalms (Ps. xci. 11, 12).

6. Jesus gave to the Scriptures an exalted position, as was His custom (Luke iv. 19); and He both heard read, and Himself did read, the word of God in the synagogue.

Now for a few general proofs.

"All Scripture is given by inspiration of God" (2 Tim. iii. 16); "when ye received the word of God which ye heard of us, ye received it not as the word of men, but as it is in truth the word of God" (1 Thess. ii. 13). See also 2 Pet. i. 21, 1 Cor. ii. 13, Rom. xvi. 26, Tit. i. 3.

Mention of individual writers who were inspired: Moses, Deut. xxxi. 19, 24, 26; Isaiah, Acts, xxviii. 25; Ezekiel, chap. i. 3; Jonah, 2 Kings xiv. 25; Haggai, chap. i. 13; Zechariah, Ezra v. 1; David, 2 Sam. xxiii. 2; Jeremiah, chap. i. 9; Amos, chap. vii. 8, 14, 15; Hosea, chap. i. 1, 2; Micah, Jer. xvi. 18; prophets generally, 1 Pet. i. 10, 12; all of St. Paul's epistles, 2 Pet. iii. 19; John, Rev. i. 1-3, 19.

The Bible is both complete and sufficient: "If they hear not Moses and the prophets, neither will they be persuaded though one rose from the dead" (Luke xvi. 31).

Names of the Bible. The Holy Scriptures (Rom. i. 2); God only is holy (Rev. xv. 4), therefore He is the Divine Author. The Book of the Lord (Isa. xxxiv. 16). The Scriptures of truth (Dan. x. 21). The word of God (Heb. iv. 12). The Scriptures (John v. 39).

The word of God is pure (Ps. xii. 6, cxix. 140; Prov. xxx. 5). God only is holy; therefore He must be the originator of pure words.

Nothing may be added to the word of God, nor taken therefrom (Rev. xxii 18, 19; Prov. xxx. 6; Deut. iv. 2. xii. 32); Jehoiakim, king of Judah, was punished for burning the roll (Jer. xxvi. 29-31). Let us be thankful that in our day we possess a complete and free Bible.

BASHAN.—SHEPARDS LEADING THEIR FLOCKS.

"As we sat and looked," writes the gifted author of "the Giant Cities of Bashan," "the silent hillsides around us were in a moment filled with life and sound. The shepherds led their flocks forth from the gates of the city. They were in full view; and we listened to them with no little interest. Thousands of sheep and goats were there, grouped in dense confused masses. The shepherds stood together until all came out. Then they separated; each shepherd taking a different path, and uttering, as he advanced, a shrill peculiar call. The sheep heard them. At first the masses swayed and moved, as if shaken by some internal convulsion; then points struck out in the direction taken by the shepherd; these became longer and longer until the confused masses were resolved into long living streams, flowing after their leaders. The sight was, perhaps one of the most vivid illustrations which human eyes could witness of that beautiful discourse of our Lord, recorded by John: "And the sheep hear the shepherd's voice; and he calleth his own sheep by name, and leadeth them out; and when he putteth forth his own sheep he goeth before them; and the sheep follow him; for they know his voice. And a stranger will they not follow; for they know not the voice of strangers' (John x. 3-5)."

PERSONAL ITEMS.

Ex-Secretary Bristow has little round eyes.

Mr. Whitelaw Reid is a bachelor of forty-two.

Mr. Gladstone on the 29th ultimo completed the sixty-eighth year of his age. Lord Beaconsfield is seventy-two.

Mr. A. H. Stephens breakfasts at half-past five in the morning, it is said: he never eats butter, and he especially likes broiled chicken.

Senator Blaine slightly lisps when he is deliberately speaking, but when he is as mad as a hornet he speaks strongly he stretches out his arm as is if he were holding a weight on it.

Colonel Robert G. Ingersoll, the leading infidel, is a stout body with boyish features. He has pouting lips, a round face and soft, straight, brown hair. Altogether he has the appearance of a twenty-year old cherub, in a fifty-year old vest.

Dr. Schliemann, the discoverer of ancient remains, before leaving Athens for London, exposed himself to the risk of serious illness by excessive labor in packing the treasures now on exhibition at the South Kensington Museum, and has become almost deaf in consequence.

Some years ago, in speaking her mind to Chief Justice Chase, Mrs. Gaines told him that she should battle before the bar until she was 150 years old. "And to think, madam, that this is to be kept up for 125 years longer!" said the Chief Justice, and bowed to the active widow.

The King of Italy died just five years to a day after the death of Louis Napoleon. The Buffalo Express remarks with ill-suppressed levity that "The death of Victor Emmanuel takes from the world, among other things, the most ferocious and generally remarkable moustache it ever had."

Mr. George Bancroft, the historian, though in his 78th year, is a tireless worker. He is now in Washington gathering materials for the forthcoming volumes of his history. In person he is spare, with bushy white hair and a long, full white beard. Every afternoon in good weather he rides horseback for an hour, attended by a groom.

Lieutenant Bullis, the dashing cavalry officer, famous for his Mexican raids, is only thirty years of age, has already served on the Texan frontier for eleven years, and is now in command of an effective company of Seminole scouts. He has black hair and moustache, and is about five feet eight inches in hight, and a model of physical strength and endurance.

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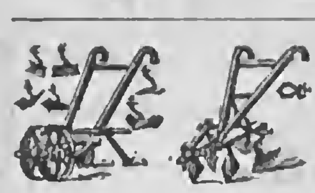

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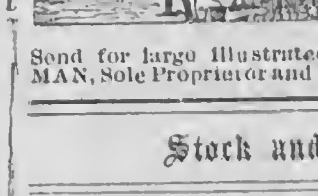

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If the short man ever feels overcome with an intense desire to be tall, it is when he finds himself on the outside of a crowd at a dog fight.

Some one will soon bring out a volume and put a stop to these silly book titles. It will be entitled: "The Fool, or the Man who Buys Me."

"That's a bit up-hill for me," as the cripple on crutches said, when he came to a place where the road sloped upward at an angle of forty-five.

It is not difficult to imitate Josh Billings; thus: "Doan't karray aigs in your cotale pocket. Aigs ain't good after they've been sot on awhile."

He was bound to be accurate, and he thus described the woman's costume: "She wore a suit of something or other, cut bias and trimmed endwise.

The old maxim, "be chaste and you'll be happy" is contradicted point blank by a Black Hills man, who was recently chased ten miles by a party of red-skins.

The horse-shoe done in flowers seems to be supplanting the time-honored floral bell at weddings. Is this to make horse-shoe-rance doubly sure in tying the knot?

Lady to door-keeper of the French Assembly—"Here is a franc for you. Just see that the session is entertaining. I will give ten sous more if they come to blows!"

The Worcester Press man shudders to think of the time when a woman's dress will consist of shred black silk which she will carry in her hand, at a distance from and behind her.

X. is a fine conversationalist. "Remark," said he, the other day, "what is, on this point, my style of thinking." "Ah!" said a bystander, "tell me your thought, but save me from your *style*."

A countryman at the baby-show asked: "Ladies and gentlemen, why is a—when is a flowerist like a wise child?" "I think, perhaps," said a timid maiden lady, "it's when he goes to bed early."

Now does the foolish man devour the cold mince pie before going to bed, and before another sun appears is surprised to see green turkeys, clothed in yellow blouses, hitched to a red omnibus.

A would-be-suicide wrote these farewell words to his wife: "Dear Mary, when my body is dragged out of the river they can identify it by the linen patch you put in the seat of my black cloth trowsers."

First fond Parisian mother of an actress—"Well, how is your little girl coming along?" Second of ditto of ditto—"Oh, nicely. She never stops now before a shop window where the jewelry is paste."

Clerical hint:—It is a bad plan to divide a sermon into too many heads, for this reason, that there may be considerable difficulty on the part of the congregation in finding ears for all of them.—*Judy*.

We hear, remarks an exchange, of second crops of everything this fall, on account of the warm weather, and now a second crop of old summer clothes has appeared on a good many persons in this place.

Cordial but equivocal. Mamma—"Look, Cissy, here is the doctor coming. What a favorite he is! See, even the little chickens run to meet him," Cissy—"Yes, ma; and the little ducks cry 'quack, quack!'"

It is said that at dinner parties in Spain the oldest lady present is seated first. When that plan was tried in New York many years ago it resulted in the collations given at evening parties where everybody stands up.

Never send a woman to the postoffice with a letter. If she doesn't quarrel with the postmaster because she doesn't see it go right into the mail bag, she will forget to stamp it, read it, or else lose it before she gets to the office.

Slavey.—"Missis ses the milk's more than 'arf water, an' she'll have to deal sumwares else if 'tain't no better." Milkman.—"Well, my dear, you must tell your missis that I'm very sorry, but them cows of mine will eat damp grass, and I can't prewent 'em this weather."

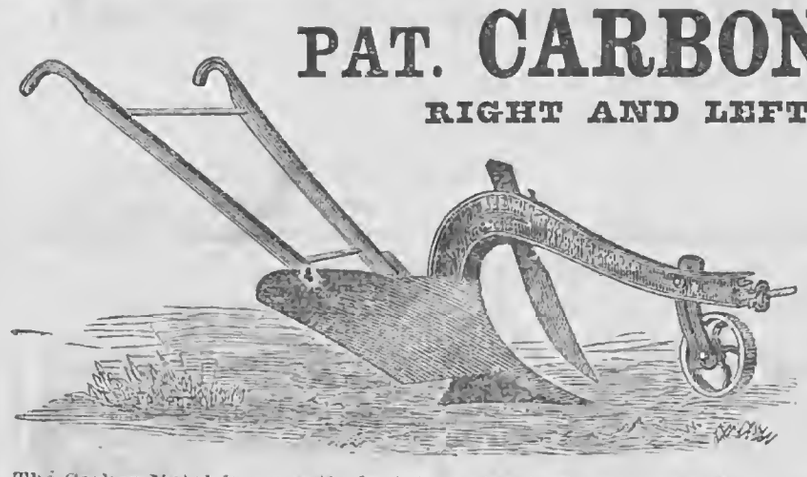
Early in the century a rich Englishman left his daughters their weight in one pound banknotes. The elder got fifty-one thousand two hundred pounds, the younger fifty-seven thousand thousand three hundred and forty-four pounds—the handsomest pair of paper weights on record.

OPENING THE CAMPAIGN.

Generalissima (otherwise Mamma.)—Girls! Attention! None of you having gone off—indeed, I may even say none of you having shown any signs of being likely to go off for some time to come—I do really think it very unkind and—very un—what do you call it? Un-daughterly of you, and I really do hope that you will—in fact it is really absolutely necessary that you *should*—do something *soon?*

PAT. CARBON PLOW.

RIGHT AND LEFT HAND.



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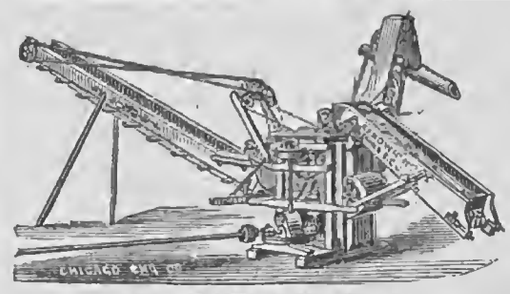

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VOL. XXXVII. No. 6.
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NEW YORK CITY, FEB. 9, 1878.

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Arboricultural.

OUR PLANT-PORTRAITS.

THE NORWAY SPRUCE AND ITS VARIETY, ELATA.

The Norway Spruce is one of the most popular, if not one of the most beautiful and hardy of evergreens. If it were properly treated while young, we are convinced it would command a higher respect during its old age. The desire on the part of those who plant trees about their homes, to see them grow as fast as possible, and their distrust of any pinching or cutting back, are natural. Anything that retards growth for one year is condemned. It is too long to wait for results that at best are not to be counted upon positively, as they believe. Therein lies the mistake. The results may be confidently counted upon; and in this we speak from our own experience.

The Norway Spruce, if left to itself while young, and especially if not well planted, attains its fullest beauty in ten years. Afterwards, the lower branches begin to lose their foliage, and the conical symmetry which in this tree constitutes its first charm, is marred. If when first set in its permanent abode, the buds had at once been pinched out or, what is the same thing, the tips of all the branches except the lower and lowermost ones had been cut off, and the same course had been pursued the second spring, growth would have been confined mainly to the lower branches, and a vigor would have been imparted to them that would be retained as long as the upper branches remained robust, or as long as the tree maintained a healthy existence.

The impression which until of late years has been quite general, that evergreen (hardy coniferous evergreens, at least) were never to be cut back, is still a conviction in the minds of many. And it is one that deprives them of the very best means both of adding to the attractiveness of their evergreens and of preserving that attraction unimpaired to a good old age.

For the purpose of inducing this strong development of the bottom branches, and at the same time a more compact habit throughout, instead of cutting off or "back" the branches, we have, for several years past, merely twisted out the verticel of buds which terminates them. These buds begin to form as soon as the spring growth is completed, and they may be removed in the following fall, winter, or early the next spring. Thus only the terminal growth which would have been made is prevented, and the same object is accomplished without diminishing the proportions of the tree.

Our illustration from life, is that of a variety of the Norway Spruce called Elata (Abies excelsa elata). The variety known as Monstrosa is notable chiefly for its long, straggling branches with few laterals. It is, indeed, of all evergreens the most lawless, if we may so speak. It despises symmetry, and seems to delight in destroying any semblance of equilibrium.

The variety which we illustrate preserves much of the long, spreading, thickened disposition of the branches of the other, while with a little direction by pinching out the buds as we have stated, a tree of marked and pleasing character, airy, free, commanding, is obtained. It is as hardy as the species, and will please all who seek variety among their evergreen collections.

To the average planter, variety among evergreens is not studied as it is among deciduous trees. It is a great pity that it is so, and we ask our friends who propose to select this spring, to visit nurseries and examine the extremely varied forms and foliage which the evergreen family presents.

ABIES EXCELSA ELATA.

THE PYRAMIDAL OAK.

SAMUEL PARSONS.

All trees have positions on the lawn specially suiting their peculiar qualities. There are trees of grace, trees of massive grandeur, and trees of diminutive size and exquisite charms. All will, if allowed, produce perfect effects, each after its kind. It is for this reason we feel a slight sense of wrong done whenever any variety is declared the best without exception or qualification. Some there are, of course, that have defects which unquestionably limit their usefulness, but a very large number may be counted on to perform their proper work most admirably. Charity should exert itself to condone the faults, even of trees, for the sake of their good qualities, especially when we know that the bad ones may be improved or veiled by pruning and other methods. Even Silver Maples and Norway Spruces, so generally popular, we can accept gladly, despite all our prejudice against them. They are attractive during particular stages of their growth, and may be cut down after reaching the ugly period, when indeed their use as screens to other plants ceases, because the age of such plants has usually by this time rendered them quite enduring.

Desiring to express the most catholic views concerning the graces and peculiar fitness of most trees in one way or another, we must yet acknowledge a fondness for certain rugged, enduring species. Not that they are necessarily any finer in their prime than shorter-lived plants, but they have been with us so long; there is such a sense of permanence and long continued relation. In our childhood they were with us, and in our maturity they still retain that perfect vigor and completeness that preserve so entirely their identity with their remembered forms of years ago. Associations cling about them, and we seem to know them better than their more recent companions.

Chief among these trees of peculiar vigor and longevity are the oaks, and were it not for their slow growth (which produces, however, their real strength and attraction) we doubt not that our lawns and avenues would be more often graced by their presence. We have been too much in a hurry, most of us, but patience will come as the country grows older, when oaks will attain, in public estimation, their proper dignity as shade trees. There are some oaks, however, that receive an unusually small modicum of attention, and on one of these, the Pyramidal Oak, we should like to dwell a few moments. It is a slow growing, massive tree with rich, green foliage hanging on its compact, thick-set boughs until late in fall. The bark is smooth for an oak, and dark, and the leaves cut much after the fashion of those of an English Oak, its proper type in very many ways. It grafts readily on the English Oak, and has all its good qualities. But the special attraction the Pyramidal Oak must always offer to the landscape gardener is its peculiar compactness and lack of spread in the branches. The outline would be truly remarkable any where, although the term pyramidal is perhaps a misnomer, for the contour swells so regularly from a minimum at the base to a maximum about half way to the crown, then diminishing to a distinct point at the summit, that it becomes more properly an ovoid than a pyramid.

It must, at once, appear that such a decided and striking form, always uncommon among deciduous trees, can be utilized with great effect upon the lawn. Heretofore it has failed to secure the attention which its elegance of outline and other good qualities merit. We should like much to see it more extensively employed in landscape design, for its nature is sterling and of lasting value.

[We have had this oak for three years. It makes yearly a growth of not less than four feet, and assumes the outline which Mr. Parsons' describes. But every spring we find most of the last season's growth winter-killed, and two years ago the stock of one was severely injured. Whether it becomes hardier as it grows, older, or whether this injury is due to peculiarities of our soil, we cannot say.—Eds.]

CELASTRUS SCANDENS.

This is a vine too much neglected. The Bittersweet is fresher in the memory of "the oldest inhabitant" than it is in that of the amateur gardener of to-day. In the rush for new things, it sometimes happens that the best of the old are forgotten for years. Then it is revived, and not unfrequently under a new name, is re-introduced, creating as much interest as if it had never been "old." It so twines itself about the branches if planted near the trunk of some old tree, as in a few years to appear a part of the tree

Farm Topics.

AGRICULTURE AND EDUCATION IN THE UNITED STATES.

PROF. I. P. ROBERTS.

No. 4.

In former articles, statements as exact as it is possible to make, have been given, as to the provisions that have been made for carrying ont in good faith, the conditions of the grant of 1862, and as to the work that has been accomplished. The question follows; What has been and will be the effect on those two leading industries?

The time is too short since these graduates have entered upon active duties, to enable us to form any very accurate or positive conclusions. We only know that with scarce an exception, they are found occupying respectable positions, and quite frequently those of honor and trust. From the best information attainable, I find about one half of those who have studied Agriculture, either return to the farm or engage in some pursuit connected directly with it. This is about the same proportion as we find in other callings; only about half the number who have received special or technical instruction, enter and continue in the callings for which they prepared

The young doctor fails for want of patients, the lawyer for want of clients, and the young farmer, for the very good and sufficient reason, want of a farm. Many of the graduates, to my certain knowledge, have not at the end of their course, a single dollar: even worse than that, some are actually in debt two, three, or four hundred dollars.

The question is not so much: What would I like to do? or even: What will pay best? but: What can I *get* to do by which I can secure a living and pay my debts? Circumstances may cause many of these to drift far away from their original plans and likings; but I predict that in most cases with the first opportunity they will embrace their "first love" with all their youthful ardor, tempered and directed by age and experience. While those who have received instruction at these schools, have frequently benefited the industries in their immediate locality, yet for want of time, if for no other reason, their influence could not well be extended or marked.

On the other hand, the influence exerted by the various teachers connected with these schools devoted largely to the interests of the industrial classes, has been marked and beneficial. By their writings, researches and experiments, by their frequent papers and addresses at farmers' institutes, clubs and conventions, they have been enabled to reach nearly all who earnestly desire to advance; and the result of their labors has been to benefit the industrial classes and the industries beyond expectation. The establishing of these colleges called forth a vast amount of thought, discussion and criticism, which has not been without its beneficial results. There are those who still fear the old empty cans of dynamite labeled "Book-farming," "Co-education," "Unsectarianism," but all that is left of this dangerous substance is the label which is getting old and dim, and the nervous strain will soon be relieved as it fades entirely from sight.

There have been several causes that have prevented these institutions from accomplishing greater results. The chief of these may be stated under four heads, viz: (1) want of funds, (2) want of trained teachers in the department of practical agriculture, (3) want of a full knowledge as to methods, (4) prejudice.

Several of the States realized less than $150 000 for their lands; the yearly income from which would build a good barn, or possibly purchase a Duke Bull. Few people have any conception of the actual cost of a common school education; they have never stopped to consider or reckon it, and fewer appear to realize the cost of establishing and maintaining a well equipped college. They do sometimes get an inkling of the cost of a thorough education when they think of sending a child to college, by computing as accurately as possible the cost of board, rent, tuition, books and traveling expenses; and when they find that it foots up from one to three thousand dollars, they are surprised to say the least, and very erroneously conclude that the benefits to be derived will not justify the outlay. None of the larger and few of the smaller colleges, think of charging for tuition more than a fraction of the actual cost of it, and some do not charge anything. If they were not heavily endowed, the industrial classes and those of limited means would virtually be excluded from a college education. Endowments to educational institutions benefit not the wealthy so much as the common people. This being the case, what better disposition could we make of our public lands, than to make an equitable distribution of them for educational purposes?

TEACHERS.

At first, great difficulty was experienced in procuring suitable teachers, for their qualifications must be peculiar, and to some extent unlike all others.

Their education must also be very extended, for in these half-endowed colleges, one Professor was expected to fill two or three chairs. In addition to this, it was desirable that he should bring to his aid, business and financial ability, equal to that found among men whose whole lives have been spent in learning how to acquire wealth. Here, in these colleges, created as by magic, was to be the ideal paradise where the highest education, science and practice, were to dwell together with no family jars or differences, notwithstanding their very recent introduction and short acquaintance. It appears hard to find men, even now, that by the most scientific process of flattening and stretching can be made to cover two or three chairs, and have room enough left for the farm under one wing and the live-stock under the other.

METHODS.

The method to be used in reaching the desired results was hardly as yet conceived; much less digested and arranged. Time, necessarily, has been lost in learning the best systems of conducting the new enterprise; where all was formerly problematical and untried, now in a great degree well-defined and tried methods are found, which have, in many cases, proved successful beyond the most sanguine hopes.

The finances of the farm have been a great stumbling-stone; for it was argued, "If the farm won't pay, the whole thing is a failure." The result has been that, in too many cases, it has been run simply to make dollars and not for the purposes for which it was designed, namely; illustration and instruction to the student. While fields of corn or wheat should be cultivated with a view to the best results, it should not be done for the dollars, but for the purpose of instructing the students as to the manner in which the result was reached.

The amount of manual labor required to be performed by the student during his college course, has been discussed and re-discussed without coming to any uniform conclusion. Michigan Agricultural College still holds on to its early practice of requiring work throughout the entire course; Iowa has modified the former practice, so that work is now only required in the first and second years; while Cornell, which formerly required little or no manual labor, now devotes two afternoons per week to field practice, or to visiting adjoining farms through the entire senior year; and also requires all students who have not been brought up on a farm or who, from any cause, are not familiar with ordinary farm work, to remain on the farm, and engage in farm labor for at least two months during the summer vacation. So we see that the manual labor question is not yet settled. The prevailing public opinion at first was that much practice and a moderate amount of class instruction should be given. Wherever this experiment has been tried, it has resulted in expert workmen rather than educated men.

On the other hand, some have advocated that familiarity with all the ordinary operations of the farm could be acquired more cheaply and rapidly at home, and that the time spent at college should be devoted to studying such subjects as related to their intended calling, a knowledge of which could not be so well acquired elsewhere; and that the field practice should only extend to the intricate and difficult operations and those whose special provisions would have to be made in order to fully comprehend the subjects taught. The subject of the relative amount of labor, recreation, and study during a college course is one that may be more fully discussed with profit. The limit of this article forbids giving my views here, but I may do so at some other time. Certain it is that four years is not enough time in which to become expert in all of the operations on the farm, (provided there has been no previous training,) and also to acquire a fair knowledge of the subjects laid down in the curriculum.

PREJUDICE,

Which has had much to do in preventing these colleges from accomplishing the greatest amount of good, has not been confined entirely to the industrial classes or the farming population. It has too frequently happened that the authorities in charge were men who had no sympathy for, or faith in what is sometimes called "The new education." They had been taught and fully believed that no true success could be attained, or thorough culture acquired, without a knowledge of Latin and Greek. On the other hand, many of those whom the new education was designed to benefit, still held on to the old idea, that ignorance was bliss in Agriculture. But opinions are changing; as we get more light from experience, we are more inclined to receive and give due credit to all classes of knowledge provided they train and develop the man, and fit him for greater usefulness and happiness.

The rural population of to-day, do not appear to be very particular about modes or systems, provided they can get at new facts and increase their fund of information. That there is a great and growing desire for information, cannot be denied, I think, by anyone who has carefully observed and noted the progress of events for the last twenty-five years.

This striving for something better and higher, has not only given rise to the colleges of which I have been speaking, but also to numerous and valuable societies and organizations, extending from the Atlantic to the Pacific and reaching every hamlet and homestead, benefiting directly or indirectly every tiller of the soil. Of the benefits of the press and of some of these organizations, I propose to speak in my next.

Cornell University.

RURAL TOPICS.

T. B. MINER.

SALT AS A FERTILIZER.

There has never been an established value of salt as a fertilizer, given to the public; and the question: "Is it a fertilizer in any degree?" remains unanswered, so as to settle the question forever. If we refer to all that has been said about its use by farmers, in the agricultural press during the last twenty-five years, we shall find a large number who claim that they have used it to advantage, while as many more say that they could see no benefit from its use; and the facts in the case appear to be about as follows: In the vicinity of the ocean, where the dews are somewhat impregnated with it, salt is of no value as a fertilizer; but in the interior it is of slight benefit to all crops, but not sufficient to warrant its purchase at the regular market value. At the saltworks at Syracuse, N. Y., damaged salt can be bought for about ten cents a bushel; and at that price, with short transportation, it will pay to use it. It may be used to a good advantage when mixed with ashes, as a fall top-dressing for grass lands; and also on lands to be plowed in the spring, as the virtues of both salt and ashes during the winter become disseminated through the surface soil. If applied in the spring to land that is to be plowed for any crop, it should be spread by hand upon the surface after plowing, and harrowed in.

A FARMER'S ICE-HOUSE.

Every farmer should have one, not only for the profit in it, but also for the luxury it affords. You don't require a carpenter to make one, as you can build it yourself, not *under* ground, but on the surface. Select a shady place if you can; if not, put it in the "blazing" sun, and I will guarantee that the ice will keep well, if you follow my directions: First, select your location, and then draw in a few loads of sand, gravel, or any light soil to raise the bed, about twelve feet square, a few inches to carry off the drippings of the ice. Then lay the sills of 4x6 timber (hemlock will do) and put up the frame; posts 8 feet high, 4x4; plates 3x4, with studs 2x4; and with a couple of 2x4 ties across from plate to plate, to prevent the building from spreading when full of ice. Hemlock weather-boards will do, if your object be to build a very cheap house. The roof should have a double pitch, and be quite steep, to be covered with sound boards and battened over the cracks. In one end of this roof, the shady end, have a window about 12x18 inches to allow the heated air within to escape. The door also should be on the north side. When you are ready to put in your ice, lay down some loose boards as a floor, on which you put sawdust, eight or ten inches thick, at the same time having a supply to pack at least twelve inches thick around the ice, as it is put in.

To cut out the ice, you need an ice-saw, some six feet long with one handle. Such a saw as is used for sawing logs may be used, with one handle removed. Saw the ice in square blocks, and pack it close in the ice-house, filling the openings with fine ice as you proceed with each layer, and the whole will become a solid body of ice. The ice should be at least a foot from the building on all sides; and this open space must be filled with sawdust, well packed down; at the door-way put loose boards, as the filling proceeds, to keep the sawdust in its place. Also put sawdust, about a foot deep, on the top of the ice, when the building is full. If your ice-house is to be built in a sightly place near your dwellings, it would be better to employ a carpenter a couple of days, and put up a nice building, clapboarded, shingled and painted—all complete for about $25. Such an ice-house as the above cannot possibly fail to afford a supply of ice for any family through the entire season; and probably one only *ten* feet square would be large enough for farmers. Think of a farmer's family living, year after year, with no place to keep butter, fresh meat etc., when for $25 a fine, commodious ice-house can be built!

SUPERPHOSPHATES AND GROUND BONE.

The most reliable commercial fertilizers of the day, are the superphosphates and ground bone, or flour, as it is called. Originally, we had simply "phosphate of lime"; but in later years the manufacturers added oil of vitriol (sulphuric acid) to make it soluble—that is, in a condition in which plants can draw sustenance from it immediately; and they now add the prefix "super." Some manufacturers add potash and other fertilizers; and, probably, no two make the same article, as regards constituents. We will take an ordinary superphosphate that is sold at $43 per 2,000 pounds by one of the most reliable dealers in New York. It contains as follows, as per his own circular: Ten per cent. of soluble phosphoric acid, and three per cent. of ammonia, worth about $30. These two constituents are all that a ton of 2,000 pounds contains of *plant food*, the balance of about 1,740 pounds, may consist largely of land plaster, or of dried swamp muck, or of something else of no great value.

The difference between superphosphate and ground bone is that the latter is composed more of bones; and, consequently, contains more phosphoric acid; and these two fertilizers are seldom applied to land without showing a benefit to crops, especially wheat, corn, rye, turnips, beans, peas and carrots, as all of these draw considerable phosphoric acid from the soil. The way that superphosphate and ground bone should be applied to lands to be cropped, is to sow them on the land, after it has been plowed and harrowed once, then cross-harrow the fertilizers in. Superphosphates ought to embrace all the essential constituents of a fertile soil, as potash, nitrogen, and phosphoric acid, and some are thus made. They then approach a "complete manure," like stable dung, and will give better general satisfaction. From 300 to 500 pounds of these fertilizers are generally applied per acre.

"COMPLETE MANURE."

The following "complete manure" is sold in New York, and said to contain as follows:

"Ammonia, 7.69 per cent.; phosphoric acid, 5 per cent.; and potash, 7.59 per cent." This is what is called Professor Ville's formula; and it has been before the agricultural public of this country and Europe many years. It comes, perhaps, as near stable dung, in its results, as it is possible for commercial fertilizers to do; but it is absurd to say that the proportion given must be exactly as the formula calls for, as 7.69 per cent. of ammonia, when 7.25 or 7.75 would undoubtedly show as good results.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

HANDLING FENCE POSTS.

February is, without doubt, the best time to cut fence posts, and all rail timber, for that matter. It is evident to us from what experience we have had, that if cut then they will last much longer free from rot, than if cut at any other season of the year; and moreover, the farmer has more leisure at this time than in the spring and fall, when they should be set. We can have them cut, peeled, sharpened, and distributed where needed, so that as soon as the frost is out, they are ready for driving. Many people leave their fence posts from six to ten inches in diameter, making them heavy to handle, and difficult to drive. This, to our mind, is a needless expenditure of labor, and a waste of timber. Small posts season much sooner and last fully as long as large ones, and if they are driven deep enough, two feet at least, form a strong fence. They should always be peeled before the time for setting, and the latter should be done as soon as the frost is out, before the ground settles. We can then get them down deeper, and they will be firmer.

ERROR IN PITTING POTATOES.

A neighbor opened his potato pit the other day. He was led to this by noticing that the snow was all melted off on top of the pit, although there was plenty about it. Upon removing the earth and manure from the potatoes, he found that they had been buried too deep, and were reduced to a rotten mass in consequence of heating. Out of forty-five bushels buried last fall, he can save only four or five bushels fit for eating. Potatoes, like apples, need just enough covering to save them from frost, if buried; and if stored, a cool, dry, well-ventilated cellar is the proper place.

SCRATCHES IN HORSES.

A horse was troubled with scratches, owing to neglect in grooming. The joints were badly inflamed and swollen, causing lameness. As soon as noticed, the diseased parts were thoroughly cleansed with castile soap and warm water, and an ointment of the pulverized root of Indian Turnip (Arum triphyllum) mixed with boiling lard, applied and allowed to cool. It was well rubbed in with the hand, and after a very few applications a cure was effected. The limbs of horses should be well rubbed with straw every night when working, whether any mud adheres to them or not. There is nothing that will rest

a tired horse, quicker than this practice. They should always be rubbed until the blood obtains a free circulation, or until they feel warm to the hand.

DESTROYING STUMPS.

Mr. MINER, in a recent article, suggests "blowing up stumps." We have heard of a better way, if it proves all that it is recommended. Bore a hole with a two inch auger, to the depth of six or eight inches, into the stump to be operated on, and place therein one or two ounces of saltpeter, then fill the hole with water, and plug it up perfectly tight. Next spring take out the plug, pour in a gill of kerosene oil, and set it on fire. It is claimed that the stump will be entirely consumed even to the smallest roots, thus doing away with the trouble of removing the *debris*, which would be scattered about by the other method. Let some of the RURAL readers, bothered with these unsightly nuisances try the experiment. It is inexpensive and can do no harm, if it does no good. There is nothing upon a farm that detracts so much from its good appearance as stumps; especially when they are, as is too often the case, embowered in a rank growth of briers and bushes.

PLASTER AND ASHES.

Our Agricultural Society held an animated discussion recently, on the benefit to be derived from the use of plaster. Some recommended its use in a dry season, some in a wet one. One claimed it should be applied to the seed before sowing or planting, another would sow it broadcast, or apply it to the growing plant. A person wishing to learn the comparative profit obtained from the application of a ton of plaster, would have been as much in the dark after, as before he had listened to the discussion. Our own experience is that it is utterly worthless during a wet season, and hardly profitable in a dry one. We never saw any good effects from its use on grass, unless that perhaps the aftermath was somewhat thicker. The clover crop is increased by its use, yet if our land is in passable condition, clover will do well enough without it. We have tried it upon potatoes, but without result save a heavier growth of vines—no more potatoes than on rows close by that had received no plaster. It will increase the growth of cornstalks, but we have no more corn than on that where it has not been used. We believe that it increases the growth of straw, but not of grain. Yet results from its application might be different in different localities. Ashes are, to our mind, the best fertilizer we can use. Either leached, or unleached they are a benefit—a great benefit to any crop on which we have ever used them. We once raised some of the largest beets we ever saw, where a leach had been emptied, and the beet bed was about half earth and half leached ashes. We would not think of planting corn unless ashes were used in the hill, and about the young plants when they are up three or four inches. If farmers realized the value of ashes, they would be more careful to save them all. Plaster *may* be good, but ashes are much better—for grain crops, at least.

SPANGLED HAMBURG FOWLS.

Two years ago we purchased some eggs of the Spangled Hamburg variety, and we are so well pleased with these fowls that we keep them only, having disposed of our old stock—Buff Cochins and Leghorns. The eggs of our favorites are small, as are also their bodies, yet they are the greatest layers we ever had, and the easiest keepers. Our fowls will eat but very little, and seem to lay summer and winter with little intermission, scarcely ever wishing to sit. Last summer we were obliged to obtain hens of another breed to sit. Their dark legs are a slight objection, yet their good qualities overbalance all their little defects.

LOOK AHEAD.

Every farmer who has timber, should get a few logs to the mill for drag-timber, wagon tongues, and the like. Have them sawed and piled under cover so that next season, when work is crowding and a piece of seasoned timber is needed, you will know just where the desired article can be found without being obliged to spend the whole day in a search for it. Each one should have a chest of common tools, such as are necessary for repair work on the farm. It is much easier if we have the materials, to repair a broken harrow or other utensil, than to travel four or five miles to a shop for the purpose of *hiring* done what we could do just as well ourselves. Any articles that are liable to break, had better be attended to at once, and not laid aside with "I guess I can make that last this season, well enough." It will be sure to break when you are in a hurry. There is a world of wisdom in the old maxim, "Procrastination is the thief of time," and to no one is *time* so precious as to the farmer at the busy season.

WE have read in agricultural journals during the past two months the advice with slight modifications, to "stop up the cracks in the barn" forty-eight times! We are growing quite interested in the subject.

Farm Economy.

CORN ACCOUNT.

As this is the season of the year in which it is supposed that we poor "Mud Sills" take time by the fore-lock and lay out our work for the coming year, is it not also a time to look up past experience and see where we may profit by it, either as it has been a success or a failure? And how can we better accomplish this object than by conversing with one another through the medium of our agricultural papers, thus getting up an exchange of ideas which may prove of benefit to many of us? I will open the ball by giving my experience with a crop of corn in 1874. The field consisted of forty acres of Michigan sand. It was a timothy sod in the spring of 1872; planted to corn that spring, sowed to wheat the following fall, and seeded to clover in the spring of 1873; but it failed to catch, so that it was a bare stubble in the spring of 1874. In the figures used here, enough is charged to cover the board of man and team with each day's work. No value is placed upon the manure, the only charge being for the time spent in handling it, as it is considered that this crop did not receive all the benefit, but that part of it should be charged to future crops.

ACCOUNT WITH FIELD NO. 8.

1874.			
May 5,	To drawing manure to date		$50 00
5,	spreading "		12 00
8,	15 days plowing @ $3.00		45 00
10,	8 days dragging "		24 00
11,	1½ days marking "		4 50
13,	3 days, man and team planting		9 00
13,	3 days, man dropping		4 50
13,	6 bus. seed corn		6 00
13,	5 bus. potatoes, two rows round, outside		5 00
13,	1 day planting		1 50
25,	2 days " pumpkins		3 00
June 1,	3 days dragging @ $3		9 00
5,	5 days cultivating, man and team		15 00
19,	" " "		15 00
25,	7½ days " man and 1 horse @ $3		15 00
29,	" " "		15 00
July 5,	4 days " " and team @ $3		12 00
5,	plaster and time sowing		5 00
Sept. 5,	cutting by the acre, @ $1		40 00
Oct. 1,	digging potatoes		3 00
Nov. 1,	husking 2335 bus. ears, @ 4½ cts.		105 12
1,	11 days drawing and cribbing		23 00
Dec. 31,	1 years int. at $75 per acre @ 7 ₱ ct.		210 00
31,	6 months int. on labor @ 10 ₱ ct.		14 23
	Total		$655 85
Nov. 1,	By 1335 bus. corn 70 lbs. @ 70 cents		$934 50
1,	40 loads of stalks, @ $3		120 00
1,	pumpkins a failure		3 00
1,	potatoes " bugs		5 00
Dec. 1,	pasturing 70 sheep 2 weeks		5 00
	Total Receipts		$1067 50
	To outlay		655 85
	Net profit		$411 65

O. N. T.

Battle Creek, Mich.

SHIFTLESSNESS ON THE FARM.

MRS. A. E. STORY.

TUMBLE-DOWN fences or fences clumsily propped up and patched, here and there, with bits of broken boards and rails; gates hanging by one hinge, or leaning forlornly against the posts, with none at all—these are some of the signs by which even he who runs may read the story of many a farmers unfitness for the calling he has chosen. There surely can be nothing in agriculture, as a pursuit, calculated to make men shiftless, caring nothing for beauty or order, and yet shiftlessness crops out oftener, or at least is more glaringly apparent here than anywhere else.

If there can be any excuse for pride in a world where so little of what we have to enjoy is owing to ourselves, the man who can lay claim to, not merely earthly possessions but the possession of earth, has the best right to feel it. In a limited sense, he is monarch of all he surveys, and that he should prefer, in this survey, to behold ugliness where might be beauty, disorder and general topsy-turviness in place of order and neatness, is matter of wonder. Fields, whose fences are hidden from sight or nearly so by elder bushes and brambles, are not likely to prepossess the passer-by in the owner's favor, and yet an hour's drive through any part of the country reveals scores of just such fields. We rarely see good crops growing inside these "elder-berry" fences and we don't expect to. If we are told as a reason for this, that the land has been "run," we accept the explanation as a matter of course; for a farmer who will suffer his fields to be thus hedged about and encroached upon by what is both unsightly and worthless, is slack through and through. We are just as sure before being told as we can be afterward, that there is a mortgage on that farm. CINCINNATUS himself, dearly as he loved the plow, would never have been able to keep his head above water under such a system of farming as is here disclosed.

But the men who follow this down-hill way of tilling the soil, are not the only ones to whom the term *shiftless* may be applied. There are others wise enough to keep up their land and maintain a pretty good state of things on the farm generally, who yet seem to delight in a wretchedly loose state of things around house and barn. These men have studied arithmetic better than those above mentioned. They have learned that take "something from naught you can't," and govern their farming operations accordingly. That is about all the difference there is between them. And yet one might as well try to wind a sunbeam around his finger as to convince a man of this type of his shiftlessness. His yard fences may lean zig-zag in all directions, an excellent way for fences to lean, by the way, for thus they keep from falling out of pure contrariness; his kitchen garden may be neglected, or left to the care of the women and children; and as to what he would call "posy" beds, his geese and chicks run at will over the only spot where these could be located; the siding may be torn from his barn; his smaller out-buildings may be doorless; his wagons, plows and harrows, without paint, and exposed to the weather may serve as roosting places for his fowls; burdocks and "stick-tights," may make rampant growth along the pathways and among the berry bushes in the garden; all these things he regards as matters of no account, and if you refer to them as marks of shiftlessness, he has only to point to his bulging corn-cribs or wheat stacks to refute the charge. And the smile with which he does it, is enough to make you resolve never to try to open another man's eyes while you live. What matters a few burdocks anyhow? If you object to them as something particularly obnoxious, he will tell you with another smile, that the way burdocks grow on a piece of land is the best way in the world to tell what that land is good for. Show him a farm where burdocks grow as if they had no business on earth, and he'll show you a farm he don't want to own.

If his wife complains that she can't stir out of doors without having to put her skirts through a picking process to rid them of burs, he has a smile for her, too, with the information that country folks can't expect to have everything as "slick" as they do in cities, which, may be, she believes and may be she does not. Women, nowa-days, as a rule, are given to exercise their own opinion on such matters, and, if it was not that they likewise "exercise" butcher knives, corn cutters and such like implements occasionally, the traveler along country roads would see more burdocks, thistles and mulleins than roses growing in farmers' door-yards.

Now a word about these same door-yards. Why is it that they are so generally neglected? The fault may rest in a great degree, but not altogether, with the women. Flowers and shrubbery are out of the question where the yard is used as it frequently is, as a sort of convenience for the passage from the road to the barns and sheds in the rear, of everything brought in, from a load of hay to a drove of pigs. Fancy a tulip or a pansy trying to open its tender petals among the litter of such a door-yard! Nothing but "Live-for-ever," Ribbon grass, or Devil's flag, could make a pretence of growing there. And try how you may to bring about a state of things more "city-like," or exclusive in the way of position for flower plots, the front door-yard is the only place about a farm-house which can be made available for this purpose.

That farmers' wives, take them as a class, should care so little for trees and flowers about their homes, is to be regretted, and that chiefly for their own sakes. They need their soothing and refining influence, of which in their isolation and in the hard work of their every-day life, they stand in peculiar need. Trees they may regard as among the impossibilities. It looks a greater task to dig up and set out a tree, than it really is. Any woman possessed of ordinary strength, can do this and feel the better for doing it. And as to flowers—well, they don't want them, or they would find a way to have them. We wonder seriously, sometimes, how some persons are to enjoy heaven, since they care so little for all beauty here, whether it consists in flower, stream, or wood.

Field Crops.

NOTES ON SEEDS.

PROF. W. J. BEAL.

WEAK SEEDS produce weak plants. This has been shown time and time again. The seeds may be weak on account of small size, or because they were immature when gathered, or because their vitality had been impaired by keeping a long time after they were gathered, or by keeping them in an improper place as to moisture, or great extremes of heat and cold. Most seeds will grow if they are not fully ripe, as most farmers know to be the case with corn and wheat. As a rule, the feeblest specimens of a lot of seedling plants are most likely to produce the choicest flowers.

In England, it is believed that old seeds of melons and cucumbers are most likely to produce nice fruit and most of it. Light seeds may sprout quicker, but produce weaker plants: Professor CHURCH of the Royal Agricultural College, England, found:—That seed-wheat of the greatest density produces the densest seed and yields the greatest amount of dressed grain. The seed-wheat of medium density generally gives the largest number of ears, but the ears are poorer than those of the densest seed. Seed of medium density also produces the largest number of fruiting plants. The densest grains are not always the largest.

PROPER DEPTH OF SOWING.

This subject has been much discussed, and some have pretended to possess great secrets in regard to vegetable physiology. Seeds are sown and buried in the soil, to keep them away from birds and other animals, and to keep them at a proper degree of moisture. Acorns and beechnuts will sprout and grow readily when dropped on the ground, provided they are moistened and a mulch is thrown over them, as is usually the case, in the form of a light layer of leaves. The same is true of most other seeds. The proper depth for planting seeds depend on the texture of the soil and the state of the weather, or the climate in which they are to grow. No fixed, universal rule can be given for any species of seeds.

Very small seeds start best with only a very slight covering of finely pulverized material, and then a slight screen to prevent destruction by excessively dry weather. In sandy soil, seeds may be planted deeper than in clay soil, in a dry climate deeper than in a moist climate. In the light soil at the College Farm, the late peas do best if planted five to seven inches deep, while for the early crop, two inches is the proper depth for planting.

Dr. NEWBERRY has given an account of the planting of corn by the Indians in Colorado and surrounding country. The soil is subject to severe drought. To secure germination, they plant twelve or fourteen inches deep and often raise good crops. At our farm, peas usually come up if planted ten inches deep, but the plants will not thrive so well as when planted at a less depth. Finely pulverized soil is quite important to secure the best results with seeds for field or garden.

TIME REQUIRED FOR GERMINATION.

This depends on the variety of seed and on the state of the atmosphere. The seed of the mangrove usually sprouts before leaving the parent tree. Wheat sometimes grows in the head, as we all too well know. Some seeds with a hard covering will not germinate until the second, third, or fourth year. Seeds of this sort are those of the rose, hawthorn, dogwood, basswood; seeds of the mustard family start quickly, while those of the parsnip family start slowly.

TEMPERATURE FOR GERMINATION.

This varies with the kind of seed from chickweed which germinates near the freezing point, to the cocoanut which germinates at 120°. I copy the following table from Johnson's "How Crops Grow:"

	Lowest temp'ture.	Highest temp'ture.	Temp'ture of most rapid germination.
Wheat	41° F.	104° F.	81° F.
Barley	41	104	84
Pea	44.5	102	84
Maize	48	115	93
Scarlet bean	49	111	79
Squash	54	115	93

It would be an interesting experiment to try to learn whether the early Flint corn of Canada would germinate at a lower temperature than the large Dent corn of Missouri. We should expect to find some difference.

THE CHINESE YAM.

THE Chinese Yam possesses merits that should commend it to the agricultural classes of the United States, yet there are many who don't even know that it is grown in this county, although it is more than twenty years since its introduction here, from China. The difficulty all new beginners have to contend with in the culture of this esculent, is a proper understanding of its wants. I have grown them for twelve or fifteen years, and will give the readers of the RURAL the benefit of my experience:

In the first place, select a soil that is moderately dry, deep and rich, and prepare it by spading or plowing deeply: then plant the tubers eight inches apart each way. They will need to be cultivated a few times the first year, to keep weeds down and soil loose. After the first year, keep the weeds hoed off or mowed down, as you prefer. The Yams are perfectly hardy, standing in the ground all winter and growing again when spring comes, increasing in size for a number of years. They increase naturally from the small tubers that grow on the vines just above each leaf. These should be saved in the fall, and kept during winter where they will not freeze, as freezing injures their growth, and planted in the spring as soon as the ground gets warm.

As to the product per acre, in the best of soil, with three years' growth and tubers planted eight inches apart each way, we could safely calculate

on getting six and a quarter tons of Yams per acre. Some may think this a large yield, but I believe it is not as large as I should put it, and think it is not an overestimate. I have only cultivated them on a small scale but have come to the above conclusion with regard to their productiveness. A few years ago, I was digging in an old bed of them where they had been left to grow for several years, and such a sight! The ground was literally full of roots, measuring one and a half to two feet in length, and one and a half to two inches in diameter at the largest end, and this too where the soil was not more than eight or ten inches deep.

They grow in a perpendicular position with the large end downwards. The vines are ornamental, having heart-shaped leaves edged with scarlet and are very pretty. A few tubers planted near a door or window and the vines trained over and about it, make an ornament worthy the admiration of all. The flowers are numerous and have a cinnamon fragrance, but the vines do not bloom until the roots are two years old. In garden culture I let the vines run on the ground, except those I wish to save tubers from for seed. These I set stakes or poles to, as I think by this method the tubers are produced in greater abundance and of large size.

There is scarcely any difference perceptible to the taste between the Chinese Yam, when properly cooked, and the Irish potato, although the Yam is much whiter and somewhat finer grained.

Mr. M. H. Rose, of Dorchester Co., Maryland, in a communication to me, says in reference to the Chinese Yam: "I have been cultivating it for about seven years, and every year I prize it more and more. They are pure white when cooked, and are dry and mealy. We cook them either by baking or boiling. After this year I shall cease to cultivate the Irish potato."

Mr. Petit of Porter Co., Indiana, says, "I have often eaten them in different parts of the world, but did not know they could be grown in this part of the country, and often wished I could have some of them when potatoes were scarce."

They have no insect enemy, and drought affects them but very little, as they root so deeply. There is no necessity for their being dug at any time of the year, except when wanted for immediate use. They are suitable for cooking any time in the year. A person can plant enough at one planting to do his family for years, each year bringing him larger Yams. I consider them safer to depend on than the Irish potato which has its enemies and is so sensitive to a little freeze.

I believe their proper cultivation would be attended with success anywhere in the United States. If the masses of the people better understood their nature and were better acquainted with their many fine qualities, they would be more generally grown. In conclusion I will say that they are the most profitable crop that I cultivate.

Wm. Cruzan.

Hamilton Co., Ind.

Horticultural.

SLITTING THE BARK ON HIDE-BOUND TREES.

I believe in the surgery. The hide-bound state, if sometimes, is not always the outcome of barron soil or starving culture. I have had it come on and stick to trees in deep, rich soil every year, well manured and opened up with the fork. It may be as Prof. Beal says, that "Hide-bound comes from trouble at the root." Or it may come from the air, or from insect sting—who knows? Until some one does, he has no right to guess, and to put out that guess as a fact. Even a right guess at the cause, under or above ground, does not support disbelief in hide-bound, or prove that ripping up the bark will not cure it. What means such unbelief and donbt? Not, surely, that such an ill condition does not befall trees, either bringing, or mated with, unthrift. You might as well disbelieve in a feverish skin, or in the sharp neuralgic pain, because they are perhaps only the register and symptoms of some deep, inner ail in life's machinery.

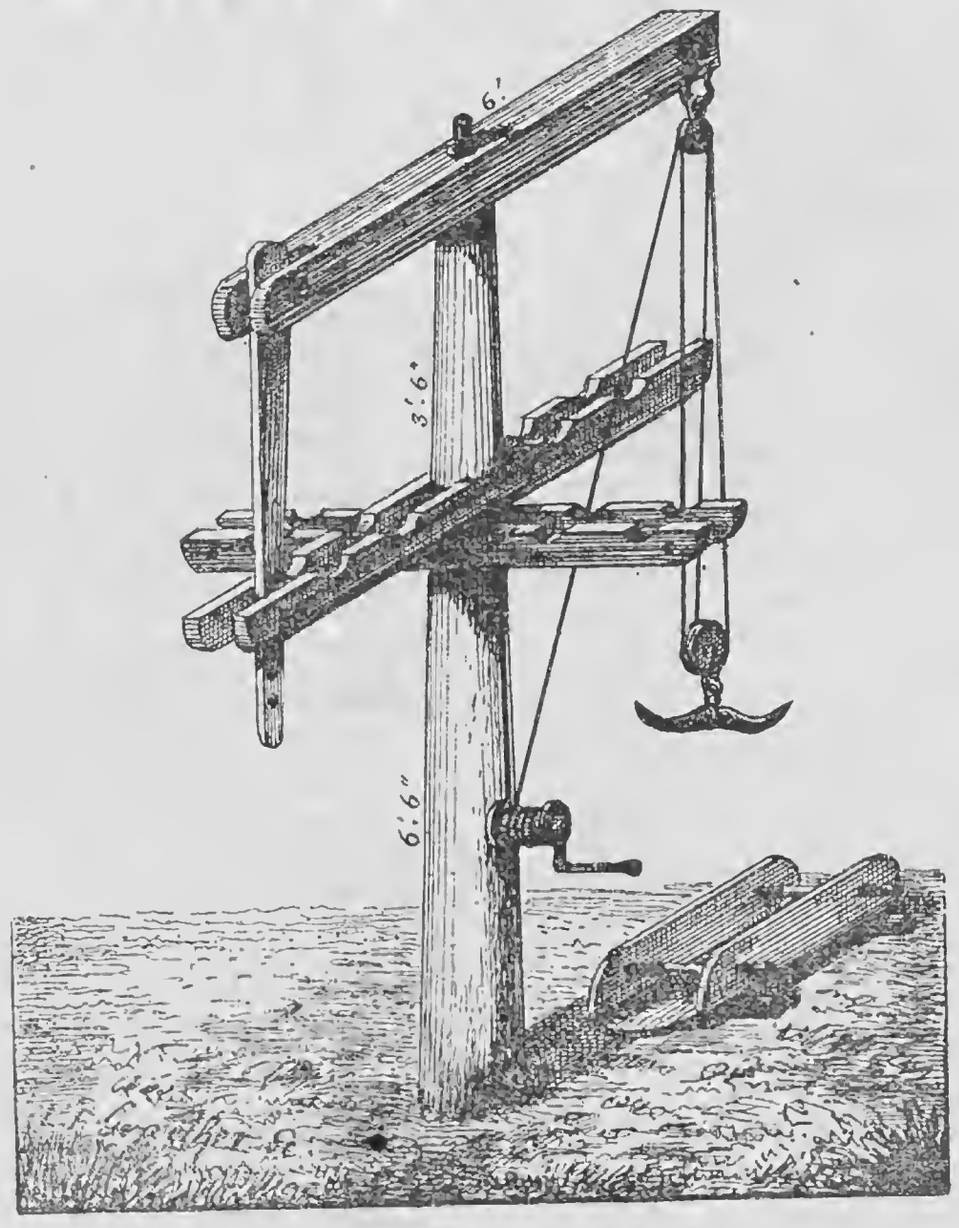
That some tree trunks take on a hard, tough, leathory bark, is beyond dispute. The trouble is sometimes brief; but it often clings and clogs all thrift for years. There it is—"What are you going to do about it?" Wait till the tree, from leaf and root tendril, gathers a force to rend the gripe? Or will you give quick help by slitting, more or loss in depth, that hide-bound bark?

The duty should be done at the season when the full force and vitality of the tree starts out for its summor's work. It will not do to slit the bark when the tree is dormant, or after the growing season has gone by. Trees, at the time of laying on their new wood, show a wonderful faculty for healing over any gash or rip-up of the bark. I have known a whole apple tree trunk stripped of its hide—along in June, I think—to heal entirely over, developing a new bark the same season. The stripping was done to stop the wood growth and make it bear. It answered the purpose.

The upshot of all this is, that slitting up the hide-bound bark is wise. It's a direct and speedy help, that will do till some one finds in the root or in the tree-top, the cause of hide-bound, and hunts up a better cure. Doubtless some wash on the tree trunk will ward off, and at some stages, relieve the hide-bound state. But is there any way so quick and sure as slitting up the bark? I have had success by this, time and time again. Such was also the experience of an extensive nurseryman here who, by the slitting process, helped his hide-bound trees.

Now, when we lay down this or that regimen as suited to the nature of growing things, we should not forget that a cultivated fruit has lost, or needs not, some of the primeval stamina of its kind. Among trees, as well as humans, the "survival of the fittest" is now hoped and helped for other ends, than to supply weapons and housing for a stalwart beast.

W. H. Noble.



APPARATUS FOR RAISING DEAD HOGS.

CATALOGUES, &c., RECEIVED.

J. M. Thorburn & Co., 15 John Street, N. Y.—There is no catalogue that we look over with more interest than the above, because we know from our own experience and that of many acquaintances, that everything it offers is the very best of its kind. This house was established in 1802, and we know of no other in this country more favorably known for conscientious and liberal dealings. The present Catalogue comprises 95 pages, descriptive and enumerative of seeds and bulbs for the vegetable and flower garden, for the lawn, farm and nursery, and probably represents one of the largest collections in the world. The Catalogue is free to all applicants.

John Saul, Washington, D. C.—Catalogues of rare and beautiful flower and garden seeds for the spring of 1878. Among the newer plants of which seed is offered, are Tuberous-rooted Begonias, Torenia Fournieri, Aquilegia chrysantha and cærulia, Arundo Donax, var., Zebra-striped Eulalia, Miles' now hybrid spiral Mignonette, and many others. Those who have files of the Rural for the past year will find many references to the above plants.

Also a catalogue of Roses. Both are free to applicants.

Wm. H. Carson, 125 Chambers Street, N. Y., issues a very attractive catalogue of vegetable and flower seeds, and also a select list of greenhouse, window, and garden plants. Mr. Carson has reason to thank his customers of the past year, many of whom testify to the excellence of his seeds.

He offers a number of excellent novelties for an appreciation of which the catalogue, which is free to applicants, must be consulted.

Alfred Bridgeman, 876 Broadway, N. Y. Annual descriptive catalogue of seeds of all kinds. Mr. Bridgeman selects from the general catalogue of seeds such species and varieties only as he deems worthy of cultivation, to the exclusion of all the various sorts that are not adapted to our climate. An experience of nearly twenty-five years in Horticulture, enables him to make such selections, and in this way protect his customers against loss and disappointment. The catalogue (which is free to all) is a model of neatness and plainness.

Mrs. J. B. Root, of Rockford, Ills., whose catalogue we noticed as free to applicants, desires us to correct the error, and to state that its price is ten cents. This we do with an apology.

The Vineyard.

EARLY CHAMPION.

G. W. Campbell of Delaware, O., wishes in the Rural, of Jan. 19th, to have the matter cleared up regarding the "Early Champion" &c. Now, in the first place, I would say that there is no such grape as *Early* Champion. Second, I know that the Champion and Tallman Seedling are one and the same thing. Now, I for my part, should not waste time, paper, ink or stamp if I did not know this to be a very important subject. I, for instance, having had about thirty-five kinds, should have been very much annoyed, to say the least, if I put out vines which are recommended to me to be about two weeks earlier than the Hartford, and then, after two years of waiting have to find to my sorrow that they are the same, or something later. Now in order to confine myself to the subject, I will give Mr. Campbell and those interested, the true history of the Champion. Only this much I would say, that if he had noticed the different articles which appeared in the American Rural Home on this very same topic, it would have been cleared up before this.

In the garden of Mr. Tallman of Syracuse, N. Y., a chance seedling came up which seemed to have two kinds of fruit, one much earlier than the other. Mr. Will. Day, an English gardener took it up and found that there were two distinct vines, and planted the earlier sort in his own garden.

It proved to be much earlier than anything else, and he propagated the same. About ten years ago, a man by the name of Spaulding bought the plants of Mr. Day, and sold them in the town of Greece, where he used to live, as the "Champion" grape. Four years ago, I changed my place of residence to Lake avenue on Lake View; there I got acquainted with a dealer in produce, fruit, etc. That man, Mr. Bady, put me on the track of it after he found out my business, telling me that they generally pay from 20 to 25 cents for those Champions. After satisfying myself that it was earlier than any other, I went to those men that had them, and pruned their vines for the wood, and planted the cuttings in spring, and in two years and a half the most of them showed me their first fruit.

Grape culture is my occupation, and I have been brought up on the vine-clad hills of Germany, and I hope your readers will not misunderstand me, but for the sake of truth, let me tell that the Champion is at least ten or fifteen days earlier than the Hartford; as good and more productive than the Concord.

E. F. Ellwanger.

Lake View Place, Rochester, N. Y.

Industrial Implements.

APPARATUS FOR RAISING DEAD HOGS.

I send, in answer to R., of Watervliet, Michigan, a drawing of an apparatus for hanging hogs without "lifting until one can see stars." The post is ten feet high above the ground; the arms are made of two-inch plank, six inches wide and six feet long, bolted on each side of the post five inches apart, the bottom of the upper ones resting on the top of the lower ones crosswise; the piece across the top of the post is three inches square and six feet long, and works on a pivot so that it can be turned to bring the pulleys over either arm; one end is fastened to the outer end of the arm, and the pulleys are hung on the other end; the windlass is two inches in diameter where it goes through the post, and four inches where the rope winds; it takes thirty-six feet of half-inch rope and one single and one double pulley. A boy twelve years old can raise a 400-pound hog.

A box as presented, sixteen inches wide and three and a half feet long, can be made with rollers under it, and the hog may be rolled on a plank from the scalding platform to the place for hanging without lifting at all; or it may be carried by the handles on each side. G.

Jack's Reef, N. Y.

The Garden.

EXPERIMENTS WITH TOMATOES.

Rural Grounds, Jan. 1, 1878.

Earliness in Tomatoes is a quality of much value, if too much is not sacrificed in other good qualities. So far, however, as our experiments extend, there is no earliest Tomato. That is, if all known varieties were planted under the same conditions, the first to ripen fruit might not be the first to ripen under other conditions. It is the same as regards fruitfulness and to a certain extent, size of fruit. Each locality must determine for itself the kind best suited to it. But it is the same with tomatoes as with other fruit—there are some varieties that will hold certain characteristics in a greater variety of soils and situations than others, and it is for this reason that experiments such as those recorded below are valuable,

April 1 we planted in 5-inch pots, seeds of ten varieties.

April 10, all had germinated but Little Gem. The germination was in the following order: Trophy, strongest, tallest, largest cotyledons; Conqueror—Arlington—Golden Trophy—Hathaway's Excelsior—Green Gage—Canada Victor—Emily—100 Day. Little Gem made its appearance not until April 14.

April 18—Three of each were transplanted into 2½-inch pots—plants about 2½ inches high, all but Little Gem. All were put out in the open ground May 17. No manure was used—the soil rather clayey. Ten days later would have been better. Through fear of frost, they were covered with flower-pots for several nights.

For those who raise their own tomatoes, we commend the plan of starting the seeds in flats or pans of good earth, and transplanting them into small pots of light soil as soon as they are in true leaf. They may then, at the proper time, be thumped out and set in the garden without derangement, and stronger stems, more roots, and a quicker establishment will be the consequence.

Little Gem (B. K. Bliss)—June 23, first set tomatoes. July 24—2 ripe tomatoes, the first of all; 1 and 1¾ inches longest diameter. Round, without seams; both cracked. Aug. 2—Ripened 6; all small, but entire and good. Aug. 7—11, all very small, splitting or breaking open and molding when ripe. Aug. 10—10 ripe, 1 and 2 inches diameter. Aug. 11—25, all small; some rotted, others cracked. Aug. 19—70, one-third decayed—sour and fermenting. Aug. 23—105, same as others, but are firmer than those which ripened earlier. This is the earliest of all, and in the sandier, drier soil of the Rural *farm* grounds, cracked and rotted less than recorded above.

Conqueror (J. M. Thorburn)—Aug. 1—Two, ripened evenly, large, and curved like a horse-shoe. Aug. 3—1 entirely ripe to the calyx,

6½ inches largest circumference. Aug. 5—5 ripe; large, roundish, not acid. Aug 7—4 well-ripened—7, 7½, 6½, and 6 inches circumference. Aug. 10—2 of good size, perfect form. Aug. 11—medium size, soft. Aug. 19—33 medium to large, soft, cracked. Aug. 23—63. Sept. 2—Many on the vines, mostly ripe, lobed; many like 100 Day. Sept. 23—are now of a fine deep-red color, well ripened.

100 DAY (J. A. FOOTE).—June 12—3 in bloom. June 25—second to set tomatoes. Aug. 3—one smooth, round, well-ripened, deep-red, 6 inches largest circumference. Aug. 4—5 ripened; small; 1 to 1½ inch in diameter. Rather large seeds, acid. Aug. 7—2; 6 inches in circumference; lobed. Aug. 10—4; deeply lobed, and ill-shapen. Aug. 11—12 very irregular, all small. Aug. 19—70: firm, ripening all over; small to medium; much lobed. Sept. 2—Of those on the vines, nearly all are ripe, small to medium, lobed and ribbed; evenly and perfectly ripened; this variety ripens the most of its crop before Sept. 10. Sept. 23—a few mostly green.

CANADA VICTOR (W. H. CARSON)—July 26—the second to bear a ripe tomato—1¾ inches in diameter—no seam or crack. Aug. 3—ripened 2; round, palish or pinkish-red, the largest 7 inches in circumference. Aug. 5—1 ripe, 10 inches in circumference; irregular. Aug. 10—4, large, knotty; green about stem. Aug. 11—1, 8 inches in circumference; smooth. Aug. 19—40; smooth, above medium, firm; not very well ripened about stem. Aug. 23—60 medium. Sept. 2—Mostly green; vines less thrifty than others. Sept. 24.—Many on the vines still, and most of them ripe.

GREEN GAGE (B. K. BLISS).—June 12—1 plant in bud. June 26—third to form (set) tomatoes. Aug. 3—ripened 2—greenish-yellow about calyx, red otherwise, not yellow, as heretofore; a few yellow; extremely sportive; round, 6 inches circumference. August 5—4 ripened; all small, well ripened, smooth, not acid. August 7—1, 6¾ inches in circumference; very smooth and round; lemon-yellow. Aug. 10—variable in color and size; largest, 8 inches circumference; round perfect, lemon color. Aug. 11—red color, size of hens' eggs; 13, 5 yellow; 8 red, averaging 7 inches circumference; 9 averaging 8½, all red; some lobed, others not; we have never before noticed so many different looking tomatoes upon individual plants; this variety was unusually true in previous years. Aug. 19—14 red, 25 yellow; all of same general shape. Sept. 2—mostly green; ripen only a few at once; all green on one vine. Sept. 23—a few ripe, for the most part *red*.

GOLDEN TROPHY (B. K. BLISS).—Aug. 6—first ripened; light, pale-yellow—even lighter than what is understood as straw-color; solid, agreeably acid, few seeded; round, well ripened, beautiful. Aug. 10—4, rather irregular-shaped, but very large; a rough, dark-brown skin forms in patches upon some. Aug. 11—4, averaging 8 inches; irregular. Aug. 19—25 large, smooth, half lobed—half not; the dark-brown blotches disappear; average 7 inches circumference. Sept. 2—many on the vines half ripe; not so desirable at this time as earlier; do not ripen fast enough. Sept. 23—laden with tomatoes nearly ripe.

HATHAWAY'S EXCELSIOR (J. M. THORBURN).—Weak-looking plants. June 12—1 in bud. Aug. 5—two ripened, largest 9½x6 inches in circumference; fine flavor; less acid than any others ripened up to this date. Aug. 10—2, round, fine. Aug. 11—4, medium size. Aug. 19—38 soft. Aug. 23—43. Sept. 2—A few continue to ripen daily, but three-quarters remain green upon the plants. Sept. 23—have more ripe tomatoes at this time than any others.

EMILY (RURAL Grounds selection for four years from a variety that had been selected for three years)—June 12—1 plant in bud. Aug. 1—1 ripe—eight inches circumference; flattened; ripe all over, firm, smooth; plants full, all large and about same size. Aug. 7—One 8½ inches circumference, smooth, slightly green about stem. Aug. 19—very large, some 13 inches in circumference, entirely smooth. Aug. 23—27. Sept. 2—large, firm, sound; average as large as Trophy, but of a more uniform size and shape. Sept. 23—mostly green.

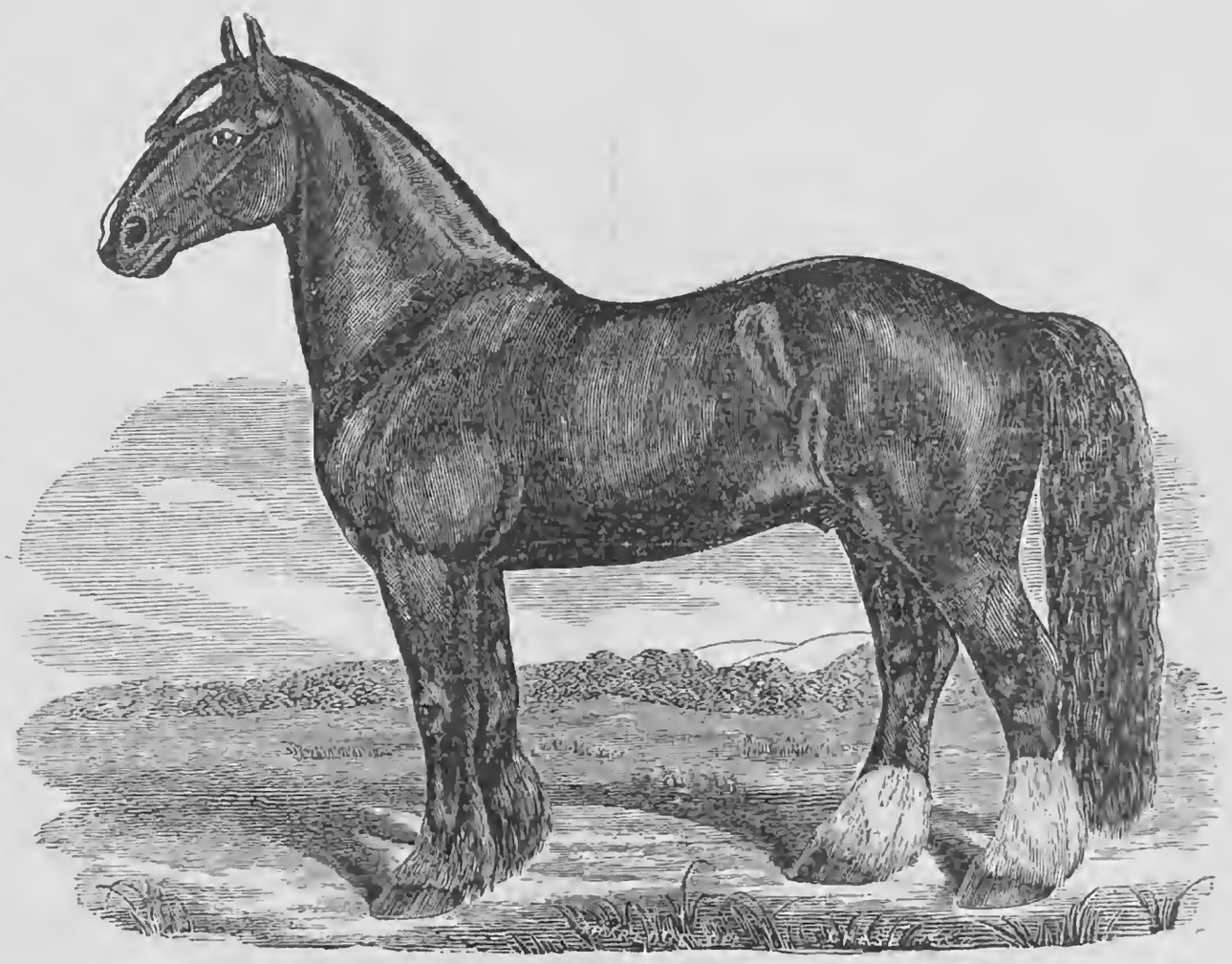
THE TROPHY (W. H. CARSON).—Extremely vigorous plants. June 12—1 in bloom. June 26—several sets formed. Aug. 1—1 ripened, 7¼ x8 inches circumference; round, smooth, green about stem, the green spreading over parts of the fruit. Aug. 19—6, averaging 12 inches circumference; fine, smooth, not well ripened about stem. Aug. 23—21, immense. Sept. 2—One-third of the tomatoes on plants ripe.

ARLINGTON (J. M. THORBURN).—Aug 19—5 very large, well ripened, quite smooth. Aug. 23—23, medium. Sept. 2—one-quarter upon vines ripe. Sept. 23—Many large, green fruit.

SUMMARY No. 1.

Ripe Tomatoes picked up to August 11:

Little Gem; small seamless	29
Conqueror; large-lobed	14
100 Day, much seamed, like a musk-melon; small to medium	12
Canada Victor; small to medium	8
Green Gage; extremely variable in size, color and form	7
Golden Trophy; whitish yellow, large	5
Hathaway's Excelsior; medium to large	4
Emily: large, even, smooth	2
Trophy; extra large	1
Arlington	0



CLYDESDALE STALLION "KING OF THE EAST."

SUMMARY No. 2.

Picked from August 11 to August 27—Prof. BEAL's first date inclusive. (See his report.)

1. Little Gem	200
2. Canada Victor	101
3. Conqueror	96
4. Hathaway's Excelsior	85
5. 100 Day	82
6. Green Gage	52
7. Golden Trophy	29
8. Arlington	28
9. Emily	27
9. Trophy	27

REMARKS.—Judging the above varieties in this soil, climate and situation—for the *earliest* market variety, we should choose Little Gem. For the best and earliest, we should choose Conqueror, and next for the same reasons, 100 Day. For the best Tomato, without regard to earliness, we should choose the Trophy for a red and the Golden Trophy for a yellow.

SPRING WORK.

TOMATO SEEDS should be started in boxes in February. Have fruit cans divided half way between the ends and make holes through the end pieces or cut them out altogether; fill these with mold, and when the plants have the third leaf, transplant to the cans. Continue transplanting which may be done by exchanging the plants from one can to another. Transplanting strengthens the plants. As early as is safe, accustom them to out-door air by raising a window or setting them out of doors through the warmest part of the day. Never fail to put them out-of-doors during warm rain. As soon as there is no danger of frost, transplant to the garden. Plants raised in this way are far more prolific than hot-bed plants, though a few of the latter are desirable for early bearing. We have been best suited with the Trophy.

PEA seed should be the first put in the ground. As soon as a hole can be dug deep enough to put in the seed, have them planted. The ground should be prepared in the fall. The best crop of peas we ever had was put in during a thaw in February. They came up and the rain fell, frost came, and snow covered them, but still they flourished. They bore earlier and for a longer time than any vines we ever had. The ground had not been prepared in the fall, so that a great deal of work was necessary through the spring to prevent the soil baking. Sow both early and late varieties at the same time. About the early varieties there are divers opinions, but for late ones, nothing can excel the English Marrowfat. This year we intend to try fall sowing.

LETTUCE, radish, spinnach and pepper-grass, also a bed of beets for early greens should be planted as soon as the ground can be raked deep enough to cover the seeds.

For starting melons and cucumbers in-doors, the best pots are small pieces of sod-turned grass-side down, and placed upon a board. When the season is warm enough, set out in the garden, having rich, loamy soil covering all but the leaves of the plants.

CAULIFLOWER plants can generally be bought better than they can be raised, unless a person has abundance of time and garden room. Set out summer cabbages in May or June, according as the season is cool or warm; winter cabbages and cauliflowers in June or July. Transplant during wet weather, if possible; fill each hole with water before setting the plants and shade for a few days.

POTATO patches in late years have not been held in good repute in small gardens on account of the potato bug; but we have found our potato patch as profitable and convenient as any part of the garden. Of course, the bugs come, but the city bugs are no worse than their country cousins and both yield alike to the influence of Paris-green. Plant as early as possible in April in a loose, sandy soil. We have tried several varieties but, all things considered, for an early potato we prefer the Early Rose.

Dig a trench for celery. Buy your plants if you have no hot-bed.

HOT-BEDS.

A GREAT mistake, made by many novices in gardening, is to use soil in hot-beds which is *too heavy*, so that the frequent waterings pack it down tightly, and the hot sun bakes it so hard that nothing can grow in it as it ought. The soil for this purpose should be much lighter and looser than common garden soil usually is.

WATERING.—Although the covering of glass holds moisture from escaping as vapor to a considerable extent, the shallowness of the soils will not enable it to hold water for a great length of time during sunny weather, and the beds have to receive an artificial watering frequently.

The best time to perform this work is about four o'clock in the afternoon.

I. F. TILLINGHAST.

The Horseman.

CLYDESDALE STALLION "KING OF THE EAST."

THE improvement of farm horses is deservedly attracting a great deal of attention in this country at present. Improvements in our methods of farming necessitate an increased amount of horse-labor, and as we manure more heavily, plow deeper, and use labor-saving machinery more extensively, we are more alive to the want of horses heavier than those common on our farms. Formerly when the country was newer, much of every farm in timber, and reaping, mowing and cultivating done by hand, a farmer owning a hundred acres, could do all the work with a single team. Now, the large acreage under cultivation on every farm, the settlement and culture of our prairie lands and consequently the extra demand for team labor make it necessary that we should have more and heavier horses. To supply this want farmers and breeders have imported different breeds of European horses among which the Clydesdale deservedly holds a prominent place.

The origin of this breed is attributed to an ancient Earl of Huntingdon who imported into the district of Clyde, Scotland, some Dutch mares, a strain then highly valued, and these being crossed with the native breed became the progenitors of the renowned Clydesdales. For the most part these are powerful horses, standing about sixteen hands high, are extremely active, and in the south of England they are largely used for the saddle and coach as well as for agricultural purposes. Their prevailing color is black but there are also among them many browns and a few grays. A pair of Clydesdale horses will plow a greater breadth of land than almost any other kind of horses, but they require to be well fed. For cart-horses, especially for one-horse carts, there is no description of horse better adapted than the Clydesdale, or that can get through more work in the course of the day. Their merits have secured them a high reputation and a ready sale not only throughout Great Britain but wherever the English language is spoken, and they have therefore been extensively exported to the English Colonies, and, to a less degree, to this country. One of the best specimens of the race imported among us is "King of the East" the property of Messrs. SMITH & POWELL, Syracuse, N. Y.

King of the East was selected in Scotland as a superior representative of the Clydesdale stock, by an agent sent over expressly for that purpose. He was imported in 1875 and was four years old last May. He is a dark dapple bay 16¾ hands high and now weighs 1800 pounds. He was sired by "the Marquis," by the "Pride of Galloway;" dam "Lovely," by "Loch Fergus Champion," he by "Salmon's Champion." All these were very celebrated prize horses in their native Scotland. The accompanying illustration gives a very accurate idea of this noble animal from a side point of view, but to justly realize his remarkable power, it would be necessary to see his unusual depth of chest and immense quarters and loins.

The same gentlemen have now on hand at their breeding establishment—one of the most extensive in the country—130 horses of Clydesdale and Hambletonian blood.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

SNOW-DROP. SNOW-FLAKE.

WHAT fond remembrances cluster around the delicate Snow-Drop, the first to herald the spring and bid stern winter withdraw his forces, that the vernal flowers may come forth once more to gladden the heart of man.

Every one hails the Snow Drop with gladness. Its appearance about the first of March is a joyful surprise. Defying the cold, it lifts to view its tiny blossom, whiter than the snow, long before the latter has disappeared, and when no other sign of vegetable life can be seen.

Of this general little favorite we have double and single varieties. The former is known botanically as Galanthus nivalis flore pleno. The flowers are very large and double; they resemble, on a small scale, the popular Peonies, the center of the flower being composed of a number of closely-set petals, around which there is a circle of larger guard petals.

The single Snow-Drop is known in botany as Galanthus nivalis: the flowers are bell-shaped and drooping. The bulbs are quite small, averaging about half an inch in diameter; the plants grow about six inches high, being just the thing required to border beds of larger growing bulbs, or they may be planted in masses of a dozen or more, or in beds.

Plant in the fall; they grow in almost any soil or situation; set the bulbs two inches deep and the same distance apart. They should not be disturbed for several years, when their flowering quality will be much improved. If a few are planted over the lawn they will be found very satisfactory. For house culture they are very attractive. A dozen bulbs may be planted in a six inch pot, and form one of the most attractive objects in the window garden. They flourish in sand or moss, and thus may be used in many ways; for instance, around pots in a window box.

The Snow-Flake resembles the Snow-Drop, but it is of a much larger growth and more robust habit: it is sometimes called the large Snow-Drop, but much oftener St. Agnes' flower, from the fact that its purity and beauty have caused it to be dedicated to the patron saint of young virgins, Saint AGNES. The botanical name is Leucojum vernum.

It grows to the hight of one foot; the flowers are very large, pure white, with green spots; they hang pendant from the top of the flower stem. Once planted, it grows freely, and manages to take care of itself pretty effectually for many years, blooming about a month after the Snow-Drop.

It does well in light, sandy loam. In very cold climates, it should have a light covering of straw. There is a late, or summer-blooming variety of the Snow-Flake known as Leucojum æstivum. It blooms about six weeks later than the spring variety and is much hardier. Both varieties are very pretty, and well worth the small space they occupy in any garden.

El Dorado, Cal.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

"We women grew old before our time," said a neighbor lately whose husband thinks a large dairy and no help a necessity in farm life. I thought of the cold and fatigue that must be experienced in this severe climate, where women do the milking, and have to reach the barn through drift and bitter blast at this season of the year, and did not wonder at the weary look and haggard face of my neighbor. What *is* harder than the life of a poor struggling farmer's wife? Paint the picture as bright as fancy can, say it is health, and plenty, and peace, I cannot discover it to be so, unless the farmer is forehanded, can sympathize with, and helps his wife, *in spite of herself*, for often it is a woman's own fault if she is overtasked.

She "can work away," and thinks the money earned will help to buy Janie a piano, or some other equally foolish purchase not worthy her self-sacrifice, when it were better employed in procuring for her own use all the labor-saving plans and helps within reach. If we were more interested in ourselves, we could manage better, but there is *so much* to do and to consider, and I would suggest to every farmer's wife, when she can visit any large city, to study the stores where hardware and house furnishings are kept, and get a practical knowledge how she can save her strength. The money invested in these things, will be more used and give greater satisfaction, than if spent in some needless finery. Another great waste of time and labor, is the constant, never-to-cease, need our family imagine they feel for *pie* as a dessert. While I do not hold, as many do, that this article as dessert *must* be unwholesome or indigestible, I am sure it can often be dispensed with. If our children were taught to eat fruit in its stead, the eye and palate might alike be tempted, for nothing is more ornamental than a pretty dish of glass or any other suitable ware, filled with the fruits in their season. The *pie* or any other delicacy would be better appreciated if not considered a necessity, and a woman's labor in preparing dessert greatly lessened. But our good housewife will say with pride; "My husband will not be satisfied with an apple or a bunch of grapes, a pear or a saucer of strawberries." I think he would, my dear "economist," if your pride will only allow him to know it is a glad and great relief to your dinner-burdened heart.

SYSTEM IN TABLE-SETTING.

Housekeepers would many times be spared the annoyance of missing needed articles, after being seated at the table, if they would pursue some system in its arrangement.

By way of explanation, when the cloth is laid, place upon the table the napkins, and if a child sits at table, its bib. Then the knives, forks, carving knife and fork, table-spoons, and tea-spoons. Next the plates, seeing that each is in its proper place and the number sufficient, then all dishes used in drinking, not forgetting the small children's. After the same method all required seasoning, such as cream, milk, sugar, pepper, salt, or if castors are used see that each bottle is properly filled, and thus proceed through each division. One soon becomes accustomed to system in this department, omissions are rare and the work is more easily and quickly done.

Mrs. H. L. Jones.

COOKERY FOR THE SICK.

Water Gruel.

Into a quart of boiling water stir two tablespoonfuls of Indian meal, previously wet with a little cold water; add salt and boil at least one-half hour. When served, pour a spoonful of thick, sweet cream over each saucerful, but do not stir into the gruel.

[Rice Gruel.]

Into one pint and a half of water put a large spoonful of unground rice and let boil until soft; strain; add one pint of new milk; and boil again for a few minutes. If ground rice is used, mix a spoonful of it with a little cold water and stir into the water; boil for five or six minutes, stirring constantly; season with salt and if the patient can bear it a piece of butter the size of a walnut; some season with sugar and nutmeg.

Raw Custard.

For diseases of the stomach when very delicate food is required, this custard is excellent. Beat up an egg with sugar to taste; add a cup of milk and whatever flavoring liked.

Tapioca.

This is also very harmless. Soak in cold water for two or three hours; cook slowly; serve with cream, sugar and flavoring.

Egg Soup.

Beat up an egg in a teacup, add salt, pepper, and pour over it boiling water to cook it a little; butter may be added if desired, also toasted bread or crackers. A variety of harmless dishes to suit the capricious appetite of an invalid is sometimes difficult to obtain.

Loretta E. K. Turner.

DOMESTIC RECIPES.

Lemon Jelly.

Grate two fresh lemons; add three eggs; butter the size of an egg and two cups of sugar; set into a kettle of boiling water and cook until it thickens, stirring constantly.

Hop Yeast.

Take six potatoes and eight good sized hops, and boil in three quarts of water, tying the hops in a bag; into a stone jar put one cup of flour, one cup white sugar, and one-half cup of salt; stir all together with a little of the boiling water the patatoes are cooking in; when the potatoes are done take the hops out and pour the rest of the water into the jar, leaving the potatoes whole; they must not be mashed but left in the yeast until it is used up, and then thrown away. Let the potato water cool before adding the yeast; set in a warm place to rise; when the yeast has risen, take out a pint and keep by itself to start the next with. To sponge the bread, take two quarts of new milk and scald—not boil; set away until nearly cool, then stir in some flour and add one pint of yeast. This makes four loaves.

Omelet.

Allow one egg for each person; beat two minutes; add salt size of a pea and one tablespoonful of milk for each egg; beat well together and turn into a hot, well-buttered frying-pan, cover and cook slowly until nearly all is thick; serve immediately.

Cream Pudding.

Six eggs, six ounces of sugar; one cup of flour; stir well and add one cup of sweet milk; salt to taste; then add one quart sweet cream and bake forty minutes; flavor with lemon.

Tart Crust.

One cup of lard; one tablespoonful sugar; four tablespoonsfuls water; the whites of two eggs beaten to a froth; a pinch of salt and flour to roll.

Cookies.

One cup of butter—cold, rubbed into the flour; one cup of sugar; four even cups of flour; two eggs; two-thirds of a teaspoonful of soda.

Marble Cake.

White Part.—Two cups of white sugar; one cup of butter; one cup of sour cream, the whites of eight eggs, two teaspoonsfuls of cream-of-tartar and one of soda; three and a-half cups of flour.

Black Part.—Two cups of brown sugar; one cup of molasses; one cup of butter; one of sour cream; five cups of flour; two tablespoonsful cinnamon; one each of cloves, nutmeg and allspice; yelks of eight eggs; one teaspoonful of soda; put in alternate layers of each.

A Farmer's Wife.

Everywhere.

RURAL SPECIAL REPORTS.

Cortland Co., N. Y., Jan. 22.

The weather in this locality up to the present date, has been very mild most of the time. The old saying, "a winter's fog will freeze a dog," has not proved true, this winter at least. I have not heard of any dog being frozen yet. We have had, the past season, abundant crops of grain and grass; the fruit crop was a fair one, and of good quality; our crops, taken as a whole, have bountifully rewarded the labors of the husbandman. This is a great dairy County, and every farmer has more or less cows. We have excellent springs of water, and all the best dairymen use coolers for their milk. While some of my brother farmers hereabouts travel in the old ruts, others are more progressive, and find dairying, with modern improvements, very profitable. I find those men that pay close attention to all the details of butter making, save all the manure, keep all the cows they can keep well, and only just so many—are the men that do not say anything about "hard times."

Charles Fairbanks.

Denmark, Tuscola Co., Mich., Jan. 21.

The country hereabouts has been settled only about thirty years, and does not propose to take a back seat in comparison with many of the older settled districts. It is a rich farming country, and products a good yield of all kinds of grain and vegetables. Most kinds of fruit do well except peaches; the winters are too cold for them; the trees die out in a few years. By the way, this is the best of all the winters I ever saw here. No cold weather to speak of, but rain, mud, and slush in abundance. Business dull, and wages extremely low. Wheat looks well so far, and there is an immense quantity sowed in Michigan this year.

S. E. O.

Brooks, Me., Jan. 23.

The winter here is characterized by its sudden changes. A severe snow, then a rain storm. Neither sledding nor wheeling. Stock doing well.

J. W. L.

The Herdsman.

DIMON STOCK FARM PAPERS.

JOHN DIMON.

No. I.—Ayrshire Cattle.

In choosing for my subject Ayrshires, I feel that I am treating a subject not as well understood by the average farmer and dairyman as it should be. Having myself, for upwards of fifteen years, been a breeder and dealer of this most useful animal in the dairy, and having made them a special study, owned and bred some animals as fine as I ever saw anywhere, I think I should understand my subject. Presuming this to be the case, I will give the readers of the Rural my idea of

A MODEL AYRSHIRE COW.

She should be of medium size, weighing, in good milking condition, not to exceed 1,000 lbs., or less than 700 lbs., live weight—about 800 lbs. I prefer. She should be dark-red and white, brown and white, or brindle and white in color, having more of the dark color than of the white. I prefer her to be two-thirds red-brown or brindle to one-third white. She should be beautifully spotted or mottled, and present a nice contrast of colors; the head small, fine and clean; the face long and narrow at the muzzle, with a sprightly, yet generally mild expression; eye small, smart and lively; horns short, fine, curved upward and slightly inward, and set wide apart at the roots; neck rather long and quite thin; body tapering from hind to fore-quarters, or what we call "wedge shape," the fore-quarters being much the lighter; back straight and narrow, but wide across the hips; bone fine; tail long, with very fine bone and good switch; hair very fine and soft; udder capacious, extending well forward; teats of fully medium size, set regularly and wide apart; milk-veins prominent and well developed; legs rather short and well shaped, very smooth and clean. On the whole, she must be so put together as to be handsome—so handsome as to attract the attention of the most casual observer. When you see a cow filling the above description, you will see not only an Ayrshire but a good dairy cow.

As to the milking capacities of these cows, I am fully satisfied, by long experience, that, as a breed, they will yield more milk, for the amount of food consumed, than any other breed; and for a milk dairy they stand at the head of the list of all breeds. Their milk is also exceedingly rich in caseine; hence they are exceedingly valuable for the cheese dairy. And for all growing animals, there is no cow's milk equal to that of the Ayrshire, as it is more rich in bone and muscle-forming material than that of any other. I am often asked the question as to what breed of cow is the best for

A FAMILY COW.

My answer is: If you want *milk* for your children, there is nothing like the Ayrshire. I am often asked how much milk a good Ayrshire should give. This depends very much on circumstances. While our soil and climate, and especially that of New England, fall far short of the moist climate and more productive soil of the west of Scotland—the original home of the Ayrshire—I am happy to be able to show you that even here, in our own sterile New England, cows of this breed have given quite satisfactory results. I will instance a few cases only:

The imported cow "Jean Armour" in 1862 gave an average of 49 lbs. 3 oz. of milk per day, for 114 days, commencing June 1st. The greatest yield in one day was 58 lbs., and the smallest yield was 43 lbs. For the month of July she gave an average of 51 lbs. 13 oz. per day. Her milk for three days in July yielded 6 lbs. 3 oz. of butter. The imported cow "Corslet," imported and owned by the same gentleman (Mr. H. H. Peters), gave, from May 2d to Sept. 1st, an average of 46 lbs. per day, or in 122 days, 5 612 lbs. This same cow, "Corslet," afterwards gave her last owner, E. D. Pearce of Rhode Island, 28 quarts strained milk per day. The cow "Ayrshire Lass," when 11 yrs. old (in 1861), calving April 1st, gave, June 10th, 74 lbs.; Aug. 1st, 66 lbs; Aug. 31st, 55 lbs.; total for the month of August, 1,902 lbs.; and for the first 16 days in Sept., same year, she gave 848 lbs. The above statement of the yield of "Ayrshire Lass" was sworn to by her then owner, James Brodie of Jefferson Co., N. Y., before the N. Y. State Agricultural Society.

The Ayrshire cow, "Flora Temple 3d," has proven herself a very remarkable animal. Her milk yield for four months, in 1874, averaged 25⅛ qts.; greatest yield, 30⅝ qts.; least yield, 20⅛ qts. She has not only proven herself a remarkable cow by the quantity of her milk yield, but by her capability of giving milk almost constantly, and under such circumstances as would exclude 999 cows out of every 1,000 from giving milk at all. For instance, she dropped her last calf in the spring of 1875, and gave milk until near the spring of 1876; she then went dry two months (her owner supposing her to be with calf). Not proving to be with calf, she was milked again (after having gone dry two months), and yielded, that season, 14 qts. per day, and was again dried in the spring of 1877, and went dry three months. Once more, not proving to be with calf, she was milked again in the summer of 1877, and is now giving a good, fair daily yield of milk. I went to see her Dec. 22d, ult. She is owned in Providence, R. I. I could give you many other astonishing facts of the yield of this breed of cows; but doubt if any of the many readers of the Rural ever heard of a cow quite as remarkable as "Flora Temple 3d."

I am frequently asked the question:

"WHAT IS A GOOD AYRSHIRE COW WORTH?"

I consider them worth all the way from $100 to $500, much depending on their breeding, style, beauty and milk-producing capacities. I should never care to own one worth less than the former price, and it is the light of my ambition to breed and sell a cow for the latter sum. I intend to do it yet, and have my customer feel proud of his purchase. I believe there are cows of this breed which would be cheap at that sum. For the cheese-dairy districts of Ayrshire, Scotland, there is no breed of cattle that, for the amount of food consumed, can begin to compete with them; and they are held in such high estimation that, at a recent fair and cattle show, the entries of thorough-bred Ayrshire cattle were 478; of all other breeds, 31 animals. This exhibition was the 42d Annual Spring Show of the Ayrshire Agricultural Association. My own experience in breeding and keeping these cattle proves them to be both hardy and thrifty, and much more easily kept in good condition than most other breeds. They stand our long, cold New England winters as well as *any*, and better than *many* other breeds.

The only objection to this breed of dairy cows, here, seems to be that many of the imported animals have too short teats. The apparent cause of this is that in Scotland, where women and girls do all the milking, cows of this kind seem to be preferred; but here, in New England, where hard-fisted and large-handed farmers do the milking, these fine teats become a serious objection, and one which our breeders will endeavor to obviate. I am breeding for good teats as well as for good escutcheons and milk-veins. My rule for breeding this most valuable dairy animal is, breed for *constitution, milk* and *beauty*.

Putnam, Conn.

REMEDIES FOR VERMIN ON CATTLE.

Some one makes an inquiry, in the Rural, for a remedy for lice on cattle. Many years ago mine were troubled exceedingly. They were covered with lice. I used a great many remedies—washed them in tobacco water, which was disagreeable to apply, and did not do its work effectually. Oil and grease were also used, but not with satisfactory results. Mercurial ointment was effectual, but was dangerous, as I lost one or two animals by its use. About this time by the purchase of some animals, a fresh importation was made of blue lice, and something had to be done forthwith. I saw in some paper that ground plaster would kill them. We dusted it on the backs of the cattle and it killed about the whole of the pests. The plaster must be ground very fine, and be dry, or it will not destroy them. It is well to dry it in a pan, on the stove, before applying it.

When animals have been badly infested, lice will live a long time in the barn, and find their way on to any cattle which may be kept there. We whitewashed the inside of the cattle stalls and after a time got the barn clean. We had animals afterwards which we had purchased which were troubled with vermin. We treated them with carbolic suds. We bought the carbolic crystals which may be had at almost any drug store, and which should not cost more than eight or ten cents per ounce. One pound of common bar soap should be put in a dish with some water and melted down; then add one ounce of crystals, stirring well. This, when cold, makes a strong soap—cheaper and better than we are able to buy. A strong suds made with it is sure death to all insects which infest our domestic animals, and is safe and pleasant to use. It is also a good remedy for all skin diseases, and a good application to cleanse any wound or sore. A wash of the suds will benefit any animal which is hide-bound or out of condition; it is a cheap, useful, and effectual remedy for many things, and should be kept on every

farm. In killing lice, two or three applications are necessary as the nits keep hatching. Many fail by not observing this; it is a mistake to suppose that fat cattle do not have them, but no animals can long remain in good condition where they are abundant. People who are negligent in the care of their animals, will not discover and exterminate the pests until their animals are overrun with them. Those who card their cattle daily are seldom much troubled with them. It is a mistake to suppose that filth will generate them, as many suppose. There must be life to beget life. With a little care, and the free use of carbolic suds, no one need be troubled with them long. Where the barn is once clean, by a little watching we may easily keep clear of them.

Hampton Falls, N. H. W. BROWN.

OIL-CAKE.

THIS extraordinarily fattening food has been going from the United States to England in great quantities, but now that beef and mutton are being sent and are becoming a regular trade, and it is found that none but the best fed meat pays for sending, it would seem altogether wrong for the farmers of this country to allow the English to keep on feeding their cattle and sheep with what ought to be used here to make the first quality of meat for exportation, and at the same time to enrich the soil by the valuable manure always following the use of oil-cake.

More especially is it surprising when it is so well understood that roots cannot be profitably grown as well in America as in England, because of the greater heat and less moisture in summer and the much severer cold in winter; on this account anyone would suppose that oil-cake would be much more valuable here than in England and also because it is very desirable on account of its counteracting the evil effects of coarse, dried-up hay.

Orange County dairy farmers purchase much food to force milk and enable them to send to New York City a certain quantity regularly all winter, and doubtless it would pay them well to use this exceedingly luscious food.

A few years ago I superintended a large dairy establishment near Baltimore. On commencing, I bought bran and fed, dry, between the times slop was given, and I raised the quantity of milk above one hundred gallons per day in three weeks, without any extra cows. The cost of bran was not felt, as we put less corn-meal in the slop, but just at this time we purchased some oil-cake meal and boiled it up in the slop with the rest of the feed and there was another rise of about thirty gallons, and from all the best customers we had expressions of pleasure and satisfaction at the beautiful quality of the milk. I used oil-cake freely in England many years ago, but it is right to add that on one occasion I fed a good deal when making butter, and although it did not hurt the milk, the butter was certainly unpleasantly affected, but nevertheless increased nearly thirty per cent. in quantity.

I have not the slightest doubt but that, if fed in moderate quantity to Orange County cows, it would pay well as regards the sale of milk, and would also enrich the manure, and thereby add to the production of grass so much as to enable those feeding it to keep twenty-five per cent. more cows. There is a gentleman now in the county who has been trying it on some cows and steers, and a man who did not know what feed was being given to them, on seeing them two weeks afterwards, exclaimed that he had not seen such an improvement in cattle in so short a time while he had been in the country. Try some by mixing small quantities first, and the results will astonish every one not accustomed to witness its effects. GEORGE GARDNER.

VENTILATION OF STABLES.

ALL considerate individuals are aware of the importance of pure, sweet air in the economy of health to the human family. Of equal importance is it to the well doing of our dumb animals, horses cows, etc.; but how many farmers seem to disregard this requirement! Many, otherwise excellent barns and stables, are faulty in this particular of ventilation. How to so arrange for perfect ventilation of our stables for cattle and horses, so that they may at the same time be protected from cold drafts of air, chills, etc., I confess myself not qualified to advise; but that with our present knowledge better ventilation may be had than is provided by a large proportion of farmers, there is unquestionably no denying. That individuals and cattle may endure and live in the stable atmosphere of farmers' barns is true; but can they live in health? In the majority of stables one cannot pass through without carrying the ammoniacal gases in his clothes for some time, even in the open air. This ought not so to be. What an atmosphere to milk cows in! but how frequently is it thoughtlessly done; although milk is exceedingly sensitive to all odors. Is there any wonder that so much poor butter and milk find their way to market, when we consider the stables and atmosphere which the cows are shut up in, to say nothing of other kinds of uncleanness which often affect the milk while being drawn.

No stable should be built without some duct through which foul air may be conveyed away; one, two, or more, according to the size of stable, should ascend from the top of the stable and pass out through the roof. Foul and heated air ascends, and the draft encouraged by the duct, will tend to clear the air of the stable; sufficient fresh air will find its way in through cracks, and over the heads of the animals from in front, to keep ventilation tolerably good, much better than where no ducts are provided. Milk producers become so habituated to this stable atmosphere that they are not aware of the amount of ammonia which they constantly carry about in their clothes, but notwithstanding this, it is none the less sufficient oftentimes to taint a good-sized room of pure air. With free ventilation this would be very much less frequent. W. H. WHITE.

MAINE Dairymen's Association's fourth annual meeting will be held with South Paris Dairying Association, South Paris, February 12th and 14th in Andrew's Hall. This meeting promises to be one of unusual interest.—J. W. LANG, Secretary.

The Poultry Yard.

POULTRY ACCOUNT.

LAST year I sent you my "Poultry Account." (See RURAL of April 7, 1877.) I think it must have been of some interest to those concerned in the care and profit of fowls. I saw the account copied in several papers; also received a large number of letters from RURAL readers, asking me to state how my fowls were housed, fed and cared for. All letters I cheerfully answered, giving full particulars of my way of managing my flock. I am quite sure, therefore, that some RURAL friends would like to hear of my success or failure during the year just closed.

The following account has been very carefully kept, and may be relied on as a truthful statement. My chickens were hatched during the month of May. Last year, as stated, my fowls were nearly pure-blood Dominiques; this year, I raised fifty Brahma and Cochin pullets, also a few Plymouth Rocks. The Dominiques commenced laying the last of September; one Brahma Dec. 22d. No eggs from the Cochins or Plymouth Rocks. At this date I am getting sixty to seventy eggs daily. From my experience, I still think the Dominique the most desirable fowl for the farm-yard.

IN ACCOUNT WITH 144 FOWLS.

Jan. 1, 1877.	*Dr.*
To 144 fowls, at 50 cts. each	$ 72 00
2 tons wheat screenings, at $27	54 00
1 ton cracked corn	26 00
½ ton wheat middlings	13 50
15 bushels oats, at 40 cts	6 00
10 bushels rye, at 70 cts	7 00
90 bushels shelled corn, at 60 cts	54 00
Meat scrap, &c	3 20
50 doz. eggs set, at 18 cts	9 00
Total cost	$244 70
Dec. 31, 1877.	*Cr*
By 1,070½ dozen eggs	$253 97
74 hens sold, April 10th	51 45
139 roosters sold, July and August	52 34
59 pullets sold, Nov. 1st, at 60 cts	35 40
27 pullets sold, Dec. 28, at 75 cts	20 25
174 stock on hand, at 60 cts	104 40
36 bbls. hen manure, at $1	36 00
Total proceeds	$582 81
Deduct cost	244 70
Profit	$338 11

The eggs were sold to grocery stores for cash; the range of prices was from 15 to 40 cts. per dozen; 74 hens were sold April 10th to 15th, prices at that time being unusually high—20 cts. a pound, dressed. By reading and following the advice of your excellent correspondent, Mr. H. HALES, I have kept my fowls in good, healthy condition. WM. C. HART.

Walden, N. Y., Jan. 14, 1878.

POULTRY HINTS.

THE last month having been one of extraordinary mildness, much of the advice given for January still holds good for February. The absence of snow, and extreme cold have given poultry a favorable chance for health, and laying birds that have had a range, have had the benefit of fine, young grass in most localities. After such weather as we have had, we must expect some more like winter, that coming on suddenly, will necessitate extra care on the part of the keepers of poultry; for sudden cold checks their laying. To remedy this, give a little more stimulating food, and see that their quarters are warm at night. With these precautions, a cold snap can be bridged over without much loss Do not forget more vegetable food than usually given, is required when the ground is covered with snow. H. H.

Miscellaneous.

THE PRINCIPLES OF SEED PLANTING.

S. RUFUS MASON.

THERE are two facts connected with this subject which must be considered: bad seeds are plentiful enough, but bad planters are entirely too numerous. The best of seeds, in the hands of a poor gardener, are nearly worthless, and it is to remove this last difficulty that I write this article. I hope to make every one who reads this a competent judge of good or bad seeds, and then it is very probable their own judgment will fall upon their own defenceless heads.

Seeds may be likened to the human race, as they are of every possible variety and disposition, and for their perfect development to maturity they require as diverse treatment as a lot of school children. There are seeds of a soft, tender shell, hard, leathery shell, and almost a stony shell; some, natives of hot and dry, hot and moist, cold and moist, of temperate and even of frigid atmospheres and soils. When we consider that we have all this variety of nativities to bring to perfection in our single soil and climate, we cannot help feeling that we have a lot of foreigners to raise from infancy in an entirely new country. This fact should induce us to plant them in such soil and at such a time, in our planting season, as will best suit their several dispositions.

On the other hand, their sizes and consequent strength must be considered. A large, robust seed can, even if planted deeply, force its way up through heavy soil, while a small one would perish in the effort. Seeds from warm countries cannot grow, if put into the ground in the cold part of the spring, nor can those from cold regions thrive, if sown late and exposed to too high a temperature while young and tender. Seeds with a thick, hard shell or skin must have time in the ground to allow the natural moisture to soften it, and allow the tender germ to make its way out. In fact, treat the different kinds as you would so many infants—the tender ones tenderly, and the robust ones according to their strength.

Now, as to the depth to plant: The old rule, "to plant only as deep as the size of the seed," is entirely wrong, and while, in a carefully managed green-house, it might be adhered to, it is perfect folly in the open air. Warmth, moisture and protection from strong light are necessary for all seeds; but the amount of the two first, as I have intimated above, varies vastly with the kind of seed. Not only must the condition of soil and temperature at the time of planting be well considered, but their probable fitness, as the season advances, must also be taken into account. If every demand be fully met at seed sowing, but the soil be likely to become, by its natural position and the natural changes of the season, too dry or too wet, these difficulties must be provided against, or failure is certain. Merely causing a seed to germinate is nothing, if its after condition is to be adverse to its healthy growth. Planting too early produces a weakly plant, and at an improper season, and if planted too late the same difficulty attends it. In the first case cold, and in the last heat, will check its growth.

This is the time of year for serious thought upon the spring business of the farm and garden, and a careful digest of the above ideas will prepare one for a later article, in which will be given practical directions for insuring success, in the hope that bad planters will not be as numerous as bad seeds in the future.

GARDEN EXPERIMENTS.

MR. CRANE, in the RURAL of Jan. 5th, notices that the Early Rose potato is running out, and as that variety is yearly improving here, so as now to be used as a winter sort, as well as a very early one, I think I can tell him how to restore its value on his farm. Our soil is a black, sandy alluvial, very rich in undecomposed vegetable matter, varying from two and one-half to four feet deep, resting on a sand-bed of unknown depth—not less than a hundred and fifty feet. It is also fully impregnated, evenly through, with potash. Nine years ago, when the Early Rose was a new thing, it was the best summer and the worst fall and winter potato known here. Constant cultivation, early digging, close covering in hills in the field till frost, and careful housing in "pits not warm enough to sprout them," about the early part of November, have almost entirely changed their character as keepers. The moment a potato sprouts it is unfit for food; but if Mr. CRANE will use potash as a fertilizer, he will, no doubt, still plant the Early Rose. I have a higher price offered for mine than the regular market rates, merely because I dig, shelter and house them so as to maintain their good qualities. Hubbard's Curled-leaf tomato is our earliest kind, and a heavy cropper. This, I believe, is as much due to our potash as to anything else. All the soil east of the Alleghany Mountains suffers from lack of potash; it *never* had as much as that west of the Mississippi, and the constant drain of two hundred years has totally depleted it. The remedy suggests itself.

Dodge Co., Wis.

WESTERN ECHOES FROM THE "MAPLE SHADOWS."

DR. A. C. WILLIAMS.

"HARD TIMES."

ALL classes in general, and the farmers of Central Illinois, in particular, are passing through the gloomiest, darkest monetary crisis that this section has ever experienced since the country was settled, 50 years ago. Time was here, when the man who went into bankruptcy was only to be heard of, not seen. He resided far away in some other vicinity, was no neighbor, and was regarded as a visionary monument of misfortune, or monster of villainy; but now he has a real existence, and is just as likely to be yourself or neighbor, as he is to be somebody else's neighbor. Our local papers chronicle, each week, bankruptcies and assignments that, like mighty earthquakes, are shaking up the country from centre to circumference, and neighborhood after neighborhood, hamlet, village and town, are being drawn into the widening vortex, while the great weeklies and dailies come from the large cities and capitals loaded with new shocks which run over the country like tidal waves, frequently wrecking the fortunes of citizens, shippers, and bankers of our rural districts, until it looks as if sooner or later, we must all be drawn into the eddy, as it were, of the great financial maelstrom. Yet, as I have before said, there is a large portion of the hard times here, the natural and legitimate results of our own extravagance and imprudence.

A DANGER TO PEACHES.

Owing to the changeable weather we are getting this winter, peaches will evidently never get through it alive. Buds will push sufficiently, I fear, during some of the warm days, to be killed by the following frosts. My trees which I laid down and covered up with earth and straw, are apparently enjoying good health; and even if they should do nothing else, I shall feel amply repaid by the questions I have been asked to answer concerning them.

A GOOD SUGGESTION.

I have been wondering of late if the managers or editors of the RURAL could devise some plan by which its subscribers could, another year, be brought into competition with each other, in growing or producing large yields of corn, roots, and large vegetables. It would matter but little if the intrinsic value of the premiums or prizes were but nominal, as the rivalry in such matters generally consists in striving for the highest success. Each competitor would be benefited by the impulse for better farming one naturally feels when he knows he is being brought into competition with his neighbors. Moreover, if one fails to secure the prize, his work is not lost; for his condition will be even better than if he had not participated, since he is likely to have better yields from the soil under such efforts as he would make. I am confident there are those among the readers of the RURAL, blessed with fortune, who would offer small prizes, themselves, just to advance the interests of agricultural pursuits. If it did not look so personal, I could name now several prominent gentlemen, well-known to RURAL readers, and whose names grace its pages frequently, who would be almost certain to offer reasonable prizes to further the project.

Douglas Co., Illinois.

FRUIT IN WESTERN N. Y.

THE following item of interest was crowded out of our report of the Western N. Y. Horticultural Society last week:

Despite partial failures of the apple and pear crops, the fruit of Western New York the past year is a leading item in its salable products. Erie county sold of apples alone upwards of $1,000,000 worth, and of pears and quinces and small fruits, half as much more. Some statistics as to the products of individual orchards for a series of years show that even apples when well cared for are a fair source of income during these hard times. Two orchards in Orleans County, indicate what may be done. Wm. Wood & Son, in the town of Carlton, set twenty-five beds of apple trees in 1860 including 1250 trees of which 600 were Baldwin, 400 Roxbury Russet, and the balance Greening and other productive varieties. From this orchard the sales since 1871 have been as follows:

Year	barrels	value
1873	300	$1 000
1873	445	3 300
1874	968	2 662
1875	1,100	3,300
1876	800	1 680
1877	1,000	3,000

It will be noticed that this orchard bears most in the odd years when apples are scarce and dear, which materially helps the goodly column of figures which tell the product of the crop.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Plant-Portraits, Our ... 85
Oak, The Pyramidal ... 85
Agriculture and Education in the United States No. 4 ... 86
Rural Topics ... 86
Notes from Maplewood Farm ... 86
Corn, Experience with ... 87
Seeds, Notes on ... 87
Yam, The Chinese ... 87
Slitting the Bark on Hide-bound Trees ... 89
Catalogues, &c., Received ... 89
Early Champion ... 89
Hogs, Apparatus for Raising Dead ... 89
Tomatoes, Experiments with ... 89
Spring Work ... 91
Clydesdale Stallion, "King of the East" ... 90
Bulbs for the Flower Garden ... 90
Siftings from the Kitchen Fire ... 90
Table-Setting, System in ... 90
Cookery for the Sick ... 90
Recipes ... 90
Rural Special Reports ... 90
Dimon Stock Farm Papers ... 90
Vermin on Cattle, Remedies for ... 90
Oil-Cake ... 91
Stables, Ventilation of ... 91
Poultry Account ... 91
Poultry Hints ... 91
Seed Planting, The Principles of ... 91
Western Echoes from the "Maple Shadows" ... 91
Fruit in Western New York ... 91

EDITORIAL PAGE:

The Temperance Movement ... 92
The Injustice Of It ... 92
Agitation! ... 92
Brevities ... 92

LITERARY:

Poetry ... 93, 95, 97
Old Tinker—A Study ... 93
How the English Language is Made ... 93
My Dream of the Rain-drop ... 94
The Photograph ... 94
Farmers as Citizens ... 94
A Russian Story ... 94
Bric-a-Brac ... 94
Recent Literature ... 95
For Women ... 95
A Family Talk ... 95
What One Woman Has Done ... 95
Toilet Box ... 95
Grandfather to the Front ... 95
Answers to Correspondents ... 96
News of the Week ... 96
Publisher's Notices ... 97
Various ... 97
Markets ... 97
Reading for the Young ... 98
A Novel Competition ... 98
A Fishy Transaction ... 98
Puzzler ... 98
Sabbath Reading ... 98
Immortality of the Soul ... 98
The Value of a Minute ... 98
Personals ... 99
Wit and Humor ... 100
Advertisements ... 96, 99, 100

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

PROF. I. P. ROBERTS' series upon Agriculture and Education is continued in this number.

A NUMBER of our subscribers have written us that they have seeds of the Shell Flower (Moluccella lævis) raised from the seeds which we sent them. We would feel obliged to such subscribers if they would state the quantities they have, and the prices at which they may be purchased.

THE TEMPERANCE MOVEMENT.

OF intoxicating liquors three hundred and fifty million gallons, or thirty-six quarts for every man, woman and child in the country, are annually legitimately made in the United States. The cost of manufacturing this enormous quantity of deleterious drink, amounts to six hundred million dollars, or fifteen dollars to each individual, from the venerable grandmother in the arm-chair to the new-born babe in the cradle. Our importations of foreign wines and other spirituous as well as malt liquors, costs about one-sixth as much as the domestic manufacture of those articles. Moreover, this vast ocean of liquor is constantly receiving no inconsiderable surreptitious contributions from innumerable illicit distilleries scattered throughout the country, and also from adulterations of various kinds, nearly all of which add greatly to the pernicious character inherent in the article. The retail price at which the stuff is distributed to the consumers, swells to gigantic proportions, the aggregate amount of money drawn in this way from the pockets of the people to tickle their palates or satisfy a morbid craving.

Taking into account the women, children, and male teetotalers of the country, it is fair to estimate that at least one-half its population never contribute a dollar towards this sum. Of the remainder, half, at least, do so very rarely, and fully recognizing the lamentable amount of evil due to the use of intoxicating liquors, would be rejoiced to see their sale either entirely prohibited or greatly limited. Nearly all the outlay on this account comes from not more than one-fourth of our entire population, and the vast bulk of it from a number considerably less than half of these. From the class thus prepared, statistics show that nearly three-fourths of the inmates of our prisons, lunatic asylums and alms-houses are composed; and in nearly all cases, their consignment to these abodes of guilt, misery and wretchedness, was but the culmination of a career in which frequent intoxication and the brutality, selfishness, improvidence and violence, which are its natural consequences, had brought misery on thousands of innocent heads. Indeed, one of the worst features of drunkenness is that while the enjoyment, beastly as it may be, is exclusively confined to the drunkard himself, the misery inseparable from it, falls most grievously on others.

There are some evils of such a nature, that the most powerful argument against them consists in a simple statistical statement of the most flagrant of their results. Of these, intemperance is probably the most forcible example, for no sober, thoughtful man can ponder on its indisputable effects, on the certain degradation, ultimate misery and poverty, as well as probable crime of its victim, and the wretchedness it inevitably entails on all connected with him, without detesting the vice and resolving to do all in his power to check its ravages. It is this consideration that is the chief motive-power with the zealous advocates of temperance and teetotalism now vigorously exerting themselves in different parts of the country, and all earnest men—and especially all women, for they, alas! are the chief sufferers by intoxication—will rejoice at the eminent success that is rewarding the labors of these apostles of temperance. Nor should they confine their sympathy with the movement merely to good wishes, but they should, each in his or her own sphere, bring their best influence to bear upon all addicted to this ruinous practice.

It should, however, be borne strongly in mind that in this connection an ounce of prevention is worth a pound of cure; for while the permanent reformation of the veteran drunkard is only occasionally seen among the few miracles that are still at rare intervals, wrought among us, the reclamation of the incipient bibber and the preservation of the rising generation, is a task much more easy and fruitful. It is, however, a mistake common alike with the most enthusiastic missionaries to the heathen, and workers among drunkards, to labor more vigorously and rejoice more earnestly over the conversion of "hard cases" than over the reclamation of those only slightly erring, or the preservation of those still happy in their innocence. Just as the zealous missionary feels amply rewarded by the partial conversion of a few ignorant savages, for an outlay of labor, risk and money that would have converted as many dozens of his ignorant neighbors at home, so does the apostle of temperance rejoice more over the doubtful reformation of a carbuncled toper than over the assured conversion of a dozen moderate drinkers whose noses even have not yet begun to blush. But, although we may differ a trifle from some of these gentlemen both in our opinions of the best methods of conducting the work and in selecting the special objects to be benefited by it, we cannot withhold our hearty commendation of their labors nor an expression of satisfaction at the ample measure of success which is rewarding their beneficient efforts.

AGITATION!

THE constant ebb and flow of the tides serve to keep in motion the waters of the sea, which would otherwise become stagnant, and cause the death of every living creature. The constant motion of the air renders it in fit condition for the lungs of man and animals—and we may add plants; for plants have lungs as truly as we have, and a stagnant air affects them as surely as it does man. Constant stirring of the ground is well known to be of great service in putting it in condition to absorb and retain fertilizing properties from the atmosphere. This is the case in some soils to such an extent, that it is said a second plowing is equal to a coating of manure, a statement which should doubtless be taken with a good many grains of allowance.

As in the physical world, so in the moral and intellectual. Is there an unjust law on our statute books? The best way to treat it is to show it up to the people. Let the community once get talking about it, and the wrong will soon become apparent. While we take no part in the recent discussions of the theological world relative to the question of the extent and duration of a future punishment—which discussion seems likely to spread throughout Christendom—we rejoice that they have arisen and trust they will be continued, only hoping they will be conducted in a Christian spirit and with brotherly love. Such discussion can do no possible harm. If it be true that the doctrines as taught by the greater portion of Christian teachers have not a foundation in fact, the sooner we know it the better for us. But if investigation shall show that the views held by the smaller number are without warrant—either of Scripture or reason—it will be well for them that they be shown their error and led into the right path. The inevitable result of this comparison of conflicting ideas, will be to induce many to enter upon a more thorough study of the subject, and to determine if they have really a belief, the result of examination, investigation, thought, and judgment; or if, while thinking they believe, they have been merely assenting to such views as others have asserted are correct.

It is certain, that few know what they really believe on these questions—or, in fact, on any other—or have a clear idea of what belief is. We may be pardoned if, in this connection, we reprint from the RURAL for July 22, 1876, brief definitions of certain words too often used synonymously:

"ASSENT is the admission of the truth of a statement or proposition without subjecting it to any proof, either of further evidence, reason, or experiment.

"BELIEF is confidence in the truth of a statement or proposition, after having examined the evidence so far as possible by the aid of Reason.

"KNOWLEDGE. When we have the testimony of our senses, used in conjunction with our reason, to attest the truth of evidence supporting a statement or proposition, we may be said to know it.

"FAITH is the conviction of the truth of a statement or proposition of which from our nature, it is impossible for us to attain knowledge or to logically prove or disprove—as faith in the absolute; in the ultimate first cause of all things; in GOD."

We rejoice, then, at the agitation of all questions in which the whole community are interested. In this way, error will be found and sophistry exposed, and the absurdity of reasoning founded on false premises, which has the show of truth to the illogical mind, will be plainly shown. None need fear the result.

"Ever the right comes uppermost,
And ever is justice done."

THE INJUSTICE OF IT.

"ORDER your shrubs and trees only of nurserymen of established reputations." One sees this advice repeated year after year—month after month, in horticultural and agricultural journals until it is not to be wondered at that it is next to an impossibility for a young man to succeed in the nursery business, no matter how competent he may be; no matter if he is twice as enterprising and fully as trustworthy as those of long "established reputations."

Everybody should know by this time that there are people who, every year, flit about the country with exaggerated pictures, jars of captivating fruits and printed descriptions which if not entirely false, so misrepresent the article with which orders are to be filled, as to disappoint or disgust the purchasers. If everybody doesn't know it, it is because he doesn't read, or is so great a dunce that he reads without being the wiser for it.

The motive of horticultural journals in seeking to protect their readers or the community against "swindling tree peddlers" need not be impugned. We desire simply to make it appear that their advice is, in many cases, working far more injury than good. By it, country people and all intending purchasers are warned against *all* traveling agents representing unknown concerns. "Are you responsible?" is now the first question which presents itself in the mind of him who desires to make out an order, let the agent seem ever so worthy of confidence—let him come as amply accredited as he may. For this reason a nurseryman who is seeking to establish a business, is placed at a great disadvantage. He is absolutely obliged to depend upon the trade of the locality or spend a small fortune in the semi-annual issue of thousands of free catalogues, and advertising in suitable mediums. Business of almost every kind is more and more from year to year being carried on by traveling agents, and if only those of well-known establishments are patronized, a very unpromising field is opened to those who have just begun the business or who intend to do so.

Swindling is by no means confined to traveling tree agents, though in times past the credulity of people who could be talked into paying exhorbitant prices for pear trees that would bear immense fruit the first year and ever after, and like absurdities, offered peculiar inducements to the cupidity of glib-tongued rogues. But such credulity is at the present time so hard to find that the horticultural press need no longer exercise itself as to their protection especially if, in order to do so, the entire tree-purchasing community must be cautioned against *all* agents who have no "established reputation."

If a person is induced to order of agents of whom he knows nothing, because the price is less or for any other reason, he has only to stipulate that the trees shall not be paid for until they have been opened and examined. There are those in almost every neighborhood who can determine a Bartlett or Seckel Pear tree—a T. Co. King or Baldwin at sight, or who, if the varieties are less common, can judge from the general appearance of the trees, the condition of the roots, the freshness of the bark; the manner of packing and labeling, whether a cheat is attempted or not.

Though, for the most part, we have dealt with firms of "established reputations," we have not always found the fruit or flower true to name. These were mistakes, for "mistakes may happen in the best regulated families." But had we purchased of traveling agents, they would have been frauds, for mistakes are not permissible to firms that have no "established reputations."

BREVITIES.

WHAT hardy ever green tree is the greenest at this season?

THE farmer's problem? How to find out what his crops need that the soil does not furnish. It looks easy enough doesn't it?

WE have all the while inquiries as to how to construct cheap ice-houses. Mr. MINER answers the question in rather a novel way on p. 86.

THE thermometer stood six degrees below zero at the Rural Grounds, February 4, being the lowest temperature this winter. Sleighing good.

WE call attention to Rev. R. H. CRANE'S Exchange offer (under Horticulture) only to say that we have reason to believe him a trustworthy gentleman.

"Ten years ago a Newburyport girl broke off a needle in her right foot, and a week ago, last Sunday, it worked out of the little finger of her left hand." To make an astounding coincidence a needle should break off in a boy's left hand and work out of the big toe of his right foot.

EVERY child over six years of age, whenever it is possible, should have a little garden of his or her own—if only three feet square. Go to the woods, children—to the fields in early spring (two months hence) and gather the plants if you cannot get them in any other way. Learn their familiar names first; then, by referring to any work on botany, the botanical names can be learnt. It is a good way to begin the study of botany, and it is a good way to lay the corner-stone of a useful and a happy life.

Literary Miscellany.

THE TWO SUITORS.

ONE sends a lily, cold and white—
White, with a heart of gold;
And one a bud, not open quite,
Whose pale lips just unfold
To whisper—hush, I know, dear rose!
Not yet, not yet, your lips unclose!

One says, "O, lady, wear to-night
This lily for my sake;
And let me read this sign aright,
A fairer flower to take!"
The other—hush, I know, dear rose!
Not yet, not yet, thy lips unclose!

Lily, I hate you—proud and grand,
Death, with a heart of gold!
Rose, dear rose, do you understand
To tell what you are told?
A word—a kiss—to-night, dear rose,
To-night to *him* your lips unclose!

[*Detroit Free Press.*

OLD TINKER—A STUDY.

M. E. S.

IT stood just across the road from the church, the little one-story red building, with its creaking, rheumatic old sign flapping in the wind. But, bless your heart! everybody in the village knew the place as well as they did their own homes, and the sign, with "SILAS TINKER, Boot and Shoe-maker" painted on it might as well have been in Jericho, for all the good it did.

"SILAS TINKER," indeed! It ought to have been "Old TINKER," for that was what everybody called him. I think he, himself, would have started if any one had addressed him as "SILAS TINKER," but Old TINKER was as familiar to him as his awl and last.

He was a dried-up, wrinkled, white-headed old curmudgeon without the heart of a mite. The milk of human kindness had soured long ago as far as he was concerned; there were always a hideous frown on his face, and a snap and a snarl on the end of his tongue. His nose was long and pointed, his mouth puckered, and his eyes about the size of beans. But they were evil little eyes! and they could dart such spiteful glints! Grown people shunned him, and children would as soon enter a red-hot furnace as Old TINKER'S shop. The very dogs took to their heels when they saw him coming and, it is said, a pet cat by some mischance wandering into his shop, went howling out and was never seen more.

Everyday was alike to Old TINKER. He did not know the meaning of a holiday. Sundays, when the villagers met at the little church to worship, they could look through the open windows and see him sitting at his bench hammering away for dear life, and looking sourer than ever. The good parson had remonstrated with him but all to no purpose. He was not to be moved from the even tenor of his way. Still, one thing was universally conceded, no one could make such boots and shoes as he. No one could put on a patch as neatly as Old TINKER; he had a faculty for mending the most dilapidated brogans until they looked as good as new. He lived on nothing a day, as the grocer could well testify. His house consisted of the one room with a bed in a recess; a table, a wooden chair and his bench, not forgetting a queer old dutch clock.

The church fund didn't trouble Old TINKER; his name was never seen at the head or tail of a subscription list. He never contributed to the foreign mission, in fact he was never known to be liberal but once, and that happened when a beggar, asking him for a penny, received his "awl" instead!

To speak truth, he was a heathen, and needed a missionary to reform him as badly as any of the South Sea Islanders. Such an one came at last, and in a strange manner.

JACK TRAVERS was considered the scape-goat of the town. He was the son of a drunken father, and a hard-working mother. I say "scape-goat"—not that there was anything so very bad about him, only a superabundance of fun; for, although he was always ready for a joke, he was just as ready to help or sympathize with any one in trouble. Girls and small boys liked him because, as he used to say, he "Wouldn't see 'em bullied." Poor JACK didn't wear very good clothes. He was always out at the elbows and knees, and his feet were oftenor bare than shod. These trifling inconveniences, however, never troubled him—not a bit of it! He was one of those happy fellows who make their own sunshine as they go along.

His way to school lay past "Old TINKER'S" shop, and one morning, his hands in his pockets, whistling along, he happened to glance in. There sat the old heathen, his face in a thousand wrinkles, his mouth puckered to one side, and the meanest little look in his bean eyes. JACK was seized suddenly with a fit of daring. Thrusting his head in at the door, he shouted, "How ugly you look, 'Old TINKER!'"

Instantly the awl came flying through the air, and the boy took to his heels with all speed.

Cursing the ill luck of it, "Old TINKER" picked up the unreasonable tool and resumed his work. But somehow he couldn't forget the words, "How ugly you look, 'Old TINKER!'" They troubled him. Everything seemed repeating them. Every peg he drove, the hammer kept saying, "How ugly you look, 'Old TINKER!'" The clock ticked out regularly, "How ugly you look, 'Old TINKER!'" when the bell rang for prayer-meeting, it rang out, "How ugly you look, 'Old TINKER!'" He couldn't even walk across the room without his shoes squeaking the same refrain.

It was aggravating—it was downright mean. He went to bed an hour earlier that night, first stuffing his ears full of cotton, so that he might not hear the clock. As soon as he fell asleep, great goblins peeped from behind his bed-posts, perched on the foot-board, and at last filled the room. They shook their heads, and pointing their long, skinny fingers at him, laughed, cackled, and screamed, "How ugly you look, 'Old TINKER! Oh, how ugly you look!"

The next day it was no better, nor the next. He didn't dare sleep o' nights, for fear of the goblins, who made it even worse for him than in the day-time. He began to neglect his work and lose his customers. The Parson found that the patch on one of his Sunday boots was so poorly put on, that it dropped off the first time he wore it; people complained that his shoes weren't half pegged, and that the leather cracked. "Old TINKER" lost ground so fast, that presently he was compelled to sit astride his bench, idle, and listen to that dreadful clock.

One day, when he could stand it no longer, he tore off the honest old Dutch face, and hammered the machinery to pieces. "There!" he exclaimed, "I shall have a little peace now." But no; he was mistaken. Very soon he heard a chirping sound near the fire-place. It was only a little black cricket, but it said as plainly as possible, "How ugly you look, 'Old TINKER!'" He rushed for it with the poker, but it skipped down a crack out of sight, and chirped louder than ever. At last, completely disheartened, and almost ready to give up, he fell asleep on his bench and dreamed a curious dream. When he awoke, he went to work with a will, and a customer coming in that afternoon, was astonished by his asking, "How many children Mrs. TRAVERS had?"

One night, several weeks after this occurrence, JACK was returning from school, with his face somewhat downcast. He was thinking how much he and his brothers and sisters needed new shoes, and how unlikely they were to get any. His father was drinking very hard and the family were poorer than ever. As he came opposite the shop, Old TINKER was standing in the door. JACK thought of the awl and was going to shy across the street, when the old man called to him.

"What do you want of me?" asked JACK, drawing back.

"I've got something for you," he answered.

"A flogging," quoth JACK to himself, "I'll bet my life;" and adding aloud, "I'm just as much obliged to you, and I hope you won't take it hard if I refuse."

"Come, now, don't be afraid. I don't wish you any harm. See," and he held a large package toward the boy. "You can have this on one condition."

"What's that?" asked JACK, his curiosity somewhat aroused.

"That you'll never say again, as long as you live, 'How ugly you look, Old TINKER.'"

"Well," replied JACK, giving a prolonged whistle, "I can promise that easily enough, if it's all you want; but I can just tell you, if I'm to have that 'ere bundle, you'll have to lay it down on the walk, and go into the shop and shut the door tight 'fore I'll come after it; for I can't get over the feeling you mean gammon on a fellar."

To his great surprise, Old TINKER did as he was bidden, and, snatching the parcel, JACK made his way home. Upon opening the package, he found that which caused him to stare in open-eyed wonder, and the rest of the family too, for that matter. It did seem incredible, but it proved a fact. Old TINKER had opened his heart, and made a present of a pair of shoes to every one of the children. Mrs. TRAVERS was not forgotten, either.

Now, as I have said before, JACK possessed a soft heart. He felt very grateful for this unlooked-for gift, and wanted to thank Old TINKER very much. But what to say, or how to accomplish it, was more than he could conjecture. He remained awake that night, thinking about the matter, forming all manner of plans, and all to no purpose. One thing was certain: he didn't wish to get very near the old man, for sundry good reasons. Eventually a happy thought seemed to strike him, and he was soon sleeping lustily.

The next morning, when he came near the shop, the door was standing half open. He felt a queer flutter about his heart, but, putting a bold face on, he hurriedly thrust his face in and shouted, at the top of his voice, "GOD bless you, Old TINKER!"

The old man started, dropping his awl upon the floor, and stared with amazement after the retreating figure. "I declare," he muttered, "that youngster gave me a queer start. What could he mean?" Soon he heard a chirping sound, and looking down, there sat the black cricket close beside him, saying "God bless you Old TINKER." He didn't start for the poker this time, but sat perfectly still gazing at the insect in a bewildered way. By and by he picked up his hammer and drove a peg. "God bless you Old TINKER" the strokes said. He got up and walked across the room—"God bless you Old TINKER," his shoes squeaked. He listened when the bell rang for prayer meeting, "God bless you Old TINKER" it rang. And, if you'll believe it, when he fell asleep that night, instead of the Goblins came troops of white robed angels who hovered around his bed and kept whispering "God bless you Old TINKER!"

Now, this was a very different tune from the other; and produced much better harmony as you well know who have had any experience in the matter. It didn't seem to distract him at all, for he worked better than ever and there wasn't half as many wrinkles in his face as formerly. In fact, he seemed to like it, for every once in a while he would catch himself repeating out loud "God bless you Old TINKER." After a while people began to notice a change for the better. A customer spread the wonderful news that "Old TINKER had smiled on him, and said good-morning." Then another thing they noticed the shop was closed on Sundays. The parson when he heard of it, determined to try his luck once again. So one day he happened in for the express purpose of engaging the old man in a little religious argument. Upon asking him "If he didn't consider his soul in a precarious condition," much to his surprise and delight he answered, "he did." The parson then proposed prayer. When he had finished, Old TINKER, with tears in his eyes, told his experience, at which the parson declared, very solemnly, it was the hand of the Lord, and Old TINKER replied very meekly, "he thought it was." He got him to promise that he would attend church next Sunday, and went away well satisfied.

Now I do not wish to condemn the good parson as an egotist, but this was such a remarkable case that he felt it his duty to go from house to house and inform the inhabitants "that he had converted Old TINKER, and that he was going to church."

The next Sabbath the meeting house was crowded to overflowing. The parson delivered a long-winded sermon, but he might as well have preached to the wind. His congregation were stretching their necks to catch a glimpse of a white-headed, wrinkled, old man on the front seat, who, after the sermon was over, arose and in a trembling voice, with the tears streaming down his cheeks, told just how it all happened.

JACK couldn't for the life of him, think why it was after this, that all the old women gave him caraway cookies and sprigs of fennel between the meeting hours; or why the old men patted him on the head and called him "a fine lad" so often. He wasn't used to it. Still, it didn't seem to disturb him much, for he kept right on shying snow-balls and fighting big boys until Old TINKER died.

HOW THE ENGLISH LANGUAGE IS MADE.

BY X. Y. Z.

STARTING from the recognized fact that the English is not a simple but a composite language, made up of several elements, it is a study of great interest to trace the words of different origin to their respective sources, and to note how and for what purposes they have come to form parts of the general amalgamation. As everybody knows, the basis of the language is Anglo-Saxon; which, moreover, is not only one of its separate elements, like the Latin or French, from which we derive considerable contributions, but rather the foundation or fundamental portion of the structure. Or, it might be called not improperly the backbone of the national speech, into which all the other parts are jointed, and on which they are dependent for their symmetry and adaptation to the ends they are called to serve. A perfect composition might be formed from Anglo-Saxon words alone, but no grammatical sentence could be constructed out of words that have been adopted from other languages. All the words we have derived from French or Latin are but additional materials of expression; they have not altered the original character of the native tongue, but have had to conform themselves to its particular laws and constitution. We must not, however, conclude that it is mere pedantry to adopt a foreign word, since, perhaps few if any, words have been incorporated into our language that were not necessary, or at least serviceable accessories. Still, it would appear that our entire acquisitions from foreign sources are merely an increase of words.

Some writers affect to admire and recommend what has been called a pure Saxon style, and somehow unduly deprecate the Latin and other foreign portions of the language, as though nothing significant were gained by them. Mr. Trench tells us that he remembers Lord Brougham urging upon the students at Glasgow, as a help to writing good English, that they should seek, as far as possible, to rid their diction of long-tailed words in 'osity' and 'ation.' Not a bad advice, perhaps, to the class of persons then addressed, as it is a known fault of young unpracticed writers to distend their composition, and to aim at an over-stately turn of sentences. No doubt, one part of the language ought not to be cultivated at the expense of the other; certainly not the Latin at the expense of the Saxon; for doubtless, every word derived from a foreign source which has become permanently incorporated with the language, was originally adopted, and has been retained in use, either because it answered some new need of expression, or afforded a convenient variety of phraseology obviating inelegant repetitions.

The earliest augmentation of the vocabulary by foreign words was evidently a consequence of the Norman Conquest. There was no immediate interpenetration of the Anglo-Saxon with any large amount of French words; for, in fact, the two streams of language flowed a long while apart, even as the two nations remained aloof, and were not amalgamated till after many years. Time, however, softens the mutual antipathy both of men and languages. The Norman, shut out from France, began more and more to feel that England was his home and sphere. The Saxon, recovering little by little from the extreme depression which had ensued on his defeat, became every day a more important element of the new English nation which was gradually forming from the coalition of the two races. His language partook of his elevation: it was no longer the badge of inferiority. French was no longer the only language in which a gentleman could speak, or in which a poet could sing. At the same time, the Saxon, now passing into the English language, required a vast addition to its vocabulary, if it were to serve all the needs of those who were willing to employ it now. How much was there of high culture, how many of the arts of life, of its refined pleasures, which had been strange to Saxon men, and had therefore found no utterance in Saxon words. All this it was thought to supply from the French.

The next great importation of foreign words was made from another quarter: it occurred shortly after the revival of learning in Italy; and from the time of the Reformation, and afterwards, it was largely followed up. There was a need of new words to express theological and metaphysical ideas—things pretty well unknown both to the Normans and Anglo-Saxons—and for this purpose a supply of Latin words was found to be essential.

The period during which this naturalization of Latin words in the English language was going forward, may be said to have continued for upwards of a century. It first received a check from the coming up of French tastes, fashions, and habits of thought, with the restoration of Charles II. The writers already formed before that period still continued to write their stately sentences, Latin in structure and Latin in diction, but not so those of a younger generation.

We may say of this influx of Latin, that it left the language immensely increased in copiousness, with greatly enlarged capabilities, but perhaps somewhat burdened, and not always able to move gracefully under the weight of its new acquisitions; for, as Dryden has somewhere truly said, it is easy enough to acquire foreign words, but to know what to do with them after you have acquired them, is the difficulty. It might have received, indeed, most serious injury if all the words which the great writers of this Latin period of our language employed, and so proposed as candidates for admission into it, had received the stamp of popular allowance.

As it happened, it was not so. It was here, as it had been before with the French importations; the reactive powers of the language, enabling it to throw off that which was foreign to it, did not fail to display themselves now, as they had done then. The number of unsuccessful candidates for admission into, and permanent naturalization in, the language during this period, is enormous; and one must say that in almost all instances where the alien act has been enforced, the sentence of exclusion was a just one; it was such as the circumstances of the case abundantly bore out.

Either the words were not idiomatic, or were not intelligible, or were not needed, or looked ill, or sounded ill, or some other valid reason existed against them. A lover of his native tongue will tremble to think what that tongue would have become, if all the vocables from the Latin and the Greek, which were then introduced or indorsed by illustrious names, had been admitted on the strength of their recommendation; if torve and tetric (Fuller), cecity (Hooker), tepid and sufflaminate (Barrow), stultiloquy, immorigerous, clancular, ferity, hyperaspist (all in Jeremy Taylor); if dyscolous (Fox), moliminously (Cudworth), immarcescible (Bishop Hall), arride (ridiculed by Ben Jonson); with the hundreds of others like these, and even more monstrous than some of these, not to speak of such Italian as leggiadrous (Beaumont, *Psyche*), had not been rejected. Among these words, we notice one, cecity, which Carlyle attempted to revive, though we cannot think it will ever be received into general use—blindness, which it signifies, is so much simpler, and every way equivalent, as to be incomparably better.

Many words, however, formerly deemed objectionable, have been adopted in a shape somewhat different from the one in which they were originally introduced. "They were made to drop their foreign termination—or otherwise their foreign appearance—to conform themselves to their ways, and only so were finally incorporated into the great family of English words. Thus, pantomimi (Lord Bacon) soon became pantomimes; atomi (Lord Brooke), atoms; epocha (Dryden) became epoch; caricatura (Sir T. Browne), caricature; effigies and statua (both in Shakspeare), effigy and statue; not otherwise pyramis and pyramides, which also are forms employed by him, became pyramid and pyramids; colone (Burton), clown; apostata (Massinger) became apostate; despota (Fox), despot; synonyma (Milton, prose), synonyms; galaxias (Fox), galaxy; and heros (H. More), hero. Nor can that slight but widely extended change of innocency, indolency, temperancy, and the large family of words with similar termination, into innocence, indolence, temperance, and the like, be regarded otherwise than as part of the same process.

The same has gone on with words from other languages, as from the Italian and the Spanish: thus bandito (Shakspeare) becomes bandit; princessa (Hacket), princess; scaramucha (Dryden), scaramouch; capriche becomes first caprich (Butler), then caprice; ambuscado, barricado, renegado, hurricano (all in Shakspeare), brocado (Hakluyt), drop their foreign terminations, and severally become ambuscade, barricade, renegade, hurricane, brocade. Other slight modifications of spelling, not in the termination but in the body of a word, will indicate, in like manner, its more entire incorporation into the English language. Thus, restoration was at first spelt restauration; and so long as vicinage was spelt voisinage, (as by Bishop Sanderson,) or mirror, mir-

ior, (as by Fuller), they could scarcely be said to be those purely English words which now they are.

These adaptations from the French and Latin are the two great enlargements which our vocabulary has received. All others are minor and subordinate. Thus the introduction of French tastes by Charles II. and his courtiers, returned from exile, rather modified the structure of our sentences than much increased our vocables. To this period we are nevertheless indebted for a certain number of new words. In Dryden's play of *Marriage a la Mode*, a lady full of affectat'on is introduced, who is always employing French idioms in preference to English—the design, of course, being to ridicule such affectation. On this Mr. Trench remarks:—"It is not a little curious that of these which are thus put into her mouth to render her ridiculous, not a few are now excellent English, and have nothing far-sought or affected about them; so often does it prove, that what was laughed at in the beginning, is by all admitted and allowed at the last. For example, to speak of a person being in the 'good graces' of another has nothing in it ridiculous now; nor yet have the words repartee, embarrass, chagrin, grimace; which all must plainly have been both novel and affected at the time when Dryden wrote."

It cannot be said that the naturalization of foreign words ever ceases in a language which is still properly living. There are periods when this goes forward much more largely than at others; but there is never a time when one by one these foreigners are not stepping into it. We very rarely, to be sure, observe the fact while it is going on.

It is indeed impossible to conceive anything more gradual than the process by which a foreign word becomes an English one. "It appears to me," says Mr. Trench, "that we may best understand this by fixing our attention upon some single word which at this very moment is in the course of becoming English. I know no better example than the French word *prestige* will afford. Prestige manifestly supplies a want in our tongue; it expresses something which no single word in English could express; which could only be expressed by a long circumlocution; being that moral influence which past successes, as the pledge and promise of future ones, breed. The word has thus naturally come to be of very frequent use by good English writers; for they do not feel that, in employing it, they are deserting as good or a better word of their own. At first all used it avowedly as French, writing it in italics to indicate this."

Besides this adoption of foreign words, as occasion seems to need them, there are yet other ways in which new words are derived. Our language admits of two or more words being formed into a new combination, thus affording convenient terms of a compound meaning. Another way in which languages increase their stock of vocables is the forming of new words according to the analogy of formations, which time, acting on the genius of the language, has previously sanctioned. Thus, upon certain substantives, such as nation, congregation, convention, have been formed their adjectives, national, congregational, conventional. Singular as it may seem to some, starvation is a word but very lately introduced to us. We have it on the authority of a writer in Notes and Queries, that it had not appeared in any English dictionary published up to 1836. It sprang up in America, and was first used by WEBSTER, it has since maintained itself as a very expressive and serviceable word. Though formed on the model of preceding formations of a kindred character—its framer did not apparently observe that he was putting a Latin termination to a Saxon word—an oversight, however, of very little consequence, as the compound elements admirably coalesce, and in no word perhaps were ever united better.

One of the most curious instances of the development of words is that by which a number of nouns, verbs, and adjectives, have grown out of proper names. To begin with mythical antiquity—the Chimæra has given us chimerical; Hermes, hermetic; Tantalus, to tantalise; Hercules, herculean. Gordius, a Phrygian king, who tied that famous Gordian-knot which Alexander cut, will supply a natural transition from mythical to historical. Here Mausolus, a king of Caria, has left us mausoleum; Academus, academy; Epicurus, epicure; Philip of Macedon, a philippic, being such a discourse as Demosthenes once hurled against him, the enemy of Greece; and Cicero, cicerone; Mithridates, who had made himself poison-proof, gave us the now forgotten word mithridate for antidote; as from Hippocrates we have hippocrass, a word often occurring in our early poets, being a wine supposed to be mingled according to his receipt. Lazarus, perhaps, an actual person, has given us lazar and lazaretto; and Simon Magus, simony. To come to more modern times, a Roman cobbler, named Pasquin, has given us pasquinade; Colonel Negus, in Queen Anne's time, first mixed the beverage which goes by his name; and Lord Spencer first brought into fashion a spencer. Dahl, a Swede, introduced the cultivation of the dahlia.

MY DREAM OF THE RAINDROP.

BY MARION WAYNE.

A FEW evenings since, I was in my laboratory engaged in making preparations for a lecture before my class in chemistry. Before me on the table were the retorts, the furnaces, the India-rubber tubing, the wash bottles and all the paraphernalia of the chemist's workshop. At my right were two gasometers whose invisible contents were soon to unite in illustrating to the tyro the truths of Chemistry. All was ready. I looked at my watch; it wanted still half an hour to the time fixed for the class to assemble. Taking from my pocket the evening paper, which I had not yet had time to look at, I seated myself in the arm chair just back of the gasometers and read the story of the "Onandaga Giant." I settled myself back to the strangeness of that story, when on looking up I beheld in place of the zinc gasometers two beings enormous in size, united together after the manner of the Siamese Twins. To describe these beings, forms, or whatever they were, is wellnigh impossible. They were ten feet or more in hight, of an ashy color, with countenances noble and expressive. I was not frightened, but pleased with my strange companions. Stooping down they lifted me up, and carried me away. I was borne over the hills, through the woods, across the rivers, along the mountain ridges, and into the caverns of the earth. The journey was long and I began to be weary of it. At last I was placed in a garden whose exquisite beauty recalled to me my youthful ideal of Eden. A pure river of crystal water flowed at my feet, soul entrancing melodies filled the air, and perfume of delicacy greeted me from a thousand flowers whose luxuriance filled the landscape sloping at my feet.

As I was reclining on the green carpet of the earth, a dark cloud which I had not before observed came directly over my head, from which a single drop fluttered down and lit in the hollow of an opening rose bud at my right. This was nothing unusual but I was in fairy land. The bud commenced to open and soon became full blown; from the midst of it sprang a tiny form which I immediately knew to be one of the sprites of this goodly place. Without a word of introduction my little friend thus discoursed.

"I am the fairy of the rain drop; our queen has bade me come and reveal to you the mystery of my origin, the names of my relatives, the influence I exert, and my future destiny. Listen. There was a time when the earth was not, when the sun, moon and stars existed only in the thought of Him who rules over all. But it did not seem good in the eyes of Him that thick darkness should rule in the realms of immensity. The creation was begun. First two fairies were made, invisible and intangible whose names were Oxygenomai and Hydrogenomai.

With playful glee they ran up and down the paths of space, watching the beauties and wonders that were unfolded by the great Creator. In their wanderings they lighted upon a small orb third in distance from the sun, without form. Come, said Oxygenomai, the elder, let us beseech our Father that he give us permission to make this unsightly orb resplendent with beauty, meet for his glory and honor. On light wings they flew to the Father's presence. With the permission granted them they hastened to their self-imposed task. It seemed almost hopeless to them with all their fairy power, to bring from this confused mass of metals and solids the ideal of beauty they had formed. They began, and under their fairy fingers, these rough and uncouth masses were transformed into rock and soil, scattered up and down the surface of the earth. I will now, said Oxygenomai, unite myself with most of what remains of this mass of metals and other solids. As she did so, they became under his magic touch, a molten mass boiling and seething in the center of the earth. All was not yet done. There flew to them from distant realms a younger sister sprite, whose name was Nitrogenomai.

Come, said the eldest of the three, let us unite our powers and envelop this goodly orb with a covering, that shall protect it and regulate the eat from within and from without, in which also may live man, the noblest being our Father is yet to create. Under their influence the world was surrounded with a blue covering, forty-five miles in depth. And still there was something lacking. From pole to pole nothing was seen but an arid waste, and a burning desert. The object of the fairies was not yet accomplished. There was an almost insurmountable barrier. Oxygenomai and Hydrogenomai pondered long and anxiously over this, for their world was not fit for the glory of the Father. But with all their fairy and magic power they grew hopeless of accomplishing what they anticipated. Weary with thought and sinking in despair, they threw their tiny arms around each other's neck, and lo! amid the thunder of the heavens, they became a drop, limpid and pure, clear as crystal, yet variegated with all the hues of the rainbow.

Surprised at this sudden change, they sought the world beneath them, and lighting upon its arid sands, a change was wrought more wonderful and beautiful than all that had yet been done. The earth was suddenly covered with beauty, forests sprang into existence, flowers bloomed upon a thousand hills, rivers and brooks meandered through the valleys.

The deed was done; the earth was completed; and the morning stars sang together for joy. My little fairy sank back into the rose bud, and as the petals closed over the tiny form, the entrance of my class awoke me from my dream of the RAIN DROP.

THE PHONOGRAPH.

WILL 'wonders ever cease?' It has taken man with all his ingenuity, research and progress, some thousands of years to become acquainted with the properties of atmospheric air. He has learned to weigh the earth, the moon and the other planets, to calculate their sizes and distances, to foretell eclipses, to calculate with some degree of precision the return of comets; has learned to encircle the globe with a message in a few minutes, has learned to utilize the sun as an artist, and that too, even without his presence; and all this has been done before he became thoroughly acquainted with the air he breaths.

True, he had learned that air is no inconsiderable part of the life of all things that live, the medium through which sound and heat travel, [That air is not necessary for the transmission of heat is proved by its absence from interstellar space through which, nevertheless, heat travels. ED.] and although it receives into its embrace all the filth and putrescence of the earth, still it is the great purifier of the medium in which man and all animal and vegetable kingdoms live. He has learned that it is the most elastic substance known, and he has even conjectured that with sufficient force it might be compressed to a solid. He has learned that the spores of microscopic plants and the germs of disease float in it invisible to the unaided eye. But it has been left to this latter day for man to utilize this invisible compound gas, not merely as a stenographer, recording words spoken; but as a reproducer of the very words themselves, with all the modulations of the original utterer.

What next: Will you next invent or discover a process by which we shall be able to *see* the quivering, trembling or gyratory and oscillating motion of the air as it passes through the intricate moves of contending sounds, as it wends its way through intervening hills and forests, or is echoed back from cliffs and promontories, and still reaches the tympanum of the ear that hears it? When you have accomplished this, we may well exclaim with Simeon of old "now lettest thou thy servant depart in peace."

A man by the name of Symmes, a few years since, propounded a theory that the earth was hollow, open at the poles, that vessels might sail in and people enjoy life there, and since then a Californian, without any complement or even reference to Symmes, advances the same idea, and furthermore has published a book entitled, "The Hollow World," in which he proves apparently to his own satisfaction, that the inside is much preferable to the outside as a place to live in, produces some startling evidence (if the facts he states are real) to prove that the undercrust of the earth, the comparatively thin layer between the outside and inside of this planet, is frozen solid instead of being liquid fire, as his predecessors have taught.

Who knows that these theories are untrue? and that we had better not brave the rigors of the northern pole for the sake of living in a more delightful climate inside? The days are past when a Galileo can be persecuted and imprisoned for saying "the earth moves." Go on, ye philosophers, and reveal further the hidden facts that shall result, not perhaps in the increased happiness, but in the increased wisdom of mankind. Go on in your own way, regardless of the wishes of an obscure individual like myself. But, humble as I am, I dare to make the suggestion, whereas through the rapacity of man, the timber of the earth is fast becoming exhausted, that for all we know coal is limited, while from the removal of the timber cold is increasing as well as rain diminishing, what shall we eventually do for lights and fuel? Therefore, we pray you to teach us to burn water to fire up our engines, to give us light and to keep us warm. Is not the thing practicable? Hydrogen, which constitutes one-third by measure of water, is said to be inflammable, and when separated from the oxygen and burned, will it not again unite with the oxygen and form water? If so, one need not fear the exhaustion of water by this process. S. B. P.

FARMERS AS CITIZENS.

THERE is no reason in the nature of his calling why the farmer should not be the peer of the foremost of his countrymen in all the essential elements of citizenship. PAUL'S charge to TIMOTHY implied that only through his own fault could his youth become despicable. If farmers have been despised, they have themselves to blame. If they have not gained admission to the highest social circles, it is because they have not prepared themselves for such circles. If the legislation of the country has been adverse to their interests, the cause must be found in their own neglect of political duties.

If they are compelled to pay as much tax on one hundred dollars' worth of their real estate as other men pay on five hundred dollars' worth of personal property, it is because they have delegated their law-making rights to men who have not regarded their interests.

The farmer is more than a farmer. He is a citizen, possessed of all the immunities, and bound by all the obligations of citizenship. Society is an aggregate, of which every farmer, as much as any other man, is an integral part. And it is just as exalted or debased as are any of its components. Our Government is of the people; it takes its character from the people, and is better or worse for the active influence or the wilful neglect of every farmer. "Every one to his trade," is the cry of the politician. "The farmer to his plow, the merchant to his store," and he should say, "I to the public crib." He would keep away from participation in public affairs a great class whose intelligence would detect and whose integrity would expose and thwart his selfish schemes. Farmers, mechanics, manufacturers, laborers, all who are honestly striving with head or hand to create the means of sustenance, shelter, and culture for themselves and others—all these are interested in the just and economical administration of Government.

Giving to the farmer the same general education to begin with, there is nothing in the nature of his calling, rightly pursued, which disqualifies him from becoming a legislator. Accustomed to acquire property by slow but legitimate methods, he places a true estimate upon it, and would enact judicious laws for its protection. His familiarity with, and easy access to farm and other laborers make him a fit man to represent the labor of the country, which is the source of its prosperity.

Does any one question the ability or reliability of farmers as legislators for farmers, let him compare the votes of the farmers in the Legislature of his State, the next session, with those of an equal number of lawyers or men of any other calling. If, as the New York State Farmers' Alliance affirm, real estate owners pay year by year, fivefold more taxes than owners of personal property, men should be sent to the Legislature who will investigate the subject and provide a remedy. If railroad corporations make discriminations, farmers and others who are interested in the matter of transportation, should send men to the Legislature who will undertake to right the wrongs in the carrying business of the country, not fearing or neglecting to battle with a wrong because it is great or difficult of remedy. Farmers need not neglect their business while they become better and more influential citizens. C. H. D.

Warsaw, N. Y.

A RUSSIAN STORY.

THE Russian princes in Paris are all men of large incomes, but generally spendthrifts. One of them borrowed the sum of ten thousand francs from a money-lender, giving his note for the same. On the day it fell due the holder presented it for payment, and was told by the prince that he had no money to waste in paying debts. At that moment a gentleman entered, and the prince handed him twenty-thousand francs to meet the losses of the night before at the club. The lender tore up his note-of-hand, and said, when going out:

"Now, prince, there is nothing between us but a debt of honor."

The prince bowed, and handed over the money without a word. The second begins in the same way, but when the lender presented his note the prince flew in a passion, called him hard names, and, drawing a revolver, made him eat the note-of-hand.

A few days later the lender received his money, with a thousand-franc bill thrown in as interest. Shortly afterwards the lender received a letter from the prince, informing him that he was again in want of money, and telling him to present himself with ten thousand francs and stamped paper upon which to write his note-of-hand. The lender came with the money.

"Where is your paper for the note?" he said, taking the money.

"Here it is, prince," said the lender, drawing a large cake of gingerbread from his coat pocket.

The prince laughed at the joke, and shortly afterwards paid the debt, with interest.

BRIC-A-BRAC.

BY C. H. E. R.

THE presents made to churches in the olden time by pious folk or repentant sinners, and the charges which appear in their books for popular festivals and the performance of Miracle Plays, throw much light on the simple realism of our forefathers. A notable example occurs in the life of "Maister Conynge," the hero of Chatterton's Rowley Poems. Sir John Harington, writing about the year 1596, quotes a memorandum which was found—among other curiosities—in the cabinet of the late John Browning, Esq., of Barton, near Bristol. This curious memorandum, which was first printed in Lord Orford's "Anecdotes of Painting," in 1762, sets forth that "Maister Cahynge hath delivered this 4th day of July, in the year of our Lord 1470, to Maister Nicholas Petter, Vicar of Saint Mary Redcliffe, Moses Counterin, Philip Bartholmew, procurators of Saint Mary Redcliffe aforesaid, a new sepulchre well gilt with golde, and a civer (cover) thereto." Then follows this description of the wonderful gift:

"Item:—An image of God Almighty rising out of the same sepulchre, with all the ordinance that 'longeth thereto; (that is to say) a latho made of timber, and the iron-work thereto. Item—Thereto 'longeth Heaven, made of timber and stain'd clothes. Item—Hell, made of timber and iron-work thereto, with divils to the number of thirteen. Item—Four knights armed, keeping the sepulchre, with their weapons in their hands; that is to say, two axes and two speers, with two panes—a large shield which covered the whole body. Item—Four payr of angels' wings for four angels, made of timber and well painted. Item—The Fadre, the crowne, and visage; the ball with a crosse upon it well gilt with fine gould. Item—The Holy Ghoslt coming out of heaven into the sepulchre. Item—'Longeth to the four angels, four chevelers (supports)."

THERE are many hard things to do in this world, but I know of none that will disgustle a fellow more than to use all one's eloquence in trying to persuade a person to the truth of a thing that you feel in your own heart is not true. Advertising Canvassers and book agents understand this.

To blandly acquiesce in the decision of one whom you wish not to offend, on some point, when you know that the speaker is a ninny-hammer, and altogether wrong.

To have to take a back-seat and listen to the spokesmen of the party making a confounded mess of it, and knowing all the while how much better you could do it yourself.

To use the best argument in your power for your side when you are morally certain that your opponent is an ill-used man.

To be a lawyer and have to brow-beat a fair witness, and imply she is not speaking the truth, when, to meet the same lady under other circumstances, you would consider it an honor, and the greatest pleasure in life to show her every possible courtesy and politeness.

To want a little liquid refreshment for the interior department, and know that your credit is exhausted and the slate broken.

It is supposed by some that the practice of sending likenesses of criminals at large from one town to another, dates only from the introduction of photography. It is much older. In Massinger's play, "The Duke of Milan," published in 1623, Graccho, after telling Francisco that he is a "condemned man," adds:

"All passages
Are intercepted, and choice troops of horse
Scour o'er the neighboring plains; *your picture's sent*
To every state confederate with Milan."

Reviews.

RECENT LITERATURE.

N. W. Ayre & Son's Manual, now in its third edition, is an excellent hand-book for the advertiser, and it condenses clearly about all that it is essential to know on the subject of advertising, and we can recommend it to the business public.

The third number of The American Bicycling Journal reaches us brimful of enthusiasm on the subject of bicycles. That the idea of cavorting over the land at a rate somewhat less than steam, is captivating to the fancy, may be judged by the fact that The Journal has bloomed into a weekly ($2.50 per year) and has a satisfactory patronage. Those interested in the sport should read the paper. It is published at Boston.

That Wife of Mine. Boston: Lee & Shepard.

The author of "That Husband of Mine" concludes to look at the reverse of the medal, and as was to be expected, as he speaks of lovely woman, "It" has made a cleverer book than was the first venture, and this is using "tall" language. That wife is a charming little Americanized German who, when excited, takes droll liberties with the vernacular, but is altogether so charming, that the reader envies the husband his exclusive right of possession. We shall not anticipate the reader's curiosity by skeletonizing the plot. Read the book, and then "declare to the tocsin" that it is capital. A paper edition is sold for fifty cents, while the more durable boards may be had for $1.50.

Economic Monographs. No. I.: Why we Trade, and How we Trade. By David A. Wells. No. II.: The Tariff Question and its Relation to the present Commercial Crisis. By Horace White. New York: G. P. Putnam's Sons.

In these small pamphlets are condensed the gist of the causes of our present troubles, and the palpable way out of them. We are glad to see that the pertinent views of such men as Mr. White and Mr. Wells are put into this popular form, and we earnestly recommend every reader of this journal to expend twenty-five cents and secure the treatises. Their intelligent perusal will do as much to set their views aright as to the causes of our commercial depression as the illimitable demagogue has done to befog them.

Especially to be commended is the plain, clear, succinct way in which the argument is put. The simplicity of style alone is irrefragible proof of of the grasp of the subjects by the writers. The simple need not fear to encounter words of learned length and thundering sound. We are too modest to make any suggestions to some of our wonderfully informed contemporaries further West, but it would seem as if the careful study of these unpretentious little books might have a very modifying effect on their ideas of political economy. Their editorials would thereafter read less like the exploitation of the wonderful schemes of "Col. Sellers," particulary where they dwell on the advantages of unlimited silver. Again we commend the books.

Complete Arithmetic—Theoretical and Practical. By W. C. Peck, Ph. D., LL. D. New York: A. S. Barnes & Co.

This is a clear presentation of the science of numbers, admirably arranged and carefully written. The difficulties of the subject are explained in an admirably clear manner. The publishers have supplemented the work of the author by good typography and substantial binding, that are hardly secondary merits in text-books. Teachers will find this book well worth their consideration.

Love and Duty. By Mrs. Hubback. Philaldelphia: T. B. Peterson & Brothers.

This book will appeal to a large circle of readers. The story is exciting and the interest is sustained to the end. "Love and Duty" makes the twelfth volume of the "Dollar Series."

The Art of House Painting. By Jno. Stevens. New York: John Wiley & Sons.

This clever little treatise tells the unprofessional painter about all it is necessary to know if he desires to do anything with the pot and brush toward embellishing the premises.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

LOVE SONGS.

RONDEL.

Kiss me, sweetheart, the spring is here;
And Love is lord of you and me!
The blue bells beckon each passing bee,
The wild wood laughs to the flowered year;
There is no bird in brake or brere,
But to his little mate sings he:
"Kiss me, sweetheart, the spring is here
And love is lord of you and me."

The blue sky laughs out loud and clear.
The missel-thrush upon the tree
Pipes for sheer gladness, loud and free;
And I go singing to my dear:
"Kiss me, sweetheart, the spring is here,
And Love is lord of you and me."

RONDEAU.

Life lapses by for you and me,
Our sweet days pass us by and flee;
And evermore death draws us nigh,
The blue fades fast out of our sky;
The ripple ceases from our sea,
What would we not give, you and I,
The early sweet of life to buy?
Alas! sweetheart, that cannot we;
Life lapses by.

But though our young years buried lie,
Shall Love with spring and summer die?
What if the roses faded be!
We in each other's eyes will see
New springs, nor question how or why
Life lapses by.

[*John Payne, in London Athenæum.*

A FAMILY TALK.

MRS. POTIPHAR.

From time to time there ascends a lamentation because American women are averse to having large families. Direful prophecies as to the extinction of the race fill the air, and women are called upon by the love they bear their country to amend their ways.

The gentlemen who indulge in these jeremiades make a great ado about *quantity* and lose sight entirely of quality. Pat's dirty, ill-favored, ignorant brood, most of whom will find their way at one time or another into some one of our penal institutions, are of more account in the eyes of these clammorers for "more children" than the well trained and respectable solitary child of American parents. It seems to me to be preferable to sacrifice numbers to superiority, but it is quite likely that this is one of those problems which the stupendous intellect of man is alone capable of grappling with. These lamentors make no distinctions; their command to all women whatsoever their circumstances, is to bring forth children.

"What is there commendable in bearing children to a heritage of sin and of poverty?" If a man and a woman love each other sufficiently well to brave the privations and sacrifices that a life of poverty entails, that is a matter which concerns them two alone, but what right have they to bring little children into their world of deprivation? Parents who are physically, morally or financially weak have no right to children. It is the basest sort of selfishness for people to become parents unless under the best possible conditions.

Do you demand Scriptural authority? You have it in the Golden Rule. Look back over your own life, embittered, perhaps by inherited disease, or grinding poverty.

Think of your struggles, of the noble ambitions that came to naught for want of means for their attainments, of the weary treadmill life, where you plod on, plod ever, and with no hope but the grave, and remembering all you have suffered, can you, will you, be instrumental in forcing your child to drink of the same bitter cup? Is that doing as you would be done by. Is it not rather a most heartlessly cruel procedure?

A child has a right to be well born, a right to the broadest culture and to the grandest and richest experiences of life.

Try and realize the misery that disease and poverty cause the world. Think of the thousands of worse than orphans, who crowd our cities. Poor little waifs, forced from their babyhood to fight their own life battle, cursed at and bullied by the great unfeeling world, and so on up through the different *gradations* of penury, the lives of the children in a greater or less degree are lives of toil and of privations.

Of all this though, the gentlemen who clamor for the expansion of the race take no account. "Give us the children" they cry, "What if many of them are cruelly confined at a tender age in stores, and factories, and that very many die from want of proper care, and that some of them

Fig. 2—Catchall.

will be vagabonds and hardened wretches, so that as to-day our prison population foots up to 40,000, "Give us the numbers!"

What would the world have lost had those 40,000 never been born? It is appalling, such an amount of concentrated wickedness. Who is to blame? The parents? Indubitably. They failed in some particular to do their whole duty by these their children.

It redounds to the honor of American women that they shrink from assuming responsibilities of this kind on the wholesale and reckless plan in vogue among foreign peoples. There is another phase of this question that I will merely hint at. Did our Creator design that woman should spend her whole life in a nursery? Is she just to her best and highest nature when she sacrifices all the grand possibilities of her life to the petty details and the wearying routine of cradle tending.

WHAT ONE WOMAN HAS DONE.

Having read with much interest the articles on woman's work which have appeared in the Rural, I am tempted to myself "unfold a tale," which will doubtless surprise those who insist that woman is a most "weak vessel." My husband bought an unimproved farm. There were about fifteen acres cleared, and not a sign of a fence on it. Beside the care of three small children, I assisted my husband in his out-door work. The Rural readers will remember that during the late war, Uncle Sam was so greedy for men, that there was hardly enough left to do the farm work: and as my husband was nearly worn out with hard work, he was in despair at not being able to obtain assistance. I offered to help him out of his strait, and he laughed me to scorn. I insisted, however, on his preparing a scythe, and told him I would make the attempt at any rate.

The scythe was brought, and unto the fields I went to commence my work, and to my husband's surprise (by his mowing around the stumps), I was able to keep right up with him. We mowed until noon; then the hay was ready to be raked up and drawn into the barn. My husband helped me rake around the piece until he could commence loading; then he and one of my little boys began drawing the hay into the barn, which was about twenty rods off. I could rake as fast as they could draw it in to the barn—so our haying was soon finished up for that season.

Then came harvesting. I aided my husband in raking and binding the oats or wheat, or setting-up buckwheat, digging potatoes, or in almost any kind of farm work. I also made our own cloth in the time of war, made linen for summer and woolen for winter, which was a great help, as such goods were very high in those days.

I continued to help my husband in the field (if necessary) until about three years ago. Four or five years ago my husband was taken sick; he could not work, but was around. It was getting rather late for digging potatoes. I asked him if he could drive the wagon into the field where the potatoes were; if he could, I would go and dig potatoes. At this time we had a dairy of sixteen cows; had no help, excepting my daughter, who was teaching school. Well, I went to work digging potatoes. I think it was nearly noon when I commenced; I dug till 3 o'clock. Then we carried sixteen bushel baskets full of potatoes into the cellar.

We increased our dairy so that a year ago last summer we milked twenty-two cows. I have done all my house work and the dairy work without assistance, excepting the working of the butter. That part fell on my husband to do. Last season we had a dairy of twenty-six cows. I also did my work alone the most of the time. All through the summer season I get up early on Monday and do my washing before breakfast—have that ready at 7 o'clock. We keep hired men most of the time.

Some will say, "That is a Dutch woman, or she never would perform such labor." But I say nay; I am a Yankee. I sometimes write a piece for our County paper; I am also agent for a medicine in your city. I get up clubs for the Rural New-Yorker.

L.

[In face of such a working record as the above, what have those who so dismally howl about the physical degeneracy of women, to say?—Ed.

TOILET BOX.

The foundation of this pretty addition to the toilet table is a very strong cord or wooden box: on the lid of this are arranged five smaller boxes as shown in the design. The foundation box measures twelve inches long, seven inches wide and two inches deep. The center one of the small boxes on the top is larger, than the four others! the others are all one size; they must be carefully fixed to the lid of the foundation by strong glue. The boxes may be made by glueing pieces of thin cardboard into the required form and lining them with tin-foil; they with the foundation are next covered with the separate petals of fir cones fixed with glue; acorns, oak galls, the shells of beech nuts, small fir cones, and seed vessels, are arranged on the lid of the foundation according to taste. A small round pin cushion is fixed to the lid of the center box which is ornamented to correspond with the foundation. The outer covering of a beech nut with a little of the stalk attached is glued to the center of the lid of each of the little boxes to form a handle to lift it off with. The center box serves as a receptacle for small articles of jewelry; the others for powder, lip salve, pins, &c. The foundation will answer well for a glove or handkerchief box. After the whole is completed it should be varnished with good copal varnish.

Fig. 2 is a catchall. It is a Japanese cuff of brown straw which can be bought for a small price at a Japanese shop. Embroider a pattern over it, line it with silk or satin, and fasten a small bag of the same material to the bottom drawn up with a ribbon, bow or a tassel.

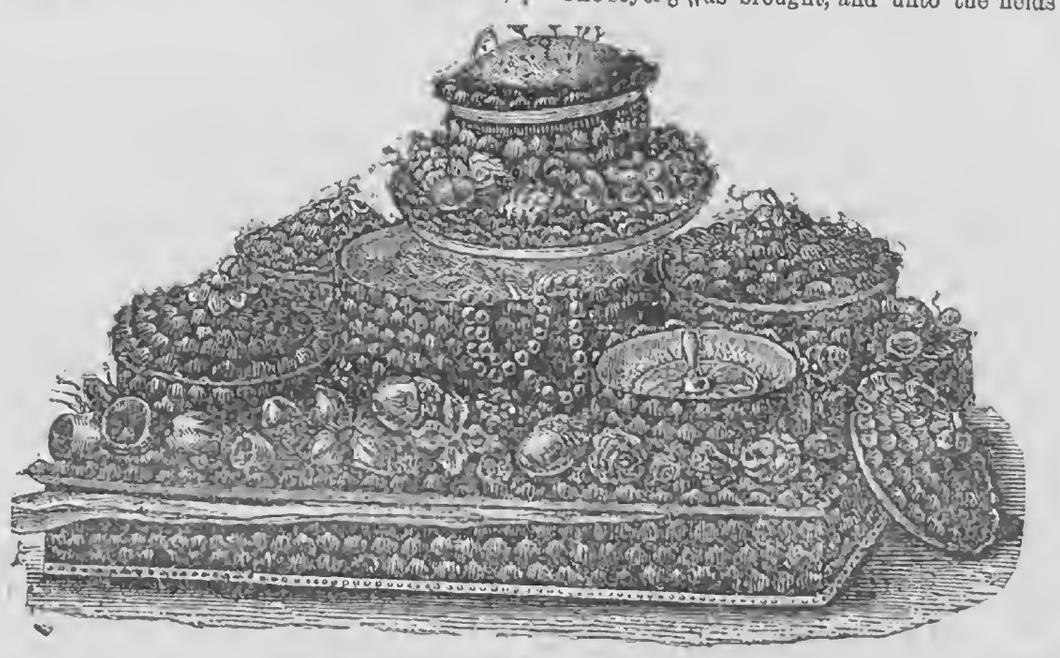

Fig. 1—TOILET BOX.

GRANDFATHER TO THE FRONT.

I am afraid grandmother doesn't live in the country where she was born and reared, but has followed one of the daughters she cuddled in her bosom to the city when she has become the wife of some fashionable, and has given herself to society. My experience has been, in cruising around the world, that the changes we notice are more in ourselves and our changed situations and surroundings, than in the difference in matters in general. When grandmother was young, she moved in one circle; now she is older, and moves in another circle, she looks through different eyes—not because there was not just such a place when she was young as she now occupies, or because there is not just such a place now as she filled when a girl; but because then it was not her desire to be where she now is, or it was not within her power—at least she was not there. She may live in the house where she was born, and her country home may have become the center of a great city, or some upstart village more presuming in its demands for fashion; may she not, if she will, find just such a place as she lived in when a girl? Would she know it if she found it?—if she found it and knew she had found it, and could take just the same place there that her old grandmother filled when she was nestling on her mother's breast, or exchanging glances with some of the stalwart sons of her mother's neighbors. Would she do it? Would she?

Grandfather.

Let us give to women such training, physically, industrially, intellectually, and spiritually, that we shall shame the words "supernuous" out of the vocabulary, as descriptive of women. And this will help men, and elevate them, quite as much as any special work which might be done for them.—*Mary A. Livermore.*

L. E. S., Waynesville, N. Y.—Unless you can afford to purchase a new black silk next season, we would not advise you to get a damasse. Plain silks are always more serviceable, and if tastefully trimmed are quite as elegant as fancy ones.

The Querist.

ANSWERS TO CORRESPONDENTS.

Poultry House for 100 Fowls.

L. D. W., Fredericktown, Ohio.—Will HENRY HALES please give, in RURAL, a plan of a poultry house of sufficient size for one hundred fowls—to be housed if necessary, but generally allowed to run at large?

ANS.—A house for this number of stock, should not be less than fifteen by twenty feet clear inside room. If built against the south side of a barn, so as to have a southern frontage, it will do as well as standing detached, and save material; for if built alone it will require a roof coming to a ridge in the center; six-foot posts for the corners, with sills set on stones, on the level ground, unless it can be built on stones on a southern hillside, which is better yet. In this case, the hill can be excavated for the north side of a good, warm house; then a large window on the east side, nearer to the front than the back, gives the birds the early morning sun so much needed by poultry. This window should be at least four feet wide, and five feet high, coming down close to the sills, as all glass should do in fowl houses in cold sections, so that the stock get the full benefit of the winter sun on the floor. There should be no opening on the north or west sides, except a ventilator in the latter, as well as in the east end, quite up to the ceiling; the door can be either on the east end or in the front. The front should have a large share of glass, say eight to ten feet wide and five feet high as at the end. The glazing can be done cheapest if stationary sash bars are used, in which case the ventilators in the ends of the house should be large, so as to admit plenty of air in summer. They can be fastened open to any desirable extent by a hooked rod pierced with holes at intervals. This ventilation is of the first importance for the health of a hundred fowls when kept together. Seldom will both ventilators require to be closed entirely.

Where stone is abundant, it will make the best of houses, laid up roughly and pointed inside. If wood is used, upright boards should be battened, but clapboards are better. A shingled or battened roof is better than one of felt, which is worth nothing. A square ventilator, like a little chimney, in the center of the roof, is very desirable. The top, outside, should have a cap on to keep out rain, with openings all around, and a little slide on the inside to be shut only when the thermometer reaches down to zero. There should never be glass in roofs. The inside, if wood, should be roughly lathed and plastered; one coat with plenty of hair will do. Unless some such plan as this is used, a large number of birds together will be difficult to keep in health; but with such a building and needful cares, as laid down in the RURAL from time to time, it can be done profitably. In addition to the house, a shed on the north side, open to the south, where the birds can dust themselves, and retire from bad weather, is useful. On a farm, a house can be sometimes built adjoining a hovel, which is beneficial for the stock. For interior arrangements, the RURAL has often given ample directions. A plan for the arrangement of nests was illustrated in number for March 31st, 1877. Perches should not be ladder-form, but all parallel, of one hight, lying loosely in notches on a frame.

Prickly Comfrey.

O. L. W., Gasport, N. Y.—Some time since there was considerable discussion about the merits of Prickly Comfrey. I have seen nothing with regard to it lately. Would be obliged to you if you would inform me if it has proved of value the past season.

ANS.—Prickly Comfrey has often been referred to in these pages, as a plant found to be profitable in certain places, under particular culture and circumstances. There seems to be a very wide difference of opinion with regard to its merits. Among those who have cultivated it, some are quite enthusiastic in its favor, others think but little of it, and others again, revile it; a thing very freely done by many who have never seen it cultivated. Our own personal acquaintance with it is too limited to enable us to speak decisively with regard to its good qualities, and we shall be pleased to publish any information on this point furnished by any of our readers who may have *practical* experience of it.

Miscellaneous.

A subscriber.—Is the Queen City Glass and Lamp Company of Cincinnati, reliable?

ANS.—We know nothing about this company, but so many fraudulent enterprises have had headquarters at Cincinnati recently, that more or less discredit is cast upon everything emanating from that city, that has not the prestige of an established reputation.

Van.—I have a cow which I discovered about three weeks ago began to milk unusually hard in one of her teats. On examination I discovered a hard, round substance very near the end, which I fear will result in a loss of the teat.

ANS.—From this meager description a certain diagnosis cannot be made. Without a doubt, it is a tumor of some kind. As you had to make an examination to discover it, it probably can not be a lacteal tumor. A lacteal calculus would not stop the flow of milk, if of the size you describe. It probably will, in time, render the teat useless. It would be well to consult a veterinary surgeon and have an operation at once.

C. B. W., Detroit, Mich.—Will the RURAL be kind enough to inform me what are the standard books on sheep raising, and in what State in the South it could best be done. These questions have been raised in my mind by your recent article on the subject.

ANS.—Randall's Sheep Husbandry in the South Randall's Practical Shepherd. Sheep husbandry is largely carried on in Texas, and has proved a paying business there. Georgia, however, claims to be the great future home of the sheep in the South.

C. E. W., New Way, O.—(1) Do you publish Randall's Practical Shepherd? If so, what is the price wholesale and retail? (2) If not published by you, where can it be got?

ANT.—We publish nothing but the RURAL NEW YORKER. (2) Woodward & Co., Park Row, N. Y.

H. W. M., Newark, Del.:—Please let me know whether you have a copy of "Money in the Garden," by Quin?

ANS.—Yes, for our own use. It is published, however, by Woodward & Co., Park Row, N. Y.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, FEB. 4TH.

"The Three Graces"—E. P. O.—S. B P.—O. C. N.—G. G.—S. & S.—W. B.—N. C.—R. S. C.—M.—B. G.—L. L. P.—W. H. W.—C. & Co.—W. B.—B. S. W.—W. H. N.—1. P. R.—E. J. B.—A. E. S.—A. W. M.—W. L. C. D.—R. W. F.—R. W. B.—A. M.—A. R. N.—L. R. C.—R. G.—M. L. S.—R. H. C.—E. G.—B. 2—J. B. Jr.—E. F. E.—M. B. H.—A. L. J.—Mrs. S. G. H.—J. B. J.—E. M. S.—M. L. D.—L. A. R.—X.—"Subscriber"—M. E. R.—T. C.—T. B. M.—H. H.—F. D. C

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Jan. 29.—There is a report that Sitting Bull is once more in the field; but so many *canards* have appeared about him, that this is possibly another.

The Conservative Ministry of England have decided to challenge a vote of confidence on the question of war or peace. All is still in doubt about armistice or peace negotiations. No news from negotiators; Russians and their allies pressing forward as hard as possible. Typhus raging in Erzeroum; 250 die daily—10,000 sick and wounded in hospital.

WEDNESDAY, Jan. 30.—In the Senate, the debate on the Silver Bill still drags its slow length along. No doubt of its passage by a vast majority, and strong probability of its passage over the President's veto, which is not quite certain to be put upon it.

Russia has assured England that the question of the passage of the Dardanelles being opened to Russian vessels only, shall be left to settlement by the European Powers. The liberals in the English Parliament are going to make the vote for £30,000,000 asked for by the Government for precautionary war expenses, a question of want of confidence in the present Ministry. They are sure to be defeated, however, by a very large majority, as the war spirit is rapidly spreading. Russian scouts are within 70 miles of Constantinople. Suleiman Pasha is at Boulair, Mehemet Ali at Constantinople. The whole coast of the Bosphorus is covered with starving refugees, and appalling misery there and at Constantinople makes the people turbulent, and reckless, so that an outbreak against the Christians may at any time take place.

THURSDAY, Jan. 31.—The Republicans in the House have defeated a resolution with regard to whiskey in bond, and carried a substitute not to reduce the whiskey tax. This is said to indicate a loss of Democratic control, of that body. The Trunk lines of railroad have agreed to stop cutting rates on freight, and re-establish old rates.

England is terribly agitated about going to war. The Conservatives or war party are almost united, the Liberals, or peace party split up hopelessly, many of them favoring war as strongly as the most violent Conservative Turkhophilites. In the parliament the government expect 100 majority. Austria is taking a stand that may lead to an anti-Russian alliance with England; the more so as Russia is acting very mysteriously in pressing forward while talking peace—peace. There are in Constantinople 150,000 refugees lacking food, shelter, and clothing. The whole Mussulman population of Turkey seems to be moving towards Asia whence their ancestors crossed over four hundred years ago.

FRIDAY, FEB., 1.—During the late terrible gale the steamer Metropolis, from Philadelphia to Bahia, with 200 laborers going to work on a Brazilian railroad, having sprung a leak, was run ashore three miles south of Currituck Lighthouse, near Kitty Hawk, N. C. close to the spot where the U. S. Steamer Huron was lately lost. About 150 persons mostly passengers were lost. Three women only on board, one of whom alone has been saved. Loud complaints of the inefficiency of the local life-saving station, by which 100 lives were lost; and of the unseaworthy condition of the vessel, which was so marked that the fault of moral homicide belongs to those who sent the old rotton craft to sea. Snow-storm general throughout nearly the entire North.

The Britons are clamorous for intervention. Meetings all over the country convened to support the Liberals in their opposition to war, have been seized upon by vast majorities and turned into war meetings, endorsing the Government and urging immediate action. The Home-Rulers in Parliament have determined not to vote on the question of peace or war, a liberal defection. Count Andrassy, the Austrian Prime Minister, has proposed to the Powers, a joint conference to prevent a policy on the part of Russia in concluding peace, unjustly prejudiced to the interests of other Powers. Russia seems willing to agree to this; and the measure may prevent further complications. France is again asserting her position as an important factor in European politics; and will be suitably represented at the proposed conference. Greece regretting her tardiness is going to rush into war with Turkey anyhow, in the expectation that the other Powers will not only save her from the terrible whipping Turkey could easily give her, but reward her rashness with an addition of territory.

SATURDAY, Feb. 2.—The number of lost by the Metropolis seems to be not much more than 100. The survivors are in a pitiably destitute condition. Consular and diplomatic salaries have been cut down $118,000. Secretaries Thompson and McCrary are said to be strongly in favor of the Bland bill. In New Orleans there is loud talk of indicting Secretary Sherman and Congressman Garfield for the part they took in Louisiana politics at the time of the Presidential election. The Louisiana Returning Board, now under indictment in New Orleans, appealed to Judge Bradley to have their case tried before the U. S. Court, on the plea that an impartial trial was impossible before a State Court. Their appeal has been denied.

Members of the Stock Exchange in London, yesterday, publicly burnt, amid groans and hisses, the Times and News and some other papers of pro-Russian tendency. War fever red-hot in England. No news yet from peace negotiators. The Russians are now within twenty-four hours' march of Constantinople, where there is a terrible panic. Hobart Pasha, with the Turkish fleet, has arrived in Constantinople with the garrison of Batoum, which has been evacuated in face of an attack, or owing to a secret stipulation with Russia. The Greeks are going to war, anyhow.

SUNDAY, Feb. 3.—General Miles reports that Sitting Bull has crossed the Canadian line and is at the head of 2,000 men. The bucks from Red Cloud Agency are on their way North, and it is feared there will be a good deal of Indian trouble generally by the opening of spring. Subscriptions are being got up in Norfolk, Philadelphia, and elsewhere for the relief of the wrecked survivors of the Metropolis.

The Sultan telegraphed to the Czar for peace; the answer has just been flashed back: "I desire peace as much as you; but it is necessary for me—necessary for us—that it should be a solid and durable peace." All military movements and emigration of Mussulmans have stopped. Mehemet Ali Pasha was first appointed commander of Para, then of Crete, a further degredation. Gambetta declares for France that the war can only be terminated by a European Congress. Italy proposes to form an alliance with any Power opposed to further Russian aggrandizement and an alliance is proposed between Italy, England France and Austria.

MONDAY, Feb. 4.—The survivors from the wrecked steamer Metropolis have arrived in Norfolk. The captain insists that the vessel was seaworthy. A bogus Roman Catholic Miracle is proclaimed from Mauch Chunk, Pa.—a dead girl called back to life, in sooth!!!

There is a report in England that the British fleet in the Mediterranean has orders to seize upon the Turkish fleet and take it to Malta in order to prevent its falling into Russian hands as a part of the war indemnity. An armistice has just been signed by the Grand Duke Nicholas and Server and Namyk Pashas. The following are the terms of peace:

First.—The erection of Bulgaria into a principality.

Second.—A war indemnity or territory in compensation.

Third.—The independence of Roumania, Servia and Montenegro, with an increase of territory for each.

Fourth.—Reforms in Bosnia and Herzegovina.

Fifth.—An ulterior understanding between the Sultan and Czar regarding the Dardanelles.

Sixth.—The evacuation of the Danubian fortresses and Erzeroum.

The garrison at Widdin has consequently been ordered to surrender their arms and will be quartered among the neighboring villages. Content at Constantinople; great joy at St. Petersburg. All the Powers have accepted Andrassy's proposal for a conference to be held at Vienna. Russia will annex Bessarabia, giving Roumania, the Dobtudscha in exchange. Ten thousand Greek regulars and as many irregular troops have invaded Thessaly, nominally to protect Christians from massacre, really to complicate matters in hope of getting as a sop a slice of Turkey. To January 20th, the Russian loss amounted to 89,304 men.

HOME NEWS PARAGRAPHS.

There were 228 miners killed and 462 wounded in the anthracite coal region last year.

Cattle are dying all over the State of Kansas, it is supposed, from eating smut in the corn fields.

Another outrage on females. Connecticut proposes to tax male and female dogs $10 and $20 respectively.

Within the past two months seventy thousand persons in northern New York have signed the temperance pledge.

Last year Illinois had 2,500,000 hogs, and packed 2,113,845—about one-half of all that were packed in the United States.

A dairyman visiting the city refused to go to one of the theatres the other night, because the word "olio" was on the programme.

The stock of mess pork in Chicago at the present time is estimated at about 128,000 barrels, against 145,000 barrels at this time last year.

There are forty thousand Italians, more than one hundred and fifty thousand Germans, and two hundred thousand Irish in New York city.

The failures in the United States for the year 1877 are 8,872 in number, being 220 less than for 1876. The total liabilities were $190,669,000, or $500,000 less than in 1876,

The value of milch cows in New York equals one-sixth the value of the cows in the United States, and in number is double the aggregate contained in New England.

The Atlanta Constitution says: "The sheep fever is taking hold in Atlanta. It almost threatens to drive the money question out of discussion. Georgia will be the great sheep State of the future."

The following obituary appeared in a Memphis paper on a man killed by an accident:—He was an upright Christian, a good citizen and an ardent patriot, but of limited information with regard to circular saws.

Between forty-four and forty-five million passengers were last year carried between New York city and Brooklyn by the Union Ferry Company, without loss of life or serious accident, only one person being injured.

The sudden change in the temperature last week was severely felt along the St. Lawrence river, There was open water in front of Ogdensburg in the morning, and before night the boys were sailing over it on their ice-boats.

Buffalo-hunting on the Staked Plains of Texas is at its hight; 200,000 have already been slaughtered, and 350,000 more will be before the season closes. The animals are killed for their skins, which fetch 80 or 90 cents a piece, and their carcasses are left to perish.

A farmer in Iowa objects to the publication of any more sermons about hell. He says his crops were eaten up by grasshoppers, his pigs died with cholera, and half his sheep were killed by dogs, while in addition he has been swindled by a lightning-rod agent and two patent right sharpers. He thinks he has received punishment enough.

A crop of English hay, weighing two tons, removes from the soil about 62 pounds of nitrogen, 70 pounds of potash, and 18 pounds of phosphoric acid. From an acre, a crop of clover hay, weighing two and a-half tons, abstracts about 175 pounds of nitrogen, 110 pounds of potash, and 32 pounds of phosphoric acid, Two or three crops grown in succession, and without manure, would partially exhaust even the best of land.

There are in Kentucky 125,000 farms, requiring 150,000,000 pannels of single pannel fence to enclose them. The number of rails required is 2,000,000,000, costing $75,000,000. Estimated cost of annual repairs, $10,000,000. The live stock now in Kentucky is worth $24,121,861. It will be seen from this that more than one-third of the value of this stock is expended in repairing enclosures. About 10,000,000 of timber trees are annually used to keep up the fencing.

Good wheat ought to furnish at least 74 per cent. of fine flour. The best samples often furnish 76 to 80 per cent., and in a few rare instances as much as 86 per cent. of flour has been obtained. Inferior varieties seldom produce more than 68 per cent., and in some instances only 54 to 56 per cent. of flour has been obtained from bad samples. On an average, wheat may be said to yield 75 per cent of fine flour and 25 per cent. of bran and middlings.

Memorial Hall, at Harvard, is the eating place of about 700 students, who bear the cost proportionately, paying an average of less than $4 a week lately. The following is given as a specimen bill of fare for breakfast: beef-steak 300 lbs.; pigs' feet, 50 lbs.; sweet potatoes, four bushels; white potatoes, two bushels; crushed wheat, 46 lbs.; hominy, 20 lbs.; 1,150 rolls; 15 gallons griddle-cake batter; coffee, 6 lbs.; tea, ¾ lb.; milk, bread, and butter *ad libitum*.

The cotton yield of the Southern States for 1877 will reach 4,750,000 bales. This is nearly 300,000 more than that of 1876. The last season was a most favorable one, and but few complained of worms, catepillars and rust. The cotton plant continued to bloom till chilled, and flowers matured into rolls of cotton in sixty days. In 1876 the killing frost that ends the maturity season occurred Oct. 3, while last year it held off until

Nov. 12. The thirty-nine days additional of maturing season were a great boon to planters.

The New Davis Vertical Feed Sewing Machine presents advantages over all other machines which deserve, and rapidly gain for it, the highest favor and popularity wherever introduced. It will do a greater variety of work than any other machine, with less skill or care on the part of the operator, and all without basting. For further information as to its special merits and advantages, address THE DAVIS SEWING MACHINE Co., Watertown, N. Y.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC Co., Cincinnati, Ohio.

FOREIGN NOTES.

The Agricultural Laborers' Union of England numbers some 60,000, farm laborers.

The United States Consul at Odessa in Russia reports that the grain crop in South Russia for 1877 is the largest for 25 years.

Forest planting operations in England have now made great progress, the season having hitherto been highly favorable for them.

The rainfall in Ireland during the year just closed has been quite unprecedented, and "'77" will long be remembered as the "wet year."

The reports of English convict prisons show that one of every twenty-five male inmates is of weak mind, insane or epileptic. This does not include those whose minds are sufficiently ill-balanced to warrant their removal to an asylum.

The home guard of England numbers 175,000 men, of whom 133,000 are infantry, 32,000 artillerymen, 7,000 engineers, and the remainder mounted rifles and permanent staff. These men are all well trained in their respective arms of the service. Add to these the yeomanry and militia, and the number of England's home defenders is raised to 300,000 men.

At the Paris Exposition there is to be a pyramid twenty feet square and nearly seventy feet high, representing the 70,000,000 cubic inches of gold which have been produced on the Pacific coast. Surrounding the pyramid will be fifty cases for the exhibition of the minerals of the country. The estimated weight of California minerals to be sent to the Exposition is 500 tons.

Our Consul at Bremen reports that exports from Bremen to America have fallen off, while imports are increasing. Several American agencies recently have been started. The sale of American mowers and reapers has been enormous. American automatic windmills are becoming popular, and the importation of American canned goods is reaching large proportions.

There are four native modes of making butter in the empire of Brazil. The first is by putting the milk in a common bowl and beating it with a spoon, as you would an egg. The second by pouring the milk into a bottle, and shaking it till the butter appears, when it is removed by breaking off the top of the bottle. The third, where the dairy is more extensive, is performed by an athletic native shaking a bag at each end until butter is produced. The fourth, which is considered to indicate vast progress over any of the preceding methods, consists in dragging the hide or leathern vessel, filled with milk, on the ground after a galloping horse until it is supposed the butter is formed. The milk is never strained and the butter never washed.

Professor Blot, the lecturer on Cookery, says that housekeepers should insist upon obtaining BURNETT'S FLAVORING EXTRACTS, as the strongest and most healthful.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Feb. 2, 1878.

BEANS AND PEAS.—Receipts of beans past week, 6,350 bbls.; Exports, 589 bbls. The offering of mediums is large and prices for even the best hand-picked are easy. Marrows have further declined and there is a better export movement at the lower figures. Pea beans selling only in a small way. Business in both white and red kidneys has slackened and prices favor buyers. Black beans dull. Green peas fewer to sell; now $1.30 for prime parcels. Southern B. E. peas $3.25 per two bushel bag, few in market. Canadian field peas quoted 83c. for general stock.

We quote:—Beans, medium choice, $1.70@1.75; other, $1.60@1.65; marrows, choice, $2.18@2.12; other, $1.85@2.00; pea, $1.60@1.85. White kidney, choice, $2.00@2.20; other, $1.90@2.00; red, choice, $2.50@2.55; other, $2.35@2.40. Turtle soup beans, $1.50. Lima, $3.

BEESWAX.—Small sales are exported at 27@28c. for Western and Southern.

BROOM CORN has increased demand and is steady in price.

Green brush at 6@7c.; green hurl, 6@6½c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—The market shows increasing firmness for the fancy grades. Fine Western creamery has advanced a trifle, and all strictly choice goods, including selected half-tubs and extra Welsh, feel the upward movement of scarce fine stock. Dealers look for still better prices during the coming week. The point with holders now is to manage the liberal stock of fair and medium qualities. The ordinary run of buyers protest against paying more than our inside rates for State, and they do not do that steadily, when Western factory has real table merit. Holders of really sound, useful State are in no hurry to accept low figures for it, as in the ordinary chances of season we may have a late spring, this year. Their position, however, is weakened by the fact that the crop of State does not show the keeping quality of many former seasons, especially when compared with the success of winter Western makes. The market trade and some exportation give Western best stock a fairly busy movement. Extremely low stock continues almost immovable.

Comparative receipts and exports of butter have been as follows:

	Receipts, pkgs.	Exports, firkins.
June 1st, '77 to Feb. 1st, '78	942,062	140,477
June 1st, '76 to Feb. 1st, '77	338,412	103,972
June 1st, '75 to Feb. 1st, '76	825,987	28,136
June 1st, '74 to Feb. 1st, '75	734,235	39,757
June 1st, '73 to Feb. 1st, '74	769,468	25,623
June 1st, '72 to Feb. 1st, '73	583,412	39,215

We quote State creamery, 25@35c.; fancy pails, 28@30c.; other 25@30c.; creamery, good to choice, 25@33c.; half tubs, fine, 28@30c.; extra, 33@35c.; other, 22@27c.; Fall Welsh 27@29c.; Welsh tubs, dairy, 24@26c.; other, 20@24c.; full dairies, fine, 26@28c.; common, 20@24c.; firkins, 20@26c.; poor State, 14@18c.; Western creamery, good to choice, 40@41c.; poor to good, 25@32c.; factory, choice, 18@20c.; good, 16@18c.; common, 7@11c.; rolls, 12@17c.; grease, 6½@7c.

Receipts for the week, 15,435 pkgs.

Exports past week, 1,678 pkgs.

CHEESE.—Export demand continues very good for the period of the year, almost entirely for fancy stock, prices for which are slightly better than last week.

Fancy factories, 13¾@13⅞c.; good and prime, 13@14c.; fair lots, 12½@12¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12@12¾c. for good to prime; 10½@11½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 5@9c. for poor.

Exports for the week, 17,523 boxes.

Liverpool cable, 64s. Gold closes 102.

Comparative receipts and exports:

	Receipts, pkgs.	Exports, firks.
June 1, '77, to Feb. 1, '78	2,228,395	95,005,808
June 1, '76, to Feb. 1, '77	1,876,768	77,127,293
June 1, '75, to Feb. 1, '76	2,177,867	82,261,854
June 1, '74, to Feb. 1, '75	1,827,495	83,378,143
June 1, '73, to Feb. 1, '74	1,843,638	80,574,206
June 1, '72, to Feb. 1, '73	1,583,827	66,242,758

COTTON has fluctuated sharply and closed firm.

Latest prices are for January, 10.95@10.97c.; February, 10.03c.; March, 11.12@11.13c.; April 11.27@11.28c.; May, 11.39c.; June, 11.52c.; July, 11.59c.; August, 11.64@11.65c.; September, 11.37@11.39c.; October, 11.16@11.18c.; November, 11.03@11.05c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	Ala.	Orleans.	Texas.
Ordinary	8⅜	8⅜	8⅝	8⅝
Strict ordinary	9 5-16	9 5-16	9 7-16	9 7-16
Good ordinary	9 11-16	9 11-16	9 13-16	9 13-16
Strict good do	10 3-16	10 3-16	10 5-16	10 5-16
Low middling	10⅜	10⅜	10⅝	10⅝
Strict low middling	10 13-16	10 13-16	10 15-16	10 15-16
Middling	11 1-16	11 1-16	11 3-16	11 3-16
Good middling	11 7-16	11 7-16	11 9-16	11 9-16
Strict good middling	11 11-16	11 11-16	11 13-16	11 13-16
Middling fair	12 3-16	12 3-16	12 5-16	12 5-16
Fair	12 11-16	12 11-16	12 13-16	12 13-16

Stained.

Good ordinary, 8⅝c.; Strict ordinary, 9⅛c.; Low middling, 10c.; Middling, 10⅝c.

DRIED FRUITS.—Apples of choice quality are firm in price, and have a fair inquiry. Peaches are very dull. Small fruits are generally scarce and firm.

Apples—State quarters, old, 6@6½c.; new, 6@6½c.; Western quarters, old, 6@6½c.; new, 5½@6½c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 10@10c.; unpeeled halves, 4¾@5c.; unpeeled quarters, 4@4c. Pitted cherries, 16@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 16c.

EGGS.—Receipts for the week, 4,307 barrels. Real winter weather has come to the relief of the hitherto dull and depressed egg market. Prices have stood an advance without a stoppage of trade, and if receipts continue small and sellers do not become too avaricious, the useful portion of the surplus will be closed out. Some held stock is so low in quality, that it will be almost impossible to sell it out. Limed are a shade better, following the advance in fresh.

Near points, 19@20c.; State and Pennsylvania, 19c; Canadian fall 13@15c.; Western best, 18@18½c.; other, 13@16c.; Southern, 18@18½c.; Limed, State, 12@14c.; Canada, 12@14c.; Western, 10@13c.

FEATHERS.—Live white prime Western geese, 45@47c.; mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $20.00@20.50; 60 pounds ave. $19.50@20; 80 pounds ave., $20@21; 100 pounds, $20.50@22; and rye at 19@20.

FLOUR.—Export trade has been lively, and home demand moderate. On account of the large stocks there are free sellers at easier prices.

Latest prices are $3.90@4.75 for poor to fancy superfine State; $4.90@5.25 for common to fair extra do; $5.40@5.75 for good to choice do.; $4.25@5.00 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $5.00@5.45 for shipping extra do., the inside price for poor, and $5.45@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@7.25; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.10@6.85; round hoop Ohio at $5.10@5.50, and trade brands of do. at $5.75@7.00, the latter for choice; St. Louis, $5.00@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.00@8.25); Minnesota clear, $5.00@6.50; Minnesota "straight," common to fancy, at $6.00@7.50, and patent poor to very choice, $6.75@9.00, with a few fancy at $9.25@9.75; unsound stock at $2.50@6.25; city mill extra at $6.00@6.85 for fair to very choice for West Indies; do. for England $5.00@5.15; do. trade and family extras, $6.65@7.75; do. South America, $6.00@7.50; No. 2 at $2.50@3.75.

Buckwheat Flour—Quoted at $2@2.60. Corn meal is selling at $2.60@3 for Western yellow and $3.20 for Brandywine.

FRESH FRUITS.—Exports of apples past week, 767 bbls. Prices have become too strong to admit much exportation. Sales are not large, but fine quality is well concentrated, and selections of any variety are quoted at $4.50@5; fair to good, $3.50@4; poor, $2.50@3. Cranberries are firm—few further arrivals expected from New Jersey. Fine crates and bbls. are higher, poor stock slow. Fancy bls., $7.50@8; do, crate, choice, $2.60; good, $2.12@2.25; fair, $1.@1.75, poor to good bbls., $1.50@6.75. Florida oranges scarce and firm at $3@5 ℔ case. Grapes dull at 6@7c. for sound Catawba. Peanuts have lost all of their recent firm tone—which was, however, a speculative one—and with a dull demand and liberal offerings of stock, prices are lower. Best hand-picked Virginia, $1.40@1.45; good to fancy, $1.20@1.35; common, $1@1.15. These low figures do not represent large sales. Hickory nuts, 75c.@$1.

FURS AND SKINS.—Some special call for a few common or fair commercial grade skins has given a little better change in prices. But as a rule the market is quiet. Manufactured stocks will be largely carried over this season.

No. 1 quality.	Nor. & East.	West & N. W.
Otter, ℔ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and ylgs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ℔ ℔	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

GRAIN.—All articles have been lower, on the peace news, but a better export trade results.

Latest sales are of No. 2 red at $1 26@—ungraded red and amber State, $1 10@1 40; white, $1 41; No 1 Northwest spring, $1 32; No. 3 Chicago, $1 20½; No. 2 red for January at $1 26; No. 2 Milwaukee spring, $1 28. Rye is a trifle steadier; sales of Western at 70@71c.; State at 73@75c. Barley, 96c for No. 1 Canada; 86@86c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 59½@60c.; steamer mixed, February, 54@54½c. Oats of New York extra white, at 34½@35c.; do. No. 1, Febuary, 35½c.; No. 2 white, 36@36½c.; mixed Western, 36@37½c.; white Western, 37@39½c.

HAY AND STRAW.—There is a fair shipping demand, and home trade is steady, with prices unchanged. Straw is in good demand by the presence of snow.

Bale hay, 65@70c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@65c. for long rye; 44@50c. for short rye, and 40@45c. for oat.

Exports last week, 2,335 bales; since Jan. 1, 5,920; same time last year, 8,585.

HIGHWINES are higher, on account of revenue agitation—$1.09.

HONEY.—Continues dull. White clover, 2-comb boxes, has sold at 13@15c., and good dark at 8@10c.

HOPS.—Exports for the week have been 2,550 bales. Aside from this there have been but little done, the trade from brewers being restricted by the excise question. Prices though not lower, as a rule, have been easy on grades from 6 to 10c.

State choice to fancy, 11@13c.; good to prime, 8@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 3@5c.; Olds, all growths, 2@3c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@22c. for light, 21@22½c. for middle, 21½@23c. for heavy, 19½@21c. for good damaged.

OIL-CAKE.—Western is quoted at $31 ℔ ton.

POULTRY AND GAME.—Supplies of live have been moderate and price fairly steady. Ducks and geese have sold better.

N. J. chickens, 8@9c.; W. fowls, 7@8c.; Turkeys, 9@10c.; Toms, 6@8c.; Ducks, N. J., pair, 55@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1.37.

Dressed Poultry.—The market is firmer for fresh lots and were it not for the quantities of old supplies that are being put out from ice-houses, fresh have a better market. The weather is now very favorable and though some parcels are detained by the snow storm, dealers do not look for any of the demoralizing gluts that have ruined the season thus far.

Fancy Phila. and N. J. turkeys, 13@15c.; good, 12@13c.; large or Toms, 7@8c.; chickens, choice, 14c.; good, 10@13c.; common, 7@9c.; ducks, choice, 12@15c.; other, 10@14c.; geese, fancy, 12c.; other, 7@9c. Capons large 18@20c.; small and slips, 15@16c.

Game is scarce and when items are not firm they are steady.

Hares and rabbits, pair, 25@30c. Canvas-back ducks, $1.25@1.50; Red-heads, 75c.; Mallard, 40@50c.; Teal, 30@40c.; Quail, prime, $1.50@1.75; soft, $1.00@1.25. Partridges, pair, 75c.@$85c. Grouse, 70c.@$1.00.

PROVISIONS.—Hog products have been in active export demand and closed firm. Mess pork, $11½@11¾ for spot lots; $11.75@11.85 for February and March. Bacon at 5¾@—c. for long clear and 6¾c. for short clear. Lard—Western steam at 7-65c. for spot and February, 7-75c. for March, and 7-85 for April. Stearine, 7½@8½c. for prime Western. Beef hams at $16.00@16.50. Beef—New extra mess, $13.00@13.50; plain, $11.00@12.00; new packet, $15.00; family mess, $17.50; extra India mess, $27.00@28.00 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2.50; Higgins', $2.40 and other sack lots at 95c.@$1.15; Liverpool ground, 65@70c.

SEED.—Clover, 8½@8¾c, for prime; timothy, $1.37½@1.42½. Rough flax, $1.55.

VEGETABLES.—Exports of potatoes past week, 3,715 bbls.; onions, 150 do. The demand is light for potatoes—in fact, the hauling is bad since the snow. Only prime seed sorts for Southern use bring the extreme—$2 in double heads. Onions quiet. Bermuda tomatoes have sold at $1.40 ℔ box. Florida green peas, bush., $6@7. Squash easier.

We quote Peach Blows, $1.75@2, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2.50@4.50; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ℔ ℔., 20@40c. Radishes, 100 bunches, $@3.50. Lettuce, mall, dozen, 75c.@$1; large, $1.50@$2. Cucumbers, doz., $3@4. Rhubarb, doz., $1@2.

WOOL.—There has been a very slow market, but prices are not changed, and generally holders are confident.

Latest sales are of X Ohio fleeces at 45c.; X and XX at 43@46c.; low Wisconsin, 41c.; Ohio combing, 54@58c.; Georgia, 30c.; Utah, 20c.; fall California, 16½@26c.

LIVE STOCK MARKETS.

NEW YORK, Feb. 4, 1878.

BEEVES.—Receipts for the week, 7,445 head; do., last week, 8,444 do. The recent snow storm interrupted the delivery of stock, and the light receipts found ready buyers at an advance of ¼@⅜c. over last Wednesday's rates. Selected stock, such as tops of droves and bunches that exactly suited certain buyers, brought 11@11½c.; prime, 10¼@10½c.; after these the range was 8½@9½c., with 10c. made for even, tidy butchers' cattle. The lowest rate represented Texas. Rough State stags sold at 4½c., live weight. Wholesale buyers are not purchasing liberally for immediate slaughter, as a good quantity of dressed stock, including Western, is on the market. The weather of February favors trade. No new sales for export.

COWS AND CALVES—Unchanged. Good ones might sell, and poor ones will not. This means a nominal market, as few extras arrive at this time of the year.

VEAL CALVES.—There were few fresh arrivals of live. Rates for milk-fed were 7½@8½c. for good to choice; other, 6½@7½c.; grassers, 2½@3c. Hog-dressed calves, fair to prime, 9½@11c.; grass-fed, 4@5c.

SHEEP AND LAMBS.—Receipts for the week, 17,304 head; do., last week, 15,793 do. The market has been quiet since the storm at Jersey City; at 60th St. sales were brisk and firm at following figures. Quality of general stock not fine. Quotations for sheep, 5@5½c. Lambs scarce and nominal.

SWINE.—Receipts for the week moderate; late trains detained. Good 180-lb. Ohio, $4.70@4.75 ℔ 100 ℔s. Country pork firmer; 4½@6½c. ℔ ℔., for light to heavy.

ADVERTISING RATES:

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Ayer & Son—Manual for Advertisers.
Barnes, W. F. & John—Barnes' Foot Power Machinery.
Bridgeman, Alfred—Vegetable, Field and Flower Seeds.
Briggs & Bro.—Flower and Vegetable Catalogue.
Burke, Jr., J.—Texas Almanac for 1878.
Calhoun, J. B.—Lands in Central-Western Iowa for Sale.
Carson, Wm. H.—Garden and Farm Seeds.
Cortland Wagon Mf'g Co.—The Cortland Platform Wagon.
Hales, Henry—Hales' Poultry Remedies.
Henderson & Co., Peter—Catalogue of Everything for the Garden.
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JOHN SAUL'S
Catalogue of New, Rare and Beautiful Plants,
will be ready in February, with a colored plate. Many new and beautiful Plants are offered for the first time, with a rich collection of Green-house and Hot-house Plants; Bedding Plants; new and choice Roses; Dahlias. Well grown and at low prices. Free to all my customers, to others 10 cts.—a plain copy free.
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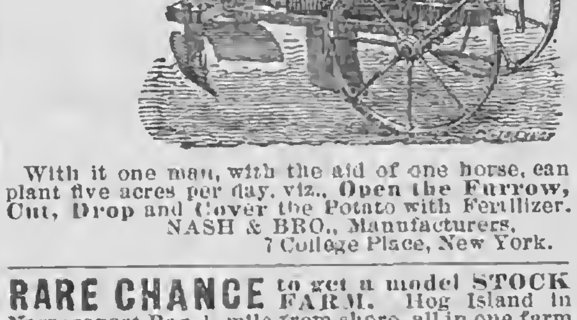

With it one man, with the aid of one horse, can plant five acres per day, viz., Open the Furrow, Cut, Drop and Cover the Potato with Fertilizer.
NASH & BRO., Manufacturers,
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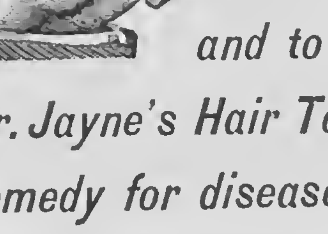
RARE CHANCE to get a model STOCK FARM. Hog Island in Narragansett Bay, ½ mile from shore, all in one farm of 212 acres. No vermin. Good buildings, large sheep houses. Valuable shore privilege. Price $85 per acre. Terms liberal. For full information, apply to DR. H. M. HOWE, 1606 Locust St., Philadelphia.

DYE your old clothes, or any article of silk, wool, cotton, feathers, etc., with Leamon's Aniline Dyes. Warranted the best and cheapest Dyes for all family and fancy dyeing. Sold by druggists, or any color sent by mail for 25c., except black.
COLOR BLACK. Almost any article of clothing after having been used until faded or dingy can be made as good as new by being colored black with Leamon's Black Dye. The expense is trifling. It is the easiest and surest Dye known, and always gives a rich, deep jet black. Give it one trial. Price 25c. Send for book and beautiful samples of colors, free. Wells, Richardson & Co., Proprietors, Burlington, Vt.

THE SUGAR MAKER'S FRIEND.
Over 2,500,000 in Use.
Post's Patent Bucket and Cover Attached.

MORE SUGAR and EUREKA better quality, from EUREKA SAP SPOUTS, than from ANY others, is the verdict of all users. Call for them at your Hardware Stores. *Responsible Agents Wanted.* Samples, Circulars and terms sent, post-paid, on receipt of 20 cts. Address C. C. POST, Patentee, Burlington, Vt.



TO PREVENT THE HAIR from Falling Out, to encourage its growth, and to give it an attractive appearance, use Dr. Jayne's Hair Tonic. A useful toilet article, and a safe remedy for diseases of the scalp.

Reading for the Young.

MILKING TIME.

EVA EDGERTON.

THE pearly dew is sparkling
On the clover blooms so sweet,
Falling in tiny showers
At the passing of light feet.
The robin trills a prelude
To the fresh-faced maiden's song,
As, with tripping step, she hastens
The grassy lane along.

No belle of Saratoga
Can look so sweet and fair
As this blooming, country lassie,
With her bonnie, rippling hair.
No laggard in the morning,
No idler poor is she,
As she does her tasks so bravely,
With a step both light and free.

Life to her is worth the living,
The future, grand and sweet.
To be is *her* endeavor,
Fulfillment she will meet.
A bonnet or a feather
Will not satisfy *her* heart;
Something higher than mere fashion
Can to her true joy impart.

'Tis this simple, true-souled maiden
That knows the worth of life,
That makes the model woman,
That proves the truest wife.
Boys, would you find a treasure
That's worth a silver mine?
Then choose one, when you see her,
At the hour of milking time.

A NOVEL COMPETITION.

IT gives me great pleasure to endorse the idea of a valued contributor. I am sure "darning" is not profanity, therefore I shall be excused if I say hooray! for that "darned" pair of stockings which carries off the prize. My dear nieces the eyes of the community are upon you, and darned be she who first cries holes enough! (Some of this is Shakspeares, the rest my own.) Without more ado I introduce you to Miss ROSE GERANIUM, who wishes to speak about

A "Little Housekeeper."

Quite a long time ago a certain idea, which at the time we thought original, began to grow in our fancy.

One evening while we were sitting alone by the winking, blinking coal-fire, it occurred to us to offer the little folks some prizes for the best exhibitions of their skill and painstaking in home industries. The idea was very pleasant but procrastination, that sly villain, got possession of us and, e'er we were aware, some more practical persons walked off with our pet idea. Alas! If we did not lead, we may at least follow.

We all—or at least some of us—know how very disgusting it is to see a foot in a stocking that has an unsightly rent in it! Why, when we used to go to a certain little white school-house, during the bright spring months, how we were shocked!

Sometimes a girl would be so unfortunate as to get a thorn or gravel located inside her shoe and there would have to be a committee for investigation. Ugh! how many times we have blushed for those untidy girls who perhaps never thought of blushing for themselves!

However, the ill-kept ones were only the exceptions. The rule was dozens of pairs of the daintiest, daringest, cutest white feet. Some of them used to go quite without shoes and stockings and then we had grand opportunities to study pedal character! There is great variety and expression in feet. We have known persons who could speak more emphatically and energize more effectually with this member than with any other.

Especially was it the case with the old local preacher—school-master. He rarely scolded any other way. If it had not been for the eloquence of his descending heel the youth of our community might have waxed lawless and desperate. Dear old man! He had a most brigandish pair of black eyes and was crowned with a hirsute glory that fairly bristled in moments of wrath. To this day we fail to understand why they were so powerless in the bloodless fray!

There was another foot to which we would fain fling back an affectionate tribute. It was the happy associate of a boy's brown ankle and was the most witty representative of its race we ever knew. It fairly excelled in conversational gifts. If it had gone out with BARNUM his educated pig would have been but a secondary attraction! Why, it could perform all sorts of ballroom evolutions, express admiration, discord or defiance, sing popular airs; weep, run away in horror-stricken fright, or fling paper balls and coal-cinders at the master's cranium. If he dared cast a suspicion upon the associated hands, which were always clasped meditatively over the outspread page, that foot would unfailingly vindicate their innocence in a proclamation as long as the neighboring sand-washes would contain!

One poor little pair of feet used to appeal to us with words that seemed to say:—"Give blue-eyed Janie part of your dinner!" You may be sure, my dears, the request was never denied.

But we must not forget what we commenced to write about. We are going to offer the little girls whose parents take the RURAL NEW-YORKER a prize—not for composition writing or puzzle solving but—for *hose-darning!* We feel very certain that a good habit acquired in girlhood is not likely to be lost or neglected as one grows older. If our small maidens learn how to do this one little task neatly and daintily they will not only be able to help mamma when she requires it, but they will have at their fingers' ends an accomplishment some grown persons do not possess.

The only terms we exact are that you must not be over eleven years old and must do the work entirely without assistance. To the one who sends the neatest work we will mail a little collection of very beautiful, hardy plants.

You can have until the 20th of March to send in your specimens. Please address them to your friend, ROSE GERANIUM.

Sycamore Dale, W. Va.

A FISHY TRANSACTION.

BY A FISH.

ONE striking difference between dreaming and being awake is that in the former state nothing surprises you. No matter how extraordinary your adventures, or how impossible the circumstances in which you find yourself, you accept them as coolly as if you were discussing your neighbors' misfortunes. It was for this reason, I suppose, that I did not experience the slightest astonishment on finding myself transformed into a salmon. Stay, "transformed" is hardly the word, because I was myself as well as the salmon. I remember I wanted to sit down, and was much troubled because I couldn't; also, I wanted to take out my watch, and see what time it was. "Transmigration," again, will hardly express what happened to me, for I was not merely a human soul in a salmon's body. I wound up my dream by dining off myself—without either lobster-sauce or cucumber, which in my two-fold nature I regarded both as a slight and a misfortune. Suppose, then, we say I found myself amalgamated with a salmon; or, rather, that a salmon became my *alter ego*, or other self. This is much nearer the mark, but it is not quite right yet.

For I was distinctly salmon in shape, and distinctly man in thought, though some of my organs performed very unsalmonlike feats, and some of my appetites were woefully inhuman. For instance, the first thing I did was to glance admiringly down my rainbow back and silver sides, which a real salmon could not do; and, a little later on, I found myself making a hearty meal off a few hundreds of my own young, which a man would never think of. Nevertheless, when I came to pick my teeth, I found my hand a fin; and when I became enamoured of a choice young beauty of my tribe, I was afflicted with a strong desire to eat her. At the same time, let it be understood that in my dual nature I was conscious of being a highly superior and responsible fish.

I knew that I belonged to the proudest aristocracy of the oceanic polity; we were privileged only to be taken in certain specified ways at certain specified times of the year; that, when we were taken, we were destined to be eaten by those only who could afford to serve us up nicely; and finally, that we of the particular river I had fixed upon as the scene of my inland excursions, furnished forth every year something like eight hundred thousand pounds of food for the population without costing a penny in breeding and rearing beyond the sums spent in protecting us according to law. Add to this that I was a very large and very handsome fish of my kind, and that I had a fine family, numbering somewhere about ten millions—whom, as a salmon, I regret to say, I cared nothing about, but whom, as a man, I was sorely desirous of bringing up in the paths of virtue—and you will at once see that I was a being of high distinction and importance.

Propelled through the silent, glittering water by my tail (to which I found all the stronger muscles of my body tended,) and balancing and guiding myself in graceful curves by my pectoral and ventral fins (which I found to correspond anatomically with the arms and legs of the human body,) I sailed past salmon-trout, bull-trout, and the "lower orders" of salmon generally, with majesty—bestowing upon them, indeed, a gracious inclination of the head if they made due obeisance, but otherwise giving them the go-by with a seeming dignified unconsciousness of their existence. It is true I had an uneasy remembrance that when I was a parr—for, unlike what obtains in human affairs, the parr is a child instead of a father, and being an old salmon, I had passed through all the preliminary stages of parr, kelt, salmon-peal, and grisle—I had, I say, an uneasy remembrance that when I first came into the world I had often been caught with and mistaken for the offspring of these "lower orders" and thrown into the water again. But I was a real salmon now, and was determined not only to keep my position, but to make it felt. So, as I say, I sailed past all sorts and conditions of inferior fry with obtrusive majesty, or at the most, if I felt in a particularly playful humor, would condescend to dart suddenly amongst a shoal of them with my terrible curved lower jaw—a deadly weapon of offence carried by old male salmon—ready for action, and scatter them to all points of the compass at once. I did not do this often, for the peculiar construction of my mouth forbade laughter, and inward convulsions of merriment were likely to inconveniently disarrange my gill-fringes.

With my experience as a salmon, and my knowledge as a man, I found these gill-fringes a fruitful subject of investigation and study. They were my breathing apparatus—I say advisedly "breathing," for fishes do not live upon water, but upon air. As regularly as a human being respires, I opened my mouth and closed it again, taking in at each gulp about a pint of water, which, with the aid of four pairs of bony plates, I shot out through my gill-fringes with this difference in its constituents—that whereas it passed in at my mouth full of air globules, it passed out at my gill-orifices, leaving every air-globule behind it to supply my blood with oxygen and so sustain my life. I then knew that the huge forests in old ocean were as necessary to fish-life as vegetation upon the earth is necessary to other animal life, and that the great winds which wreck ships are vital to the myriads of creatures that live beneath the waves; and I determined that when I ceased to be a fish—for by a kind of dream within a dream I knew that this must happen shortly—I would take the first opportunity of advising such of my friends as keep aquaria to be very particular that their tanks are well supplied with plants, and periodically aerated.

The general construction of my mouth astonished me nearly as much as the construction of my gills. Not only had I teeth all round my upper and lower jaws—not fitted in like human teeth, but forming part and parcel of the bone itself—but I also had two rows on my tongue, and a few in the roof of my mouth. And I found this arrangement very convenient; for it must be remembered that my mouth was the only thing about me with which I could lay hold upon my prey, and I was terribly voracious, eating fifty or a hundred small fry at a meal. Not that I confined myself to small fry; I could eat almost anything, from trout-fly or the eggs of shell-fish, to a good-sized herring. And it was when engaged in munching these latter gentlemen, that I found my supplementary teeth most useful—I could hold the rascals between my tongue and the roof of my mouth while I opened my jaws for a renewed bite. Another thing that pleased and surprised me was the rate at which I could sail through the water. I could do my thirty miles an hour for an hour or two easily, though I did not usually travel more than ten or twelve—sometimes not that.

And now I approach the end of my adventure as a fish. I had gone up and down my river regularly season by season, until I knew every cataract in it, and had become so expert in leaping, that the salmon-ladders kindly placed up some of the weirs to help us over our difficulties, were to me useless. I had even become so accustomed to the ways of salmon anglers that I had playfully swallowed a bait or two on my way down stream in the kelt state, to see what being caught was like, well knowing that as soon as I was taken I should be thrown in again with disgust. But one day, I don't know how it was, I found myself lying upon the bank. The next thing I remember was that I sat at table dining off myself with relish, and the next that I woke up in my easy chair with a yawn and a kind of dim consciousness that on the whole, I had had a very strange dream.

The Puzzler.

MISCELLANEOUS ENIGMA.

I AM composed of 41 letters:
My 13, 28, 32 has been very scarce this winter.
My 28, 40, 1, 33, 41 what my 28, 25, 13, 15, 39, 21, 32, 30 like.
My 4, 15, 36, 6, 25, 29, 35 an animal.
My 23, 9, 5, 18 an insect.
My 6, 20, 2, 27, 12, 41 not ugly.
My 11, 17, 34, 14 one who has not much brain.
My 26, 35, 8 a busy little insect.
My 23, 22, 38, 14 an important constituent in the manufacture of our clothing.
My 24, 13, 1, 36 a kind of drink.
My 10, 19, 6 a fancy young man.
My 31, 7, 31 what small boys are sometimes called.
My 3, 37 the abbreviation of one of the United States.
My whole is an old and good saying.
☞ Answer in two weeks. LUCY.

CROSS-WORD ENIGMA.

My first is in Loire but not in Tagus,
My second is in Potomac but not in Indus;
My third is in Patapsco but not in Seine,
My fourth is in Raritan but not in Tyne;
My fifth is in Jordan but not in Moser,
My sixth is in Thames but not in Tiber;
My seventh is in Boyne but not in Oder,
My whole is a river often fought over.
☞ Answer in two weeks. BALTO.

QUADRUPLE CROSS-WORD ENIGMA.

My first is in checkerberry but not in anise seed,
My second is in cantharides but not in flower seed;
My third is in nectarine but not in camphor gum,
My fourth is in strawberry but not in egg plum;
My fifth is in citron-melon but not in thyme,
My sixth is in nannieberry but not in lime.
My whole form four kinds of fruit.
☞ Answer in two weeks. FLORIDAN.

PUZZLER ANSWERS.—Jan. 26.

HIDDEN BIRDS.—1, Ostrich; 2, Swallow; 3, Blackbird; 4, Raven; 5, Woodcock; 6, Pheasant; 7, Partridge; 8, Snipe; 9, Cockatoo; 10, Woodpecker; 11, Paroquet; 12, Cuckoo; 13, Bluebird; 14, Hornbill; 15, Dodo; 16, Goshawk; 17, Petrel.

ENIGMA.—Drum.

CHARADE.—Artless.

BURIED ENGLISH CITIES.—1, Ellon, Lyons, Bute, Ware; 2, Ayr, Dover, Bath, Stone, Oxford; 3, Leith, York, Oldham, Perth, Boyle, Ely.

Sabbath Reading.

SLEEP.

O GENTLE sleep! the gracious gift and blest,
Of God's own sending;
O sacred sleep! dear foretaste of that rest
Which knows no ending;
Sweet promise of that far-off Paradise
Of calm release,
Where weary ones may lean on Jesus' breast,
And close their eyes,
And be at peace.

Earth "presses down;" the hearts that would ascend
Droop, faint and weary;
So distant seems the lifelong journey's end,
The way so dreary;
Each day's fierce struggle tires us out as though
We could no more,
Then comes thine handmaid, Sleep, our griefs to tend,
With balm for woe,
And strength in store.

We lay us down in peace,—thy touch divine
Our eyelids closing;
Darkness,—thy secret place,—becomes the shrine
Of our reposing;
Gently we breathe our souls into thy care,
So glad to be
One day more near to that home-rest of thine,
Which we may share
With saints and thee.

So night by night we linger at thy feet,
Until the morning;
Glimpses of heaven, bright visions pure and sweet,
Our dreams adorning;
And if thy voice, kind Lord, we seem to hear,
That word most blest
For willing souls, with sympathy replete,
Falls on our ear,
"Sleep,—take your rest!"

[*Genevieve Irons.*

IMMORTALITY OF THE SOUL.

BY OLD JONATHAN.

AN eminent divine was once trying to teach a number of children that the soul would live after they were dead. They listened, but evidently did not understand it: he was too abstract. Snatching his watch from his pocket, he said:

"James, what is this I hold in my hand?"

"A watch, sir. "A little clock," says another.

"Do you all see it?"

"Yes, sir."

"How do you know it is a watch?"

"It ticks, sir."

"Very well. Can any of you hear it tick? All listen now."

After a pause, "Yes, sir, we hear it."

He then took off the case, and held the case in one hand and the watch in the other.

"Now, children, which is the watch? You see there are two which look like watches."

"The littlest one, in your right hand, sir."

"Very well. But how do you know that this is the watch?"

"Because it ticks."

"Very well again. Now I will lay the case aside—put it away, there—down, down in my hat. Now let us see if you can hear the watch tick."

"Yes, sir, we hear it," exclaimed several of the children.

"Well, the watch can tick, and go, and keep time, you see, when the case is taken off and put away in my hat. So is it with you children; your body is nothing but the case, the soul is inside. The case, the body, may be taken off and buried in the ground, and the soul will live and think, just as well as this watch will go, as you see, when the case is off."

This made it plain, and even the youngest went home and told his mother that his "*little thought would tick after he was dead.*"

THE VALUE OF A MINUTE.

A SMALL vessel was nearing the Steep Holmes in the Bristol Channel. The captain stood on the deck, his watch in his hand, his eye fixed on it.

A terrible tempest had driven them onward, and the vessel was a scene of devastation. No one dared to ask, "Is there hope?" Silent consternation filled every heart, made every face pale. The wind and the tide drove the shattered bark fiercely forward. Every moment they were hurried nearer the sullen rock which knew no mercy—on which many ill-fated vessels had foundered, all the crew perishing.

Still the captain stood motionless, speechless, his watch in his hand. "We are lost!" was the conviction of many around him.

Suddenly his eye glanced across the sea; he stood erect; another moment, and he cried out, "Thank God! we are saved, the tide has turned; in one minute more we should have been on the rocks!" He returned his chronometer, by which he had thus measured the race between time and tide, to his pocket; and if they never felt it before, assuredly both he and his crew were on that day powerfully taught the value of a minute.—*Children's Hour.*

MANY a Christian has been made worse by the good things of this world; but where is the Christian that has been bettered by them?

GOD thrusts many a sharp spear through many a sinner's heart, and yet he feels nothing, he complains of nothing; these men's souls will bleed to death.

COLD prayers shall never have any warm answers. God will suit his returns to our request; Lifeless services shall have lifeless answers. When men are dull, God will be dumb.

PERSONAL ITEMS.

Colonel Robert Ingersoll says he made $20,000 by his recent lecture tour.

The Hon. "old Ben" Wade, who is now seventy-seven years of age, is suffering from disease of the kidneys, and his friends feel great anxiety on his account.

Shack Nasty Jim, the once famous Modoc, has raised 1200 bushels of corn, and wants to learn the process of preparing it so that it may be eaten out of a flask.

Such are time's changes that a Napoleon has lately been the guest in England of a Wellesley, the ex-Prince Imperial having been staying with the great Duke's grandnephew, Lord Cowley, at his seat, Draycot, in Wiltshire.

The Queen of the Gypsies, Mrs. Matilda Stanley, whose authority as such is recognized by all the tribes in the United States and Canada, died a few days ago in Vicksburg, Mississippi. Her remains have been taken to Dayton, Ohio, where her "family" owns much real estate.

W. E. Chandler, who charges President Hayes with bargaining with the South, is about the medium hight, but very slender and insignificant in appearance. He has a small head, garnished with dry, light hair; small gray eyes, partially hid behind glasses; a rather weak face, with a beard that seems to be apologizing for its appearance that is bad.

When the Duke of Edinburgh was in New Zealand, he was introduced to the Rev. Mr. Piaratanatissatarrunanse. But that clergyman, writes Mr. Conway, must hang his head at the curtness of his name, if his eye should alight on the report of the trial of a clerical brother in Wales for obstructing a highway. The defendant is described as the rector of Llanfairpwllgwyngllgogerytysilliogogogoch.

The home of Mr. Thurlow Weed, the veteran politician, in New York, is a pleasant but not pretentious house, situated at the corner of Twelfth street and Fifth avenue. The only notable things about it are a large flag staff projecting above the door, and a beautiful display of rare hot-house flowers in two or three windows. Mr. Weed seems very fond of flowers, for the window conservatories are kept up all the year round.

Ex-Gov. Young of Ohio, and Governor-General Dufferin of Canada, happened to meet at a reception in the White House on the 28th ult. The ex-Governor was born on the estates of Earl Dufferin's father, in the north of Ireland. There is only a difference of two or three years between the ages of the Earl and Mr. Young, and a pleasant hour was passed together by the two gentlemen in recalling reminiscences of their youthful days.

The Strohl family of Mauch Chunk, Pa., is probably the largest in the United States. Nicholas Strohl is a Pennsylvania German, now 76 years old. By three wives he has had thirty children, twenty-seven of whom are living. The youngest child is now three years of age, and was born when its father was 73 years old. Nineteen are married, and their families average eight children each. At a family gathering they numbered over 200.

A modern "Robinson Crusoe" owns and occupies Quiros Island, a neighbor of the Samoan group, where he has lived for over thirty years. He is an American, Eli Jennings by name, and has a Samoan wife and many olive branches. The island is about three miles long and from one to one and a-half wide, and is some 200 miles north-northeast of the Samoan group. The patriarch is well-to-do and happy as a lord, and verily he is monarch of all he surveys.

The family of which United States Marshall Frederick Douglass was a slave in his younger days, has always kept with him the most kindly relations. Mrs. Sears, of Baltimore, is the daughter of his former master on the Eastern Shore of Maryland. Her husband a few days since sent the following dispatch: "My wife is dying, and wishes to see you; come immediately, if possible." Mr. Douglass was affected to tears, and obeyed the summons at once.

General Diaz is a very unostentatious man, and lives within his moderate means. The White House at Washington is a palace compared with the simplicity of his surroundings. It has, like all Mexican houses, a large court-yard, and is two stories high. There are no soldiers nor flunkies to bar the way. The general is a man of fine presence, every inch a soldier, tall and straight, rather spare than corpulent. He wears his thick dark hair closely cut, a medium-sized moustache overshadowing a clean-shaved chin. He is a man of about forty years of age. His manner is cordial, and bears, like his face, the impress of boldness and frankness. In fact, there is a magnetism about the man which, perhaps more than anything else, has raised him to his present eminence, and is the cause of his great popularity.

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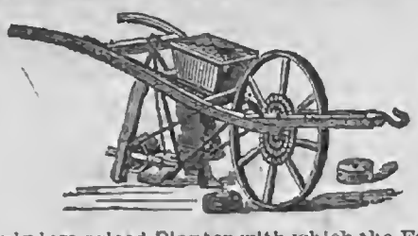

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SPARKS AND SPLINTERS.

AUTUMN leaves—and doesn't carry her trunk with her.

THE drop-curtain is so called because the gentlemen go out for a drop while it is down.

AMONG the items in a plumber's bill are: to searching gas leakage, 50 cents; to having found it, $1.

"I DO not ask thee for thy hand," as the child said, when gazing earthward o'er its parent's knee.

THE Rev. Mr. Tooth, the English ritualist, has a beautiful set of twins, who are commonly known as his "little double teeth."

IT is asserted of a Philadelphian that he died "worn out by too severe mental effort in the study of how to live without work."

EVERY Turkish commander in the field has a crescent over the door of his marquee. Can this be termed a symbol of disc-on-tent?

MAY be they did "have giants in those days," but they couldn't have looked any bigger than a free-born American citizen feels when he's in a procession.

Now does suffering humanity eagerly scan the report of patents granted for the week ending, to see if somebody hasn't invented a nose that will stay blowed.

"TRUTH lies at the bottom of a well." We have often verified this by looking down into a well and seeing Truth's honest countenance in the smooth water.

A POLITICIAN who escaped from a burning hotel, clad only in an undershirt and a pair of socks, said it was the nearest he had ever come to taking a nude departure.

SAID a gentleman (?) to a Professor who was expounding the Sanscrit: "What makes your breath so offensive?" "Guess it must be the dead language," replied the Professor.

THE coal combination has already put up the price of coal. This will make no difference to the poet Whittier, however. He has received odes enough during the past two months to keep him in fuel for at least two years

I'M waiting 'neath the window, love, upon the porch's seat; I'm waiting there till you come down your own true love to greet. Don't be too long a-fixin' up; for if I may make bold, I ain't a-goin' to wait here long, a-sittin' in the cold.

A CINCINNATI music publisher has issued three new songs which are entitled: "Tickle Me Softly, Mother Mine," "Touch Me Gently, Father Time," and "Darling Pussy, Why so Sad?" They are said to be very touching melodies.

TURNING THE TABLES.

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Old Gent.—"A Boy! No! Why?"
Young Person.—"Oh, to clean Boots and Knives, carry up Coals and——"
Old Gent.—"Ah, may I ask—can you play the Piano?"
Young Person (dubiously.) "N—no, Sir——"
Old Gent.—"Ah, then, I'm afraid you won't—that is, we shall not suit you. I and my Wife always carry up the Coals, and wash the Dishes, and all that sort of Thing. All we want is some one to play the Piano!"

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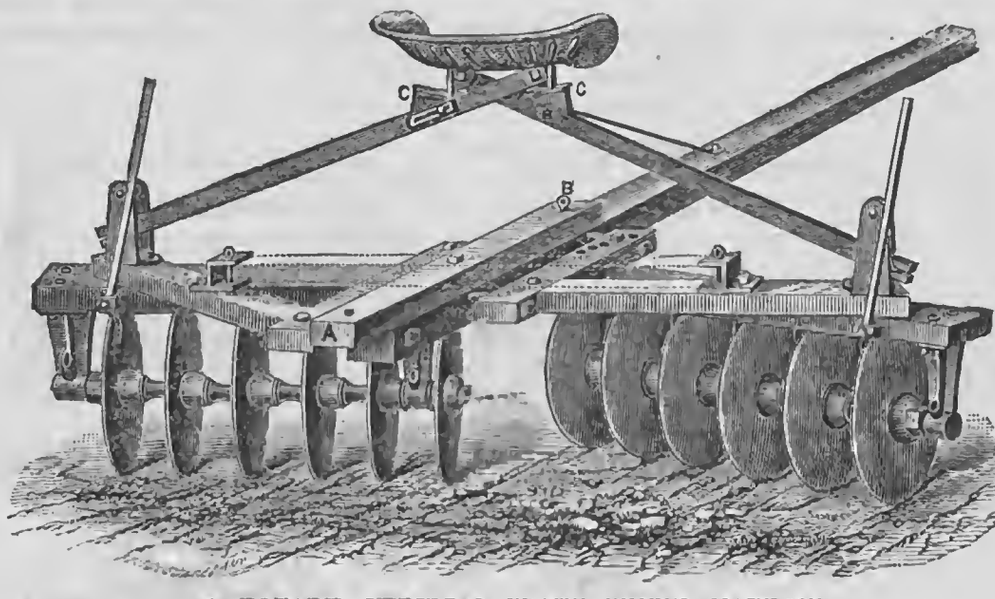

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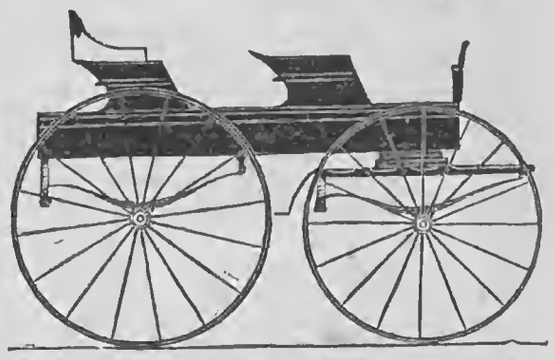

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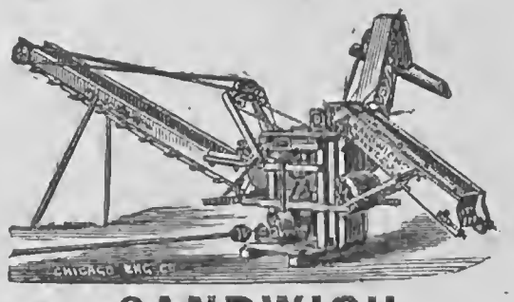

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VOL. XXXVII. No. 7.
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NEW YORK CITY, FEB. 16, 1878.

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Farm Topics.

AGRICULTURE AND EDUCATION IN THE UNITED STATES.

PROF. I. P. ROBERTS.

No. 5.

THAT great power of the nineteenth century, the Press, has benefited Agriculture fully as much as any other industry, and far more than it has politics.

The discussion and debate through the press, relating to the industries, have been for the praiseworthy object of arriving at and disseminating facts, and also of correcting error and removing prejudice; while in politics it would seem at times, as though the only object was to gag truth, and promulgate error; not that some possible good might come, but simply to destroy an opponent. Happily he who engages in agriculture has no need to destroy his brothers in order to arrive at eminence in his calling; for his neighbor's prosperity increases his own.

While the press has done wonders in disseminating useful knowledge that otherwise would never have benefited the world, yet it has been the medium through which improvement has been effected, rather than the direct cause of it; but it has been the cause of removing prejudice against "book-farming." All have come to the conclusion that knowledge is none the less valuable, because gained through the medium of a book or a newspaper. But there are certain kinds of knowledge that all the power-presses in the land cannot give us, though they may guide us to it. One could never become a good judge of Shorthorns by simply studying the Herd-books and Stock journals; he must have the living animal before him, that the eye, the hand, and the judgment may be educated; but the rapidity with which this education is acquired will depend largely on his acquaintance, through books and papers, with the experience of others. If this be true, it would appear that for the most rapid advancement, we need not only the aid of the press but also those great educators, the annual fairs.

Because they are sometimes turned into horse trots, and baby shows, is no argument that the day of their usefulness has passed. Instead of abandoning them, correct the abuses that have crept in and diverted them from their legitimate purposes. The social advantages of these yearly gatherings are alone worth all they cost, to say nothing of the information gained and the desire for improvement that is stimulated to fruitful effort. I trust the day is far distant when farmers will cease to meet together for the purpose of acquainting themselves with the greatest successes of their neighbors and of learning the methods by which these were attained.

FARMERS' CLUBS, CONVENTIONS ETC.

I believe there are no organizations that give so much practical and profitable information for so little cost as some of these local organizations. John Doe of Kentucky publishes an admirable article on corn culture, but it may cause Wm. Smith of Mass., to make some expensive mistakes; for many of Doe's theories may only be applicable to a small extent of territory, possibly not larger than a township, or at most, a county. Therefore, local organizations are of the utmost importance as practical educators; for the successes or failures of one man, if the causes that produced them are explained, are of great value to his neighbor, because their circumstances and surroundings are so nearly identical.

The great advance in agricultural literature has materially injured the local clubs through no fault of the papers but rather of those who read them. The old saying transposed, I think, would be applicable here; "no great gain, without some little loss." It is so much easier to sit by the fire and read, than to go a mile or two in the cold and participate in discussions! The fact appears to be lost sight of that the benefits derived from participation in the meetings are of great value, though no new facts are acquired of local application. I have spoken at length of the small local organizations, because there is great danger of their becoming extinct, which, in my opinion, would be a great calamity; for they are to the larger organizations what the district schools are to the academies and colleges.

As to the larger bodies, such as the State Agricultural Society, Dairymen's Association, Patrons of Husbandry, Horticultural Society etc. I need not speak at length, for they are so well organized and their usefulness is so well understood and appreciated, that there is no one but that bids them God-speed. I am neither a prophet nor a son of a prophet, and therefore cannot predict to a certainty what is in the future; but it is the part of wisdom to look back over the past, that we may be enabled to learn something of the probabilities of the future. I may be of too sanguine a temperament to judge wisely, but when I compare the period of my early boyhood with the present, as to education, methods and results; as to comforts, enjoyment and wealth; as to dignity, morality, and temperance of the rural population, I can but believe that the future has greater prosperity, knowledge, and happiness in store.

I am well aware that we are a long way from perfection yet; but some valuable facts have been established, one of which is that ignorance and agriculture, or rudeness and farming are not necessarily inseparable. True, there are a few fossils remaining who are fearful that everybody will be educated off of the farm; but we need not fear, for the fact is only too evident to all, that as education advances in any locality, agriculture improves in the same

HOW TO DO IT.
Dedicated to our Long Island Fox Hunters.

ratio. We will say no bad things of these relics of a pre-historic period; for they are valuable as a sort of unchangable point from which we may reckon our progress. Since we are agreed, I think, that all knowledge is valuable if rightly used, it would appear to be the part of wisdom to devote our energies to perfecting the methods of imparting and acquiring it, rather than of destroying or crippling the institutions already in existance, because all of their methods are not perfect, or because they are not precociously fruitful. When we see the increased comforts, happiness and education of the average farmer of to-day, as compared with half a century ago, we must acknowledge that the influence brought to bear on agriculture has been on the whole beneficial, and the results highly satisfactory. But notwithstanding all this, much remains to be done, and how can it best be accomplished? I believe the surest, and, in fact, the only means is to educate the masses through general and technical instruction.

Government should gather and prepare statistics, and carry on investigations that are too large in scope, or too expensive for States or local organizations, and above all, cost what it may, it should foster the primary public schools, and if need be, compel the States to establish and maintain them in their greatest efficiency. The States should each establish a general central experiment station, and in time, various special local ones as the industries might require.

To do this would cost large sums of money, but so do alms-houses, prisons and jails, but still we have them because they benefit the public. It costs more to try and hang a single murderer, than it would to establish a respectable experiment station; yet we incur the expense, not to reform the man, such a thing is not thought of, but that law-abiding people may have the protection of the government and dwell in safety. But the prisons and alms-houses are filled, not with the educated, as a rule, but with the ignorant; and so it would appear cheaper and wiser to build school-houses than prisons. And finally, as education is our chief national safe-guard, our shortest road to industrial prosperity and surest one to happiness, I claim that every law-abiding citizen has a right to demand of the Government which he has served and sustained, often at the risk of his life, that it place within his reach and that of his children, every possible facility for acquiring education, wealth and happiness.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

Our winter seems to have begun with spring. To-day we heard the summer birds singing as the rain gently fell, melting away the remnants of one week's sleighing. This rain came most oppertunely, as the cisterns were getting dry and the wells low.

This year is remarkable for heavy hogs. We never knew of so many before. The reason is the mild weather of the fall and the spring-like winter have been most favorable for faltening animals, and then, the price of pork is low and many have fed later than usual, hoping for a rise in the price. We ought to begin feeding earlier. In this section farmers do not generally commence fattening their pork before October. This is two months too late if they would feed to the best advantage; for one bushel of corn in warm weather will actually make more growth than double the quantity in cold weather. Most of the pig-pens are cold, open places, so that a large percentage of carbon is required to keep the animals warm. This heat is furnished from the food, and if there is any surplus after this demand is supplied, then the pig will grow. A cold hog won't fatten. He has got to be warmed up first, neither will he fatten if he is hungry and when he is cold he is sure to be hungry. Warm weather and profit go together. They are mates, and so are cold weather and loss. It is strange that so many farmers think that ears of corn are cheaper to keep out the cold, than hemlock boards, so they stuff their pigs with corn and wonder why they squeal and don't get fat when lumber, at two cents a foot, would keep the wind out of the pen, and a big armful of straw would make a warm nest, and so reduce the cold to a temperature which would make a gain possible. When the mercury in a pig-pen sinks much below the freezing point, profit sinks with it. Four average ears of corn fed three times a day, will keep a breeding sow in good condition in a pen where it does not freeze hard. With such conditions a pig will be well and healthy and a fine litter of pigs may be expected. In an open pen where there are cold drafts, a pig is liable to have rheumatism, quinsy, dysentery, and all other diseases incident to exposure, and colds. No, it does not pay. A pig wants good air to breathe, so does every animal, but it also wants to be kept warm.

Some one, a number of years ago, conceived the idea of having horses wear blankets on their breasts in winter. We thought so well of the idea that we purchased blankets and have used them ever since. They used to be plenty in the country, but now scarcely one is seen. Farmers have got a notion they do more harm than good when horses are traveling on the road. They think they lie against the muscles of the breast, and make it hotter and, when standing, they are blown away by the wind and make the horse wearing them more liable to take cold. There is, doubtless, truth in this. For truck horses and others that stand around in the streets a good deal, they will afford some protection to the breast. It takes but a few minutes for a horse heated up to get a chill in the breast, which is very likely to produce stiffness or founder. The owner is unable to account for it, as he is sure he has not given his horse water when warm or fed him when overheated. Horses will catch cold in the breast while traveling, if they have been heated and are then turned to face a cold wind.

Two Jersey cows which came in last March and are due to calve again in March, are still giving a good mess of milk. They must be dried off this month, as it is unwise to milk a cow up to the time of calving. Cows thus milked, when they come in, will not give as much and the young calf will be thin and weak, unless it may be that the mother has been strongly fed. When allowed to go dry, there is always a renewal of energy and vital force, hence the udder is enlarged, and the lacteal glands are also strengthened and enlarged, resulting in an increased flow of milk. A cow ought, as a general rule, to go dry at least three months, but while the Jersey cows do not give so large a mess, they are persistent, continuing in milk all the time and thus really force their owners to break the rule. We are feeding two new milch cows a heaping half bushel of turnips every day. This is all the extra feed any of our cows get. They have all the hay they can eat three times a day. The turnips impart no perceptible flavor to the milk. The turnips are fed the first thing in the morning and are followed by a generous supply of hay. The turnips are mixed in the stomach with the hay and perhaps their odor is neutralized in this way. The milk is rich and the butter is of fine quality. There is nothing equal to bright, sweet hay as winter food to make good milk. It is, and must be, the most natural and best food. Corn-stalks will produce a good flow, but the milk is not so rich in buttery qualities.

The two bull calves which we shut up in order to give them more condensed food to reduce the capacity of their bellies, in three weeks shrank in circumference seven inches. This reduction makes a decided improvement in their looks. We are now giving them less meal and turnips and more hay. With the lessening in the quantity of turnips, drink is necessary and they get a half a pail of water each, daily. Their hair is glossy, showing a healthy condition, and they jump around like lambs when let out of the stable.

The recent cold snap found the trees full of sap and we are looking for many of them to split open. The weather had been so mild until the cold spell came on, which it did so rapidly, that the trees must be injured, and then it was so cold! From Indian Summer we went to winter and fifteen degrees below zero almost in a night. Such severe changes seldom occur.

Our Canary birds are doing well this winter, living on millet of our own growth, and coarse corn meal, with the particles about the size of a millet seed. The heads of millet are stuck through the bars of the cage and the birds help themselves. They seem to enjoy picking out the seeds exceedingly. Maybe they imagine in so doing that they are free, for so they would do if they were. A handful of millet sown in the oat-field or in the garden, will produce heads enough to feed a pair of birds more than a year. Either the common or the golden millet will answer equally well. We suppose that more than a million of dollars are paid out annually for bird seed. Now, if farmers and those who have a small plot of ground can raise their own seed for feed and add to it a little corn meal, a saving can be made of no small account. Canary birds do not necessarily need the hemp (large seeds) and poppy seeds which are imported for them. For a change the yelk of a hard-boiled egg, chopped up fine and mixed with cracker, is good.

RURAL TOPICS.

T. B. MINER.

NEW BREEDS OF FOWLS.

Whenever a new breed of fowls is heard of in any part of the world, a class of men in this country forthwith import such breeds, and then they are advertised as something wonderful; and they feel such a deep interest in the welfare of the rural public, that they are willing to "spare a few trios at $50 to $75!" This liberal offer is generally made after a large number of fowls has been raised. Now, the most that is said about these new breeds is sheer humbuggery. Note the statements made about the Houdans, Crevecœurs, and La Fleche fowls when first imported, and at what high prices they were sold; and to-day I would not accept a hundred of either breed, as a present, if I were to be obliged to keep and breed them. Then came the "wonderful" Pekin ducks at $20 a pair, and eggs at $10 a setting, which turn out to be no better than several breeds that we had before they were imported; and now we have the "Langshan" fowl, said to have been "discovered in Northern China, by an exploring party!" Not a word of proof is adduced showing these fowls to be worth over 50 cents a piece, yet a breeder of them kindly offers "one trio for $50, and two trios for $90;" but he cruelly adds: "only two trios sold to one person!" Verily, this humbuggery in both new and old breeds of fowls ought to be "played out;" but it is not, and never will be so long as people will throw away their money in buying them.

APPLYING MANURE.

A farmer says that he obtains from 10 to 15 per cent. more wheat, when he spreads his stable manure on the surface of the land, after the seed is harrowed in, than he does when the dung is harrowed in. Now, I claim that such a result is impossible; and the above is, undoubtedly, one of the unreliable statements that some farmers make, without having proved their assertions sufficiently to go forth to the public as *facts*. For instance, one of these farmers spreads his manure on the land and harrows it in as well as he can; and the season is dry, and the result is a poor crop. The next season, he spreads it on the surface of the land, and so leaves it; and the season is rainy, and the result is "10 or 15 per cent." more wheat than the previous crop. Now, what produced this increase? It was not the manner of applying the manure, but the favorable season; yet he straightway writes to his agricultural paper, giving his experience in applying manure, without ascribing the increased crop to the right cause. Scores of such unreliable experiments are published annually in the agricultural press, farmers follow their teachings, meet with failure, and then denounce such writers as "book-farmers."

I claim that manure, to produce the best possible results, should be covered about *two inches* deep, but this is not practicable, as plowing or harrowing it in covers but a small portion of it to that depth; yet if it all could be placed about two inches below the surface of the soil, for all grain and cultivated crops, it would produce much better results than when placed on the surface of the land. Is it not reasonable that a large part of the ammonia of stable dung, when on the surface of the land, *must* pass off into the atmosphere? Suppose we spread a load of stable dung upon a platform, where it is exposed to the sun and air, a month in spring or summer, what would it then be worth? Would any farmer agree to pay 50 cents a load for such dried-up dung? I would rather pay $2 a load for dung while fresh, than 50 cents after the above exposure; and so would any farmer, I think, who uses his reasoning faculties in deciding such a point. I admit that in cases of much rain, not so much of the virtues of manure spread upon the surface of land, is lost; but in all cases a large part of them evaporates.

WESTERN FARM TOPICS,

PROF. E. M. SHELTON.

There is much fear and trembling in the ranks of the ice dealers, caused by the protracted mild weather. Not that mild weather is an anomaly in Kansas winters: far from it; our winters abound in bright, warm sunshine, and days and weeks are not uncommon when wraps and overcoats are superfluous. But usually before February 1st, we have two or three "cold snaps," lasting from a few days to a couple of weeks, in which the mercury goes capering down far below the zero point, and indescribably fierce winds blow, ice from ten to sixteen inches forming in a few days. Our winter weather averages mild and agreeable, albeit should you travel in Kansas in July or January, provide yourself with an Ulster and a fan, a linen duster and a gum coat, for the chances are that you will need them all every two days of your journey.

The past two weeks have been very like the two weeks previous; the temperature of the days has held pretty uniformly between 40° and 59°, three or four rainy days having been had and a total down-pour of one inch of water. The result is, the roads are everywhere abominable, and along the bottoms, quite impassable except on horseback.

A KANSAS ORCHARD.

In the Rural of December 22nd, I read a very instructive article from the pen of Professor Beal, in which a model Michigan orchard is described and the details of its management given. It occurred to me at the time that some of our Kansas orchards need not be ashamed to hold up their heads, or tops, even in the presence of those great Michigan orchards. Comparisons in agricultural affairs, ought never to be odious, for they are usually full of instruction to the farmer.

The particular orchard which I now have in mind, is the property of Mr. Welcome Wells, and is situated in the Kaw Valley, 115 miles west of the Missouri River, and three miles east of this city. This orchard deserves particular mention for three reasons; it is one of the best if not *the* best orchard in a State whose principal crop is popularly supposed to be grasshoppers; it is situated quite beyond what is generally considered the extreme western limit of the fruit-growing area; and finally on account of its thriftiness and very great productiveness. This orchard occupies thirty-five acres of ground and all, except a few trees around the house, were set in 1866. The soil is very rich alluvial bottom-land, having a clayey subsoil, but it is no more fertile than the average of the four or five mile wide strip of Kaw bottoms, that extends 150 miles west of Kansas City.

The first thing that strikes the visitor on entering the orchard, is the low heads and the surprising uniformity of the trees. The clean trunks are rarely more than two feet high, and many not eighteen inches, while every tree is as nearly alike every other, as the individuals in a herd of Devon cattle or Berkshire pigs. This matter of low heads Mr. Wells insists is a vital point to the Western orchardists. The low heads shade the ground, and check evaporation, besides protecting the trunk of the tree from our blazing July suns and scorching winds. Again, the bushy, unpruned heads of these trees appear strange to one accustomed to Eastern orchards. Mr. Wells expresses himself very emphatically upon the subject: "You would kill your trees in a single season," said he, "if you pruned them as trees are pruned in the East; prune but very little," he went on, "and the less the better.

This orchard has the indispensable adjunct of all Western plantations—a "wind-break," and a magnificent affair it is, consisting of three to five rows of trees—Cotton-woods, Black-walnuts, Honey Locusts, Soft Maples and White Cedars—ten feet apart and flanked on either side with a vigorous Osage hedge, all planted at the same time with the orchard, in 1866. The wind-break completely surrounds the orchard, and it is worthy of remark that the best yields and the fairest fruit are obtained next this wind-break on the south side. I saw here Soft Maples that were set out in 1866, and are now great trees, twenty feet or more in hight, having trunks six to eight inches in diameter. I was particularly struck with a double row eighty rods long, of White Cedars the seed of which was sown in 1866, and which have already attained a hight of fifteen and twenty feet, and although the rows and the trees in them are ten feet apart, they now form such a dense mass of evergreen foliage as would puzzle a rabbit to penetrate.

I made several measurements of the apple trees; thus a Wine-sap, a fair average of the orchard, measured twenty-eight feet in the diameter of its top, and its trunk, thirty inches in circumference. Around the house are a few trees of standard Eastern sorts set out in 1861. Of these, a Rhode Island Greening measured forty inches around the trunk, and its top twenty-nine feet in diameter. A Talman Sweet measured forty-three inches in circumference of trunk and thirty-four feet in diameter of top.

The trees in the younger portion of the orchard yielded, the present season, in many cases sixteen bushels of fruit, and in a number of cases, twenty measured bushels were picked from a single tree. In 1876, four thousand bushels of apples were sold from this orchard, in addition to those used in the family and made into cider. The average price in the orchard was $1.25 per bushel. The yield of 1877 has been even better than this, over five thousand bushels having been sold at an average price of one dollar per bushel. Mr. Wells has taken, in the past two years, in cash, from the proceeds of this orchard, no less than $10,000. Do Eastern orchards generally give better results than this?

The great success of this orchard may be attributed: (1) to the selection of sorts suitable to this climate — Wine-saps, Limber Twigs, Ben Davis, Rawle's Janet, Jonathans, Early Harvest and Red Jones, being the prevailing sorts; (2) to judicious management, good cultivation, low heads and very moderate pruning; (3) to the thorough protection it receives from the wind-break; (4) to the excellence of the soil, it having never yet received a load of manure.

January 30th.—Within the twenty-four hours that have passed since the above was written, we have had eight hours' rain-fall, and twelve or more of snow. This morning there are fully six inches of snow on the ground, and aloft, a bright, warm sun that will melt it all within three days.

Manhattan, Kansas.

Farm Economy.

MANUFACTURE OF MAPLE SIRUP.

HAVING had considerable experience in the manufacture of this, which is among the most wholesome as well as agreeable sweets we are permitted to enjoy, I thought that perhaps I might be able to give some of the readers of the RURAL some instructions that would aid them in making a pure article from the sap of the Maple.

To begin then: I would say, that in order to secure a pure article, no foreign substance should be permitted to find its way into the sap, from the time it leaves the tree till it is ready for use, either in the form of sirup or sugar. I have observed that most writers on this subject have taken the position that a first-class article of this product cannot be made without the use of all the modern improvements, many of which are, in cost, beyond the means of a large number of our farmers. Now, although I am willing to admit that these things are all very fine and convenient to have, and would advise all who have the means to afford it, to invest in some improved evaporator and other things of a like kind, still, I maintain that with the necessary care, just as fine an article can be produced with the common sheet iron boiler as with the best of those appliances. Neither would I argue that for a man of capital the improved evaporator would not be the most economical; but a poor man sometimes must do as he can, not as he would, and what I wish to show is, how people of this impecunious class may have an article equal to the best, and with *absolute cleanliness*. I know that a first-class article can and has been produced, where the sap has been caught in common wooden buckets. Indeed, previous to the introduction of tin buckets, I made an article equal in quality to any I have ever seen, and I believe as good as ever was produced. Still I would not be understood to recommend the use of wooden buckets in preference to those of tin, as I think, all things considered, the latter are the most economical; but I only wish to show that the appliances used are matters of less importance, than that everything which can give any color should be kept from entering the sap; for while a considerable quantity of foreign substance will not perceptibly color a hundred pails of sap, still when the whole is boiled down to a compass of only a few gallons, the coloring matter is so concentrated as to give a considerable tinge to the sirup.

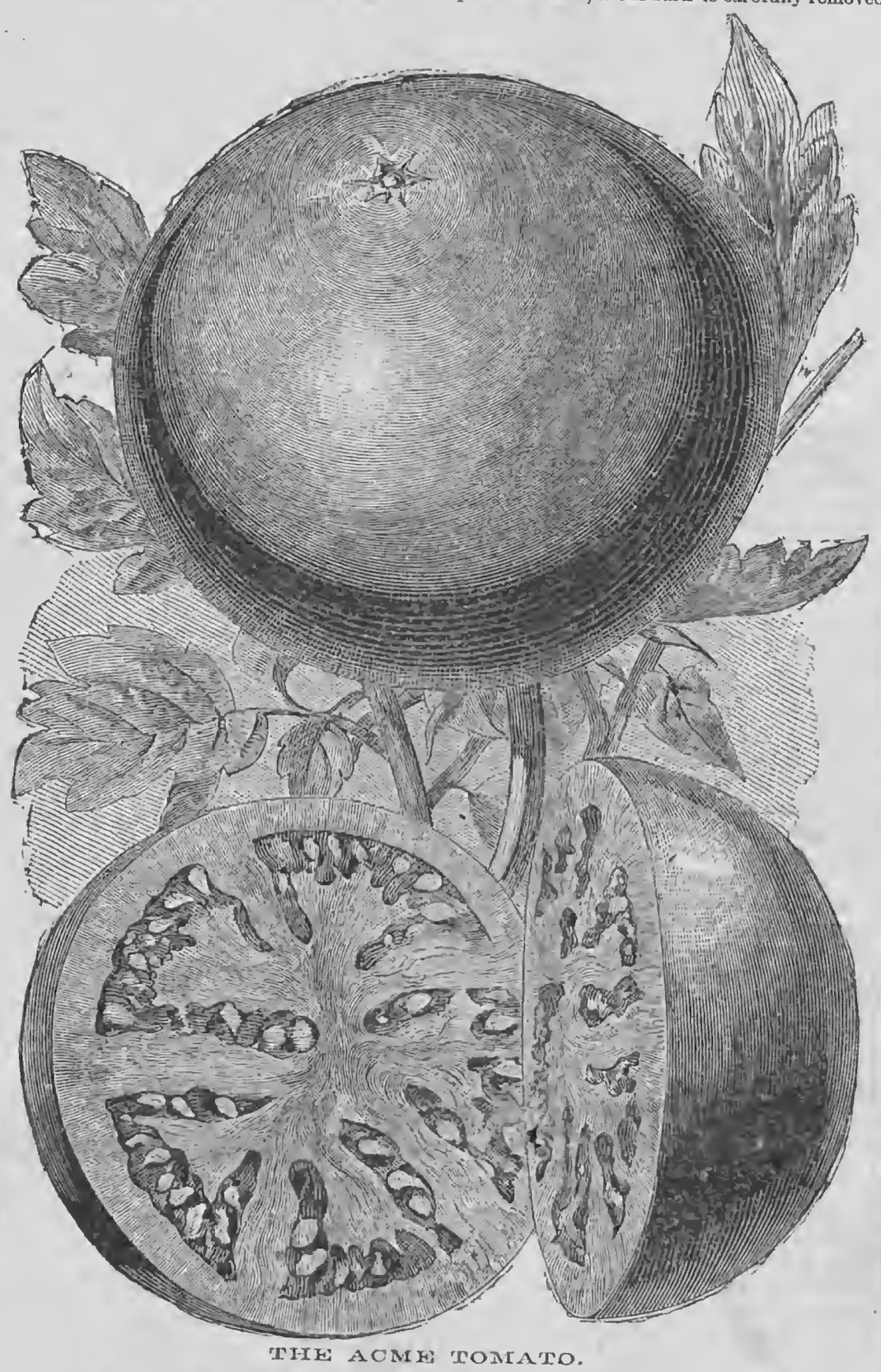
In regard to dishes, as I have already said, I believe the tin buckets to be, all things considered, the most economical, and those with covers would, of course, be an improvement, as in this way everything injurious could be kept out of the sap. As to spouts or spiles, there is a patent spile which I believe gives universal satisfaction wherever used; but if one wishes something less expensive, a very good spile can be made from scraps of sheet-iron, cut into pieces about four inches in length, an inch in width at one end and an inch and a half at the other, and this can be obtained at small cost at any hardware store. With these spiles, I should bore to a depth of about an inch and a half, using, in the first place, a $\frac{5}{8}$-inch bit and driving the spile well into, but not through, the bark, sharpening the wide end for this purpose. Then, when the trees have become dried up, and a new run comes on, they can be re-bored with a $\frac{3}{4}$-inch bit without removing the spile, and they will run nearly as well as freshly-tapped trees. And here is one advantage with these spiles that is not possessed by the patent article.

Of course, no one will, in these times, think of anything but hanging up the buckets; and with the tin buckets this can conveniently be done by simply driving a nail into the tree. For those who use the wooden buckets, a very convenient hook can be made in the form of a fish-hook without the barbs, to be driven in the tree with the hook turned down. The top of the bucket can then be hooked in between the hook and the tree. In using the wooden buckets I always, at the end of the run, turn them bottom upwards, and hang them by the chine to the hook, and when a new run begins, they are dry and sweet, which is not often the case when they are left partly filled with sap and rain-water.

The next thing to consider is: how shall we gather the sap? I use for this purpose a tub made smallest at the top and holding about thirty pailfuls, with a head in each end, and a semi-circular door sawed out at the top. Select for the boiling place, if possible, a sidehill or knoll where the boiling arch can be built at the lowest point; the store tub is to be set above this, so as to discharge the sap by leaders into the pans; and still above this drive, with the gathering tub, building up a bridge, if necessary, to get the sled on which the gathering tub is fastened, high enough to draw the sap from it into the store tub, thus saving all handling of the sap after it is gathered into the drawing tub, till taken from the pans as sirup. Arrange a cloth strainer over the store tub, through which to pass the sap, thus removing all leaves, etc., which may be in it.

One word more in reference to the construction of the arch, and I will close for this time, though perhaps I may hereafter say something further in reference to converting the sirup into sugar. It is important, in order to keep out from the pans all ashes, etc., that the arch should be as nearly tight as possible. Procure a casting for the back end of the arch, with holes for stove-pipe at each end, and let it be of the length you wish your arch in width. By this means you can best secure the necessary draft, the amount of pipe required depending in a great measure on location of the boiling place. Then build your arch of stones, using for mortar a compost made of equal parts of clean horse-manure and common loam, which is better for this purpose than lime mortar, or anything else I ever used.

S. J. B.



THE ACME TOMATO.

Horticultural.

A NOVELTY.

Among novelties in Tomatoes, we know of none more promising than the ACME, of which we present the accompanying excellent portrait. Mr. B. K. BLISS of this city, who will offer it in his spring catalogue, states that it has been carefully tested the past season in many localities, and that "all agree that it is not only one of the earliest, but the handsomest variety ever introduced." The tomato is of medium size, round, slightly depressed at the ends, very smooth. The color is a dark-red, with a purplish tinge. It ripens all over at the same time, and bears continuously until frost. It is said to be delicious in flavor, to have no green core, and but few seeds.

We hope to test the Acme for ourselves next summer, and to be able to confirm the above high claims.

SLITTING THE BARK OF HIDE-BOUND TREES.

I NOTICE in the issue of January 19th, an article on "Slitting the bark of Hide-bound Trees" and the opinions of several eminent horticulturists on the practice. As I have experimented considerably in this line, I give the results.

Whenever it is done during the fall or winter, it has seemed to injure the tree, leaving a wound slow to heal and liable to crack deeper, or the bark is apt to peel up from the edges of the slit; but when done toward the longest days in the year, or sometime in June, it has healed over at once without injury. In fact, a tree may be peeled all over, if the bark is carefully removed, without scraping the inner surface, or what, when peeled, is to be the outer surface or new bark of the tree, and this without doing any harm. As to its advantages—if the tree is healthy and thrifty as trees should always be, it is of no use—but if from any cause a tree stops growing and becomes "stunted"—remove the cause, and yet the tree will not start; but cut away some enfeebled limbs, and remove or slit the bark, and the tree starts at once. Two years since, we had a six-year-old block of nursery apple and pear trees somewhat "stunted," that came into our hands by purchase of the land. As we wished to plant an orchard, and these trees were not very salable, we set 2,000 of the apple trees and 1,000 of the pear trees in an orchard, believing that, as they were healthy, they could be made thrifty. They barely lived the first season but made no growth. Last spring, in April, we trimmed about half the orchard pretty severely, and slit the bark of some of them in *June*; those that were only trimmed grew well, but those whose bark was slit, out-grew the others and the bodies swelled out—and were much more stocky than those not slit. The bodies healed up where slit, and took on a much more glossy appearance, and were altogether more handsome trees. We also fancied when there was a tendency to blight, that the slitting was beneficial, at least there was no appearance of blight among those that were slit, and there were half a dozen cases among those not so treated. The trees that were neither trimmed nor slit, scarcely made any growth of top, but inclined to sprout up near the root, and along the bodies, rather than to make top growth.

We also had an orchard of some 200 trees, six years planted, on a farm bought three years since, that stood in a meadow and looked badly. We seriously considered the question of removing them and replanting, but decided to try renovation; we drew from the streets of Rochester such coal ashes as we could find, and put half a load around each tree, first trimming off close to the trunk the mass of sprouts growing around the roots, and cutting out all stunted and dying branches, leaving the head open, and the limbs not crossing each other. In June we slit the bark of the worst looking trees, and now passers-by often remark, "What a fine, thrifty, young orchard you have!" We have since plowed the ground and shall not seed again for four or five years; we shall use at least a load of coal ashes to each tree, as a mulch and to keep away insects. This orchard has lost by neglect at least three years in growth; but we think has fully regained its health and vigor. We always find it difficult to start a new growth on a tree that has stopped growing in the nursery, but prefer to cut back to the ground again, when without other treatment, it will grow well. J. B. J.

THE LAW AS TO THE SALE OF TREES.

YOUR correspondent "Ruralist," in his report of the late meeting of the Western New York Horticultural Society, was misled into saying that it was found that there must be fraudulent representation to make a nurseryman liable for the sale of spurious trees. One member *did* state from hearsay that such was the rule laid down in the case of Van Wyck vs. Allen, and that judgment was given for the plaintiff only because the defendants had represented that their cabbage seed was grown by a particular man while that supplied was not; but after the adjournment I was enabled to point out to the gentleman referred to, from an official copy of the charge of the judge, that in that case the Court expressly refused to charge that the representation referred to was material and instructed the jury that the vital point for them to determine was whether or not the seed sold was, in fact, "Early Flat Dutch Cabbage."

Damages are no less serious in their effect upon the sufferer because they are the result of negligence or mistake rather than of wilful fraud, and when one of the two men must suffer, the law naturally chooses to place the loss on him by whose mistake, negligence or fraud and at whose profit the damage occurs, rather than on one who has had no part or lot or profit in bringing about that result. It says: "If a man come to me and asks to buy a particular article, not readily distinguishable, and I give him one resembling it, I thereby warrant to him that the article supplied is the article asked for, and undertake to make good to him the damage, which naturally follows from its failure to be such article." Any other rule would be a cloak for swindling, because it would compel the sufferer to not only prove that he had suffered by his adversary's act; but it would force him to reach down into the secret chambers of the swindler's heart and prove that he intended to swindle. Happily the law is not so capricious as that.

In principle the law is all right and it is unfortunate that a fear of its execution does not deter many from committing frauds now prevalent, or drive out of business those who are incompetent to transact it rightly; but the difficulties incident to proving claims under this law are, owing to the nature of the articles affected by it, so serious that few will avail themselves of its provisions unless their damages are great or the circumstances under which they arise very aggravated. EUGENE GLEN.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

ALLIUMS.

THE Allium family of bulbs, although known for many years, are very seldom met with in the flower garden. They have been very much neglected, not only by amateurs but by scientific cultivators. This is probably due, in part, to the very savory name, Flowering Onions, by which they are commonly called. It is perhaps too suggestive of the vegetable garden to allow them a place among the flowers. They are, however, except in name, entirely unlike that tear-productive vegetable.

For several seasons I have grown and flowered the several differently colored varieties, with the greatest of pleasure and satisfaction. Indeed, I had no handsomer bed in the garden, than my bed of white, blue and yellow Alliums. Of the white variety, I had specimens over two and a half feet high, the umbel of flowers being eight inches across. Without reflecting on the beauty of other bulbs, I can safely say there are none better for border ornamentation, and that they should occupy places where many far less showy plants have found favor, merely because they have a higher-toned appellation. They have much to recommend them; the several varieties are all hardy, require no particular care to bloom very satisfactorily and produce yearly masses of beautiful and showy blooms; the flowers last for a long season, at least two to three weeks longer than Hyacinths.

There are three varieties in ordinary cultiva-

tion, Allium azuroum, a handsome bluo flowered variety growing one foot high; A. Moly album, a pure white variety attaining a hight of one and a half to two feet; A. Moly is a bright yellow flowered variety, growing one foot high. I find none of these catalogued by our American bulb dealers. We have also two varieties, natives of California, Allium acuminatum, with bright rosy flowers, and A. Wicksonium with pale, rose-tinted, lilac flowers: both of these are very handsome, and woll worthy of a placo in any collectiou.

ORNITHOGALUM.

Another bulb of merit, which has been sadly neglected, is the beautiful but delicato Ornithogalum, or Star of Bethlehem. I use this for borderiug beds of larger growing bulbs, with the best of satisfaction, preferring them to Snow-drops for this purpose. They grow six to eight inches high, producing their pretty flowers in clusters of six to a dozen oach.

There are two varieties in cultivation, but I only find ono in American catalogues, the Ornithogalum umbellatum. This variety is very hardy; the flowers are white, variegated with green linear veins. They remain in bloom for a number of weeks.

Ornithogalum aureum is a very beautiful variety, in this respect far surpassing O. umbellatum. It is not hardy, however, and in all its movements very slow, so that it can never become so common. To bloom, it usually requires two years' growth. It can only be flowered successfully in the house or conservatory; and only in a pure sandy loam, free from manuro, has it flowered well with me. Some who have tried it, not boing aware that the bulb usually lies dormant the first year after removal, throw away the contents of the pot, thus losing the bulb, and all chances of seeing the flowers slowly expand. The flower well repays the little attention required during the two years' waiting and watching.

THE FLOWER GARDEN.

W. FALCONER.

On high, dry positions—as on terraces around houses—Aconites and Snow-drops will soon appear if tho weather he mild, and should therefore be looked to, to reduce the mulching a little from over them, so that the stems may not emerge bleached and weakly. Most other herbaceous plants had better remain undisturbed for some time yet.

Vines.—Clematises may be unraveled, pruned a little if necessary, and tied up in place. Their stems are very brittle, and though they don't break right off, they often get sadly mutilated by twists and strains, consequently should be handled with care. Akebia quinata is a very pretty vine that grows quite thickly; a reduction of the minor branches invigorates and beautifies the remainder. The Dutchman's Pipe (Aristolochia Sipho) is a favorite pillar, trellis, and screeu covering, and usually a lot of the wood dies every year. These dead pieces should be removed, also the most weakly of the living. Honeysuckles and other vines should be strongly fixed to their supports. The old stems of Hops, Ground-Nut, Wild Balsam Apple, Nasturtiums, and other annual and herbaceous vines, look most unsightly during the winter months if not removed from their summer supports, therefore they should be cleaned away, and the wires or trellises refixed for next year's crop.

Ampelopsis tricuspidata is perhaps our most serviceable self-clinging wall covering; it grows freely, propagates readily, is extremely hardy, and produces a dense luxuriance of neat green leaves in summer, which assume a lovely crimson-tinted hue in fall. It is a great wanderer, however, working into every nook and cranny, and if permitted, will obscure window and wall with equal fondness. To have it appear appropriate, we must keep it in place, and recall the disobedient branches by removing them altogether, or tacking them elsewhere into position.

Pruning Shrubs.—Of course, we look upon the winter months as the time for pruning, and many amateurs—and, I am sorry to say, professional gardeners too—prune all shrubs on an equal footing. They get a pair of hedge-shears, and ruthlessly clip over isolated specimens of Deutzias, Mock-Oranges, Diervillas, Spiræas, Althæas, and other garden shrubs in piano-stool, semi-spherical, or any other "looks-nice" fashion, that may suit their fancy. This is barbarous desecration. Deutzias, Diervillas, Mock-Oranges, Lilacs, Japanese Quinces, double-flowering Almonds, Forsythias, Spirea Thunbergii, and such like shrubs should be pruned but very little now, and that only enough to thin out the weaklings and preserve a comely and limited form. A little disbudding in spring or early summer, very considerably lessens pruning, and so far as I have observed, I have experienced no noticeable check or evil in judiciously pruning Diervillas, Forsythias, and some others after they have done blooming and before they start vigorously into growth.

In pruning, I make it a point to cut out a portion of the most exhausted old wood every year, and thus maintain a body of young and vigorous branches. Spiræa paniculata we find bears much the largest panicles, when cut hard back—to a few eyes from the ground. Althæas, too, require severe pruning; but even in their case I must rigidly deprecate the use of the shears, as with it the good and bad branches are equally treated, and the result, a crop of basket-osiers-like wythes quite unbecoming to the flower garden. Use the knife instead. Many shrubs, as Chaste Shrub and Snow-drop Tree may have their branches winter-killed a little; hence, it is advisable to leave them unpruned for a month or six weeks yet, till danger of severe weather is past, and it can be fully ascertained how much is dead. Their shoots should then be cut back to good fresh wood and healthy eyes. Some shrubs—as Callicarpa purpurea and Hydrangeas, are often killed to the ground, and these likewise should be left uncut till the approach of spring, as the dead branches are, in a measure, a protection, and they serve to keep the mulching in place.

Winter Protection.—It is not in November or December that our shrubs and flowers want our protecting care; we merely apply it then as a matter of convenience, but now—February till April. Tender nursing cannot be commended, as we may be likely to kill with kindness. Providing a little mulching of leaves, litter, manure, sedge-grass, earth, or ashes, has been applied over the roots, a few Hemlock Spruce, or other evergreen twigs or branches placed right over the plants, greatly preserve them from injury. In the absence of evergreen branches, any twiggy branches will prove useful, as will also thinly made umbrella-shaped straw thatches. These branches and crinolines are more applicable to shrubs than herbaceous plants, as the latter, root and crown, may be mulched with impunity. In the case, however, of Statices, Armerias, and a few other of the finer kinds of herbaceous perennials that have persistent foliage, I place a few twiggy small branches right over the plants and then some sedge grass over that, and I find this method preferable to placing the grass immediately on the leaves. In mild weather it would be highly beneficial to remove the protections and replace them nightly or as danger approaches; but I scarcely think the results would pay for the trouble.

Cambridge Botanic Gardens.

NEBRASKA PLANTS.

I am frequently in receipt of inquiries concerning plants that are pretty and novel to Eastern people. Prof. Aughey describes fiftoen species of cactus growing within the State. Of these only two that are found in my neighborhood, are worthy of cultivation; to wit, Mammillaria macromeris and Opuntia vulgaris. The latter is generally frozen to the ground during the winter, but it springs up on the advent of milder weather, and by the last of June is in full bloom. It is about as tenacious of life as the old-fashioned "Live-for-ever." If any fail with this plant, it will be by over-watering. This is perhaps true of all cacti. Mammillaria macromeris is a great favorite here. It is somewhat of a globular form, corrugated and bristly. It is entirely hardy during our coldest winters. I don't know why it would not thrive without protection in Canada. In early June it is crowned with from one to four beautiful blossoms.

Yucca angustifolia is a candidate for public favor. To me, it possesses the greatest interest. When other vegetation is brown with frosts or clad in ermine, its long, dagger-like, ever-green leaves form a pleasing contrast. Scattered among ever-green trees it possesses a decidedly fine effect.

Schraukia uncinata is both pleasing to the eye and agreeable to the nose. Its blossom looks like a little gold-bespangled ball and is deliciously fragrant. It bears a compound leaf which is somewhat sensitive, like its renowned cousin, Mimosa pudica, and it is sometimes known as "Sensitive briar." It is generally found most abundant on broken ground, thus clothing in beauty what would otherwise be barren. I don't know how it would stand transportation, but I am sure that it would please wherever it can be found in perfection.

Euphorbia marginata and Verbena montana are at home here. The florist's catalogue sufficiently describes them.

Shepherdia argentea is a shrub bearing in profusion scarlet berries which remain without falling off for a long time. Those who have tried them say they are unsurpassed for jelly. I can testify to their excellence in pies. The shrub is somewhat thorny, and I propose to test its adaptation to hedging. Last year Prof. Aughey ordered this and some Y. angustifolia for the college campus in Lincoln.

Negundo aceroidos, as its name indicates, bears an intermediate position between the Ash and Maple. It makes a clean, pretty, shade tree and is a vigorous grower. It is extensively used here, in the West, on claims for timber culture. I have a few thousand trees just right for mailing, and I think a few quarts of seed left over. Orders for any of the above will be placed on file and filled in their season. I would like, in exchange, hardy climbers, bulbs, roses, Concord grapes, currant cuttings, goose-berry,—in fact any small fruits, chufas, artichokes, pearl millet, Butman squash seed, Prescott molon, Compton's Early Field Corn, Longfellow's Field Corn, or almost any choico seed or plant. Order what you want and give me your list from which to select.

R. H. Crane.

Orleans, Neb.

Miscellaneous.

JOTTINGS FROM MY NOTE BOOK.

CLINTON.

AGRICULTURAL HORSE TROTS.

The time for the annual meetings of our State, County and Town Agricultural Societies is now probably mainly over, and the officers generally chosen for the ensuing year. Making out premium lists will be next in order. Let us hope that in performing this duty, the officers will not lose sight of the professed object of such Associations, which usually is to encourage improvements in agriculture and horticulture and also in manufactures and the domestic arts. To convert these annual exhibitions into mere "Horse trots," as too frequently is the case, is a sad perversion of their professed objects. The plea is to improve our breed of horses; a very laudable purpose, it is true, if properly directed. But will mere competitive trials of speed, for short distances, do this?

If the ability to trot a mile in the shortest possible time, were the only requisite for that valuable animal, the horse, then indeed there might be some plausibility in the plea. But we all know that this ability is not at all a desideratum with the agricultural community proper. What is of far more value to us, is a breed of horses for all work, combining strength with agility, adaptable either to the plow or to the road, as occasion shall require. A good walker and roadster, easily kept, and with powers of endurance fitting him for any emergency that will be likely to arise—that is the breed of horses the farmer wants. By directing the attention mainly to the rearing of a breed capable only of going at the greatest possible speed for a single mile, we are led to overlook the more valuable quality of being able, in case of emergency, to go at a rapid rate for hours together, without injurious fatigue or exhaustion. This service the animals usually exhibited at these horse-trot fairs, are generally entirely unfitted for. They are best adapted to displays of short spurts of speed, after which they require to be carefully rubbed down, sponged and blanketed, and to enjoy a season of rest before repeating the effort.

There is much reason to apprehend that the tendency of these annual horse trots, in connection with our farmers' fairs, is to destroy the qualities of the horse, most valuable for the agricultural community. The New York State Agricultural Society has wisely excluded them entirely from its exhibitions. It would be well if our county and town societies would follow this example. The excuse for not doing so, is that such exhibitions attract crowds who otherwise would not come, and these add largely to the receipts for admission. In answer it may well be replied that they also attract a crowd with which it is not desirable that our sons, wives and daughters should be compelled to come in contact, including not only the vulgar, the profane and the intemperate, who feel no interest in any other part of the exhibition, but also blacklegs, gamblers and pickpockets, who seek such opportunities to ply their vocations. If the main object of such organizations is to *gather money*, then, like any other speculations, they will be likely to be continued so long as they can be made to pay. But we had supposed their object to be a more creditable one; and we still believe that in most cases it is. But in the other cases, we are satisfied that the course pursued prevents the attendance of many respectable persons who would otherwise be glad to assist in sustaining them. If such societies continue to be perverted by making such exhibitions the leading object, then the State cannot too soon withhold its annual appropriations from all such State or County Societies as continue the practice.

THE USE OF COAL ASHES.

Coal ashes are pronounced by many to be valueless for agricultural or other useful purposes. Consequently they are frequently allowed to accumulate around the premises till they become a nuisance. In cities it is the practice to have means provided for their frequent removal at the public expense. But in villages and country places the practice is usually different. Probably a large majority of our farmers get their main supply of fuel from their own wood lands, but the use of coal is constantly increasing in all parts of our country. Where the ashes of coal and wood are mingled together, there can be no doubt of their manurial value, and the greater the proportion of wood ashes composing the mass, the greater the value, of course. But coal ashes alone are of some value, even to any one who has but a mere garden spot to cultivate. On heavy soils they may be used to advantage, in large quantities. They tend to meliorate the soil and render it more porous. They may also be used beneficially in forming little mounds about the trunks of small trees, to protect them from the depredations of mice in winter, and are better for that purpose than earth. When spring opens they can be spread around on the surface of the soil and worked into it. Covering the ground under currant bushes with coal ashes is useful in preventing the larvæ of the currant moth from burrowing in the soil for his winter hybernation, or emerging from it readily the ensuing season. They may also be used to advantage around other bushes or shrubs, and are useful as a portion of the material for constructing walks. They may be also used to advantage as a deodorizer in privies and water-closets, absorbing the offensive odors otherwise likely to emanate from them, and the mingled mass will thus become a valuable and inoffensive fertilizer.

NOTES AND COMMENTS.

W. H. WHITE.

SHADE TREES.

The error of Mr. Curtis's neighbor, Vanguysings, mentioned in a late Rural, is no uncommon one. We rural dwellers, at least many of us, think, and truly too, that shade, as well as ornament, is a fine thing during the summer and hot season; and so we plant trees, or build our houses under their shade, oftentimes without thinking of subsequent results. Shade and dripping of water from trees cause premature decay of even our most durable stone: how much greater is the destruction of wood! It is much better to plant large-growing trees a little more distant from our dwellings; plant shrubs nearer, and we get more ornament and less after regret. Sunshine is one of our greatest promoters of health, therefore let us not exclude it too much from the houses we live in.

TREATMENT OF POOR LAND.

"We have a few acres of land that for several years, has been bungled over and half worked, until it has become so poor that we can think of only one crop to apply the coming season, namely, buckwheat." "We propose to seed thick with large clover, and clover alone." This, I understand Mr. Bertram, is in addition to the buckwheat; the ground being located at the summit of a steep hill, it being impracticable to enrich the soil with manure, the clover being designed for fertilizing purposes. Will the clover take and grow well with the buckwheat as shade? and will not the buckwheat tend strongly to still further reduce and exhaust the soil? Buckwheat, as a crop, tends to make the surface soil very light and ashy, and the shade tends strongly to subdue lower growing plants, and for this purpose we often sow buckwheat to subdue some of our soils. Would it not be better, Mr. B., if you cannot fertilize *economically* otherwise, to sow the clover seed without any other grain, sowing with the seed gypsum, at the rate of about one bushel per acre, or applying it to the surface after the seed is sown and harrowed in; and make another application after the clover has come up and made a small growth? If the case were mine, I should leave out the buckwhoat, whether I made any substitute or not.

SAND FARMING.

What is sand? Writers differ so much in their ideas of soils that it is puzzling, often, to define their meaning. Pure sand makes a poor soil, or no soil at all, on which to attempt to grow any kind of crop. Our common, sandy soils contain more or less clay, and this it is which gives them their capacity for being improved or made productive. The sand farming referred to by Mr. Looms is on sandy loam. Of this soil there are grades: the lightest is a quick, warm soil, and crops grown on such mature early, while at the same time they partake of the nature of the soil; this gives to melons and similar products their rich, delicate flavor. These light and heavy sandy loam soils are the best of all our arable soils in New England for any crop we produce. There are considerable tracts where, a few years since, a person could buy any quantity for $3 to $10 per acre, which, rightly handled, are very productive of all kinds of crops; but they need constant manuring, to which they are very sensitive, showing its effects, in the crops, quicker than heavier soils. Some of these lands will

now command a price from ten to fifty times as high as twenty years since.

PLANTING APPLE TREES.

Prof. BEAL gives us some good thoughts concerning orcharding, which I can indorse from observation. There is one thing more I would have desired him to notice: What influence has our present mode of planting upon the increase of the depredating enemies of orchards and their products? Does it not invite, and furnish a most tempting nidus for, the most destructive enemies to plants? Would it not be better to set the trees so far apart as to completely isolate them?

VAN'S VIEWS.

ONE of the most prominent things just now is our weather. It is English pure and unadulterated,—fog, mud, rain, and profanity. We have not had cold weather enough to freeze the swamps, and no one can get out any wood, logs, or other products of the forest with which we were in the habit of helping to make the two ends meet. As a consequence, many of the farmers on new clearings are having a very hard time to raise their taxes. It is, however, not without its benefits, for it enables some of our farmers who are fortunate enough to have a good manure pile, to get it on their fields ready for spring. And I notice that there is a great change gradually coming over our practice of applying manure. Formerly if manure was hauled in the winter, it was piled in heaps in the field and in the spring it was spread; thus making a second handling necessary. Now our best farmers prefer to spread it directly from the wagon (or sleigh) as it is hauled. I will not enter into a discussion of the merits of either method but merely give the facts of the case.

Another effect of the mild winter has been to set our farmers at work in their stumpy fields and, next season, we shall probably have double the amount of ground over which the mower and reaper can run that we had last. After a field has been chopped over six or eight years, a team will pull out most of the stumps, if you take a soft time for it. But six or eight years is a long time to wait for them, and much time is lost in plowing, cradling and mowing around them, but to pull sound stumps with any stump-puller we have at present, costs more than it comes to. Have any of your readers tried blowing them up with dynamite? We have thought of trying it, but the fear of getting blown up ourselves has held us back.

During the past fall, an unusually large breadth of rye was sown hereabouts. With our variable winters and wet soil, it is hardly worth while to grow winter wheat, but rye is a very sure crop and it is a hopeful sign to see its increase. Another hopeful sign is the number of clover hullers being bought in the State. One agent told me last fall that he had sold seventeen of the "Birdsells," that year. Seventeen Birdsells will hull a great deal of clover, and clover means more stock and less exclusive grain farming. But if we must stick to our grain farming, we can very profitably use clover. One man who took a farm in 1863 when it yielded, on an average, thirteen bushels per acre, has brought it up in 1877 to an average of thirty-four bushels per acre on ninety acres of wheat. He has always sown plaster and clover with wheat, even when the land was to be sown with wheat the next year.

Our horses are just now laid up with what is called "mud-fever," a swelling of the legs which makes them as useless as did the "epizootic." It is said to have passed off in five to ten days in other places where it has been prevalent.

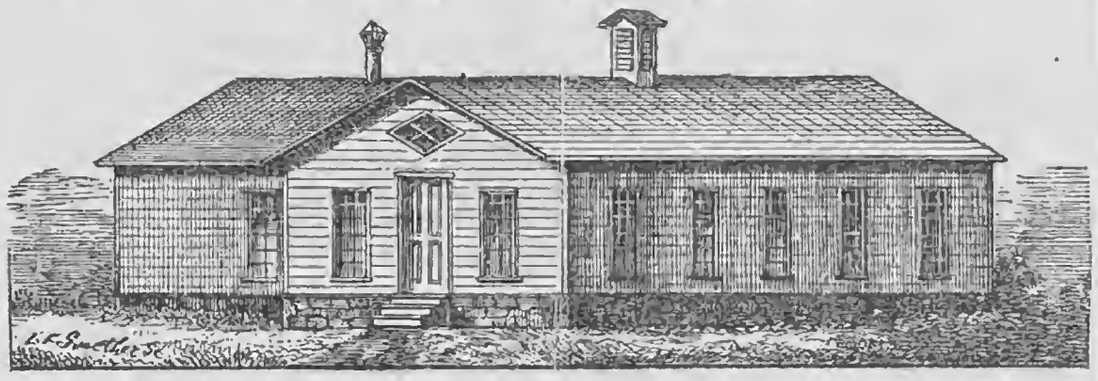
Fort Howard, Wis.

TRICKS OF TREE PEDDLERS.

IN reading an article in the RURAL of January 26th, by S. B. PECK, on "Those tree peddlers," I am reminded of the way myself and neighbors have fared at their hands, and thinking my experience may be of benefit to some fellow mortal, I will relate it.

An agent for a certain firm who represent themselves as nurserymen (and are of the kind who have no nursery or a single tree growing, but are merely peddlers of trees and as I have been told, sell what purchasers want, and deliver what they can buy cheapest, regardless of kind) called at my house and insisted on selling me some trees. After showing him those I already had, we agreed on price for a lot of dwarf pears, he agreeing they should be as large as a certain tree we specified. Soon another tree man came. I showed him a list of the trees I had ordered, told him the price, and that they were to be as large as the tree we made the bargain by, which measured 4½ feet. He told me that tree man No. 1, was not responsible, and had so swindled his customers that he did not pretend to go into the districts where he had sold trees five years ago; that I would not get the kinds I agreed for, nor as large as I expected. There was also a Champion grape in the list. I asked No. 2 what the Champion grape was. His reply was, "It is good for nothing; you would not eat one after a Hartford Prolific ripens, and you know you would not eat them after you can get others." I told him this was a poor recommendation for a grape he had sold at the rate of two dollars for a two-year old vine, but a month or two before.

Beginning to feel uneasy about my tree order, I began to inquire further about my peddler and found that he had sold one of my neighbors a bill of over thirty dollars' worth of trees about



MODEL PIGGERY—ELEVATION.

four years ago, the larger part of which died and the balance are diseased and worthless. Another neighbor bought seven dollars' worth at the same time, not one of which is living to-day. Feeling sure that I was "sold" I thought that I would write to the man and make him an offer to release me, telling him his agent had agreed that trees should be as large as one that measured 4½ feet. In reply, I got the most abusive letter ever put on paper. He told me that instead of being 4½ feet, they were to be three feet, that he should furnish trees that size and expect me to take them and pay for them, that I was a fool, and if I did not know any more than to let some irresponsible person who could not get any trade without slandering him, influence me, I ought to be put under a guardian. I am willing to admit I was a fool, but am a wiser man to-day.

I concluded the best way to "get even" with him was to sell trees myself and so much cheaper than he did that he cannot sell another bill of trees in our town. I ordered 150 Pears, 125 Roses, 25 Grapes, 500 Asparagus, besides some Peaches, Quinces and shrubbery direct from a reliable nursery at wholesale prices, and sold them among my neighbors, supplying them with reliable trees at about half the price they had been paying for trees hawked about the country by these peddlers: moreover, I have a margin left to pay me for time and trouble. If some good man in every town or district, would call round among his neighbors and take their orders for whatever they needed in the nursery line, and order the trees direct from some responsible nursery, he would do his community a great favor by furnishing them trees at one-half the money they have paid for what they know nothing of, moreover he would find the business quite brisk, for low prices and reliable trees would induce those to buy who were too sharp to buy of peddlers.

Jamestown, R. I. J. J. W.

CATALOGUES, &c., RECEIVED.

THE winter meeting of the State Pomological Society (C. W. GARFIELD, Sec'y.) will be convened at Allegan, Mich., the 13th, 14th and 15th insts. A feast of good things is announced in the way of papers and discussions. Addresses will be delivered by our correspondents, Prof. W. J. BEAL, Pres. T. T. LYON, Prof. A. J. COOK, S. B. PECK, and many others. We hope the meeting will meet with the success this wide-awake Society so richly deserves.

JAMES J. H. GREGORY, Marblehead, Mass. This well-known establishment offers its catalogue free to all. It contains 52 pages, 10x8 inches in size, many illustrations, both of vegetables and flowers, and all needed instructions to the amateur.

Mr. GREGORY carries on one hundred acres in annual tillage, on which he raises about one hundred and fifty varieties of the vegetable seed contained in this Catalogue. He guarantees that the seed shall be what it purports to be, in so far as to refill the order anew, *gratis*, in other seed, should the first prove at all defective.

THE proprietors of the RURAL offer the most ingenious, taking little gem ever before offered, to any subscriber who will send them two new yearly subscribers at the usual price. It is intended as a near approach to a valuable unconditional present See page 107.

AUGUST ROLKER & SONS, 44 Dey Street, New York, will send their catalogue of flower, field and garden seeds free to all applicants. Messrs. ROLKER & SONS are sole agents for several horticultural firms of France and Germany.

JOHN SAUL, the distinguished nurseryman and florist of Washington, D. C., offers to send his new catalogue which contains a number of plants offered for the first time in this country, with a colored plate, free to all his customers. To others he makes the nominal charge of ten cents. A plain copy free to all.

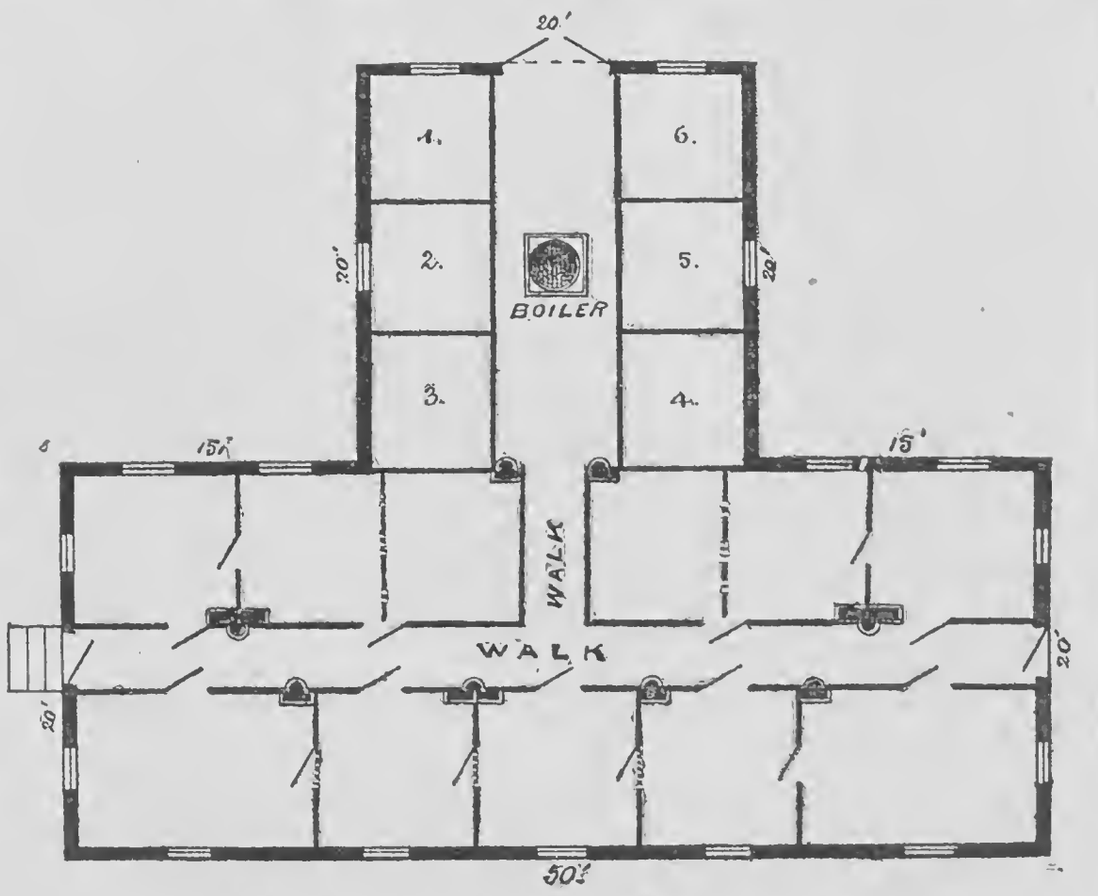
At the annual meeting of the Chautauqua County Agricultural Society held at the Secretary's office in Jamestown, on January 28th, 1878, the following officers were elected for the ensuing year:—President, John T. Wilson; 1st. Vice-President, J. H. Russell; Secretary, L. W. Wiltsie; Treasurer, Geo. S. Gifford. Directors:—M. Prendergast; Wellington Woodward. It was decided to hold the next Fair of the Society at Jamestown, N. Y., Sept. 10, 11, 12, and 13, 1878. Yours truly,

L. W, WILTSIE, Sec'y.

Rural Architecture.

A MODEL PIGGERY.

THE recent inquiry of S. LEHMAN, and the similar wants of hundreds of your readers prompt me to offer the following cheap, convenient, and eminently practical piggery as filling the bill very nearly, if not quite. It has the merits of being most compact and complete in itself. Being of this kind, it may be so located with reference to other buildings, that neither the odor, squeal nor grunt of the bristly beauties can interfere or offend. It has a water-tight, shallow cellar beneath it for making and saving manure in, which is part and parcel of the pen. The wood-work is raised out of and above the penetrating moisture and destroying influences of contact with the excrements, and is thus preserved as much as possible from decay. The floor and sides of each pen, firmly cemented for some three feet upwards, present an indestructable surface to the gnawing, chawing, tearing propensities inherent in swine generally. It makes the pens warm in winter and cool in summer.



MODEL PIGGERY—GROUND PLAN.

The pens communicate with each other and with the walk, affording conveniencies for ingress and egress of swine, &c. Each pen has a window, and the four corner ones have two each. These corner pens would afford good breeding places and could be made a little larger than the others.

1, 2, 3, 4, 5, 6, storage bins. Boiler in the extension. Walk, through center from which each pen can be supervised. Feed spouts communicate from walk to the feed troughs. Divided into nine apartments. If division is made across large pens where the dotted lines are, there will be eleven apartments all easily reached and controlled.

The building should be fifty feet long by twenty wide. Extension 26 by 20, both six feet posted; roof flat pitch; ventilator in center of roof; walk the whole length, 4 feet wide. The foundation may be sunk two to three feet in the ground, walled up and thoroughly cemented, the whole forming a tight, shallow cellar, the walls coming two feet above the surface of the ground. In this cellar there can be no leakage of manure either solid or liquid, and if kept well supplied with litter, as it should by all means be, there will be large amounts of the richest compost formed annually. The absorbent litter can be supplied by the windows, which should be so arranged as to slide horizontally out of the way and come low down. These slide windows can be left partially open in warm weather for ventilation. The manure can be readily pitched from each pen into carts or sleds through these same windows. In the extension the food is prepared by means of boilers &c. Convenient bins are prepared to hold, in bulk, roots, grains, meal, etc., etc. The whole structure is surmounted by a vane in the shape of the owner's ideal pig, and toward which—both model and vane—he should continually *aspire*.

Waldo Co., Me. J. W. LANG.

The Herdsman.

ALDERNEY CATTLE IN SHROPSHIRE, ENGLAND.

ONE of the oldest established herds of this beautiful and highly-prized milking breed, was founded in the year 1830 by its present owner, the Rev. JOHN HILL, at The Citadel, situated in the picturesque park of Viscount Hill, near Shrewsbury, in the county of Shropshire. Mr. HILL'S herd now consists of thirty head of which sixteen are in milk: they have been most carefully bred from FOWLER'S imported cattle, and strict attention has always been paid to their milking properties—some of them yielding twenty quarts and more per day. During the summer of 1876, trials were made and as much as 175 quarts per week were measured from a cow, which milk produced 322 ounces of butter, or nearly 1½ ounces per quart. The farm on which this herd is kept is light land and the grass of very moderate quality and no artificial food is given during the summer months. All the herd are of the fashionable dark, self-color, and are especially beautiful in their deer-like appearance, having elegant heads, small well-shaped horns and skins like satin. The bull now in service is of a rich, dark gray as nearly as I can describe it, with perfect points, and all his stock are of one uniform color, the whole herd, in fact, possessing that family likeness which is only attainable after years of patient perseverance and strict attention to breeding.

Mr. HILL has never used bulls except those directly imported from the Island, or bred from the best of his own cows. He has never exhibited but once, when he took the silver cup given at the North Shropshire show for the best Channel Island cow. They are thoroughly acclimatized and hardy and live on little food, and are eagerly sought after by all who know them; as they invariably improve when taken to richer and better pasture. To all those who may be interested in Alderney cattle, this herd is well worth inspection, and visitors will be well repaid for spending an hour or two in looking them over, and will get many a useful hint in farming matters in general, from a walk over the farm which is a pattern of neatness and perfection. AN ENGLISH CORRESPONDENT.

ACCORDING to the census of last year Switzerland has 593,000 cows, 10,000 bulls, 313,000 calves, 67,000 covered heifers and 53,000 bullocks.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

I WENT over to neighbor BARTLETT'S, the other day, to the "Kitchen club" meeting, to hear Mrs. NELLIS read a paper on "Children's behavior at table." As this lady is the mother of three children, who are models of good behavior and neatness, she was considered the mentor for the mothers whose children are everything else *but* pinks of propriety at meal times. After the reading, each one gave her method of family government in this respect, and among the counsel were some very choice bits of wisdom, that are worth repeating.

Mrs. WILSON told us that her little ones were all supplied with rubber pinafores to wear over their dresses, and instructed early not to begin a meal without them. Mrs. RUTHERFORD said that when they had company, the children came to the table by turns, as many as there was room for. In this way they tried their best to behave well, and want of neatness was a signal for banishment. I asked the mothers if they had ever tried giving the children a picnic in summer. The looks of inquiry answered my question, and I explained that often in the spring or summer, and even during the fine autumn days, I packed up a lunch-basket, and sent the children into the orchard, within sight and call. They were provided with toy dishes, and amused themselves and each other by this pleasant method. "Please can we picnic?" is a common request at tea time, and it is quite a lesson in generosity when one child is deputed to share with the others some special dainty. Depend upon it, if tried, it would be thoroughly appreciated, and give the children lessons in housekeeping on a small scale, while helping to relieve the mother.

There was a diversity of opinions regarding the practical use of this suggestion, and then Mrs. PRICE recommended that for children under six, a half tray be bought, and as they were easily washed and kept bright, they were a great saving to a table-cloth. A napkin with a bright border, soon took a little one's attention, and they would learn to use it with a little teaching. It was also thought that the English fashion of a separate table for children, was good in many ways, as little children without judgment, will seek for condiments that are injurious, and often given injudiciously. Mrs. RUTHERFORD gave us a favorite lunch she prepared for her children to take to school. It was simply when baking to cover an apple with dough thinly drawn over it, putting in the slightest sprinkle of sugar. Bake and when done, cover with a cloth to keep the crust soft. Any healthy child will relish this plain lunch at noon. She also recommends giving a child a knife and fork early, guiding them in their use for awhile. They soon become self-helpful, and proud to be trusted. And so in talking over our little cares, they seemed to grow less by sympathy and discovery that our trials are mutual.

PUDDINGS.

White Pudding.

Two pounds of beef-suet; two pounds of leaf lard; ten pounds of wheat flour; one-half pound of salt; two tablespoonfuls, each, of thyme, summer savory and black pepper; rub thoroughly together all the ingredients and keep in a cool place. When wanted for use, tie the required amount in a cloth and boil until done; then remove to the oven and brown.

Yorkshire Pudding.

One pint of sweet milk; four eggs; one cupful of raisins or currants; one teaspoonful of soda and two of cream-of-tartar; a pinch of salt and flour enough to make a stiff batter; pour into a buttered pan and place in the oven under a roast of beef, allowing the drippings to fall upon it while baking. It requires about twenty minutes to bake and should be eaten as soon as dished.

Potato Pudding.

Boil two medium sized potatoes, mash smoothly and add two beaten eggs; one pint of sweet milk; two tablespoonfuls of sugar; flavor with vanilla and bake.

Egg Pudding.

One quart of sour milk; eight beaten eggs; two teaspoonfuls of soda; flour to make a stiff batter. Bake quickly and eat warm with cream and sugar, flavored with nutmeg.

MRS. MARY McC.

Cocoanut Cream Cake.

Four tablespoonfuls of butter worked to a cream; two cups of white sugar; one cup of sweet milk; the whites of four eggs, beaten to a froth; four teaspoonfuls of baking powder in four cups of sifted flour; bake in four or five square tins lined with greased white paper.

The Cream.

The whites of two eggs; five tablespoonfuls of sugar; one cup of sweet milk; one-half cup of cocoanut; two tablespoonfuls of corn-starch mixed with a little of the milk; mix all together in a pan and set it over a kettle of boiling water, stirring constantly until it thickens. When both the cake and cream are cool, put together; frost the top and sprinkle cocoanut over it.

MRS. S. C.

CIDER PUDDING.

BY request of a reader, we republish Mrs. SEWALL'S recipe for Cider Pudding, published in the RURAL of Sept. 29, 1877:

One pint of cider; one-half pint of molasses; one teaspoonful, each, of ground cloves and cinnamon; one teaspoonful of soda; one cup of chopped raisins; one-half cup of suet or butter; a pinch of salt, and flour enough to make a stiff batter. Boil two hours, and serve with hot or cold sauce, or both, according to taste. Milk substituted for cider will make an excellent pudding.

RECIPES WANTED.

WILL you be kind enough to give me a good recipe for making Clam Chowder, in your next number? You have so many good and valuable recipes, I think your Clam Chowder must be extra good. Also please give a recipe for making Soda Crackers. CONSTANT READER.

Clam Chowder.

IN reply to "Constant Reader," we give the following recipe, which we have used for years for either fish or clam chowder:

Cut into *thin* slices about one-half pound of fat, salt pork; place in the bottom of a kettle and try out until the pork begins to brown; then add four good-sized onions, chopped finely or sliced thinly, as best liked, and partially cook them in the fat; slice eight raw potatoes, and about six good-sized tomatoes (if canned, allow one pint); break into small bits one-half pound of crackers, and chop up forty clams; pour the onions and pork from the kettle and make layers of the ingredients—the bits of pork can be taken out or left in, according to taste—seasoning each layer with pepper, salt, ground cloves, a little chopped parsley and a small quantity of powdered thyme and summer savory; over the top place a few slices of lemon; cover with water, and cook from one to one and a half hours.

Will some of the RURAL sisters please give "Constant Reader" a recipe for Soda Crackers?

Everywhere.

FACTS, NOT FANCIES FROM MISSISSIPPI.

THE "Observations of a Commercial Traveler," in the RURAL of January 5, while presenting a fair picture of things as they appeared to him, skimming over the country on a railroad car, fall short of giving a correct idea of the condition of the people in north Mississippi at this time. It is indeed a deplorable one. The system of farming is simply execrable. The soil, so fertile in its virgin state, has deteriorated through unscientific and injudicious farming, until the "uplands" will now hardly make "nubbin-corn," and not enough cotton to the acre to pay for the picking. The yield is better in the "bottoms," but the same careless, thriftless methods in their regard are fast rendering them infertile. The amount of ignorance among white and black, in this part of the world, is absolutely appalling. In many houses the stock of books consists of a last year's almanac and a New Testament, and the poor white people are really opposed to sending their children to school, on the score of needing their services in the farm and household. So the free schools actually cease to operate for lack of scholars.

This country, twenty-five years ago, might have been the "garden spot of the United States," but it is now a paradise *only* for those farmers who have reserved capital. The large land-owners live in, or near towns, rent their land in small lots of thirty, forty, or fifty acres to poor white people and freedmen who, from one year to another, accumulate nothing, and seldom get able to "run" themselves, being fortunate indeed if able to pay their rent and store accounts at the end of the year. This "running" is undertaken by merchants who advance supplies at the rate of 100 per cent. for such things as meat, flour, meal, shoes and homespun; and 500 per cent. on "notions." These poor white people whose grade of intelligence is not greatly superior to that of the average freedman, have a penchant for such "notions" as candy, calico, lily-white and snuff, the colored man is death on cheese and crackers, "musk" and red-top boots, while both regard tobacco as one of the necessaries of life.

The credit and mortgage system prevails to a ruinous extent, and puts the poor white people as well as the negroes, absolutely at the mercy of the merchants. A very different state of things we find in the country from the description given by an enthusiastic land-owner on the look-out for tenants. Said he: "The land will bring "vodles" of corn; cotton opens like an oven of pop-corn; the rivers are full of fish, just stir the water with a stick and you can pull 'em out with your hand; the woods are overrun with deer, turkeys and squirrels!" Reality—wild turkeys as scarce as hens' teeth; no deer except in uninhabited river bottoms; you have to pay half a dollar for a great big, coarse catfish with a flavor of the mud in which it was spawned; cotton in the bottoms on freshly cleared land, only averages from a half to a third of a bale per acre; and nobody ever makes quite enough corn to supply his own wants, so that the merchants import Northern corn and advance it to the natives at $1.25 per bushel. I have known poor short-sighted white and black renters sell their home-raised corn in the fall and winter at 50c., 60c. and 75c. per bushel, and pay their merchants $5 per barrel for meal the following summer.

Another drawback to our perfect agricultural felicity is the malarial affection known as "chills," which keeps people shaking from June till November. To obviate this nuisance, quinine must form a regular ingredient of breakfast, taking it by the half spoonful on the point of your knife-blade. If you have got a regular "spell," you can only break it up by taking repeated heavy doses during the twelve hours preceding the expected paroxysm.

There is a tremendous stir just now among the colored people in regard to going to the "territory," as they call some "terra incognita" of the far West, where they think the long-expected "forty acres and a mule" will be forthcoming, evoked by a process as magical as the wondrous powers of Aladdin's Lamp. Considering the plight the poor creatures are in, the unprecedentedly short crop, leaving no margin for a fair start with this new year, it is no wonder that both white and black in considerable numbers, should resolve on "moving to Texas," as you say, Mr. Editor, or even follow in the wake of the frantic "darkey" who is off for the "territory."

PERLE PERDUE.

NOTES FROM CALIFORNIA.

THE Orange and Lemon are the most profitable orchard trees in Southern California, and that for many years they will remain so, there can be no possible doubt. The Orange is cultivated with success as far north as Sacramento, some parties claiming that finer oranges can be raised just south of Sacramento than at Los Angeles. Sixty trees are usually set to the acre. They come into bearing when from six to seven years old. Every year after this the trees become more productive. They frequently bear from 2,500 to 3,000 fruit when fifteen to eighteen years old.

NEW ORANGE.

To California has fallen the good luck to give the world the best sweet orange ever grown. It is known as Garey's Mediterranean Sweet, and is the result of several years' study and work by THOMAS A. GAREY.

The fruit is of a fine size and very symmetrical shape, which, together with its magnificent color, makes it the handsomest orange in cultivation. It begins to ripen in December and remains fresh and firm until August following. A finer flavored fruit could not be desired by the most fastidious epicure. The tree bears early, fruiting at from two to three years from the time it was budded.

We have had a storm of wind and rain that was something like our old-time days in winter. The wind whistled around furiously for several days, in some localities unroofing houses and prostrating fences without regard to the wishes of the owner. But the rain was grand. It will give many a desponding arm fresh courage and nerve; it makes the outlook for a good harvest look brighter, and with rain in the next two months—which cannot fail us—it will do much towards restoring California to her former prosperity. It was a general rain throughout the State.

W. C. L. D.

RURAL SPECIAL REPORTS.

SHERMAN, Chautauqua Co., N. Y., Feb. 1.

SHERMAN is a small town situated in the western part of the county of Chautauqua and in a rich farming and dairying region. The village is the center of trade and attraction for several miles around, and is the principal butter mart in the county. The crops, the past season, have been large and the farmer has enjoyed a bountiful harvest. The apple crop was the largest known in this section for many years. Green apples sell for 75@85c. per bushel, and dried apples 5c. per pound; oats, 40c. per bushel; pork, 5c. per pound; beef, 5@6c. per pound. We have had a very mild winter so far and with but little snow or cold weather. Yesterday morning, however, snow commenced falling fast and the prospect now is that we shall have snow enough to be even deeper than the mud of which we have had a considerable quantity during the winter.

M. L. D.

WHEELER, N. Y., Feb. 4.

WE have had an open winter up to the last days of January. A storm which had been brewing for some days, came January 31. It commenced snowing at 9 A. M. and continued throughout the day, and was snowing as hard as ever at 9 o'clock P. M. Friday morning, Feb. 1st found us shoveling a path to the barn (not to the wood-pile) through over two feet of snow.

The roads were broken out early in the day and the merry jingle of sleigh-bells now and then come to our hearing. We do not remember as much snow falling in so short a time, for a number of years. The lumbermen are making things lively now for this place. Farmers who disposed of their crops during the fall and early winter, can now sit by the fire, read their new almanac, and "laugh and grow fat.

Pork sold for 4@6c. in the fall. White wheat is now quoted at $1.20; red, do., $1.10 and spring wheat at 90c.; corn, 50c.; rye, 60c.; oats, 22@27c.; buckwheat, 40c.; barley, 45@50c. Potatoes were a good crop and mostly sold as fast as dug at from 20@26c. A few rotting quite badly.

S. S.

MEADVILLE, Pa., Feb. 6.

WE had about twenty inches of snow last week, which has helped business along greatly and has proved a great boon to our farmers. The dairy interest has prospered this last season. We have closed out all of our cheese and creamery butter at good prices and dairymen are correspondingly happy.

K.

The Apiarian.

OUR BEES.

MRS. A. E. STORY.

My readers are hereby informed that we keep bees. Last spring we bought three hives of the "Head of the household"—his entire stock—taking into partnership with us a youthful "Scion of the House," who has a taste for turning an honest penny whenever opportunity offers. We became half-owner of these bees confidently, with a full determination to let certain people we know, see what a woman can do when she tries.

We thought we know the ways of bees. "Get acquainted with your bees and let them get acquainted with you," say the books, and we began the acquaintance at once. It got to be rather a close acquaintance at times, but, as we thought it might result in mutual improvement, we kept it up. Towards the latter part of May we noticed that the bees in one hive hung underneath in a black mass. We shall have a swarm, and a large one, early in June, we thought. But our bees went out before the May did, and we hadn't even the *dis*satisfaction of seeing them go.

"A swarm of bees in May,
Is worth a load of hay."

quoted the wise ones; but without that old saying we were not likely to forget that bees do sometimes swarm in May.

"Well, in nine days we can prepare for the second swarm," was the reflection that, in a measure, consoled us. So we made new hives—no old, musty hives for *our* bees—and waited. Out they came at last, flew about long enough to alight twice over, then dropped down here and there and all over, and crept quietly back to their old quarters.

"Too strong a wind," said the knowing ones again. The next day they came out and repeated the performance, and, as this time there was no wind at all, the information that "something was wrong with the queen or something," more than satisfied us. It coincided with our own views exactly. "Three times and then out," said my partner, as we stood watching their egress from the hive, through a veil of mosquito netting. But the ways of bees are wonderful and past finding out. The queen was collecting her forces on a currant bush, after the most approved manner, when out comes a swarm from another hive, and the scene is changed. I don't say there was a battle in the air, but there was darkness and confusion there. A part of the new-comers took lodgings with the swarm on the currant bush, part sought a hanging place of their own, while goodly numbers of both swarms returned to the old hives. We got them hived, and then all might have been well but for the perversity of the bees that

would stick to the wrong nest. It was but a battle in a bee-hive, and it ended as all battles perforce must, when all of the weaker side had been killed. When the bees were moved to the stand at night we "took a peek," and found a good double handful in each hive.

That was but the beginning of the troubles and perplexities which our bees have caused us. One swarm went off out-of-hand. Another staid an hour or two, just long enough to set our mouths watering with a foretaste of white-clover honey—such a wealth of white clover as there was, too, in field and roadside!—when away they went. Another swarm, however, better disposed than the rest, settled down to work at once, and would, doubtless, have gone on improving the shining hours to the end of the chapter, had not the junior member of the firm been possessed by an uncontrollable desire to see how the work inside the hive was progressing. He tipped back the hive to take a look, the comb came down, and the bees with it. Next day they came out, but, stopping to rest on a hill of corn, they were prevailed upon to enter another hive. But that didn't mean submission on the part of the bees, as the next day showed us plainly.

"The bees are coming out!" That was the cry which summoned us from "Helen's Babies." Away went the bees over the fields, in spite of numberless pails of water thrown *at* them by the junior member, who forthwith withdrew from the firm in disgust. A man and a philosopher might have stood quietly by and seen his property thus take wing and vanish. Not so did we. We thought we had a right to know for what sort of habitation the one we had provided was thus unceremoniously forsaken. But house slippers are not just the thing to wade through the long grass with. They would come off at the heel, and I had to stoop down to pull them on, and so——well, the long and short of it is, the bees got away, and I returned to the "Babies" aforesaid, sadder and wiser.

After a month or so, one of the first two swarms having, without avail, made a desperate effort to gain a respectable livelihood, was driven out by worms, but, with our usual good fortune, we succeeded in capturing them. The next morning though, when we went to see how they were getting on, we found an empty hive. The bees had, to use a figure of speech,

"Folded their tents like the Arabs,
And as silently flown away."

"Bees never rob when there is honey to be got in the fields," say the books. Well, ours did. And yet not ours, but our neighbor's. Ours were the victims. The marauders began operations about the middle of September, and kept it up, off and on, for a month. Only one swarm—one of the old ones—gave up "beat," and that we took up at once. The others were fortified by narrowing the entrances, and whenever victory seemed doubtful, we turned the tide for the day by dashing on a barrel or less of water. But each succeeding morning only brought the besiegers back to renew the attack, till, taking a hint from a friend, we got ahead of them in the morning, closed up the entrances to the hives, and sprinkled the would-be robbers, as they came, with sulphur. They left forthwith, but came back at the end of a fortnight, when another sprinkling of sulphur brought an enduring peace.

We still own those bees, and next summer they are to go out of their present box hives into others of movable-frame construction, after which we shall hope for less trouble and more honey.

The Poultry Yard.

CARE OF POULTRY.

HENRY HALES.

WINTER WORK.

THE time will soon be at hand when the raising of young chickens will claim the attention of the good farm-wife. At such times the farmer himself is occupied tilling the ground and planting his crops, and to his wife and children are we indebted for the new-laid egg or the tender broiler, and for their sakes I will say a few words to the farmer himself. During the stormy months of February and March, many days are not fit for outside employment; at such times get your coops mended and white-washed, ready for use when wanted. If you have not enough on hand, make a few more. It is trying in spring to have hens hatch out their broods with nothing to put them in. Some make shift with an old barrel laid down, and many a good clutch has had nothing better. But a barrel is a miserable thing; the chicks settle down too much to the bottom part and many a one gets crushed, which in a properly made coop, with the flat ground for a floor, might be saved. I do not believe in board floors for chicken coops; they always have a very nasty smell that is unhealthy for the brood.

Make the coops square, the top sloping to the back with lath slats in front, one loose so as to slide out, for letting the hen in and out. Always, however, have a piece of wood for each coop, to be laid down inside in wet or cold weather, for the hens and chicks to get on. Often in summer during heavy showers, the water gets under the coops and drowns the little occupants. Have a piece of board about a foot square to each coop for feeding the chicks on, and if you are living in a part where minks or weasels are around, have a lath front, with the laths so close that the vermin cannot get through; when in use, put this at the front of each coop at night and prop it up with the feeding-board, to keep it from falling down. Such a slat front is better than board, as it gives air and ventilation, yet keeps the little chicks from getting out in the wet grass too early in the morning. During the day, it can be laid on the coop out of way, and using the board for feeding keeps the food clean

A lot of old fruit or tomato cans cut down, make good water vessels for chicks. Prepare one or two for each coop; by having these all ready, the poultry-keepers' troubles are much lessened at a season when many things are pressing to be done.

If you raise many chicks, have light slat feeding coops; slats all around a plot about three feet square, with the slats wide enough apart to admit chicks, but not hens. A few of these placed about the yard among the coops, allow the chicks to get in and out without being disturbed by big fowls, so that when they are left longer than usual unattended, they do not suffer for food. These conveniences can be made and stowed away till wanted. A little time can be profitably spent preparing such things now, and when required, if found all in good order, it makes work go pleasantly.

PIGEON SHOW AT THE NEW YORK AQUARIUM.

THE National Columbarian Society held a show in New York, at the Aquarium, in January last. The great variety of fine birds were much admired by the many visitors to this popular place of amusement. All the customary marine wonders were on exhibition, as usual. Few people can associate the idea of a simple pigeon with the great variety of pleasing forms and colors, to say nothing of the different sizes, brought together in this collection. There were little, tiny Tumblers and Owls; fine Carriers and Pouters of great size and beauty; Fantails of several colors; Barbs, Jacobins, Nuns, Priests, Trumpeters, Magpies, Ice Pigeons, Archangels, Romans of immense size, and many others. To attempt any particular description of all these varieties would be too long a task. The contemplation of such a variety of birds, all bred from one common parent stock, suggests what care and skill can do in breeding variety, in domesticated animals. Some people are inclined to wonder at the prices asked for a single pair of birds of some of the rarer varieties, amounting, in some instances, to several hundred dollars for one pair; but it is the difficulty of getting them up to this point of perfection that makes them so valuable. The price itself shows the rarity of such specimens. H. H.

POULTRY SHOWS.

THE New Jersey State Poultry Society held its first meeting at Elizabeth, Jan. 22–25. Quite a goodly number of birds of most of the leading varieties, were on exhibition. Asiatics were not as numerous as at some shows, except Partridge Cochins, of which there were some beautiful specimens. Leghorns, both White and Brown, were in full force. It is natural enough for these varieties to be well represented in New Jersey, for it is from that State that so many fresh eggs reach the New York market, especially Leghorn eggs. A great number of farmers in that State are now giving great attention to this branch of farming, and the result is that many up-town grocers in New York City can supply their customers with fresh-laid eggs, even at a reasonable price. Fresh Leghorn eggs are now a feature of the city market.

Many other breeds of fowls were conspicuous at the exhibition—White-faced Spanish, Polands, Games, Hamburgs, Plymouth Rocks, and many others. Such gatherings as these encourage the breeding of various kinds with purity and care, to which the farmer is indebted for the improvement of his stock. H. H.

CROSS-BRED FOWLS FOR PRACTICAL FARM USE.

AT the Eastern New York Poultry Show at Jamaica, two special premiums of $10 and $5 were offered by R. H. ALLEN & Co, Water St., New York, for the most useful cross-bred fowls or chicks. The conditions were, that the breeds of the sires and hens should be definitely stated, and that the exhibit should consist of at least two cocks or cockerels and two hens or pullets. Only two entries were made, one of which did not comply with the requirements, having been bred from mongrels on one side. Of the other entry there were four birds and, of course, no competition. This premium, I understand, will be repeated next year. This will give poulterers time to select their birds and to mate them for the purpose of breeding fowls to compete for this prize next season. It is to be hoped that this liberal offer will result in bringing out a good display of various crosses that will be useful and hardy birds and of good constitution, and prove a benefit to the community. H. H.

THE RURAL'S "CRICKET" CLOCK.

THE MOST BRILLIANT OFFER MADE BY ANY JOURNAL.

SOMETHING THAT EVERY FAMILY WANTS AND SHALL HAVE.

THE MODERN CRICKET ON THE HEARTH.

WE have been enabled, through the facilities afforded by our Experimental Farm (owned and operated exclusively for the benefit of RURAL readers) to make a FREE GIFT to our subscribers of a collection of rare and valuable flower seeds which have been enthusiastically received; and this gift on a still more liberal scale, will be repeated during the present year. Meantime, the RURAL itself has been enriched in all its departments, by the contributions from the best writers and life-like illustrations, demonstrating that our enterprise has not been at the expense of the paper.

This policy has been responded to by our patrons so liberally in subscriptions that we have decided, after a careful consideration, to make one more offer that shall

ECLIPSE EVERYTHING!

This offer is to subscribers, and anticipating the popularity of "The Cricket," we have made preparations for supplying this exquisite little Time-piece on the most extended scale. We regret that every one of our readers cannot see the "RURAL Cricket," as it is quite impossible to give any description of the premium that will afford a clear idea of its beauty, value and attractiveness. In our issue of next week we shall give a faithful representation of it, and then all may form some idea of what we now offer.

The "Rural Cricket" is inclosed in a beautiful circular metallic case of elegant design, which is nickel-plated. The face of the clock is white and has a "second" dial as in watches. The works are securely inclosed so that no dust can penetrate and harm their movement. It is like a stem-winding watch, in that it requires

NO KEY TO WIND IT!

and the hands are regulated without being touched. It runs thirty hours, is a chronometer-balance lever, jeweled, and it is guaranteed to keep as accurate time as the best watch.

IT RUNS IN ANY POSITION,

on its face, on its back, standing up, lying down, on its side, in short, in any position.

IMPORTANT!

This is the first time this clock has been introduced to the Puplic, and only after long negotiation with the world-renowned manufacturers, could we have a clock produced that exactly met our wishes. It is therefore unique, and no matter how many clocks there are in a house, all will want this insinuating little gem.

The offer is so liberal that it will be no trouble for thousands to secure the most valuable premium ever offered to the public without any more effort than is required to tell its merits to a friend or so. The lowest price of the "Cricket" is $2.50. We engage to forward it

First, to any one sending us the names of

Two New Subscribers and $5.00.

(which is the lowest cash price for two yearly subscriptions to the R. N. Y. alone.)

Second to any one sending us **$3.50** and the name of *one new* subscriber.

Should any one be dissatisfied with the "Rural Cricket" after an examination, he may return it at our expense and we will promptly refund the money.

RURAL NEW-YORKER,
78 Duane St., New York.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Agriculture and Education in the United States No. 5. ... 101
Jottings at Kirby Homestead ... 102
Rural Topics ... 102
Western Farm Topics ... 102
Maple Sirup, Manufacture of ... 102
A Novelty ... 103
Slitting the Bark of Hide-bound Trees ... 103
Sale of Trees, The Law as to the ... 103
Bulbs for the Flower Garden ... 103
Flower Garden, The ... 104
Nebraska Plants ... 104
Jottings from my Note-Book ... 104
Notes and Comments ... 104
Van's Views ... 105
Tricks of Tree Peddlers ... 105
Catalogues, &c., Received ... 105
Piggery, Model ... 105
Alderney Cattle in Shropshire, England ... 105
Siftings from the Kitchen Fire ... 106
Puddings ... 106
Cider Pudding ... 106
Recipes Wanted ... 106
Facts, Not Fancies, from Mississippi ... 106
Notes from California ... 106
Recipes ... 106
Bees, Our ... 106
Poultry, Care of ... 107
Pigeon Show at the New York Aquarium ... 107
Poultry Shows ... 107
Cross-Bred Fowls for Practical Farm Use ... 107

EDITORIAL PAGE:

Aspect of European Politics ... 108
Some of the Best ... 108
To Readers ... 108
Hereford Herd-Book Society ... 108
Where to Sell Good Butter ... 108
A Word to Parents ... 108
Financial ... 108
Look to Your Cellar ... 108
Exchange Resumed ... 108
Do not Wash and Shear Sheep Early ... 108
Brevities ... 108

LITERARY:

Poetry ... 109. 111. 113
Decorating Pottery ... 109
Talks on Timely Topics ... 110
Beautiful Women ... 110
Cora ... 110
Love's A B C ... 111
Bric-a-Brac ... 111
Answers to Correspondents ... 112
News of the Week ... 112
Publisher's Notices ... 112
Various ... 113
Markets ... 113
Reading for the Young ... 114
A Few Comments ... 114
Letters from Boys and Girls ... 114
Puzzler ... 114
Sabbath Reading ... 114
Pray On ... 114
Personals ... 115
Wit and Humor ... 115
Advertisements ... 113. 115, 116

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE have said that we should try to do more for our subscribers for 1878 than we promised. We respectfully call their attention to our announcement on page 107 as the first proof thereof. It will be seen, we think, that the offer there presented is the most liberal which has hitherto been made to the subscribers of any journal. As an evidence of our entire good faith, we would say that if the article does not meet the expectation of the subscriber, he is privileged to return it at our expense and we will at once refund the money.

ASPECT OF EUROPEAN POLITICS.

IN view of the momentous contingencies dependent on the election of a new Pope, the distrust produced by the vigorous action and astute diplomacy of Russia, and the uncertain issues of the approaching Conference on the Eastern Question, European politics wear a decidedly menacing aspect. The loss of the temporal power has by no means deprived the Papacy of grave influence in political questions, for the possessor of paramount spiritual influence over a large proportion of the citizens of nearly every nation in Christendom, must always be an important factor, not only in European affairs, but in those of the world at large.

The presence of the Russian forces within thirty miles of Constantinople and that of the British fleet in the Bosphorus, places these two Powers in a state of distrustful watchfulness, while the sentiments of both nations are becoming mutually more bitter. The Liberal peace policy in England has brought upon its foremost advocates a storm of opprobrium and unpopularity which will probably cling to them for many a day; but, however willing the Government may now be to support the Turk, the time for doing so favorably, has been suffered to go by. It would take at least thirty days to land a British force at Gallipoli or Constantinople, whereas the Russians could easily make themselves masters of both places in two. The Czar is emphatically now master of the situation. He can readily bid defiance to England, and by seizing on favorable points, prevent the entrance of her fleet into the Black Sea. He can afford to be comparatively indifferent to the action of Austria; for, with the free command of the Black Sea, he can make the Crimea the basis of supplies for his forces. The consciousness of his strong position will probably keep other nations watchfully neutral, at least until the proposed Conference shall have an opportunity of making a satisfactory disposal of "the sick man's" inheritance.

NOTES.

Some of the Best.—The Alnwick Seedling is thought in England to be their best late Grape of recent introduction. And Lord Napier is classed as the largest and best of early Nectarines. Of new Peas, the Criterion, introduced by Messrs. VEITCH of London, is highly spoken of. Of Potatoes, Maguum Bonum, as a general cropping Potato, is placed in the front rank. Of American varieties, the Gardeners' Chronicle says a good many have appeared during the past year, but although handsome in appearance it is premature to speak of them as suited for cultivation in England. Trophy, Centennial, Superior and Manhattan are specially noted. The Tomato is every year becoming a greater favorite in England. "Early Gem," by which we suppose Little Gem is meant, is highly valued as a dessert fruit eaten raw. Vick's Improved is set down as a "decided acquisition"—while our well-tried and favorite Trophy is thought to be fine for "exhibition purposes." During every year we hear a great deal of new fruits and vegetables, that are far superior to all others of their kind, but a very few of which are again heard of after the first season of trial.

To Readers.—Our circulation has increased over that of last year beyond our expectations; or rather we might better say, the increase over last year has fully met our expectations. The fact is simply that at this time our actual paid-for circulation is twice as great as it was the first day of August of last year, and of course it is increasing every day. The offer which we make on page 107, is one which we did not feel we could afford to make at an earlier date, though we have had it in mind for a considerable time. It will be seen that it is an out-and-out present, worth at the least retail price $2.50, to any one of our present subscribers sending us two NEW subscribers for one year. By such means, as well as by others which will develop themselves as the year goes on, the RURAL will strive to work a place in the hearts of its readers wider and deeper than that it has ever filled before. As we have no mind to be carried beyond our depth, we reserve the right to discontinue this offer upon giving in these columns due notice.

The Favorite Horse for New York.—The horses which bring the highest price in New York are those large enough with fine style and step to go before a carriage. They are called "park horses" because they are adapted for this form of driving. They must be full sixteen hands high. Bay is preferred, but other colors are often in demand. These "park teams," as the name implies, are for driving in the park, where every afternoon they may be seen by the hundreds prancing along with lofty step and showy style. They are not wanted for speed but for display. Fast driving is prohibited in the park, but out on the "road" beyond the park the trotters have it all to themselves. In New York the horses of most of the fashionable turnouts have their tails cut squarely off. It is called the "English style." There are two forms, one to cut the hair just below the bone and the other to square it off a little above the hocks. Some of the most elegant teams are not bobbed after this fashion but wear their tails as long as they chance to grow. Doubtless the owners have more regard for their comfort in fly time or perhaps they, like us, do not fancy this awkward style.

Hereford Herd-Book Society.—We hear from England that the above Society has been formed for the carrying on of "Eyton's Herd-Book," the copyright of which they have purchased from Mr. THOS. DUCKHAM, the late proprietor. A council has been formed, and editing and other working committees, on the same basis as the Short-Horn Society of Great Britain and Ireland. We are told that the prospectus will soon be published, and that the tenth volume of the book will be published under the new superintendence as soon as possible. The Secretary is Mr. SAMUEL URWICK of Leinthall, near Ludlow, England. We are glad to see the interests of this excellent and rent-paying breed of cattle looked after; their popularity is increasing over the whole world, but more especially in this country, where their merits as meat producers and their capability of living on rough feed, and being able to stand cold and wet, are becoming more and more appreciated.

Where to Sell Good Butter.—In talking with a person who had been a grocer, we heard the following remark in answer to the question, "Why do you not make more difference in the price of butter taken in from the farmers?" "We cannot do it. It will not work. Nothing will offend a woman quicker than to tell her that her butter is not first-class. If we tell her the butter is poor, she will sell it somewhere else, and she will trade where she sells her produce. To keep her trade, I must buy her butter. So it is often customary to pay about the same price for all grades of butter offered in small lots. We make on the best lots and lose on the poorest. We come out about even, satisfy all parties, and get the custom of those who sell butter which is good or poor." The better way for those who make the best butter is to find some regular customers and supply them from week to week, throughout the year. In this way, the producer gets better prices and avoids the close shave of middle-men.

A Word to Parents.—If you wish to make your son like his business place him in responsible places. Trust him; consult him about the work he is to do. He will take more interest in his work and be much more likely to succeed when he starts for himself. Don't make slaves of your children. For want of proper training, many a young man has grown up without discipline. He has been able to run through in an incredibly short space of time all that his strong-minded father left him. Twenty years ago we knew such a man. To-day his son owns only a poor old span of horses and is living from hand to mouth—and a very poor living he gets at that. The fine estate slipped easily from the hands of the son who had no skill to manage it. So one generation makes money for the next to squander.

Financial.—If JONES, a dealer in dry goods and groceries in a country town, should offer to take in trade potatoes and turnips, at the same price per bushel, while the farmers could, in an adjoining town get two bushels of turnips for each bushel of their potatoes, how many potatoes would JONES be likely to get in payment for his goods? When you arrive at a satisfactory solution of this problem, suppose you construct from it a formula and see how it will apply to the financial topic of the day.

Look to Your Cellar.—Clear out all decaying vegetables for the bad air will find its way into the rooms above and poison your wife and children, who may pine away and die. Do not, in such cases, lay it to some mysterious Providence. When the air is dry outside and near freezing, or a few degrees below, open the windows and cool and purify the air. Keep the windows closed on damp and warm and on very cold days. Pick up the rubbish; sweep up the litter; whitewash the walls and ceiling.

Exchange Resumed.—We now give notice that our seed and plant exchange will be resumed to subscribers during the next three months. Our old subscribers understand it. To our new friends we will say: State plainly the names of the seeds or plants of which you have a large quantity above your own needs and then state the seeds or plants you desire in exchange therefor. Finally write your address in full.

Do Not Wash, and Shear Sheep Early.—Washing is injurious to the sheep and to the washer. If not washed the sheep may be sheared earlier. If sheared early the new growth of wool comes on more rapidly. A sheep with a heavy fleece is in poor condition to stand a cold rain. She will suffer less if sheared. Sheep will do better and shear more if sheared earlier than common among most farmers.

BREVITIES.

GOOD things generally come slow.

THE man who thinks most—enjoys the most on the average.

GIVE us less dress and style, and more time to study and experiment.

PARENTS should find time to attend to the inquiries of their children.

SAVOY-leaved is about the only spinach raised by N. Y. market gardners.

AGRICULTURE advances with the improved condition of the common schools.

THE question is whether there isn't a connecting link between sausages and hydrophobia.

A PERSON may have a perfect knowledge of a trade in all its details, and yet be a very narrow man.

FOR private gardens no celery is so good or so little trouble as the Giant. It may remain where grown all winter, and well grown seed is always solid.

THE most successful farmer is not the one who squeezes the most money out of everything. His children and his wife should receive some attention. It should not all be given to his horses, cattle, and sheep.

LATE London papers announce the death of Mr. ANDREW MURRAY, a distinguished and much loved horticulturist. In speaking to those who sought his advice, he was wont to conclude with: "Now I have told you—do not believe me; go and see for yourself how it is."

MR. LAWES states that for twenty-two years in succession, artificial fertilizers (nitrogen, phosphoric acid and potash) gave an average annual crop of hay of nearly three tons per acre. During that period, a second crop was cut each yielding 2½ tons more.

OUR country children need to be in school more days in the year, and fewer hours of each day. A part of each day should be applied to technical education. In many cases, the large towns would be better off with less showy schoolhouses and teachers who should be better paid.

IF TAILBY'S "Hybrid" Cucumber is to become popular, it is time it made some progress in that direction. We have never praised it as a market variety, but for family use, it proved last summer, as it did the preceding one, the most tender and the smallest-seeded variety we have ever cultivated.

A THOROUGHBRED or a grade is much more certain to make good use of his food than a common or scrub animal. Feed in warm places; feed regularly. Do not kick, and yell, and thrash your stock, if you care to have them thrive. Roots and bran have a good sanitary effect in winter. Their food value cannot be estimated by the amount of starch or albumen they contain.

THE RURAL clock is the neatest, prettiest, most substantial article of the kind ever before offered for sale. It will please all, and everybody should have it even though he has a dozen clocks in the house besides. It will keep time in any position and may be carried from place to place. It is dust-proof, needs no key—the hands are moved without touching them—is nickel-plated—a pretty ornament for any room and an excellent time-keeper. See page 107.

MR. MEEHAN, in his interesting European Notes, makes the following statement which brings one back with a shock to an understanding of the real improvement made in the Strawberry by English horticulturists: "Strange, very strange, it seemed to me from a country where we are not satisfied unless we have a new kind of strawberry every year or two, to hear Mr. NORMAN avow that the best kind he had yet was the Keen's Seedling, a variety which may soon advertise its "centennial show."

THE always varied and interesting Agricultural department of the Tribune, speaking of "Brands and Butter," says: In Brooklyn complaints have been made against at least four dealers, for selling unstamped oleomargarine. Their disinclination to comply with the statute is not only a little suspicious, but impolitic. If they make a substitute for butter, which is as good as butter itself, they should let their manufacture stand upon its own merits, and should, in fact, prefer to stamp it, in order that the public may accord the palm to the thing which merits it. This is the true way of promoting an honest sale. Instead of pursuing it, some of them at least run the risk of paying a penalty rather than use the brand.

BUSINESS NOTICES.

Hearing Restored.—Great invention by one who was deaf for 20 years. Send stamp for particulars. JNO. GARMORE, Lock-Box 905, Covington, Ky.

For Women.

(CONDUCTED BY MISS FAITH RIPLEY.

KERAMIKAL KRAZE.

Of all the diseases that ever were known
Since Noah's unfortunate days,
The strangest that yet has afflicted mankind
Is the present keramikal kraze—
Ke-ra-mi-kal—
Oh, yes; the keramikal kraze!

You may spell it ceramical craze, if you choose
To follow illiterate ways;
But modern Kultcha kommands that it should
Be spell-ed keramical kraze—
Ke-ra-mi-kal—
You know—the keramikal kraze.

Whoever is seized with this kurious komplaint,
Very soon all the symptoms betrays—
And, by gum, every pot, mug and jug in the house
With birds, bugs, and Japanese blaze!
Ke-ra-mi-kal!
For such is keramikal kraze.

By and by, when this kueer epidemic is o'er—
The ash-man will stand in amaze
To find all the barrels so full of "ould pots"—
The remains of keramikal kraze—
Ke-ra-mi-kal—
Then adieu to keramikal kraze!

[Boston Commercial Bulletin.

DECORATING POTTERY.

Great as is the temptation to descant awhile on the history of Ceramic Art, and on its power of affording glimpses of ancient times and peoples' the scope of this article is too limited to admit of

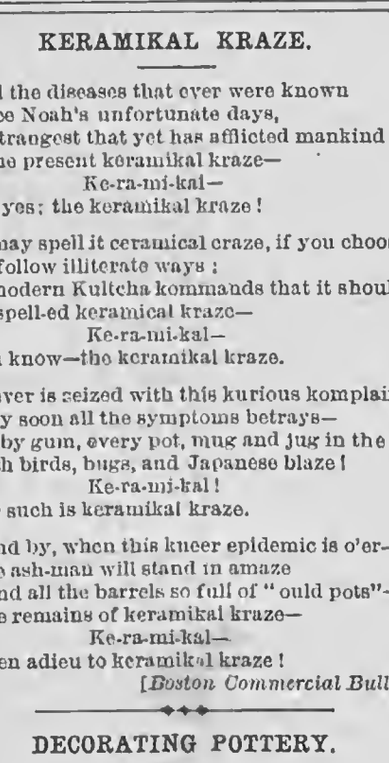


Fig. 1.

our doing justice to so imposing a theme; we shall therefore consider pottery solely from a decorative point of view, and without anything more in the line of preliminaries, we will proceed to give a few plain, practical hints on the subject of decorations.

First, as to materials used: they are: colors, platform, brushes, paint-saucers, tracing paper, impression paper, sand paper, spirits of turpentine and boiled oil. As the materials used in the decoration of pottery are few, they should be of the best quality, and carefully selected. Perhaps no one item will so much contribute to success or failure as the colors used, and a thorough knowledge of them is quite essential. Pottery or earthenware is porous and it is the different degrees of porosity which cause a difficulty. If it were all alike, there would be no trouble and the color once prepared, would always produce the same results. Unfortunately this is not the case and ware of a light bake will be found very porous. A hard bake is the other extreme, and between these is a wide difference. The first will absorb the color so rapidly that the pigment will be left on the surface as a powder, and will rub off.

Fig. 57.

Hard baked ware, being less porous, will not absorb the fluid so rapidly and the same preparation being applied will be allowed to dry more on the surface, and will form a glaze, which is not desirable. To obviate this, the color should be diluted with pure spirits of turpentine, which should be added drop by drop until a proper result be obtained. This can be done by testing it on the bottom of the vase to be decorated. Turpentine used for this purpose should be kept from the air,—a glass-stoppered bottle is the best vessel to keep it in; otherwise it will become gummy, and instead of obviating the difficulty for which it is intended, will only add to it. Neither should the colors be used from the bottle, as exposure to the air will cause them to become gummy, and unfit for use. Remove a small quantity to a paint saucer, and mix as required.

In mixing two or more colors to get a new tint, be sure and mix a sufficient quantity to cover the object intended, as it will be difficult to produce the same shade a second time. After using the colors, cleanse the paint-saucers and brushes

Fig. 3.

thoroughly with turpentine, else the paint when dry will be difficult to remove from the saucer, and will ruin the brushes for further use. We have shown how to graduate the colors for use on soft and hard ware. There is still another surface to be prepared for; when sand-paper and oil are used to improve the ware, the dust from the pottery and oil will fill the pores, and form a new surface. If the bottom of the vase be subjected to the same treatment, it can be used to test the colors upon. Sometimes it may be necessary to use a second coat of paint, to correct errors, or to change a pattern: in such cases, use more turpentine in the second coat, as the first coat will have changed the surface, and the same combination may produce a gloss. We have gone into detail in the use of these colors, as the material they are to be used upon is so entirely unlike anything else that special treatment is required to obtain full success.

A full set of pottery colors comprises white, black, red, blue, yellow, and gold. In the Grecian style of decoration, black is the principal color used; in Egyptian and other styles, all the colors can be used. For combinations of colors, in the different schools of decoration, see Owen Jones' "Grammar of Ornament," which may be found in the larger libraries. There is a more modern style of decoration, which consists in coloring the vase entirely with black, and ornamenting with flowers, birds, &c. In this, after coloring the vase black, the ordinary oil tube colors may be used.

If the decorator is not well skilled in drawing, or is making the first attempt to decorate, we would suggest that it be done by using only the first letter of the alphabet of the universal language of drawing—that is the dot. Make them longer or shorter, according to the place they occupy; a fine illustration of the capacity and power of this simple method may be seen on the new Doulton ware; they may be arranged horizontally, vertically or obliquely.

The extension of the dot in one given direction, or a point in motion, gives the straight line—the second letter of the universal alphabet.

Fig. 4.

Fig. 5.

Fig. 15.

In producing this horizontally around the vase, a simple mechanical device called a platform, will be found quite indispensable.

The platform will aid and encourage the beginner very much, for, by that alone, quite a pleasing effect may be produced by placing the vase upon the center of the disk, and then arranging the pencil or brush so that the point will touch that portion where it is desired to have a line or band; revolve the disk once slowly, and the work is done. For the next band or line, raise or lower the vertical bar, and so on. Horizontal bands and lines at different distances apart, with rows of dots, give a pleasing result.

With the straight line horizontal, vertical, and oblique, and in conjunction with the dot, many of the most pleasing and classic forms of Ceramic decoration are produced.

The meeting of oblique lines at the same angle gives the *zigzag*, another antique and universal decoration. The union of three straight lines gives the triangle—of four, the square—if they are of the same length and meet at right angles. With these taken as units, by varying the size and the thickness of the lines, hundreds of diverse patterns may be produced coming under what is technically known as "diaper work,"—a style of ornamentation peculiarly adapted to the embellishment of pottery. We would advise much practice in this before attempting the third and last letter of the alphabet.

When the curved line is added, the whole range of decorative art is open to the pupil; but our advice is, to keep to the simple curves as long as possible.

The quadrant, the semi-circle, the circle, will, in conjunction with the dot and straight line, furnish many pleasing forms; afterward the more subtle curves, as found in the wave scroll, the line of beauty, and the anthemeon may be attempted.

One common fault with beginners, we find, is the tendency to put on *too much ornament*, producing a loaded, crowded, disagreeable impression upon the mind.

Few, simple, and chaste, are the ornaments that have been universally used.

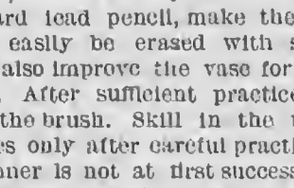
The law of the survival of the fittest only, has left us but a score or two of forms from the nations of antiquity; yet, few as they are, the combinations of which they are capable are many, and, with the variety produced by change of color, ample to meet all our wants in this department of art.

Fig. 2.

The better way to practice is to buy some vase—the cylinder is the simplest form, and, next to a flat surface, the most easy to work upon, and with a hard lead pencil, make the drawings. They can easily be erased with sand-paper, which will also improve the vase for permanent decoration. After sufficient practice with the pencil, try the brush. Skill in the use of the brush comes only after careful practice, so that, if the beginner is not at first successful, it is no reason why he should be discouraged. A good lesson on the cylinder will be to divide it into sections by drawing, with the aid of the platform before described, parallel lines at stated intervals around it; paint every other solid and alternate with figures selected from the studies given.

A knowledge of drawing—such as is taught in our public schools will be sufficient—will greatly assist the amateur; but it is not absolutely necessary, as with the aid of the platform, tracing and impression paper, very good results may be obtained; for instance, first, trace the design you wish transferred to a vase on to paper specially prepared for the purpose. A piece of impression paper must then be placed on the vase with the traced outline over it, then go over the lines carefully again, with some fine hard point—a very hard lead pencil will do. When the paper is removed, the design will be found transferred to the vase. To make the lines transferred permanent, it will be necessary to go over them with the paint, which can be done with a fine steel pen; although we would advise practice with the brush, until the pupil is proficient in drawing fine lines, as a pen is liable to scratch.

In the use of tracing and impression papers, a piece of thin white paper placed between, will cause the lines of the copy to show more prominently than they will over the impression paper—black is the best color to use, as it will answer in all cases except in drawing on black, when red can be used.



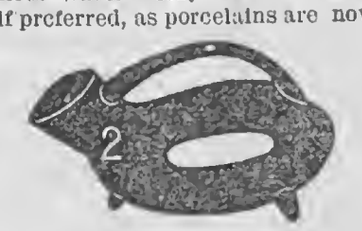
Pottery, as received from the hands of the potter, can be greatly improved by rubbing with sand-paper. Many persons prefer a darker shade than the natural color of the ware. This can be obtained by giving it a coat of boiled linseed oil. After rubbing down with sand-paper, a second coat will make it still darker.

The Albert ware is made expressly for ornament, and will not hold water without injury to the decoration. If the piece has a mouth wide enough to admit the hand, it can be made waterproof by first oiling it on the inside, then going over it with a coat of paint, and, finally, with a thick coat of varnish.

To those who are more particularly interested in transferring pictures from paper or from fabrics to wood or earthen ware we have the following to say:

To meet the growing fondness for Decalcomanic ornamentation, a plain pottery is manufactured in classic shapes and at inexpensive rates. It is prepared for use both glazed and unglazed. The former is chosen for the immediate transfer of pictures that are purchased already shaped in proper outlines or are cut from colored or ink prints, photographs, gilt, silver and glazed paper, also wad paper, Chinese *crepe*, and rice paper. Calico, cambric, printed silks, brocade silks and ribbons are also used to ornament vases, screens,

tables, *jardinieres*, etc. The unglazed pottery may be washed over with thin glue-water to fill up the pores before the paint is put on, provided a different color from the burnt clay is desirable. This glue-water will make one coat of paint quite sufficient. The paint may be purchased all prepared in bottles, or the paint of ordinary use in a house may be procured. After the pottery or wood is dry of the glue, it is painted plainly with the color selected. A pale tan or *ecru* tint represents Kioto ware. Any other color may be chosen if preferred, as porcelains are now found



in all tints. Decorations like those suggested for the glazed ware, may be chosen for pottery finished in this manner, and are laid on with a flour or starch paste in which there is a little dissolved glue. Pastes prepared in bottles may also be purchased if more convenient. After the pictures are dry, a thin varnish, also procurable in bottles, or of shellac, is laid over the entire vase or plate or whatever is decorated. This finishes it to resemble porcelain or delf ware.

Figure No. 1.—This is a vase of Phœnician shape. It may be very properly left of the natural tint of the clay, and all the ornamentation may be black. This may be done with the black Japan varnish and a tiny brush. The effect will represent the antique with satisfactory fidelity. As this shape has been reproduced in modern wares at Sevres, Jassy, Limoges, Dresden, Berlin and England, it has been richly colored and high-

ly enameled in many styles of decoration. A medallion, with a "gray and gray" photograph, a painted miniature or a printed face, is effective upon its side, instead of a bouquet; although flowers, singly or in clusters, with their natural hues, are a much-admired ornament upon it. The borderings may be cut from gilt, silver or colored papers and pasted upon it, or papers already cut may be purchased at small expense at the shops where the ware is selected. The sizing of the article with glue, the painting, and the addition

of a coat or two of varnish to finish it, have all been explained. The colors of a vase should contrast pleasantly with the general colors of a room, except in such instances as pale-blue, rose-pink or gold-colored apartments, when they should match the tints about them with exactness. This rule for artistic effects applies to all styles of vases, and indeed to all articles that are purely ornamental.

Figure No. 2.—This vase is Egyptian and also Moorish in outline, and was much in use to hold the ashes of the dead. It was one of the earliest of the many urn shapes, which increased in variety and picturesqueness as the centuries grew in number. It is often painted black all over, and the figures are afterward formed by scraping

away the color with a sharp instrument. When more convenient, the light-colored ornamentation may be pasted on in dull reds, if the original Egyptian or the Moorish idea is to be preserved.

If the decorator be indifferent to the continuance of early ideas in art, any brilliant colors may be added by transferring pictures of foliage and flowers to its sides. Patterns traced upon plain paper may be selected from laces, frescoes, or anything that is pretty and graceful, and then cut into shape before the paste brush is applied.

This vase is sometimes chosen of very large size, and decorated and finished in any agreeable colors and placed in the hall to receive dripping umbrellas. Of course, the furnishing of the hall will be consulted when its tints are selected. Sometimes a monogram of the resident of the house is arranged in black upon a gold medallion, or the letters in gold or other color are placed upon a black medallion at the side, when the same two colors are chosen as borderings.

If the vase is painted in pale hues, the ornamentation is pretty in black or all-white, in silhouettes, in traceries of foliage, or in the forms which are called arabesques and used by the Arabs and Moors. The latter people were forbidden by their religion to picture anything that had life, and hence their ingenuity is highly developed in pretty shapes and fanciful outlines.

FIGURE No. 3.—Here is an article decidedly French in its form, and its ornamentation is suggestive of both the Egyptian and Gothic. The style of decoration is both pleasing and fashionable, but it is not of necessity confined to this shape, nor is the vase limited to the illustrated method of being beautified. It is one of those outlines that are adaptable to the fancy of every ornamenter of pottery.

A plain band of gold at the top and bottom, with bouquets, a medallion with a face upon it, a monogram, a picture of a favorite dog or cat, birds or indeed anything that pleases the fancy, may be placed upon this ornamental article of pottery. It is called a flower-pot or a *jardiniere*, because it is oftener used for the growth of plants than for a simple decoration.

FIGURES NOS. 4 AND 5.—These are both antique forms, lately reproduced, because we are passing through an era of admiration for the old without regard to whether it has or has not sufficient claims to our devotion. They are restorations of forms from Pompeii and from the ancient Greek. Other nations of the same date as Pompeii also possessed them, although their origin was most likely in Italy. They are forms that are seldom ornamented in flowers, but they are handsome with grotesque figures in black or dull gold, and also in *lapis lazuli* on a dull red ground. For the growing of flowers, or for dried grasses, pressed foliage and wax flowers, they serve the part of vase or *jardiniere* with agreeable effect. No. 5 is especially handsome when supporting the roots of a growing vine, such as German ivy, Japanese fern or smilax.

Plates, modernly styled *plaques*, are among the decalcomanie favorites. Flowers, photographs of friendly or admired faces, pictures of domestic animals, etc, are placed in the center, and the edges are bordered or painted to suit the taste. Sometimes the edges are left plain with fine effect.

To use a photograph upon pottery, provided the picture has been mounted upon a card, lay it face downward in a bowl of clean water and permit it to remain all night, or even longer if needful. When it has been soaked long enough, it can be shaken off the card into the water. If it is removed with effort, it is likely to be injured. The water will separate it, if time enough be given to its dissolving power. Dry the photograph and then brush the back of it with mucilage, and let it dry again, being careful not to allow it to wrinkle during the drying, after which it is ready to be trimmed and pasted to the plate or vase.

Tables, fire-screens, etc., are finished in decalcomanie style, with pretty effect. It is a pleasant method of mounting family groups of pictures, and if applied for, photographs will be furnished unmounted at the photographers. When wood is used, coats of paint are required before the pictures are added to it. Varnish in two coats should suffice as a finish.

Catalogue of illustrations here given of the Albert ware.

15 represents an Egyptian Amphora.

24 a candlestick with snuffer and match-safe.

32 a Greek vase.

57 an Egyptian vase.

101 an Etruscan card receiver.

115, 111, 2, 555, 601, vessels discovered by Prof. Schlieman on the supposed site of Troy.

Thanks are due Messrs A. H. HEWS and Co., North Cambridge, Mass., for cuts of the Albert ware which are published, and also S. W. TILTON and Co, Boston Mass., for their Book of Designs and Illustrations for Decorating Pottery from which I have extracted largely in this article.

It will give me great pleasure to answer any questions on subject of the history, uses, or methods of decorating pottery that RURAL readers may feel disposed to ask. FAITH RIPLEY.

TALKS ON TIMELY TOPICS.—No. 4.

ROSE GERANIUM.

Willow Baskets.

WE want to tell the RURAL readers how these conveniences are made. Will the one who so gracefully presides over our circle permit it?

Very dear they have been to our heart, with their graceful white curves, their smooth, glossy polish, and subtle, dainty fragrance. Their very sight recalls to memory spring-days shining away back over little girlhood, when we pressed the faint green meadow-grass with fitful steps, and hunted blue-eyed violets and tawny willow-waste together! In those days we carried our treasures to a dear, peaceful little log cabin, and left them for transformation. And if we loved willow baskets for no other reason, we would still cherish them as a reminiscence of that tiny palace of logs. Can we admit that it was only such, and yet show it to your vision as it dwells in our own? * * * So cleanly were its ragged brown walls, over which red honeysuckles and pink "multifloras" clambered! So guileless of cobwebs were those eaves where the brown wren builded! So green, oh! so velvety, grew the short grass over the door-yard, and along one side; just within the brown rail-fence rippled a tiny brook which in all the world, my dears, has no counter-part. Have we not tested the matter? Did we not forsake full often, the shadow of the porch, and the weaver plying her art, to run under the flying snow of apple blossoms, and quench romantic thirst with water which the brown gourd dipped from its fountain-head?

Behold the College of our learning! Now for the learning; for, in rather ungrateful disregard of her life-long self-sacrifice we overlook our gentle teacher. (Heaven found and took her long ago!)

Come with me, in fancy, and we will pull the willows for ourselves. You see how daintily the slender last year's growths snap and are off, as though falling into your hands were a genuine pleasure. We must carry home a generous bundle for two or three baskets seem to naturally grow from one attempt—a sort of inevitable tendency to cluster. If willows ever do bear baskets you may expect them in bunches of from three to half a dozen.

The porch is the place to sit just now. While the ground is still damp we should have a floor beneath. Yet, with a sky so bright, we need but little roof above. And it is well we delayed our gathering no later, if the leaf buds are allowed to progress too far, our wands will be brittle and there will be consequent annoyance. We must assort them—chosing the most slender for bottom weaving and those which are longer and stronger for the the braids.

We must curl them in a kettle, cover them with water, and boil them—sufficiently. We determine this point by and by. If some one will agree to tend the fire we can have time to whittle the hickory pincers necessary to the "peeling" process, and afterwards take a little nap, or try two or three bits of new music.

Now, we seize a willow and place its base between the jaws of our pincers.

"What are they like?"

Oh, nothing very formidable. Only a hickory peg a few inches long, smoothed off and split half way up. We compress the jaws of this unique agent, and draw the willow through. If the bark peels readily, the boiling may be discontinued. However, don't lift the wands from the water, but keep them covered, and throw the peeled ones into a tub of clean water.

Select from thrifty, unboiled wands eight uniform pieces nine inches long, and when scraped white, as thick as a turkey-feather quill. With a sharp knife trim four along an inch of the middle, until they are slightly flat. In a corresponding part of the others cut slits. (Look in the bottom of any basket, my dear, for a pattern.) It is best, after you have prepared your frame, to wrap a bit of fine, strong twine securely around it to give additional strength before the weaving is commenced. When the bottom is complete, select two strong willows for each end of the rib, shave the ends, press them firmly in. Your structure is, at this point, somewhat spidery in appearance and rather hard to compose. However, it won't bite; so, sieze bravely hold, and bend the ribs together! Bind a strip of cloth around to keep them in place. Oh, of course you can use a string, but of course it will slip off!

Now, weave a strip about two inches high. Do not separate the pairs of ribs! When your work is complete, you are ready for the braid. Choose from six to ten willows for each cluster.

And now—if you have ever seen a willow basket, you will perceive how to twine the clusters, in and out, and out and in, until the tops all point downward; you will understand how to work them up again and down once more, and cut them off for the last touch. If you have no pattern, instinct may teach you. If she fails, you will have to throw the whole affair away! Our pen utterly fails us further in the way of description.

Should the baskets ripen, set in one a shallow dish, and all summer long enjoy the little blessedness of a rustic basket of flowers. Devote one to yellow peaches and red apples, and another to your grandmother's knitting. This last will be the sweetest work of all!

BEAUTIFUL WOMEN.

ONE thing may be particularly noticed in English women. The mouth, when beautiful, is absolutely statuesque. The curves are decided, and at the junction of the red of the lips with the white, there is a delicately raised outline which marks the form of the feature in a very noble way. This may also be said of the nostril. It gives a chiseled effect to those features, which is not so often found elsewhere; but the nose itself, the brow, and the set and carriage of the head are generally finer among Americans.

In both countries, however, the head is apt to be too large for perfect proportion. This is a characteristic defect of the English type of beauty. Then, again, the articulations are heavy. Really fine arms are rare; but fine wrists are still rarer. Such wrists as the Viennoise women have are almost unknown among women of English race in either country. It is often said, even in England, that American women have more beautiful feet than English women have. This may be doubted. The feet may be smaller, but they generally look smaller because English women wear larger and heavier shoes.

Literary Miscellany.

"LET THE DEAD BURY THE DEAD."

'Tis gone, with its joys and sorrows,
Its sunshine and storms of rain:
Look not away in the distance,
On relics of grief and pain:
Look up, dear friends, instead:
Let the dead year bury its dead!

What if our pride have suffered,
What if the hour of need
Have shown that the friend we trusted
Was worse than a broken reed?
Look up, though our hearts have bled:
Let the dead year bury its dead.

Let us count the abundant mercies
Our one great Friend has sent;
The days of our light and darkness—
All gifts of one sweet intent.
No matter the tears we shed:
Let the dead year bury its dead.

Ah, youth has been taught stern lessons,
And we of maturer years
Have learned a yet keener knowledge
Of life's vain hopes and fears.
How surely God's hand hath led!
Let the dead year bury its dead.

And the new-born year shall find us
Courageous, alert, and strong;
Girt up for the strife before us,
Though sharp the trial and long.
On, on, with a firmer tread,
While the dead year buries its dead.

CORA.

CHAPTER 1.

"Now, Hal, do be amiable for once, and accede to my very simple request?"

"For once, you ungrateful puss! When do I refuse any reasonable request of yours?

And Harold Sinclair turned away from his easel and faced his sister (as she stood behind him), brush and pallette in hand, and a complete expression of mingled severity and gentleness on his face.

"When?" she answered laughingly. "Never, of course, so do not begin now, but like the self-sacrificing brother you always are, put away that horrid painting, and take me up to town to see the illuminations."

And Cora Sinclair enforced her pleading by kneeling down beside her brother, and bringing her face on a level with his shoulder, lifted her beautiful dark eyes, half-entreating, half-triumphant to his relenting face.

A more beautiful pair of people could hardly be imagined than this brother and sister, although no one looking at them would have imagined that any relationship existed between them, and the few friends and clients whom the young artist received and introduced to his sister were always surprised when they made Cora's acquaintance.

Harold Sinclair was one of those to whom one would instinctively ascribe pretty sisters, but the contrast between himself and Cora was remarkable, and one could not help a feeling of disappointment, and the wish that he had another sister of the same grand Saxon type of beauty as himself. About the medium hight, and rather slenderly built, his figure had hardly attained the massive, stately proportions one ascribes to our Saxon ancestors, but his face was one of the purest Saxon type; his eyes, blue and sparkling; his waving hair of the fairest golden hue; his complexion, pure and brilliant as a girl's.

Cora, on the contrary, was more a brunette than a blonde; her hair was of the darkest brown, gleaming with a tinge of gold when the sun touched it; her complexion was of that warm, clear paleness the Italian masters loved to paint; and if her features were less regularly beautiful than Harold's, any irregularity was fully atoned for by the wondrous dark-gray liquid eyes, fringed by long black lashes, which cast a shadow over the fair cheek.

"I wish you would not urge it, Cora," he said, with a last feint at resistance. "You have no idea of the unpleasantness—to use a mild term—of a crowd on such an occasion. Why, my child, people are often killed, crushed to death."

"Oh, don't be so absurd, Hal," she replied, pettishly: "one would think you were a malden aunt from the tone of your forebodings. Just as if I had never been in a crowd! I remember quite well being in a huge crowd one night at the Champs Elysees on the Emperor's fete, and papa lost me, and I was only ten, but I enjoyed it very much, and people were quite nice about the pushing: I was not jostled a bit more than was agreeable."

"French and English crowds—" began Harold.

"Oh, yes, I know all about it," interrupted Cora, laughing. "They are very different, and English crowds are much the nicest. Hal, dear, do be kind and take me. I don't have much fun down here."

"I know that, dearest child," said Harold, sadly. "I wish I could make things brighter for you."

"Hal," she interrupted, impetuously, "you know you are a million times too good to me! There, I don't care to go a bit if you do not wish."

"I would take you in a minute, Cora," said her brother, after a moment's pause, during which time she had danced a merry *pas seul* round the sitting-room, pausing at his side, and looking up laughingly into his musing face, "but I am really afraid of a crowd for you. We might get separated—you might faint."

A peal of merry laughter rang through the room.

"Have I ever fainted in my long life of nineteen years and a half?" said Cora, scornfully. "You must have a bad opinion of your sister's nerves. You are about as likely to faint yourself as I am. Are you going to take me, brother mine?" And she assumed a pretty attitude of determined wilfulness. "Or must I go by myself?"

The words sounded self-willed enough, but the expression of entreaty and affection in the sweet dark eyes belied them.

Harold smiled as he contemplated the graceful figure in its pretty, artistic dress of dark-blue serge, enlivened at the throat by a knot of ruby-colored ribbon, which fastened her plain linen collar; a dress simple enough, yet not without a grace of its own, besides that which it borrowed from its wearer.

"Thanks, brother mine," said Cora, noting the smile. "I will go and get ready at once."

"Wrap up well, little girl," said Harold, then, rising, and beginning to put away his painting materials, while his sister ran away to get ready.

Harold and Cora Sinclair were orphans. Their mother had died at Cora's birth; they had lost their father about six years previous to the opening of our story.

Reginald Sinclair was the younger son of an old and wealthy English family, but he had married a young Italian actress, and his family had disowned him for the misalliance—if one can give such a name to such a union.

Clara Visconti had possessed great beauty and talent; her professional career had been very unusually brilliant, but she had been quite willing to give up her laurels and triumphs for the love of Captain Sinclair, and the quiet home he offered her.

During the few years of happiness she had enjoyed with her husband, she never once regretted the luxury and pleasure of the life she had renounced. Her husband's admiration was enough for her; his appreciation of the beautiful voice which had made plaudits issue from a thousand throats, sufficed for her ambition; and when she lay dying, with her hand in his, she was able to say, with a smile, truly:

"I have been so happy with you, *caro mio*, it seems hardly possible that I can be happier where I am going."

And the beautiful dark eyes turned to him with one last look of love ere the veined lids closed over them for ever.

Reginald Sinclair never fully recovered his wife's death; all the sunshine and beauty of his life passed away with her lovely face and soft voice, and when he saw her no longer, it seemed as if he had but to lie down and die. But there were other uses for his life yet.

The brave, handsome boy, Harold, was but six years old when his sister was born, and Reginald Sinclair had the child—with her mother's wistful, lustrous eyes—to win him back to brighter things. Harold was nineteen, his sister six years younger, when they lost their father; and during the six years which had elapsed since his death, Cora had had no other guardian but her brother.

Well and truly had he fulfilled his father's trust, and no father's care—hardly a mother's—could have been more tender or more guarded than Harold's. They had retained the pretty, old-fashioned cottage midway between Richmond and Kew, where they had lived ever since Captain Sinclair's return from abroad, and it is there we found them on the 10th March, 1863.

Harold had adopted the profession of an artist, and already, young as he was, was adding sensibly to their small income by his professional earnings. The Tryst was a happy home for Cora. She had few friends, and now, since the departure of her governess, had but one constant companion, an old Italian servant, who had been her mother's nurse as well as her own, and who loved Harold and Cora for her dear sake.

"Here I am, Hal," said his sister's voice, breaking in upon his reverie, as he stood at the bow-window of his studio looking out on the dreary March landscape. "Remember, we have to get to the station to catch the 7 o'clock train. Marianna is shaking her head, and looking like an owl in an ivy-bush at such a rash proceeding. I think she is more surprised at you than at me."

And Cora's eyes danced under the shade of her sealskin cap as she drew on her little fur-lined gloves, and Harold donned his great coat.

The railway-station was tolerably crowded, and Harold had some little difficulty in obtaining places in the up train; but they were off at last, and half an hour brought them into the heart of London.

At first Cora enjoyed the excitement and novelty of the crowd, which was not so great as Harold feared it would be later.

"I want most of all to see Temple Bar, Harold," she had said; and they had gone city-wards with the greater mass of the people. Harold had put his arm round Cora, and the pleasure both felt in the contemplation of the illuminations, and the weird effect they had in their contrast with the deep blue of the sky, made both for a time insensible to the crush and discomfort of the crowd.

Very slow was the progress made by the moving mass towards Temple Bar, and Harold felt that the crowd was gathering and increasing as they went along, borne forward irresistably by the immense concourse of people. Glancing down at his sister's face he saw that she was looking a little pale and startled, as if but now stricken with a sense of their helplessness and inability in such a crowd. The people were getting more noisy too; more than once words which Harold hoped his sister did not hear struck upon his ear. Many of the sight-seers were people belonging to the great middle class, but the greater number were in a station, considerably below it

and were not always choice in language and expression. Once or twice Harold felt his sister shiver and press more closely to him; but when he stooped his head to give her an encouraging word or two she flashed back a smile and a merry reply.

Just as they neared Temple Bar, there was a stoppage; it was evident that there could be no advance or retreat, and yet those behind pushed forward, those in front backwards; so that one of those surging movements common in a crowd made itself felt all along the dense masses which thronged the street.

Closer and tighter became Harold's clasp of his sister, and intense was his fear that she should be hurt, as he felt how painful the pressure and crush were to his own stalwart, well-knit frame. The hoarse murmurs deepened around; the multitude, like so many living waves, surged to and fro, and Cora began to feel stifled, and a longing for fresh air came over her. She could feel the hot breath on her cheek, the huge arms thrust near her face, the heavy tread on her little feet, and her repentance for her wilfulness was very sincere just then.

Anxiously Harold glanced around, and longed for a passage through the crowd; but great as his strength was, it was all required to prevent the delicate girl by his side being seriously hurt by the rough movements of those around her.

"I am so sorry, little sister," he said, bending down "It will be less dreadful in a few moments. I will take care of you."

"I am not afraid, Hal," she answered, lifting her eyes, with a forced little smile. "Look how beautifully those two letters are interlaced. What a pretty monogram they would make!"

Brave as Cora tried to appear, she could not quite disguise the trembling of her voice, nor force back two large tears which welled up into her gray eyes, and hung for a moment on the long dark lashes.

Harold saw them, and felt very angry with himself for having yielded to her request.

"If I could get you out into one of those quiet side streets, Cora," he said, wistfully.

"Don't try, Hal; you might get hurt, or I might lose you," she replied.

After this there was a short silence; neither spoke again until a sharp, shrill cry of anguish rose in their immediate neighborhood, and all personal anxiety was momentarily forgotten. A delicate-looking woman, holding a child in her arms, had been unable to support the pressure and jostling around her, and had felt the little fellow she carried slip from her feeble grasp, and knew that both were in danger, imminent danger, of being crushed to death and trodden down in the eagerness and impetuosity of the moment.

"Help me! oh! help me!" she cried, faintly. And instinctively Cora Sinclair unclasped her hands from her brother's arm.

"Harold," she said, eagerly, "help her. I am all right. Look! look!" she went on, with feverish eagerness, "she is fainting; she will be killed, and the child."

Reluctantly, and yet moved by a stronger feeling which he could not resist, Harold, as he released his sister, managed to seize the child, and then turned his attention to the mother.

"Keep near me, Cora," he said earnestly, as he caught the drooping form of the poor woman, and in a louder voice appealed to those around him to make a passage and allow them to get to one of the deserted side streets. His words were not quite without effect; but in the movement of the people around, who tried to accede to his request, Cora found herself borne irresistibly forward several yards, and entirely separated from her brother.—[To be continued.

LOVE'S A. B. C.

"Going to Europe?"

The speaker was one of two gentlemen sitting at an open window on the second story of the "Ocean Hotel," Long Branch. Both the young men were smoking.

"Yes; I am going to Europe," was the reply. "I will be frank with you, Charley, for we were at school together, were chums at college, and have been close friends ever since. I will say to you what I could say to no one else; and I feel I must unburden myself to somebody."

"A woman of course?" said his friend, sententiously, selecting a fresh cigar.

"Yes; a woman."

"Miss Temple?"

"Isabel Temple."

"Just as I supposed. But look here, Hal, is she not a bit of a blue-stocking?"

Harry Darnley winced. He could not bear that anyone should speak disparagingly of the woman he loved; and Charley Rossiter used the phrase, he knew, disparagingly.

"I do not think so," he answered. "She ranks intellect above all else; is fond of the society of men of ability rather than that of mere boys; likes, in fact, to talk of things not persons; in other words, is no gossip, as so many women are. If that is being a blue-stocking, then she is one?

"Precisely. Reads Darwin, Herbert Spencer, and Huxley. I don't mean to be offensive, but isn't this your half-fledged female lecturer? Before long, mark me, she'll be haranguing from a platform, probably in full Bloomers, with a monkey-jacket and a man's hat."

Even Harry could hardly repress a smile. But he replied, warmly:

"You do her great injustice. She is a thorough woman at heart, with infinite capacities for sympathy, self-sacrifice, tenderness, devotion. Only nothing has yet touched her deeper nature——'

"You mean that no man has ever yet won her love," interrupted Charley.

Harry finished, without noticing the interruption: "As she is full of character, she feels the need of doing something; and so throws herself heart and soul into all the movements, from the Radical Club down."

"Oh! yes; goes to feminine conventicles, where they read poems and essays, admire each other, and listen to transcendental fools lecturing. Faith, Harry, I thought you had more sense than to fall in love with a girl of that kind. Grant she is pretty, charming fascinating, even: I am quite ready to admit the two last, and I know she is beautiful; but for Heaven's sake don't marry any woman who thinks more of herself than she ever will of anybody else."

Harry took a turn up and down the room to calm his irritation, regretting that he had made a confidant of this cynical Charley.

"You entirely mistake her," he said, at last. "You should see her in the privacy of her home, as I have; for I first met her a year ago at her father's country-seat. Her little sisters fairly worship her; so do all the poor of the neighborhood. A woman more free from affectation, or who is less self-conscious, never lived"

"And she will have none of you?"

"In every way I have shown my love, but she will not let me speak. She seems to wish to spare me a refusal, and in that reveals the delicacy of a true woman."

"Well, old fellow, I'm sorry for you. You're not the sort of man either that really first-rate women dislike; and that convinces me that you overrate this Miss Temple. If she knew you as I do, she'd crawl on her hands and knees to beg you not to go away, but to remain here, and live for her."

"Some day," said Harry, with a sigh, "she'll find she has a heart; and then you'll see how you have maligned her. She's the sort of a girl to die for the man she loves."

"Stuff and nonsense! She'll die for nobody unless, when older, she dyes for herself: pardon the pun, I know it's intolerable, but it's good enough for her. I only hope her hair, instead of coming out chestnut color, will come out blue. Ha! ha!"

"You may laugh at women who are intellectual, and sneer at them for blues," answered Harry, sternly; "but for my part I wouldn't marry one who wasn't. Think of being tied for a whole lifetime to a silly woman. But with one as bright, as full of spirits, as cultivated as Miss Temple, for a wife and companion, one's home would never grow dull."

"'A perfect woman, nobly plann'd
To warn, to comfort, and command.
And yet a Spirit still, and bright,
With something of an angel light.'

Heaven bless her! I hope the man who wins her, when I'm far away and forgotten, will be worthy of so rich a prize."

"I wish him joy of his icicle. The cold glitter of steel; all brains, no heart. She isn't capable of learning even the A B C of love, and never will be. Forget her, Harry."

"Well, we shall never agree on this subject, so let us drop it, and forget I ever spoke. What say you to a stroll on the Parade?"

"With all my heart," was the response.

"I shall see her to-morrow for the last time," said Harry, in conclusion. "There's to be a picnic at Paradise Rocks. After that—well, Europe."

Little did either of the speakers imagine that there had been a listener to their conversation, much less that the listener was the very lady under discussion. But so it was. Miss Temple had come to call on a friend at the hotel, and finding her out, had sat down at the table, in her private parlor, to pen her a note. Now this parlor was the next room to that occupied by Charley Rossiter, and as the windows of both apartments were open, she heard distinctly every word that was spoken. It was Harry's admission that he was going abroad, which first attracted her attention.

A sudden pang shot through her heart, a spasm of absolute physical pain. Harry had been so devoted to her for more than a year, that she had taken it for granted he would always be so. She had, therefore, no wish to change these pleasant relations; as Harry had said, she shrank from him when he became too demonstrative; but now that she found he was going away, she awoke to the consciousness that he was necessary to her happiness, and it burst on her like a revelation.

She listened, spell-bound, to what followed. It never even occurred to her that she was eavesdropping; she was too intensely absorbed. While her cheek flushed, half angrily, more than once, at Charley's cynical criticisms, her heart throbbed with strange pleasure at Harry's generous defence of her; the more generous she felt because he admitted that he was without hope. And it began to dawn on her that she had been, unintentionally, a little selfish in expecting to keep him at her side, on her own terms, receiving everything and giving nothing. She saw, too, that she had misunderstood herself. She had been saying all along, and her set had said it also, that only weak, silly women fall in love; that men were all alike selfish; that her sex were the victims of their affections—"too emotional altogether," as the high priest of the æsthetic Club put it. It should be her care, Isabel had early declared, to avoid this weakness. Life surely had enough in it, even for a woman, without the need of love. But now her fine-spun philosophy fell from about her. Now, when one whose society had, somehow, become essential to her, talked of going away for ever, she suddenly discovered what a dreary waste of years lay before her—what a hopeless, purposeless future. And she compared Harry, mentally, with the other men she knew, realizing, as she had never done before, how superior he was to all of them; nobler, truer, manlier, more intelligent, better cultivated, chivalrous beyond words—a Sir Launcelot in all that was great and good. And she blushed, with secret pleasure, as she thought it.

But he was going away for years. It was too late to recall the past. Yet there was one hope—a slender one, but still a hope. They were to meet to-morrow at the pic-nic; and though she could not take the initiative, yet something might happen. Perhaps—perhaps——

Suddenly she roused herself, with an effort, for she had been thus musing for long after the two gentlemen had gone out, and rising, ran downstairs to her pony-phæton, feeling like some guilty thing, all at once remembering that she had been eaves-dropping.

There was a great dinner-party that day where Isabel was a guest, but everybody remarked that she was not herself. She was dull, spiritless, absorbed. Her usual gay sallies, her contagious wit, were absent. Little sleep visited her eyes that night. She was thinking all the while that she had discovered her secret too late; she called it a secret now; a week ago she would have called it a weakness. Harry was going, and might go, was almost certain to go, without a word.

She dressed for the picnic next day with the greatest care. She was in a fever when she reached the rocks till Harry made his appearance, for she feared something might happen to prevent his coming. He did not, for awhile, join her; and she was in a fever of apprehension till he did. When, at last, he came up, she welcomed him with a bright smile; and from that moment she was the gayest of the gay. Never had she been more brilliant. Half a dozen of the most intelligent gentlemen present were about her; she had a retort for each; the ball of conversation never flagged for a moment. But, with all, she was restless. She was hoping that Harry would give her a chance to see him alone; but he made no movement to do so.

"Why does he not ask me to go for a walk?" she said to herself. The afternoon was rapidly passing; her hopes began to grow faint: she resolved on a decided step.

"How very warm it is," she cried, fanning herself vigorously. "I wonder if there is more breeze on the beach."

Immediately her attendants, one and all, offered to escort her to the shore—Harry among them. She put her arm in his.

"I will accept Mr. Darnley's kind escort," she said, bowing gracefully to the rest. "They tell me he is going to Europe, and it will be my last walk with him. The rest of you I can see dozens of times yet."

The others took the hint, and bowing, left Isabel and Harry alone. Neither spoke until they had left the noisy company far behind them, and quite out of sight, and had reached a rocky bluff, with the low, level sands stretching before them, and the long line of breakers whitening in the distance.

"Let us sit down here," said Isabel.

They sat down, and, as the sun was still warm, Harry put up her silk umbrella, and held it over her. Still he did not speak. Something in Isabel's manner began to give him hope, yet he could hardly believe it; and he feared to spoil all by precipitation.

"Are you really going to Europe?" said Isabel; and her voice trembled a little in spite of her effort to be calm. "Is it not very sudden?"

"It is sudden; but it is the only thing left for me to do."

"Why?"

There was a tenderness in the tone that was unmistakable, and such as Harry had never before heard. He looked at her suddenly and keenly. Her face grew crimson with blushes; her eyes fell; she turned half aside. Then, as if hardly knowing what she did, she began to draw lines in the sand with Harry's thin bamboo cane, which he had put down when he opened the umbrella.

A wild, desperate resolution took possession of her companion. He was no faint-hearted knight; but, as he had told Charley, never before had Isabel given him even the slightest encouragement to speak as a lover. At this sudden shyness on her part he took courage, and resolved to peril all "on the hazard of the die."

Only those who have been in such straits themselves, hoping and yet fearing, but fearing more than they hoped, can know how he spoke. His earnestness, his passion, made him exceptionally eloquent, even for himself.

Isabel listened with a beating heart, and with fast-changing color. He told how long he had worshipped her; how her coldness had driven him to despair; how, being about to go away for ever, he could not leave without saying all this, even though he had no hope.

"Some happier man," he said, in conclusion, "will yet touch your heart. I shall not hate him. I love you too purely for that. Heaven bless you both!"

She made no reply. But if Harry could have seen her averted face, he would have seen that tears were in her eyes. After awhile, however the tears ceased; a look of perfect happiness irradiated her countenance; and then a roguish smile began to play round the corners of her mouth. She stopped, and traced, once more, something in the sand. But what she traced now were large Roman letters—the letters "A B C."

"Haven't you even a word for me?" said Harry, after a pause. "I haven't, at least, offended you?"

"I have some letters for you, as you may see, if they will do," she answered, looking up with a mischievious smile; and then she demurely finished off the tail of the C.

What did she mean? Enigmatical as were the words, the look made his heart beat high. He leaned towards her. She did not move away. He put his arm about her. She did not shrink; on the contrary, she said, in a low whisper:

"Will you—give—up—going away, if I ask you?" And her appealing look was even more eloquent than her words.

"I will give up my life, even," he answered, passionately, pressing her to his heart.

She lay passive for a few seconds with her head on his breast; then made a faint effort to release herself.

"Not yet," he said, holding her fast. "Not till you have told me that you love me. It seems to good to be true. My happiness would be too great."

"You must not hurry me," she answered, with a saucy, bewitching glance. "Don't you see I am only at the A B C?"

The look of those splendid eyes, her sweet head on his cheek, the close proximity of her tempting, inviting lips were too much for him. What could he do but kiss her?

"There, that will do—at least, to begin with," she cried, laughingly, but blushing crimson; and extricating herself, with a sudden little movement, from his arms, she said: "You, at least, understand the A B C."

He looked at her with such a puzzled air that she broke into a peal of laughter.

"Don't be angry," she said. "I am not laughing at you. I was in a room at the hotel yesterday, next to that where you were sitting. It was Carrie Stewart's room, but she had gone out, and I was sitting at the table, writing a message to her, when I heard your voice. You understand now. The windows looking on the Parade were open in both rooms, I suppose; you must be more careful, Master Harry, in the future. And it was then I heard the talk about the A B C of love." And she laughed mischieviously again.

"What a veritable sprite you are," he answered, joining in the laugh. And catching something of her sportiveness, he said:

"But you must be punished for eaves-dropping." And he caught her once more in his arms, before she could elude him, and kissed her again and again.

"Oh! but you're getting beyond the A B C," she said. "Surely one—is—quite—enough."

"One will be; or I suppose will have to be," he answered. "I am waiting for it."

She opened her eyes wide.

"Waiting for it? Haven't you had—a—a dozen?"

"Yes! maybe. But none from you."

"Oh!"

"Certainly."

"From me."

"Why not?"

She pouted.

"But you love me?"

No answer.

"You love me?"

She looked up from under her half-veiled eyes, blushing rosily.

"It is not much to ask," he said, "is it? It's only the A B C, you know."

"There, then," she said, "that's the A. We'll see about the B and C by-and-bye, perhaps, if you behave yourself;" and she glided from his arms again, and stood like a laughing Grace, full two feet distant.

And there we leave them. But Harry was right. Isabel, once having loved, loved with her whole soul.

"She does nothing by halves; she learned the entire alphabet, by Jove!" said Charley, speaking of it many years after. "She didn't stop, as namby-pamby women do, with the A B C."

BRIC-A-BRAC.

BY C. H. E. R.

We are all greater dupes to our weakness than to the skill of others; and the successes gained over us by the designing are usually nothing more than the prey taken from these very snares we have laid ourselves. One man falls by his ambition, another by his perfidy, a third by his avarice, and a fourth by his lust. What are these but so many nets, watched, indeed by the fowler, but woven by the victim?

The following translation was made by a Frenchman who professed to teach languages, and who thought he was telling a story in really beautiful English:—"A lady which was to dine child to her servant that she not had used butter enough. This girl, for to excuse himselve, was bring a little cat on the hand, and told that she came to take him in the crime finishing to eat the two pounds from butter who remain. The lady took immediately the cat whom was put in the balances, it just weighed that two pound. 'This is all the very much well for the butter,' the lady then she said, 'but where is the cat?'"

One often hears of "touts" and "touting." The word came into use in this way:—In the reign of Charles the Second, the Londoners east of Temple Bar used to flock to Epsom to drink the waters, as their West End neighbors did to Tunbridge Wells. On their way they were met at *Tooting* by a crowd of lodging-house keepers, tradesmen, etc., with so many clamorous importunities for patronage, that the word "touting" is derived from the name of the village where the practice was carried on. At least, so says Mr. Peter Cunningham.

The Querist.

ANSWERS TO CORRESPONDENTS.

Hen Manure.

F. C. M.—I have about a dozen barrels of pure hen manure; will the RURAL please tell me what is the best thing to mix with it, and in what proportion, for general use?

ANS.—Dry muck is, probably, the best thing to mix with hen manure. Let the mixture lie in a heap until it heats. Then work it over and mix with more, repeating the operation two or three times, until the dung is mixed with fully four times its weight of muck, which will probably be eight times its bulk. If muck is not handy, soil or coal ashes will do instead; common barnyard manure will also answer very well, and the compost will be very rich.

Applying Liquid Manure.

W. H. Stoughton.—What is the best way to apply liquid manure on my garden patch?

ANS.—Having collected the liquid manure in, say, a barrel, as if for a leach, draw off the strong liquid from the bottom; and having diluted it to the color of ordinary tea, apply it to the plants only when they are in a growing state. If used when drought has checked their growth, it will prove injurious. On such a small scale as you need it, the best way of applying it is by means of a watering-pot. Draw away the earth from around the roots of the plant, apply the liquid manure, and when this has soaked away, replace the earth. An application twice a week is quite often enough.

Soft-Shelled Eggs.

R. C. M.—My hens lay a great many soft-shelled eggs. Will the RURAL please tell me a preventive?

ANS.—Give your hens powdered oyster or clam shells, lime, finely powdered bones, or marble dust, mixed with their feed.

Miscellaneous.

J. M. A.—Can the RURAL give me any information as to the actual cost of carrying freight and passengers a hundred miles?

ANS.—We presume our correspondent refers to railroad transportation. Reports are annually made by the different lines of their running expenses, and a little figuring with regard to any of these will give, pretty closely, the information our correspondent is in search of.

S. C., Brooklyn, N. Y.—I wish to have a bed of Snow-drops and Crocus this coming spring, but as I can't plant them *now* in the spot where I would like them to blossom, will the RURAL be good enough to tell me whether I could start them in the house (cellar) and transplant them in February or early March?

ANS.—Yes, you could do this but transplanting would injure the roots and the flowers, unless, they were planted in little pots and thumped out with the earth intact. It seems to us the plan will give you more trouble in its execution than the results will be worth.

Subscriber, Lynchburg, Va., wants a cure for a horse that is going blind. He had better look in the animal's mouth, and if he finds an extra tooth in front of the grinders, let him pull it out, on the upper jaw on each side, and I think his horse's eyes will get well. Have had *experience* in that direction. Any one who has a colt that was a year old last summer, can find them now, and they ought to be pulled out at once. A. W. H.

Greenfield, Mass.

J. D. G, Meadville, Pa.—Please let me know through your next issue, (1.) the name of the best seed drill—for horse, not hand use.—If you do not wish to discriminate, name two or three of the best. (2.) Is there a potato digger that is a success, one for horse power I mean? What name?

ANS.—We are always glad to give all the information we can without regard to the fact we may discriminate in somebody's favor and give a little "free advertising." Our only care is to do no injustice. (1.) We refer you to our issue of Jan. 10, for description of improvement in the Albany planter which is a good one-horse implement. The RURAL of May 19, '76 will give you illustrated description. (2.) There are several potato-diggers in the market differing from each other immaterially. Allen's Potato-Digging Plow, (189 Water St., N. Y.,) is as good as any.

M. W., Poquonoc.—If you will send a flower and leaf, we can probably tell you.

A. E. C., Charlotte, Mich.—Please to tell me, through the RURAL, how much boiled flaxseed to feed to a small yearling per day. I wish to fatten it for the butcher as it does not pay to keep such stock on the farm.

ANS.—Not over a quart and then it ought to be mixed with some coarser feed, beginning gradually.

T. W. M., Liv. Co., Mich.—Will want a quantity of field and garden seeds soon. There is so much bogus seed on the market, want to know where the best can be obtained. Want to know who has an incubator for hatching at least 300 eggs. Would like to raise poultry by the thousand. Do you know of any incubator that hatches a large per centage of the eggs, and that does it successfully, economically, and without too much watching and trouble?

ANS.—We can not say where the *best* seed can be obtained. As regards incubators, we would refer to recent issues of the RURAL for the information desired.

Mrs. C. C. North Bass, Ohio.—Will the RURAL please tell me what is the matter with my Oleander; it seems to be growing vigorously, but the under side of the leaves is affected with a white scale, and if it is not removed by washing, the leaves turn yellow and drop off. Please give remedy.

ANS.—Scrape them off with the back of a knife and sponge the leaves afterwards. Collect the scales upon a paper and burn them. Alcohol may be advantageously used for sponging the leaves.

Reader.—Will the RURAL tell me where I can get the following grass seeds, as I want to experiment with them the coming season, and whether such mixture would be good for hay as well as pasture, on clay land?—Timothy, Red-top, Blue grass, Orchard grass, Meadow Fescue, and English Rye grass; how much of this mixture will seed four acres, and the cost? (2). What is a good remedy for lice on cattle?

ANS.—Timothy and Orchard grass do not ripen together, as the latter is fully three weeks the earliest; hence, for a meadow, it is not wise to seed them both on the same land. We would not mix Timothy with any other grass for a meadow, unless it was with Red-top. English rye grass would be likely to kill out in our northern latitudes, and in the South the climate is probably too hot and dry for it to do well. Red-top, Orchard grass, Blue grass, and Meadow Fescue, would be a good mixture for a permanent pasture, sowing one part of each to an acre, making two bushels in all; ten or twelve quarts is enough Timothy seed for an acre. Red-top is worth in New York, $1.25 per bushel of 12 pounds; Blue-grass, $2.25 per bushel of 14 pounds; Orchard grass, the same weight, $2.25; and Meadow Fescue, 20 pounds for a bushel, is worth 45c. a pound; Timothy grass, the best quality, is worth $2 per bushel. The seeds can be had of R. H. ALLEN & Co. of this city, or of any seedsman here or in the next town to you.

(2). A strong soap suds of carbolic soap will kill lice on cattle or ticks on sheep; and so will a decoction of tobacco, when thoroughly mixed with salt, also destroy them when rubbed into the hair.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, FEB. 11TH.

B. A. W.—G. G.—M. B. M.—F. F. L.—W. F.—J. H.—W. B.—W. C.—W. C. L. D.—S. B. P.—J. M. G.—J. B. J.—A. C. W.—M. L. D.—S. V. W. C.—S. B. P., No. 2.—B. P. M.—F. S. R.—W. J. B.—W. H. 1.—A. E. B.—A. W. M.—M. B. B.—L. W. B.—C. C.—A. L. J.—J. S.—J. G. L.—C. B.—S. T. F.—L. A. R.—W. J. B.—A. S.—D. M. O.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Feb. 7.—There have been made some shocking revelations of the tortures to which convicts have been put in the New Jersey State Prison—burning, putting on the rack, etc.; several deaths have resulted from this official barbarity. More trouble apprehended among the Sioux: Gen. Miles has been reinforced, and is getting ready for operations in early spring.

All the Turkish men-of-war on the Danube have been surrendered to Russia, and a part if not the whole of the Ottoman fleet will also be given up as part of indemnity. The Powers that have guaranteed the independence of Greece insist that she shall discontinue hostilities. Her army, despite reports to the contrary, has not come into collision with the Turks. There are 40,000,000 bushels of wheat stored in the Black Sea ports of Russia, to be thrown on the market on the conclusion of peace.

WEDNESDAY, Feb. 8.—The silver bill is taking up all the time of Congress. Oceans of talk, with no result. The Senate Committee on Finance has agreed to Senator Wallace's bill substantially for Post-office savings banks.

Austria's invitation to the Powers to hold a conference has been accepted by Germany, France, and Italy. England will also concur. Russia maintains a war-like attitude, and reinforcements are constantly pouring into Turkey, to be prepared for all emergencies. There has been a great panic at Athens on report of the approach of the Turkish fleet. A new ministry has been formed in Turkey, responsible to Parliament, and the office of Grand Vizier has been abolished. In the British Parliament all attacks on Russia are loudly cheered. Austria insists that Russia shall not control both sides of the Danube at any place.

THURSDAY, Feb. 7.—Augustus Tourney, teller of the Bank of North America in this city, has defaulted to the amount of $100,000—a model of piety and morality!

There is a wild rumor that the Russians have occupied Constantinople. Russia objects to holding the conference in Vienna, and insists that a small town in a small State is the most appropriate place, she agrees to take part in it however. It is said Osman Pasha will be court-martialed by the Russians for ordering the execution of prisoners of war. Server Pasha, plenipotentiary to the Grand Duke Nicholas, declares that the Porte was misled and encouraged to fight on the promise of English support. Lord Beaconsfield says the statement is an infamous fabrication. Strong language from a Prime Minister of one nation to the foreign Minister of another—and everything indicates that the latter is substantially correct.

FRIDAY, Feb. 8.—Anderson, the first of the La. Returning Board tried, has been found guilty of forgery and altering public documents, and for publishing the same as true.

After a life of 85 years, and a pontificate of 32 years, and a self-imprisonment of eight years, Pope Pius IX died yesterday at a few minutes before five in the afternoon. The following additional points of the armistice conditions are asserted in special despatches to the London morning papers:—

That the railway between Adrianople and Constantinople be repaired and operated, and also the telegraph line between Adrianople and Odessa by way of Constantinople.

The raising of the blockade of the Black Sea and the Danube for everything except ammunition.

The Russians to occupy the Black Sea coasts from the Russian frontier to Baltchik, and from Missouri to Derkioj.

On the Sea of Marmora, the Russians to occupy Batjuk-Tchakmadje and Tscharkioj.

On the Ægean Sea, from Enos to Mekri.

These are in addition to the points held by the Russians at the time of the signature of the armistice.

Roumania refuses to re-cede Bessarabia to Russia. The windows of Mr. Gladstone's house and those of the Daily News were broken last evening by a furious mob in disapprobation of the Russian advocacy of the statesman and paper.

SATURDAY, Feb. 9.—Anderson of La., asks for a new trial on the ground that his conviction was against the evidence. Wells has been released on $10,000 bail. Sitting Bull, after all, is still in Canada.

Italy has assured foreign governments that she guarantees a free and uninterrupted election of a new Pope. Preparations for this are rapidly being made; Cardinals are summoned to Rome from all quarters. Cardinal McCloskey has just left this city for Europe. The body of Pius the IX has been taken to St. Peter's. The Ultramontane candidates are Cardinals Bilio and Panebianco, the liberal, Ferrieri and Pietro. Papal elections, however, very often result in surprises, Germany will not interfere, and if a Liberal is elected Bismarck will seek an accommodation of existing difficulties. There is a strong probability that Russsia and Turkey will form an offensive and defensive alliance. The English Ministry has been sustained by a vote of 328 against 124, many of the prominent Liberals having abstained from voting. A portion of the English fleet has been ordered to the Bosphorus to protect British interests at Constantinople. The war spirit is very fierce in England; and all confidence in Russian moderation is declared to have been forfeited.

SUNDAY, Feb. 10.—The Silver men in Congress will force rapid action on the Bland bill, which will be passed probably within a week. Senator Kellogg of Louisiana, is said to hold the balance of power on the bill in the Senate, as without his vote it cannot get the two-thirds majority required to pass it over the President's veto. At Pittsburg, Pa., 12,000 men turned out in procession as a demonstration against the proposed change in the tariff favorable to free trade.

Russia declares that the dispatch of the British fleet to the Bosphorus restores to her liberty of action, releasing her from all the engagements made to England with regard to terms of peace. She does not regard this movement, however, as a *casus belli*, but will regulate her conduct by that of England. The Sultan and the Grand Duke Nicholas are to meet at Tchataldja, near Constantinople. The most earnest pro-Russian papers in England now approve the warlike action of the British Government. The 64th Regiment has shipped for Malta. The Russians have captured 120,000 men, including 20 Pashas, and 1,000 cannon during the war. The insurgents in Epirus have proclaimed their union with Greece; but the forces of the latter have been recalled, much to the dissatisfaction of the people.

MONDAY, Feb. 11.—Anderson, of the La. Returning Board, has a dispatch from Secretary Sherman, Stanley Mathews, Garfield, and other "visiting statesmen" earnestly protesting his innocence of fraud, and denouncing his conviction as an exhibition of sectional partizanship. Two colored jurors declare they brought in a verdict of "guilty, but recommended to mercy," against him because the other jurors told them this was tantamount to an acquittal. Both not over 22 years, one perhaps disqualified for juror on account of being too young.

The Turkish forces have evacuated Widdin, Rustchuk, Silistria, Belgradschik, and Erzeroum, and withdrawn from the outer defences of Constantinople leaving a neutral zone, 12 miles broad, between themselves and the Russians. Austrian and Italian war vessels are on their way to the Bosphorus, following British example. By former treaties no foreign war vessels were allowed to pass the Dardanelles. A war with England would be highly popular in Russia; but it is probable that before any hostile action is taken, Austria and Great Britain will wait to see the result as the proposed conference. In this Russia will insist on a reservation of certain points which will not be discussed. What these may be will probably decide the question of peace or war involving the greater part of Europe. Meanwhile, the Black Sea ports are all open, and an enormous shipment of grain will soon reach foreign markets. Garabaldi is alarmingly ill.

HOME NEWS PARAGRAPHS.

Montana, with fifty thousand people, reported not a single failure during 1877.

The Governor of California receives the highest salary among Governors, viz., $9,000

The Rural Clock speaks for itself (see page 107) though we hope every one of our subscribers will speak for it.

Sing Sing prison cleared six thousand dollars last month. It is a satisfaction to know business is good somewhere.

Thirty-four thousand Massachusetts women have petitioned the Legislature to allow women to vote at municipal elections.

Based on the average yield of the land in the United States, it would require the product of 4,000 acres in corn, or 6,000 acres in wheat, to fully load one freight steamer of a carrying capacity of 3,000 tons.

It is stated that the farmers of Clinton county, Iowa, during the past year have lost from 75,000 to 100,000 hogs from cholera, the loss in value reaching at least $500,000, and many consider that a low estimate.

Near York, Pa., lives a farmer who has kept a record of the number of tramps visiting his premises. From the 1st of April to the 18th of November last year, there were 545, or an average of about sixteen a week.

The total dividends paid last year by mining companies, banks, insurance and express companies, and other commercial enterprises on the Pacific coast, not including the Central Pacific Railroad, was $34, 366,000 an increase of $1,250,000.

The winter of 1829-30 surpassed the present one in mildness. Farmers plowed every month in the season, and no snow fell until Feb. 2. It was followed, however, be a cold, backward spring, with a snow storm in May which killed the returning swallows.

The State of Georgia lets out its convicts for $14 a piece to companies that furnish guards and employ the prisoners in mines or on farms. A contract has just been entered into between ex-Gov. Brown and the State by which the former agrees to pay the latter $500,000 in yearly installments of $25,000 for the use of all convicts for twenty years from April, 1879.

The coal production of the world has increased enormously since 1845. In that year Great Britain produced 31,500,000 tons; in 1874, 125,043,000; Belgium, 1845, 4,960,077; in 1874, 14,669,000. France, 1845, 4,141,617; 1874, 16,949,000. Prussia, 1845, 3,500,000; 1874, 41,754,600. In the United States the production in 1874 was nearly ten times that in 1845.

A statistical report to the Montgomery county (O.) Horticultural Society, on the 12th inst., shows that 880,000 acres in the State are in apple trees, yielding an annual average of 12,000,000 bushels; that the State averages 100,000 bushels of pears annually; and that 10,000 acres are in grapes, producing an annual average of 90,000,000 pounds, yielding 700,000 gallons of wine.

The wholesale slaughter of deer in the Adirondacks is going on this winter more recklessly than ever, and is arousing the indignation and alarm of all true sportsmen. The woods are full of hounds, and at least 100 deer were killed on a single river and its lakes last fall. It is estimated that, if this wanton destruction goes on unchecked, there will not be a single deer in all the Adirondack region in ten years.

The State salt manufactures at Onondaga, N. Y. which have been a source of immense profit to the State and the individual lessees of the works, have been steadily running down hill for some time past. Last year the expenses were $59,999, and the surplus only 49 cents, the annual manufacture is only half what it used to be and some change of policy is demanded which shall prevent the entire ruin of the business.

The Moffett bell-punch seems to be working out the financial salvation of Virginia, and is bringing into the State treasury from $400,000 to $600,000 per annum toward the payment of the State debt. There is a good deal of talk of introducing into other States, especially Kentucky, this method of registering every drink taken in every liquor store, taxing the same, and thus raising a large revenue while checking drinking to some extent.

There are fifty men in San Francisco worth from $1,000,000 to $25,000,000. Flood, O'Brien, Mackay and Fair, the bonanza men, represent one hundred millions of money, already accumulated, with the possibility of untold millions under their feet as they walk over the lower levels of the "Virginia Consolodated," the "California" and the "Ophir" mines. "Ophir," like a Kentucky ham boiled in Burgundy, grows richer as it is cut deeper down and nearer the bone. Leland Stanford, Charles Crocker, and David D. Colton, the Central Pacific railroad builders and principal owners, are worth from $5,000,000 to $30,000,000

piece. "Lucky" Baldwin, once a livery stable keeper, swore lately on the witness stand he did not know whether he was worth $8,000,000 or $10,000,000.

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC CO. Cincinnati, Ohio.

FOREIGN NOTES.

England holds $700,000,000 of Turkish securities. One cause of her unhappiness.

Nearly 100 English and American teachers are employed in the schools of Japan.

A London paper estimates that during the latter 200 days of 1877, human blood flowed at the rate of forty gallons an hour.

Fifty-three persons were condemned to death in France during the past year, but only in fifteen cases was the capital sentence carried out.

The works now in progress at Chatham, England, will make the dockyard there the finest in the world. The work is chiefly done by convicts.

Canada exported to Great Britain during the year 1877, 8,412 cattle, 6,825 sheep, 373 pigs, and 298 horses. In 1876 the exportation was but 4,645 cattle and 4,218 sheep.

A letter from Ventnor, Isle of Wight, says: "The magnolia is in full bloom here; primroses and other summer flowers in blow; and last December a fine dish of outdoor green peas was pulled and brought to table."

That the Suez Canal is proving a success, is shown by the steadily increasing business it is doing. In 1875, 1494 vessels passed through, paying $5,777,269 in tolls; in 1876 the figures were 1457 $5,994,999; in 1877, 1663 and $6,552,279.

Great Britain paid to foreign nations for grain, cattle, and meat, during the year 1877. $484,398,685, while during 1876 the total was $435,646,930. Of the total in 1877, $315,961 120 was for grain, $86,568,370 for cattle and meat, $47,691,525 for butter, $23,815,268 for cheese, and $12,362,405 for eggs.

Frank Leslie, Esq., of the "Illustrated Weekly," says:—"For some time past I have been using BURNETT'S COCOAINE, and think it far preferable to anything I have ever used for the hair."

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Feb. 9, 1878

BEANS AND PEAS.—Receipts of beans past week, 970 bbls.; Exports, 6,100 bbls. The demand for mediums has somewhat improved, but buyers will not pay above $1.75, though some holders strive for $1.80. Marrows, as a rule, quoted as before. A small lot of selected brought $2.15. In Havana, Feb. 2, mediums were quoted at 26½@27 reals per arroba (25½ lbs.) Reals nominally 5c. U. S. Cur. White kidneys are quiet and favor buyers. Red bring late rates in a small way. Reduced rates for pea have given more movement. Black beans dull and unchanged. Green peas freely offered at $1.25. Southern B. E. peas too high for sales—$3.25 per two bushel bag. Canadian field peas quiet at 83c. for general stock.

We quote:—Beans, medium choice, $1.70@1.75; other, $1.55@1.65; marrows, choice, $2.10@2.12½; other, $1.85@2.00; pea, $1.70@1.85. White kidney, choice, $1.85@2.10; other, $1.55@1.95; red, choice, $2.60@2.85; other, $2.35@2.40. Turtle soup beans, $1.50. Lima, $5.

BEESWAX.—Small sales are exported at 27@28c. for Western and Southern.

Exports since Jan. 1, 15,775 lbs.; same time last year, 6,050 do.

BROOM CORN has increased demand and is steady in price.

Green brush at 6@7c.; green hurl, 6@6½c.; medium green, 5@5½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Receipts for the week 18,132 packages. It is now undisputed that the best lines of State stock have been secured and are either here or city owned, and the market is consequently quoted higher for all table stock. The strength of the market is in choice Western creamery and selections of half tubs; though full dairies, firkins and market grades partake of the firmness. It is yet to be seen if the new scale of figures will be supported; as it is, no dealer is reporting a liberal style of outlet to consumers, and the times at present do not justify speculation. Firkins are sawed into half tubs by some sellers. It is better that this sort of alteration should be made here than in the country. Dealers know where they can be best placed and have the means of making a neater job of the method. Prime Western factory sympathizes with State and 21c. is readily given for nice quality. No dairy made Western of account coming. Shippers are looking about and seem to be willing to pay old prices now that the market has assumed some buoyancy.

We quote State creamery, 25@35c.; fancy pails, 30@32c.; other 25@28c.; creamery, good to choice, 25@30c.; half tubs, fine, 28 30c.; extra, 31@35c.; other, 22@27c.; Fall Welsh 27@29c.; Welsh tubs, dairy, 25@27c.; other, 20 23c.; full dairies, fine, 28@30c.; common, 20@24c.; firkins, 20@27c.; poor State, 14@21c.; Western creamery, good to choice, 40@41c.; poor to good, 25@32c.; factory, choice, 20@21c.; good, 16@18c.; common, 7@11c.; rolls, 12@18c.; grease, 6½@7c.

Receipts for the week, 15,635 pkgs.

Exports past week, 2,885 pkgs

CHEESE.—Strictly fancy factories have reached 11c.; there are so few of these last, that the general market is best represented in the quotations of average fancy factories, which are 12½@13½c. Shippers have been less inclined to purchase, but the stocks are more easily controlled, and there is confidence generally among holders of current prices.

Fancy factories, 13½ 13¾c.; good and prime, 13@14c.; fair lots, 12½@12¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12@12½c. for good to prime; 10½@11½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 5@9c. for poor.

Exports for the week, 14,421 boxes.

Liverpool cable, 67s. Gold closes 102.

COTTON has felt the English needs, and has tended lower [illegible] closed rather firmer.

Latest prices are for February, 10.95@10.97c.; March, 11.05@11.06c.; April, 11.19c.; May, 11.32c.; June, 11.44c.; July, 11.56@11.57c.; August, 11.57@11.58; September, 11.31@11.33c.; October, 11.12@11.14c.; November, 11.08@11c.; December, 11@11.02c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	Ala.	Orleans.	Texas.
Ordinary	8¼	8¼	8¼	8¾
Strict ordinary	9 3-16	9 3-16	9 5-16	9 5-16
Good ordinary	9 9-16	9 9-16	9 11-16	9 11-16
Strict good do	10⅛	11⅛	11⅛	11⅛
Low middling	10⅝	10⅝	10⅝	10⅝
Strict low middling	10 13-16	10 13-16	10 15-16	10 15-16
Middling	11 1-16	11 1-16	11 3-16	11 3-16
Good middling	11 7-16	11 7-16	11 9-16	11 9-16
Strict good middling	11⅝	11⅝	11⅞	11⅞
Middling fair	12⅛	12⅛	12⅜	12⅜
Fair	12⅝	12⅝	12⅞	12⅞

Stained,

Good ordinary, 8½c.; Strict ordinary, 9¼c.; Low middling, 9⅝c.; Middling, 10 5-16c.

DRIED FRUITS.—Apples of choice grades have a good jobbing demand, but quarters and medium stock generally is slow; prices are steadily held. Peaches are quiet and nominal. Blackberries and small fruits generally hold to firm prices.

Apples—State quarters, old, 6@6½c.; new, 6@6¼c.; Western quarters, old, 6@6½c.; new, 5¾@6¼c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 10@10c.; unpeeled halves, 4½ 5c.; unpeeled quarters, 4@4c. Pitted cherries, 16@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 16c. and Southern at 10c.

EGGS.—Receipts for the week, 6,063 barrels. The market did not carry its high head long. Ever since Tuesday last there has been a steady decline, and the low prices of to-day are weak. Old stock is not looked at with the present rates for fresh, and the receipts are ample enough to more than fill the singularly small wants of the season. Ice-bound parcels are turning out badly; good limes are preferable to many of them.

Near points, 18@19c.; State and Pennsylvania, in good order, 16@17c.; Western best, 15c.; do. Southern, 15½@16c.; inferior and all quality, 10@14c.; State and Canadian, limed, 10@12c.; Western, 9@12c.

FEATHERS.—Live white prime Western geese, 45@47c.; mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $17.50@18.00; 60 pounds ave., $17.00@18; 80 pounds ave., $18@18; 100 pounds, $18.00@20; and rye at $18.50@20.

FLOUR.—A much better export business has been done this week, and prices of grades below $6 in price have risen in price 10 to 20 per barrel. This improved position has been brought about by the advices from the other side indicating prolonged trouble there in regard to the Eastern question.

Latest prices are $3.90@4.75 for poor to fancy superfine State; $5.00@5.25 for common to fair extra do; $5.45@5.75 for good to choice do.; $3.80@4.75 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $4.80@5.25 for shipping extra do., the inside price for poor, and $5.15@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@7.25; fancy do. at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.10@6.75; round hoop Ohio at $5.10@5.50, and trade brands of do. at $5.75@7.00, the latter for choice; St. Louis, $5.50@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.00@8.25); Minnesota clear, $5.00@6.00; Minnesota "straight," common to fancy, at $5.65@6.50, and patent poor to very choice, $6.75@9.00, with a few fancy at $9.25@9.75; unsound stock at $2.50@6.25; city mill extra at $6.00@6.20 for fair to very choice for West Indies; do. for England $5.15@5.20; do. trade and family extras, $6.65@7.75; do. South America, $6.40@7.50; No. 2 at $2.50@3.75.

Buckwheat Flour—Quoted at $3@2.60. Corn meal is selling at $2.90@3 for Western yellow and $3.20 for Brandywine.

FRESH FRUITS.—Exports of apples past week, 1,350 bbls. This is a good-sized quantity, considering the strong advance that has obtained. Baldwins and Greenings, $5@5.50, though the latter must be faultless. Russets, $3.50@5; a few carefully preserved Spitzenberg, $8. Fine sweet are out of market. A few "Pounds" remain. Talmans sank badly. Cranberries are firm. Grapes have served their mission for the season—6@7c. for sound Catawba. Florida oranges firm for sound and showy—$3@6 ₱ case. Cranberries, fancy bls., $7.50@8; do. crate, choice, $2.50; good, $2.12@2.25; fair, $1@1.75. Peanuts have lost all of their recent firm tone. Best hand-picked Virginia, $1 35@1.45; good to fancy, $1@1.35. Hickory nuts, 75c.@$1.

FURS AND SKINS.—Low prices keep the market from becoming absolutely dead; buyers for mill furs for hatters' use being one of the main stays of the present market.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@45	40@45
Red Fox	75@80	60@65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and yigs.	1 00@2 00	1 00@2 00
Florida deer skins.	15@18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@1 00	50@60
pale	50@60	30@40
Muskrat, winter.	8@10	6@8
fall	6@7	4@5
Kitts	@2	@2
Beaver, ₱ lb	1 00@1 25	60@75
Raccoon	35@45	35@45
Opossum	3@6	3@6
Skunk, black		50@60
striped		7@30
Wolf, mountain		1 50@2 00
prairie		50@60

GRAIN.—The news from the other side has been unusually exciting the past week in the possibility of England becoming embroiled in the Eastern troubles, and the markets here have been very feverish, standing at the close decidedly higher and active.

Latest sales are of No. 2 red at $1 26@— ungraded red and amber State, $1 10@1 40; white, $1 41; No 1 Northwest spring, $1 31; No. 3 Chicago, $1 20½; No. 2 red for January at $1 26; No. 2 Milwaukee spring, $1 28. Rye is a trifle steadier; sales of Western at 70@73c.; State at 73@7 c. Barley, 95c for No. 1 Canada; 86@93c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 50¾@51c.; steamer mixed, February, 51@51½c. Oats of New York extra white, at 34½@35c.; do. No. 1, Febuary, 35½c.; No. 2 white, 36@36½c.; mixed Western, 36@37½c.; white Western, 37@39½c.

HAY AND STRAW.—There is a good trade in medium grades and a fair shipping demand, with prices steadily held.

Bale hay, 65@70c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@60c. for long rye; 50@55c. for short rye, and 40@45c. for oat.

Exports since Jan. 1, 6,625 bales; same time last year, 5,050 do.

HIGHWINES are higher, on account of revenue agitation—$1.09.

HONEY.—Continues dull. White clover, 2-comb boxes, has sold at 13@14c., and good dark at 8@10c.

HOPS.—Exports for the week have been 3,600 bales. This shows a good trade, and prices have been well sustained. The only change in prices being for old and yearling lots, which are reduced 1@2c.

State choice to fancy, 11@13c.; good to prime, 8@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@22c. for light, 21@22½c. for middle, 21@22½c. for heavy, 19@20½c. for good damaged.

MAPLE SUGAR.—Ohio new or re-molded, 14@16c Very little inquiry.

OIL-CAKE.—Western is quoted at $31 ₱ ton.

POULTRY AND GAME.—The supply of live has been liberal and small prices, with the aid of wagon venders have kept the market pretty free. The authorities still keep city buyers from holding stock on their premises.

N. J. chickens, 7@9c.; W. fowls, 10@12c.; Turkeys, 6@10c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1.37.

Dressed Poultry has arrived heavily and with fickle weather receivers have been anxious to sell. Freight Western unpacks badly and has to be named low. There are no large lots of fine quality. The demand is not general at this time of the year, turkeys have only a chance sale, while chickens sell steadily at fully as good prices. Ducks are scarce geese not wanted.

Fancy Phila. and N. J. turkeys, 13@14c.; good, 11@13c.; large or Toms, 7@9c.; chickens, choice, 14c.; good, 11@13c.; common, 7@9c.; ducks, choice, 13@15c.; other, 10@14c.; geese, fancy, 13c.; other, 7@9c. Capons large 18@20c. small and slips, 15@16c.

Fancy game is scarce and the relative high prices for quail and grouse give wild pigeons considerable activity. The scarcity of tame ducks gives more room for Norfolk wild. Grouse have advanced beyond ordinary use. Rabbits and hares are running out.

Hares and rabbits, pair, 30@37c. Canvas-back ducks, $1.25@1.50; red-heads, 75c.; Mallard, 40@50c.; Teal, 30@40c.; Quail, prime, $2.50@2.75; soft, $1.75@2.25. Partridges, pair, 75c.@$3c. Grouse, $1.37@1.50; poor, 90c.@$1.10.

PROVISIONS.—Hog products have reached the lowest prices of the season this week, notwithstanding the export trade is the largest ever known here. Mess pork, $11.25 for spot lots; $11.20 for February and March. Bacon at 5¾@5¾c. for long clear and 6c. for short clear. Lard—Western steam at 7-55c. for spot and February, 7.62c. for March, 7-70 for April, and 7-80 for May. Tallow at 7½c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.50@13.00; plain, $11.00@12.00; new packet, $11.75; family mess, $17.50; extra India mess, $27.00@28.00 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2.50; Higgins', $2.40 and other sack lots at 95c.@$1.15; Liverpool ground, 65@75c.

SEED.—Clover, 7¾@8c. for Western; 8¼@8⅝c. for State. Timothy, $1.37½@1.42½. Rough flax, $1.55.

TOBACCO.—Export demand has been very fair and chiefly for low grades, for which full prices are made.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3¾@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	7½ @ 8¾	8 @ 9
Good leaf	9 @10	10 @10½
Fine leaf	10½@12	11 @12½
Selections	—@—	13 @15

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	29 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—Exports of potatoes past week, 2,177 bbls.; onions, 172 do. Retailers have been replenishing during the week, and the potato market has a semblance of activity. A few holders ask $2, but $1.87 is mostly quoted for choice stock. Chili Red, $1.87@2. Onions dull; garden stuff not active.

We quote Peach Blows $1.75@1.87, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.50@1.75; Sweet, $1.50@2.50. Cabbages, 100, $2.50@4.50; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 75c.@$1.00. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₱ lb., 20@40c. Radishes, 100 bunches, @$3.50 Lettuce, small, dozen, 75c.; large, $1.50@$2. Cucumbers, doz., $3@4. Rhubarb, doz., $1. Spinach, Southern, $1 12@2 bbl. Florida green peas, $6 bush.

WOOL.—There has been a very slow market, and prices are easier on fine grades, but otherwise quotations are unchanged.

Ohio, Pennsylvania and Virginia—XXX and picklock, 47@50c.; XX, 45@47c.; X, 42@44c; No. 1, 43@46c.; No. 2, 38@40c.; common, 35@37c.; combing, 50@55c.

New York, Michigan, Indiana and Wisconsin—XX, 39@43c.; X, 38@42c.; No. 1, 40@41c.; No. 2, 35@38; common, 31@33c.; combing, 50@52c.

Iowa, Vermont and Illinois—X and XX, 36@39c.; No. 1, 37@42c.; No. 2, 33c.; combing, 48@52c.

Missouri Kentucky and Tennessee—36@41c. for washed; 27@32c. for unwashed, and 33@38c. for unwashed combing.

LIVE STOCK MARKETS.

NEW YORK, Feb. 11, 1878.

BEEVES.—Receipts for the week, 9,037 head; do., last week, 8,444 do. There has been a brisk trade at all the yards, and prices close higher and stronger than on Wednesday last. There has been a better and steadier demand for beef at the stalls and wholesale slaughterers have purchased with more confidence. The pens at both Jersey City and Sixtieth street were all clear for Monday's market. Stock has arrived somewhat irregularly, as the roads still feel the effect of the last snow storm. Stock is arriving in very good average quality, and the fact helps to promote sales. Extra steers, 11@11½c.; good, 10@10½c.; medium to fair bunches, 8¾@9½c.; fat bulls, $3.40 ₱ 100. The highest rates were made at Sixtieth street. At Jersey City the top was 10¾c. No Texas cattle on sale.

COWS AND CALVES.—The demand is very light for even the best milkers, and the rough specimens that form the bulk of the supply are not looked at for local dairy purposes, while they are certainly not good enough for the hooks. No comprehensive rates to be given.

VEAL CALVES.—There were few fresh arrivals of live. Shipments from usual near points are retarded by roads that are soft one day and hubby the next. Rates for milk-fed New Jersey were 9c. for good to choice; other, 6@8½c.; grassers, 2½@3½c. Hog-dressed calves, fair to prime, 9½@11c.; grass-fed, 4@5c.

SHEEP AND LAMBS.—Receipts for the week, 20,659 head; do., last week, 18,581 do. Supplies are moderate for the season, and sales have been brisk, with more satisfactory prices. Good Canadian lambs, 7¼c.; mixed lots, 5@5½c. Quotations for sheep, 4¼@6½c.; Canadian ewes, 5¼@5½c.

SWINE.—Receipts for the week, 34,322 head; do. last week, 32,201. The offering was liberal at both yards, and the market weak at $4.50@4.65 ₱ 100. Country-dressed pork arrives lightly; heavy to medium State and New Jersey, 5@6c.; Western dressed, 4½c.; city, 5@5¾c.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c.	per line.
" 13th page	50	"
Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

INDEX TO NEW ADVERTISEMENTS.

Beekman, A. S.—High-bred Colts.
Bliss & Sons, B. K.—Earliest Tomatoes Known.
Daggett, David—The Toilet Washstand and Boot-Blacker.
Dingee & Conard Co.—Beautiful Ever-Blooming Roses.
Dreer, Henry A.—Dreer's Garden Seeds.
Eckstein, Hills & Co.—The "Phœnix Brand" Pure White Lead.
Excelsior Fertilizer Works—The Best Fertilizer.
Gregory, James J. H.—The Three Potatoes.
Hoopes, Bro. & Thomas—Splendid Flowers and Roses.
Hovey & Co.—Hovey's Illustrated Seed Catalogue.
Jones, Faulkner & Co.—Ralph's Oneida Cheese Vat.
Lummus & Co., E. E.—Holbrook's "New Regulator" Seed Drill.
Parker, Dr W. H.—The Science of Life; or, Self-Preservation.
Parry, Wm.—Best Strawberries and Raspberries.
Root, A. I.—The A B C of Bee Culture.
Ross Bros.—Epilepsy or Fits Cured.
Schroder, Dr. H.—Superior Grape Vines
Willard & Hammond—Champion Milk Pan.
Wood, Taber & Morse—Portable, Stationary and Agricultural Steam Engines.
Young, Oscar W.—Imported Scrap Pictures.

BUSINESS NOTICES.

Garmore, Jno—Hearing Restored.

New Advertisements.

My Annual Catalogue of Vegetable and Flower Seed for 1878, rich in engravings, will be sent FREE to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed *warranted to be both fresh and true to name;* so far, that should it prove otherwise *I will refill the order gratis.* ***New Vegetables a Specialty.*** As the original introducer of the Hubbard Squash, Phinney's Melon, Marblehead Cabbages, Mexican Corn, I offer several new vegetables this season, and invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.*

JAMES J. H. GREGORY, Marblehead, Mass.

CHEAPEST FERTILIZER
BECAUSE THE BEST.
PREMIUM BONE
For all crops. Made only by the EXCELSIOR FERTILIZER WORKS, Salem, O. Circulars free.

BUTTER. OUR PERFECTED BUTTER COLOR is far better than carrots, annatto or any other color, at one-fourth the cost and no work to use. It gives a pure dandelion color and never turns red or rancid, but tends to improve and preserve the butter. Warranted to add 5 cents per pound to its selling value. Thousands of testimonials from the very best dairymen. Descriptive Circulars telling where and how to get it, free. Sold by druggists.
WELLS, RICHARDSON & CO., Burlington, Vt.

RALPH'S ONEIDA CHEESE VAT.

For Single Dairies and Small Factories.
Send for Circular and full description to
JONES, FAULKNER & CO.,
Sole Manufacturers, Utica, N. Y.,
Dealers in Dairy Supplies and Furnishing Goods. Also, Manufacturers of Steam Boilers and Engines and STEAM DAIRY APPARATUS, for Cheese Factories and Creameries.

GRAPE VINES.
1,000,000 of Concord, 1 year, $15 to $20 per 1,000; 2 year, $20 to $30. All other varieties cheap. DR. H. SCHRODER, Bloomington, Ills.

☞ FRIENDS! If you are in any way interested in
BEES OR HONEY
THE A B C OF BEE CULTURE,
Just Published, will tell you all about the latest improvements in securing and Marketing Honey; the new 1 ℔. Section Honey Boxes; all about making Artificial Honey Comb, Candy for Bees, Bee Hunting, Artificial Swarming, Bee Moth, &c. *Nothing patented.* Part First, fully illustrated with costly Engravings, mailed for 25c.
A. I. ROOT, Medina, O.

Coughs and Colds.

"Brown's Bronchial Troches" will allay Irritation which induces coughing, and gives immediate relief in Bronchitis, Catarrh, Influenza, Hoarseness, Sore Throat, and Consumptive and Asthmatic Complaints. The Bronchial Troches have been steadily winning their way into public favor, until they are known and used nearly all over the world.

FOR ALL LUNG TROUBLES, as well as Complaints of the Throat, Dr. Jayne's Expectorant is certainly a palliative and often a curative, as the testimony of thousands and its world-wide reputation attests. For Coughs or Colds no surer or more effective remedy can be found.

Reading for the Young.

MUSIC ON ALL FOURS.

JOSEPHINE POLLARD.

A Pussy cat and a Black-and-Tan
Were shut in a room together,
And, after a season of quiet, began
To talk of the change in the weather,
And new spring fashions, and after that
They had a sort of musical chat.

Said Puss:—"To me it is quite absurd—
But taste and opinions vary:
And some have declared that no beast or bird
Can sing like the small canary,—
Who, if it be true as I've heard it told,
Is really worth more than its weight in gold!"

Said the Black-and-Tan, with a pensive smile:
"I've wanted to call attention
To this bit of scandal for quite a while,
And, if not amiss, to mention
That my daily allowance of bark and w(h)ine
Has greatly improved this voice of mine."

"It has," said Puss, with a comic grin;
"The words of truth you have spoken;
A name for ourselves we must strive to win
At once, now the ice is broken;
For one or two doses of catnip tea
Have had a wondrous effect on me!

'Twas only the other night I strayed
Where a silvery moonbeam slanted,
And gave such a beautiful serenade
You'd have thought the place enchanted.
It roused the neighborhood to a pitch
Of praise, or envy—I can't tell which."

Said the Black-and-Tan, "Why shouldn't we try
To sing a duet together?"
Said the Puss, "I see no reason why
We can't; and we'll show them whether
To birds and bipeds alone belong
The gift of singing a pleasing song!"

They sang—and they sang; but oh, my dears!
If you had been anywhere near them,
You'd have shut your eyes and stopped your ears,
And wished that you couldn't hear them.
'Twas a brilliant effort, upon my word,
And nearly killed the canary-bird.

The Pussy cat and the Black-and-Tan
With the music were so delighted,
They will give a concert as soon as they can,
And perhaps we may be invited.
"Bow-wow!" "Miaow!" I'm sorry, you know,
I've another engagement—and cannot go!

[*St. Nicholas.*

A FEW COMMENTS.

I see I have again to admonish my young relatives in regard to the way in which they send me *Mss.* Such letters as are interesting it gives me great pleasure to print, but you would be surprised to see the number of nice letters that go into the basket, mainly because I cannot spare the time to copy off what is written on the reverse of the page. Be careful to write on one side of the page only. Perhaps I am frequently accused of slighting you when the fault lies at your own doors.

I have here a handful of appreciative notes from my large family, which I shall give the gist of.

W. B. Lozer, is very complimentary. He says the RURAL is worth more than it costs. That is true, and I'll tell you why I know it. It costs more to make each paper than the money we receive will pay for. The reason of this is that we are making the RURAL better than ever before in all departments. This young gentleman also asks what others often mention, viz: that I shall excuse bad grammar, I don't like to hear such requests. There should be no necessity for them. See to it in the future and correct the fault by a closer application to your studies.

Now, here is Belle Bowmen, who sends me a slip of paper about quarter note size, written on both sides, and on the side an insinuating little note to Uncle True, saying that if Madcap Mollie sends her address to me to forward it. I have a number of such requests, and in many instances I should like to honor them, but how can I know that your parents would approve of your corresponding indiscriminately? I will

Propose a Plan

by which this much desired result may be attained, if it is to be attained at all.

Any of my relatives wishing to correspond with their "Cousins" may do so on condition that they send me the written consent of parents or guardians. I will then publish their request for correspondence, and if the other cousin is agreeable, I shall expect from that quarter a similar letter from parents giving their cousent to the arrangement. This accomplished satisfactorily, I will send the addresses to the applicants.

Here is a note "From The Mountains" asking information that I'm sure some of the cousins can supply. I give it entire.

"Will Lily Lu Randolph, tell a mountain cousin how she made the ornaments of pop corn for the Christmas tree, also directions for making brackets on glove-box. If Lillie Lu cannot tell of a pretty patch-work pattern, please, some one else do me the favor."

An Eastern Ohio girl, Florence Hawthorn, writes for the first time. She tells me all about how she looks except her complexion. That she adds, "would not charm any one," but I think this probably a subterfuge, and that there is undoubtedly one whom it charms.

I hope you are all doing your utmost with your studies at this season. I think some notes of school gossip, and what is being done for education would be [illegible] able to the cousins. Let us see. UNCLE TRUE.

LETTERS FROM BOYS AND GIRLS.

A Squirrel Hunt.

DEAR COUSINS:—Will you admit another into your happy midst? If you will, I will tell you how I spent Christmas.

A cold, damp mist hung over wood and hill-top as F. and I shouldered our guns and started on a squirrel hunt. Every limb and bough was white with frost; every breeze that rustled the tree-tops sent down a shower of glistening crystals. The woods were silent as we entered them, save now and then, the chip of a snow bird or the sighing of the wind. We stationed ourselves beneath the branches of a hemlock and listened. Soon we heard a noise in a neighboring tree, then a peculiar scolding and chattering, and then we saw the whisk of a gray tail. Presently a plump body came in view on the top-most branch of a hemlock. I heard the mulled click of F's. single barrel, at the same time I raised both hammers of my fowling piece. Out, out, further on the branch came the brisking tail; it stopped and a head appeared above the limb. *Bang!* went F's. single barrel and down came the squirrel—no, he has caught the limb of a small beech and is scrambling up the trunk. With a roar my old fowler asks him to stop and down he comes!

"Young Canadian" wishes to know how to trap squirrels alive. Make a box-trap in this wise: Take two boards eighteen inches long by ten inches wide, for sides; one eight inches wide by eighteen inches long for bottom; one board eight inches wide by ten inches long for one end. Nail these together in the form of a box without a cover. Now take a board eight inches wide by seventeen inches long, nailing this on to a piece eight by eight inches for cover and other end. Fasten the last so it can be raised by boring holes through the sides near the top and driving a nail. Bore a hole through the middle of the long end for the spindle. The spindle is simply a sharp-pointed stick with a shoulder so that it cannot slip clear through the hole.

Maple Glen. MENZER.

What is Thought of Them.

DEAR UNCLE TRUE:—I have been a silent spectator to all this sharp shooting for some time, and have now concluded to add my mite. Uncle True, if you will just give me an introduction to all these cousins I will begin.

Well, "Solomon Sap," you look *exactly* as I imagined you would, and *you*, "Slayerofconceit," are the very picture of—— Well, anyone would know what your name was, or what it *ought* to be. If you chose *your* own name you judged yourself well! But now for my little introductory speech. As I have said before, I have long been a silent spectator, and for all of what I have said concerning "Solomon Sap" and "Slayerofconceit," I have always looked upon them in the strife with favor, and as though they were to be pitied. Now, Cousins of the fairer sex I imagine I hear you say "Hush! If you knew them as well *we* do, you would *think* as we do." Well, perhaps that is so, but as yet I don't think so. "Madcap Mollie" and "Ivy" seem to be the only ones left on the field in the opposing army, and I think, "Bravo!" might well be said in their behalf. I am not sure but they will come out victorious yet, and possibly sometime *I* may join their ranks. Ladies have *such* a faculty for convincing people against their wills! But here I am taking all the time, (and the first attempt too,) with my worthy (?) opinion. Adieu. ATTEMPTS-AT-ELOQUENCE.

Wants Some Excitement.

DEAR RURAL COUSINS:—I hope you will not think my letter very uninteresting. I will try my luck, and if I do not get laughed at, perhaps I will try again. I presume some of the Cousins remember Carrie B. H.?—for I have written before. One of the Cousins was kind enough to answer my letter. If she wishes to correspond with me, I will send her my address, and she will do the same. I go to school all the time and study quite hard (but think I could study harder). I went away September 14, for a little trip. I went to Boston, Chelsea, Somerville, and Haverhill in Massachusetts; Durham, Dover, Portsmouth, and New Castle, in New Hampshire. I would like to hear from "Young Bach," if he is in the land of the living. I hope we have not scared him from our interesting column. I think the Cousins are rather quiet. I wish we could get up some kind of excitement this winter. I am willing to help if some of the others will start it. I think they are rather hard on "Slayerofconceit." I will take his part after this, and if there are any more sneers, look out for yourselves.

Camden, N. Y. CARRIE B. H.

Wishes They Would Write More.

UNCLE TRUE:—I thought I would write to the Cousins, as I should like to be one of them. I wish the girls would write more about fancy work, as I like to do such work. I have just finished a "tidy" on canvas, which is very pretty. My father has taken the RURAL for a number of years, and I like to read the letters from the Cousins very much. I hope the girls and boys will write more letters. I go to school, and am thirteen years old. I study seven studies, and like to go very much.

Will some one tell me how to fix autumn leaves?

Fort Atkinson. M. B. P.

From a New Cousin.

DEAR UNCLE TRUE:—Hawaii Nei said in one of her letters that she would like some of the Cousins to write and tell the Cousins how they spent Christmas and New Years. I, for one, will tell you how we spent those two days. We invited our aunts, uncles, and cousins to dine with us on Christmas day. We had roast turkey and plum pudding. After dinner, one of my uncles read the story of the "Queer Customer," which is in the dear old RURAL. We played games, and sang till 11 o'clock; then all went home, having spent a happy Christmas. New Year's we were all invited to our uncle's, to spend the day. There were fifty relations asked, and forty came. We had a grand time.

Now, dear Uncle True, I hope you will print this; if so, I will try again. I hope some of the Cousins will tell how they spent Christmas Day. We were sorry that Uncle True was not with us.

ESTHER BURNHAM.

Another New Cousin.

DEAR RURAL COUSINS:—As I have never written any letters to the RURAL I will attempt to write one. My aunt takes the RURAL and I have been reading the girls' and boys' letters. I like them very much, and would like to become one of the cousins. I am ten years old and go to school. I live in the country. I think it is all right to piece quilts. I pieced one when I was six years old, and another one when I was nine. The weather is very warm and it has been raining four days and nights. FANNIE L. FORSE.

Washington, Ind.

We Shall Know All About Toledo!

DEAR RURAL COUSINS:—I have been reading the RURAL for almost a year, and lately have taken more interest in the letter column. Therefore, this being my first attempt, I shall live in hopes, until the next issue comes, of seeing my letter published. If it is, I will write again, and tell the dear Cousins a little about Toledo, O. If ever Lottie King sees my letter, please answer through the RURAL. Age, 18; hight, 5 feet.

Toledo, O. ED. E. K.

No, Don't be Afraid!

DEAR COUSINS:—I have been reading, with considerable impatience, the girls' letters about "Solomon Sap" and "Slayerofconceit." So I will write to relieve my mind, and take their part. Now, girls, I do not see why you are so down on those boys. But never mind, boys; do not let them frighten you away. It is a trick of the girls to try to scare a fellow. SAM.

Collins, N. Y.

The Puzzler.

GEOGRAPHICAL ENIGMA.

I AM composed of 56 letters:

My 14, 12, 17, 24, 43 a town of Ireland.
My 48, 4, 3, 17, 16 a city of Afghanistan.
My 32, 9, 13, 6, 15 an island of Oceanica.
My 2, 31, 30, 45, 50 a county of Iowa.
My 37, 21, 46, 38, 6 a city of Nova Scotia.
My 8, 10, 23, 35, 43 a city of Egypt.
My 42, 6, 14, 5, 49 a city of Utah.
My 26, 45, 44, 50, 43 a cape of New Zealand.
My 17, 18, 55, 45, 40 a town of New Hampshire.
My 51, 27, 56, 1, 32 a country of Asia.
My 19, 20, 17, 11, 31 a country of Europe.
My 22, 14, 40, 25, 17 a town of Michigan.
My 32, 17, 47, 28, 41 a river of Portugal.
My 52, 33, 5, 35, 56 a fort of Kansas.
My 4, 29, 10, 6, 34 a town of New Hampshire.
My 36, 10, 43, 54, 12 a river of Siberia.
My 31, 17, 39, 7, 8 a color.

My whole is a gem of truth, culled from a garden of literary flowers.

☞ Answer in two weeks. LITTLE ONE.

DOUBLE DECAPITATIONS.

1. DECAPITATE to mingle, and leave to loan; again, and leave the termination.
2. Evidence on oath, and leave to cause by friction; again, and leave a part of the head.
3. To sneak, and leave part of a chain; again, and leave a fluid.
4. Sealtered over, and leave indebted for; again, and leave married.
5. Fragile, and leave a fencing timber; again, and leave pain.
6. To make afraid, and leave watchful attention; again, and leave a plural verb.
7. To cut, and leave to go away; again, and leave part of a building.

☞ Answer in two weeks. S. C.

MISCELLANEOUS ANAGRAMS.

1. OH, pet ram. 2. A glen. 3. Do, pray. 4. Some Ross. 5. Sour dua. 6. An ear. 7. Ira D. 8. Reach, R. 9. Rat bier. 10. On par. 11. Mad Ned. 12. Words. 13. Tops. 14. I led Cate. 15. Eu's dog game. 16. Rats cart, Io. 17. Be led at Ire. 18. I churn. 19. Love W. 20. Charts. 21. M spat. 22. Plates. 23. Chants. 24. Seat T. 25. Rales. 26. Stang. 27. O, some.

☞ Answer in two weeks. DR.

HOUR-GLASS PUZZLE.

1. PERSONS of high birth. 2. Exceeding just limits. 3. A number. 4. To salute. 5. A number. 6. A consonant. 7. Foolish talk. 8. Appellation of honor. 9. Companionship. 10. A young male student. 11. Quarrelsome. Centrals form ambitious display.

☞ Answer in two weeks. FLORIDAN.

PUZZLER ANSWERS.—Feb. 2.

MISCELLANEOUS ENIGMA.—It is far better to die a porter in the fear of the Lord, than a courtier in the fear of the devil.

DOUBLE ACROSTIC.—Initials, Maria Edgeworth; finals, Castle Rackrent.

Sabbath Reading.

THE ANGELS' GREETING.

COME to the land of peace!
Come where the tempest hath no longer sway,
The shadows pass from the soul away,
The sounds of weeping cease.

Fear hath no dwelling there!
Come to the mingling of repose and love,
Breathed by the silent spirit of the dove
Through the celestial air.

Come to the bright and blest,
And crown'd forever! Midst that shining band,
Gather'd to heaven's own wreath from every land,
Thy spirit shall find rest.

Thou hast been long alone:
Come to thy mother! On the Sabbath shore,
The heart that rock'd thy childhood, back once more
Shall take its wearied one.

In silence wert thou left:
Come to thy sisters! Joyously again,
All the home voices, blent in one sweet strain,
Shall greet their long bereft.

Over thine orphan head
The storm hath swept, as o'er a willow's bough:
Come to thy father! It is finish'd now;
Thy tears have all been shed.

In thy divine abode,
Change finds no pathway, memory no dark trace,
And, oh! bright victory, death by love no place.
Come, spirit! to thy God.

[*School and Home.*

PRAY ON.

I HAD a brother once, now more than a brother. He was wild, wayward, reckless. Elder brother as he was, and the natural guide of a younger, I could not look to him for an example of good. He loved the wine-cup, he loved the paths of folly and sensual pleasure. When a boy—for God showed His great mercy to me in calling me early to a knowledge of Himself—I used to pray for him often, with agony of soul. But on he went in his career of folly and sin, a burden and grief to his parents.

We grew up to manhood. Still prayer seemed unavailing. He had intelligence, ability; he might have been a useful, a happy, and a distinguished man. But he clung to his idols. At times indeed there was reflection, remorse, and a feeble effort to break away from his chains; but this soon passed, and he was as before. Prayer followed him still—the prayers and tears of a believing mother, whose heart swelled well-nigh unto breaking. But apparently there was no answer. He became a wanderer, went to sea, roaming in foreign lands. What he suffered we never knew. He returned destitute, wretched, a mere wreck of his former self; returned to a widowed mother, for our father had passed away. For a time he reformed, and hope again sprang up, and too soon to be dashed. His old habits resumed their wonted power.

Once more he goes forth; now to the distant west. Years pass, years of anxiety. Our mother, whose prayers, and patience, and hope never ceased, in a ripe old age goes to her gracious reward, her prayers unanswered, her hopes unrealized. But they were all laid up before God. Time in its ceaseless course rolls on. More than sixty winters whiten the head of that brother. Increasing infirmities warn him of the approaching end; yet he lives on without God, he turns in anger from every gospel appeal.

The ocean rolls between us; but on a foreign shore, to which God in His providence has called me, my heart anxiously turns to the loved ones in my native land. Shall the brother descend to the grave, having no interest in the great Redeemer? Shall he in the great day be the only one of this family circle who has no crown to cast at His feet? It seems like hoping against hope, yet prayer in his behalf ceases not. Letters come, the seals are eagerly broken. What do I read? Is it possible? Is prayer, after so many years of patient waiting, indeed answered? Yes; that brother, so long, so very long a wanderer, sits at the feet of Jesus, clothed and in his right mind.

Hope deferred maketh the heart sick: but when after years of waiting, hope is realized, what joy fills the soul! It is not always so. Henry Martyn when he gained that on which, during years of toil, his heart had been set, and appeared as senior wrangler in the university, exclaimed, "I obtained the object of my highest wishes, and found I had grasped a shadow." But a shadow is not what I grasp. Enduring as eternity is this joy that fills my heart—a brother born into the kingdom of God; a brother made an heir, a joint heir with Christ! Kingdoms may fall, cities may become desolate, earth may pass away, but his song of praise shall never cease. O my soul, magnify the Lord, who is indeed the hearer of prayer! Rejoice, for your joy no man taketh away from you. Poverty may come, toil may come, change may come, sickness may come, death may come; but this joy remains eternal as Jesus Christ Himself, the Author and Finisher of our faith. S.

WHEN a man goes from the sun, yet the sunbeams follow him; so when we go from the sun to righteousness, yet the beams of his love and mercy follow us. Christ first sent to Peter, who had denied him, and the rest who had forsaken him.

How deeply rooted unbelief must be in our hearts when we are surprised to find our prayers answered, instead of feeling sure that they will be so, if they are only offered up in good faith and are in accord with the will of God!

PERSONAL ITEMS.

The "Cricket" is abroad in the land, as may be seen on another page of this issue.

General Joe E. Johnston has agreed to run for Congress from the Richmond, Va., district.

George Cruikshank, the well-known draughtsman and caricaturist, has just died in London at the age of 87.

Bishop Coxe, of Western New York, very mildly calls Colonel Bob Ingersoll "a notorious and foul-mouthed blasphemer."

The Prince and Princess of Wales will pay a visit to the Duke and Duchess of Norfolk at Arundel Castle in March next.

It was the belief of the distinguished French statesman, M. Guizot, that Constantinople would become the capital of the Greek empire.

The House joint resolution extending thanks to Henry M. Stanley, the African explorer, was unanimously agreed to by the Senate last week.

Lieut. Flipper, the only colored graduate of West Point, is to be appointed military instructor of the colored branch of the Texas Agricultural and Military College.

When Mrs. Hayes has her receptions she wears black silk and a pretty constant smile, and she bewitchingly murmurs your name as if she were an angel or a second cousin come to stay all winter.

Major E. A. Burke, Chandler's vituperative correspondent, in regard to a bargain in La., about the Presidential count, is about 36 years old. Ten years ago he was a laborer in a stone-yard; now he is at the head of his party, and has, or had until recently, one of the best paying offices in Louisiana.

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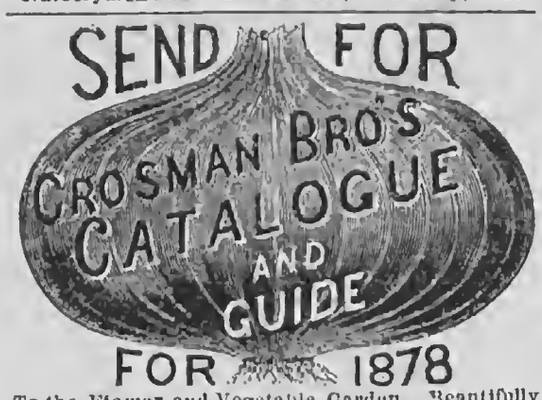

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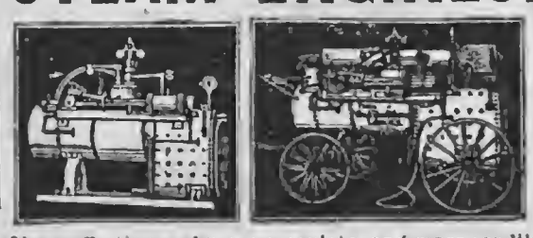

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Wit and Humor.

SPARKS AND SPLINTERS.

BABY shows have proved disastrous ever since the one King Herod inaugurated.

THERE is one trouble greater than carving a turkey. It consists in not having a turkey to carve.

THIS sort of winter is rough on manufacturers of sleighs, dealers in furs, and the oldest inhabitant.

A GREEN Christmas makes a fat goat, for then the succulent old shoe and oyster can are not hidden beneath the snow.

IT will be very pleasant in 1881 to make a trip through Ohio, and hear the natives begin their remarks by saying, "When I was consul at——."

He stood on Afric's burning sands,
And smiled on Hottentot and Kaffir,
He said "I'm safe," and rubbed his hands,
When, lo! there stood a paragrapher!

AN old proverb says that "the anvil lasts longer than the hammer." This is probably the only consolation the undermost man in a fight has.

SOME prefer to have "clocks" on their stockings, but it seems to us that the mantle is the best place for them. Why we think so may be seen on another page.

Some soda water was heard talking to itself thusly to-day in one of our drug stores: "What place do I resemble?" "Why, the mouths of Misses sip I, of course." Applause from the glass holders and tremendous hissing from the fountain.

THE church debt raiser is now in New York. Until we announce that he is in Massachusetts, it will be safe for the pillars of the church to enter boldly, without squinting around the door post to see if there is a strange and business-like man in the pulpit.

A PROFESSIONAL base-ball player came forward in a recent revival meeting in Philadelphia and was "saved." Perhaps it would be just as well to drop this discussion as to the existence of a hell, since there doesn't appear to be any use for such a place.

"I CALL you darling," she said, as she leaned her head on his coat collar. "Show your hand," he returned mechanically. The young miss, not understanding his answer, continued to poker head against his chin, and he hove ace high of relief at her unconsciousness of his mistake.

If you dream of a Patagonian with the chills and fever, paying assidious court to a rheumatic lion with a pink polonaise draped gracefully over a point-aiguille tunic, cut bias in a dark night, it is a sign that you'd better wake up, for you are dreaming like a three-ply jackass.

HIS wife caught him with his arms around the hired girl's neck, but his courage even in this trying extremity never forsook him. "I suspected some one of stealing the whisky on the preserves, Jane, for some time, and of course you know her breath would have told if she was a guilty party."

AN Irishman, fresh from the "old country," saw a turtle for the first time, and at once made up his mind to capture it. The turtle caught him by the finger, and he, holding it out at arm's length, said:—"Faith, and ye'd better loose the howlt ye have, or I'll kick ye out of the very box ye sit in, be jabers!"

"Now," sobbed a devout North Carolina fisherman, as a passenger packet came crushing ashore in the storm and darkness, "Now," he exclaimed, raising his hands to heaven and falling on his knees, "Now, thank Heaven, my wife and daughters can have good clothes and jewelry to wear to church."

Some women love and praise their husbands. Said a Louisville wife the other day in a frank, honest way; "My husband is a smart man, yes he is. I never saw a smarter. Why, he has it fixed so that I can go to any store in town and run in debt as much as I please, and they can't touch a thing. But, of course, I wouldn't."

THE landlady brushed back the boughten curl from her alabaster brow, as she asked her favorite boarder on Christmas if he would have some of the spring chicken; and true to its name, the fowl sprung from the dull points of the carving-fork, like a rubber ball, into the lap of the young man with yellow pantaloons on. The spring chicken proved to be an infringement on the Goodyear patent.

AN Iowa man recently exploded ten pounds of gunpowder under a platform where two score cats, allured by a liberal spread of milk and bones, were having an oratorio by moonlight. There was a general feline transformation scene, a shriek that would have made the hair stand up straight on a billiard ball, and fifteen minutes later the cats organized on the roof of a neighboring woodshed, passed resolutions expressive of their sentiments, and then went on with the performance just as if nothing had happened.

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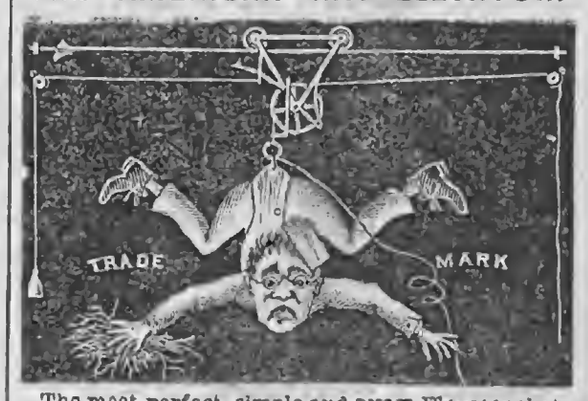

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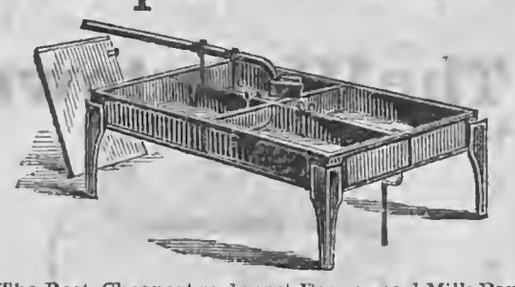

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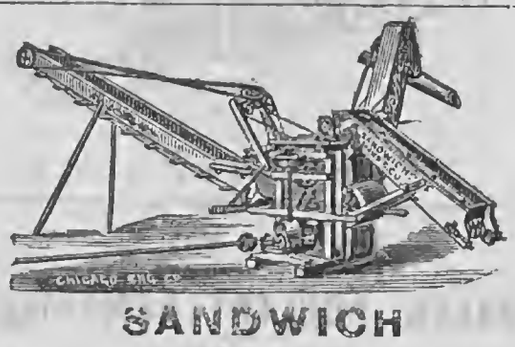

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VOL. XXXVII. No. 8.
WHOLE No. 1465.

NEW YORK CITY, FEB. 23, 1878.

PRICE SIX CENTS
$2.50 PER YEAR.

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Sheep Husbandry.

HORNED SHEEP.

THERE are several varieties of horned sheep still extant, but all the most renowned breeds which are eagerly sought after in every part of the world for their mutton and wool combined, have long since lost all trace of horns. Indeed, it is not at all improbable that by the close of another century, few choice cows will be found with these useless and dangerous appendages.

The Dorset sheep is probably the best horned sheep in existence at the present day. In the neighborhood of London, England, they are used for raising lambs at seasons when it is unusual for other breeds to have young. Animals of this strain, however, will breed the year round at any time that may be selected, and will drop lambs twice every year. A few farmers in Dorsetshire and a few in Somersetshire are, we are informed, now breeding animals of this horned variety, with a view to their improvement so as to establish them as a standard breed. But had it not been for their great fecundity, and their capacity for breeding again immediately after yeaning, and so producing lambs at any time of the year when desired, so that very early lambs can be had with certainty, they would probably have by this time been unknown. The recent improvement effected in them, however, has made them valuable for wool and mutton, independently of their dropping lambs at whatever season the owner may wish.

There are in England, Wales and Scotland, other breeds, also, of horned sheep; but they are much smaller in size and are, some of them, almost as wild as deer, and, like them, generally found in forests; while others, like our own Rocky Mountain sheep, are extremely active, and can climb almost as well as goats. The flesh of some of them—notably of the Welsh Mountain sheep—is sold at a high figure, and is said to have a flavor in some respects more palatable to the epicure than that of Down mutton, because it savors in some measure, of the taste of game or venison. Indeed, a saddle of mutton from one of these semi-wild sheep, is said to be second only to a haunch of the best venison.

BREEDING EWES.

WHILE there are reports and complaints of bad results with ewes and lambs, those that are rightly managed and have good, succulent food, are doing well. On Houghton Farm there is an English shepherd in charge of a flock of rather more than 100 ewes, composed chiefly of grade Merinos with a few pure-bred South-Downs. A pure-bred Down ram was with the whole of them, and there are already about sixty lambs, while others are coming daily. Some of those which came first are now as fat and plump as possible, the ewes being very healthy and giving abundance of milk. They will be fit for the butcher when they are eight weeks old. Should the treatment be as good as heretofore, the nutritious diet be continued, and the other fifty-two ewes have as good luck as those which have yeaned, there will be a fine show of lambs; for at the present time not one has done amiss, every ewe having had a lamb or two.

These will have the genuine flavor of prime, first-class lamb, and will not look like the poor miserable creatures so often to be seen hanging at the butchers' with the "kells" of old sheep wrapped around the skeletons to make believe they belonged to them. If farmers would feed some oil-cake with some oats and bran, too, the ewes would require much less hay and they would be able to send to market mutton and lamb as ripe and palatable as it is in England. This would induce the upper class and the public in general to consume so much more mutton in comparison with beef that the demand would increase and the price would be always remunerative.

If these ewes had been given some stimulant in August, they would all have had lambs in January, and these would have been worth from $10 or $15 each when they were eight weeks old. The English lambs coming first of all into market are, a good deal of them, not more than six weeks old, but they are very fat and have the exquisite taste peculiar to the meat when the lamb has had all the milk it could take and has eaten no food besides what it sucks. First-class butchers would buy neither veal nor early lamb if either calf or lamb had tasted anything besides milk. What is called lamb by second-class butchers in the United States is in reality young, washy mutton. The proprietor of this farm is feeling his way and experimenting with good, common stock preparatory to procuring such pure-breds as his experience with the present animals shall prove will be most suitable for his purpose of inaugurating a new era in agriculture.

January 20th. GEO GARDNER.

Farm Economy.

GROUND BONE—BONE MILLS.

IN the RURAL of Dec. 29, several questions are asked, and others suggested, that are of much interest to farmers generally at this time, and need to be more fully answered or discussed.

The value of ground bone as a fertilizer, and how it compares with superphosphate—on what soils and for what crops is it most valuable, and by what means can bones best be pulverized or made available as plant-food?—are questions that hundreds of our farmers in this north-eastern section of Ohio, are seeking to gain light upon at this time, and topics that are frequently discussed at meetings of Farmers' Clubs and Granges.

It has come to be quite generally admitted that the fertility of the soil in these old-settled districts, has gradually declined, and something

HORNED SHEEP.

more is needed to keep up or restore fertility than is supplied by the usual rotation of crops and occasional manuring. It is also beginning to be admitted, as the result of many experiments, that the element most generally wanting in our clayey or loam soils, where grass and grain are the chief products, is *phosphoric acid*. This idea is also quite in accordance with the teachings of science—that this element was essential to fertility, and was not over-abundant in our soils naturally, while at the same time it has been carried off continually in wheat and milk, as well as in the bones of animals. Of course, nitrogen (or ammonia) is also wanting in these worn soils; but this can be supplied by increasing the manure pile, as many farmers are doing.

Then the question arises: Can the phosphoric acid be most economically supplied in the form of superphosphate, or of pure ground bone? Most writers on these topics have asserted that plant-food, in order to be available, must be in a soluble form; and as the phosphate of lime in bones is not counted soluble, except in a small degree, it is thought to be too slow in its effect as a fertilizer, and hence should be treated with sulphuric acid, which separates the lime from the phosphoric acid and leaves the latter in a soluble state, readily available as plant-food—while the sulphuric acid and lime form sulphate of lime, or plaster, and the whole compound is sold under the name of bone superphosphate. If the gelatine of the bones, which is first separated by steaming, is returned to the compound, as is commonly claimed, it produces from three to five per cent of ammonia; and with this alone, or the addition of flesh and blood, or poorer materials, the compound is called "ammoniated superphosphate."

If the articles commonly sold to our farmers as superphosphate, were honestly such, or were only slightly adulterated, we should have less cause to complain than now, and it might be found true that for some purposes—as where only the crop of the first season is cared for—this may be the best method of fertilizing; but of this I have my doubts. Many farmers are grossly deceived in supposing that a so-called superphosphate is a good article because it is darker colored than one having a full share of bone, and has a strong odor of ammonia, when in reality it is composed of flesh, blood and slaughter-house filth, with so little bone as to render it undeserving the name of superphosphate, and not worth a quarter of the price asked for it.

SALE OF FERTILIZERS AND THE LAW.

The use of these fertilizers will greatly increase if such laws are enacted as will protect the farmers from imposition in their purchase; and, of course, this will prove of benefit to honest manufacturers. Let it be required that all the packages shall be distinctly marked with the percentage of the different elements deemed of value, and the farmers would not only be thereby protected from fraud, but they would also be greatly aided in deciding what kinds of fertilizers to use for different soils and purposes. As soon as our people begin to realize the importance of this subject, or the magnitude which the trade in commercial fertilizers will shortly assume, the needed legislation will, no doubt, be secured. As Connecticut has led the way, we look to New York and Pennsylvania to follow, then our turn will come.

QUESTIONS FOR THE AGRICULTURAL CHEMISTS.

From my own experience and the results of many other experiments that I have observed, the past year or two, I am of the opinion that most of us have been too hasty in adopting the belief that the best form for using bone material as a fertilizer, is that of superphosphate—or that bone, especially when finely ground, is not speedily available as plant-food. If this is all a mistake, it is one of great importance. Besides the door which it opens for deception and fraud, as before stated, there is an obvious waste of money or materials in the manufacture and purchase of superphosphate, if the supposed necessity for the increased solubility of the phosphoric acid is a mistake. A ton of good average superphosphate, costing say $40, contains only about twelve per cent. of phosphoric acid; whereas, a ton of finely ground bone contains twice as much, or twenty-five per cent., while in each there is about an equal amount of ammonia. The remainder of the superphosphate is mostly sulphate of lime and water, and that of the bone mostly lime, with which the phosphoric acid is combined.

Now from the results of a large number of experiments, I am convinced that by means of the carbonic acid and water in the soil, combined with the vital action of the roots—*vide* Johnson's "How Crops Feed"—these small particles of bone are dissolved and assimilated as speedily as wanted by the growing plants. Of the many facts that I could give in support of this belief, I have only space for the following, and it is most directly in point; because the crop is one of the quickest growth and maturity.

RAPID EFFECTS OF GROUND BONE.

Messrs. HOUGH & SON of Rootstown, Portage County, O., had five acres of clay loam soil, which they decided to sow with buckwheat. They knew that the land was poor, but having no fertilizer excepting one barrel (250 lbs.) of bone dust from the Salem Mill, they applied this broad-cast on one-half the field—only 100 lbs. per acre—and harrowed it in with the seed. The field was all alike in other respects—sowed the last of June—the ground in fair order, and rain enough followed to bring the plants up in due time. Almost immediately after their appearance, it began to be seen that the plants on the fertilized half of the field were more vigorous than the others; and this difference increased as the season advanced, the growth of the one side being fully twice as great as that of the other; and at harvesting the fertilized portion gave fifty-six bushels of nice grain, while the other half was not worth cutting, and only gave six bushels.

I found numerous instances where this bone-dust had been used by the farmers of Columbiana County, not far from Salem, with excellent results, when drilled in with wheat and grass seed, greatly benefiting the wheat-crop and securing a fine catch of grass and clover. Also applied on meadow and pasture land, a well-known dairy farmer in Geauga County used several tons of the bone with very satisfactory results, where he failed to see any benefit from a supposed fair article of superphosphate, applied at the same time as the bone, and at the same rate of 200 lbs. to the acre. I will give his address to any one who desires it.

Most of the experiments with superphosphate that I have observed, have been with corn, which needs ammonia more than phosphoric acid, and in a majority of cases there has been obvious benefit, in giving the plants a start in the first part of the season; but if the land was not otherwise enriched, the growth stopped when the roots got away from the influence of the fertilizer, which had been dropped in the hills, and hence it did not help in the earing time. Of course, a larger application is required for poor soil, and it needs working in broad-cast. I found the same true in regard to its use for garden crops; and there was no perceptible benefit the second year, even when freely applied, unless the first season was dry. The bone-dust applied at the same rate was more lasting, showing effect the second season, as well as the first, if at all freely used.

Another question for the chemists is this:—It is a fact, I believe, that phosphoric acid will not remain in a free or soluble state when in contact with any alkaline base—as lime or magnesia—with which it can unite; and although its affinity for lime is overcome by the greater power of sulphuric acid, will not that affinity cause it to again unite with the lime that is in the soil where it is applied and thus again form phosphate of lime as insoluble as it was in the bone, before it is likely to be found by the roots of plants? Or, if lime is not present, which is seldom the case in Ohio, magnesia may take its place. This question I have never seen answered, and it is plain, I think, that it is of much practical importance, affecting as it does, the fundamental principle of the value of superphosphate as compared with simple bone for fertilizing.

ABOUT BONE MILLS,

or machinery for pulverizing bones, most persons who have undertaken the work have found serious difficulty; and, as I have hinted, much of the objection that bone-meal is slow of effect as a fertilizer, is owing to its being coarsely ground. I have seen samples of the meal from at least half a dozen different establishments, East and West, and nearly all of them had the particles averaging as large as wheat grains, some larger. And these were as fine, I believe, as bones can be ground by any of the iron or steel mills which have been constructed for the purpose. The contrivances for pulverizing by means of friction or attrition, are found expensive and unsatisfactory. The mill at Salem, O., is the only one within my knowledge that produces a really fine article of meal from pure raw bones, without any previous softening or driving off the natural gelatine which adds to the fertilizing effect. I visited this mill last September, and was greatly interested in learning from the farmers of the region, how much benefit it was doing in the way of stimulating thought and increasing the fertility of the lands. The mill was then running night and day, producing five or six tons of meal every twenty-four hours; but this was not sufficient to meet the demands—so much of the article was being used for wheat sowing.

The bones were obtained from nearly all parts of Ohio, and some from other States—occasionally from the Western plains—and delivered by rail-cars within a few rods of the mill. All the preparation they required was the sorting out of such as were too wet or greasy—these being deposited in an open yard and simply exposed to the weather for a month or two. A powerful steam-engine is used, and the bones pass through several different kinds of grinding machinery, part of which is of the ordinary kind and of the strongest pattern, and part is of Mr. SHILLING'S own contriving, and which I am not at liberty to describe.

One question more. Is there not a mistake in the article in the RURAL to which I have referred, [Dec. 29] quoting BERZELIUS, stating that ox-bones contain 33.30 per cent.—or one-third their weight—of gelatine? I have not the book at hand, but I think this cannot be correct.

Painesville, O. M. B. BATEHAM.

[THE proportion of bone gelatine in ox-bones—33.30—as given in our answer to a correspondent's question in the issue of the RURAL referred to by Mr. BATEHAM, is quite correct, according to analysis of BERZELIUS. Should the works of that chemist be inaccessible to any curious reader, he will find a quotation from them of this analysis in "Appleton's Cyclopœdia."—EDS.

COTTON SEED.

PROF A. W. MANGUM.

SOME time since I wrote you that many people in the cotton-raising territory, utilize the seed of the cotton by feeding it to cattle. A poor man, who rented a house from me last winter, told me that he did not regard the expense of feeding his cow in winter, as he gave her nothing but cotton seed. The cost, in this place, is 12½ cents per bushel. The quantity given is from half a gallon to a gallon, at a time. I have sometimes used the seed for my milch cows, regarding them as a valuable addition to other kinds of feed. They may be fed alone, or mixed with slops or meal. Large quantities are said to be injurious both to cows and hogs. I have heard that hogs have died from eating too great a quantity at once.

A farmer, from whom I have regularly purchased butter, explained the absence of the desirable yellow color in winter, by stating that he was not feeding meal but simply cotton seed, in addition to the rough provender. Of course, the butter was not so valuable; still it was not what we would call poor.

But the seed can be much more extensively utilized, according to statements recently published in the organ of the Board of Agriculture in North Carolina. It is from the pen of W. H. OLIVER, Newbern, N. C. He argues that the seed may be so manipulated as to sell for as much as one-fourth of the entire cotton crop. He estimates that each ton of seed will make thirty-two gallons of oil and 700 pounds of oil-cake. The crude oil is put at 40 cts. per gallon, and the cake at $25 per ton. For both of these there is an immense demand, great quantities of the cake being shipped to Europe. He claims that feeding the cake to stock fattens them, and increases the quantity while improving the quality of the manure. Of various kinds of feed compared, the following sufficiently indicates the superiority claimed for what he calls the "cotton-seed meal:"

	Flesh producing.	Fat producing.
Hay	8	50
Oats	12	63
Corn	12	68
Linseed Cake	26	56
Bran and Mill Stuff	31	51
Cotton-seed Meal	41	77

He has ascertained that the cost of machinery to press 60,000 pounds of seed per day is $5,150. After the oil is expressed, the residuum may be made into "a very superior toilet and laundry soap." He adds that the oil is used for many purposes—among others, that of *adulterating* other oils—and is a superior salad oil. (Its use for *adulteration*, if the term is employed in its common sense, is, of course, to be condemned.) He affirms that we might get from the seed, now almost wasted, enough food for every milk cow in the United States, salad oil enough for the world—and forty millions over, and soap enough for the United States. His expression "*almost wasted*" may refer to the custom, extensively prevailing, of using the seed as a fertilizer. Great quantities are used in composting.

University of North Carolina.

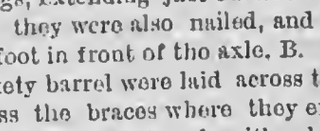
Farm Topics.

FARM HINTS.

I LIKE the RURAL'S suggestion, of a few weeks since, that farmers should give a description of any cheap devices they may have found to be of value. I believe we might "exchange" valuable hints if we were awakened to the subject.

A BRIDLE MENDED.

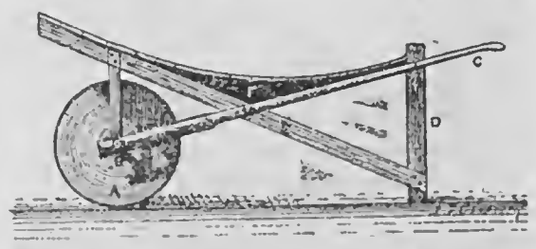
A year or two since, while busily at work on the farm, the bit in "Charley's" mouth parted in the middle, and could not be tied or wired together to do temporary service. My boy entirely removed the pieces, took two rings, each about two inches in diameter, an old strap about a foot long, doubled it through the rings, leaving a ring at either end; a few stitches in the



middle, and a bit was made that answers every purpose, is not a terror on a frosty morning, and is in use yet.

A HANDY "WHAT IS IT."

It is not convenient to remove the manure from my stable with a fork and shovel alone, the deposit being too far away. The barn barrow was burned, and a substitute must be devised. The hind wheel, A, of a boy's cast-off cart was at hand. The wheels had been sawed out of a cottonwood board. An axle, B, was made about 2½ feet long. Two white-ash poles, C, each about five feet long, were denuded of their bark and framed into the axle, and we had



the handles to our "What is it." For legs, D, strips of cottonwood, about three inches wide and two feet long, were nailed securely to the handles, C, three inches projecting above. For braces, E, longer strips were nailed to the foot of the legs, extending just outside the handles, to which they were also nailed, and projecting about a foot in front of the axle, B. The staves of a rickety barrel were laid across the handles and across the braces where they extended in front, and were fastened with shingle nails and——the baby begged for just one ride. The bicycle (?) is loaded in the stable, run out upon the manure heap and tipped over endwise instead of sidewise.

More perhaps, by and by, if we get *quid pro quo* in exchange. R. H. CRANE.

A GOOD FARMER.

PROF. W. J. BEAL.

I GIVE a few notes taken at the residence of J. D. ADAMS in Climax, Kalamazoo County Michigan. He has a farm of some 700 acres nearly all of which was purchased at different times at a very low price many years ago. The soil was strong and first-rate, bearing some Burr Oak and Hickory. It was only very gently rolling and needed no ditching. This farm has taken some premiums as the best in the State. Mr. ADAMS began as a poor man. He labored for the money to buy his land.

His house and barns are neat and well built, though there is nothing extravagant about them. The floors of the barns are all laid on grout which does not permit vermin to find a hiding place. The cost is not very great, and the owner is always gratified with the result. No cold currents blow under the floor. No animals injure their limbs by breaking through the floor. There is a wind-mill on top of the barn, which pumps water into the tank in the loft of the barn. From the tank run pipes to tanks for the stock. Everthing is well built—from first to last—to prevent accident and frequent repairs. The proprietor is ingenious, and makes many little repairs though he does not do all the work on his buildings.

He has always practiced mixed husbandry. Everything is convenient. He keeps, if I remember right, seventeen horses, 300 sheep, about fifty cattle and a large number of hogs and fowls, yet two men take good care of all these, and find much time to get up wood and do other work. The stalks are drawn from the field as they are needed to feed. This winter, in good weather, he has fed cattle every day in the orchard. The stalks will serve as a good mulch next year. He fattens some steers and sheep. He is particular to save an abundance of seed corn early and stores it in a perforated iron chest in the chamber of his house. He has not had any freaks of running wild from one part of farming to another, but has kept on an even course. Mr. ADAMS has learned from experience and from others with whom he has come in contact. We judge he is not a book-farmer in any sense of the word. With more knowledge of what others have done as recorded in books and papers, he would, no doubt, have made still more money as a farmer.

We attribute his success to buying at a low price excellent land which needed no ditching; to his ingenuity, and thorough way of doing all kinds of work; to his steadily adhering to some system of farming; to his economy in the use of money and time, as shown in his saving of

labor in every way possible; to his habit of keeping good stock and avoiding fancy prices when purchasing.

CONTENT ON THE FARM.

My June pullets, thirty-five in number, commenced laying about the 1st of December and averaged about two dozen eggs each day until within three weeks ago when eggs went down. Then my poultry, thinking it did not pay for the wear and tear, dropped very suddenly to three or four eggs a day. They have now recommenced laying abundantly and I shall consequently expect to see the egg market improve. I feed buckwheat and oats and corn and clam-shells, all they want, and plenty of clean water.

I keep ten cows: they have made two hundred pounds of butter since the first of December, are looking well and are coming in in March. I feed twice a day, once in the yard and once in the stable. I like to have my cows run out in the day-time, unless stormy or very windy. I think cattle are stronger if wintered in this way. I feed corn-stalks and two quarts of Indian meal and buckwheat-bran mixed, mornings; and at night, all the hay they will eat and the same feed of grain. I have farmed thirteen years and never had a sick cow in the spring. My hogs get all surplus milk and I think do much better than if fed on clear grain.

I have seven hundred fruit trees and to protect them from the mice in the winter, my little boy goes ahead with a pick and loosens the ground, and then I follow with a hoe and clear from around the tree everything wherein mice can harber, and pile around each tree a little mound of clear dirt about three inches high. Moreover, I take a wire and sharp knife along with me and clean out every grub. This work I do about the middle of September, and I am never troubled with either mice or grubs. My trees have been set from two to ten years, and in that time I have lost only one tree through the ravages of mice.

This, of course, requires some labor; but as some worthy has said, you can't get something from nothing. A little labor laid out at the right time, saves a good deal of money and trouble. I hate to lie awake at night and think that mice and grubs are undoing what I have tried to accomplish.

Now, just one word for the birds. I think they are my greatest friends. Nothing makes my children more happy than the return of these feathered wanderers. They are harbingers of the summer days, and they follow me as I turn the furrow, and clean my land as well as the trees of all the pests they can get at. I have never been in the law business, but if I should see anybody on my premises shooting birds, I think I should give him a dose of Blackstone. I am happy in farming and think all farmers would be so, if they worked more and grumbled less.

W. H. INGALLS.

Green County, N. Y.

BUY GOOD LAND.

In buying farms there are usually many things to be considered, the size of the purse, nearness to market, good water, healthful climate etc. In visiting many portions of several of the Northern States, we have usually found the people most prosperous where the land was the best. There we find the best houses and the best barns among the farmers. A lean soil supports farmers who are unable to build fine houses and barns. To till land costs a good deal. To grade it and take out stumps also often require much labor. I have concluded that enough attention has not been paid to the subject while hunting for a home. Fine new farms of the best soil are held at high prices, but I think they are cheaper than poor land at any price, if they are intended for most kinds of farming, and for similar reasons land of medium quality is also dearer than good land at any price.

W. J. B.

Horticultural.

A WORD TO INQUIRING FRIENDS.

In sending specimens of plants for name, some of our friends merely forward a blossom, a leaf, a seed or even a piece of stalk. It would be well in such cases, to bear in mind the multitudinous genera, species and varieties of vegetation, many of which in one or more of these particulars so closely resemble each other that several points of comparison must be instituted between them in order to distinguish one from the other. Hence, a leaf and a blossom should always be remitted to us to insure a satisfactory answer to a query in this connection. In this matter, as in all others connected with agriculture, horticulture, and kindred subjects, we shall be happy at all times to furnish the best information to inquiring friends. Entomology also is yearly becoming a subject of greater interest and importance to the farmer, and the necessity is constantly growing more urgent that he should make this a subject of study and attention. All inquiries connected with this department of knowledge shall secure prompt attention through our columns, and we cordially invite our friends to send us specimens of all insects about which they may desire to obtain information.

BLEEDING HEART.

Will you tell me what plant is meant by Bleeding Heart? Would it be hardy here? Is it a shrub or a root? Would you advise me to purchase a plant?

E. C. A.

Meadville, Pa.

We furnish, for the benefit of our inquirer, a very accurate sketch of what is generally known as Bleeding Heart, sketched from life by Mr. HOCHSTEIN, years ago. Dicentra spectabilis, (sometimes Dielytra s.) is the botanical name, and a more charming spring plant we hardly know. It is quite hardy, will take care of itself if given half a chance, and cannot fail to please any lover of flowers.

The plant is from the north of China, and is a herbaceous perennial. The flowers are much like those of the biennial vine, Adlumia cirrhosa (Climbing Fumitory, Alleghany Vine,) with which our friend may be familiar. But they are far prettier, the white and bright rosy-pink flowers adorning the graceful sprays of foliage like so many heart-shape gems. The foliage appears in April and the flowers in May. The roots may be allowed to remain in the same place for several years, when they will form large masses that few of the treasures of the floral world can equal.

BLEEDING HEART—DICENTRA SPECTABILIS.

To those who have seen this plant from childhood, in almost every garden of the neighborhood, the above may seem extravagant praise, while, if they set eyes upon it for the first time they would find it difficult to frame their admiration of it in fitting words.

To the botanist, the flowers are especially interesting, and a study of the manner in which the stigmas are pollenated will repay the young student.

SLITTING THE BARK OF HIDE-BOUND TREES.

WILLIAM FALCONER.

This is a tender question and one to which there may be two sides; and with due deference to your scientific correspondents who, with the RURAL, have adopted the negative, I must, in justice to my own practice and observation, assume the affirmative. Of the existence of hide-bound trees I am perfectly satisfied, and the writings and teachings of our most noted modern physiological botanists prove scientifically what I have noted practically. That the slitting of the bark does relieve trees so affected I have proved to myself beyond a doubt; however, I do not mean to dictate to others, but merely relate my own experience.

Trees growing under natural conditions, as by the way-sides or in the fields and woods and not subject to artificial pruning and training, are less liable to this ailment than are cultivated trees—the members of our gardens and orchards. Grafted, budded, and clean-stemmed trees are the most subject, and trees that have been firmly supported by the help of stakes from their early youth, are more liable to become hide-bound than those that have been allowed to support themselves.

As your other correspondents have called attention to this subject as regards out-door trees, permit me to notice it respecting trees cultivated in glass-houses, and which from their artificial conditions of growth are very liable to become hide-bound.

In the United States we know little of fruit-growing under glass, because our out-door conditions are so favorable; but in Europe the cultivation of Peach, Nectarine, Apricot, Plum, Cherry, and the finer kinds of pear trees in orchard-houses, is one of the most particular branches of horticulture. No matter what-like the season may be, out-of-door gardeners are expected to annually reap from the orchard-houses the very finest fruits, and heavy crops of them. With this end in view, they make it a point to keep their trees in the best condition, both as regards roots and crops; in fact, nothing is left undone that money and skill can do. Let us take the Peach for instance. The Peach trees are budded on Plum stocks, and mostly grown in inside borders and in pots, those in borders oftentimes living to the age of 30 or 50 years and over, as may be seen at the Earl of Stratford's gardens at Barnet. During a few years of their youthful career the trees, in growth and in fruitfulness, are usually all that can be desired; but after a time the diameter of the peach stem may considerably exceed that of the plum stem with a knob or hood at the union. Gardeners who know their business, never permit this difference to attain an injurious degree, but timely correct the matter by slitting the bark of the plum stem, and thus securing the desired end—a greater and more proportionate passage-way for the conduction of food from the roots to the tops.

Referring to "the great assistance, to the increase in diameter of trees, afforded by the diminution of the pressure of the bark on the cambium," we find in "Sachs' Morphological and Physiological Botany,"—"The bark of young trees is split from above downwards in summer; cushions of wood are formed at the edges of the incisions, which soon close up the wounds. The use of this process is that from the more rapid increase of the wood in thickness, the conduction of water to the leaves becomes more copious, and the loss by transpiration is more easily replaced. The development of the buds and hence the formation of the organs of assimilation will be promoted by the increase of turgidity in the young branches." That the narrowness of the plum stem would beneficially affect the peach trees grown under glass, by curtailing their wood-luxuriance, would be a libel on gardeners, for once their trees begin to fruit, they practice other and better means of regulating growth.

The effect of the evil of the hide-bound tree is first observable in debility of the leaves and young wood, a tendency to drop more fruit than healthy trees usually do, and inability to satisfactorily mature in quality and quantity the fruits that remain. Two notable examples—one at Clapham, and the other at Twickenham—of the evil of "hide-bound" in peach-trees came under my notice some years ago. In both cases the gardeners—green-house men who knew nothing of fruit-culture—were averse to slitting the bark because it was contrary to their ideas of physiology. "And if Camelias and if Azaleas—both 'worked' plants were shrouded in blooms without slitting, why shouldn't the peach-trees ripen good fruit with equal immunity?" But they didn't, and instead annually be-

came worse. Why? The ventilation, position, and borders could not be improved, and the evil was elsewhere. One man would not be advised and though he always got peaches, they were poor samples; but the other—Mr. Wm. Cummings—slit all of his trees but two, and in a couple of years he had as good peaches as anybody. The two left, were kept at my request by way of experiment. One was in the early house—fruit in May—and the other in a later compartment—fruit in June and early July. The early tree—Royal George—at the end of two years showed much greater decrepitude than the late one—Walburton Admirable—which I presume, was owing to the latter's more natural condition of growth—exemption from hard forcing—but both yearly produced and ripened fruits, though these were fewer and inferior to those yielded by the "slit" trees. The result so overcame Mr. Cummings' ideas of physiology that in future he resolved to assist as well as follow nature.

That the evil under these artificial conditions, does not appertain to any bad state of the root-bed is perfectly evident; it is found in the inability of the compressed hide to grant the ready passage of nourishment sufficient for the healthful demand of branches, leaves, and fruit, or, in other words, "the trunk being left to itself can not appropriate its proper share of the nutriment supplied." This "slitting the bark," is a more delicate operation than some may think: in fact, it is a job experienced gardeners either do themselves or have done by their foreman, for they would no sooner trust it to their journeymen, apprentices, or laborers, than an army surgeon would the amputation of an officer's leg to a private soldier.

When this operation should be executed, is most reliably told in answer to a correspondent by the Eds. of the Gardeners' Chronicle, p. 1121. 1867:—"Early in the season, but not when the tree would bleed from the cuts; therefore not when the sap is flowing, but when the leaves have expanded." As regards the slitting itself, may I ask what harm does it do to the tree operated on, providing a sharp thin-bladed knife be used, the cuts made clean, through the bark—no more—from top of main stem downwards, and one or two incisions (two to three cuts are usually made at first application,) and the time in New England be during the first three weeks in July? I never knew evil to accrue from thus judiciously slitting the bark, but on the contrary, time and again, I have found it to most forcibly improve debilitated and mossy apple and pear trees that I was satisfied were hide-bound.

Gumming and other diseases are generated by unjust mutilation of the bark of stone-fruit trees, and with this in view, and incited by a discussion we had on this subject when I lived in the Southern States, I slit the bark of peach, nectarine, apple, pear, persimmon, box-elder, and several other trees, that were not hide-bound, and not in a single instance was gumming or any harm apparent, and by the succeeding winter the wounds had filled up and healed over. My friend, Mr. Silman of Leon Co., Texas, had a peach orchard of fine young trees, and a few he trained as high standards, that is, with clean stems, some four feet high, as he wished to plow under them after they became biggish trees, but they grew unwieldy and several got broken. I called there in May '75, and we discussed the orchard freely. I advised him by no means cut out his standards, but instead, either firmly stake them permanently, or stake them temporarily and slit them to see what effect that would have on them. "Well," he remarked "they're of little use as they are anyway, and if you do it for me, I'd as lief slit them as not." I slit every alternate tree, and when I saw them again—the January following—the average trunk of the slit tree was some three-fourths of an inch greater in circumference than that of the uncut, and all were well healed and sound. The land was cleared Post Oak, and the soil a rich gray sandy on a clay subsoil. The point to be gained in this case was not a relief because of hide-bound, as the trees were very thrifty and not perceptibly, if at all, hide-bound, but to get a trunk stout enough to support its head unassisted.

At Corsicana I met a farmer from Waco, who has a thrifty orchard of apple trees, but, he said, the stems were not growing as fast as the tops were and he had to stake them. The trees were of tall-standard fashion, as we have in the Northern States and quite unfit for the South. I told him to slit the stems and if any switches grew on the stems not to cut them off as he used to, but pinch their points when they got six or eight inches long, and then cut them off in winter. He said he would try it, and in a letter I had last fall from a friend at Mexia, he thanked me for the suggestion, and stated that his trees had improved mightily.

This idea was first impressed on myself by my esteemed friend Pitman, who is foreman in that old-established and famous nursery—Osborne's, at Fulham, London, and who during 55 years has been connected with the establishment. He endeavors to prevent rather than induce and then cure this hide-binding. He does this by permitting the existence of a few sprayey or spur-like shoots along the stems of the young fruit and ornamental trees. Not only does this prevent the stems from becoming hide-bound, but it also so strengthens them that stakes are seldom necessary as supports. Of course, I don't mean that the trunks are feathered like those of annually clipped basket-willow trees; no, only a few shoots are left, and these are foreshortened in the summer time and removed in the winter.

Whether or no trees become hide-bound, and the effect produced on them by cutting the bark, is scientifically and most minutely detailed in that excellent work—Sachs' (professor of botany in the University of Wurzburg) text-book of Morphological and Physiological Botany, and under the heading of "Mechanical Laws of Growth—modification of growth caused by pressure and traction."

The practice of slitting the bark in order to relieve hide-bound trees has been practiced for centuries back, as will be observed from the following lines which I quote, by way of curiosity, from Lord Bacon's "Sylva Sylvarum," which was written in the earlier years of the Seventeenth century;—"It hath beene observed, that *Hacking* of *Trees* in their *Barke*, both downeright, and acrosse, so as you make them rather in slices, than in continued Hackes, doth great good to *Trees*; And especially deliver eth them from being *Hide-bound*, and killeth their Mosse." The presence of moss upon trees he attributes to loss of vigor, thus:—"*Old Trees*, are more *Mossie*, (farre) than *Young*; For that the Sap is not so francke as to rise all to the Boughes, but tireth by the way; and putteth out *Moss*."

Botanic Gardens, Cambridge, Mass.

CATALOGUES, &c., RECEIVED.

D. C. McGraw, Riverside Gardens, Binghamton, N. Y. Abridged catalogue of seeds, greenhouse and bedding plants, shrubs, evergreens, &c., for the spring of 1878.

T. S. Hubbard of Fredonia, N. Y., who, as is well known, has made a specialty of grape-vine culture and propagation for many years, will send a price-list free, and a descriptive list of trees and small fruits also, upon receiving postage stamp.

The Stockbridge Manures, originated by Prof. Levi Stockbridge, and sold only by W. H. Bowker & Co., Boston and New York. A pamphlet giving all needed information and prices.

Ellis Brothers, Keene, N. Y. Descriptive catalogue of choice green-house and bedding plants, seeds, small fruit and vegetable plants for 1878.

Our acknowledgments are due to Messrs. S. R. Wells & Co. for a very useful as well as ornamental Phrenological Bust, which they present to each subscriber to the Phrenological Journal for 1878.

Circular. Analyses and commercial values of commercial fertilizers admitted to sale in Georgia. Under the supervision of the Commissioner of Agriculture, Atlanta, Ga.

Waukegan Nursery, Robert Douglas & Sons, Waukegan, Lake Co., Ills. Wholesale catalogue of evergreen and ornamental tree seedlings, etc. Messrs. D. & Sons have found that, after twenty years' experience in growing evergreens from seed, packing and shipping millions annually, they can so pack and ship them that they will arrive as safely and transplant as successfully as apple or other deciduous trees.

Thomas Jackson, Portland, Me. — Twenty-seventh annual wholesale Catalogue of Nursery Stock for spring of 1878.

Plant Seed Co.'s Illustrated and Descriptive Catalogue for 1878, St. Louis, Mo. Vegetable, Field, Tree, Grass and Flower seeds, Seed Potatoes, Summer-flowering Bulbs, etc., 64 pages, free to applicants.

Cole & Brothers, Pella, Marion Co., Iowa. Illustrated Guide to the Flower and Vegetable Garden. Vegetable seeds of all kinds—Chufas, Artichokes, Field and Flower seeds. This catalogue offers special premiums to all purchasing seeds.

D. M. Ferry & Co., Detroit, Mich. A catalogue for 1878, comprising 144 pages and hundreds of excellent engravings and two chromos. Free to all.

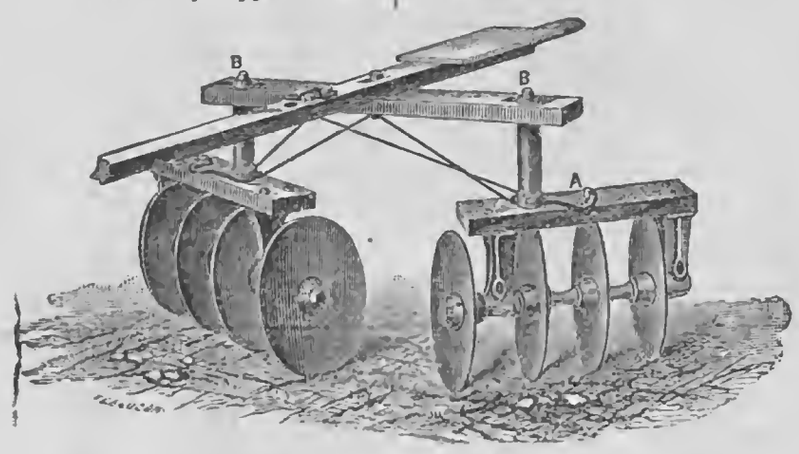
Peter Henderson & Co., 35 Courtlandt St., N. Y. Catalogue of "Everything for the Garden." We need scarcely refer to this comprehensive catalogue as being one of the most attractive and instructive of any published. It offers many novelties and two colored plates, one of Pansies, the other of the Hydrangea, "Thomas Hogg" and the white Tea Rose "Cornelia Cook."

Our thanks are due to Mr. Daniel H. Wheeler, Secretary of the Nebraska State Board of Agriculture, (Plattsmouth)) for an address by Prof. Rodney Welch upon "How the West has Moved On."

R. S. Johnson, Stockley, Del. Wholesale price-list of Nursery stock at the Sussex Nurseries. Also abridged wholesale price-list.

George S. Josselyn, Fredonia, N. Y.—A little work of thirty-two pages with plans and elevations descriptive of the most approved methods of caring for high class poultry. Events and items of interest and importance for reference. It will be sent free to all applicants. Mr. Josselyn is, we presume, one of the largest breeders of pure-bred poultry in the world. He may be the largest for aught we know.

The Dingee & Conard Co. — West Grove, Chester Co., Penn. The New Guide to Rose Culture. We have much pleasure in commending this catalogue to lovers of the Rose, for it contains all the information in a plain practical form, that anybody needs, and is to be obtained for the asking. Its perusal will reveal the secret of their great success as rose-growers, a success scarcely equaled by any other establishment of the kind in this country.



BRAMER'S CORN HARROW.

Industrial Implements.

BRAMER'S CORN HARROW.

If the farmer of one hundred years ago were permitted to return to the scenes of his busy and useful life, he would be gratified to find his prediction more than fulfilled. He would see the wilderness, where his were the first sturdy strokes that felled the trees, now peopled by an active population, the farmer on his rich and productive farm, the mechanic in his workshop, the merchant at thriving business centers, exchanging the products of labor; each contributing to the success of all. But this would not be all. He would note the rapid strides that had been made in the methods and means that wrought such results—making the work lighter, more expeditious, and productive of better results. He would see that improvements in implements to aid the husbandman, had enabled him to till his fields, cut and secure his crops, and do all the work that, in his day, taxed physical endurance to the utmost, with ease and celerity. The old saying that "He who makes two blades of grass grow where but one grew before, is a public benefactor," is no more true than that he who, by his ingenuity, makes it possible to do in one hour, without additional expense, what before had required two hours, is entitled to the same praise; for time is money, and in these days no laggard need hope for success.

The Warrior Mower Co. of Little Falls, N. Y., whose name has become familiar to farmers as manufacturer of the "Warrior," has, without doubt, enabled many a farmer to make two blades of grass grow where but one grew before, by the introduction of the Randall Harrow, making it possible to do twice the work in a given time, and, while thus reducing the labor, largely increasing the yield of the lands. This Company, ever alive to the wants of the farming community, has, after thorough tests, added, this season, to the specialties of its manufacture, a Corn Harrow, for working rowed crops.

This implement represented by the cut, has the same soil-working devices as the Randall Harrow; a series of plate wheels set so as to run at an angle to the line of draft, each wheel cutting, lifting, turning over, and thoroughly pulverizing the soil in its path. In the Corn Harrow the two gangs of four of these wheels each, are used; one gang working each side the row. The advantages claimed for this Corn Harrow are, that instead of lifting up the soil and allowing it to drop back in nearly its original position with weeds and grasses, in many cases, left in prime condition for growth, it cuts deep, and turning the soil, buries the weeds and grass beyond the hope of resurrection. Instead of clogging with every obstacle with which it comes in contact, it rolls over and cuts through without trouble or delay. It is easily changed to throw the soil towards or from the growing crop as may be desired. It is also adjustable in width to adapt it to the work to be done.

"THE FIRE ON THE HEARTH."

In this age of thrifty devices no object of domestic economy has taxed the ingenuity and skill of inventors more heavily than the discovery of that form of stove which, while simple and inexpensive, is at the same time most economical of fuel and most efficient in diffusing throughout the area to be heated a uniform and wholesome temperature. While the ordinary open fire-place is pleasant in its cheerful glow and healthful by the ventilation it produces, yet it is a sad waster of fuel, both on account of the imperfect combustion effected by it, and because warming the room almost entirely by direct radiation, the air which causes combustion, rushing in a hot current up through the chimney, is wasted in the open air instead of being utilized either for culinary purposes in the kitchen or for increasing the temperature in sitting rooms. It has been calculated that on an average six-sevenths the caloric contained in fuel used in ordinary open fire-grates, is lost in this way; while some of the lauded hearths of our fore-fathers swallowed up in their capacious maws fully seven-eighths. The ordinary closed stoves, while lacking the genial glow, and easy ventilation of the open grate are, it is true, far more economical of fuel, yet they are, many of them, very unnecessarily wasteful, a fact that can be readily detected by feeling the temperature of the pipe through which the smoke and other products of combustion escape into the atmosphere. Moreover, when made of cast-iron and highly-heated carbonic oxide and other deleterious gases are generated which, every winter, are stealthy, but prolific causes of not a few annoyances and ailments.

Among the numerous stoves of various patterns and patents, that have come under our notice, there is none which commends itself more strongly than "The Fire on the Hearth" both for its beauty of design, simplicity of construction, cheerfulness of effect economy of fuel and efficiency in diffusing a healthful and uniform temperature. Used with the blower on, it acts in every way like a close stove, but with a large, additional air-warming capacity; with the blower off, it is converted into a "Franklin" stove, cheerful as an open grate, but with a greatly increased air-warming power. So thorough is the combustion of fuel in this stove, and so entirely is the heat utilized in warming the room that the temperature of the products of combustion escaping through the smoke-pipe into the chimney, when the blower is off, is actually less than the temperature of the air delivered in the room from the top of the stove, demonstrating the remarkable utilization of the heat generated from combustion of fuel. This excellent stove, which during the six years of its existence, has found its way all over the world is for sale by The Open Stove Ventilating Co., N. Y.

Miscellaneous.

FARM NOTES.

S. Rufus Mason.

A CHEAP POULTRY HOUSE, AND HOW TO USE IT.

A house for 50 hens should be 16x24 feet inside. Set up 3x4 posts, 8 feet long, so as to inclose that space, and outside of that another row, four feet off. Nail boards, 1x4 inches, around the outside and inside,—one board even with the top of the posts, one six inches from the bottom, and one in the middle. Let the posts be about five feet apart. Nail common plastering lath upright from the top strip down to the bottom strip, and about six inches apart. Lay for the roof a 3x4 from post to post across the room, not the cribwork; support these by central posts, and cover with long, straight willows, laid quite close. The door and windows must now be provided for. I use three hot-bed sashes on one end, and the light is ample. The frame of the house is now finished. Fill in the walls with straw, old hay or any light material, packed down tight; cover the whole with straw

or hay, stacked on, and you have a cheap, warm house.

Now if, in building this, it is made in bents, it can be taken down readily, removed to a new site, the old straw thrown away and replaced with new in a few hours, and you have a new, clean house. Every spring and fall, burn a pound of brimstone in the house, and vermin will be very scarce. Hoe out the droppings once a week, keep the floor *dry*, remove the whole building once in three years, and pip, croup, cholera and all such, will give place to robust health and vigor. Never build a palace for poultry.

SULPHUR FOR SWINE.

The practice in some parts of the West (Iowa, especially,) of throwing bituminous coal to hogs, is a poor mode of administering sulphur. Their liking for it is also a proof that they are not generally in a healthy condition. Too much corn, too few roots, a constant confinement to pasturing over their own excrement, contaminated water, and foul air generated by crowding at night, are certainly conducive to ill health.

Pork, even in its best condition—that is, when produced by stock kept entirely healthy from birth to killing time—is the most unhealthy food for man, and an abomination to a large portion of the world's population. What must it be when made from animals so constantly in ill health as to crave such food as coal?

Until we follow the example of the Jews, Mahometans and other nations who discard swine flesh, we must expect to be only what we now are—transmitters of scrofula to our children, even to the third and fourth generation. I doubt if that filthy disease could be eradicated from pork eaters under ten generations. If this is conceded, why does not public opinion demand a mode of treatment which shall make the least possible objectionable quality of this great staple?

TALKS UPON THE PRAIRIES.

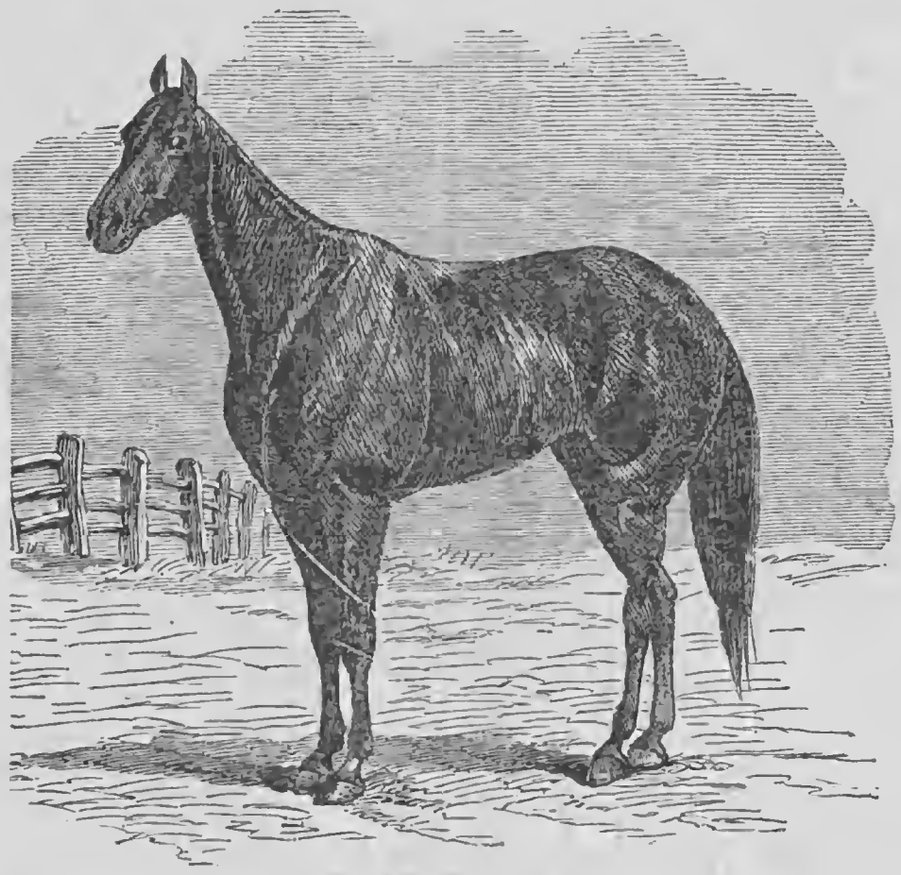
BY FRONTIER.

Writing within a few miles of the geographical center of the Union, and near the middle of that great prairie region that stretches from the head-waters of the Saskatchawan and Red River of the North, to the Rio Grand and Gulf on the south, you may be sure that we feel something of the importance that attaches to this prairie country. Room! there is no word to express it. Men are crowded here by neighbors five miles away. Wheat, and corn, and cotton! The head tires of the millions of bushels of the former, and pounds of the latter. And more wearied still are we in counting up the hundreds of thousands of cattle, to say nothing of the sheep, roaming over the plains from the Gulf to the head-waters of the Platte, drawing just now only a meager support from the rain-soaked and sun-burned grasses, unfortunately covered at the North with more than the usual burden of snow. And more wearied shall we be if we talk of the starved carcasses which a few stormy weeks may scatter over the plains; these are not our chosen themes, but they come within the Rural's range as an agricultural paper.

We are glad, however, to see so ample a space given to topics that may be grouped under the heading "Horticultural," if we use the term in its most liberal sense. Let us say that the Rural of February 2nd 1878, is really a gem among papers. Here we have Floricultural, Arboricultural, Pomological, indeed a full service of Horticultural dishes, thoughtfully and practically presented. Nor shall we ever have reason to complain, as long as you can fill up the "Miscellaneous Department" with such mature and valuable papers as that of Secretary Garfield.

In the culture of corn and wheat, as well as in the raising of stock, our processes are, of course, in some degree modified by our peculiar climate, but when we come to Forestry, Pomology, Flower and Vegetable Gardening, we find ourselves thrown almost utterly adrift from the experience and instruction of the past years in the East. In some sense we are beginners in a new world. For example, some trees that make fine forests on the shores of Lake Michigan, cannot be coaxed into forest proportions here. The varieties of fruits that are now, in February, only deliciously ripe on the banks of the Hudson, our clearer sky and warmer suns gave to us fully matured in the early fall. Some flowers and shrubs that are the delight of the Eastern gardener, may as well be left behind if he comes to the prairie for a home.

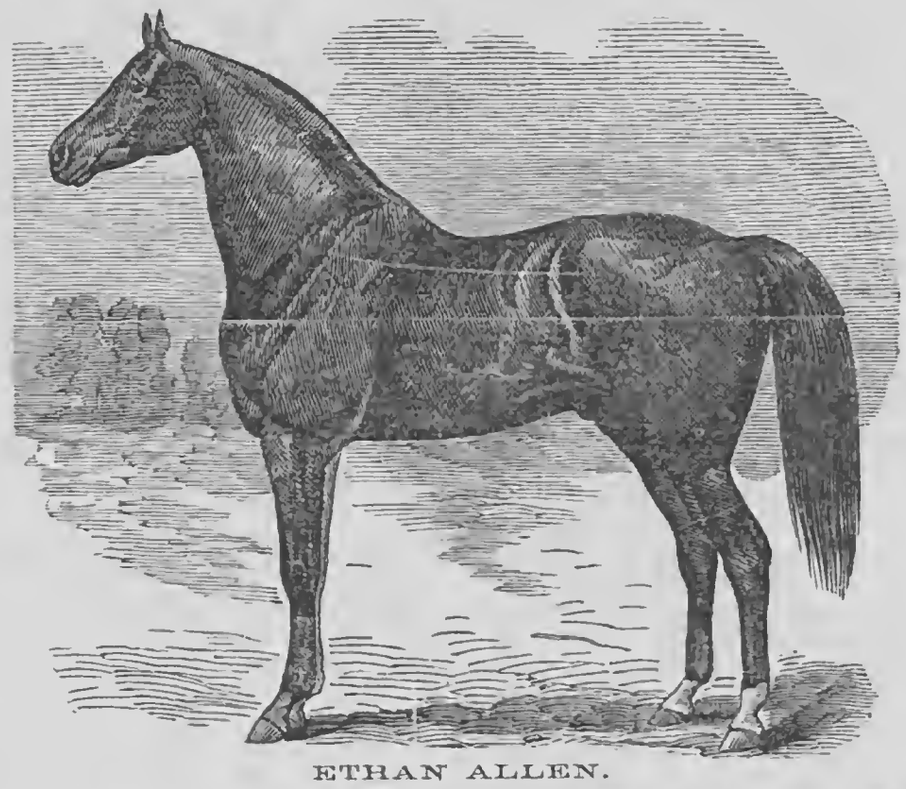
It is hard to realize this, and hence we see thousands of men, every year, wasting means and strength in vainly trying to do what can't be done. One man writes: "I have a peck of Norway Spruce seed, how shall I plant it?" Another says: "Dear friends in the East have sent me a few quarts of beech-nuts, when and where should they be planted?" And still another: "I have brought a fine lot of Sugar Maple seed from my old home in the East, and I want to plant the hill-side to the north of my house to keep off these cold northwest winds. Can you give me a little instruction as to how to plant?" It is hard to say to all the people, "Don't;"—better sometimes, perhaps to let them try. Some must learn in this way. How much better if others could learn just a little in regard to the climatic conditions which they must meet before they come here!



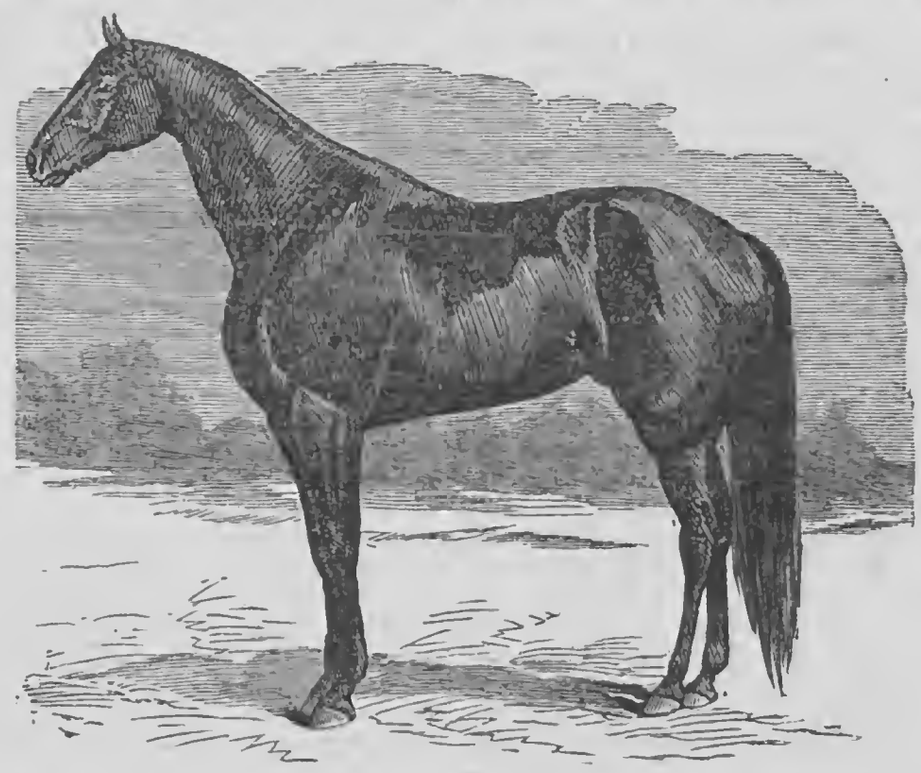
LADY THORN.

THE OSAGE ORANGE.

I am glad to see you call special attention to the Osage Orange. It is not only a beautiful lawn ornament, contrasting finely both in form and color, with many other trees and especially noteworthy when loaded with its curious fruit, but its wood must be counted as among the most valuable. The old French name *Bois d' Arc*, or Bow-wood, suggests its true character, in one respect. But while remarkably elastic, it is quite incorruptible. And this is true not only of the the heart-wood but of the sapling twigs no larger than a finger. A little stick was sharpened and put into the ground three years ago, and I find it is now as free from decay as at first, so that even the sap-wood only wastes away but does not rot. This tree is perfectly at home to the south of Nebraska, and while it will endure our dry uplands, it grows with greater vigor upon our bottom lands. It is *the* hedge plant for the plains, without question; but it ought also to be counted among our best timber trees. It is furnished here for hedge at about $1 25 per 1,000. And hence while it is one of the best, it is really among the cheapest of trees for early forest planting.



ETHAN ALLEN.



CONFIDENCE.

WINTERING NURSERY STOCK.

Within the past ten years we have had two very severely cold winters. Many trees of all kinds standing in nursery rows, were injured more or less or killed outright. Our most enterprising nurserymen began to experiment. Two or more of the largest firms in Michigan now have the following arrangement for keeping trees in winter. They construct large, well drained cellars which have stone walls at the sides, and windows for ventilation. In these cellars they place damp sand; in autumn they take up from the rows all the stock which they expect to sell in the following spring. The trees are healed in deep, and remain ready for orders in spring. No severe winter can cheat the owners out of this stock. The trees are arranged in systematic order so it is possible to get out any variety at any time. There are other advantages in keeping trees in this way. The owner can begin to pack and ship early in all kinds of weather. He can take a few at a time and avoid exposing the trees to dry winds or the sun. In the cellar trees will remain quite late without starting to grow. Orders can therefore be sent out later as well as earlier if the stock is kept in cellars.

W. J. Beal.

The Horseman.

NOTED TROTTERS.

Among civilized mankind there is a legitimate curiosity to learn the appearance and history not only of those of our own species who have distinguished themselves by some special excellence in their various vocations, but also of those among the lower orders of creation, that have displayed pre-eminent merit in their particular careers. Among the latter, none has ever excited this sentiment so strongly or universally as the noblest of all irrational animals—the horse. In every age some of these have won celebrity for some special excellence, and the interest they have excited among men has been second only to that aroused by the pre-eminent members of our own race. It is this consideration that has led us to present to our readers a series of accurate portraits accompanied by brief accounts of some of the most celebrated trotters whose names are familiar to most of our patrons, and about whose appearance and history many of them feel a very legitimate curiosity.

LADY THORN

was one of the most celebrated of trotters of the last equine generation. She was a large powerful bay mare, very high-bred, very game and resolute. She was got by the famous Mambrino Chief and had another cross of the Messenger blood through her dam, a mare by Gano, son of American Eclipse, an offspring of Messenger's daughter, Miller's Damsel. Moreover, the cross through Eclipse was of special value; for not only was he a wonderful race-horse himself, but he had a strain of the blood of English Eclipse through his dam, who was out of an imported mare by Pot-8-os, son of the celebrated English flyer. When young, Lady Thorn was known as Lady Ashland, and though always noted for speed and bottom she was then fractious and often broke away from the control of her driver. Afterwards, care, patience and perseverance made her more quiet and obedient and gained for her, in her day, rank as a trotter second only to that of Doxtor. Although she once beat the "King of the Turf" it was in his younger days, before he had fully developed his marvelous speed, but a series of races between the two in 1867-8, on the Fashion Course, conclusively proved that the mare could not successfully cope with the white-legged horse. Her best time to wagon was 2m.24s., and in harness 2m.18¼s.

ETHAN ALLEN.

Ethan Allen has always stood very high in the New England States because he was the chief representative of the Morgan line and also the fastest stallion that had been trained in his palmy days. He was a small but beautifully-built horse. Although never equalling the pace of Goldsmith Maid, Dexter, and a few other marvelous flyers, he was a very rapid goer, and his action and style were as near perfection as could be conceived; but he always had a trifling objection to weight and distance. Although very enduring under favorable circumstances, his best time was made in short races, and few could get a-head of him in a burst of half a mile. He was especially great for his knack at going with a running mate, and many of his most famous contests were made in this way. He was bred by Joel Holcomb at Ticonderoga, in this State, and was got by Hill's Black Hawk, though many stoutly maintain that his sire was a colt called Flying Morgan, both these stallions having been on the same farm. His dam was a gray mare of the Messenger strain. He has been more successful in the stud than is generally known, and Honest Allen, Pocahontas and not a few other speedy rattlers attest the excellence of his get.

CONFIDENCE.

Confidence, at one time known as Fred. Pence, was a handsome, bay gelding fifteen hands high. Of his pedigree nothing definite is known. After distinguishing himself on this side of the Atlantic in a great number of contests with the fastest trotters of his day—notably with Dutchman and Fanny Pullen in 1836, with Ripton, Spangle and Dutchman in 1841, and with Lady Suffolk and Ripton in 1842—he was afterwards purchased for Mr. Osbaldeston, the "Old Squire" of English sporting history, and taken over to that country. There he was driven many years and won a number of races. His owner had so us of the best racers, hunters, and steeple-chasers in England, but for trotters he had to come to America.—[To be continued.

Domestic Economy.

CONDUCTED BY EMILY MAPLE.

PITHS.

"Early to bed and early to rise
Will make a man healthy
And wealthy and wise."

A RURAL "Cricket" will assist him.

Economy is the very soul of cookery.

Never let a child cry himself to sleep.

Keep a cake of white soap for starch.

A remedy for poison-ivy—bran poultice.

Meat should not be salted before cooking.

A good breakfast is conducive to good health.

Onion sauce made with milk is nice, served with roast mutton.

It is said that lime dusted over potatoes will prevent their decay.

A gargle of sulphur and water has been used with success in some cases of diphtheria.

Patient rubbing with sweet-oil will remove finger marks from polished furniture.

It is really wonderful how many nice dishes an economical cook can make out of odds and ends with proper seasonings.

Capers are the flour buds, which have been preserved in salt and vinegar, of Capparis spinosa, a shrub of the Mediterranean regions.

It is better to cut bread upon the table as needed than to accumulate pieces from day to day, which too often in the end find their way to the waste barrel.

To renovate black dresses: Buy ten cents' worth of soap bark—from the soap-tree, Sapindus saponaria—of any druggist; steep a while in a quart of water; strain into a basin and it is ready for use. It is best to take the dress apart brushing every particle of dust from it. With a sponge dipped into the decoction, wipe off each piece thoroughly, folding it up as you proceed. Then with well heated irons smooth and press all upon the wrong side until dry. The result of this simple process is quite wonderful—it is applicable to all black goods.

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

"How do you manage to have your bread so uniformely moist?" asked a neighbor, the other day, who had taken tea with us when our bread was six days old.

"Potatoes" I answered. Her look of surprise was such that I feel justified in giving to the RURAL readers our simple plan for having moist, wholesome bread without the need of baking every second day.

The first thing is the yeast which is made with hops, a small handful boiled and stirred into flour with a little salt, and sometimes a little ginger and brown sugar. This we make every Wednesday—keeping a fixed day, and for this extra care we are rewarded by never having sour bread. To "set" the sponge, the flour is sifted carefully, and into the center is poured the yeast thoroughly mixed with water and salt, and about a peck of finely mashed potatoes is needed for a baking a dozen loaves of medium size. This mixture is made thoroughly fine, and the ingredients when mixed (about new-milk warm in summer, and a little warmer in cold weather), poured slowly upon the flour and made into a fine batter. If at night, which is our plan, the first thing in the morning, it is again worked and set to rise, before breakfast, so that by dinner time our large baking is finished. The potatoes, without a doubt, keep the bread moist, are a healthful addition, and where cheap, as with us, effect a saving in flour of some importance.

DOMESTIC RECIPES.

Cream Cake.

One cup of white sugar; two eggs well-beaten; one tablespoonful of butter; one-half cup of sweet milk; one-half teaspoonful of soda and one of cream-of-tartar; one and one-half cup of flour; add a little salt; beat thoroughly and bake quickly in five or six round tins.

Cream.

One and a-half cup of sweet milk; one heaping tablespoonful of flour, rubbed smooth in the milk; one beaten egg; half a cup of white sugar. Boil the whole together, stirring all the time until quite thick; when cool, flavor with lemon or any extract preferred, and spread between each layer.

Bean Soup.

Boil the beans and put them first through a colander and then through a seive; season with butter, pepper, and salt.

Do all of my sister house-keepers know that the fat from fried pork makes very nice shortening for cake? We think it equal to butter. Those who send their milk to the factory will appreciate this item. W. H. S.

Corn-Starch Puffs.

Four eggs beaten separately: one cup of sugar; one cup of corn-starch; one-half cup of butter; one teaspoonful of lemon in the butter and sugar; two teaspoonfuls of baking powder mixed in the corn-starch.

Confectionary Cake.

Three cups of sugar; one and a half cup of butter; one and a half cup of sweet milk; yelks of five eggs and whites of two beaten separately (whites of three left out for frosting); one teaspoonful of soda and two of cream-of-tartar; four and a half cups of flour. Divide into three equal parts—each in a separate dish; add to one-third, one cup of raisins chopped fine; one-half cup of citron; one cup of currants; one teaspoonful each of clover, cinnamon and nutmeg; bake in layers and frost.

Orange Cake.

Three eggs; one cup of sugar; butter size of an egg; one cup of flour; one teaspoonful of cream-of-tartar and one-half teaspoonful of soda dissolved in a tablespoonful of milk; bake in three layers; put between each layer the whites of two beaten eggs with grated rind and juice of one orange and powdered sugar.

Sponge Cake.

Two eggs; one-half cup of sugar; two-thirds of a cup of flour; two teaspoonfuls of baking powder; flavor. Cut in two and put custard between. MALOMA.

Geneva, N. Y.

Scientific and Useful.

CLOCKS.

THE sun-dial of AHAZ, on which ISAIAH the prophet, by crying to the LORD, brought the shadow ten degrees backward, is the first instrument for ascertaining the time of day, mentioned in history. In early Christian ages, any device for this purpose, whether it was a sun-dial, clepsydra, sand-glass or clock, received the general name of horologium, derived from two Greek words signifying hour-teller. Down to the 14th century, the word clock, (Anglo-Saxon, *clucga*; German, *glocke*), was applied only to the bell upon which the hour determined by the horologue, was rung.

The invention of clocks, such as have certainly been in use for the last half-dozen centuries, has been ascribed, without sufficient proof, to various ingenious men from ARCHIMEDES, B. C. 220, to ROBERT WALLINGFORD, Abbot of St. Albans, in 1326. From numerous allusions to *horologia*, however, and to their striking spontaneously, in the 12th century, it may be inferred that genuine clocks existed considerably before the days of the latter worthy, and indeed there is still extant a description of one sent, in 1232, by the Sultan of Egypt to the Emperor FREDERICK the II. This, like many of the other early clocks, must have been a very ingenious but highly complicated contrivance. "It resembled a celestial globe in which the sun, moon, and planets moved, being impelled by weights and wheels, so that they pointed out the hour, day, and night, with certainty." Complexity, indeed, has been in all ages a marked characteristic in the early stages of nearly all important inventions. But while in the days of old, fond of mystery and delighting in displays of ingenuity on its own account, this complication was often regarded as a merit; in our mystery-hating epoch, when the object of all inventive ability is economical utility, it is always justly considered a defect which ingenuity and experience are constantly striving to lessen.

The first clock on record, which in accuracy of movement and simplicity of construction approached the clocks of the present time, was made for CHARLES the V. of France by HENRY DE VICK in 1370. The representation of this, however, still extant, shows that its movements were produced by a vibrating balance instead of a spring or pendulum, the latter of which was not invented until three centuries later. This important invention, like most inventions of value, is a matter of dispute; but like many other useful discoveries, it was probably made by various persons independently, and almost simultaneously, when the state of science had become ripe for it. But there is no recorded proof of its use before the discovery of GALILEO at Florence, in 1582, by observation of a swinging chandelier in the cathedral, that a pendulum vibrated in arcs of different lengths in the same time, if the arcs were small. HUYGENS, however, is now admitted by all to have been the first to apply the pendulum to clocks, in the early part of the 17th century. This application, together with the invention by his contemporary, Dr. HOOKE, of an escapement by which the pendulum was only required to oscillate in a small arc, substantially completed the method of clock-making in general use at the present day.

Many of the best clocks, nowadays, however, are driven by a spring coiled up in a barrel in the same manner as in watches which, indeed, may be justly considered as small clocks, in which the weight and pendulum are replaced by the main-spring and balance, the latter of which is composed of a balance-wheel and a balance or hair-spring. The invention, by HAUTVILLE, about 1722, of a lever escapement for regulating the motion of the scape wheel, together with subsequent improvements on his device, has rendered time-pieces of this style models of accuracy, compactness and cheapness.

To this country is due the credit of originating, about thirty years ago, the manufacture of clocks and watches by machinery—an important innovation on the old-fashioned, manual methods still almost universally in vogue in Europe. By this means greater nicety is attained in cutting out the various parts than is possible by the slovenly hand-labor of transatlantic craftsmen. Moreover, the polishing of the leaves of the pinions and the teeth of the wheels, as well as the grinding of the face of the pallet-stones to their proper angles, are processes that are performed with much greater facility and accuracy by the use of machinery than by hand; while the various parts, being made to a gauge, can be readily, cheaply and accurately replaced in case of injury by use or accident. So admirable for accuracy, durability and cheapness are the time-pieces made in this way, that English clock-makers loudly complain that they are yearly losing many branches of the horological trade through their inability to compete not only in foreign, but even in their domestic markets, with the cheaper and better productions of our manufacturers. A forcible illustration of this truth was offered, a couple of weeks ago, by a large shipment of American machine-made watches, bought, after careful examination and competition, by the English Government for the use of engineers and conductors on its railroads in British India.

The beautiful "Cricket" we are offering as a liberal premium to our friends, is an admirable specimen of the best type of manufactures of this kind. Compact, portable and elegant, an accurate time-keeper and a graceful ornament, it combines the best merits of the clock with those of the watch. Inclosed in a sparkling case of nickel-plated metal, its works are dust-proof, while its construction obviates the frequent annoyance from mislaid keys, and renders it equally accurate placed in any position. Like its cheery little namesake, it is equally at home in the kitchen, the parlor, the dining-room, dressing-room, bedroom, and library; in the poor man's cottage or the mansion of the prosperous.

Everywhere.

RURAL SPECIAL REPORTS.

NORTH BASP ISLAND, Ohio, Feb. 3, '78.

I HAVE seen reports in your valuable paper from nearly all parts of the country but this; and thinking a few words from this locality would not be amiss, I pen you a few lines from one of the vine-clad isles of Lake Erie.

Up to January 29th, the weather was warm and pleasant, not enough snow to cover the ground, while the lowest temperature for the month was 13° above zero. At this date, however, the weather has taken a decided change—wind blowing a gale from the northeast, accompanied with snow, which indicates that winter has begun in good earnest. This island is situated in Lake Erie, and in the northwestern part of Ohio, only a few miles from the Canadian line. It contains about 800 acres, mostly cultivated in grapes of different varieties—Catawba being the standard. In winter it is somewhat isolated and lonely, but we manage to pass the time very pleasantly, reading the RURAL and other good papers and books; and in summer it is a delightful place to live in, surrounded by the crystal water of the lake, and refreshed by its balmy, bracing atmosphere. C. C.

RANDOLPH, Vt., February, 11, 1878.

THE winter so far, has been unusually pleasant and mild. There have been a few very cold days when the thermometer stood at 20°, and two days on which it ranged for a few hours at 30°. Very little snow has fallen. February 1st was a very snowy day, and Sunday, the 10th, was another, but the snow-fall was not more than six or eight inches at either time. From the 2nd to the 9th it was glorious, bright, pleasant weather, like the 1st of April. Market prices are still very low for all kinds of produce. Hired help is very plentiful. Farmers all hold back from hiring till they see what the prospects for the coming season are. Kitchen help still cling to high wages, three dollars per week being what they intend to receive; but wives and daughters will do their own work before they will pay such prices for outside help; so it may prove a blessing in the end. Hay and water are abundant this season, so of course, stock is looking well. R.

Entomological.

THE CODLING MOTH (Carpocapsa pomonella.

S. B. PECK.

THE remedies for the progeny of the Codling Moth, in the RURAL of 15th December last, appear to me to be akin to the directions given by the Yankee to the woman who had bought a package of his flea powders, before being informed how to use them. "Take him by the nape of the neck and tickle his tail with a feather, and when he opens his mouth to laugh put in a dose." The Frenchman's remedy is more scientific, and doubtless more effectual—"Take him by de leg and put de poudre on de head, and if that don't do, take de hammer." Up to the 15th when the RURAL gave us the two recipes, we had no reliable remedy; the insect increasing on our hands in spite of all efforts. There may have been some local reductions in the census of numbers, but the pest is on the general increase, if we may judge by the apples brought to market from year to year. Millions of the larvæ have been caught in the traps that have been invented, and this certainly must have had the effect of lessening the number that there would otherwise have been, but the present outlook is that the apple is destined to become a luxury, even if sound specimens do not become extinct; for the whole world of entomologists, pomologists, horticulturists and experimenters has thus far failed to abate the nuisance.

Some three years since the question arose, whether the worm remained in a single fruit during its larvahood, or whether it emigrated from apple to apple seeking "pastures new." I have not had a doubt that the latter was true, and those who take the negative of the question have been unable to convince me that I am wrong, or even to raise a doubt in my mind and unless they can refer me to repeated experiments and give other reasons than a mere denial I shall continue obdurate. The larvæ have certainly been caught in the passage from one apple to another, being partially in two at the same time. A great many experiments have been made by taking a worm from one apple and placing it in contact with, and even in proximity to another, which it has been seen to enter. Sound apples have been marked and put in a package with infected ones, and found wormy by the next day; and it frequently occurs that apples are found that the worm has only partially entered. Nearly half of all the apples on a young tree (the Pound Sweet) were found in this condition. The man who didn't "believe a word of it" is by no means an anomaly. The Pope didn't believe the world moved; he hadn't been so taught. In the case under discussion the man who said it was "erroneous," and who experimented by mixing wormy and sound apples and failed to show any emigration expects by this means to upset the evidence of those who succeeded in observing a contrary result, thus inventing a new rule of evidence.

There is much circumstantial evidence—too much for insertion here—to substantiate the affirmative of this question, besides there is more direct testimony to the same effect. If I am questioned as to the merits of the case, I reply that in all questions of any importance the truth is worth knowing; and in this particular case, the question is whether we shall watch the appearance of infected fruit and destroy it and its occupant at once, and thus prevent not only the increase of the insect but the destruction of a dozen to fifty more sound apples, or whether we shall rely upon obsolete theories and content ourselves with the idea that it is but one apple anyway. Many have claimed to have greatly diminished this pest by keeping hogs or sheep in the orchard, to eat the fallen fruit, and I begin to think there is something in it. Not that they destroy many of the insects, for the tenant of an apple is generally about as sure to leave it before it falls, as rats are to desert a sinking ship; but there are certain scents or perfumes that are distasteful to certain insects, and if hogs or sheep have any very decided effect in diminishing the number of these pests, it must be in this way.

A SIMPLE METHOD OF DESTROYING THE PHYLLOXERA has just been published, in pamphlet form, by Madame AMENA DE BOMPAR, of the Canton of Plessac. According to her experience, all that is needed to insure this happy result is to set strawberries at the foot of the vine-stocks. These plants, in her neighborhood, at any rate, are infested by a spider of the genus Trombidion, whose business and pleasure it is to devour both the phylloxera and its eggs with such a ravenous appetite that the reproduction of the pest in its vicinity is scarcely possible. Practical experts in France, however, receive the announcement of this discovery with such incredulity that the labors of the Phylloxera Commission are hardly likely to be discontinued.

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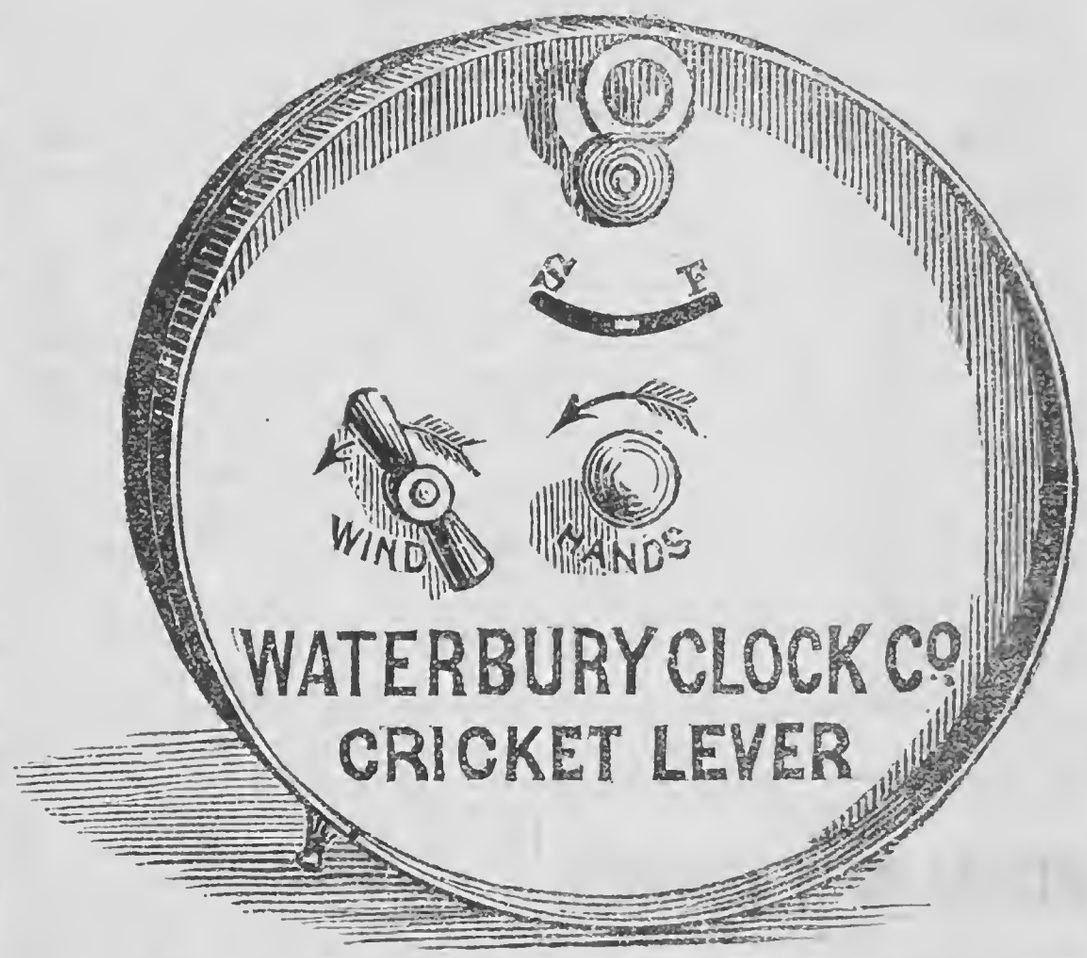
THE LATEST ANNOUNCEMENT

TO THE FRIENDS OF THE RURAL.

How They May Secure an Elegant Time-piece Without Cost and with very little Trouble.

THE OFFER ALL THAT IT IS MADE TO APPEAR AND MORE.



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IT COMBINES THE BEST FEATURES OF BOTH CLOCK AND WATCH, And May be Carried from Place to Place in a Trunk or Valise.

Please return at our expense if disappointed, and we will promptly refund the money.

We want the Rural Cricket Clock in the Home of Every Subscriber.

THE MOST BRILLIANT OFFER MADE BY ANY JOURNAL.

On page 130 may be seen an accurate portrait of the "Cricket" in so far as it can be presented in an engraving. The cut on this page is merely a photographic enlargement of the back, to show its actual size as nearly as our page permits. It is one inch larger in diameter.

ITS BEAUTY, COMPACTNESS,

elegance of form, depth and finish can not be shown by any engraving. It must be seen to be appreciated.

To judge by its appearance many who have not seen it before, estimate its value to be ten dollars.

We have been enabled, through the facilities afforded by our Experimental Farm (owned and operated exclusively for the benefit of RURAL readers) to make a FREE GIFT to our subscribers of a collection of rare and valuable flower seeds which have been enthusiastically received; and this gift on a still more liberal scale, *will be repeated during the present year.* Meantime, the RURAL itself has been enriched in all its departments, by the contributions from the best writers and life-like illustrations, demonstrating that our enterprise has not been at the expense of the paper.

This policy has been responded to by our patrons so liberally in subscriptions that we have decided, after a careful consideration, to make one more offer that shall

ECLIPSE EVERYTHING!

The "Rural Cricket" is inclosed in a beautiful circular metallic case of a single piece, and therefore without a seam, which is nickel-plated. The face of the clock is white and has a "second" dial as in watches. The works are securely inclosed so that no dust can penetrate and harm their movement. It is like a stem-winding watch, in that it requires.

NO KEY TO WIND IT!

and the hands are regulated without being touched. It runs thirty hours, is a chronometer-balance lever, jeweled, and it is guaranteed to keep as accurate time as the best watch.

IT RUNS IN ANY POSITION,

on its face, on its back, standing up, lying down, on its side, in short, in any position.

SIMPLICITY, ELEGANCE, DURABILITY.

Only after much negotiation with the world-renowned manufacturers, have we been enabled to offer our friends a present which exactly met our wishes and one which all will want, no matter if there are a dozen clocks in the house besides.

It may be secured without any more effort than is required to tell its merits to a friend or so, and a sample clock will enable anybody so inclined to dispose of hundreds in a week.

THE OFFER.

FIRST.

Two New Subscribers

secures the clock! The lowest price of the RURAL NEW YORKER, except in clubs, is $2.50. Therefore upon the receipt of $5.00 and two names the sender is entitled to ONE "RURAL CRICKET."

SECOND.

We will send the RURAL NEW YORKER for one year and the Cricket Clock to ANY ONE upon the receipt of $3.50.

RURAL NEW-YORKER, 78 Duane St., N. Y.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Sheep, Horned ... 117
Ewes, Breeding ... 117
Ground Bone—Bone Mill ... 117
Cotton Seed ... 118
Farm Hints ... 118
Farmer, a Good ... 118
Content on the Farm ... 119
Land, Buy Good ... 119
Inquiring Friends, A Word to ... 119
Bleeding Heart ... 119
Slitting the Bark of Hide-bound Trees ... 119
Catalogues, &c., Received ... 120
Corn Harrow, Bramer's ... 120
"The Fire on the Hearth" ... 120
Farm Notes ... 120
Talks upon the Prairies ... 121
Nursery Stock, Wintering ... 121
Noted Trotters ... 121
Piths ... 122
Siftings from the Kitchen Fire ... 122
Recipes ... 122
Clocks ... 122
Rural Special Reports ... 122
Codling Moth, The ... 122

EDITORIAL PAGE:

Value of Experience ... 124
Our View of It ... 124
A Square Offer ... 124
The Sword of Damocles ... 124
Brevities ... 124

LITERARY:

Poetry ... 125, 127, 129
Pope Pius IX ... 125
Cora ... 125
London ... 127
Parrot-Toed ... 127
Bric-a-Brac ... 127
For Women ... 127
Letters from a Country Girl ... 127
Home Sketches ... 127
A Plea for the Children ... 127
Answers ... 127
Answers to Correspondents ... 128
News of the Week ... 128
Publisher's Notices ... 129
Various ... 129
Markets ... 129
Reading for the Young ... 130
Faith and Works ... 130
Letters from Boys and Girls ... 130
Puzzler ... 130
Sabbath Reading ... 130
Trials by the Way ... 130
"I Will Stand, by My Master" ... 130
Personals ... 131
Wit and Humor ... 131
Advertisements ... 123, 129, 131, 132

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street New York City.

SATURDAY, FEBRUARY 23, 1878.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE begin, this week, the first of occasional articles entitled "Talks upon the Prairies." If the name of the writer were given, they would command, no doubt, an interest from the first that, without it, we feel assured, their own merits will ere long secure.

THE article "Noted Trotters," on another page, is the first of a series that will extend through several issues, and be carefully illustrated with faithful portraits of celebrated animals.

VALUE OF EXPERIENCE.

WHILE we were sitting in the cabin of a Fulton Ferry boat, a few mornings ago, one of the oldest and most prominent of New York's successful merchants entered and took a seat opposite. Very naturally he was the subject of remark of gentlemen near us. One observed, "There is nothing in the physiognomy or general appearance of Mr. A. that would lead a stranger to suppose he was possessed of more than ordinary ability. Wherein does his strength lie? for that he has it, his success proves". "I'll tell you, my friend," said another, "he has had a large experience in his line of trade, and has profited by it."

This led us to consider how little men in general treasure the lessons they learn every day of their lives, and what an amount of practical knowledge, synonomous with worldly wisdom, they might acquire if they would only store up in memory, to be used when wanted, the knowledge thus gathered from their own experience as well as from the experience of others.

What is experience? Simply the result of experiment. These experiments may be made by ourselves or we may profit by the labors of others. The child is attracted by the light and stretches out his little hand to grasp it. The experience of unsuccessful trials teaches him it is beyond his reach. A hundred or a thousand experiments serve to instruct him how to judge of distance. This is one illustration. You cannot think of anything accomplished by your work to-day that is not another, if you choose to use it as such. But the experiments may have been made by others and you are profiting by their experience. Why do you plant one crop on a certain soil and for another select a soil made up of different constituents? Why one on upland and the other in low ground? Because somebody, sometime, experimented and imparted the results of his experiments to others; and you have been instructed therein.

Man's reasoning faculties are of much service in this connection, and he who uses them most will reap the most advantage. The organs of Comparison and Causality, aid materially in experimenting, and logical conclusions are often as good as hard work. Combined with Constructiveness, they may be called the father of invention, of which necessity is said to be the mother.

That results are sometimes obtained by accident, is true; but may not such be called experiments made unintentionally? Some years ago, a leading Horticulturist imported one very rare and costly lily bulb. He prepared with great care, a place for planting it, and stepping back, placed his foot on the bulb and crushed it. Vexed at his carelessness, he gathered the scales, threw them into the hole, covered them, and left in disgust. After proper time, he had not one but many lilies, and examination showed him that nearly every scale had thrown out roots and was commencing life on its own account. This experience, the result of accident, he turned to valuable account in after years.

Experience is also, to a large extent, inherited, and we are indebted to all the generations since the beginning of the world. If we do not directly inherit the knowledge required to perform certain things, we certainly do inherit the capacity of acquiring it with facility. If the mind of the infant at birth (as is claimed by some) be a blank, that blank will be much quicker and better filled in the child whose ancestors have been educated; for education may be said to bear the same relation to experience as experience does to experiment—education being only the sum of experience.

OUR VIEW OF IT.

IN the RURAL NEW-YORKER of Feb. 2, Professor BEAL, of the Michigan S. Ag. College, gave an account of tests with seeds obtained from various sources. Fifty seeds of each variety were planted, and a considerable difference was shown in their germinative powers and consequent value. The reader, however, is referred to the article itself for particulars. We have received a number of letters touching this article, some of which thank us for the valuable information it contained—others regarding it as an injustice to seedsmen generally. One gentleman of some prominence asked us if we were not afraid that the RURAL would lose the advertising patronage of seedsmen if it persisted in such a course.

We should dislike to lose the advertising patronage of any respectable, fair-dealing establishment that has hitherto favored us with its orders. Neither should we like to prejudice ourselves in the eyes of the future seedsmen who shall take the place, or swell the list of the seedsmen of to-day. And yet we do "propose to persist in just that course."

People advertise with us and pay the prices we ask, for the reason that they presume it to be to their interest to do so. And we are glad to have them, because the income thus derived assists us greatly in defraying the entire expense of making the RURAL all that we aim to make it. There is no obligation whatever on either side, except that which naturally springs up between those who habitually deal with one another in an honorable manner. Our obligations are to our readers, and we believe that those journals which most assiduously study to benefit their readers, are those which should, in the end, prove most serviceable to advertisers—a view which the crowded state of our advertising columns seems to justify.

The RURAL Horticultural and Agricultural Grounds, as we (perhaps rather grandly) call them, contain hundreds of hardy plants of various genera. During the warm season, everything in the way of novelties or of other plants whose merits are differently estimated, are tested in so far as, with our facilities, we are enabled to test them. With what object? Many of these are sent to us BY advertisers, with the request that we will try them and state our opinion of the result. Are we to understand that if our reports be unfavorable, they will withdraw their advertising patronage? Are we to consider the gift of a new grape-vine—of a paper of seeds, or of some new thing, as *purchasing* a favorable notice at our hands, whether the article be all it is represented to be, or not worth a tithe of the trouble it will cost us to test it? A fine way, indeed, for a "pretentious" journal to engage the confidence of its subscribers and readers who are those to be influenced by our reports and who purchase of the advertiser accordingly!

If any test with seeds or plants published in these columns should do injustice to any seedsman or nurseryman, we should regret it exceedingly. Therefore every care is exercised to render its occurrence impossible.

IN Prof. BEAL'S experiments above referred to, we do not suppose his good faith or accuracy will be questioned. Seeds were procured promiscuously from prominent houses, and his results cast no more a reflection upon those named in the report than upon the hundreds of other seed-concerns about the country. We believe that all seedsmen who entertain a stronger regard for fair-dealing and the good repute of their occupation than they do for a short-lived thrift, will respect all such honest efforts to benefit the agricultural or horticultural community. Those who take a different view of it, may discontinue their advertisements with us, it is true.

No reasonable person will expect that the seeds collected by seedsmen for sale, will average as good as those collected by individuals for private use. The latter take time to pick out only the ripe, solid seeds, while the former, of necessity, collect them *en masse*. They could not otherwise afford to sell seeds at present market prices. Some seedsmen are more careful, more conscientious than others. Some raise their own seeds or a large part of them; others purchase of wholesale dealers. The question is: Where does fair-dealing end and unfair dealing begin? What percentage of fresh, perfect seeds has the purchaser a right to expect for the money which he pays?

Some seeds are as good the second year as the first—some are better—some are worthless. The seedsman should know about this. If not, he has no business to be a seedsman. If, knowing this, he disregards it, whose duty is it more than that of the horticultural or agricultural press to expose the deceit? But "you may lose their advertising patronage!"—Aye, there's the rub! It's more than a *rub*. Advertising patronage is the *soul* of the journal of the period, is it? Let us see. Oh! Ceres—Oh! Pomona—Oh! Flora—What *are* you thinking about! Oh! Professor BEAL, see what you have done! Ah! Woe is us!

A SQUARE OFFER.

WE may have a special premium to offer next year to our friends. And we should wish them to believe that we are incapable of exaggerating the merits of such premium for the purpose of enlisting their interest in our favor. If now the RURAL Cricket should not prove all that we represent it to be, our readers would be justified another year in accepting our statements for what they may be deemed to be worth. In order, however, to appreciate it, our readers should know that the price of the clock has been fixed at $2.50, so that an immense sale should compensate the manufacturers for a very small profit. It *looks* to be worth four or five dollars and a knowledge of its good qualities confirms the impression.

Knowing this ourselves, we guarantee our friends against cause of dissatisfaction by *agreeing to take the clock back and to refund the money promptly* if, upon examination, it shall not prove all we represent it to be. It will be seen by reference to page 123, that in connection with one subscription to the RURAL it will cost but one dollar, and that for two yearly subscriptions, it is offered as a present outright! In answer to the natural query why we did not make this offer earlier in the season, we reply that we have not felt before that we could afford it.

The Sword of Damocles.—All know the story about the ancient tyrant Damocles: how having been congratulated by a toady on the enviable happiness of his exalted position, he invited the sycophant to a banquet, where despite the innumerable dishes of the costliest viands placed before him, the wretch's position was rendered unutterably miserable by the sight of a naked sword suspended by a single hair, directly over his head. Somewhat like this, during the past week, has been the predicament of Europe. While, with a couple of exceptions, all the nations therein were regaled with the bounteous gifts of peace, all felt that every hour was big with a war that might, ere long, suddenly wrap the entire continent in its sulphurous blaze. While its devastating progress could not be otherwise than disastrous to humanity; its issue, though it might change the map of Europe, and perhaps that of Asia, could hardly have been advantageous to civilization. For the present the impending terror has been veiled, but it may reappear only to fall with tragical effect, at any moment the flush of victory and the greed of aggrandizement or the dread of loss and humiliation may determine.

BREVITIES.

OUR subscribers when they meet ask: "How do you like the RURAL'S "Cricket?"

WE see that many of the oranges shipped from Florida are packed in Black Moss, Tillandsia Usneoides.

NEXT week we shall present our readers with a first page engraving of a remarkable specimen of the Weeping Spruce.

WE should have said, in speaking of Abies excelsa elata, that it originated in the nurseries of the PARSONS of Flushing, L. I.

PROF. TYNDALL concludes that putrefaction is impossible without germs, and that absolutely pure air is a preventive of fermentation. It is not the air which corrupts, but it is the matter in the air.

HAVE you decided what vegetable seeds you are going to plant in your garden next spring? Now is the time to send for catalogues. Send for those announced in our columns, read them and then—hand them to your neighbor.

THE Husbandman of Elmira, one of our favorite exchanges, devotes over seven solid columns to the able address of Prof. G. C. CALDWELL of Cornell University delivered before the N. Y. State Grange. Subject "Phosphates."

MR. GEO. SUCH, who brightened our sanctum with his presence a few days since, has not so surrendered himself to rare hot-house or conservatory plants that he can not see in the Gladiolus one of the most beautiful of flowers. He advocates planting the corms very early in spring.

"KITTATINNY" WILLIAMS. So Mr. E. WILLIAMS of Montclair, N. J., is often called by old friends; and it is a "familiar" name of which he need not feel ashamed. If every one of us "horticulturists" were to introduce a variety of fruit as valuable as the Kittatinny Blackberry is universally acknowledged to be, we might congratulate ourselves that we had not been horticulturists in vain. Mr. WILLIAMS is the hard-working, efficient secretary of the N. J. S. Hort. Society.

IT will be seen that the lowest cash price of the Cricket is $2.50. All who see it think that it is worth at least twice as much. The lowest price for the RURAL, except in clubs, is $2.50. Anybody sending us one new name for one year gets the clock for $1.00. May we not hope that every one of our present subscribers will secure it? It is a neat ornament for the sitting room or parlor—bedroom or office—for the student or professor. It combines all the good qualities of watch and clock, is not deranged by a knock or even slight fall, may be carelessly handled and carried from place to place.

MR. CHARLES DOWNING states, in the N. Y. Tribune, that there is no doubt that in deep, rich soil trees succeed better in grass, but in poor or moderately rich soil, it is best to keep the trees in thrifty condition with sufficient enriching material and clean culture. His experience in his own locality (Newburgh, N. Y.,) is that the blight affects trees in all soils and under all conditions, and, so far as he knows, none of the theories or cures has been successful. In his locality the pear blight has appeared at intervals of about twenty years, and the duration of each has been from three to five years. He has passed through three of these periods, and with each additional visit the attack is very much lighter, and it may, he thinks, run itself out in time. Let us hope so.

BUSINESS NOTICES.

SEE Mr. MINER'S adv't of White Grapes and other fruits—something new and valuable.

Literary Miscellany.

LOST.

A WILD rose, by the wayside hung
  Dew-glittering, on the morning air
A pure, scarce conscious, perfume flung;
  I looked, and found the flow'ret fair—
So fair, I sought with sudden zest
To wear its beauty on my breast.
  The trembling petals at my touch
A sweeter, subtler fragrance shed;
  'Tis strange I loved that flower so much,
    And—it was dead.

In that high mood when thought hath wings,
  And finds alone its speech in song,
I struck an old harp's slumbering strings,
  And drew an idle hand along;
Nor deemed the careless chords had caught
The life-note that my spirit sought.
  Till sudden on my startled ear
Its dream-created accents woke.
  Alack! I bought the rapture dear—
    The string had broke.

I heard a wild bird on the shore,
  Singing a wild song to the sea;
And bold the burden that it bore,
  And sweeter than all else to me—
So sweet, I caged the bird to hear
His magic minstrelsy more near.
  Untamed the captive's swelling throat
In one sad song his whole soul cast:
  Too well I knew his loveliest note
    Had been his last.

And yet while memory hath power
  To count the hours too vainly spent,
The fragrance of that faded flower,
  That harp's last dying music, blent
With the wild bird's weird death-song, will
Haunt every waking moment still,
  Teaching my heart the bitter cost
Of all the eye of hope hath seen,
  Of all that life hath won and lost—
    That might have been.

[*Tinsleys' Magazine.*

POPE PIUS IX.

THE news of the death of Pope Pius IX. flashed by the lightning over continents and under oceans, on the evening of the 7th inst. smote with a sense of personal bereavement on the hearts of 200,000,000 members of his Church, who sorrowfully felt that by the departure of the venerable Pontiff they had lost what the word, Pope, really signifies—a father. Nor was sadness at the event confined exclusively to the vast Roman Catholic body, for not a few of the adherents of other creeds, while repudiating the doctrines of which the dead high-priest had been the representative had learnt to admire the simplicity, amiability and benignity of the deposed sovereign, as well as to respect the quiet firmness with which he adhered to what he considered his duty, and experienced a natural regret at the removal of a good man from a prominent position in a world which is lamentably in need of good men in exalted places.

Giovanni-Maria Masta-Ferretti was the youngest of the seven children of Count Girolama Mastai-Ferretti and Countess Catarina Saluzzi. He was born on May 13th, 1792, at Senigaglia, on the west coast of Italy. In 1803 he began his classical studies in the College of Valterra, suspended them in 1808 in consequence of frequent epileptic attacks, and on the abatement of the malady in 1809, he received the clerical tonsure and went to Rome to study theology. On the following year he returned to his native place where he continued his studies under his maternal uncle until 1814, when he repaired to Rome where he received "minor orders," and was ordained priest in 1819. In 1823 he was chosen Secretary to Monsignore Muzi, apostolic delegate to Chili, where he chiefly busied himself with ministering to the Indian population of the interior. On his return to Rome, in 1825, he became domestic chaplain to Leo XII, and in 1827 was nominated archbishop of Spoleto and Perugia. In 1832 he was made archbishop of Imola and on December 23, 1839, he was created a Cardinal, and after the death of Gregory XVI., June 1, 1846, he was selected Pope on the 16th of the same month.

Immediately he began a thorough system of liberal reformation in the States of the Church, dismissed the foreign troops, reduced Papal household expenses, abolished pensions, taxed benefices and wealthy church corporations, reduced taxes, chartered railroad and telegraph companies, stimulated home manufactures and encouraged the formation of agricultural societies. He set about draining marshes, establishing reading-rooms and mechanics' clubs, patronizing scientific congresses, educating tradesmen's and workmen's children, and providing free lodging-houses for the poor and homeless. Encouraged by his liberal tendencies, the republican advocates all over Italy, the secret societies, the liberal adventurers, artistic and political, who make Rome their headquarters, commenced a series of agitations in that city and the surrounding petty States, that alarmed the local Arch-Dukes and Princelings, and resulted in numerous assassinations in Rome, the imprisonment by mobs of the friends of the Pope, and finally a fierce insurrection and the flight of the latter, in the guise of a common priest, to Gaeta on November 15th, 1848. On April 25th, 1849, a French force landed at Civita Vecchia and marched upon Rome, while the Austrians invaded the northern and the Spaniards the southern provinces. On July 1, the short-lived Republican Government that Mazzini, Garibaldi & Co. had established in the Eternal City, capitulated, and the Pope re-entered the city on April 12th, 1850. During the late troubles his progressive tendencies had been thoroughly checked, and on his restoration the reactionary policy of Cardinal Antonelli, his Secretary for Foreign Affairs, became dominant in his council.

The later history of the Pope and the Papacy is too familiar to our readers to require recapitulation here, nor is there space for detailing the various steps which led to the final abolition by Victor Emmanuel, in 1870, of a sovereignty founded by Pepin The Short of France, in 755, and confirmed and enlarged by his son and successor Charlemagne, in 774. H.

POPE PIUS IX.

CORA.

CHAPTER 2.

Timely Succor—Treasure Trove.

WHEN Cora found herself separated from her brother by the sea of eager, intent faces, many of which wore an expression which terrified her, her first feeling was one of uncontrollable terror, during which she could hardly refrain from shrieking aloud. She could see above the other heads Harold's waving golden hair, and pale, agonized face; could hear dimly through the noise his words of encouragement, and she refrained from adding to his terror for her by any cry of her own; but she felt, with increasing fear, that every moment increased the distance between them, and that burdened as he was, it was almost, nay, quite, an impossibility for him to force his way to her. Cora was not without some courage of her own, but it failed her now, and she was terrified beyond measure.

"Oh! Hal—Hal," she said, as she tried to choke back her sobs.

Dreadful as the crowd had been before to the young girl, it was ten times more so now. She could hardly breathe, and it was only by the strongest effort of will that she kept herself from fainting. How she missed the close guard of her brother's arms, the reassuring clasp of his hand, the brave, gentle face bent over hers, the tender voice murmuring words of cheering encouragement! Her brain seemed in a whirl of terror and bewilderment, and she thought that she must die here, crushed to death under the hundreds of cruel feet.

But help was nearer than she could have hoped, and a few minutes gave Cora a more experienced and efficient protector even than her brother could have been. As she stood, pale, trembling, helpless, large tears following each other swiftly down her soft cheeks, there came a quiet voice close beside her, whose musical intonation she noticed even in her terror.

"Will you trust yourself to me?" it said, very gently. "I can help you if you will."

Cora glanced up, and saw bending over her a face of singular and rare beauty—a face forming a striking contrast to the coarse, repulsive countenances which surrounded her, and one on which her eyes rested at once with a feeling of relief and trust.

It was the face of a man of Harold's age, or it might be a little older; and as it bent over Cora with an expression of pity in the dark velvety eyes, she thought then, as she thought afterwards, that it was the most beautiful face she had ever seen.

The features were clearly and well cut, beautiful in themselves, and lighted by dark velvety smiling eyes; dark waving hair was parted over a brow of marble whiteness, and the well-formed lips were shaded by a dark silken moustache.

Most people, at first sight, took Stanley, Viscount Almane, for a foreigner, and few ever betrayed their Norman origin so clearly as he did by that handsome expressive face.

"Will you trust yourself to me?" he went on in his gentle, rather languid tones. "I suppose you have been separated from your party. Can I help you?"

"I have lost Harold," she said, trying to speak calmly. "He tried to help a poor woman who had fainted, and we got separated by the crowd."

"We shall find him again," said Lord Almane, cheerfully. "You must try and think he is with you now, and not a stranger. Pardon me."

As he spoke, with a gentle, courteous inclination of his head, he quietly put his arm round Cora, and placed her before him in such a manner that she felt the pressure least.

"Poor child," he said, softly, in a moment, as he felt her tremble. "Do not fear, I will take care of you, and we will find your companion in a few moments."

"You are very good," faltered Cora.

Nothing could have surpassed the Viscount's care and tenderness for the girl he had befriended. He was evidently well used and experienced in a crowd's temper and disposition, and though perfectly quiet, and almost languid in tone and manner, was able to hold his own easily and well. Now and then he stooped over Cora to whisper a few re-assuring words which she was almost too pre-occupied to heed, and once, when two men just near them began to fight, and use their fists vigorously, he gently and with a murmured apology, pressed the girl's face against his shoulder to hide the sight from her.

The boxing-match, however, caused a slight diversion, which Lord Almane was quick to take advantage of, while with a powerful effort, exerting all his strength, he cleverly drew Cora to the edge of the crowd, and in a moment she found herself in a little deserted alley, and free from the terrible pressure she had endured so long, while her companion, looking rather pale and still breathing quickly from the great exertion he had made, stood beside her.

"How can I thank you?" said Cora, impulsively, when she had sufficiently recovered from her agitation to speak, and holding out both hands to him in the excitement of the moment.

"By saying no more about it," he said, laughingly, "I am so happy that we have managed to extricate ourselves from those dreadful specimens of humanity. I am fond of a crowd, and have been in many, but I have rarely passed such a *mauvais quart d'heure* as the last. Are you sure you are not hurt?" he went on, anxiously, holding her hands, and looking down at her fair face with an expression of admiration in his eyes which made her lids drop. "I was terrified for you at one moment. It was only with some difficulty that I got up to you."

"It was very good of you," faltered Cora, the sweet carmine flushing her pale cheeks. "I do not know what would have become of me without your help."

"You are very weary, I fear," he said, after a moment's pause, withdrawing his dark eyes reluctantly from her face. "And this is no place for you. Can I take you anywhere?"

"I must find Harold," she exclaimed, recollecting her brother's anxiety, which for a moment she had forgotten. "He will be so anxious. How can I find him?"

And she clasped her hands and moved forward in unaffected anxiety and eagerness.

Lord Almane interposed, and detained her gently.

"I think you must let me do so for you," he said. "Will you tell me how I am to recognize this gentleman, and whether he was before or behind you in the crowd."

"Behind," she replied.

"Then he must pass here," said the Viscount, "and we shall see him. How shall I recognise him?"

"He is tall and fair," said Cora, nervously. She was beginning to feel the strangeness of her position—alone at midnight with an unknown companion in the streets of London.

"Are you afraid to remain here alone for a few moments?" said Lord Almane; but Cora's quick movement to his side and involuntary clasp of his hand were sufficient answer.

"Look," he said, smiling; "if you jump up on this accommodating old buttress you will be sufficiently elevated to see over all those heads, and you will recognize your——" he hesitated a moment, glancing down at her hand as it lay on his arm; but it was gloved, and it gave him no clue to her relationship with the lost Harold—"the gentleman who was with you."

With his assistance Cora mounted on the stone buttress projecting from one of the old houses, in whose shadow they stood. Lord Almane retained the hand he held and made it rest upon his shoulder.

For a few moments they stood in perfect silence. It was a strange sensation, the utter stillness and quiet of the dark, narrow street where they stood; the brilliance and noise of the broad thoroughfare beyond, with the moving sea of faces, and the illuminated houses on either side. Cora was almost too anxious to heed the spice of romance which mingled with the unpleasantness of her adventure, and yet she felt it was a rather odd and unusual proceeding altogether.

Suddenly she caught sight of Harold, with eager, wide-open eyes, and disordered hair, pushing his way fiercely through the mob, evidently in the greatest anxiety, and as she saw him Cora uttered a little joyful cry.

"Hal!" she cried, her clear, silvery tones rising distinctly above the hoarse murmurs around him—"Hal! I am here. Come, Hal."

Her brother heard her voice,

but for a moment he could not tell from whence it came. Lord Almane felt that the little hand on his shoulder grew unsteady.

"He does not see me," she said, tremulously; then lifting her voice again, she went on: "Hal! I am safe, Hal!"

A momentary silence, then her voice broke again upon the stillness.

"He sees me! All is well now," she exclaimed, joyfully. "Do you think he can manage to get out?"

"Of course he can," said Lord Almane, a little coldly. "A man and alone he will have no difficulty."

And then his lordship took himself mentally to task about the unaccountable feeling of annoyance her interest in "Harold" excited in his own breast. What could it matter to him?

Cora heard the change in her companion's voice, and wondered; but the wonder was soon superseded by delight as she caught sight of a tall figure striding towards her.

"There is Harold," she exclaimed, joyfully, and was about to spring down, when Lord Almane prevented her, and lifted her down with a gentle courtesy and deference, and the Viscount had the pleasure of seeing her run into the arms of the tall stranger, and hide her face on his shoulder with little cries of delight and love.

"O! Hal, I am so glad—so thankful!"

Harold bent his head over her for a moment, while she rather incoherently whispered the details of her rescue, then he came forward and put out his hand with a few simple but sincere words of thanks to Lord Almane.

"What do we not owe you!" said Harold, earnestly. "I shudder now at the thought of the danger Cora was in, and from which you rescued her."

"Your thanks embarrass me," said the Viscount, a little coldly. "Mine was the most simple act of courtesy in the world. I should have been a cur to leave it undone."

"Even that does not lessen our debt of gratitude," answered Harold, smiling. "We cannot forget it, believe me."

Lord Almane bowed. Somehow he could not fraternize cordially with the new-comer until he ascertained what was the relationship between him and the girl he had befriended.

They walked down the quiet little street and found themselves in another equally deserted.

"How are we to get home, little sister?" said Harold then. "We have missed the last train to Richmond, and I doubt if we can get a vehicle of any description."

Lord Almane's face cleared, and he turned to Harold with a sudden cordiality the other was almost at a loss to understand. "My brougham is waiting not a stone's throw from here," he said. "It is entirely at your service. Pray oblige me by accepting it."

Cora sent him a bright look of thanks from under her long lashes, but Harold hesitated. He had inherited more of his father's English and reserved disposition than his mother's expansive Italian temperament.

Lord Almane saw the hesitation, and went on quietly:

"Your sister is very tired," he said, his voice softening into a gentler, more tender intonation. "I think you ought not to refuse me."

"You are overwhelming us with obligations," said Harold. "And besides, I do not know to what inconvenience we may be putting you."

"To none, I assure you," said the Viscount, "if you will allow me to accompany you. I am staying at the 'Star and Garter' for a short time."

"If that be really the case," said Harold, "I think we must trespass on your kindness so far; but, Cora, remember that we are incurring a debt of gratitude we never can repay."

Cora's face seemed to say that she was not unwilling to owe it to such a creditor, and meeting her eloquent eyes, Lord Almane smiled a little, and came round to her side as they walked on.

"You will not care to face a crowd again," he said, in the languid, musical tones she liked so much. "This will be your first and last experience, I am sure."

"Yes," she said. "It was too dreadful, and I most sincerely repented my willfulness in making Harold bring me. I regretted it bitterly when too late."

"I do not regret it," said the Viscount, lowering his voice a little, "since it has given me the pleasure of meeting you."

Cora glanced up shyly but did not reply, and just then they came in sight of the carriage—a brougham drawn by a superb bay horse. Lord Almane put a little whistle, suspended to his watch-chain, to his lips, and the sound brought the carriage to them. A footman, in quiet, dark livery, sprang down and held open the door, not without a little surprise on his face at the friends his master had found, which expression made Cora painfully conscious that her dress was torn and dusty, her sealskin coat disordered, and that her little fur cap had disappeared entirely. Altogether she felt quite unfit for the luxurious, softly-cushioned, scented vehicle in which Lord Almane placed her so carefully. Harold followed and then his lordship sprang in, giving the coachman directions to drive to the "Star and Garter," Richmond.

"If you will put me down there," he said, "the carriage is at your disposal, Mr. Sinclair."

The drive was a pleasant one. Cora, resting back on the cushions, watched the handsome face opposite to her with a kind of fascinated admiration, although her lashes drooped every time he turned to her, which was not seldom, during the animated conversation between himself and Harold.

Very soon, it seemed to Cora, they reached the hotel, and Lord Almane took her hand in farewell, holding it a minute while he expressed his hope that she would not suffer from her fatigue, and requested permission to call.

Harold had alighted to give the coachman directions how to find The Tryst, and for a minute Cora and Lord Almane were alone.

"May I come?" pleaded the soft tones, as he held her hand in his. "Will you be glad to see me? Nay, I will not come else."

"I shall be glad," murmured Cora, shyly, a thrill of happiness she could not define making her heart beat quickly.

"May I keep this?" he went on rapidly, opening his hand, and disclosing the little crimson knot of ribbon she had worn at her throat. "I should like to have a *souvenir* of to-night. Besides, it is mine—treasure trove. I will keep it now."

He clasped her hands with a lingering pressure, and sprang out, exchanging a hasty farewell with Harold, and cutting short the latter's words of thanks. Then, lifting his hat, he stood bareheaded as the carriage drove away; and Cora's last look showed her the face, beautiful as any Greek god's, which was to exercise an influence over her future life, and to bring her some joy and much sorrow.

"Did I not tell you something would happen, *signora mia*?" said Marianna, as she undressed Cora and combed out the shining tresses.

"And did I not tell you it would be something pleasant, Marianna?" said the girl, laughing; "and it was far more pleasant than otherwise."

"Time will tell," answered the old servant, sententiously.

And when, half an hour after, she stole out of Cora's room, leaving the young girl sleeping softly, her sweet crimson lips pouted in a happy smile, Marianna shook her head a little mournfully.

"The signorina is no longer a child," she said to herself. "Well, her brother is there, and he will let no harm come to her."

Ah! Marianna, the harm was already done. Cora's eyes were blinded by the glamour of that wondrous beauty, its fascination was strong upon her even now; and as she slept, she saw again the dark, smiling, tender eyes, and felt the clasp of his hand on hers, and heard the liquid tones of the sweet, languid voice. The mischief was done!

CHAPTER III.

An Incident.—Pleasant Quarters.

The drawing room at The Tryst was a large, low, square room, with no pretensions to grandeur, and yet not without a certain artistic elegance, and some taste. It was simply furnished, and hung with gray damask, and though its ornaments were few they were well chosen, and of some value. It was lighted by a large window looking over the quaint, old-fashioned garden which The Tryst boasted, and the door, which faced the window, opened into the little hall.

It was the second day after Cora's rescue from the crowd by Lord Almane, and she was sitting dreaming over a volume of Tennyson, in the deep window seat—at least, the book was open on her lap, and her eyes were bent upon it, but for quite half an hour she had not turned a page, and there was a tender little smile playing around her lips which surely Elaine's unhappy love for Lancelot could not have brought there; and whereas we know that Lancelot of the Lake was no Apollo, the face which was in Cora's thoughts as she sat there was a very handsome one—gay, smiling, triumphant.

She was going over in her own mind the events of the last night but one. Again she heard the tender voice and felt the pressure of Lord Almane's protecting arm; again she recalled the quick yet gentle movement with which he had turned her face to his shoulder to shut out a sight which would terrify her; again she saw the pleading eyes seeking her own, and the little knot of crimson ribbon which he declared was "treasure trove;" and the innocent girlish heart throbbed with a happy ingenuous triumph which would certainly have made his lordship smile could he have known it.

Cora was aroused from her reverie by the sound of voices and steps in the hall, and she rose to ascertain the cause of the unusual commotion, when the door of the room in which she was, opened hastily, and Harold entered.

"Do not be frightened," he said, hurriedly; "Lord Almane has met with an accident, has been thrown from his horse, and is hurt, not seriously, I hope; they are bringing him here."

"Lord Almane!" repeated Cora, mechanically.

"We shall want your help, so be a brave girl, went on her brother. "Run and find Marianna, and then come back here. Bring some eau-de-Cologne with you."

Cora ran off, her face very pale, and her heart full of an undefined fear and foreboding. Marianna, was out, and the only other servant at The Tryst was a young, inexperienced girl, who seemed startled out of her wits, and Cora felt a little nervous at the thought that if a woman's help were needed, she must give it. Hastily fetching a bottle of eau-de-Cologne from her room, she went quickly downstairs, softly opened the door of the drawing-room, and entered unobserved.

Harold was the first person she saw. He was standing at the head of the sofa where Lord Almane lay, while a groom in livery, with a very startled face, stood near, apparently receiving Mr. Sinclair's orders, although too much frightened to clearly understand Harold's rapid directions about a doctor and the nearest place to find one.

Lord Almane looked very pale, his eyes were closed and his lips set, while his head lay back upon the cushions in a helpless manner. He opened his eyes languidly as Cora entered, but his face brightened when he saw who it was, and he made a movement as if to rise, but sank back again on the pillows, a spasm of pain contracting the handsome features.

"I must apologise, Miss Sinclair," he said, smiling. "What will you say to such an invasion?"

Cora's face was eloquent as she came to his side, and put her hand into his outstretched palm; but though she tried to say a few words of sympathy, her voice failed her.

Silent as her greeting was it seemed to satisfy Lord Almane, for he smiled contentedly as he rested back on his pillows.

"I am afraid you are suffering much," said Harold when the servant had disappeared.

"Hardly at all *now*," answered the Viscount, with an emphasis on the last word which did not escape Cora. "I don't think there has been much damage after all. This arm is broken, I think, nothing more."

"Broken!" echoed Cora, affrightedly turning very pale.

"That is not much damage to proceed from such a fall as I have had," he said, smiling at her. "My horse stumbled, and I must own to having been very preoccupied, for the next thing I remember is that your brother and Giles carried me in here."

"You were riding in a very heedless fashion," said Harold, re-arranging the cushions which had been disturbed by the movement Lord Almane had made when Cora had entered. "Lord Almane's horse stumbled," he went on to Cora, "and he was thrown with some violence against our garden wall. A very serious hurt might have ensued."

"I am sorry that my carelessness should put you to any inconvenience," said Lord Almane. "I trust, for your sake, the medico will say that I can go back to the hotel."

"Were he to say so fifty times we could not permit it," said Harold, smiling; "although I fear our simple life and customs will not give you your ordinary comforts."

Cora, recalled by her brother's words to a sense of her duty as hostess, went away to see that a bedroom was prepared, and without hesitation chose the large one which had been her father's, and which was now quickly got ready.

When she returned to the drawing-room Harold was impatiently awaiting the surgeon's arrival, and blaming himself that he had not gone in search of one instead of trusting the servant.

"Surely he could have brought some one by this time," he said. "Every doctor in Richmond cannot be out. Stay with Lord Almane, Cora; I will go and see for one."

Cora looked startled, and parted her lips as if to speak; but before she could utter any remonstrance Harold had disappeared.

"Don't be afraid," said the Viscount, smiling. "I promise not to faint, Miss Sinclair. But run away if you like; I shall do very well alone until the surgeon comes."

Cora colored and came slowly near the sofa.

"I am not afraid," she said, simply. "Can I do anything for you, Lord Almane? I am afraid you are suffering a great deal more than you say."

"My arm is rather painful," he owned, "and my head aches. Don't look so pitiful, my child. It is not worth one moment's anxiety."

"Will you let me bathe your temples a little?" said Cora. "I will not hurt you. I am used to doing it for Harold when he has a headache. I think it will relieve the pain."

"I cannot trouble you to do so for me," he replied.

"It is no trouble."

And very simply and naturally she proceeded to bathe the throbbing temples; and after a few minutes' patient work she was rewarded by seeing the handsome features relax and lose some of their set look of pain.

"That is so much better, think you," he said, opening his eyes to see the fair face, with its angelic look of pity, bending over him. "There must be some magic in your touch, Miss Sinclair! The throbbing is almost gone."

"I am so glad," she answered, without pausing in her graceful task, until the sound of footsteps announced the arrival of Harold and the anxiously-looked-for physician.

"At last!" said Cora, joyously. "Now you will be better, Lord Almane."

He smiled; and then, as she rose, he put up his uninjured hand, caught hers, still wet and perfumed with the scented waters she had been using, and drew it for a moment passionately to his lips with a tender murmur of acknowledgment.

Cora drew it quickly away, and turned from him as the door opened to admit Harold and a stranger.

As they passed in, Cora drew back, and then swiftly and silently left the room.

In about an hour Harold joined her in the dining-room. Lord Almane was in bed, he said, his arm set, and going on quite satisfactorily; Marianna was with him.

"He was coming here when he was thrown," went on Harold. "I am happy to be able to repay the debt of gratitude we owe to him, Cora. We must try and make it less tedious for him. Why, what is the matter, little sister? You're as pale as a ghost yourself, and trembling. You have been startled, and must go and lie down and compose yourself. I can't have two patients in one house!"

"No fear of that," answered Cora, laughing, as she threw her arms round Harold's neck and kissed him with unusual passion. Then, wishing to avoid his questioning glance, she escaped from the room up to her own.

The unexpected advent of such a guest could not fail to cause some little excitement in such a quiet, uneventful household as that of the Tryst. Harold, who spent most of his spare time with Lord Almane felt the pleasure of such constant association with a traveled and cultivated companion; and, though for a few days the Viscount suffered acutely from the inflammation which set in on the second day of the accident, he seemed to find equal satisfaction in the society of the young artist.

Even the servants seemed excited and interested in the young nobleman; Marianna herself succumbing to the powerful fascination he exercised over all around him.

During the first week Cora heard nothing except Harold's daily bulletin or Marianna's occasional report, the old woman being very curt and business-like in her replies to any questions the signorina seemed anxious to have answered.

Sometimes during his daily visit Dr. Tapley came into the drawing-room, and gave the young girl some news of his patient; but of the Viscount himself Cora saw nothing, and Marianna's quick eyes saw, what Harold in his pre-occupation with the invalid failed to see, that the young girl was restless and ill at ease.

One afternoon Harold received a business summons to town, and before leaving came into the drawing-room, where Cora was sitting, playing some dreamy chords on the piano.

"Lord Almane is getting up," he said, rather uneasily. "I don't know whether he is quite up to it, but Dr. Tapley has given leave. Don't let him talk too much, Cora; he's far from well yet. Good-bye, little sister."

Cora stood at the window watching her brother as he went down the garden; her face a little flushed, and a sudden gleam in her gray eyes.

Harold, turning as he went, saw her, and was struck with a sudden sense of her wondrous beauty, which gave him an undefined feeling of mingled pride and uneasiness. She was dressed very simply in dark-gray; but the flush on her cheeks, the sudden brilliance in her eyes, made her radiant just then, and her loveliness came with fresh power before Harold's eyes; and as he walked swiftly down towards the station, he carried away a very fair vision.

And it was a very fair vision which met Lord Almane's gaze as he entered a few minutes after, and Cora turned from the window to greet him. He was looking very pale and worn; so much so, that Cora started at the change, and pushed forward a large, deep arm-chair.—[To be continued.

An Amusing Comedy of Errors.—Mme. de V. was very jealous, and determined to watch her husband. One day he told her he was going to Versailles, and when he went out, she put on her bonnet and followed him. She kept him in sight until he turned into a passage which shortened the way to the railroad station, where she missed him. She stood for a few minutes in the passage looking about, and suddenly saw a man coming out of a glove-shop with a rather over-dressed lady. From a distance she made sure the man was her husband, and without a word of warning she gave him three or four sound boxes on the ear. When the gentleman turned round to confront his assailant, she perceived that she had made a mistake, and at the same time she caught sight of her husband, who had replenished a cigar-case at a tobacconist's and was crossing the street. What could she do? She fainted in the arms of the stranger whose ears she had boxed—while the other lady ran off as fast as she could to avoid scandal. The stranger, who was a comedian, was astonished to find an unknown lady in his arms; and, while his ears were still tingling with the blows, he was again startled. A gentleman collared him, and shaking him roughly, asked him what he meant by embracing a lady in the street. "Why, she boxed my ears and fainted!" screamed the actor. "She is my wife," shouted the irate husband "and never would have struck you without cause." The infuriated gentlemen shook their fists until the lady, who had been carried into a shop, recovered sufficiently to explain how it happened.

At the recent Anthropological Congress at Jena, Prussia, Privy Councillor Schaafhausen read a paper on the color of complexion, eyes, and hair. He said that blue eyes indicate a lack of coloring matter which originally proceeded from inferior nourishment, and was evidence of a weaker organization than is possessed by persons of dark eyes. The less coloring matter there is the lighter the hue of the eye, until, by reason of its utter absence, the blood vessels become visible, and the eye is red, as is the case with the Albinos. The fact that people living in the country, other things being equal, have light colored eyes more frequently than those living in cities, is accounted for by the inferior nutritive value of the vegetable food of the former as compared with the meat and beer of the people of the cities. In the mingling of the blonde and dark types, the latter usually shows the greater vitality, and the children assume the darker complexion. The blonde complexion usually carries with it a finer organization and a higher and a thinner voice. Of sopranos and tenors, a majority have light-colored eyes and light complexions, while of most alto singers, and particularly of bassos, the reverse is true. The fact that light hair and eyes are more numerous in northern than in southern countries is attributed to the colder climate, which consumes the pigments of those features. Dr. Schaafhausen's conclusions were based on statistics carefully gathered.

LONDON.

LONDON is the greatest city the world ever saw. Babylon, Thebes, Rome were never so populous, while the largest city of India at the present time, contains less than a million inhabitants. Within the borders of the metropolitan and police districts, a circle of fifteen miles, it is computed there are at the present time upwards of four million persons. London is three times more populous than St. Petersburg, twice as populous as Constantinople, with two-thirds more people in it than Paris, and one-fourth more than even the living multitudes of Pekin. All Scotland but equals it in the number of its people, and half as many Yorkshiremen again as are numbered in their own county could find accommodation within its circle. Every eight minutes of every day of every year a soul goes out of London, and in every five minutes of every day a new immortal enters upon this scene of its probation. It is at once the court, the seat of government, the center of fashion, the home of all the charities, and the general rendezvous of all criminal and desperate characters of the United Kingdom.

PARROT-TOED.

C. H. E. R. asks why parrots always hold their food with their left foot. Well, now for a "scientific why." The parrot stands upon his right foot because it is right to do so, and as he has but one foot left, he is compelled to hold his food with his left foot. Q. E. D. Patent applied for.

BRIC-A-BRAC.

BY C. H. E. R.

THE following anecdote is told of Lord Brougham. "Mr. Brougham (afterwards Lord Brougham) was junior with Mr.—, a leading counsel of the day, in a *cause celebre* that nearly concerned the royal family. The leader, oppressed with the responsibity of his charge, and weary with his exertions, had been addressing the court in close argument for several hours, when it was apparent to every one that his mind had suddenly ceased to act in unison with his speech. Mr.—became hurried, stammered, and began to plunge. Brougham saw what had happened, and instantly rose, interrupted his chief, and addressed the court. Wearing upon his face an expression of great suffering, he assured their lordships of his deep regret at having to trouble them at such a time with a matter personal to himself. He did most unwillingly, but he was sure their lordships would forgive him if they only knew the agony he was enduring in his right ear by reason of the killing draught that rushed through "that door leading into the Common Pleas." He was nearly mad with earache. What he *should* do if the nuisance continued he could not tell. Might he, in the interest of his clients, entreat the interposition of the Bench? The Bench condoled with Brougham on his suffering, and at once ordered measures to be taken to stop the draught. "The door leading into the other court" was shut, but still the draught came; windows were examined, and sandbags were placed against the openings in them till the nuisance was abated—till a good quarter of an hour had been consumed, and Mr. Brougham's leader had had time to recover himself. It is, perhaps, needless to add that the intelligent junior "had not an ache or pain in all his great body."

So inscrutable may the human face become, that frequently it is but a mask which conceals the real character. The men and women most famous for heartless cruelty have often been celebrated for their handsome faces; writers of fiction have not been unmindful of the fact, and Faust is represented as being a handsome man; while the German fishermen sing of the sirens who drag men's souls down to perdition with their fatal dower of beauty. Some faces are unreadable, and tell nothing of the owner's character. The merriest men now and then have solemn faces, and the most serious frequently have cheerful ones. Frequently the most heartless coquette has all the shy graces of a girl of sixteen, while the heart of some woman who looks you through with cold, steady eyes, may be filled with love and tenderness that you are too blind to discover. So we all go on, wearing disguises of different devices, never quite concealing, never revealing, the life within. And thus it will ever be.

RICHARD COEUR-DE-LION once took the Bishop of Beauvais prisoner in battle. The Pope, hearing of it, sent to him to say that he had broken the privilege of holy church and taken his son. The king, in reply, sent him the armor in which the bishop was taken, with this, in writing, "Vide num hæc sit vestis filii tui" (See whether this be thy son's coat or no.)

A good reputation should be preserved with especial care, for when once lost, it is always difficult, and sometimes even impossible, to recover it. Good renown is like ice, which, when once broken, can never be made whole again. The following fable affords a very useful lesson on this subject. It happened one day that Fire, Water, and Reputation were traveling together: they were deliberating how they should meet again, in case of losing each other. Fire said, "You will find me, when you see smoke." Water said, "Where you see marshy places, you will find me." But Reputation said, "Take care you do not separate from me; should you do so, you run a great risk of never meeting me again; for when I am once lost, it is very seldom I am ever recovered."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

LOVE.

A VOLUME in a word—
An ocean in a tear:
An old, a never-ending song,
That angels stoop to hear.

A seraph's perfumed kiss—
An Ætna of unrest:
A word, the royal king of words,
Writ on Jehovah's breast!

[*Transcript.*

LETTERS FROM A COUNTRY GIRL.

MARGARET B. HARVEY.

No. 1.

COUNTRY life has in it glorious possibilities of beauty, loveliness and happiness. Fragrant flowers, graceful trees, smiling skies, rippling brooks, and grand hills, are all around to feast the eyes; pure air, clear water, wide space, and fresh breezes contribute to the health; and the fields, the orchards, the streams, and the forests, are ready to give of their riches to the table.

But, alas! in how many localities do we find country life hard, cold, and contracted, especially among women! Unnoticed are the glorious sunsets, unheard the songs of the birds, unknown are all the attractions of art, literature and science—all such thoughts, inclinations, and opportunities are trodden out in the everlasting tread-mill of the work of a farm-house.

A farm-house! What more beautiful picture than the average one on a bright, spring day, as it stands back in its ample lawn, sheltered by tall trees and adorned by its vines and shrubbery? Perhaps, on near examination, the fence may prove a little dilapidated, the lawn weedy, the trees wormy, and the flowers coarse; nevertheless, it is a charming sight. And what more dismal picture than the inside of the same house on a rainy day, when there is no escape to the lawn or woods, and one is compelled to remain imprisoned within its bareness and gloom? Yes. Notably in the country, with boundless ungathered harvests lying all around, does the soul starve. There are immense barns for the crops, ample stables for the cattle, great cellars for the provisions—but for the hearts and the souls, are there *homes?*

In some places, yes; but in most, no. How different it all might be! The farmers are the princes of the soil, the kings of the earth; but this royalty, after all, is of an inferior, corporeal kind. Yet it might be and ought to be, in every respect, "a goodly heritage."

Take a farmer's wife. All around her, rolling on every side, are broad acres which, in name at least, belong to her. Great is her wealth in flocks and herds. Large is the amount of money she can think of as her own. Commodious is the house of which she is mistress. But the acres do not know the sound of her foottall; of the flocks and herds she cannot dispose of one head; of the money, a few pennies now and a few dollars then are all she can touch; of the large house, all is dreary, and the kitchen her constant abiding-place.

What can *she* do to elevate the members of her household, to say nothing of the country round? Hopeless indeed, seems her task. But there never was a worse that could not become better. To such a one I would say: first of all, you must be perfectly willing to try; second, keep up heart, even through years of effort and discouragement. With your small means, and amid the hard routine of your every-day work, how shall you begin? This is the hardest part of your task. But the best commencement is, to determine to make one.

Now and then you *do* get a little money from selling the produce of your own little garden-patch, or from eggs and chickens, perhaps; but once in a while, like a school-girl, you have a little. With your one end in view, this is to be laid sacredly aside for—books.

Yes, books. You always want them and must have them—there is no such thing as growth without them. We must have the choicest thoughts of the best minds to correct our mistakes, discover our needs, and receive our inspirations. It is not enough that you have a ponderous Bible, a Psalm-book and a gay Annual on your parlor-stand—books must be purchased just as continually and surely as clothing. Under ordinary circumstances, buy according to your own fancy; but now you have a purpose in view, so buy specifically. Purchase then, first "House and Home Papers," by Miss BEECHER and Mrs. STOWE; then you want "The Schoolmaster's Trunk," by Mrs. ABBY MORTON DIAZ; get a good Botany—Gray's or Mrs. Phelp's—and as soon as ever you can afford it, "Appleton's Cyclopædia." Now you are well armed for your attacks on ignorance, stagnation and discomfort.

Read carefully the first-mentioned book, and keep it by you as a reference. Many of its suggestions are of no use to you, but many others will be just what you want. Ah! now I see that you are awake. You realize how much there is for you to do, but you also realize that you can do more than you thought.

I have a fine house, you say—why not *use* it? Its rooms shall be all thrown open and thoroughly aired. There is plenty of wood, and the boys shall make fires all through to dry out the damp and mold. And I will keep fire always in the parlor and sitting-room as well as in the kitchen, and open the doors straight through, and keep up a constant summer heat—not have one room like an ice-house, the next like an oven. So the upstairs shall be kept warmed, and the children can use the center-room to dress in, and I will keep fire there. We *can* afford comfort at least, and this we will have, first of all.

Some of your family may talk of extravagance. But you can talk of chills and colds and cramps and catarrhs and medicines and doctor's bills, and continue to do so until they all like the new order of things too well to object any longer.

Next, survey your possessions. You will probably find yourself growing dissatisfied with your rooms. This is a good sign. The pictures and ornaments soon go to the garret, the gaudy shades disappear, the flaming papers come off, and everything you own takes a thorough overhauling.

The walls soon are covered with a plain, neat paper, or painted with some neutral tint. If the carpets are too gay, you resolve to replace them as soon as possible; but for the present, you will try to direct the attention from them; if too dull, you relieve them by bright rugs. You may do up the furniture yourself without the aid of any one, for a mere trifle. Make a mixture of linseed oil and amber and rub all the bare places, and when dry, apply a coat of varnish. When everything is bright and clean and full of light and warmth and sunshine, put clear, fresh muslin curtains to the windows, and let them fall in full, ample folds. You are now in a good way. It will not be long before flowers and vines are everywhere, choice engravings adorn the walls, tasteful ornaments appear on the mantels, and the select library grows. Of all this also, more anon.

And your house must be *used*. Take time—make time—to read, plan, and rest. At first, perhaps, the "men-folks" will not want to sit in the parlor or sitting-room, or they will go in with boots fresh from the barn-yard. But you can impress upon them that no one has a better right to enjoy a house than its owners, and coax them to wear the comfortable slippers you have provided, and they will soon appreciate it all as much as you do.

And now you have done wonders, though—as I shall presently show you—not half enough. You have laid the foundation of a refined home, and the superstructure will rise almost insensibly. New beauties will be continually added, as your taste develops and your love of home increases, and like rays from a focus, its influence will reach out as a continual inspiration.

HOME SKETCHES.

BY ALIQUA.

DOT is my daughter, four years old. I introduce her thus at first, because if I am to write from my home, and of it, you often will hear of her. The lady readers of the RURAL know how important a part of home life are the children.

Dot assists me in fancy work by her admiration and advice, and occasionally by tangling my zephyr or making free with my patterns. Whenever I find a really pretty pattern that I think may be of use, I put it away in a box for the purpose; and when I need a pattern I invariably find in my collection one that is just the thing. These patterns make excellent ornaments for doll-houses, and sometimes are confiscated for that purpose, but always are returned in good order. The other day I went to this box to find a pattern for a toilet cushion; and selected a bunch of leaves and sprays to be worked in satin-stitch. Over this I basted a square of Swiss muslin, through which the pattern was distinctly seen, and embroidered it with shaded green zephyr. I took single zephyr, but split it a needleful at a time. Care must be taken to leave the stitches sufficiently loose, as the Swiss will draw easily; also to use a medium-sized needle which can be done by waxing the end of the zephyr; a large needle will tear the muslin. For the border I used a two-inch pleating of the muslin, finished on the outer edge with button-hole stitch in green split zephyr, and headed the pleating with a narrow green ribbon laid on plainly and held in place by cross stitches of gold color. This cover placed over a white cushion is pretty and effective. I have made still more delicate ones by selecting patterns of flowers, and using shaded embroidery silks instead of zephyr. Charming Swiss tidies are made in exactly the same way only a trifle larger.

The autumn leaves that I had this winter, were mostly of soft maple, and most beautifully shaded and spotted. When trimming my rooms, I laid aside some of the smallest and brightest and varnished them with care, though they had been ironed with wax when gathered and afterward pressed. When dry, I arranged them in groups on back-grounds, some of white bristol-board and others of tinted pebble-board. Mucilage can be used to fasten them, but I used a fine needle and brown sewing-silk. I made for them rustic frames of walnut splints, oiled with linseed oil; if a higher finish is desired they can be afterward varnished.

Out of pebble-board I cut a letter-case of tasteful shape, pinked it around all the edges with a pinking-iron, and with a shoe-maker's punch made a hole in each scallop. This I ornamented with some of the smallest and brightest of the the autumn leaves, and being fastened with thread they can be replaced at any time without spoiling the foundation. Decalcomania or transfer pictures of leaves and flowers are very pretty for these letter-cases and similar articles of use and ornament, and do not need to be remedied.

Dot has stopped playing "blind-buff-man" with her dolls, to tease me to go and make "purple-cake," otherwise marble cake, which is her favorite.

KNOXVILLE, Tenn.

A PLEA FOR THE CHILDREN.

Another "Family Talk."

CLINTON.

YOUR correspondent, Mrs. POTIPHAR, in her article in RURAL of 9th February, deprecates the natural increase of our native population. She assumes that so large a proportion of the infants who are born into our world are doomed to "lives of toil and privations," that it has become a duty to "sacrifice numbers to superiority;" in other words, to raise fewer children, and better ones. Precisely how this improvement is to be effected, she does not inform us—whether by the "selection of the fittest," or otherwise, is left entirely to our own inference.

She does, however, promulgate a new "bill of rights," which, no doubt, has a bearing on the subject. While kindly admitting the right of a man and woman to marry, if they "love each other sufficiently," even though they are poor, she asks, "What right have they to bring little children into their world of deprivation?" "Parents who are physically, morally, or *financially* weak," (mark the latter disqualification), "have no right to children." Putting this and that together, it amounts to the positive declaration that *poor people* have no *right* to become parents. *Ergo*—*that* right belongs exclusively to the wealthy; and to clinch the matter, she asserts that a child has a *right* to be "well born." This right, then, inheres prior to birth.

Mrs. POTIPHAR (unfortunate selection of a name—if it was selected) appeals to Scriptural authority, to sustain her strange doctrine. Now let us examine the Scriptures briefly, and see what that authority teaches. We find in the very first chapter of Genesis, not merely a permission, but a direct *command* to the only representatives of the entire human family, to "Be fruitful and multiply and replenish the earth." Precisely the same command was subsequently given to NOAH and his three sons. We find the same command, virtually, repeated in numerous instances afterward. It was substantially incorporated with the Jewish law. No greater misfortune could befall a wife than to be childless. No greater blessing could she ask, than "to bea joyful mother of children." How natural was the regret expressed by that ancient Hebrew husband when he said, "Seeing I go childless!" How touching the appeal of that later Hebrew wife, when she cried out, in her grief at her childlessness, "Give me children, or else I die!"

The Saviour had a fondness for little children, and said "of such is the Kingdom of Heaven." He did not discriminate between the "well-born," and the "children of toil and of privations." Possibly the number might have included some who were as "ill-favored" and as "ignorant" as those of whom your correspondent now speaks so disdainfully.

Out upon such a theory as your correspondent advances! As a father and as a citizen I protest against it. Some of the best and greatest men that ever lived were the children of poverty, and, apparently, were born to lives of toil and of privations. But by noble energy they succeeded in overcoming the adverse circumstances, and gained for themselves honorable reputations, which became world-wide. In our own country, two, at least, of such, have occupied the highest seat in the gift of their countrymen. Let no one, therefore, be discouraged because he had not the good fortune to be *well-born*. But, "Did our Creator design that woman should spend her whole life in a nursery?" No, not her *whole* life, certainly. But if she be a true woman, acting on the right impulses of her womanly nature, she will not object to giving proper attention to that important portion of her duties—to care for and properly educate her infant offspring, both physically and mentally. She will find much pleasure in so doing. If she loves her offspring, if she rightly loves herself, if she loves her husband, if she loves her country, if she loves her God, she will not consider it a "sacrifice of all the grand possibilities of her life," but rather a pleasure, to devote a portion of her time even to the "petty details" of the "routine of cradle-tending."

ANSWERS TO CORRESPONDENTS.

"A READER OF THE RURAL."—Some few ladies have sent money sufficient to pay for two yards of muslin with orders to stamp an initial in the center of each yard, but most ladies have simply ordered the initial stamped on a piece of paper.

L. B. S.—White hats are suitable only for dress occasions. It would be in better taste for you to have a pearl gray felt.

LILLIE W.—West Indies.—Prepared chalk will whiten your skin quite as effectually as any of the much puffed powders, and there is no danger of its injuring your complexion.

MRS. H. L. JOHNSON.—Summer silks sell as low as 65 cents a yard, and for $1.35 one can buy an excellent quality of silk, American manufacture.

THE POLONAISE.—In reply to the many inquiries concerning prospects for the continuance of the popularity of the polonaise, I can assure the ladies that there is not the slightest possibility of this convenient form of garment going out of style. Several new models for it have been introduced, illustrations of which I will publish next week.

CORA.—Begin with Dickens' Child History of England. Get the facts well fixed in your memory and then you will be better prepared to attack a more elaborate history.

MISS NELLIE BOARDMAN.—Send on your silk; I will match it for you.

The Querist.

ANSWERS TO CORRESPONDENTS.

NOTICE.—Our questions have so accumulated that we give undue space to them this week, while apologizing that we have been unable to give them earlier publication.

Training Setters.

Gussie B., Bristol, Tenn.—Will the RURAL please inform me of (1) the best mode of training an English setter and at what age to commence; (2) also how deep potato onions ought to be planted?

ANS.—1. Commence when he is four months old. Be gentle but firm. Let his first lesson be in "down-charging." Place him in the proper position and repeat the words "down-charge" frequently so as to associate the sound and the act. Make the first lessons short. Never require of the pup any obedience that is not absolutely necessary. But invariably persevere in any lesson that you do attempt. It is of the first importance that the pup should be made to understand that you are master and that there is no escape from a compliance with your command. When house-broken in this manner, field-training, if he has a good nose and is of good parentage, will come very easy. You have but to teach him to come "to heel" and to "hie on," terms which explain themselves. Then he must "down-charge" whenever a bird is shot or shot at. For the rest, his instincts will guide him. Good dogs are *trained too much*. Bad dogs are worthless creatures.

2. Plant near the surface in drills about a foot apart and four inches apart in the rows.

About Clematis, Etc.

Mrs. R. B. asks:—(1) Ought Clematis seeds to be soaked in boiling water before planting? (2) What course ought to be pursued that would be most likely to produce double flowers from the seeds of the Ten Weeks Stock? (3) Is there a pure white Nasturtium? (4) If so, where can it be procured? Have purchased seeds purporting to be white, but they proved to be a pale yellow! (5) Of the large and showy varieties of the Dahlia will you please name a good white one, also one of the best crimson or scarlet ones. (6) It would please me much if the illustrations and articles on Clematis published in the RURAL five or six years ago could be reprinted.

ANS.—(1) It will do them no harm if placed in water *nearly* but not quite boiling. We do not know that it will hasten germination, never having tried the experiment with Clematis seeds. Often they will not germinate in two years. It is well to bury them or place in dampish sand as soon as picked until the following spring. (2) Mixing the single flowers with the double ones. This may be done artificially by placing the pollen of the one upon the stigma of the other, or by placing both sorts of plants near together. (3 and 4) We do not know of any. (5) Vesta, Snow-ball and Snow-drift, for white; Dr. BOYES, Flambeau (Pompone.) (6) We would be happy to comply with this request, but the article was long and our columns are much crowded at present. We can, however, promise notes upon the Clematis ere long.

Weeping Beech.

F. H. D.—In setting this tree in the lawn, how much space ought to be allowed, to produce the best effect?

ANS.—It grows very slowly for the first three or four years, but forms a tree twenty feet high with spreading branches, in ten years. It is one specially adapted in all respects to occupy an isolated position. We shall soon present a picture of this tree that will give our friend a better idea of its form than anything we can add to the above.

Grape Culture.

E. P. Orr, Tuscola Co., Mich.—Being a new subscriber to your interesting paper, I would like to ask a few questions regarding the culture of Grapes. (1.) What time of the year should Grapes be set out, and what kind of soil? (2.) What treatment do the young vines require the first year?

ANS.—(1) Spring or fall, the former preferred. The soil should be naturally of the best, or else enriched with bone, potash, and nitrogenous manures. Thoroughly decomposed stable manure is good.

(2) Clean culture, firm support, the pinching out of all but one, the strongest, shoot.

Gypsum and Plaster of Paris.

L. C. M.—What is the difference, if any, between Gypsum and Plaster of Paris; some of my neighbors say they are the same thing; others insist that they are not—will the RURAL please decide.

ANS.—Gypsum—otherwise sulphate of lime or land-plaster—is sometimes confounded with Plaster of Paris, even by those who should know better. Plaster of Paris, however, is made from ground Gypsum by heating it. This drives off all the water and reduces it from a granular condition to that of an impalpable powder. Gypsum is the most suitable name for the agricultural article, for it is not in condition to be used as plaster, and no confusion can occur by the use of the word.

Miscellaneous.

J. B., Fontana, Pa.—Will the RURAL please inform me where I can get eggs of the pure-blood Dominique stock, also a pair of the fowls?

ANS.—Address GEO. S. JOSSELYN, Fredonia, N. Y. HENRY HALES, Ridgewood, N. J.

B. S. Ward, Salem, Oregon.—In RURAL of October 27, 1877, I notice a correspondent writes very highly of the Hornet Raspberry. What I wish to know is if there is a probability of its being what it is there represented and where it can be obtained. Will the RURAL please give me the full address of some one that has them?

ANS.—The above publication of your letter will probably gain you the information you seek. Its hardiness in your climate is the one thing you have to consider.

H. D., N. Y.—Would the RURAL please tell me through its columns of advice (1) about how much grass land is worth an acre in New Jersey, within fifteen miles of Newark; (2) if you consider that locality very healthy. Also, I would like to have T. B. MINER say what the chances would be for a young man with a small capital, say about $3,000, who would start a chicken farm, without any practical experience, but who has studied French books and American papers on that subject. Any information on the above will be very thankfully received.

ANS.—(1) It is impossible to answer this question with any degree of accuracy. The best answer we can give is to say $200. (2) There are localities within fifteen miles of Newark, in New Jersey, as healthy as can be found within fifteen miles of New York City or Boston or Philadelphia.

J. L. Bill.—Will the RURAL please inform me (1) whether coal ashes will pay to put in the barn yard to help make manure; (2) Can ripe grapes be put up in any way to keep them any length of time fresh and good; (3) What shall I do to a plum tree to make it bear fruit; it blossoms but they all fall off.

ANS.—(1) The fertilizing properties of coal ashes are very trifling, if at all existent; but the ashes are often useful as an absorbent, while their mechanical effect in lightening heavy soil is also beneficial. If the manure is to be applied to soil of this description, mixing coal ashes with it will pay, otherwise, scarcely. (2) The roots can be wrapped in moss and occasionally moistened. (3) Cut it back now and enrich the ground about it.

Jasper.—(1) I believe, according to the RURAL'S announcement, I am entitled to five papers of flowers. (2) Please tell me when seeds of the Polargonium should be planted to insure success.

ANS.—(1) The free seed distribution was discontinued last year by limitation. Another will be announced during the present year of which we hope our correspondent may avail herself. (2) If in the house, plant now; if out of doors, not until the middle of May.

Mrs. L. G., Mt. Vernon, N. Y.—Many thanks for the seeds you so kindly sent. Will you please tell me through the columns of the RURAL if an Ageratum and a Eupatorium, are the same.

ANS.—They both belong to the same great family but are different genera. Eupatorium perfoliatum is the well-known Thoroughwort or Boneset. E. ageratoides is White Snake-root—both native plants. The Agoratums are from tropical countries.

Mrs. S. C. T., Perry, N. Y.—A short time since I received a variety of flower seeds from the RURAL office for which accept my most sincere thanks: I shall try and take the very best care of them. Among them was one of the Glaucium luteum. I have searched the old RURALS and Vick's catalogue but cannot find a description of the plant; you will confer a great favor upon me by giving me the name of it in English, also whether it is a house or out-door plant.

ANS.—Glaucium is derived from a Greek word signifying "sea-green" referring to the color of its leaves. Luteum is Latin for yellow. It is a hardy perrenial and is very desirable for flower-beds, the lawn or for edgings. It is not offered for sale except by a few seedsmen among their novelties.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, FEB. 18TH.

S. H. R.—"Jim Crow."—W. J. B.—S. R. M.—Mrs. W. C. G.—C. H. H.—S. B. P.—"Minnehaha"—M. G. R. thanks always.—"Grace Gould."—"Clinton."—S. J.—N. R.—L. L.—L. A. R.—R. H. C.—A. W. M.—E. W.—G. G.—J. B. R.—J.—C. T.—F. A. R.—K.—G. M.—T. B. M.—W. C. L. D.—S. B. P.—T. T.—H. C. U.—E. G.—R. S. C.—"Rural Reader."—E. M.—J. B. A., thanks—F. H. D.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Feb. 12.—Intense excitement and wrath among the "visiting statesmen" at the fate of the Louisiana Returning Board. They declare Anderson's conviction the result of a packed jury, a drunken judge and a lawless mob.

The situation in Europe is highly critical: Russia threatens to occupy Constantinople if the fleets of England or any other nation approach the city. England is resolved to send her fleet thither, and intimates that she will consider Russia's occupation of the Turkish capital a *causus belli*. All talk about the projected conference seems to have dropped in view of the imminent peril of immediate hostilities. Turkey seems to have suddenly conceived a great affection for and confidence in the Muscovites. It seems conceded on all sides that Bismarck holds the key of the position. What use will he make of it?

WEDNESDAY, Feb. 13.—The President has written a letter to the Attorney-General, asking what the Administration can properly do to save the La. Returning Board. He and his Cabinet think the prosecution the result of partizan rancor and the conviction the consequence of a packed jury and a corrupt and hostile judge. The proposed reduction of the whisky tax has been defeated. That Conkling and Spencer, and Spencer and Conkling have different influence was shown yesterday by the confirmation of Wickersham to be postmaster of Mobile, despite the opposition of Spencer and Conkling, whereas those whose confirmation was opposed by the other union were defeated.

The excitement in regard to the menacing attitude of the British Government towards Russia, is intense. Lord Derby says he hopes by Tuesday to be able to inform Parliament that the fleet is before Constantinople. Prince Gortschakoff has snubbed the English Ministry by answering their enquiry about the proximity of the Russians to Constantinople in court terms, that the conditions of the armistice concerns the belligerents alone. The Grand Duke has informed the Porte that his troops will enter the city so soon as the British fleet appears in the Bosphorus.

THURSDAY, Feb. 14.—Violent recriminations between Democrats yesterday in the House with regard to the charges of dishonest bargains in the Electoral matter.

The British fleet has passed the Dardanelles into the Sea of Marmora, and will go to Constantinople at all hazards. Torpedoes have been shipped from Odessa for Russian use in the Bosphorus. At all the English dock yards, work is being pushed forward by day and night. At present there is a dark outlook, but as the war, if once begun between Great Britain and Russia, would most likely involve the whole of Europe before long, doubtless every expedient will be tried for averting so disastrous a struggle.

FRIDAY, Feb. 15.—Mr. Tilden is credibly reported to be the prime mover in the trials of the Louisiana Returning Board, with a view to his re-nomination at the next Presidential election. Very severe weather on the ocean reported by vessels that have just come into port. Many of the passengers that escaped from the wreck of the Metropolis, set sail again yesterday for Brazil on board the Richmond.

The Russians have renewed their march on Gallipoli, and are within a few hours' march of the place. The English Ministry have decided to ignore Turkey's protest against the advance of the British fleet. A large number of Whitehead torpedoes have been shipped to the East. Gladstone and most of the Liberals violently oppose the warlike movements of the Government. Austria is indignant at Russia's disregard of her representations, and will probably join England in hostile movements unless the Czar soothes the Emperor by conceding at least a part of what is asked for. It is said that that Roumania also, rather than yield to the Russian demand for the retrocession of Bessarbia, may join the coalition, and endanger the Muscovite communications.

SATURDAY, Feb. 16.—According to her last wish, the body of Mrs. Jane Pitman of Cincinnati was yesterday cremated at Washington, Pa., by Dr. Lemoyne. Reports of local embezzlements, bankruptcies and swindles compose nearly all our domestic telegrams.

Four British iron-clads have reached Princes' Island, four miles from Constantinople, two remain at Gallipoli, and three at Besika Bay. To prevent the Turks from firing on them, Admiral Hornby had to declare that the fleet came to protect Turkish as well as British interests. Come what may, the Sultan will remain in Constantinople. The Turks are still fortifying the redoubts around the city. Russia has assured Austria that she will occupy Bulgaria for only two years. It is said British prevarication has so disgusted the Turks, who based all their hopes and conduct on English untrustworthy assurances of aid, that henceforth they will seek a close alliance with Russia, however disastrous it may be to British interests.

SUNDAY, Feb. 17.—After an all-night session of the Senate on Friday night, the Silver Bill was passed early on Saturday morning by a vote of 48 to 21. Four absent members, two of whom would have voted affirmatively and two negatively, were paired; and RANSOM of N. C., who would have voted for it, was absent through sickness without pairing. As more than two-thirds of the Senate are in favor of it, there is but little doubt but it will become a law, even if the President vetoes it.

The outlook in Europe is more peaceful. The English fleet has been withdrawn to Mudania Bay, forty miles south of Constantinople to facilitate negotiations to prevent the entry of the Russians; orders have been sent to the Muscovite headquarters not to occupy Gallipoli. A Congress—not a Conference—has been agreed upon, to meet within three weeks at Baden-Baden. All the Powers have consented; and it is expected peace will be signed by that time. The Grand Duke Nicholas will visit Constantinople as the friend and invited guest of the Sultan. The Greeks seem resolved to risk a whipping, and are again preparing for hostilities. When the conclave assembles, it is expected a new Pope will be elected in a few days.

MONDAY, Feb. 18.—The President is reported to think that his veto will kill the Silver Bill, whereas its friends are confident the late vote of the Senate guarantees its success despite the veto.

Russia has represented to England that the United States, as a maritime power, should take part in the approaching Congress. England has consented, but said Greece also should be admitted. The latter country will be an ally of England in case of war. The Czar has intimated to the Porte that it should remove the Mussulman population from Bulgaria. Bismarck's representations have modified the demands of Russia, and are said to have renewed the good understanding between Russia and Austria, so that the latter will not be an ally of England, should she venture to break with Russia. The English fleet will remain at their present post during the Congress, and the Russians have agreed not to enter Constantinople. The ultramontane cardinals are making vigorous efforts to elect a Pope of their own party. Many false reports of disputes, etc., etc., in this connection, are sure to be spread until the conclave has finished its labors by nominating a new Pope.

HOME NEWS PARAGRAPHS.

SOME of our readers may feel too lazy to "go forth" and obtain two new subscribers, which would entitle them to the Cricket as a present. If, however, a single subscriber should fall in their way, they may add one dollar and secure the RURAL CRICKET, which, could they not procure another, they would not part with for five dollars!

Two hundred different varieties of a fruit regrown successfully in Georgia.

On New Year's day, new potatoes sold in San Francisco at ten cents a pound, $6 a bushel.

During the past year not a single mile of railroad was built in Georgia, Mississippi or Arkansas.

Nineteen thousand sheep from one county in Texas, alone, are being grazed on the North Platte.

From 1867 to 1877 the total tax paid on manufactured chewing tobacco amounted to $213,216,327.15.

It cost the Government $5,187 to run the revenue office at Frenchman's Bay, Me., last year, and the receipts were $8.85.

Sixty millions in U. S. Government bonds have been returned from England and Germany within three months as the result of the silver agitation.

They have "mush socials" in Cleveland, and vast quantities of boiled mush, cold mush, fried mush, mush patties, mush omelet, mush pudding, &c., are disposed of.

The large number of negroes who have rented land in Alabama and gone to farming for themselves, has caused a great scarcity of hands among landowners who desire to farm their own land.

The overseer of the poor at Geddes, N. Y., erected a building worth $400 for tramps to lodge in free of cost. On the third night they beat their benefactor almost to death, and burned the house.

The number of Mormons in Scandinavia is stated to be 2,249 in Denmark, 1,606 in Sweden, 892 in Norway, and 15 in Iceland. During the course of last year, 583 persons emigrated from Scandinavia to Utah.

The southern education convention, in session at Atlanta, Georgia, has adopted a resolution favoring the creation of a national education fund from the proceeds of the sales of wild lands, and will memorialize Congress.

Indiana farmers say that either the dogs must be killed off, or they will stop raising sheep. So much mischief has been done to flocks of fine sheep by worthless curs recently, that the raisers are completely discouraged.

In opening a bed of marl at Tarboro,' N. C., recently a stream was found about eight feet below the surface, in which was an Indian canoe containing the skeleton of a man, with the remnant of a paddle in the hand.

An owl shot near Burlington, Vt., had a steel trap and two feet of chain belonging to a Hinsdale, (N. H.) man, on its leg. The trap was set five weeks before in the Hinsdale man's henhouse, and was carried about 100 miles by its captive.

The total imports of barley from the Province of Ontario into the United States in 1877 were 6,825,082 bushels as against 7,521,382 bushels in 1876. The imports at Oswego from Canada in 1877 were 8,812, 154 bushels, an increase over the previous year.

A Sacramento woman accused her husband of attempting to kill her, and he was sentenced to prison for two years. Then she begged to be sentenced for the same term, because she could not bear to be parted from him, and the Judge refusing, she went away and tried to hang herself.

FOREIGN NOTES.

The RURAL Cricket Clock is a perfect little gem. It may be carried about in one's o'coat pocket.

Fifty per cent. of the marriages celebrated last year in Italy, were between people neither of whom could write their names.

The Russian journals are beginning to talk of "Czargrad," meaning thereby the city which the rest of the world know as Constantinople.

Besika Bay, where the British Mediterrancan fleet has so long been stationed, is off the west coast of the plains of ancient Troy, in Asia Minor.

In France ninety-five per cent. of the murders are committed for money; in Spain ninety-eight of every hundred murders are inspired by motives of jealousy or love.

Kangaroo hides are an important article of export from Australia. They make the most pliable leather that is known, admirably fitted for boot-legs, gloves and riding-whips.

The slave trade is extensively prosecuted on the Nile. A gentleman returning from Upper Egypt counted twenty-three boats between Asiout and Cairo laden with slaves, the men being tied together on deck, and the women in the cabins.

Manufacturers of Clothing and ladies' suits find the New Davis Sewing Machine adapted to the full range of their work, trimming, binding, sewing thick and thin goods, over-seams, without any difficulty, and requiring no basting or change of tension. The DAVIS SEWING MACHINE Co. are enlarging their manufactory at Watertown, N. Y., to enable them to supply the increasing demand for their machines.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC Co., Cincinnati, Ohio.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Feb. 16, 1878.

BEANS AND PEAS.—Receipts of beans past week, 9,140 bbls.; Exports, 911bbls. Medium beans have been quoted stronger, and for strictly choice $1.90 has been obtained; the general selling figure for prime is unchanged. Marrows are weak, with poorer prices in Havana, their principal outlet. Good stock quoted $2, though all holders are not offering at that figure. White kidneys are dull, and have dropped to marrow figures. It is getting late for ready sales of Red kidney, and $2.50 is extreme. Black beans nominal. Green peas are dull and offered lower to arrive, at $1.17½@1.25. Southern B. E. peas, $3.25 per two bushel bag. Canadian field peas quiet at 83c. for general stock.

We quote:—Beans, medium choice, $1.75@1.75; other, $1.55@1.65; marrows, choice, $2.00@2.00; other, $1.85@2.00; pea, $1.80@1.85. White kidney, choice, $1.85@2.00; other, $1.85@1.95; red, choice, $2.50@2.50; other, $2.35@2.40. Turtle soup beans, $1.60. Lima, $8.

BEESWAX.—There is a slow market and prices unsettled; Western and Southern quoted at 26½@28c.

Exports for week, 1, 10,000 lbs.

BROOM CORN.—The trade is very light and prices unsettled.

Green brush at 6@7c.; green hurl, 6@7½c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—The improved prices for fine and good table grades are firmly set and fairly responded to. The supplies of State are of more satisfactory grade with better receipts; at this season of the year the special reserve of the interior is usually released, but very little of the fancy is country-owned this winter. More Welsh could be used for the market and eastern trade. Best dairies are quoted 28@30c. but the price is exceptional. Stock good enough to bring the extreme can be very profitably broken up in the present scarcity of fine and strong prices. Still the rating helps next grade Western creamery and fresh factory steady and firm, with only moderate lots of either arriving. Roll butter is less abundant and outside rates are more frequently given. The movement in low grades during the past fortnight has taken out considerable stock, but holders are very willing that more should go at old figures.

We quote State creamery, 25@35c.; fancy pails, 30@32c.; other 25@28c.; creamery, good to choice, 25@35c.; half tubs, fine, 28 30c.; extra, 33@37c.; other, 22@27c.; Fall Welsh 27@28c.; Welsh tubs, dairy, 25@27c.; other, 20 23c.; full dairies, fine, 28@30c.; common, 20@24c.; firkins, 20@27c.; poor State, 14@21c.; Western creamery, good to choice, 40@12c.; poor to good, 25@32c.; factory, choice, 20@21c.; good, 16 18c.; common, 7@11c.; rolls, 12@18c.; grease, 6¾@7c.

Receipts for the week, 15,435 pkgs.

Exports past week, 1,874 pkgs.

CHEESE.—There is no marked change in the situation of the market. Demand for export is steady and fair, and the choice lots are being steadily reduced in stock.

Fancy factories, 13¼ 13¾c.; good and prime, 13@14c.; fair lots, 12¾@12¾c.; poor, 10@10¾c.; 7@10c., skimmed. Farm dairy, 12@13c. for good to prime; 10½@11½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13¾c. for fine 11@12c. for good; 5@9c. for poor.

Exports for the week, 22,056 boxes.

Liverpool cable, 69s. Gold closes 102¼.

COTTON.—The market has fluctuated sharply as the news from abroad varied in its character, but on the whole, is decidedly lower.

Latest prices are for February, 10.68@10.69c.; March, 10.61@10.63c.; April, 10.79c.; May, 10.92c.; June, 11.05c.; July, 10.21@10.13c.; August, 10.17@10.18c.; September, 10.02@10.03c.; October, 10.75@10.77c.; November, 10.78@10.79c.; December, 10.71@10.72c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8¼	8¼	8¼	8¼
Strict ordinary	8¾	8¾	8¾	8¾
Good ordinary	9 3-16	9 3-16	9 5-16	9 5-16
Strict good do	9¾	9¾	9¾	9¾
Low middling	10⅛	11⅛	11⅛	11⅛
Strict low middling	10⅜	10⅜	10⅜	10⅜
Middling	10 13-16	10 13-16	10 15-16	10 15-16
Good middling	11 3-16	11 3-16	11 5-16	11 5-16
Strict good middling	11⅜	11⅜	11⅜	11⅜
Middling fair	12	12	12⅛	12⅛
Fair	12⅛	12⅛	12⅜	12⅜

Stained.

Good ordinary, 8¾c.; Strict ordinary, 8¾c.; Low middling, 9¾c.; Middling, 10c.

DRIED FRUITS.—Apples have a fair home trade demand, and the better grades are at strong prices. Peaches are dull and unchanged. Small fruits are in light supply and firm.

Apples—State quarters, old, 5¾@6¾c.; new, 5¾@6¾c.; Western quarters, old, 6@6½c.; new, 5¾@6½c.; Southern, new, prime sliced, 7c.; fair to good, 5@5¾c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4½ 5c.; unpeeled quarters, 4@4c. Pitted cherries, 16@17c. Blackberries, 9@10c. Raspberries, 27c. Plums, 16c. and Southern at 10c.

EGGS.—Receipts for the week, 11,160 barrels; do. last week, 6,062 do. The market has ruled weak, and no one seems prepared to say that the declining movement of the past week has subsided. State stock has been a great detriment to the market this year, and unless it is rendered less pressing before Lent—which begins March 6—even that special period in egg commerce may be severely damaged.

Near jobbing, 17@17c.; State and Pennsylvania, in good order, 16@17c.; Western best, 16c.; do. Southern, 15½@16c.; inferior and off quality, 10@14c.; State and Canadian, limed, 10@12c.; Western, 9@11c.

FEATHERS.—Live white prime Western geese, 45@47c.; mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $17.50@18.00; 60 pounds ave. $17.00@18; 80 pounds ave., $18@18; 100 pounds, $19.00@20; and rye at $18.50@20.

FLOUR.—The news from the other side has started a large business, including export speculation and trade purchases and prices are higher and strong.

Latest prices are $4.15@4.75 for poor to fancy superfine State; $5.00@5.25 for common to fair extra do; $5.45@5.75 for good to choice do.; $4.15@4.75 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $4.85@5.25 for shipping extra do., the inside price for poor, and $5.45@5.75 for good to strictly fancy extra do.; common to choice white wheat extras, $5.50@6.75; fancy do at $7.25@8.25; red and amber winter wheat, good to choice family, at $5.20@6.75; round hoop Ohio at $5.10@5.50, and trade brands of do. at $5.75@7.00, the latter for choice; St. Louis, $5.50@6.25 for poor to fair extra and $6.25@7.50 for good to fancy, (with a few brands of very fancy quality quoted up to $8.00@8.25); Minnesota clear, $5.10@6.25; Minnesota "straight," common to fancy, at $5.75@6.75, and patent poor to very choice, $6.75@9.00, with a few fancy at $9.25@9.75; unsound stock at $2.35@5.75; city mill extra at $6 10@6.35 for fair to very choice for West Indies; do. for England $5.15@5.20; do. trade and family extras, $6.50@7.50; do. South America, $6.40@7.50; No. 2 at $2.75@3.75.

Buckwheat Flour—Quoted at $2@2.60. Corn meal is selling at $2.50@2.90 for Western yellow and $3.20@3.25 for Brandywine.

FRESH FRUITS.—Exports of apples past week, 320 bbls. Very few lines of apples remain in store, and railroad arrivals are selling more freely. Baldwins and Greenings, $5@5.50; "Seeks" and Spitzenbergh, most of the latter now light-colored, $6@6.50; poor to fair remnants, $2.50@4.50. Russets will probably open regularly next week. We hear of prime Roxbury at $5. Cranberries have advanced; fancy bls., $8.50; good, $7.50; do. crate, choice, $2.50@2.75; good, $2.12@2.12; fair, $1@1.75. Grapes are out of market. Florida oranges, $3.50@5 ₱ case; extras, $5.50@6; there is a rumor that the crop will be short. The decline in peanuts fails to bring out buyers. Best hand-picked Virginia, $1.35@1.45; good to fancy, $1@1.35. Hickory nuts, 75c.@$1.

FURS AND SKINS.—Some of our surplus raw stock has been forwarded to London for the March sales more as a chance to realize, than for any real want abroad.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and ylgs.	1 00@2 00	1 00@2 00
Florida deer skins.	15@ 18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₱ lb	1 00@1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wulf, mountain		1 50@2 00
prairie		50@ 60

GRAIN.—The markets have been very much excited by the European news and with large transactions prices are decidedly higher.

Latest sales are of No. 2 red at $1 28@— ungraded red and amber State, $1 10@1 40; white, $1 41; No 1 Northwest spring, $1 31; No. 3 Chicago, $1 20½; No. 2 red for January at $1 28½; No. 2 Milwaukee spring, $1 30. Rye is a trifle steadier; sales of Western at 71@73c.; State at 74@77c. Barley, 86c for No. 1 Canada; 86@86c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 60½@61c.; steamer mixed, February, 56@56½c. Oats of New York extra white, at 34½@38c.; do. No. 1, February, 35½c.; No. 2 white, 36@36½c.; mixed Western, 36@37½c.; white Western, 37@39½c.

HAY AND STRAW.—There is a good trade in medium grades and a fair shipping demand, with prices steadily held.

Bale hay, 65@70c. for shipping, and 70@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@60c. for long rye; 50@55c. for short rye, and 40@45c. for oat.

Exports since Jan. 1, 6,800 bales; same time last year, 7,600 do.

HIGHWINES are higher—$1.08½ regular.

HONEY.—Continues dull. White clover, 2-comb boxes, has sold at 13@14c.; dark and buckwheat at 8@10c. Selected white clover is in few hands, and might bring 18c.

HOPS.—The receipts continue liberal, and there are free sellers at late prices, leading to a great export business.

State choice to fancy, 11@13c.; good to prime, 8@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@22c. for light, 21@22½c. for middle, 21@22½c. for heavy, 19@20½c. for good damaged.

MAPLE SUGAR.—Ohio new or re-molded, 14@16c. Some of the late arrivals are bright and handsome. Very little inquiry.

OIL-CAKE.—Western is quoted at $30@31 ₱ ton.

POULTRY AND GAME.—Steady supplies of dressed and easier figures cause low rates for the liberal supply of coops.

N. J. chickens, 7@9c.; W. fowls, 8@10c.; Turkeys, 6@10c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.00@1.25.

Receipts of dressed are not over heavy but there is no sharp demand, retailers not expecting more than too busy days at the close of the week, and by Friday there is apt to be an accumulation that keeps prices tame. Turkeys are unsaleable when exceeding a dozen pounds. Ducks are scarce and very firm.

Fancy Phila. and N. J. turkeys, 13@14c.; good, 11@13c.; large or Toms, 7@9c.; chickens, choice, 14c.; good, 11@13c.; common, 7@9c.; ducks, choice, 16@—c.; other, 13@14c.; geese, fancy, 11c.; other, 7@9c. Capons large 18@20c. small and slips, 15@16c.

Supplies are moderate in fancy game and prices are firm. Grouse are unusually scarce. Pigeons are in large supply but their comparative cheapness gives them activity.

Hares and rabbits, pair, 35@40c. Canvas-back ducks, $1.25@1.50; Red-heads, 75c.; Mallard, 40@50c.; Teal, 30@40c.; Quail, prime, $2.75@3.87; soft, $2.25@2.50. Partridges, pair, 75c.@$85c. Grouse, $1.00@1.45; poor, 90c.@$1.10.

PROVISIONS.—Hog products have tended a little stronger with a good export demand and smaller receipts. Mess pork, $11.14½@11.12½ for spot lots; $11.50 for April and May. Bacon at 5¾@5¾c. for long clear and 6c. for short clear. Lard—Western steam at 65c. for spot, 7.75c. for March, and 7.85c. for April. Tallow at 7¾c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.50@13.00; plain, $11.00@12.00; new packet, $14.75; family mess, $17.50; extra India mess, $28 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2.50; Higgins', $2.40 and other sack lots at 95c.@$1.15; Liverpool ground, 65@70c.

SEED.—Clover, 7½@7¾c. for Western; 7¾@7¾c. for State. Timothy, $1.37½@1.42½. Rough flax, $1.55.

TOBACCO.—Export demand has been very fair and home demand small, but prices held as before.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3½@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	7½ @ 8½	8 @ 9
Good leaf	9 @10	10 @10½
Fine leaf	10½@12	11 @12½
Selections	—@—	13 @15

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	19 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—Exports of potatoes past week, 1,925 bbls.; onions, 132 do. Potatoes for local use are freely offered at $1.87 as extreme. Some seed orders are here, but special selection and packing runs the price up to $2.50. Bermuda produce arrive regularly. Full crop potatoes, $4.50@$5. Tomatoes, $1 6-quart box—slow. Other stuff low for the season.

We quote Peach Blows $1.75@1.87, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.95@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₱ lb., 20@40c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1.50@$2. Cucumbers, doz., $3@3. Rhubarb, doz., $1. Spinach, Southern, $1 12@2 bbl.

WOOL.—There is no improvement to demand. Trade is in small lots, but prices are held steadily on other than fine fleeces; the latter being in fair supply can be had easier.

Ohio, Pennsylvania and Virginia—XXX and picklock, 47@50c.; XX, 45@47c.; X, 42@44c; No. 1, 43@46c.; No. 2, 38@40c.; common, 33@37c.; combing, 50@55c.

New York, Michigan, Indiana and Wisconsin—XX, 39@43c.; X, 35@42c.; No. 1, 40@41c.; No. 2, 35@38; common, 31@36c.; combing, 50@52c.

Iowa, Vermont and Illinois—X and XX, 36@39c.; No. 1, 37@42c.; No. 2, 33c.; combing, 48@52c.

Missouri, Kentucky and Tennessee—36@41c. for washed; 27@32c. for unwashed, and 38@38c. for unwashed combing.

LIVE STOCK MARKETS.

NEW YORK, Feb. 18, 1878.

BEEVES.—Receipts for the week, 10,076 head; do., last week, 9,037 do. The bulk of the supply arrived early in the week, and as large buyers were pretty well filled by Friday, the closing sales lacked spirit, and when stock was at all "off" in quality, easy rates were accepted. This was most particularly apparent at Jersey City pens. At Sixtieth street but few sellers managed to avoid a decline. The selling range is 7¾@10¼c.; one fair extra for 11c.

COWS AND CALVES.—There is no variation which encourages shipments of fine stock. Common grades depend upon choice sales. As nominal quotations, $60@60 rate the style of milkers now arriving.

VEAL CALVES.—Choice fat milk-fed are scarce and bring 9c.; Good New Jersey and prime State, 7¾@8¾c; other, 6@7c. Hog-dressed calves, fair to prime, 9¾@11c.; best grades selling quickest; grassers, 4@5c. Live grassers, 3@3¾c.

SHEEP AND LAMBS.—Receipts for the week, 18,485 head; do., last week, 20,639 do. Demand fair. Ohio showed some fine heavies. Quotations for sheep, $4.80@6.75 ₱ 100 lbs. Lambs alone, 7¾c.

SWINE.—Receipts for the week, 31,112 head; do. last week, 34,322. The last sale of live stock was Ohio, 160 lbs., at $4.65 ₱ 100; other sales, $4.50. Country-dressed pork arrives lightly; heavy to medium State and New Jersey, 4¾@5c.; Western dressed, 4¾@5¾c.; city, 5¾@5¾c.

INDEX TO NEW ADVERTISEMENTS.

Allen & Co., R. H.—Vegetable and Field Seeds.
Allen & Son, Fred.—Improved English Cheshire.
Ames Plow Co.—Centennial Swivel Plows.
Baker, Mrs. M.—Farm for Sale.
Conklin, W. H. & D. C.—The Conklin Farm Wagon.
Eckstein, Hills & Co.—The "Phœnix Brand" Pure White Lead.
Elliott & Co., B. A.—Splendidly Illustrated Catalogue of Flowers and Vegetable Seeds.
Gregory, James J. H.—Pedigree Onion Seed.
Howe, Dr. C. B.—Howe's Concentrated Syrup.
Hostetter's Stomach Bitters.
Jayne & Son, Dr. D.—Dr. Jayne's Hair Tonic.
Josselyn, Geo. S.—High-Class Poultry.
Landreth & Sons, David—Landreths' Home-grown Garden Seeds.
Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.
New York Life Insurance Company—Thirty-third Annual Report.
Page, Jr., N.—Portable Pump and Fire Extinguisher.
Parsons & Sons Co.—Fruits and Ornamental Trees and Shrubs.
Reeves, E. A.—Descriptive Catalogue of Seeds.
Root, J. B.—Root's Reliable Seeds.
Upton, C. H.—Farm for Sale.
Wells, Richardson & Co.—Leamon's Aniline Dyes—Leamon's Black Dye.
Williams, E. & J. C.—Spring Price List of Small Fruits.

BUSINESS NOTICES.

Miner, T. B.—White Grapes, Strawberries, Melons, &c., &c.

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SUGAR MAKER'S FRIEND

PRICE, $4.50 per hundred.

More Agents wanted to canvass for the sale of Post's Patent GALVANIZED METALLIC EUREKA SAP SPOUTS and BUCKET HANGERS. Samples, Circulars and Terms sent post-paid on receipt of 20c. S. C. POST, Manuf'r and Patentee, Burlington, Vt.

Call for these Spouts at your hardware stores.

LADIES IF YOU WISH TO COLOR—

Use Leamon's Dyes.

Warranted the best and cheapest Dyes for all family and fancy dyeing. Dresses, Cloaks, Coats, Ribbons, Ties, Feathers, anything, can be colored any shade. Anyone can use them. The expense is trifling. We especially recommend the Black as much better than logwood. Sold by druggists, or any color sent by Mail, large size, 25c., small size 15c. Send for Dye Book and beautiful Samples, Free.

WELLS, RICHARDSON & Co., Prop's, Burlington, Vt.

SENT FREE on application—BRIGGS & BRO'S Flower and Vegetable Catalogue. Our large crops enable us to SELL SEEDS LOW. ROCHESTER, N. Y., or CHICAGO, ILLS.

Send to E. & J. C. WILLIAMS, Montclair, N. J., for
Spring Price List of SMALL FRUITS.

WHITE GRAPES,
&c., &c.

I have the best White Grapes in the United States, the result of 20 years in growing seedlings. I also offer for sale "Miner's Great Prolific" and the Great American Strawberry plants; berries nine inches in circumference, the most productive ever known, and at half the prices of 1877. Also, "Miner's Hybrid" melon seed, never equaled in quality, with other choice fruits. Prices of all very low, as I do not grow fine fruits so much for profit as for pleasure. To Agents who introduce my new fruits among their friends, I send a supply free! My Circular, with full details, is now ready, and is sent free to all applicants. T. B. MINER, (Ex-Editor of the Rural American,) Linden, Union Co., N. Jersey.

CHEAPEST FERTILIZER
BECAUSE THE BEST.
PREMIUM BONE

For all crops. Made only by the EXCELSIOR FERTILIZER WORKS, Salem, O. Circulars free.

HIGH-CLASS POULTRY.
Send for New Practical, Valuable Circular.
GEO. S. JOSSELYN, Fredonia, N. Y.

IMPROVED ENGLISH CHESHIRE

Direct descendants of the celebrated Boar and Sow that carried off the Pork Packers' Prize of $500, at Great St. Louis Fair in 1870; also all prizes that Boar and Sow could take in New York State. Breeder's certificate of pedigree given. Address
FRED. ALLEN & SON, Oneida, N. Y.

HALES' POULTRY REMEDIES.

ROUP PASTE.

For Colds, Catarrh, Roup, Canker in Throat or Mouth, Chicken Pox, or Eruptions of the Head and Neck, and kindred diseases.

CHOLERA PASTE.

For Cholera, Indigestion and Bowel Diseases.

CARBOLATE OF LIME.

For Disinfecting and Whitewash.

Being constantly in receipt of testimonials as to the beneficial effects of these Pastes, I confidently place them in the hands of poultry keepers, that they may be judged according to their own merits.

Pastes in boxes at 30 cts., 50 cts., and $1. Agents wanted.
HENRY HALES,
Proprietor, Ridgewood, N. J.

DRY, HARSH, UNMANAGEABLE Hair, is rendered soft and glossy by Dr. Jayne's Hair Tonic. It stimulates the scalp, promotes the growth of the hair, and prevents it falling out. It is also a capital dressing for the hair, and cleanses it from dandruff.

Reading for the Young.

BABY.

One little head of yellow hair;
Two little cheeks, so round and fair;
Two little lips, with fragrant sighs;
One little nose, and two blue eyes;
Two little hands, so soft as a peach;
Two little feet, with five toes each;
Two little smiles, and two little tears;
Two little legs, and two little ears;
Two little elbows, two little knees;
One little grunt, and one little sneeze;
One little heart; no little sins;
Plenty of skirts, and lots of pins;
One little cloak, and plenty of frocks;
One little hood, and two little socks:
A big disposition to haul and to pull;
One little stomach, never full;
One little mouth, of the rose's tint;
One little bottle of peppermint;
Plenty to eat and lots to wear,
And yet this baby 's cross as a bear.

Chicago Times.

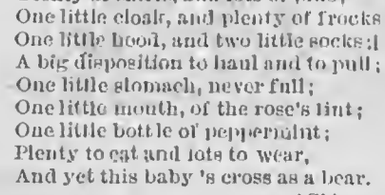
FAITH AND WORKS.

I am reminded of an anecdote, by a neat little parcel received from the Editor this morning. It is this:—When American watches were first introduced into China, the natives were struck with the adaptability of their cases for other and totally different uses; so, instead of devoting them to the uses for which they were designed, they removed the works, and installed little Joss images (their gods) in their places, being a funny instance of faith without works.

In the present instance the Celestial would be sadly balked, as the Rural "Cricket" sent me, is a little gem of a timepiece whose works cannot be tampered with; and in fact, the "Cricket" is so handsome, that even a heathen would have no desire to "improve" upon it.

My friend, the Editor, tells me that the Publishers of the Rural are offering this timepiece as a premium, and wishes me to tell my young readers my candid opinion of the Clock. I have no opinion. I can only say, "How can they afford to do it?"

Let us see what it is. This cut will give you a fair idea of the Aldermanic little fellow as he



stands on his pudgy legs, looking at me with the most open and innocent face you can imagine. The second-hand clicks away, cutting time into the crispest seconds; while the pure-white dial, with its clean, legible numerals, can be plainly seen from the remotest corner of the room.

A natural curiosity tempts me to look at the other side, and turning the "cricket" on its face we see that unlike other clocks we have here a

stem-winder, and a little knob by which the hands are moved at will; arrows engraved on the metal back point the direction in which the knobs are to be turned. The semi-circular opening with the figures F. S. at either end is the regulator, and just above it is a convenient attachment by which the "cricket" may be suspended against the wall. But how is this! While I have been telling about this entirely novel feature the clock has remained face down, but has kept ticking right on as relentless as time. This leads me to investigate. I turn it over on one side. It does not stop. I roll it along my table until it is only prevented from making a complete circuit by one of its legs. Useless effort! it ticks on unconscious of any change of position. Then I fall to experimenting in a way that may be termed grotesque, placing the "cricket" in the most absurd postures in the hope of gaining a victory and stopping the clock. My labor is wasted. I can, therefore, honestly subscribe to the claim of the publishers, viz.: it will run in any conceivable position.

I suppose it may be called a commendable curiosity to like to see the inside of things, the mystery so to speak. At any rate I felt a longing to see what this "cricket" was made of. But how to do it? It is said to be dust-proof, and curiosity-proof might have been safely added. After some little thought, and a great amount of tinkering I made this discovery: that the works are securely fastened to the back and front of the clock, making it impossible for them to get out of position; that the beautiful nickle-plated case is stamped out of *one piece* of metal, thus avoiding seams, and making it about indestructible. The glass plate fits over the face like a lid to a jar, and when all is in shape I think one has about the neatest, most charming little timepiece ever made. Being a *lever* movement it will run in any position in which a watch will run, and every inch of the works and case is metal. Its diameter across the face, is three inches and across the back, four and a quarter inches, making it eighteen inches in circumference. The illustration on another page gives a fair idea of its actual size.

It makes no difference how many clocks there are in a house, all who see this one will want it, and I advise you, my young relatives, to get one. The offer of the publishers is more than liberal and I should hold your powers of persuasion in low esteem indeed, if with such a lever as this clock, you could not carry your friends by storm. Now let me see what you can do!

Secure one clock to start with, and then make a crusade among your friends. If they can only see the "Cricket" they will be speedily captivated, and as for the Rural, you know what *that* is.

I have secured permission from the publishers to have all the Rural Cousins address what subscriptions they may secure to me personally. All who intend to add to the ranks of our cousins, may therefore send me their names and addresses and I will see that they are armed for the campaign with the most approved weapons. Who will be the first in the field? Uncle True.

LETTERS FROM BOYS AND GIRLS.

Snowdrop Drops Her Alias.

Dear Rural:—How do you do, Cousins all? You see I have jumped unceremoniously into your charmed circle once more. Thank you for such a kind welcome. But who is this I nearly stumbled over as I entered, and who rises with a young-woman-you-annoy-me, air? Let me take a nearer view; why, it is "Slayerofconceit! How do you do, my Lord? I think it would improve you very much to have the conceit taken out of you, but am afraid after the operation was performed you would be in a highly exhausted state, as there would not be much else left of you! I suppose from your extremely elevated position you look down on the rest of the cousins and expect them to do you homage; but I think I can safely say that neither "Madcap Mollie" nor myself reverence your lordship. "Madcap Mollie," I believe I have found in you a kindred spirit, and would like to know you personally. Why doesn't "Adel W." write again? I have an idea she effectually silenced young "Tom"; perhaps some of the cousins remember his efforts. I advise her to take "Slayerofconceit" in hand. "Hattie A." advises the little Cousins "to speak back!" That is just my advice. I perceive "Rocky Mountain Joe" has again appeared on the scene of action, and would say to him that I sincerely hope he is not one of the kind of boys that stay in the house and torment their sisters, while father is doing the work on the farm. A word to "Wild Fire;" I am afraid you injured your health trying to compose that poetry; poor fellow, didn't you have to take a general reprieve from all mental and physical labor the next day, in order to restore exhausted faculties? I don't think the boys can say anything to the girls about shoes; the style is *so* elegant! The shoe projects four or five inches beyond the foot, and then turns up like the rocker to a chair; that is the fashion. Boys, don't follow the fashions, you know! Then just look at those standing collars! They are *so* graceful and becoming! Look more like the sideboards to a wheelbarrow, than anything I can compare them to. "Solomon Sap!" what an appropriate name for the individual that bears it! A few words to "Uncle Trhe" and I shall close. I received the kind letter you wrote me, and thank you very much for it. I also received that "fine engraving," and would say that my hopes were realized, as one by one the wrappings were removed and the magnificent picture unfolded itself to my gaze. How my pulses quickened as I beheld such matchless coloring! such faultless drawing! and I would add that if all the cousins received such a beautiful present as I, they will all feel encouraged to try for another prize. Sincerely hoping this, my third or fourth effort, will appear in print I will bid adieu to the Cousins. I have written before under the name of "Snow-Drop," but will now sign my true name.

Norfolk Co., Va. Bertha A. Weeks.

An Old Friend.

Dear Uncle True and Cousins.—Whoop! Here I am again. You probably thought that I was gone forever; but I am like a bad penny—I always come back again. I have not written to the dear Old Rural for over a year, as we did not take it last year. I missed it greatly, I can tell you. I often wondered what was transpiring in the Cousinly camp; now that I take a survey of you all, I see that most are strangers. Where are Ellen J. S., Belle E. F., Young Tom, etc.? All exiled, I suppose, and "gone where the woodbine twineth." Oh, dear! all *gone!* Pardon, dear Cousins, for this untimely outburst of grief; but just wait till I get this tear wiped away, and then—give me your hands, Cousins, and let me make your acquaintance—yours especially, Mad-cap Mollie.

I see that most of the Cousins have had Christmas trees. We had an awfully dull Christmas here. There were heavy fogs and rains all day. But for all that, it was splendid weather for Christmas trees, as there were two feet or more of mud to plant them in! When people meet each other, the usual mode of salutation is, "Did you ever see such a winter?" The farmers in this section are afraid they cannot get their grain to market.

Well, Cousins, I suppose you will be out of patience, so I will not write any more to gain your displeasure. Hoping to see letters from you all again, I will withdraw from your pleasant circle until you hear again from

Macton, Can. Bouncing Bob, *alias* R. H. C.

An Ornithological Cousin.

Dear Rural Cousins:—I am a new Cousin, and have only just claimed relationship, although I have always read the letters that have passed between you. I don't know whether I am writing this letter to you or the waste-basket, but it is intended for you. I have heard great stories of that terrible waste-basket, but I hope it will not devour this. As you have never seen me, I may as well describe myself.

In the first place, I am a boy—a farmer's boy. I live on a small farm, one mile from a beautiful village in the central part of New York. I have been in my teens a little over two years. I go to school. Our school-year consists of two twenty-week terms, a ten-week vacation in the summer, and one of two weeks in the winter.

We are very busy this winter at home, wintering fifteen cows, eight calves, and eighty sheep. The most of them are Cotswolds, with a small sprinkling of fifteen Merinos mixed in.

I like colts very much, if they do not try to make love for their master too demonstrative. The other day my colt stood upon his hind legs in front of me, and brandished his fore-legs over my shoulder. I suppose he was trying to hug me; but I don't think I relish colt hugs.

I wonder if all of you are having as much snow as we are having here this month? We did not have any until the middle of January, and now it is making up for it. We usually have skating too; but this winter, as soon as the ice formed, it was covered with snow too deep to allow skating. If this first effort of writing to my new Cousins succeeds, you will hear again from your Cousin.

Jim Crow.

While Laboring Under Excitement.

Dear Uncle True:—I would like to say a few words to that "Young Orator," who comes into our ranks with such impudence. He seems to think that because I said some of the cousins were conceited, I am conceited too. Perhaps I am. But what would *he* say if *I* were to call him a falsifier simply because he did that to "Miss Bessie?" (as he certainly did when he insinuated that her poem was not original;) or to call him by a more opprobrious epithet as he did *me*. I may have said some harsh things while laboring under strong excitement; I may have jokingly called some harmless name, with no intention of offending; but *never* have I stooped so *low*, or been so *utterly* lost to all sense of *decency* as to call a person names barred by decent society. But to change the subject; how am I to get out of this scrape. It will never do to have the girls against me. I tell you it is fearful. What tempers they have got, to be sure! Since they have found that my name (according to my deeds,) is a misnomer, they have cooled off somewhat; and if I keep cool for awhile perhaps they will be in a frame of mind to listen to reason. Slayerofconceit.

The Puzzler.

ENIGMA.

In varied scenes I may be met,
In gold and jewels sometimes set;
Though often wrought in costly mold,
I'm sometimes for a trifle sold.
Adorning many a fair one seen,
The simple maiden and the queen;
I'm issued, too, by her command,
And some receive me from her hand.
While thus so costly I am seen,
I have the source of torture been,
And have my place in Church and State,
As well as at a ball or *fete*.
I many different figures make,
And many varied aspects take;
Yet still my form appears the same.
To some a spell lives in my name;
And yet I would not like to see
One that I love becoming me.

☞ Answer in two weeks. Jenny.

MISCELLANEOUS ENIGMA.

I am composed of 14 letters:
My 13, 6, 2, 9 is a mineral.
My 4, 5, 8, 7, 7, 10, 14 to engage in dispute.
My 3, 8, 1, 5, 6, 13 a man's name.
My 9, 6, 13, 14 a girl's nickname.
My 7, 2, 1, 11, 13, 10 to wander about.
My 4, 5, 10, 14, 13 to crush.
My 3, 2, 7, 6 to venture.
To take part in my whole gives much pleasure.

☞ Answer in two weeks. C. E. L.

CROSS-WORD ENIGMA.

My first is in lilac but not in aster,
My second is in oil but not in caster;
My third is in loose but not in tight,
My fourth is in eye but not in sight.
My whole is a flower.

☞ Answer in two weeks. Md.

PUZZLER ANSWERS.—Feb. 9.

Miscellaneous Enigma.—Never put off till to-morrow what can be done to-day.

Cross-word Enigma.—Rapidan.

Quadruple Cross-word Enigma.—Banana, Cherry, Citron, Raisin.

Sabbath Reading.

IF WE HAD BUT A DAY.

Mary Lowe Dickinson.

We should fill the hour with the sweetest things
If we had but a day;
We should drink alone at the purest springs
In our upward way;
We should love with a life-time's love in an hour
If the hours were few;
We should rest, not for dreams, but for fresher power
To be and to do,

We should guide our wayward or wearied wills
By the clearest light;
We should keep our eyes on the heavenly hills
If they lay in sight;
We should trample the pride and discontent
Beneath our feet;
We should take whatever a good God sent
With a trust complete.

We should waste no moment in weak regret
If the day were but one;
If what we remember and what we forget
Went out with the sun;
We should be from our clamorous selves set free
To work or to pray,
And to be what the Father would have us be,
If we had but a day.

TRIALS BY THE WAY.

Austin Phelps.

The truth is, that we never feel Christ to be a reality until we feel him to be a necessity. Therefore God makes us feel that necessity. He tries us here, and He tries us there. He chastises on this side, and he chastises on that side. He probes us by the disclosure of one sin, and another, and a third, which have lain rankling in our deceived hearts. He removes, one after another, the objects in which we have been seeking the reposo of idolatrous affection. He afflicts us in ways which we have not anticipated. He sends upon us the chastisements which he knows we shall feel most sensitively. He pursues us when we would fain flee from His hand; and, if need be, He shakes to pieces the whole framework of our plans of life, by which we have been struggling to build together the service of God and the service of self, till at last He makes us feel that Christ is all that is left to us.

When we discover that, and go to Christ, conscious of our beggary in respect of everything else—wretched, and miserable, and poor, and blind, and naked—we go, not expecting much, perhaps not asking much. There may be hours of prostration, when we ask only for *rest;* we pray for the cessation of suffering; we seek repose from conflict with ourselves, and with God's providence. But God gives us more; He is more generous than we have dared to believe. He gives us joy; He gives us liberty; He gives us victory; He gives us a sense of self-conquest, and of union with Himself in an eternal friendship. On the basis of that single experience of Christ as a reality because a necessity, there arises an experience of blessedness in communion with God, which prayer expresses like a revelation. Such devotion is a jubilant psalm.

"I WILL STAND BY MY MASTER."

(A Motto for Sunday Teachers.)

What more beautiful words could be selected as a motto for Sunday teachers? They were spoken not long ago by one whose hair had grown white in the service of Christ. He knew what discouragement was, and he knew what disappointments were: he had just been speaking of them; but the thought of his Master gave him fresh courage, and the resolution with which he was filled found utterance in the words, "To my dying day I will stand by my Master." The calling of the speaker was a high one, his ministerial office undoubtedly the most honorable which any can fill on earth; but we too, dear fellow-teachers, are servants; our work is in the great Master's Sunday-school vineyard; and shall not we also be faithful to our Lord?

Our charges are watching us; they hear us tell of Jesus on the Sunday, and in the week they are keen observers of what their teachers do; perhaps none will know it sooner than the members of our classes if we desert our Master or dishonor our Christian profession. Isabel.

Life of the Good Man and the Worldly.—To what may we liken the lives of the good and the worldly?

Sometimes a life is like the mountain torrent, which begins its course wildly, dashing from rock to rock, and flashing in and out amongst the pebbles, until it at length grows calm and flows through the land as a rivulet, bringing health to the village home, and clothing the fields with a garment of verdure; such, with its imperfect commencement, in many a good man's course. Sometimes a life is like a rapid river which sweeps all before it with its impetuous energy and silent strength, but becomes rough and tempestuous when it reaches the ocean and is lost in its waters; such is the course of many of those who live only for the world. H. B.

The Sailor's Line.—Is it not unwise to believe where we cannot fully understand?

Surely not. A sailor's line may not be long enough to fathom the sea; but it may be of use nevertheless to keep his vessel off the rocks and shoals. Neither by our intellect may we be able to fathom all the depth of the ocean of religion; but reason may assure us that there is water enough for our ships to sail in without running aground.

PERSONAL ITEMS.

The death of ex-Secretary Gideon Welles leaves Mr. Blair the only living member of Mr. Lincoln's cabinet.

Skobeloff, the Russian general, is said to only thirty-three years of age. He is a very religious man. "One cannot face death boldly," he says, "who is not a believer in God and who is without hope of a better world." He leads the soldiers in prayer and joins in their peculiar chant, which is said to be very touching.

Mr. Theodore Roosevelt, a well-known citizen of New York, and who was recently nominated by the President as Collector of the Customs in this city but rejected by the Senate, died on the 9th inst., after a short illness. He was 47 years of age and had long taken a prominent part in the management of local charities.

Pius IX., at the time of his death, was eighty-five years and something more than seven months old. His great age, remarkable among Popes, was not remarkable in his own immediate family. His great-grandfather lived seventy-three years; his grandfather ninety-three years; his father eighty-three years; his mother eighty-nine years. Of his three brothers, Joseph died at the age of seventy-six, Gabriel at eighty-eight and Gaetan at eighty-nine years.

Agents Wanted.

☞ Please mention Rural, when addressing Advertisers.

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THE WAR IN THE EAST
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WANTED SALESMEN for a wholesale house. Liberal salary; traveling expenses paid. Address R. & Co., box 1364, Cincinnati, Ohio.

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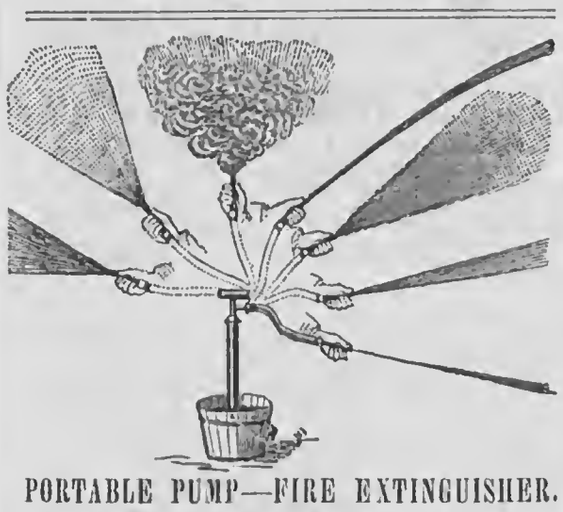

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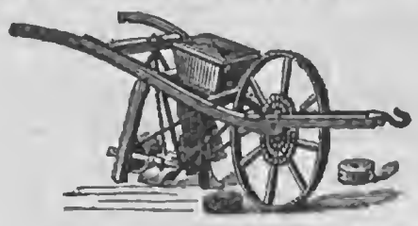

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Insurance.

THIRTY-THIRD ANNUAL REPORT
OF THE
New York Life Insurance Company.
Office, No. 346 and 348 Broadway.
January 1, 1878.

Amount of Net Cash Assets, Jan. 1, 1877 ..... **$32,730,898 20**

REVENUE ACCOUNT.

Premiums received and deferred	$6,232,394 70	
Less deferred premiums, Jan. 1, 1877	432,695 40—5,799,699 30	
Interest received and accrued	$2,168,015 85	
Less accrued, Jan. 1, 1877	300,558 68—1,867,457 17—	7,667,156 47
		$40,398,054 67

DISBURSEMENT ACCOUNT.

Losses by death, including additions	$1,638,123 39	
Endowments matured and discounted	185,100 12	
Life annuities and reinsurances	191,318 56	
Dividends and returned premiums on canceled policies	2,121,817 36	
Commissions, brokerages, agency expenses and physician's fees	531,526 03	
Taxes, office and law expenses, salaries, advertising, printing, &c.	501,025 90	
Reduction of premiums on United States stocks	$211,112 72	
Reduction on other stocks	12,030 00	
Contingent fund to cover any depreciation in value of real estate	250,000 00— 473,142 72—	5915,149 38
		$34,452,905 29

ASSETS.

Cash in bank, on hand and in transit; since received	$1,216,301 61	
Invested in United States, New York City and other stocks (market value, $13,379,930 33)	12,875,584 69	
Real estate	3,350,268 07	
Bonds and mortgages, first lien on real estate, (buildings thereon insured for $13,580,000, and the policies assigned to the Company as additional collateral security)	15,379,202 23	
*Loans on existing policies (the reserve held by the Company on these policies amounts to $3,145,195)	695,234 74	
*Quarterly and semi-annual premiums on existing policies, due subsequent to Jan. 1, 1878	306,289 26	
*Premiums on existing policies in course of transmission and collection (estimated reserve on these policies $674,000, included in liabilities)	167,133 37	
Agents' balances	56,915 97	
Accrued interest on investments to Jan. 1, 1878	315,895 35—31,452,905 29	
* *A detailed schedule of these items will accompany the usual annual report filed with the Insurance Department of the State of New York.*		
Excess of market value of securities over cost		504,345 64
Cash Assets, Jan. 1, 1878		**$34,957,250 93**

APPROPRIATED AS FOLLOWS:

Adjusted losses, due subsequent to Jan. 1, 1878	$348,069 48	
Reported losses, awaiting proof, &c.	112,897 84	
Reserve for reinsurance on existing policies: participating insurance at four per cent. Carlisle, net premium; non-participating at five per cent. Carlisle, net premium	31,022,405 99	
Reserved for contingent liabilities to Tontine Dividend Fund over and above a four per cent. reserve on existing policies of that class	792,302 22	
Reserve for premiums paid in advance	17,430 91—32,293,106 44	
Divisible surplus at 4 per cent		$2,664,144 49
Surplus, estimated by the New York State standard at 4 1-2 per cent., over		**$6,000,000**

From the undivided surplus of $2,664,144 49 the Board of Trustees has declared a Reversionary Dividend, available on settlement of next annual premium to participating policies proportionate to their contributions to surplus.

During the year, 6,597 Policies have been issued, insuring $20,156,639.

Number of policies in force Jan. 1, 1876, 41,661.	
Number of policies in force Jan. 1, 1877, 45,421.	
Number of policies in force Jan. 1, 1878, 45,605.	
Amount at risk Jan. 1, 1876	$126,132,119 00
Amount at risk Jan. 1, 1877	127,718,173 00
Amount at risk Jan. 1, 1878	127,901,887 00
Divisible surplus at 4 per cent. Jan. 1, 1876	$2,499,676.
Divisible surplus at 4 per cent. Jan. 1, 1877	2,626,816.
Divisible surplus at 4 per cent. Jan. 1, 1878	2,664,144.

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GARDEN ENGINE AND FIRE EXTINGUISHER. For Washing Windows, Carriages, etc. Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

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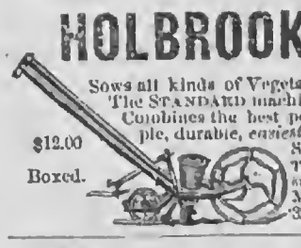

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Too long courtships are not allwuss judicious; the partys often tire out skoreing before the trot begins.

An Aberdonian recently bought a horse by photograph, thus literally getting the carte before the horse.

Nature seldom makes a phool; she simply furnishes the raw materials, and lets the follow finish the job to suit himself.

In reply to the question, "Will the coming man be bald?" the Norristown Herald affirms that "he generally is when he first comes."

Boots of the thirteenth century are occasionally dug up in London, with skeletons of cats of the same festive era. The relative positions of the boots and cats show that the ancients were not much better at aiming than we of to-day are.—*Danbury News.*

If you dream of a stuffed oyster-shell dancing in its ulster, to the tune of "Hold the Fort," while a club footed Indian looks on and chews gum, it is a sign that it is going to rain when your blonde cousin gets married. (If it is a brunette cousin, you have got to dream something else.)

If you dream of a ring-tailed monkey chewing bar soap on the top of an obelisk, and scratching the small of his back with his left hind foot, on which there is a blister of the eighth potentiality, and of two years' standing, it means that you will meet a cross-eyed girl the next time you go hunting for raccoons in a reservoir.

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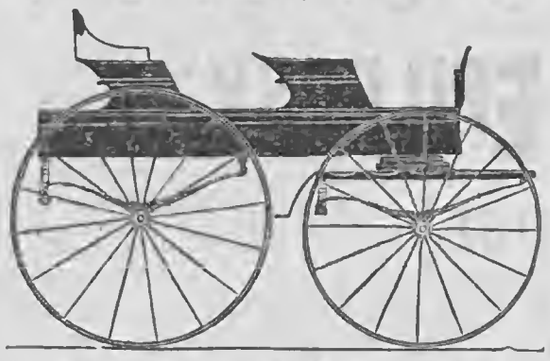

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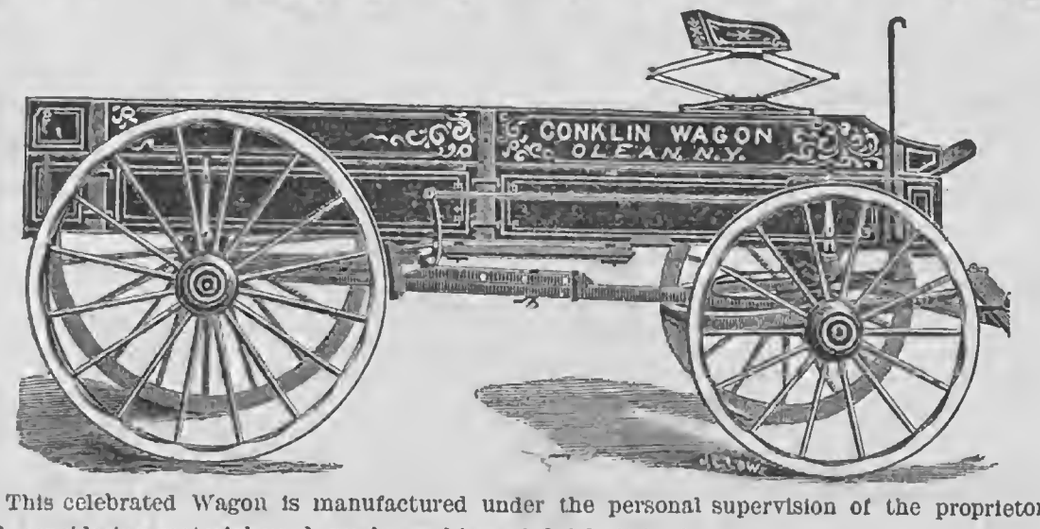

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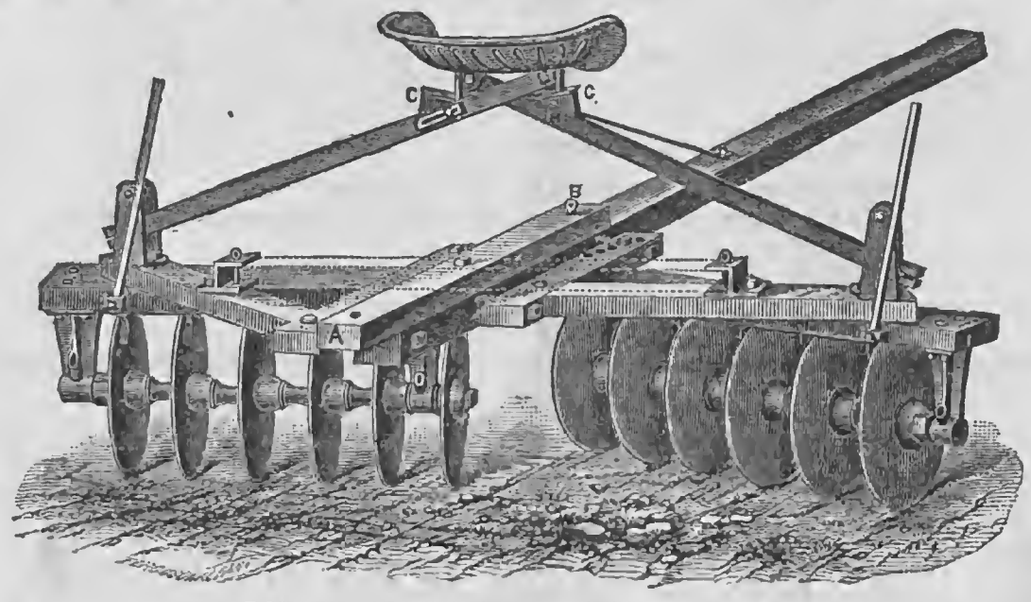

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 9.
WHOLE No. 1466.

NEW YORK CITY, MARCH 2, 1878.

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Arboricultural.

OUR PLANT-PORTRAITS.

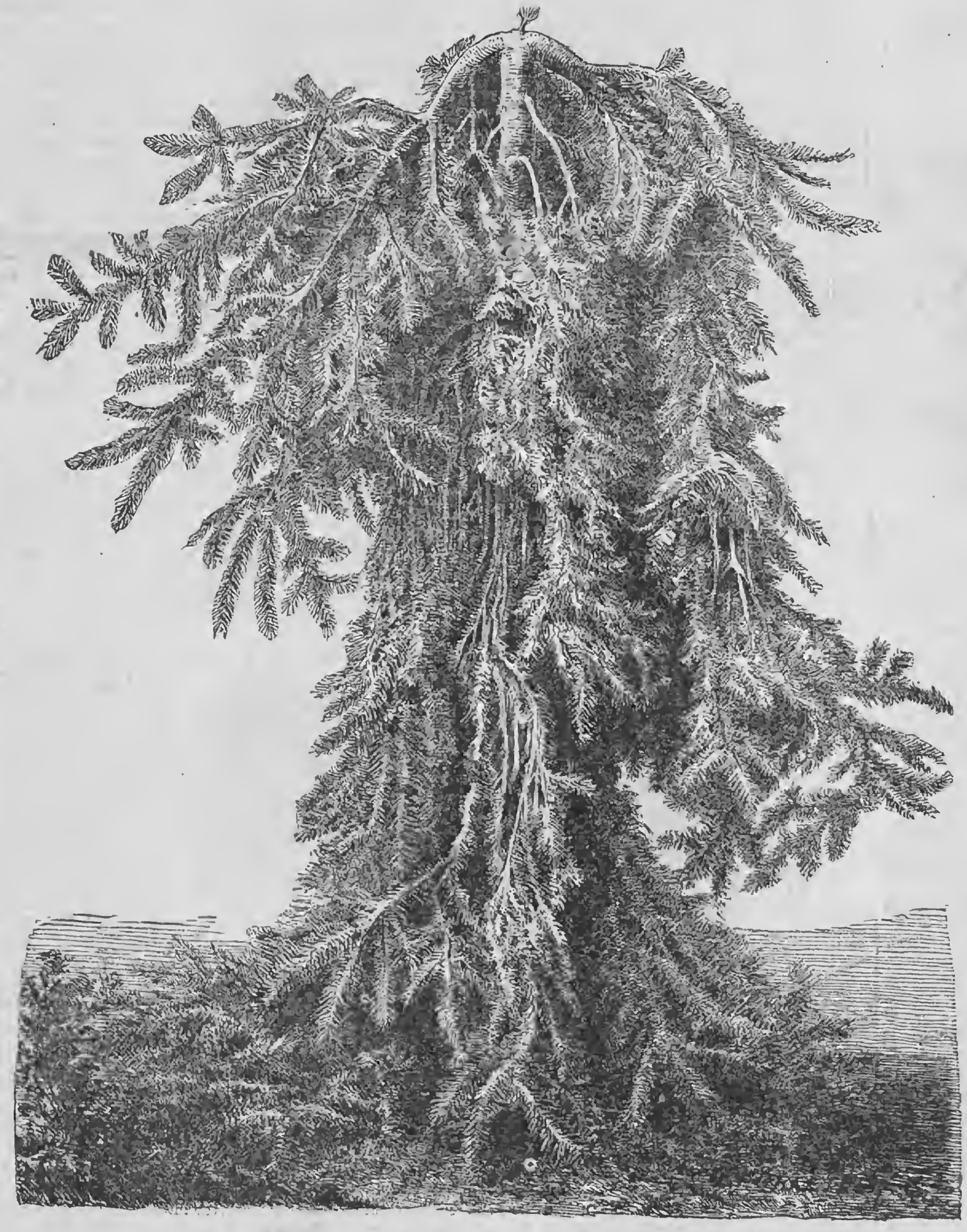
THE WEEPING NORWAY SPRUCE.—(Abies excelsa Inverta.)

This curious evergreen (of which the accompanying sketch is an exceedingly accurate portrait) belongs among the rarer and choicer kinds of hardy ornamental trees. It is not an old variety, having been first offered to the trade some twenty-five years since. The specimen—about five and a half feet high—from which the sketch is taken, stands near the house of Mr. S. B. Parsons, Flushing, L. I., in which spot it has been planted some six years, being at the time of planting about eight years old. No assistance, in the way of pruning, has been given to it, except an amputation performed on the leader once or twice, in order to encourage bushiness at the base. A good stout stake has been employed to induce an erect growth, but only because it had been neglected in this particular during early youth.

The curves of the branches are not strictly weeping, as the term is usually accepted; but after drooping down and hugging the stem in the most determined and melancholy fashion, continue here and there to burst away and turn up with strange vigor and eccentricity. In fact, the name Inverta well indicates its peculiar nature, for inverted it is in every way. This very waywardness would readily suggest the idea of a fountain of green foliage, only that there is a certain sedateness that could only belong to the fountain if suddenly frozen.

Like the parent Norway Spruce in most of its qualities, it transplants easily and is of a very hardy and healthy nature, though, like all weeping or variegated plants, it is more dwarf and of slower growth. It is, therefore, specially suited for planting near the house or in cemetery lots. By tying lightly to a stake and removing only the tips of branches, the effects of pruning need never become very noticeable. It is also quite important that such training should commence in early youth. Later in life, it is liable to distort if neglected. It will be found, therefore, a great advantage if the plant purchased has been treated in this manner. Many nurseries allow them to straggle about in the row until one hardly recognizes the plant.

The proper position of this tree on the lawn, is in some conspicuous place, where its grotesque yet graceful form may be fully open to view. To accomplish this, it should be planted in an open space, or among low, broad evergreens. For the same reason, it would be especially beautiful, as already remarked, occupying the position and suggesting the idea of a fountain in the center of a small lawn or grass-plot. Perhaps, as a rule, it should always be planted singly, although we do not doubt that very effective groups might be made by combining it with contrasting evergreens. The group, however, in this case, must be arranged with some knowledge of the nature of the individual plants, otherwise there will grow up an incongruous mass. This remark may be also considered true of any grouping of ornamental plants, but it is especially true of the Weeping Spruce.



WEEPING NORWAY SPRUCE.—(From Life.)

WHAT SHALL I PLANT?

No. 1.

SAMUEL PARSONS.

Twenty years of experience have proved to us the serious difficulties encountered by those called upon to answer this question. A large catalogue of trees and shrubs, with full descriptions, is presented for inspection; but the space in any catalogue is too limited for really satisfactory descriptions; and such problems as, "What shall I buy to make up groups of flowering shrubs or many-colored evergreens?" are left practically unanswered. If the lawn be only in the first stages of construction, the landscape gardener may be economically employed; but every one interested in plants desires to add to their number continually. To assist such, we desire to make a few suggestions, and name a few of the choicest plants, with some of their uses.

It may be assumed at once that common trees, like Norway Sprnces, Maples, or White Pines, belong to the original frame-work or outline of the place, and hardly come within the scope of our present remarks. They are rarely added to or changed from year to year, unless the place is radically altered or enlarged, and our present wish is to call attention specially to such plants as give a rich finish and variety to an otherwise old and fine place.

First and foremost we want groups of Rhododendrons, planted three feet apart and selected from the hardiest Catawbiense varieties. These must be planted in position somewhat protected from the north and northwest, and covered with evergreen boughs for at least the first winter. Let the soil be loamy, rich and well drained, and especially not raised into a mound above the surrounding surface. You will thus obtain a crowning effect on the lawn, and abundant flowers the very first year.

The Ghent, or Hardy Azaleas, of varied hues—rose, crimson, white, and orange—are hardly less grand than the Rhododendron, and no less exquisite. They may be fringed about Rhododendron beds, or planted in effective masses by themselves. Their treatment should be much that of Rhododendrons, as to soil, &c.

Of slower growth they may be planted from two to two and a half feet apart, and given less protection, as they are very hardy, and profuse bloomers.

Splendid masses of color on the lawn may be formed with Hydrangea paniculata grandiflora, the great flowers of which appear in August—first white, changing later in the season to purple, pink, and dark-red. No lawn can afford to spare any of these effective groups, as they give the choicest bloom throughout the summer.

The proper disposition of various flowering shrubs—Wiegelas, Spiræas, &c.,—in groups, or belts for screening unsightly objects, so that flowers may appear scattered throughout the mass during several months of the year, is productive of the best results in perfecting the details of lawn planting. Then, here and there, along walks, or on the outskirts of the lawn, may be planted singly such choice flowering shrubs as Cercis Japonica, Exochorda grandiflora, Viburnum plicatum, Magnolias Halleana and conspicua, Dwarf Horse-chestnut, and Stuartia pentagyna, so beautiful in midsummer. All these are of good size, and suited to prominent positions. Nearer the house, also on the edges of walks, such flowering shrubs may be employed as the sweet-scented and delicate Daphne Cneorum, the Rhodora Canadensis, the Hypericums, and Flowering Almond, all blooming at different seasons.

We have thus dwelt briefly on the finest flowering plants, and given a few hints as to their proper arrangement on the lawn. Indeed, all such are particularly fitted to add the more delicate forms and colors, that amid the massive proportions and shades of the Oaks, Maples, and Spruces, enhance so greatly the charm of the entire effect.

There are yet other plants well suited to increase this same effect, concerning which we may, at a future day, hope to offer a few practical remarks.

MID-WINTER BEAUTIES.

As we walk about the RURAL GROUNDS to-day, there are several plants that are attractive beyond most others. They show that with a little care in making selections, the winter garden might be made far more interesting than it is.

The Golden Retinospora is now as richly golden as in the early fall, and must be ranked among the first of hardy winter plants. It is charming at any season of the year, perhaps most so just after it has made its growth in spring, when the new shoots present an incomparable freshness and delicacy of coloring. But now we prize it more in contrast with the dull brown or olive color of Arbor-vitæs, Spruces, and Firs, and see that all vegetable life is in the very depths of its wintry rest. There are some plants so beautiful that we are impatient at their slow spread and appreciation. Spring is upon us. We tell our readers, who have plants to order, to include this.

Shall we implore them to do so? Shall we say, "Do it if you value our friendship?" And then should the plant disappoint them—what then? Then they need not ever speak to us again. So you see, RURAL friends, how much we are willing to hazard upon the beauty and worth of the Golden Retinospora.

The variegated Pinus Massonianus is a tree of great promise for this climate. Its "needles" are now of a bright yellow, and it has thus far stood the winter without the least injury. Our account of it, with an engraving, a few weeks since, will be remembered.

As a winter out-of-door plant, Yucca filamentosa is of rare merit. For hill-sides, lake-borders, or clumped here and there among dwarf evergreens, its long curved leaves, which remain quite green through the winter, are always pleasing to look upon.

VARIEGATED EUONYMUS RADICANS.

Kalmia latifolia, our Mountain Laurel, is now one of the greenest shrubs to be seen. It is quite common in some of the woods within a short distance of these Grounds, and yet it is rarely to be seen in the gardens of the neighborhood. Several have tried to transplant it without success.

It is only necessary, however, to dig about the roots, so that the soil may adhere to the fibers which grow near the surface, and to shade the plants during the first spring and summer. Their flowers, which vary from white to rose, are both odd and showy. (See page 137.)

Among deciduous shrubs which attract the eye in winter and are worthy of a place in our winter garden, is the blood-wigged Dog-wood, Cornus stolonifera (or sanguinea of catalogues). The stems are as smooth as glass, and of the color of blood, so that, especially when snow covers the ground, they stand out conspicuously. The variegated Euonymus radicans is also a sturdy dwarf bush with evergreen leaves of light green margined with white. (See cut).

There are scores of plants that are as pretty in the winter as in the summer, a happy selection and arrangement of which, as we stated in the beginning, would render gardens during that long dreary period, rather more inviting than they seem to be at present.

Prof. Gray, in the American Agriculturist, tells of Mr. Francis Parkman's experience in crossing Lilies. We cannot give the particulars. But the gist of it is, that with only two or three exceptions, all the seedlings closely resembled the female plant. Liliums auratum, speciosum, longiflorum and superbum were the species used for crossing.

Prof. Gray concludes his article as follows: "All this is very curious indeed. We knew that offspring might take a great deal more after one parent than the other. But that the female sex should be so prepotent in Lilies, is a quite unexpected result. That in so many cases the influence of the male parent should be imperceptible is most wonderful."

Several years ago, the writer became interested in crossing Pelargoniums, the main results of which were published in these columns a while afterwards. In the hopes of producing a variety which should bear flowers as intensely scarlet as Jean Sisley, with a pure white center much larger, we crossed it with Madam Vaucher, one of the oldest white Pelargoniums, and still one of the best. From the seeds thus obtained, we raised at least fifty plants, and *every one* was scarlet, most of them with a white eye smaller, and not one larger, than Jean Sisley. This was made the female parent because it formed seeds far more readily than the pollen parent Vaucher.

In our other crosses with Pelargoniums, also, it always seemed that the female parent, was more potent in impressing itself upon the seedlings than the male, but as in these instances we were simply striving to obtain improved varieties, we cannot speak with any precision.

It may appear from the above that there are other genera besides Lilium, the seed bearers of which, when crossed with other species, are more potent than the pollen parents in transmitting their likeness.

Rural Grounds, Feb. 20.

The Horseman.

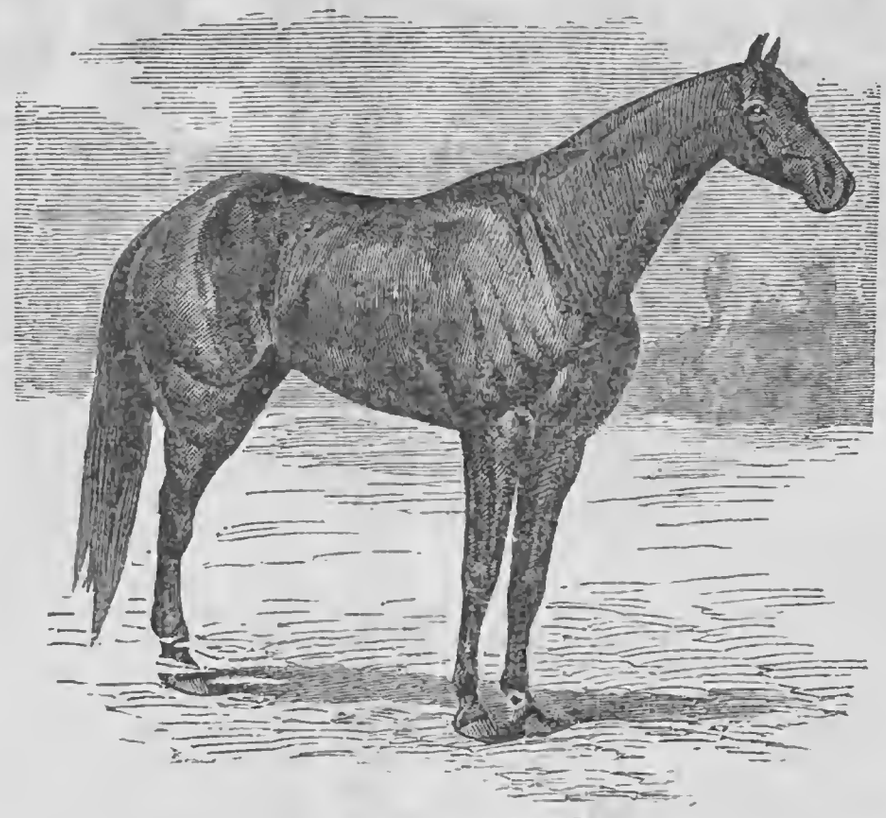
NOTED TROTTERS. NO. 2.

CASSIUS M. CLAY, JR.

IN the once splendid horse, Cassius M. Clay, Jr., now somewhat aged, is liberally united the blood of the famous Bashaw with that of the still more illustrious Messsenger.

The Bashaw race owes its origin to Grand Bashaw, a horse imported from Barbary, and it has been represented principally through his son, Young Bashaw, and the latter's sons, Andrew Jackson, Black Bashaw and Saladin. The first of the trio was also the first stallion that ever trotted in public, his best performance having been in 1835, when he trotted two miles in 5.18. Before his day, the opinion was general that entire horses would be ruined for service if "put through the mill" for racing purposes. Cassius M. Clay Jr., is his great-grandson through Henry Clay and old Cassius M. Clay, also the sire of George M. Patchen. It is pretty generally conceded that the Bashaws are inferior to the Messenger line as natural trotters; but it is no easy matter to separate them, as Young Bashaw's dam was a Messenger mare, and in many other cases, also, the lines have been intimately mingled. For instance, Cassius M. Clay, Jr. received, through his dam, another strong dash of Messenger blood, his maternal grandsire, Chancellor, having been by Mambrino, son of the far-famed Imported Messenger.

From this gray, thorough-bred, English horse, imported into this country in the latter part of the last century, all versed in the origin and characteristics of the American trotting horse, concede that the highest types of that valuable race are descended. Indeed, in view of the excellence of which he was the founder, and of the vast extent of the interest that has sprung from his loins, it has been well remarked, though perhaps with just a trifle of enthusiastic exaggeration, that when he descended the gang-plank of the vessel that brought him over, the value of not less than one hundrod million dollars struck our soil. Before his death, in 1808, he covered in this country, during 20 seasons, and as he had plenty of mares and was a sure foal-getter, it is estimated that he must have been the sire of about 1000 horses. His sons also were long-lived and as constantly employed in the work of increase as himself, and his grandsons likewise impressed on their multitudinous progeny the excellent characteristics he owned and conferred. Now, taking into account the remarkable power these horses had of stamping their living image on all their get, and of infusing into their sons and daughters the attributes of pluck, resolution, and endurance, some estimate can be formed of the vast influence Messenger has had on the trotting stock of this country. Experience has shown that the blood of this celebrated horse "hits" with almost any other strain, a fact that increases the value of the pedigree of Cassius M. Clay, Jr. This stallion is of a rich brown color, and nearly 16 hands high. His legs are clean and flat, his shoulders sloping his chest deep and back short. He has powerful hind-quarters, a beautifully set-on head, a flowing mane, heavy tail, and a fine, graceful carriage. His eye is marvelously full, and his hoofs round and solid. He has now a numerous progeny, favorably known among the "Clays."



GEO. PALMER.

GEORGE PALMER.

Some military commanders, like William of Orange, for instance, have achieved an honorable reputation for generalship, although pretty uniformly unsuccessful in the field, and similarly, George Palmer, who died a couple of weeks ago, won high distinction for speed, although ordinarily unlucky on the trotting track. Like the English King, his misfortune lay in that he was far too often matched with the very few rivals just able to baffle him. Lady Thorn, Goldsmith Maid, American Girl, and Lucy, the illustrious quartette of mares, that since the withdrawal of Dexter, have generally carried off the highest honors of the trotting track, were, all or most of them, his chief competitors in his most famous efforts. Although more than once he outstripped each of these in individual heats; still one or other of them was fortunate enough in nearly every instance, to win the chief honors, and, better still in their owners' eyes, the first money. For instance, on the 8th of October, 1869, in a race with the four mighty mares at Narragansett Park, he won the third heat in his best time, 2 m. 19¼ s., and carried off the second money; but Lady Thorn gained the race, after having won the second heat in her best time, 2 m. 18¼ s.

George Palmer was a bay gelding, small, narrow, and light in the bone, and at first sight few would consider him as fast and enduring as many closely contested races proved him to be. It is generally believed that his sire was a horse called Lame Bogus and his dam an unknown mare; but late researches prove that Lame Bogus died in 1843, while George Palmer was not foaled until 1861. According to WALLACE'S recent discoveries he was bred by ALLEN WATSON, of Stafford, Genesee County, N. Y., and was got by Ames' Bogus, known after his son had become famous as Palmer's Bogus, a grandson of Lame Bogus, through his son Ballard's Bogus, a fine bay, 16 hands high and an excellent roadster. Palmer's dam was a chestnut mare, said, without sufficient investigation, to have been a daughter of old Henry Clay, the sire of Cassius M. Clay, and progenitor of the Clay breed of trotting horses.

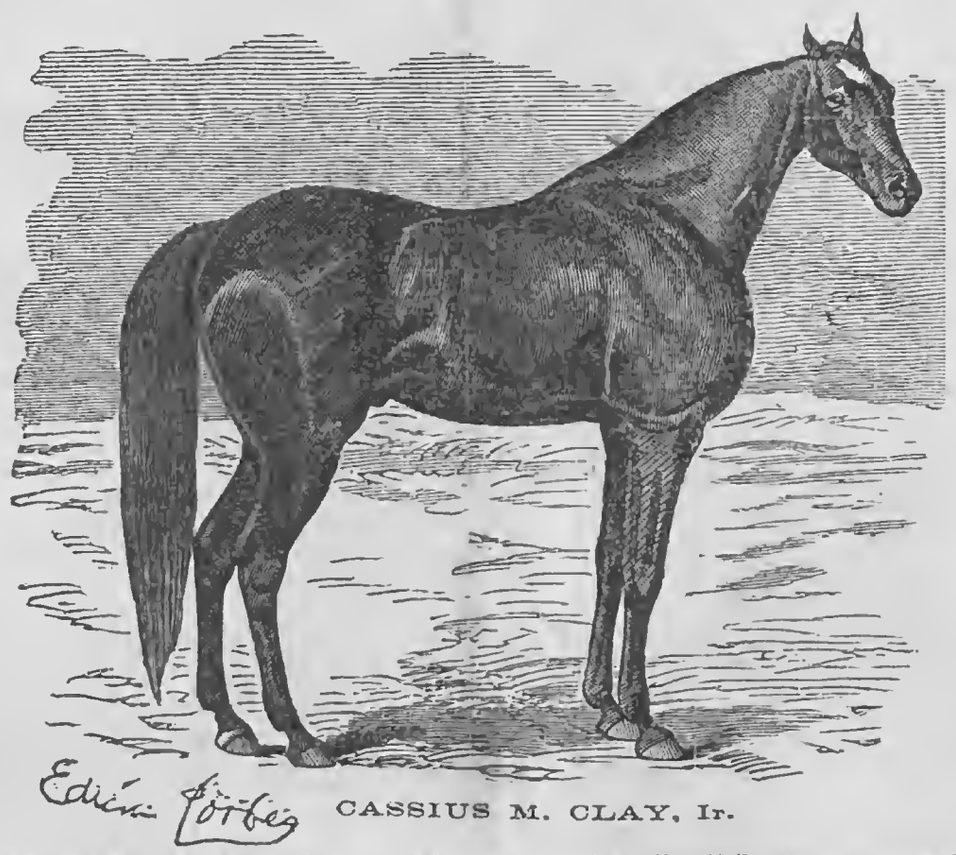
Farm Topics.

WHY CITY FARMERS FAIL.

WM. J. FOWLER.

THE stress of the time is compelling thousands of families who have heretofore lived in cities, to go to the country. Men who have failed in other business take the remnants of their fortunes and betake themselves to the country with the idea that they can make money by farming. Almost invariably this idea has proved delusive. Men who do not succeed in avocations where they have spent their best years and which, it is to be presumed, they understand, will not usually do better in a business about which they know little or nothing. Farming especially is a poor business for beginners. It requires considerable capital and unless this is carefully watched much is sure to be wasted. Besides, at the best, farming is never a very profitable business. During the last four years only good farmers have made any thing more than a living. If we are to have an influx of thousands crowded out or starved out of the cities the prospect ahead is quite as blue. Farming is a safe business, but even this is only true of experienced farmers, for they are invariably so cautious that they would make any business safe. If the beginner in farming thinks of going ahead at railroad speed, there is just as much likelihood of a smash-up on the farm as on the rail.

We know very well the answer which will be made to these forebodings. It is that the city farmer proposes to do so much better than all his neighbors that his increased expenses will be more than met by still larger profits. They know only the rose-colored side of farming. "Nature works for the husbandman. He plants or sows the seed and the crop is growing while he is sleeping." These and like aphorisms have satisfied them that farming is a simple and easy business. If farmers do not make money, it is because they are so incorrigibly stupid and old-fogyish. With all their doubts about the ability of average farmers, they have none



CASSIUS M. CLAY, Jr.

whatever as to their own, "Wait till we get on the farm, and we will show the natives how good crops are grown!" This is the thought and often the language of men who hope some day to be farmers. We met such a one years ago, who had bought a hundred-acre farm and retired from professional business. "I presume I shall have no trouble in managing the farm. I have learned that the secret of success is always to use plenty of manure on every crop." "Certainly," we replied, a good deal piqued by his affected mastery of the mysteries of farming in one easy lesson. "It is just as easy, Doctor, as your old business. The secret of success in medicine lies in always giving remedies adapted to cure the disease. It is all simple and easy." The Doctor took the hint. He became afterwards an excellent farmer, but he learned how difficult it often, and indeed always, is to follow his excellent agricultural prescription, "Plenty of manure for every crop." That is exactly what we all want, but how and where shall this enormous amount of fertilizers be obtained?

Good practical farming involves a greater amount of thought than any other avocation. The conditions of success are more complex than in any other. It is, least of all, a business for lazy, listless men who dread the drudgery of thinking. Nor is more acquaintance with the ideas and practices of progressive farming enough. There must be practical experience on the farm and some degree of practical work and attendance by the owner. Thousands of farmers fail for lack of this, especially men who disdain to learn the ways of common farmers in the conceited assurance that they can do a great deal better. There can be no greater mistake than this. If we want to improve anything the first requisite is to thoroughly understand its methods and management. No man learns to be a superior farmer until he first learns how to be a good ordinary farmer. Honest JOE GARGERY'S advice to PIP, when that young gentleman aspired to be something uncommon, contained a world of shrewd and homely wisdom. "You will never get to be uncommon till you have first got to be common." This is true of almost everything and is especially true of farming.

Possibly the later recruits to the agricultural interest come with humbler notions and more teachable spirit to learn its mysteries. If so, their chance for success will be so much the greater. It is best at first to attempt no innovations on the established customs of the neighborhood. Improvements are doubtless possible, but let them be suggested by practical experience. This may make progress slow; but it will be sure, and it may save you from mortifying failures. After you have first become "common" there may be hope that you will become "uncommon." In the meantime there is consolation in the fact that farmers throughout the country are reasonably sure of a good living, and that is more than thousands in the cities have been able to make these last few years. It will require some work, but this is only fulfilling the original decree passed upon man that in the sweat of his brow he should earn his daily bread. Trying to evade this decree, is one chief cause of hard times. When we see a return to habits of industry, the revival of all honest business cannot be long postponed.

RURAL TOPICS.

T. B. MINER.

HOW TO MAKE FARMING PROFITABLE.

I WILL lay down a few rules for successful farming as follows:

1. Have order and system in all you do, having in your mind in advance what crops you intend to grow; and provide the seed, so that no delay will occur when the time comes for sowing and planting. You should also closely estimate the amount of stable dung that you can spare for crops, so that in no case shall a crop be grown on land that has already been overcropped, unless some fertilizer has been applied to it.

2. Obtain good help, if possible, as half of your success depends on the kind of hired help you have; and don't employ too many hands, as a man and a boy will often do as much as two men, especially if the latter are left to work by themselves, as they frequently spend half of their time in talking; but a man is not apt to talk much with a boy, and the consequence is that he attends to his work. Of all the nuisances that I ever suffered on a farm, I have found gabbling help to be the most unprofitable. When I hire a man, I tell him plainly that he must not "fool" away his time (my time) in talking to other men while at work, unless he wants his "walking papers."

3. Work *with your help*. This is the key that unlocks the door that leads to prosperity; but don't say any more to them while at work than is necessary, as you will set a bad example by telling "yarns" etc. Suppose that a farmer is hoeing corn with two or three men, and he says, "Boys, have you heard the news?" And he and all stop work, or partially stop, to hear the "news," which takes, perhaps, 15 minutes to relate, and what little corn is hoed while the "boss" is relating the "news," is but half-hoed, and might as well not have been hoed at all. Now, a day is made up of *minutes*, and the waste of a few in this or that way constantly during the day, is sure to result in unsuccessful farming in the end. Say to your man, in plain English: "Shut up and attend to your work, or take your money and go. I hire men to *work*—not to spend their time in talking."

HOLSTEIN BULL "UNCLE TOM."

4. Don't covet the name, "he is a good man to work for"; but rather the name that I had many years: "He is a hard man to work for, but he is good pay." That meant that I made my men do a fair day's work, which hired men now-a-days call "hard." The fact is, farmers, that nine farm-hands out of ten won't do half a day's work, on an average, if you are so easy with them that they call you "a nice man to work for."

5. To do good work, you want the best farm implements that you can obtain, and plenty of them, so that if one gets out of order while in the hurry of work, you can use some other implement till the broken one is repaired. You will save money in the end, by throwing away your old plows, which were made about the time of the deluge, and getting the best patterns, with steel mold-boards, as they pay for themselves in a single season in the saving of horse-flesh in their draft. Again, see the old rusty hoes that many of you use, bought perhaps twenty years ago! Take out the handles and sell the hoes as old iron, and buy new ones, because you can do one-third more work, and do it much better, in a day with one of the most improved new ones, than you can with one of those old stubs that some of you use.

6. Feed your land, if you expect it to feed you. Make all the manure that you can, as this is the bank that pays your drafts and notes. The best farm that exists may be ruined in a few years by a continued cropping, without applying manure; and put under the plow only what land you can fertilize liberally. Adopt a rotation of crops, and keep your pasture and meadow lands in good condition, as the profits on your cows depend on the quality of their pastures, and the quality and quantity of hay that you cut; and keep good stock, as a cow that gives twenty quarts of milk a day, can be kept almost as cheaply as one that gives only five quarts.

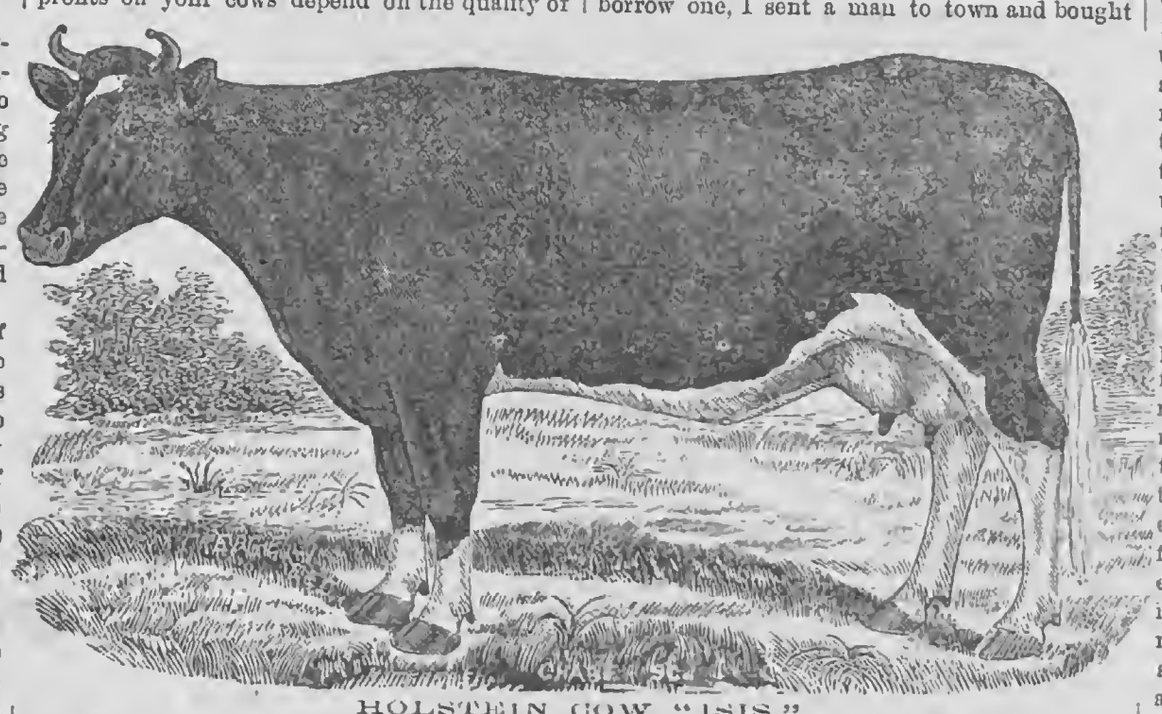
7. "What is worth doing, do *well*." Put this into your memorandum book where you can see it often. Did you ever hear of a slovenly farmer getting rich? No, not one of you. Then do your work well, as it pays the best in the end. If you are making fences, make them to stay as built, for years. A good farmer may be known by his fences alone.

8. Carry a memorandum book in your pocket, in which to note down things that are to be done, or that are wanted; and by so doing you will save much time. Your team, for instance, is going to the village. You refer to your memorandum book, and you find, "plow-share to be sharpened," "a new helve for ax," "nut for mowing machine," and other things that you would not have thought of, if they had not been noted down in your book; so this may save you the time and trouble of sending again to town the next day. Farmers, there is money in *head-work*, as well as in your physical strength.

To-day is pleasant, and you and your help are at work in the fields. Now, suppose you think over in your mind, "What can we do if it shall rain to-morrow, or next day, or at any time?" Well, the idea strikes you that you have a few hundred fence posts in the woods, that could be holed on a rainy day, under your barn-shed, if you had them there; so after dinner you send a team for a load or two of posts, as the weather seems to forbode rain soon, and the next day a storm comes on, and your hired men are kept busy at the posts. So you see how profitable it is to do a little "head-work" occasionally.

9. Don't borrow farm implements of your neighbors. This is one of the rules that every farmer should heed, as it prevents your neighbors becoming your enemies. If a farmer has a good implement, he had rather, in many cases, give his neighbor a dollar than lend such implement to him, as, in most cases, it will be returned to him injured, or out of order. Indeed, if the owner does not have to send for it two or three days after the time that the borrower agrees to return it, he may consider himself fortunate. Every farmer should buy every kind of implement that he may need. I once had occasion to use a large stone sledge-hammer—one large enough to break stones of 200 or 300 pounds weight to pieces. A few hours' work was all I had for it; but rather than borrow one, I sent a man to town and bought one for three dollars; and I have found it very useful in driving stakes into the ground in making fences, and for various other purposes. So I say to farmers, *don't borrow*, but buy what you need.

LINDEN, N. J.



HOLSTEIN COW "ISIS."

The Herdsman.

HOLSTEIN BULL AND COW "UNCLE TOM" AND "ISIS."

WE have the pleasure of presenting the readers of the RURAL, portraits of two fine animals of the Holstein breed belonging to the herd of Messrs. SMITH & POWELL of Syracuse. The bull, "Uncle Tom," by "Rip Van Winkle," out of "Topsy," was two years old in April last, and when put on the scales in October, weighed 1710 pounds. The cow "Isis" is his full sister, was four years old last summer and then weighed 1510 pounds.

Mr. W. R. SMITH has recently returned from Holland bringing with him ten yearlings, two two-year-old and one four-year-old cow, for this herd. They are represented as a very superior lot; even in size, uniform in color, large, smooth and handsome.

This strikingly handsome breed of cattle is steadily increasing in favor, there being a good number of importations every year. In size they fully equal and often surpass the Short-Horns. Black and white are the only admissible *colors*, if that expression be allowable. The cows are great milkers, and it is for their dairy qualities that they are so much valued. The best come from Friesland and North Holland.

JOTTINGS FROM MY NOTE-BOOK.

CLINTON.

PUMPKINS FOR DAIRY STOCK.

THE wise man tells us that "There is nothing new under the sun." But, verily, the idea recently advanced by some that pumpkins, containing their seeds, are specially hurtful when fed to milch cows, is certainly new to me. From my earliest recollection, they were thus fed by my father, as they had been by his father before him; and I continued the same practice during the succession of years in which I was engaged in dairying, without ever dreaming of the risk we are now supposed to have run.

The practice was to collect a quantity of the pumpkins, as soon as the flush of fall feed began to diminish, and each evening, after milking, scatter them about on clean grass ground in some convenient place, breaking them up into pieces of convenient size for the cows to masticate freely, without a thought of any necessity for first removing the seeds. It strikes me as somewhat remarkable that if this new theory in regard to the injurious effect of the seeds on the cows, is correct, that I never discovered it in the course of more than forty years' opportunity for observation, and I flatter myself that I paid more than ordinary attention to all such matters, and I think I may safely say this without subjecting myself to the charge of egotism; and I will further say, that during the whole time that I was engaged in dairying, I never lost a single animal by disease, never had one affected by anything more serious than mere temporary illness, and never had a single case of abortion in my herd. During all this time, my cows were fed freely with pumpkins—seed and all—every fall, according to the supply.

It is not claimed that the pumpkin furnishes any great amount of nutriment, in proportion to its bulk, as we know it is composed largely of water. The same is true in a greater or less degree of the beet, the carrot, the turnip, and the cabbage, and yet we find them all to be valuable feed for dairy stock. That the pumpkin tends to increase the flow of milk, I have had ample evidence. Another advantage in the feeding is found after beginning to feed hay, in keeping up the color of the butter as well as its flavor, and in this respect it is only equaled by the carrot. Partly with these objects in view, the practice has been to gather the pumpkin crop prior to the coming on of hard frosts, store them under cover, and feed them out daily in the stalls. Should the weather become quite severe before the supply is exhausted, a covering of hay or straw may be used for further protection.

The diuretic property of the seeds of the pumpkin has long been believed in, and was formerly almost proverbial. But personal experience induces me to believe the idea was very much exaggerated. When the country was new, fruit was far less abundant than at present, and to make up for the deficiency, it was customary each fall, to dry large quantities of pumpkins for future use. My father's family was not an exception to others in this usage. While a boy, it was part of my duties to assist in the preliminary preparations for this drying, and an important perquisite to me was the privilege of saving as many of the seeds as I desired for my own future use. After drying them carefully, I stored them away as carefully, for that purpose, and used them as frequently and as freely at any and at all times, as I desired, without experiencing the least injury or inconvenience to myself. Indeed, I used them as freely as peanuts (then unknown to us) or other nuts are used by

children at the present day. Hence I am induced to believe that the *scare* about their injurious effects is all "moonshine."

The Poultry Yard.

THE BRAHMA FOWL.

JOSEPH WALLACE.

I HAVE no desire to enter into, much less to continue a controversy on the Brahma or any other breed of fowls, unless it tends to throw some new light on the subject at issue. I am not seeking notoriety through the press as being the first one in this country or in Europe, who has questioned the native land of this mysterious fowl. I wish from my heart that I could give my country priority, and pre-eminence in every thing that is noble and useful, but as this subject is one of great interest to poultry breeders, I must forego my wishes for the present, and try if I can remove the veil which shrouds the origin of the Brahma breed. I feel the impropriety of occupying too much space in these columns, and as it is impossible to be explicit in every detail, I have to confine myself to general remarks without being able to give the full texts of the authors whom I quote.

In the RURAL of December 29th, I said, "The Rev. JEAN B. PROULZ, in his book of "Travels through India, Siam, and China," accurately describes the domestic fowls of these countries, especially the Brahma which he admired above all others. Now, when I said *accurately*, I meant the word in its widest sense—as clear and concise a description as any breeder of this fowl could give in general terms without the "Standard' as a guide. I am satisfied that when a person describes every part, point, and feature of a particular breed of domestic fowls, I know, or at least I fancy I know, that he is not describing an ostrich, or a condor. It is true, he did not call the fowl Brahma, or give them any specific name. But not so with Dr. HASTINGS, who was well posted in such matters as I inferred from his introductory remarks on poultry. He called the fowl he particularized "Light Hindoo" and says: "They were bred with great care and exhibited by the vaisyas (merchants) in fancy *yum sulas*, (sandal wood coops). Some of the native breeders select places where the fowl can have free access to granite or white sand, with the view of giving their plumage a whiter appearance. Pure white fowls though sometimes seen, are very rare in India. Some castes worship them as the Birmins do the white elephant."

Mr. MINER claims that the United States is the "fountain-head" of the Brahma breed. He has not advanced a point to show that they do not exist outside of this country only by *negation*. Indeed, he says "poultry breeders have earnestly sought to ascertain their native land but in vain." Pray, who were the breeders who sought to find out their native land?" I venture to assert that many of the breeders he classifies as such, never left their native States in search of the much desired information.

Doubtless ere this, thousands of the RURAL readers have asked themselves the conundrum, "How were the first pair bred?" "Were they adult fowls when they came to New York. "They must have originated from a pair of the same breed, &c." Now, it is a philosophical axiom, "that like produces like," and if this is a fundamental law of nature, certainly Mr. CHAMBERLIN'S pair must have come from Asiatic fowl of the same or a similar kind; surely they were not bred from the pelican or the fabled roc, and most assuredly, Mr. MINER is a disbeliever in mythology, and would not venture to assert that they had sprung from the brain of some pre-historic mammalia. However, is it not reasonable to suppose that the Brahma had a pedigree like other breeds? And if they were the result of a cross, doubtless their original breeders would have taken advantage of the "cross," and produce "chips from the old block."

From my own personal knowledge of fowl breeding, having had over thirty years' experience; having bred most of the varieties now known in this country, and some which are not generally known to our poulterers; from observations during travel in foreign lands; chit-chat with East India seamen, and soldiers—and the familiar descriptions which came from the lips of my venerable father (who was well posted in poultry and who spent many years in India, and the adjacent islands,) I am led to believe that American poultrymen too fondly hug the delusion that the Brahma originated with them.

Mr. MINER thinks that Captain STUART had no pure bred Brahmas in 1846, because it was not heralded throughout Christendom. STUART had a pair of Asiatic fowl as pure, as true to color and markings as any Light Brahmas of the United States prior to 1852. They were known by the name "Light Indo," and at the time they did not cause much curiosity, as the Gray Shanghæ and Malay breeds were in advance of them, some two years. Moreover, Sea Mount was an isolated country-seat near the Atlantic coast—away from public travel, and at a distance from a newspaper office. The Captain too was an invalid and, no doubt, could not bestow proper attention on his fowls, and if his intentions were to breed exclusively from his "Indo" fowl, he was unfortunately disappointed, for the cock was maimed by one of his ferrets, so as to render him useless.

Sir RICHARD raised the first year some nice "Dark Indo" fowl, but after a while they got mixed in with his Malays, and they lost most of their distinctive characteristics. But Mr. MINER says that "the Dark Brahmas originated with Mr. BURNHAM of Roxbury, Mass., and that there were no Dark Brahmas known before 1856." For the present I concede Mr. BURNHAM'S claim as the first *American breeder* who produced Dark Brahmas. But I respectfully enter my solemn protest against his claim as being the original breeder of them. With all due respect to Mr. BURNHAM, of Melrose, Mass., I aver that there are scores of breeders throughout Asia, who could teach him or any of our "fanciers" a lesson in cross-breeding, and in breeding to color. It is questionable if Mr. MINER doubts that a people who have known and practiced artificial incubation, cramming, &c., for upwards of two thousand years, and who have bred and domesticated all the beautiful varieties we now have, from the wild *Gallus Bankiva*, to the meek-eyed, giant Brahma, can yet be ignorant of the method of producing a change of plumage without relatively changing the breed.

Mr. MINER seems to have not much faith in the authorities I cited. He says, "French clergymen, and British army officers, are not supposed to be good judges of any breed of poultry." This may be true in general, but there are exceptional cases. I consider them reliable, and evidently better informed on Asiatic breeds than most travelers. PROULZ held the professorship of Natural History for several years, until his health compelled him to travel abroad, and Hastings' learned disquisitions on poultry, prove that he was "master of the situation."

I regret that the works of these gentlemen are not in my possession. If they were I should send them to Mr. MINER with pleasure and without pay. PROULZ'S Travels was purchased some sixty years ago by my father at Brussels, and Hastings' book I bought in Liverpool, in the spring of 1847. I prized these books, not alone for their remarkable descriptions of Asiatic poultry, but also for their graphic accounts of the habits, customs, and religious rites of the Indo-Chinese race. I lost them, or at least had to abandon them with other things at "Limkins' Mills," some ten miles from Holly Springs, Miss., in the winter of 1862.

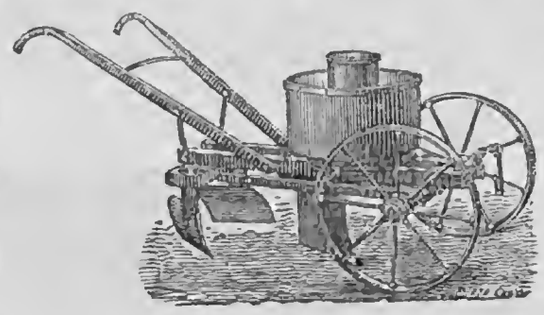
Industrial Implements.

TRUE'S POTATO PLANTER.

A POTATO planter that has been growing steadily in favor of late, is used for illustration in our columns of the present issue. It may be briefly described as an iron cylinder, which works as a hopper, resting on a frame. The bottom plate of this cylinder is made to revolve by the wheels acting on cogs. The plow under the hopper, opens a furrow, into which the seed is dropped, and the coverers following, effectually cover it in. The plow may be made to work at various depths, the coverers may be adjusted to work in unison. The drive wheels are constructed to work independently of each other, if thought desirable, and by means of a lever convenient to the operator's hand, the machine is thrown in or out of gear.

The important feature is the cylinder first mentioned. Into this are thrown the potatoes; about a bushel. They fall onto a revolving bottom which is indented with what are termed "seed boxes," and these boxes pass in rotation over the knife. The knife is fixed, and so placed relatively to the seed box, that the potato once in the box remains there until completely sliced and dropped into the furrow. The potatoes are cut somewhat like a wedge, that is, one end is thicker than the other. This is thought to be of advantage by some. The back part of the plow is open, and the operator has the satisfaction of seeing each piece drop, besides keeping constantly in view the length of furrow from the plow to the coverers. This advantage insures precision of planting, and is moreover, we believe, a feature peculiar to this implement.

Gauge-rings exactly fitting the seed-boxes are supplied for modifying the amount of seed sown, or to regulate the even distribution when different sized tubers are used. The seed, by this neat device, may be planted nine, eighteen or thirty-six inches apart in the rows. The fertilizer attachment that accompanies each machine, enables the farmer to use any dry, concentrated fertilizer that may be thought desirable. This attachment gauges the discharge, and is also supplied with an agitator to prevent clogging. Finally the machine is made in the best manner and is sold with a warranty.



Prejudice exists against preparing potatoes for planting in any other than the old way. Farmers seem to take a subjective view of the "eye" and become influenced by surface considerations. It has been shown by repeated tests with TRUE'S PLANTER that slice potatoes, not only are effective, but actually strike oftener than hand cut potatoes. The yield per acre is always satisfactory when the season is propitious, and in cases of severe drought, the machine-planted seeds have proved the hardier growers. This is accounted for probably by the fact that the seed going into the ground charged with moisture has that great advantage over a hand-treated potato that has most likely dried out by manipulating processes.

The advantage of a machine over hand planting in time is too obvious for reference; also its superior exactitude.

One man with his horse can cut and plant six acres per day under ordinary circumstances, and the manufacturers of the machine Messrs. NASH & BROS., 7 College Place, New York city, in their warranty, grant the privilege of planting five bushels before purchasing, as a test of the quality of its work.

Perhaps we cannot do better than insert an extract from a correspondent, Mr. J. D. RUE, Dutch Neck, N. J., who is a most conservative man and excellent farmer. It was some time before he cared even to try mechanical appliances for planting his large potato crop, but he eventually used a True Planter. He writes: "I was very much pleased with the manner in which it (the planter), did its work in every particular. I consider the yield equally good when the Planter was used, as when planted by hand. If there is any difference it is in favor of the Planter. I gave each a fair trial, planting alternate strips through my field of eight rows each, and measured the potatoes at digging time. I planted Peachblows, Peerless and Early Rose. The land was heavily manured with common barn-yard manure, plowed under." We think this a very thorough test. The Planter may be seen in New York, or the manufacturers will send all required information on application.

THE DAVIS SEWING MACHINE COMPANY, Watertown, N. Y., is extending its business with astonishing rapidity. The plans and specifications for additions to the main buildings embrace two wings, 40x105 and 20x32. With increased facilities and steam-power, the company will be in a position to meet the growing demand for this very popular sewing-machine. The merits of the Davis are too pronounced to need praise, and as the machine combines entirely new features, it would be well worth the while of our readers to see their circular.

Miscellaneous.

TESTING SEEDS OF GRASSES AND CLOVERS.

PROFESSOR W. J. BEAL.

THIS is delicate ground to tread upon, because it hurts somebody. Those who have bought seeds have been quietly (?) submitting, without a word; at least, many have bought poor seeds without finding fault. Buyers of seeds have some rights which should be respected.

A letter from a New York seed dealer thanks me for my previous article on testing seeds, desires me to test their seeds, and says, "The article will do legitimate, square, honest trade only good, and we thank you for it." The letter goes on to say that "the fault with your Western houses is, that every thing must be cheap or people will not buy it. Good seeds are worth good money. The commission box-trade in seeds in this country cannot compare in quality with the goods of regular seed houses."

In reading what follows, the author of the above quotation will see that the selling of poor seeds is not confined to Western houses which sell some seeds on commission.

A letter from another Eastern seed dealer thinks the article one of great interest, and says I have made "an important omission and, in justice to the seed trade and the public, it ought to be stated that the seeds tested were seeds sold on commission by grocers in the country." I hasten to make any and all amends necessary in this respect. I supposed that buyers and dealers generally knew how this business was done. It is commonly understood in our section of country, by buyers and sellers, that the grocers sell these seeds on commission. The boxes are taken around early in spring and picked up late in summer, probably to be overhauled and sent the rounds again and again, year after year. The second firm hopes I will continue the experiments and give some "reliable houses a trial."

I had but a limited time to devote to the subject, and began where I had the greatest suspicions of finding poor seeds. I intend, the coming season, to go quite largely into this testing business. At the Michigan Agricultural College we have tried many firms, East and West, and thought we knew of some which ranked high.

The past season I purchased directly of one of these reliable seed dealers, East, in New York, small lots of all the kinds of grasses and clovers which they could furnish. The name of the firm I will omit for the present. The seeds were tested in the green-house with great care. They were placed between folds of coarse woolen paper, and kept moist in a temperature of 56° to 70° Fahrenheit. At two different times, two lots of seeds were counted out, with fifty seeds in each lot. They germinated as follows:

Large Red Clover	41 43 47 46	total 177,	or 88.5	per ct.
Medium Clover	46 39 48 43	" 176,	" 88,	"
Bokhara Clover	35 28 15 18	" 96,	" 48,	"
Italian Clover	42 48 37 28	" 165,	" 82.5	"
Lucerne	37 39 38 35	" 149,	" 74.5	"
White Clover	44 42 42 40	" 168,	" 84.	"
Alsike Clover	40 37 30 22	" 129,	" 61.5	"

If good, the above should have averaged over 90 per cent. of growing seeds. About 95 per cent. would be what might be expected of fresh seeds. The above averaged a trifle over 75 per cent., if I have figured correctly. Our gardener feared we had not tested the seeds fairly. He tried seeds from the same lots, by placing them on sand kept moist by placing the pans in shallow water. Glass was placed over the pans (with some ventilation), which were kept at 50° to 65°. The result in this case was, that a trifle over 72 per cent. germinated.

I made similar tests of twenty-two species of grass seeds. The tests were more extensive than in the previous cases. At first we were not particular to take each from the chaff, so as to know that we had as many seeds as there appeared to be.

I have saved seeds of many kinds of grasses grown on the college grounds. Two years ago last summer I saved some, and three years ago I saved some. They have been tumbled about and kept in four different places, some of the time in a damp basement. I did not suppose they were good seeds, but they were the best I had on hand. With such seeds I have tried some of those taken from the lot above used, giving each the same chance. To be sure of the seeds, I shelled out a lot of fifty each with my own hands and eyes, assisted by a stage microscope.

		Grew.	Pr ct.
Schrœder's Bromus,	Eastern seeds	32	64
" "	Old College seeds	48	96
Sheep's Fescue,	Eastern seeds	0	0
" "	Old College seeds	36	72
Ky. Blue Grass,	Eastern seeds	3	6
" "	Old College seeds	14	28
Rye Grass,	Eastern seeds	9	18
" "	Old College seeds	37	74
Meadow Fescue,	Eastern seeds	3	6
" "	Old College seeds	46	92
Orchard Grass,	Eastern seeds	33	66
" "	Old College seeds	41	82

It will be seen that in every case the old college seeds spoken of were much the best. On the average, 74 per cent. germinated, while of the Eastern seeds only 26⅔ per cent. germinated. Remember that weak, old seeds produce weak plants.

Perhaps these tests of grass seeds will set some people to thinking. They may have wondered why they did not find all the varieties in the lawn where the seeds were sown. Kentucky Blue Grass or June Grass is ever present in our soil, and ready to grow and spread rapidly. It is our best lawn grass, and by its rapid growth has soon covered the land, and doubtless also covered up the deception of some seed dealers.

Agricultural College Seminary, Mich.

NATIONAL AGRICULTURAL CONGRESS.

THE National Agricultural Congress, which originated in 1841, and was then known as the Agricultural Society of the United States, and which was subsequently reorganized in 1857, and then resuscitated in 1870, convened in Washington, D. C., Feb. 18, 1878. The Society has held annual meetings since 1870 in various parts of the United States, and its members are composed of persons interested in agriculture and agricultural education, residing in nearly every State and Territory. Delegates were present from nearly all of the States and several of the Territories. Mr. W. C. FLAGG, the President for three years past, being detained at home by illness, provided an interesting address, which was read before the Congress. The address contained a brief sketch of agricultural societies which had been organized in this country, other than

of a local and State character, and recommended, among other things, that a committee be appointed to confer with the Agricultural Department, to see if a memoir of the history of the agriculture of this country had been prepared, in accordance with the request of the Minister of Agriculture of France, to be presented at the "World's Fair," to be held at Paris, in 1878. Committees on credentials and on business were appointed. At the evening session the following resolution was introduced by Col. BEVERLY of Virginia, and after a lengthy discussion was unanimously adopted:

Resolved, That, recognizing the substantial benefits already conferred by the act of Congress to encourage the agricultural or mechanical arts, passed in 1862, this body would respectfully urge upon the United States Congress the expediency of supplying such additional endowment as is necessary to the better carrying out of the objects for which this act was passed; and would further recommend to the said Congress of the United States that, in case the proceeds of the sale of the public lands be devoted, as proposed, to the education of the people, not less than one-fourth of the said proceeds be assigned to the further endowment of the agricultural and mechanical colleges organized under the grant of 1862.

Messrs. BEVERLY of Va., PURNELL of Del., and FIELDS of Wis., were appointed a committee to present this resolution to Congress.

It was also

Resolved, That this Congress congratulates the agriculturists of the country upon the fact that experiment stations have been established in several of the States, and earnestly recommends their establishment in other States, as insuring a practical education for farmers."

The following resolution was referred to the committee on business:

Resolved, That this body does not indorse any further distribution of the public lands to railroad corporations.

W. P. ADAIR, from the Chorokee nation, by request, made a very interesting address, showing great progress in agriculture and the various branches of education, stating that they had eighty-two free schools.

The business committee, consisting of J. R. DODGE, E. WHITMAN, B. M. FROBEL, W. G. MARKHAM and Col. F. D. CURTIS, reported subjects for the consideration of the Congress, for Wednesday, to be Agricultural Education, Inland Transportation, Sheep Husbandry and Wool Growing. This completed the first day's session. The meeting promises to be one of interest, one feature of which—and not the least important—is the interchange of sentiments and friendly greetings between the farmers and those interested in the calling, from remote sections of our country. D. C. F.

NEW JERSEY STATE HORT. SOCIETY.

THE third annual meeting of this society was held in the city of New Brunswick, Feb. 6th and 7th, with a large attendance.

The following officers were elected for the current year: President—Geo. Such, South Amboy; Vice-Presidents—John S. Collins, Moorestown; Alex. Barclay, Newark; C. W. Idell, Hoboken; Edwin Allen, New Brunswick; J. Van Deventer, Princeton; J. Nan Doren, Manalapan; B. F. Errington, Whiting; H. E. Chitty, Paterson; D. C. Voorhees, Blawenburg; E. P. Boebe, Elizabeth; E. S. Carman, River Edge. Rec. Secretary—E. Williams, Montclair. Cor. Secretary—B. B. Hance, Red Bank. Treasurer—W H. Goldsmith, Newark. Executive Committee—P. T. Quinn, Newark; E. Roberts, Fellowship; John S. Collins, Moorestown; D. McLaury, New Brunswick; D. C. Voorhees, Blawenberg. Fruit Committee, B. B. Hance, Red Bank; Wm. Parry, Cinnaminson; D. McLaury, New Brunswick; C. W. Idell, Hoboken, J. M. White, New Brunswick. Flower Committee—John T. Lovett, Red Bank: Jas. Taplin, South Amboy; E. S. Carman, River Edge. Vegetable Committee—W. H. Goldsmith, Newark; C. W. Thompson, Stelton; Benj. L. Trafford, Red Bank. The exhibition comprised twenty-two plates of apples, nine of pears, seven of native nuts, one of Florida oranges, and plants and cut flowers in good supply. An invitation from the Burlington Co. Ag. Society to hold an exhibition under their auspices at the time of their annual fair in October, at Mt. Holly, was received and accepted.

The next annual meeting will be held at New Brunswick. W.

THE N. Y. LIFE INSURANCE CO.

NOTHING creates so disastrous a panic in confidence as the loss of faith in things in which we were accustomed to place a blind reliance. Unsound assurance associations took advantage of this confidence and battened on it until the eventual wreck of matter opened the eyes and depleted the pockets of the victims. The reaction was and is as unreasoning as the former state of fancied security. The fact is, the public are too prone to rely on unsupported statements. A little original investigation would save a world of misery and induce a healthy discrimination in favor of sound companies, that would quickly solve insurance doubts by the annihilation of weak corporations. Indeed, such action would be but simple justice to all concerned. That people are beginning to take this view is clear by the statement of the N. Y. Life Insurance Company, printed elsewhere in our columns.

The amount of insurance in force in the Company at the end of the year was nearly one hundred and twenty-eight millions of dollars, and this was over one hundred and fifty thousand dollars greater than it was at the beginning of the year. The number of insurers has also increased very nearly two hundred, or until the total number of policies in force at the end of the year was 45,605. This handsome increase of business in the face of the times and of the circumstances is certainly worthy of commendation.

There are any quantity of good and interesting things to be learned from this thirty-third annual statement. The Company secured enough interest from its investments to pay its losses and it is not often a Life Insurance Company can do that. It paid claims to some six hundred families. It paid a better dividend than it did the previous year, and yet it marked down the value of its Government securities and its real estate a half million dollars. And then it left itself with a surplus, by the New York standard, of over six millions dollars; and that was one dollar extra for each one dollar of liability. The list of the Company's assets needs only to be examined. The assets of the New York Life amount to $34,957,250 96. If is enough to say of these assets that they are worth fully what is claimed for them, and that, if they were reduced by the sum of six million dollars, the Company would still be fully solvent.

For thirty-three years this Company has marked its ever-increasing prosperity by the most rigid fair-dealing, and the result is the handsome exhibit of its flourishing condition.

KALMIA LATIFOLIA.—(See page 134.)

The Garden.

WHAT VEGETABLES TO PLANT.

WHO, after looking through the long lists of vegetables offered by different seed-houses, is not bewildered to know which of the several varieties he requires? The various descriptions written about such, generally tend to make you believe they are all the best and all really necessary for the formation of a respectable vegetable-garden. Novelties in the way of Potatoes, Cabbages, Radishes etc., appear in the catalogues year after year, possessing unheard of excellent qualities. In fact, the advantages to be gained by making use of these novelties are so beautifully portrayed, that either through curiosity, or else fully believing all that is written about hem, one is led to experiment with certain kinds, while other, older and perhaps better varieties are allowed to fall into the background. I do not wish to imply by this that all such novelties are of but little account, or that all old sorts are the best; but, in order to aid some persons in their selection, I would mention the names of a few varieties known to be good and reliable through actual experience. My remarks will be confined more closely to the earlier sorts of vegetables, such being generally more desirable for those wishing to plant a garden the products of which are to be used during the summer.

DWARF OR BUSH BEANS.—Of the twenty-five varieties found in Seedsmen's catalogues, I find the "Yellow-podded Black Wax" the earliest of them all, and it is certainly surpassed by none in richness of flavor.

POLE BEANS.—Among these used as Snaps or String Beans, the "Speckled Cranberry" is the earliest and, to my taste, the best. The "French Asparagus" might also be mentioned as being very rich and delicate. Of Shell Beans few if any take precedence before the "Large White Lima," though the "White Dutch Runner" is a famous old-fashioned earlier sort, and very nice-flavored.

BEETS.—The earliest and prettiest is the "Egyptian" though inferior in quality. The sweetest is the old "Bassano," whilst for general winter use, the "Blood Turnip," if of a good strain, is the best. Beets to be used during the summer should be pulled when half grown.

CABBAGES.—For family use, the best early varieties are the "Little Pixie" and the "Dwarf Savoy." The best winter varieties are the "Drumhead Savoy" and the "Large Flat Dutch."

CARROTS.—The earliest, and best early sorts are the "French Short Early Forcing," and the "Half Long Carenton."

CAULIFLOWER.—The variety to be recommended for frames or forcing is the "Extra Early Dwarf Erfurt." For general use in this climate the kinds most certain to head are the "Algiers" and "Thorburn's Nonpareil."

CELERY.—"Dwarf Crystal White" and "Giant White Solid" are my favorites. Both are perfectly solid and of unsurpassed flavor.

CORN SALAD—is one of the most useful vegetables used for salad. Should be in every garden. If sown in August, it will be ready for use in October, and from that time, will retain its fine green color and excellent eating qualities till Christmas. Being very hardy, in mild winters, like the present, one may have it every day on the table direct from the garden.

CORN.—Among the many varieties of sweet-corn, none can be better for an early crop than the "Minnesota." This may be succeeded later in the season by the "Early Eight Rowed." For general and late use "Stowell's Evergreen" is the best.

CUCUMBERS.—The "Improved White Spine" takes precedence before them all for general table use. For pickling the "Green Prolific" is most desirable.

EGG-PLANT.—The only really desirable variety of this vegetable is the "New York Purple." The "Early Dwarf Purple" has the merit of being early, but is too small and delicate to become a standard sort.

ENDIVE.—If selected from good stocks, the "Green Curled" is the most desirable for autumn and winter use, being the hardiest and most tender after blanching.

KOHLRABI.—A vegetable cultivated by far too little. Boiled and served with sauce, like Cauliflower, it is delicious. The "Early White Vienna" appears to answer best in our climate.

LETTUCE.—For forcing the "White Forcing Head" and "Tennisball" or "Boston Head" are the best. The "Simpson" and "All-The-Year-Round" are old and reliable varieties for out-door, spring and summer use.

MELONS.—Among Musk-melons the "White Japan" is certainly the best and earliest. It may be succeeded somewhat later by "Sill's Hybrid" and the "Valparaiso." The finest Water-melon is undoubtedly the "Southern Rattlesnake." The sole objection to this variety is its lateness in ripening.

ONIONS.—The "Queen" being very early and tender is excelled by none. The "Large Red Wethersfield" and "White Portugal" are best for main crops.

PEAS.—Among the dwarf varieties, or those requiring no brush, "The Little Gem" still reigns supreme. "Blue Peter" is also very productive. Of the tall, wrinkled kinds, "Alpha" is the earliest, and the "Advancer" second. For a general crop, the "Champion of England" has few, if any, competition.

POTATOES.—The new "Beauty of Hebron" is the earliest variety which has yet come under my notice. The quality is also very fine. For winter use, I have found no sort superior to "Thorburn's Late Rose."

RADISHES.—For forcing and early spring sowing the "French Breakfast" is the first to be recommended. The "Yellow Summer Turnip" is excellent for summer use, and the "Scarlet Chinese" for winter.

SPINACH.—The new "Large Viroflay" is the best variety for this locality. For more northern situations, the "Prickly," being very hardy, is to be recommended.

SQUASHES.—In my experience, for summer use the "Summer Crookneck" has proved the best. For winter either the "Yokahama" or "Hubbard" should be planted.

TOMATOES.—The "Conqueror" is certainly the earliest variety; but for general use the "Hathaway Excelsior" and "Trophy" are to be recommended. This latter is probably the most desirable for eating raw, but perhaps a little too acid when cooked. X.

New York.

HOT-BEDS.

S. RUFUS MASON.

THE old way of having glazed sash for hot-beds is fast becoming obsolete. I have discarded glass entirely; it is expensive at first, costly to repair, and either freezes or scalds the plants when they touch it, as the temperature is low or high. My sashes have never cost less than $4.00 each, 3 feet by 6 feet—and average fifty cents per annum for repairs. Three years experience with muslin sashes where the thermometer ranges from 20° below zero to 70° above, satisfies me of their superiority. I make a square frame of 1½ inch stuff with a single bar of same size down the middle, cover it with common, heavy, unbleached muslin, paint it over, two coats, with boiled linseed oil and find it far better than glass. Have had no freezing or scalding, but better colored plants, more stocky, and better able to withstand early transplanting. After the hot-bed is filled with manure, level in the soil so as to come within three inches of the muslin, sloping exactly as it does. As the season advances, the bed will settle about as fast as the growth of the plants require it. This plan prevents the plants from becoming long-legged, which is the main cause of the slow after-growth, and in the cabbage family, of so many plants failing to make solid heads.

Muslin sashes 3 feet by 6 feet, cost not over 75 cents each, and will last five years, when 40 cents for new muslin and oil will make them new again.

Dodge Co., Neb.

THE ACME TOMATO.—Seeing the RURAL'S notice of the Acme Tomate, I wish to add my testimony in its favor. I grew it last season in different parts of my grounds, and I found it equally fine in all. Your description of it is very correct. It certainly is an acquisition, combining all the good qualities of the Tomato—smooth, solid, ripens well, bears constantly, and is of good size and excellent flavor.

J. G. R. KALE.

Loudon Co., Va.

CATALOGUES, &c., RECEIVED.

E. A. REEVES, 58 Courtlandt Street, N. Y., Illustrated, Descriptive Catalogue of choice seeds, embracing all the best varieties of American and European growth. Vegetable, flower, field, fruit, herb, tree, shrub and bird seed—also garden implements, etc.

Our readers are invited to send for this catalogue which contains over 100 pages.

THE GARDEN, published quarterly by BENJ. A. ELLIOTT & Co., 114 Market Street, Pittsburgh, Pa. A brilliant chromo of popular flowers for a frontispiece, excellent engravings, fine tinted paper and clear print, with practical floricultural articles characterize this first number of the Garden. If we understand it, this work is sent free to customers and to all others who buy seeds or articles to the amount of fifty cents. or more. Besides this, special premiums are offered for clubs. We think we may safely commend a consideration of the above to our readers.

Domestic Economy.

CONDUCTED BY EMILY MAPLE.

A PLACE FOR EVERYTHING.

"I HAVE heard of having a place for everything and everything in its place," said a friend whom I was visiting, to me one day, "but how that can be done in a closet like this, is more than I can imagine."

"Why?" I asked.

"Because it is the receptacle of almost everything that is in constant use, and there is so much in it that everything is in piles, and I cannot keep it in any other way."

Ah, I thought, Is not that the very secret? "I *cannot!*" Said closet opening off from the sitting-room was indeed the place for everything, and it so chanced that I was sent one day to that closet to get some article. Yes, it was small; about four feet by one and one-half, two shelves above, with nails for hanging articles under the lower shelf. There were from two to four garments on each nail—well that might do if each end and side had been appropriated to any particular kind—but there were pantaloons for Papa, also for Freddie, dresses for Mamma, skirts and aprons for both large and small, baby clothes of all kinds, &c., &c.

But the shelves, O, dear! they were filled to overflowing, and how? Why, with a mass that must be over-hauled for anything one wanted to get. Really my fingers tingled to take every article out of that closet, and while I preached them a sermon on order, put in practice what I preached by replacing them in order. The closet was but a specimen of some other corners in that house. And yet this friend of mine is one I value. She is really a good woman and in many things a close economist.

Perhaps some would call me notional, but there never seemed to me any reason why a closet should not be as well regulated as any other part of the house, even though crowded. Sheets seem to lie with so much greater ease in a pile by themselves, pillow-cases, ditto; with still another portion devoted to underclothes. Dresses should have their respective nails and skirts in order. Why not? Then when one wants any article she has but to turn in the one direction to get it. If we are to economize our time, this is one item of importance.

At a neighbor's, once upon a time, a certain pattern was wanted. Mother looked here and there, the girls searched closets and cupboards, up stairs and down, and meanwhile the thought came that I had heard before this family never knew where to find anything. As they were a large family, with a great deal of work to do, how much time might have been saved for their more necessary work by simply having "a place for everything and everything in its place!"

"Let all things be done decently and in order," says Holy Writ. It certainly takes no more time—and allow me to think not somuch—and very many times saves mortification and apologies. RAY HULBURT.

THE LAUNDRY.

AT the time of building a house, it adds but little to the expense to provide a room for washing-day and other days of disagreeable work. Allow me to describe a basement room of that kind, which is said to be a model. The cellar extends under the entire house, as all cellars should. A partition is set, making a square room in the rear. The chimney, built from the ground, gives a place for the stove-pipe of the small cooking stove to enter. The floor is cemented, so there is little danger from fire. The room has windows on two sides, thus giving plenty of light and air. There is an outside door, and easy steps to the clothes-yard; also an inner door, leading to the kitchen above, and a door to the main cellar, where there are bins of coal and wood. A pump brings water from an outside cistern—experience had taught the builder that cisterns under dwelling-houses ought never to be constructed. A zinc funnel carries the suds to the cess-pool and garden. The necessary furniture for such a room is of the simplest. Besides tubs and a bench to set them on when in use, there is a closet high enough to hang the skirt-board in, and wide enough for shelves on one side for the smoothing-irons, bluing box, cans of starch, and all the small articles needed. A good table for ironing, with clothes-frames and a chair, completes the furniture.

In winter, the ironing may be done in the upper kitchen, if saving fuel is a consideration. To make the laundry conveniences complete, it was thought best to finish the upper story of the wood-shed for a room to dry clothes in, when the weather was unfavorable, and it is a *real comfort*. There are three windows on each side, north and south, and when all are open the drying process is thorough and rapid.

It is to be hoped that the gentlemen readers of the RURAL, who contemplate building, will think favorably of an *especial* room for laundry purposes. It will prevent much annoyance to themselves and their families, which will fully compensate for the expense. M. G. R.

Lyons, Iowa.

DOMESTIC RECIPES.

I HAVE tried some of the recipes given in the columns devoted to the culinary art, and it occurred to me to send a few of my own "ways" in return. I wish the ladies would try my

Apple Turnovers.

Make a paste of sour milk or buttermilk with a little soda and salt, as for biscuits, except that more shortening is necessary. Rub the shortening into the flour and add the milk; then cut off a piece the size of a biscuit and roll out rather thin. Have ready dried apples stewed, sifted, sweetened and spiced to taste. Place a large spoonful on one half of the rolled paste and bring the other half over it, pinching the edges securely together. Fry in hot lard, turning them frequently to brown evenly. Also if you will make up your soda biscuits for tea in precisely the same fashion, and before putting into the oven wet the surface with milk, you will find it an agreeable variation from the usual way.

Cream Cake.

Two cups of sugar; one cup of sour cream with a small teaspoonful of soda; two eggs and flour enough to drop smoothly from the spoon.

Do the RURAL ladies know that if wheat pancakes, intended for breakfast, are stirred the night before as if for baking (except the soda) and left until morning, they will be more tender than just-made batter. In the morning add the soda and bake as usual.

LYDIA WOOD BALDWIN.

Cold-Slaw.

We make cold slaw of our cabbage as follows: cut very fine and pack in a small jar; sprinkle a little salt and pepper over it; take vinegar—a pint will answer for a small head; butter the size of a walnut; one spoonful of sugar or more if liked; heat this to the boiling point; mix a well beaten egg in a cup of cream and pour into the vinegar, stirring briskly until it again boils; then instantly pour it over the cabbage and cover tightly, pressing down with a little weight or plate. This slaw is better when two days old, although it can be eaten at once or after a week if kept in a cool place.

Flaky Pie Crust.

As some of our friends say that our pie crust cannot be excelled, I will tell you how I make it. It is to be supposed that every housewife knows how much or how little butter or lard she wishes in her crust. Cut the lard or butter into small bits, about the size of a thimble and stir, not rub, with a little salt into the flour; mix with cool water as quickly as possible and roll out. Cream, sweet or sour, makes a nice mixing for pie-crust, but does not make it flaky like the above.

Cracked Wheat.

This excellent dish is often spoiled by very good cooks who think they must stir it all the time to keep it from burning. Too much stirring makes it like paste; putting in more water when nearly done has the same effect. One-third of wheat, by measure, to two-thirds of water, soft, if you have it, will make it about right. The water should be cold when the wheat is put in; it should cook slowly and be covered closely. In this way scarcely any stirring will be found necessary. There is a deliciousness in this dish when cooked as above, which is never found if stirred while cooking. The same may be said of oatmeal, only the latter should be quickly stirred into *boiling* water; cover closely and let cook for about twenty minutes. Wheat may be cooked about the same time, although it bears cooking longer.

AUNT FLORA.

Egg Toast.

Beat four eggs; yelks and whites together thoroughly; put two tablespoonfuls of butter into a sauce-pan and melt slowly; then pour in the eggs and heat *without boiling* over a slow fire, stirring constantly; add a little salt and when hot, spread on slices of nicely-browned toast and serve at once.

To Fry Smelts.

Wash, cut off the fins, and dry with a cloth; melt a spoonful of butter and into it stir the beaten yelks of two eggs; salt and flour the smelts a little, dip into the egg and butter, roll in grated bread-crumbs and plunge into boiling fat; fry until of a bright, yellow brown; serve upon a napkin garnished with fried parsley.

To Fry Parsley.

This when done as it should be, is one of the nicest as well as cheapest of garnishings. The parsley should be washed and dried in a cloth; then if one is the happy possessor of a wire basket, put in the parsley and hold from two to three minutes in *boiling* drippings; take from the basket and dry until crisp before the kitchen fire. It may be fried without a basket but requires more care in so doing. E. M.

Everywhere.

NOTES FROM CALIFORNIA.

GRASS is knee high, and almonds are in blossom. The rainfall is very abundant, but a little monotonous. Fifteen inches have fallen during the past three weeks, well distributed over the State. This insures a mighty crop of wheat. Only those who endure the heat of the long, parching summer can bear with patience these tremendous storms of rain. We know how the ground requires a deep soaking to nourish the crops, when the skies, for months, are cloudless, and the growing grain must depend on searching with its rootlets for moisture.

There are short intervals of clearing weather, when the sunshine brightens the landscape, touching the mountains and the green fields with cheerful light, and we flatter ourselves the rains are over. But the southwest wind is treacherous while it holds. Ten minutes is time enough to hurry up the dispiriting drizzle out of a cloudless sky, and another ten minutes converts it into a deluge that roars, and splashes, and drifts horizontal sheets of rain through the tightest roofs. But we console ourselves with the thought that our floods are more endurable than the winter climate with you, where the thermometer is kept busy registering the fitful temperature of each twenty-four hours. Here it stands, without much variation, at about 50°.

FRUIT PROSPECTS.

As an example of the rapidity of vegetable growth, the writer's experience in planting three years ago may suffice. At that time it was determined to set an orchard by digging holes for two-year-old trees, three feet in width and depth. A bushel of bones was placed in the bottom of each hole for drainage, and to supply food for the roots in after years. The trees were firmly staked and tied. Clean cultivation was given, without which there is no success here. They have never been watered. The soil is black, gravelly loam; some of it approaches adobe. Branches grew three, five, ten feet the first year. A little fruit set, but was hardly permitted to bear. The second year a few apples, plums, almonds and peaches were borne. The third year, after severely thinning, peach trees yielded three pecks; Bartletts and Winter Nelis twenty pounds per tree; and almonds, nectarines, apricots and apples were quite a show. Only *slips* of grape vines were planted. One turned off twenty pounds of fruit the third year. We never have fears of a failure of the fruit crop. Sometimes a late frost thins it out—nothing more. The fact is, the unvarying yield of grapes, peaches, pears, plums, apricots, oranges, &c., &c., together with the mild climate, constitutes the main attraction California has to offer immigration.

RICH MINING STRIKE.

Last summer a resident of Bald Hill, near Auburn, made a snug fortune in three days. He was a prospecter, and, like most of the class, was wofully down at the heel, living from hand to mouth. One day, when hunting around over the hills, he struck his pick into a little mound, which looked like an ant hill, and to his great delight he unearthed some chunks of rotten quartz which contained traces of gold. He sunk on the ledge, and, at every stage of the descent, was rewarded by finding more gold. He procured help and took out fifteen hundred dollars' worth at thirty feet depth. Further down, the chimney, or ledge, became richer, yielding lumps of pure gold, and the interstices between the rocks were so rich that he began to wash it in a pan. The editor of the Placer Herald and Sheriff MCCORMICK visited the mine next day and found him with a pan of the glittering stuff, which washed out over a thousand dollars. Other pans were sent up which washed still more. The next day he took out $10,000, making $35,000 all told, when he accepted an offer of $20,000 for his claim and retired, saying it was money enough for him.

It is a good story, and is authentic. It goes to show that placer mining still pays in occasional big strikes. In fact, that kind of mining pays moderately all the while. At Gold Hill, Nevada, and Dutch Flat, where there are vast hydraulic appliances, acres of land are washed over every season. There are canals forty or fifty miles long supplying water. Iron pipes, from ten to thirty inches in diameter, with enormous pressure, discharge cataracts of water against gravel banks that melt away and run, in torrents of mud and water, through long channels, with riffle bars and quicksilver to catch the gold. This branch of gold mining paid about eighteen millions the past year.

PROSPECTS.

The population of this State increases slowly. Our remoteness is not the only reason for it. Routes of access are long and expensive. It costs about as much to travel as before the building of the railway. The fairest and best parts of the State were long ago gobbled up by land-grabbers, who hold immense tracts of land for a rise. A few of these monopolists have the State Government by the throat, and our taxes are the highest of any State in the Union. These would seem sufficient reasons for the stunted growth of the Commonwealth. There are still others. But we hope yet to rescue this coast from such domination. SPECS.

San Francisco, Feb. 7, 1878.

NOTES FROM TEXAS.

AFTER a very wet January, February came in with fine sunny days, rather a cool temperature ranging from fifty to seventy degrees, prevailing during day-time and falling so much during nights as to occasionally cause slight white frosts, not severe enough, however, to hurt anything in the garden. It is just the kind of weather we like here at this season of the year. Farmers have their plows agoing; gardeners are busy sowing and planting the more hardy vegetables. Strawberries kept on blooming since December, though they do not set fruit; the stamens and pistils get blackened by the frosts. By a little extra painstaking, giving them slight protection against occasional night frosts, we, no doubt, would be able to enjoy this luscious fruit during the greater part of the winter months. Our vegetable stalls are well supplied with all the hardy vegetables which had been started during the fall months. In flower-gardens violets are, and have been, in their full glory since October. Narcissii, Jonquils, Snowdrops, Leucojum vernum, etc., bloomed for some time; Hyacinths are beginning to do the same. Lilium longiflorum is sending up its flower-stalks; Cyclamen Persicum and Libonia floribunda stood unharmed a frost of six degrees below freezing. The first bush I noticed in full bloom, is Mahonia aquifolia; Forsythias and Spiræas follow suit. The Japan Medlar is developing its fruit; no frost, as yet, has been hard enough to destroy it. Planting trees, vines and flowers is the order of the day.

Of the Jerusalem Artichokes, the Long Purple and Round White, I received from RURAL Headquarters last year, the former took the lead, but, subsequently most of these plants succumbed to the hot season. The white ones came out later but stood their ground. On digging them I could find no perceptible difference between the tubers of those few plants of the purple kind that braved the season and the white ones. They all were white and roundish. Of their yield I am not prepared to give my judgment, since a brood of that pernicious little animal with so many different names such as gopher, salamander, ground-rat, mole (though I never have seen a genuine mole in Texas yet) found their way into the patch where they helped themselves to the best tubers.

Houston, Feb. 13. G. MARTI.

RURAL SPECIAL REPORTS.

OAKLAND, Douglas Co., Oregon, Feb. 5.

WE have had a very fine winter so far. Have had no snow or freezing weather, and only a few frosty nights. Vegetables, such as cabbage beets, lettuce and radishes, grow out in the garden all winter. Strawberries are in blossom now. Farmers have been plowing and sowing grain all winter. Grain brings a good price here: wheat, $1; barley, 75c.; oats, 50c.; potatoes, 75c.; hay, $10 per ton; apples, 50c.; butter, 37½c.; eggs, 25c. per dozen. Stock is cheap: horses, $25@125; good milch cows, $12@40; sheep, $1@2. Land is worth from $2.50@20 per acre. H. C. U.

WHITNEY'S POINT, N. Y., Feb. 18.

WEATHER mild and sleighing good. Wind in the N. N. W., but not very cold. Lumbermen very busy. Butter is selling here for 20@25c. per pound; eggs, 15c. per dozen; oats, 35c. per bushel; potatoes, 35c. per bushel; hay, $7@8 per ton; straw, $3 50@4 per ton. The ice crop is being harvested; the average thickness is from ten to twelve inches. M. B. D.

WOOD CO., Ohio, Feb. 19th, 1878.

WE have had a very mild winter hereabouts: no snow until February. We have had two heavy storms this month. Stock is doing well, feed is abundant and cheap. Indeed all kinds stock are at a low figure. Wheat looks very well. Hay sells at $6 to $8 per ton; wheat, $1.15; corn, 35c; oats, 25c; potatoes 35c. H.

RURAL GROUNDS, Feb. 23.

FROST entirely out of the ground. Constant rain and high winds. Bottomless mud. Warm, muggy. A freshet is feared.

Miscellaneous.

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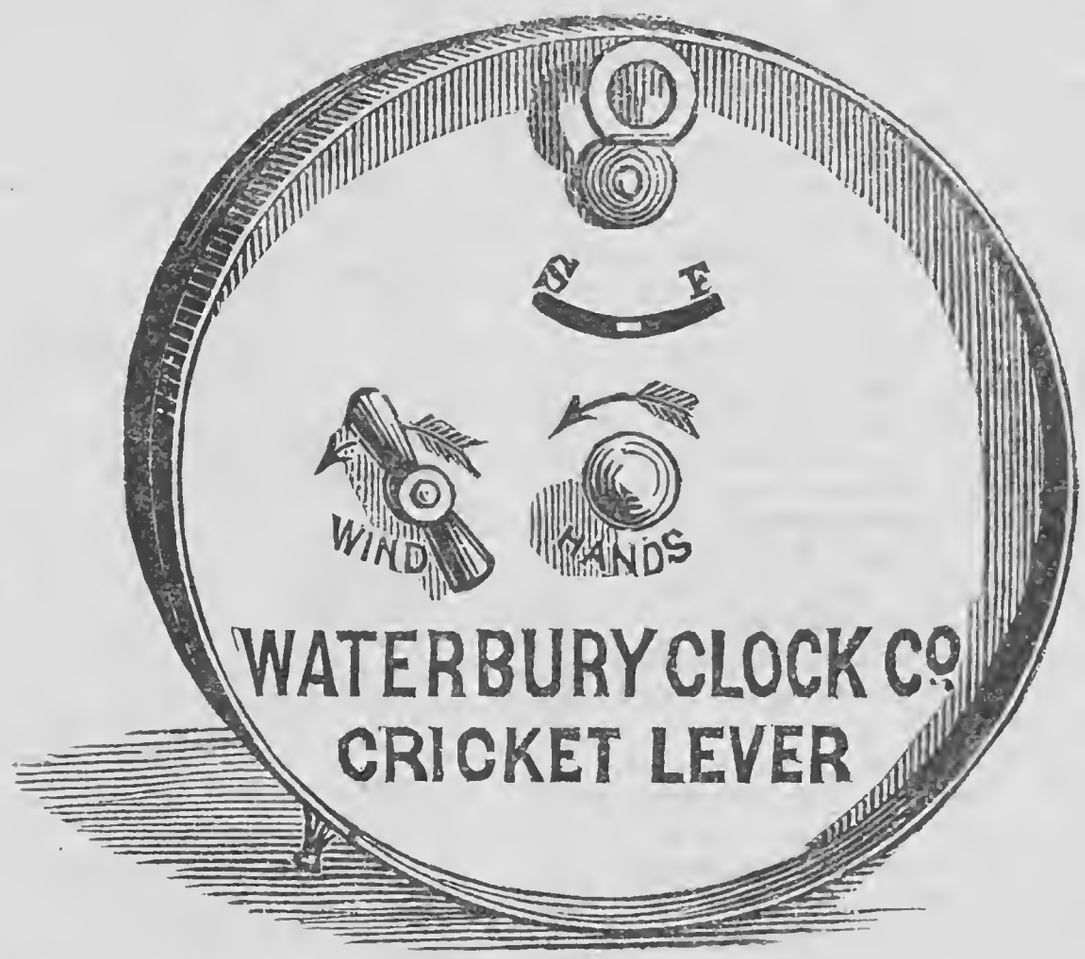

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ITS BEAUTY, COMPACTNESS,

elegance of form, depth and finish can not be shown by any engraving. It must be seen to be appreciated.

To judge by its appearance many who have not seen it before, estimate its value to be ten dollars.

We have been enabled, through the facilities afforded by our Experimental Farm (owned and operated exclusively for the benefit of RURAL readers) to make a FREE GIFT to our subscribers of a collection of rare and valuable flower seeds which have been enthusiastically received; and this gift on a still more liberal scale, *will be repeated during the present year*. Meantime, the RURAL itself has been enriched in all its departments, by the contributions from the best writers and life-like illustrations, demonstrating that our enterprise has not been at the expense of the paper.

This policy has been responded to by our patrons so liberally in subscriptions that we have decided, after a careful consideration, to make one more offer that shall

ECLIPSE EVERYTHING!

The "Rural Cricket" is inclosed in a beautiful circular metallic case of a single piece, and therefore without a seam, which is nickel-plated. The face of the clock is white and has a "second" dial as in watches. The works are securely inclosed so that no dust can penetrate and harm their movement. It is like a stem-winding watch, in that it requires.

NO KEY TO WIND IT!

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THE OFFER.

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SECOND.

We will send the RURAL NEW YORKER for one year and the Cricket Clock to any one upon the receipt of $3.50.

RURAL NEW-YORKER, 78 Duane St., N. Y.

WHAT THEY SAY OF IT.

FIRST ACKNOWLEDGMENTS.

ALL THINK IT "SPLENDID."

TO THE FRIENDS OF THE RURAL.

WE issue this week a large, *extra* edition of the RURAL, to supply the great demand for sample copies; and we would be much obliged to our friends everywhere, if they will send to us for one, or more copies, to show to any person who they think will subscribe for it. A postal card is all that is necessary for application.

Hitherto, we have not made any very strong appeals to the patrons of the RURAL, but *now*, in view of our EXTREMELY LIBERAL OFFER of a new, unique, and really ELEGANT CLOCK to any one who sends us $5, (*two new subscribers* at $2 50 each) or $3 50 (the clock and one name), we call on our friends to do their best to aid us in still further extending the RURAL'S circulation.

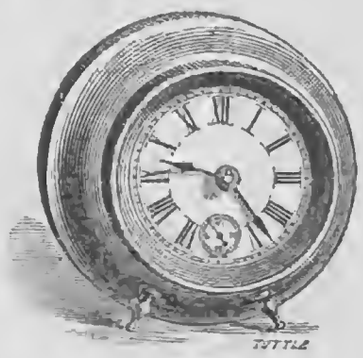
Let us, then, friends, hear from you *immediately*. Please not delay; as spring work will soon be upon you. We want 10,000 of our *present* subscribers to have one of our splendid time-pieces, to which their children, many years hence, will point with pride, exclaiming: "My father obtained this elegant clock for one evening's work in getting subscribers for the RURAL NEW YORKER. It runs as true as a *chronometer*, has had no repairs for twenty years, and now bids fair to last a half a century."

It is now our modest aim to render the RURAL NEW YORKER the greatest success known to Ruralistic journalism, and to force it by weight of *worth* into every family home that loves plant life.

The following are among the first acknowledgments we have received.

UNCLE TRUE:—I read all about what you said of the "Cricket" and thought I would try for one. I send you $5 and the names of my two uncles. They used to read our paper when we got through, but mother said she could not spare it any more, because she did not get a chance to look at the Fashions in the paper until they were two or three weeks old. I just had no trouble in getting these names. I hope the cousins will tell how they succeed. Please hurry up the clock. We are all anxious to see it. If I like it I may try for two more names and get a clock for my married sister. J. T. S.

Burns, N. Y., Feb. 21, 1878.



YOU request me to state frankly what I think of the RURAL "Cricket," and say that if I do not like it, I may return it at your expense and you will promptly refund the five dollars. We would not part with it on any account if it will keep good time, and we only wonder how you can afford to send it. A. Mc. C.

Richmond Hill, N. Y.

IF it is as good as it looks to be, I shall be perfectly satisfied. C. J.

Brooklyn, N. Y.

THE "Cricket Clock" received. All think it splendid. Will show it. It came safely, except one leg "dented in;" can be fixed. Many thanks. Am well suited in change made. Will do what I can. Respectfully, C. E. S.

Garden Prairie, Ill.

I WRITE for my son, (S. M. S.) to acknowledge the receipt of the clock with which he is well pleased. You will please accept our joint thanks for the same. M. J. S.

Auburn, N. Y.

THE RURAL "Cricket" chirps cheerfully, not on the hearth, but on the mantel-piece beside me; and its handsome presence is a constant reminder of a large reward for a small service. It needed only a merited commendation of the RURAL, confirmed by reference to the rich contents of the last issue, to secure the two subscriptions in return for which the "Cricket" has come to be a charm, an ornament and a convenience in our home. My little boy, the appearance of whose juvenile efforts in the Youth's Department of the RURAL, has more than once tickled him hugely, expects, before long, to secure a "Cricket" of his own for the room jointly occupied by himself and his little brother.

MRS. C. L. H.

Licking Co., Ohio, Feb. 20, 1878.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Weeping Norway Spruce 133
What Shall I Plant? 133
Mid-Winter Beauties 134
Noted Trotters—No. 2 134
City Farmers Fail, Why 134
Rural Topics 135
Holstein Bull and Cow "Uncle Tom" and "Isis" 135
Jottings from my Note-Book 135
Brahma Fowl, The 136
Potato Planter, True's 136
Testing Seeds of Grasses and Clovers 136
National Agricultural Congress 136
New Jersey State Hort. Society 137
Vegetables to Plant, What 137
Hot-Beds 137
New York Life Insurance Company 137
Everything, A Place for 138
Laundry, The 138
Recipes 138
Notes from California 138
Notes from Texas 138
Rural Special Reports 128

EDITORIAL PAGE:

Sane or Insane? 140
A Valuable Experiment 140
Get the Best 140
The Spread of Diseases 140
Politics for the Farmers 140
Silver and Gold 140
Colorado Potato Beetle 140
A Card 140
Question in Mathematics for the Commissioner of Agriculture 140
The Enthusiasm which Horticulture Inspires 140
Brevities 140

LITERARY.

Poetry 141, 143, 145
For Women 141
Fashion Items 141
Answers 142
Literary Miscellany 142
Corn 142
Washington Sights 142
Bric-a-Brac 143
Recent Literature 143
Magazine Notes 143
Answers to Correspondents 144
News of the Week 144
Publisher's Notices 145
Various 145
Markets 145
Reading for the Young 146
The End of the Candle 146
Letters from Boys and Girls 146
Puzzler 146
Sabbath Reading 146
The Wealth of Others 146
Personals 147
Wit and Humor 147
Advertisements 139, 145, 147, 148

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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE apologize to our readers that Questions and Answers are at the last moment for the most part, unavoidably crowded out. Even if placed in our practical pages, we promise to publish them next week.

SANE OR INSANE?

A CONSIDERABLE excitement has been caused in certain circles by the recent marriage of Mr. LORD to Mrs. HICKS, and in none more than in his family circle. His sons were particularly aggrieved, and immediately concluded that the old gentleman was insane. What is insanity, is not an easy question to answer; but they insisted that for a long time his acts and deeds had been such as to prove him positively insane; and the last and overwhelming proof, was the fact, that at his age he married. Now, there are undoubtedly differences of opinion on this head.

A little reprobate, being asked on the occasion of his first visit to Sunday School if he said his prayers night and morning, asking GOD to take care of him, replied he did at night, but he thought any smart boy ought to be able to take care of himself in the day! Now, many young men have married in order to have a wife to look after them, to sew on their buttons, mend their clothes, and do various things in which the skill and handicraft of women exceed those of men. We would not forget, either, that the gentle woman is a solace to pain, a comfort in time of trouble; and under favorable pecuniary circumstances, a young man is not usually thought insane who contracts matrimony; on the other hand, it is considered he acts the part of a very nice and entirely sane individual. A young man may be able to take care of himself, while an old one needs help.

If then a young man, hale and hearty, strong and able-bodied—in admirable condition to take care of himself so far as in a man lies so to do, is not only excused but commended for marrying, why not so much the more, should he be, who, past the three score years and ten, feeble in body, needing hourly assistance, liable at any time to be overcome by rheumatism, gout or any of the other ills that old age is heir to, needs the kindly care of a wife? Should the taking of one under such circumstances to be considered as an indication of insanity?

But the younger LORDS persisted in the assertion that their paternal ancestor was a lunatic, or at least an imbecile, or, call it by what ever name you will, a man unfitted to take care of his property, and called upon the courts to examine into the matter, sustain them in their assertion, and keep the poor old man from improperly disposing of his estate.

The courts however have been saved the necessity of interference. The children modified their assertions somewhat, and have seen signs of returning sanity and strength of mind in the old gentleman. He has executed such papers as will ensure to them the bulk of his property. This is satisfactory and the family jar is at an end.

Query.—If Mr. LORD, the elder, was not of sufficiently strong mind to manage his own affairs had he determined to give property to others, of how much value in the law should be these trust deeds be made, in favor of his children.

A VALUABLE EXPERIMENT.

MR. FRANCIS DARWIN, the worthy son of Mr. CHARLES DARWIN, has taken up the investigation of so-called carniverous plants, where his father left off. The latter showed, in the case of Drosera, that certain nitrogenous substances—such as bits of meat—induced an acid secretion from the cells of the leaves, which gradually dissolved them. This being established, the next inquiry has been, was the plant benefited thereby? an inquiry that Mr. FRANCIS DARWIN seems to have answered in the affirmative. The Gardeners' Chronicle says that about two hundred plants were grown by him in soup-plates filled with damp moss and divided by a partition. The plants on one side were artificially fed; those on the other were left alone. The experiments lasted from July till September, the plants being "fed" every two or three days during that period. Only a short time elapsed ere it became evident that the fed plants were benefited by the process. They became more hearty-looking, their green color was intensified, and "just as an animal lays on fat when fed under certain conditions, so did these Sundews lay on protoplasm, chlorophyl and starch." The following table, which Mr. F. DARWIN furnished the Gardener's Chronicle, gives the differences between the two sets of plants, and shows the results and the inferences to be derived therefrom:

Results of Experiments in Drosera.

	Unfed.	Fed.
Total weight of plants, excluding flower-stems	100	122
Total number of flower-stems	100	165
Sum of hights	100	109
Total weight	100	282
Total number of capsules	100	194
Av. number of seeds per capsule	100	123
Total number of seeds	100	242
Total weight of seeds	100	380

Here we have it proven that some plants at least absorb through their leaves not only liquids but also nitrogenous substances, and are benefited thereby. And this benefit is most marked in the seeds and stems. In such experiments the practical cultivator is indeed greatly concerned, and it is hard, in the light of such results, to deny the scientist his meed of praise and justice.

GET THE BEST.

THERE is no place where this bit of advice acted upon, is of more value than in the selection of tools and implements for the farm. A good ax, hoe, or plow, is cheaper at a high price, than a poor one would be at less than half the cost of its manufacture. With a good tool one can do much more work with less expenditure of force—which means muscle—than with a poor one, so it saves both ways. Beside, it serves a purpose as a moral agent. You will find much less ill temper and profanity on a farm where poor tools are discarded than on one where they are used. When the ordinary mortal is out of humor, whatever the cause, he is inclined to give vent to his feelings in some way, sometimes in actions, by a kick or a cuff as any dog or boy within his reach will be able to bear witness, sometimes by words, fretful, or scolding, or if he be given to profanity, (and sometimes when not) by an energetic expression, best used if at all when none are within hearing distance. Now all this, and more too, can be prevented by "Getting the best."

By the way, we wonder how many who see this bit of advice and direction so often found in the newspapers in connection with advertisements, know that it originated with O. S. FOWLER the Phrenologist. More than thirty years ago, in writing of Webster's—then comparatively new—Unabridged Dictionary, he advised the readers of his Phrenological Journal, not to be content with any other, but at whatever sacrifice to "Get the best."

THE SPREAD OF DISEASES.

THE relationship which the minute lower organisms bear to contagious diseases, opens up one of the most important subjects of inquiry known to modern science. The Gardener's Chronicle, in referring to the extraordinary range of temperature that Bacteria, for example, will bear in the germ state without injury, says that this discovery is of no little importance in relation to the diffusion of contagious diseases, which are now believed by many eminent men to be actually caused, and not merely accompanied by the presence of Bacteria. If this doctrine can be established, it is likely to lead to discoveries of incalculable benefit to the human race.

The theory of abiogenesis, or *spontaneous* generation, has been proven to be untenable. Now, it remains to discover some means to destroy the germs and avoid the conditions favorable to their development. "Just as the potato fungus is developed from minute resting-spores, and especially favored by certain climatic conditions, so are contagious diseases the result of similar though infinitely smaller parasitical organisms whose propagation is much more certain and rapid in ill-fed, dirty, and badly-housed individuals, than in those who are well-nourished and who breathe a pure air."

In this view of the case, "contagion" means simply a condition of the atmosphere favorable to the spread of these minute organisms, and hence it is that people who are perfectly healthy ofttimes suffer the same as those who are not. And no doubt that this is as true in vegetable as in animal life.

POLITICS FOR THE FARMERS.

IN many of the States, the election of township officers is soon to occur. Whether the election occur at this time or at any other time, whether it be for the election of town-officers or for county or State officers, the following remarks are equally applicable in all cases.

Good farmers are very likely to be much interested and industriously engaged in what immediately concerns their farms or their families. Busy with their own affairs, they often forget or neglect their duties to their country. When a dishonest or incompetent man is elected to an office, the farmer sometimes growls and thinks the country is all going to destruction. Who is more to blame, we should like to know, than the honest, industrious man who fails to take part in political affairs? We are not among those who think that politics should be entirely given over into the hands of professional wire-pullers. The man who fails to attend and encourage his best neighbor to attend the caucus, neglects an important duty. Whichever party he may work with, he should see to it that the best men are nominated for office and then he should assist in trying to elect them by all honorable means. Such a course, honestly pursued for some years, will be a great benefit to our country; it will lead to the abolishing of poor laws and the making of better. The time so spent will be a profitable investment.

SILVER AND GOLD.

AN ounce of silver is worth 54 pence sterling in London, equal to $1.09 gold. The proposed new silver dollar is to contain 412½ grains of silver, equal, at the above rate, to a trifle over 90 cents; and although the silver dollar will pay, in America, as much debt as the gold one, it will buy only nine-tenths as much in Europe, because there it is worth only its value in silver by weight. Consequently, our merchants will use the gold to pay their debts abroad and silver to pay those at home, for who would be so foolish as to send eleven hundred silver dollars to London to pay a debt that could be satisfied with a thousand gold ones, if at home the silver and gold dollars were equal in value?

How long the silver dollar will be worth 90 cents, depends much on how rapidly silver is mined in America. The quantity contained in the mountains of Nevada, Colorado, and New Mexico, is simply inexhaustible, and as it is brought to market, the tendency will be to reduce its commercial value. Should several millions of dollars' worth be used by our Government every month for coining, the probable result will be to increase the price somewhat at present. How much this has had to do with the passage of the Silver bill, politicians and financiers probably know better than we do.

NOTES.

Colorado Potato Beetle.—Probably there has never before been an insect so much talked about as the Colorado Potato Beetle; certainly no other has had so many portraits taken of it. Probably no other insect has advanced in a greater degree an appreciation of the science of Entomology, while more than one worthy entomologist has to thank this honest beetle for a notoriety which might else have been long deferred. The more we think of Doryphora, the more we are inclined to entertain for it—her—him, a certain amount of—not exactly esteem, nor yet respect—we will say, consideration.

A Card.—ED. RURAL NEW-YORKER: In my first seed-article I find some did not fully understand me. The seeds, as I stated, were those sold at the groceries, such as I suppose are carried about from year to year and sold on commission. I did not send direct to the firms for the seed. I began where I had greatest suspicion of fraud and I found it worse than I expected. Some firms have already again sent packages of seeds around to the groceries. I am going into this "Seed Business" heavily this spring, and with the help of fearless papers shall do what I can to drive worthless seeds out of our markets.—W. J. BEAL.

Question in Mathematics for the Commissioner of Agriculture.—If it costs twenty cents a pound to raise and prepare a certain kind of tea for market, where labor is five cents a day, how much will it cost where labor is fifty cents a day, and what percentage on his investment may the capitalist expect to realize who engages in tea culture as a business at the latter place, admitting that the soil and climate are as well adapted for the growth of the tea plant in one place as in the other?

The Enthusiasm which Horticulture Inspires.—"I pray," said a gentleman through whose youthful grounds we were walking a few days since, which had been laid out and planted under his own direction, "that we all" (his family) "may live at least another year to enjoy our home." We give the remark, to show to what extent a person may become interested in Horticulture. It is a truth that few pursuits add more to the real happiness of life.

BREVITIES.

CUT cions for grafting.

THE Northern Spy is the best apple now.

THE papers talk against Commissioner Le Duc just because he is a t-totaler.

A FRIEND remarks: "If I could have but one shrub, it would be Spiræa prunifolia. It has such a beautiful autumn foliage, and such glossy leaves."

THE hard times oblige the poor people to wear their dresses long. But this is the last reason in the world why rich people should follow in the same train.

"HE is a good man to work for." Mr. MINER says it is no compliment to a farmer's administrative ability to have this said of him by his farm-hands.

A FINE table-bird is produced by crossing an English male pheasant with game hens. The hybrids are plump birds with long, tapering tails, somewhat like those of the pheasant; the plumage is beautiful. These crosses are gamey and delicious eating.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE BABES IN THE WOOD.

Now, grandma! why don't you look jolly,
  Instead of that sorrowful way?
Don't you know Hal and I have been married
  Just a fortnight ago yesterday?

And we're perfectly happy, and will be;
  Folks need'nt be doleful, I know,
If they don't look for troubles and worries,
  And heartaches. My Hal thinks just so.

Now you're sighing! I know what you're saying:
  "The Babes in the Wood." But you see
That Hal's twenty-one in November,
  And I shall soon seventeen be.

And we've seen a great deal of the world, too,
  We know how to battle with life;
And Hal says, "There can be no sorrow
  When a man has a true little wife."

You've had lots of troubles and trials,
  But maybe we won't. Seems to me
You old folks bring sorrow by looking:
  There! you want to say, "Wait, and you'll see."

But you only look over your glasses,
  And clasp hands, as though you would pray,
And whisper, "God bless you, my children,
  And keep you in sunshine alway."

FIVE YEARS AFTER.

Grandma, won't you come out and help us?
  I'm worn out with watching and work,
For the children are sick, baby teething,
  And the cook (that old Biddy MacQuirk)

Went away in a huff, without warning,
  And I cannot manage the range;
So Hal takes his meals in the city,
  You know a man must have a change.

All night I was up with the children,
  For Hal says "It's hard on a man
To be wakened all night with the baby,"
  Oh, grandma, dear, come if you can.

TEN YEARS AFTER.

Tell me, grandmother dear, the old story
  Of the heavenly home and its rest,
And hold me close up, as you used to,
  And lay my head down on your breast.

I'll try to look yonder to meet them,
  My two little saints gone before,
And forget the sharp pain of the arrow
  That shattered the ring I once wore.

Ah! I see it all now why you whispered,
  "The Babes in the Wood," long ago,
While I trusted the reed that has broken
  The sand-chain, the knot made of snow.

And though neither gray hair nor wrinkle
  Has come to me, now I can see
Other Babes in the Wood, and am silent,
  Foreboding, as you looked at me.

[*Ethel Lynn in New York Ledger.*

FASHION ITEMS.

WHAT a boon it would be to working womankind, those who have little leisure to follow the vagaries of fashion, if it were possible to evolve for them a costume of fur or feather material which would protect from the cold, make laundries superfluous, renovate itself, and never become old-fashioned. What an amount of time, toil, and vexation of spirit would be saved.

But alas! there is little prospect of this much needed reform ever being brought about. As it is, it requires a liberal education in designing and draping, and dress-making to properly put together one of the costumes of to-day; and a lady who, living remote from large cities (where one can gather hints from experienced costumers, or from shop windows,) succeeds in making a stylish outfit from patterns simply, may pride herself on being an accomplished woman. Why, the drapery of an overskirt requires a degree of taste and a knowledge of artistic effects which, if applied to some more pretentious object, would make the "draper" famous.

As this is an "off season" in fashions, there is little to chronicle in the line of novelties. The crop of "indications" is large, but nothing very definite has been decided on. For the early spring the prospects are that the colors and materials so popular during the past season will continue in favor. As in the winter fabrics, the dark colors—olive, bronze, blue, form solid foundations and are sprinkled or striped with gayer colors. The long-time favorites, Princess and polonaise, still retain their hold on popular favor and with a little modification a last year's garment of this description can be made to appear in the latest style. A new feature is the panel inserted back and front. It is either plain or shirred to suit the fancy of the wearer. At 6145 and 6143 are published models of some of the latest styles in polonaise.

Figure No. 1—The combination of plain and brocaded goods continues popular and is seen in all sorts of materials, from worsted to the richest of silk and velvet. The costume illustrated is composed of plain silk of a dark tint and brocaded silk of a light shade of the same color.

The skirt is a demi-train and by the insertion of fan-gores at the center of the back-breadth falls in the narrow flouncing outline which fashionable ladies consider indispensable in handsome costumes. It is simply trimmed with a box-plaited flounce of the goods set on to form its own heading, while the train and a portion of the sides are underlaid with plaited Swiss edged with lace. Sometimes two rows of trimming are employed and may be similar or contrasting in style. The pattern to this skirt may be used for any material, and is No. 1836, price 35 cents.

The polonaise is of the latest styles, and is so constructed that over any skirt of the same material it produces the effect of a Princess dress with a scarf drapery. The fronts and under-arm gores are about the length of a long cuirass basque, the front being fitted at each side by two

6143

bust darts and an under-arm dart. To these fronts and gores a drapery cut in one piece is attached, descending from right to left and laid in diagonal plaits. This drapery is of brocaded material and is trimmed with a row of white lace. The sleeves themselves are of the dark silk like the remainder of the polonaise, and are made with gatherings at the elbows.

The back and side of the polonaise are in one piece, but are fitted to the figure by a center seam terminating in an extra fullness just below the

6143

waist, and by a dart seam extending from the shoulder for a considerable distance into the skirt. The fullness of the center of the back is laid under in a box-plait, while an extra width occurring in the under-arm seam is turned forward on the under side and tacked to position. A downward turning plait is made in the front edge of the back skirt, before the seam is closed, and the skirt is also caught up twice at each side of the center, the corresponding tackings being connected by elastic straps. The bottom of the skirt is corded with light material, and may be further decorated by a continuation of the lace on the front.

The *lingerie* consists of lace arranged inside the standing collar of the polonaise and extending down the front over the *plastron* in a narrow *jabot*, that is held in place by clusters of roses and foliage.

The drapery may be of the dark material. Two shades of rich or inexpensive goods, or a combination of silk and worsted, will be found very charming for such a costume, the polonaise which was cut by pattern No. 6143, price thirty-five cents.

The *plastron* mentioned was cut by pattern No. 6161, price twenty cents. This pattern is made the full length of a lady's figure, so that a *plastron* may be made to wear over a Princess dress and polonaise. It is also marked with perforations, showing where it may be cut off for a short vest like the one represented on this figure. This *plastron* only extends under the top of the drapery and is formed of guipure net bordered with torchon lace. It is gracefully shaped to the figure, curving in below the bust and rounding up over it, and finally extending about the neck in collar-like tabs that meet and fasten at the back. The sleeves are completed with deep cuffs, which are similarly composed of net and bordering, but are straight around at the top, being in this respect unlike the pointed cuff pattern accompanying the *plastron* pattern and included under the same number.

The cuff and *plastron* may be omitted from the costume, except when the latter is worn for full dress. Or, they may be made of black lace, or of the brocaded silk. They are handsome to wear with any costume, provided they are made of appropriate materials. Silk, velvet, Swiss muslin, and *crepe lisse*, as well as the more inexpensive nets and laces, are all used in making the set.

When constructed, like the model, of black silk and dark gray suit goods, with silk pipings, silk-bound slashes, silk buttons and simulated button-holes, as decorations, it becomes particularly effective for ordinary wear, and when made of costlier materials in the fashionable evening tints, it completes a handsome toilette, that can be appropriately worn at receptions, weddings or any other entertainments where elegant costumes are required.

The center-front is formed of a vest that extends the entire length of the polonaise, and from the neck to a short distance above the bottom, is shirred over a piece of lining suitably shaped to the figure, and then falls in a moderately deep flounce, neatly hemmed at the lower edge. These shirrs are arranged in four clusters, separated by deep puffs, the two upper and largest groups being placed one above the bust and the other below the waist-line, the remaining two appearing at regular intervals below.

The side-front extends from the top of the shoulder to the bottom of the vest, and is snugly fitted to the figure by a bust dart and an exceedingly narrow under-arm gore. To its gracefully curved front edge, which is first laid in three upward-turning plaits below the middle of the skirt, is joined a *revers*, which is carefully hollowed out at the waist-line, above and below which it gradually widens. Both *revers* are made of black silk piped around the edges, and are ornamented with clusters of buttons upon simulated button-holes placed opposite the shirrs. The front edges of the side-fronts are lapped upon the adjacent edges of the vest, whose right side is joined the entire length, while the left is tacked only to a little above the second cluster of shirrs, the remaining edges being bound and joined by means of buttons and button-holes to a fly sewed beneath the edge of the front.

Although the back presents a decidedly unique effect, it is still of the stylish Princess shape, having a gracefully inflected center seam, and a handsomely formed side-back gore proceeding to the shoulder and terminating about an inch below the neck. The center-back is artistically shirred over a piece of lining made to fit perfectly to the figure, the shirrs being disposed in two groups separated by a very deep puff. At quite a distance below the waist-line an extra width is left upon the back edge of the side-back gore, and another upon the adjacent edge of the center-back, the width upon the former being turned under for a hem, while the edge of the other is neatly bound. The plaits laid in the front edge of the side-front are continued across to the back edge of the side-back gore, which from the shoulder to the extra widths is joined to the center-back in an ordinary seam. From the top of the widths the side of the center-back is lapped upon that of the gore, and after being laid in two downward-turning plaits or loops, is tacked to the latter as far as the lowest plait. Tapes, which are attached one to each plait at the back edge of the side-back gore, tie beneath the back and hold the drapery in its graceful position. The overlapping sides of the back are ornamented with silk buttons and simulated button-holes, and the bottom of the polonaise is cut in slashes, which are neatly bound with the silk.

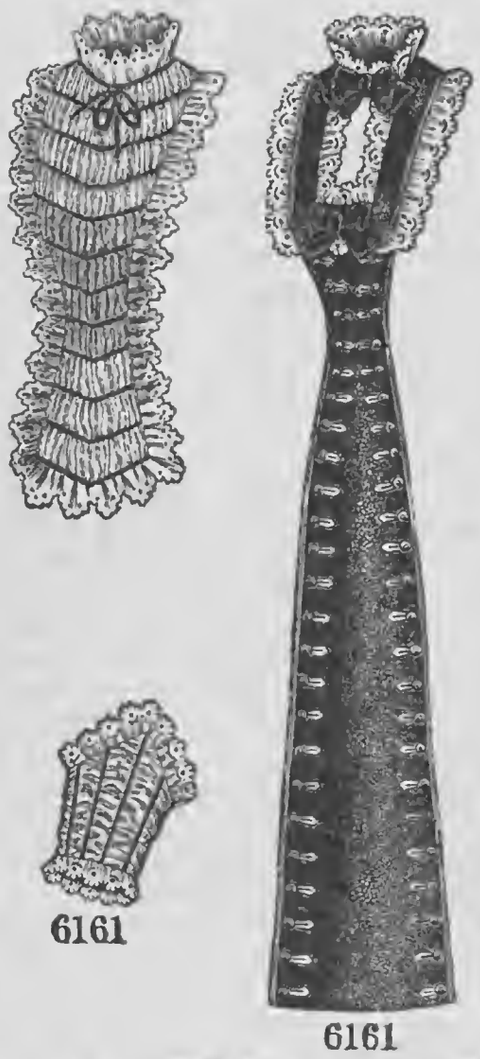
A long lap, wider at the bottom than at the top, is made of silk and sewed between the edges of the seam joining the side-back to the under-arm gore, at a short distance below the waist-line. This lap is fastened upon the under-arm gore, and is ornamented with pipings, and a row of buttons placed upon simulated button-holes of varying lengths.

The neck is stylishly completed by a fraise made of the silk. The pretty article is formed in double box-plaits at the back as far as the shoul-

LADY'S HOME TOILET.

der seams, from which it is left plain and tastefully shaped at its front edges.

The fashionably shaped coat-sleeve, with gathers underneath the elbow, is made of the silk and trimmed at the wrist with a deep puff of the material, shirred at about an inch from the upper and lower edges.



6161

6161

If preferred, the vest and center-back can be made of the contrasting fabric, and fringe, folds, pipings, lace, plaitings or galoon-bands can be employed as decorations instead of the slashes. Any pretty method of finish, and any stylish combination of materials, either of uniform or contrasting colors, are suitable for this model, which would be exceedingly handsome if composed of velvet and silk or silk and cashmere, and trimmed with satin pipings and deep silk fringe mingled with *clair de lune* beads. For a polonaise of black silk, a vest of shirred satin would be very handsome, combinations of satin and silk being particulary fashionable.

We have pattern No. 6145. In making the polonaise for a lady of medium size, ten yards of goods twenty-two inches wide, or five yards forty-eight inches wide, together with three yards and an eighth of silk for the sleeves, *revers* and laps, and a yard and five-eighths of lining material twenty-seven inches wide, will be needed. Price of pattern, thirty-five cents.

Patterns described are for sale at the office of the RURAL NEW-YORKER, at prices given.

FAITH RIPLEY.

ANSWERS TO CORRESPONDENTS.

MRS. S. G. H.—First rip the baby's cape, separating the merino from the lining and the trimming. If the satin is very much soiled, I know of no way to renovate it, except sending it to a professional cleaner. But the merino can be thoroughly cleaned by carefully washing it after the following method:

1st. Brush it well so as to get rid of dust. Use only fresh rain water, or very clear river water is preferable. With a sponge or old flannel rub up a very strong lather of either soft soap or best yellow soap. The lather may be prepared with a small quantity of water and the remainder (of the water) added boiling hot, the moment before using it. The whole should be as hot as the hand can bear it; the hotter the better. If the cape is very dirty, two lathers may be required in succession; and unless a second person is at hand to rub up the second while the first is being used, both had better be prepared in separate vessels before the wools are wetted, leaving only the boiling water to be added. Take the article to be washed and without leaving hold of it, keep on dipping and raising, dipping and raising, for two or three minutes. By that time the lather will be absorbed by the wool, and the liquor will resemble slimy suds. Squeeze the article as dry as may be *without wringing it.*

The second lather having been brought to the same heat as the first, proceed in the same manner, dipping and raising. If the article is only slightly soiled and after the first washing appears quite clean and clear, the second washing may be made in hot water without soap. Whether lather, or water only, a blue-bag may be slightly drawn through before the second washing. Having squeezed the article dry as may be, spread it on a a coarse, dry cloth pulling it out to its proper shape, lay over it another coarse dry cloth, roll up tightly and let it remain half an hour. If you care to send the cloak or the cape to me, I will have it cleaned for you, and returned in good order. The cost will be about $1.25 or $1.50. If you should decide to send it, would recommend that you rip it apart.

CLARA BREITMAN.—The most fashionable evening hat at present is a thing of lace, feathers and flowers; very much resembling a fancy cap; but in spite of its dainty appearance, horribly suggestive of such unromantic ailments as neuralgia, tooth-ache and influenza.

Literary Miscellany.

MASKED BATTERIES.

If you'll keep it secret—honor bright—
I'll tell you a little story, Joe;
Something that happened to me last night
Here at the masquerade ball, you know.

You may have noticed I've spooned of late
On Laura Clyde—nothing else to do—
She's rather pretty—at any rate,
Fond of flirting, and I am, too.

Laura's a friend of my sister Fan:
Her rooms join mine and the walls are thin,
So I, by accident heard them plan
Their dresses for masquerading in.

The ball was lovely, the costumes fine,
And either dancing or iced champagne—
Can't say which, but expect the wine—
Just a little confused my brain.

So, meeting Laura—a gypsy maid—
Knew her at once by her dress, you see—
I took her out for a promenade
On the piazza alone with me.

Flirted? Said I was deep in love,
Madly worshiped the ground she trod,
Vowed it by all below, above,
Did she return it!—a word, a nod?

The fair head dropped in assent, and I
Snatched off the mask—with rapture kissed her:
A peal of laughter was my reply,
By Jove, old boy, it was my sister!

Laugh at me, Joe! Don't spare my pride!
Nor mind my feelings—I feel so glad
It was my sister, not Laura Clyde;
Heavens! What an escape I had!

[*Vanity Verses.*

CORA.

CHAPTER IV.

"Is this prudent?" Cora said, half reproachfully, as Lord Almane came forward and took her hand.

"Do I look so very ghost-like?" he asked, smiling, as he held her hand and bent a very admiring look on her face. "Do not send me away, for pity's sake. I am so tired of solitary confinement, but I shall wish myself upstairs again if you look sorry to see me."

"I am very glad," she answered, coloring hotly under his dark eyes, and gently disengaging her hand—"very glad; and yet sorry to see you looking so ill."

"It is ten days since I had a glimpse of you," he went on, as he sat down and lent his head back on the cushions. "Ten long weary days! Have you been a little sorry for me, Miss Sinclair?"

"A little!" said Cora, impulsively; "much more than a little."

"Have you?—really?" he queried, eagerly. "I have wished to see you so much. Your brother has been all that is kind, but all his attention could not prevent me from wondering whether you thought of me sometimes, and pitied me a little."

"You have suffered a great deal," she said, gently, taking up some work to hide her embarrassment.

"And yet you have lived abroad your brother tells me. Does not Richmond seem very lifeless after Paris and Rome?"

"I was too young when we came here to feel the change," she answered. "At ten years old if one has one's favorite companions and toys it is all one needs."

"But not at twenty," he said, quickly. "Then one ought to live, not merely exist. Ah! there are such beautiful things in this world of ours. I for one, quite agree with Voltaire, in calling it 'the best of all possible worlds!'"

Cora raised her eyes wonderingly to his face, but she did not understand the expression she saw there.

"I am so many years older than you," he went on, smiling a little. "You are looking at life through rose-colored spectacles, my child. But I, who see things as they are, know that those moralizers are wrong who say there is nothing worth living for. There is much!"

He paused a moment, and meeting her wistful, wondering eyes, laughed a little as he proceeded:

"I am getting earnest," he said, lightly; "but it is rather a pet hobby of mine—the way in which the greater part of humanity waste their time, their lives, and die without ever having lived—lived in the real acceptation of the word—at all, and say, like dolts as they are, that there is nothing worth living for: Nothing!" he went on, passionately, his tones losing all their languid dreaminess in his earnestness—"nothing! when there is beauty such as yours, my child—beauty which could bring back an old man's vanished youth; when there is pleasure—the pleasure derived from the use of physical and intellectual faculties; and lastly," here his voice took the soft tender tone which was becoming familiar to Cora now—"lastly, there is love!"

"Do you know what that is, Cora? I hope not—I hope not. Ah! forgive me if I am presumptuous, let me teach you what it is. I can—I know I can, if you will let me, Nay, do not take away your hand, my child. Will you let me teach you the lesson, Cora? It shall not be a hard one, Cora."

She had risen in her agitation, but had not withdrawn her hands from his as he held them closely; both faces were passion-pale, and hers was deeply moved. He, more experienced though he was, had spoken with no small degree of emotion, for her beauty had touched him deeply.

"You have taught me to love, Cora," went on the tender musical tones; "may I not teach you the same lesson?"

The girl's head dropped, and her lips quivered, as she turned slightly toward him.

"Cora—Cora—my own!"

He had not risen but held her two hands closely clasped in one of his, and sitting there, he bowed his head over the little hands which fluttered in his grasp, and pressed his lips upon them, even as he had done once before. This time they were not withdrawn.

Marianna, passing down the garden, saw the group; one rapid glance showed her Cora's drooping head and tremulous lips; Lord Almane's pleading, passionate face and attitude of devotion. The old servant rapidly retraced her steps, and a few minutes after, with a light knock at the door, appeared in the drawing-room with

6145

6145

He did not answer, and there was a short silence. Cora knew that the dark glowing eyes were fixed upon her, and felt herself flush and grow pale under the earnest gaze. Lord Almane saw her agitation, and smiled.

"How do you generally pass your time?" he said, in a minute. "Are you much alone here? Is it not a little dull for you?"

"Oh, no!" she answered, quickly.

And Harold rose to put a chair for the old woman, whom both he and Cora always treated with the respect due to her age and faithful service.

"I will not detain you a minute, signor," she went on; a flush appeared on the yellow wrinkled face. "I only wanted to know how long Milord Almane would remain?

Harold looked a little surprised.

"Until he is quite well—as long as he likes, of course," he answered. "Why do you ask, Marianna?"

"I should be glad if he were gone, signor," said the old servant, sturdily. "Such *grands seigneurs* as he is, are out of place in our quiet home."

The young artist smiled.

"I never knew you inhospitable before," he said. "Lord Almane has fallen very easily into our quiet ways."

"Too easily," muttered Marianna, discontentedly; then she went on aloud:—"Milord Almane is quite well enough to go, signor?"

Harold lifted his eyebrows. As an old and faithful servant and friend, Marianna had many privileges; but he did not recognise her right to dictate to his guests the limit of their stay.

"Lord Almane is welcome to remain as long as he wishes, Marianna," he said, quietly. "His being well enough to go does not make any necessity for departure as long as he cares to remain."

"Signor," said Marianna, earnestly, "do you not know, can you not guess, that great as he is, and rich as he is, you possess a treasure which Milord Almane courts with all his heart? Are you willing that he should have it?"

Harold Sinclair looked up in astonishment. The woman's tone was so full of significance that he could not but see there was a deep meaning attached to her words.

"What do you mean, Marianna?"

"I mean this, signor;" and she motioned him to follow her.

Leaving the studio, which was lighted by a large window let into the roof, Harold followed her on to the landing without. An ivy-covered latticed window looked out upon the garden, and following the direction of Marianna's glance, Harold saw his sister and Lord Almane strolling up and down the little path.

It was a fair, sunshiny April morning, and the trees were putting forth their tender green shoots, the flowers their spring buds; but Harold Sinclair saw nothing but the two people who were pacing up and down in the sunlight.

Lord Almane still wore his arm in a sling, and was wrapped in a long, fur-trimmed coat; but he looked very happy and contented, notwithstanding that his face still bore marks of suffering.

Cora had caught up a gay scarlet scarf which she had thrown over her head, and twisted around her, beneath which her face looked out radiant with light and beauty—more beautiful than her brother had ever seen it before.

Harold drew back from the window, a flush of painful surprise rising to his face. Could it be possible that Lord Almane had so betrayed the laws of hospitality and honor? No, it could not be. But there was danger to Cora in the companionship; danger in playing with such edged tools. What might be amusement to Lord Almane would not be to the innocent inexperienced young girl; and his lordship could have no serious intention towards her, unless.——

"Do you think he loves her?" asked Harold, in a low tone to Marianna, as he went back to his studio.

"Ay, as he can love," she replied.

"And she?"

"She? Ah, signor, she has a child's heart, and a child's heart is easily touched, easily wounded; but, but the saints be praised, easily healed.

There was a short silence.

"Do you know aught of him, signor?"

Harold shook his head; he was feeling painfully the imprudence of his conduct in allowing the free, unrestrained companionship between his sister and his guest; but the habit of looking upon Cora as a child was strong upon him still, and he had never thought of danger.

"It must be stopped at once," he said, aloud, striding up and down the studio. "It was wrong to expose her to——"

"But, signor," the old servant interposed, "our signorina would make a beautiful *grande dame.* It may be that milord would make her his wife, and all we need ascertain is whether he is worthy of her."

Harold smiled sadly.

"Ah, Marianna, if it were so, it would be well indeed. But men like Lord Almane do not marry girls in Cora's position."

"Why not, signor?" said Marianna, almost fiercely. "The signorina comes of a family as ancient, perhaps more so, than his own."

"That may be, Marianna," replied Harold, unable to resist a smile at the old woman's flash of fierce pride. I hope the child's affections are not seriously engaged," he went on in a minute. "Leave me now, Marianna, and let me think what is best to be done."—To be continued.

WASHINGTON SIGHTS.

The Agricultural Building—Tea Growing in the South.

MARY GAY ROBINSON.

WASHINGTON, D. C., Feb. 14, 1878.

ONE of the most interesting departments in Washington is the Agricultural. Once it was a mere appendage of the Patent Office, and very suitably associated with that, as the first inven-

tions and patents in the world must have belonged to agriculture from the date that ADAM and EVE were put in the garden and told to till it.

It is but nine years since the Agricultural building, erected for the special use of this department, was completed. The grounds are handsome, rising a gradual ascent to the front; flowers, shrubs, trees, walks, and drives, ranging the foreground with hot-houses and gardens in the rear. The building is of brick, with brown-stone trimmings.

On the first floor are offices, laboratory, library, and reception rooms, opening into handsome halls upon which are hung in conspicuous places, "No vacancies"—"No one need apply for employment," &c., &c. But in spite of these, there is a waiting crowd who have brought letters of introduction and of recommendation. They are a study in themselves, ranging through all the grades of active life, from those who call themselves "working-women," to the delicate hands of wealth and idleness. It is a dreadful misfortune for a woman to have a hand so delicate she cannot use it; she is on a par with Chinese ladies with feet that cannot walk.

There were few gentlemen applicants, and those who came were too impatient to wait; but the women sit by the hour, as if waiting was second-nature. They seem to be under the influence of so much inertia, that it will take a thunderclap from the heavens to make them hear the order, "Go, work in my vineyard." The workers of the world are divided into three classes—those who can set themselves and others to work, those who can only set themselves to work, those who can work when another directs them; and outside of these ranks the drones or paupers, whom the workers have to lift and carry.

Waiting may have its place, but waiting *on* people is much more healthy than waiting *for* them, and it is pitiful to see the wrong kind of waiting at the door of office and position.

The present Commissioner is Gen. WM. G. LE DUC, a wide-awake man, who does not spare himself in his work. He fully appreciates the necessities of the country and the importance of agricultural interests; he is not afraid of enterprise or toil, for he sees far enough to know that labor is king—when labor stops, the world dies; therefore, he gives himself to looking out new industries for the people, new crops, new fields to cultivate.

One of the most interesting projects in the hands of Gen. LE DUC and his assistant, Mr. A. C. JONES, is the raising of tea in this country. Experiment has succeeded, and the time has come to go beyond experiment, and cultivate it on a large scale. His report opens with this fact:—"We import annually from China and Japan twenty million dollars' worth of tea; this large import comes to us through British merchants, who are monopolists in the trade. Once upon a time, we pitched the tea into Boston harbor, rather than pay unjust taxes, and now when hard times are crushing us, we must look about to see what we can do without, or what domestic productions can take the place of our expensive importations. The cup of tea exhilarates, without intoxicating; it is the favorite beverage of the people, and twenty million dollars a year will hire labor, land, and whatever else is necessary to get into full development this well-known evergreen which we propose to adopt. The propagating-beds of the Department are filled with healthy seedlings, and it is expected they will be able to give away a hundred thousand plants early in the spring."

We saw this hardy little shrub untouched by frost or snow, like a thrifty evergreen, in the grounds not under protecting glass; it had gone beyond need of careful nursing, and looked as bright and healthy as box. The ordinary hight of the cultivated plant is from three to six feet, and we are told the wild growth reaches fifteen or twenty feet—in fact, a tree eight or ten inches in diameter.

Tea is raised from small nuts or seeds. Three or four of these are dropped into a hole and covered with earth two or three inches deep. The weeds must be removed, of course, and at first a little shading is necessary until they are large enough to supply their own shade. They also require some pruning, and the leaves are not collected for use until the plant is three years old; when nine or ten years, they are cut down to make room for the young shoots. The tea is gathered when the leaves are small, young and juicy, and the first tender leaves make the best tea, so choice and rare that we never get it here; in fact, the best tea is worth, in China and Japan, from five to fourteen dollars a pound.

Tea gathering is a process of great niceness and delicacy; it requires delicate, clean, and skillful hands; those of women and children are best fitted for the work, and each leaf must be plucked separately from the twig with great care, so as not to injure the young leaves just coming out.

After gathering, the process of preparation for use is quite elaborate in rolling, drying, clipping, and packing ready for transportation. They pack the tea while warm, in a box perfectly dry; the evaporation of water and the drying changes the color to dark-brown or black. Teas are named from the size and age of the leaf and the locality in which they are raised.

Physicians tell us tea is not nutritious, but that it prevents waste of the system, and makes less food necessary. The Chinese drink the tea made from leaves soon after they are picked, but prepare quite a different article, dried and dressed for the foreign market, and the best authority declares the one leaf makes every variety of tea, the difference being the result of different ways of preparing. The first thing the United States might attempt would certainly be to raise enough for our own use as long as we have more workmen than work, workers whom capital refuses to employ. Some statesman must devise ways to do ourselves what foreigners now do for us.

The average price of tea as imported, is about thirty cents a pound, and it sells at retail for more than twice that amount. In latitudes adapted to its growth every farmer can have his tea garden. Four pounds of green leaves make one pound of prepared tea, and one acre will produce four hundred and fifty pounds of tea.

The States which are best adapted, from climate, for this plant, are Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Arkansas, Missouri, and part of the Pacific coast.

Many letters have been received from people in those Southern States, who have succeeded in raising tea. They compare their success with the cotton crop, and think it bids fair to be more profitable, only the one is in full development and the other not. In South Carolina, they say the cotton yield to the acre is $15, and the best yield about $40; but tea at fifty cents a pound would bring $220.50 per acre. It figures up handsomely in prospective, but fortunes are often more easily made on paper than in reality. However, there is a wide margin for failure between a cotton crop at $15 the acre and tea at $220.50. It certainly looks promising enough to try.

Mr. IVES, of Lake City, Florida, says we ought to grow our own tea but we are not likely to, unless something is done to promote an interest in the matter. The interest may be promoted by our poverty. If hard times keep growing harder we may raise our own tea, because we cannot afford to buy from the foreign market. A gentleman who had experimented with thirteen plants and knew the elaborate process through which it must pass, said the difficulty was to obtain cheap labor at five and ten cents a day, as the Heathen Chinee sells himself, but this might be compensated by some machine to imitate hand labor. As soon as we begin to try our tea plantations, the inventors must set themselves to work to make a machine as near like a human hand as possible. Already we have many inventions in machinery that are miracles to look at, and as the future brings us whatever we need, no doubt there are countless numbers yet to come.

BRIC-A-BRAC.

BY C. H. E. R.

WHAT appreciative reader can sufficiently value books—those silent friends that develop new beauty at every turn? The more life embodied in the book, the more companionable. Like a friend, the volume salutes one pleasantly at every opening of its leaves, and entertains; we close it with charmed memories, and come again and again to the entertainment. The books that charmed us in youth recall the delight ever afterwards; we are hardly persuaded there are any like them, any deserving equally our affections. Fortunate if the best fall in our way during this susceptible and forming period of our lives. Books are to be valued for their suggestiveness even more than for their information; they may be taken in hand and laid aside, read at moments, containing sentences that quicken our thoughts and prompt to following these into their relations with life and things. We are stimulated and exalted by the perusal of books of this kind.

WINTER makes nations manly by driving men into social unities, and obliging them to live with each other, and devise ways for their amusement and instruction. In a mild climate, where there is no necessity for men to dwell under a roof, they wander abroad, and in a great measure dispense with each other's society, so that, although they may have a certain amount of cursory enjoyment, they are comparatively uninstructed. But, in a severe climate like this, when the cold season shuts men out from the field, and they retreat from their ordinary avocations, and the days are short and the evenings are long, the dwelling becomes a school-house, and there must be conversation and reading. Under such circumstances the family is a center of knowledge, and, if there be any leaven in it, a center of Christianization.

OUR ART CORNER.—Those who are interested in art in the household, will doubtless gather a hint or two from the following Art Corner chat which we clip from the Christian Union: "Our art-corner was conjured up by Isaac and me. The design was mine, most emphatically mine, for I am the artist of the family—taking to art as to the manner born. Still, to give Isaac his dues, I must say that after my designs were laid before him he showed himself very appreciative and good at a suggestion; consequently, I always use the plural in speaking possessively of that corner. In fact, Isaac did most of the work, while I superintended and added the finishing touches. Where I got my first idea of an art-corner I cannot remember—perhaps from Eastlake or Clarence Cook; or it may have been from little hints here and there that wove themselves together in my mind. But whatever it was that gave the first impulse in regard to that structure, there it stands in all its glory, the delight of my eyes, of Isaac's, and of our numerous friends and acquaintances. The beginning of it in tangible form was two boards for uprights about forty inches in length by eight and a half in width; three shelves thirty-six inches long by eight wide; another board the same size as the shelves. The latter is nailed across from one upright to the other, back of the highest shelf, the two china plates of my own decoration resting against it, while there is the delightful prospect of an additional plate, aged one hundred and fifty, to add its antique beauty to the rest. On the same shelf is a ginger jar, not loaded with all imaginable devices so closely crowded that one scarcely knows where a Chinese woman ends and a voracious looking serpent begins, but decorated with a few well-selected pictures on a pale cream-colored ground. This color was laid on in oil paint, and between the pictures, partially filling up the vacant spaces, are gilt scrolls, very easily made with a sable brush dipped into printer's gilt after the gilt is mixed with a little mucilage. An old-fashioned brass candle-stick, containing a wax candle ornamented with a little decalcomanie work, completes the furniture of the top shelf. The second shelf contains a little Japanese cabinet and tea-pot, an empty salt jar nearly covered with roses and butterflies, and a large beautifully variegated nautilus shell. On the lower shelf is a number of shells of various kinds and sizes, and two or three articles from India. But it is not so much the furniture of the shelves as the shelves themselves I want to speak about. The plain boards, brought by Isaac from a planing mill at a trifling cost, are transformed into an article that every one not in the secret supposes to have come from Japan. They are painted black, thoroughly dried, then varnished, and while the varnish is wet the printer's gilt is rubbed on in spots with a pad of wadding. Then, when thoroughly dry again) the shelves receive a final coat of varnish; carriage varnish is the best. The edges of the shelves are trimmed with scolloped points of crimson enameled cloth, nailed on with silver or brass-headed nails. Above this "high art" establishment is a standing row of Japanese fans, which give the finishing touch to our corner.

Reviews.

RECENT LITERATURE.

The House Sparrow, at home and Abroad, with some concluding remarks upon its usefulness and copious references to the literature of the subject. By THOMAS G. GENTRY. Phila., Claxton, Remsen & Haffelfinger. Price $3, with colored plate.

THIS work is a valuable contribution to "Sparrow" literature and we commend it to the careful perusal of farmers. To give our readers a fair idea of the scope and aim of the book we will quote from Mr. GENTRY in the Preface:

"In view of the many heated discussions which the sparrow has produced in this country tending to show its general usefulness or wholesale destructiveness, a careful and critical survey of its life-history, detailing the minutest particular thereof, cannot fail to awaken attention and to command respect. Agriculturists and fruit-growers mainly of all others will certainly reap the first fruits of such knowledge. The facts which the writer has gleaned from various fields of observation, but largely from his own, at infinite pains and expense subserve in the highest degree, the interests of humanity, and should not be carelessly set aside. With the disappearance of our highly insectivorous native species before the rapid and insolent advances of their hardy foreign brother and the consequent multiplication of insect foes, must come the destruction of vegetation and the entailment of untold misery upon man and beast. The sparrow itself, by reason of its almost exclusive grain-eating habits will assist in bringing about this much-to-be-regretted condition of things. He must be a fool who can close his eyes to the fact. Wherever we turn, evidence of its baneful influence confronts our vision. We cannot escape it. The writer would say that his only plea for writing this history is that a more general knowledge of the sparrow's odious practices which are manifold, shall be brought before the tillers of the soil and the growers of vegetables. Further to awaken attention to the growing evil in the confident expectation that it may be instrumental in the adoption of practicable means for getting rid of the intolerable nuisance.

The Nabob. By ALPHONSE DAUDET. Translated from the French by LUCY HOOPER. Boston: Estes & Lauriat.

THE fact of this book having gone through seventeen editions in three weeks, proves, beyond peradventure, that it is worth reading. The scene of the story is laid in Paris, under the second Empire, and a more deplorable picture of corruption and venality in social and political life it would be hard to imagine. The hero, BERNARD JACSOUTET, is a vulgar man, whose instincts and tastes render him totally unfit for the society of the polished, cynical, unprincipled Parisians by whom he is surrounded. There is something pathetic in this simple-minded, good-hearted fellow's frantic endeavor to shine in society, and his utter unconsciousness of the fact that the polite world is laughing in its sleeve at him.

It is with feelings of positive pleasure that one turns from the contemplation of the immorality and coarseness of the "upper ten" to join the delightful family circle of the JOYEUSE. The charming "Grandmother" is only a little more adorable than Papa JOYEUSE, with whom we sympathise acutely when he grieves over the loss of his position. As a whole, the story is clever in conception and brilliant in execution.

Our Merchant Marine. A Voice for American Commerce. By CHAS. S. HILL. New York: D. Appleton & Co.

UNDER this title Mr. HILL, in a monograph of some 60 pages, has given to those interested in American commerce a compilation of facts and figures worthy of their closest consideration. Mr. HILL draws attention to the vast *internal* developments of our country, under the auspices of the Government, within the past few years, and the proportionate neglect and decay of our commercial resources, comparing these features with the fostering care bestowed by other nations upon their merchant marine, and the consequent benefits that have accrued to them. He urges upon all classes—mechanics, merchants and farmers—a revival of interest in the subject, and points out the means of retrieving our loss and placing American commerce once more on a footing with that of the leading nations of the world.

Leedle Yawcob Strauss, and other Poems. By CHARLES F. ADAMS. Boston: Lee & Shepard. Cloth; $1.50.

THE ephemeral popularity of such ballads as "Leedle Yawcob Strauss," "The Puzzled Dutchman," and the like, whose sole merit seems to rest upon the correct rendition of a maudlin Dutchman's broken English, do not make for a man the reputation of a poet. Nor do the parodies and weak imitations which, with them, make up this book of "poems," contribute aught of originality or piquancy to the collection. The volume is not one we can commend as an addition to one's library, notwithstanding its attractive exterior and clever illustrations.

Quinnebasset Girls. By SOPHIE MAY. Boston: Lee & Shepard.

THE charm of this book lies in the naturalness of "the girls." They are true to life and, notwithstanding their sometime naughtiness, utterly charming. The chapter on "Spiritual Lilies" we would especially commend to those of our young friends who are beginning to feel an attraction for table turnings, phantom bouquets, and other peculiar "*spiritual*" manifestations.

MAGAZINE NOTES.

THE ATLANTIC, March issue, is brimful of interesting matter, and the papers are selected with great aptness, making a varied table of contents that will captivate most diverse tastes. "Detmold:" a romance, opens the number. This serial grows in interest. Edward H. Knight contributes the eleventh article on Crude and Curious Inventions at the Centennial Exhibition. The poetry is contributed by C. P. Lathrop, Whittier, L. C. L. Cleaveland and Longfellow; while Mr. Steadman's poetry is the subject of an appreciative paper by J. J. Platt. Mark Twain is excessively funny with The Loves of Alonzo Fitz Clarence and Rosannah Ethelton, while C. D. Warner continues to verify the Adirondacks in the most delightfully humorous way. The Opposition to Lincoln in 1864, by the late Gideon Welles, Victor Emmanuel's Political Work, The Story of a Swiss Ring Politician, together with the Contributors' Club, and the usual departments make up a charming number.

SCRIBNER'S has has not yet reached its ideal. It improves with each number both as to matter and illustrations. The March number opens with an agreeable paper on Central America by E. Westervelt. The serials, His Inheritance, and Roxy, sustain their interest. Concerning a Prodigal, by Henry King, is a quaint bit of writing that will be appreciated; Noah Brooks' Personal Reminiscences of Lincoln, of which we have the second paper in this number, are most interesting, and furnish new anecdotes and traits of the man. The three remaining illustrated articles are: An Earthquake Experience, Dresden China, and Kenyon College. Saxe Holm contributes a story, and Boyesen figures among the poets.

ST. NICHOLAS is as captivating as ever. Two full page illustrations: A Horse at Sea, and The London Chickweed Man are very spirited, but the whole number is so replete with fine specimens of art work that it seems invidious to make distinctions. Here are the titles of the prominent papers: Hansa, The Little Lapp Maiden, Secrets of The Atlantic Cable, A Night with a Bear, Westminster Abbey, Crumbs from Older Reading, and The Boy in the Box.

THE IOWA LIBERAL, edited by Mr. C. F. Leidy, at Le Mars, Iowa, is one of the best country exchanges that reach this office. Every issue of the Liberal is brimful of spicy, readable news, showing to good advantage the go-aheaditive characteristics of our Western cousins. Those of our readers who want to learn concerning the Northwest, will save time and trouble by sending fifty cents, and securing the Liberal for three months.

ALL of our readers interested in the sea, and sea songs, should send fifty cents to PROCTOR BROTHERS, Gloucester, Mass., and receive per return mail a copy of "The Fisherman's Ballads and Songs of the Sea." It contains 121 songs and ballads, handsomely printed and finely illustrated.

LIPPINCOTT'S MAGAZINE for March maintains its usual standard of excellence. It contains among other attractive matter, Edward King's second paper on "With The Russians in Bulgaria," which those who have heretofore trusted entirely to English sources, for information respecting Russian campaigns, can accept as a fair showing of the "other side." A story by Clara M. Green, entitled "Miss Twill's Observations," is extremely chatty and pleasant, and M. F. Synge's poem "The Withered Chaplet," is as dainty a bit of sentiment as we have met with in some time. "Small Farce and Comedy," by Mary Dean, is an idyl of the children, and although the mind masculine can hardly appreciate her rhapsodies; most mothers will doubtless cordially endorse the author's idealization of the little folks. The installment of "For Percival," the anonymous serial, is particularly clever.

The Querist.

ANSWERS TO CORRESPONDENTS.

Miscellaneous.

Mrs. Julia A. Judd, Bee Co., Texas.—I have just received the seeds, for which accept many thanks. There are two kinds that I cannot find in my catalogues, and I am no botonist and not much of a florist, except in my love for them. I do not know how to treat them. They are Eryngium Leavenworthii, and Glaucium luteum. Please tell me about them.

ANS.—Eryngium Leavonworthii is one of the showiest, most striking annuals that has been introduced for many years. Treat them in the same way you would Balsam seeds. Glaucium luteum is a hardy perennial and of the easiest cultivation. It is suitable for edgings and borders.

Wm. S. Ross, Wood Co., Ohio.—Will the RURAL please state the difference between the Voltaic Armadillo Electrical bands and soles of E. J. LEIBERT, New York, and Pulvermacher's chains and belts.

ANS.—We have never seen the first named, but should suppose that the respective pamphlets of the two firms would lucidly explain the points of difference.

Miss M. J. R.—We extend our thanks for poem copied and sent us. We cannot use it because it is protected by copyright, and published in book-form. It would be an injustice, moreover, to the author and his publishers to do so. Thanks, also, for other offer, which we must decline.

Address mislaid.—Would you kindly name for me the inclosed plants? A portion are wild, the rest garden plants.

ANS.—The flowers reached us in such a forlorn condition that we cannot name them all:

1. Kerria Japonica. 2. Lysimachia nummularia. 3. Achillea Ptarmica. 4. Missing. 5. Anemone quinquefolia. 6. Physostegia Virginiana. 7. Gillenia trifoliata. 8. Missing. 9. A Ranunculaceous plant. Helleborus perhaps. 10. Hibiscus moschoutos. 11. A mallow of some kind. Callirrhoe? 12. Missing. 13. Trillium erectum (?). 14. Cannot determine. 15. Tradescantia pilosa.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, FEB. 25TH.

Lottie King.—Mrs. S. H. R.—J. W.—E. B.—L. A. R.—E. S.—"Sam."—S. R. M.—A. G. B. seeds received, thanks.—R. H. A.—"Perle Perdu."—G. W. S., next week.—G. R.—"A Working Farmer."—Mrs. C. C.—Nell S.—L. S. W.—A. L. J.—Y.—S. E. T.—Mrs. W. C. F.—B. P. M.—Mrs. C. M. C.—A. L. J. No. 2.—M. B.—M. B. H.—"N. J. Sandpiper."—W. W. R.—L. A. R. 2.—E. E. R.—M. S.—A. W. M.—T. H. H., M. D.—M. E. S.—"Brown Badger."—H. A. M.—"Gina H."—L. J. T.—Mrs. S. A. M.—W. C. L. D.—A. C. W.—F. D. C.—B. F. T.—W. J. B.—Miss S. A. L.—M. B. P., thanks.—R. A.—G. A. W. W. J. F.—Mrs. S. A. M.—"Wild Cherry."—W. F.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Feb. 19.—All the reports about Sitting Bull having crossed the frontier, were got up by people interested in the establishment of new forts or contracts for supplies.

Germany asks Russia not to occupy Constantinople. Europe is drawing a long breath of relief, after having escaped an imminent peril; but things are still more than a trifle menacing.

WEDNESDAY, Feb. 20.—After the passage of the Silver Bill, a vigorous effort will be made to repeal the act for the resumption of specie payments in 1879.

The Russians are still massing troops in Turkish territory. They have concentrated 300,000 men in Roumania, not a little to the distrust of Austria. Servia and Roumania are both indignant at Russian treatment of them. The Conclave for the election of a new Pope has just commenced.

THURSDAY, Feb. 21.—The Senate has restored the franking privilege. Darrall, Rep. of La., has been unseated by the House, and Acklin, Dem., seated in his place. Republicans complain bitterly of gross injustice in this and other cases of contested elections.

Prince Bismarck has made a speech in which he says Germany has no rivalry with England, except in friendly trade, is friendly with Austria, hopes Russia will be moderate, is willing to use her good offices for peace; but must decline to arbitrate, and will not go to war unless German interests are threatened; which is not the case now.

Cardinal Pecci has been elected Pope, under the name of Leo XIII. Out of 61 Cardinals in the Conclave he got 43 votes on the third ballot, and was then nominated unanimously.

FRIDAY, Feb. 22.—The Silver Bill as amended in the Senate, has been passed by the House. Williamson of La., has been rejected by the Senate as Collector at New Orleans.

Various conflicting rumors regarding European complications. England growing more resolute as public opinion becomes stronger against Russian aggrandizement. Russia will certainly insist on grasping everything she can by any possibility secure. Suleiman Pasha has been placed under arrest, degraded and banished.

SATURDAY, Feb. 23.—President Hayes will certainly veto the Silver Bill. W. E. Chandler has written another letter on the La: matter strengthening his charges of a corrupt bargain.

The Russians will occupy Constantinople unless the Turks agree at once to the terms of peace dictated to them. Austria has decided to mobilize a portion of her army. Bismarck's speech meets with favor in Vienna, but with disapproval at St. Petersburg.

SUNDAY, Feb. 24.—Late rains here have caused very disastrous floods in California.

A crisis appears to be approaching in European politics. Russia is delaying the meeting of the Congress or Conference while consolidating her power in prostrate Turkey, negotiating with Austria, conciliating Germany, and forcing Turkey to sign a disastrous peace, so as to meet the other Powers on the basis of accomplished facts. The whole of Europe is now armed to the teeth, while every day fresh forces are mustered in and armaments increased, so that a violent outbreak may be expected at any moment, and would perhaps, be preferable to this state of suspense, uncertainty, and mutual distrust and animosity.

MONDAY, Feb. 25.—The Silver Bill. It is now pretty generally conceded will be passed over the President's veto. It is probable that its effects will be neither so disastrous as its opponents think certain, nor so beneficial as its advocates expect. "Returning Board" Anderson's appeal for a new trial has been denied.

The prospects of a settlement of European affairs are by no means improved by the latest conditions reported to be imposed by the Muscovite on the Ottoman. Russia demands a war indemnity of $1,120,000,000, and is to hold Batoum, Kars, Ardahan and adjacent Armenia until it is paid:—that is virtually always. Another trifle of $200,000,000 is to be paid for various specified accounts and four iron-clads to be surrendered. Virtually Turkey is obliterated as an independent sovereignty in Europe, being mortgaged hand and foot to Russia, and despoiled of all influence and extensive tracts of her territory to be ceded to Montenegro, Bulgaria, and Roumania. The enforcement of these conditions means *war*. There seems little use of a Conference or Congress, as Russia insists that peace shall be concluded before it assembles, and denies the right of the assembly to touch the chief conditions of the settlement. Meanwhile the war spirit is hot and intolerant in England; preparations for war are rapidly pushed forward. Austria is growing very restive and the outlook is stormy. It seems probable that the new Pope, Leo XIII, will become reconciled to the various governments with which Pius IX was at variance.

HOME NEWS PARAGRAPHS.

Seventy-five dogs afflicted with hydrophobia have been killed in one county in Georgia.

More than a thousand persons were in Nashville, Tenn., last month looking for homes in the famous farming country near by. They were from half the States in the Union. A tide of immigration to that region has set in that makes Kentucky green with envy.

The Massachusetts Board of Agriculture complains that the rural horse trot at county fairs lowers the tone of the exhibition, and fills New England with a class of horses that are of little practical benefit. The cattle show managers, however, say that the trotting is the only paying feature.

What a few years of good rule can do for the colored men in a Southern State is evinced by the fact that the 84,164 colored voters of Georgia own 457,635 acres of land worth $1,244,104, city property worth $1,199,725, personal property worth $486,528, stock worth $241,106, and other property worth $2,250,000,

Frog culture is the latest Western industry, and is being systematically carried on in Minnesota. It is a simple process, consisting chiefly in the protection of eggs and tadpoles from birds and other enemies by means of wire screens. The product thus far reported amounts to 3,00 dozen legs, of which two-thirds have been shipped to St. Louis, where they bring an average of twenty cents per dozen.

A Chicago man, visiting in Pittsburgh, was crossing a lonely bridge, when a well-dressed lady met him, knocked him down, and took from his pockets every cent. He was frightened nearly to death, made complaint, and had the woman arrested. It transpired that she was his wife, and knew that he could not go to Pittsburgh without getting drunk and wasting his substance. He smiled a sad smile and withdrew the complaint.

The exportation of forest tree seed is assuming dimensions in this country. California sends $10,000 worth per year. The principal purchases are made for Germany, Austria, England, and the colonies, in Austria and New Zealand; and at present the demand exceeds the supply. The seeds of the Oregon pine, known also as the yellow fir, are most in demand. The timber of that tree is as good as British oak for ship building, and has been found sound after eighteen years use for this purpos The South Sea colonies are planting the Californi red wood tree extensively

From observations made on specimens still in existence, the longevity of various trees has been estimated to be, in round numbers, as follows: Deciduous cypress, 6,000 years; baobab trees, 5,000; dragon trees, 5,000; yew, 3,000; cedar of Lebanon; 3,000; "great trees" of California, 3,000; chestnut, 3,000; olive, 2,500; oak, 1,600; orange, 1,500; Oriental plane, 1,200; cabbage palm, 700; lime, 600; ash 400; cocoanut palm, 300; pear, 300; apple, 200; Brazil wine palm, 150; Scotch fir, 100; and the balm of Gilead about 50 years.

The Ætna Life Insurance Company of Hartford, Conn., with its assets of $24,141,175.20 and its clean surplus of nearly four and a quarter millions of dollars, and its well known ecomonical management, has recently received a well merited endorsement from the Special Commission appointed by the Legislature of Connecticut a year ago, to investigate all the Life Insurance Companies of that State. The Commission say of the Ætna that it is "not only solvent, but financially sound, and under the management of officers and directors of large experience, sound judgment and unblemished character, and entitled to the entire confidence of policy-holders and the public."

FOREIGN NOTES.

Cowansville, Ont., boasts of a bride who was recently led to the altar for the fourth time, and who is not over eighteen years of age.

In Russia a husband may appear as a witness in a lawsuit against his wife, but a wife is not heard against her husband, neither has she any redress against him if he deserts her.

A single orange tree in the Azores in one year produced twenty thousand oranges in a fit state for exportation. The Azores send every year to London more than two hundred thousand boxes of oranges.

An Austrian surgeon says that when the Russians took Kars they not only pillaged the shops, but they entered the hospitals and took everything of value they could find, even from the sick and wounded.

Before the Church of Our Lady of Atocha, in which the King of Spain was lately married, a sentinel perpetually stands on guard. The Virgin of Atocha has long held the rank of Colonel in the Spanish army. Hence the military honor.

Cleopatra's Needle cannot be placed in Parliament Square, London, because the Metropolitan Railway demands a perpetual indemnity against risk of accident. Application has been made to the authorities for permission to erect it between Charing Cross and Waterloo bridges, on the top of the Adelphi steps.

Before France stopped the coinage of silver five-franc pieces she had more of these pieces (or unlimited legal tender silver) than our mints could strike in seven years. The enormous sum of 773,130,000 in five-franc silver pieces was in the Bank of France on July 15, 1877.

The French Minister of Public Works has laid plans for the execution of new lines of railways and canals which will cost, for the former, 3,000,000,000 francs, and for the latter, 1,000,000,000 francs. It is expected that these works will consume ten years in their construction.

It is stated that one of the principal rose firms of England purchases annually from sixty thousand to eighty thousand briar stocks upon which to bud standard roses. These when received are sorted, trimmed, and planted out where they are to grow until sold. The proper time for budding these stocks in England is said to be in July, earlier or later, according to the season.

The Gazette of Moscow publishes a letter from Mr. Gladstone (the late British Premier) to a friend in Russia, in which he talks of the "theatrical farces of Lord Beaconsfield," characterizes Osman Pasha as a coarse brute, though courageous; thinks that the palm for strategy during the late war should be awarded to Gen. Gourkho; glorifies the brave little State of Montenegro; and hopes that Bulgaria will be free from all connection with Turkey.

Trustworthy statistics, regarding the recent famine in India, show that out of 1,668,000 inhabitants in the district of Bellary, 14,006 died of starvation, in March alone, 1877. In that of Cydarah, out of 1,300,000, there died in February, 11,442; in Kurnaul, out of 952,640, those that starved in January numbered 6,553. Out of 29,000,000 in Madras, there died in February 105,172, and by the end of June over 500,000. Bombay lost over 165,000 in the first three months of the year, and it was anticipated that before relief came a total of 2,000,000 would die.

The Italian papers abound with incidents of Victor Emmanuel's life. When Thiers visited him, he said the late King was "the *plus fin* of political men." Cavour said of him: "He allows us to go ahead until we are compelled to stop; then he undertakes to show us the way, and it is always the right one." The title of "Gentleman-King," so frequently applied to Victor Emmanuel, originated soon after the battle of Novara, when, apprehending the possibility of becoming only a vassel of Austria, he called d'Azeglio to the head of his Government. To that diplomat he said: "There are so few gentlemen-Kings that it would be well to begin the line." The evening Charles Albert fled to Portugal, Victor Emmanuel, on leaving Radetzki's tent, exclaimed: "No; I don't want to be King of Sardania. You once told my father that Italy was his. Nearly true, for Italy shall be mine."

Manufacturers of Clothing and ladies' suits find the New Davis Sewing Machine adapted to the full range of their work, trimming, binding, sewing thick and thin goods, over-seams, without any difficulty, and requiring no basting or change of tension. The DAVIS SEWING MACHINE CO. are enlarging their manufactory at Watertown, N. Y., to enable them to supply the increasing demand for their machines.

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THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Feb. 23, 1878.

BEANS AND PEAS.—Receipts of beans past week, 8,916 bbls.; Exports, 242 bbls. The bean market, as a rule, is in a weak condition. Mediums have no stimulating demand, and are again off 5c. for choice. Cuban advices represent the market as dull, and marrows are consequently very quiet. Pea beans have not rallied from their old nominal position. White kidneys lower, in sympathy with marrows. Red have some small sale yet. In black there is a rev ved call, prices a little better. Green peas are dull and offered lower to arrive, at $1.15@1.20. Southern B. E. peas, $3.25 per two bushel bag. Canadian field peas quiet at 85c. for general stock.

We quote:—Beans, medium choice, $1.70@1.70; other, $1.50@1.60; marrows, choice, $1.80@1.90; other, $1.70@1.80; pea, $1.60@1.65. White kidney, choice, $1.90@1.93; other, $1.85@1.95; red, choice, $2.00@2.50; other, $2.35@2.40. Turtle soup beans, $1.60. Lima, $3.

BEESWAX.—There is a slow market and prices unsettled; Western and Southern quoted at 27@25c.

Exports since Jan. 1, 25,775 lbs.—19,100 more than for same date last year.

BROOM CORN.—The trade is very light and prices unsettled.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—There is little new to remark in butter. Receipts are quite liberal, surprisingly so in view of former advices as to remaining part of crop, and with the last winter month going out, sellers are disposed to favor buyers of medium and good qualities. The fancy reserves of State half-tubs and regular receipts of Western creamery are just as firm on dull days as when high-priced buyers appear. This indicates that holders are not afraid that choice old stock will lap upon new to the detriment of present strong quotations. Late supplies do not make much addition to the stock of upper grade. Deliveries of Western are not in excess of the wants of trade and fine factory will bring 22c. Exporters would take some of the good grades of Western but sellers who make Western a speciality, prefer to accomodate the city demand.

We quote State creamery, 25@35c.; fancy pails, 30@32c.; other 25@28c.; creamery, good to choice, 25@35c.; half tubs, fine, 28 30c.; extra, 33@37c.; other, 22@27c.; Fall Welsh 25@29c.; Welsh tubs, dairy, 25@27c.; other, 20 23c.; Fall dairies, fine, 28@30c.; common, 20@24c.; Rolls, 20@27c.; poor State, 14@21c.; Western creamery, good to choice, 40@42c.; poor to good, 25@32c.; factory, choice, 20@21c.; good, 15@18c.; common, 7@11c.; rolls, 12@18c.; grease, 6½@7c.

Receipts for the week, 15,435 pkgs.

Exports past week, 2,163 pkgs

CHEESE.—There is a steady fair trade from exporters and the home trade. Stock is running down sufficiently to give a steady feeling as to prices.

Fancy factories, 13½ 13¾c.; good and prime, 13@14½c.; fair lots, 12½@12¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12@13c. for good to prime; 10½@11½c. for fair lots; 7@10c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 5@9c. for poor.

Exports for the week, 23,093 boxes.

Liverpool cable, 70s. Gold closes 102¼.

COTTON.—The tendency has been slightly upward, with a more active market.

Latest prices are for February, 10.88@10.90c.; March, 10.64@10.90c.; April, 10.78c.; May, 10.92c.; June, 11.05c.; July, 10.21@10.13c.; August, 11.40@11.41c.; September, 10.19@10.21c.; October, 10.75@10.77c.; November, 10.78@10.70c.; December, 10.91@10.90c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8 3-16	8 3-16	8 5-16	8 5-16
Strict ordinary	8 13-16	8 13-16	8 15-16	8 15-16
Good ordinary	9⅛	9⅛	9¼	9⅜
Strict good do	9 13-16	9 13-16	9 15-16	9 15-16
Low middling	10 3-16	10 3-16	10 5-16	10 5-16
Strict low middling	10 9-16	10 9-16	10 11-16	10 11-16
Middling	10⅞	10⅞	11	11
Good middling	11⅛	11⅛	11⅜	11⅜
Strict good middling	11 9-16	11 9-16	11 11-16	11 11-16
Middling fair	12 1-16	12 1-16	12 3-16	12 3-16
Fair	12 9-16	12 9-16	12 11-16	10 11-16

Stained.

Good ordinary, 8 3-16c. Strict ordinary, 8 15-16c.; Low middling, 9 7-16c.; Middling, 10 1-16c.

DRIED FRUITS.—Apples have a fair home trade demand, and the better grades are at strong prices. Peaches and small fruits are nominal.

Apples—State quarters, old, 5¾@6¼c.; new, 5¾@6¼c.; Western quarters, old, 6@6½c.; new, 5¼@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5¼c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4½ 5c.; unpeeled quarters, 3½@4c. Pitted cherries, 16@17c. Blackberries, 8@10c. Raspberries, 27c. Plums, 16c. and Southern at 10c.

Exports past week, 116 bbls. apples; since Jan. 1, 750: same time last year, 8,925.

EGGS.—Receipts for the week, 6,950 barrels. Supplies have fallen off, but they are still unreasonably large, and the market is perplexed with the supplies of unsold Stock. Unless this class of stock is put out of the way before Lent—which begins on the 6th—the Lenten market will be deprived of its snap. Best wholesaling stock is down to 25c., and sellers do not anticipate a further decline for reliable qualities.

Near points, 17@17c.; State and Pennsylvania, in good order, 15¾c.; Western best, 14½c.; do. Southern, 14½@15c.; inferior and off quality, 9@12c.; State and Canadian, limed, 9@11c.; Western, 9@11c.

FEATHERS.—Live white prime Western geese, 45@47c., mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave. $19.00@20.00; 60 pounds ave. $18.00@19; 80 pounds ave., $18@19; 100 pounds, $19.00@20; and sharps at $20@22.

FLOUR has been less active with the changed situation abroad, and prices have eased off a little, closing, however, stronger.

Latest prices are $4.25@4.85 for poor to fancy superfine State; $4.30@5.25 for common to fair extra do; $5.25@.60 for good to choice do.; $4.25@4.85 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $4.90@5.25 for shipping extra do., the inside price for poor, and $5.25@5.60 for good to strictly fancy extra do.; common to choice white wheat extras, $5.50@6.75; fancy do. at $6.75@7.75; red and amber winter wheat, good to choice family, at $5.25@6.75; round hoop Ohio at $5.10@5.50, and trade brands of do. at $5.60@7.00, the latter for choice; St. Louis, $5.50@5.35 for poor to fair extra and $6.35@7.25 for good to fancy, (with a few brands of very fancy quality quoted up to $7.50 a $8.00); Minnesota clear, $5.00@5.15; Minnesota "straight," common to fancy, at $5.75@6.30 and patent poor to very choice, $6.35@8.50, with a few fancy at $8.75@9.00; unsound stock at $2.35@5.75; city mill extra at $6.00@6.40 for fair to very choice for West Indies; do. for England $5.10@5.25; do. trade and

family extras, $6.50@7.50; do. South America, $6.50@7.50 for fair to fancy; No. 2 at $2.75@3.90.

Buckwheat Flour—Quoted at $2@2.60. Corn meal is selling at $2.50@2.90 for Western yellow and $3.20@3.25 for Brandywine.

FRESH FRUITS.—Exports of apples past week, 900. Fresh arrivals of apples are selling about as well as stored. The latter are down to a small quantity. Railroad receipts are varied in quality, and it must be remembered that many parcels turn out different from their home appearance and cannot be quoted at full figures as live prices. Baldwins and Greenings, $5@5.50; "Seeks" and Spitzenbergh, $6@7.50; Russets, $4.50@5.; rough and rejections, $2.50@4.50. Cranberries have advanced; fancy bls., $9.00; good, $7.50; do. crate, choice, $3; good, $2.12@2.12; fair, $1.50@2.25. Florida oranges, $3.50@5.00. Peanuts declined again this week but buyers are few; daily receipts more than supply them. Best hand-picked Virginia, $1.30@1.40; good to fancy, 85c.@$1.20. Hickory nuts, 75c.@$1. Pecans, Texas, 8@10c. per pound. Since these latter have been arriving commercially the old-fashioned demand for Shellbarks is much reduced.

FURS AND SKINS.—Shipments for the London March sales have subsided and the market has resumed its quiet neglected position.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₩ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and ylgs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₩ ℔	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

GRAIN.—All articles have been affected by the variable reports from the other side, but have generally tended lower until the close when a stronger feeling has set in.

Latest sales are of No. 2 red at $1 35@— ungraded red and amber State, $1 35@—; white, $1 44; No 1 Northwest spring, $1 26; No. 3 Chicago, $1 20¾; No. 2 red for January at $1 28¼; No. 2 Milwaukee spring, $1 30. Rye is a trifle steadier; sales of Western at 71@72c.; State at 7.@—c. Barley, 66c for No. 1 Canada; 56@56c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 58@—c.; steamer mixed. February, 53¼@54¼c. Oats of New York extra white, at 38@38½c.; do. No. 1, Febuary, 35¼c.; No. 2 white 35¼c.; mixed Western, 35¼@37c.; white Western, 37@39¼c.

HAY AND STRAW.—Shipping grades of hay are most wanted and they bring steady prices. Prime stock is plenty and dull.

Bale hay, 65@70c. for shipping, and 70@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@60c. for long rye; 50@55c. for short rye, and 40@45c. for oat.

Exports since Jan. 1, 8,750 bales; same time last year, 8,600 do.

HIGHWINES are higher—$1.08½@1.09 regular.

HONEY.—Continues dull. White clover, 2-comb boxes, has sold at 13@14c.; dark and buckwheat at 8@10c.

HOPS.—There is a good strong market with a fair degree of activity especially in good and prime stock. State choice to fancy, 11@13c.; good to prime 8@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@21½c. for light, 21@22c. for middle, 21@22½c. for heavy, 19@20c. for good damaged.

MAPLE SUGAR.—The quotations for reputed new is 14c. It is the old story with the demand, buyers will not purchase freely until new crop is a settled fact.

OIL-CAKE.—Western is quoted at $30@31 ₩ ton.

POULTRY AND GAME.—Supplies of live poultry are light, but the demand is also very light and prices are very easy. Geese, to bring best rates, must be choice. A good many old ones are pushed forward, and this hurts general sales.

N. J. chickens, 7@9c.; W. fowls, 8@9c.; Turkeys, 9@10c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.00@1.37.

We are having soft weather again, and the dressed poultry trade is not helped thereby. Supplies are moderate, but the average of stock is not attractive, and prices are easy and lower for any item but ducks. Large turkeys are a drug.

Fancy Phila. and N. J. turkeys, 13@14c.; good, 10@11c.; large or Toms, 7@9c.; chickens, choice, 12c.; good, 11@13c.; common, 6@7c.; ducks, choice, 16@—c.; other, 13@14c.; geese, fancy, 11c.; other, 7@9c. Capons large 18@20c. small and slips, 15@16c.

Game is scarce, and the short-seasoned kids are winding up high. Missouri pigeons dress better, and Ohio outsell them at an almost doubled price. The law for the sale of grouse, quail, and rabbits expires this week.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $2.00@2.50; Red-heads, $1.50; Mallard, 65@75c.; Teal, 30@50c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$8.c. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS.—Hog products have tended a little stronger but at irregular prices, closing firm. Mess pork, $11@11.14½ for uninspected spot lots; $11@11.15 for March and April. Bacon at 5¾@5¾c. for long clear and 5¾c. for short clear. Lard—Western steam at 7-57½c. for spot, 7-60c. for March, 7-72½c. for April. Tallow at 7¾c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.50@13.00; plain, $11.00@12.00; now packet, $14.75; family mess, $17.50; extra India mess, $23 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2.50; Higgins', $2.40 and other sack lots at $1.10@1.15; Liverpool ground, 60@65c.

SEED.—Clover, 7¼@7¾c. for Western; 7¾@7¾c. for State. Timothy, $1.35@1.45. Rough flax, $1.55.

SUGAR.—Refined at 10¾c. for cut-loaf; crushed, 10c.; powdered, 9¾c.; granulated, 9¾c.; soft white, 8½@9c.; soft yellow, 7½@8¼c.

TOBACCO.—Export demand has been very fair and home demand small, but prices held as before.

VEGETABLES.—Exports of potatoes past week, 1,410 bbls. The market is fairly active for potatoes for home use at old prices. There seems to be some difficulty in buying straight lines of seed. Packers demand 50@62½c. ₩ bbl. for choice red stock. Bermuda potatoes, $1.50@5. Garden stuff is not active, but produce in fine order is quoted with some firmness.

We quote Peach Blows $1.75@1.87, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.95@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., @2@75c. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₩ ℔, 20@40c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1.50@$2. Cucumbers, doz., $1@2. Rhubarb, doz., $1. Spinach, Southern, $1 75@2.25 ₩ bbl.

WOOL.—Fine grades are lower, but otherwise there is a fairly steady market, with rather a freer trade from manufacturers.

Ohio, Pennsylvania and Virginia—XXX and picklock, 46@48c.; XX, 43@44c.; X, 42@43c; No. 1, 42@43c.; No. 2, 36@38c.; common, 31@33c.; combing, 55@56c.

New York, Michigan, Indiana and Wisconsin—XX, 36@40c.; X, 36@40c.; No. 1, 38@42c.; No. 2, 35@37; common, 32@33c.; combing, 46@53c.

Iowa, Vermont and Illinois—X and XX, 35@38c.; No. 1, 37@40c.; No. 2, 32@31c.; combing, 45@52c.

Missouri Kentucky and Tennessee—37@42c. for washed; 25@30c. for unwashed, and 32@33c. for unwashed combing.

LIVE STOCK MARKETS.

NEW YORK, Feb. 25, 1878.

BEEVES.—Receipts for the week, 10,001 head; do., last week, 10,076 do. The regular selling days have had a steady demand, and as an indication that butchers wanted stock: the detained cattle for Friday were patiently waited for. The bulk of the sales were at 8¾@9¾c. for good useful to prime steers. The extreme range for rough oxen to fancy pairs, is 7½@11½c., with lot Ohio, Illinois, and Missouri steers that had been held a day or so bringing 9@"¾c.; heavy bulls, $3.90 ₩ 100 ℔, live weight. Quite serious losses on shipboard have attended the recent exportation of live bullocks. The tone of Western cattle points lead to the belief that an easy range will rule during the spring months for the large supply of medium quality stock known to be in the country.

COWS AND CALVES.—Light arrivals more than fill the demand. The nominal quotations are $40@70 ₩ head for good to choice, with very common as low as $25@30.

VEAL CALVES.—There is a moderate demand for live at 6@8½c., the latter for near points; course heavy calves, 4@5c. Hog-dressed calves at Washington Market, fair to prime, 9@10¾c.

SHEEP AND LAMBS.—Receipts for the week, 19,013 head; do., last week, 18,485 do. Receipts continue light, but seem fully equal to the demand, the market, as a whole, seeming weak. Quotations for sheep, $5.25@5.75 ₩ 100 lbs. Lambs alone, 6¾@7¼c.

SWINE.—Receipts for the week, 31,408 head; do. last week, 31,112. The holiday of the 22d broke the regular buying, and there was no definite late prices for live. Country-dressed pork firmer now—State and New Jersey, 5@6c.; Western dressed, 4¾@8¾c.; city, 5¾@5¾c.

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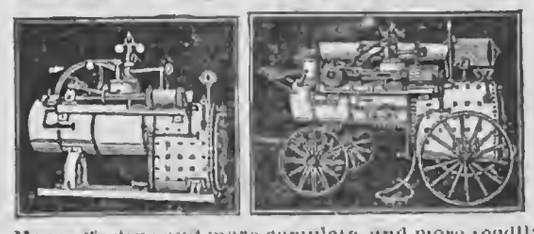

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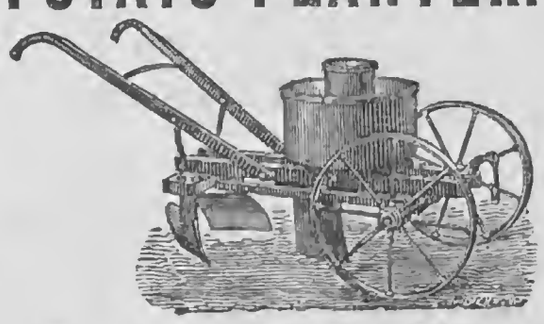

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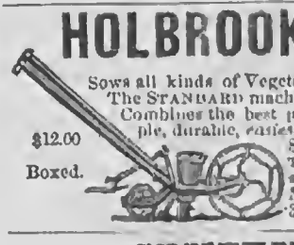

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Reading for the Young.

NURSERY JINGLES.

KISS OF THE RAIN.

PRETTY little rain-drops,
Laughing, kissed the daisy,
Dozing on its couch of green,
Oh, so hot and lazy!
Then the daisy upward sprang
And sang out so gaily,
"Kiss again, kiss again,
Rain-drop soft, I pray ye."

THE DICKEY BIRDS.

DICKEY-BIRD baby
In the nest sleeps,
Dickey-Bird mother
Watch o'er it keeps:
Dickey-bird father
Is the bread-winner—
See him fly home
With crumbs for a dinner.

THE END OF THE CANDLE.

CLEMENT SCOTT.

THE title of my story is suggestive, and I doubt not that it may appeal to boys' minds in various ways. Allow me, however, to preface my little annecdote with the grave assertion that what follows is connected in no way whatever with what, in schoolboy phraseology, is technically known as "a sell." I have been, thank goodness, a schoolboy myself; and I am happy to say that the old-fashioned tricks were, as they should be, played upon me in common with my fellow-creatures.

What I have to tell has, however, nothing to do with tricks in tallow or pilfered lights. My story treats of a real and *bona-fide* candle, not one of your modern composite inventions with a finely-tapered end patented and warranted to fit every conceivable candlestick, and a wick that never wants snuffing, but dies away into a dissipated flory end.

You must go back with me to the old days, when patent candles were not invented or thought of, and when a silver snuffer-tray and a pair of silver snuffers were brought in and deposited by the side of the tall candlesticks in great state. According to my present ideas of life, I don't think that I should consider Staunton altogether a lively place; but Staunton in the days when I know it was to me a paradise. My two maiden aunts, were exceedingly fond of their nephew, and as their nephew was not altogether a mischievous lad, and possessed the wonderful gift of being able to amuse himself, it need not appear extraordinary that the owners of a certain white-looking, clean mansion in Main Street of Staunton and the pale-faced visitor at the said mansion got on very well together.

My first insight into life and its mysterious ways, dates from my first visit to Staunton, where I was just as happy watching the market-carts come into town and put up at the "Tavern," over the way, as I was playing at stage coach, and every other conceivable variation of a coaching expedition, all by myself in a deserted outhouse, the only property to render me any assistance being a tumble-down and rickety old phaeton.

I had been a mild, docile lad, amusing myself in my quiet, unassuming manner, thoroughly contented with my own society and that of my respected aunts. Charley Clode was the means of revolutionizing my life. He had lots of adventures and tales to relate to me; he first fired me with the enthusiasm of public school life, told me of his adventures and deeds of daring, of the heroes of the school that he worshiped and the sneaks whom he despised; and altogether I thought Charley Clode a most enjoyable companion, and cultivated his society accordingly.

He was a capital fellow was Charley's father, and would often come out and have a turn with us at ball, or whatever game we might be playing. He was a doctor, and great at all sorts of experiments, with which he used to delight us in the evenings. According to Charley's account there was no one who could make such fireworks as his father, and though it was the wrong time of the year we were promised a miniature display on the lawn the very first dark night that came.

One evening—I shall never forget it—I was over at the Clodes' house, and the doctor, who had nothing particular to do, was working for us a little steam-engine he had lately made. The doctor had a workshop in the basement floor of the house; and adjoining this was a dark, gloomy-looking cellar, wherein were deposited all sorts of odds and ends—old empty bottles from the surgery, packing-cases, and rubbish of every kind. The workshop and its adjacent lumber-cellar had always been forbidden us boys, for the doctor rather mistrusted Charley's capabilities of resisting the fascinations of the lathe; and though not particularly tidy in his own work, had that peculiar method in his untidiness that he knew exactly where to lay his hands upon everything he wanted, and was by no means anxious that any of his work should be spoiled by careless handling or delayed by a sudden impulse of boyish mischief. On the particular night to which I am alluding, Charley and I were sent off from the drawing-room, in which the doctor's family was assembled, to hunt up the remains of an old tramway which the doctor had made years ago, and which was to be called into requisition on the special occasion on which the doctor had promised all of us that he would work the miniature engine on which he had expended so much time and trouble, in full assembly.

The wreck of the tramway was reported to be among the old lumber which lay in a helpless and confused mass in the dreary dark cellar which adjoined the surgery on the basement floor.

"We must get a candle," said Charley, "for it is pitch dark now, and we shall not be able to see a yard before us."

"All right old boy; but let us be quick about it, for your father seems anxious to work this engine, and all the ladies are impatient."

We made our way into the kitchen, and I don't think they were quite prepared for our sudden appearance or the energetic appeal Charley made for a candle.

In a little room adjoining the kitchen a maid was washing up plates and glasses by the light of the very smallest portion of a tallow candle, whose wick was at that moment of a portentous length, and dimmed considerably the uncertain rays which the candle threw upon the melancholy party.

"Here, this will do," said energetic Charley, seizing the scrap of candle, and, in his energy, extracting it from the humble socket which contained it. I really believe it was nothing more than a bottle. "We shan't be gone a minute. You can stay in the dark, Mary, until we return."

It was useless for Mary to protest, which she did emphatically, asserting that she would not allow the young gentlemen to go messing themselves over with all that nasty tallow. Charley would wait for no apologies; and thrusting the scrap of tallow-candle end into my hand, for he was guide and knew the way and the whereabouts of the article which we had come to find, he preceded me through the surgery into the deserted cellar.

Charley's search was not at first quite successful. I could do nothing towards assisting him, but stood patiently in the middle of the cellar with the scrap of candle-end gradually diminishing between my fingers, the wick getting longer and longer and the light more and more obscure.

At last Charley's voice spoke encouragement. My part of the transaction was not a lively one, and I felt particularly glad that we were not to return to the drawing-room discomfited. Boys don't like to be thought stupid, and to have returned to the doctor empty-handed would have been the signal for a volley of "chaff" from the doctor and a chorus from the expectant ladies.

"Here's the tramway sure enough," said Charley, from behind two old packing-cases, "but I can't get it out without your help. Just put that beastly candle down somewhere and give us a hand behind here."

Charley's request was easier made than accomplished. The "beastly candle," as he chose to call it, was naked and unprotected by any candlestick, and to keep the light in under these circumstances was not such an easy matter. We were not at all anxious to be left in the dark, which fate very nearly overtook us, for I made three dismal attempts at setting up the candle, and failed egregiously on every occasion.

Charley was getting impatient, and again summoned me to his assistance in authoritative tones from behind the large packing-cases.

A bright thought suddenly struck me. At my side was an open bag containing sand—at least, it seemed like sand to me; but I had no time to stop and examine its contents very closely. I plunged the candle-end into the sand, and to my joy I saw that it stood up firmly in its *impromptu* resting-place. But I could not help noticing that the wick had now got to an enormous size, and that at its end was an ugly fiery lump which threatened every moment to detach itself and tumble among the sand. I went to Charley assistance, and by dint of a good deal of pulling and hauling we managed at last to extricate the doctor's tramway from its obscure hiding-place.

We emerged from behind the packing-cases.

"Where did you put the candle?" said Charley; for the light had now got so dim that it was a difficult matter to see it at all.

"In that bag of sand."

"Bag of sand!—where?"

I went towards it. I heard a crash behind me. The tramway had fallen from Charley's shoulder, and I felt myself suddenly dragged back just as I had got within reach of the candle.

I heard but three words, and they were not spoken, but literally hissed into my ears.

"Sand! It's gunpowder!"

I very nearly dropped. That awful cold shiver which we have most of us experienced, ran all over me, and then I turned round and faced Charley. He looked like death, and a cold sweat was breaking out on his face. There was no time to be lost. An enormous blossom of red fire was now hanging to the charred wick, which any moment might fall among the gunpowder, and then it was easy to guess what would follow. There was enough there to blow up the house twenty times over.

"Does your hand shake?" said Charley. "Do you think you dare try?"

My nerve—I was very young, you must remember—was quite gone. I tried once, twice; and so did Charley; but we were both trembling in every limb. A nervous twitch of the hand would have destroyed every soul in that house in less than a minute. Charley had said rightly that there was no time to be lost. There was little good in our standing there looking at one another and waiting for death. That we were powerless to save another or any one, had been proved.

Charley was the bolder of the two; and luckily knew his way in the dark. He literally dragged me out of the cellar. I did not know where I was going, and expected that every moment would be my last. At last I heard him say:

"Mary! Mary! I say, look here! we've forgotten that bit of candle you lent us. You'd better go and fetch it now, or something or other may catch fire. Run along at once will you?"

Hand in hand we stood in the dark stone passage. Two minutes would decide our fate. It was decided in less than one. We were saved.

The servant knew nothing about the gunpowder, and so fearlessly approached it, snatched up the candle, and joined us in the passage.

It was a marvelous escape certainly, and the wonder of it was considerably heightened by our being told afterwards that the charred end of the wick did fall, but upon the floor, and within a foot of the exposed gunpowder. I think we both added a little warm boyish thanksgiving to our prayers that night. We are big boys both of us now, but I doubt if either of us will forget our adventure with the "the end of the candle."

THE FIGURE NINE.—A remarkable property of this figure is, that all through the multiplication table the product of nine comes to nine. Multiply any number by nine, as nine times two equals eighteen, add the digits together, one plus eight equals nine. So it goes on until we reach nine times eleven equals ninety-nine. Very well; add the digits, nine plus nine equals eighteen, and one plus eight equals nine. Going on to any extent it is impossible to get rid of the figure nine. Take any number of examples at random, and we have the same result.

LETTERS FROM BOYS AND GIRLS.

From Wild Fern.

Now, Cousin, let us give three cheers for "Rocky Mountain Joe," because he has so many virtues, also give him a vote of thanks for coming to the front so boldly, and setting other boys an example so praiseworthy. I do not mean that they should praise themselves, oh no! but to encourage them to be useful in and out of the house; and not to chew, smoke or drink. Boys, (I am talking to the sensible ones now), what if other boys do say that you are tied to "mother's apron strings?" It is an honor to be "mother's boy." You can look back in after years when she is no more and know that you did all you could for her.

"R. M. Joe" wants to know what I can do in the line of out-door work. I can sum up the work in a few words. I live on a farm. Some of the things I delight in are to fish, skate, and ride horse-back. I would like to correspond with "R. M. Joe." "Jumping Jack," I think it is real mean in you to excite my curiosity by wondering who you are? I thought you were a boy, but now I do not know whether you are a boy or a girl. I guess you are a boy. Are you as "us girls" say a college chap, or a Union School boy? What is your name? Echo answers what? "Ivy" said that *she* was somewhat surprised to hear that I thought she was a boy. Who would not think that she was a boy, when she asked so much about the girls? Will Uncle True be so kind as to tell me in what paper there is a premium list or where I can get one? Adieu. WILD FERN.

U. T. sends you a Premium List by this mail. You should make your offer of flower seeds in the Exchange, in another part of the paper. Please send it to the Editor.

The Puzzler.

MISCELLANEOUS ENIGMA.

I AM composed of 22 letters:
My 1, 18, 2, 17, 9 was lately fashionable.
My 13, 2, 3, 3, 12, 16 an article for the head.
My 5, 11, 18, 4 an article for the foot.
My 13, 2, 18, 10 also for the foot.
My 11, 2, 15, 14 articles of dress.
My 9, 6, 2, 18, 19 a sort of seat.
My 15, 21, 11, 2, 18, 19 a place of learning.
My 17, 8, 3, 4 a kind of tree.
My 10, 11, 20, 3, 14 a pronoun.
My 4, 7, 12 part of your face.
My 11, 12, 22 an interjection.
My whole is an old proverb.
☞ Answer in two weeks. FLORIDAN.

PYRAMID PUZZLE.

1. BEGINNING of man. 2. A crowd. 3. Malice. 4. A man's name. 5. To dread. Centrals form a State of New England.
☞ Answer in two weeks. LITTLE ONE.

PUZZLER ANSWERS.—Feb. 16.

GEOGRAPHICAL ENIGMA.—Pure love is immortal; springing up in time, it runs through eternity.

DOUBLE DECAPITATIONS.—1, Blend, lend, end; 2, Swear, wear, ear; 3, Slink, link, ink; 4, Sowed, owed, wed; 5, Frail, rail, ail; 6, Scare, care, are; 7, Cleave, leave, eave.

MISCELLANEOUS ANAGRAMS.—1, Metaphor; 2, Angle; 3, Parody; 4, Moss rose; 5, Arduous; 6, Arena; 7, Arid; 8 Anchor; 9, Arbiter; 10, Apron; 11, Demand; 12, Sword; 13, Spot; 14, Delicate; 15, Demagogues; 16, Aristocrat; 17, Deliberate; 18, Urchin; 19, Vowel; 20, Starch; 21, Stamp; 22, Staple; 23, Stanch; 24, State; 25, Stare; 26, Gnats; 27, Moose.

HOUR-GLASS PUZZLE.—

A R I S T O C R A T S
E X C E S S I V E
S I X T E E N
G R E A T
O N E
T
G A B
T I T L E
S O C I E T Y
S C H O O L B O Y
C O N T E N T I O U S

Sabbath Reading.

THE SILENT CITY.

WEARY of life and sad at heart,
From the world's highway I roamed apart,
Through wood and wilderness, far away,
Till near the close of the dying day
I came to a shadowy river side—
And the wailing water was wild and wide—
Where a black-sailed shallop bore me across
To the Silent City of Thanatos.

Oh, a singular city it is to see
As any that in the world may be!
And a strange community bide therein,
Unvexed by the mad world's fret and din;
For they dream no more, or know, for aye,
The cares that wither, the hopes that die,
Nor touch of sorrow, or pain of loss,
In the Silent City of Thanatos.

And the houses all are straight and low,
Where shoulder to shoulder sleep friend and foe,
And marvelous sculptures, white as snow,
Gleam in the moonlight, row on row,
And scored in the rock with curious care
Are the records of those dumb dwellers there,
Inwrought with hieroglyph, scutcheon and boss,
In the Silent City of Thanatos.

And the kings of the earth, though never so high,
With the vassal hither shall come and lie;
And the warrior, glutted with half the world,
Here shall find his banners furled,
And his arrogant armies come to halt
In the silent bivouac of the vault—
And pride and pomp be but as dross,
In the Silent city of Thanatos. [*Golden Rule.*

THE WEALTH OF OTHERS.

M. BARTON.

"LET no man seek his own, but every man another's wealth." Such is the injunction of St. Paul to the church at Corinth. It applies with as great, if not with greater force to each individual Christian at the present day. But how few are those who heed the wise counsel of the apostle in its widest and truest sense. How few really bring thoughts, words and deeds, character, influence, and life, to bear upon their neighbor's welfare; so much self-seeking of our own in all we attempt. Where is the spirit of the Saviour, who "pleased not Himself," but whose stay on earth was one perpetual sacrifice for the wealth of others? "Though He was rich, yet for your sakes He became poor, that ye thought His poverty might be rich."

How can we add to the wealth of others? Spiritually, first by the tone of our life and character. Let the happiness and beauty of obedience to Divine law shine out continually; this will tempt others to inquire into its cause and seek it for themselves. Let words follow deeds, not go before; let there be some likeness to our Master ere we make a profuse profession of the lip: this will speak plainer language than the tongue.

The Lord accepts the stammering accents which would say something for His cause. Who knows whether a right thought may not be stirred up in the heart of a brother or sister, or a worthy purpose strengthened, by even a simple expression? Let us commit the results of our words to God; we may wing the arrow, in His hands lies the direction of it. It is not uncommon to hear the remark, "Yes; he is a very good man, but very disagreeable." Why is this? Why do real Christians often adopt a harsh demeanor toward others? They can be right, yet not rude. Let us boldly set our face against anything that involves the sacrifice of principle, but yield minor points with gentleness. Be courteous; let the leaven leaven the whole man. Nothing is little that goes to make up character. We allow the grace of God to change and control our disposition, why should it be forbidden to refine our manner? "Glorify God in your body." "A soft tongue breaketh the bone." Let there be the utmost possible tenderness and forbearance in our intercourse with "those that are without."

Is it not true that we willingly or unwillingly, consciously, do effect a large and continuous influence on the minds, habits, and outward walk of those about us? The simplest thing may lead to great results. A look, a sigh, a touch may change a resolution. Some natures are so constituted that they yield at once to the subtle force of a strong character, and are led at will. Others resist and beat against the hand that would guide, thus bringing out their own independent strength, and in turn acting for or against the discipline of another. No act is without its consequences. What awful issues then may hang on the works of our hands and the words of our lips! Truly we have need to watch, and that continually, lest we should give the enemy an advantage.

Seeing therefore that "no man liveth to himself" alone, but that he wields a mighty power over his immediate circle, and through them to some extent on the world, it becomes an important matter to examine into the ways in which this rule is exercised, and whether it be his own or another's wealth he seeks to increase. Look at the price Jesus has paid: "ye were not redeemed with corruptible things," "but with the precious blood of Christ." By the costly outlay of his inestimable life He has long bought us altogether—our wills, our hearts, our whole beings—"that they which live should not henceforth live unto themselves, but unto Him which died for them." "Set in slippery places," we have often to contend against influences antagonistic to Christian profession and practice; hence must we be very careful here to maintain a firm front, and by every means put forth a resisting power which, while preventing ill effects on our own souls, shall also induce others to come on our side, won by our good conversation in Christ.

We have all experienced the power of a consistent earnest Christain on ourselves; how we aspire after the like peaceful assurance.

PERSONAL ITEMS.

It is said that Mr. Sankey learnt his free and easy style of public singing by selling a cure-all patent medicine in the streets of different places, attracting purchasers by playing on a melodeon and singing.

Riza Pasha, who died recently at Riza, was a thrifty Ottoman. During the Crimean war he drew the pay of an entire army corps, which never existed, and by that fine operation made ten millions of dollars.

The Duke of Edinburgh is now with the British Mediterranean fleet, and it is said has had the following put up in his cabin to check unpleasant references: "Please to remember that the Emperor of Russia is my father-in-law."

Colonel Ingersoll's nomination of Blaine, in the Cincinnatti convention, was the best investment of brains he ever made. It made a comparatively unknown man famous, and he now lectures for $20,000 a year, board and washing included.

Edmund Yates, the novelist and journalist, says that on the front of a house in Albert Terrace, Knightsbridge, London, has been recently painted in large letters, the inscription, "Naboth's Vineyard." The house is the residence of Mr. Charles Reade, the celebrated novelist, and the legend is supposed to refer to a prevalent idea that some one covets the site, desiring to pull down the dramatic novelist's modest tenement and erect a magnificent mansion.

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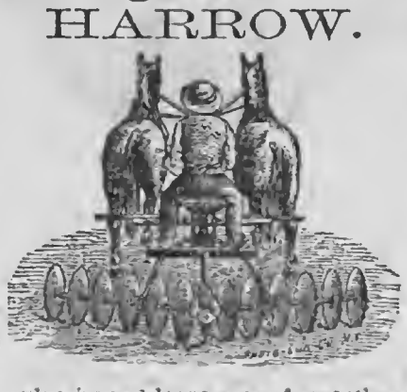

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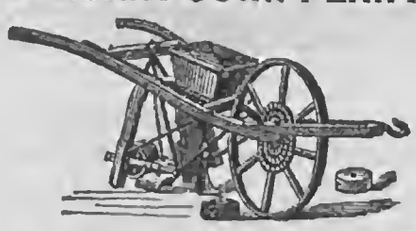

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HORSE HOE

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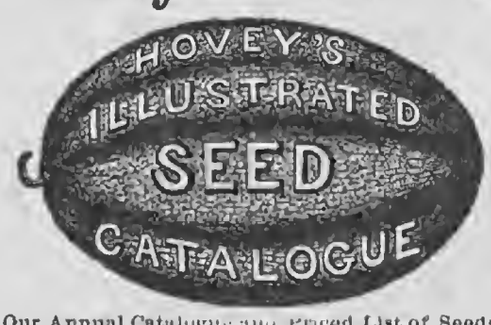
1,000,000 of Concord, 1 year, $15 to $20 per 1,000; 2 year, $20 to $30. All other varieties cheap. DR. H. SCHRODER, Bloomington, Ills.

2,500,000 *Strawberry, Raspberry, Blackberry, Currants, Grapes, Asparagus Roots, Peach Trees*, etc. 100 SELECTED VARIETIES. *Great American Strawberries.* Largest and best. Berries 2 oz. each, 9 in. around. By mail, 10 for $1; 100 for $5; 1,000 for $40. *Wilson Albany, Chas. Downing, Monarch of the West, Kentucky, Green Prolific*, $2 per 1,000. *Capt. Jack, Cumberland Triumph, Sterling, Jocunda*, $5 per 1,000. ALL PURE. Catalogue free. Cut this out. JOHN S. COLLINS, Moorestown, New Jersey.

To Buyers of Seeds.



Our Annual Catalogue and Priced List of Seeds is now ready and sent free to all our customers, without writing for it, and to all others inclosing stamp for postage. As the best seeds are always the cheapest, we invite the attention of Farmers, Market Gardeners and others, to our specially fine stock of Home Grown Vegetable Seeds of all the staple kinds; and also of Florists and others, to our very large collection of the best strains of Flower Seeds, Novelties, &c. Seeds sent by express and mail to all parts of the United States and Canada, and guaranteed to reach purchasers. HOVEY & CO., 16 South Market St., Boston, Mass.

BEAUTIFUL EVER-BLOOMING Roses

10 Beautiful Roses for $1, 16 Bedding Plants for $1, 20 Verbenas for $1, 10 Choice Geraniums for $1, 10 Splendid Fuchsias for $1, and numerous other Plants at equally low rates, sent by mail, postage paid. *Their safe arrival guaranteed.* Our Illustrated Catalogue for 1878 sent free to all applicants.

SKED, PADDOCK & CO., Cleveland, O.

GRAPE VINES.

Also Trees, Small Fruits, etc. Wholesale rates very low to Nurserymen, Dealers and large Planters. Send stamp for Descriptive List. Price List FREE. T. S. HUBBARD, Fredonia, N. Y.

Trees, Seeds, Plants, &c.

Send Your Address to

SEEDS E. A. REEVES, SEEDS

58 Cortlandt St., New York,

FOR HIS

DESCRIPTIVE CATALOGUE OF SEEDS FOR 1878.

Contains over 100 pages, and is fully illustrated.

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ROOT'S RELIABLE SEEDS.

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We deliver Strong Pot Roses, *suitable for immediate flowering*, safely by mail, at all post-offices. 5 Splendid Varieties, *your choice*, all labeled, for $1; 12 for $2; 19 for $3; 26 for $4; 35 for $5; 75 for $10; 100 for $13. Send for our NEW GUIDE TO ROSE CULTURE, and choose from over 500 finest sorts. Our Great Specialty *is growing and distributing Roses.* THE DINGEE & CONARD CO., ROSE-GROWERS, West Grove, Chester Co., Pa.

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BEAUTIFUL FLOWERS A GREENHOUSE AT YOUR DOOR FOR $1.00 EACH.

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We will send free by mail and guarantee their safe arrival in good condition,

12 Roses, 12 different varieties, for - $1.00
20 Verbenas, 20 different varieties, for $1.00
15 Basket & Bedding Plants, 15 sorts, for $1.00
10 Geraniums, 10 different varieties, for $1.00
12 Tuberoses, all flowering bulbs, for $1.00
12 Gladiolus, all flowering bulbs, for - $1.00
8 Carnations, 8 splendid sorts, for - $1.00
6 Hardy Flowering Shrubs, 6 sorts, for $1.00

A hundred other things cheap.

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Also, an immense Stock of Fruit & Ornamental Trees, Evergreens, Shrubs, etc. A 64-page catalogue of trees, etc., and 16-page price list free. 24th year. 13 Greenhouses. 400 Acres.

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Flower, Field and Garden. Fresh quality. Catalogues mailed free on application. AUGUST ROLKER & SONS, 44 Dey St., New York.

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A full supply for your Garden. YOUR ORDER, enclosing CASH, will be filled, POSTAGE FREE, Peas, Beans, and Corn excepted, for which 2 cents per paper must be added for postage.

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1500 ACRES owned and cultivated in SEEDS. Farms in the States of

PENNSYLVANIA, NEW JERSEY, WISCONSIN, VIRGINIA.

☞ COMPARE THESE WITH COMMISSIONED SEEDS. ☜

Trees, Seeds, Plants, &c.

Will be mailed FREE to all applicants. It contains colored plate, 500 engravings, about 150 pages, and full descriptions, prices and directions for planting over 1200 varieties of Vegetable and Flower Seeds, Plants, Roses, Etc. Invaluable to all. Send for it. Address D. M. FERRY & CO., Detroit, Mich.

Send to E. & J. C. WILLIAMS, Montclair, N. J., for

Spring Price List of SMALL FRUITS.

THE SORGO HAND BOOK

A Treatise on Sorgo and Imphee Canes, Varieties, Seed, Culture, and Manufacture *Sent free, on application.* We are prepared to furnish

PURE CANE SEED

Of the Best Varieties.

Blymyer Manufacturing Co., Cincinnati, O.

SEED CHUFAS FOR SALE.

60 cents per quart, by mail; $8 per bushel, by freight or express. Say you saw this in the RURAL NEW-YORKER. ALBERT WELLS, Jasper, Marion Co., Tenn.

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SEND FOR VANDERBILT BROTHERS' SEED CATALOGUE, 23 Fulton Street, NEW YORK.

FELTON'S WONDERFUL NEW BERRIES! A BLESSING FOR EVERY RURAL HOME! Please send for Illustrated Catalogue, *free.* GIBSON & BENNETT, Nurserymen and Fruit Growers, Woodbury, N. J.

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☞ Please mention Rural, when addressing Advertisers.

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We will pay agents a salary of $75 per month and expenses to sell our new and wonderful inventions. Address L. S. SHERMAN & CO., Marshall, Mich.

PROF. SCHEM'S HISTORY OF **THE WAR IN THE EAST** or the conflict between RUSSIA and TURKEY is the LIVE book for LIVE agents. Has 700 octavo pages, 100 engravings of BATTLE SCENES, Fortresses, Generals, etc. Price $3.00. Terms unequaled. AGENTS WANTED. Address H. S. GOODSPEED & CO., New York, or Cincinnati, Ohio.

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3000 FREE SAMPLES to be given to men and women in search of honorable and profitable work. P. MORRIS, Chicago.

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CONSIDERING the length of its legs, the RURAL "Cricket" makes the best time on record.

JOSEPH COOK'S definition of a small philosopher is quotable:—"One who guesses at half and multiplies it by two." And Joseph—by the way, Joseph!—we think we have our eye on that man now.—*Graphic.*

THE model husband has been found in Albany. He doesn't permit his wife to do more than half the work. She puts up the canned fruit in summer, and he puts it down in winter.

YOUNG Lady: "It was a very stylish dinner." Learned Uncle: "Stylish! Are you using the word correctly?" Young Lady: "Certainly; from sty, a pig-house, and lish, the noise made by the animals when eating." Learned uncle in despair.

"THE VICAR OF BRAY!" FROM LIFE.

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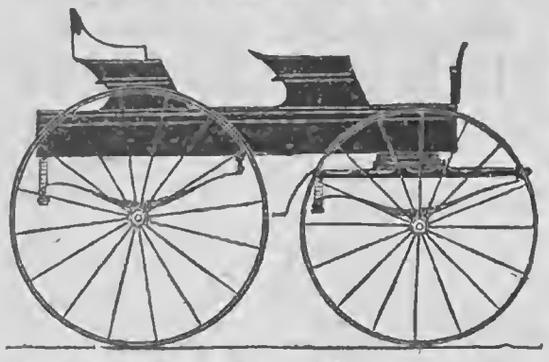

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CHEAPEST AND BEST

Platform Spring Wagon made.
Every Wagon fully warranted.
If there is no agent or dealer in your town, send for Circular and Price List to the
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The most perfect, simple and ONLY Elevator that raises the hay from wagon and carries it in barn any required distance. Economical, durable, labor-saving. Send for Illustrated Circulars and prices to
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CONSUMERS' IMPORTING TEA CO.,
P.O. Box 5509. No. 8 Church St., New York City.

THIRTY-THIRD ANNUAL REPORT
OF THE
New York Life Insurance Company.
Office, No. 346 and 348 Broadway.
January 1, 1878.

Amount of Net Cash Assets, Jan. 1, 1877.....$32,730,898 20

REVENUE ACCOUNT.

Premiums received and deferred	$6,232,394 70	
Less deferred premiums, Jan. 1, 1877	432,695 40	—5,799,699 30
Interest received and accrued	$2,168,015 85	
Less accrued, Jan. 1, 1877	300,558 68	—1,867,457 17— 7,667,156 47
		$40,398,054 67

DISBURSEMENT ACCOUNT.

Losses by death, including additions	$1,638,128 39	
Endowments matured and discounted	185,160 12	
Life annuities and reinsurances	191,318 86	
Dividends and returned premiums on canceled policies	2,421,847 36	
Commissions, brokerages, agency expenses and physician's fees	531,526 03	
Taxes, office and law expenses, salaries, advertising, printing, &c.	501,023 90	
Reduction of premiums on United States stocks	$211,112 72	
Reduction on other stocks	12,030 00	
Contingent fund to cover any depreciation in value of real estate	250,000 00	—473,142 72— 5945,149 38
		$34,452,905 29

ASSETS.

Cash in bank, on hand and in transit; since received	$1,216,301 61	
Invested in United States, New York City and other stocks (market value, $13,379,930 53)	12,875,584 69	
Real estate	3,350,268 07	
Bonds and mortgages, first lien on real estate, (buildings thereon insured for $13,580,000, and the policies assigned to the Company as additional collateral security)	15,379,202 23	
*Loans on existing policies (the reserve held by the Company on these policies amounts to $3,445,195)	695,234 74	
*Quarterly and semi-annual premiums on existing policies, due subsequent to Jan. 1, 1878	396,289 26	
*Premiums on existing policies in course of transmission and collection (estimated reserve on these policies $674,000, included in liabilities)	167,183 37	
Agents' balances	56,945 97	
Accrued interest on investments to Jan. 1, 1878	315,895 35	—34,452,905 29

* *A detailed schedule of these items will accompany the usual annual report filed with the Insurance Department of the State of New York.*

Excess of market value of securities over cost 504,345 64

Cash Assets, Jan. 1, 1878.....$34,957,250 93

APPROPRIATED AS FOLLOWS:

Adjusted losses, due subsequent to Jan. 1, 1878	$348,069 48	
Reported losses, awaiting proof, &c.	112,897 84	
Reserve for reinsurance on existing policies: participating insurance at four per cent. Carlisle, net premium; non-participating at five per cent. Carlisle, net premium	31,022,405 99	
Reserved for contingent liabilities to Tontine Dividend Fund over and above a four per cent. reserve on existing policies of that class	792,302 22	
Reserve for premiums paid in advance	17,430 91	—32,293,106 41
Divisible surplus at 4 per cent		$2,664,144 49
Surplus, estimated by the New York State standard at 4 1-2 per cent., over		**$6,000,000**

From the undivided surplus of $2,664,144 49 the Board of Trustees has declared a Reversionary Dividend, available on settlement of next annual premium to participating policies proportionate to their contributions to surplus.

During the year, 6,597 Policies have been issued, insuring $20,156,639.

Number of policies in force Jan. 1, 1876, 44,661.		
Number of policies in force Jan. 1, 1877, 45,421.		
Number of policies in force Jan. 1, 1878, 45,605.		
Amount at risk Jan. 1, 1876		$126,132,119 00
Amount at risk Jan. 1, 1877		127,748,473 00
Amount at risk Jan. 1, 1878		127,901,887 00
Divisible surplus at 4 per cent. Jan. 1, 1876	$2,499,656.	
Divisible surplus at 4 per cent. Jan. 1, 1877	2,626,816.	
Divisible surplus at 4 per cent. Jan. 1, 1878	2,664,144.	

TRUSTEES.

MORRIS FRANKLIN,
ROBERT B. COLLINS,
CHARLES WRIGHT, M. D.,
J. F. SEYMOUR,
JOHN MAIRS,
DAVID DOWS,
HENRY BOWERS,
WILLIAM BARTON,
WILLIAM A. BOOTH,
WM. H. APPLETON,
EDWIN MARTIN,
ISAAC C. KENDALL,
WILLIAM H. BEERS,
H. B. CLAFLIN,
LOOMIS L. WHITE,
GEORGE A. OSGOOD,
JOHN M. FURMAN,
EDW. A. WHITTEMORE.

MORRIS FRANKLIN, President.
WILLIAM H. BEERS, Vice-President and Actuary.
THEODORE M. BANTA, Cashier.
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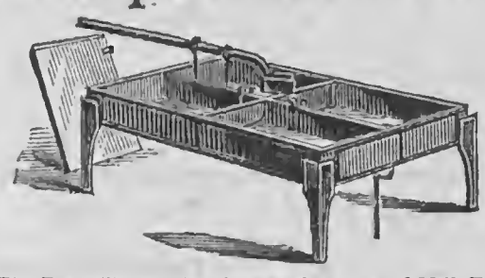
Highest Award at the Centennial!
THE IMPROVED BLANCHARD CHURN
PRICE GREATLY REDUCED

Perfect stock, best work, very efficient and durable. Nine sizes made, churning from one to 150 gallons. Warranted to be exactly as represented. Sold by all dealers in REALLY first-class Farm Tools. PORTER BLANCHARD'S SONS, CONCORD, N. H., Sole Manufacturers. Send for Circular.

CHEESE VATS.

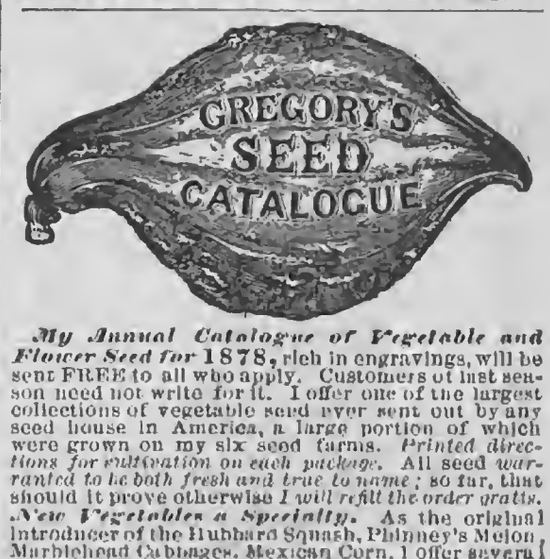
We continue to manufacture Steam Boilers and Engines and all kinds of Cheese and Butter-making Apparatus, combining the latest improvements. Send for Illustrated Circular and Price List.
CHARLES MILLAR & SON, Utica, N. Y.

Champion Milk Pan



The Best, Cheapest and most Economical Milk Pan in the Market. Saves the Butter Maker both time and money. Saves labor in handling the milk. Makes the best butter, and excels all others in durability and simplicity of construction. Illustrated Circular, giving full description of its working, sent free on application to WILLARD & HAMMOND, Randolph, Cattaraugus Co., N. Y.

GUNS and Revolvers. Illustrated Price List free *Great Western Gun Works*, Pittsburg, Pa



My Annual Catalogue of Vegetable and Flower Seed for* 1878,** rich in engravings, will be sent FREE to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed *warranted to be both fresh and true to name;* so far, that should it prove otherwise *I will refill the order gratis.* ***New Vegetables a Specialty. As the original introducer of the Hubbard Squash, Phinney's Melon, Marblehead Cabbages, Mexican Corn, I offer several new vegetables this season, and invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.*
JAMES J. H. GREGORY, Marblehead, Mass.

SEEDS.

All the leading and most desirable kinds of
VEGETABLE, FIELD,
AND
FLOWER SEEDS,
will be found in my new priced lists. Mailed free.
ALFRED BRIDGEMAN,
Broadway, cor. 18th St., New York.

THE THREE POTATOES

EARLY OHIO.—Earlier than Early Rose. Ranked by general consent, in earliness, yield and quality combined, at the head of all the early potatoes.
BURBANK.—Medium late; a prodigious cropper; flesh remarkably white; quality excellent.
DUNMORE.—A splendid late sort. A greater cropper than the Peerless, which it resembles in form, while far better in quality.
Each, per Barrel, $4.00; per Bushel, $2.00; per Peck, 75 cents.
My Illustrated Seed Catalogue *free* to all applicants.
JAMES J. H. GREGORY, Marblehead, Mass.

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On application we send free of charge our new Catalogue of
VEGETABLE, AGRICULTURAL, FLOWER and TREE SEEDS.
Also *just published*, our New List of Gladiolus and other Spring Bulbs, containing also a list of Hardy Perennial Plants, &c., &c
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Send for our New Reduced Price List.
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MOORE'S RURAL NEW-YORKER

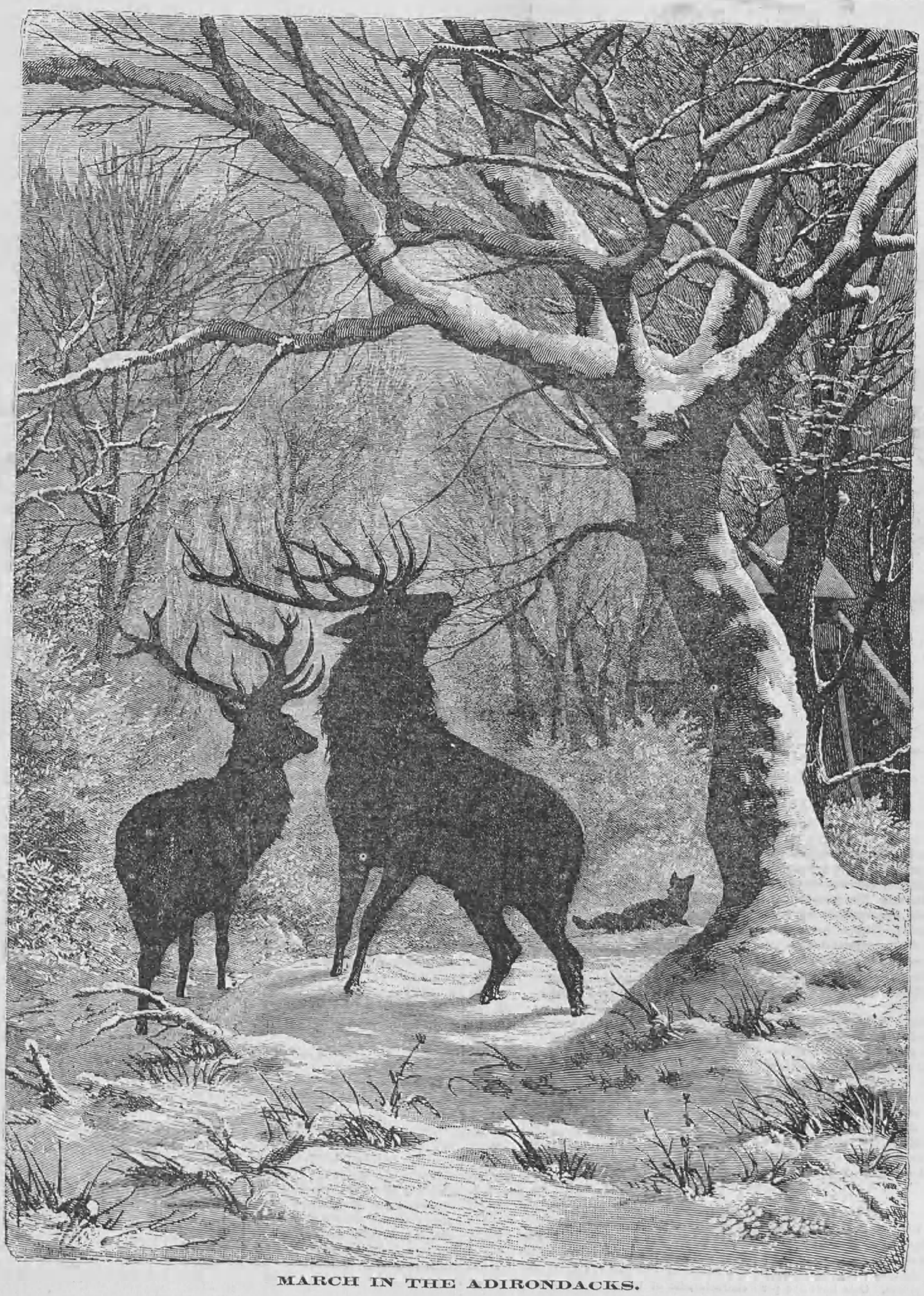
RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 10.
WHOLE No. 1467.

NEW YORK CITY, MARCH 9, 1878.

PRICE SIX CENTS
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]



MARCH IN THE ADIRONDACKS.

The Herdsman.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

We threshed our oats and barley in the fall and had a huge mow of straw. In cold weather if stock are stinted in their food, they will eat straw with considerable greediness, but in a mild winter, like the present, when fed hay, although it may be a little, they will not eat straw. We took pains to cut our grain before it was fully ripe and were fortunate in getting it harvested without being rained on. This straw constituted an important share of the winter feed, and what to give it to during the weeks of mild weather, was a perplexing question. At last we concluded that the Jersey bull, two years old, must live on straw and the breeding mare too—not being in foal. We could not afford to keep the cows on straw nor would it be wise to confine the young stock to this diet. The sheep helped us out of our trouble. They would do well on straw if it should be supplemented with a little extra feed. In the morning their racks are piled full of straw which they pick over through the day. At night they are filled up again.

In the morning all this is cleared out and a liberal feeding of turnips is given to them the first thing and then the straw. Two weeks before lambing time, which is in March, we intend to give them daily a half pint each of oats with the turnips, beginning for the first few days with a gill. We have an idea that the straw and turnips are equal in nutritive value to hay alone—especially since we do not require them to eat the coarser part of the straw. The oats we think, will strengthen the sheep and help fill the udders with milk ready for the young lambs. If this is found not to be the case, then hay will be substituted for the straw, before lambing time. After the lambs begin to come, then we begin to feed hay, continuing the turnips and oats. If the sheep were required to eat all of the straw, it would take at least three times the bulk of straw to equal hay, that is, it would take thirty pounds of straw to furnish the same amount of flesh-forming and fattening matter which would be contained in ten of hay.

If the straw was unripe or damaged by rain, it would take a much larger quantity, probably forty or fifty pounds of straw. Straw is exceedingly variable in value for fodder. Bright oat or barley straw cut when the heads were just turning white, is, in our judgment, and an analysis ought to show it to be so, equal to coarse hay, or hay unripe, or hay which is black and damaged from being wetted. This is the condition of a large percentage of the so-called stock hay. A sheep could not consume such a large amount of straw or poor hay in a day, hence they should be allowed to select the best portions in which there is a larger per centage of nutritive qualities. It is true the turnips are eighty-five per cent. water, with less than ten per cent. of nutriment; but this watery substance is just what the sheep want to help moisten and help to assimilate the mass of dry food. Now, if our theory and practice prove successful, we have a home market for straw, and a place for sheep which are a blessing on any farm. A flock of sheep will always make a rich farm, and moreover they will keep it clear of weeds and bushes turning all such things into mutton and wool.

We have two young calves aged five and eight weeks, which are pictures of health and contentment. The milk of an Ayrshire cow is divided between them, and the oldest one, a Jersey, gets two handfuls of meal with each feed of milk. The other gets one big handful now, but will get two when he is a week older. We began with a spoonful to each when they were two weeks old. This was stirred into the milk. The meal is wheat bran and ground oil-cake, equal parts by measure. Milk is the most natural food for all young animals and contains all of the properties required for their growth and health; but when there is a lack of milk, then the most natural and healthful food for young calves is wheat bran and oil meal.

Our calves each have a warm woolen blanket served out to them, and are kept separate so they will not worry each other. A temporary partition was put into the ox-stall so they can play and see each other. They need exercise, and seeing each other makes them more contented. If you would have animals do well, let their *minds* be at rest. If they are homesick or lonesome they will not thrive. Our little pets get a regular feed of hay three times a day, and they expect it, a bright clover leek or a handful of nice rowen.

Corn and oats are now exactly the same price, a penny a pound. Which is the cheapest and best feed? That depends on what we want to feed. Corn contains eight per cent. more of fat forming properties, and oats ten per cent. more of flesh-forming elements. Oats have five per cent more of woody fiber and one per cent more of ash. This is because oats have the thickest hulls or skin.

To feed cattle for fattening and for milk, mixing these grains half and half would undoubtedly be the best. This would be a good combination for working horses, or for a horse it was desirable to put into good condition, as the excess of fattening matter in the corn would help to fatten him quicker; the more oats the better for a horse driven hard upon the road, as such a horse does not want fatty but flesh-forming food to make up for the waste which his service creates. Too much corn is not best for poultry. A portion of oats mixed with their food would be an advantage. For fattening hogs corn is obviously the best food, but for sows and pigs we want the flesh-forming qualities and here we must add oats liberally.

Barley is a stronger food than oats and contains five per cent more of fat-forming principles and three per cent less of flesh-forming. It has less ash and less woody fiber. It is the best grain to feed alone to make milk, owing to its constituent elements and their particular combination.

Buckwheat is not equal to corn in making fat by nine per cent, but in making flesh it is only one per cent less effective. It is good winter food for any store animals, especially pigs and cattle. It is good for colts, and most excellent for poultry. Both buckwheat and corn contain too much heat (carbon), which is involved in the fat-forming parts, to be suitable food in hot weather for any heavy feeding; or for animals which are worked or driven on the road.

The same is true of rye which is a stronger food than either corn or buckwheat, as it contains 69.2 of fat-forming properties, and 11 of flesh-forming. This is about one per cent more than corn. It has less woody fiber and this makes rye bran a very nutritive food. It contains three and a-half per cent more fat-forming principles than wheat bran and nearly three per cent less of woody fiber. More than one-half of both wheat and rye bran is fat-forming, and more than one-seventh is flesh-producing.

It must be borne in mind that in the processes of digestion and assimilation of food in the stomach, the relative chemical combinations change and the real value of no one kind of grain or roots can be actually determined by analysis. Roots, for instance, have an actual value as food far beyond the standard assigned them by the chemist. The wheat bran fed our calves has an important value not given by the analysis, as it helps to supply the waste material which is the woody fiber and ash absolutely necessary to feed the intestines, and make the necessary distension and action in them without which the animals would suffer. The same is true of oats when fed to a horse in such quantities that the animal does not partake of coarse food. Buckwheat bran is a valuable auxiliary in caring for stock because of its waste material which is just as essential for health as the concentrated food.

We can buy this at our mill for $16 a ton. We have been trying to determine which would be the most profitable, oats at $20 a ton, or buckwheat bran at $16. The value of the bran will depend on the amount of coarse flour in it. We like buckwheat bran for colts, and cows giving milk. It clears colts of worms and will induce a good flow of milk. An analysis of this bran will not determine its general value except of the sample analyzed. The miller does that. The finer bran is ground the better. The finer particles are more readily digested, and dissolved by the gastric juice.

DIFFERENT KINDS OF DUTCH CATTLE.

A correspondent in Jamestown, N. Y., asks to have the difference explained between the Dutch belted or sheeted cattle and the "Holsteins." Views differ somewhat, in regard to the origin and qualities of the cattle of Holland. The Dutch are excellent farmers and dairy folks, and such they have been for centuries. They have a breed of cows which is so good that there has been little inducement for them to go out of the country for fresh blood to improve them in dairy qualities. The so-called, *native* cattle of Holland are, as a general thing, black and white, although red and red and white ones occasionally occur.

There are many herds in which only black and white cattle are to be found, and in the breeding of which great pains have been taken for several generations. The characteristics of these cattle are as follows: *size*, very large; *aptitude to fatten*, good, exhibited in the "handling" qualities of the hide, softness of the coat and in the presence of fat in young females and bulls; *form*, symmetrical, on the whole, yet failing in some points regarded as important by Shorthorn breeders. *Milking qualities*, unsurpassed in absolute quantity of milk, which is of good quality. Fifty to eighty pounds of milk a day being about the range of the yield of good cows. It is a characteristic of the cows generally that they are very hard to dry up, and often never go dry, and that their flow of milk is not only continuous but very uniform throughout the grazing season. These and such are the Holsteins.

It is not claimed that the breed exists in its purity in Holstein—an ancient duchy subsequently a province of Denmark and now annexed to Prussia and the German empire—but the early importers of these well-bred Holland cattle to this country, learned of a tradition that a great improvement in the Dutch cattle was brought about, perhaps centuries ago, by the introduction of cattle from Holstein, so they gave them that name.

Many of the recent importations of cattle from Holland have not been made with great care in selecting, and the cows show it painfully in a lack of stature and symmetry. Nevertheless they are excellent milkers and much liked by those that have them, and are admitted to record in the Holstein herdbook.

BELTED OR SHEETED CATTLE.

These are a breed of Dutch cattle never called Holsteins, though for aught that appears to the contrary, they have just as good a right to the name. They are black and white also, but marked as if black animals had broad white belts or sheets around their bodies. All are not thus belted with white, but many are and these only are retained as breeders, hence the markings have become fixed. The Belted cattle possess many of the valuable qualities of the so-called Holsteins. They are of fair size, are very uniformly good milkers and make good beef; so that in usefulness they compare favorably with Shorthorn or Holstein grades. The interest in them depends upon the perfection of their markings. Those who have animals for sale of either of these breeds would do well to advertise.

Sheep Husbandry.

A NEW INDUSTRY.

Were our children, reared on the comparatively treeless plains of the West, transported to some heavily timbered country, they would study to utilize the straight shafts that are allowed to go to waste or are wantonly burned to make way for a coming crop. When a man comes to the West, much of whose life has been spent in Eastern towns the suburbs of which would seldom furnish even scanty pasturage for the family horse and cow, he is struck with the millions of acres of choice pasturage annually going to waste, and the query is: Cannot this pasturage be utilized?

It is believed there is capital enough in the East, earning but a low interest, to stock these plains with sheep. It is conceded that the United States furnish no better range for sheep than can be found in Kansas and Nebraska. Most of the sheep in the country are in the hands of wealthy stock-men, who own from 1,000 to 10,000 head. While I write, a "prairie schooner" (covered wagon,) is trundling by; behind it follow a few head of choice cattle. In this way, cattle are more evenly distributed than sheep. Yet among the settlers who have been a few years in the State, there is a feverish desire to possess a flock. This desire is based upon the fact that this country is naturally adapted to sheep raising. Iowa, Missouri and Illinois can surpass us in raising corn, perhaps Iowa can in wheat, though we are loath to own it, but this surpasses them as a stock State. We are too far from the seaboard to make grain shipping profitable; but we can advantageously pack our rich pasturage in wool-sacks for shipment or, better still, manufacture woolen goods here and ship our surplus ware. The world knows how droughths and "hatefuls" militate against grain raising but never check sheep husbandry; for grasshoppers do not eat grass.

Agricultural implements, from a plow to a harvester or thresher, are sold to our farmers "on time;" thus allowing the judicious farmer to avail himself of the best tools which are made, while they are paying for themselves. Sheep sold "on time" would be a more profitable industry, because:

1. It would not involve the outlay of so large a capital before a dollar can be had in return.

2. Machinery is liable to be superseded by "improvements;" nothing can supersede sheep for wool and mutton.

3. Machinery unsold at the end of the season, depreciates in value. Sheep unsold at the end of the season, can be gathered on a grand range and continually increase in value until the next selling season.

4. Drought and hoppers lessen the sales of agricultural implements, but would correspondingly increase the sale of sheep. A systematic purchase, importation, and sale would be the most economic way the homesteaders could procure sheep. The demand now is simply enormous and for the business man, with capital, there is an abundant harvest. R. H. Crane.

Harlan Co., Neb.

The Poultry Yard.

SPRING CHICKENS.

HENRY HALES.

As the spring approaches, the younger members of the farmer's family—if not, perchance, their mother—are laying plans for their annual employment—or rather enjoyment—of raising young chickens.

Remembrance of former years will bring to mind some individual hens that showed certain peculiarities; one did not keep steadily to her work of hatching; another, perhaps, broke her eggs; while others behaved so quietly as to allow you to lift them off the nest, examine the eggs, and replace them again, without any such annoyance as some that peeked at your hands till they tore the skin. Those that sat well, brought out the most chicks and took the greatest care of them, will be the first to have the privilege of sitting again, should they so desire; and the cross old hen that is suspected of killing other hen's chicks, will be shut up when broody, till she is cured of the fever. Then the eggs of those hens that laid best, must be saved to be set: also some of different breeds, to be compared for their special merits, not forgetting those of the strongest and hardiest of the flock.

Those who have many out-buildings, will bear in mind to put nests in quiet corners, so that their favorite birds may lay where they will want them to sit. This makes easy work for those who have to look after them; for a hen generally keeps well to the nest she has been accustomed to lay in, especially if it is in a quiet, cozy corner, that every hen cannot find out.

Do not allow the impulses of a few fine days, in very early spring, to lead you to set hens too early. This is a poor practice. April is early enough to have the chicks hatched out, as we sometimes have such cold weather in March, that it is a hard matter to raise chicks, unless they are allowed to get around a kitchen fire during stormy weather, and are put in a very warm place at night.

Unless you want a large proportion of cockerels, do not set all the largest eggs you can pick out. There are no means known by which the sex of eggs can, with certainty, be determined. Although many have thought some signs indicated the sex, yet, after repeated fair trials, all these indications have entirely failed with me, except the one which follows: with regard to the eggs of most of the feathered kingdom, if you pick the biggest out of a nest, they are the ones that generally produce males, especially if they happen to be the first laid. Even in a canary's nest, it is noticeable that the first egg laid is very often the largest; the young from it is the first hatched out; keeps ahead of its comrades; is the first to quit the nest, and the first to sing.

Industrial Topics.

NATIONAL AGRICULTURAL CONGRESS.

The session of the National Agricultural Congress was continued on Wednesday, and the morning meeting was occupied with discussions of the question whether four years was long enough to fit a young man to be a scientist, with part of the time devoted to manual labor. The discussion embraced the work and results of agricultural colleges and the training of farmers at these schools.

Col. Curtis of New York, led off with a sharp criticism on agricultural schools and contended that they were so conducted that they did not make scientific farmers or farmers of any kind, but rather perverted the tastes of the farmers' sons and sent them to the cities or failed to so unite manual labor and study that one should inspire the other, and both work together, the hands helping the brain and the brain guiding the hands. Hence, unless they changed their system they would really be a damage to the farmer rather than any benefit. He said much more in the same vein which called out forcible replies from Messrs. Warfield, Hoyt, Bland, Brewer, and Purnell, who were connected with various colleges. They contended that the agricultural colleges were yet in their infancy, and time must be given to allow them to remedy the evils which might exist. President Purnell, of Delaware, took the ground that it was absurd to expect any one school to attempt to teach everything; that colleges should be established with different aims and courses of study to accommodate the peculiar views and proposed avocations of all classes of students. It may prove a positive advantage, therefore, that so much diversity and contrariety of views have existed among the founders of these industrial institutions.

Prof. Brewer of Yale College said one difficulty was that boys come too young and too de-

ficient in the rudimentary branches which had to be taught in large part in the colleges, leaving but little time for the more practical education, and then boys did not see much attraction in digging ditches and hoeing potatoes. They could learn that at home; they came to college to learn science, etc., so it was very difficult to unite study and manual labor, notwithstanding the eloquent theories to which they had listened.

The next subject discussed, sheep husbandry and wool-growing, occupied an entire evening and was concluded on Thursday.

The following resolution was offered:

"*Resolved*, That sheep husbandry in the United States, with its products of wool and mutton, its value in fertilizing the soil, and its adaptability to every section of the country, is eminently a national industry. Its extraordinary progress in the last ten years justifies the national protection which has been afforded to it, and warrants the conclusion that no change in the revenue policy at present applied to this industry is demanded by consideration of national interests."

This subject was argued in a most exhaustive manner by Messrs. Cochran, of Virginia; Dean, of Maryland; Curtis, of New York; Colonel Aiken, of South Carolina; Beverly, of Virginia; J. R. Dodge, Agricultural Department; Klippart, of Ohio; Morton, of Nebraska, and Homes, of Virginia.

At the evening session the subject of inland transportation was discussed.

Senator Windom, of Minnesota, made the opening address. After ably discussing the general question of cheaper inland transportation, he announced his belief that transcontinental water transportation, by aid of Congress, was the only solution of the difficulty.

The Hon. Mr. Hayes, of Michigan, followed in a very exhaustive argument to show that the interference of the Federal Government for the regulation of commerce between the States, was an absolute necessity and the only mode of breaking up railroad combinations and the exorbitant local freights now exacted of the farmers of sections of the country who now raise produce for which no adequate remuneration could be secured.

The Hon. Mr. Elliott, a member of the Agricultural Congress, scouted the idea of Government interference as not only an invasion of State rights but a virtual adoption of a system of parentalism, which should be left for countries under kings and emperors, because contrary to the spirit of our Government.

Hon. Mr. Dorr, of Illinois, sustained the general views of Messrs. Windhom and Hayes.

The following resolution was offered:

"*Resolved*, That the subject of inland transportation, the cheapening of freights across the coutinent, for the relief of consumer as well as producer, demand the intelligent, prompt and efficient action of the Congress and people of the United States."

Hon. Mr. Reagan, of Texas, also spoke on this subject. While opposed to subsidies as granted to railroad monopolies, he was in favor of a subsidy for the general benefit of the people.

The Hon. Mr. Aiken, of South Carolina, spoke in favor of the resolution, and was strongly against governmental subsidies to railroads, and said he should not object to a few millions to be expended for the recuperation of the South.

The pending resolution was then adopted.

Professor Brewer, on behalf of the business committee, submitted resolutions of thanks to Mr. M. C. McDonald, of Willard's Hotel; to the committee on arrangements and reception; to Messrs. J. R. Dodge and Thomas B. Bryant for their labors in behalf of the Congress; to the railroads; to the press; and to those members of the United States Congress who took part in their discussions; also a resolution of heartfelt sympathy to their honored president, Mr. W. C. Flagg, hoping for his speedy recovery.

INTER-STATE COMMERCE.

Mr. W. W. Fields, of Wisconsin, presented the following resolution, which was adopted:

"*Resolved*, That it is the sense of the National Agricultural Congress that the National Government ought to control inter-State commerce, and we respectfully urge Congress now in session to take this matter into consideration."

Mr. G. L. Binghampton, the secretary, was authorized to correspond with the Ministers of Agriculture of France, Holland, and Germany, and ascertain in what particular manner the governments render aid to the agriculture and the mechanical arts.

The committee nominations made the following report, which was adopted: For president, W. C. Flagg, of Illinois; vice-president-at-large (who shall be president *pro-tem*). Dr. Thomas P. Dean, Georgia; vice-presidents, J. M. Pugh, Ohio; J. Merimon, Maryland; Professor Brewer, Connecticut; W. H. Pomell, Delaware; F. D. Curtis, New York; D. W. Aiken, South Carolina; R. Beverly, Virginia; W. W. Field, Wisconsin; Colonel W. P. Adair, Indian Territory; assistant secretary, J. M. Ream, Virginia; secretary, J. Perian, Illinois; treasurer, E. Whitman, Maryland; executive committee, W. C. Flagg, J. Periam, and E. Whitman.

Professor J. D. Warfield offered the following resolution, which was also adopted:

"*Resolved*, That this body hold semi-annual sessions; and that when we adjourn it will be to meet in New Haven the last Tuesday in August.

The above report is only of a part of the proceedings, but that is the most important part.

The Forestry convention met at Washington Feb. 26th, when Mr. J. A. WARDER, of Ohio, the President, delivered an interesting address on forestry and its needs. Essays were submitted by J. C. NEALLY, E. K. PRICE, and Mr. THOMPSON, respectively on wintering of fruit trees, sylviculture and forestry. The society closed its meeting on the 28th by the adoption of the following memorial and the appointment of a committee, consisting of Professor Brewer of Connecticut; Dr. J. A. Warder, Ohio; and Mr. J. A. Saul, District of Columbia, to present it to the United States Congress:

"That the subject of forestry and tree-planting in all their bearings upon timber production, water supplies, and climatic influences, is a matter of vast importance to the future of our continent.

"Those of us who have at all considered the subject realize how sadly this branch of agriculture has been neglected in our country, and we feel the necessity for immediate action, and for the fostering aid of the General Government. Moreover, those of us who have already made some advances in the great work of foresting the lands that have been stripped of their primeval covering of trees, as well as those of us who are making attempts to clothe with woodlands the open prairie regions of our vast interior basins, all alike, are fully impressed with the magnitude of the undertaking, and are discouraged by the ignorance which, unhappily prevails among us, as to the best modes of procedure necessary to bring about the most satisfactory results.

"We have full faith in the talents and ingenuity of our fellow-countrymen, and believe them capable of solving any problem that may be presented for their solution, be it even so great a one as the production of the woodlands, that are now so nearly destroyed, and the development of an enlightened system of forestry, adapted to our continent. It is believed that it may be possible to change parts of our country now treeless and arid into regions of trees and water-courses, thus providing for occupation by a teeming population. Still we are convinced that unless aided by Government the solution of this forest problem will require a century or more for its completion, in the results of the necessary experiments that must be carried out, and the country, in its threatened needs, cannot afford to wait so long.

"But we also feel assured that the centuries of observation and practice, which have been devoted to this subject in Europe, have already educed systematic and successful results, in the broad areas of those countries where forestry has been most carefully studied and practised for so great a length of time. From this rich treasury of facts, and the principles deduced therefrom, we feel confident that much may be advantageously drawn for the benefit of our country."

"We therefore respectfully beg of you to take such action as may be necessary in the premises; and, that without unavoidable delay, you will liberally provide for the means of sending a commission to observe carefully and fully to report upon this subject in all its bearings, for the benefit of the agriculturists and other citizens of our land."

The Association then adjourned, subject to the call of the chair.

Field Crops.

PRICKLY COMFREY.

In a late issue you open your columns to the discussion of the value of Prickly Comfrey by persons having practical knowledge of it. Induced by reliable English and French authorities who strongly recommended it as an unrivaled food-producing plant, I purchased a number of roots for the purpose of exact trial as to what they would do in this country. About the first of July my plants were fairly growing, some of the leaves being six inches or more above ground. Some time after this, I began feeding cows and horses with it. At first they refused the food, but on running it through a cutting machine and adding a little corn-meal, they readily devoured it and in two or three days they all greedily ate it as cut from the roots. Pigs and sheep in pens ate it readily without any coaxing. Indeed they grew so very fond of it, that after a few days they preferred it to clover. My poultry also became fond of it just as soon as the sheep. It will therefore be valuable in poultry yards. I judge fowls would get one-half of their subsistance from it.

In respect to its growth, my experience is this: I cut one plant at the middle of September, and in exactly 30 days afterwards, I cut again and weighed the leaves, finding them six pounds. This from one plant only! One acre will take 4820 plants, set three feet apart, therefore at the same rate, an acre in thirty days would yield over fourteen tons! It is asserted by European growers that it will spread its roots (not runners or seed), so as to entirely fill all the space between the plants in about two years. This food-plant I consider of great importance to the agriculturist, as it is so productive under widely varied climatic conditions. The roots will endure the winter frosts but the leaves were singed when only half an inch of ice was made. Probably a little more cold would kill the leaves, but in some mild days and nights of December the leaves started and grew three or four inches, thereby showing it will give food early in the spring. Those who live in towns and have only a very limited space available for vegetable growth, would be able within a few square yards to grow enough Prickly Comfrey to keep a cow, pig, or even a horse, and to supply a large part of the food needed by poultry, and a careful return of the manure would permanently maintain the productiveness of the soil.

I hope if any of the readers of the RURAL have had experience of this plant adverse to that above stated, they will kindly give the result of their trials, so that a wider experience may be attained; but I hope in such case the writer will add to the value of his report by subscribing his name and address. G. A. WILCOX.

Gasport, N. Y.

No contribution is ever admitted into the columns of the RURAL unless its fidelity and originality are vouched for by the name and address of the writer. For various reasons, however, the Eds. do not always deem it advisable to publish these, although always rigidly requiring that they should be furnished as guarantees of good faith.—[EDS.

Farm Economy.

IRON HURDLES ON WHEELS.

THE papers and Mr. MECHI of Tiptree Hall celebrity, himself, tell us that for making fences and folds so that his stock might feed on his crops where they were grown, he uses iron hurdles on wheels so that they can be easily moved. It is probable these hurdles, with or without wheels, would be cheaper for a number of years than any other kind of fencing, and if so, how very convenient it must be to have a good stock of them ready to make a division wherever desired or to make pens for sheep to be kept from ranging into mischief!

If these hurdles are painted green they are invisible at a distance, and the fields in front of any gentleman's house, can be made to look like a very large park; and if this were done in Orange County, N. Y., where so much is grass land; what a picturesque scene would be presented by a herd of dairy cows, a fine stud of horses, and a numerous flock of sheep, all in view at the same moment and apparently all in the park! Yet this park might be in four equal divisions and the aforesaid hurdles would be there though entirely invisible.

In Orange County, which is a great horse and milk-producing district, such a disposition of grass land would be particularly suitable, because the cows could be the leading grazers. Say, for instance, there were thirty acres in each division, or say any other number more or less—Well! the cows are turned into No. 1 lot, on the 1st of May, and on the 8th they are moved into No. 2, and the horses are put into No. 1. Then on the 15th the cows go into No. 3, the horses into No. 2 and the sheep, which perhaps have been on some mountain run or elsewhere, are put in No. 1. Now, after this in regular rotation they need not be moved oftener than in two weeks, which will give the cows a two weeks' growth of grass after the sheep have been periodically moved. For if there are four lots and only three of them stocked, while the animals are shifted round as stated, when the cows are in No. 4, the No. 1 lot will have nothing in it, and young grass will have two weeks to thicken up among what the sheep had not eaten, and all the bare grazed portion of the surface would have two weeks' nice sweet herbage for the cows, and every man of experience knows this would make a great difference in favor of milk. There is nothing interferes so much with dairy cows giving a great flow of milk as to have other animals besides themselves grazing and picking out the best grass, as sheep and horses will do; for they have more time to do it and their mouths can eat nearer the ground where, in a good old permanent pasture, all the thickset, juicy herbage is. This can be done well enough without iron hurdles; but on some of the beautiful farms it would be very pretty if done as stated.

Hurdles, if kept in sufficient numbers, and with them some easily movable contrivance to give shade in summer, could be used so as to supersede the soiling of animals, by having them at the homestead and hauling home crops and hauling away the manure afterward. Crops of rye, clover, millet, sowed corn, rape etc., could be folded off and the crop mowed daily or two or three times per day, and given to them in any kind of rack found most convenient. This is done on many farms in England with sheep, but if hurdles were made heavy enough, cows or stock of any kind, could be penned over the crops in a similar manner and the moving of the hurdles and the means of affording shade would not be more trouble than hauling home the crop. Moreover, there would be a clear saving of the labor necessary in cleaning out manure and taking it into the field, as it would be dropped regularly over the ground where the crop grew.

There is no doubt but that this kind of soiling will be adopted through a greater part of the year at the North and the whole year round in the South within another century, because no other system will renovate the land so well and economically and cause it to bear full crops. The consumption of a crop of clover or of any crop in this way, has the advantage of preventing waste by the stock treading on and injuring the herbage, while it saves the full quantity of urine, too much of which is lost at a farm homestead.

Any American gentleman, in order to fully appreciate the merits of this hurdle system, should see the very fat sheep to be met with in England, in the spring, after having been folded all winter without any shelter or anything but their wool to protect them. But, putting the advantages of all this on one side, look at the pleasure of being able to start a team and two or three men to fence off any portion of a farm in a few hours, without the necessity of digging any post-holes, or chopping rails, or the fear that rotten rails will let the cattle into valuable crops. Then, again, if iron hurdles are used, what a satisfaction to know alternate wetting and drying etc. will not hurt them, and that when once paid for there will be no further call for buying others to replace worn-out ones.

In a few more years, wood in the United States will be scarce and, as there is iron in extraordinary bulk in every direction, iron fences, iron gates, and iron hurdles, iron implements etc., will make repairing a much less annoying nuisance hereafter than it is at the present day. There is still another superiority in iron for fencing—it cannot be burned. And in the vicinity of water or on land that floods, it will not swim away. GEO. GARDNER.

Farm Topics.

BAD ROADS.

PROF. A. W. MANGUM.

AMONG the very few Latin words planted in Britain by the Romans, in their first invasion, was *strata*, from which comes our word *street*. The Romans made *roads*, called *strata*; and these roads proved so lasting and convenient that they held their name through all subsequent changes and convulsions, and transmitted the word through the centuries to the present. They were a wise and enduring product of advancing civilization. Roads have always been a criterion of the progress of a people. The railroad is the fruit, the friend and the inspiration of advancing art and science. But with all the facilities of transportation and travel which steam-cars and their allies, the steamboats, furnish, there has always been, and will continue to be, great need of the slower vehicles drawn by animals. The railroads are, in most cases, absolutely dependent on the country roads. What freight train ever moves a burden that is not, directly or indirectly, the result of work with carts and wagons? And what train does not need to be aided by these humble vehicles, before its stores can reach those to whom they are sent?

Not only the convenience but, to an appreciable degree, the profits of the producers in our country are affected by the character and condition of the roads that lead to the market. Comfort, pleasure, clothing, from hat to boots, oxen, mules, horses, all kinds of private vehicles, precious time and golden opportunities are all, to some extent, dependent upon them. Notwithstanding all these considerations, the country roads in many parts of even some of the old and thickly-populated States, are in a miserable condition. I have known a road within less than a mile of the capital of a large State, not only dangerous, but almost utterly impassable by any kind of conveyance. And that road was an important channel of supply to the market and

trade of the town. This is, probably, not an extraordinary case. The much-traveled roads are, no doubt, very bad throughout a large part of our country in the winter season. Those that are used most are, singularly, permitted to fall into the worst condition. How often do merchants sit and vainly watch for customers, and heads of families groan over scanty supplies in market stalls, while the farmer impatiently looks at his ready produce and hopes for the day when King Mud shall raise the siege of the inaccessible village or town! Only think of the spattered, panting, overstrained horses; of the muddy boots, soiled garments and lost patience of the sorely-tried wagoner; of the miring and prizing, the whipping and stalling, the turning over and the breaking down!

How are we to account for the continuance of those things—those reproaches upon civilization—from generation to generation? It appears to be an inherent peculiarity in man to neglect the roads over which he knows he must travel. That peculiarity is aggravated by general custom among all classes of people. Everybody who travels complains of the roads in his own neighborhood; but how few are willing to act sensibly and faithfully in improving them? In at least some places, all that "the overseer and hands" desire or intend is to escape prosecution and fines. As a term of court approaches, they pretend to "work the road." And what a work! Sometimes a little earth or even mud is thrown into a mud-hole, for the first wagon to cut out—perhaps a few pieces of brush being put in the hole. To prevent washing along the route, ditches are opened diagonally, and the dirt piled so high that the horses, the vehicle and the backbone of the traveler must all be subjected to a severe trial at every crossing. These barricades are sometimes placed on the very brow of difficult hills. Rocks, roots, stumps are left in undisturbed possession of their places directly in the road for years. Surely *ignorance* must be regarded as one explanation. The progress of the age seems to have no effect in many localities. The people work the roads simply as their fathers worked them. It is rarely that any jurors present the responsible parties—although the judges so often charge them directly upon the subject. Their observation is dull, or their memory is short, or they can't tell when a road is neglected, or they may have consciences that need sharpening.

In all the bad portions of the road, common sense would convince a man that it is necessary to raise the middle and open a channel for the water on the sides. A rolling road becomes firm and remains so.

It would work well for all, if it should become general, to utilize the muscle of convicts in every county, by making them work the roads. If there be those who, for any reason, ought not to be thus employed, let impartial discretion exempt them. There are at least some classes of convicts who ought to be thus made to contribute to the welfare of the people who are supporting them. But there is need, in any event, of securing the services of more competent "overseers" of those who do the work. As a rule, the most intelligent do not give their attention to the matter.

But I will not carry the reader further on "bad roads."

University, N. C.

Floricultural.

WATERING PLANTS IN POTS.

WILLIAM FALCONER.

Nurserymen and florists who grow Polargoniums, Roses, Verbenas, Carnations, and the like by the thousand or hundred thousand, may water them overhead and irrespectively from the garden-hose, because it would not pay to use the watering-pot; but the amateur who grows only a few plants cannot afford to have some of them drowned or parched, hence he supplies their wants individually from the pot. Grass, and the common herbs of the field are indiscriminately showered overhead from heaven but the trees though similarly treated, teach us a mighty lesson: Instead of the water that descends on them being equally deposited on the ground underneath their branches, it is warded off so far as the branches extend, and falls, not at the base of the stem, but where the rootlets exist; and this is a chief cause of arboreal longevity.

It is most injurious to any kind of plant to water it, time after time, right on its crown or to direct the stream of water against its stem, thus laying bare the roots and making a hole in the middle of the soil in the pot, just at the stem. If we notice the position of any permanent plant, as a tree or a shrub, growing in the garden, field or wood, we will find that the stem rises from the ground on a little hill rather than from a basin-shaped hollow. After plants are freshly potted, and in the case of seeds and young cuttings, water should be applied over the whole surface of soil, through a rose, but when the soil gets compacted, the water may be poured on without the rose, keeping the water-pot near the flower-pot, around the inside edge of which the libation should be applied—never in the middle.

Soft water, as that from pond, river, stream, or tank, is the best for plants, yet some as nice window plants as I ever saw grown were fed from a well whose water was "hard." Water to be applied to the roots should be about the same in temperature as the atmosphere of the house or room in which the plants are grown, but while active growth is being made the water may with impunity be a little warmed, and again while the plants are at rest, water a little colder than the atmosphere won't hurt them. At any rate the water of equal temperature is always the safest. Don't water a plant till it needs it, and then give a plenty, that is, fill the pot to the brim, but if that be insufficient to moisten the whole ball of earth, give more. If the plant is somewhat moist but not enough so to do without water till next watering-time, then give it a lesser quantity than you would to a dry plant. Dribbling, or in other words, giving a little drop every day to every plant, is miserable practice, by which wet plants are made wetter or sodden, and dry ones don't get enough.

The syringe is used to bedew plants and thus refresh their herbage and incite growth, as well as to cause stems or branches to "break equally, and for this purpose it is employed daily in fine weather in spring and early summer. Later on, it is brought into requisition, less frequently though, as a cleanser from dust and insects. In dull or wet weather, except in exceptional cases, the syringe should not be used. In syringing instead of showering the water so as to wet the surface of the leaves, I direct it up through between the branches and against the underside of the foliage, thus more effectually dislodging vermin. In spring and summer the water used in syringing may with benefit be a few degrees warmer than that applied to the roots, but in fall and winter it should not be so. Plants should not be syringed while the hot sun is blazing on them, nor should they be done so late in the afternoon or evening, that they might remain wet all night. The proper time to syringe unshaded plants is at or soon after sunrise in the morning, giving ventilation enough to prevent burning the leaves; or when the sun's heat is on the decline, say three to five o'clock in the summer time, so that all may be dry before night.

More plants are killed by bad watering and over-watering than by anything else. When a plant becomes sickly, inexperienced growers usually "cure" it with more water, when in fact, they kill it. If you are satisfied that your plant is suffering of drought, then water it, giving enough to moisten the whole mass of earth, and if you be not confidently sure that the earth is entirely wetted, place the pot for a few minutes, an hour or two, or even a night if need be, up to its brim in a bucket or tub full of water. But if your plant be sick with the "well, I don't know what is the matter with it" disease, then keep it dry. And it is a frequent occurrence to give manure water to a sickly plant, but this "cure" is to the plant, as a Delmonico's dinner would be to a person sick of typhoid fever.

Manure water is an excellent stimulant to healthy plants, but should never be applied to those that are sickly. Neither should it be given to newly-potted plants, to those whose pots are not well filled with roots, nor to plants that are in a dormant condition. Soft-wooded and gross-feeding plants as Cinerarias and Calceolarias love it, but hard-wooded kinds like Camellias and Myrtles, though they like a tasting, are safer without its aid in the hands of most amateurs.

As some plants require to be kept moist all the year round, others only a part of the year, and some grow in the summer and rest in the winter, others grow in the winter and rest in the summer, and too, as plants grown under different conditions often have different tastes, I will refer to this subject in another paper, perhaps next week.

EVERGREEN SHRUBS (Mahonia and Leucothoe.)

The other day, in the gardens of John C. Gray, Esq., at Mount Auburn, near Boston, I noticed the following two evergreen shrubs in very fine condition. They are big bushes, very thrifty, and growing in a mixed border along with Lilacs, Mock-oranges, Rhododendron maximum and others, and quite unprotected by mulching or otherwise. In this way they undergo our more than zero winters, and with their shining metallic-green persistent leaves, make winter's garden enjoyable. Not only are they ornamental as evergreens, but both are comely flowering shrubs. Their hardiness we have proved in the gardens here, and our plants are much smaller than Mr. Gray's.

The Mahonia or Holly Barberry (Berberis Aquifolium) is a beautiful shrub some four feet high, a native of Oregon, and as an established plant is quite hardy at Boston. It has large shining pinnatifid leaves, and a dense crop of clustered racemes of yellow blossoms that appear in May. B. repens from the Rocky Mountains, is very like the other, but it is much shorter-growing and I believe hardier.

Leucothoe Catesbæi is an evergreen bush of the Heath family, a native of the Southern Alleghanies and the moist banks of streams in their vicinity, and, apparently is perfectly hardy in Massachusetts. It has arching branches, four feet long and over, and ovate-lanceolate taper-pointed leaves, and a wealth of little racemes of white flowers arranged along the under side of the branches in Soloman's Seal fashion, and which though budded in fall like an Andromeda, do not open out till the succeeding May or June.

Botanic Garden, Cambridge, Mass.

Dairy Husbandry.

INFLUENCE OF CONSUMPTION OF WATER BY COWS ON THEIR YIELD OF MILK.

C. G. King.—Will the Rural please explain what influence, both as regards quantity and quality, the amount of water drank by milch cows has upon their yield of milk?

Ans.—Experience has told not only practical dairymen but every observant cow-keeper, that when cows are fed on a diet containing a good deal of water, their yield of milk is larger than when their food contains but little moisture; and every summer furnishes a multitude of instances proving that cows shrink rapidly of their milk in dry, hot weather, when water is scarce and the animals do not get their usual supply. But although it has long been known that an increased secretion of milk follows the consumption of an unusually large quantity of water, it has been very often assumed that a thinner and poorer quality of milk is then produced, and that the increase in quantity consists disproportionately of water. The experiments of Dancel, however, as communicated to the French Academy of Sciences, repeated and extended with greater precautions by Stohmann, go to prove that this assumption has but little foundation in fact.

Dancel states that when he gave cows from 20 to 25 litres of bran mash instead of the corresponding amount of dry bran, the animals still drank the usual quantity of water and gave from 14 to 16 litres of milk per head instead of the ordinary yield of from 10 to 14 litres, without any depreciation either in the quality of the milk or in that of the butter made from it. Similarly, by inciting the animals to drink large quantities of water by the administration of salt, an increased secretion of milk was produced, and milk that was yielded under this water regimen, having been carefully analyzed as to its chemical and physical properties, was declared to be of good quality—a decision confirmed by the excellent butter obtained from it. It was Dancel's opinion that on observing the relative appetites for drink in a number of cows, and the quantity of water usually consumed by each member of a herd in the course of twenty-four hours, and comparing this quantity with that of the milk produced, the inference is inevitable that the yield of milk is in direct proportion to the quantity of water absorbed. His experiments, however, were not conclusive as to whether this increase in quantity was at the expense of its quality, as he made no special examination of it with a view to determining this point.

It was reserved for Stohmann, by experimenting upon goats at Halle, to afford clear proofs that an increased supply of water is followed not only by a larger yield of milk, but also by an increase in its dry constituents. Morever, at the same time he took note of the influence of an extra supply of water on the bodily conditions of the animals. From an analysis of the increased yield of milk produced under the stimulant of an unusually large consumption of water, the appetite for which had been artificially provoked, as well as from the quantitative determination of its constituent parts, it appeared that the increased secretion was not due to an unusually large proportion of water contained in it, but to an actual increase of all its constituents. In other words, the composition of the extra large quantity of milk yielded in the three days during which the experiment lasted, corresponded almost exactly with its composition immediately before and immediately after.

The experiments proved, however, that if attempts are made to increase the secretion of milk by increasing the supply of water, an increased consumption and digestion of food must also be insured; otherwise the enlarged secretion will take place at the expense of the whole system; the animal will soon fall off in condition, and consequently will, ere long, cease the increased yield, however much water may be given. In this connection Stohlman says:—"An increased consumption of water favors the secretion of milk, but is unfavorable to fattening; the production of milk requires a large conversion of albumen, and everything that increases such conversion counteracts fattening." During the experiment, an increase of water and consequently of milk caused an increased destruction of albumen; for the goat eliminated in her urine considerably more than the usual quantity of nitrogen, while more fæces were also excreted and she daily lost weight at the rate of 44 grammes, while ordinarily on similar solid diet, she gained from 60 to 90 grammes of flesh. In the case of pregnant animals the effects of a stimulated consumption of water, without the absorption of a corresponding supply of nutritious food, may be still more prejudicial, since the conversion of the nitrogenous constituents of the body into milk or urine must deprive it of much of the substance necessary for the development of the fœtus.

It must be borne in mind, however, that the quality of water sometimes has considerable influence on the yield of milk. Water foul with decomposing organic matter, may injure the general health of animals, and so decrease the secretion of milk; while water, in itself harmless but possessed of a disagreeable taste, often acts injuriously on the yield of milk, because the animal will not drink a sufficient quantity of it to promote a full lacteal secretion. Partly for the same cause, water whose temperature is too low, is apt to reduce the yield of milk, because cows will drink only a very moderate quantity of it even when specially thirsty, while the process of digestion is retarded by the introduction of very cold water into the stomach. Experience goes to prove that the best temperature of water for stock, is that which is pretty uniformly maintained in a well of moderate depth.

From these facts practical dairymen, and indeed, all interested in domestic stock of all kinds, should draw the lesson that cows and other animals, to yield the best returns, must be provided with an abundance of pure water, easily accessible at all times. Dancel's opinion may also be, as a rule, accepted: that the quantity of drink habitually consumed by a cow is a valuable test of her worth as a milk producer; and hence, that an animal that generally drinks an unusually small quantity of water—say 27 quarts per day—is necessarily a poor milker.

Miscellaneous.

CATALOGUES, &c., RECEIVED.

We have to thank Mr. Wm. H. Carson, the enterprising seedsman of this city, for a large package of many kinds of seeds for the field, vegetable and flower garden, among which are a number of novelties of much promise.

Hoopes, Brother & Thomas, Cherry Hill Nurseries, West Chester, Pa. A hand-book of green-house and bedding plants, embracing descriptions of the most popular plants grown under glass, to which is added the novelties for 1878.

We are always glad to call the attention of our readers to the excellent catalogues of this trustworthy establishment. No. 4, now before us, contains 57 pages, printed upon tinted paper and well illustrated. Also, price-list of evergreens and fruit trees at "panic prices." Sent free to applicants.

George Such, South Amboy, N. J. One of the best though most unpretentious catalogues we know of. It contains a long list of Gladioli, a specialty with Mr. Such, and a rare collection of choice plants.

Among those to which we would call particular attention are the following: Hardy Ghent Azaleas; Abutilon "Rosy Queen;" White Hydrangea "Thomas Hogg;" Hydrangea paniculata grandiflora; the new double white Violet "Belle de Chatenay;" Enlalia Japonica zebrina; Cannas, an excellent collection of named varieties.

D. S. Marvin, Watertown, N. Y. Price-list of grape vines, &c. Single vines are offered, of all good varieties, for from 25 cts. to $1 each, and at proportionately less prices by the dozen, hundred and thousand.

Mr. Marvin gives the species from which the varieties have been obtained, not all of which are in accord with other authorities. Autuchon, e. g., is from Aestivalis and Vinifera, not from Vinifera and Cordifolia as he states. Mr. Marvin is much opposed to crossing V. vinifera with our native varieties.

E. & J. C. Williams, Montclair, N. J. Descriptive catalogue of small fruits, grape vines, &c., for the coming spring. Here we find the latest varieties of strawberries, such as Great American, Beauty, etc., etc. Also, a list of the best grapes.

For the convenience of those having new places, this catalogue gives an excellent list of Strawberries, Currants, Grapes, Blackberries and Raspberries. It will be sent free to applicants.

Carrots, Mangel-wurzels and Sugar Beets. How to raise them, how to keep them, and how to

feed them. By J. J. H. Gregory of Marblehead, Mass. He who wants practical and trustworthy information respecting the above-mentioned roots, will find it in the above work of 62 pages Price 30 cents.

John Lewis Childs, Queens, N. Y., Catalogue of Half-dime Packets of Flower Seeds. Also price-list of Bulbs and Plants for 1878.

Gould Brothers, Rochester, N. Y., Wholesale Catalogue or Trade List of the Monroe County Nurseries for Spring of 1878. The following Catalogues will be sent, prepaid, on receipt of postage stamps:

No. 1—A Descriptive and Illustrated Catalogue of Fruits, 10 cents.

No. 2—A Descriptive and Illustrated Catalogue of Ornamental Trees, Shrubs, Roses, Flowering Plants, Bulbs, etc., etc., 10 cents.

No. 3—A Wholesale Catalogue, or Trade List, free.

R. H. Allen & Co., 189 and 191 Water Street, N. Y.—Catalogue of choice farm, garden and flower seeds, Roots, etc., for 1878. Few catalogues, however large, have more complete lists of seeds for fodder and root crops. In the vegetable line also, it will be found to contain everything desirable. Among Mangel-wurzels, we notice Webb's New Kiiver Yellow Globe of which, it is said, eighty-four tons per acre have been grown. Half Long Orange Carrots—Webb's Imperial Swede, Golden Millet, Prickley Comfrey, Cow Peas, Sweet Corn for fodder are especially referred to.

The Jerusalem Artichoke and Chufas, about which we have constant inquiry, are offered. The catalogue is free to all.

Annual Report of the Treasurer of the United States to the Secretary of the Treasury for the year ending June 30, 1877.

E. E. Hardin & Co., Scotia, Schenectady Co., N. Y. New price-list and circular of thoroughbred live stock and eggs for hatching in season.

Report of the Kansas State Board of Agriculture for November and December, 1877. Alfred Gray, Secretary. A very interesting and instructive compilation of facts.

Burke's Texas Almanac for 1878 and Immigrants Hand-book. An almanac for Texas—Farm and Garden Hints—Descriptions of various counties etc. Price 75 cents with map—50 cents without.

Vanderbilt Brothers, 23 Fulton St., N. Y. Seed and Illustrated List, Farm and Garden Implements, Peruvian Guano, Superphosphate, Land Plaster, Plants etc.

Young & Elliot, Annual Catalogue of Vegetable, Agricultural Grass and Flower Seeds, with descriptive and cultural notes. A neat, illustrated Catalogue of 70 pages. Free.

Belcher & Taylor, Chicopee Falls, Mass. Descriptive and Illustrated Catalogue of Agricultural Implements, 54 pages, in great variety.

Samuel Kinsey, Dayton, Ohio. Wholesale Price-list of small fruits.

E. Wyman, Jr., Rockford, Ills. Catalogue of flower and vegetable seeds and summer flowering bulbs for 1878.

Randolph Peters, Wilmington, Delaware, Great Northern and Southern Garden and Nursery. Descriptive Catalogue of fruit and ornamental trees and plants. An excellent book of 55 pages sent free to applicants.

Charles S. Pratt, North Reading, Mass. Descriptive circular and price-list, strawberry plants and small fruits generally.

FOREIGN CATALOGUES RECEIVED.

William Bull, King's Road, Chelsea, London, S. W., England. Catalogue of new and rare plants; 175 pages, finely illustrated.

B. S. Williams, Victoria and Paradise Nurseries, Upper Holloway, London, England. Catalogue of plants; finely illustrated; 80 pages. Also, catalogue of flower, vegetable and agricultural seeds; 65 pages.

Wm. Paul & Son, Waltham Cross, Herts, Eng. Catalogue of roses; 32 pages.

Sutton & Sons, Reading, England. Amateurs' Guide for 1878. 131 pages, beautifully illustrated.

James Veitch & Sons, Coombe Wood, Kingston Hill, Surrey S. W., Eng. Catalogue of garden and flower seeds, horticultural implements, &c. 74 pages; illustrated.

Hurst & Son, 6 Leadenhall St., London, E. C., Eng. Trade seed catalogue. 30 pages; illustrated.

James Carter & Co., High Holborn, London, W. C., Eng. Seed order for 1878; 25 pages. Also, Carter's Vade Mecum—a profusely illustrated catalogue of 100 pages.

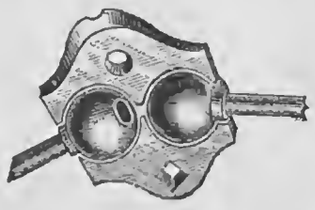
Cranston & Co., King's Acre, near Hereford, Eng. Descriptive catalogue of forest and fruit trees, conifers and ornamental trees and shrubs; 64 pages. Also, a descriptive catalogue of roses; 40 pages. Also, catalogue of flower, vegetable and agricultural seeds; 52 pages.

Daniels Brothers, Norwich, England. The illustrated guide and seed catalogue for amateur gardeners. 116 pages, finely illustrated.

Industrial Implements.

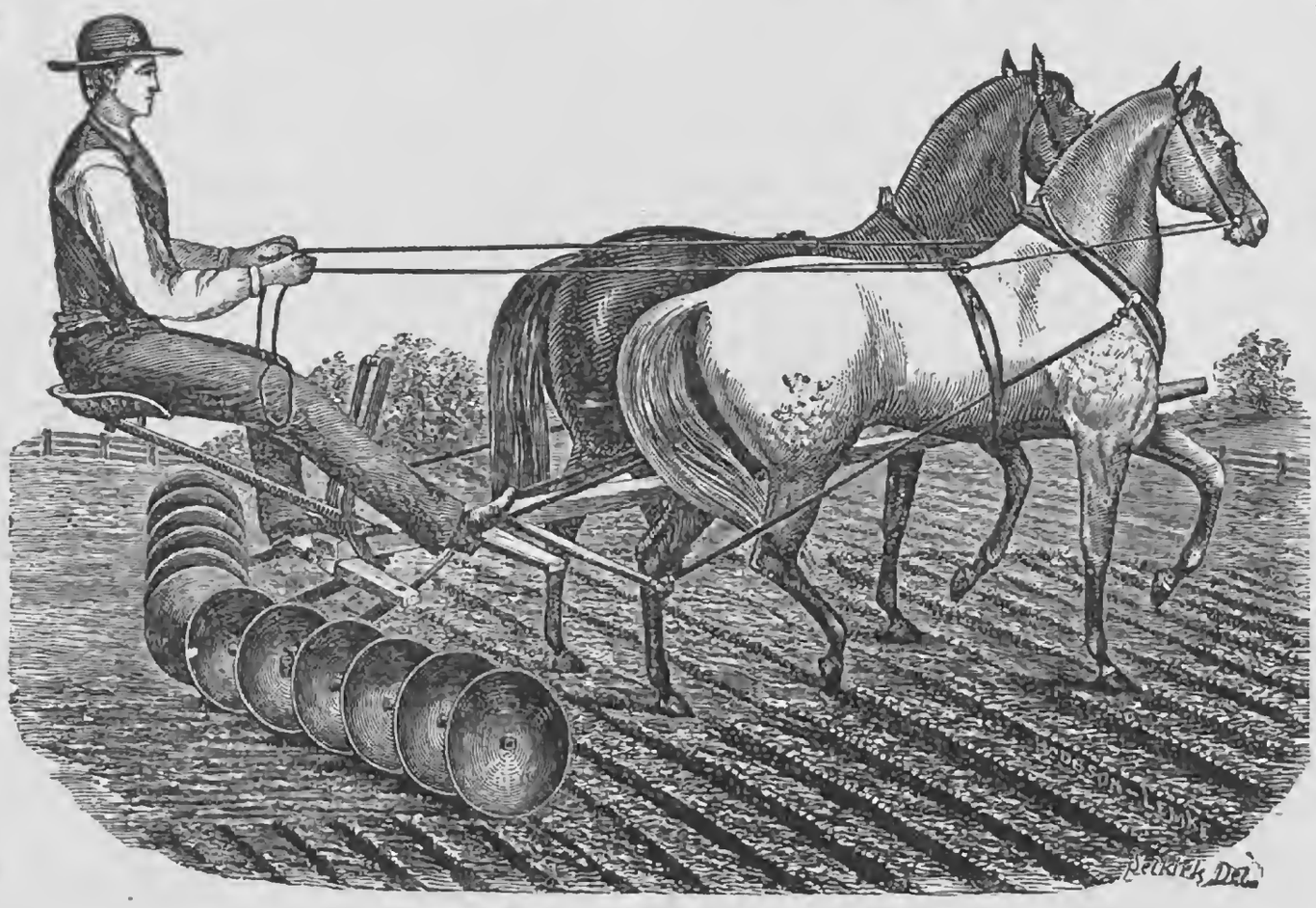
AN IMPROVED HARROW.

The multiplicity of designs for harrows would indicate that if the soil escaped thorough pulverization under the teeth of one it should certainly yield to the scraping disc of another. The best thought and practice of the times agree that harrowing is a branch of agriculture requiring great attention, and on its thorough performance depends a great part of success on the farm. Inventive genius has been steadily directed in this direction, and it will be because of incapacity if the ideal harrow is not introduced.



It would be as senseless as carrying coals to New Castle to parade the necessity of careful working over of the soil to fit it for germination, but we do not believe that the agriculturist gives as much thought to the selection of the most approved methods of accomplishing the best results

We illustrate in this issue an improved harrow (Ladow's patent) made by the Wheeler & Melick Co., Albany N. Y., which lays claim to superior merit. Briefly, the implement is composed of two gangs of adamant metal or steel discs, which work at an angle that can be changed by a lever at the option of the operator. The salient feature is shown in the cut of the universal joint forming a coupling that is strong, yet flexible. The manufacturers say:



AN IMPROVED HARROW.

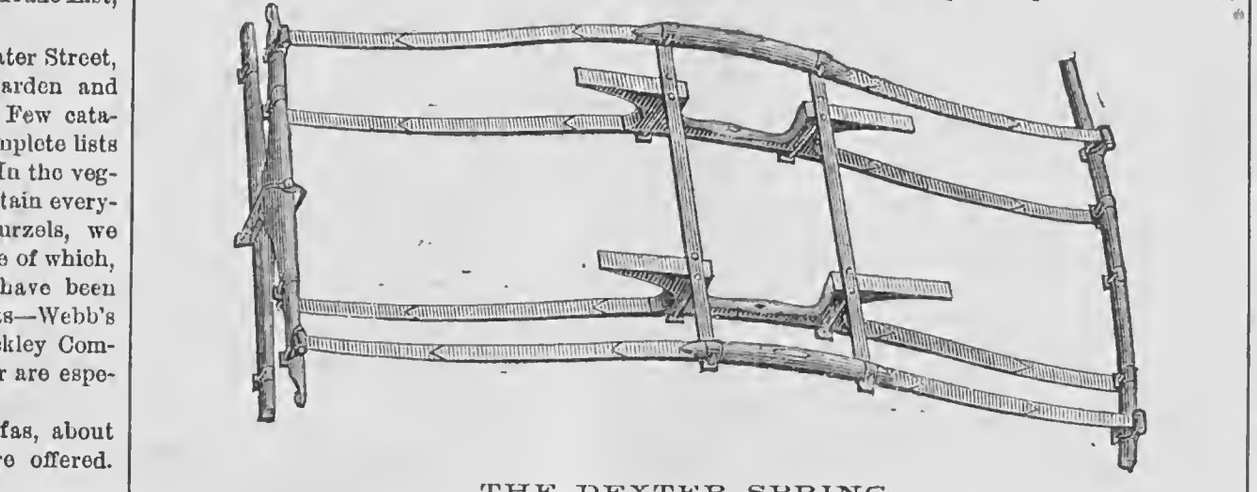
"The wheel gangs being united by a series of universal joint boxes, allows each part to accommodate itself to uneven surfaces, working in a hollow, or dead furrow or over ridges and obstructions, the wheels adjusting themselves to the surface over which they pass, cutting a uniform depth and drawing more easily than if th gangs were rigidly connected. The draft is also lessened by the construction of the center coupling, one gang counteracts the friction caused by the other gang pressing against it, making the harrow draw very easily, even when the driver rides.

The inner wheels of each gang are brought near to a cutting edge with each other, throwing the loosened earth in opposite directions from the center, leaving no ridge in the center. Both gangs of wheels stand at a relative angle to each other, thus overcoming any tendency to work sidewise to the line of draft.

The disc wheels are polished on both sides entering and leaving the earth readily, so that a scraper to clean the wheel is entirely dispensed with and unnecessary.

The journals are protected from dirt, and provided with self-feeding oil cups and the whole Harrow being of iron and steel, except the pole and seat standard, will bear exposure to the weather without injury. The construction is such that any part is easily removed or replaced, which with the system of bracing, renders this a very light, easily handled, and strong wheel harrow.

The price of the harrow with adamant metal discs is twenty-five dollars, steel wheels may be substituted at an additional cost of five dollars. Interested readers will receive a prompt answer to queries by addressing the manufacturers.



THE DEXTER SPRING.

THE DEXTER KING.

The bewildering variety of form that springs have been made to assume is the best evidence of the great ingenuity and study devoted to this important part of a vehicle. Quite the most novel recent improvement is the "Dexter," made by the Dexter Spring Co., Hulton, Pa. The writer personally tested this spring at the Centennial, and was gratified with the result. Its ease of motion and strength were really remarkable. This spring is clearly shown in a previous issue of the Rural; two parallel springs, with a center brace, and malleable fastenings at the ends. The subject of this notice is, as shown in the illustration a modification of this construction, but one spring showing at each side of the buggy; the others doing their work under the body.

By this arrangement a neater and a more graceful appearance is given the vehicle, while The popularity of the spring is the best test of its worth, and the low price at which it is sold puts it within the means of moderate purses. It is easily applied at trifling expense, and many know how to reduce its first cost by disposing of their old replaced springs to the carriage-wright who fits the new ones. The novelty and worth of this article deserve critical examination and the makers will give every facility to our subscribers to learn all there is to be known concerning both the "Dexter" and the "Dexter King."

Various.

GRIMES' GOLDEN PIPPIN.

Will the Rural please give a description of the Grimes' Golden Pippin, and its character in general and oblige one, and perhaps many of its readers. J. G. R. K.

Va.

Ans.—It originated in Brook Co., Va., on the farm of Thomas Grimes in the locality of which it is highly prized for its hardiness and for its uniform annual productiveness. Mr. Downing describes the tree as vigorous, hardy, upright spreading, very productive, branches with peculiar knobs at the base of each, connecting it with the main limbs. Young wood dark dull red brown, grayish. Fruit, medium, roundish, oblate, slightly conical. Skin, uneven. Color, rich golden yellow, sprinkled moderately with small gray and light dots. Stalk rather short and slender. Cavity rather deep, sometimes slightly russeted. Calyx, closed, or partially open. Basin, abrupt uneven. Flesh, yellow, compact, crisp tender, juicy, rich, sprightly, spicy subacid, peculiar aroma. Core rather small. Very good to best. December to March.

The American Pomological Society gives it one star for Nova Scotia, Michigan, Virginia, Ohio, and two stars for Iowa and Nebraska.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

The Codling Moth.

I do not share in Mr. Peck's expectation that the apple is destined to become scarce, although, to prevent it from becoming so, it will be necessary for orchardists to take more care of their trees than they take now, generally; this they will do when they realize the need of it. Certainly apple-worms can pass from one apple to another; the only question would be, do they? I, for one, have no objection to accepting Mr. Peck's statement that they do, because he has seen it; at the same time I think it likely that they remain more often in one apple for their whole larvahood, or only pass from one to another apple which touch. I should expect a larva which was taken from an apple prematurely to enter the first one it could find for food.

I have no doubt that the sooner infected fruit is discovered and destroyed the better; the sap which would otherwise go to a doomed apple, is saved, and the larva is more surely killed. I do not know what "obsolete theories" are referred to, but I hope Mr. Peck does not refer in these terms to the advice to wind bands of hay or cloth around the tree as a trap for this, or its equivalent, is the most generally available means of coping with the pests. I have no belief that the odor of sheep or swine affects the insects; the good that is done is in the timely destruction of *inhabited* fruit and thus of the inhabitant.

Mass. B.

Quick Returns.

I believe that women would be more healthy if they would work more in the garden. Of course, some are not able to do it, and some prefer to hire such work done; but I am speaking to those who, like myself, do their own work, and do a great deal of it. I say the first dish of berries will amply repay for the labor of raising them, no matter how hard it may seem at the time. Amelia.

Notes in the Flower Garden.

Liliums candidum, longiflorum, and lancifolium, are up finely and promise a beautiful harvest of blooms. Narcissus of Double and Polyanthus sorts are in bud and will soon flower. Pansies, Daisies, Violets, and Wall-flowers are in fine array of bloom. Rose bushes—or rather trees—are budding out.

El Dorado, Cal., Jan. 28. W. C. L. D.

New London, Co., Conn.

Some of my annual Dianthus from seeds you sent, were more than three inches across, last September, and covered with the most beautiful pencilings imaginable. My Snap-dragon seeds you also sent, were loaded with flowers of the most beautiful and brightest colors, and nearly double the size of any I ever before raised.

M. W.

Domestic Economy.

CONDUCTED BY EMILY MAPLE.

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

We enjoyed a very pleasant afternoon at Mrs. Rutherford's last week, the discussion of the "Kitchen Club" being chiefly a paper read by Mrs. Wilson, entitled

"Culture in the Kitchen."

"Culture" said the reader, "may seem a hackneyed word to use in this place, for many people consider this part of a home simply a place to cook, and wash dishes in, or a sort of penal colony for the children when meriting punishment. 'Go into the kitchen,' is a sentence we have often heard addressed to a child, as if the threat was intended to carry terror with it. But I appeal to every housekeeper, especially to those who do their own work, to tell me if they do not often wish the apartment where they spend their time, could be improved and adorned."

"When I get my lounge re-covered, I shall put it in the kitchen" I said the tho other day, and the party to whom I was speaking evidently thought me given to indolence, as the answer came, "What in the world do you want a lounge in the kitchen for?" in the same indescribable tone I sometimes have people say to me, "Pictures in the kitchen!" as if the cheap but pretty chromos were a crime, and the walls of a kitchen must be condemned to remain bare and uninviting.

Some women expend all their surplus energy in stove-polishing, others in scrubbing the floor; and these things are necessary for neatness and comfort. But the hanging shelves where a few books and papers can be placed, the useful clock, the cosy rocking chair, as well as bright pictures, with shining utensils for kitchen use, are signs of culture in the kitchen that are to be admired and copied. A little painting or oiling of our woodwork, a few flowers on a bracket and curtains at the windows are simple things in themselves but they show the taste of the owner more than mere words. Why should the broken chairs and discarded tables be "good enough for the kitchen?" Let us determine that no more of our time and money shall be spent to adorn the closed and darkened parlor until our kitchen is furnished with the best conveniences for our work, and kept fit for any lady in the land to work in.

Mrs. Wilson then went on to name many useful labor-saving helps that have been mentioned before in these "Siftings" and advocated a neat closet with pegs for hats and coats that often are left about by children or hired hands, and are needed too frequently to have a place in the front hall or wardrobe. Plenty of light, and to have it so arranged as to save work, and yet keep up a neat appearance, are the first steps toward culture in the kitchen.

DOMESTIC RECIPES.

Cure for Hoarseness.

The juice and pulp of lemons, stirred thick with white sugar, will relieve hoarseness—besides being an agreeable remedy.

For Croup.

A piece of lard as large as a butternut, rubbed up with sugar, and divided into three equal parts and given at intervals of twenty minutes, will often work well.

For Bronchitis.

A residence in a sugar-house from the first of August until January, has been known to give relief.

For Toothache.

Put a piece of lime as large as a hickory-nut into a quart bottle filled with water, and rinse the mouth with it frequently.

For a Cold.

Drink a tea made by steeping together equal parts of catnip, spearmint, and sassafras. Steep, but do not let the tea boil; put the feet also in hot water. B. C. D.

Moths.

Let me disclose to my Rural sisters a secret well worth knowing: namely, that simply wrapping furs and woolens in common brown paper will prevent the ravages of the clothes-moth. I have been told that professional furriers adopt this simple method with their goods and guard their secret well. E. M. B.

Answer to an Inquiry.

To make paste for a scrap book, nothing equals boiled starch. I have tried mucilage and flour paste but prefer starch to anything else. Prepare as for starching linen and let it cool before using. Farmer's Wife.

Veal Cake.

Chop fine three pounds of veal steak; roll three crackers and beat well three eggs; to these ingredients add a pint can of tomatoes; juice and chopped peel of one lemon; two tablespoonfuls of butter; one teaspoonful each of ground cloves and sage; pepper and salt to taste; mix well together and form into a loaf; place it on a dripping pan; strew bread-crumbs over the top and bake about two hours; keep a cup of water and butter on the back of the range and baste the loaf frequently with it. It is better not to cut the loaf until the day after it is made. Nice for tea.

Apple Jam.

The following is an excellent way to preserve winter apples for spring and summer use. Peel and remove the cores from juicy apples; slice thinly and put into a preserving pan with three-quarters of a pound of white sugar to each pound of the fruit; add a little water to prevent their burning, and a few cloves, a little ginger and the rind of a lemon tied up in a piece of coarse muslin; stir with a wooden spoon over a quick fire for from twenty to twenty-five minutes—careful that the jam does not burn. When cold, put into jars and paste or tie down with thick paper, or it may be put into cans and sealed.

Spinach and Eggs.

Carefully look over and wash the spinach in several waters; boil for about ten minutes in salted water; take up and place on the back of a sieve that it may drain; press any remaining water from the spinach, and put into a frying-pan with two or three tablespoonfuls of butter, a little salt and pepper; keep constantly stirring and cutting with a knife until quite dry. Poach some eggs; lay them on the spinach and serve at once. E. M.

Everywhere.

MORE "FACTS" FROM MISSISSIPPI.

In the year 1867 there originated at Washington, D. C., through the efforts of O. H. Kelly, Wm. Saunders and W. M. Ireland, an organization called the "National Grange," or Patrons of Husbandry. The Order spread over the West, like fire in the woods in time of a drought. At one time the secretary of the National Grange reported an aggregate of one million seven hundred and fifty thousand members in the United States. The always hard-up farming population thought they had found in it a solution of all their difficulties, financial and political, and a means of escape from inadequate representation and the miseries attendant upon mortgages, liens and executions.

And, indeed, were the principles underlying the Order strictly put in practice, all these desirable ends might, in whole or part, be achieved; but people hereabouts join the "Grangers" and then go on in the same old well-beaten path; that is, they go to their old merchants for "advances" on a strained credit, plant more cotton than they can "tend" or gather to any advantage; and elect lawyers, village politicians and demagogues to office. The Grange exhorts its members to "raise provisions, and "grow cotton as an *extra*." It bids its members "to pay as they go," or "do without what they cannot pay for." It urges upon them the importance of co-operating in the purchase of necessary supplies, and so getting their goods at wholesale prices. But this co-operating business is what "no fellah" can induce a hard-headed old farmer to do. He has an idea that he can make his individual ten dollars go farther by his own shrewd manner of "trading" than by lumping it with the ninety dollars of his brother Grangers, and you can no more drive the notion out of of his head than if it had been hatched in the cranium of "hard-koppig Pete" of New Amsterdam. Not only so, but after "resolving" in the Grange that he will "stand by men of his own vocation," he will go to the next convention and vote for office for some plausible wireworker who never handled a plow or a hoe in his life. This he will do after a "big talk" regarding the Agricultural Endowment Fund of Mississippi, amounting to forty thousand dollars still lying idle, or the interest on it applied to alien uses. It tickled the Grangers greatly that the "Department of Agriculture at the Mississippi University at Oxford, consisted of fifteen acres of worn-out land, "tended" by an old "darkey" and a "blind horse." The Grange requires from its officers "reports on crops, system of culture and amount produced;" but such "reports" are eliminated to a greater degree in the after dinner meetings, through social chats, than in formal written presentments.

There is a class of farmers in this country, who are slowly accumulating property. These are the men who were called "poor" in slavery times, because they owned no slaves, or very few, and worked themselves. Such men knew how to "take hold" when self-support was thrust upon them by the results of the war. They not only knew how to work themselves, but their wives and children had definite ideas on the subject, and now these "practical Grangers" are the men who have the biggest "hog killings," who raise corn as well as meat to "do them," also wheat, rye, oats, sorghum and rice. They are the men who put up flour mills, who understand the process of making syrup from sorghum, as the "Chinese sugar-cane" is called, and grind their neighbors' cane, and turn many an honest penny at a pinch, by carrying around portable threshing machines and cotton gins. These practical Grangers have large flocks of sheep, and their little daughters knit the wool into socks and stockings enough to supply the family. They are even "long-headed" enough to invest their hard-earned gains in improved breeds of cattle, and some of them have a few "short-horns" of the Durham breed among their cows, and even a pair of Merinos among their sheep.

Perle Perbu.

NOTES FROM CALIFORNIA.

February will soon be growing weak; time is fleeting fast; the sun, in all his glory, beams down on the greenest of carpets; rain has come in plenty; the ground is literally soaked, being wetter than it has been for several years. Glad tidings come from all sections of the State.

Almonds are in full bloom; cherries and other trees are swelling, and will soon be covered with masses of snowy bloom. Pruning and grafting are now in order, and must be pushed vigorously forward. Strawberries in many sections, are in full bloom; half-ripe fruit is frequent in some lots.

In the vegetable garden, there is work in abundance; a few of the best kinds for California are—of Tomatoes, Hathaway and Canada Victor; of Beans, Ferry's Golden Wax and Royal Kidney; of Lettuce, Hanson and Silesian succeed well; of Radishes, I like the French Breakfast the best; always tender, tubers well and never with the strong, rank taste so frequent in other sorts. Blood Turnip and Pine-apple Beet are both good, and are the best varieties I have ever grown. Tailby's Hybrid Cucumber is the finest in cultivation; it is tender; even in large specimens it is free from bitterness, and being a pretty fruit, it should be very popular.

El Dorado, Cal. W. C. L. Drew.

[We are rejoiced at last to find somebody that indorses what we have said of Tailby's Hybrid.

Feb. 27. Millions of dollars of damage have since been done by floods.—Eds.]

NOTES FROM NORTH CAROLINA.

For the last two months we have had all sorts of weather. Early in January we had a freeze-up for a few days; since then the roads have been in a very bad condition, notwithstanding the annual repairs, which consist in putting pine brush in the worst mud-holes when they become impassable. Our supervisor, when remonstrated with, replied that "we must do something, and as the roads were good during summer, we could only repair them in winter."

No snow until yesterday; just enough then to whiten the roofs. Stock of all kinds are wintering well. Plowing commenced, and next week a good deal of oats will be sown. Horses and mules from the West are in plenty; prices low and sales slow. Farm products are in good demand and at fair prices for these dull times. Corn, 55@65c.; oats, 50c.; corn-fodder, $1 per hundred; Northern hay $30; North Carolina hay, $20 per ton; sweet potatoes, 50c. bush.; Irish, $1.25; tobacco ranges all the way from 30c. per hundred for inferior lugs to $65 for bright fluecured wrappers. Peaches are safe, as yet. Although this has been a mild winter, the temperature has been even, and we have had no such warm days in succession as to swell the buds. Two years ago, at this date, many trees were in full bloom. M. B. Prince.

Brookston, N. C., Feb. 19, 1878.

WHAT KANSAS NEEDS.

I do not know how many readers the Rural has in the great Mississippi basin, but it must have *many that are looking* to some part of this vast region for homes, in the future. There are a thousand conditions that are peculiar to the West, so that recommendations that may be profitably followed by Eastern men, would often utterly fail among us. For example, one of our great interests is tree culture, but our people have followed the rules laid down by Europeans and Eastern men who knew nothing of our climate until hundreds of thousands of treasure and years of precious time have been wasted. Eastern men have given us, again, a "timber act" that is more useless than a fifth wheel to a carriage. But an "act" embracing even a few elements of possible success would have conferred a great blessing upon the whole country. What we want now is more light for the people upon the subjects of tree-planting and fruit culture, where our conditions and practice are essentially different from yours in the East. How to get this before the people is now the question E. G.

Riley Co., Kan.

RURAL SPECIAL REPORTS.

Humboldt, Tenn., Feb. 22, '78.

It is now about twelve hours since the rains commenced, and the down-pour still continues. For the past week the weather has been warm, and we have had but little frost. We had a cold snap, however, on the 4th of January; during which, for a few hours, the mercury dropped away down to zero. During the past year, we have certainly had double the amount of rainfall usual, desired or beneficial, nor is there to-day any prospect of its ceasing. Bottomless mud and bottomless slush are everywhere. If the roads were as "hard" as the times, we could get along splendidly. But it is much to be wished that the roads were harder or the times not so hard. Provisions are plentiful and cheap enough. Hereabouts, we would prefer a little more "Greenbacks." With these we know we would feel better, and think we could do better. We don't like a hard money basis. It doesn't suit poor folks. B. F. T.

Poquonoc Bridge, Conn.

"Old Probability" has been busy enough around here celebrating the birth-day of the Father of our Country by one of the hardest storms felt for many a long month. The rain has been falling in torrents for twenty-four hours, and there are yet no signs of its clearing up; the tide is far above ordinary high-water mark; the wind whistles and howls across the channel and around the house corners with a terrible noise. Our winter has passed without any snow to speak of—something new to the oldest inhabitant. Business is dull, money scarce, tramps plentiful, provisions cheap. Pork, 5c. per pound; coal, $4 ton; eggs, 18c. dozen.

Feb. 22. M. W.

Cherrytree, Pa., Feb. 25.

This has been a remarkable, pleasant winter; so far, we have had very little cold weather. On January 31st it snowed all day, and then during the first week of February we had tip-top sleighing and weather as pleasant as could be wished for. Market prices are low for all kinds of produce except apples; they are worth two dollars per bushel, feed is plenty and stock is doing well. D. A. K.

The Vineyard.

CHAMPION GRAPE AGAIN.

Your correspondet, E. F. Ellwanger, in Rural of Feb. 9, gives the correct version of the origin of this Grape with two trifling exceptions. It originated in the garden of a Mrs. not a Mr. Tolman—not Tallman—as he writes it. I wish Mr E. had stated that this Grape was sold by Mr. Day, to Mr. Spaulding, under the name of "Tolman," for such is the fact. If Mr. Spaulding would "rise and explain" the reason why he sold it under the new name of "Champion," instead of its original one, by which it was well-known and I may add, generally condemned in this vicinity, it might be of interest to many now in ignorance as to his motives.

Let us hope his object was not to deceive, by flashy advertisements of his so-called new grape some of us into buying, at exhorbitant rates, what we already had too much of. It was by the merest accident that I was saved from paying $3 for two of these "Champions," after I had fruited the Tolman for five years, by which time I had become thoroughly disgusted with it. Mr. Ellwanger thinks that the Champion is from "ten to fifteen days earlier than the Hartford, and is as good as, and more productive than the Concord.

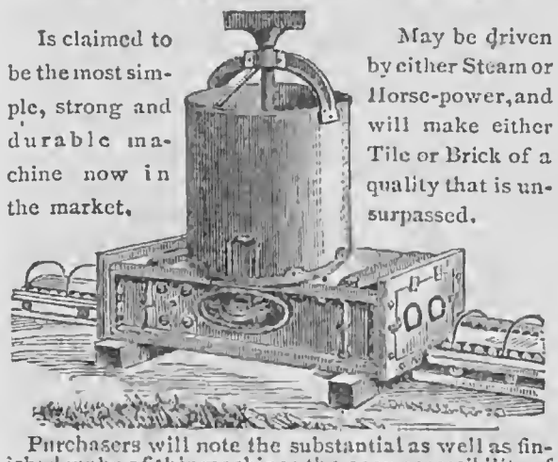
With me it is not fifteen *minutes* earlier than the Hartford, and (to my taste, remember,) it is the poorest grape in quality that I have ever chanced to meet. A Grape "that is ten to fifteen days earlier than the Hartford, and as good as, and more productive than the Concord," ought, in ten years, to have overrun the entire country—this State at least—like a "wild-fire." This is just such a Grape as we are all anxiously searching for. I would willingly pay $100 for one dozen plants of such a desirable variety. The fact is, that in this vicinity, where the Tolman originated, where it has been longest cultivated and where it is the best known, it is generally condemned. There are not one-half as many bearing vines here as there were five years ago. I will venture the prediction that both the Hartford and the Concord will be grown when the Tolman (Champion) has sunk into oblivion.

It may interest Rural readers to learn that this Grape has already assumed a *third* name, under which it is to be discreetly disguised, properly puffed and offered to a credulous public. My advice is, to beware of all "early grapes," offered by unknown or irresponsible parties: otherwise some of us will surely get humbugged. We should also refuse to deal with any man who knowingly will, in any way, countenance this renaming and selling old, discarded or worthless varieties of fruits, plants, seeds etc. We should also expose all dealings of this kind, as we have the opportunity. I wish Eugene Glen, or some one else, posted in the intricacies of the law, would inform us whether or not such practices are not in violation of law as well as of sound morality.

Syracuse, N. Y. Nelson Ritter.

Implements and Machinery.

The Phœnix Drain Tile Machine



Is claimed to be the most simple, strong and durable machine now in the market.

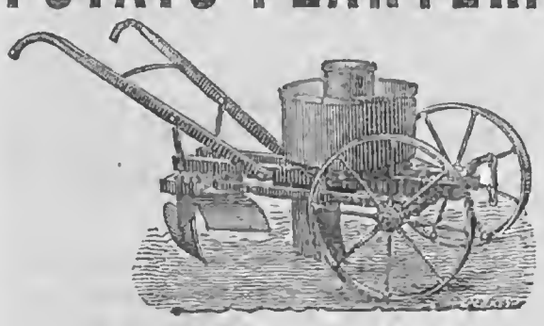
May be driven by either Steam or Horse-power, and will make either Tile or Brick of a quality that is unsurpassed.

Purchasers will note the substantial as well as finished make of this machine; the easy accessibility of its working parts; the means of keeping its plunge-chamber to fit closely, without reference to age or wear; and its general suitability for making Tile at the lowest cost. SEND FOR CIRCULARS.

CHANDLER & TAYLOR, Indianapolis, Ind.

TRUE'S

POTATO PLANTER.



With it one man, with the aid of one horse, can plant five acres per day, viz., **Open the Furrow, Cut, Drop and Cover** the Potato with Fertilizer.

NASH & BRO., Manufacturers,
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CENTENNIAL

SWIVEL PLOWS!

Triumphant Everywhere!

Accepted by the New England and Maine State Agricultural Societies. Superior to any for Level Land and Hillside.

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☞ Liberal discount to dealers and agents. Send for Circular.

The **THOMAS RAKE** is made for farmers who want a first-class Rake at a comparatively low price. It costs less for repairs, does better work, and is more durable than any any other Rake. It is the standard everywhere. We also make a lower-priced Rake and the best Revolving Rake in the market. Send for Circular. Order from the Factory if your dealer does not keep them. Made by

J. H. THOMAS & SONS, Springfield, Ohio.

PEARCE'S IMPROVED CAHOON

BROADCAST SEED SOWER.

Sows all kinds of Grain and Grass Seed.

No more sowing too much to the left. Small gate for grass seed. Sows 4 to 8 acres per hour. Does better work than can be done by any other means whatever. Only $5. Sold everywhere. Send Stamp for Circular.

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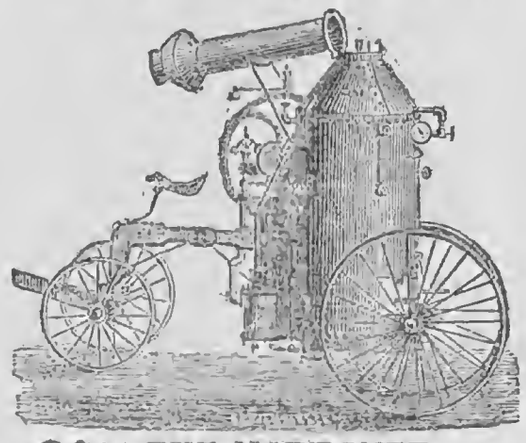

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Send to the Company for Descriptive Circular.

PERRY'S NEW YORK

HAY TEDDER.

This greatly improved and new model machine has been pronounced by FARMERS and AGRICULTURAL IMPLEMENT DEALERS to be by far the best and cheapest Hay-Spreading Machine in the world.

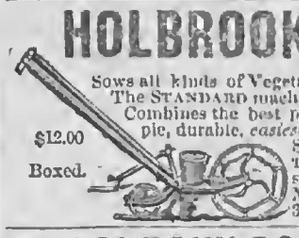
EVERY MACHINE FULLY WARRANTED.

All orders received on or before April 15th, 1878, will be entitled to a special discount.

Address OTTO E. C. GUELICK,
Manufacturer, Utica, N. Y.

Circulars and full description free.

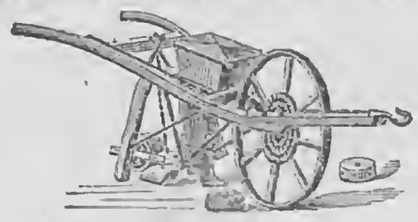
HOLBROOK'S "New Regulator" SEED L



$12.00 Boxed.

Sows all kinds of Vegetable Seeds with regularity. The STANDARD machine. REMODELED for 1878. Combines the best points ever produced. Simple, durable, *easiest handled*, OPEN WHITE SEED CONDUCTOR SHOWS THE SEED DROPPING. Gives satisfaction. Circulars Free. Made by E. E. LUMMUS & Co. 32 S. Market St. Boston, Mass.

THE ALBANY CORN PLANTER



The only low-priced Planter with which the Farmer can sow his Corn perfectly both ways. Will plant Corn, Beans, Turnip and small seeds with precision. It will

SAVE ITS COST THE FIRST SEASON.

This PLANTER, at ONE PROCESS, OPENS its furrow, GAUGES, DROPS, COVERS the Seeds and ROLLS them down. ALSO MEASURES and MARKS OFF the DISTANCE for the next ROW or DRILL to be planted. It is changeable from a *Planter* to a

HORSE HOE

in two minutes' time, and is altogether the most complete Implement for the purposes designed in use. Price greatly reduced for 1878.

Send for Circular, &c., to O. H. P. CORNELL,
Proprietor Albany Ag'l Works, Albany, N. Y.

PAT. CARBON PLOW.

RIGHT AND LEFT HAND.

THE HARDEST KNOWN SUBSTANCE THAT WILL SCOUR IN ANY SOIL.

The Carbon Metal is a practical mixture of refined steel, wrought iron and other metals, cast in form. *Harder than steel* or any surface-chilled iron. Combining great strength, great wear and durability. Subject to fine polish, and guaranteed to scour in any soil. Costs less than steel. Warranted to do good work in any land. See one! Try one! Buy one! If there are none for sale in your locality, send for full particulars to

REMINGTON AG'L CO.,
Manufacturers of Agricultural Implements, Ilion, N. Y.,
or 57 Reade St., New York.

N. B.—Also manufacturers of the celebraced REMINGTON PATENT STEEL SHOVELS, SCOOPS, SPADES, Etc. Also, Right and Left-Hand Steel and Grey Iron Plows.

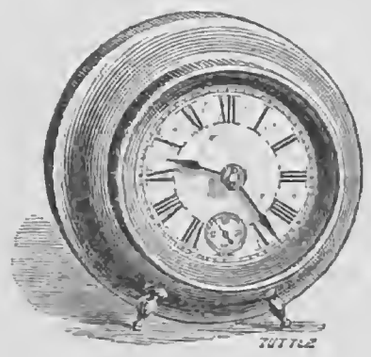
WHAT THEY SAY OF IT.

SECOND ACKNOWLEDGMENTS.

ALL THINK IT "SPLENDID."

DEAR SIR:—I send you money order for $5 and two new names, one of them being my own. This makes my second remittance. The first clock was received in good order, and showing it in our store, I was compelled to sell it to a friend who would not take nay for an answer. So I lost my "Cricket" before I had owned it an hour. I then went at it again, and have secured the additional name (with my own) I send you, although it was mighty hard work to get him to subscribe. Every one to whom I showed the RURAL likes it; but the mud has about put a stop to all business out here, and there is no money in the country. I think the "Cricket" is a beauty, and if it keeps as good time as it is handsome, it is without doubt the "boss" premium. How can you afford to offer it! Wishing you success, I am, your friend,

Milton, Kan. S. H.



"WHAT a little Beauty!" was the exclamation of all the children as they crowded around me while untying the package that contained the RURAL "Cricket." The enthusiastic expression of admiration the first sight of it drew from the juvenile members of the family, was modified a little later by my husband, who on his return home, doubtfully remarked, "Well, I hope it will be as correct as a time-piece as it is handsome as an ornament—but I don't see how they can afford to give, for so small a consideration, a present combining both beauty and utility." This was a week ago, and I resolved to defer acknowledging the receipt of the premium, until its merits as a time-keeper should be tested. In the interval it has been quite as accurate as our family clock or my husband's watch, which, according to him, is infallible. S.

Seneca Co., N. Y., Feb. 27.

WELL, through the dear old RURAL, I've got at last what I've long been—shall I say pining, hankering or anxious for?—a pretty little time-piece of my own, making my room much more cheerful and—shall I say habitable? Some time back my brother Ned got a new watch and at first we had lots of fun at his habit of pulling it out every few minutes to see what time it was, but I can tell now just how he felt, for I've been up stairs for the last two days, scores of times just to see how the "Cricket" was getting along. Several other girls also have been in to see it, and if the RURAL doesn't get many more subscribers from this neighborhood, it won't be for want of school-girls anxious to have a handsome little "Cricket" MINNIE L.

Newark, Ohio, Feb. 26th.

YOUR card received yesterday and the "Cricket" to-day, and we are highly pleased with its appearance. Yet there are many pretty things in this part of the world which are not known to possess any other commendable quality; but we hope this may not prove such. We have placed him upon the shelf, and he has started off on his round of duty with a pleasant face and bold front and a clear and distinct voice, and if he shall prove himself worthy of trust, we shall admire and esteem him highly. D. C.

Onondaga Valley, Feb. 28, 1878.

I SEND you $3.50 for another Cricket. The first which you gave me for two new subscribers, I sold for $3, so you see I now get a Cricket *and* the RURAL for myself for 50 cents. I shall try for more. E. T. B.

Glen Cove, N. Y.

THE "Cricket" is received and I was agreeably surprised, not expecting to find as neat a little arrangement for a time-piece as it is. How you can give as nice a *present* and the RURAL for the money ($3.50), rather puzzles me, as I don't see where the profit comes in. We always used to suppose the RURAL worth all the subscription, but to have a reminder of it every hour, minute and second before us, is not at all unpleasant. Surely we cannot forget when the time comes to renew our subscription. Fifty-two such papers and a clock for $3.50! It is cheaper than any reading I am acquainted with, taking into consideration the quality.

Palnesville, Ohio, Feb. 24. J. W.

I HAVE received the "Cricket" Clock, and we are entirely satisfied with it. A. E.

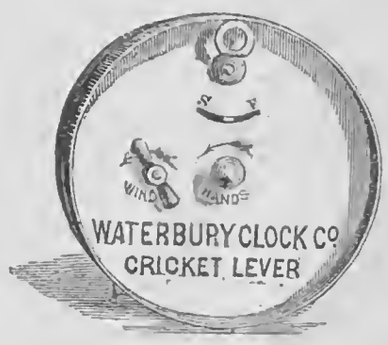
Providence, R. I.

THE Cricket is received and is a perfect little gem of a timer, and has the appearance of being durable. It is worthy of patronage with the RURAL by every family in the land. Wishing you much success. J. G. C.

Bridgeport, Feb. 25.

MR. EDITOR:—I sent you $10.00 and the names of four subscribers. I know that they were new, because they had never seen the paper before I showed it to them. I am more than pleased with my clocks, and think I shall send you some more subscribers. I got two clocks which were one more than I wanted. I sold one for $2.50, so I am more than satisfied with my work. This is my first trial at canvassing, and I was surprised to find it such easy work. You will hear from me again. S. N. F.

Troy, N. Y. Feb. 15, 1878.



I RECEIVED my clock all right and we are greatly pleased with it. Inclosed I send you Money Order for $3.50 for one more subscription and another "Cricket." A friend called in just as we received ours and we persuaded her to subscribe, and to add one dollar for the clock which is certainly worth five. Long life to the RURAL! L. J.

Glen Cove, L. I.

I HAVE carried mine about in a traveling bag from place to place; it keeps excellent time, is as "handy as a pocket in a shirt." They look to be worth more than twice what you ask for them. A. R. C.

New York City.

THE "Cricket" received, and O! what a beauty. How the RURAL Publishing Company can furnish two yearly subscriptions to such an excellent paper, and such a beautiful little clock for the small sum of $5, passes my comprehension. I am afraid you will not be able to supply the demand for the "Cricket" when your liberality is more generally known. The clock itself is worth the money, and the paper is worth twice the subscription price. Success to the RURAL and the "Cricket." Yours,

LONG ISLAND.

DEAR RURAL:—By to-day's express, the premium for new subscriber to RURAL in the form of a *beautiful* little clock arrived; it is in every way a little gem; it pleases the wife, the children, and all the household. It doubly repays for the labor in obtaining the two names. I cheerfully commend it to the friends of the RURAL as a choice and ornamental time-piece, and worth working for. W. H. R.

I RECEIVED the "Cricket" clock yesterday. It was all right. I sold it for $2.75 within an hour after receiving it, and before I got home from town. I am going to have another. Clocks will be plenty now. N. BURNHAM.

Amboy, Ill., Feb. 26, 1878.

P. S.—The Express Agent charged 30 cents. He said that to get reduced rates, expressage must be paid in advance.

[ANS.—Fifteen cents sent to us with order will prepay expressage.—EDS.]

IT is the most complete little thing we have ever seen in the shape of a clock. E. S.

Grand Rapids, Mich.

IT has kept exact time so far, and is a neat ornament for the mantel. I shall try to get one more. E. N. K.

Meadville, Pa.

I WOULD not take ten dollars for mine, if I could not get another. It has not varied a minute since yesterday. You may publish this.

Yours sincerely, C.

Dayton, Ohio.

MY premium came in good order. It arrived in time for a birthday gift to Mrs. L. You will accept my thanks. I can look with great pleasure over the many things which I have received as premiums from the Old RURAL: it would take some time to name them all.

Coxsackl, Green Co., N. Y., Feb. 25. J. H. L.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Jottings at Kirby Homestead 150
Dutch Cattle, Different Kinds of 150
Industry, A New 150
Chickens, Spring 150
National Agricultural Congress 150
Prickly Comfrey 151
Iron Hurdles on Wheels 151
Roads, Bad 151
Watering Plants in Pots 152
Influence of Consumption of Water by Cows on their Yield of Milk 152
Catalogues, &c., Received 152
Foreign Catalogues Received 153
Harrow, An Improved 153
Dexter King, The 153
Grimes' Golden Pippin 153
Extracts from Correspondents' Letters 153
Siftings from the Kitchen Fire 154
Recipes 154
More "Facts" from Mississippi 154
Notes from California 154
Notes from North Carolina 154
What Kansas Needs 154
Rural Special Reports 154
Champion Grape Again 154

EDITORIAL PAGE:

How to Remedy One Evil by the Employment of Another 156
The Remedy for Unjust Weights and Measures 156
Close of the European War 156
Profitable Work at Home 156
Weeds along the Roadside 156
Caution to Poultry Shippers 156
An Easy Way to Secure the Rural and the Cricket 156
Teamsters' Mistakes 156
Brevities 156

LITERARY.

Poetry 157, 159, 161
Literary Miscellany 157
The Marked Hand 157
Cora 158
Recent Literature 158
For Women 159
Talks on Timely Topics 159
That Dress which did not Improve 159
Description of Cuts 159
Talk About My Jewels 159
Answers to Correspondents 160
News of the Week 160
Publisher's Notices 161
Various 161
Markets 161
Reading for the Young 162
Letters from Boys and Girls 162
Puzzler 162
Sabbath Reading 162
Words 162
Personals 163
Wit and Humor 163
Advertisements 155, 161, 163, 164

THE
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THE offer to sell the engravings used in this journal at ten cents per square inch has brought us many requests to send to parties proofs from which to select. Now, we have over 10,000 cuts, so that it is quite impossible to comply with such requests. Besides, the price is so low that we could not afford to do so even were it practicable. Those desiring to purchase these cuts—for which we have no further use—will be obliged to select from files of the RURAL most readily accessible to them.

WE have to thank our friends for their responses to our request respecting "Hide-bound Trees." Having yet a number of excellent communications upon the subject, which, however, for the most part, are repetitions of what has already been said, perhaps it may be well to consider the subject sufficiently discussed for the present.

NEVER since we have known the RURAL have we been constrained to delay the publication of so many valuable articles. We do not say this to discourage our friends from sending future communications, but for the purpose of enlisting their patience for a few weeks.

HOW TO REMEDY ONE EVIL BY THE EMPLOYMENT OF ANOTHER.

TRAMPS and bad roads are both grievous evils in almost every district throughout the country. It is a merciful decree of fate, that when one is most harassing the other is least troublesome; for were the rural population afflicted with the worst phase of both at the same time, flesh and blood could hardly bear the twofold visitation. It is, probably, this alternate culmination of the annoyances that has prevented the idea of using one of the evils to mitigate the other. Tramps profess to be in eager search of a market for their labor, while the roads they infest are in urgent need of it; but though supply and demand, both equally importunate, are thus brought into the closest proximity, the public has hitherto been blind to the obvious method of practicing the first principles of trade, redressing two crying evils, and vastly benefiting society by employing these gad-abouts to repair the highways. In such a measure, poetic as well as prosaic justice would be admirably exemplified, for of all the incumbrances that obstruct our thoroughfares, there are few that render them more disagreeable or dangerous than these alternately cringing and truculent vagabonds. Now that the mild weather of a probably early spring is about to start these nomads from the lock-ups, charitable institutions, rookeries, and squalid purlieus of cities and villages, on their annual holiday peregrinations throughout the country, not a moment should be lost by the rural population before organizing a system by which they should be made to earn their bread; and as they have hitherto won it metaphorically "on the road," it will be meet for them henceforth to do so literally.

CLOSE OF THE EUROPEAN WAR.

THE signatures of Russia and Turkey to the treaty of peace have doubtless put a definite end to all reasonable fears either of a renewal of the terrible European struggle that has lately been suspended, or of any immediate outbreak of hostilities between other transatlantic nations. The humiliating and disadvantagous predicament in which the final settlement leaves Great Britain, will probably prompt that arrogant little island to bluster and fume a trifle longer with great self-satisfaction but little harm to others. Certain it is, however, that the hostile step she shrank from taking when sure of the grateful aid of Turkey and hopeful of Austria's powerful assistance, she will hardly venture upon now that the former has been utterly prostrated through misplaced confidence on her support and the latter has been conciliated by her enemy.

While the Ottoman Empire has been utterly ruined by the results of the conflict, and England virtually excluded from intermeddling in future in continental questions, the glory of the Muscovite has not been of a very dazzling order in view of the comparatively feeble and diminutive proportions of his swarthy antagonist and the powerful blows this pigmy at one time managed to plant on his gigantic body. The material advantages reaped by the Northern Colossus, however, are of vast present and still greater prospective importance. After crushing his hereditary foe he has converted him into a dependent and useful ally. In Servia and Roumania he has established two nominally independent States, which are really vassals to him; in Bulgaria he has set up a new principality in Turkey, that will soon be sure to follow the example of successful revolt set it by its two neighbors: he has gained a foothold on the Danube by the appropriation of Bessarabia; and, finally to crown his European triumphs, he has torn to shreds the treaty of Paris—that memento of his defeat in the Crimea. Still greater both in *prestige* and profit are the Russian acquisitions in Asia. By means of these Muscovite renown will be spread all over the East, from the Mediterranean to the Yellow Sea, while the territory appropriated assures the final subjugation of the Caucasus and opens the gates wide to the Czar's conquering legions into Persia, Central and Southern Asia, and peradventure, ere long, into British India.

THE REMEDY FOR UNJUST WEIGHTS AND MEASURES.

IN many places—especially in the newer portions of our country—there is great talk among the farmers of false weights and measures. We could give a very large number of definite examples of this kind, which have come within our observation.

Hogs fall short from five to twenty-five pounds each. Buyers take from fifteen to ninety pounds of wheat or oats from each load bought in the street. At the close of the season, one buyer in a small town had a surplus of two carloads of wheat left over. This was equally divided between the dealer and the Railroad Company. Two bags of clover seed fell short sixteen pounds; a small crock of butter three and a half pounds; three bags of barley ground at a mill fell short fifty pounds, besides the lawful toll; a load of wool shrunk fifteen pounds in going to town. Meat, tea, coffee, sugar, and all kinds of groceries, often fall short from five to twenty-five per cent. Two firms advertised kerosene at five cents a gallon less than most other dealers. They were found to make up the difference in price by the shortage in measure. At one railway depot, in two years, fifteen thousand bushels of grain were taken out of the farmers.

Most of the above examples were detected by the good sense of several farmers. They mistrusted they were being cheated. They bought large and small scales, and carefully weighed everything before going to mill or to market. The cheating is done by leaded weights; two sets of weights, two sets of trucks, and various other devices which ever suggest themselves to minds wanting to use them.

We have mentioned only a few cases in which we could give the names of the parties. What shall the farmers do about it? They might go to law, but they are a peaceful class of people, and dislike to make a "fuss." The enterprising men referred to are now buying and selling by their own weights and measures. They are saving each year more than the cost of the scales and the trouble of weighing. Grists of grain they now weigh in, and weigh out of the mills. Such farmers are looking out for their rights; many others are catching the same spirit. Heretofore they have done as do now a very large majority of the farmers in the country—they allow the buyer to set his own price, do his own weighing on his own scales, and make his own figures as to the result. Such farmers court abuse from all dealers who are in any ways inclined to be dishonest. Who says that the farmer does not need to keep his ears and eyes open, to learn the tricks of the trade? Successful men are learning to conduct their farms on business principles.

PROFITABLE WORK AT HOME.

WHERE there is a will there is a way. The old adage is nowhere more true than in finding work. The man who relies wholly on employment which others can give him, makes a serious mistake. It may be, as in thousands of instances it unfortunately is the fact, that such a one will for long intervals be thrown out of work. When the capitalist ceases to make a profit, he dismisses hired help and closes out his business. This is what has happened to many thousands of the unemployed to-day. It will always be so while men rely on others for the privilege of labor. Some means by which the mass of men may at least partially employ themselves is the only practical remedy. Whoever has a *home*, be it never so humble, has received the first means to an honorable independence. There is always something to be done to promote the convenience and comfort of the home, and, in the absence of work giving money remuneration, making the home more pleasant and comfortable is the best paying job which any man can undertake. It is a sign of shiftlessness, if not worse, to see men idle while a day's work might be well expended in battening doors and windows against winter's rude blasts, or in providing some simple conveniences long needed by the good housewife to lighten her work.

NOTES.

Weeds along the Roadsides.—The Assembly the other day, at Albany, discussed for some time a bill which was on the calendar, requiring noxious weeds to be cut along the highways. The debate took a wide range, and was participated in by a number of members, some of whom contended that once a year was often enough to have the weeds mowed down; and others thought that the more harmful sorts, like thistles, should be cut twice in a year. There was a dispute also, whether elders and alders are weeds, and whether weeds should be cut anywhere except along-side of improved lands. At last, after the botanical knowledge of the legislators had been severely tested and their wisdom well ventilated, some one said he believed there was a law now on the statute book which provided for the destruction of weeds, and he felt sure it covered the ground better than the bill they had been talking about; so the bill was "progressed," as they say in legislative phrase, and went over to another day. The revised statutes of New York do make it the duty of the overseer of highways to cause all noxious weeds to be cut twice a year—once in July and once in September—and the time so spent shall come out of the highway tax. The law was not well enforced; but since the statutes make it unlawful for stock to run on the highway, the owners of land are quite generally mowing the roadsides, and in this way the weeds are destroyed; any inhabitant can complain and compel the overseer to comply with the demands of the law, or he is liable to be fined: so that every owner of land can now protect himself from the foul seeds which might mature on the roadside and be scattered by the winds on his farm.

Caution to Poultry Shippers.—Dressed poultry often gets caught in a thaw and arrives in New York in bad order. On January 26 there was a large amount of this sort of meat which had no doubt started for market during the cold snap at the beginning or middle of the week, and arrived here in the midst of fog and mist to rapidly sour and spoil. Such meat is usually bought by irresponsible hucksters who peddle it through the streets to poor people. Some of this poultry unfit for food was offered at eight to ten cents per pound on Saturday and at night in some streets, a pair of chickens were offered at six cents for the pair, good poultry being worth from fourteen to sixteen cents per pound. The vendors ought to be arrested. They buy this stuff by the load at a nominal price of the commission merchants who dare not put it on the market. It is hard for the shippers as they must lose its entire worth, and in such open and uncertain weather as we have had this winter, their losses have been too frequent to be at all comfortable.

Teamsters' Mistakes.—Draymen seem to forget, or else they do not know, that the draft of a wagon is doubled when the wheels turn on snow, and very much greater still when the snow is deep and mealy. We could never see the advantage of overloading a team and spending so much time in getting them started when they get set, as they are sure to do, if the load is too heavy. Better take a less load and go quicker without any risk of injuring the horses. In the cities, as well as in the country, there are more or less treacherous holes which it is well to think about when an unreasonable weight is put upon a vehicle. And it is wise to remember that one team stalled on a thoroughfare will often hinder a score besides themselves.

An Easy Way to Secure the Rural and the "Cricket."—We are very pleased to know that every one who has written to us upon the subject has expressed himself more than pleased with our Clock, and that we have not exaggerated its merits in any way. One subscriber sent us two names and received the Cricket Clock. He readily sold it for $3, by adding fifty cents to which he was enabled to secure the RURAL for one year *and* the Cricket Clock. The second installment of "What they say of it" will be found upon page 155.

BREVITIES.

LET's get up a great political party to abolish politicians.

KEEP your poultry-houses *dry*. It is more important now than at any other season.

MR. B. K. BLISS has *done much* in the matter of introducing new varieties of potatoes. But Mr. J. J. H. GREGORY has DUNMORE.

WHAT THE CLOCK SAYS.

"TICK," the "Cricket" says, "tick, tick, tick:
What you have to do, do quick;
Time is gliding fast away;
Let us act, and act to-day.

"When your mother speaks, obey;
Do not loiter, do not stay;
Wait not for another tick,
What you have to do, do quick." [*Parody.*

WE find the following funny advice as to hotbeds in the agricultural department of a contemporary: "After the first intense heat passes off, throw on very fine soil, made of *well-rotted manure free* from *straw* (adding a little sand if the soil is *inclined to be hard* and some *superphosphate of bone* if you have it." The italics are ours.

THE following from Mr. VICK'S Monthly Magazine for February, is a forcible expression of what we have often tried to convey to our readers: In Europe, farming is held in the highest esteem—it secures the attention of men of the higest political and social positions. Even Royalty is not dishonored by contact with soil. For such persons to engage in commerce or "shop-keeping" as it is called, would be a disgrace. Here, farming is degraded below the shop. *Only a farmer* are words we often hear, not used as complementary terms. The farm is not a place for stolid drudgery and unthinking toil, but a field for study, thought and research—a place where not only money but honorable name may be earned. When this is true of American farms and farmers, our young men will follow the occupation of their fathers and flowers will adorn every country home.

BUSINESS NOTICES.

SEE Mr. MINER'S adv't of White Grapes and other fruits—something new and valuable.

Literary Miscellany.

PROVEN.

I.

My love spurred over the mountain side,
And "O for an adamant wall!" he cried,
"Whose summit that uppermost star should hide;
Straight over its terrible hight I'd ride,
For my heart is gladsome and young and strong,
And never a barrier could stay me long
With this love my soul o'erflowing."

II.

My love rode down to the broad sea side,
All down to the kiss of the onward tide,—
A kiss like the kiss of a toying bride;
And, "O for a mystical sea!" he cried,
"Where the waves should clamor like beasts of prey;
For I by this love could their fierceness stay
With never a tremor showing."

III

My love he came to my waiting side,
And his broad arms offered a haven wide,
So I launched my life on its beating tide,
Fearing no evil with him for a guide;
A little star touching the disk of the sun,
And the moon looked down on the hearts made one
With passionate love o'erflowing.

* * * * * * * *

IV

My love was brought to a mountain side,
Where the way was weary and rough and wide;
And "O 't is a perilous road!" he cried;
"Push on! for a woman may safely ride;
And I at the foot till you come again
Will wait in the levelling autumn rain,
Or harvest the springtime's sowing."

V.

My love was brought to a broad sea side
Where the waves grew higher at every tide;
And "Sail as 't were Heaven you sought!" he cried,
"For God shall a woman most safely guide;
And I will pray as never before,—
Will wait and pray on the desolate shore,
Where the cold fierce winds are blowing."

VI

My love was laid at my weary side;
And 't was "O for a surer hope!" he cried;
And my poor weak love on my bosom died.
Alone I had passed up Grief's mountain side,
Alone had ferried Sin's foaming tide;
And over it all God made me brave,
Yet under it all my heart would crave
A love who should share the going.

Boston Transcript.

THE MARKED HAND.

"Is this the last stoppage, guard?"

"The very last, Miss. We shall have a long run of two hours now before we reach Chenworth—no more disturbances of any kind; so just take my advice—make yourself comfortable, and have a good nap. I wish you pleasant dreams;" and the old guard nodded good-naturedly, as he locked me in.

I was glad to be alone at last. It had been very pleasant during the early part of the journey to observe the faces and manners of my fellow-passengers; but now they had all got out, and I felt quite prepared to take the guard's good advice.

It was a comfortable first-class carriage, with the usual two divisions on each side, and lighted up on this dark December afternoon by a dimly-flickering oil-lamp. I took off my hat, stretched my feet across to the opposite side, and, closing my eyes, began to think a little. First of all my thoughts took a retrospective view—back to the little parsonage on the green hillside, to the patient, hard-working father with the incessant cough, which ended at last in a quiet grave under the yew-tree, to the gentle widow-mother who followed him after a few months of hard struggling with poverty and sickness—next to stirring memories of happy school-days, and then to the monotonous life with two old aunts on the wild Yorkshire moors, and finally to Reggie's appearance on the scene, which changed the whole course of my existence.

I was on my way to spend Christmas with Reginald's family. It was my first visit to them, and I felt nervous about it for two reasons—first, because I had been so unaccustomed to visiting, and, secondly, because it is always trying for a girl to go amongst her new relatives for the first time. However, from all Reggie had told me, about mine, and from their kind letters to me, I felt convinced that there was really not much to fear.

At about this time in my reflections the borderland between waking and sleeping melted away and I found myself in a dream. The place was a church, the subject a wedding, the parties concerned were Reginald and myself. I had a hazy idea of light dresses and bright faces, and there was a feeling of great happiness in my heart; but nothing was very distinct till I heard the words, "Those whom God hath joined together let no man put asunder," and then—then I knew that something had come between Reggie and me. It was a hand, a woman's hand, peculiarly white, long and thin, with a bright red mark reaching from the wrist to the knuckle of the middle finger. I remember in my excitement striving in vain to push it away and to reach Reggie on the other side. I remember glancing down at my bridal dress and seeing it changed to one of deep mourning; and then with a sharp cry of pain I awoke.

I awoke—but I did not experience that feeling of relief which generally follows on waking from an unpleasant dream. Something was still weighing on me. I sat up and looked about. I know from the inky blackness outside and from the peculiar sound of the train that it was now passing through a tunnel. The flickering light of the lamp fell on the seat in the opposite corner of the carriage. In that seat sat a figure—the figure of a woman dressed in dark clothes and very much muffled up. She wore a thick black veil over her face, and she sat bolt-upright, as still as if she had been a statue or a ghost. I looked farther, and perceived a small traveling-bag by her side; that relieved me. Ghosts do not usually travel with luggage. She must be a human being after all. But how had she got in? How had she crossed over me without waking me? Why did she sit in that peculiar position? All these questions puzzled me, but I saw no way of solving them just yet. I was afraid to speak, so I could only sit still and wait, my eyes fixed with a sort of fascination on the strange figure opposite to me.

I glanced at my watch; it wanted half an hour to the time when we should reach Chenworth. She must show her ticket there, and I should at least see her move. The time seemed very long till the train began to slacken its speed, and I knew we were drawing up to the ticket-platform. I got mine out that I might have leisure to observe my fellow-traveler. Our carriage was near the end of the train, and I was growing more impatient every minute. In time however the man appeared at our door, holding the small lantern usual on such occasions. I handed my ticket at once; my companion was some time in producing hers, and, when she did so, a corner of her cloak fell back and displayed her left hand. It was ungloved, peculiarly white, long and thin, with a deep red mark reaching from the wrist to the knuckle of the middle finger—in short, the hand of my dream!

I cannot describe what I felt then; a cold chill seemed to run through me, and a feeling of faintness crept over me, so that I was thankful indeed when the train reached the station. My fellow-traveler got out, and I heard the welcome sound of Reggie's voice.

"Why, Nell, how cold you are! You're frozen to death, child; yet you seem pretty well wrapped up. Had you a foot-warmer?"

"Yes—I felt chilly only just now. But stay, Reggie. While you are looking after my luggage I want to speak a word to the guard. There are two trunks and a small tin bonnet-box; you will find them marked in full. I shall be back in a minute." I pushed through the crowd to where I saw the guard standing, and touched him on the shoulder. "Guard."

He turned round sharply.

"Did the train stop between Lodeford and Chenworth?"

"Oh, yes! The engine wanted water, so we were obliged to stop at a little station rather more than half-way between. You must have been very fast asleep not to notice it."

"So I was. Did any one get in?"

"Yes; strangely enough, there was one passenger—a lady."

"Thank you—that is all I wanted to know. Good night."

As I threaded my way back to Reggie and the luggage I rapidly strung events together and came to a conclusion. The lady, in getting in, must have gently moved my feet in order to reach the other side of the carriage. This no doubt partially roused me. I probably half-opened my eyes, caught sight of the hand that was touching me, and so mingled it with my dreams. Much relieved by this reflection, I was able to enjoy the drive home with Reggie; but I did not say anything of my adventure.

Cedeville Manor is a fine old family mansion. It looked stately and cold on that dark winter day, standing amidst the snow-covered walks and bare leafless trees; but I soon found the cold stateliness was all on the outside.

Inside were warmth and light, bright faces and merry voices. My welcome was even more affectionate than I had dared to hope. I was passed from one to another to be kissed and caressed, till Lady Cedeville herself finally carried me off to my room, and left me in peace to dress for dinner. When that operation was performed, I heard a light tap at my door, and on opening it, found the youngest of my new sisters-in-law, Louise. She was as sweet a girl as bright eyes, flowing curls, and a warm heart could make her. When we went down-stairs, I had leisure to observe the rest of the family.

There were Lady Cedeville, tall and dignified, but with a kind, motherly manner; Minetta, her eldest daughter, also tall and dignified, engaged to the fair-haired young Captain leaning over her chair; Marian, the second, gentle and fragile, seldom off the couch; and Louise, already described, not long emerged from the school-room. Of the sons I thought Sir Henry, the eldest, rather stern in manner, but very polite, and particularly attentive to his mother. Frank, the second son, was away at sea; and Reggie, the youngest, with curling brown hair and eyes to match, sensible about most things, but infatuated on one point, need not be more minutely described.

I spent a very pleasant evening, and that night enjoyed the dreamless sleep of good health and a light heart.

The next morning Louise came down to breakfast with a very doleful face and a pair of very red, swollen hands.

"I don't know how it is," she said, holding them up to view, "that my hands get so much redder than any one else's. I have tried glycerine, chilblain ointment, and all the rest of it, but without result—on the first frosty day I am just as bad as ever. Can no one suggest any cure?"

We all sympathised with her, and many suggestions were made, all of which Louise promised to try in turn.

"By the way," said Captain Lewis—Minnie's intended—"what became of that governess of yours, Louise, that I met here last year? She had the whitest hands I have ever seen—almost too much so, in fact. Where is she now?"

I noticed a sudden silence fall over the party at this question. I noticed Louise grow a shade paler; and every one looked fidgety till Lady Cedeville came to the rescue by saying—

"She left us at midsummer; Louise had quite grown out of the school-room by that time."

Then the conversation turned upon other topics—but Louise spoke no more, and seemed to have suddenly lost her appetite.

After breakfast she offered to show me over the house. The last room we came to was long, low, and pleasant-looking, with book-cases all round it and a bright fire in the grate. Louise drew me in and shut the door.

"Come in, Nellie," she said. "This is my old school-room. It is called the library now; but I like the old name, and I love the room better than any in the house."

She placed an arm-chair by the fire for me, and threw herself on to the rug at my feet. From talking of the school-room we went on to school-days. I told her some stories of mine, and asked her how she had liked hers. To my surprise and sorrow, the only answer was a sudden burst of tears; and then the story came out at intervals and through the sobs.

"Did you notice, Nellie, how queer we all looked this morning when Arthur asked that question about my governess?"

"Yes, I noticed, dear; but don't tell me anything that distresses you."

"No, it won't distress me, Nellie. I should like to tell you, as you are to be my sister. Listen, then. Miss King was her name—my governess; but she was not like a governess, Nellie—she was more a dear friend, an elder sister. I cannot tell you how fond I was of her. Very few people in the world came before her in my affections; she understood me so thoroughly, and was so gentle and patient with all my faults. She had had a great deal of trouble in her life, and that made her depressed in spirits, and quite strange in her manner at times. We thought nothing of it at first, but of late years it increased so much that mamma consulted the doctor, and then, Nellie, the truth came out—she was going out of her mind! We did all we could. She was sent away for a long holiday, surrounded by everything bright and pleasant, and came back again apparently quite restored. But about the time of Reggie's engagement she broke out again far worse than ever; and," added Louise, suddenly kneeling and taking hold of my hand, "her madness took a curious form, Nellie. It was love for Reggie."

I felt a queer shiver run through me at this point, but I made Louise go on and tell me all.

"Well, it was the day Reggie wrote to tell us about you. Mamma read the letter out at the breakfast table. We were, of course, in great excitement when, in the midst of our talking and laughing, I saw Miss King suddenly turn as white as death and leave the room. I followed her upstairs. She locked herself into her room, and I could hear her pacing up and down, and saying, in a voice that makes me shudder even now, 'He shall never marry—never, never, never, while I live!' There she remained the whole day, refusing to open the door or to take any food. Towards evening the sounds ceased. We forced open the door, and found her lying in a dead swoon on the ground. From that hour she was raging mad. They took her away soon after, and she is now confined in a lunatic asylum not far from this. No hope is given of her recovery—and oh, Nellie, how I loved her!"

The sobs came thick and fast now, and I let the poor child cry, not liking her the less for the warm, faithful heart which prompted such tears.

After that the days sped by swiftly and pleasantly. I never was so happy in my life. To see Reggie, to be with him all day and every day was enough in itself to account for it; but, besides this, nothing could exceed the kindness of the whole family, especially Louise, who became almost more than a sister to me. Christmas Eve drew on, and a large party of friends and relatives were invited for the occasion. In the course of the evening the conversation turned on ghosts. All were expressing their opinions, some utterly scouting the idea of their existence, others declaring, with a little affected shudder, that they "really half believed in them." I did not join in the conversation, though I noticed Reggie often looking half-expectantly in my direction. At last he quietly left his seat and took one next to me, and, when the conversation was at the loudest, he said, in an undertone:

"Nellie, do you believe in ghosts?

"Why do you ask, Reggie?"

"Because," he said, "there is a legend in the Cedeville family that, if anything extraordinary is to happen to any member of it in the course of the year, a ghost appears on Christmas Eve. The place of its appearance is an old gallery hung with ancestral portraits at the top of the house. Now I do not in the smallest degree believe in the legend, but still I have a fancy, a strange fancy, to pay a visit to my ancestors every Christmas Eve. No one in the house knows of this habit—they would only mock at it if they did; so hitherto I have always gone alone. This evening I want you to come with me. Will you, Nellie?"

"I will go," I answered, looking into his brown eyes.

An hour or two later I found myself following Reggie up curious winding stairs to an out-of-the-way back part of the house where I had never been before. Presently we reached a long, high, narrow room smelling strongly of dust and moldiness.

"Here we are," said my guide, holding the candle high that I might have a good view. "No ghost yet. Allow me to introduce you to my ancestors;" and he began explaining the curious old portraits of all ages and in all varieties of costumes.

Suddenly, as I was gazing at one old lady with tower-like headgear and a waist in close proximity to her arms, I felt my wrist grasped by Reggie. I turned quickly. He held the candle on a level with his face, and I could see that it was ghastly pale, while his eyes were fixed with an expression of wild fear on some object at the other end of the gallery. At the same moment a cold blast from the open door sweeping in blew out the light, and we were left in total darkness—only for an instant though. As our eyes became accustomed to it, we could distinguish a faint bluish light at the far end of the room, and in the very midst of the light stood the tall white figure of a woman. She was motionless as a statue, her left hand was stretched out, and the first finger pointed toward Reggie.

For a moment I thought I must have sunk to the ground as my eyes fell on that hand. I knew it so well—long, thin and very white, with a deep red mark right across it—again, most unmistakably, the hand of my dream! For about three minutes she stood so; and then, as it seemed, noiselessly disappeared. After she had gone, we remained as if rooted to the spot, till the firm conviction that was tugging at my heart broke forth in passionate words:

"Reggie, that is no ghost, no spirit! It is a woman—a living woman! I have seen her before—I know I have!"

In my excitement I would have pressed forward, in spite of the total darkness, to the spot where she had stood, but Reggie held me back.

"It would be useless now, Nellie," he said—and his voice sounded hoarse and broken. "Nothing can be done in this darkness. Wait till daylight, and the place can be examined."

"What—and have us all robbed and murdered in our beds? Let me go, Reggie—let me go!"

But he would not let me go; he held me tightly with his arms around me, and he laughed a little as he whispered—

"If any one is murdered, it will be me, for the finger pointed towards me; but I have no fear. Nellie, you are trembling like an aspen leaf, and you are as cold as an icicle; for my sake, darling, come away—for my sake!"

That plea was not to be resisted. I suffered him to lead me quietly out of the room, down the dark winding stairs, into the light and warmth of the other part of the house. Not till the next morning did we tell of our adventure, and then it was received with a provoking amount of incredulity. However, after breakfast, we succeeded in forming a party for the examination of the premises.

"Shall we go armed?" asked Captain Lewis, producing a formidable-looking revolver.

"By all means!" laughed Reggie, who seemed to have quite got over his first fear, and to be convinced that some one was playing a trick.

But no such thought consoled me, as I followed the rest of the party up to the north gallery. Arrived there, we pointed out the spot where the figure had appeared. Captain Lewis examined it carefully; he pushed away some of the pictures from one side of the room, but nothing could be seen but an old damp-looking wall. Still undaunted, he examined the other side, when presently a loud exclamation startled us all. He had lifted up one of the heavy portraits hanging at the end of the room, and, on touching what seemed a tiny black speck in the wall, a little door flew open, and revealed a small closet behind. This, again, communicated with a long passage, ending in narrow steep stairs, which were found to lead right down to another secret door opening into the back hall. One and all, we crept through the aperture, and down the passage, scarcely wide enough to admit one at a time, and so low that we were obliged to bend almost double.

When we were all assembled in the back hall, we could do little but look at each other in blank amazement, till Sir Henry came to the rescue by explaining that many old houses were built with these secret passages; he had heard that this house was quite a famous hiding-place in Jacobite times, but he had never known of this particular passage before. Still this did not explain the mystery of the preceding evening, nor did it at all relieve my mind. Inquiries were instituted, but without success—no clue could be found to the perpetrator of the "trick," as everybody would persist in calling it. The affair became a nine-days' wonder, and then died out altogether.

Not so with me however—all real enjoyment of my visit was over. I dared not communicate to any one the terrible anxiety gnawing at my heart. Night after night I lay awake reasoning with myself, but the awful presentiment of evil seemed to be hanging over me, and I could not get rid of it. People began to notice my pale looks and nervous manner. Reggie grew quite unhappy about it—and this he told me one day when we were walking out together. It was our favorite walk round by the cliffs. The sea looked grand on that day, with the dark, melancholy grandeur of a winter sea. There was something almost ominous in the sound of the waves upon the beach and the wailing of the wind among the trees.

"Tell me all about it, Nellie," said Reginald. "You are ill—I know you are. You are unhappy—miserable; to see you so makes me wretched. Whom should you tell if not me? Why won't you confide in me?

Then my resolution was taken, and I determined to tell him all.

"Let us sit down, Reggie," I answered. "We are well wrapped up—the wind will not hurt us."

So we sat down on an old rock, with the gray sky above us and the sea sobbing at our feet, and I told him all—of my dream, my strange fellow-traveler, and the unmistakable identity of the hands. He listened patiently till I had finished, and then he put his strong brave arm around me and drew me very close to him.

"Nellie, my treasure," he whispered, "you need not fear dreams, presentiments, or anything else. With Heaven's will nothing shall separate us—nothing, nothing but death."

Even as the word passed his lips a wild shriek rent the air. We started up and looked eagerly round. While we were talking the tide had been so rapidly rolling in that it had almost reached the rock where we were sitting. Many were already nearly covered. On one of these latter stood the solitary figure of a woman, frantically gesticulating and calling loudly for help. She was in imminent danger. In a few moments more she must inevitably be swept away.

Quicker than thought Reggie had taken in all this—quicker than thought he had thrown off his coat, and was even now wading towards her. In the wild selfishness of the moment I would fain have recalled him, but he heeded not my imploring gestures; a human life was in peril, and he might be the means of saving it. On and on, nearer and nearer, he progressed, till, just as he reached her, a huge billow rolling in enveloped them both; then, as it passed on, I watched for some seconds which seemed like hours the rising and falling, the struggle between life and death.

If Reggie had been alone, he could easily have battled against the waves, but the clutch of the drowning woman and his efforts to keep her head above water weighed him down and clogged his progress so that I felt both must be lost. Just at this awful moment two coastguardsmen, attracted by my cries, appeared on the scene, and in another instant four figures were in the water instead of two. Then a mistiness crept over my eyes, and, though I still stood rooted there, I knew nothing of what happened till I felt some one pull my sleeve. It was one of the coastguardsmen, dripping from head to foot, and looking very much exhausted. He did not speak but only pointed to two objects lying on the dry sand a little way off.

"It is Lady Cedeville's son," said the other man, coming up—"Mr. Reginald; who will prepare the poor mother?"

Then sight and speech seemed to return to me suddenly.

"I will!" I cried, not heeding the pitying looks of the men, not heeding anything but the madness that seemed coursing through my veins like fire as I rushed on, on, till I reached the gate of Cedeville Manor.

Lady Cedeville was walking up and down the avenue. I ran up to her and clutched hold of her hand.

Mother," I cried, using the first word that came from my agonised heart, "your—Reggie——"

I saw her turn as white as death, I saw her fix her eyes on me and ask the question which her lips refused to utter, I felt my head reeling, I felt my senses going; but I had no pity for the bereaved mother then, no pity for any one but myself, as I shrieked out—

"He is dead—dead—dead!"

It seemed to me that the trees, the earth, the sky, the whole air took up and re-echoed the cry and with it still whirring and dinning in my ears I fell down on the cold damp grass and was for the time lost to all outward things.

They told me I went from one fainting-fit into another, and it was not till two days later that I came to my proper senses again; then I found myself in my own little room, Louise sitting on a chair by the bedside. She too looked dreadfully ill, poor child. She was leaning back in her chair, and I could see the tears rolling down from her closed eyelids; but as soon as I touched her she started up and brushed them away.

"Louise!"—"Nellie, my sister!"

"Yes, we shall be sisters, Louie—sisters still." She bent over me, with a wealth of pity and love in her dark eyes. "It will not be long, Louie, I think," I said, lifting my head wearily—"not long; you know I cannot live without him. I cannot—I cannot!"

"Don't speak so, Nellie. Heaven is very merciful."

"Heaven is very merciful, therefore I shall be taken away. I shall not be left all alone in this cold world. I could not bear it, little sister. Having tasted the sweetness of love, I could not live without it now."

"You shall not, Nellie. Heaven has many ways of showing mercy." And, so saying, Louise gently drew back the curtain and stepped aside.

Had the dead come back to life? Almost, I think; for my own Reggie stood before me. That afternoon I rose and dressed. The excitement of great sorrow, succeeded by the excitement of great joy, left me weak and faint. One thing puzzled me. Louise still looked downcast and unhappy without apparent cause. She came into the room just as I was dressed, and a sudden thought struck me.

"Louie," I said, "tell me what became of the woman Reggie tried to save. Is she alive, too?" I saw she tried to evade an answer; but I would not be put off. "Tell me, Louie. I would rather hear the worst at once."

"She is here, Nellie."

"In this house?"

"Yes—all that remains of her."

"Will you let me see her?"

"Better not, Nellie."

"Nay, little sister, but I wish it."

Without another word she led the way into an adjoining room, where lay the dead body. I looked down on the calm white face, with the black hair brushed softly back, and then I looked farther—to the hands crossed on the still breast—and my heart seemd for an instant to cease beating. The left hand lay uppermost. Scarcely whiter in death than in life, with the deep red mark reaching from the wrist to the middle finger, once more, and for the last time, I saw the hand of my dream. When I looked up, Louise was standing opposite me, gazing wistfully at the dead form.

"Ah, Nellie," she said, as our eyes met, "I may well be sad! It is my late governess and dear friend, Miss Klog."

So the mystery was solved. My fellow-traveler, the apparition in the north gallery, and the woman lying dead before us now were one and the same. She had escaped from the lunatic asylum, had traveled down to Chenworth, and, knowing all the ins and outs of Cedeville Manor, had appeared in the north gallery on Christmas Eve, apparently to warn Reggie. What she intended in her madness to do, or whether she had any settled plan to frustrate his marriage, will on this earth never be known, but her words came true—Reggie did not marry in her lifetime. They buried her in the little village churchyard, and erected a plain white stone to her memory. Reggie and I often walk there in the still summer evenings. We talk of the poor young creature whose life was so sadly blotted out, and of Heaven's great mercy to us.

CORA.

When Harold Sinclair was alone he threw himself into a chair, and gave himself up to deep thought. Recalling in his mind many an incident during Lord Almane's stay at the Tryst, it seemed to him now almost impossible that he should not have suspected some attraction which detained this brilliant young nobleman in their quiet home long after he was sufficiently recovered to leave it.

"Dolt that I was to risk her happiness so carelessly!" he exclaimed. "Has he touched her heart I wonder; it is almost impossible that it can be otherwise. My poor Cora!"

Harold remained some time in this state of painful meditation, and then moved by a sudden resolve, caught up his hat and started for town, making his way to the studio of a young artist—a man of good family and considerable talent, with whom Harold was intimate.

He found George Leeson at home and busily engaged on a large painting of "Rebecca," which he destined for the Academy, and which as yet had not made much way towards completion.

"Welcome, thrice welcome, old fellow!" he exclaimed. "I was just wishing some one would look in and prevent me from working myself to death. Look at my 'Rebecca.' Lady St. Maur sat for her. Is she not beautiful? I had to put some warmth into the face, however, for her ladyship is an icicle, notwithstanding those great black eyes of hers, which look so full of softened fire. What do you think of her?"

"It is a glorious face," Harold answered, surveying the painting with a professional interest; "and rarely beautiful. I have not seen you for an age, Leeson."

"No, I was just wondering what had become of you. Well, have you made up your mind for Rome, Sinclair? I am quite willing to risk malaria, and go in the summer for such an opportunity as Martinucci offers us."

"I have not thought about it lately," Harold said, throwing himself into a chair and watching his friend's skillful fingers as he wielded his brush. "I have been over head and ears——"

"In love?" interrupted his friend, with a laugh.

"Nonsense" said Harold, testily. "In arrears of work; and you know, Leeson, I am not so free to come and go as you are. There is Cora."

"Rome would not do for her in summer," said Leeson, gravely. "That sweet bloom of hers would soon fade there. But it is a thousand pities that one should lose such a chance of studying anatomy."

"True," mused Harold, who was more intent on Lord Almane in the flesh than any anatomical studies just then. "We have had an unexpected visitor at the Tryst," he went on, after a pause. "Lord Almane was thrown from his horse, and seriously hurt at our door, and has been with us for three weeks."

"Who?" said Mr. Leeson, pausing in his painting, and looking up.

If George Leeson had a weakness it was for a title, and he was not a little proud of his relationship to one or two peers, while his knowledge of "Bourke" was profound.

"Lord Almane," answered Harold, with an affected indifference.

"Stanley St. Roger, tenth Viscount Almane," said the other, nodding his his head. "I know."

"Do you know him?" queried Harold.

"I have met him once or twice. Is not his a splendid face? Purest Norman type I ever saw."

"Do you know much of him?" said Harold, hiding his anxiety under an assumed indifference.

"Only that he is one of the handsomest men of the day, and a king of fashion," answered Mr. Leeson, with a touch of contempt. "He is a clever intellectual man, however, and tolerably well liked, I believe. Of course, he is a great favorite with the fair sex. I have heard also that he has sown a tolerable crop of wild oats, and rather materially affected his fortune, which was very large when he inherited it at one-and-twenty, having accumulated during a long minority. However, that will be easily repaired."

"How?" asked Harold.

"By a rich wife, my friend. Stanley St. Roger seems born with a silver spoon in his mouth, for he has wooed and won one of the richest heiresses now in London market. A pretty creature, too, though a little insipid. He is engaged to be married to his cousin, Lady Lucy Belmont, and the engagement was announced in the Court Journal about three months ago."

CHAPTER V.

A LITTLE MUSIC—UNDER THE ELM.

Harold left George Leeson's studio anxious and ill at ease, totally at a loss as to the best course to pursue. Marianna's words had been so significant and earnest that he felt almost certain that Lord Almane had spoken love to his sister; at the same time was it possible that he, a man bound by every tie of honor to another woman, a woman, too, his equal in rank and fortune, should have stooped to try and win an affection which he could not return?

Harold, with his simple, old-world notions of a man's honor and truth, his veneration for the sex to which his mother and sister belonged, could hardly believe that it could be so; he had liked and trusted Lord Almane much too easily to credit anything to his disadvantage.

"Marianna must be mistaken," he mused, as he went back to The Tryst. "The child would have told me if it were so; she would not keep such a serious thing from me. He could not—he could not have betrayed my trust so basely. If she loves him—I pray Heaven that she does not—it will be my fault not his. Cora, oh, Cora! I who so longed for your happiness."

Sorely perplexed and distressed was the young artist. Had both his friend and his sister deceived him, and was Cora to be the sufferer for his carelessness and blind confidence? Until his sister confided in him he was powerless to act; he could neither upbraid his lordship nor inquire what his intentions were—that momentous question which is not always so easily answered as asked. Neither could he let Lord Almane suppose that he did not trust Cora fully and completely. It was a very heavy heart that Harold Sinclair took back to the Tryst.

He found his sister and Lord Almane sitting in the dreamy twilight in the pleasant old-fashioned drawing-room. Cora, sitting at the piano, in an evening-dress of some fleecy black material, with a scarlet geranium in the shining folds of her dark hair, made a pretty and attractive picture.

The Viscount was reclining in a deep arm-chair. Neither appeared to be speaking much, but there hung over the room an atmosphere of happy silence which did not quite please the anxious brother.

Cora rose to meet him, and the innocent glance of the sweet gray eyes went like a stab to Harold's heart. Lord Almane gave him a few pleasant words of greeting.

"What a truant you are, Sinclair! Have you been painting all the afternoon, or have you been up to town?"

"I have been to London," Harold answered trying to speak unconstrainedly. "I went up to see a brother artist, whom perhaps you know, Lord Almane—George Leeson."

"I fancy I do know the name," Lord Almane replied, indifferently.

"He is painting his long-talked of 'Rebecca,' Cora," continued the artist. "Lady St. Maur sat for him; she must be a beautiful woman."

"She is exceedingly handsome," remarked the Viscount. "One of the reigning belles, and has been ever since she was presented, five years ago."

"Do you know her?" said Cora, turning to him.

"I know her very well," he answered, with a slight smile, which the darkness hid. "We meet very often, and I admire her immensely."

After this there was a short silence. Cora, sitting on a low seat by her brother, played uneasily with a scarlet blossom in her breast.

"Why don't you ring for lights, Cora?" Harold said, as he walked towards the bell and rang it.

"Blind man's holiday was so pleasant," she replied, a little confusedly.

In a few moments Marianna appeared with lights, and then the chit-chat recommenced until dinner was announced.—[To be continued.

RECENT LITERATURE.

The Poetical works of Percy Bysshe Shelley [with copious notes.] Edited by Mrs. SHELLEY: With a Memoir. Four volumes in two. 12mo., pp. 1552. $3.00. New York: Hurd & Houghton.

The publication of a new edition of SHELLEY'S poems has revived an interest in one whose brief life shines brighter with passing years, and whose memory continually grows dearer to those who are willing to judge a tree by its fruits, and a man by his deeds.

SHELLEY was born in Sussex County, England, in 1792, was the eldest son of Sir TIMOTHY SHELLEY of Castle Goring. His education was commenced while he was quite young and at 13 he was sent to Eton where he remained three years. His hatred of oppression and willingness to suffer for the right, showed itself at this early age in his refusal to fag, for which he received harsh treatment from his school-fellows, but by his determined spirit of resistance and uniform kindness he at length won their respect.

During his stay in Eton he seems to have had ambition to enter the literary field, and indeed in his 15th year wrote two romances. That they were written, and that they were crude and romantic, as might have been expected from his years and nervous temperament, is all that is remembered of them.

But he did not neglect his studies, and was well prepared, in 1810, to enter University College, Oxford. Here he devoted himself to the study of physics, and spent much time in the Chemical Labratory. Several accidents, consequent either on his carelessness or want of knowledge, aided doubtless in his abandoning this branch of education and taking up Metaphysics instead.

About this time he read the works of HUME and others of the same character. His nature was such that to believe a principle was to become its defender and champion. With the impulsiveness of youth he became so earnest in his advocacy of the atheistic doctrines, taught in the books he now devoured, as to be offensively aggressive. So clear to his immature mind, seemed the fallacy of the generally received ideas, that he set about converting the world at once—and published an argument full of false logic and indiscreet assertions calling it The Necessity of Atheism. This resulted in his immediate dismissal from the College and the refusal of his father to receive him at his home.

Such treatment was not the best for one of SHELLEY'S temperament. If at this time a spirit of kindly affection and Christian charity had been shown him, the result would doubtless have been much different. Angered by what he felt to be unjust censure and oppression by the college authorities, his father, and his friends, he went to London almost penniless, but strong in the belief that he was a martyr in a righteous cause, and determined to go on in the way he had commenced.

In London he read Godwin's "Political Justice," a work almost as radical in its way as were those of a theological nature with which he had become acquainted at Oxford. His sisters (who were at school near London) divided with him their pocket-money, which they sent by one of their schoolmates, HARRIET WESTBROOKE, the daughter of a retired coffee-house keeper. His acquaintance with her soon ripened into intimacy, and resulted in wedlock.

Influenced in some way not recorded, SHELLEY'S father had relented sufficiently to allow him a small income; but after learning that he had made a Gretna Green marriage with Miss WESTBROOKE (supplemented, however, by a public marriage at Sussex) this was discontinued. It is said that thereupon the bride's father, proud of an alliance with a noble family, furnished the youthful pair—he was 19, she 16—with the same amount his father had formerly given him.

Notwithstanding the cloud under which SHELLEY lived, he formed the acquaintance of such men as SOUTHEY, LEIGH HUNT, DE QUINCEY—men who could perceive genius and goodness and right-mindedness in one who had some opinions with which they could not agree, and whose society could not fail to be of service to him in various ways.

He seems to have lived but a short time in any place, until in 1812 we find him again in London. Here his first child, IANTHE ELIZA, was born. An estrangement—for some cause not known—had been slowly growing, which culminated in 1813; and his wife left him and returned to her father. Soon after a second child was born, who died in 1826.

SHELLEY'S admiration for the work on "Political Justice," and others of the same character, induced him to seek the acquaintance of their author, WILLIAM GODWIN—whose wife was MARY WOLLSTONECRAFT, known as one of the earliest advocates of Woman's Rights. She held much the same views of marriage as SHELLEY expressed in his "Notes to Queen Mab." That her daughter, Miss GODWIN, was also a believer in the doctrine of elective affinity, may be presumed from the fact that she eloped with SHELLEY in 1814. They visited Switzerland and other parts of the Continent, returned to England in 1815, were again in Switzerland in 1816, and returned to England in the same year, bringing with them their child. He then learned that his first wife had committed suicide by drowning. No cause for the act has been made known. The effect on SHELLEY was such as for a time to deprive him of reason.

Later in the year 1816, he and MARY WOLLSTONECRAFT GODWIN were legally married, and about the same time his father, having succeeded to the ancestral estate, made him an allowance of £1,000 a year.

After the death of his first wife, SHELLEY desired to regain possession of his children, who had lived with their mother, but was denied by the Court of Chancery, on the ground that he was an atheist and as such was not a proper person to have control of children. During his residences in England, from 1815 to 1818, he wrote several of his poems among which were Alastor and the Revolt of Islam.

In 1818, seeing how fruitless were his endeavors toward regenerating society, and fearing the courts might take from him his son by his second wife, he left England to make his future home abroad. The remainder of his life was mostly spent in Italy studying and writing.

While he was yet at Oxford at the age of 18 he wrote Queen Mab—a production which was full of his sentiments and ideas at that time. He did not publish it, and only circulated a few copies privately. In 1821 some persons without his knowledge or consent and much to his displeasure printed an edition. He endeavored to have it suppressed by the courts but without avail, being told that the only notice a court could properly take of an atheistical work was to punish the author.

SHELLEY was drowned in 1822 by the capsizing of a pleasure boat in which himself and a friend were making a trip from Leghorn to Lerici. His body was washed on the shore of Tuscany. In accordance with the sanitary regulations of that State which direct that everything washed on the shore from the sea should be burned, to prevent infection, his body was cremated in the presence of LEIGH HUNT, Lord BYRON and Mr. TRELAWNEY. The ashes were carefully gathered and deposited in the Protestant cemetery at Rome. Thus at the early age of thirty he passed from earth.

Few lives have been so little understood and appreciated, and few memories so unjustly defamed as that of SHELLEY. The errors of his boyhood have been counted as crimes. Be it remembered he was only eighteen when he wrote Queen Mab. Shall the impetuous imaginations of youth always stand against him? Shall the ideas of marriage recorded by a boy of eighteen, be used to blast his character during his whole life?

SHELLEY'S soul reverenced what he chose to call the "Spirit of Nature"—in distinction to the God of anger, a merciless God, as taught him in the churches; but this spirit was his God eternal, invincible, and immortal. He could not conceive that matter more than spirit had any beginning. But is it not time that we remember a man can not believe just what he pleases; that there are honest convictions in the minds of one, diametrically opposed by the convictions of another just as honest. We do not approve atheistic or Free Love doctrines as expressed in Queen Mab and the notes thereto. Neither, so we believe, did SHELLEY in his later days. That he did once is evident from the fact that, rather than retract them he gave up home, society, wealth, and probably a title and a seat in Parliament. "By their fruits ye shall know them." What was SHELLEY'S life? Those who best knew him bear witness to his gentleness, kindness and christian charity. One has written of him: "It was the cardinal article of his faith that if men were but taught and induced to treat their fellows with love, charity, and equal rights, this earth would realize Paradise." He looked upon religion as it is professed, and above all practiced, as hostile instead of friendly to the cultivation of those virtues that would make men brothers.

To promote "peace on earth and among men good will," was one of the chief aims of his life; with oppression of every kind, domestic political, or religious he waged war to the utmost extent of his powers. He believed "the place and time in which to commence the regeneration of mankind were here and now, rather than await the future life of which we have no absolute knowledge."

There have been several lives of SHELLEY written, all well worth reading, but we doubt if from any of them one can get so full and clear insight as to the real life and spirit of the man as from these volumes of his poems recently published, to which we commend the attention of the public. Here, in notes, are his own explanations of his views, and the editorial notes by Mrs. SHELLEY, full and abundant, leave little to wish for, unless it be that his prose writings could be given to us in the same beautiful style. L. A. R.

LITTELL'S LIVING AGE. The numbers of The Living Age for the weeks ending February 23d and March 2d have the following noteworthy contents: A French Critic on Goethe, by Matthew Arnold, Quarterly Review; Natural Religion, part IX., Macmillan; An Oxford Lecture, by John Ruskin, Nineteenth Century; March of an English Generation through Life, Quarterly; French Home Life, Blackwood; Macleod of Dare, by William Black, and Within the Precincts, by Mrs. Oliphant, both from advance sheets; The Great Fourfold Waterfall, Frazer; Doctor Lavardin, a sketch, Macmillan; Shakespeare in France, Nineteenth Century; Erica, translated from the German of Frau von Ingersleben; Pleasant People, Saturday Review; Antoine Cesar Becquerel, Nature; The Cruelty of Pecuniary Crime, Spectator; Walking in Winter, Pall Mall Gazette; The Emotions due to Christmas Bills, Spectator; and the usual select poetry and miscellany. The back numbers containing the first instalments of "Erica," and a story by Miss Thackeray, are still sent gratis to new subscribers for 1878.

For fifty-two numbers, of sixty-four large pages each (or more than 3000 pages a year), the subscription price ($8) is low; or for $10.50 any one of the American $4 monthlies or weeklies is sent with The Living Age for a year, both postpaid. Littell & Gay, Boston, are the publishers.

DON'T rob your neighbor of his good opinion of himself. Crush a woman's self-esteem, and you make her cross-grained and snappish. Do the same with a man, and you only make him morose. You may mean to create a sweet, humble creature, but you'll never do it. The people who think best of themselves are apt to be the best. Women grow pretty in believing they are so, and fine qualities often creep out after one has been told one has them. It only gratifies your own momentary spite to force your own unfavorable opinion of him deep into another's mind. It never, never did any good. Ah, if this world, full of ugly people and awkward people, of silly people, and vain people, knew their own deficiencies, what a sitting in sackcloth and ashes we should have! The greatest of all things that a man can possess is a satisfactory identity. If that which he calls I, pleases him, it is well with him; otherwise he is utterly wretched. Let your fellow-beings alone; hold no truthful mirror before their eyes unless with a pure intention to uproot sin. So may a mirror without a flaw never be prepared for you.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

AN UNCROWNED MARTYR.

No outward sign her angelhood revealed,
Save that her eyes were wondrous mild and fair—
The aureole round her forehead was concealed
By the pale glory of her shining hair.

She bore the yoke and wore the name of wife,
To one who made her tenderness and grace
A mere convenience of his narrow life,
And put a seraph in a servant's place.

She cheered his meagre hearth—she blessed and warmed
His poverty, and met his harsh demands
With meek, unvarying patience, and performed
Its menial tasks with stained and battered hands.

She nursed his children through their helpless years—
Gave them her strength, her youth, her beauty's prime,
Bore for them sore privation, toil and tears,
Which made her old and tried before her time.

And when fierce fever smote him with its blight,
Her calm, consoling presence charmed his pain:
Through long and thankless watches day and night
Her fluttering fingers cooled his face like rain.

With soft magnetic touch, and murmurs sweet,
She brought him sleep, and stilled his fretful moan,
And taught his flying pulses to repeat
The mild and moderate measures of her own.

She had an artist's quick, perceptive eyes
For all the beautiful; a poet's heart
For every changing phase of earth and skies,
And all things fair in Nature and in art.

She looked with all a woman's keen delight
On jewels rich and dainty drapery,
Rare fabrics and soft hues—the happy right
Of those more favored but less fair than she.

On pallid pearls, with glimmer cool and white,
Dimming proud foreheads with their purity;
On silks which gleam and ripple in the light,
And shift and shimmer in the Summer sea.

On gems like drops by sudden sunlight kissed,
When fell the last large brilliants of the rain;
On laces delicate as frozen mist
Embroidering a winter window pane.

Yet, near the throng of wordly butterflies
She dwelt, a chrysalis, in homely brown;
With costliest splendor flaunting in her eyes,
She went her dull way in a gingham gown.

Hedged in by alien hearts, unloved, alone,
With slender shoulders bowed beneath their load,
She trod the path that Fate had made her own,
Nor met one kindred spirit on the road.

Slowly the years rolled onward; and at last
When the bruised reed was broken, and her soul
Knew its sad term of earthly bondage past,
And felt its nearness to the heavenly goal.

Then a strange gladness filled the tender eyes,
Which gazed afar beyond all grief and sin
And seemed to see the gates of Paradise
Unclosed for her feet to enter in.

Vainly the master she had served so long
Clasped her worn hands, and with remorseful tears
Cried, "Stay, oh, stay! Forgive my bitter wrong;
Let me atone for all those dreary years!"

Alas for heedless hearts and blinded sense!
With what faint welcome and what meagre fare,
What mean subjections and small recompense,
We entertain our angels unaware!

Golden Rule.

TALKS ON TIMELY TOPICS.—No. 6.

ROSE GERANIUM.

Perforated Card Fretwork.

FOR all pretty toilet accessories, boxes, receivers, baskets, and their kindred, we regard fretwork as extremely beautiful. Though of trifling expense and speedily executed, it has not the tawdry effect of some of the cheaper classes of fancy work.

The gilt card-board is quite handsome in its place—never more so than when fretted out in good designs and placed as a mat over a group of photographs in some neat, dark, home-wrought frame; or it is pretty as a border for boxes of white Bristol. But our own personal fancy is in favor of pure, ivory-white, either placed over silver or rose color. For the benefit of the uninitiated, we will try to describe the method of preparing it.

Lay a strip of card upon a smooth, poplar board. With your instrument, which should be narrow and sharp—a steel awl, ground at the point to a keen, flat blade, is excellent—proceed to cut down the depth of one perforation, quite along the edge. This will give you an army of tiny heads, crowded close together. Turn your blade and, cutting crosswise, remove each alternate one. This is pretty in itself! But we will carve farther, although we haven't the slightest prospect of carving our way "to fortune," or to anything more startling than a new fancy production!

You see the host of heads lying upon your board! Now, commencing in the next row, remove a duplicate for each—a mate in chart. Draw a bit of bright pink under your work, and it will look through even, square rows, in a way that will delight you.

Chip again—this time removing a little, somewhat triangular-shaped snow-flake, which will count three "heads" lengthwise and two downwards. To be very succinct, this "snow-flake," when it lies in your palm, must contain a cluster of four heads, grouped together as though you would build a pyramid with three stories at the base and one at the crown. We trust we have made our meaning plain.

After this pattern is wrought, if your ambition is gratified and you have worked quite around the edges of a suitable sheet, you can line it with color and arrange for a cornucopia; if the card be an oblong square, a design may be embroidered in the center and the whole applied to a box; or a space matching some bright chromo may be cut from the middle, a border fretted out like the first, and you have a cool-looking front for a small paper-receiver.

But if you desire a delicate, lace-like border, suitable for an infinity of petty purposes, we will go back to where we left off one pattern. We will go a step deeper and, turning this way and that, work around as closely as possible, scallop-fashion. Immediately below the deepest portion of each triangle, we must spare a single, isolated head. When the work is all complete and our border separated from the sheet, you will be literally amazed that you never thought of doing it before.

Very well, you didn't! Now, cut another strip and by fitting them together, various ways, you will unearth the mystery of making corners and also teach yourself a beautiful design for the body of a cross to be laid on pink for a book-marker; or, if wrought sufficiently large, placed over rich black velvet and framed. [*Note.*—If your finances admonish, you will find good black card-board a very respectable substitute.]

Small squares or circles, of narrow pattern, lined with silver paper and laid over white card (Bristol), will be found effective. And upon the same foundation, unlined, and laid fold over fold, a result can be produced which suggests the finest carving upon marble. Care must be used, however, that the tints and quality of the papers exactly match.

We have in our fancy, many exquisite patterns of leaf, letter and Mosaic, which defy the most deft flatteries of our pen; however, having once commenced, your own imagination will guide you to innumerable happy results.

THAT DRESS WHICH DID NOT IMPROVE.

MY DEAR MISS RIPLEY:—I wrote you last fall about my American silk dress which, after vast opportunities, had failed to improve. I was sorry to give an unfavorable account of any domestic manufacture; but truth demanded the statement I made; for, up to that time, that dress had not improved; and all this winter it has been in disgrace, relegated to a second-best-hand, which must have been mortifying after its seven years of first place, and no wonder it looked gruff and grim. Well, last week I concluded to see if anything could be done for it; and once more ripped up the skirt, then tried a new plan.

I put a tablespoonful of extract of logwood into two quarts of boiling water, dissolved it carefully, added the size of a Lima bean of copperas, dipped the silk in, wetted it carefully, folded and slightly wrung it out breadth by breadth, then dipped these, still dripping, into sweet milk, folded, wrung them lightly; half dried them before the fire, turning, folding and clapping them so that they should be evenly moist, then ironed them.

This process was troublesome, for the silk stuck to the iron unless it was quite hot, and this would scorch the silk; but I took irons as hot as seemed safe, ran them quickly over the silk, at first, then more slowly as they cooled; had some one hold one end of the breadth while I held the other to keep it stretched, I got them all smooth and nice; and, now, justice requires me to say that my silk does improve with judicious wear and care, and looks better to day than it did when first made up, and is thicker owing to the fact that it has shrunk from a dimi-train to a walking dress which clears the ground. It was too much trouble to rip up the basque, so I mixed the black dye and milk and sponged it, and it has a softer lustre than the skirt. It was not ironed, and the milk when cooked by the heat does not aid the lustre so much as when dried without cooking. So American grosgrain does improve with use, if it is used right, and the Cheney Brothers are not mere boasters.

True, thin silks do seem to resent being washed on a wash-board, in potash ley, hot and strong with plenty of soft soap; but one can scarce wonder at this, and it would certainly be well to omit that part of my treatment in any experiment made on these goods. I rather think it would have been better if I had removed the oil and paint with benzine or some other contrivance of that kind and kept the tar off it altogether without greasing it to get it out.

My present anxiety about "that dress of mine" is as to its future. Now that it has actually begun to improve, no knowing where the process will end. I would like to keep it in the family but have no grand-children and think of bequeathing it to the matron of some orphan asylum to be handed down with the office.

I have written these articles as though it were all a jest, because the endurance of that dress has long ago become comical, and a subject of surprise and merriment to my friends; but my statements are below, rather than beyond the simple facts of the case. In seven years and four months of such an amount of wear as few dresses get, the woof has worn through on the edge of two sharp folds which were exposed to unusual friction, but even in these spots the warp holds its own and my dress of '71 is a good and handsome dress to-day. People of moderate means, make a great mistake in buying showy, foreign goods when, for a less price, they can get an incomparable article of home manufacture.

JANE GREY SWISSHELM.

MARK TWAIN IN A NEW ROLE.—The Girl of the Period will no longer be compelled to bow at the shrine of Worth, of costume designing fame. America has produced a genius who promises to eclipse the great man of Paris in his ability to evolve miraculous toilets. In the March number of the Atlantic, Mark Twain, (the aforesaid genius) gives surpassing evidence of his talent in this direction, and for the benefit of our readers we reproduce the following description of a costume in which he arrays his heroine. "Her dress and adornment were marked by that exquisite harmony that can come only of a fine natural taste perfected by culture. Her gown was of a simple magenta tulle, cut bias, traversed by three rows of light blue flounces, with the edge turned up with ashes-of-roses chinelle; over-dress of dark bay tarleton, with scarlet satin lambrequins; corn-colored polonaise, *en panier*, looped with mother-of-pearl buttons and silver cord, and hauled aft and made fast by buff-velvet lashings; basque of lavender reps, picked out with valenciennes; low neck, short sleeves; maroon-velvet necktie edged with delicate pink silk; inside handkerchief of some simple three-ply ingrain fabric or a soft saffron tint; coral bracelets and locket-chain; coiffure of forget-me-nots and lilies-of-the-valley massed around a noble calla."

DESCRIPTION OF CUTS.

3392 is model of a sweeping cap. It is quite an addition to ones "sweeping toilet" and while protecting the hair from dust quite as effectually

4752

3392

as the odd bits of clothes women affect so much, it has the additional advantage of being infinitely more becoming.

No. 1.

At 4752 is shown model of gentleman's slipper, and No's. 1 and 2 are designs in embroidering for the same. If any ladies like this design I can

No. 2.

have it stamped for them on a piece of paper for 10 cents, or have the slippers stamped, for 25 cents. Price of cap pattern, 10 cents; slipper pattern, 10 cents.

TALK ABOUT MY JEWELS.

No. II.

MARGUERITE.

I AM beginning to learn that my children are to me mirrors—reflectors of myself in many ways. I do not refer to my outward appearance, but in heart and actions. I see GERTIE doing and hear her saying many things for which I correct her and wonder who taught her, but afterward find out that she was only patterning after her own mother.

People are constantly saying to us about our children, as they do to every one—often when they are only adopted ones—"They are just like their father!" Perhaps in half an hour the remark will be made by another that the children are the image of the mother.

I had been told that baby FRED looked like me until I fully believed it. Among the callers to see him was one lady who exclaimed, "Oh, he looks exactly like his father!" "Do you really think so?" I asked. "Yes, indeed. Any one can see that," she answered. "*He is white.*" I laughed to myself as she ran briskly down stairs, apparently unconscious of the compliment (?) she paid me. Since then I have not tried so much to trace the family resemblance, as to attend to the cultivation of the heart.

To the parents children are a bundle of joy and cares. Joy when the little arms twine about your neck, and the kisses are lavishly given you in return for yours, while the little prattler says, "I love you, dear Mamma." Cares when the sudden thump, thump, thump, tells you that FRED is falling down stairs; or when he climbs into the rocking-chair and leans over the back until it tips, and he falls screaming, to the floor; or when papa lies helpless in his room, and you leave him an instant to follow the truants to the pantry to find them pounding vigorously with a dasher in a six gallon crock of packed eggs.

One is ready to believe under such circumstances, that they are really "little troublesome comforts" until one thinks that there is danger of losing them, and then for the word "troublesome" we substitute *precious*, and then it does not express more than a shadow of the love that binds them to the heart. GERTIE came to me yesterday, saying: "Mamma, my throat is awful sore." What mother is not fearful of sore throat? My heart gave a quick beat, and I asked, "Where is your throat, GERTIE?" Placing her little hands across her stomach she said, "Here it is, Mamma."

The Querist.

ANSWERS TO CORRESPONDENTS.

Short-Horns or Durhams.

J. J. A. P., Cassopolis, Mich., asks:—"Is the Durham breed a family of the Short-Horns?" ANS.—No. It is simply an old name applied to the Short-Horns and associated with them—that is with the "Improved" or pedigreed Short-Horns. The ancient breeds out of which the breed came which we know as the Short-Horn, are natives to the North and East of England, particularly to the Shires of Durham and York. They are the Holderness, Teeswater, Yorkshire, and Durham, and it is from this connection that the breed has been known in this country as the Durham or Durham Short-Horn.

About Water Pipes.

W. H. W., Chenango Co., N. Y.—I have a spring about 120 rods distant from my dwelling house and barn, from which water has formerly been conducted in or through pine logs, which are getting very much out of repair and must needs be soon re-laid with modern pipes or those of some other material. About two-thirds of the distance from spring to house is pretty steep decent, the remaining distance water backs up. Any size caliber from ⅝ of an inch to 1¼ inches will answer my purpose. Now, I would like information on the following points: (1) What would be the best material, all things considered, to re-lay it with; iron, wood, lead, earthen or water-lime? (2) If wood is used, which would be the best kind of an augur to bore them with, viz: what is termed a pod or a screw-augur: if a screw augur; would one work the best with a square or flaring bit; or in other words, which is the most improved or approved kind? (3) Can logs or wooden pipe be purchased, and at what price per foot or rod and where? (4) If iron is to be used, which is best, the common or that which is galvanized? (5) If earthen, of what dealer purchased and at what price per rod or foot? (6) If water, lime, or cement, how should it be mixed and laid? (7) What is the best method of constructing a bench or frame where pump logs or wooden pipe is to be bored by hand, and the best kind of augur for the purpose?

ANS.—Will some of our readers who have practical experience with regard to the various questions here propounded, oblige us and our correspondent by furnishing the desired information? Our own experience is limited to the use of one kind of pipe only in this connection, and it would doubtless be useful to many of our readers to learn the respective merits of the different ones mentioned.

Diseased Hogs.

J. J. D., Woodson Co., Kansas.—I write to the RURAL to learn if it or any of its readers can give me any assistance in regard to my hogs. Last fall they were doing finely, but now most of them look gaunt and mopish and, in some of the worst cases, the skin around the hind legs looks loose and wrinkled. All of them look more or less scurvy and some are losing the hair in patches. Quite a number of the pigs have died and, on opening some of them, I found the intestines full of worms from five to ten inches long, of a yellowish color, and pointed at both ends. The hogs have a range of 60 acres of timber land with a creek running through it, also good sheds for shelter and they have had plenty of corn in the ear. I have fed them salt, sulphur, ashes, coal, copperas, turpentine, and charcoal, but as yet have found nothing to help them. If the RURAL can give a cure for this disease or to remedy it, we will be thankful if it will print it.

ANS.—Give more turpentine for worms. Use tobacco water, carbolic acid or soap for a wash. Have any of our readers fuller experience in this predicament?

Liquid Manure Tanks.

J. W. S., Attica, O.,—Will the RURAL please tell me (1), what kind of turnip seed J. R. of Freedom, Wis. used, and how much he put on one acre of ground? I saw his statement in issue of Jan. 12th, 27th page. Please tell me also (2), how to make a "liquid manure tank," and (3), how the urine will find its way in where the common plank floor is used.

ANS.—Construct a pit just as you would a cistern, either at, or to, a lower level than that of the dung heap, and let it be of sufficient capacity to contain not only the liquid excrements of animals, that may flow to it through a drain directly from the stable, but also the drainings of the dung heap. The bottom and sides of the tank should be rendered impermeable to water by means of a thick layer of clay, or much better, by a lining of brickwork and hydraulic cement. The manure is in this way prevented from penetrating the ground and the drainage from the roofs of farm buildings, rain and waste water is carefully excluded. In all cases, liquid manure tanks should be covered, both to exclude rain water and prevent the escape of their volatile riches. In addition to this, means should be taken to prevent the escape of ammonia by the use of what are known to be fixers of ammonia. Sulphuric acid and sulphate of iron, when they can be had at a cheap rate, are by far the most efficient materials for this purpose, one pound of of oil of vitriol being, on an average, sufficient for 150 pounds of liquid manure. The acid should be first diluted with water before being poured into the manure tank. Gypsum is another "fixer," but when it is used the contents of the tank should be frequently stirred up, as it is not easily soluble in water, while on account of its specific gravity, it readily settles at the bottom of the tank. Sulphate of magnesia also serves the same purpose.

(3.) Behind the stalls of the animals in the stable, there should be a slight trough or depression to receive the urine &c., that escape from the litter, and from the trough there should be a drain to convey the liquid voidings to their appropriate tank.

About Ewes Adopting Lambs.

R. N. Stockmeyer.—In past years I have suffered considerable loss by the death of lambs soon after their birth, and the refusal of the ewes to adopt other lambs; can the RURAL help me to avoid such losses in future, by suggesting some means of inducing the bereaved ewe to adopt another lamb? I have tried several plans, but with only partial success.

ANS.—Among the many methods of inducing ewes which have lost their lambs, to take to other lambs, the following two are said, on excellent authority, to have proved very successful: First; put the bereaved ewe in a small pen away from the rest of the flock. Hold her while the lamb suckles, and milk a little of the milk on the lamb. Repeat this four or five times a day, especially the last thing at night and the first thing in the morning, and almost invariably the ewe will take the lamb in a couple of days, if not sooner. Second; cut off a portion of the skin of the dead lamb and tie it over the neck and shoulders of the living one, wool side out, and the dam of the dead lamb will at once adopt the living one.

Subsoiling.

F. C. Mansfield.—I see a great deal in the papers about subsoiling. Is it beneficial for all lands, and if not, on which should it be applied?

ANS.—The object of subsoiling is to loosen the soil beyond the reach of the ordinary plow, and in this way subject it to the action of the air, allow the roots to go down and the moisture to come up. If the subsoil is a loose gravel allowing a free circulation of air, there is no use for a subsoil plow. If it contains substances injurious to plants, the first crop at least, would probably be injured by the loosening. If it is so wet that the roots of the plants cannot go down into it, it would not be worth while to subsoil it. Well-drained lands are most benefited by the operation, and, in nearly all cases, pay well for subsoiling. By subsoiling a few furrows and comparing the crop on them with that on the rest of the land you can best determine whether subsoiling will pay.

Sowing Clover.

Mrs. Mary McC.—Will the RURAL please tell me the best time to sow clover; and what fertilizers should be applied to it. Which is the best kind for plowing under?

ANS.—The best time to sow clover is probably in August. It should be sown on well-mellowed ground with a dressing of plaster, say ten bushels to the acre. The pea vine variety makes a very coarse hay, but it is probably the best for plowing under green. In the spring clover does very well sown upon winter grain or with spring grain, but it does better by itself. For light lands plowed in the spring to be sown with clover, suitable top-dressings are plaster, ashes, any fine compost, or Peruvian guano, made fine and mixed with plaster and soil, or superphosphate of lime.

Applying Fertilizers to Spring Wheat.

J. M. Davis.—Would it pay to apply a top-dressing of bone-dust or superphosphate to winter wheat in the spring?

ANS.—The increase of wheat alone would probably not pay for the manure; but besides causing an actual increase, bone-dust would so benefit the land for succeeding crops, that in the end the outlay would be amply returned. For immediate effect on the wheat, one of the best applications is a mixture of Peruvian guano and superphosphate, 150 lbs. each per acre. Sow it as early in the spring as possible. Sift the guano to get out all the lumps; then break them up and pass them through the sifter, as no lumps larger than a Marrowfat pea should be sown. Besides the increased yield of the wheat crop, the extra straw and clover resulting from this treatment, will be a valuable consideration.

Remedy for Heaves in Horses.

H. L. K.—Will the RURAL please publish again the recipe for the cure of "Heaves in horses"—Nitric acid and milk. It has cured some cases hereabouts. Indeed I never knew it to fail if taken in season. A RURAL reader in Mich. has a valuable horse that has heaves; he has never read that recipe, and he offered $50 for a cure. There may be many that take the RURAL, who are like him in regard to this recipe; and for the sake of that noble animal, the horse, please publish it again.

ANS.—The recipe here referred to was originally published on the authority of a Michigan farmer, in the RURAL for Sept. 14th, 1872. Since then several assurances as to its efficacy have been received, quite as strong as that from our present correspondent: give once daily a teaspoonful of aqua fortis, nitric acid, prepared as follows: mix it with a teaspoonful of sour or skimmed milk, mix this with bran and the bran with the grain fed. The catarrhal affections of the throat make rapid amendment under this treatment, which should be continued if necessary until a pound of acid is given.

Guano and Ashes.

C. L. M.—Would it be advisable to mix ashes with guano, as a manure for potatoes?

ANS.—No, as they would set free more or less of the already formed ammonia, especially if they were moist. Both might, however, be advantageously applied to potatoes, though care should be taken not to mix them before the application.

Miscellaneous.

A. Hoys.—Do you import Bermuda Grass seed? If so, what is the cost per bushel or half bushel? If you do not import, can you tell me who does?

ANS.—We have repeatedly stated in these columns, that *our sole business* is the production of the RURAL NEW-YORKER. Bermuda Grass is propagated by roots and joints. It does not produce seeds in this climate.

W. J. Gould.—Will the RURAL please tell me whether land plaster loses it manurial qualities by keeping?

ANS.—If it is kept dry, no change will take place in it to lessen its manurial value, and after months it will be just as good as if obtained fresh from the mill.

S. E. B., Pierson, Mich.—I wish to purchase two or three head of Jersey cattle and do not know any dealer in them. Would the RURAL please inform me of the names of two or three, and oblige.

ANS.—Col. M. C. WELD, 189 Water Street, N. Y. Messrs. SMITH & POWELL, Syracuse, N. Y.

Dennis Nelligan, Monson, Mass.—Having seen in the RURAL NEW-YORKER mention of a plant called Dipladenia Williamsii, I should like to get the seed of it, also the seed of Crown Imperial or Fritillaria, if they are house-plants. Can the RURAL please tell me where they can be purchased?

ANS.—Mr. GEO. SUCH, South Amboy, N. J., could probably supply Dipladenia and also bulbs of Crown Imperial. The latter is a hardy spring bloomer—the former a stove climber.

E. D. J., Auburn, N. Y.—Where can I procure a hand-mill that will make fine flour from the whole grain? I wish something that combines cheapness with excellence in work. Would I need a small bolting attachment? I suppose the ordinary coffee-mill does not grind fine enough?

ANS.—Yes. Write for circulars to Blymyer Mf'g. Co., Straub Mill Co., Cincinnati, Ohio, and to Nordyke, Marmon & Co., Indianapolis, Ind.; U. S. Wind Engine and Pump Co., Batavia, Ill. A postal-card will secure you complete information.

H. B. Knower, Westminster, Worcester Co., Mass.—Being a new subscriber to your paper I would like to ask through its columns, where I could get the Chinese Yam for seed; and what would be the price per pound, or if you would furnish them?

ANS.—We sell absolutely no seeds. Write to R. H. ALLEN & Co., 189 Water Street, N. Y.

Subscriber.—I value the recipes in the RURAL very highly, and wish to preserve them for future reference. I also wish to preserve my papers as nearly intact as possible. Could you not arrange to print the recipes on the back of some advertisements, or other matter of no value or interest for preservation, so that when cut out, the paper although marred in appearance, will not be intrinsically injured?

ANS.—We are always happy to receive suggestions from our readers. The above suggestion is good, but for reasons that it would not be interesting to explain, impracticable.

T. W., Kalamazoo, Mich.—Would the RURAL please tell me the address of Mr. WILLARD, who seems, according to its opinion, to be one of the most experienced men in the country on dairy matters?

ANS.—Little Falls, N. Y.

W. F.—Will the RURAL please tell me which are the best hens for winter laying.

ANS.—Brahmas are generally considered the most prolific breed in winter; though with this opinion there are some who disagree. Perusal of the valuable articles on poultry, that appear, from time to time in the RURAL, will give our correspondent full information concerning the merits as well as the best treatment of the different varieties of fowls.

S. H.—In the issue of the RURAL for Feb. 23, is a description of a "Cheap Poultry House," by S. RUFUS MASON. As I am about to construct a poultry house (a cheap one if I can) I would like if Mr. MASON would kindly give me, through the columns of the RURAL, a little further light upon the subject. What is the object of the two rows of posts, four feet apart? Is this what you call "the wall" which is to be filled in with straw? Is the roof to be perfectly flat? How are the windows arranged? If you could give a rude sketch of the house it would be a considerable help.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, MARCH, 4TH.

"Reader"—J. G. R. R.—M. W.—R. L. P.—E. P. H.—G. B. F.—M. A. L.—J. W.—W. J. F.—Edward—A. L. J.—E. M.—W. H. W.—J. W. S.—F. S. R.—R. W. F.—S. R. L.—R. A.—W. F.—T. B. M.—"Bitter Sweet"—W. C. H.—L. P. S.—J. H. B.—W. B. C.—G. H. F.—"Frontier"—D. I. B.—C. McC.—E. C. F.—W. H. H.—"Bertie A. Winkler"—E. L. M.—L. S. W.—J. B. V.—W. W.—W. H. K.—J. C.—P. H. A.—C. C.—E. R. C.—S. S.—S. B. P.

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

TUESDAY, Feb. 26.—Vice-President Wheeler is ill. There is a rumor in Washington that a writ of ouster has been prepared to contest Hayes title to the Presidency. Louisiana has declared against all forms of repudiation and in favor of paying the State debt.

The Russians are massing their troops around Constantinople. The Czar while guaranteeing to Turkey that the Russians shall not approach nearer to Constantinople than San Stefano, declares that he has great difficulty in restraining the Grand Duke Nicholas from entering the city as a conqueror. Russia wants the Conference to meet, the first time, on on appropriate day—the first of April.

WEDNESDAY, Feb. 27.—Gen. Gourkha with 30,000 men, is marching on San Stefano, on the outskirts of Constantinople. The Russians are pressing Turkey to be allowed to enter the city; but the latter persistently refuses. A levy of 75,000 Bulgarian troops, just ordered, will be commanded by Russian officers.

THURSDAY, Feb. 28.—It is probable that the State Legislature will pass a law rendering the canals free. Gov. Halliday of Va. vetoed the bill virtually repudiating a portion of that State's indebtedness, and his veto has been sustained by the Legislature.

In England, Lord Napier of Magdala, of Abyssinian fame, has been appointed Commander-in-chief of any expeditionary force England may send against Russia, with Sir Garnet Wolseley, of Ashantee renown, as his chief of staff. Still talking earnestly of peace while actively preparing for war. The new Pope discourages visitors and pilgrims from speaking on political matters.

FRIDAY, March 1.—The amended silver bill was yesterday promptly passed by more than the needed two-thirds majority over the President's veto in both houses of Congress.

Despite the report of a better understanding between Great Britain and Russia, the former is straining every nerve to expedite preparations for war. The Porte has yielded to nearly all the Russian conditions of peace. Both Powers profess warm friendship! All see now what we said *last week*; that there is little use in a Conference and it is doubtful whether it will be held. The Italian Ministry has decided the "Papal Guarantees" granting the Pope certain immunities and a large annual income, are constitutional laws which Parliament cannot interfere with.

SATURDAY, March 2.—The Silver Bill will cause the coinage of three and a half or perhaps, four million dollars a month, and will increase the volume of currency, thus making money more free and it is to be hoped more easily to be got hold of by deserving folks like our subscribers and ourselves. Benjamin Franklin Wade, better known as "Old Ben. Wade," ex-Senator, and once acting-Vice-President of the United States, has just died at half-past six this a. m. at Jefferson Ohio, in his 78th year.

The Czar is impatient of the delay in signing the treaty, guessing that England is causing it, while pushing on her warlike preparations. Count Andrassy is about to ask 30,000,000 florins to prepare the army for emergencies. Canada will send 10,000 troops to the war in Europe, should England become involved in hostilities there. The Cuban insurrection, after a nine years' struggle, is now ended; the insurgents are all surrendering to the Spaniards who are treating them kindly. Much wrath and many charges of treachery and cowardice from some of the brave Cuban patriots who have been fighting carpet battles in this and other American cities, while a few of their courageous compatriots, a lot of run-away slaves and a number of foreign adventurers have been robbing, pillaging, sacking and now and then fighting in the "Ever-Faithful Island."

SUNDAY, March 3.—Glowing reports from the Black Hills; a reach of 60 miles of the richest mineral deposits yet found on this continent!

The British fleet on the Bosphorus are in great trepidation lest the Russians should send torpedoes amongst them. The Sultan has ordered the Governor of the Dardanelles to allow no more men-of-war—British, French or Austrian—to enter the Sea of Marmora. Russia has no objection to Austria's occupation of Bosnia and Herzegovina; but Austria fears that if she extends her territory in the south, Prussia may demand a smaller but more valuable slice of it at the north. King Humbert of Italy, has been invested with the English Order of the Garter. Ex-President Grant is expected at Rome from Egypt, on the 15th.

MONDAY, March 4.—The treaty of peace between Russia and Turkey was definetely signed on Saturday. Great rejoicing at St. Petersburg and Constantinople, and a sense of relief widespread throughout Europe. The Grand Duke Nicholas visits Constantinople to-day. The terms of the treaty are not promulgated, but it is understood that Russia makes considerable concessions: The Turkish fleet is not to be surrendered, Russia has abandoned her claims to the Egyptian and Bulgarian tributes, nor is there any interference with the portion of the Turkish revenue pledged to foreign creditors The money indemnity will be as large as formerly reported, but will take the form of territory in Asia, including Kars and Batoum, not Erzeroum. Bulgaria will have no port on the Mediterranean, and Salonica as well as Adrianople will still belong to Turkey. Numerous questions are left undecided till the Conference or Congress shall assemble, and Russia is then expected to recede from some of the extreme terms she has imposed in that expectation. England and Austria grumble and protest, especially the former, but what can they do about it? Pope Leo XIII was privately crowned yesterday at the Sistine Chapel in Rome, the cardinals, prelates, diplomats, and only a few other persons being present. Cardinal Franchi has succeeded as Pontificial Secretary of State to Cardinal Simeoni against whose reappointment several Catholic Powers and some cardinals protested on account of his reactionary tendencies.

Manufacturers of Clothing and ladies' suits find the New Davis Sewing Machine adapted to the full range of their work, trimming, binding, sewing thick and thin goods, over-seams, without any difficulty, and requiring no basting or change of tension. The DAVIS SEWING MACHINE Co. are enlarging their manufactory at Watertown, N. Y., to enable them to supply the increasing demand for their machines.

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THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, March 2, 1878.

BEANS AND PEAS.—Receipts of beans past week, 2,293 bbls. Depression prevails in the general bean market. Mediums have not had the steady call that would have been noted if the winter had been colder, and the spring month finds us with an offering to some degree oppressive. The Cuban demand for marrows has been interrupted for several weeks and with this principal traffic restricted, prices are weak. White Kidneys are also quiet, they are apt to be dull when marrows are slow. Red Kidneys cannot be quoted in a large way; neither can Pea beans, Black hold their late slight advance. Plenty here. Canadian peas have a steady place at 83c. Green peas show no improvement, $1.15@1.20. Southern B. E. peas, $3.25 per two bushel bag.

We quote:—Beans, medium choice, $1.70@1.70; other, $1.45@1.55; marrows, choice, $1.85@1.90; other, $1.70@1.80; pea, $1.75@1.80. White kidney, choice, $1.70@1.80; other, $1.85@1.95; red, choice, $2.25@2.50; other, $2.35@2.40. Turtle soup beans, $1.50. Lima, $1.

BEESWAX.—Has been in freer demand for shipment and brings trifle better prices; Western and Southern quoted at 27½@28½c.

BROOM CORN has a freer demand from consumers and holds firm.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 5@6¼c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—March is here, and so is a good deal of unsold butter; and when there is danger of unsold butter becoming unsound as well, its owners are not apt to have very set ideas as to prices. The stock of medium grade, or what would be really termed common, in many other average crops, is daily taking in additions from current receipts, and there is a marked inclination to sell all stock below fine to good. It will be difficult to sell full dairies after this date, unless very seductive concessions are promised. It is very likely that holders of State dairies will carefully cull the table tubs and save the best firkins, in order to participate in the 25@35c. range, and let the remnant take its grease or export chance. A late spring may help some grades of stock now neglected. Western factory sells readily at the prices which receivers adopt. They keep them enough under serviceable State grades to attract close market and ordinary grocery buyers.

We quote State creamery, 25@35c.; fancy pails, 30@32c.; other 25@28c.; creamery, good to choice, 25@35c.; half tubs, fine, 28 30c.; extra, 33@37c.; other, 22@27c.; Fall Welsh 27@29c.; Welsh tubs, dairy, 25@27c.; other, 20 23c.; full dairies, fine, 28@30c.; common, 20@24c.; firkins, 20@27c.; poor State, 14@21c.; Western creamery, good to choice, 40@42c.; poor to good, 25@32c.; factory, choice, 20@21c.; good, 16@18c.; common, 7@11c.; rolls, 12@18c.; grease, 6½@7c.

Receipts for the week, 18,397 pkgs.

Exports past week, 925 pkgs

On March 6-8 the National Butter, Cheese and Egg Association will assemble at Chicago. This organization now numbers 700 members.

CHEESE.—The steady fair requirements for export, and a falling off in receipts, with stocks steadily diminishing, give a firm market, and prices not changed.

Exports for the week, 21,285 boxes.

Liverpool cable, 69s. Gold closes 101¾.

Receipts for the week, 10,167 boxes.

Fancy factories, 13¾ 14c.; good and prime, 13@14¾c.; fair lots, 12¾@12¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12¾@13c. for good to prime; 11@12c. for fair lots; 8@11c. for skimmed; Western factory, cheddar, 13@13¾c. for fine 11@12c. for good; 6@10c. for poor.

COTTON has fluctuated sharply in sympathy with the English views.

Latest prices are for March, 10.88@10.89c.; April, 10.91@1092c.; May, 10.04@10.04c.; June, 11.15@11.16c.; July, 10.22@10.23c.; August, 11.28@11.29c.; September, 11.11@10.13c.; October, 10.95@10.97c.; November, 10.87@10.89c.; December, 10.89@10.91c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8	8	8¼	8¼
Strict ordinary	8¼	8¼	8¾	8¾
Good ordinary	9 3-16	9 3-16	9 5-16	9 5-16
Strict good do	9¾	9¾	9¾	9¾
Low middling	10 3-16	10 3-16	10 5-16	10 5-16
Strict low middling	10 9-16	10 9-16	10 11-16	10 11-16
Middling	10¾	10¾	11	11
Good middling	11¼	11¼	11¾	11¾
Strict good middling	11 9-16	11 9-16	11 11-16	11 11-16
Middling fair	12 1-16	12 1-16	12 3-16	12 3-16
Fair	12 9-16	12 9-16	12 11-16	10 11-16

Stained.

Good ordinary, 8 1-16c. Strict ordinary, 8 13-16c.; Low middling, 9 5-16c.; Middling, 9 15-16c.

DRIED FRUITS.—For medium and good grades of apples, peaches and small fruits generally, there is a steadier market, with increased demand from shippers.

Apples—State quarters, old, 5¾@6¼c.; new, 5¾@6¾c.; Western quarters, old, 6@6½c.; new, 5¼@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5¾c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@17c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c.

EGGS.—Receipts for the week, 11,142 barrels. The demand is light. A good many consumers discard eggs just before Lent, as many are apt to get a surfeit of them before the Fast is over. Prices are easy, but not droop any, and if the heavy surplus of held stock were out of the way, strictly fresh would show some firmness. It is feared that the market will be perplexed with limed and State all the spring.

Near points, 16@16½c.; State and Pennsylvania, in good order, 15½c.; Western best, 15½c.; do. Southern, 15@15½c.; inferior and off quality, 10@13c.; State and Canadian, limed, 9@10c.; Western, 9@11c.

FEATHERS.—Live white prime Western geese, 45@47c., mixed, 30@40c.

FEED.—Is more freely offered and easier. Sales 40 pounds ave., $18.00@19.00; 60 pounds ave., $18@18.50; 80 pounds ave., $18@18.50; 100 pounds, $18@20; and rye at $19@19.50.

FLOUR.—The news from the other side has been of a threatening character, and has led to a larger business here, with prices stronger.

Latest prices are $4.25@4.85 for poor to fancy superfine State; $4.85@5.25 for common to fair extra do; $5.25@ .60 for good to choice do.; $4.25@4.85 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $4.85@5.25 for shipping extra do., the inside price for poor, and $5.25@5.00 for good to strictly fancy extra do.; common to choice white wheat extras, $5.50@6.75; fancy do. at $6.75@7.75; red and amber winter wheat, good to choice family, at $5.25@6.75; round hoop Ohio at $5.10@5.50, and trade brands of do. at $5.60@7.00, the latter for choice; St. Louis, $5.50@6.35 for poor to fair extra and $6.35@7.25 for good to fancy. (with a few brands of very fancy quality quoted up to $7.50@8.00); Minnesota clear, $5.00@6.15; Minnesota "straight," common to fancy, at $5.75@6.35, and patent poor to very choice, $6.35@8.50, with a few fancy at $8.75@9.00; unsound stock at $2.35@5.75; city mill extra at $5.00@6.40 for fair to very choice for West Indies; do. for England $4.95@5.10; do. trade and family extras, $6.50@7.50; do. South America, $6.50@7.50 for fair to fancy; No. 2 at $2.75@4.

Buckwheat Flour—Quoted at $2@2.60. Corn meal is selling at $2.90 for Western yellow and $3.15 for Brandywine.

FRESH FRUITS.—Apples are quiet but firm. Russets are now put out for general use. A few good rod remain, but they are tender after the soft season they have gone through. Baldwins and extra Greenings, $5@5.50; "Seeks" and Spitzenbergh, $6@7 50; Russets, $4.50@5.; rough and rejections, $2.50@3.00. Cranberries have advanced; fancy bls., $9.00; good, $7.50; do. crate, choice, $3; good, $2.12@2.12; fair, $1.50@2.25. Florida oranges, $3.50@5.50—choice Indian River exceed the extreme. Peanuts rather more active; spring revives the demand; prices as yet no better. Best hand-picked Virginia, $1.30@1.40; good to fancy, 85c.@$1.20. Hickory nuts not wanted even at 75c.@$1. Pecans, Texas, 8@10c. per pound.

FURS AND SKINS.—The nominal recent rates are tamely quoted. No demand outside of hatters' stock.

GRAIN.—The markets have been sharply affected by the news from abroad, and the most active business is towards the close with prices of wheat especially higher.

Latest sales are of No. 2 red at $1 26@— ungraded red and amber State, $1 38@—; white, $1 15; No 1 Northwest spring, $1 31; No. 3 Chicago, $1 20½; No. 2 red for January at $1 28¾; No. 2 Milwaukee spring, $1 30. Rye is a trifle steadier; sales of Western at 71@72c.; State at 73@7 c. Barley, 86c for No. 1 Canada; 86@88c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 59½@60c.; steamer mixed, February, 52½@53c. Oats of New York extra white, at 36½@38½c.; do. No. 1, Febuary, 35½c.; No. 2 white 35½c.; mixed Western, 35½@36c.; white Western, 35@38c.

HAY AND STRAW.—Prime hay is plenty and dull, but shipping stock has a fair sale, and brings very regular prices.

Bale hay, 65@70c. for shipping, and 70@85c. for retail qualities; clover, 40@50c. for prime. Straw, 50@55c. for long rye; 50@55c. for short rye, and 40@45c. for oat.

HIGHWINES are higher—$1.08½@1.09 regular.

HONEY.—The season for comb may be deemed over, especially as new maple sirup is at hand, and there is not trade enough to make quotations.

HOPS.—Exports for the week have been 4,500 bales. This large movement not only absorbs receipts, but draws upon the accumulation and prices are strong, and on the medium and low qualities a trifle better.

State choice to fancy, 11@13c.; good to prime, 8@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@21½c. for light, 20@22c. for middle, 20@22c., for heavy, 18@19c. for good damaged.

MAPLE SUGAR.—Vermont and Ohio both send good-looking stock, but as we have remarked, buyers do not take hold freely until new crop is in large stock. Quoted at 14@16c.

OIL-CAKE.—Western is quoted at $30 ₮ ton and $29 bid.

POULTRY AND GAME.—Live poultry is in free supply but buyers will not operate largely in it as fair receipts of dressed over-stock or at least fill the market.

Fancy Phila. and N. J. turkeys, 9@10c.; good, 8@9c.; large or Toms, 7@9c.; chickens, choice, 8@9c; good, 11@13c.; common, 6@7c.; ducks, choice, 10@—c.; other, 13@14c.; geese, fancy, 11c.; other, 7@9c. Capons large 18@20c. small and slips, 15@16c.

Dressed poultry is winding up its remarkably unprofitable season at easy figures. There is no regular call for Western even at the cheap figures. One or two market days towards the close of the week start a demand, but buyers whose trade requires daily supplies can obtain about all the want from Philadelphia and other near points.

N. J. chickens, 13@14c.; Fowls, 8@9c.; Turkeys, @10c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.00@1.37.

Game is reduced to few kinds. For the first time in several years there was no surplus of fancy birds left to be disposed of covertly. Pigeons and wild ducks in good demand with the other items dropped from the list.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $2.12@2.25; Red-heads, $1.50; Mallard, 60@75c.; Teal, 50@50c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$85c. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS have been declining on large stocks. Mess pork, $10.90@11. for spot lots; $10.80@11.00 for March and April. Bacon at 5 7-16c. for long clear and 5¾c. for short clear. Lard—Western steam at 7-55c. for spot, 7-52½c. for March, 7-62½c. for April. Tallow at 7 9-16c. for prime. Stearine, 8c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.00@12.50; plain, $11.00@11.50; new packs, $14.75; family mess, $17.50; extra India mess, $28 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2.50; Higgins', $2.40 and other sack lots at $1.10@1.15; Liverpool ground, 60@65c.

SEED.—Clover, 7¼@7¾c. for Western; 7¾@7¾c. for State. Timothy, $1.25@1.40. Rough flax, $1.55.

SUGAR.—Refined at 10½c. for cut-loaf; crushed, 10c.; powdered, 9¾c.; granulated, 9¾c.; soft white, 8½@9c.; soft yellow, 7¾@8¾c.

TOBACCO.—Export demand has been very fair and home demand increasing, as expected after the interruption occasioned by the strike.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3¾@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	6 @ 7	7 @ 7½
Good leaf	7½@8¾	9 @10
Fine leaf	10½@12	11 @12¾
Selections	—@—	13 @15

VEGETABLES.—Potatoes are in good demand for home use and seed purposes. Grocers expect an improved demand when Lent sets in, and are consequently replenishing. The shipping demand for Southern use is for prime red. Bermuda stuff, $4@4.50 for potatoes, 85c. ₮ box for tomatoes—5-quarts. Beets, $2 ₮ crate. Florida peas come in bad order.

We quote Peach Blows $1.75@1.87, bulk and double-heads. Early Rose, $1.75@1.87; Peerless, $1.25@1.50; Nova Scotia, $1.90@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.10@2.20. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.25@1.50; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₮ lb., 20@40c. Radishes, 100 bunches, $1@1.50. Lettuce, small, dozen, 75c.; large, $1.50@$2. Cucumbers, doz., $1@3. Rhubarb, doz., $1. Spinach, Southern, $1.75@2.25 ₮ bbl.

WOOL.—There continues a sluggish condition of trade, manufacturers buying sparingly, and absence of speculative demand. Prices are rather weak on other than medium stock, but quoted essentially as last week.

LIVE STOCK MARKETS.

NEW YORK, March 4, 1878.

BEEVES.—Receipts for the week, 8,948 head: do., last week, 10,001 do. The supply, though smaller than last week, was ample for trade. There is always more or less curtailment in butcher's supplies as Lent nears. Nothing was left over, but as a rule, prices were a trifle easier than for last week. The quality of the stock shows no general improvement, and the report to the effect that a large crop of common or medium grades is to be worked off this season, seems to be given with considerable authority, when looking at the style of bullocks that have filled the market most of the time. A few exceptional fine steers brought 10c. at the latest sales, and the range for other stock was 8@10c. Considerable stock was taken for slaughter for export.

COWS AND CALVES.—Light arrivals more than fill the demand. The nominal quotations are $45@70 ₮ head for good to choice, with very common as low as $35@30.

VEAL CALVES.—There is a moderate demand for live at 5@8c., the latter for near points; coarse heavy calves, 4@5c. Hog-dressed calves at Washington Market, fair to prime, 9@10½c.

SHEEP AND LAMBS.—Receipts for the week, 19,725 head; do., last week, 19,013 do. Receipts continue light, but seem fully equal to the demand, the market, as a whole, seeming weak. Quotations for sheep, 4½@6½c. ₮ lb.

SWINE.—Receipts for the week, 32,442 head; do. last week, 31,408. Country-dressed pork—State and New Jersey, 5@6c.; Western dressed, 4¾@8¾c.; city, 5¾@5¾c.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

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Reading for the Young.

WHAT THREE LITTLE KITTENS DID.

THREE little kittens, so downy and soft,
  Were cuddled up by the fire,
And two little children were sleeping aloft,
  As cosy as heart could desire;
Dreaming of something ever so nice,
Dolls and sugar plums! rats and mice!

The night wore on, and the mistress said,
  "I'm sleepy, I must confess,
And as kitties and babies are safe in bed,
  I'll go to bed, too, I guess."
So she went up stairs just a story higher,
While the kittens slept by the kitchen-fire.

"What noise can that be?" the mistress said;
  "*Me-ow! me-ow!*" "I'm afraid
A poor kitty-cat's fallen out of bed!
  The nice little nest I made!"
"*Me-ow! me-ow!*" "Dear me! dear me!"
  I wonder what can the matter be!"

The mistress paused on an upper stair,
  For what did she see below,
But three little kittens with frightened air,
  Standing up in a row!
With six little paws on the step above,
And no mother cat to caress or love!

Through the kitchen door came a cloud of smoke!
  The mistress, in great alarm,
To a sense of danger straightway awoke;
  Her babies might come to harm!
On the kitchen hearth to her great amaze,
Was the basket of shavings beginning to blaze!

The three little kittens were hugged and kissed,
  And promised many a mouse:
While their names were put upon honor's list
  For hadn't they saved a house?
And two little children were gathered tight
To their mother's heart ere they slept that night.

Youth's Companion.

LETTERS FROM BOYS AND GIRLS.

How It Is Done.

DEAR UNCLE TRUE:—One of the mountain cousins calls on Lily La, for information, about the decorations of her Christmas tree; I expect that means myself, although she did not get the name quite right. I am Lee, instead of La, but that is no matter.

Have the corn all popped nicely; and by the way, did the cousins ever notice how much better corn pops on a shining cold day, with the wind blowing a hurricane, than it does in a mild warm day? Make some candy, either of maple or granulated sugar; the white sugar looks nicest, but the maple tastes the best, so I generally use it. The way I make it is, to two pounds of sugar, pour in one small teacup of good vinegar, and let it boil till a drop from the spoon will sink in a little ball to the bottom of a cup of cold water. I cut out crosses and anchors and wings from white pasteboard, and spread the candy all over the surface of one side, then stick the corn in. You have to work lively, or the candy will get cold, and it will stick then; but you can keep it over. I make corn balls in the same way, only do not have any paste-board; but put a little flour on my hands, and squeeze the corn and candy together in a round ball. They are just as nice as can be. For festoons, we string the corn with a fine needle and white thread, and they look lovely among the dark green branches, as well as the other ornaments, and one does like to see pretty things on one's Christmas tree.

I wonder if all the cousins know how to make nice candy? I think it is fun to make it, but better sport to eat it; and then, we do not get any thing in it that is hurtful or poisonous. If they would like, I will get the receipts that grandmother had from a Southern lady for making molasses candy, sugar and cream candy, lemon drops, and some other kinds, and it is real jolly to make them, and pull them too. Now about that glove box on brackets. I can tell you how to make the glove box, and the boys can make the brackets to set it on. In my letter to Uncle True, I said we had glove boxes, and brackets. I expect changing that little word from a conjunction, to an adverb, is what they call a typographical error, yet I think that a nice bracket to set a glove box on, would be a very fine arrangement, and I intend to propose to my brothers to make one, purposely to use in that manner. I think these brothers are the nicest institutions in the universe. What girls ever do without brothers, is a hard conundrum for me to puzzle out. They are perfect comforts over at our house; the only trouble is, they get to be young men so quickly!

LILY LEE.

Another Wild One.

DEAR COUSINS:—Here is another *wild* cousin who has read the cousins' letters with a great deal of interest and would like to join the ranks,—that is if you do not object.

I feel like saying some *dreadful* things about that "Slayerofconceit," but suppose I must not. I should judge, however, that he is one of those boys who thinks himself a little wiser than mankind in general, and women in particular. What rubbish has crept into that fellow's head! And you, "Solomon Sap," what is the use of being frightened away by little girls, for as "Sam" says, it is a trick of the girls to try to scare a fellow. The girls are not so easily scared! Now, there is "Rocky Mountain Joe"—who says he can sew with a thimble, and do housework equal to any girl, and asks "Wild Fern" what she can do in the line of out-door work. Come girls, let us all tell. I for one can milk, feed cows, pigs, chickens, horses and calves, and harness and drive a horse as well as any boy. I think that "B. B." is wrong about "whistling girls;" for its my belief that "whistling girls and hens that crow, take their comfort as they go." Write again, "Adele W.," your letters are capital, and will not "Hawaiine" please write as often as she can? Dear me, how long this letter is getting, and how mixed up, too, and if it does not find its way into UNCLE TRUE'S basket, you may hear again from

WILD CHERRY.

Wishes to Say a Word or Two.

UNCLE TRUE AND COUSINS:—I should like to put in my voice and say a word or two. To begin with I, for one, will sign "Mad-cap Molly's" pledge, and hope many more will do the same.

I have never read "Solomon Sap's" or "Slayer-of conceit's" letters, but I think from the way the Cousins write about them, that one needs the sap drawn from his head and the other the conceit from his. I should like to ask Katie and Susie if the initials of the club that the boys got up in opposition to E. E. C. were not B. Q. C. instead of B. O. C.? I should like to know how many signers "Wild Fire" has secured for his pledge. One word to "Young Canadian": I think your letter was too short if anything, but I see you got all the desired information. I wish to ask "Yankee Bill" if Josh Billings ever wrote upon the interesting subject of old Bachelors?

"Rocky Mountain Joe" wants to know what one of the Cousins ("Wild Fern") can do in the way of out-of-door work? Well, I am not "Wild Fern," but I will tell what I can do: I can catch a horse, harness and hitch him to the wagon; can take care of cows, and—but I guess I have said enough on that subject. I, for one can say that I do not drink any spirituous liquors, nor wine, nor use tobacco in any form. I hope the Cousins will have a pleasant winter, with plenty of snow and good ice. BROWN BADGER.

Wis.

An Earthly Paradise.

DEAR UNCLE TRUE AND COUSINS—I am not so young but that I have been younger, and not so old but that I expect to be older. Liking to talk, and thinking you would be glad to hear me when you know what I have to say, I write to tell you that we have a delightful country. In our reading books we are accustomed to find sketches from tourists among the Pyrenees, the Appenines and the Alps, describing the scenery as delightful, entrancing, but I doubt much whether the world anywhere presents finer, grander, or more delightful scenes for the pencil of the painter or the pen of the writer than can be found among our hills and valleys, and you may be glad to know that at this season of the year you may find here game in profusion, and in summer, if familiar with hook and line, you may fill your basket with as fine speckled trout as swim, and in hunting or fishing you will breathe as pure air and drink as clear spring water as can be found on this earth. If you don't believe it or do, come and see. Y.

Emporium, Pa.

A Visit to the Indians.

DEAR COUSINS;—The Indians of the Cattaraugus Reservation, which is not far from here, have been holding a council and dance the past two weeks. Our teacher and twenty of the boys and girls went in a sleigh to see them. They were not dancing that afternoon, but we had a splendid time. I wish Uncle True and all the Cousins could have been with us. They were playing a game which we did not understand, but they laughed and talked and seemed to have a great deal of fun over it. Some of us boys were not satisfied, and went the next day. We saw them dance the war and several other dances. I have not heard from "Jumping Jack" since he escorted the two young ladies out. I am afraid they were too much for him. When I write again I will tell about our school. SAM.

Collins, N. Y.

Miss Lottie Returns Thanks.

DEAR EDITOR:—I had thought of not sending another letter to the RURAL, as no *little* girls seem to be writing; but last week, while reading the letters, I was delighted to see my name mentioned by a young lady from Toledo, O., and I thought I should certainly write and thank her for remembering me so long. When I wrote my first letter to the RURAL, I was not quite eight years old; now I am nine, and am going to school. I have six studies besides Writing, and after my lessons I have lots of fun. Would like to tell you all about our games and amusements, but I cannot write a very long letter. Again I thank Miss E. K. for thinking of me, and hope to hear from her soon. You little friend, LOTTIE KING.

Accepted.

DEAR RURAL COUSINS—I am anxious to become one of the "Cousins." Will you accept me as such? I live on a farm and enjoy country life very much.

I am a girl and sixteen years of age. I have been to boarding school for a year and a-half. We have just begun to take the RURAL. We have never taken a paper in which the boys and girls take such an active part as in the RURAL. Encouraged by these letters I have tried to write to you. If I am accepted, perhaps you will hear from me again. GINA H.

Lewisburg, Pa.

Yearns for Excitement.

DEAR COUSINS:—I have just been reading Carrie B. H.'s letter, wishing for something exciting, and I quite agree with her. But cannot she commence it by telling the rest of the Cousins (who had to stay at home) about her trip! I think it would be quite interesting. Will M. B. P. tell about her fancy work—that is, some of it? Ed. E. K. told ago and night, but did not say anything about books. I suppose he did not think them of any account. I would like to hear about Toledo. NELL S.

Mercer Co., Pa.

The Usual Kind.

DEAR UNCLE TRUE AND COUSINS—If you will allow me to claim relationship. I have been a reader or the RURAL for some time, and I like it very much. I am always anxious to read the Boys' and Girls' Letters.

I think "Slayerofconceit" has a pretty hard row to hoe; but I imagine he has conceit enough to come out winner. I should have tried to write you ere this, but for the thoughts of that terrible waste-basket. If this should find its way to the Letter Column, I shall try to write you again.

EDWIN.

From Rhode Island.

DEAR RURAL COUSINS—I want to claim relationship. I like your letters about as well as my father does the letters about cows and fruit. I hope they will teach him to raise some good pears and grapes, because I like them: don't you? I have a little flower garden, I call my own, but my father does the work and I pick the flowers. He says he will get me some new seeds from the RURAL next year. LIZZIE S. WATSON.

A Murphy, but No Ribbon.

DEAR RURAL COUSINS:—As the Editor was so kind as to print my first letter, I thought I would try again. We had a Christmas tree in the church and we had a very fine time. I think that perhaps "Yankee Bill" is trying to surpass "Josh Billings." I belong to the "Murphies," but here they do not give blue ribbons. Until you hear from me again, I remain, WILLIE W. R.

"All O. K."

DEAR RURAL COUSINS:—I have been watching with much interest your letters back and forth, and have enjoyed them very much. I would like to join you. I am very much pleased with two or three Cousins, and would like to hear oftener from them. So, with your kind permission, I would join you with this, my introduction, and remain yours, hereafter, "O. K."

Expresses Satisfaction.

DEAR RURAL COUSINS: I have been reading the letters from the Boys and Girls with considerable interest. This is my first attempt at expressing my satisfaction and I think I will stop right here.

X.

The Puzzler.

GEOGRAPHICAL ENIGMA.

I AM composed of 24 letters:
My 3, 7, 6, 12, 10, 6 a city of Europe.
My 18, 10, 24, 15, 6, 17, 22, 5 a city in the United States.
My 23, 10, 1, 6 are mountains in the United States.
My 7, 14, 19, 10 one of the United States.
My 1, 15, 11, 15, 6 12 an island in Europe.
My 10, 6, 20, 15, 23, 19 7 a North American lake.
My 21, 22, 6, 6, 22, 24, 24, 22 a river in the United States.
My 13, 7, 23, 23, 22, 6, 24 a lake.
My 8, 7, 6, 19, 6, 4 a gulf near the Pacific Ocean.
My 16, 7, 11, 4, 1 a city in Madagascar.
My whole is an old saying.
☞ Answer in two weeks. ALICE.

HIDDEN BUILDINGS.

1. DID you shove Leonard's chair?
2. I advise you to shun evil, lads.
3. John shot larks for sport.
4. You are a staver, Norman.
5. It is a fact, or Youngs would not have told me.
6. Does Mat owe Robert yet?
7. Where is that heater, mother?
8. Give me a stem, please.
9. Don't you think Amos queer sometimes?
10. Died: Henry Scott, aged 90 years.

☞ Answer in two weeks. S. C.

DOUBLE CROSS-WORD ENIGMA.

My first is in cranberry but not in berry,
My second is in pumpkin but not in cherry;
My third is in whortleberry but not in peach,
My fourth is in persimmon but not in leech;
My fifth is in crab apple but not in blueberry,
My sixth is in watermelon but not in mulberry;
My seventh is in tomato but not in soup,
My whole are two kinds of fruit.
☞ Answer in two weeks. DR.

CROSS-WORD ENIGMA.

My first is in jay but not in martin,
My second is in lark but not in robin;
My third is in ostrich but not in sparrow,
My fourth is in woodpecker but not in swallow;
My fifth is in condor but not in mavis,
My sixth is in lapwing but not in ibis;
My seventh is in pewit but not in bunting,
My whole (a bird) you'll find by hunting.
☞ Answer in two weeks. FLORIDAN.

PUZZLER ANSWERS.—Feb. 23.

ENIGMA.—A Cross.
MISCELLANEOUS ENIGMA.—Masquerade Ball.
CROSS-WORD ENIGMA.—Lily

Sabbath Reading.

AT REST.

"The eternal God is thy refuge, and underneath are the everlasting arms."

It is the evening hour,
  And thankfully,
Father, Thy weary child
  Has come to Thee.

I lean my aching head
  Upon Thy breast,
And there, and only there,
  I am at rest.

Thou knowest all my life;
  Each petty sin;
Nothing is hid from Thee,
  Without, within.

All that I have or am
  Is wholly Thine;
So is my soul at peace,
  For thou art mine.

To-morrow's dawn may find
  Me here or there—
It matters little since Thy love
  Is everywhere.

N. Y. Observer.

WORDS.

"For by thy words thou shalt be justified, and by thy words shalt thou be condemned."—*Matt.* xii. 37.

HAVE you ever thought how important your *words* are—that every word you speak on earth will be remembered either to justify or to condemn you at the great day of judgment? We are all apt to speak the thoughts of our hearts, whether they be good or bad, and we soon forget that which we have said; how differently we should speak if we were always to remember that every word is noted down in the book of God's remembrance! Solomon, the wise king, knew the great importance of words, and in almost every chapter of the Book of Proverbs he speaks of the evil wrought by them, and the necessity for guarding our lips. St. James, too, speaking of the tongue, says it is "a world of iniquity."

Does it cost you more to speak kindly than it does to speak unkindly? How often does your brother or sister come to ask you something, and is driven back with the cross word that brings the tears to their eyes, when a smile and a kind word would have smoothed away the difficulty and made them happy. How much happier we should all be if we always spoke kindly and considerately to one another; instead of this, we are too ready to find fault with each other, to speak of each other's shortcomings, forgetful of the words, "Speak evil of no man," and so cause more unhappiness than I can tell you; and many a sorrowful heart has been made more sorrowful, many a hard trial harder to bear, by unkind words. Try to speak kindly now that you are young, and thus you may help others, as well as do good. Remember it has been said, "Speak of the faults of others only in prayer;" and "for every fault we find in others, find ten in ourselves."

We very often speak of the troubles that come to us, but we more often forget to mention the blessings we enjoy; and yet if anybody would fairly count both troubles and blessings, he would find the last to be far the greater number. Those persons who are always grumbling, finding fault with others and themselves, are not pleasing to God; their words will condemn, not justify them; but those who speak much of God's mercies, and who accept His dealings with them in a right spirit, who seek to cast sunshine on all they do by the bright words they say, shall have their reward.

Praying Christians are always holy Christians. We often speak of the friends we love; ought we not often to speak of God? Let us do so in prayer, and the words will be blessed to us; for they always bring a blessing from above.

If we have anything we value very much on earth, we like to tell other people about it, and often talk about it; and so, if we know anything of how sweet it is to love Jesus, we shall be very anxious to tell our companions and friends.

These are some of the words we ought to speak; are such words as these often on your lips? Or do you speak unkind, selfish, quarrelsome, and idle words? Remember, that all such will bring you into condemnation.

There are two very solemn reasons why we should be careful about what we say; one is, that God hears every word and, as I told you before, notes it down in His book, so that nothing is lost. We may speak unkindly to others, and they may forgive our words, and possibly forget them; but God remembers them. We may speak unkindly of others, and they may not hear what we say, may know nothing of it; but there is One above who does know, and He will judge us for it. We may say things that are not true now, and no one on this earth may discover our sin; but "lying lips are abomination to the Lord," and assuredly the Lord will punish their possessors. Let us remember, then, that God hears our words, and let us strive that He shall hear none but words of love; for these too are written down in His book, and those who have such words written against their names, God promises shall be numbered amongst his jewels.

The other reason is, because our lives are so uncertain that each word we speak may be our last. If we know that before to-morrow came we should be speechless, should we not be very careful what we said to-day? We do not know this, but we do know that it may be so. CARRIE H.

PERSONAL ITEMS.

Eighteen million dollars in judgments are down to Tweed's account in the courts, and the proceedings to declare him a bankrupt have failed.

King Humbert is reported to be seriously indisposed. He has been subject to blood-spitting for a long time, and recent fatigue and excitement have aggravated his complaint.

Mr. Wm. B. Astor has just bought for $10,000 General Phillip's, a horse which has won many races in the Gulf States, and which, the Galveston News predicts, will be at four years old the fastest horse of his age in the country.

Three weeks ago the aggregate sum which John T. Raymond, the actor, had paid Samuel L. Clemens, better known as "Mark Twain," for the right to apply the name of "Colonel Sellers" to one of the cleverest of original creations, was $100,000. The play, "The Gilded Age," has therefore proved a bonanza to Mark.

Pecci, now Pope Leo XIII., is tall, with a fine head, high forehead narrowing at the temples, a long face, and straight features. He has a large mouth, prominent chin, cheerful, open countenance, and large, well-shaped ears. He has a fine sonorous voice, great dignity, even austerity of manners in public life, but privately is affectionate, unassuming, sociable, and witty.

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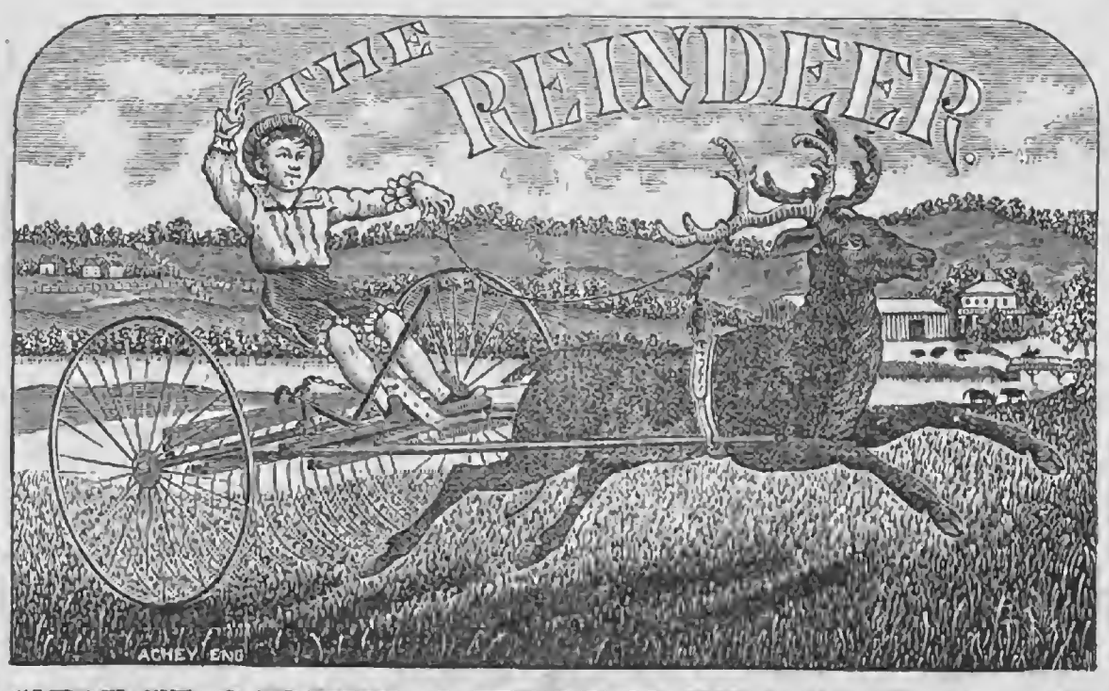

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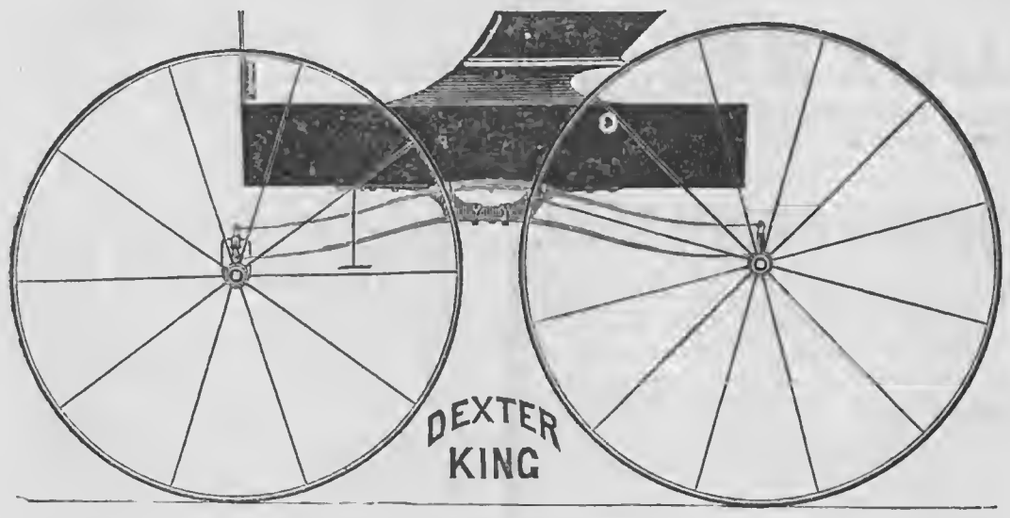

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VOL. XXXVII. No. 11.
WHOLE No. 1468.

NEW YORK CITY, MARCH 16, 1878.

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$2.50 PER YEAR.

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Arboricultural.

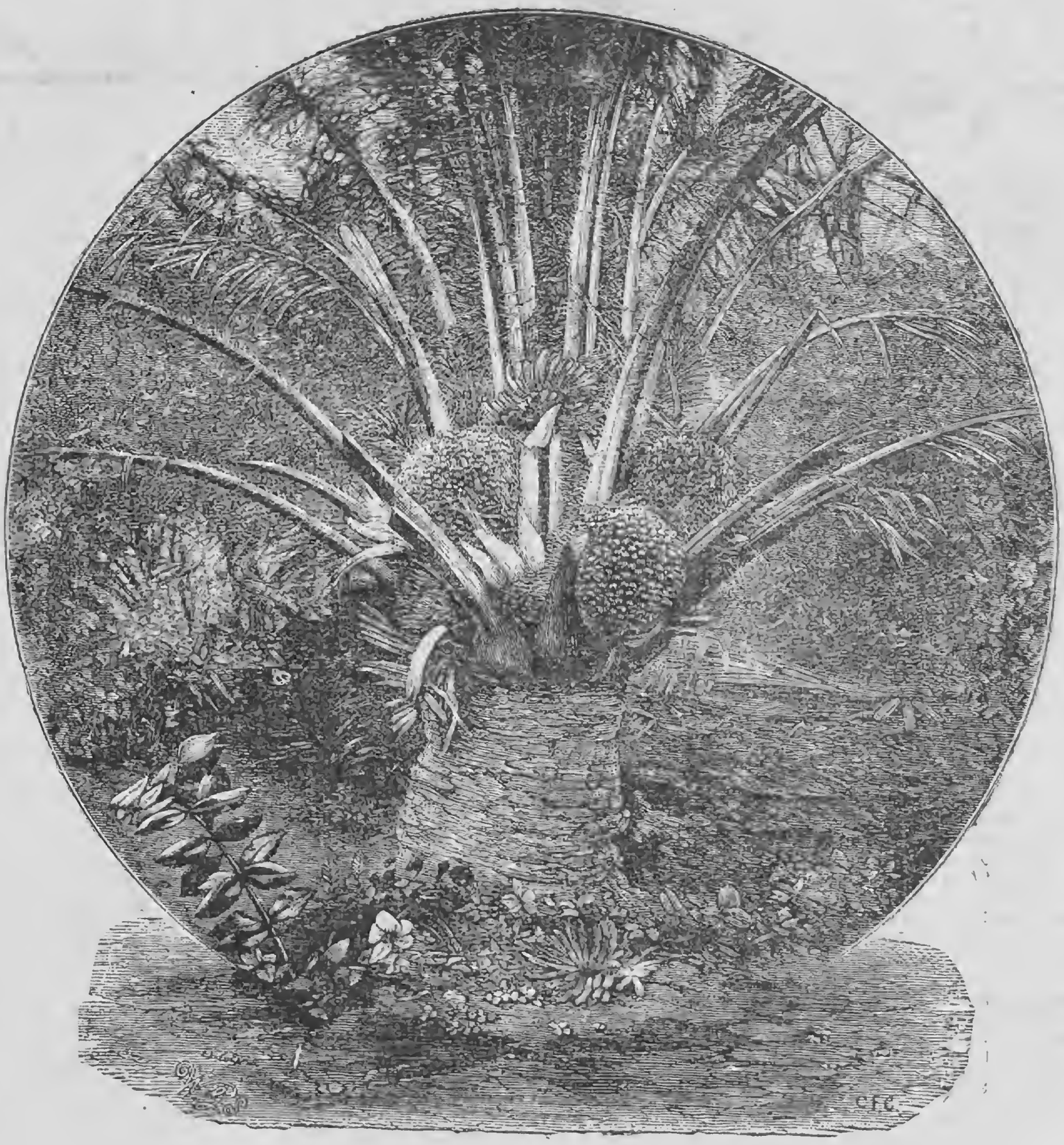
THE OIL PALM TREE AND ITS PRODUCT.

Of the multitudinous species of the Palm family, the products of a few only have found their way into American and European commerce, the most valued being those of the Cocoa-nut, the Date and the Oil Palms. Of these the appearance of the last is the least familiar to most persons as, unlike the others, it has never hitherto been accurately pictured in scientific and popular works. In Western Tropical Africa there are vast regions thickly covered with the members of this species, and it is from this torrid region, especially from the River Bonny, that the largest quantities of palm oil find their way into the American markets. The trade with the natives is carried on chiefly by barter, glass beads of various forms, sizes, and colors being among the principal articles of exchange.

The trunk of the tree from which palm oil is obtained is seldom over thirty feet high, and is surmounted with a tuft of long pinnate leaves garnished with prickly petioles. The flowers are dioecious, and borne in dense heads, sometimes two feet long and two or more feet in circumference. In these closely crowded spadices the fruit is so compactly clustered that the bunches bear a strong resemblance to large pine-apples. The individual fruits are about an inch and a half long, somewhat pear-shaped and when fully ripe of a bright orange color. They consist of an outer soft, pulpy substance from which the best oil is obtained, inside which, forming about one-fourth of the whole, is a very hard, stony shell inclosing the seeds, and yielding, when crushed, a clear, limpid product called palm-nut oil. The fruit, when sufficiently ripe, are gathered by men, boiled in large earthenware pots by women, and then crushed in mortars. They are next placed in large clay vats filled with water, and women tread out the oil which rises to the surface and is skimmed off. It is then once more boiled to get rid of the water, and packed away in barrels or casks for exportation. It still retains the coloring matter of the fruit, which is removed by subsequent processes in numerous factories in Europe, either by bleaching in shallow pans on the surface of hot water or by various chemical methods of treatment. As each drupe affords only about one-sixteenth of an ounce of pure oil and each tree only three or four pounds, an immense amount of labor is required to procure the product and a vast area of forest is annually destroyed to supply the demands of commerce.

Good palm oil is a fatty substance of the consistence of butter, of a rich orange color, a sweetish taste, and an odor like that of violets or orris root. It is now extensively used in the manufacture of candles, soap, and also as an axle grease, chiefly for the wheels of railroad cars. At a temperature of from 75° to 95° F. it melts to a very thin fluid, and the older it is, the greater the heat required to liquify it. By age and exposure it becomes rancid and assumes a whitish tinge. It is perfectly soluble in ether, slightly so in cold alcohol, but readily dissolves in hot alcohol, though on cooling it solidifies. It consists of margerine, oleine, and a solid fat like stearine, which is called palmatine, and constitutes two-thirds of its weight.

Palm oil is used more extensively for the manufacture of candles than for any other purpose and the process, though somewhat lengthy, is highly interesting. Having been melted by a jet of steam introduced into the casks, and freed from all impurities, it is mixed with from one-seventh to one-sixth of its weight of sulphuric acid and briskly agitated for about two hours in copper boilers in which steam maintains a temperature of about 350°. The sulphuric acid and the glycerine, which is an ingredient of its component fats, are in this way decomposed and escape partly in the form of carbonic and sulphurous acids, and partly by subsequent washing. The impure acids are then distilled in copper stills steam-heated to a temperature of 600°. The dark residue in the boilers is made to yield still more oil by heavy pressure and the black refuse that remains is used for fuel. When cooled, the distilled fat is broken into cakes eighteen inches long and at about an inch and three-quarters thick. These are spread upon squares of cocoa-nut matting and are then piled on top of each other and submitted to hydraulic pressure at a temperature of 75°. The fat obtained may be run at once into candles for the European and American markets, but for tropical use, it is again submitted to pressure at a temperature of 120°. The engraving is from a



THE OIL PALM TREE.

photograph presented to the Kew Museum, published in the London Gardener's Chronicle and deemed worthy of reproduction here reproduced as above.

Farm Topics.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

ORNAMENTING THE HOMESTEAD.

I HAVE often wondered at the lack of interest displayed by farmers in the matter of adorning and beautifying the home and farm. Men of no other occupation have the resources that they possess. Every wooded slope, every swamp, every piece of timber land furnishes ample material for the decoration of the lawn, the garden, and the roadside. The Sugar and Black Maple, the White Ash and the Linden, are easily attainable by nearly all rural readers for roadside planting, and those who think they cannot afford to purchase Spruce, Fir, or rarer specimens for the lawn, or as a protection to outbuildiugs from the rigorous blasts of our northern latitude, can easily and cheaply procure an excellent substitute among the smaller specimens of Hemlock, Balsam, or even Pine. Nothing, to my mind, impresses a more desolate aspect than the farm-house upon the hillside, destitute of any artificial protection save the skeleton trunks and branches of a few stunted and ill-favored apple or cherry trees. A heavy belt of evergreens on the north and west side of all the buildings where practicable, a clump or a single tree here and there upon the lawn, arranged and grouped in accordance with nature, not set after any prescribed rule, would relieve the monotony of the view amazingly, and afford an immense amount of protection from the searching winds of winter.

And the road-sides? They too should be the object of our attention. True, the law prescribes a remedy for the lack of shade trees within the bounds of the highway in this State, in that twenty-five cents shall be deducted from the road tax of every landholder for every tree he shall plant and protect until growing nicely. I, however, would not wait for this, or be influenced on this account, in a matter which is of as much interest and satisfaction to myself as to other people. Ten chances to one, the highway requires *all* the tax and perhaps an appropriation from the Commissioner besides, in order to make it passable. For small hedges about the lawn, I consider planting seed the surest and easiest mode, digging trenches where the hedge is desired, and filling them with soil from the woods. I would plant in the fall, as soon as the seeds mature. Some people claim the proper time for setting Balsams to be in June; yet that has not been my experience. Whenever I planted this species at that time, I have always lost more than I saved. Some people will claim they have no time for such "fol-de-rol;" that the more important features of the farm demand their exclusive attention. Farmers make a great mistake here. It will be money in their pockets when they sell or desire to sell their farms—should such an event ever occur—and if not, then it will amply repay them by the genuine, heartfelt enjoyment they will thereafter derive from the change. And as for time, let them rise a little earlier mornings, spend less time at the blacksmith shop and in talking to passers-by, and they will find ample time both to transplant evergreen and deciduous trees, and to assist the good-wife in beautifying the garden and house. I have found it profitable and more safe to select small trees for planting than large ones. They branch lower down, and in taking them up there are not so many roots to be removed. The idea that one will have large trees sooner by selecting large ones, is erroneous. The small ones grow much faster, and make better-shaped trees. Balsams and Hemlocks grow thin tops in the forest, but transplanted to open ground, become thick and compact.

MAPLE-SUGAR MAKING.

The season of making maple-sirup and sugar is at hand, and a delicacy so easily obtained by the majority of farmers, should be found in many more houses than it is. I claim to be something of an epicure myself, and I defy any one to produce an article that will entirely fill the place of light buckwheat cakes, sweet yellow butter, and delicious maple sirup. It is unnecessary for me to say much in regard to the manner of securing the sap and extracting the sweetness therefrom, for S. J. B., in the RURAL of February 16, has given us a detailed and comprehensive account of the means employed. I differ from him in one particular, however—that is in regard to the manner of tapping the tree. Formerly I considered an auger best, but shall hereafter use an ax, cutting a small notch; two blows are amply sufficient. I shall use the spiles recommended by him; but only slightly bent and driven into the tree underneath the notch. They should be ground sharp on one side before bending. It is unnecessary to girdle trees, as some do: the two blows of the ax, if rightly applied, will induce as great a flow as though a large chip were removed. Trees properly treated will retain their vitality for many years; and although there will not be as great a flow of sap, it will be much sweeter than at the first season's tapping. Let all RURAL readers who are fortunate enough to possess sugar maple trees, make a little sirup, at least; and this spring enjoy a few meals that a king might envy.

REMEDY FOR SCURF ON PIGS.

Some time since I purchased a three-months-old pig that had become covered with a thick, black scurf, caused probably by sweating, for there were several in the pen together; or perchance it might have been from eating buckwheat, with which it had been fed occasionally. During the warm days, I have poured buttermilk over its back, and the scurf is all removed and the pig doing finely. The remedy is simple; yet I have never known it to fail, even when the disease was of so long duration that the animal's back was raw with sores.

TOO MANY FENCES.

I have often wondered at the preference of farmers for small fields. One often sees two, three, or five acres inclosed by an old, zigzag rail-fence, and the whole farm, in many instances, cut up into small sections; whereas, one-third the amount of fencing would be just as satisfactory and much more pleasing to the eye. Cultivated as it usually is, nearly a rod in width of the land is left for the propagation of briars, weeds, and thistles. From what experience I have had, I arrived at the conclusion, some time since, that the old-style, seven-rail staked and ridered fence was the most expensive that could be built. Post-and-rail fences or board, are much neater, require less room, and are not nearly so liable to get out of repair. And in regard to small fields; we all, of course, need *some;* yet that does not compel us to divide all our land in the same manner. Seventy acres of ground calculated for a grain crop, all inclosed in one field, is worth nearly double—one-third more at least—than the same area divided into four small fields: that is, considering the difference in time required to cultivate each, and the waste land taken up by the unnecessary fences. Large fields are more handy to till, are a saving of both land and fencing materials, look much better, while it requires less time to keep the fences in good condition. This last consideration I am sorry to say, is even by many otherwise good farmers, seriously neglected.

FARMERS' INSTITUTES IN MICHIGAN.

PROFESSOR W. J. BEAL.

THE last of these for this winter, has just been held at Climax, in Kalamazoo County. This is the third winter that a series of six Institutes has been held by the Agricultural College in various portions of Michigan. From the first, they have increased in interest and in attendance. Besides those held by the College, others of a similar nature are to be held in various portions of the State. At present we know of five such Institutes in preparation. Some of the most interesting topics presented by Professors of the College were:—Cost and Price of Farm Products, Rotation of Crops, Relative Value of Different Varieties of Michigan Wheats, Experments in Testing Seeds, Economy of Farm Management, Hessian Fly, Practical Education, Use of Steam in Agriculture, Veterinary Science for Farmers, The Agricultural College, Tile Draining, Starting an Apple Orchard, Healthy Homes for Farmers. Many valuable papers were presented by farmers and their wives.

The Institutes were well attended, and consisted mostly of farmers and their families. At each session there were usually present from 200 to 600 persons. In some cases delegates came fifteen, twenty, or thirty miles, and in one case a man rode a day and a half in a stage-coach to get to the railway which took him to the Institute.

The programmes were all good, and called out profitable discussions. In some cases the agricultural bore was present with his long speech or his paper filled with common-place sayings. However, the bores were so well managed that they rather proved a source of amusement than annoyance.

Farmers seem well pleased with their occupation. Certainly, any other business carried on as many farms are carried on, would lead to loss and failure. Judging from the Agricultural Fairs, the meetings of the Grange and Institutes, the farmers of Michigan are waking up and making rapid progress in every department of agriculture. They have not yet arrived at perfection. We hardly dare venture to give the meager number of agricultural papers taken by the farmers, even in the best portions of the State. A reliable person of much intelligence said that in his neighborhood, in the garden of Michigan, not over one farmer in twenty took an agricultural paper, and not one-half took any paper which pretended to contain any agricultural information. If this be true, the farmers' millennium is still a long way in the future; for no farmer can keep up in these times without one or several papers devoted to his business.

I could quote several pages from the State and local papers, stating in the most enthusiastic terms the delight of their editors in attending the Institute.

CARBOLIC ACID IN CASTRATION.

PROBABLY most readers of the RURAL, who raise stock, have been troubled by animals getting fly-blown subsequent to castration. Such will be glad to hear of any effective preventive or remedy. Dilute carbolic acid with thirty times its weight of water, and apply well to the wounded part after the operation.

Last year I cut a boar in warm weather, and, as the parts appeared unduly swollen, I examined the wound and found it badly affected with maggots. It struck me that carbolic acid would most effectually destroy them and restore healthy action. I thoroughly syringed the wounds with the diluted acid and it afforded immediate relief, followed by speedy closing of the wounds. I now constantly use it after castration, and find it most beneficial, preventing putrefaction and undue formation of pus.

Monterey, Cal. EDWARD BERWICK.

Horticultural.

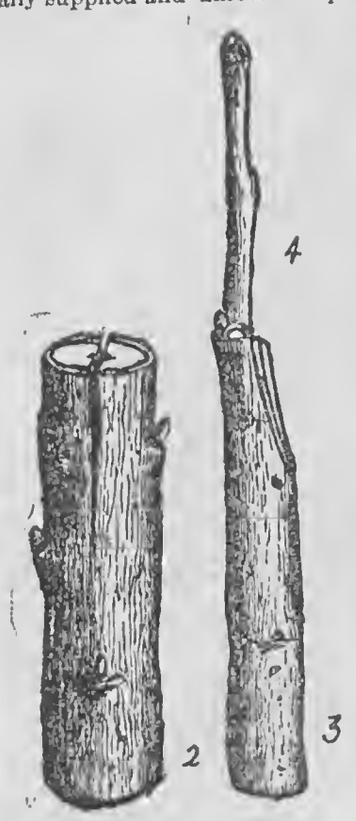
NOTES FROM THE RURAL GROUNDS.

Northern Spring-time.

AGAIN we have spring. One year of life gone another spring-time arrived. Have we a sharper appetite and a keener relish for the green things that are soon to spring up about us, for the floral beauties that soon will follow? This is one of the pleasures that those who live in lands of perpetual verdure never know. The long night of rest to plants has nearly ended. They have had their repose and as if thoroughly refreshed—as if indeed wearied with rest—they are ready to awake again to work and growth.

EARLY WORK.

The first work of the enterprising horticulturist is to select from all plants accessible to him, those most useful, most beautiful, the best adapted to the situation, soil and climate in which they are to grow. This done, he is to provide all necessary care and culture for their future well-being. It is time that the preliminary steps were now taken. All needed information as to hot-beds and cold-frames may be found in any catalogue. We may now say a word as to the preparation of the borders where the young plants are to be placed and to remain during the season. Unless the soil is rich, either naturally so or from previous manuring, manure must be liberally supplied and unless composts have



been previously prepared, perhaps old stable manure is best for general purposes. Spread this at the rate of a barrowful to every fifty square feet, and as soon as the earth will crumble in the hand, spade it under. But let this be done carefully, thoroughly digging close to the margins so as to insure that the edging plants shall have a due share. At the same time the sods forming the grass borders should be cut sharply, thus preserving a distinct, perfect outline. If the soil of the plot is of that kind which readily bakes, good results would flow if pure sand were added and well mixed with the soil previous to applying the manure. Leaf mold or sandy muck would answer the same purpose. Much tedious after-work may be saved if, while the manure is being dug under, such perennial weeds as show themselves—as Dock, Sour Grass, Plantain, &c.—are pulled out and destroyed.

But whether the soil needs manure or not it should be turned over, pulverized, cleared of all stones and litter and raked to a clean, tidy, level surface, so to remain until the plants are set in it, when another going-over will be necessary. Those who prize their beds of hardy herbaceous perennials, will see that manure is spread over them in the fall. Of course such plants can not be spaded up now, unless it is desirable to transplant or to divide the roots. But all chips, sticks and rubbish may be raked off, the manure incorporated with the surface soil, the margins rectified and a sightly, cared-for appearance obtained.

DO NOT UNCOVER TOO EARLY.

All plants, such as Clematis, Ivy, Pansy, Hydrangea, Rhododendron, Rose, that have been protected with evergreen boughs, hay or straw, should so remain until all fear of cold snaps shall have passed. A good deal more harm often results from uncovering too early than many inexperienced persons suppose. And the more the covering or protection, the more there is to be feared. Too much is generally used. Some suppose that plants are covered to keep them warm. This is so far from true that they are protected rather to keep them cold, or at least to preserve, as far as may be, a uniform temperature. The same may be said of Strawberries, Grapevines, Raspberries, etc.

THOROUGH WORK.

We advise all of our readers to send to nurserymen and seedsmen for their catalogues. The catalogues of to-day are of much value to those who wish to select judiciously and to plant with a knowledge of the requirements of the plant. Compare these catalogues and study them. Make selections and forward your orders as soon as you can do so intelligently. Then make or provide, substantial labels and mark them neatly and plainly. Choose positions and dig ample holes, wheeling away the inferior earth and wheeling back good earth. Throw it in lightly to await the arrival of the plants. Then without hurry or slight, the work of planting may be performed in a systematic, satisfactory manner. Respecting

LABELS.

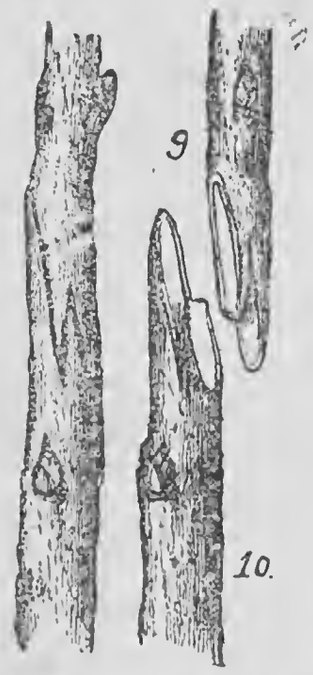
we have a word to say. Five years ago, we had labels made of pine wood of different lengths and widths, but all of the same shape. One end was cut wedge-shape to go into the ground readily. They were given two coats of white paint and with a "penny" paint brush and black paint, the names were painted upon them. The wedge-end was then dipped in warm tar, and after scraping off the superfluity, with a flat stick, sand was sprinkled upon all sides. They were thus in a day or so enveloped in almost stony and impermeable coverings. We have used these labels for five years and they are still apparently uninjured by moisture and exposure.

GRAFTING.

Few have failed to notice where the branches of trees have intersected and remained in contact for some time, that a union has occasionally taken place between them. From such occurrences, very likely the first hint was given to the early horticulturist that what nature thus accomplished might also be artificially effected. Scores of methods have since been devised and practiced, though for the most part, differing but slightly from those known in Pliny's time and by him described. The inexperienced, to whom alone these notes are addressed, will, we hope, by the aid of the accompanying illustrations, be enabled with a little practice, to graft as successfully, if not as rapidly, as old gardeners.

The difference between grafting and budding is in name alone. In the former we use a part of a branch (cion), in the latter a bud which is but an undeveloped branch. Bud-grafting and cion grafting are more appropriate and less confusing terms. If we cut off a piece of

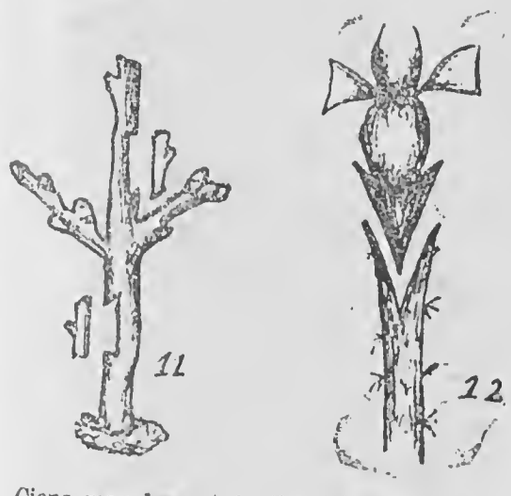
a shoot of a gooseberry bush and place it in soil, roots readily issue from the extremity and the shoot becomes an independent plant. This, before it has made roots, is called a cutting. If the end, instead of being placed in the soil, is cut smoothly wedge-shape, (Fig. 1), and placed into a slit made in the stem of a currant bush, it is then called a cion, and the stem into which it is inserted is called the stock, (Fig. 2).



Instead of deriving nourishment from its own roots, the like parts of both having grown together, the currant is to the cion what the roots and soil were to the cutting. Between cions and stocks which thus become, as it were, soldered together, a close similarity of nature and structure is essential. We may generally work different varieties upon the species—as a Baldwin upon other apples—less often different species upon each other, as an apricot upon a plum, rarely different genera upon each other, as a lilac upon a privet.

The corresponding parts of the cion and stock should be placed in contact or rather the layer which seems to divide the bark and the wood, but which really unites them, should be placed in contact, for which reason the wedge-end of the cion should be cut as nearly as possible to conform to the slit of the stock which is to receive it.

This is the one important thing about grafting. As the annual growth takes place between the wood and the bark, it is plain that this is precisely where the two parts will begin to grow together. Many novices think it necessary that the outside bark of cion and stock should be placed together. But except when the entire bark of each is of the same thickness the outside bark of the cion will always be perceptibly within the other.



Cions may be cut in the fall and preserved fresh in sand through the winter. Or they may be cut now and so preserved until needed. The best time for grafting varies with different plants and the season. No infallible date can be given. The best time is just after the buds begin to swell, and we feel assured that the time for cold snaps is over. The plum and cherry may be grafted earlier, the apple and pear later, even after the buds have broken. Root grafting, largely adopted by nurserymen, for the apple and some others is performed throughout the winter, the roots having been taken up in the fall, washed and carefully packed in boxes of moss. We have not space to describe this in detail. Fig. 17 is the cion, 18 the root-stock, 16 shows the operation completed.

CLEFT GRAFTING

is the method, which we advise the experimenter to adopt in his first essays, especially where the stock is much larger than the cion. Fig. 1, is the cion ready to be inserted into the cleft of the stock, Fig. 2, or one on either side as in Fig. 5 and 6. When but one cion is used, it is better to pare off the other side as in Fig. 3 and 4.

Splice grafting is the next easiest and most effectual method when the cion and stock are the same or nearly the same size and neither is more than an inch in diameter. The wedge of the cion Fig. 8 fits into the notch of the stock, Fig. 7. Both are pressed firmly together and bound with yarn, bast or tape, and then covered with grafting wax or any other tenacious, yielding substance that will not be washed off by rain and that will exclude air from the covered parts.

Two years ago we grafted the Weeping Privet (a variety of Ligustrum vulgare) upon what we call the California Privet (L. oyalifolium) to ascertain which would succeed best, the splice or cleft graft. Eight of each were tried. All lived, however, and seemed equally strong and vigorous. Figs. 9 and 10 show a form of splice grafting which is more effectual than binding plain surfaces together, in that the tongue holds them more securely when bound. Fig. 11 represents a mode of

SIDE GRAFTING

which may be practiced when one has acquired a little skill and desires to display it. Grapevines may be grafted by this method when dormant, near the ground, and covered over with earth until the next spring.

Fig. 12 shows how many species of the Cactus family may be worked upon each other, Pereskia aculeata being often used as the stock. Pelargoniums of different colored flowers and foliage may also by the same form of cleft grafting, be worked upon a single stock, and very interesting plants secured.

Figs. 13, 14, 15 show a mode of herbaceous grafting, as in grafting the tree Peony upon the tubers of the herbaceous Peony, or the Dahlia upon its own tubers. In Fig. 19 we have a modification of side grafting the cion of which may

be cut smoothly concave, or with a tongue as at D. The lower end (C.) is immersed in a vessel of water or moist soil, and may thus derive an auxiliary support while above, it is uniting to the stock. In Fig. 20 we have precisely the reverse of the method shown by Fig. 12. The cion (*a*) is made to fit over the stock (*b*), the completed operation being shown at C.

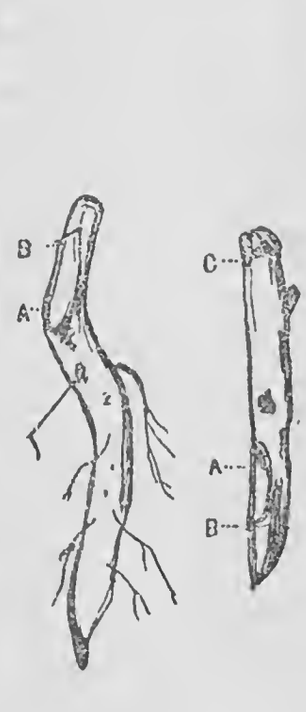
REMARKS.

We have often thought that when the simplest parts of a simple thing are described at length, much mystery is thrown over all, and the beginner applies himself to a study of what he already knows. Let him bear in mind that he is merely to place like parts of one stem upon those of another; that all cuts are to be made as smooth as possible and the union securely bound together. This, with what has been said, and the aid of the accompanying illustrations, should enable any child, twelve years of age, to do ordinary grafting successfully.

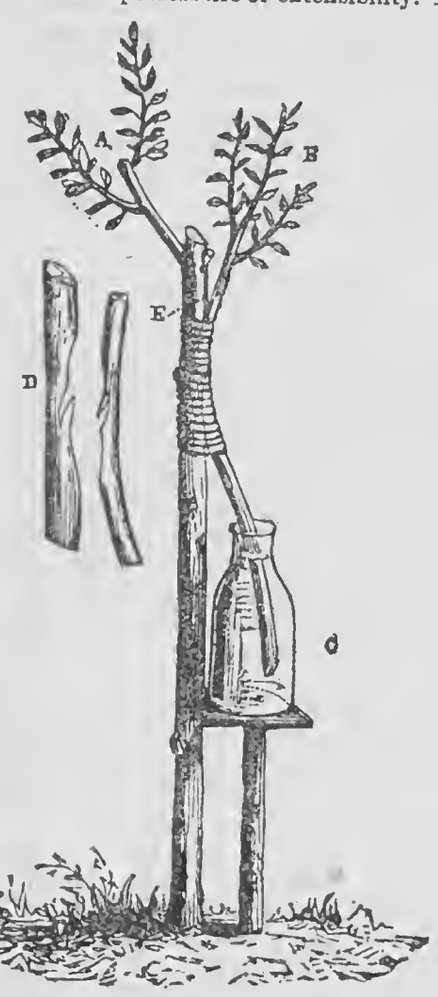
"HIDE-BOUND" TREES.

T. H. HOSKINS, M. D.

It seems to me that the use of this term is unfortunate, because it misleads the hasty thinker into the supposition that there is a real analogy between the living and elastic skin of an animal and the dead and rigid bark of a tree. Only the inner layers of the covering of the trunk and larger branches possess life or extensibility. The



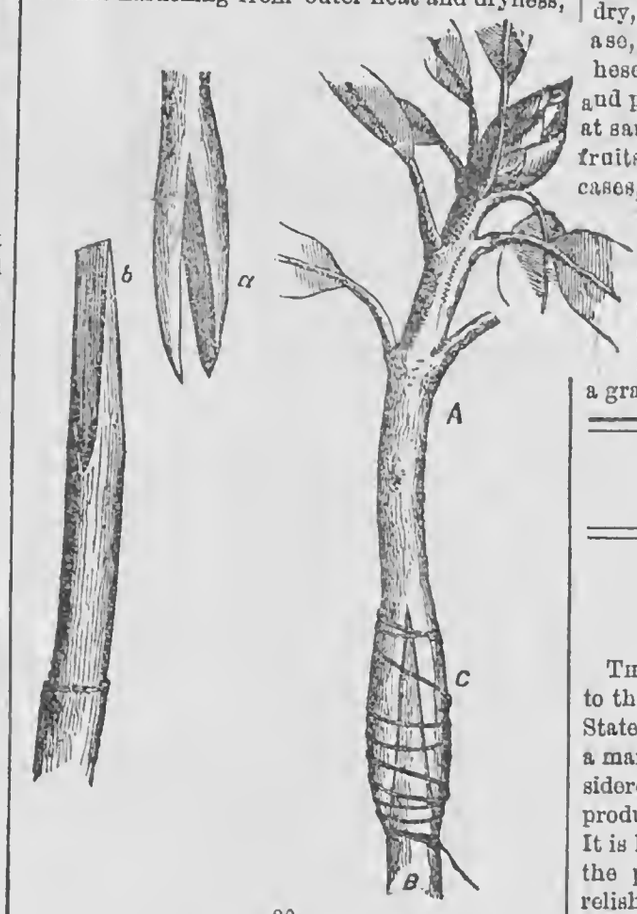
18. 17. 16.



19.

outer bark yields to the growth of the tree, not by elasticity but by rupture, and if the chemico-vital action developed in the tree is feeble, it may be unable to "burst its cerements," and thus enlarge itself in the natural way.

When the tree is continuously thrifty, it "keeps things moving," and during the growing season pushes open the texture which envelopes it by a continuous pressure which does not allow of that hardening from outer heat and dryness,



20.

and from interstitial deposits of mineral matter, which finally incases the weakly tree with an armor that it cannot throw off, and which still further enfeebles it by its constricting action upon the sap vessels.

Until it was brought out in the recent correspondence of the RURAL, it had not occurred to me that any one would undertake to relieve this constriction by slitting the bark at any other time than early in the growing season. A very little reflection would teach one that as "the time to catch bears is when bears are around," so the time to relieve this pressure on the growth of the tree, is when the tree is growing. There can be no question that slitting the bark in the fall or winter would produce an injurious, rather than a useful effect. It is no doubt true, also, that only under exceptional circumstances is a good orchardist who attends to his trees and keeps them thrifty, obliged to resort to this sort of surgery.

Newport, Vt., Feb. 22.

THE PRACTICE OF SEED PLANTING.

S. RUFUS MASON.

The presence of warmth and moisture, and the absence of light are the necessary conditions under which healthy germination takes place. Peas germinate at a comparatively low temperature, have very tender, succulent roots and stems, and are quickly destroyed by excessive heat; therefore, in a sandy soil they must be planted four inches deep, but in a heavy clay, only two and a half to three inches. In deep planting, it is not necessary to compact the soil over the seed, as the sun cannot penetrate so far, early in the season, as to dry the young roots. But all small seeds to be planted early, should have a sufficient covering firmly trod down by the feet, to exclude the drying effect of both sun and wind. This "treading in" secures moisture as well, and does not prevent the warmth of the sun from reaching the seed. If the 1st of April allows the ground to work mellow and free from wet, plant Peas four inches, Beets two inches, Carrots one inch, Lettuce one-half inch, Radish one inch, Parsnips one inch, Onions three-quarters, Turnips one-half inch deep, and tread them in firmly. This calculation is made for a medium light soil; if the soil is very light, plant deeper; if very heavy, plant shallower.

Beans, Sugar Corn, Melons, Squashes, Cucumbers etc., should not be put in till May 10th, and then about one-half inch deep upon hills level with the surface (with a depression around them) on light soil; or in hills raised above the surface, for heavy soil. All these seeds require much warmth and moisture to start them. Make the ground quite firm as before.

As Cabbage, Cauliflower, Tomato and Pepper seeds are always started in boxes or hot-beds, I shall not consider them in this article.

With these general ideas, the soil of the garden is the next item. Let every farmer have two gardens, side by side if he likes, but totally separate. Plow the ground early in the season, haul on enough manure to cover it five inches deep, plow again so as to turn it all under six inches; then haul on two inches more and mix that just below the surface with a shovel plow, cultivator or any suitable tool. This gives a stratum of rich soil at top, warm and light to induce prompt and healthy germination, and another two or three inches under it, as a support to the plant when summer heat becomes powerful. If the season should prove wet, the feeding roots will form in the top stratum; if dry, they will seek the lower one and in either case, strong growth will be certain. Let one of these gardens be devoted to vegetables entirely, and plow it every spring, adding manure on top at same time; the other patch plant with small fruits, bushes, vines and asparagus. In both cases, rows should run north and south. The fruit patch will require stirring with the plow or cultivator once in two years. Remember one thing in the outset: if the crop to be grown is weeds, just prepare the soil, plant the seeds, and "let it alone," and no matter what vegetable seeds are put in, a grand crop of weeds will follow.

The Garden.

THE TOMATO.

CHARLES B. DECKNER.

The writer has devoted considerable attention to the cultivation of the Tomato, first in the State of Wisconsin and for twelve years past on a market garden near this thriving city. Considered either as a fruit for the table, or as a product for market, it is worthy of high esteem. It is healthful in its effects, and as agreeable to the palate as it is inviting to the eye. As a relish, it is at the breakfast-table the peer of that delight of the epicure,—the cantaloupe. Served fresh from the vine, it is palatable and wholesome, while it may be served as a cooked dish in half a dozen different styles. In the vegetable season, no table is complete without it, and no canned fruit is more acceptable in winter. Add to the good qualities already mentioned, the immense yield of the Tomato, and it is not surprising that the subject of its culture is receiving so much attention.

HOW TO PLANT AND WHEN.

The time for planting varies with the climate. The March season of Georgia is the April of New York State. Every section must be governed by the usual closing of its season of frost. Two months prior to the last expected frost, seed may be sown in hot-beds, or if—as is the case with the great majority of families—no hot-bed is on the premises, then in small boxes which should be placed on the window-sill in some room which is kept warm. This will furnish plants which, properly cared for, will be about ready to begin bearing by the time the sunny days of spring have arrived, when they can be transplanted into the garden. One paper of seed will be sufficient to supply an ordinary family. Twenty-five Tomato vines, properly cultivated will supply an average boarding-house for a season.

IT IS BEST TO TRANSPLANT

from the boxes or hot-beds when the plants are two inches high, that they may have space in

which to grow. In the hot-beds or in large boxes, four inches should divide them each way. In the house, small flower-pots may be used, one plant being set in each pot. The expense is nothing, and the enhanced earliness of the crop of fruit secured, will compensate handsomely the care required. In the hot-beds, if considerable growth has been obtained before it is warm enough to transplant into open air, additional space should separate them: say eight inches. Transplanting into the garden should be delayed until all danger of cold, wet weather and frost is past. The plants will fruit sooner if nursed under glass until the first blossoms appear. I have profited by keeping them thus protected until first fruit had developed. After the last transplanting in the hot-beds, leaving the plants eight inches apart, they require but little attention. The glass may be removed when the temperature of the atmosphere will permit and only replaced when the nights are cold, or the weather cold and wet. In severe weather additional protection should be afforded by covering the glass with boards, cloth, straw or hay. The great point of success in cultivating the Tomato is in keeping it from the effects of frost and cold, wet weather.

THE SOIL

best suited for the Tomato is a dark, warm, sandy loam. If it is rich from having been fertilized the previous year, a light application of ashes or guano will stimulate a quick growth. If the land is poor, apply rotten stable manure heavily.

HOW CULTIVATED.

Having been properly prepared, the land to be planted should be laid off in squares, four by four or four by six feet. I prefer the latter dimensions. At the corners of the squares, or where the lines intersect, dig out a hole sufficiently large to admit the plant with the soil clinging to the root. From their winter residences transplant the vines into these holes: rake the surrounding soil and compress it firmly about them with the foot, and they are established in their summer quarters.

The space between the rows, six feet apart, may be planted with some vegetable of short duration, such as peas, beans, radish, lettuce, etc. It is necessary that the vines, when well started to growing, should be tied up to stakes, some three feet high, as when allowed to fall upon the ground, any part in contact with the soil will take root, thus diminishing productiveness.

To secure a well-flavored Tomato, the fruit should be protected from exposure to the sun. This can be accomplished by clipping the extremities of the branches. If allowed to grow very long, the vines shed their lower leaves leaving the lower fruit exposed. The clipping invigorates the vine and produces heavier fruitage as well as fuller foliage to protect the fruit.

VARIETIES.

My experience has proven the Trophy superior to all other varieties for combination of the qualities desirable for family use. It is large, smooth and well flavored. If there is an objection to be urged against it, it is that it does not ripen so well at the stem as some others. But when size is not sought after, and earliness of maturity is the chief desideratum, Hathaway's Excelsior is the most desirable variety. It is a medium-sized, smooth, red Tomato, of excellent flavor, and ripens fully a week earlier than any other. Next in earliness, (and it is a good Tomato too), is the familiar Early Smooth Red.

ROT

is caused by long spells of warm, wet weather, and also by heavy dews, succeeded by warm, sunny days. It will not occur from the latter cause, however, when there is a free circulation of air among the vines. To secure this, the vines should not be crowded too near together, nor should weeds be allowed to grow about them. The fruit affected with rot should be removed from the vines, as worms sometimes infest it, and if not removed, the worms will soon find their way into and destroy the sound fruit.

The Tomato has another enemy in the worm. There are two kinds which are destructive. One is essentially, in habit, like the tobacco worm, and can easily be detected and destroyed. The other cuts its way into the green fruit, burrowing therein until the fruit is decayed, when it moves on to another. But where vines are properly raised and trained from the ground, there is little damage to be apprehended.

Atlanta, Ga.

BRUSSELS SPROUTS.

Why is this delicious vegetable so little known? Its cultivation is easy, the seed which must be of a good strain, should be sown in the spring, in the same manner and time as for winter cabbage. When the plants are of sufficient size, transplant to about a foot apart each way. In ordinary seasons they may be had for the table from first of October to Christmas. The plant is quite hardy, and its numerous small heads become very tender when touched by frost. Boil and serve as you would cauliflower.

X.

Floricultural.

WATERING PLANTS IN POTS.

No. II.

WILLIAM FALCONER.

Most plants require more water in spring and summer than they do in winter; but many want water in winter and none in summer; others, water in summer and none in winter; and in the case of several others, the water supply should be guided by the conditions of growth. But be it summer or winter, or under natural or artificial conditions, plants usually require the most water when they are in active growth. True, the woods and fields are sometimes inundated in winter when plant-life is dormant, and often comparatively dry in early summer when vegetation is busiest, in which cases the flood may be harmless on account of its low temperature, perhaps in some cases beneficial in prolonging the season of "rest," but at any rate, I'd prefer unflooded land as productive of the happiest results.

Many plants, require to be kept moist all the year round, as Palms, Camellias, Azaleas, India-rubber trees, Myrtles, Mahernias, Dracænas, Daphnes, Acacias, Heaths, Epacrises, Jerusalem Cherries, and evergreen, herbaceous and shrubby plants generally. But even these require less water when they have completed their growth than when they are growing or flowering. Calceolarias, Cinerarias, Stevias, Chinese Primroses, Chrysanthemums, Carnations, and such like plants, whether treated as annual, biennial, or perennial, require plenty of water at all times while they remain in pots. The same may be said of Cyclamens, and Calla Lillies, though many good growers lay the pots on their sides to dry these off after they have done blooming.

GROW IN SUMMER AND REST IN WINTER.

Achimenes, Gloxinias, tuberous-rooted Begonias, Gloriosas, some Gesneras, Cissus discolor, Amorphophallus Rivieri, spotted-leaved Caladiums, and the like, don't require a drop of water for three or four months during the winter time, but most of them drink heartily while growing. I may also say that the finest Lilium speciosums I ever saw grown were potted in November, kept dry in a cool green-house till their shoots peeped above soil in March, when just a little water was given near the edge of the pot, gradually increasing it as growth proceeded, till heavy libations were applied. This proves that though these lily bulbs are wintered in moist earth in the garden, in pot culture they should be kept dry, and so it is with many other bulbs. Fuchsias, Lemon-scented Verbenas, Coral Plants, Crape Myrtles, Lantanas, and several other shrubby plants if not young and sappy, winter quite well when kept dry and cool—say in the cellar, shed, under the green-house stage or in any other safe out-of-the-way place. Poinsettias require the same treatment for two or three months after they have done blooming; only they require warmer quarters, say 45°. Araujia, climbing Clerodendrons, Allamandas, Stigmatophyllums and some other hot-house climbers start to grow more vigorously in spring, and blossom more concentrated and lavishly if subjected to a long winter's drouth.

GROW IN WINTER, REST IN SUMMER.

By September Oxalises are transposed from the bureau drawer to flower-pots; the Elephants-foot Creeper sends forth a shoot; "Smilax" runs, Tropæolum tricolorum shows its stringy vines, the Canary Islands Bell-flower (Canarina campanulata) begins to grow, and a host of Cape bulbs, as Lachenalias, Ixias, Babians, and the like are buried, for a New Year to Easter show. During the summer time these receive no water, but little after they are potted till roots are forming, then gradually more, till the flowers are gone and the foliage turns seedy, when water is gradually withheld and ultimately stopped.

BEDDING PLANTS.

Bedding plants as cuttings in store pots or boxes, require very little water in winter, only enough to keep them from wilting, but towards March, when growth begins and demands for food increase, more water should be given in proportion; but always bear in mind that too little is better than too much. The variegated Mesembryanthemum, Othonna, blue leaved Kleinia don't require a drop of water from Christmas till Easter unless good growing conditions are theirs. Coleuses, Achyranthuses, and Alternantheras, winter better and endure in safety a much lower temperature if kept very dry than moderately moist. Of course, in warm greenhouses a little water may be beneficial through the winter months, but in other cases drouth is preferable. From the middle of March onwards when growth is desirable, more water is necessary as it also is in the case of newly potted plants.

SEEDS.

Seeds should be sown in moist earth and care taken to prevent it from drying rapidly. This is done by keeping the pots in shady places, covering them over with shaded glass, paper, or some damp moss or grass, till germination appears. After this, gentle sprinklings are preferable to sudden splashes, and to prevent a too frequent repetition of the operation, if the pots be stood in saucers, and thus be fed underneath instead of above, the lives of many delicate seedlings will be saved. Young seedlings should never get dry, nor should they be kept sodden.

CACTUSES AND OTHER SUCCULENTS.

Most of these can be wintered in dry airy cellars or rooms, providing they be kept rigidly dry, but, like other plants, while they are growing they like plenty water. Cape of Good Hope species, as those of Aloes, Sempervivums, and Crassulas, like a little water in winter if their quarters be good, as many of them bloom at that season. Unless to remove dirt or vermin, syringing does them little if any good, and in the case of densely hairy or spiney kinds, as many Mamillarias, Cereuses, and Echinocactuses, showerings overhead, in winter whatever, are quite hurtful. Of course there are exceptions in the case of young stock or that in exceptional quarters. A humid, muggy atmosphere is killing to Cacti. Cotyledon farinosa, pulverulenta, and other powdery-leaved kinds should not be wetted overhead, neither should Kleinia tomentosa nor others of that class.

FERNS.

Filmy ferns require a close, damp atmosphere and daily dewings overhead, summer and winter. Some growers say—keep them in a saturated atmosphere but don't wet the leaves; well, that is gospel for winter in England, but I must see, in results, the superiority of such doctrine before I'll adopt it in America. All ferns are very thirsty while growing, and some Pterises, Aspleniums, Dicksonias, Cyatheas, Polypodys, Todeas, Woodwardias, and the like, enjoy a shower-bath on summer afternoons. Maidenhair (Adiantum) Gold and Silver Ferns (Gymnogrammas, Cheilanthuses and Notochlænas), and a few other powdery or downy forms are much more injured than benefited by wetting their leaves. Many ferns while at rest suffer a deal of drouth with impunity: indeed, Adiantums, Pterises, Onychiums, and some others may be cut over in the fall and stood on a damp floor, in a cool green-house without getting a drop of water till February, and they will rise in March and April clean and bright. Too much drouth would kill them or irreparably weaken them. We have some very beautiful Pælleas from California, and which are found in dry, rocky or sandy places; indeed, collectors of them have assured me that they undergo severe drouths for a considerable period, but as pot plants they are about the most particular genus I know of as regards moisture; subject them to half the drouth an Adiantum could bear and they die outright.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

ZEPHYRANTHES.

These are handsome little bulbous plants nearly related to the queenly Amaryllis. They were formerly, for many years, classed under that genus, and are even now frequently sold as a species of Amaryllis under the pseudonym of of A. Atamasco. They are now recognized as a distinct genus by the best botanical authorities.

The Zephyranthes are alike valuable for pot and border culture. For pot culture they are particularly valuable as they flower, if properly treated, in from twenty to thirty days after planting. For this kind of culture, the bulbs may be planted at any time during the winter, in six-inch pots filled with a moderately rich, light loam, four bulbs in each pot. Plant the bulb so that at least one-third of its length will be above the surface of the soil; water and set in a warm, dark closet for seven or eight days; then remove to the window or green-house, setting the pot as close as possible to the glass.

For border culture, keep the bulb dry until about the first of May; then plant in light, rich soil, being careful not to entirely cover the neck of the bulb. Plant the bulbs in clumps of three each for a good display. Set in this way, the bulbs will flower three or four times during the summer.

The flowers are produced on foot stalks about ten inches high, and are finely adapted for bouquet making. They are like miniature Lilies in shape and are very beautiful. There are several varieties in cultivation, all desirable. Z. candida is a very hardy variety, in many localities enduring the winter in the open ground; the flowers are snowy white.

Z. rosea is a very pretty plant with rose-colored flowers, frequently with longitudinal variegations of white; this variety is often sold as Fairy Lily. Z. Atamasco is a white variety, the flowers having a pearly appearance. Z. Vilmoriensis is a comparatively new variety, large white blooms. Z. chloroleuca has a pretty orange yellow flower and is unique.

SCHIZOSTYLIS.

This is a very neat plant of recent introduction. As yet it is rather scarce, and in view of the number of good things which have been neglected by amateurs, it is not likely that it will ever be very extensively cultivated. The flowers are very pretty and resemble somewhat those of the Ixia, the bulb requiring similar treatment. The flowers which are borne in long spikes, are of a velvety texture, the color being a bright scarlet crimson, much darker towards the center of the flower. I am acquainted with only one variety, S. gigantea. It is well worth cultivating.

EXCHANGE.

Another season of buds and flowers will soon be here, and often during the long winter days have I formed plans for my flower garden and seen, in imagination, the bright floral treasures I hoped to cultivate the coming season. I was very successful with my exchange last spring. I received much that was valuable; and O! the interesting letters from Rural friends have been like so many pleasant conversations that will long hold a bright place in my memory. And you, dear Rural, I sincerely thank you. Long may you live, and carry your pure, elevating influence to every fireside throughout our land, and gladden the hearts of many thousands. I will give a list of the different varieties of seed I have for exchange:—Aquilegia double, blue; Digitalis, new spotted; Fenzlia dianthiflora; Pansies, best varieties mixed; Phlox Drummondii; Poppies, double, mixed colors; Salpiglossis, scarlet finely spotted; Sedum Aizoon, yellow flowered; Sweet Williams, mixed; Lavender. In exchange, I should like to get any of the following seeds or *plants*:—Daisies (double), Gypsophila, Pentstemon, Statice, Pampas Grass, Wistaria (plants), and Holly (the variety that bears the berries used for winter trimmings) To those wishing a few flower seeds and having nothing to send in return, if they will send me a stamped and addressed envelope, I will forward them seed by return of mail. Mrs. C. Cox.

North Bass Island, Ottawa Co., O.

Miscellaneous.

"THE SNOW—THE BEAUTIFUL SNOW."

S. B. PECK.

The lumberman's winter has just begun. Thus far, there has been no snow to help him. He has waited with the best grace he could, till patience was nearly exhausted and hope almost abandoned. He could have watered his roads and trusted to "Jack Frost" to pave them with ice; but the thermometer, instead of favoring this process, has, except for a very few days, persisted in staying above 32° since the beginning of the old-fashioned winter.

Now the prospect brightens. Mercury, like Lucifer, has fallen, and down comes the feathery snow, lubricating the roads, lying like a fallen tree, where it falls—for no winds penetrate the forests; the roads are broken as the snow falls; the wet places and the frozen lakes to be crossed are tramped to promote congelation, till the whole path becomes a solid bridge. "Then comes the tug of war." The woods swarm with men, horses, and oxen, all ready and eager for the fight. The blows of the sturdy axmen echo from over the hill; the soft whispering of the saw is heard; near by the scaler's hammer whacks the owner's mark into the log's end, and echo says, "Whack!" Now the monarch pine of a century comes roaring as he brushes his fellows, and crackling, crashing, thundering, plunges down, shaking the earth. No sooner is he prostrate than axes and saws are upon him, stripping him of his branches and cutting him into huge pieces, ready for his over-land and water journey to market. Bushes crackle under the tread of teams, chains rattle, cant-hooks grapple, and off goes a burly log over hummocks, bushes and fallen trees, propelled by the sturdy and patient oxen, and is laid snugly beside its fellows upon two parallel skids, ready for their transit by the more supple horse teams. Men "jump at the conclusions," and the inevitable "bobs" are loaded with a number and weight that would make any one but a logger stare; but the trained horses flinch not, and soon convey the monstrous load beyond our sight.

Anon comes a booming sound, like that of distant cannon, and we know that the logs are tumbled against their fellows, down the river's bank. And so this round of motion, muscle and sound goes on. The bluejay screams at it, the partridge retreats whirring to the thicket, the deer with sprightly bounds, seeks the swamps; but men and teams "pursue the even tenor of their way" till darkness drives them to their rude, but hospitable shelter.

The flora of America—and perhaps of the world—presents no sight more grand and magnificant than the unbroken pine forests. Tow-

ering up almost out of sight, with their tufted tops gently waving in the breeze, as if making obeisance to Æolus, with their needle leaves fluttering like a frightened bird, they inspire in the heart of a stranger an awe unlike that produced by Niagara or Yosemite; but more pleasing to the eye and more gratifying to the greed of the lumbermen, who change this scene of beauty and grandeur to one of ruin and desolation. Time dries the severed branches and refuse timber, the parching winds and scorching sun fit them for torches, the inflammable pitch oozes from the ax wounds, and a fire is started perhaps by a hunter or a smoker, or by the tears of pitch acting as a lens, and the entire mass of living and dead vegetation falls a prey to the all-devouring element, leaving only here and there a blackened mass of charred timber. Time goes on, nature, ever abhorring a waste as well as a vacuum, starts up innumerable embryo trees; briars, brakes, and thistles spring up under the stimulus of the ashes, hiding the desolation until another class of occupants, possessing more refinement and sociality, shall take possession of the premises, and fit them for the permanent abode of man, and for the enjoyment of society.

Muskegon, Mich.

PINUS AYACAHUITE.

[The following, kindly furnished by Professor Sargent, would have been published in the Rural of February 2, page 71, which presented an engraving of Pinus Ayacahuite, but owing to miscarriage, the letter reached this office only in time for this issue.—Eds]

This is a large tree growing from 100 to 150 feet high, a native of the mountains of Mexico, and botanically closely related to our White Pine, which it somewhat resembles, or perhaps in part, color of the bark and cones it is more like the P. excelsa. It was introduced in 1840 into Europe by Hartweg, and is said by Carriere to be hardy in the climate of Paris. I don't remember to have seen it there or in England, and possibly the severe winter of 1860 may have killed it, as it did nearly all the Mexican conifers, which before that time were exceedingly fashionable in Europe. Pinus Ayacahuite would succeed in southern California and western Texas, and possibly in Atlantic and Gulf States south of Georgia; but probably nowhere else in the United States. As an ornamental tree it is hardly superior to our White Pine. C. S. Sargent.

Botanic Gardens, Cambridge, Mass.

DIOSPYROS KAKI.

Mr. Hollister presented to the California Academy of Sciences a specimen of Japanese persimmon, grown in an orchard at Santa Barbara. He remarked that the tree is highly ornamental, a prolific bearer, and as hardy as a pear. The fruit is of a bright yellow or orange-color, and seems more like a little ball of wax than a fruit. He thinks it will be the greatest acquisition to the State ever introduced. It grows, he says, to a large size, attaining, in some cases, a pound each in weight. It is well adapted to the soil of California, and may be cultivated the same as an apple. The grafted tree bears in about four years; seedlings require double that time, and are not reliable.

CATALOGUES, &c., RECEIVED.

Ward's Dairy and Breeding Calender. Price 10 cents.

L. W. Goodell, Amherst, Mass. Catalogue of choice selected seeds and bulbs—free.

John Saul, Washington City, D. C. Catalogue of new, rare and beautiful plants, Dahlias, Chrysanthemums, Geraniums, Fuchsias, Carnations, Verbenas, Phloxes, etc. 100 pages illustrated. Plain copy free. Ten cents with a large, showy, colored lithograph of the Pelargonium, "Mrs. John Saul."

J. M. Thorburn & Co., 15 John Street, N. Y. Catalogue of French Hybrid Gladioli, and other spring Bulbs. All of our readers who intend to select any of the above, will do well to send for this.

John S. Collins, Moorestown, N. J. Wholesale price list of small fruits, fruits trees, berry crates and boxes. "Great American" and all the best strawberry plants. Free.

The Bellevue Nursery Co., Paterson, N. J. An Illustrated Catalogue of 80 pages.

Guimes & Garrow, Pittsburgh, Pa. This is a modest, but a good catalogue of 32 pages, enumerating fruits, flowers and seeds. It presents an excellent list of Grapevines, Strawberries, Raspberries, Blackberries, and Currants; fruit trees, evergreens, bedding, plants, Roses, Gladioli, vegetable seeds. Special offers are made which seem very liberal. It will be sent free to applicants.

B. K. Bliss & Sons, 34 Barclay Street, N. Y. Illustrated Spring Catalogue and Amateur's Guide to the flower and kitchen garden. A work of 204 pages. The colored frontispiece is exceptionally pretty and well worthy of a frame. Among Godetias, Carnations, Petunias, Ipomœas, Pansies and many others there shown with much fidelity, we recognize the strange calyxes and flowers of the Shell Flower, (Molucella lævis) that the Rural New-Yorker popularized last year, and which is now for the first time offered for sale. We take much pleasure in commending this work to our readers, knowing that it is worthy of being bound and retained as a book of references as well as for present use. The price is but 35 cents.

Also, Illustrated Hand Book for farm and garden, and abridged catalogue of garden, field and flower seeds, 100 pages. Price 3 cents.

Also, Illustrated Catalogue of Plants for greenhouse, conservatory, lawn and flower garden. Also Illustrated List of Novelties for 1878. Mailed free to all.

Rural Architecture.

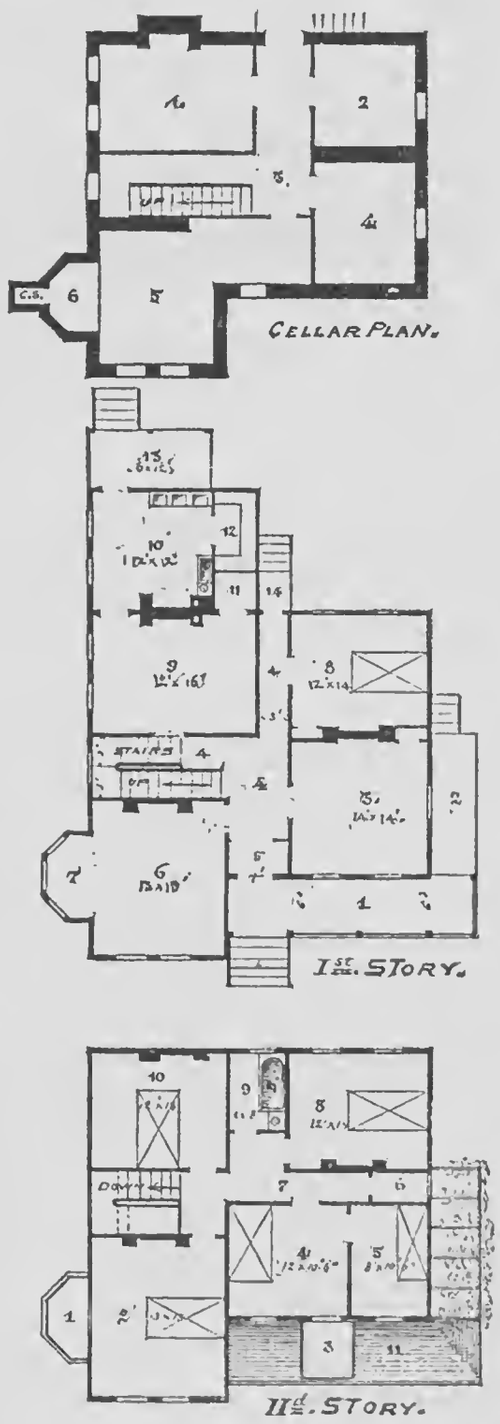
A CHEAP, CONVENIENT HOUSE.

As the Rural devotes some space to architecture one of its friends would like to ask it to

ELEVATION.

furnish an illustration and ground plan of a house to contain a parlor, hall and stairway, and sitting-room and bed-room off of same, with dining-room, kitchen and pantry in the rear. The house to be two stories high with

PLANS.



square or hipped roof. A plan, and front elevation of a house as above described will greatly oblige. A. H. Beihtler.

Marysville.

Ans.—In compliance with the request of our correspondent we publish to-day designs for a country residence, which we hope will meet his approval. The elevation represents a two-story house with cellar and a veranda in front, bay-window, on the side, and kitchen extension. The divisions of the differentstories are as follows, viz:

Cellar plan: (1) Washroom; (2) Vegetable cellar; (3) Passage; (4) Provisions; (5) Wood; (6) Coal-bin with Coal Chute. *First Story*: (1) Veranda; (2) Trellis-walk; (3) Sitting-room; (4) Hall; (5) Vestibule; (6) Parlor; (7) Bay-window; (8) Bedroom; (9) Dining-room; (10) Kitchen; (11) Closet for dining-room; (12) Pantry; (13) Veranda; (14) Stoop with back steps.

Second Story: (1) Balcony; (2) Bedroom; (3) Balcony; (4) and (5) Bedrooms; (6) Linen-closet; (7) Hall; (8) and (10) Bedrooms and (9) Bath-room with water-closet.

For any additional information regarding our architectural designs, inquiries addressed to this office will be cheerfully answered.

Everywhere.

RURAL SPECIAL REPORTS.

Harborton, N. J., Feb. 28.

Roads bad; prices of grain low: times dull. Corn, 47c. per bushel; oats, 25@28c; wheat, $1.10@1.20; hay, $12 per ton, prime timothy; dressed hogs, $4.75@5 per 100 pounds (lower than they have been for over twenty years); veal calves, 7½c. per pound.; butter, 30@32c. per pound. Fresh milch cows are about all that will bring good prices. They bring from $50@60 each at vendues. Grain in the ground looks well, where not sown too early last fall.

D. J. B.

El Dorado, Feb. 23.

We have had no mail for a week, but rain, rain in endless quantity. The Sacramento was higher than ever before known, the railroad track between here and Sacramento was washed away, also the bridge, so we had to get along without our usual mail for a week. I never knew the ground so full of water. In Sacramento there was great fear of a flood, in fact, at one time the water was a foot or so high all around the Capitol building. A good year in California is certain, while a few are washed out of everything, the majority are jubilant.

W. C. L. D.

Marshall, Mich., March 1, 1878.

Spring opens fine. We have had a very open winter; not over five days of sleighing. The roads have been almost impassable, but are now drying up so as to allow light loads to be drawn to market. Farmers are generally holding wheat. They could have got $1.30 for it last fall; it is now worth only $1.10, and the market falling. I must go for two or three of your "Cricket" clocks this spring. L. W. G.

Bryn Mawr, Pa., March 7.

The weather hereabouts is remarkable—flowers blooming in the open air and the season seeming to be a full month in advance of its usual forwardness. My husband asked me tonight if I wanted my hot-beds made "right off." I am too much afraid of a March "nip" to be in too great a haste. M. W. F.

Carlisle, N. Y., March 4, 1878.

The weather here at present is very disagreeable, high winds and rain. Wheat is looking well. It is worth 90c. to $1 per bushel; cattle and hogs are selling very well; the former, for yearlings, $30 per head; the latter from $3 to $5.

M. H.

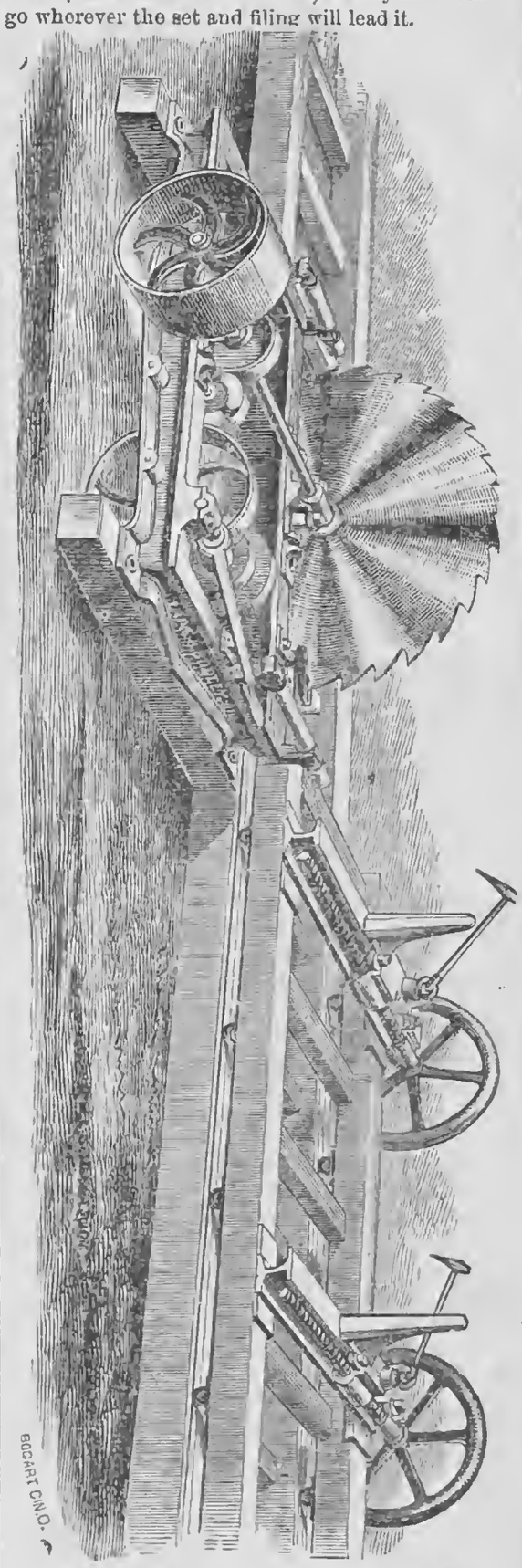
Industrial Implements.

FARM AND PLANTATION SAW-MILLS.

The cut on this page represents a cheap saw mill, to be run by light power, such as agricultural engines or horse power. As the agricultural engine is in use in regular farm work but a small part of the year, it is desirable to find other employment for it. This mill is constructed to meet this want. It will furnish profitable employment to two or three men in cutting fallen timber and supplying the neighborhood with lumber, at a much cheaper rate than it can be obtained in distant cities.

The frame of this mill is of solid cast-iron, strongly braced, and will swing a fifty inch saw. The journal-boxes of the saw mandrel are of ample length to give a good support, and are lined with Babbitt-metal. The saw mandrels are made with great care. The pulleys are truly turned and balanced. The feed and backing works are the best friction device in use. The carriage is 18 feet long, base of head block of wrought iron and the knee is moved by independent screws. The design and material used are all first-class and made with great care.

Many of these mills are running, and with a ten-horse portable engine are cutting from 2,000 to 3,000 feet per day. The quantity of lumber cut per day will depend on the character of the wood and the skill of attendants. Any careful man can soon acquire the skill necessary to run this mill and make good wages. Any person that can file a sash or muley saw, can soon learn to keep a circular saw in order, as any saw will go wherever the set and filing will lead it.



This saw mill is sold for the low price of $188, without saw; and a saw can be furnished for $50 or $60, according to the size.

For further information address the Lane & Bodley Co., Cincinnati, Ohio.

The following interesting item is from the St. Louis Texan:

Judge Tiffany's refrigerator car line has recently entered into a contract with the International and Great Northern railway to furnish all the refrigerator cars necessary to transport the fruit crop of Texas to St. Louis, Chicago and other Northern points. Fruit cooling houses are to be built at Columbia, Houston, Round Rock, Austin, Palestine and other fruit shipping stations as required. The cooling house at Palestine is now under process of construction, and at the other points named the buildings will be erected in time to receive the present year's crop.

The remarkably liberal offer made by the Syracuse Plow Co., on another page, is worthy, and will doubtless command wide attention. This plow is extremely popular and deservedly so. The offer states that for a period of thirty days from date of the announcement the makers will ship free of all freight charges, every plow purchased by those availing themselves of this offer. This coupled with the low price of the plows, considering their workmanship and reputation, is most liberal, and could only be afforded by a company of the standing and resources of the Syracuse Plow Co.

Frequent inquiry prompts us to state that the firm of Russell & Co., Massilon, Ohio, should *not* be confounded with the firm of C. Russell & Co., Canton, Ohio. The latter firm has lately suspended, while R. & Co., on the contrary, are as vigorous as ever, and continue to manufacture and sell the celebrated Massilon threshers and Agricultural steam-engines.

The Boomer & Boschert Press Co., Syracuse N. Y., has shipped to the Paris exposition a complete Wine Press. Those who remember he fine exhibit of this company at the Centennial may be able to judge of the completeness of the French exhibit.

Domestic Economy.

CONDUCTED BY EMILY MAPLE.

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

It is the gray dawn of a March morning, cool and clear. The frost has made slight fantastic shapes upon the window panes in the kitchen, for the fire is out. But it is not cold, and the canary wakes up and shakes his feathers with a lively twitter, while we proceed to clean out the ashes and soot before lighting. It is less trouble in the end, and quite a piece of economy to do this rather distasteful bit of work oftener than is the general rule. I draw on a pair of old gloves long at the wrist, have a good turkey's wing fastened to the end of a stout stick, and a poker with a bent end. Thus equipped, soot and ashes are lifted easily, the latter with an old trowel, into the ash-pan, and all placed in a large brick bin in the cellar. The "siftings" from the kitchen fire are treasures for the garden in summer; for we burn dry Maple and Elm, with a mixture of Cedar and Pine when we wish an extra blaze, and save every particle of this valuable fertilizer.

But while I am talking to you, my hands have been busy, and the kettle is now sending forth a long column of steam for our coffee. Do you think this a pernicious drink in the morning? Well! perhaps it is not according to the laws of hygiene, for we like it strong; but the "guidman" must have his Java, and I do not say "nay." We use the coffee-pot with a single strainer, grind the berry after the kettle boils, and throw it in dry; use no egg or egg-shell to clear; simply pour on the *boiling* water, shut the lid quickly, and let it simmer *but not boil*, for three or four minutes. Our coffee is then a rich amber color, pleasant to eye and taste, while the tight and quick closing of the lid (and if one could take the trouble, a cork in the spout,) and the standing to settle without any stirring, retain the aroma that is lost if the coffee-pot is exposed to an after pouring on the water.

Does it seem fussy over small details? Ah! my dear, life is made up of little things, and on these a great deal of our happiness depends. The fire has burned down to a bed of clear coals; rake them down, and you can make a few slices of toast, for there is nothing like the coals of a wood fire for giving the *flavor* to this breakfast dish. Didn't know toast had *flavor*? Then you have never tasted it made at a coal stove, when by carelessness it imbibed a taste of the gas. And now we can close the dampers; the rest of the breakfast is ready, and with a fresh stick the fire will smolder till needed.

METHOD OF HANGING UP THE WASHING.

"When we build, I am going to have a place in the house where we can conveniently hang the clothes to dry." This has been one of my sayings every stormy washing day since we went to housekeeping until recently. "When we build," however, is still an indefinite time in the future; but I have found a way of hanging the clothes in-doors during the drying process, which is so simple and easily done, that I want the RURAL housewives to know of it. Thus I decided to tell them while comfortably hanging a large washing in our dining-room yesterday, while the wind and snow were holding a grand carnival outside.

All that is required are four strong nails, a line, and two windows or doors opposite, or nearly so. Drive a nail in each corner of the casing of either doors or windows, and tie the rope so that there are two lines passing from window to window parallel with each other.

The manner of hanging up the clothes is where the advantage is gained. We will begin with towels. Take two clothes pins, and pin one corner upon the line; then take the corner opposite and pin upon the second line, and let it hang between the cords. With pillow slips, fasten one-half upon the first line, the other half upon the second, thus only using as much of the line as the clothes pins are wide. For tablecloths and sheets, use four pins, one for each corner. A large washing in this way can be hung upon a short line, but strong nails are required. One can have the clothes ready and hang them in the sitting-room where it is warm, and they will be dry and ready to take down before the family are astir in the morning.

I am very enthusiastic over this plan. I trust it will please the lady readers, and should it make the washing-day easier for any of them, I shall rejoice. M. L. S.

DOMESTIC RECIPES.

Oatmeal Porridge.

WILL you please be so kind as to give recipes in your department for making Oatmeal Porridge also Chocolate (breakfast drink)? By so doing you will greatly oblige a

Six Miles, Ala. "NEW SUBSCRIBER."

ANS.—Put one pint of water into a stew-pan over the fire and as it boils, dredge in two small tablespoonfuls of oatmeal with your left hand stirring with the right; boil slowly from twenty to thirty minutes, stirring almost constantly. When made turn into a soup-plate and add salt, sugar or spice to taste; have heated one-half pint of new milk which should be added to the porridge as it is eaten.

Chocolate.

To each quart of new milk, or half milk and water, allow three heaping tablespoonfuls of scraped chocolate. It is best to set a coffee-pot, or any convenient dish, into a kettle of boiling water; pour in the milk and as it heats add the chocolate mixed to a paste with a little milk; boil for two or three minutes and serve. Some prefer to boil chocolate only one minute, others fifteen, while others boil it one hour, setting aside to cool that the oil may be removed and then reheating when wanted.

CAN'T some of the farmers' wives give us more recipes in which *buttermilk* is used?

Norfolk, Conn. L. P. STEVENS.

Queries Answered.

Will you please to tell me what will remove white paint from a black silk, after it has become hard? S. Mc. C.

ANS.—Chloroform is excellent for the removal of dry paint from all sorts of clothing. Portions of dry white paint which resist the action of ether, turpentine, or alcohol are at once dissolved by chloroform.

Please tell me if there is any thing I can mix with tallow which will harden my candles?

YOUNG HOUSEWIFE.

ANS.—Allow one pound of alum for every five pounds of tallow. Dissolve the alum in a kettle with a little water, add the tallow and stir until melted together, then run into molds the usual way. This makes a candle as hard and white as wax—that is if the tallow is pure. Another way is to add to each pound of tallow one-fourth pound of common rosin and melt together. This last, although an improvement upon the common tallow candle in hardness and lighting power, is not in color.

Is there anything that will remove iodine stains from bed-linen? W. E. P.

ANS.—Apply rectified spirits.

How shall I cleanse chamois leather so that it will be soft after the process? EMMA B.

ANS—Dissolve a piece of borax, the size of a hickory-nut, in sufficient *warm* water to wash the chamois. Use good hard soap and rub the leather well with the hands in every part. Wash in this way in two, and if the chamois is very soiled, in three or four waters, rinsing at last in clear, warm water in which a piece of borax has been dissolved, the same as before. Squeeze out but do not wring, snap, stretch slightly and hang before the fire. As it dries, stretch from time to time—this last is important.

Entomological.

SLITTING BARK.

DEAR MR. MANN:—"Have you had any experience in slitting the bark of trees that are hide-bound? Do you know of any entomological reason against it?" ED. RURAL.

In the twenty-fourth annual report of the Secretary of the Massachusetts Board of Agriculture for 1876, p. 33, the term "hide-bound" is applied to the checking of the circulation in the stem of a tree, and your correspondents,—Prof. BEAL and Mr. T. T. LYON, on p. 44 and 71 of the present volume of the RURAL NEW-YORKER, seem to have a similar understanding of the term; namely that the trouble comes from the root. If the trouble is not caused by the tightness of the bark, then, of course, there is no occasion for relieving that tightness. The question is only whether the trouble is caused by tightness. As this condition of tightness is natural and inevitable in all trees, it is difficult to understand why it should be looked upon as a disease or a condition requiring treatment.

As to cutting the bark lengthwise, to give the wood more room for expansion, it does not seem, after President CLARK'S experiment on the squash, that we need to trouble ourselves about the ability of the wood to break its way out when it is ready. I do not know that, botanically, there would be any perceptible injury to the tree from this operation, for it is stated in the volume for 1874 of the Reports above mentioned, p. 239, that the separation "of the bark from the wood by the combined action of frost and sunshine is not uncommon in the apple and other cultivated trees. If a severe frost separate the water from the wood as ice, and it then thaws and freezes again before it can be reabsorbed, it will be likely to burst the bark or tissues in which it is accumulated. This usually results in one or more cracks through the bark on the southerly side of the tree, from which there is, in the case of the apple tree, commonly a slight flow of crude sap in the following April or May. The outside of the bark is blackened and the detached portions die."

In an earlier part of the same Report for 1874, p. 531, an account is given of an experiment showing that one eighty-fourth of the natural amount of wood was sufficient to supply nourishment to the whole natural amount of foliage of a Hibiscus, for the period during which the experiment lasted; and in other parts of the treatise from which these extracts are taken, it is shown that considerable mutilations of bark can be repaired by the plants experimented upon.

I do not know whether there are any fungi which would attack the wounds in the tree, but there are certainly some insects that would pounce eagerly upon any such wound and find lodgment therein.

The Plum curculio (Conotrachelus Nenuphar) comes forth from its winter retreat sometimes as early as the 30th of March, and different individuals are engaged in the deposition of eggs from the middle of April until the end of July. Naturally they deposit their eggs in fruit of various kinds, but although not the cause of the "black-knot" of plum, cherry and other trees, these beetles sometimes breed in the "knot" and would be likely to deposit their eggs in any wounds of the bark of these trees, where they would breed unobserved.

The Apple Buprestis (Buprestis fomorata) becomes a perfect insect at the last week of May and contrives during June and the forepart of July to lay her eggs upon the bark of the trees, especially "where the bark had previously been killed from some cause, and almost invariably according to report made to Dr. FITCH, on the south side of the trees."

The Apple Saperda (Saperda bivittata) makes its appearance, every year, early in June. In the course of June and July she lays her eggs, one in a place, upon the bark, low down, at or very "near the surface of the earth;" or "when these beetles are numerous, some of their eggs are placed higher up, particularly in the axils where the lower limbs proceed from the trunk." As soon as the eggs hatch the grubs begin to feed on the inside of the bark.

The Woolly Apple-louse (Eriosoma lanigera) sucks the sap of the bark and of the young wood immediately under the bark from spring through summer until late in the fall or even in winter. It lodges in crevices of the bark and causes warts to grow there, making the tree diseased and finally killing it.

I have found also under the bark of apple-trees what seem to be the caterpillars of the pear-tree borer (Ægeria pyri,) which becomes a moth in the autumn, and lays her eggs again on the bark.

Thus it may be seen that at no time of the year can the bark be wounded without thereby becoming more readily subject to the attack of important destructive insects. Yours,

B. PICKMAN MANN.

(For other Queries see page 176.)

Miscellaneous.

PLEASE answer the following questions through the columns of your valuable paper:

(1). I have a Black Walnut and Maple floor in my dining-room. Can you tell me how to wax it? (2). Explain the process of obtaining spring wheat. Is it obtained by sowing winter wheat in the spring? (3). Are eggs from pullets as good for incubating as others? MRS. S. W. C.

(1). Cut into small bits six and one-quarter pounds of yellow wax and stir into a hot solution of three pounds of pearl-ash in rain-water. Stir constantly while boiling. The mixture is at first quiet, but soon commences to effervesce. As soon as this ceases, add three pounds of dry yellow ochre and pour into tin cans. When wanted for use, melt one pound of the mixture in two and one-half quarts of boiling water and apply while hot to the floor with a paint-brush. This will dry in a few hours, after which the floor should be polished with a large floor brush and then rubbed with a woolen cloth.

(2). There is no difference between spring and winter wheats except by cultivation. The one is converted into the other by successive sowings in spring or fall.

(3). There is no difference that we are aware of.

Varieties of Pelargoniums.

L. S. W.—Please name inclosed Geranium and oblige

ANS.—It is a Zonal Pelargonium—not a Geranium. There are perhaps a thousand varieties like the one you inclose, with differences so slight that it would be difficult to tell one from the other unless compared together. Hundreds are named one year to be forgotten the next.

WHAT THEY SAY OF IT.

THIRD ACKNOWLEDGMENTS.

STILL ALL THINK IT "SPLENDID."

[THE letters we have received from those who have earned RURAL "Cricket" Clocks, are very gratifying indeed. In the crowded state of our columns this week, we cannot find space for all that we would be pleased to publish. We beg to state that fifteen cents forwarded to us will prepay expressage. Twenty-five cents may be charged by the express companies if collected on delivery.—EDS.]

MY LITTLE FRIEND.

My pet has but two little feet,
And yet he runs all day,
As merrily and tirelessly
As if it all were play.

He chirps away a lively song
To cheer my every task.
And he is wise, my little friend,
And tells me all I ask.

That he is *lettered* one could tell
By looking at his *face*,
And all his *works* are widely known
For nicety and grace.

And yet he shows no pride, because
Of his most favored *case*,
But ever holds his slender *hands*
Before his modest *face*.

I thank the RURAL publishers,
Who sent this friend to me;
May willing *hands* reward their *works*,
Their *time* pass merrily!

Painesville, O. MINNIE D. B.

THE "Cricket" was received by express, all right. When I took it out of the box, the children exclaimed, "Oh, it is a silver clock!" It couldn't be a prettier ornament for my parlor mantle-piece if it were solid silver. We have had it now five days, and in that time it has neither gained nor lost one minute. The old pendulum-regulator has been deposed, and we now regulate our household by the "Cricket." Mr. T—— informed me he had sent you two names and had ordered the "Cricket" for himself, but thought it must be some no-account, cheap contrivance, or you could not offer it so liberally. I showed him mine, and all he wants to know now is, "How you do it?"

Boonville, Mo. S. C. H.

THE premium received. The RURAL "Cricket" chirps cheerfully, not on the hearth, but on the nail, and its handsome presence is a constant reminder of a large reward for a small service. It chirps and keeps time with those clocks for which we have paid five and ten dollars. It is a charm, an ornament, and a convenience to the whole family. J. B.

Annville, Lebanon Co., Pa., March 3, 1878.

I AM in receipt of your beautiful premium, the "Cricket." I am free to confess that I felt it was possible that your offer was in too glowing terms; but a glance at the beautiful and substantial time-piece, has convinced me of my error. I submitted mine to a practical clock-maker, and he pronounced it a marvel of beauty and simplicity. Accept my warmest thanks.

EDMUND Y.

Brantford, Ont., March 5, 1878.

THE "Cricket" Clock received all right. Has proved to be a good time-keeper, running in any position; and it is certainly worth double the amount you charge for it and the RURAL together, to any one having any use for a timepiece.

Waterford, Va., March 4, 1878. J. H. [illegible]

WE have been very much disgusted with some premiums we have received for newspaper work. We tell you frankly, the "Cricket" Clock is a true, a liberal reward for our two names, and we shall do all we can for the RURAL NEW-YORKER.

Hempstead, N. Y. A. M. S.

OUR Clock was at the Express office when I wrote you that we had not received it. It is a *Gem*, as you represent it, and we are altogether satisfied. M. A. B.

Detroit, Mich., March 6.

YOUR Clock received by Express. It is all right, seems to keep good time, and we thank you. P.

Cincinnati, Ohio, March 5.

WE value our "Cricket" Clock highly. It keeps good time and can be regulated, no doubt, to keep exact time. It is all you say of it, and you may publish this as my honest sentiment.

Akron, Ohio. M. S. M.

IT is the prettiest clock I have ever seen. You are very good.

Jackson, Mich. C. M.

MY daughter is much pleased with the "Cricket." It goes well. M. B. B.

THE SYRACUSE CHILLED PLOW

It is Lighter of Draft, More Perfect in Shape, More Durable in Wear, Does Better Work in the Field, Has Less Breakages in its Different Parts, than any other Plow made in this Country or Europe.

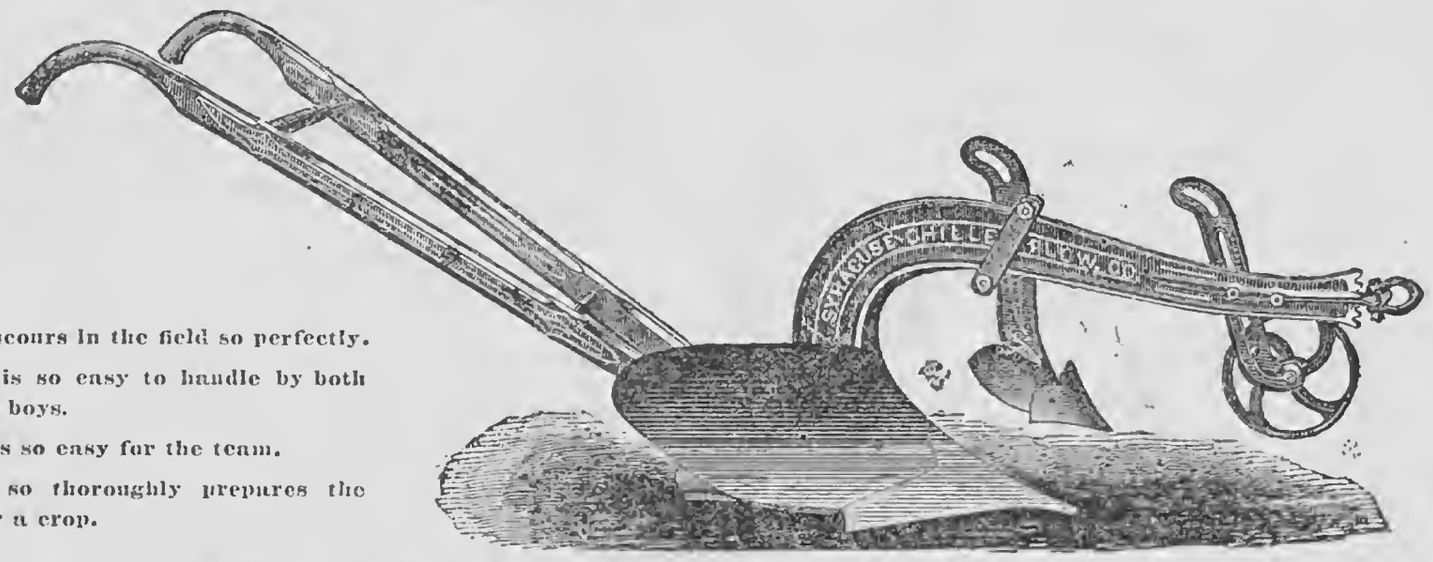
Perfect Workmanship, Perfect Material, Perfect Patterns, Perfect Plows.

☞ No Plow scours in the field so perfectly.

☞ No Plow is so easy to handle by both men and boys.

☞ No Plow is so easy for the team.

☞ No Plow so thoroughly prepares the earth for a crop.



More of these Plows Sold in the State of New York in 1877, than of all others Combined.

Thousands of farmers, the past year, who have tried all the other kinds of so-called Chilled Plows, have cast them aside for the Syracuse Chilled Plow.

Eighteen months have elapsed since we commenced at Syracuse, N. Y., the manufacture of CHILLED PLOWS. In that time we have demonstrated:

FIRST—That they are a more durable Plow than any other in use.
SECOND—That they will clean in any soil superior to the best tempered Steel Plows.
THIRD—That they possess the like superiority over any Cast Iron Plow, and that their draft is twenty-five per cent. less.
FOURTH—That their price is considerably less than that of the Steel Plow, or any other Plow which is really a Chilled Plow.

The great success of this Plow has induced other manufacturers to come into the market with Plows that they claim are chilled. Some of these claim that their *chill* consists in a combination of metals, producing the requisite hardness, while one or two boldly assert that their *chill* is produced in the process of manufacture. The truth is that there is no other so-called Chilled Plow in market that is made by a process bearing any resemblance to that by which the SYRACUSE CHILLED PLOWS are made, nor can such Plows be made by any combination of metals whatever, nor can a genuine Chilled Plow be sold at a less price. The process of manufacture will not admit of it, and whenever a Plow is offered at a less price, the purchaser can be assured that it is not a genuine Chilled Plow.

Annexed will be found a few out of hundreds of recommendations of these Plows that have been received by the manufacturers.

This Plow received the highest award of merit at State Fair Albany, 1876, and Rochester, 1877, Western New York Fair, Rochester, 1876, Central New York Fair, Utica, 1876. It has also been uniformly successful in over one hundred competitive trials since the fall of 1876, at County and Town Fairs and Plowing Matches.

☞ Every Plow is warranted to give satisfaction, and we warrant our Beams, Mold Boards, Landsides, Wheels and Jointer Standards against breakage from any flaw or defect in manufacture, during the current year.

Some unprincipled manufacturers are palming upon the community a most inferior kind of Extras, claiming that they are as good as those made by us; while the truth is they are made of the poorest metal, and will not do one-quarter of the service that ours will do.

THE PRICES OF THESE PLOWS ARE AS FOLLOWS:

One Horse Plow, No. 0	$10.00;	Weight 70 pounds.
Two " " " 1, full rigged	16.00;	" 150 "
Two " " " 2, "	16.00;	" 140 "
Two " " " 3, "	10.00;	" 120 "
Three " " "10, "	18.00;	" 170 "

A "full rigged Plow is one that has two Plow Points, two Jointer Points, one Clevis, one Wheel, one Malleable Wrench, one Jointer and one Band.

CLAY, N. Y., Sept. 25, 1876.

GENTS:—I have been using a Steel Plow of about one-half of the weight of your Plow, but it draws at least one-third heavier. I have used various plows in my experience in farming, and can state without hesitation that the Syracuse Chilled Plow is the best I have ever used, or seen used.

GEORGE HAMLIN.

BROADALBIN, N. Y., Oct. 22, 1876.

GENTS:—I have plowed with one of your Plows on a farm where a Steel Plow would not clear, but your Plow worked to a charm, clearing every foot of the way. Yours, truly, ISAIAH BETTS.

CLINTON, Dutchess Co., N. Y., Oct. 23, 1876.

DEAR SIRS:—We tried your Chilled Plow last fall. It will be useless for us to relate to you the working of this Plow. In the first place we cannot extol it enough. It is far ahead of anything we ever used.
Yours, truly, BROOKS & LENARD HAIGHT.

CANANDAIGUA, N. Y., Oct. 1, 1876.

GENTS:—I took one of your Plows on trial with those of other manufacturers, who claimed superior merits, and among them was included a Western Plow. I gave each of them a fair trial, and have no hesitation in pronouncing your Plow superior to them all in many respects. It holds easier, cleans perfectly and holds to the ground, and runs steadily where the other Plows would not. I cheerfully recommend it as superior to any I have ever used.
Yours, M. D. MUNGER.

WASHINGTON HOLLOW,
Dutchess Co., Oct, 10, 1875.

SIRS:—I have used the Chilled Plow made at Syracuse, and am fully satisfied that it does better work, and in every respect surpasses any plow that I have ever used. Yours, truly, MILTON HAM.

HIBERNIA, Dutchess Co., Nov. 23, 1876.

GENTS—I have given the Chilled Plow I purchased of you a thorough trial, and it gives me pleasure to recommend it as the best plow I ever used. I have used many kinds of plows for the last thirty years, and for five years made many kinds of plows. I am confident that for ease to the team and the holder, for the amount of work it does in a given time, and the condition it leaves the land plowed, your Chilled Plow is far superior to any plow now in use.
Yours, truly, ISAAC LAWTON.

LOCKPORT, Sept. 25, 1876.

I HAVE used Plows more or less for forty-five years and now have four of your Plows on my farm, which I would not part with for four times their cost, if I could not buy the same again. I advise my farmer friends to buy them, for I know they will please them. They wear well; their draft is light, they do their work well, and they will scour in any soil. Yours, respectfully, J. R. HILL.

WASHINGTON, Dutchess Co., Oct. 28, 1876.

DEAR SIRS:—I have used your Plow to plow twenty acres, and I find that the Syracuse Chilled Plow is the best for all kinds of ground, that I ever used. I think I can plow much more ground in the same time and one-third easier than with any other plow.
Respectfully yours, J. H. LOSEE.

POUGHKEEPSIE,
Dutchess Co., N. Y., Oct. 25, 1876.

IT gives me much pleasure to say I find the Syracuse Chilled Plow far superior to any other. I was plowing a swamp that consisted of several kinds of soil. Had it not been for your Plow it would have been turned over in bad condition. It cleans perfectly in mucky soil.
Yours, truly, JOHN FITCHETT.

PLEASANT VALLEY, Dutchess Co., Oct. 30, 1876.

GENTS:—We bought two of your Plows in the fall of 1876, and we can say, for all kinds of work, they have no equal in this country. They will turn a furrow up hill far superior to any plow I ever used. The draft is evidently light. Respectfully yours,
THEODORE & HERMAN HICKS.

POUGHKEEPSIE,
Dutchess Co., N. Y., Nov. 29, 1876.

DEAR SIRS:—I bought one of your Chilled Plows this fall, and tried it in sod that was paved with stone; it hung to the ground well, and did its work better than any plow I ever used.
Yours, truly, WM. E. BADGLEY.

POUGHKEEPSIE,
Dutchess Co., N. Y., Nov. 25, 1876.

GENTS:—It gives me much pleasure to recommend your Chilled Plows. I have used one of them this fall, and can say they are better than any plow I have ever tried in an experience of thirty years of cultivation of the soil. It cleans perfectly wherever I have used it, and is of a lighter draft, and easier to hold than any plow I ever used.
Yours, truly, JOHN WING.

NEW CANAAN, Conn., Dec. 1, 1876.

GENTS:—Your Plows give great satisfaction. They do the work well even in our rough, stony soil, and took the First Premium this fall at the Fairfield County Fair. Yours, J. F. SILLIMAN.

BETHLEHEM CENTER, Jan. 20, 1877.

SIRS:—I have thoroughly tested the Syracuse Chilled Plow, taken on trial, and am so well pleased with its use on all kinds of soil, that I would not do without it. Several of my neighbors have borrowed it, and without exception pronounce it perfect. It leaves the ground in better condition than the Collins or Adamantine, and entirely does away with the use of the Wheel Cultivator in preparing the soil for sowing or planting. Yours, D. P. SIMMONS.

WASHINGTON,
Dutchess Co., N. Y., Nov. 17, 1876.

SIRS:—I bought one of your Chilled Plows this fall and find it as recommended. I can plow one-fourth more land than with any plow in this vicinity. The draft is lighter than those I have been using. LEWIS D. GESMOND.

NEW HAVEN, N. Y., Jan. 23, 1877.

GENTLEMEN:—I have been engaged in agricultural pursuits quite extensively for the last fifteen years, during which time I have had in use ten plows of different manufactures, including one of your Chilled with the Jointer Attachment, and can testify that to the best of my judgment the Plow I got of you can do a greater amount and more perfect work in the same length of time than any other that I have had experience with, and with less draft power.
Yours, etc., HENRY J. DAGGETT.

KEELER BAY, Vermont, Nov. 1, 1876.

GENTS:—I have had three of your Plows this season. Two of them have been tried and they work nicely. I have been wanting to find the Plow for a long time. Your Plows please me.
Yours, respectfully, H. HARRINGTON.

MARSHALL, Mich., Nov. 7, 1876.

SIRS:—To-day being Election day, I had an opportunity to exhibit and test your Plow in the presence of a large number of farmers. The field in which it was tried was a timothy sod. The Plow did its work well and gave great satisfaction.
Yours CHARLES H. MANN.

ENFIELD R, N. Y., Nov. 10, 1876.

GENTS:—Your Plow proves itself worthy of your recommendation. It took the first prize at our County Fair. Yours, S. V. GRAHAM.

NEW SCOTLAND, N. Y., Feb. 2, 1877.

SIRS:—I have used various plows in my experience of twenty-five years in farming, and can say without hesitation that the Syracuse Chilled Plow is the best I ever used, it working equally as well in sod as in stubble, leaving the soil in better condition for the crop than any plow I ever saw used.
Yours, E. CRAWFORD.

WHITEHALL, N. Y., Jan. 20, 1877.

THE Syracuse Chilled Plow I took of you on trial last fall, proved to be the best Plow that I ever had on my farm. It works the best of any Plow I have ever used. Truly yours, SAMUEL BENJAMIN.

DARIEN, Aug. 4, 1877.

GENTS:—I tried four different plows this spring, and found your Chilled Plow to be superior to them all,—they are fast coming into use in this section.
S. YATES.

ALBANY, Jan. 23, 1877.

SIRS:—I can with pleasure recommend the Syracuse Chilled Plow to be all that you claim for it. It cleans perfectly and leaves the ground in the very best condition, and I consider it a Plow of the highest excellence. I have not been hitherto favorably disposed toward Iron Beam Plows, but I like the one I have so well that I shall buy another the coming season. Yours, very respectfully, L. J. GOVE.

PEMBROKE, May 11, 1877.

GENTS:—I have bought and used one of your Chilled Plows, and find it will clean in any soil on my farm. It is lighter in draft and better than any plow I have ever used.
Respectfully yours, W. M. JOSLIN.

DARIEN, Genesee Co., N. Y., May 10, 1877.

I BOUGHT this spring one of your Plows and can say I have never seen its equal in an experience of twenty-five years' farming. It suits me in every particular. JOHN RICHLEY.

WEST BATAVIA,
Genesee Co., N. Y., April 21, 1877.

I HAVE used the Syracuse Chilled Plow and am fully satisfied that it does better work and in every respect surpasses any plow that I have ever used.
J. L. LOWN.

PEMBROKE, N. Y., May 17, 1877.

I HAVE used all the different kinds of Plows for the last thirty years, and unhesitatingly say that the Syracuse Chilled Plow is the best I ever used, or saw used, and would recommend it as superior to all others. WILLIAM H. CLEVELAND.

WEST BATAVIA, Aug. 6, 1877.

GENTS:—I took one of your Plows on trial this spring and find it all you recommended it to be.
A. HARTSHORN.

ALEXANDER, N. Y., May 21, 1877.

I HAVE this day tested and bought the Syracuse Chilled Plow, and unhesitatingly say I have never seen its equal for lightness of draft, workmanship, and ease of handling; and holding to the ground when dry and hard. Of its clearing qualities I have no doubt. GEORGE B. PARISH.

BATAVIA, Aug. 20, 1877.

GENTS;—I was plowing oat stubble, and my plow clogging very badly. Your agent drove into my lot and insisted on my trying one of your Plows. I did so and found it would plow my ground without clogging. I bought it, and would not part with it at any price if I could not replace it.
Yours, respectfully, PATRICK DUANE.

BATAVIA, N. Y., Aug. 13, 1877.

GENTS:—Your Plow proves itself worthy of your recommendation. H. UPHILL,
WM. S. LEAR.

A FEW WORDS IN REGARD TO THE USE OF THE JOINTER.

Farmers sometimes say that they do not care for the Jointer and desire to purchase a Plow without one. This is a great mistake on their part, and no farmer who has once used a Jointer will give up its use for any consideration.

The Jointer Standard should be set nearly perpendicular, and arranged to cut a furrow slice not over two inches deep. This furrow slice will be turned over in the bottom of the furrow, and the mold board of the plow will then turn its furrow over upon top of it, completely burying with it all the weeds, manure, clover stubble, sod, etc., turned under, out of sight, and the top of the ground will be left even and light. In sod, the ground once plowed in this way is light and mellow and the harrow will not drag up the turf.

Wherever a colter will work, the Jointer will work, and do all that the colter can do, and much more effectually. When the Jointer Point needs replacing the farmer can replace it by loosening one bolt, with a new point that will cost him but twenty-five cents. This is a great saving over the time and expense required to re-face and sharpen a colter.

With every Plow an additional Jointer Point is furnished free of charge. These points are made of the best iron and hardened, and they are very durable.

☞ **SPECIAL OFFER.**—For the purpose of introducing our Plows in sections where no agencies have been established, we will send any one of the foregoing styles, free of freight, to any Railroad Station in the Eastern and Middle States, on receipt of the price thereof, as above stated. This offer to be open for thirty days.

All communications to be addressed to the

SYRACUSE, N. Y., March 12, 1878.

SYRACUSE CHILLED PLOW CO., Syracuse, N. Y.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Oil Palm Tree and Its Product, The 166
Notes from Maplewood Farm 166
Farmers' Institutes in Michigan 166
Carbolic Acid in Castration 166
Notes from the Rural Grounds 166
"Hide-Bound" Trees 167
Seed Planting, The Practice of 167
Tomato, The 167
Plants in Pots, Watering 168
Bulbs for the Flower Garden 168
Exchange 168
"The Snow—The Beautiful Snow" 168
Pinus Ayacahuite 169
Diospyros Kaki 169
House, A Cheap Convenient 169
Catalogues, &c., Received 169
Rural Special Reports 169
Farm and Plantation Saw-mills 169
Siftings from the Kitchen Fire 170
Washing, Method of Hanging up the 170
Recipes 170
Bark, Slitting 170
What they Say of the "Cricket" 170

EDITORIAL PAGE:

Cloud Land 172
Have Women Business Ability? 172
Frames for Plants 172
Respecting the Rural 172
Grape-vines 172
The Objection Removed 172
Brevities 172

LITERARY.

Poetry 173, 175, 177
Literary Miscellany 173
Cora 175
My Porter's Daughter 174
Washington Letter 174
Lightning Conductors 175
For Women 175
Letters from a Country Girl 175
Divorce 175
Answers 175
Perseverance 178
Answers to Correspondents 176
News of the Week 176
Publisher's Notices 177
Markets 177
Reading for the Young 178
Puzzler 178
Sabbath Reading 178
Vows 178
Christian Fellowship 178
Personals 179
Wit and Humor 180
Advertisements 171, 173, 179, 180

THE
RURAL NEW-YORKER.

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SATURDAY, MARCH 16, 1878.

CLOUD LAND.

Fools' Paradise, where the rich soil yields a generous harvest with just enough tillage to serve as a pastime; where profitable markets are always at hand liberal of reward to pleasurable effort; where the weather can be had to order and health instead of disease is catching; where the neighbors are all delightful, and ignorance, uncouthness and turbulence are unknown; where sucking pigs, baked an appetizing brown and impaled with convenient knives and forks, trot briskly around delighted to afford a slice of hot pork and savory crackling at a moment's notice, and where all other viands and grateful beverages are equally handy, is a place which many emigrants, all the world over, are restlessly in search of. 'Tis the only spot, even in dreamland, where Adam's descendants are exempt from the hereditary penalty imposed on Adam's transgression—that in the sweat of their brows he and his children should earn their bread.

Among the myriad toilers of other countries there is a vague notion that this delectable locality, or at least a region approaching it in attractiveness, can be readily stumbled upon within the broad bounds of "The Land of the Free and the Home of the Brave," while the inhabitants of this favored country, despairing of finding this elysium among the struggling crowds around them, seem, many of them, to imagine they can hit upon, or soon create, a fac-simile of it, somewhere in the sparsely settled wilderness along our civilized frontier. A search for it there, however, would be as vain as Ponce de Leon's pursuit of that sparkling treasure of Fools' Paradise, the Fountain of Youth. Indeed it would be well for all about to emigrate, especially farmers, to bear in mind that success in a new location will inevitably necessitate cautiously prudent selection, an energetic spirit, and, at least at the outset, an increase of labor, privation and hardship. Nor would it be unwise to reflect whether the voluntary practice of these requisites among the friends and scenes endeared by familiarity, would not be likely to win as fair a measure of future prosperity as could be reasonably expected from their compulsory endurance amid the miseries inseparable from the condition of a stranger in a strange land.

HAVE WOMEN BUSINESS ABILITY?

A few weeks ago, in one of the comfortable sleeping coaches which have so reduced the weariness of travel, we left Boston on a train bound outward for the West. There were not more than half a dozen persons beside ourselves in the car, and this scarcity of travelers made conversation general, and established friendly and social relations between people who had never seen each other before, and did not, even then, know each other's names.

In the section just behind ours, four gentlemen had seated themselves, and were talking concerning matters of general and sometimes local interest.

Occupied with a book, we gave little heed to their conversation until our attention was suddenly arrested by hearing one of them exclaim, with much emphasis, "Yes, sir! I believe that, as a rule, women are more economical than men. You see, woman can't *waste* much money if she tries; she's obliged to spend it on herself, on her jewels and laces, her silks and satins and furbelows of one kind and another. All these, however, can be turned into money again; and the more ragged and dirty and dingy a piece of lace is, the better a woman likes it, and the more money it will bring. But now just look at the men, and think for a moment of the enormous sums of money spent every year on fast horses, gambling, wines and tobacco; things that represent not capital invested, but capital sunk, wasted. Why, if a man sets about it, he can waste more money in one year than a woman can spend in five."

"I guess you're right," assented his neighbor; and—" dropping his voice to a low tone and speaking slowly, as though he were about to tell something which, though true, was entirely beyond his comprehension—"I'll bet a copper that my wife can tell exactly how much money she has had in the last ten years, and just what every cent was used for."

"How about yourself," asked number three, "can you do the same?"

"Not much!" was the emphatic answer. "I've had a good many attacks of book-keeping in my time, but I get over them in just about four days. By that time the thing won't balance, and I give it up."

A hearty laugh followed this frank confession, and then a lady who sat by the opposite window turned and said, with a half smile, "And yet, I suppose that if any one were to ask you if your wife has any business ability, you would say no?"

"Well, ma'am, I suppose I should. We men don't generally reckon on a woman's having much business ability; but I'm not sure they haven't got it in spite of us."

Here the conversation drifted into other channels, but it started a train of thought in our own mind and may perhaps do the same for some of our readers.

Do we not all know women, who, with inadequate means at their command, have struggled for years against trials difficulties and obstacles, which, to the more timid, seemed simply appalling? Women who have made home pleasant and attractive to their children; who, by the exercise of qualities which would have made good business men of them, had they been men instead of women, have given these children education and accomplishments.

These women are sagacious; quick to see where their interests lie, and always ready to avail themselves of fortunate circumstances. Upright and conscientious in all their dealings, they are not forgetful of the fact that the world owes them place and station and recognition. Respecting themselves, they are respected by others, and have the confidence of all who know them.

There is an adjective peculiarly American in its significance, and of the widest comprehensiveness which people apply to such women. They are *smart*. A woman who manages her household affairs with such prudence, foresight and economy as to excite the admiration of her neighbors; who is always neat in appearance though she may not possess any fine clothes; who, though a hard worker, finds time to read and thus enlarge the horizon of her otherwise narrow world, is invariably spoken of as a "smart woman."

She is not a business woman because her smartness has never been turned in that direction; but that she has the ability to carry on business, we do not for a moment doubt.

She could not do it at once, of course; any more than a man could do her work put into her place. But she would soon learn.

We are not to be understood as discussing the advisability of women engaging in business affairs which are usually conducted by men. We are simply entering a protest against the remark one hears too frequently, "what are women good for in business?"

FRAMES FOR PLANTS.

In the crowded state of our columns, we may be excused from furnishing minute directions as to the construction of hot-beds and cold-frames, especially as now-a-days this information is given in most of the seed and plant catalogues issued by our seedsmen and nurserymen, with every needed detail. Cold-frames are of much value, and within the reach of all. Dig a square or a rectangular hole in a well-drained part of the garden, a foot deep, and place therein a box made higher behind than in front, or towards the south or southeast. Fill this in with light, rich soil, and sow the seeds. Now a hot-bed differs from a cold-frame in that it rests upon a foot or more of decomposing manure, which generates heat underneath the soil, while the cold-frame receives heat only from the sun's rays. The latter should, therefore, be uncovered in the morning as soon as the sun becomes warm enough upon it, and again covered as soon as it begins to lose its warmth in the afternoon, so that all the heat possible may be retained until the next day. The sides of the frame, which should extend a few inches above the earth about it, sufficiently protect the young plants from strong winds, or a shelter of any kind may be placed on the side whence the wind comes. When the principle of these useful arrangements is understood, a very little ingenuity serves to provide them, and to work them with success.

NOTES.

Respecting the Rural.—In deference to other advertisers, we are obliged this week to omit our advertisement of the Rural "Cricket" Clock, which has created a little *furor* among our friends which we had scarcely anticipated. Quite a number, however, have not quite understood our offer, and we will here endeavor to make it plain. The lowest price of the Rural New-Yorker as is well known, except in clubs, is $2.50 per year; for two subscribers it is $5.00. The retail price of the clock will probably be fixed at $3.00—together making $8.00. Now to anybody sending us two new subscribers and $5.00, we will present the "Cricket" Clock. Or it will be presented to anybody forwarding us one subscription and $3.50, instead of $2.50, as for the Rural alone. We have made arrangements with the express companies by which those preferring to prepay may do so by forwarding us 15 cents.

We are encouraged to believe that those who choose to avail themselves of our offers, will find, ere the year closes, that they will have received a fair equivalent for the price of subscription, without taking into the account the value—whatever that may prove to be—of the Rural itself. At least, we have a very earnest desire to do all we can without actual loss to ourselves.

Grape-Vines.—The advice generally given to those intending to plant Grape-vines is, "Select the Concord, because it thrives almost everywhere." If it is intended to plant but one vine, the advice is good, no doubt; but if more, we advise our friends to select many of the best varieties at present known. It will generally be found that a large proportion will live and bear fruit. The minority that fail can be replaced by others as soon as the failure is ascertained, and the loss will be more than compensated by the pleasure of having many kinds, of different flavor, color, and time of ripening.

The Objection Removed.—Many first-rate authorities advocate the use of whitewash upon fruit trees. Several are convinced that it will prevent and even cure pear-blight. But many object to whitewashing trees because it renders them unsightly. This need not be. A certain quantity of lamp-black and red mineral paint-powder may be mixed with the whitewash, imitating the color of the bark so closely that it is not apparent to the casual observer that the trees have been washed at all.

BREVITIES.

One intuitively begins to think about planting strawberries. The garden without strawberries is a breakfast without coffee.

The Herald would do well to give more attention to our weather reports and less to those of England.

Baked Beets.—Whoever heard of baked beets? It is said the Egyptians use them cooked only in this way. Why not try baked beets?

When Mr. Meehan hears a man remark that the beautifying of homes is only the indulgence of a pride, he sometimes doubts whether such a man is human.

If our income is six cents per day, we should save one cent. That is equivalent to saving one-sixth of our time, which in one year amounts to about sixty days—a solid nest-egg for a rainy day or upon which to start anew.

In answer to many questions—What varieties of strawberries shall I buy?—we answer as for grapes: As many as you can afford to buy, and you will then be enabled another season to answer the question better than any other person can answer for you. We believe that such experiments cost less, generally, than taking the advice of others.

Mr. Hiller, of Lancaster, Co., Pa., stated at the last convention of the Pennsylvania Fruit Growers Society, that of 150 standard pears which he planted twenty years ago, twenty per cent. have perished by blight. Mr. Meehan remarked that he never noticed blight where trees were whitewashed. Mr. Saunders believes whitewashing an absolute remedy.

April is full time in this climate to sow seeds of Asparagus. Thin out the plants to four inches in the rows, reserving only the strongest. Set out one-year-old plants at least one and a half foot deep in sandy, light soil that has been highly enriched. For family use, make plots five or six feet wide, four rows to each, allowing a foot in the row and set the plants six inches or more deep.

There are many who do not greatly relish blackberries. But this need not deter them from raising all they can find room for, since blackberry wine is of much value for medicinal purposes, and its value increases with age. Mr. Parry's recipe for a gallon is: "Add three pounds of sugar to three quarts of blackberries and a little water." The Kittatinny is still the best variety for this if not for every climate where this fruit thrives.

Rural Grounds, March 11.—Yesterday (Sunday) was here a May day. Many plants are breaking into leaf—such as Honeysuckles, Hypericums, Spiræa sorbifolia—and Strawberry plants are pushing through their covering, as if impatient of longer restraint; Grass is green and fresh in sheltered spots; many Maples are in bloom. Horsechestnut buds are swelling and altogether we entertain serious fears that a cold snap, which we can yet scarcely hope to escape, will effect much harm. The thoughtful farmer or horticulturist will, however, avail himself of such opportunities to do everything that can be done to simplify or to promote spring work.

We regret that advertising favors, aggregating more than one hundred lines, are left out of this issue. As it is, we encroach upon the space devoted to reading matter to an extent that urges us also to apologize to our readers. However, we may truthfully say to these last that our advertising columns this issue will prove most interesting reading. In them will be found answers to scores of questions that are sent us weekly for insertion in our question and answer columns. We are gratified to be able to present the announcements of most of the representative manufacturers of the country who cater to the special wants of the class that mainly compose our circulation. We think there will be a reciprocity of gain, if advertisers and readers come together.

Competition is a good thing if it makes business men more active and reduces the cost of the necessities of life. There is much that is suggestive in the old adage that "a nimble sixpence is better than a slow shilling." When competition takes the shape of overdoing business, and on the principle that all must live, exhorbitant charges are imposed to make up for limited sales, then the sooner competition which creates such a condition in business, is lessened, the better. A benevolent physician says that gratuitious visits to the poor are often for naught because they cannot afford to buy the medicines he prescribes on account of the excessive rates charged. Are there not too many druggists?

Nature's Darlings?—As in the moral so in the physical world, seeds beneficial to our race, have, as a rule, to be carefully protected from injury and destruction, while those inimical to humanity, disregarded by man, seem to have become the special proteges of Nature. A forcible illustration of their extraordinary vitality has lately been afforded by experiments made by Dr. Klien, President of the Kingsberg Versuch Station, on the waste matter from oil cake. One sample of rape-cake he examined contained seeds of weeds to the number of 2,250,000 in a cwt. These had passed through the process of manufacture without having been in any way crushed or having had their germinative powers destroyed, and, moreover, the Doctor detected them uninjured in the dung of cattle fed upon the cake. Are not weeds then Nature's darlings?

Literary Miscellany.

IF I SHOULD DIE TO-NIGHT.

If I should die to-night,
My friends would look upon my quiet face
Before they laid it in its final resting-place,
And deem that death had left it almost fair;
And laying snow-white flowers against my hair,
Would smooth it down with tearful tenderness,
And fold my hands with lingering caress;
Poor hands, so empty and so cold to-night.

If I should die to-night,
My friends would call to mind, with loving thought,
Some kindly deed the icy hand had wrought;
Some gentle words the frozen lips had said;
Errands upon which the willing feet had sped;
The memory of my selfishness and pride,
My hasty words would all be put aside,
And so I should be loved and mourned to-night.

If I should die to-night,
Even hearts estranged would turn once more to me,
Recalling other days remorsefully;
The eye that chilled me with averted glance,
Would look upon me as of yore, perchance,
And soften in the old familiar way.
For who could war with dumb, unconscious clay?
So I might rest forgiven of all to-night.

O friends, I pray to-night,
Keep not your kisses for my dead, cold brow—
The way is lonely, let me feel them now.
Think gently of me; I am travel-worn;
My faltering feet are pierced with many a thorn.
Forgive, O hearts estranged; forgive, I plead!
When dreamless rest is mine, I shall not need
The tenderness for which I long to-night.

[*Exchange.*

CORA.

Harold was watching closely, but he was none the wiser for his scrutiny. Cora's manner was perfectly natural; the Viscount's showed simply the courtesy of perfect high breeding, without a touch of any deeper feeling. Harold was beginning to breathe more freely; Marianna had been mistaken after all.

They went back to the drawing-room, and the conversation which the young nobleman's ease of manner and knowledge of the world rendered so pleasant, went on uninterruptedly over the coffee. Then there was some music, Cora sang, and Lord Almare joined her at the piano. When the song was ended his lordship turned away from the piano with a stifled sigh.

"I am afraid this must the last of our pleasant evenings," he said, in a regretful tone. "I have trespassed on your hospitality too long already, Sinclair, and I am so well now, that I have not the shadow of an excuse for remaining any longer."

Harold murmured a few words of polite commonplace regrets.

"It has been a very pleasant three weeks," went on Lord Almane. "And I am inclined to be very grateful for Sultan's stumble, which gave me the pleasure of your friendship."

"You are very good," Harold said, a little coldly.

There was a silence then, which Harold was the first to break.

"You have given us the name of friends," he said, smiling. "Do we possess enough of the privilege of friends to congratulate your lordship?"

"On my recovery? Please don't; I, at least, think it a matter of regret," replied the Viscount's languid tones.

"We should do so doubly," answered Harold, courteously. "No, Lord Almane, it is not on your recovery that I congratulate you."

"On what, then?"

Lord Almane flushed a little as he put the last question, and he lifted his head with a slight gesture of surprise. Cora, with her little fingers still lingering on the keys, turned suddenly round from the piano, and glanced from one to the other.

Harold did not glance at her; but he guessed the movement, and the expression of wistful wonder and curiosity in her dark eyes.

"On your approaching marriage," replied Harold, bowing slightly. "You will not think me presuming, Lord Almane."

"Certainly not," replied the Viscount, smiling a little, while an expression of bitter annoyance passed over his handsome face. "But that auspicious event has been public so long now, that the shower of congratulations which assailed me at the time has long ceased to fall. It is not possible that you are only now aware of it?" he went on, questioningly.

"It came to my knowledge this afternoon only," answered Harold, quietly, dreading to look at his sister lest he should see the confirmation of his fears upon her face, but almost unable to refrain from doing so: "therefore, if my congratulations are tardy, they are none the less sincere, Lord Almane."

"You are very good," his lordship said, a trifle haughtily. "Will you give us something else, Miss Sinclair, if you are not tired?"

Cora had listened to the short dialogue as one in a dream. At first she fancied her ears had deceived her; but when the reality forced itself upon her, there came a sudden, sharp pang of agony, under which her face paled and her hands shook. But one moment brought pride to her help, and inexperienced as she was, and unused to control her feelings, she knew that the wound must be concealed and hidden from all eyes, most of all from the eyes of the man who had deceived her.

She did not speak, however—she dared not trust her voice to do that—but she turned to the piano again, and played a mad waltz with as much *entrain* as though she were in her wildest spirits.

"Does not that make you want a waltz, Hal?" she said, as she finished, and whirled herself round, with crimson cheeks and glittering eyes. "Should you not like one?"

"I almost think I should, little sister," said Harold, laughing, and feeling quite relieved from his anxiety about her.

Lord Almane, from his arm-chair, noted the radiant face, and understood it more correctly. He sat in utter silence without altering his position for some minutes, but as Harold took his sister's place at the piano he rose, and moved first to a window, then to Cora's side, as she sat in a low chair at some distance from the piano.

As he drew near the girl lifted her eyes to his, full of an unspoken passion and reproach.

"Do not condemn me unheard," he murmured, bending over her for a moment. "Cora, let me plead my cause with you. I cannot let you think me as guilty as I appear. Nay, I will speak. I have a right, and you must give me the opportunity."

"Must!" she answered, haughtily, rising and moving away with a queen-like gesture of offended dignity, which, while it made Lord Almane smile, increased the passion her beauty had excited.

"Yes, must," he answered, in low, impressive tones, under cover of Harold's chords, which were quite *fortissimo*. "My love for you gives me the right to insist."

Her lip curled, but the little hands were beginning to tremble. Cora's pride was failing her; and Lord Almane, seeing his advantage, pursued it.

"I claim the right," he said. "You must hear me, Cora," and his voice sank to the lowest whisper. "I love you! If I loved you less I would not stoop to plead, but loving you as I do I must justify myself. I cannot let you think of me with contempt. Cora you will hear me?"

The pleading, impassioned tones thrilled the girl, and her pride gave way.

"When? Now?" she faltered.

"Meet me to-night under the elm at the end of the garden. There is no danger of discovery," he said eagerly. Then, seeing her hesitation, he went on: "I shall have no opportunity of seeing you alone otherwise. Cora, do not be hard."

Cora hesitated; her heart urged her to accede to his request, but her loyalty to Harold made her refuse.

"No," she said, quietly; "I will not come."

He turned from her then, not with any reproach or anger, but an intense sorrow and reproach on his face, and a look in his eyes which went to her heart, so grieved and pained and yet so loving.

He went back to his seat and sat in silence, resting his head on his hands in an attitude of dejection and weariness which made Harold, as he rose from the piano, ask if his arm were painful.

"Thank you, no," replied the Viscount. "What makes you think so?"

"Your face," answered Harold, with a smile which Lord Almane returned.

"I've been a little bothered about some news from town," he said. "One cannot be exempt from trouble here below, Sinclair."

"If anyone might expect to be, you might I should think," Harold remarked, laughingly.

"You judge by appearances," answered the Viscount, half sadly. "You are strangely mistaken."

He rose as he spoke and they separated for the night; but as he held Cora's hand for a moment in his, she said, quickly, in a low tone:

"I will come."

A flash of joy lighted the handsome, weary face.

"Midnight, under the elm," he whispered, and then he released her hand, and held his own out to Harold as cordially and as heartily as though he were not trying to rob him of his greatest treasure.

It was a still, calm night, cold as most spring nights are in England, with a deep blue starlit sky overhead, a fitting vault for the solemn stillness which reigned around.

Lord Almane was pacing up and down with slow, noiseless steps, waiting for Cora, and as the half hour after midnight chimed from the neighboring church tower, he began to fear that she would not come.

"She will not come," he said; "she does not trust me fully; she will not come, and I am an idiot to care. I wonder what there is about this girl which fascinates me so strangely. I almost think I love her a little!" and then he laughed mockingly, but with an uneasy consciousness that he was not quite so indifferent as to Cora's feelings towards him as he had been on any previous similar occasion.

"She is very beautiful, he mused, "but not more so than Helen St. Maur, or that little coquette, Elise de L'Estang; and I never doubted or cared about them. What fascination can this girl exercise over me? I think I care more for winning her than I have ever done before in my life for anything. I wish she were in a different position; she would make a charming Viscountess Almane."

He smiled as he pictured to himself Cora in stately, shimmering robes, presiding at his table, with that fresh vivacity and charm of hers, or receiving his guests with that simple high-bred courtesy and grace of manner which distinguished both her and Harold.

"She would be as beautiful as a fairy queen in my mother's diamonds," he thought, as his eyes brightened and softened into tenderness over the fair picture; and he sighed a little, as he added to himself, "I wish I could afford the luxury of a penniless wife. I almost think I should commit myself."

A soft, swift footfall sounded near him; he turned quickly, and saw Cora coming rapidly towards him. He went forward a few steps to meet her, and taking her hands in his, he led her tenderly to the rustic seat under the elm tree, and gently made her sit down.

The girl's face was very white; her eyes were glittering with fear and excitement, and he felt the little hands in his tremble.

"My poor little love," he said, with an exquisite tenderness of intonation, which soothed the excited girl. "How can I thank you?"

"I am so frightened," she whispered, as she clung to him. "It is so wrong—so wicked, to deceive Harold thus."

"Nay, do not tremble my dearest, you are safe now," he said soothingly.

For a moment she sat thus, resting against him, and suffering him to hold her hands, as he murmured his tender words; then remembering she withdrew her hands, and raised herself from her reclining posture, calm and quiet, waiting for his explanation.

The Viscount sighed heavily as he saw her movement.

"You do not trust me, Cora," he said, sadly "Well, it may be that I have deserved that mistrust at your hands. You will say that I have deceived you. It may be so, but my child, I did not do it wilfully. You must remember that the fact of my engagement is so generally known, that I did not suppose for a moment that you were unaware of it."

"I am sorry you thought so basely of me," broke in Cora, passionately.

"Basely of you," he repeated. "Heaven knows how I have thought of you, my child; with what reverence and with what love."

"If it be so;" she answered, simply, "why did you deceive me so cruelly? Why did you let me love you, let me think you loved me when you were bound to another? Why did you pretend——"

"Hush!" he said passionately. "Child, you don't know your power,—your beauty—or you would not speak thus. How could I help loving you?"

Cora laughed bitterly and scornfully.

"It was easy to deceive me," she said. "I trusted you."

"Cora," he said, in the same tone of passionate pain, "you are cruel; do not add to the misery I am enduring by your reproaches."

She was silenced. The Viscount's histrionic powers were of the highest order, and he was sufficiently in earnest now to act well. He paced up and down the green sward for a minute or two, and then resumed his seat by her side.

"Do not let me waste these few precious moments," he said, sadly. "I want you to understand that if I make you suffer, Cora, I suffer ten times more, and that I would give my life to save you one pang. Was it possible not to love you when I saw you first, and you clung to me helpless, in the crowd? Was it possible, I say, when I came to know you better, to resist my heart's first impulse towards you? Although I knew, but too well, that my love must bring me misery and suffering, I loved you from the first moment I saw you. I loved you as my life."

He half turned away from her, and bowed his head upon his hand.

Cora was trembling. The momentary anger had passed away. She was a woman and young. She loved him, too, with the first passionate infatuation of her hitherto untouched heart. She turned to him gently, and put her little unsteady hand on his.

CHAPTER VI.

LORD ALMANE'S STORY.

For a few moments neither Lord Almane nor Cora moved nor spoke; then he turned to her, and caught her hands in his, pressing them passionately to his lips and brow.

"Let me tell you all," he said, in a hoarse, broken voice. "You will pity and forgive me then."

Sitting thus with her hands held in his, the passionate dark eyes fixed on her face, Cora listened.

"You thought very hardly of me this evening, Cora," he began, "when your brother congratulated me on my engagement—when he congratulated me on that which hangs like a millstone about my neck, and puts away from me all that would make life bright and precious. You may say that I am a free agent—that no one could hurry or force me into an engagement against my wish; but, my child, there are circumstances sometimes, which bind one closer than chains, under which a man is no more free to follow his own wishes than the captive in his dungeon. It was under such circumstances as these that my engagement was contracted. Lucie Belmont is my cousin, her mother and mine were sisters, and I have known and been intimate with her from her childhood and my early manhood. She is an orphan, and was brought up at Almane Park by my mother, whose dearest wish was that Lucie and I should be joined in a nearer, closer tie than that of cousinship. Still, it rarely happens that one falls in love with a girl one has known as intimately as I have known Lucie. I always looked upon her as a sister, and cared for her as such, with the quiet fraternal affection which never deepens into any warm feeling, which could never possess the warmth and passion of the love I feel for you, my beautiful darling. Nay, don't turn away; listen yet a little while, dear child.

"My father died," resumed the Viscount, after a pause, "while I was a little child. My mother, my dear mother, left me when I was nineteen and Lucie about ten. After her death Lucie went to reside with some connections of her father's and I went abroad. When I returned, after a long absence, I found that the girl I had left a child had blossomed into a woman, fair enough and gentle. The old intimacy was renewed between us. Lucie was presented three years ago, and since we have met often in the world, and have been intimate as brother and sister might be. Sometimes I wondered why my cousin did not marry; but last winter the reason for her persistent refusals became known to me. She seemed ill and unhappy, and any questioning on my part only elicited a passion of tears, and an avoidance which I was at a loss to account for. I found out the reason almost too soon. Cora, can you guess the rest?"

Cora's eyes were very soft and pitiful now. All the angry fire had died away, quenched in the dew of the large tears which welled up into the sweet eyes, and fell heavily on his hand as it clasped hers.

"Have you guessed it, my darling?" he went on softly. "Are you sorry for her, or for me? Ah! my child, I want that pity most, although I never knew that I should need it as I do now. One day her aunt, Lady Marlyn sent for me, and told me that my cousin loved me—that her only chance of recovery of health and spirits depended upon me, upon my love. Ah! Cora, had I known then, I think the sacrifice would have been too great, beyond my strength. But I was fond of the poor child. I pitied her—I cared for no one else—and I yielded—yielded, to find myself bound when I would be free—yielded, to find that I had put out of my reach all happiness and peace of mind, that I had given up the freedom in which I rejoiced, and obtained nothing in exchange. Nothing," he ended, passionately—"nothing but misery and unrest."

He dropped Cora's hands, and, turning from her, rose and moved away a few paces; then, turning to her side, he went on again:

"Am I forgiven, Cora," he said, pleadingly. "The temptation was so strong, how could I do aught but yield? You were so beautiful and so gentle how could I do aught but love you? I was an idiot—mad, if you will—to risk the danger, to play with edged tools. I was mad, but I suffer. I wish I alone could suffer, and yet I am selfish enough to be glad you care a little."

A little! when the girlish frame was shaken with a storm of sobs. He caught her in his arms, and with increased earnestness went on:

"Ah! child, you are so young; you will forget—you will be happy again; but I, with naught to look forward to in the future, cannot hope to do so. I shall hear of you, happy, beloved, and loving, united to a man who will care for you—ah! not more than I should have done—and I shall think 'she is happy, she has forgotten,' while I—"

She had bowed her head upon his shoulder, and was sobbing passionately. Stanley St. Roger felt the perfumed breath upon his cheek, the clinging clasp of the little burning hands, as he held her within his arm; and he knew that she was suffering, but he had no pity. He must keep the love he had won—the heart he had touched must be his. At whatever cost to her, his selfish passion should be gratified, and for that purpose they must part now, since parting was unavoidable—must part friends, with the fascination still upon her, with the spell of his beauty, of his eloquence, of his singular charm of manner, yet unbroken.

Holding her to his breast, he soothed the passionate emotion with tender, murmuring words, spoken in the low, sweet voice which was so pleasant to her. For a few moments she stood thus, yielding to the magic of his touch.

"Am I forgiven?" he whispered then. "Have you forgiven me, Cora?"

She withdrew herself slowly from his arms, calmer now, and struggling to regain her composure.

"There can be no talk of forgiveness between us," she said, gently. "Let us try rather to forget. She loves you, and you are bound to her. Make her happy, and happiness will come to yourself in the effort. Let us forget all that has passed, and should we meet again, let it be as friends."

"I could not meet you as a friend," he said, passionately.

"Then we must never meet again," was the low reply. "Let it be farewell now, Lord Almane, and remember that you have no friend who wishes for your happiness more than I do."

"Are you going thus?" he said, as he sank upon one knee at her feet and held her hands in his.

"Lord Almane," answered the girl, steadily, although she was trembling, "if, in the past, when I allowed you to speak words of love to me I erred, it was in ignorance. Now, were I to do so, knowing the ties which bind you to another, I should be indeed to blame. For any wrong I have done, I am expiating bitterly now," she went on, with a caught breath. "It is hardly my place to blame you for any suffering you have made me endure. I do not, Stanley, I do not. I deserved it all; but, at least, let it be the guilty alone who suffer, not the innocent girl to whom you are engaged."

"Is all your thought for her?" he said, bitterly and reproachfully, still holding her hands which struggled to free themselves from his grasp. "All your pity for Lucie? Do you not think I suffer, Cora?"

"What can I do?" she answered brokenly "Stanley, be generous; do not tempt me too far. Ah! you are using your power cruelly now. Let me go I say," she continued, with a sudden pas-

sion. "I am already despicable enough; do not render me more so."

She wrenched her hands from him with a sudden, violent effort, and then, swiftly and lightly as a startled fawn, she fled up the little garden-path, and he was alone.

Lord Almane rose from his kneeling posture with mingled feelings. He had never cared for Cora as much as when, in her wounded pride and love, she had turned upon him with bitter reproach, and had upbraided him for his betrayal of her trust. He knew now that no woman had ever touched his heart as this girl had done, and that he desired to retain her love with a fierce desire he had never felt before. His career as a lady-killer had been a very successful one; he could look back on many a heart lightly won and lightly lost; on many a high-born, dainty lady-love whose smiles he had basked in for a time, until he wearied of the petty game and turned to fresher sport. The last ten years were hardly pleasant ones to look upon.

He had entered upon life the possessor of a noble unsullied name and a great fortune, the latter of which was seriously impaired; to the former, if he had not disgraced it he had added no luster. For a moment he almost wished he could recall the past, with its faults and follies, and win back the years of reckless expenditure which had rendered his marriage with a rich wife imperatively necessary for the preservation of the estate which had descended to him clear and free from debt.

The story he had told Cora with such pathetic earnestness was but a partly true one. George Lecson's words were more correct; he had "wooed and won his cousin, and she was one of the richest heiresses of the day." But she was as he had said, fair and gentle, and had loved him, poor child, with a tenacity and ardor which would have perhaps wounded her to death, had she not deemed her love requited.

As he went slowly back towards the house up the narrow path over which Cora's little feet had fled so rapidly, he thought over all these things, and the retrospect was hardly a satisfactory one.

A light touch on his arm made him start from his reverie, and looking up hastily, he perceived a dark figure at his side, which the semi-darkness prevented him for a moment from recognizing.

—To be continued.

MY PORTER'S DAUGHTER.

"*Bon jour, madame;* any letters for me today?" asked my friend Jules of the porter's wife, as we descended from the three rooms and kitchen we occupied, and were wont to call our *appartments*. It is true they were *au sixieme*, but *n'importe;* they were light and airy, and from the windows a beautiful vista of house-tops and chimney-pots, with the Pantheon and the pavilions of the Louvre, met our gaze. "Any letters?" repeated Jules, as Madame Jacques, the portress, replied to his salutation.

The good dame smoothed down her apron, adjusted her cap, and having assumed an air of profound woe and commiseration, produced a letter, deeply edged with black.

"Ah, I fear monsieur will have bad news," said the little woman, "for I am sure such letters always tell of some one's death."

Jules took the letter, and was soon deeply engaged in reading its contents.

"Read it, *mon ami*, and tell me shall I laugh or weep," said he, having read the letter, and handing it to me.

"My dear aunt," he resumed, "peace be with her, whom I have not seen for ten years, has died, therefore should I weep; but she has left me ten thousand francs a year. Therefore I shall neither weep nor laugh; so we will dine at the '*Trois Freres*,' and drink to my good aunt's rest in their famed Burgundy, for it was her favorite wine, and——"

"Good morning, mamma; how delighted I am to see you," cried a sweet voice at the door of the lodge, and in another minute the speaker was in the arms of Madame Jacques.

"My dear child is it you?" exclaimed madame; "well, well, who would have thought of seeing you back so soon! It is my little Marie, messieurs," said the portress, her little eyes twinkling with pleasure in answer to our mute inquiries.

Marie turned, and, bestowing on us a roguish glance, made us a profound bow.

"Come, come, Jules," said I, grasping his arm, for he stood rooted to the spot, gazing at the blushing Marie, "come, *mon ami*, I long to taste the Burgundy," said I, fairly pulling him to the door. "Good morning, ladies," I added, and we were on our way down the street.

"I verily believe you have fallen in love," I continued. "Come, old fellow, it won't do for Jules de Quenille, with ten thousand francs a year, to fall in love with a porter's daughter. But Marie is handsome. Did you notice the bewitching eyes she had?—and such teeth! and as for her hands, they were as small and white as those of a duchess. I am sure she has a fine foot and ankle, for her figure is perfect. But I forgot to congratulate you on your good fortune, Jules. Why, what is the matter? You are in the clouds, *mon cher*."

"No, no, not in the clouds," said Jules. "I "I was thinking, that is—yes—I was thinking of my poor aunt. But Mademoiselle Marie is beautiful; you are right; it is a pity she is a porter's daughter."

Having honored the memory of the deceased aunt in a glass of Burgundy, we drank to Marie, and we spoke of Marie, and Marie it was for the whole evening. Even the *petit vert* with our *cafe* was emptied in Marie's honor.

Alas, my poor friend! I saw he was badly off when, for the twentieth time, the next morning he descended the six *etages* to see if there were any letters; but Marie was not there, and madame was out, so Monsieur Jacques kept house, and Jules' pride would not permit him to ask the old porter concerning her. He was proud, was my friend Jules; of a good family in the provinces, he had been brought up to regard good birth as one of the essentials which a wife must possess. It is thus with all Frenchmen; notwithstanding the many democratic principles they possess, pride of family is with them as striking as it was under Louis XVI. Though in the ordinary intercourse of life they forget or lose sight of these principles, yet when the question of marriage is discussed they revive in all their pristine force.

"Yes, *mon ami*," said Jules, laying aside his pipe, and smoothing his luxuriant moustache and beard, "now that I am a rich man I feel it a duty I owe my family to marry. But my wife must be of good family; and Marie is not. I know what you would say; you Americans, when you fall in love, forget all social distinction, but we French have more firmness, and can conquer our feelings. We marry for our family, and we grow old and feel happy that we have done a good action; this is true greatness. You Americans cannot comprehend it."

"Then you'll forget Marie," said I, "and won't see her any more?"

"But I will see her again," he replied, "and only to speak to her, that I may forget my unfortunate *penchant;* for you know an illiterate woman disgusts me, and I am sure she is without education."

An hour afterwards as I passed the porter's lodge on my way to the post-office I saw my friend engaged in an animated conversation with Marie.

"Are you disgusted with her, Jules?" I asked on my return that evening.

"I am more in love than ever," he replied; "she is as well-informed and accomplished as she is beautiful; but what would my father say?—she is but a porter's daughter."

"An," thought I," he thinks of what his father would say; assuredly she has gained one point: she has conquered his own pride."

Thus the week passed. Marie was only to be seen in the afternoon; she dressed in a style much above her station, I thought, but she was such a perfect lady that one lost sight of this apparent incongruity. My friend was perfectly enraptured; he spoke and thought of nothing but Marie. The merits of my own sweet little betrothed were quite eclipsed, or rather never mentioned, for when at times I would endeavor to speak of Lizzie I was interrupted and bored with the name of Marie. I could not blame my friend nor be angry with him, for heretofore Lizzie's name and merits had formed the staple of our evening's conversation.

One evening we returned home earlier than usual, and were surprised to hear the sound of a female voice singing in our rooms. We stopped and listened at the door. It was a love song from the opera of the *Pre aux Cleres*, a favorite of my friend's.

How beautifully she sang!—with what style and execution! She was a finished artiste. We stopped at the door until the last note had died away and was succeeded by a lively *valse*. Then we entered.

"It is impossible! It can't be!" cried Jules.

But it was Marie, who, rising from the piano as we entered, stood suffused with blushes.

"I beg your pardon, gentlemen, for my presumption in entering your rooms," she said; "but madame was here arranging them, and I came up to keep her company."

Madame's head, with her twinkling, mischievous little eyes, just then peered forth from the adjoining room, as if in proof of Marie's statement.

"No presumption whatever, mademoiselle; it is an honor," said Jules. "But I beg you will once more sing my favorite song."

The sun had long since cast its last rays on Montmarte, and madame had a dozen times risen to go, and still Jules and Marie were at the piano. My friend was an accomplished performer on the piano, and an enthusiastic admirer of music. They sang duets and solos without number, and when at last Madame Jacques said she must go, it was with regret they parted.

The morrow was Sunday; we slept longer than usual on that day, and ten o'clock had sounded from a neighboring steeple when Madame Jacques entered the room with two letters, one for Jules and one for me. Mine was from Lizzie; she was educated in France, and she told me that she intended paying a visit to an old school-fellow of hers, Mademoiselle Ernond, who resided at the Chateau de Beauville, near Rouen; and, further, that she expected me to pay her an early visit there. I could bring my "double," thus she called my friend, with me. I jumped out of bed, delighted at the prospect of seeing Lizzie so soon, and hurried into Jules's chamber. I found him intently occupied with a little rose-colored billet.

"What, a *billet-doux!*" said I. "Pray who thus honors you, Monsieur Jules?"

He handed me the note; the writing was delicate and ladylike.

"Monsieur," thus it ran, "I have to thank you much for the honor and pleasure you have afforded me by your pleasant society. I leave Paris this morning, and have no time to bid you adieu. Receive, therefore, monsieur, my best wishes, and believe me, with respect,

"MARIE."

"Well, it is bad news, *mon ami*," said I; "but if you love her, you must find out from madame where she is gone, and follow her."

"Ah, madame won't tell me her address,' replied Jules. "She says Marie has forbidden her to do so. She says she is gone to join the family with whom she resides in Normandy."

"But this is superb!" I exclaimed. "Read what Lizzie says. We will be off on Thursday morning, and having seen Lizzie, I will tell her of your love affair, and I am sure she will aid you, for a woman's wit is sharper than man's."

Thursday evening found us located in the hall of the Chateau de Beauville. The first raptures of my Lizzie were over, and we were seated near the fire which burned in the huge chimney. Jules was occupied with Lizzie's friend, Mademoiselle Ernond, while the rest of the family were variously engaged in other parts of the chateau.

I had determined to speak to Lizzie of Jules' love affair at the earliest opportunity, and this opportunity now presented itself. How her eyes sparkled while I narrated the story and described Marie! I thought she was amused at the idea of the struggles between pride and love that my friend had undergone.

I had scarce finished speaking when Mademoiselle Ernond rang; and when the servant appeared, she desired him to ask Maria to come to her.

"She is my companion," she said, smiling, to Jules; "a very beautiful and interesting girl, I assure you; but unfortunately, she is only a porter's daughter."

What! could we have thus fortunately found Marie without a day's search? Yes, sure enough, the door opened and there stood Marie.

Demure and humble enough was her greeting to us, but her eyes sparkled with an irrepressible fire that strangely affected me; I could not comprehend her. As lady's companion, she occupied a seat at table, and I noticed the servants treated her with marked respect.

I need not say with what rapidity the week allotted for our stay had nearly passed. On all possible occasions Jules was the attendant of Marie, and he did not escape the jests and laughter of the company on this account; but he bore them with extraordinary meekness and coolness for one so proud and hot-blooded as I knew him to be.

One day Lizzie and I were seated in an arbor in the garden; she had consented to fix on an early day for our wedding, and we were discussing our marriage arrangements, when suddenly we heard footsteps approaching, and Jules say, "Nay, Marie, believe me, I love you truly and dearly; can you return my love, and be my wife?"

"Can you then really sacrifice your principles, and brave your father's displeasure, by marrying a porter's daughter?" she asked.

"Trust me Marie, my false pride is all gone," he replied. "I love you devotedly, and ask you to be my wife."

The answer I could not hear for they had passed on toward the chateau.

"Well, Jules, I involuntarily heard your declaration of love to-day," said I, when the family had retired for the night. "What answer did you receive?"

"Congratulate me, my friend," he replied. "She loves me—she told me so; but she could give no positive answer about the marriage, she said; she must speak to her friends first—it is a duty she owes them."

The next morning at breakfast the unpleasing intelligence was given us that Marie had left the chateau, and left nothing to tell her whereabouts, or her reasons for doing so.

Mademoiselle Ernond appeared rather offended, but forgot her ill-humor when she was told that her cousin, Mademoiselle de Beauville, had just arrived.

The sadness which had seized poor Jules when he heard of Marie's departure was noticed by all, and there was many a laugh at his expense, when the door opened, and Mademoiselle de Beauville was announced. Could it be possible? Why, the lady who entered was certainly Marie.

"Jules, Jules," I cried involuntarily to my friend, who had forgotten his accustomed politeness, or did not hear the lady announced, for he remained at the table without turning, "Jules, is not this Marie?"

Before he could rise from his chair she stood before him, and gave him her hand. "I have spoken to my friends," she said, "and they are satisfied, Jules; therefore I will be your wife."

In an instant she was in his arms, closely clasped to his heart.

"But they announced Marie as Mademoiselle de Beauville," I said to Lizzie.

"Yes, it is true, Monsieur," cried Marie, freeing herself from Jules' embrace. "I am the heiress de Beauville, and not the porter's daughter."

"How could you impose on our credulity in such a manner?" I asked.

"Madame Jacques is my foster-mother," she replied, "and she calls me her daughter. When I met you it was an accident, and madame having called me her child, I determined to allow you to retain the belief that such was the case, for I felt interested in Jules, and soon found he loved me; and having discovered that you were the lover of my old friend Lizzie, I made a plan to meet you here and give Jules a trial to test his affection for me, for I have learned from Lizzie to wish for a husband that would love me for myself."

She hid her blushing face in Jules' bosom for a moment, and then asked, "Have you nothing to say, Jules? You won't be angry with me for the deception I have practiced, will you?"

"No, no Marie, I am too happy," he replied. "I only ask that Lizzie's bridal day may be also ours."

And thus it was settled. Jules and I are now both happy husbands; and when the late war broke out, Jules and his wife came to reside near us in New York.

J. P.

WASHINGTON LETTER.

MARY GAY ROBINSON.

Southern Orators—Society Pleasures—Distinguished New Yorkers.

WASHINGTON, D. C., March 1, 1878.

A GREAT day at the Capitol has just passed—the climax of the Silver Bill. The first interest centered in the House; its floor, galleries, and doorways were black with the crowd; a third of them could neither hear nor see, but they could say "we were there," and people go far to do that. The PRESIDENT'S veto was read. A silence like the grave fell over all the House, then they took up the bill, voted, and passed it by a large majority over the PRESIDENT'S head. When it was announced there was applause, stamping, and rapping such as I do not remember having heard before.

The galleries at once thinned out; members of the House left; business was resumed, but no one seemed inclined to heed it except the few who had speeches to make and those who came to hear them. There is no Congressman without his line of followers who will always be on hand to listen to his speeches, and applaud at the right moment.

J. N. WILLIAMS of Alabama, made a good plea for resuming the pension of the soldiers of the Mexican war. He read his plea and had all the discomfort of the going out of those who followed the Silver Bill over to the Senate where it was taken up almost immediately. If a man can talk well with inattentive listeners, he has a rare gift; but our Southern friends are invariably noted for their eloquence;—speech-making is their glory. Honorable ALEXANDER H. STEVENS can make the House pause in one of its noisiest performances, so strong is the hold of his mind and his infirmity upon the other members. He looks almost like a dead man, pale and wan as he works his three-wheeled chair up and down—sits with his hat and glasses on, while often congressmen stoop down to talk with him.

Hon. CHARLES O. HOOKER, of Mississippi next spoke for the Pension Bill. He has but one arm, the other was lost in the Confederate service.

He too is a born orator; the right arm is all-sufficient for his expressive gestures, his large, broad face flushes with intense excitement, a white moustache and black hair make him conspicuous and easily remembered. In spite of thinned floor and galleries, he is complimented by the silence of all who are present. It is a great success when a man speaks so people will stop to listen; he has then half-gained his cause.

Leaving the Representatives speaking on the Pension Bill, we find the Senate in its more dignified and solemn way repeating the scene just passed in the House. Every spot in the smaller hall of the Senate is filled. SENATOR CONKLING has a party of ladies in the diplomatic gallery which is usually empty and blue, for foreign diplomats care little about our Congressional doings and are seldom there, and the rule is their gallery must not admit any one else. The Representatives we missed from the House, are all here. Long sofas from side rooms have been brought in and when the ayes and nays are taken every man is watched to see how he votes. They are pretty surely pitted South and West against North and East. When the Silver Bill is passed one rejoices while another side groans. The amendment which is some panacea to those who opposed the bill is spoken of by the other side, as an act which future legislation can annul. The country has been tipping over into an abyss so long and has not gone clean over, we begin to believe it will weather all storms.

From the strife of Congress we turn to the glare and glitter of society which now flames up with its last brilliant efforts. This week witnesses the last receptions in many high quarters. Cabinet day, K Street, was gay with equipages; beautiful ladies in charming costumes dazzled the eye and the ladies of the Elliott and Riggs Houses also held their final levees. Many fashionable people go to Paris next month and use the intervening time to visit home, East, West or South.

The President's last evening reception was very brilliant. The Cabinet officers were all present, also Senator DAWES of Massachusetts and Senator BURNSIDE. Mrs. HAYES with her lady friends, are pronounced by all very agreeable. Mrs. HAYES wore white silk plain, with velvet and silk striped fringe, lace, folds and plaitings richly trimming it. Secretary EVARTS walks as quietly and self-consciously about in a Presidential levee as if he were walking through a crowd on Broadway. He takes no note of anybody, seems busy looking at his thoughts and revolving them over and over. He is as emaciated as ever, and one would scarce believe that he lived in the midst of plenty. The thin, wiry people are reckoned among workers, and the angular Secretary is supposed to be the personification of industry, but overwrought energy is not the best. His physician ought to prescribe more play and less work, or he will never see a mellow old age.

Mr. BIERSTADT, the artist, is visiting at the White House. On sunny afternoons we see the HAYES family and their distinguished guest riding out through the pleasant suburbs, and at receptions the artist is an honored friend, pronounced by all a very handsome man. Among foreigners, one of the most curious physiognomies is that of a gentleman who is stepson of Pere HYACINTHE—one of those German-French faces of intense homeliness which you have to learn to like, as we like bitter when opposed to too much sweet.

We took for a study the other day the face of a beautiful society belle. The first thought is, "How exquisite! A joy forever!" Then you are a little weary and at last turn away, as you would from a repast on sugar. The plain people may rejoice, for they are as necessary to the attractiveness of a company as the beautiful. It is a comfort to meet the "nobodies." They are so simple, unaffected, and demand no admiration or attention at your hands.

The evening receptions at Secretary EVARTS' have been very enjoyable. The last took place on Thursday evening. The whole house was thrown open, and all the world was there. The ladies' toilettes, however wonderful they were, at first had small chance of display, for the crowd; but Mr. EVARTS himself never looked so well as when playing the part of generous host. His face was smiling and happy, rejoicing to give so much pleasure. Speaker RANDALL and wife were the center of attraction in one part of the room; in another, Mr. and Mrs. YOSHIDA, the Japanese Minister and his pretty wife, Secretary CARL SCHURZ and his interesting daughters; while Mrs. EVARTS and her daughters were always the agreeable hostesses. There are a few parties still to come, but none can be more pleasant than this one has been.

SEAL-SKIN FUR.—In killing the seals much care is used. The instrument of destruction is a long club of hard wood, with which the animals are struck a violent blow on the head. One is usually sufficient. A long, sharp knife is then thrust into the vitals, and the carcass laid aside; and so on until about one thousand have been slain, when the work of skinning commences. When taken off, the skins are salted, and sent home in that condition. On arrival here they are properly cured; and then comes the preparation needed for their conversion into what is popularly called "seal-skin." It is difficult to conceive how that beautiful article of dress can ever be manufactured out of the very unattractive object the skin presents at this juncture. It is as hard and unyielding as a board, and the stiff, coarse hairs cover the fur so completely that its very existence might be unsuspected. How to separate the fur is a problem. For many years each individual hair was plucked out separately, at, of course, a vast expenditure of time and money, until a lucky accident revealed to the dressers that the roots of the hair were more deeply seated than those of the fur. Now, therefore, after the preliminary preparation, the skins are laid hair downwards upon a wooden block with a curved surface, and pared down with a knife until the roots of the hairs have been cut through, and the skin is very little thicker than a kid-glove. All the coarser hair can then be brushed off with the hand, leaving the fur, which is then seen to be arranged in small curls, of a light-brown color, varying slightly in shade in the different parts. In consequence, nearly all "seal-skin" is dyed before it is sold, and in the process of dyeing the curls untwist themselves, and the fur becomes smooth and ready for use.

LIGHTNING-CONDUCTORS.

FRANKLIN meant the lightning-conductors which he invented to consist of iron alone. Iron, however, has too strong an affinity for oxygen to allow of this. All moisture, and all heat, corrode it more or less; and thus grew up the custom of pointing the conductors with copper, and in some cases with costly platinum, soldered to the iron rod. But exposure to weather, and the weak galvanic currents which unavoidably set in where metal of one sort is in contact with metal of another sort, cause rapid decomposition at the joint, and encourage the rust to eat into the substance of the rod. A heavy flash will melt or cripple a conductor thus imperfect, and then woe to the structure! This defect can now be cured by coating the iron rod completely with nickel, a metal which defies rust, and which conducts electricity better than the pure iron does. Bars and rods of this nickelized iron have been kept under water for several days without tarnishing, and resist the effects of the most powerful battery of Leyden jars.

It had been believed, until lately, that platinum was a metal with which no rogue, however dexterous, could tamper. The platinum coinage of the Russia of thirty years since was considered inimitable by the manufacturers of false money; while the capsules, crucibles, and other apparatus required by scientific men were sold according to the high market value of what is really a precious metal. Unluckily, fraud has been found possible even in this case. The Director of the Royal Italian Observatory on Vesuvius, M. de Luca, surprised at finding first one and then another of the platinum points of his conductors melted by the effect of lightning, made a careful investigation, and discovered that the platinum had been adulterated with from ten to twelve per cent. of lead, and thus rendered fusible. Platinum thus mixed with an inferior metal can be identified by its lesser density, or more easily by the blowpipe, before which a tell-tale green flame will reveal the presence of the lead. Such a mixture would render the hitherto resisting platinum absolutely worthless in the laboratory.—*Chambers Journal.*

I HATE that man worse than poison that offers to run away when he should fight and lay stoutly about him. Is it not better and more honorable to perish in fighting valiantly, than to live in disgrace by cowardly running away?

For Women.

[CONDUCTED BY MISS FAITH RIPLEY.

LOST.

A HOUSEHOLD darling, but four years old,
And the night is falling dark and cold.
"Lost!" is the anguished mother's cry,
With ashen lip, but tearless eye.
There is gathering now from cot and hall,
The hills resound with halloo and call,
Seeking, for tender Mercy's sake,
The lost, through wood, and swamp, and brake.

A shot rings out on the wintry air—
A sound that answers the mother's prayer:
Another! another! in salvos ring,
As home in triumph the lost they bring.
Close-clasped in her father's arms she lies,
Faint and weary, with half-closed eyes.
"O Papa! I'se tired!" Now closer pressed,
She hath fallen asleep on her father's breast.

Lost! A woman yet young in years,
But old in sorrow, and pain, and tears;
Lost through her trust, and truth, and love:
O God! that *these* should devils prove,
Dragging her down to sin and shame,
To a blighted life and a tainted name.
Proud woman's scorn, man's ribald jest,
Mock the breaking heart and the aching breast.

There are none who seek the lost one now,
No hand to soothe the throbbing brow;
On a cold stone step, in the chill night-air,
She lies half-hid by her golden hair.
The pale lips mutter—blue eyes are dazed,
As if on a brighter world they gazed—
"Dear Lord, I'm weary—give me thy rest!"
She hath fallen asleep on the Father's breast.

Aye, Madam, gather your dainty skirt,
Uncontaminate by this human dirt:
Hers was a crime may no pardon win;
'Twas love—and love like hers is sin.
A smile and a blush for the profligate—
For thy sister-woman, scorn and hate;
Hunt for her as beagles hunt their prey,
Till the grave hath hid her shame away.

O "humble shepherd" in silken gown,
"Meek," with supercilious frown,
The charge the Master bade thee keep
Was, "If thou lovest Me, feed My sheep."
A Magdalen hath perished here,
With clay-cold cheek and frozen tear.
At the shepherd's gate a dead lamb lies,
Shaming a Pagan sacrifice.

[*A. H. Howe, in Chicago Tribune.*

LETTERS FROM A COUNTRY GIRL.

MARGARET B. HARVEY.

I SHALL begin this second letter by correcting an error in the first. The printer, or perhaps my own penmanship, made me speak of a mixture of linseed oil and *amber*; the word is *umber*.

Say that you have followed out to the best of your ability the few suggestions given. Then you find your house in a fair way towards becoming a cheerful, bright, pretty, refined home. And this is what you want. "Live while you live," is a good maxim, as well as an old one when applied in its higher meanings. That is, remember that our homes, and the opportunities, interests and affections of our homes, are the highest and best earthly objects for which we can work and from which we should derive our most constant and lasting enjoyments. Think of this every mother, the center of a home. Try with all your might to make it to all its inmates, the most comfortable, the most beautiful, the most beloved spot on the face of the earth. So keep continually in view the aim with which you started out.

Whether you have or have not purchased house and home papers, read and study all intelligent suggestions that come in your way on the subject of home decoration. You cannot adopt all of them—you may, perhaps, none of them—but they can scarcely fail to quicken your inventive faculty and put you in the way of creating something pretty very often. So here you may be safely left for the present. The next book suggested was, "The Schoolmaster's Trunk," by Mrs. DIAZ. In this admirable volume we have, in a very small compass, many vivid pictures of life as it is too often found in some country districts, the hard work, the narrow sphere, the unattractive homes, the ignorant conversation, together with high encomiums on woman's wonderful executive ability, which rightly directed, would revolutionize all. This book you bought for the express purpose of lending to your neighbors around, as it contains so much, and your idea is to elevate the tone of the neighborhood as well as that of your own house. Remarking that here is a good book which, though a little personal, contains many valuable hints, quietly hand it to any one who, as you find on inquiry, hasn't it, and as you continue to do so, you cannot fail to do good.

The chief point dwelt on, I think, and which I want to consider, is the duty of dividing the time so that the least important affairs of a household shall take the least part and thought, leaving as wide a margin as possible for rest, culture and higher duties. This is reasonable. As I said before in substance, the minor details of living—such as eating, sleeping, and dressing—with the necessary work occasioned by them, are but means toward living itself—the foundations of a temple. So all the opportunity and energy diverted from unnecessary care about the lower, may profitably be given to the higher living. Remember, that the effects of the former will pass away, the effects of the latter never will. Having accepted this fully yourself, and influenced some of the neighbors to do likewise, you have made considerable progress toward the end for which you are striving—the elevation of your home and the surrounding community.

Keep the book in circulation till it is worn out. By that time the people generally will understand your new departure, like your improvements, and be ready to carry on the good work for themselves. And don't be surprised if some, catching at your suggestions, rush ahead of you and hit upon and put into execution some pet plan of your own, even before you have it fully matured. But never mind. In thinking of the common good, you can well be content to sacrifice a little private inclination.

Country people have their faults—their chief one is closeness—but they are always sociable. When a claim is made upon their hospitality, they are generous. When distress calls them, they are heroic. But when a common interest presses upon all, where else than in the country can we find such warm sympathy, such real union, such earnest endeavor? And all these and more, will show themselves sooner or later, as this same purpose inspires the neighborhood. Slowly but surely, all will want to help, and insensibly the tone of ordinary conversation will rise. At the gatherings the difference will be noticeable. Less will be said about private concerns, more about the new order of things, this improving continually, as the order itself improves.

So much for the second book. The botany I recommend because I believe every woman living in the country, or anywhere else, ought to know something about objects so dear to her. The effects of even a little conscientious study of this beautiful science will soon be seen in more tasteful, enjoyable gardens, more natural floral decorations, and more life-like flower-pictures as well as enlarging the capacity to appreciate intelligently, the diversified attractions of field and wood and meadow. And when the club is formed (I will tell you about it presently), the herbariums, the fresh flowers and plants, the conversation of the members regarding them, will form some of its chief attractions.

Of the cyclopœdia I will say that you will constantly need it in your general reading. Go to it every day of your life. Every name, or place, or object, or circumstances mentioned in your hearing, in the newspapers, in any book, even to your Bible, refer to carefully. Do this a little while and you will wonder how you did without it so long. And you will need it the more as time goes on and your scheme progresses.

I have now briefly sketched out a plan which I hope to elaborate more in detail, for improving your home, for influencing your neighbors to do the same with theirs, and for creating a community of interest and feeling of oneness regarding personal and general culture. With these few books in the hands of a woman having *will* and a true desire for growth, no one can foresee what wonders may not be accomplished.

DIVORCE.

MRS. POTIPHAR.

THE apathy with which the general public regards the increasing facilities for "shuffling off the coil" matrimonial, and the avidity with which large numbers avail themselves of these facilities, can only be accounted for on the ground that people do not realize how widespread is the desire to make the marriage tie less binding. It is no longer counted as disgraceful for a husband and wife to seek redress for real or fancied wrongs in a divorce court; on the contrary, it is considered an evidence of emancipation from tyrannous custom—progression, in short. After all that has been written and preached on the great need there is of maintaining the purity and the sacredness of the marriage relation, it seems almost superfluous to even advert to it; but people seem not to be alive to the danger there is to the family and the State in tampering with the laws regulating marriage. Women especially should rouse themselves to combat, with all their energies, the loosening of marital ties; for where marriage is held in light repute, there woman is dishonored.

Marriage is not, as many apparently regard it, a holiday experiment; it is a life-long contract which, when once entered into, can be dissolved only by death. "Whom GOD hath joined together, let no man put asunder," has become a dead letter. Hardly has the officiating priest pronounced these words of solemn command, before one of the couple finds the other to be "not congenial," and forthwith a divorce drama is enacted with the usual washing-of-soiled-linen accessories. A decree grants the coveted freedom, and the two who swore "to be and to have for better or for worse," lightly break their vows, and go their separate ways.

There is one unpardonable sin-marital, which one would be lacking in dignity to condone; but even in the most aggravated cases, would not a separation vindicate one's honor quite as effectually as a divorce? Then the wrong of a *re*-marriage would be avoided. What right have divorced couples to marry? *None.* In the eyes of the law, it may be justifiable, but morally it is *criminal.*

In the divorce court of to-day the flimsiest pleas—such as "incompatability of temper" and other sentimentalities of that class—are admitted as good and adequate reasons for repudiating solemn obligations voluntarily assumed. What a picture it gives of the average morality of a people when such pretexts as the foregoing are permitted, without a protest, to be registered as sufficient to absolve couples from the performance of their duty. The fact that one's life partner fails to fulfill our ideal, or that unlovely characteristics develop in him, affects the matter not at all. If during the courtship we allowed our affections to blind our judgment, the fault is ours, and the only honorable course for us to pursue is to philosophically accept the situation, and bear our burden of disappointed hopes with what grace we can.

Divorce should be abolished. It is inimical to the best interests of the family and of society, it puts a premium on immorality, and it behooves the lovers of virtue to insist on its total abolition.

Many estimable people, while regarding divorce with disfavor, still hold that it is the duty of a couple to separate so soon as the love between husband and wife has ceased to exist. They maintain that it is little short of desecration for people to live together when the ardor of their youthful affection has abated. Besides being sinful, this is absurd. It is absolutely impossible for people to maintain their emotions at the high pressure of youthful rhapsodies; and, in fact, it is not at all desirable that they should, after all. Thrills, sighs, tears, and moonshine are inconvenient for steady matrimonial experience.

Love is largely a matter of volition—romancists to the contrary notwithstanding—and most married people can (if they only will make the endeavor) retain for one another a strong regard, and it is certainly worth the effort.

No right-minded person will gainsay that it is preferable to marry for love; but it is a most pernicious doctrine to advance, that a change of sentiment is sufficient to justify our refusing to fulfill solemn obligations.

Human nature is, on the whole, not given to constancy, and it requires strong public opinion and not a little coercion, to keep many people faithful. Even with the best of us, there are times when thoughts of "might have been" obtrude themselves, and when perhaps a fair face or an attractive manner causes a momentary thrill; and whereas now we crush back such memories and emotions as dishonoring to our better natures, if loose rein is to be given to sentiment, and emotion set up as the sole basis and limit of marriage, will not the tendency be to encourage a longing for affinities, congenial spirits, and a distaste for whatever tends to "cabin or confine" sentimental aspirations?

Think of the misery a universal application of such ideas would bring upon society! It would alienate parents and children, break up the home circle, bring upon us social anarchy; Oneida Communityism would be the next step, and the final one, perdition. Those who are interested in the cause of good morals, or who care for the well-being of the nation, would do well to zealously guard the sacredness and the *permanency* of the marriage relation.

ANSWERS TO CORRESPONDENTS.

WILL the lady, who sent me a sum of money to purchase some material for stamping, please send her address on a postal card, naming sum sent to avoid mistakes. The letter has been mislaid.

FAITH RIPLEY.

MINNIE PALMER.—Flower hats are still worn and their popularity is likely to continue through the season.

MRS. L. B., Cornwall, N. Y.—Summer silks come as low as 65c., but they are suitable only for second-best. For "dress" occasions, the expensive imported grenadines will be popular during the coming season.

JENNIE LEE.—Bead-trimming abounds on parasols, wraps, mittens—in fact, everything is beaded, so that you need have no fear that your beaded jacket will be out of style.

L. W. C.—India shawls are fashionable. Should you desire information as to price and quality, I shall be happy to furnish the same.

[Many answers to inquiries have been crowded out for want of space.—ED.

THE newspapers are fond of telling stories about the cowardice which women are alleged to show in the presence of a mouse. A severe masculine censor once declared that the most grave and wise gathering of women, for the most important and serious purpose, could be utterly thrown off its balance by the letting loose of a mouse in the room. That was men's theory. Here is fact:—"While a Judge was holding court at Van Wert, O., a few days ago, a mouse took advantage of his preoccupation and climbed up inside his pantaloons. The attorneys and attendants became aware of the situation when the Judge suddenly gave a jump, clapped his hand to his legs and stamped on the floor. The Sheriff rushed to the rescue, and the spectators rose in their seats, not knowing what was about to happen. The Judge whispered to the Sheriff, a lawyer shook the intruder out, and in the general confusion that ensued, the mouse escaped." Fancy the howl of derision that would have gone up from "the superior sex," if this had happened in a court presided over by a woman!

THE Christian Intelligencer announces, with apparent despair, that "ladies who do not know how to bake bread are learning how to bake terra-cotta ornaments." This is shocking! but it may also be recorded that gentlemen who do not know how to smoke a ham are learning to smoke cigars and meerschaums, all over the country, and have been doing so ever since it was settled. Whither are we drifting?

WHEREVER desirable superfluities are imported industry is excited and thereby plenty is produced. Were only necessaries permitted to be purchased, men would work no more than was necessary for that purpose.—*Franklin.*

The Querist.

ANSWERS TO CORRESPONDENTS.

Phonography and Stenography.

J. N. M., Montville, N. J.—Will the RURAL please inform me whether Phonography and Stenography are the same, and if not, which one would it recommend a young man, who desires to become a reporter, to study? Also, will it recommend a suitable text-book?

ANS.—Phonography and Stenography are different forms of the same art. In the latter, certain signs or characters are used to represent whole words; but the system is being rapidly superseded everywhere, by phonography or phonetic short-hand. In this certain sounds are represented by distinctive characters—the consonants by straight lines and curves, the vowels by dots and short dashes. There are also a multitude of abbreviations. The system was invented by ISAAC PITMAN of Bath, England, and was first published in 1837. Since then various changes have been made by the inventor and other short-hand writers. The best text-books published in this country are: "Manual of Phonography," by BENN PITMAN of Cincinnati, brother of the inventor, and lately prominently before the public in connection with his wife's cremation; "The Handbook of Standard Phonography," by A. J. GRAHAM, and "The Complete Phonographer," by JAMES E. MUNSON. Your local bookseller can procure you either.

Destroying the Fertility of Eggs.

F. C. F., Morristown, N. Y.—Will Mr. HALES please inform me through the RURAL, whether the fertility of eggs can be destroyed without injuring them for market purposes, and if so, how can it be done?

ANS.—There are ways of destroying the fertility of eggs without injuring them for market purposes. One way generally believed to be effectual, is to hold an egg tight in one hand, raise the hand above your head and give it a very sudden jerk downward. This may be looked upon by some persons as a very questionable question and answer; yet, I presume, the inquirer has some reasonable motive for seeking such information. For instance, a breeder of pure-bred poultry may have more eggs than he can dispose of at fair prices for setting, and wishing to turn them to account, sends them to market as ordinary eggs for cooking. If he lives in a small town or village, some selfish neighbor knows that he keeps good fowls, wants to obtain the stock, and is too mean to pay a fair price for them; hearing that some surplus eggs are sent to the store or market, this covetous but parsimonious individual goes and purchases them or changes others for them, and so procures the stock for a mere trifle, which his neighbor has paid high prices for, and spent much valuable time in improving. This is not doing as one would be done by, and to frustrate such a proceeding is justifiable.

Reclaiming a Peat Marsh.

J. T. Pratt, Richland Co., Wis.—I have a peat marsh of 12 acres which is three feet deep to hardpan. Will the RURAL please tell me how it can be reclaimed profitably?

THE first requisite is to insure good drainage, so that the basin of the marsh may be emptied rapidly after showers, especially in summer. The best means of effecting this is to put down covered drains deep enough to take off all the water. If the swamp lies on a clay hard-pan impervious to water, and under this there is a stratum of gravel, drainage may be effected by sinking wells at intervals through the hard-pan, and these would also help to improve the character of the subsoil rapidly. Before attempting this method on a large scale, however, it would be well to sink one well as an experiment, and watch the results. If the water disappears in the vicinity of the well, it will pay to sink others. When the land is thoroughly drained, it should be plowed deep and cross-plowed to dry the top; then burn this off, mingle the ashes with the rest by plowing and harrowing, and sow timothy, red clover, or perhaps corn. Such peat is a very valuable manure for sandy land, and an application of sand will also greatly improve the peat.

Beet Culture.

Thomas H. Malony, Seneca Co., Ohio.—I wish the RURAL would give me some information about raising beets for stock, and the best variety. My soil is damp sandy loam and very rich. The information will oblige a new beginner.

ANS.—Norbiton Mangel Wurzel if the soil is deep, Warden Orange Globe, Long Yellow, Yellow and Red Globe, Red Tankard and Golden Tankard are all good. To thrive well, Mangels require a deep soil, and the ground should be plowed deep and generally subsoiled a foot to eighteen inches, but whether the later operation would be advisable on your farm depends on the amount of moisture in the soil and other conditions mentioned in answer to a correspondent in the last issue of the RURAL. Apply plenty of rich manure, sow in May in rows eighteen inches apart and afterwards thin out to eight inches in the row. On the first frost, dig and store in the cellar, or if you can secure a high, dry spot in the field, they can be safely preserved there in trenches; but you should be careful to maintain free ventilation by placing bunches of straw on end at intervals of four or five feet. Don't store too many in the same pit, and they should not be covered until frosts become quite severe.

Chinese Yam.

A. Duncan, Wm. H. Koller and others.—I read in the RURAL of Feb. 9, an article on the Chinese Yam and would like to know where the seed can be procured, as I would like to try its cultivation?

ANS.—We have to say for the benefit of many inquirers, that if they want this vine for *ornament*, probably they will be pleased. If for a crop in lieu of potatoes, they will be *disappointed*. In an amateur way or for a curious dish, it may be well to cultivate a few. The roots are 18 inches or more long, club-shaped, the larger end down. The flesh is white, mucilaginous and liked by some. The digging of a crop owing to the depth to which the roots go perpendicularly down, would be very expensive, especially as being extremely brittle, they cannot be pulled out but must be dug under.

The seed cannot be procured that we know of. In fact so far as we are informed there is no female plant in this country. Little bulblets are plentifully formed in the axils of the leaves or stems about as large as peas. These germinate and grow freely. They will fall upon the ground, remain over winter and spring up the next season. THORBURN & Co. and B. K BLISS of this city, have the bulblets for sale.

"Beauty of Hebron" Potato.

D. L. R., Fredonia, N. Y.—I notice in the last issue of the RURAL, under the head of "What Vegetables to plant," the name of a new variety of early potatoes, "Beauty of Hebron." (1) Will you please inform me where and for what I can get some for seed? I have heard of none in this section and would like to hear more fully about it. Also (2) if plants, such as cabbage, cauliflower, celery etc., etc., can be shipped safely and how? I want to raise a considerable number of onions this year, for a good profit; would you (3) buy sets or grow from seed sowing some seed for sets next year?—say about one acre of onions.

ANS.—(1) You can get seed potatoes of "Beauty of Hebron" of J. M. THORBURN & Co., 15 John Street, N. Y. We have heard that they are earlier than Early Rose and excellent in every way. The price is $4.50 per bushel or $9 per barrel. (2) They can be shipped with perfect safety, packed in a little damp moss or other moist covering and wrapped in oil paper. (3) From seeds as you say.

Eradicating Wild Thyme.

Irvington.—My lawn is overrun with wild Thyme, living through the winter and grasping the ground with a firm hold. I have found it impossible to eradicate it by tearing or digging. Can the RURAL inform a subscriber of the best course to pursue to exterminate this disagreeable pest?

ANS.—We cannot except by carefully pulling up each plant by the roots. We were not aware that Wild Thyme (Thymus Serpyllum) ever became a great pest upon lawns that were well cared for and frequently cut.

Miscellaneous.

W. C. H., Campbell's, Tenn.—Would it be a profitable use of hen-manure to scatter daily half a bushel or more of it in the cow-stable, mix it with the stable manure and then in fall, use the entire amount as a top-dressing for rye.

ANS.—Poultry manure is so excellent a fertilizer, that its use in any form, sufficiently diluted, must be remunerative. With the shrewd farmer, however, the question with regard to everything on his place should be, not will this method be profitable? but is this method the most profitable? And the RURAL has frequently given at length its opinion of the best use and treatment of hen-manure.

B. A., Erie Co., Pa.—I saw in the RURAL that there was a premium of some flower seeds offered to those that took the paper, and as we have done so since February, I hasten to send in my claim. I do not understand whether we are to select the seeds or you are to make the selection. I hope they may be such as to make beautiful house-plants for winter, as I live so secluded from society that plants and a few pets are the only company I have. Hope you will send a Pelargonium "Rienzi."

ANS.—To explain to our *new* friends: For the past two years we have made free seed distributions to our subscribers, and it is our intention to make another during the year. The seeds, for the most part, will be such as can not be procured from any other source. Last year's distribution closed by limitation on the 1st of January.

L. W., Round Mountain Station, Ala.—(1). Where can I get Australian Gum trees; and are they the same as the Gum trees of this continent? I have examined the catalogues of several seedsmen, but can find no mention of them. (2). I wish to buy a mowing machine. Our grass here is of a peculiar kind, and stands on not very level ground. I would like to get a strong machine, but one that can be easily drawn by two light horses.

ANS.—(1). The gum tree of this country is Liquidamber styraciflua, that of Australia various species of the Eucalyptus; the chief of which introduced into the United States, is E. globulus. This is readily grown from seeds, and can be purchased from many florists, among others, from THORBURN & Co., 15 John St., N. Y. (2). There are many excellent mowing machines, the merits of which are about equal. Among the best that it would be well to examine are: The Bradley Mfg. Co.'s, made at Syracuse, N. Y., "The Warrior Mower," Little Falls, N. Y., "The Buckeye," Springfield, Ohio, and "The Eureka, Towanda, Pa. Circulars descriptive of these machines can be had by applying to their respective makers.

W. E. Emery, et al.—See notes from the RURAL Grounds, this issue.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, MARCH, 11TH.

W. B. H.—H. H.—W. H.—E. S.—"Young Orater"—S. L.—"Bob White.—J. P.—B. A.—C. S. S.—V. S. H.—A. D.—D. L. R.—S. W. C.—W. H. I.—Cousin Emma—Hawaii nie.—J. W. S.—W. H. H.—Mrs. S. C.—S. V. W.—C. B. H.—R. C. J.—Minnie D. B.—M. W. F., thanks—"A Hired Man"—T. B. M.—"Blue Bell.—D. S. M.—A. C. W.—M. G. R., many thanks—H. P. H.—M. G. R., (Washington)—H. H. R.—J. P. J—J. O. T.—G. A. G—D. S. M.—R. G. F.—J. E McC.—B. P. M.—X.—A. B.—J. C. N.—C. C., it was not so intended—A. R. C—S.B. P.—E. S.—"Drew."

News of the Week.

CONDENSED NEW YORK TELEGRAMS.

SUNDAY, March 10.—It is believed in Washington on what is thought good authority, that the La. "Returning Board" prosecutions are ended and that convicted Anderson will soon be pardoned. The M'Garrahan claim for the quicksilver property now held by the New-Idria Quicksilver Mine is up again before the Senate Committee on Public Lands.

In the event of movements by England hostile to Rusia Lord Derby will resign the Ministry of Foreign Affairs and be succeeded by Lord Lyons, formerly British representative at Washington and lately Minister at Paris. The *people* of England are no doubt violently inflamed against Russia, as all public demonstrations shew, but—well, its probable their bitterness must be confined to their own tight little island.

MONDAY, March 11.—The project of testing Mr. HAYES' righ to the presidency is gathering strength. Ex-Judge Black, Montgomery Blair and a number of other lawyers and Democratic politicians propose to bring the question to judicial settlement. Gloucester, Mass., fishermen complain loudly of outrages on them by Newfoundland Britishers. Our foreign office has called the attention of the English Government to the matter, and it does not increase the Canadian chances of touching those $5,000,000 awarded them for fishing damages. Atlanta, Ga., felt the worst tornado yesterday ever known there. The Episcopal Church was demolished during service, but as the congregation threw themselves under the seats by the advice of the minister all miraculously escaped death, though eighteen were more or less injured.

For the past week there has been a lull in European news; except the receipt of telegrams containing conjectures, contradictions, and unreliable information of diplomatic movements and tendencies, furnished chiefly to fill newspaper columns. The news appears to be confirmed that Suleiman Pasha was drowned in a sack for having entered into a conspiracy to depose the Sultan. Moreover, his slaughter of his command by hurling them at the Shipka Pass, his insubordination which paralized Mehamet Ali, and his blundering movements as commander-in-Chief deserved the infliction of many such examples of Ottoman vengeance. The treaty of peace between Russia and Turkey has been ratified, and it seems mutually agreed that they will not recognize the right of any Power or Congress of Powers to interfere with its terms.

Manufacturers of Clothing and ladies' suits find the New Davis Sewing Machine adapted to the full range of their work, trimming, binding, sewing thick and thin goods, over-seams, without any difficulty, and requiring no basting or change of tension. The DAVIS SEWING MACHINE Co. are enlarging their manufactory at Watertown, N. Y., to enable them to supply the increasing demand for their machines.

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC Co. Cincinnati, Ohio.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, March 9, 1878.

BEANS AND PEAS.—Receipts of beans past week, 5,732 bbls. Medium beans are quoted as before, but holders do not look for further falling off in prices for prime stock, and there is less pressure to sell. During the past three years the war in Cuba has enlarged the exportation of marrows, but with quiet rates ruled in that important island, former shippers are not venturing so freely. It is unusual to see mediums and marrows so nearly similar in price. Neither pea, white, nor red kidney has much activity in the generally quiet market that prevails. Canadian peas steady at 85c., bulk and bond. Green peas very dull at the low figure of $1.15. Southern B. E. peas nominal at $3.25 ₱ 2 bush bag.

We quote:—Beans, medium choice, $1.70@1.70; other, $1.45@1.55; marrows, choice, $1.70@1.75; other, $1.55@1.65; pea, $1.55@1.80. White kidney, choice, $1.70@1.80; other, $1.85@1.95; red, choice, $2.25@2.50; other, $2.35@2.40. Turtle soup beans, $1.50. Lima, $3.

BEESWAX.—There is but little demand from either exporters or home buyers. Western and Southern quoted at 27@28c.

BROOM CORN has a freer demand from consumers and holds firm.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 5@6½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—The first few days of March have had a rather intimidating effect upon butter merchants. There is at present nothing to build late spring hopes upon if the opening is as mild in the important dairy districts as it is in a wide adjacent area. There is no frost in this neighborhood to waste spring's sun-warmth and the meadows seem ready to assume their green grandeur as soon as a few seasonable showers bid winter a glad and positive adieu. With our liberal stock of butter and comparatively free receipts, sellers feel warned that there is no time to be lost in pushing trade and all grades of butter are named easier. One thing seems pretty well settled and that is much of the surplus of medium, and as some term them "wilted" lots, will not run down fast enough to save them from grease at the worst or exporter's option at the best. Shippers have taken over 3,000 packages this week at a range @12c. for Western. Most of late local trade in butter has been at prices verging towards annexed inside rates.

We quote State creamery, 25@35c.; fancy pails, 30@32c., other 25@28c.; creamery, good to choice, 25@35c.; half tubs, fine, 28 30c.; extra, 33@37c.; other, 22@27c.; Fall Welsh 27@28c.; Welsh tubs, dairy, 25@27c.; other, 20 23c.; full dairies, fine, 28@30c.; common, 20@24c.; firkins, 20@27c.; poor State, 14@21c.; Western creamery, good to choice, 35@37c.; poor to good, 25@32c.; factory, choice, 20@22c; good, 16 18c.; common, 7@11c.; rolls, 12@18c.; grease, 6½ 7c.

Receipts for the week, 18,397 pkgs.

Exports past week, 932 pkgs.

CHEESE.—The English market is at a decline, and exporters will purchase importers' lots only as they get easier terms. The decline for the week is about ½c., and at the close there is a desire to sell, as supplies are arriving beyond expectations, and with the advanced season the disposition is to keep stocks down as close as possible.

Fancy factories, 13½ 13¾c.; good and prime, 13@13c.; fair lots, 11¾@11¾c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 12@13c. for good to prime; 11@12c. for fair lots; 8@11c. for skimmed; Western factory, cheddar, 13@13½c. for fine 11@12c. for good; 6@10c. for poor.

Exports for the week, 27,579 boxes.

Liverpool cable, 68s. Gold closes 101.

COTTON has been affected by the foreign news and has generally tended higher, with more of a stir to export demand.

Latest prices are for March, 10.03@10.89c.; April 11.09@11.13c.; May, 11 17@11.18c; June, 11.27@11.28c.; July, 11.35@11.36c.; August, 11.41@11.41c.; September, 11.24@11..5c.; October, 11.05@11.06c.; November, 10.91@10.92c.; December, 10.9.c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8¼	8¼	8¼	8¼
Strict ordinary	8¾	8¾	9	9
Good ordinary	9 9-16	9 5-16	9 7-16	9 7-16
Strict good do	9⅝	9⅝	10	10
Low middling	10 5-16	10 5-16	10 7-16	10 7-16
Strict low middling	10 11-16	10 11-16	10 13-16	10 13-16
Middling	11	11	11⅛	11⅛
Good middling	11⅜	11⅜	11⅛	11⅛
Strict good middling	11 11-16	11 11-16	11 13-16	11 13-16
Middling fair	12 3-16	12 3-16	12 5-16	12 5-16
Fair	12 11-16	12 11-16	12 13-16	10 13-16

Stained.

Good ordinary, 8 3-16c. Strict ordinary, 8 15-16c.; Low middling, 9 9-16c.; Middling, 10 1-16c.

DRIED FRUITS.—In apples the better grades of sliced and quarters have continued for home demand and rule firm; but the common qualities are dull. Peaches and small fruits generally on reduced stocks are rather more in favor of sellers.

Apples—State quarters, old, 5¼@5¾c.; new, 5¼@6¼c.; Western quarters, old, 6@6½c.; new 5¾@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@17c. Blackberries, 9@10c. Raspberries, 28c. Plums, 15c. and Southern at 12c.

EGGS.—Receipts for the week, 10,928 barrels. Lent as yet has given no marked impetus to the general demand, but holders look for an early enlargement of consumption. Prices have no snap; 14½c. is extreme for best Western marks or selected Southern. Fancy or extra fresh near points not above 15@16½c. Inferior or long-stored eggs which are the ghost of the market this season are freely offered at 10@13c.; Limed dull at 8@11c.

FEED.—Sales 40 pounds ave. $18.00@19.00; 60 pounds ave., $18@18.50; 80 pounds ave., $17.50@18.50; 100 pounds, $18@20; and rye at $18.50@19.50.

FLOUR.—With lower markets for wheat abroad, diminished export movement and large supplies, prices have been declining and closed weak.

Latest prices are $4.10@4.65 for poor to fancy superfine State; $4.75@5.10 for common to fair extra do; $5.15@ .50 for good to choice do.; $4.10@4.65 for superfine Michigan, Indiana, Iowa, &c., outside for choice; $4.75@5.10 for shipping extra do., the inside price for poor, and $5.15@5.50 for good to strictly fancy extra do.; common to choice white wheat extras, $5.75@6.65; fancy do at $6 6 @7.50; red and amber winter wheat, good to choice family, at $5.10@6.35; round hoop Ohio at $4 8%@5.25, and trade brands of do. at $5.10@6 75, the latter for choice; St. Louis, $5.25@6.10 for poor to fair extra and $6.10@7.00 for good to fancy, (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, $4.85@6.00; Minnesota "straight," common to fancy, at $5.60@6.75 and patent poor to very choice, $6.10@8.25, with a few fancy at $8 35@8.50; unsound stock at $2.35@5.75; city mill extra at $5 85@6.35 for fair to very choice for West Indies; do. for England $4 80@5.00; do. trade and family extras, $6.35@7 50; do. South America, $6.35@7.35 for fair to fancy; No. 2 at $2 65@3 75.

Corn meal is selling at $2.50@2.75 for Western yellow and $3.15 for Brandywine.

FRESH FRUITS.—The market for apples is weak; supplies are large for the season and demand especially as other cities are sending their surplus here. A full price for most prime Baldwins. Greenings and Russets is $5, other qualities range at $2.50@4. Stock sinks very rapidly of late when exposed. Cranberries have advanced; fancy bls., $9.00; good, $7.50; do. crate, choice, $3; good, $2.13@2.12; fair, $1.50@2.25. Florida oranges, $3 50@5.50—choice Indian River exceed the extreme. Peanuts weak but more activity is expected. Best hand-picked Virginia, $1 30@1.40; good to fancy, 85c.@$1.20. Hickory nuts not wanted even at 75c.@$1. Pecans, Texas, 8@10c. per pound. Hot-house strawberries $1 per quart.

FURS AND SKINS.—Market nominal and likely to be until the next London sales are heard from.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₩ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and ylgs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₩ lb	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

GRAIN.—There has been a depressed, unsettled, and lower market with the weak foreign advices, and very limited export movement.

Latest sales are of No. 2 red at $1 22@— ungraded red and amber State, $1 32@—; white, $1 40; No 1 Northwest spring, $1 27; No. 3 Chicago, $1 22½; No. 2 red for March at $1 21½; No. 2 Milwaukee spring, $1 27. Rye is a trifle steadier; sales of Western at 71@73c.; State at 73@7 c. Barley, 36c for No. 1 Canada; 86@88c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 55½@56c.; steamer mixed, March, 52c. Oats of New York extra white, at 36½@38½c.; do. No. 1, July, 35½c.; No. 2 white, 35½c.; mixed Western, 35½@36c.; white Western, 5@38c.

HAY AND STRAW.—The comparatively easy prices for prime stock have at length led to a much freer demand, and the market now favors sellers a little. For shipping grades inquiry continues and steady prices are made.

Bale hay, 65@70c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@5 c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

HIGHWINES are higher—$1.08½@1.09 regular.

HOPS.—The arrivals continue fair, and the export demand has fallen off, only about 400 bales shipped this week. The English advices are dull, and prices here are a little weak, especially for the low grades.

State choice to fancy, 11@13c.; good to prime 8@10c; do., low and fair, 6@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@21½c. for light, 20@21c. for middle, 20@21c. for heavy, 18@19c. for good damaged.

MAPLE SUGAR.—There is more activity; late Ohio receipts are of fine quality; large molds, 12@14c.; small cakes, 13@15c. Sirup, $1@1.60 gal., with can.

OIL-CAKE.—Western is quoted at $31 ₩ ton and $30 bid.

POULTRY AND GAME.—Considerable quantities of live have gone to Havana, and the market has felt the good effect of the additional demand. Exports of live chickens and fowls are to be an important branch of the poultry trade.

N. J. chickens, 10@11c.; W. fowls, 8@9c.; Turkeys, @10c.; Toms, 6@8c.; Ducks, N. J., pair 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1 50.

The arrivals of dressed are light but they supply the small wants of the season. Large turkeys not worth shipment. Poultry frozen for spring is said to have kept badly.

Fancy Phila. and N. J. turkeys, 12@14c.; good, 8@ 6c.; large or Toms, 7@9c, chickens, choice, 8@9c; good, 11@13c.; common, 6@7c.; ducks, choice, 12@16c.; other, 13@14c; geese, fancy, 11c.; other, 7@9c. Capons large 18@20c. small and slips, 15@16c.

In game warm weather restricts the demand but the supply is moderate and prices are fairly firm.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.25@1.40; Red-heads, $1.50; Mallard, 60@75c.; Teal, 30@50c.; Quail, prime, $ .75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$8.c. Grouse, $1.00@1.50; poor, 9. c.@$1.10.

PROVISIONS.—There has been a sharp decline and a generally deferred and unsettled market. Stocks are liberal here and at the West, and the arrivals of hogs continue beyond expectations, and there have been free sellers.

Mess pork, $10@10½ for spot lots; $10.00 @ 11.10 for March and April. Bacon at 5 1-16c. for long clear and 5½c. for short clear. Lard—Western steam at 7-20c. for spot, 7-17½c. for March, 7-20½c. for April. Tallow at 7 9-16c. for prime. Stearine, 7½c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.00 @12.50; plain, $11.00@11.50; new packet, $14.75; family mess, $17 50; extra India mess, $27 for city brands; do. Philadelphia, $26.00.

SALT.—Ashton's at $2 50; Higgins', $3.40 and other sack lots at $1.05@1.20; Liverpool ground, 60@65c.

SEED. Clover, 7½@8½c. for Western; 7½@8½c. for State. Timothy, $1.25@1.35. Rough flax, $1.50.

SUGAR.—Refined at 10c. for cut-loaf; crushed, 9½c.; powdered, 9½c.; granulated, 9½c.; soft white, 8½@9c.; soft yellow, 7½@8½c.

TOBACCO.—Export trade has been light but there is increased demand from the home trade.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3½@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	6 @ 7	7 @ 7½
Good leaf	7½ @8½	— @—
Fine leaf	—@—	— @—
Selections	— @—	— @—

VEGETABLES.—Potatoes are dull and tending lower; prices 2½c. off from last week. The demand for seed has subsided. Onions dull and weak. Florida green peas again arrived worthless.

We quote Peach Blows $1 50@1.75, bulk and double-heads. Early Rose, $1.62@1 87; Peerless, $1 25@1.50; Nova Scotia, $1 9@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.00@1.25; white $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₩ lb., 20@40c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1.50@$. Cucumbers, doz., $3@3. Rhubarb doz., $1. Spinach, Southern, $1 75@@2.25 ₩ bbl. Bermuda, $4.50@5.

WOOL.—There has been a little pressure to sell most grades, with slightly easier prices, on account of the late period of the year; the fact that manufacturers have been buying sparingly on account of the slow movement in the goods market and the pretty fair stocks.

Ohio, Pennsylvania and Virginia—XXX and picklock, 45@47c.; XX, 44@46c.; X, 40@4 c; No. 1, 42@45c; No. 2, 36@38c.; common, 3@35c.; combing, 50@55c.

New York, Michigan, Indiana and Wisconsin—XX, 35@ 8c.; X, 35@37c.; No. 1, 38@ 41c.; No. 2, 33@36; common, 32@34c; combing, 50@52c.

Iowa, Vermont and Illinois—X and XX, 31@36c.; No. 1, 36@39c.; No. 2, 32@31c; combing, 46@52c.

Missouri, Kentucky, and Tennessee—Washed fleece, 35@40c.; unwashed, 25@30c.; unwashed combing, 32@37c.

LIVE STOCK MARKETS.

NEW YORK, March 11, 1878.

BEEVES.—Receipts for the week, 7,823 head; do., last week, 8,948 do. There is quite an unusual falling off in the demand for meats—dull times and Lent making a severe combination for dealers. Prices at the cattle yards are firm, and the closing rates are quite as low as at our last, being 7½@10c. for ordinary to picked steers. These prices have not been exceeded during the week.

COWS AND CALVES.—Market more than supplied. The nominal quotations are $40@60 ₩ head for good to choice.

VEAL CALVES.—Not enough live have arrived latterly to establish new rates. Recent rates, 5@7½c Hog-dressed are neglected, as the weather has been against them—6@9c.

SHEEP AND LAMBS.—Receipts for the week, 17,077 head; do., last week, 15,725 do. Receipts continue light, but seem fully equal to the demand, the market as a whole, seeming weak. Quotations for sheep, 6¼@6¾c. ₩ lb.; choice State lambs, 7c.

SWINE.—Receipts for the week, 27,522 head; do. last week, 37,412. Country-dressed pork—State and New Jersey, 4@5¼c.; Western dressed, 4½@5c.; city, 4½@5c. Live hogs, 3½@4c.

SPECIAL NOTICES.

The Press is published at Middletown, N. Y., a thriving village sixty-six miles from New York City on the Erie and Midland Railroads. It is an old paper, the Weekly having been established in 1850, and the Daily in 1869. The circulation of the Weekly is a little over 2,300, and the Daily 1,000, both circulating among the well-to-do farmers and business men of the county. These numbers are actual, and only include pay-in-advance subscribers. The Weekly PRESS is also the largest paper in the county.

For information about Kansas lands, &c., address "NEWS," Hutchinson, Kas.

As an advertising medium, THE DEMOCRAT, published at Belleville, St. Clair Co., Ill., should not be overlooked. The county is populous and wealthy, and the paper enjoys a large circulation among the best people. Deal with us directly.

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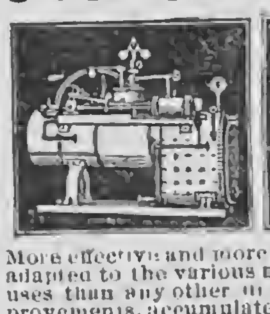

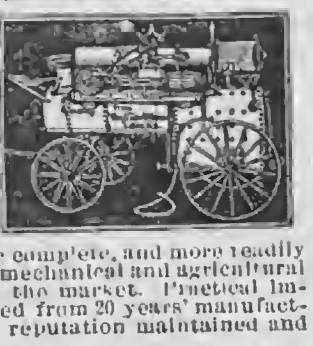

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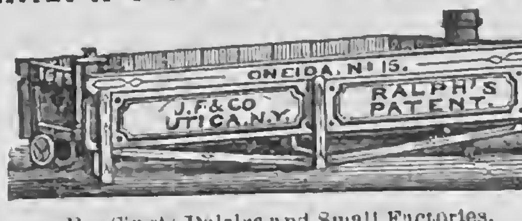

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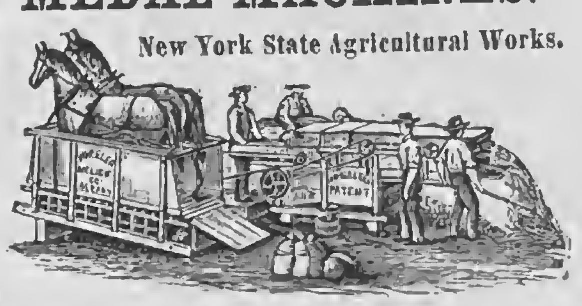

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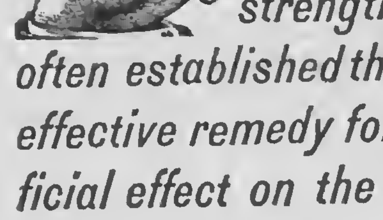

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Reading for the Young.

ROCK-A-BY, BABY.

"Rock-a-by, baby, in the tree top,
When the wind blows the cradle will rock;
When the bough breaks, the cradle will fall,
Down tumbles baby, and cradle, and all."

Rock-a-by, baby; the meadow's in bloom;
Laugh at the sunbeams that dance in the room;
Echo the birds with your baby tune,
Coo in the sunshine and flowers of June.

Rock-a-by, baby; as softly it swings,
Over thy cradle the mother love sings;
Brooding and cooing at even or dawn,
What will it do when the mother is gone?

Rock-a-by, baby; so cloudless the skies,
Blue as the depths of your own laughing eyes;
Sweet is the lullaby over your nest,
That tenderly sings little baby to rest.

Rock-a-by, baby; the blue eyes will dream
Sweetest when mamma's eyes over them beam;
Never again will the world seem so fair—
Sleep little baby—there are clouds in the air.

Rock-a-by, baby; the blue eyes will burn
And ache with that your manhood will learn;
Swiftly the years come with sorrow and care,
With burdens the wee dimpled shoulders must bear.

Rock-a-by, baby; there's coming a day
Whose sorrows a mother's lips can't kiss away;
Days when its song will be changed to a moan;
Crosses that baby must bear all alone.

Rock-a-by, baby; the meadow's in bloom,
May never the frosts pall the beauty in gloom;
Be thy world ever bright as to-day it is seen,
Rock-a-by, baby; "thy cradle is green."

[*Burlington Hawk Eye.*

PERSEVERENCE.

M. F. BERNE.

It is of no use, Theo, I can't study; how can any one be expected to, this hot weather? how I wish summer was over, and I was free from books!"

And Clementine Gresham, pushing back the mass of golden hair from her heated brow, sent the large history spinning across the room, and threw herself on a couch.

"Never mind, Clem, only a month longer, and this examination is something quite extra and unusual, you know."

The speaker was Theodora Gresham, a young girl of about nineteen years; she was bending over a large painting in oils, on which she seemed to be bestowing an unusual amount of care. The two girls were sisters, and were now completing their education. It was twelve months since they had left boarding-school, and since that time they had been taking occasional lessons at the large college near their home.

But now the energies of all the young students were bent on preparing for the grand examination. It was Mr. Gresham's special wish that his daughters should compete for the various prizes. Theo was competing for one prize only, that of a painting; the prize for this department was much coveted. Clem studied first one branch and then another, until her friends almost gave up hope of her succeeding in anything. On this afternoon Theodora had to listen to many complaints of the weather, the books, the examination, and indeed, of nearly everything which Clem talked of.

"It is so horrid," she said, picking up her discarded history; "to think there should be anything like books or drawing in the world. If it wasn't for papa, I'd"—but suddenly catching sight of her dog Fido, making havoc among the tulips, she flitted out through the open French window, leaving Theo in peace.

The face that was bent over the painting was a very lovely one, with its delicate complexion, and eyes of softest, darkest gray. Her hair, which was soft and very dark, was allowed to rest in natural wavelets on the fair brow; this afternoon it was slightly ruffled, and her cheeks were flushed, for she had been bending closely over her easel since mid-day. She rose when Clem left the room, and retreating a little, gazed at the painting, not yet half finished. She had chosen for her subject "Autumn," represented by a maiden with nut brown hair streaming over her shoulders; she wore a russet dress, and a wealth of brilliant leaves, while around her were piled rosy apples, clusters of grapes, and glowing berries.

"If only I can do it justice," murmured Theo, as she again bent over the easel.

It was a few days later, and a brilliant morning; earth seemed basking in its young summer loveliness; it was a morning to tempt one to leave all duty, and wander off in the cool green woods, carpeted with blue-bells. Clem burst into her sister's room with sparkling eyes.

"Theo, what do you think? the most delightful thing imaginable, a pic-nic to Beverly Woods, wagons to start at eleven, make haste and get ready."

"Why do you ask me, Clem, dear," said Theo, gently; "you know that I cannot spare a day; my painting is not half completed, and in three weeks it must be ready."

"Theo, you are the most tiresome girl in the whole world," exclaimed Clem, petulantly; "I know why you are trying so hard; it is all because you think Hugh Stanley will admire you more, and I can tell you he will not, although he does preach so much about perseverance, and all that nonsense; however, perhaps you will alter your mind when I tell you he is going to-day."

Was there a moment's hesitation, a slight wavering in Theo's mind? If so, it was but momentary.

"No, dear," she replied firmly; "it can make no difference; do not wait longer; you will be late."

In another minute Clem was downstairs and out in the sunshiny garden. Theo, looking through the window, saw that Hugh Stanley was waiting at the gate.

"Your sister not going?" came clearly to her ears, borne upon the still summer air, and Clem's reply, more clearly still:

"Oh, no; she says she doesn't care to go."

A few silent tears hastily brushed away, and Theo soon became entirely engrossed in her work. And all through the glowing June days, when the earth lay bathed in golden sunshine, and no cloud crossed the blue arch of heaven, she worked on steadily and constantly, allowing no party of pleasure to tempt her from her task.

The 22nd of June arrived, and Theodora remained shut up in her studio all day; the painting must be sent in by seven in the evening, and she had to put a few finishing touches; at five o'clock she called her mother and father and Clem; the painting was finished. Very warm and loving were the praises bestowed by Mr. and Mrs. Gresham on their daughter's handiwork. Clem, after her first involuntary exclamation of admiration at the beautiful painting, stood silent; she was thinking what Hugh Stanley would think of it, and of Theo, and thinking, too, of her own neglected studies, and of how she should get on on the morrow.

Two days were given to the grand examination, the first to history and other general subjects, the second to French, and the prize awarded for painting. Poor Clem was very unsuccessful.

"I was ever so low on the list," she said to Theo, dolefully, on the evening of the first day. "I wish I had never tried; I can't bear learning."

"Clem has no perseverance in her," Mr. Gresham said to his wife that same evening.

"I fear not," she replied; "if only she had applied herself more!"

At two o'clock the following day, one hundred and fifty young girls were gathered in the large hall, where the prize award for painting was to be made. The side seats were occupied by the friends of the competitors, and at the top of the hall were seated the patrons of the College, and a few eminent artists—Hugh Stanley among the number. On the platform, which was draped with crimson, and decorated with evergreens and rare exotics, sat the President with his fair daughter, Edith. Many hearts beat quicker, and many faces flushed, as the President arose. Theo, sitting nearly at the back of the hall, was calm and collected; she had not the slightest hope of winning; to have her name honorably mentioned was all she expected. The President made a long speech, and a very clever one; a dead silence reigned in the hall, and his closing words were distinctly heard.

"The winner of the first prize for the best executed and well-finished painting in oils, is declared to be Theodora Winifred Gresham; will the young artist advance."

Perhaps it was close application during the past weeks, or the utter surprise of the moment, but Theo's face turned as white as the dress she wore, and a mist arose before her eyes.

"Go up, quickly," she heard her companion whisper, and mastering the feeling of faintness by a strong effort, she passed quietly up the hall to the platform where Miss Edith stood, with the set of brilliantly bound volumes and the gold medal in her hands. Theo paused an instant to hear the President say in kindly tones, "All accomplished by talent and perseverance; my dear child you must have worked hard, and I congratulate you most sincerely." And raising her eyes in that large assembly, Theo saw the sweet smile bent upon her, the smile she valued of all others, that of Hugh Stanley. The ladies and gentlemen and young girls all left their seats and crowded around the successful young artist until the slight figure in flowing white, with the heliotropes in her dark hair, was the center of a throng, receiving their congratulations and praises with her winning smile and sunny face.

* * * * * * *

The sweet June twilight fell; the air was heavy with the rich fragrance of flowers; the stars came out in the clear summer sky, and the queen of night arose, looking lovingly down on two who were yet lingering under the chestnuts, while the old old story was whispered once more on this eventful midsummer night.

And later, as Theo hid her crimson face on her mother's shoulder, and in low tones told of her new happiness, Clem stole softly in, and with tearful eyes kissed her sister again and again.

"Forgive me, darling, for all my jealousy and cross-temper," she whispered; "I hope you will have all the happiness in the world; and, Theo, if there is ever another examination, I mean to show the same perseverance that you have, and perhaps I shall receive the same reward."

The Puzzler.

PYRAMID PUZZLE.

1. A CONSONANT. 2. An insect. 3. A steamboat bed. 4. A river of Virginia. 5. An island north of North America. Centrals form a bird.

☞ Answer in two weeks. MAY.

PUZZLER ANSWERS.—March 2.

MISCELLANEOUS ENIGMA.—"Honesty is the best policy."

PYRAMID PUZZLE.—

M
JAM
SPITE
FRANCIS
APPREHEND

Sabbath Reading.

HEAVIER THE CROSS.

Heavier the cross, the nearer heaven;
No cross without, no God within—
Death, judgment from the heart are driven
Amid the world's false glare and din.
Oh! happy he with all his loss,
Whom God hath set beneath the cross.

Heavier the cross, the better Christian;
This is the touchstone God applies.
How many a garden would be wasting,
Unwet by showers from weeping eyes!
The gold by fire is purified;
The Christian is by trouble tried.

Heavier the cross, the stronger faith;
The loaded palm strikes deeper root;
The vine juice sweetly issueth
When men have pressed the clustered fruit;
And courage grows where dangers come,
Like pearls beneath the salt sea foam.

Heavier the cross, the heartier the prayer;
The bruised reeds most fragrant are;
If sky and wind were always fair,
The sailor would not watch the star;
And David's psalms had ne'er been sung,
If grief his heart had never wrung.

Heavier the cross, the easier dying;
Death is a friendlier face to see;
To life's decay one bids defying,
From life's distress one then is free.
The cross sublimely lifts our faith
To Him who triumphed over death.

Thou Crucified, the cross I carry,
The longer may it dearer be;
And lest I faint while here I tarry,
Implant Thou such a heart in me
That faith, hope, love, may flourish there,
Till for the cross my crown I wear.

[*From the German.*

VOWS.

GRACE GOLD.

The psalmist says:—"I will pay thee my vows, which my lips have uttered, and my mouth hath spoken, when I was in trouble." As I read these words, I thought how many of us when prosperity smiles upon us, forget to pay the vows we made *when we were in trouble.* How easy it is when the dark clouds of adversity hover about us, and it seems as though every earthly friend had forsaken us, and we must look to God alone for assistance and sympathy, how easy it is then to make vows unto the LORD; and, as we utter them we feel them, and GOD, more willing to trust us than we are to trust Him, often restores us to a position where we can fulfill them. Then, ah, then do we remember how faithfully we promised to perform all that our lips had uttered? Do we remember how we pleaded with God to lift the clouds that overshadowed us, and remove the burdens that seemed to weigh us to the very earth, and we would perform all that our mouth had spoken? Alas, we fear too many *forget* to pay the vows they made when they were in trouble.

I remember once making a vow unto the LORD, that if he would give me a certain desire, though I must confess to my shame that I did not believe it would come to pass, for I could not believe such happiness would be mine, but I promised the LORD what I would do, and He, taking me at my word, gave me the desired position. Then came the struggle. For a time it seemed that pride would triumph over grace but at last, thanks be unto God and the angels, grace triumphed. I was enabled to perform all my vows; and much good was done in the name of the LORD. Dear readers, have you performed unto the LORD all your vows? If you have not, think not you will prosper, though you seem to for a season. For it is better *never* to vow, than to vow and not perform, for the LORD will surely require it at your hand.

CHRISTIAN FELLOWSHIP.

ACTS XX. 6-12.

ST. PAUL and his fellow-disciples were so deeply interested in their meeting that they could not bear to break it up, not knowing when in the providence of God they would again be together. Together they held sweet communion upon the precious truths and glorious realities which cluster around the person of Christ; together they knelt in prayer, seeking spiritual and eternal blessings for themselves and others; together they commemorated their Saviour's dying love, and felt their hearts knit in a closer bond of union to each other and to their common Lord. Well might the disciples, in the enjoyment of such rich privileges, forget the flight of time! To them the hours were not heavy-footed, but, winged by faith and love, bore them upward until they could almost catch a glimpse of the heavenly Jerusalem and of the lamb who is the light thereof. Such seasons are the Christian's heritage even in this life, and are a foretaste of the full, deep, perfect joy which awaits him when he sits down at the marriage supper of the Lamb—

"When the saints of all ages in harmony meet,
Their Saviour and brethren transported to greet;
While the anthems of rapture unceasingly roll,
And the smile of the Lord is the feast of the soul."

Christian fellowship, or the communion of saints, is, next to communion with Christ, the source of the purest happiness we taste on earth. By mutual counsel and sympathy, Christians lighten each others' burdens, and encourage each other to press on in their pilgrimage heavenward. And when separated in the flesh, they are still united in spirit, one in Christ for ever and ever. Though oceans roll between, there is one spot on earth where they can meet—the throne of grace. Their voices may not mingle, but their hearts can ascend even as one, with and for each other. And when God calls His children home, one by one, the link which binds the believer on earth to the believer in heaven is not broken only hidden for a season by the veil which shuts out heaven from mortal view. Earthly ties may be dissolved, friends may change or grow faithless, but every link of the chain which unites Christian hearts together will grow brighter and stronger throughout the ages of eternity, fastened as it is to the throne of God, and cemented by the love of the same crucified yet Divine Redeemer.

Miscellaneous.

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PERSONAL ITEMS.

The late Pope Pius IX. was once in this country. He was shipwrecked on the North Carolina coast, near where the Metropolis and Huron disasters occurred, and just before the wreck of his vessel, put into Norfolk for water.

Colonel Forney was at the Stanley banquet in London, and, speaking of the Prince of Wales's speech, says: "What a fine, hearty, clear elocution he has! Altogether English, yet without affectation, he captured everybody; and he looked well."

A Washington correspondent says that Senator Davis and Judge Clifford are fast friends, as are their wives. They occupy one table, and are together a great deal. Judge Clifford has, like Davis, a smooth face, small eyes and large nose. His hair is straight and brown, and parted smoothly on the side, like his friend's. He is not quite so large as Judge Davis, and is neater looking, and has a more formal, old-school manner.

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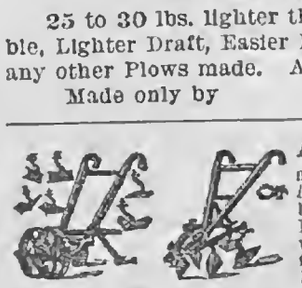

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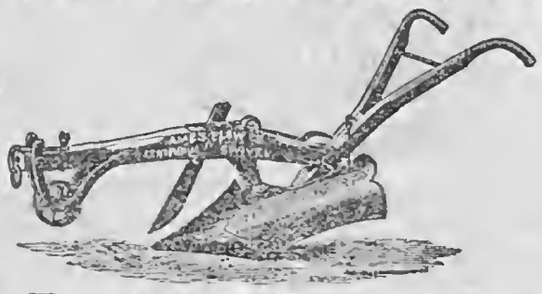

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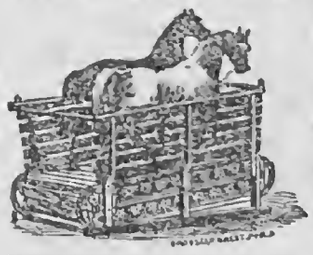

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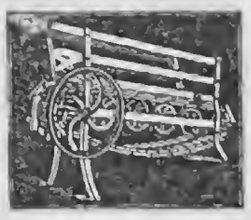

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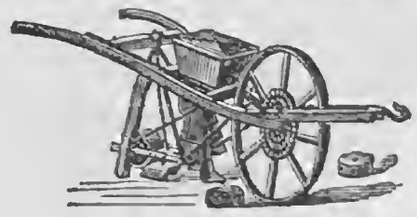

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WHEN a man wants to call a puppy he whistles, but a girl just walks along with her handkerchief floating across her shoulder.—*Rome Sentinel.*

A GENTLEMAN coming into the room of the late Dr. Barton, told him Mr. Vowell was dead. "What!" said he; "Vowel dead? Let us be thankful it was neither U nor I."

FIND a man who has just seen his girl waltzing with another fellow, and in every case you will discover him to be an ardent admirer of Mrs. General Sherman.—*Louisville Argus.*

Among the Dead Failures

Of the past, how many bogus nostrums may be numbered! Beginning their careers with a tremendous flourish of trumpets, blazoned for a time in the public prints and on flaming posters, soon, but not too soon, were they relegated to the limbo of things lost on earth. But Hostetter's Stomach Bitters is a living and thriving remedy. It goes on, curing and to cure. Neither underhand nor open competition affect it. On the contrary, contrast with inferior rival preparations only increases its popularity. It has been repeatedly imitated, but without success. Counterfeits of it have been surreptitiously introduced, but have fallen flat. Everywhere it entrenches itself in the confidence of the people; and well it may, for it is a thoroughly reliable invigorant of the feeble, banishes dyspepsia and constipation, braces the nerves, cures rheumatic ailments and kidney complaints, and eradicates and prevents intermittent and remittent fevers.

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$250 in Premiums.

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CHAMPLAIN.—A bearded variety—a cross between the Black Sea and Golden Drop. Its strong and vigorous straw, growing 6 to 12 inches higher than its parent varieties, stands erect, frequently bearing heads from 5 to 6 inches in length, containing from 60 to 75 kernels each.

Price, $1 per lb.; 3 lbs., $2.50, by mail, post-paid.

DEFIANCE.—Another variety of the highest promise, which displays great productiveness, vigor and hardiness. It is a beardless, white chaff wheat, with heads frequently 5 to 6 inches long, very closely set with large white kernels, frequently numbering 75 to 80 to the single head.

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In order to induce Wheat Growers to give these new sorts a thorough trial, we offer **$250 in premiums** for the largest quantities grown from 1 lb. of seed, also for the 20 largest heads. For particulars see Circular.

Two New Varieties of Potatoes.

BLISS' TRIUMPH.—An extra early variety, ripening a week to ten days earlier than the Early Rose—and one of the most attractive in appearance. Superior quality and very productive.

TROPHY.—A new and exceedingly fine, medium early, red-skinned variety, resembling the Snowflake in appearance and quality. It might with propriety be called a Red-Skin Snowflake.

This variety was exhibited in London at the great International Potato Show, in October last, and received a first-class certificate.

Price of each, $1 per lb.; three lbs. to one address, $3.50, by mail, post paid. See Potato Catalogue.

Bliss's Illustrated Seed Catalogue and Amateur's Guide to the Flower and Kitchen Garden, 220 pages, including several hundred finely-executed engravings, and a **beautifully-colored Lithograph. 35 cents.**

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34 Barclay Street, New York.

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EARLY OHIO.—Earlier than Early Rose. Ranked by general consent, in earliness, yield and quality combined, at the head of all the early potatoes.

BURBANK.—Medium late; a prodigious cropper; flesh remarkably white; quality excellent.

DUNMORE.—A splendid late sort. A greater cropper than the Peerless, which it resembles in form, while far better in quality.

Each, per Barrel, $4.00; per Bushel, $2.00; per Peck, 75 cents.

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20 Papers Garden Seeds, 10c. Size
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GEO. S. JOSSELYN, Fredonia, N. Y.

GUNS and Revolvers. Illustrated Price List free *Great Western Gun Works*, Pittsburg, Pa

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CHEAPEST and BEST FARM WAGON in the MARKET.

Every Farmer, Teamster and Lumberman should have one.

EVERY WAGON FULLY WARRANTED.

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OSWEGO CORN STARCH,

For Puddings, Blanc Mange, Cake, Etc.

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30 Mixed Cards, Snowflake, Damask, &c., no 2 alike with name, 10c. J. Minkler & Co., Nassau, N.Y.

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PURE COD LIVER OIL AND LIME.

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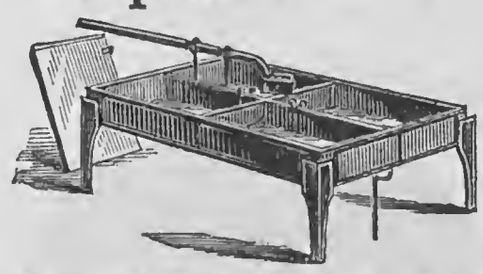

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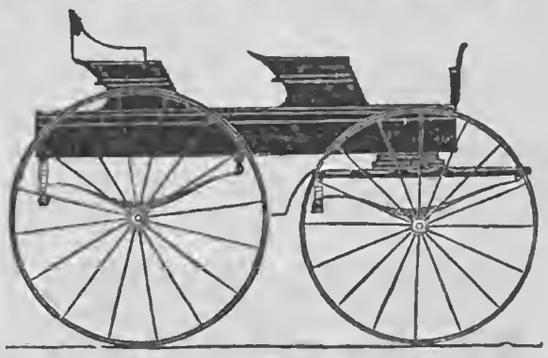
THE CORTLAND



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CHEAPEST AND BEST

Platform Spring Wagon made.
Every Wagon fully warranted.
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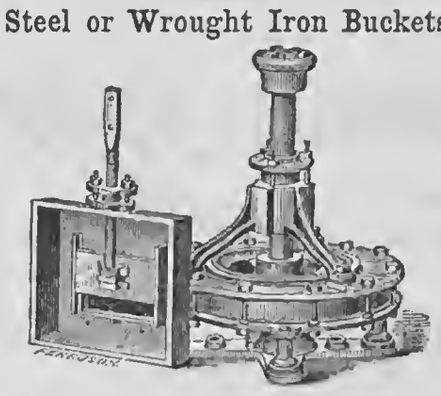

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Price $12.00. J. R. FITZHUGH,
1708 Barker St., Philadelphia, Pa.

EXCELSIOR

MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 12.
WHOLE No. 1469.

NEW YORK CITY, MARCH 23, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

Floricultural.

EULALIA JAPONICA VAR. ZEBRINA.

We are glad to place before our readers at this time a fine picture of the Zebra-striped Eulalia, to which we have several times referred, during the past year, in commendatory terms. The inflorescence is set in a black background in order to show by contrast its feathery plumes, but otherwise the figure does not exaggerate the beauty of this Grass. Our own specimen did not bloom last year, but though the plant was very small when set out in the spring, it made a growth of three or four feet, presenting, in every leaf, a creamy-white and green variegation correctly expressed in our illustration.

There is a longitudinal striped Eulalia that has been known among us for eight or ten years, introduced by Mr. Hogg. The present variety, also introduced by Mr. Hogg from Japan, has been offered by florists and nurserymen only during the past year, and is far from being generally known.

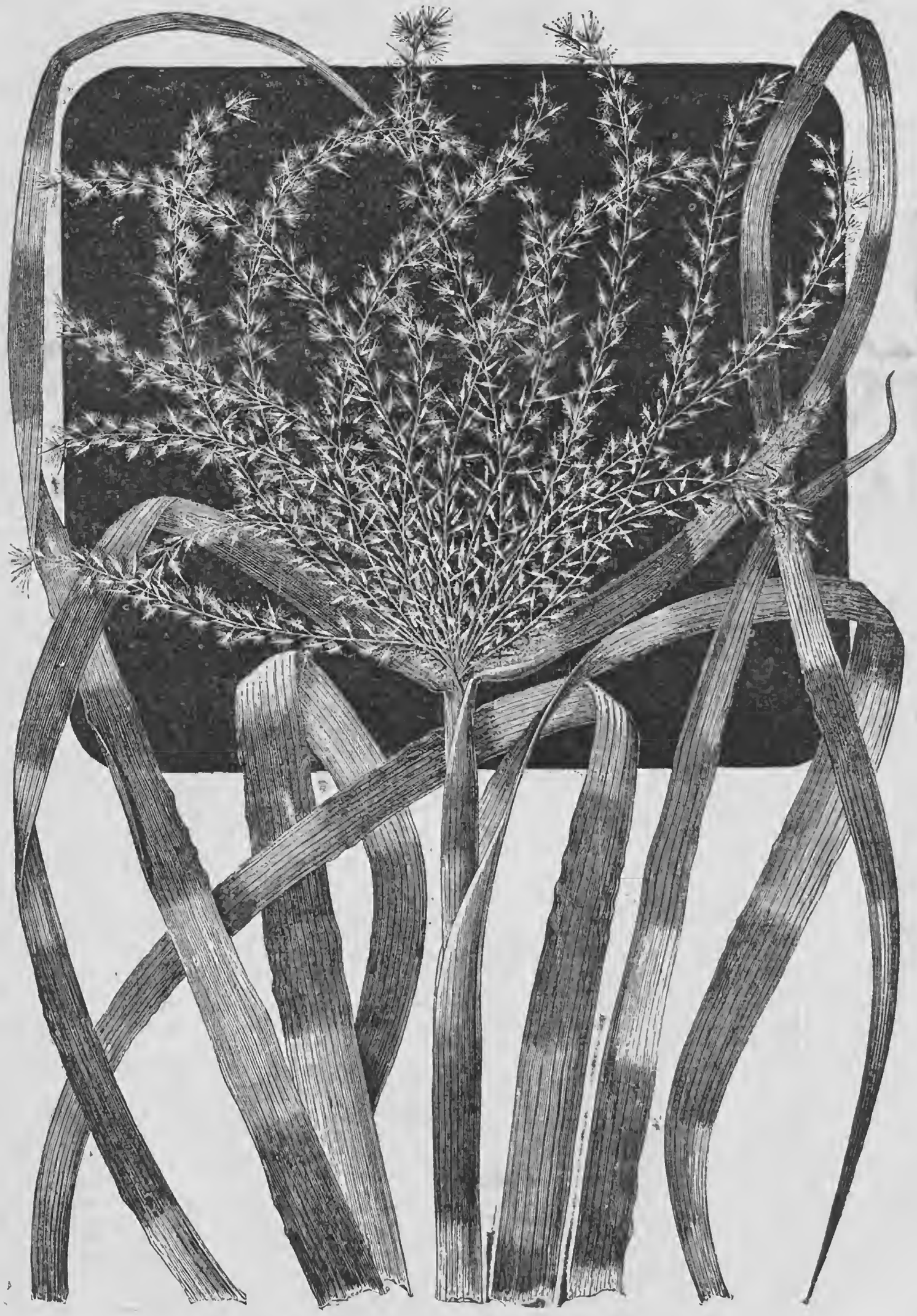
There is scarcely any doubt that it is hardy in this climate, and perhaps it will stand a severer one, though the mildness of this winter has not enabled us to speak positively from our own experience. This point settled, however, we should prefer the Zebra-striped Eulalia to any other large-growing Grass with which we are acquainted, and we suggest to our readers that they include a specimen in their spring orders. Our illustration is taken from one in the Gardeners' Chronicle of London, which was drawn from a specimen plant furnished by Mr. Wm. Bull of that city.

SHELL FLOWER.

We wrote to Mr. Robinson, editor of the London Garden, to learn if Moluccella lævis (Shell Flower) was known in England, and if so, why it was not cultivated. The following reply explains itself. The plant needs a hot sun and dry weather to do well, for which reason we think it may be more desirable here than there:

"In Mr. Robinson's absence I beg to acknowledge receipt of yours of the 15th ult., and to state that I have known Moluccella lævis for some eighteen years at Kew, where I was about 1860, at which time Dr. Hooker made a trip to Syria and Asia Minor, and brought home seeds of the Moluccella, which we raised. We continued to grow the plants, but I failed to notice any beauty in them — being more curious than beautiful. Yours, truly, T. Spanswick,

"Publisher 'The Garden.'"



EULALIA JAPONICA VAR. ZEBRINA.

The Garden.

ASPARAGUS BEDS.

Mix a goodly quantity of old manure with the soil of the bed to the depth of eighteen inches. The quantity of manure to be used need be measured only by the quantity that can be spared—for there is no danger of making the soil too rich. Bone, wood-ashes, salt, lime, &c., are all good. Then open trenches six inches deep and, spreading out the roots, place the plants at least a foot apart. The crowns will then be about three inches below the surface. The old practice of planting very deep in order to procure white shoots is now abandoned, though it required a long time to ascertain that such shoots possessed little of the rich, marrowy flavor of those exposed to the light. Make the trenches (that is for the garden,) from one foot to eighteen inches apart. Bed may be laid out five or six feet wide with paths between, so as to prevent tramping upon the soil which should always be mellow. When it is desired to raise Asparagus in large quantities for market, the rows must be made four feet apart that the plow may be used. The productiveness of Asparagus is much impaired by cutting for too long a time. A bed made as above described, will last for many years, needing only a light spring dressing of salt; which however, as with the manure at first used, may be applied without fear of injury and will at least serve to keep weeds down. Seed may be sown as soon as the soil can be worked. Rake the seed bed smooth and sow the seed in drills, a foot apart. One ounce of seed will suffice for five drills ten feet in length.

Thin the plants, when well up, to three inches apart. Keep free from weeds during the summer and dress with manure in the fall. Such plants may be transplanted to a permanent bed or left in the seed-bed a second year. If strong plants only be transplanted, the permanent bed may be cut from the second year thereafter.

Asparagus beds prepared as we have directed need a large quantity of manure—but they will last for a lifetime. They may be prepared with very little manure so that the soil is light and well drained and the exposure sunny. Then in the fall, cover with manure, and rake off the littery part in the spring.

Asparagus Roots and Seeds.—The best variety of Asparagus is that known as Conover's Colossal. It is sold by all good seedsmen — the seeds for ten cents per ounce or fifty t sixty cents per pound, th roots for one dollar per one hundred.

Horticultural.

MAHALEB STOCKS FOR CHERRIES.

WM. H. HART.

As the time for tree-planting approaches, I wish to give my rather unfavorable experience in regard to the use of the Mahaleb stock in propagating so-called "standard" cherry trees. I have several hundred trees, mostly of the Morello class, worked upon the Mahaleb stock, and in bearing—and as these are alternate with similar trees worked upon Mazzards set under similar conditions, the comparison between them is a fair one.

The Mahaleb stock is peculiarly liable to the attack of a worm at the root, very similiar to that infesting the peach tree, (perhaps our entomologists can tell us whether it is the same species) and although it is held that constant vigilance and the knife are the sure and only remedies in the case of the peach worm, yet with the Mahaleb my experience seems to indicate that the most faithful attention one can give it in this respect only lessens the evil, without removing it. The worm rarely attacks the Mazzard stocks except in the close neighborhood of infested Mahalebs. If the latter stocks were in other respects much to be preferred, the disagreeable operation of careful examination twice a year might insure a fair measure of success. But on our light soils, adapted to the Mazzard stock, I firmly believe it is folly to plant a tree worked on anything else than the Mazzard.

I write at this season to call timely attention to the practice, by many reputable growers of nursery stock, of recommending "standard" trees worked upon the Mahaleb as being hardier and better than those upon Mazzards—or even filling orders for standard Cherries with such trees without consulting the wishes of their patrons. As regards hardiness, with me the fruit-buds of trees upon Mazzard stocks are injured rather less by cold than those upon Mahalebs. Moreover, the union between our improved Cherries and the very dissimilar Mahaleb stock is so imperfect that I question the expediency of its use at all with any varieties except those of the Morello class, which succeed best upon it.

The point of the whole matter is this: trees of more handsome appearance can be grown with less expense and in shorter time upon the Mahaleb stock than upon the legitimate Mazzard; and so long as this is the case, growers of cherry-trees will try to persuade themselves and their patrons that this weakly Mahaleb stock, used so many years simply for dwarfing the Cherry—and I admit it is well adapted for that purpose—will sustain and nourish the life of a standard cherry-tree longer and better than its own species, the healthy and vigorous Mazzard.

Trees worked upon the Mahaleb stock, if sold at all, should always be specified as such, and put at a lower price proportionate to their ease of propagation. Dealers who put off such trees upon their uninformed customers commit gross injustice upon them.

Poughkeepsie, N. Y.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

"Our View of It."

I THINK your subscribers will generally thank you for the opinions expressed in your article under the above heading. No doubt Professor BEAL'S experiment was carefully conducted, and the results correctly reported, though I should not be surprised to see interested parties try to show otherwise. The experiment is valuable, as it shows the reliableness of seeds as they are sold to dealers and planters in the open market. There is a demand for cheap seeds, but every good gardener knows such seeds are dear at any price. This experiment will cause others to be made, and may eventually cause better seeds to be put upon the market; though, as I notice, most people sow all garden seeds too thick, even when of poor quality, public confidence would have to be regained before it would be of much benefit to the average planter. E. L. M.

Tomatoes.

ON my flower-stand, among the Fuchsias, Roses and Geraniums, are two small green boxes of tomato plants, the seeds sown not many days ago. My object in keeping them there is because I am sure to give them due attention when caring for the other plants. There is nothing objectionable in having Tomatoes among the flowers until large enough for the first transplanting. Then, I will put them in larger boxes or tin cans, and keep them in the kitchen until it is time to set them out in the ground. Ladies are apt to be so given to floriculture that they often neglect to sow vegetable seeds of any kind in the house or hot-bed. A little attention in this line will pay well for the trouble. I always sow Lettuce, Cress, Radishes and Peppers in the hot-bed, but am more successful with Tomatoes, treated as above. The "Early Smooth Red" is an excellent variety. M. G. R.

SEED EXCHANGE.

MANY thanks for the seeds the RURAL so kindly sent. I would like to exchange an Amaryllis or Jacobean Lily for a variegated Caladium, and a plain green Caladium or three varieties of Cannas for a Wigandia, or double (?) Japan Lily. Last summer I had Cannas that were eight feet four inches high, and Caladium leaves that were 28 by 41 inches, standing 6 feet 6 inches high.

Those wishing to exchange, please direct postal card to J. B. VERDEN.

Cochranton, Marten Co., Ohio.

THE RURAL being a "medium for the exchange of seeds," I have the following I would like to exchange: Dahlia; Pansy (best); Bryonopsis laciniata; Aster, several sorts; Dianthus diadematus laciniatus, etc.; Petunia, several sorts; Marigold, new sort; Verbenas, several sorts; Canna, many sorts; Celosia, several sorts; Amaranthus tricolor; Balsams, several sorts, including Gregory's "Yellow;" Gaillardia; Antirrhinum, several sorts; Chrysanthemum, several sorts; Coreopsis; Nasturtiums; Phlox Drummondii, all sorts: Columbine, different sorts; etc., etc. Of vegetables, I have six or eight sorts of Squashes; "100-day Tomato;" Sweet Corn, several sorts; Field Corn, six or eight sorts, including Compton's Centennial Prize Corn; Prof. Murdock's celebrated Yellow, 76-day Corn, good size, prolific and weighs more than it measures. It would be trespassing on the already crowded space of the RURAL to extend the list, since I have most "things" found in an amateur's garden.

I will exchange any of the above for Double Portulaca, Ten-week Stock, Scarlet Sage, Centaurea Americana, Digitalis, Cyclamen, Datura Wrightii. Of vegetables, I wish Mammoth Chili, Yokahama, Valparaiso, Nantucket and Butman's Squashes. With regard to the other seeds I have and those I want, if I rightly understand the RURAL'S scheme, we can arrange after we have once been brought together by correspondence. My Pansy seed, in fact all, are of the best strains, and procured at the highest prices to insure the best seeds. A. C. WILLIAMS.

Hugo, Ill.

I shall have a large quantity of surplus Dahlia roots next spring, perhaps ten to twenty bushels, representing 300 to 400 colors, all very fine. I would like to exchange these for any of the bulb plants, any of the new colored Peonies, any of the Lilies except Tiger, (double Tiger is a poor thing), any choice hot-house plants, or any hardy ornamental shrubs. I should also like a three-cornered Cactus, the sides full; or seeds of any rare plants, perennials in particular. Write what you have to spare and I will reply.

A. G. BISBEE.

Willoughby, Lake Co., Ohio.

I HAVE 150 or 200 varieties of plants, including hardy shrubs and vines, green-house and bedding plants, bulbous and tuberous roots, which I would be glad to exchange for others with any one who will exchange lists with me.

MRS. VIRGINIA S. HALLER.

Marion, Smyth Co., Va.

SEEING the RURAL'S offer with regard to the exchange of seeds and plants, I would like to profit by it. I have a good many different kinds, and would be glad to exchange some of them for others. The following are the names of some of the seeds that I have to spare: Candytuft; Pinks; Morning Glory; Sweet Peas, mixed; Double Hollyhocks, mixed; Mourning Brides; Clarkia; Eternal Flower; Marigold.

Cedarville, N. Y. E. P. HUNTLEY.

I AM a recent subscriber to your paper, am much pleased therewith, and sorry I was not sooner acquainted with its merits. In No. 7, Feb. 16th, you invite those having plants or seeds to exchange to send in lists. Herewith I send mine. I am in a position to supply almost any variety of vegetable seeds and a great many sorts of flower seeds. Would like some information on growing Gladiolus. [As soon as we can find space.—EDS.]

Tomato Plants or Seeds: Trophy, Canada Victor, Conqueror, Red Smooth and Strawberry. Vegetable Seeds of every kind, many varieties. Flower Seeds: Delphinium, Drummond's Phlox, Everlastings, three sorts, Eschscholtzia, Crimson Mignonette, Double Petunia and Portulaca. Ornamental Grasses, four varieties, Verbenas &c. For Flower Seeds or Bulbs: Address for one month, ROBERT R. MCGILL.

Bay Ridge, L. I., N. Y.

[SOME of the persons offering Exchanges are known to us—some are not. We cannot vouch for their good faith. Readers must judge for themselves.—EDS.]

THE AUBURN HORSE.

CATALOGUES, &c., RECEIVED.

WE thank Mr. Henry M. Seely, Secretary, for the Fourth Report of the Vermont Board of Agriculture for the year 1877.

I. C. WOOD & BROTHER, Fishkill, Dutchess Co., N. Y.

No. 3. Wholesale price-list—Fruits, deciduous and evergreen trees and shrubs.

No. 5. Wholesale price-list of plants.

No. 7. Price-list of plants by mail.

Illustrated catalogue and price-list of the Whitney crates and baskets.

ANNUAL REPORT of the Connecticut Agricultural Experiment Station for 1877.

ADVANCE sheets from a work on Sheep Husbandry by J. B. Killebrew.

ANNUAL REPORT of the Entomological Society of Ontario for the year 1877, including reports on some of the noxious, beneficial and other insects of the Province of Ontario; prepared for the Commissioner of Agriculture on behalf of the Society, by William Saunders, Rev. C. J. S. Bethune, B. Gott and Joseph Williams.

TWENTY-SECOND ANNUAL CATALOGUE of St. Mary's Academy, Notre Dame, Ind., for the academic year 1876-7.

E. B. UNDERHILL, Poughkeepsie, N. Y. Circular and price-list of strawberries, raspberries and currants.

THE following is a list of the officers of the American Cotswold Association, as reorganized:

President—T. L. Miller, Beecher, Ills.

Vice-Presidents—John C. Snell, Edmonton, Ont.; Chas. P. Mattocks, Portland, Me.; Robert C. Estill, Lexington, Ky.

Secretary and Treasurer—Chas. P. Willard, Chicago, Ills.

Board of Directors—Samuel E. Prather, Sherman, Ills.; Chas. A. Degraff, Janesville, Minn.; Chas. F. Mills, Springfield, Ills.; T. L. Miller, Beecher, Ills.; Chas. P. Willard, Chicago, Ills.

The Cotswold Record is progressing favorably, the work having the endorsement and support of the best breeders of the country.

SECRETARY'S Third Annual Report to the American Berkshire Association, together with suggestions, instructions and rules covering applications for entry in the Record.

A GUIDE to Southeastern Nebraska, with a new map of the "wonderful Nemaha Valley." Published by the Southeastern Neb. Immigrant Union.

STORRS, HARRISON & Co., Painesville, Ohio. A trustworthy establishment, and a neat, comprehensive catalogue of 80 pages.

New and rare plants for 1878, including greenhouse and bedding plants. We have never seen finer nursery stock anywhere than in the extensive grounds of Storrs, Harrisen & Co.

HOVEY & Co., 16 South Market St., Boston, Mass. Illustrated Guide and Seed Catalogue for 1878.—84 pages. It is a matter of surprise how this firm can afford to send a catalogue of this size free to applicants. The firm is too well known to need any special commendation from us.

ALFRED BRIDGEMAN, 876 Broadway, N. Y.

There is no space lost in this excellent catalogue, which gives the botanical and familiar name, hight of plant, duration and hardiness, in an abbreviated form, leaving a solid list of all that is desirable among vegetable and flower seeds. A long list of rare novelties, among both vegetables and flowers, is given, with descriptions. Among these we notice the Shell Flower (Molucella lævis), which will delight all lovers of the odd in floriculture—and Glaucium luteum, a plant with creamy-white foliage, which the RURAL has lately distributed among many of its subscribers.

We are pleased to commend this establishment and this catalogue (which is sent free to applicants) to our readers and friends.

The Horseman.

THE AUBURN HORSE.

THE splendid specimen of the equine race known by the name of the Auburn Horse, was foaled in 1858 and bred by PHILIP SMELZER of Lodi, New York. His dam was out of a Vermont Hamblotonian mare by a Bellfounder horse, and his sire by Champion, greatgrandson of imported Messenger. He was over sixteen hands high and in color a golden chestnut. When two years old, he was sold for a price boasted to have been $400. In May 1865 he was bought by Mr. PARSONS of Auburn for $550 and henceforth was known by the name of the town wherein his purchaser dwelt. It required little training in his case to develop great speed and to give promise of marvelous powers. His fame rapidly spread abroad and later in 1865 he was purchased for $13,000 by Mr. ROBERT BONNER, and became the stable companion of such famous trotters as Lantern, Lady Palmer and her mate, Flatbush Maid, the beautiful gray mare, Peerless, and other flyers owned by the same liberal lover of horse-flesh. In the hands of his new owner he had the advantage of the best care and training, and soon satisfied such excellent judges of equine fleetness as his owner, HIRAM WOODRUFF and others, that he was the fastest trotter on this footstool, and could even beat Dexter's best time. The uniform policy of his new owner, however, prevented his appearance on the trotting track, and his best public performance was shortly after his arrival in this city when, driven by Mr. BONNER to a road-wagon which with the driver weighed 325 pounds, he trotted a mile in 2 minutes 39 seconds. HIRAM WOODRUFF, one of the very best judges of trotting stock we have ever had in this country, in lamenting the early death of this fine gelding, declared that he was the best horse he had ever held reins over, not barring Lady Thorn or his favorite, Dexter. In appearance he was a perfect model of equine power, with great muscles, faultless bone, iron sinews, hard flesh just "placed where it did the most good," clean limbs, slender neck, bony head, fine eyes, and altogether a very thoroughbred form.

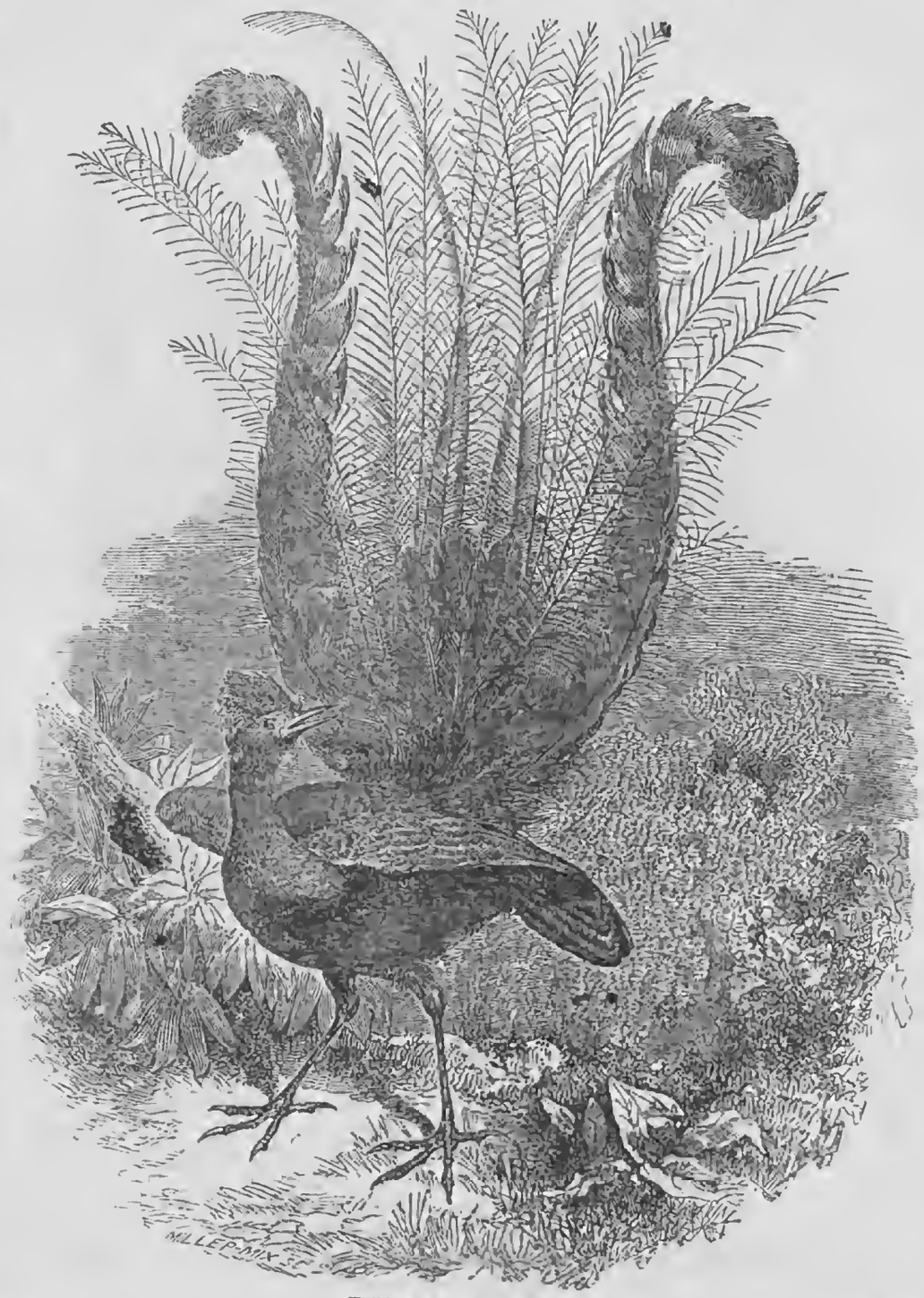
The Naturalist.

THE LYRE BIRD.

OF lyre birds there are only two species described by naturalists, both of which are natives of Australia, and together constitute the genus *Menura*. Of these by far the most common is the wood-pheasant, *M. superba*, which, from the form of its legs, has been placed by some among the gallinaceous tribes, while others class it with the hornbills, and yet others with the thrushes or the wren family. Its length is about forty-three inches, of which the tail constitutes twenty-five inches; the bill is a trifle over an inch long, resembling that of a peacock,

and in a groove, near the middle of its length, are the nostrils, which are long and narrow. The wings are short, concave and rounded, the quill feathers short and feeble, the general plumage full, deep and soft, of a brownish black above and a grayish brown below; the head is slightly crested and the throat of a reddish hue; the size is about that of the pheasant. The birds are very shy, running rapidly among the brush-wood, scratching for slugs, beetles and insects, generally among fallen leaves, and seldom taking to wing. They live in pairs in rocky places overgrown with bushes; their motions are graceful, the males strutting and displaying their tails with all the pride of peacocks, from which they greatly differ in having a pleasing voice of varied intonation.

The chief characteristic of the lyre bird, however, is its ornamental tail, from the singular shape of which it derives its name. This consists of sixteen feathers of three distinct kinds. The external two are broadly but loosely webbed on the inside, curve outward then inward, and again turn boldly outward and downward, both together forming an outline resembling that of an ancient lyre of which the fourteen intermediate feathers are the strings. Except the two center ones, these consist of slender shafts, two feet long, truly webbed with delicate, alternate filaments, springing out at increasing intervals towards the end. The two middle feathers are longer than the rest, pointed at the end and barbed only on the outer side. The color of this graceful ornament is an amber brown, except the two outer feathers, which are black, with a narrow white border, pearly underneath, and with bright reddish spots on the inner web. This gorgeous tail is confined to the males, that of the female being long and graduated, the feathers perfectly webbed on both sides of the shaft, and the texture soft and flowing.



LYRE BIRD.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

We have cut all of the beech wood on several acres, which we found to be very much decayed in all of the large trees at the heart, while the tops of almost all were more or less dead, and getting rotten. We think we have saved money by clearing off this wood; as in a few years more the large trees would not have made but a very little of marketable wood, and the decay in all of them would have kept pace with the growth and we are not sure but that it would have exceeded it. Where then is the profit of letting such timber stand? We shall not clear off all of the wood but have left the Sugar-maples, the Basswoods, Ash, Ironwood, and the thrifty Hemlocks. The most of the timber growing on this ground was Beech, and now since it is all cut away the timber is thin and scattering. As the land is rather rough and a sidehill, we want to keep it in woods, and therefore we shall plant on this ground the nuts of the Black-walnut, and let them grow into a grove. If we put the nuts in the ground, in the fall, the squirrels would doubtless dig them all up during the winter, so we shall bury them in a pit near the house and plant them in the spots where they are wanted to grow in the spring. There are now several bushels of black-walnuts in the wagon-house chamber, and we wonder if they will grow. If they will, then the grove may be started next spring. Most nuts will not germinate after they get dry. These may be an exception. Anyway, we will bury a couple of bushels right-away under some coarser mulch, and try to keep them in a condition to grow if possible. If they fail, another fall ample preparations may be made. These black-walnuts have a somewhat rank and oily taste, and most people do not like them, especially if they have plenty of hickory or chesnuts; but where the latter do not abound, folks do eat the coarser black-walnuts and seem to think they are good. In West Virginia they grow in great abundance, and are gathered and sent to the cities where they sell for from 75 cents to $1 a bushel. This would make the nuts quite a source of profit if the husks came off readily, but it is considerable work to fit them for market. The oil in them must have a value, and if expressed would no doubt find a sale as a lubricator of fine machinery.

We observe that Mr. DIMON says the Ayrshire is the best family cow. Our baby has done splendidly on the milk of a pure-bred Ayrshire cow, after getting sick on the milk of the Jersey. There is more butter in the milk of the Jersey, it is richer, and they are better cows for a butter dairy. Once the calf of a Jersey cow while sucking its dam, became very sick and weak. A change to an Ayrshire cow soon cured it. It could not digest Jersey milk. Some grown-up people cannot digest butter, and have to do without; and, when we remember that the milk of many Jersey cows is one-fifth butter, no wonder that it disagrees with these young things.

Another year we must save a lot of cabbage to feed the hens in winter. This is probably the best form in which green feed can be stored up for them, and as we are satisfied they require it, we shall lay in a stock of cabbage. The wonder is we have never thought of it before. The bastard heads will do for the poultry, and so will the stems if they are cut fine. Where the snow does not cover up the grass they can find green bits for themselves, but in our cold and snowy climate this want ought to be provided for.

One of the new milch cows began to run down on her feed of all the hay she could eat and a half bushel of turnips. She could not eat hay enough to keep her in condition, as too much of her subsistence went into milk, and so a peck a day of buckwheat bran has been added to her daily rations. She is improving on this, and the other cow is fed the same, so she will not also run down. Our long winters compel us to economize in feed, and sometimes, no doubt, to our detriment.

The breeding sows have been separated and each one has a pen by herself, as the pigs are due within two weeks. A feed of corn once a day will now be added to the mangels. It would not do to feed corn alone, for this would produce constipation, and then we might expect the mothers to be restless and perhaps crazy, as they sometimes are when the young are born, and either lie on them or eat them up, according to the degree of their malady. This is the cause of the "ugliness" and "ferocity" of sows when they are so. And the remedy is prevention, by giving them a variety of food, and such as shall put their stomachs and bowels in the best possible condition. Do not give them all corn or all roots but some of both, with a half bushel of ashes to root over to get the charcoal, and plenty of good swill.

We saw, awhile ago at a friend's house, the best form of a ventilator. A board is fitted between the jambs, eight or ten inches high at the bottom of the window. The window being lifted at the bottom allows the fresh air to come in, which strikes against the board and escapes over the top of the board into the room without any current or draught. The quantity of air desired can be regulated by the hight of the board and the distance between it and the window, which may be close or otherwise.

If a chicken freezes its comb or wattles, cut them off at once and they will heal over in a few days. If not treated in this way, it will take weeks for the dead parts to dry up, drop off and heal up. It does not seem to injure a fowl to have these parts cut away, for if it did then game cocks would show it, as they are denuded of every bit of their combs and wattles by sportsmen, (?) apparently without any detriment, as they do as well afterwards, and, they say, fight better, when deprived of these sensitive organs, having more courage and being less liable to get wounded.

AN EXPERIMENT WITH FERTILIZERS.

BELIEVING that it is for the interest of RURAL readers to compare notes with each other on a subject in which we are all so much interested as in the effects of different fertilizers, I give you the result of some experiments I made during the past season: I broke up, in the spring of 1877, about four acres of poor land, such as, without any fertilizer or stimulant of any kind, would not produce a good crop, and sowed it to buckwheat, using on a portion of it, about two acres, well-rotted cow manure. On another portion of about one acre, I applied the scrapings of the chip-yard, which were also well rotted, and which my neighbors told me I would receive no benefit from. On the remainder of the field, except a few rods on which I did not use any fertilizer, I applied 80 pounds of superphosphate to the acre.

Now, for the results: I harvested from the whole field 85⅓ bushels of buckwheat. The growth of straw, except where no fertilizer was used, was very uniform. On that portion where I had used the superphosphate it seemed to be filled somewhat better than on the remainder of the piece, while that portion on which the chip manure was applied was quite as good as where I used the stable manure; thus proving satisfactorily to me, that there is some virtue in the scrapings of the wood yard. The part on which no manure was used, was very light, and had the whole field been as poor, it would hardly have paid for harvesting. All this goes to prove to me that whatever we invest for fertilizers, if adapted to the soil and crop on which they are used, comes back to us in the first crop, besides adding to the value of our land.

E. J. BROWNELL.

WORTH KNOWING.

IN this section of country it is the custom of our farmers to fatten and kill one or more beeves during the winter. In most cases a quarter or a half is used in the family, and the balance sold. Usually the prices range very low, and only a small amount of ready cash is realized. This winter, having some difficulty to sell half a beef at a paying price, I concluded to convert the round of the hind quarters into smoked beef. I looked over my RURAL papers, but could find no statement of profit and loss. I give the result of my experiment, therefore, to your readers, and would add: let the farmer note that from this little item he can more than save the subscription price of the RURAL:

DR.

By 115 lbs. beef, at 7 cts.	$8 05

CR.

To 70½ lbs., at 16 cts.	$11 28
5 lbs. trimmings, clear meat, at 8 cts.	40
34½ lbs. soup bones, at 2 cts.	69
5 lbs. shrinkage	
	$12 37
Value of beef	8 05
Profit	$4 32

Gross weight of cow, 515 lbs.; rather fine boned. The grocer with whom I trade offers me 16 cts. cash, or 17 cts. per pound in trade.

Walden, N. Y. H.

Farm Economy.

COST OF BARN YARD MANURE.

W. J. FOWLER.

IF any farmer reckon the amount of produce in his barns and stocks in the fall, the value of his stock then, and its value in the spring when feeding ceases, he will have the data for deciding how much his manure pile has cost him. Whoever does this will be surprised at the expensiveness of home-made fertilizers. In a large majority of instances barn-yard manure as it is hauled out in the spring, costs fully one dollar per load, or fully as much as is charged for it from city stables. If this manure is kept a year and partially decomposed, its cost per load will be twice or thrice as much. Farmers are seriously asking themselves whether they can afford this expense. So near the city of Rochester as this, there is always a market for even the coarsest produce, so that there is no necessity, except for manuring the soil, to feed it on the farm. But the salable value of almost every thing is greater than its manurial value. A load of straw that will sell for $6 to $8 will hardly make $1 worth of manure. The difference is even greater with most other articles of farm produce. Whenever it can be done, the advantage is almost always in selling whatever will sell and maintaining the fertility of the farm by liberal purchases of manure. The failures in farming always come from buying too little fertilizers and never from selling too much produce.

On every farm there will always be some manure from work-horses, from fowls, and from the cows needed to supply butter, or at least milk for the family. This should be saved as carefully as if it were the main dependence. But the bulk of fertilizers must be obtained in some cheaper way. We cannot afford to keep large stocks of cattle, sheep, and horses mainly for the manure they will make unless this is the only resource for fertilizing the soil. We had better do almost any thing rather than let the farm deteriorate. In my opinion commercial manures are the best substitute for those which the farmer himself can make. Care must be taken to get those which are what they profess to be, and this done, they may be used in much larger quantities than even the most liberal farmers have ever attempted. It may seem foolish to many to apply a few hundred pounds of fertilizer with the expectation of realizing as much benefit as from several tons of barn-yard manure. But it is not the bulk which tells. Analysis proves that the phosphates and nitrates in a large load of coarse manure may not be greater in amount than those elements in a dressing of superphosphate or guano. If the manure is mainly made from straw, its fertilizing properties will be very slight in comparison with any reliable concentrated manure. The bulk of most stable manure, especially if unrotted, consists of carbonaceous subtances in which few soils are deficient. Carbon needed for plant-food is supplied in abundance by the carbonic acid of the atmosphere. It is pretty well established now that plants derive through their leaves from the air all the material for starch and other carbonaceous matter which they contain. What the farmer needs to do is only to supply phosphates, lime, potash and nitrogen and to keep the soil in such mechanical condition as to make these elements available. A large crop takes from the soil only a few pounds of these precious elements. It is entirely reasonable to believe that the restoration of an equal quantity will make good the loss. This is not mere theory. Messrs. LAWES & GILBERT of Rothamstead, England, have proved by carefully conducted experiments, that fertility may be kept up for a long series of years with continuous cropping solely by the application of concentrated manures. This subject is one of great and increasing interest to American farmers,

who must more and more depend on the chemist's laboratory rather than on their barn-yards for fertilizers.

Monroe Co., N. Y.

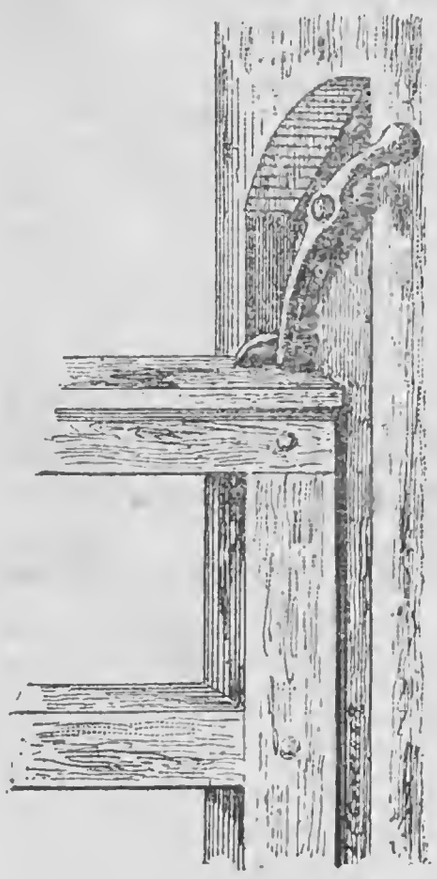
MANURES.

It becomes a pressing duty on the farm, at this season, to devote serious attention to the subject of fertilizers. Do not go at the subject blindly. Study, as well as you may, the requirements of your land, and aim to supply its deficiencies through artificial channels. If you are not at all sure as to what your land lacks, which, alas! is too often the case, compel prejudice and custom to yield a point, and do a little intelligent experimenting. Try fertilizers of various constituent parts, but be sure you know of what they are composed, and are prepared to apply the experiences gained to subsequent operations.

You will, no doubt, have to use some bone superphosphate. Be careful to avoid materials not strictly pure. If you have occasion to use ammoniated bone superphosphate, yan may buy the article made at Buffalo, N. Y., by L. L. Crocker, with the assurance that you are getting a "straight" fertilizer, whose effect may be counted on with certainty, if your land requires this manure.

GATE LATCH.

Sink a notch in the gate-post two inches deep shaped as in the figure. In this fasten to the post by a bolt the catch as shown in the cut. In the end of the gate, opposite this catch, place an iron pin or bolt ⅝ or more in diameter. Push the gate shut and the pin shoves the lower end



of the catch back and up. This drops and holds the gate closed. To open the gate place the thumb on the knob of catch. This is cheap, simple, effective, and not likely to be opened by trickey cattle. This was seen on several farms in Climax, Michigan.

FARM HELP.

Knowing the Rural is just enough to afford an opportunity for a fair prosentation of all sides of a question, I take the privilege of making a few remarks on an article that lately appeared in its columns under the title "How to make farming profitable." In the first place, the writer, Mr. T. B. Miner, is certainly old enough to know that, as a general rule, farmers are quite hard enough on their help, without any of his prompting. According to his views, hired hands should have no more privilege or consideration than an ox or a horse. It would be little wonder in that case, if they took no more interest in their work and required as constant watching! You think, Mr. Miner, because you are rich and I am poor, that it is your place to be a hard taskmaster and mine, a diligent toiler who must never staighten his bent back for a few moments' rest, however toilsome the labor or hot the day. As for a fair day's work, I am glad to get it and never shirk it, but to work for a taskmaster of your type — never! I know of men that started as poor as poor could be, and who to-day are far richer than you (?) and yet they have always had the good-will of all about them, which you couldn't have had, and have always been called "easy men to work for," a title of honor of which you acknowledge yourself undeserving. The idea of telling a man to "shut up," when he wanted to say a few words, just because it might take a moment that did not belong to him! But you, Mr. Miner, and those like you, do not hesitate to ask your hired man to work after dark, every few nights, to finish a field of hay, or do something you are in a hurry for. But I tell you, farmers, when one hand refuses to wash the other, both are soon in a sorry pickle, and if the employer keeps his help's nose constantly to the grindstone during every moment the pittance of pay entitles him to do so, he should not, and must not, expect anything more from him. Yet, on every farm, whenever a storm is coming up, it's hurry! hurry! until the rain comes down. And then, instead of saying "Boys rest a few minutes before going to work again," Mr. Miner would have some posts ready under the barn, on which he would insist that his hands, panting from their late exertions in his behalf, should at once set to work! But even in hired help there still remains a good deal of human nature, and sometimes not a little intelligence, and they are sure soon to learn this trick, and when called upon to hurry, will do so very slowly.

Indeed, under such a master as Mr. T. B. Miner, pray what encouragement is there to exertion? He boasts of having been "a hard man to work for," but says he was "good pay." With regard to the first part of this there will be few to misunderstand him; but with regard to "good pay," what does the phrase generally mean in the mouth of a "hard man?" In my experience, and I doubt not in that of most others, it simply means that he hired men at the lowest rate at which he could get the class of help he wanted, wrung all the work he possibly could out of them at all hours, and didn't cheat them out of their sweat-stained wages.

If a man gets the good-will of his help, and they are of the right sort, such as Mr. Miner says he always hired, he will get much more and better work out of them than if their only inducement to labor is dread of their driver's tongue-lash or fear of being shown the road. Neither is there then any necessity of his being constantly with them, for if sent to the field alone each will do a fair day's work without even a thought of shirking. On the other hand, with regard to the help employed by men like Mr. Miner, it is just as Mr. Miner says: You have to be with them every minute. This, farmers, I know to be a fact, and not a few among you, who in your day were hired hands also, know it likewise. A Farm Hand.

HIRED HELP.

In Rural New-Yorker for March 2nd, Mr. T. B. Miner proceeds to "lay down a few rules for farming," and among some things that are really commendable and sensible, gives his views in regard to the treatment and management of "hired help." Most of these views I think are wrong in principle, and would be disastrous in practice. First, I find in rule second, he says: "A man and boy will often do as much work as two men, especially if the latter are left to work by themselves, as they frequently spend half of their time in talking;" and he implies that a man will not talk to a boy. Now, is this a fact? I think not; for if the boy be old enough to accomplish even half the work of an ordinary man, he is as apt to talk to the man, and *more* liable to stop to listen than the man; and, in several years spent on a farm, I have observed that men will talk to an intelligent boy as readily as to a man, if there are no men in the field. Indeed, so far as my experience goes, it does not pay to employ boy help on a farm where all the help is hired.

Again, he says: "When I hire a man, I tell him plainly that he must not 'fool' away his time (my time) in talking to other men while at work, unless he wants his 'walking papers.'" One would very naturally infer that Mr. Miner follows the plan adopted in some of the penal institutions of the country, namely: the silent system. But even in our prisons this system has been acknowledged by some of the best men who have had charge of such institutions, to be a stupendous failure; and in this State and some others, the system has been abandoned for the reason that the men are more easily controlled, and will accomplish more work when allowed to talk. Furthermore, here in the West, if a man were to use the language quoted above, when hiring men, he would find but very few who would work for him at all. Now, permit me to express it as my opinion, if a man is capable and does his work well, but very few men of sense will object to his talking; and further that a man who cannot work and talk, or listen at the same time, and do his work well, is not worth his board, whether he talks or not.

NORWAY SPRUCE—SHELTER BELT.

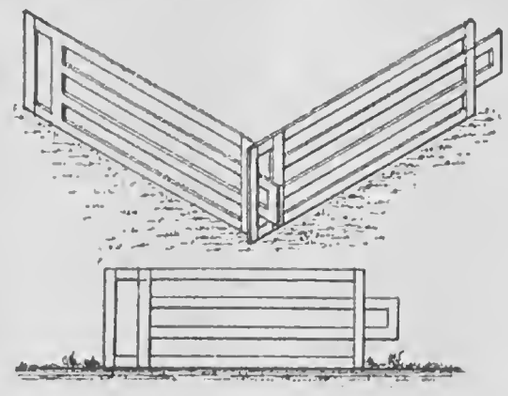
Farther on he says: "I say to my men in plain English: 'Shut up and attend to your work, or take your money and go. I hire men to *work*—not to spend their time in talking.'" Now, if Mr. M. uses such language to his men—which I doubt, notwithstanding his assertion—I will venture to say that he employs only stupid, ignorant men—men but little, if any better than a brute or a machine, and who are good for nothing without a *driver*; for smart, intelligent men who know how work should be done, will not brook such language from their employer.

In regard to Mr. Miner's assertion that it shows a lack of administrative ability in a farmer to be called "a good man to work for." I have this to say: I can refer him to several of our most successful farmers here, as such men; and if their success is to be taken as proof, it pays to treat even *hired help* as men, and not as mere machines to be *driven*. And his further assertion that "nine farm-hands out of ten will not do half-a-days work on an average if you are so easy with them that they call you "a nice man to work for," is a libel on the intelligence and fidelity of working-men in general, and does no honor to the writer. "A Hired Man."

Waupun, Wis., March 4, 1878.

FENCE FOR OVERFLOWED LAND.

I. A. Youngs wants a fence for overflowed land. The sketch below shows a single panel, and also two panels set up. We use here boards 1 by 6, 12 feet long. Let the projecting ends stand out 12 inches. This fence needs no posts,



and two men with a team to haul the panels, can set up 400 rods in a day, if the hauling distance is not too far. It is best to make the panels near the line of fence. Put the boards together with eight-penny wrought nails. It withstands our winds well. Can be taken down rapidly. S. Rufus Mason.

Purple Cane, Dodge Co., Nebraska.

CONVERTING MAPLE SIRUP INTO SUGAR

As I partly promised in my article on "Manufecture of Maple Syrup," to give some hints on converting it into sugar, I will now try and do so briefly.

As I said in my former article, "No foreign substance should be permitted to find its way into the sap from the time it leaves the tree till ready for use." I would here still further emphasize the assertion; though many I know will differ with me, and be ready to maintain that without the use of milk, eggs, or something else to clarify the sirup, you cannot make a prime article; still I think if even those persons, would try the following mode, they would be convinced that the clarifying process at least was no advantage, even if not a positive injury to the quality of the article. Set the sirup in a tub, with a faucet about two inches from the bottom, and let it stand long enough to settle thoroughly; then draw off through the faucet, thus leaving the sediment at the bottom of the tub, and you will find there will be nothing in the sugar that will injure it. Indeed, I am disposed to believe it to be freer from impurities than when clarified by the ordinary method. Boil carefully in a sheet-iron pan, about eight or ten inches in depth and as large in area as convenient for the size of your stove, until hard enough to cake. When it is fit for this, we ascertain by dropping some on a new tin dish and, if when cold it cleaves readily from the dish, it is hard enough. Stir occasionally until cool enough to take out for caking in the dishes which should be wet with cold water to prevent it from sticking to them. The most convenient form of cakes I find to be about the size of an ordinary brick, and dishes for these can be made by any tinsmith. D. J. B.

Arboricultural.

SHELTER BELTS.

In view of the manifold advantages of trees for timber, shelter and ornament, their conceded influence in securing a beneficial water supply, and their constant destruction to meet the demands of home industry and foreign requirements, coupled with an innate disinclination in the minds of many to make an immediate outlay, however trifling, either of money or time, for the purpose of insuring a comparatively remote benefit, however important, it would be a national blessing if a law were passed in every State compelling all landowners to set out a certain number of trees each year until the number, on every farm, should bear a specified proportion to its extent.

Beneficial as such an enactment, duly enforced, would be at the East, its advantages would, ere long, be far more appreciable on the bleak-looking prairies of the West. Experience has amply shown that lines and belts of trees, by checking the violent sweep of prevailing winds, materially increase the crops they shelter; afford a healthful and economical protection to stock of all kinds; and salubriously temper the local climate round every homestead whose beauty and value their presence enhances. While for timber, it would not take long to establish a walnut grove from walnuts, and oak, hickory, maple and other suitable deciduous trees could be procured and planted at a trifling expense: for shelter, a belt of evergreens would, on many accounts, be the most desirable. To say nothing of the relief their leafy presence affords to the bleakness of winter scenery, the protection they offer to man and beast, would be invaluable at that season when on the exposed prairies, fierce gales laden with icy death, render protection most needed. Of evergreen trees adapted to this purpose not the least desirable is the Norway Spruce.

The valid nature of the protection afforded by a line of these trees, is excellently exemplified by the accompanying engraving taken, a few weeks ago, from a photograph of one of the Norway Spruce shelter belts in the grounds of Messrs. Robert Douglas & Sons, of Waukegan, Ills. The belt was planted eight years ago, and in the last four years has made growth of nearly nine feet. This surely proves there is no reason why prairie farmers need have their dwellings and stock exposed to the unchecked violence of wintery gales, if they wish to shelter them.

Miscellaneous.

KELLOGG'S SALE OF TROTTING STOCK.

A NEW DEPARTURE.

Mr. Peter C. Kellogg, well known among horsemen and readers of Agricultural papers by his *nom de plume* "Hark Comstock," has issued a catalogue of horses offered at a "special combination sale" to take place on the 27th and 28th, in this city, at the building long known as the "Rink." Mr. Kellogg has laid himself out to secure a selection of excellent trotting horses, which are chiefly breeding animals. He has pledged every owner upon his honor not to have his stock

bid upon or run up by interested parties; and he has entered into stringent contracts with them to the same effect, so that it may be fairly assumed that every bid made will be in good faith. Nearly all the horses are registered in WALLACE'S Register; all are to be collected in the vicinity of the American Institute Building, (the Rink,) ten days before the sale, and all moneys will be retained by the auctioneers, (VAN TASSELL & KEARNEY) for three days, to enable buyers to verify warrantees. These are some of the commendable provisions to secure the confidence of buyers, but the fact that Mr. KELLOGG has devised and is carrying out the scheme is the strongest guarantee of perfect fairness and satisfaction to both buyer and seller. There are 95 horses catalogued. Of these 15 are stallions, and 21 brood mares, and among these and the roadsters are not a few which are quite famous. The breeders' names and addresses are given in full, together with extended statements in regard to pedigrees and performances. The catalogue forms a considerable pamphlet and an appendix of 18 pages contains one of the most valuable essays on the breeding of trotting horses which has ever appeared — a condensation of "Hark Comstock's articles—entitled "Echoes for Breeders' Ears." An advertisement of the sale appears in its proper place.

RURAL SPECIAL REPORTS.

(See pages 171, 172, for other Reports.)

Floyd Co., Iowa, March 9, '78.

WE have had the most remarkable winter for this latitude, on record. Have had no snow since last November, no storms and very little cold weather. February was like balmy May, and March is duplicating it thus far. Our farmers have been plowing and seeding for the past two weeks. The ground is in splendid condition for tillage. Several of our citizens have visited Texas and other Southern States this winter, but all have returned better satisfied than ever with our beautiful Iowa. One remarked that Floyd Co. is worth more than the whole State of Florida. W. L. MCEWEN.

P. S.—We are disappointed in not receiving the promised seeds.

[Positively the seeds were mailed to you if you applied.—ED.]

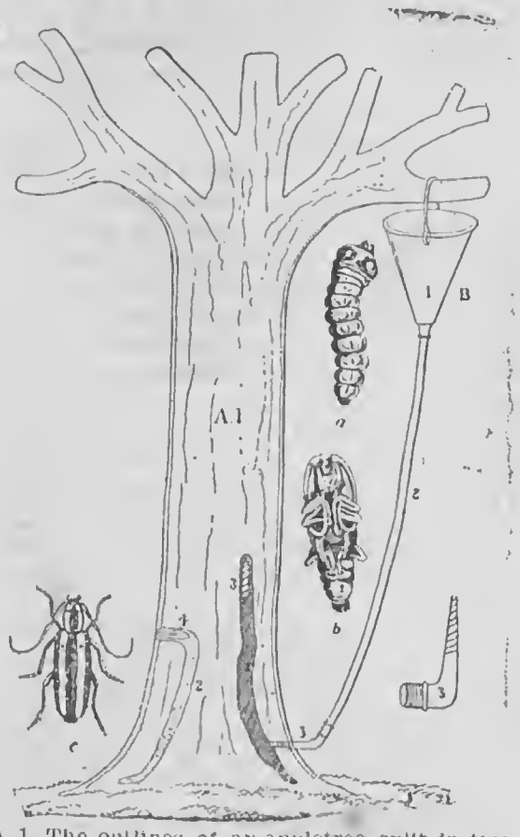
WHEELER, N. Y., Feb. 28.

PLEASANT weather still continues. Our sleighing from the 1st of the month to the 20th called out the lumbermen, and a large stock of logs are being hauled to the mills daily. The past three days have been fine sap days. Farmers are hiring hands for the coming season at prices ranging from $12 to $18 a month, with board and washing. I have noticed that the most of the "Rural Special Reports" are from New York State, only occasionally one from another State. As good a paper as the RURAL must have a large circulation in other States than this. It seems as though the correspondents' column might be made more interesting, if even a few only of the many readers would send in a report monthly from their immediate vicinity. Items from other States are interesting sometimes. S. S.

Entomological.

TO KILL THE LARVÆ OF THE APPLE TREE BORER.

THE eggs of the apple tree borer, Saperda bivittata, are deposited at the base of the main stem, and the hole which the young larva makes is scarcely larger than a pin and is soon closed



A. 1. The outlines of an appletree split in two, showing the inside of a longitudinal section. 2. The burrows of the borer. 3. The borer at the upper end of the burrow. 4. The pupa waiting for the proper time to emerge from the tree.
B. The apparatus for introducing the liquid. 1. The funnel. 2. Gum-elastic tube. 3. Nozzle.
c. Saperda bivittata; *b*. Pupa; *a*. Larva.

by the growth of the tree. These larvæ remain in the tree perhaps four years, penetrating the wood and making excavations more and more. At this time, we believe it is next to impossible to kill the larvæ by the use of wire or pliable sticks as is often recommended, because their course is closed up after them by their "excretal discharges in the form of agglutinated saw-dust." The *debris* so often referred to as a means of detecting their presence, is more frequently a means of detecting the beetle's escape after it has perpetrated the damage of a three or four years' residence in the bark and wood while in the larval state.

Mr. RATHVON, in an essay upon "Insect Longevity," delivered before the Pennsylvania Fruit Growers' Society, refers to a self-operating plan for the destruction of this insect, the explanatory cut of which we here produce. The funnel-shaped reservoir is hung in the lower branches or at least elevated a foot or more above the base of the tree, connected by an elastic hose with a "tapering nozzle spirally grooved, forming a coarse screw." This is to be screwed into the infested part and the reservoir filled with any liquid that will kill the borer—such as tobacco water, or a carbolic dilution. The liquid will tend to rise in the burrow to a level with that in the reservoir and will gradually make its way through the saw-dust excrement, finally reaching and killing the borer.

Mr. RATHVON thinks that water alone would be effectual though requiring a longer time. However effectual, the plan is attended with too much trouble and expense ever to be put into general use, or it would have been popular long since. Prevention is the best cure for the apple tree borer and a strong wash of lime, tobacco, carbolic acid, potash and the like, applied often between the 1st of June and 1st of August will generally render the use of sticks, wires and reservoirs unnecessary.

Industrial Implements.

STEAM POWER FOR FARMERS.

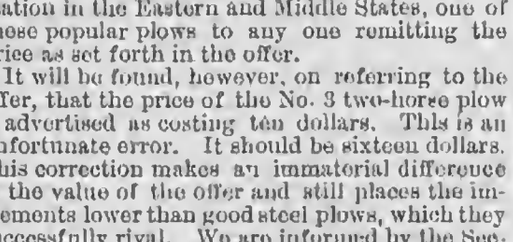
WITHIN the past few years steam power has become as much of a necessity on the farm as the wagon, and without it there would be no possibility of securing the crops or fitting them for markets, especially on the large farms of the West. To supply a growing demand for such a power, great improvements have been made of late in the construction of agricultural engines as well as in the facilities for their manufacture, and now there seems to be little that is desirable in such a machine that has been omitted in construction. Those made by the Oneida Iron Works, at Oneida, N. Y., are deserving of especial attention from those contemplating the purchase of such an engine. The company is co-operative in its organization and composed wholly of practical mechanics in the various departments, who have the advantage of over twenty years' experience. The building and tools of the company were constructed for the manufacture of engines, and being supervised solely by themselves in all their details, with a thorough knowledge of the power required for the various purposes of agriculture, it is not to be wondered at that their machines have taken such high rank among farmers.

Their engines are no mere experiment, but are constructed upon well-known and tried principles, embodying simplicity, economy, durability, safety from fire; are easily managed, and consequently not liable to get out of repair. All material used in their construction is of the best, and the workmanship unexcelled. While they make a specialty of mounted engines for agricultural purposes, they at all times keep a full assortment of portable and stationary engines, from three to fifteen horse power, suitable for all uses. Being established in the center of the great dairy district of New York, they know from experience just what is required for a cheese factory or creamery, and can furnish such power at all times. As a shipping point, Oneida is one of the best in the country. Engines may be shipped to any point without delay and at very low rates.

THE SYRACUSE PLOW.

THIS chilled plow has met with great favor, especially in the State of New York. Owing to the intense competition among manufacturers, and the fierce activity of agents, the farmer has ample opportunity to test plows. Therefore, one that retains its popularity, and increases in favor, must have sterling qualities. The only satisfactory test of an implement of this kind is its actual performances in the field under various conditions of soil and circumstances. We gather from testimonials sent to the Syracuse Chilled Plow Co., Syracuse, N. Y., many of the names of the writers of which are known to us, that this plow has done satisfactory work in muck bottoms; that the ground is left in fine condition; that its ease in handling and working on stony ground is the subject of almost extravagant praise; that it works equally well in sod as in stubble; that its lightness of draft, and holding to the ground, when it is hard and dry, are prominent and valuable qualities. The scientific construction of the plow, and the excellent material used in its manufacture, guarantee durability.

An excellent feature of the plow is the jointer, and it would be greatly to the advantage of farmers if they gave more careful attention to the



use of this convenient part. To use it to the best advantage the jointer standard should be set nearly perpendicular, and arranged to cut a furrow slice not over two inches deep. This furrow slice will be turned over into the bottom of the furrow, and the mold board of the plow will then turn its furrow over upon top of it, completely burying it with all the weeds, manure, clover stubble, sod, etc. turned under, out of sight, and the top of the ground will be left even and light. In sod, the ground once plowed this way is light and mellow, and the harrow will not drag up the turf.

Referring to an announcement made in this journal in a previous issue, it will be seen that the manufacturers make a very liberal offer that comes most appropriately to those who need good farm implements at this season, but are victims of the present financial stress. This company propose to send, during thirty days, from March 12, free of all freight charges, to any railroad station in the Eastern and Middle States, one of these popular plows to any one remitting the price as set forth in the offer.

It will be found, however, on referring to the offer, that the price of the No. 3 two-horse plow is advertised as costing ten dollars. This is an unfortunate error. It should be sixteen dollars. This correction makes an immaterial difference in the value of the offer and still places the implements lower than good steel plows, which they successfully rival. We are informed by the Secretary of the company that the spring business is something unprecedented, notwithstanding this company has been noted, during its short existence, for enormous yearly sales. It will be lack of ordinary foresight not to embrace so unusual an opportunity.

THE SYRACUSE ENGINE TRIAL.

THE report of the Committee on Farm Engines at the Syracuse trial has been received. This test was made under the auspices of the New York State Agricultural Society. The report which is quite voluminous, will be condensed and its most important features printed in these columns. In this issue we can name only the successful competitors. In the first class The Fishkill Landing Machine Co., and G. WESTINGHOUSE & Co., Schenectady, N. Y., take prizes B. W. PAYNE & SON, and the Porter Manufacturing Co., secure the honors in the second class.

THE Blanchard Churn, so long before the dairy public, and holding its rank despite multitudinous new inventions and improvements, has lately improven upon itself slightly by a modification of its interior arrangements. Its yearly sales have steadily maintained a high aggregate figure, and now, for the present season the already reasonable price at which it was sold has been reduced, placing the churn within the reach of the many. Circulars and prices will be sent by PORTER BLANCHARD'S Sons, Concord, N. H.

CHAS. MILLER & SONS, Utica, N. Y., are a firm thoroughly well known throughout New York State, but to others of our readers who are in occasional want of dairy supplies, we may suggest that the facilities of this firm are most complete. They especially make a varied display of cheese vats, graded to every capacity. Circulars descriptive of their entire stock may be had free on application by mail.

The Poultry Yard.

REPLY TO MR. WALLACE.

I SEE no particular benefit to anybody, to reply in detail to Mr. WALLACE, as all that he has adduced is too vague to be considered as throwing any light on the native country of the Light-Brahmas, which would be interesting to discover. I presume that they originally came to this country from India; but from what part of that country has never been shown, nor that any such fowls exist in any part of it.

Mr. WALLACE proposed to quote from two works to show that Light Brahmas existed long ago in various countries, but as he admits, he had no such books in his possession; and one of them, he says, was published over *sixty years ago*! even if he had quoted direct from the books, as he wrote to the RURAL, there is no evidence that the writers referred to the Light Brahmas. He says the fowls were called "*Light Hindoos*." Now, if such fowls ever did exist in India, why is it that no account of them ever reached either England or the United States, through the poultry books and papers of these two countries?

Mr. WALLACE will please to excuse me from any further notice of his claims, as they are in my opinion, too unsubstantial to be seriously argued; but if he can hereafter produce any *new* information bearing on the question, the fowl-breeders of this country will, undoubtedly, be interested in reading it.

Linden, N. J. T. B. MINER.

New Advertisements.

BROWN'S BRONCHIAL TROCHES

Coughs and Colds.

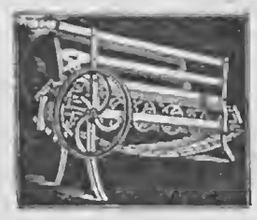
"Brown's Bronchial Troches" will allay irritation which induces coughing, and gives immediate relief in Bronchitis, Catarrh, Influenza, Hoarseness, Sore Throat, and Consumptive and Asthmatic Complaints. The Bronchial Troches have been steadily winning their way into public favor, until they are known and used nearly all over the world.

TROTTING STOCK
AT AUCTION,
Without Reserve or Postponement.
WEDNESDAY & THURSDAY,
March 27 and 28, 1878,
Commencing each day at 11 o'clock, A. M., at the American Institute Building, on Third Avenue, between Sixty-third and Sixty-fourth Streets, in the City of New York. The animals comprise
ABOUT 90 HEAD
OF THE MOST
Meritorious and Fashionable Breeding,
believed by the subscriber to be incomparably superior to any considerable lot ever heretofore offered at absolute sale. They are selected (not culled) from the studs and stables of several well-known Eastern breeders and owners, in whose interest they are offered, and whose names and residences appear as vouchers for the pedigrees and statements regarding each animal in the catalogue, all of which are recorded in the Trotting Register.
The Stallion list includes the famous **King Philip**, that has the fastest stallion record in the Hambletonian family by the direct mail line; also the brilliant young sire **Kentucky Prince**, unsurpassed in record and performance of get by any stallion of like age; also the three-year-old colt **Inheritor**, by Jay Gould, out of the noted turf mare Lucy; also three young sires by Rysdyk's Hambletonian, all out of mares tried very high as producers; two by Backman's Messenger Duroc, out of superior mares of Clay and Star blood; one by Edward Everett, dam by Rysdyk's Hambletonian; one by Middletown, dam by American Star; and others of great worth.
The broodmares include daughters of Rysdyk's Hambletonian, Middletown, Almont, Woodford Mambrino, Green's Hambletonian, Rysdyk, Sackett's Hambletonian, Conklin's Star, and of Lucy Almack. The mares and fillies otherwise classed include daughters of Kentucky Prince, Rysdyk's Hambletonian, Messenger Duroc, Almont, Blackwood, Jay Gould, Aberdeen, Ajax (brother to Walkill Chief), Thornedale, Strideaway, Edward Everett, Billy Denton, Knickerbocker, Rysdyk, Woburn, etc., and likewise fashionably bred on the side of their dams.
The Trotters, Roadsters and growing stock range in speed from ability to beat 2:20 to animals barely broke to harness, and others entirely unhandled.
All the stock is pledged to absolute sale.
No postponement on account of weather.
Send for Catalogue to PETER C. KELLOGG,
110 JOHN ST., NEW YORK.

USE THE BUFFALO
HONEST FERTILIZER
Ammoniated Bone Super Phosphate,
AND
Pure Ground Bone.
The purity of these goods is guaranteed, and their standard proved by regular analyses of Prof. G. A. Liebig, and other eminent chemists.
No Rock Phosphate, Mineral Guano, Land Plaster, Salt Cake, Spent or Sludge Acid, and other inferior materials, enter into the manufacture of my Phosphate, which is solely made of **Bone, Meat, Blood, Pure Acid and Potash Salts.**
My Works are always open for inspection to every consumer of Fertilizers.
Highest Premium and Medal of Honor awarded to my Fertilizers by the Centennial Commission, Philadelphia, 1876.
Send for new Spring Circular, containing full directions and testimonials. L. L. CROCKER,
252 Washington Street, Buffalo, N. Y.

CHEAPEST FERTILIZER
BECAUSE THE BEST.
PREMIUM BONE
For all crops. Made only by the EXCELSIOR FERTILIZER WORKS, Salem, O. Circulars free.

BONE DUST.
FINE GROUND, WARRANTED PURE.
Manufactured by S. H. MORGAN, Toledo, Ohio.



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DOG POWER
Has no equal in the market. Price reduced. Send for Circular.
CORTLAND FOUNDRY AND MACHINE CO.,
CORTLAND, N. Y.

PERRY'S NEW YORK

HAY TEDDER.
This greatly improved and new model machine has been pronounced by FARMERS and AGRICULTURAL IMPLEMENT DEALERS to be by far the best and cheapest Hay-Spreading Machine in the world.
EVERY MACHINE FULLY WARRANTED.
All orders received on or before April 15th, 1878, will be entitled to a special discount.
Address OTTO E. C. GUELICK,
Manufacturer, Utica, N. Y.
Circulars and full description free.

CIDER PRESSES AND GRATERS.
BOOMER & BOSCHERT PRESS CO., Syracuse, N. Y

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

The March sun comes streaming in strong and cheery. It shines upon the kitchen fire, and the wood seems to burn dull and black—too early—we must put in a pine stick and coax a blaze. *Next* month I should not wonder if in the hurry of gardening, I have to announce that the fire is out, between meals. Ah! now it is getting bright and warm, sending out its pleasant glow, till the kettle begins to "hum" as pleasantly and full of suggestions as Mrs. Peerybingle's, and promises a cup of good tea. And here comes "Tilly" to *infuse* it, as the old housekeepers say. Rinse the teapot with hot water, child; now a teaspoonful for each person and one for the pot. Just a little water, and set the teapot which is best of brown earthenware, upon the tea-kettle, in place of the lid. Then the steam from the boiling water will bubble under it, and draw out all the strength. It must be covered with a "cosey" when you set it on the table to keep in the heat and aroma of the choice leaves you have infused. Don't know what a "cosey" is? Do you see that gay, scarlet cloth cap on the side-board? It *does* look like a Turk's cap a little, but made to fit our teapot. Very gay? Yes it was a gay friend of mine who made it and embroidered it with gold thread. It is thickly wadded and lined with scarlet flannel, with a stout cord of gold and scarlet drawn around the bottom. When it is in use, it is quite ornamental and will keep the tea hot for an hour, or more as I have noted by experience, when by any chance a member of the family has been detained from the table.

Are the children to have tea? No, "Tilly." Not a child of mine takes any such beverage. Of course, if milk were scarce I might give them something else, but we keep a good supply of milk for the family to use, and that is their best drink. When I was a little girl, a certain enterprising grocer of the town where I lived, caused to be inserted in the daily paper this rhyme:

"When you start in the morning to travel by rail,
Or by steam take a trip to the sea,
No perfume e'er wafted from Araby's gale
Smells then like a cup of good tea."

I thought *then* that Cowper's cup that "cheers" was a treat I should enjoy when I grew older, but have since, with wider knowledge, learned that my robust-childhood and freedom from what are known as "children's diseases," are largely due to the pure sweet milk that was my daily beverage. Put in a log "Tilly;" we do not need the kitchen fire any more just now, and these thoughts have taken me back to other days that seem *now* but a dream.

COOKING AN ART.

Whosoever would become a good cook must give the mind to it and in order to excel in this branch of domestic economy, one must have, or cultivate, a taste for it. Seasoning is the most difficult part of cooking. One may know how to stew, roast or broil, but to know well what seasonings or spices to add which will improve the flavor, requires patience, practice, and I may add ideality.

Again, badly cooked food is sheer waste of material, strength and nerve. What mother can justly expect to rear rosy, happy children upon sour bread, indigestible meats and rich pastry! No woman should take upon herself the duties of wife or mother, without a thorough knowledge of this art, and no woman's education is complete, however brilliant, if this branch be neglected. If mothers taught their daughters from the first that it was as much of an accomplishment to manufacture light, wholesome bread, snowy biscuits or to be enabled to broil a steak to a nicety as to master a difficult piece of music, or one of the languages, there would be fewer divorce cases, fewer complaining husbands and miserable unhappy wives.

Mrs. Mary Olin.

UTILIZE THE CANS.

Old tin fruit and vegetable cans, have been thrown into the back yard and alley long enough. Instead of disposing of them in this way, they can be used for flower-pots, and may be made very ornamental too. Here is an opportunity for a display of the "Decorative Art," at present, so popular. The plants will thrive if a hole is made in the bottom of the can, quite as well, I find, as in porous pots. The rust from the tin is more of a benefit to the plants than otherwise. They may be painted any color (I like brown and black), with pretty pictures pasted on. I am reminded of a window I passed, which was filled with blooming plants, in tin cans. I knew that they were Pelargonium Roses, Petunias and Pinks but the labels said they were Canned Pumpkin, Lima Beans, Lobster, Corn, Oysters and Mackerel. Better the bare cans than the labels and pictures representing the original contents. M. G. R.

CHEESE FROM SOUR MILK.

Not having seen any directions for making cheese from sour milk in the department devoted to Domestic Economy, I venture to give my way for doing the same. I know from experience how the tired and overburdened farmer's wife often racks her brain for something to fill out her meager bill of fare, when time is precious and every step counts. I have been so benefited myself by a recipe or suggestion from some one more experienced, that I add my mite hoping it will be tried by those who are in the habit of making cheese from sour milk. Take a pan of thick milk after it has been skimmed, place it over a kettle of boiling water, after cutting it in squares with a knife. Let it stand until thoroughly heated, then set aside until cool and pour into a colander or sieve to drain. When the whey has drained off turn into a pan, pour on plenty of cold water and let it soak two or three hours. Drain again and then with a fork mash fine, season with salt to taste and stir in a few spoonfuls of thick, sweet cream. Beat well with the fork and turn into a dish for the table, putting it on ice or in a very cool place before serving. Mrs. S. G. H.

Corning.

DOMESTIC RECIPES.

Cocoa-nut Cake.

Three-fourths of a cup of butter; two cups of sugar; five well-beaten eggs; one and one-half cups desiccated cocoa-nut; one-half cup of sweet milk; three teaspoonfuls of baking powder in three cups of flour.

Cheap Raisin Cake.

One egg; one cup of sugar; one-half cup of butter; one teaspoonful of soda in one cup of buttermilk; two cups of flour; one cup of raisins; one teaspoonful each of cloves, allspice and cinnamon.

To Boil Parsnips.

Scrape or pare the parsnips and cut cross-wise in slices one-fourth inch thick; put them into a kettle with as much slightly salted water as will be cooked away when they are done—great care must be taken that they do not burn; when very tender dish up and put butter, pepper and sweet cream on them. Mrs. S. C.

Savannah, N. Y.

QUERIES ANSWERED.

Can you give me the recipe for Javelle water?
Dansville, N. Y. Mrs. E. J. G.

Ans.—Put two pounds of sal-soda into a kettle; pour on two quarts of boiling water, and boil fifteen minutes; add one-half pound of chloride of lime; when cold put into a jug and cork tightly.

How shall I clean children's white kid shoes?
Akron, Ohio. Mrs. Mary Brown.

Ans.—Empty a small quantity of hartshorn into a saucer; wet a piece of white flannel in it and then rub on a piece of white soap; rub the shoes with this, and as the flannel becomes soiled take a fresh piece.

What will remove soiled spots from bed ticking?
City.

Ans.—Rub starch in thick with a wet cloth, and put the ticking in the sun. When dry, rub well with the hands. It may be necessary to repeat the process.

Everywhere.

TALKS UPON THE PRAIRIES.

Good Advice to Emigrants.

FRONTIER.

Few count the cost of a free homestead on the frontier. The Government gives each head of a family or a single person twenty-one years old, one hundred and sixty acres of land, for only about the cost of survey, upon the condition that the recipient of Government bounty occupy that land for five consecutive years. This is a gift really of about $186—a liberal provision, on the part of the Government. But it is well enough for a shrewd man to take even a "gift horse," a little one side and quietly look him in the mouth, provided there is a long winter before him. While the Government makes a free gift in good faith, the homesteader really pays a high price for all that he gets.

On the cost side we shall find a large number of items like the following: First, serious exposure of families to all the vicissitudes of a changeable climate, with inadequate provision for protection. Second, living for years in small and uncomfortable cabins or "dug-outs," roofed with sods, involving a series of discomforts, to be understood only by those who have endured them. Third, coarse and short rations may be counted among the usual conditions of frontier life. Fourth, while the perils from prowling Indians can now be scarcely counted, there are, even yet, localities—where frontier families must keep their powder dry. But these are unworthy of mention by the side of another item—that is, the loss of the privileges of civilized society. This loss is felt most by the children; for they must form their habits and tastes with the rudest surroundings. In most cases, they will have small opportunities for culture. You would understand this better if you should see as the writer has seen, young men of eighteen or twenty reading in the same classes with children of seven or eight years. No after-training can obliterate the effects of these wasted early years. In too many cases the child receives a harmful bias, that must shape all after life.

We have a class of men who have always lived on the frontier, as their fathers did before them. They will move on as often as they can sell out their claims, until there are no more claims to take or "jump" on this side of the Pacific Ocean. They realize no great loss in frontier life, but to a man of culture, everything about him tells of loss. Few of us would like to have our children trained to such a life. And parents who prize the privileges of society in their quiet Eastern homes, as they think of the future of their little ones, will pause long before they will lead their families to a frontier home at such a cost. There is, however, one redeeming fact—that all do not suffer alike by rough surroundings. Culture and refinement within the family circle is potent for good on the frontier as well as elsewhere.

While I would not discourage any energetic man with or without a family in regard to coming West, let me say to all our Eastern friends, remember that there is

A BETTER WAY TO "GO WEST,"

than to rush at once to a homestead upon the distant frontier. It should be remembered, in all cases, that a man without money cannot support a family easier here than in the East. Hence, a man with a family proposing to come West should have at his command a few hundred dollars,--enough to provide himself with a team and support his family for a year, at least, free of debt. If you have so much or more, and are disposed to come West, let me whisper in your ear, not to bind yourself up to some plausible emigration scheme. Some oily-tongued Mr. Winksharp may tell you a great deal about a company which he is forming to settle a delightful region about a thriving city, which the thankful settlers have insisted, as a very inadequate token of their respect, shall be called "Winkfastfield," and now if you will only go rightthere, you will find the people all ready with open arms to receive you. And as he has become specially interested in you, and "knows that you will make with your excellent wife and beautiful children, a valuable accession to the very refined society of Winkfastfield," he is willing to have reserved, for a very reasonable consideration, until you can examine it, one of the best quarter sections in all that region, only five miles from the city. This may all be very kind on the part of "Mr. Winkfast;" but don't invest. These emigration projects may look very plausible at the East, but they are bubbles, that have all an unfortunate way of bursting here. Stand clear of both the schemes and the men who push them.

Unless you have friends to whom you can bring your family, it is far better to come in advance and select a temporary home for them. It is quite essential that you seek only a temporary home at first. There are several advantages in this. It may be your purpose to ultimately secure a good farm. By selecting a temporary home in some thriving town for a few months or even a year, you will have ample time to make your selection. You will know better after a few months what you want, and at the same time learn more fully what you can do, thereby escaping the otherwise almost inevitable imposition. By this course you will be able to throw yourself more out of the friendly (and disinterested?) grasp of land agents. You will find in this class many honorable men, but it will be well for every immigrant to remember that it is the business of these men to sell land, and if in their power, they will sell you a farm whether you really want it or not. Avoid all hasty conclusions with these men. Know beforehand just what you want, and take things cooly with land agents. If the immigrant does this, he will thank "Frontier" sometime for his advice. If you have little money, do not lay it all out in land, but get a good team, a few farm tools, a few good cows, and rent a farm convenient to market, for a few years, or even work some land near town for a year, until you can rent a good farm. Depend upon it, this is a better and a safer course for a few years, than to be burdened by exorbitant interest and heavy taxes.

NOTES FROM KANSAS.

A large number of people, many of whom are subscribers to the Rural New Yorker, have written to me from the East, making inquiries about lands in Southern Kansas, and thinking the columns of that valuable paper would be the best medium through which I could reach all, I will, in a rough farmer's style, state some of the advantages of this, the most fertile valley in the West.

The winter has been very mild, as they generally are: indeed, wheat has grown all the time. It looks as green now as in April or May; the ground is entirely matted. In riding over this country, Rural readers would be surprised to see the immense fields of growing wheat. They cannot realize the beauty and fertility of this Great Arkansas Valley, unless they were here to see it for themselves. This county (Sumner,) the garden of this Valley, has about 100,000 acres of growing winter wheat, and if nothing befalls it before harvest, we shall have a large yield. Our average crop is from twenty to twenty-five bushels per acre.

This county was settled in the fall of 1870. In September 1871, it was organized with a population of 250; to-day it has 12,000 inhabitants. It lies in the southern tier of counties and is about 130 miles from the east, and 230 miles from the west line of the State.

It contains an area of 1188 miles. Much of it yet belongs to the U. S. Government. Of this any one who is 21 years of age, can secure 160 acres at $1.25 per acre by living on the same six months. Or they can purchase farms with some improvements at sums varying from $800 to $2500. In speaking of a farm what is meant is a quarter-section. There are many in the East with a small capital who could do well here, and there is no field so inviting as this Valley. In three years these lands cannot be purchased for anything like the above figures, and no more lands can be secured from the Government.

The Soil is a rich black loam mixed with sufficient sand to prevent baking. This loam is from two to six feet deep; under this is a subsoil of clay, gravel, loam, and sand.

Streams and Water.—This county is well watered having about 250 miles of streams which are equally distributed through the county. The rivers are the Arkansas, Nenescah and Chicaskie; the creeks are the Slate, Shoo Fly, Bluff and Fall, and their tributaries: springs, are numerous. Water can be found in wells, on every quarter-section, at a depth of from ten to forty feet.

Timber and Fuel.—The larger streams are skirted with timber belts, reaching back from a quarter of a mile to a mile. They consist of Black Walnut, Mulberry, Elm, Ash, Hickory, Cotton-Wood and Sycamore. Wood can be secured at $3.50 to $4 per cord; posts can be had at ten to fifteen cents. Fences are not required, as we have the Herd Law in force. Thus, farmers can commence operations at once, after securing the land and the team.

Fruit.—Kansas has secured a reputation for fruit, second to none. As yet this county is too new to contain many orchards of bearing apple trees; but those that have borne are of an excellent quality. Cherries, Grapes, Strawberries, Blackberries and Raspberries have been tried: the fruit is luscious and the crop is abundant. Our peaches cannot be surpassed for flavor. They are equal to the peaches of Georgia. It is astonishing how rapidly trees grow: one can have a grove in three years.

Cereals, &c.—Wheat is the staple product, yielding from twenty to forty bushels per acre, and this on sod ground when broken in May, June, and July, and sown in the fall. Corn yields from twenty-five to eighty bushels per acre; the bottoms along the streams prove the best soil for corn. Oats seldom fail to yield from twenty-five to sixty bushels per acre. Rye always does well, and affords a splendid pasture for stock during the winter. Sweet potatoes do well, yielding largely; they reach the highest state of perfection and are equal in size and flavor to the Carolina potatoes. Early Irish potatoes do well and yield largely; Peach Blows and late varieties do well on the bottoms near the streams. Peanuts yield from 100 to 150 bushels to the acre; vegetables do well.

Stock-Raising and Grasses.—Timothy, Bluegrass, Alfalfa, Red and White Clover all do well. The nutritious grasses that grow spontaneously over these broad prairies have never been utilized. This county is favorably situated for stock-raising: lying adjacent to the Indian Territory, cattle can be kept there the year round at a cost of $3 per head.

Climate and Health.—We have a climate which suits all, and healthfulness is a feature not to be ignored by the sufferers from miasma in low marshy districts. Our people had a few chills when the country first commenced settling up, but these have been scarcely known since the lands have been broken and cultivated.

BUILDING MATERIAL.—Nature has thrown up in mounds, here and there, stone in sufficient quantities to supply the wants of all; it is magnesia limestone. Brick of an excellent quality is also made.

CHURCHES, SCHOOLS AND SOCIETY.—Almost in every school district there is a church organization. At this point we have five church organizations, consisting of the Presbyterian, Methodist, Baptist, Christian and Catholic. The white school-houses can be seen dotting the prairies in every direction. We now have about 100 in this county. Society here will compare well with that in many old counties in the East.

TOWNS, RAIL-ROADS, &c.—Wellington is the county-seat and on Slate Creek; Oxford is on the Arkansas River; Caldwell on the Chicaskie; many other thriving towns are yet in their infancy, but are destined to become populous and wealthy. Our nearest Rail-Road point is Wichita, a distance of 35 miles. From that place there is a line of daily stages to this and other points in the county. EDEN.

Oxford, Sumner Co., Feb. 25.

WHERE IS THE BEST LOCALITY FOR FARMING?

NELSON BITTER.

SYRACUSE, N. Y., Feb. 23.

MY article published in RURAL of Dec. 29, has called out several inquiries, by mail, as to the best place for "new beginners" to locate a farm. It will save my time, and perhaps interest an occasional reader, if I answer through the columns of the RURAL.

I would as soon attempt to choose a "wife," for another person, as a farm. It would be just as wise to warrant perfect satisfaction in the first instance, as in the second. There is such a variety of opinions as to the most favorable localities, such a diversity of soils, even in the same neighborhoods, so many endless and conflicting questions to settle, that the wisest may well hesitate before making a selection, even for himself, but to choose satisfactorily for another is attended with still greater difficulties.

Every person has his own peculiar notions, that are to be taken into account; his likes and dislikes to be considered, and his prejudice to be thought of. One man thinks nearness to market the main consideration; another wishes to locate where land is cheap, so that he can own a large tract of it; and still another's greatest desire, may be to settle in his own native State, surrounded by his relatives and friends. Some young men wish to stay near their father, that they may be benefited by his counsel, and—if worst comes to worst—receive aid from him; others desire to strike out independently, and rise or fall by their own exertions.

I must confess that this latter class have my sympathy. When a young man, I spent several years in a dozen different States, looking for the very best place to locate. California I found to afford many advantages; Oregon the same; Nevada, Kansas, Idaho, and Nebraska, all have many desirable points. Michigan, Wisconsin, Iowa, and in fact, all of the Western States possess plenty of good land, with almost every variety of location. I finally settled down within twenty-five miles of the place from which I first set out. My present location is very satisfactory to me, but yet, very likely it is not—in the opinions of other people at least—the very best that could have been selected. The fact is that owing to there being so much that is good and desirable to choose from, it is impossible to select the very best; or—if a reasonable amount of caution is used—to entirely fail in finding what will prove satisfactory. A more competent judge than myself says: "We cannot select any particular locality as better than another, while advantages and drawbacks are so variously intermixed, and while different places are fitted to the peculiarities and preferences of purchasers." I think one should be governed, to a certain extent, by his predilections.

To illustrate: I would sooner climb the hills of York State, wrestle with the rocks and stones, which we have in such great abundance, than to face the fearful winds that prevail throughout the Western States, while it is altogether likely that the average Western man who can plow a whole section without finding a stone large enough to throw at a bird, would decide quite differently. Again, I have a certain pride in being a citizen of this Empire State, the most populous and wealthy of them all. To quote the language of another: "No wonder it is called the Empire State! Think of its grand natural beauties! Its eastern boundary is followed by the majestic Hudson; on its western, thunders the cataract of Niagara; its northern boundary is formed by that great inland fresh-water sea, Ontario, and the noble St. Lawrence, with its wondrous thousand islands. Through its center is scattered the loveliest line of lakes—a score or more in number—besides Watkins and Havana Glens. It is also rich in waterfalls: Genesee, Trenton, Portage, Tanghanic and many others of lesser note."

One can well be excused for hesitating, before abandoning all this loveliness—not half enumerated above. But persons will, perhaps, exclaim: "All sentiment, and it will not help one to earn a living," which is true; but it certainly renders life more pleasant and happy to look upon so many beauties. Take all the poetry and sentiment out of our lives, and compel us to consider only "what we are to eat, and wherewith we shall be clothed," and this life will be a humdrum affair certainly.

I will drop a few hints that may be of some service to new beginners. When one intends to settle in a location with which he is not familiar, do not be in too great haste in buying. Better wait a year, at least, and study carefully all the advantages and disadvantages of the locality; notice the crops grown, the expenses of marketing etc., etc., and finally when you buy, buy the very *best* land to be procured, remembering the dearest land is often the cheapest in the long run. The most productive land not only pays the best while in your possession, but is also the most salable, should you desire to change your locality. Do not buy too much land. This is the rock upon which many a new beginner has been ship-wrecked. In the West especially has this been too true. With those who have had no experience in farming the greatest caution is necessary. Unless they have capital sufficient to enable them to farm it for several years at a loss, until they have learned the business, they had better hire a farm for a few years or else—what is perhaps better still—work for some successful, practical farmer, until they have learned the *modus operandi*. My object in offering this advice, is by no means to discourage any one from engaging in farming, but to assist them, if possible, in making their undertaking a successful one.

NOTES FROM SOUTH CAROLINA.

I DON'T think the friends of the RURAL properly appreciate, or rather avail themselves of, all the advantages which might be derived from the column, which has been set apart for correspondents from "Everywhere." I regard this column, as a sort of puplic reception-room, where every one is free and easy, and at liberty to address his neighbor with all the freedom of polite intercourse, while the neighbor would be deemed uncivil not to respond in the same spirit. For instance, I would ask my neighbor: "Where are you from? Excuse me, but is your country a desirable one to live in? What are its advantages, and disadvantages? How is the society morally, and intellectually? What are its resources, developed and undeveloped? How about its healthfulness, climate, water, soil," together with a thousand other questions, more in detail, which would be interesting and instructive to one desiring information, and in addition to contributing a useful fund of information, would awaken an interest in, and cultivate a friendship between individuals from different sections of our country now again united, which could not be but productive of good.

Well, to follow out this suggestion, I will jot down a few notes concerning this part of the world.

This place is a neat little country village, which has sprung up around a most remarkable mineral spring, containing lime, magnesia, and sulphur, in their various combinations, and whose waters are claimed to be efficacious in diseases of the stomach, liver and kidneys, and are much resorted to. It is situated in Spartanburg county, one of the Piedmont counties of the State, about twelve miles from the Richmond and Atlanta Air-Line Railroad, and is easily accessible from the town of Spartanburg. Spartanburg county is one of the largest, and most important counties in the State—important for its location, and for its wonderful resources in agriculture, manufacturing facilities, and mining, the last two of which are as yet almost entirely undeveloped. To give an idea of its water power: there are five large streams; two, the Broad River and the Enorce, bounding it on the east and the west, and the others running at about equal distances through its length, and all of them, intersected by ledges of gneiss rock running at right angles with the streams, and at regular intervals along them, like the steps made by some Cyclopean giant up to his home in the Blue Ridge Mountains. And yet the country is by no means mountainous or rugged, except in the northern part, near the mountains.

Prof. OSCAR M. LIEBER, in his Zoological report of the State, mentions by name, some regular shoals in those streams, ranging from five to eighty-five feet fall, in from three to sixty chains—and Prof. TOURNEY, speaking of those in the Enorce River, the western boundary of the county, says: "At Gordon's Mill the falls are thirty to forty feet in 200 yards, and a few miles higer up, at the Mountain shoals, there is a fall of seventy feet in about the same distance, and at Van Patton shoals the river falls fifty-five feet in about one hundred yards. So very even is the edge of the rock at those, and in fact, all of the shoals made by the gneiss rock, that it forms a natural dam across the streams which it crosses, and it is impossible to examine these localities without being impressed with the great facilities which they afford, at small expense, for manufacturing purposes.

Besides these falls there are a number of mines of gold, copper and iron—iron of the best quality, and gold, if scientifically mined for, would be more permanently remunerating than the auriferous deposits of the Pacific slope; and to cap the whole, we have at Limestone Springs the itacolumite or flexible quartz, a sure concomitant of the diamond that, as yet, never has been found.

This is the place, which that great-hearted philanthropist, PETER COOPER, has recently expressed an intention to donate to the State, for a private school, like his Institute in New York, and we are sure when it gets into operation, diamonds of the first water, will then, at last, be plentiful.

Weather like spring; indeed, we are all gardening. J. W. S.

Glenn Springs, S. C.

NOTES FROM NEBRASKA.

READING Prof. SHELTON'S article from Manhattan, Kansas,—"A Kansas Orchard,"—I am reminded of a promise to give you an occasional article from the "Twin Sister State," Nebraska.

We have had a remarkably open, mild winter thus far, in fact, scarcely any weather we could call winter. This has really been what we never before had, a wet winter. Frequent rains, and snow which melted away quickly, leaving the soil in excellent condition for the coming crop season. Some early spring wheat has already been sown. The fruit prospect was never so promising as at present date. Our fruit ordeal, however, is yet to come. March is the critical period for fruit in this State. When prematurely advanced by the warming influence of mild February and early March weather, we are sometimes caught by a cold snap in the latter month, that blights fruit hopes. We anticipate a glorious crop season, however, for 1878.

Our first State Agricultural Institute has just closed a two weeks' session at Lincoln, the capital. It was a grand success. There was a general attendance from all portions of the State, of representative men and minds. It was a pleasant and profitable blending of the practical and scientific. The active farmer and the Professors of the State University worked hand in hand. The former to present experiments and results, and the latter with scientific reasons. The whole range of agriculture, horticulture, forestry, stock-raising, general crop and fruit growing, soil and climate was gone over. A vast amount of valuable information was imparted and obtained. The Institute was gotten up and conducted under the auspices of the State Agricultural College and Experimental Farm, presided over by Prof. CULBERTSON, a young graduate of the Agricultural College, at present filling its chair.

We boast of rare advancement in all referred to, and under discussion, during the Institute. We are particularly proud of our success in fruit culture. Instances were presented of an income of two thousand dollars per acre, in apple growing. Two thousand bushels of apples were gathered from one hundred trees, eighteen years old, growing on an acre of ground, and the fruit sold for one dollar per bushel. This, of course, is rare, but it shows what can be done.

Great attention is being given to stock growing—cattle, hogs, and sheep particularly. Within a few years past, the finer strains of horses have been introduced, and with gratifying success. Wool growing is also becoming an important factor in our products.

This State is enjoying an unusual influx of immigration the present season. The fertile, cheap lands are attracting the attention of your over-crowded portions of the country, and the people are coming by the thousands. They are welcome. With industry and a few years of perseverance, they will be surrounded with all the needful comforts of life.

ROBT. W. FURNAS, Pres. Neb. S. H. S.

RURAL SPECIAL REPORTS.

BURLINGTON, Neosho Valley, Kansas.
February 25, 1878.

WE have been having some very nice weather for the last ten days so that the roads are getting good again. Some farmers on high prairie have commenced plowing already, and others are getting ready to plow in a few days.

On the 25th of January we had a thunder and lightning storm. The lightning struck one house in the county. It struck the roof about half way between two lightning rods, and passed through the house into the cellar. There were a number of persons in the house at the time but none was injured. The rail-road is being pushed forward very fast. Owing to the high water in the river the abutments for the bridge cannot be finished as soon as expected. Burlington is the liveliest town in southern Kansas. Large business houses and another hotel are to be put up this spring. A large quantity of red ochre of the finest quality has been discovered about four miles from Burlington, by the graders on the new railroad. Some of it was sent to Professor WILLIAM KEDZIE who said it was of the best kind. It has been known for some time that the best of fire clay and also yellow ochre were to be found in large quantities in the county. About ten days ago there was quite an excitement in the county south of this, over a gold and silver mine discovered near Yates Center. As near as I can learn from the reports, the precious metal was found about seventeen feet from the surface, and quite a large vein of it. Some are going to have silver whether the Silver Bill passes or not. A short time after it was found, over a thousand persons arrived there in one day. E. C. F.

FEDERAL POINT, Putnam Co., Fla., Feb. 27.

EXTREMES of temperature since Dec. 20 varying between 38° to 78°. Weather this winter uniformly cool, the thermometer ranging in the sixties most of the time. To-day a north rain, thermometer 59°. Western supplies of flour, grain and bacon shipped across from Nashville and other points by rail, are sold at about New York prices. Sweet Potatoes 35 and 50 cents per bushel. Oranges $15 and $30 per 1,000. Orange growing at favorable points in the State is becoming quite profitable to those who combine skill and some capital with unflagging perseverance, while the failure of many who were unfitted for the task and unable to meet the requirements of a semi-tropical climate and a frontier life, is freeing the business of any unhealthy speculative tendency. We command unrivaled water communication and good markets, and I cannot but believe that with the mere general use of tropical grasses and forage-plants to supplant the wire-grass of the piney-woods, cattle and sheep may be raised with much profit. Why should native grown mutton rarely be seen here when dogs form almost the only drawbacks to successful sheep husbandry? W. H. H.

SYRACUSE, March 1.

ON the 9th of last month a meeting was held in this city for the purpose of organizing a County Agricultural Society. Articles of association were adopted, and ordered filed as directed by law. The last County Society was abandoned in 1859, after twenty years of varying fortune, and no attempt to organize another one has since been made until now. From all indications this movement is to prove successful. The farmers of the county generally lend a ready support to the efforts of its managers in all suitable ways. The capital stock is $10,000 divided into shares of $10 each. The subscription to the stock will be made as small as possible, in order that many persons may be enlisted in the enterprise. E. A. POWELL, Esq. of the Nurserymen firm of SMITH & POWELL, is the President. A County Fair will be held some time in September, and in point of excellence, bids fair to excel any previous one held in our county. P. H. A.

HENRICO Co., Va., March 4.

HENRICO COUNTY, which contains Richmond, the capital of this State, is, I think, one of the best counties around Richmond. The crops are fine; wheat is looking well; winter oats are doing finely; the farmers are sowing spring oats; potatoes are being planted, and gardening is being done; the ground is in fine condition; the weather is delightful with occasional showers. Vegetables can be taken from the ground every month in the year; produce brings a good price: wheat, $1.30@1.50 per bushel; oats, 50c.; potatoes, $1; hay, $20; corn, 65@75c.; sweet potatoes, 90c.@$1 per bushel; eggs, 15c. per dozen; butter 25c. per pound; horses are selling from $50@150; cows, $25@40. Land is selling from $7@60 per acre. W. B. H.

SHERMAN, Chaut. Co., N. Y., March 11.

WE have had a very warm and pleasant winter, and March came in warm and pleasant and has continued so up to the present writing. Considerable maple sugar is being made by the farmers in this section. We had a slight fall of rain last night, but the sun is shining warm and bright this morning. An early spring is now in order. We have already heard of some farmers plowing—something unusual in this vicinity at this season of the year. M. L. D.

LAVALLE, Sauk Co., Wis., March 4.

THE weather is spring-like; robins and bluebirds have appeared. We have had no snow to amount to anything since November. The weather has been very mild, and farmers have been sowing wheat and plowing all winter. Wheat is from 90c. to $1.00; corn, 40c.; oats, 20c.; hay, $7.00; potatoes, 30c.; butter, 12 to 15c.; cheese, 10 to 12c. W. S. H.

PURPLE CANE, Dodge Co., Neb., Mar. 8.

It is now raining and thundering. S. R. M.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:
Eulalia Japonica var. Zebrina ... 181
Shell Flower ... 181
Asparagus Beds ... 181
Asparagus Roots and Seeds ... 181
Cherries—Mahaleb Stocks for ... 182
Extracts from Correspondents' Letters ... 182
Seed Exchange ... 182
Catalogues, &c., Received ... 18
Auburn Horse, the ... 182
Lyre Bird, the ... 182
Jottings at Kirby Homestead ... 183
Fertilizers, an Experiment with ... 183
Worth Knowing ... 183
Cost of Barn-yard Manure ... 183
Manure ... 183
Manures ... 184
Gate Latch ... 184
Farm Help ... 184
Hired Help ... 184
Fence for Overflowed Land ... 184
Shelter Belts ... 184
Converting Maple Sirup into Sugar ... 184
Kellogg's Sale of Trotting Stock ... 184
To Kill the Larvæ of the Apple Tree Borer ... 185
Steam Power for Farmers ... 185
The Syracuse Plow ... 185
The Blanchard Churn ... 185
Cheese Vats, Chas. Miller & Sons ... 186
Syracuse Engine Trial ... 185
EDITORIAL PAGE:
Oleomargerine ... 188
Private Experiments with Manures ... 188
Breeding Stock on the Farm ... 188
Parlor ... 188
A Grindstone Homily ... 188
Who Shall Decide, &c ... 188
Too Liberal ... 188
Brevities ... 188
LITERARY
Poetry ... 189, 191, 195
Literary Miscellany ... 189
Corn ... 189
Aunt Calista's Hair ... 190
Kew Gardens ... 190
Broncho Ponies ... 191
For Women ... 191
Topics ... 191
Work-Basket, Watch-stand, Wall-pocket ... 191
Answers to Correspondents ... 191
News of the Week ... 192
Markets ... 193
Reading for the Young ... 194
Mrs Skermerhorn ... 194
Puzzler ... 194
Sabbath Reading ... 194
Precious Stones in the Breast Plate ... 194
Personals ... 195
Wit and Humor ... 178
Advertisements ... 185, 193, 194, 195, 196

THE
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Address
RURAL PUBLISHING CO.,
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SATURDAY, MARCH 23, 1878.

We take great pleasure in announcing to our readers that we shall shortly publish a valuable contribution from Mr. J. B. Lawes, the world-renowned experimental agriculturist of Rothamsted, England.

OLEOMARGARINE.

Owing to the watchfulness of some of our best dealers in Dairy Products, a conviction has already taken place under the new statute forbidding the manufacture or sale of fat-butter without its being branded. The defence was utter ignorance of the fact that the article sold was not good cream butter. Of course such a defense could not avail the accused and he was fined fifty dollars and ordered to be imprisoned till the fine was paid.

The intention of the law is not to prohibit the sale of this article; but to prevent the public from being deceived by purchasing it for the genuine article. The statute is a good one, and should be enforced throughout the State. And so far as our observation goes, the honorable portion of the manufacturers of, and dealers in, the article, claiming for it no virtue which it does not possess, have no desire to impede the full enforcement of the law; but rather favor it. We think it would be not only policy but wisdom for our manufacturers in the rural districts to take the matter in hand themselves.

PRIVATE EXPERIMENTS WITH MANURES.

Professor Johnson states that a multitude of observations has demonstrated that from ninety-five to ninety-nine per cent. of the entire mass of agricultural plants is derived either directly or indirectly from the atmosphere; and the object of applying fertilizers of all kinds is to supply whatever the soil lacks in an assimilable form of the remaining constituents of various crops. But although the amount of food drawn by plants from the soil is trifling in comparison with that furnished by the air, still an ample sufficiency of it is essential to profitable farming, and its available presence in varying proportions makes all the difference between land entirely barren, through all degrees of productiveness, up to that which yields the most generous harvests. The more readily assimilable the plant-food in all fertilizers, the more economical is their application and the more immediate their results. The bulk of manures, although often, when large, beneficial on account of its mechanical effects, has nothing to do with their value as fertilizers, for this depends entirely on the quantity of chemical salts they contain. According to Mr. Lawes of Rothamsted, England, whose life-long study of experimental agriculture has deservedly won him a world-wide reputation, the manurial properties of a ton of barnyard manure are confined to its inorganic matter, amounting only to 62 pounds, and even in this pittance there is a considerable amount of substance of such comparatively little value as a fertilizer that he excludes it from his manure ingredients. Moreover, a great deal of the manurial constituents of dung are in an inactive form and are either slow in their effects or wholly lost. Mr. Lawes' experiments with farm-yard and chemical manures on two plots, proved that 3,800 pounds of nitrogen applied in the former, during 19 years, produced precisely the same total yield as 779 pounds applied in the latter during the same period. In other words, 41 pounds of nitrogen in ammoniacal salts produced as great effect as 200 pounds in barnyard manure.

Nevertheless barnyard manure, being a necessary product of nearly every form of farming, must continue to be the agriculturist's chief means of restoring or preserving the fertility of his land. But after every scrap of dung as well as of all kinds of refuse, has been carefully husbanded and utilized, there will still be a large field for the profitable employment of chemical manures; for it would be the hight of thriftlessness to keep stock solely or mainly for the purpose of manufacturing barnyard manure where its equivalent can be otherwise obtained at a reasonable figure.

While judicious economy is very important in the use of all manures, it is of special importance in the employment of commercial fertilizers on account of their high price and the numerous chances of their being unwittingly misapplied. This economy can be insured only by the person who uses them knowing what kinds of food which the various plants need, are deficient in the soil, and abundantly supplying what is lacking. Science has pretty accurately determined and widely published the nature of the elements which each class of plants absorbs from the soil, but experiment is the only reliable means of ascertaining the quantity of these the land contains. Nitrogen, phosphoric acid, and potash are the most important ingredients in commercial fertilizers, both on account of their cost and scarcity in the soil. Other things being equal, each of these should predominate for certain kinds of crops—nitrogen for wheat, rye, barley, oats, meadow and timothy hay, onions, sugar-beets and carrots; phosphoric acid for corn, turnips and rutabagas; potash for potatoes, cabbages, peas, beans, buckwheat and fodder-corn and rye. As the fertility of the soil varies not only in every neighborhood, but often on every farm in accordance with its natural formation and the treatment it has received, it would be well for every intelligent farmer to do at once what every intelligent farmer is certain to do five years hence—establish on his own farm a private experimental station. In reality, it would be a very simple undertaking and the fund of practical information derived therefrom would, ere long, richly reward the necessary trouble and amply repay the trifling outlay. Set apart a piece of ground of average condition, divide it into a number of plots sufficient to allow one to each fertilizer to be tested, and when the same fertilizer is tested on more than one kind of plant, allow a plot to each. Set out specimens of each kind of plant on an unmanured plot, so as to be able to judge correctly, by comparison, of the effects of the various fertilizers. Each plot need not be larger than 1-40 of an acre, or 33 feet square. By this means every farmer could demand of his land what is needed to produce the very best yield of every kind of crop, and always receive a truthful answer. It would be by no means necessary to limit experiments exclusively to chemical fertilizers, for the lack of nitrogen might be indicated by the effects of such manure as blood and flesh; of phosphoric acid, by those of home-prepared crushed bone; and of potash, by those of wood ashes. Care should be taken to sow precisely the same number of each kind of seed when experimenting on it with different fertilizers, and to apply the same quantity of manure to different seeds. By adopting such a practice, at the close of each season the mind will inevitably be enlarged, a valuable fund of practical knowledge will be yearly accumulated, and the way at once thrown broadly open to a system of economical manuring.

BREEDING STOCK ON THE FARM.

In view of the market for choice stock lately thrown open to our farmers by the exportation of cattle and meat to Europe, it behooves them to pay increased attention to the raising of superior animals on the farm. A late report on the American meat trade, by Professor Sheldon of the Cirincester Agricultural College, England, after furnishing a mass of information on the subject, comes to the conclusion that, despite some fluctuations, the dead meat trade will rapidly increase, and that appliances for its successful management will be multiplied here and in Europe. The profits of the traffic will be in a great measure, proportionate to the excellence of the product, and the limit to the quantity shipped will be the stowage capacity of vessels crossing the Atlantic; for, owing to the falling off in our imports, the number of ships engaged in the transatlantic trade will be too small to afford room for a large export of meat together with other merchandise without advancing the freight to a figure that will prohibit further exportation.

The experience of many thriving farmers all over the country, proves that a better run of animals is obtained by breeding them on the farm than by purchasing them. More care is bestowed in selecting the likely offsprings of tried animals, they will go on fattening more rapidly and uniformly than strangers picked up here and there, for it takes some time before these get acquainted and become content enough to lay on flesh kindly in their new home; and moreover, the tendency of prices for young stock is upwards, and the probability is very strong that ere long it will not pay farmers to go into the market for young animals. In any case, it is, as a rule, more profitable to breed the stock one handles than to purchase it.

PARLOR.

What horrible associations crowd into our mind when the word "Parlor" is mentioned. We immediately picture in our imagination the terrible oppressiveness of that best room, where the sun is never allowed to shine for fear of fading carpet and furniture, where the chairs have all a stately, polished and stiff look about them, where the children are never allowed to enter, where what little air there is may never be allowed to change, and where the smell is something akin to that of a family tomb. This is the best room and is too sacred for the use of the family and is only kept for purposes of ceremony and for the convenience of those people for whom we do not care a rush. People whom we like and with whom we are on familiar terms, come right into the living room and have a good chat in a pleasant way; but the ceremonious visitor, whose departure gives us relief, is ushered into the "Parlor."

The principle upon which this room is founded is all wrong. Let us have no such room in our house. Open the shutters and windows. Admit the sunlight and air. If the carpets and furniture fade, let us enjoy their use in that condition. Let us not have any tomb in our home where all should be cheerfulness and brightness. Abolish the "Parlor" and enjoy the home.

NOTES.

A Grindstone Homily.—If ever there was anything that made us wish our boyhood days were over it was turning a grindstone on which a dull scythe was being sharpened. That was before the days of friction rollers and treadles—and how our arms and back did ache! We would wonder if the thing ever would get sharpened and if we began in the morning it seemed as if we had worked long enough to have it be near dinner-time. Then we would try to distract attention from the ache, and think perhaps a hundred times more would be enough—and count one—two—three, and when the hundred were counted, feel disappointed because another one had to be commenced. There were moments of relief, when the scythe had to be examined and its edge felt from point to heel. These moments were precious to us, for they gave an opportunity to straighten up and take the kinks out of our back and arms—but they were soon put in again by the turning of the crank. But there is an end to all things, and finally the scythe was sharp. Did the owner ever look at us and notice how we sweated and looked all over? Not a bit of it. Don't believe he ever thought such a thing possible. But the first thing would be—"Now Johnnie run in the field and get those hay cocks shaken out as soon as possible!" We made a vow then that if ever we had a farm we would try to invent some machine to turn the grindstone or, at any rate, to lessen the labor, and further that we would try to remember how we felt then, and have pity on the boys.

Too Liberal.—From letters received we find that many of our readers, owing to the liberality of the offer, apparently, do not understand it. One writer says: "If the Crickst clock as you represent, is worth at least $2,50, how can you give it and the Rural New-Yorker together for $3.50 which makes the clock but $1.00?" The writer sends us $3.50 and a subscription for one year, adding, "If I am wrong please advise me." Another writes: "I send you $5.00 and two names for one year. *Now* am I entitled to the Cricket?" We give the above as examples of many. Our answer is, yes, to all. Still, without a single exception, all have expressed themselves as much pleased with the clock, and many have returned us their cordial thanks. We would say to the latter that our cordial thanks are also due to them.

Who Shall Decide etc.—The Homeopathtic Medicial Society of the county of New York at a meeting, last week, decided that its members might depart from the rigid rules of Hahnemann whenever they thought scientific investigations and research since his time had shown a better way. On the other hand, one of the Professors of a leading Medical College of the Allopathic, or "Regular" school, in a lecture this winter, told his students that many of the medical preparations of the Homeopaths were more reliable than those to be had from general druggists. It is a happy thought that all medical men may some time be willing to "Prove all things, and hold fast that which is good" without being bound by the rules of this or that society.

BREVITIES.

Frosty nights—warm days.

"Everywhere" has a benefit this week.

Similia similibus curantur is in despair!

Do not forget to set out a few rhubarb plants.

We commend the frank advice of "Frontier" to intending emigrants.

The house with modern improvements, in last issue, would cost $35.00.

In the Asparagus editorial brevity of last week, fifth line, read *apart* for *deep*.

This novel sort of a spring is respectfully solicited not to fool with the fruit buds.

On Dit, to kiss and tell is bad enough, but not to kiss and yet to tell, is still worse. Truth.

It is recommended that the pig be elevated from a neglected scavenger to a "recognized stock."

We call attention to the article "Kew Gardens" on page 190. When may we hope to have a garden like it in this county? Some day?

Do not plant trees deeper than is necessary to cover the roots well or than they were planted in the nursery rows. Never place the roots in contact with manure.

We wish to impress upon our friends the importance to them of experimenting with commercial manures during the present season. What fertilizing principle does your land stand most in need of? You can solve this question for yourselves at a very small expense.

Plant Peas. Philadelphia for earliest. Early Dan O'Rourke is better, but a day or so later. Laxton's Alpha is early and good. McLean's Little Gem though not so early is the best of early peas. Eugenie is a good intermediate variety. British Queen is one of the best late varieties. For succession it is well to plant all of the above varieties at once.

We presume—we hope, at least—that the time is past for a little season, for telling farmers to stop up the cracks in their barns. Let's rave about Gentle Spring for a week or so—then the heat of summer may be alluded to—then the "cracks" may be resumed. A little rest is good. We do not suggest an abolition of the topic, not until not only every crack in every barn is stopped up, but not until every crack is anticipated and stopped up before it develops into a crack. "A stitch in time saves nine." If every farmer would "go over" his barn several times every season and nip every crack in the bud, blooming cracks would be unknown. This is the view we propose to take of it another year. It has never been touched upon in that way that we know of.

Literary Miscellany.

GROWN APART.

ONE in name, yet two in heart,
Slowly, but surely, grown apart;
Saddest of all sad sights to see—
Love from his own sweet bonds set free.

Grown apart—through the lagging years—
Nor smiles, nor sighs, nor melting tears
Shall call love's rose to the cheek again,
Or thrill the heart with its precious pain.

Growing apart—for evermore—
A canker worm at the very core,
Shorn of all the sweets of life;
An unloved husband, unloved wife,

Ah well! they have had their little day;
Some flowers bloom only, and die, in May;
And if these have missed the summer's prime,
And riper fruits of the autumn time—

Knowing only the drought of one,
And failing the other's blasts to shun:
There yet may be garnered in each sad heart
Sheaves that have ripened and grown apart.

ANCESTRAL HALL OF A CHINESE MANSION.

ALL the Chinese, whether Confucianists, Buddhists or Taoists, worship the spirits of their deceased parents and ancestors, and offer to them money, food and clothing. This is done before their tablets, which are placed in some recess in the house, or, in the case of the wealthy, in the ancestral hall, which is connected with the family mansion.

The general belief is that the unseen world is very much a copy of this, only that things are spiritualized. The departed spirits are supposed to need food, clothes and money, just as much as when they lived in bodies, and it is the duty of their living friends to provide them with these.

CORA.

CHAPTER VII.

"A WORD with you, signor," said a voice, which Lord Almane immediately discovered was Marianna's.

He shook her hand off a little impatiently.

"Well!" he said, haughtily. "What is it?"

"You will pardon me, signor," she went on, quietly, "if I seem to be taking a liberty; but the signorina's happiness is very dear to me."

"And to me, good mother," answered the Viscount, thinking it might be wiser to win the old woman to his interest.

Marianna's face brightened a little.

signor, if I understand aright what I heard——"

"How interrupted Lord Almane, sharply.—"Have you, then been eaves-dropping?"

"Wherefore not?" replied the old woman, with a sort of simple, unconscious dignity, which at any other time would have amused his lordship, "You are a grand seigneur, and I but an old nurse; but I love my signorina, and if any action of mine can save her from dishonor——"

"Who speaks of dishonor?" again interrupted Lord Almane. "You are doting, Marianna."

"From sorrow, I should have said, she resumed with the same calmness of manner, "Milord, you have won the child's love, and yet I heard you say to-night that you were bound to another."

The Viscount uttered an impatient exclamation; he did not at all approve of Marianna's cross-examination.

"If you are not going to make the signorina your wife," she went on again, heedless of his impatient gesture or quick stride, "why speak of love to her, milord?"

"My good woman," replied the Viscount, haughtily, "men in my position don't marry every pretty face they come across. The signorina and I understand each other perfectly. Do not trouble yourself to interfere any further."

"Signor," she said, passionately, "the child is well-born—as highly connected as yourself; she is fit to mate with the highest in the land."

Lord Almane laughed lightly.

"We will not discuss the point, my good woman," he said, carelessly. "There is no need for you to be kept from your rest any longer. If your pretty signorina is willing to let things be as they are, why need you trouble? I will take care that no harm happens to her, Marianna."

"You dare not harm her," the old woman exclaimed, fiercely. "You dare not harm her! Nay, had she not her brother to defend her, you should not do so—you dare not, I say!"

"Take care," he answered, in a menacing tone—"take care; your interference cannot do good, but it may do harm. I am not accustomed to be baulked in my wishes either by brother or duenna."

Marianna paused, and laid her hand on his arm, with a hard, stern pressure.

"Listen, signor," she said, in the cold measured tones of contempt; "you are great, and noble, and wealthy; I am but poor, humble, and ignorant, but from my soul I despise you. You come into a poor man's house, and receive hospitality and kindness, which you repay with baseness and ingratitude. You shall hear me; you shall know that a poor ignorant servant has only contempt in her heart for the grand seigneur who, in return for confidence and friendship, steals the richest treasure the man possesses, and blights the happiness of a fair young life."

Lord Almane uttered an execration, and tried to disengage himself, but this was impossible without using actual violence, and this he could not do.

"Loose me" he said, in a low tone, full of concentrated anger. "Loose me; you are mad."

"I would not wish the signorina to marry you now," she went on, without heeding his efforts or his angry exclamations, "if you were to sue her on your knees; I pray for a happier fate for her than that she may wed such as you."

She removed her hand from his arm, and allowed him to pass before her into the house; then she noiselessly closed and barred the door after them, and followed him up-stairs. As they passed the door of Cora's room a sound of stifled but passionate sobbing struck upon the ears of both. Lord Almane started and half paused, while, by the light of the candle she held, Marianna saw that he had turned a shade paler. Then he passed on quietly, and entered his own room, while the Italian waited until the sorrowful sound had died away, and she could hope that Cora slept, before she sought her own room.

The next day Lord Almane left The Tryst: his manner was graver and quieter than usual, while Cora's forced vivacity badly dissembled the heavy eyes and the pale cheeks which told of a sleepless night.

The Viscount returned to his chambers in the "Albany" with no small regret; but he threw himself into the vortex of the London season, which was early and brilliant that year, and strove to shut out the remembrance of those wistful haunting eyes, and of the sweet low voice which sounded so often in his ears. They came before him often, notwithstanding all his efforts. More than once, whether riding in the Row with Lady Helen St. Maur, the prettiest married coquette in his "world," or bending over the daintily-gloved hand when she stopped her victoria, and bent her graceful head in pleased greeting, there came before him another fair face which shut out all her ladyship's—a face with dark lustrous eyes, full of reproach and pain, and quivering crimson lips, and then he would be so absent and *distrait* that Lady Helen would toss her haughty head and wonder to herself.

"Are you thinking of Lady Lucie?" she said one night, as they sat together in the conservatory of a great house, where all the best, and noblest, and highest in the land were assembled to "chase the hours with flying feet," and Lord Almane and her ladyship were favorite guests. "For quite ten minutes you have said nothing, and I allow no one to be silent and absent in my society."

Lord Almane smiled as he turned to her, and his eyes fell upon the radiant beauty, with diamonds flashing on her white throat and wreathing the noble coronet of raven hair which crowned her fair brow. Truly she was beautiful, in the sheeny satin robes and flashing jewels; but beside that queenly radiant figure there appeared to him a slender girlish form in dark serge, with a crimson ribbon fastening back the rich brown hair, and Lady Helen's beauty seemed cold and conventional beside that girlish loveliness, so pure, and fresh, and glowing.

"Thinking of Lucie?" he repeated, giving to his languid tones an expression of eager dissent. "Do you think that is possible when I am with you? Why do you try to remind me that the day must come when——"

"When Lady Lucie Belmont becomes Viscountess Almane," she interrupted, lightly. "By my faith!" she added in a moment, laughing a little musical laugh, "Lucie Belmont is most confiding to remain in Italy so long, and leave her *fiance* to follow his own sweet will! I, in her place, would not be so much so."

"Would you not?" he answered, readily; "and yet there would be less fear."

And the beauty laughed her triumphant laugh, and flashed her dark eyes into his, as they sat in the scented, dimly-lighted conservatory, and played at the pretty game of Platonics, which might be safe to them, but which is so often attended with sorrowful results.

But even the pretty game of Platonics, with Lady Helen St. Maur for a partner, did not quite satisfy the Viscount now, and after he had left The Tryst three weeks, he resolved to pay a visit to Harold Sinclair.

"We parted good friends," thought his lordship, as he drove down in his mail phaeton. "The brother suspects nothing, unless that old Italian witch has betrayed us, which I doubt."

The road was looking its prettiest this fair spring day, and Lord Almane's spirits rose as he sped along; but as he drew near The Tryst he fancied it looked closed and uninhabited.

Pulling up at the little gate near which he had met with the accident a short time before, he threw the reins to his servant, and went himself to make inquiries.

The door was opened by a surly, untidy-looking woman, who immediately vouchsafed the information that the family were not there.

"Where have they gone?" said Lord Almane, in some surprise and discomforture.

"I don't know, I'm sure," returned the harpy, peering at him through the small space which she had opened the door.

"How long have they left?" resumed the Viscount, slipping half a crown into her hand, which *douceur* softened the rough tone.

"Quite ten days, your honor," she replied, with some civility. "I can't tell you much about 'em, but I did hear that the gentleman, who is a hartis, 'ad gone to study his hart in furrin parts."

The Viscount turned away with an angry scowl and muttered exclamation.

"The birds have flown."

CHAPTER VIII.

Lord Almane returned to town vexed and baffled: he had counted upon seeing Cora again, upon holding the little fluttering hand in his, upon seeing the sweet faint color deepen in the rounded cheek, of meeting the great, lustrous eyes half innocently, half bashfully lifted to his, and his disappointment was acute enough to make itself felt. But acute though it was, it was but momentary; and long before he had reached the Marble Arch, Lord Almane had remembered that it was quite possible to find out the whereabouts of most people; that there were such things and places as private inquiry offices, and that a golden key would unlock most hiding-places, even if Harold Sinclair had purposely removed his sister.

"Can he have taken her away to cut off any communication between us?" mused his lordship as he tooled his chestnuts through the park and acknowledged the greetings of his acquaintances. "Has that meddling old woman indeed betrayed us? I thought he half suspected something on my last evening, but his manner afterwards made me think otherwise. Ah! well, I am not so easily defeated, and Cora is worth some little trouble."

June came, bringing with it from the sunny south Lady Lucie Belmont and her aunt, Lady Martyn, and the Viscount, in duty bound, was one of the first and most constant visitors at their house in Park Lane. He was fond of his cousin in a quiet cousinly manner, but she bored him rather, and he would have infinitely preferred Lady St. Maur for a companion, not for life, perhaps, as the Viscountess Almane must be like Cæsar's wife, "above suspicion," but for a flirtation.

Lady Lucie was a pretty, fair creature, with large blue eyes and flaxen hair, a gentle manner, and a very sweet, low voice; but to Lord Almane, accustomed to the more brilliant charms of the great ladies of his world, impressed now with Cora Sinclair's glowing, soul-lit loveliness, his cousin was a little insipid; and though he was attentive enough to be styled a model lover, as I said, her attention bored and wearied him.

"You are not looking well, Stanley," said Lady Lucie, on the evening they met. "Are you sure you have quite recovered from the effects of your accident?"

And the wistful blue eyes turned to him with a tender earnestness in their depths.

"Quite, dear," he answered, smiling at her, "I suppose, however, two or three weeks of suffering leave a mark behind them even when they have entirely passed away."

"Tell me about the people at Richmond, with whom you were," she went on. "I mean the young artist you wrote to me of. They were kind to you, you said."

"Very," answered the Viscount. "It was a quaint, old-fashioned cottage, with gables and lattices which would have delighted a romantic young maiden like yourself. The household consisted of an old Italian woman, who wore the dress of her country, and might have stepped out of a Rembrandt, and one English servant. Harold Sinclair himself was very unusually handsome, and I fancy talented in his profession; while his sister, though quite in a different style, was equally good-looking."

"Will you take me to see them?" asked Lady Lucie. "I should so much like to thank them for their goodness to you, Stanley."

"Grateful little heart," he replied, smiling. "That is a graceful proof of your interest in me, dear Lucie; but I am very sorry to say that when I called at the Tryst a short time after I had left it, I found it closed, and the person in charge could only tell me that they were gone abroad."

"I am sorry," answered Lady Lucie, sincerely. "We might have been useful to them perhaps, Stanley."

Days slipped rapidly by, and the London season was drawing to a close; but Lord Almane had had no satisfactory result as to his inquiries about the movements of Harold Sinclair, and he began to be getting rather anxious about his success in the matter. The obstacles which separated him from Cora by no means quenched his desire to see her—on the contrary, they rather increased his ardor and added zest to his pursuit. He was more than ever determined to find her again, and to regain the power he possessed over her, and which, if absence had weakened it, would be easily regained.

Meanwhile, he rode and drove with Lady Lucie, attended her to the few evening entertainments her health, which was delicate, permitted her to enjoy, appeared regularly in Lady Martyn's opera box, and was altogether devoted enough to raise a smile among some of his intimates, who opined that Almane was becoming sober at last.

Lady Lucie was supremely happy, and her happiness transformed her from a pretty girl, wanting life and color, into a lovely and interesting woman. Her eyes grew lustrous and brilliant, her lips were wreathed with bright smiles, and a charming rose-bloom replaced the pallor of her cheeks. People began to remark that the heiress was turning out a beauty as well, and that the Viscount was a lucky fellow to obtain beauty, wealth and amiability in his wife.

"Will you take me to see Mrs. Colston to-day?" said Lady Lucie one afternoon, when Lord Almane settled her comfortably in his phaeton, and prepared for one of the cosy *tete-a-tete* drives,

ANCESTRAL HALL OF A CHINESE MANSION.

which were few and far between, to suit Lady Martyn's old-world notions of propriety.

"If you like; but it is almost a pity to waste such an afternoon upon her, Lucie."

"It will not be wasted, Stanley," she replied, laughingly. "Nowhere shall we receive such a hearty welcome, and the honor of receiving you will drive her wild with delight. Do come."

"Your wishes are laws," he replied, gaily. "Let us have one turn in the park first, and then for Brixton, *Lucia mia*."

So they drove gaily away through the thronging carriages and rank and fashion of St. James's; and then he turned the horses' heads towards Brixton, where Mrs. Colston, who was the wife of a rich merchant and Lady Lucie's former governess, lived in a handsome modern mansion.

"Poor Mrs. Colston!" said the Viscount, as they went slowly up the carriage drive. "It always surprises me that with so much money she has so little taste. She has not a single beautiful thing in her house."

"Oh, Stanley, you are wrong," exclaimed his *fiancee*, excitedly. "Look up there. Is not that a lovely face?"

Lord Almane glanced up in the direction she indicated, and saw what changed his indifferent expression into one of eager and intense surprise. It was the face of a young girl, who was sitting by the open window, apparently absorbed in a book she held. Her eyelids were lowered and hid her eyes, but the exquisite shape of the face, the careless grace with which her rich luxuriant hair was drawn back from her brow, denied Lord Almane's assertion that Mrs. Colston had no beautiful thing in her house.

"Who can she be?" mused Lady Lucie; and though Lord Almane could have gratified her curiosity, he did not pause to do so.

Reining in his horses with a sudden jerk which pulled them almost on to their haunches, he threw the reins to the groom, and springing out, lifted out Lady Lucie, who ran lightly up the steps to meet Mrs. Colston, who appeared full of hospitable but fussy welcome.

The Viscount waited a moment to give an order to the servant, and then followed more slowly; as he did so the girl in the window lifted her eyes, and they met his. It was but a transient glance, but it sufficed; Lord Almane saw the beautiful face flush and grow pale, and knew that he had found again the girl for whom he had made such fruitless search. The face at the window belonged to Cora Sinclair.

As Lady Lucie had predicted, the welcome they received from Mrs. Colston was of the heartiest; she was delighted to see her ex-pupil looking so bloomlng, and overwhelmed with the honor of Lord Almane's visit, while the latter charmed her by the cordiality and easy grace of his manner, and for some minutes the drawing-room, gorgeous in gilding and crimson damask, was alive with lively and animated conversation.—To be continued.

AUNT CALISTA'S HAIR.

"Splendid!"
"Magnificent!"
"So long!"
"So thick!"
"And soft!"
"And glossy!"
"The loveliest brown!"
"With just a tinge of gold!"
"And it waves so sweetly!"

It was Edna and Alice Bristol who were praising their Aunt Calista's hair. Aunt Calista "pished!" and "pshawed!" and begged them to hush; but it was evident, after all that she was pleased at their enthusiastic praise of what was her only positive attraction. An attraction, of which she, poor soul, had been heretofore but dimly conscious, for all her life, thus far, had been so occupied in caring for others, that she had no time to think of herself, whether she were a fright or otherwise; though a fright she certainly was not, for her complexion was fair and clear, and her expression was one of great sweetness and intelligence, too, so what matter if her features were not all cast in beauty's perfect mold.

A quiet, sober, and, at times, a sorrowful existence had been hers since her earliest girlhood—she was now bordering upon old-maidenhood—when, for several years, she was almost the sole nurse and companion of an invalid mother; and then, later, when death had removed from her clinging arms this loved charge, her father was stricken down with an incurable and lingering disease, and she was kept a close but not unwilling prisoner by his side for many more long, weary years, until now he, too, was mercifully taken to rest, and she had come to make her home, for awhile, with an only sister, who had married and removed far from her native place, many years before.

This sister and her two young daughters were gay and fashionable, and it seemed like being in a new world to her, quiet old maid as she was, and she kept within the seclusion of her own room as much as her lively nieces would allow her.

Do not imagine, though, that she was either awkward or vulgar, for she was nothing of the kind. Her father had been a man of high mental culture and refinement, and the few friends who visited him occasionally during his long illness were gentlemen of like tastes and advantages; besides, too, she, with him, had been a constant reader of all the standard literature, as fast as it came before the public; so that, although dreading society, and shrinking and easily embarrassed when compelled to mingle in it, she was far from being a person of whom her friends need feel ashamed, had they been much more sensitive than they were.

"Oh! Aunt Cally," pleaded Edna, "do let us dress your hair, just this once. You've no idea what a difference it will make in your appearance to have it done fashionably. You might be stylish if you only would. Why, your hair alone is enough to make your fortune!"

"Make my fortune?" said Aunt Cally. "I don't understand. Sell it, you mean?"

"Catch a husband with it, I mean," laughed Edna. "Now, don't look so horrified, aunty! You must know that every girl and woman wants to do that—catch a husband—whether they will own it or not."

Aunt Calista *was* horrified, quite as much as her looks expressed.

"Catch a husband!" she gasped. "Girls of your age talking like that! Why, I thought it was women who were caught if there was any catching in the case. I didn't know that they hunted or fished for husbands!"

"Well they *do*, Aunt Cally," asserted Alice, she, as well as Edna, intensely amused at their aunt's "country simplicity," as they called it. "Why, half the women here are doing their very best to catch Lawyer Chester now."

"The bold, forward things!" exclaimed Aunt Calista, in great disgust. "If he has any sense, he won't have any of them. I hope neither of you are included in the number."

Alice tossed her head with a little sniff, saying: "I don't care for a husband old enough to be my father, if he is rich and popular; and as for Edna,"—with an arch look towards her sister—"she has her fish already caught; so don't worry about us, but just be nice, and let us braid these beautiful long tresses, and put them up high upon your head in a lovely coil, and then you'll look young and pretty; and you shall catch Lawyer Chester yourself, so you shall, without trying one bit."

"You make me ashamed, though I know you are only teasing. If I thought you were in earnest I should be angry with you," replied Aunt Cally.

But the girls had their way with her hair, though they nearly had their labor for their pains; for when she escaped from them at last, and took a look at herself in the glass, she gave a half-frightened exclamation of, "Oh, my patience!" and unconsciously put up her hands to destroy the wonderful structure they had built of it. They both flew to the rescue, laughing, and seizing her hands.

"Don't, don't, aunty!" they both entreated; and Edna added: "You look splendid; and you'll get used to it in a little while; so, now, please, put on your most becoming dress, and then if company calls, you must not run off and hide yourself as soon as the bell rings. You look ever so much like mamma now, only younger, and she's not thought to be a bad-looking woman I assure you."

Two hours later, Aunt Calista came stealthily down stairs with a volume of Bryant's poems in her hand, and her black straw hat "upon her face." She said: "There was no other way to wear it." She was going for a walk, mainly to escape the company which she was certain was expected during the afternoon.

"Wait a moment, aunty," called out Alice, who provokingly came through the hall, just as she thought she had escaped the observation of any of the family. "Wait a moment, and let me bunch up your overskirt a little more. You are determined to ruin all your prospects in life, and disappoint the cherished hopes of your dearest friends."

Aunt Cally laughingly eluded her, and darting through the door, disappeared around the house, and took her way across the garden and through the meadow to the brook, which skirted its farther edge. She strolled along its bank until it entered a wood, and then for some distance farther, enjoying the coolness, the silence and the restful quiet.

"Oh, this is lovely!" she said to herself. "And there is just the place I have been looking for! That spreading beech upon that bank. I wish that clump of alders was not there, though; they hide the brook from me; but never mind, I can hear it ripple, and gurgle, and 'babble,' I believe the poets call it, and that will do quite as well as seeing it."

So she climbed the steep bank, and seated herself with her back against the smooth stem of the beech, and, removing her hat, looked about her for a few minutes, and then with a sigh of satisfaction opened her book and read:

"Here are seen
No traces of man's pomp or pride; no silks
Rustle, no jewels shine, no envious eyes
Encounter; no fantastic carvings show
The boast of our vain race, to change the form
Of thy fair works. But thou art here; thou fill'st
The solitude."

Hark! Was not that footsteps? It certainly was; and they were coming down to the brook. Now she was glad of the alder screen. She would remain quite still, and the person, whoever it might be, would pass on, unconscious of her presence.

There he came; she could peep through the bushes and see that it was a man; yes, a man with a fishing-rod—a short, middle-aged man—"And, of all things! if he isn't going to stop right here! Well, this is a situation! I can't go away. He'd be sure to see me. I shall have to sit still and hold my breath. What if he stays here all the afternoon! I hope to goodness he won't catch a single fish, the brute! I won't look at him!" for she had been peeping down through the branches of the alders, while the gentleman was rapidly preparing for his cruel sport.

It was rather an embarrassing situation for a timid spinster, to be sure. The gentleman was so close to her that, but for the screen of alders, she could almost have touched his hat with her hand. The alder-bushes were barely high enough to hide her from view, as she sat. The moment she arose she might be discovered. Besides the unpleasantness of the situation, she had a profound horror of fishing.

"I won't look! I *won't* look!" she said to herself, over and over, and resolutely bent her eyes upon her book. But try as she might, she could not take the sense of what she read, and could not keep her eyes from stealing glances now and then through the leaves, down at the unconscious figure, sitting so motionless almost at her feet. How absorbed he was! She could not see his face, of course, for his back was towards her; but she fancied that his eyes were bent immovably upon his line, watching for the least intimation of a bite or a nibble.

Before she was aware she, too, began to be interested. Luckily, or unluckily, she could see a bit of the line, just where it entered the water. There! did it not tremble a little? No, it was only a ripple in the water that moved it. There, again! That certainly was something. Oh, dear! it was too dreadful! What if some poor little hungry, unsuspecting fish were to come along, and be caught on that cruel hook, deceived by the tempting bait, and she should be obliged to witness the barbarous transaction? She *would not* look another second. But, somehow, she couldn't stop looking, and every minute vibration of the line only increased the fascination, and made her the more anxious for the result. Once or twice the hook was lifted out of the water for an instant, and each time she almost shrieked aloud.

"If he should bring up a poor little struggling creature, I shall scream, I know I shall," she said to herself. "It seems as if I must throw something at him, the great awful brute!"

She had half risen now, and was peering over the tops of the alders with anxious frightened eyes riveted upon the line, feeling, as she had just said, as though she must scream, when, all at once, there was a very perceptible pull downward, followed instantly by a most vigorous jerk upwards, and she did scream, for good gracious! what was it tugging at her hair, as though the purpose was to take it all out by the roots?

Her scream brought the gentleman to her side almost instantly.

"Good Heavens, madam!" he exclaimed, excitedly, "I hope you are not hurt. What is it? Ah! I see; my fish-hook caught in your hair. How awkward of me! However, be calm, madam,"—this, by the way, was wholly unnecessary, for Aunt Calista was as quiet and composed, to all outward appearance, now as she ever was in her life—"I can very soon extricate it, if you will allow me." And without waiting for permission with deft pliant fingers, he set about his task, talking volubly all the while; now a word or two of apology for himself, then a remark upon the beauty of the day, then her book—Bryant was a favorite of his, too—then a compliment to her hair—he wouldn't have believed it was natural—until, at last, in a tone of satisfaction, and with a little flourish of the hands, "There we are," he said, "clear at last!" And Aunt Calista thanked him, without exactly knowing for what, however; and taking her book and hat, prepared to return home.

Half an hour later, her sister and nieces were electrified by seeing her walk shyly into the house, accompanied by Lawyer Chester, for it was he, and this is the way their acquaintance began. How it grew and ripened I shall leave you to guess from this slight bit of conversation which somebody overheard the following Christmas:

"It was your hair that did it, after all, Aunt Cally,"—it was Edna who was speaking—"and what did I tell you? Didn't I say that, properly managed, your hair might make your fortune? And hasn't it? You've got a husband, or will have one to-morrow."

"But please to remember, miss," Aunt Calista replied, with spirit, "that *I* was the one that was caught."

KEW GARDENS.

WILLIAM FALCONER.

The Royal Botanic Gardens, at Kew near London, are the noblest national botanic gardens in the world, and there more living genera and species of the vegetable kingdom are represented than in the same space anywhere else on the earth. They comprise an area of 322.8 acres, and are supported by the British Government at an expense of about $100,000 annually. They come under the jurisdiction of the Board of Works and are presided over by a director (Sir Joseph Dalton Hooker, who visited our country for nearly three months last year), an assistant director and a curator; and have a working force of several permanent and experienced foremen, some thirty experienced young gardeners who are employed in the greenhouses, and a host of outdoor and indoor laborers.

Visitors are admitted gratis from 1 P. M. till dark everyday of the year, Sundays included, except Christmas day on which day the gardens are closed. The proximity of Kew to London, the fame and beauty of the gardens, the lovely flowers, and the acres of glasshouses and ample breadths of lawns and woodland groves make these gardens a pleasurable resort in summer and winter, in fair weather or in foul, and they are well patronized by visitors of whom on holidays from 20,000 to 60,000 visit them.

The outdoor gardens are divided into two divisions, which are known as the Botanic Gardon and the Arboretum or Pleasure Grounds. The grounds in the botanic garden are kept as well as those of any nobleman in the country, and are enlivened with beds of spring and summer-blooming plants, groups of shrubs, noble specimen trees from all parts of the temperate world, alpine plants and ferns, and a special corner for hardy herbaceous plants, of which the collection represented is enormous. The Pleasure Grounds include a piece of woodland, a wide sweep of lawn, hills and dells, also a lake. And in this division hardy shrubs are arranged in botanical groups, and among them are very many representatives of the United States. Unfortunately, the natural soil of Kew Gardens is wretchedly sterile, and consequently arboreal specimens are short-lived; but as regards shrubs and particular trees, the evil is partly remedied by introducing a depth of good compost where only a parched skin existed. The beauty of these gardens is enhanced by the presence of Father Thames which skirts their whole length on one side, the princely mansion and spacious grounds of Syon House, the Seat of the Duke of Northumberland, and which is on the opposite side of the Thames, and the proximity of Richmond, from the hill of which one of the most lovely views in Southern England is obtained. [In the grounds at Syon House is the finest collection of mature specimens of American trees to be found in Great Britain.]

The green-houses at these noble gardens are numerous and immense. The Palm house is a magnificent curvilinear glass building, iron being used altogether in place of wood. Its outline is a semi-ellipse; the extreme length, 362 ft.; breadth of center, 100 ft.; and hight of central part, 63 ft. It is surrounded within by side benches, on which plants in pots are grown and geographically arranged, and the central spaces are occupied by large plants of every tropical country, grown in large pots, immense tubs, or planted out in beds of earth. We commonly regard palms as graceful little pot-plants, such as are seen in florists' shops; but to see them as they are at Kew, we must recall the towering tufted trees that kiss the waters of Florida or the West Indies, or are found in gardens along some parts of the gulf coast. In this glass house we find fan palms and feather palms with leaves rising right to the topmost pane, fan palms, date palms, sugar palms, and others with vast arboreal stems annually flowering and fruiting. A fan of Sabal umbraculifera might roof a cabin, and feathers of avenga saccharifera are over 30 feet long. The Giant Bamboo shoots up branched stems of over 50 ft. high in a year, and the Traveller's Tree of Madagascar is seen in its true character, with tall palm-like trunk and tufted head of erect banana-tree-like leaves. Arads and jungle vegetation and twiners court the stems of the palms, and the walks are bordered with a dense edging of living moss. "Jack apples" of Java ripen as plentifully on the tree as Baldwins do in New York, and the clusters of Bananas (M. sapientum) are yearly matured, and they are of splendid quality. Round the central portion of this structure is a gallery (after the fashion of that at the botanic garden at Washington, the palm-house at which is to that at Kew but little more than a marble is to a foot-ball) reached by two cylindrical iron stair-cases, and from which the beauty of the tropical forests beneath can be viewed to advantage.

The Great Temperate House is larger than the palm house, and with the exception of the two end wings is completed. As it now stands it presents a central part 212 feet long, 137 feet wide and 60 feet high, and at each end is an octagon 50 feet in diameter. The end wings are proposed to be 112 feet long, 62 feet wide and 37 feet high; so that when finished this house will be 582 feet long, covering some 48,000 superficial feet—nearly 1⅓ acres. Here are collected all half-hardy plants, from Australia, New Zealand, the mountains of India, some parts of China and Japan, the Mediterranean neighborhood and elsewhere, and nowhere in England is there a more pleasurable result than is here attained where the plants are planted out. Araucarias, Blue Gums and some others soared so lofty that they had to be removed; the Sikkim Rhododendrons are at home and a-blaze; the Australian Acacias are mighty trees, umbrageous, silvery, graceful and draped with gold; and Evergreens assume an almost olive hue. Eugenia Ugni berries as heavily as do Huckleberries in New England swamps, and Passion flowers depend in festooned drapery on staircases and from the roofs. Benches with geographically arranged plants in pots surround the house, and a stairway conducts us to a gallery above.

In the Water-Lily House the Nelumbium or Sacred Bean of Egypt and tropical Nymphæas grow with native luxuriance. In another aquarium the Victoria regia is regularly grown to perfection. Its circular leaves attain nearly seven feet in width, are strongly netted underneath, and, providing a tray or board be placed on them to prevent breaking through them, they will bear up over a man's weight without breaking or sinking. From twenty to thirty-four flowers are annually produced; they are large, beautiful, of a pale rose color, and last but a day.

Next door is the Orchid department, where India's most gorgeous treasures, and the most beautiful gems of the Andes and Mexico find a home; and the representatives are legion. Pitcher plants too, from the Indian Archipelago, find a resting place. At the opposite end are economic plant houses, where the representatives of tropical and semi-tropical plants of medicinal and other commercial interest are grown. An adjoin-

ing compartment is devoted to beautiful Stove plants, and next to that another where the multitudinous representatives of the Begonia family are displayed. The next house contains South Africans in the way of Mesembryanthemums, beautiful Cape Heaths, Pelargoniums, etc.

Then there are ranges of ferneries where every tropical and subtropical representative of the genus obtainable is grown, and that creditably too; and the collection is immense. Besides these is No.4, or the greenhouse, which is kept as a show-house, and in as gaudy dress as I ever saw greenhouse anywhere; in fact, I never saw a conservatory where so many genera and species of really beautifully flowering plants were in bloom at one time; and here florists' and horticultural varieties are as rife as species.

Then there is the Cactus house where benches and beds are heaped with the oddities, with their woolly pates, formidable spines, and brilliant blossoms. Candelabrum Euphorbias, massive Agaves and hosts of other monster and tiny succulents are here congregated, as well as tall-stemmed grass trees from Australia. On the whole, I don't know of a collection in the world approaching this one in completeness, notwithstanding often published assertions to the contrary.

Near the main entrance gate is a large dead-like glasshouse—an old orangery I believe, which is now chiefly devoted to Araceous plants. Here Anthuriums, Marantas and Philodendrons of undreamt of forms exist, and the Mexican Monstera deliciosa climbs up a back wall for twenty feet to ripen its cone-like fruits, which when ripe are truly delicious. In this house tree ferns display their far-reaching fronds, and that handsome shrub-tree, Brownea coccinea, unfolds its colored young leaves and its showy blossoms. But one of the most wonderful plants in the house is the Lace or Lattice plant, a pretty little acquatic from Madagascar. Its leaves are from 9 to 16 inches or so in length, 1 to 3 inches broad, and just like skeletons, being as systematically netted as a honeycomb is celled.

Besides these greenhouses there is quite a village of glasshouses for propagation purposes and growing plants for conservatory and outdoor embellishment, but they are private. There are also glasshouses and nursery grounds connected with the Arboretum.

In addition to these features there are three separate museums—big buildings, situated in the gardens, and which contain vegetable products crude and manufactured of every conceivable kind, also specimens of woods, models of flowers, fruits, and hosts of other things.

Apart from all these and outside the garden proper are the herbaria and libraries and a staff of eminent botanists of whom the nineteenth century has cause to be proud.

The object of these gardens is to combine science with recreation and to collect and disseminate the plants of all quarters of the globe. Kew gardens are one of the sights of London, but even an uninitiated person can no more see them all through them in an afternoon, than he could our late Centennial Exhibition in a day. The liberality with which plants and seeds are distributed and exchanged at home and abroad, and the facilities for examining the living and dried specimens, together with the courtesy and attention shown by the officials at Kew to Englishmen and foreigners alike, are worthy of such noble gardens, which are not only of national but of international importance.

Botanic Gardens, Cambridge, Mass.

THE BRONCHO PONIES.

QUITE the most remarkable trained horses are now performing in this city, at the Aquarium. Trained hardly conveys a correct appreciation of the developed intelligence of these animals. From a wild state, these Mexican ponies have been taught to perform most intricate evolutions by mere word of command; to carry handkerchiefs to boxes, put them in, shut down the lid, and then to reverse the operation; to "see-saw," a horse being at either end of a long plank, the performance showing a perfect discernment of equilibrium. To roll a cylinder up an inclined plane, and down the opposite side, pushing and holding back with the fore feet, is a tremendous strain on an animal, and has never before been accomplished by a horse. This in conjunction with the remarkable jumping feats of the horse Nettie, is alone worth the going far to see. An amusing incident of the performance is the exact imitation of circus performers by a dog and two goats. They ride fearlessly; jump over hurdles, through hoops, and in short, so closely and excellently imitate those biped rivals, that it is quite enough to put a "star" out of conceit with his his profession. The courtesy of the attendants at the Aquarium makes it a charming place of amusement for ladies and children unescorted. In fact nothing mars the merriest of the performances.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

HER LETTER.

THE following lines were suggested by a letter found by the writer upon the beach near the scene of the wreck of the Huron:

We walked at night the wreck-strewn sand,
We walked and watched the dying storm;
With eager eye and ready hand
We sought to find some sea-tossed form.

And as we walked the guard and I,
The tide crept out till broad and gray
The shingled sand shone smooth and dry,
Beneath our fitful lantern's ray.

On either side, and everywhere,
Lay limb and broken bits of wreck,
Of clothing, ropes, of wooden-ware—
All kinds of things one finds on deck.

From out this scattered wreckage waste
I stooped and picked a little note,
A dainty monogram was traced
Above the lines the owner wrote.

"My darling"; but it gave no name,
As if he only of mankind
To such sweet title had a claim:
The words were coined her love to bind.

'Twas written full, and crossed again,
All interlined with after thought;
'Twas spotted o'er with salter stain
Than e'en the sea could yet have wrought.

"My darling"; there a fold was pressed,
The words just here were fainter yet,
As though 'twere worn upon his breast,
A prized and sacred amulet.

Anon, she wrote her hopes and fears,
Of fickle fortune's smile or frown,
Of homelike joys in coming years,
When they were wed and "settled down."

She spoke of spring and Easter flowers,
Of silk and satin for her bonnet,
Of sick friends, funerals, marriage dowers,
Her new suit and the trimmings on it.

And so this unknown maiden wrote
Her loving letter to the end,
And little dreamed the waves would float
Her writing to a stranger's hand.

Somewhere, to-night, a girlish face
Is raised to God in mute despair;
Somewhere, a woman prays for grace
And strength of soul her load to bear.

Somewhere along the wintry coast
Her hopes lie buried in the sand,
While this tells of the love that's lost—
This sea-stained letter in my hand.

[*N. Y. Graphic.*

TALKS ON TIMELY TOPICS.

Decorative Pottery.

ROSE GERANIUM.

IF you admire the ugly work—and certainly you *must* so long as it is fashionable—I will tell you how to increase your stock at comparatively little expense. Of course I now refer to the popular Japanese style of adornment.

Procure a quantity of the little embossed chromo pictures which you see advertised in all the newspapers at from ten to fifty cents per hundred.

Select a smooth, angular-looking jar or flower-pot—the clumsiest of your lot. If it is clay-red, leave it so, and around the bottom and top either paint broad, dull blue bands or simulate them with strips of paper neatly pasted on.

From your collection of pictures choose a set as unharmonious and ill-adapted as possible—snakes saints, butterflies, zebras, tulips and so on, *ad infinitum*. Stick them fast in a blown-about fashion. Only one rule, here, must guide you and that is no rule at all.

If you do not care to purchase the chromos, sharpen your scissors and go on an expedition through a heap of old newspapers. You will be sure to find more than you can appropriate. Cut very carefully and by no means deprive your Madonna of her nose or your cow of her cherished horn. Bring with you a few redeeming sprays, leaves and buds. Now stain or paint them all black and you have your own domestic brand of material.

When the vase is complete, remember that there are cases when "distance lends enchantment to the view" and this may not be an exceptional one. Locate it at a respectful reach from the self-elected examining committee, dose your consciences with a mild extract of valerian and you can walk off and invest your ten or twelve dollars at the book-store! Your pottery will last until you grow tired of it and that is long enough!

Confidentially, I will whisper that spatter-work will help you to make your jar infinitely prettier. There is something really beautiful about a daintily spattered, red flower vase. It would scarcely be necessary to pen any directions, since, thanks to the blessed, home-missionary work of the newspapers, the act is no longer a secret to any who will care to practice it.

However, it may not be known to all how effectually and speedily the work may be accomplished by the use of an "atomizer." One can be obtained at any well-furnished drug-store. After it has once been used, the agent for "A full set of Spattering Tools" will be driven to new territory.

After you have experimented with fern and grass patterns, I will beg that you test the beauty of ivy leaves and berries. They are among my favorites.

A smooth, clear, glass vase or goblet is somewhat out of the beaten path for spatterers. After it is done, either line with white or fill it with flour. Behold the result of your labors!

Apropos, I remember the little japanned tin boxes, trays and canisters, so long condemned to secluded service in pantries, closets and kitchen cupboards. Here are treasures in earnest! Go, bring them forth, brush away all traces of dust and elevate them to their proper sphere. Pepper them over with star-spangled chromos or with wreaths and sprays of varnished autumn leaves. After this is done, you will have nothing left to desire and, like a certain monarch, you will be free to sit down and weep because you have no more *japanesery* to conquer!

DESCRIPTION OF CUTS.

NOS. 1 AND 2—WORK-BASKET, WITH EMBROIDERED DRAPE.

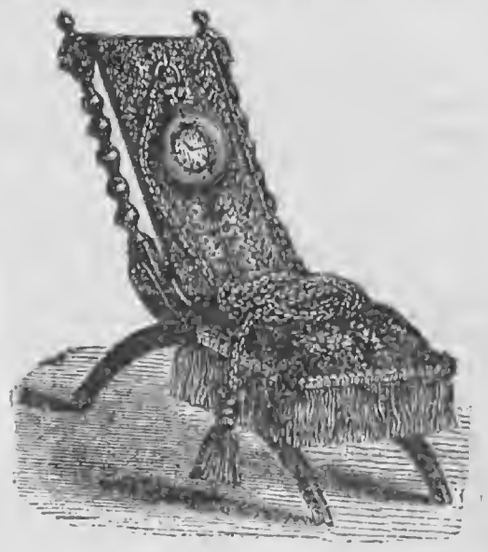
THE basket is of fancy wicker. It is lined with crimson satin or merino, and ornamented with a fine black cloth drape, embroidered in chain and satin stitches with crimson and gold-colored purse silk. A portion of the drape is shown in full-size in No. 2; it is scalloped and plaited at the edges. Two silk cords, one of crimson and the other gold-color, are neatly sewn round the top; the handle is ornamented with a crimson cord and tassels.

NO. 3—WATCH-STAND.

The stand is made of a small chair, which may be purchased at almost any toy-shop. It is ornamented with a stripe of embroidery, worked on black cashmere with gold thread and blue silk, which extends over the seat and back. The seat is finished by a fringe of blue silk, with a heading of gold, using a mesh measuring a quarter instead of a half an inch in width. A brass hook is sewn to the top of the back, from which to hang the watch.

NO. 4.—WALL-POCKET.

For the foundation take two pieces of stiff cardboard, measuring 14 inches long and 10 inches wide, and cover them with maroon cashmere, that used to cover the front being embroidered with maroon and pale blue silk. For the sides take double cashmere 4 inches wide at the top and 15 inches deep gradually sloped to one end. Sew these to the front and back, and sew up the bottom of the pocket. A fringe for the bottom



No. 3.

should be made of maroon and blue silk. The pocket is ornamented with bows of maroon and pale blue ribbon.

ITEMS FOR CORRESPONDENTS.

WATERPROOFS.—The old-fashioned circular style is still worn, but many ladies prefer the Ulster, it being more shapely. We have pattern (6151) of Ulster with triple cape. Four yards of goods forty-eight inches wide will be required. Trimmings—Ribbon, velvet is not used for trimming. Fringes made of silk, chenille, and worsted and shirrings and folds of silk or satin and lace are fashionable trimmings.

If the lady who asks what style of polonaise is suitable for a gingham, will send me her address I will mail her illustrations of several different styles.

HOW TO WASH TASSELS TO NUBIAS.—If any of your readers have tassels which have been soiled they can be washed so as to look as well as new, by braiding each tassel carefully in two or three braids, which prevents them from becoming tangled, and after drying they can be combed out, when they will look as well as if they had never been worn. MISS M. J. B.

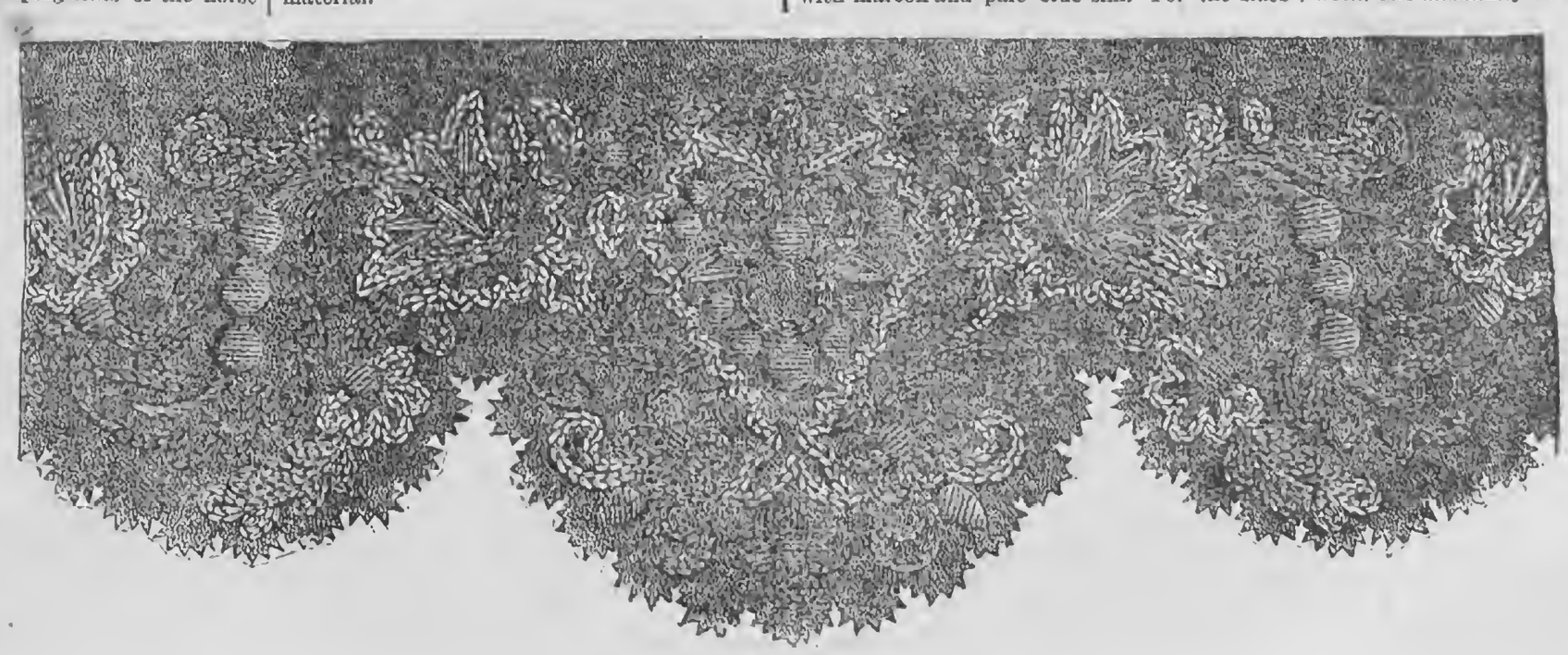
MRS. M. G. B.—Black silk jsacques will be worn during the coming season trimmed with lace or fringe. It is a little early to determine the most popular shape. For spring, English walking jackets and cutaways made in light cloths will be worn, but these jaunty shapes are hardly suitable for rich silk.

No. 4.

INDIA SHAWLS.—Real India camels' hair shawls, $45 to $85. India Deca shawls $10 and upward. Striped India in new designs and colors $12.

LILLIE WHITING.—The "Cricket" clock will make a suitable gift for your friend. It is infinitely preferable to the slippers you propose to work. The unanimity with which young ladies inflict slippers on their friends of the male persuasion has passed into a by-word, and is the occasion for no end of fun at their expense. Better send in the two names you have secured and order the "Cricket."

POTTERY AND LACQUER WARE — For superior work in decorating pottery, the Albert ware is the only ware I can recommend, but for decalcomania ornamentation, common pottery makes a very acceptable background—to those desiring it I will send by mail the address of reliable N.Y. firms who sell earthenware at low rates.



NUMBER 2.

The Querist.

ANSWERS TO CORRESPONDENTS.

Grafting Wax—Tree Wash.

T. Ham, Brantford, Ont.—As we are subscribers of the RURAL you will oblige us by giving (1) the best recipe for making grafting-wax also (2) for a solution for washing trees.

ANS.—(1) Use two pounds of resin, one pound of beeswax and a pint of raw linseed oil. A good way is to tear strips of calico, saturate them in the above composition when warm, and bind about the graft. Or the composition may be used alone.

(2) Dissolve one pound of potash in one gallon of water. Soft soap is good, especially for old bark. A quart of quick-lime may be thrown into two gallons of water, to which add a little lamp-black or mineral paint, so as to imitate the color of the bark. Tobacco ashes, a small quantity of carbolic acid may also be added.

Miscellaneous.

A. C. W.—(1) Are artichokes once established, troublesome to get rid of. (2) I have in my yard what was purchased for a Red Siberian Crab; it is from a questionable source, and bears small, yellow fruit of no account. It has been set five years, is fifteen feet high, and continues to grow two to three feet per annum. It is in a deep remarkably rich soil; fruit is the size of a hickory-nut. What is it? What is the trouble and the remedy? (3) Using it for a stock only, which would succeed best, budded or grafted on it; Pear, Apple or genuine Crab, or would either? (4) Would Huckleberry thrive at all with us in Illinois? I could give them high white-oak soil, or low bottom land, if our climate is not uncongenial for them. Would be satisfied even with a "poor do." if it would be likely I could get any berries at all.

ANS.—(1) They are. (2) The Red Siberian Crab apple is twice the size you state which is about that of the common Siberian Crab. (3) Any variety of Apple would succeed grafted upon it. The Pear would not. Pear stocks or, for dwarfing, Quince stocks, are alone used for the Pear. The Thorn and Mountain Ash are used as stocks for the Pear for special purposes. (4) We have often advocated the cultivation of the Huckleberry. We hope you will try, and let us know the result. Your other questions will be answered next week.

Mrs. F. M. Beers, Linn Co., Mo.—I can hardly find words to express my thanks for those flower seeds. (1.) How can you afford to be so good! (2.) Will you please describe the Eryngium Leavenworthii? I do not find it in my catalogues. Is it an annual? Is it hardy? Tell the *seedsmen* your kindness to us helps their business, for we are like *misers*. "The more we *have*, the more we want," and many a dollar will find its way to *them*, from those who never would have thought of cultivating flowers, had it not been for you.

ANS.—The kind feelings such as those you express, are a sufficient compensation. If we were obliged to buy the seeds we could *not* afford it. (1) We raise the plants, which we should do in any case, and collect the seeds. The cost to us is the time and trouble of collecting, the purchase of the envelops and addressing and stamping them. (2.) It is an annual of very easy cultivation. The leaves are of a metallic purple. The stems are two or three feet high and branching. When cut after maturity, they will last for a long time.

J. H. Clapham, Loudoun Co., Va.—I inclose some seed found in a lot of Ohio Sapling Clover seed. If the RURAL can tell me what kind of seed they are, it will very much oblige me, for I could not sow the seed on any account, as my farm is now quite clear of troublesome weeds; and for aught I know, these may propagate them.

ANS.—The seeds in the clover are those of the chess, such as is common in some wheat fields. In the sample sent all but one kernel were stripped of the hull which usually adheres to the chess. This was done, we presume, by the machine which hulled the clover seed.

L. H. D., Leon Springs, Dexar Co., Texas.—In the RURAL of January 12th, 1878, page 23, you recommend a work on "Swine Husbandry," by F. D. COBURN, of Kansas. I cannot get the work here, and my letter to Mr. COBURN was returned by the P. O. Department for more explicit directions. Can you inform a constant reader of your paper—either as to his further address, or how to get his work?

ANS.—The ORANGE JUDD Co., 245 Broadway, N. Y., will supply the work.

A. B. WARE, Oswego Co., N. Y. ANS.—We are unable to give you the law respecting the sale of leaf tobacco.

A Working Farmer, Rockingham, Va.—I would like to ask the RURAL one or two questions. I owe $2,000 on 90 acres of land, have six years to pay it in: 1st, will it pay me to buy lime at 12½ cents per bushel, and haul it three miles to put on my land? The soil is a mixture of gravel and sand with a clay bottom. Or will it pay to use lime at all? 2d. Will it pay to harrow wheat in the spring at the time of sowing grass seed? I want to get out of debt as quickly as possible.

1st. The soil may be deficient in lime in which case it may pay to use it even on gravel. Usually lime is chiefly beneficial in decomposing more rapidly the vegetable matter the soil contains. Probably your soil has no large amount of vegetable matter and this use of lime would not be advisable. For the direct use of crops, small quantities of lime only are needed and it is generally preferable to use the sulphate of lime, gypsum or plaster of Paris, which besides being cheap contains sulphuric acid which is an active stimulant to vegetable growth. If you have a clover ley to turn under this season, experiment with lime on a small piece at the rate of fifty bushels per acre, sown broadcast after plowing. If the result is favorable you will know what to do without asking any advice. Try also other fertilizers to test what the soil needs.

(2.) It will pay to harrow wheat just before sowing grass seed. The wheat and the clover catch will both be better for it, though the harrowing will make the wheat look worse for two or three days after the operation. Harrow if possible just before a good rain.

A Subscriber.—I would like to get some information through the RURAL in regard to fruit trees. I think of setting about $500 worth of trees this spring, and would like to know. (1) What are the most profitable kinds and (2) which are the most reliable nurseries to buy of. Will give you a list of what I intend setting:

200 pear trees; 350 quince bushes; 100 apple trees; 50 plum trees; 1000 raspberry bushes; 300 feet edge fencing.—*Providence, R. I.*

ANS.—APPLES: Baldwin, Fall Pippin, Gravenstein, Hubbardston Nonsuch, Keswick Codlin, Peck's Pleasant, Rhode Island Greening, Roxbury Russet, William's Favorite.

PEARS: Bartlett, Belle Lucrative, Beurre Clairgeau, Beurre d'Anjou, Duchesse d'Angouleme, Lawrence, Sheldon.

QUINCES: Portugal Apple or Orange.

PLUMS: Washington, Coe's Golden Drop, Imperial Gage, Purple Gage, McLaughlin.

RASPBERRIES: Philadelphia, Orange, Mammoth Cluster, Doolittle. So much depends upon soil and situation and it costs so little to test the adaptability of varieties to each locality that we would recommend you to try the following: Thwack, Highland Hardy, Florence, Delaware.

EDGE FENCING: If for ornament, American or Siberian Arbor Vitæ. The Red Cedar (Juniperus Virginiana) is also adapted for this purpose beyond what is generally supposed.

(2) In almost every issue of the RURAL will be found the advertisements of nurserymen all of whom are quite trustworthy. Send for their catalogues—compare and judge for yourself.

M. D. D., Toledo, Ohio.—Will the RURAL please tell me in "Answers to Correspondents" what is the matter with my ivy, two leaves of which I inclose. Also the means of destroying what I suppose to be a parasite on it.

ANS.—This is a scale insect. Wash the leaves and stems with a soft tooth brush and warm water and soap.

Querist, Tecumseh, Mich.—Will the RURAL please publish a general rule for the propagation of house plants from slips or cuttings, season, soil, and condition of plants?

ANS.—Different cuttings require different treatment, which could not be given in detail in this column. The present is a good time for general propagation. Flower pots or boxes well drained and filled in with pure sand, either white or red, answer the purpose. Make cuttings from two to six inches long, and insert them an inch deep in the sand and an inch or so apart. Keep the sand moist, not wet, and place in a sunny window. Cuttings of a stocky growth should be selected and cut just under a joint.

ANS.—In answer in part to J. J. D., Woodson County, Kansas, on page 160 of RURAL NEW-YORKER. If Mr. D. will send some of the hide of his hogs, where the hair has been lost in patches, to Mr. WALTER FAXON, Museum of Comparative Zoology, Cambridge, Mass., he may find that the pits which contained the hairs have been inhabited by certain mites known as Demodex. The hide should be put, while fresh, in a bottle of alcohol or strongly alcoholic liquor of some kind. This explanation of the loss of hair is only a conjecture, based upon certain very interesting and valuable observations lately made by Mr. FAXON upon the loss of hair and ruination of leather of cattle-hides. It seems as if carbolic soap would be a good remedy for the Demodex, in case they are present.

O. K. C., Beloit, Wis.—Please let me know through your columns if you think JNO. GARMORE, Covington, Ky., who advertised in the RURAL NEW-YORKER, is to be trusted.

ANS. We cannot say, of our own knowledge. He is represented as being what he represents himself to be. Whether his skill as a medium is sure to work cures, we cannot, of course predict.

J. H. K.—Will the RURAL please state what it knows about the "Wood Organ?" Whether it has the preference, or what one has? Reading the advertisements I can tell nothing about it, for they are all alike puffed.

ANS.—The preference as between the leading makers is mostly a matter of caprice or conviction through the efforts of an active agent. All are good, and some are only distinguished by inconsiderable variations of tone, or peculiarities of the stops. The Wood's Organ is a good one, and in purchasing, if you propose doing so, you will have a serviceable instrument.

F. R. M., Seneca Falls, N. Y.—(1) What book on botany would the RURAL recommend to one who has a common-school education, and wishes to pursue the study at home without a teacher? Can you (2) give me a better description of Hydrangea paniculata grandiflora (mentioned in last week's RURAL) and (3) would it pay to purchase one to plant in Seneca Co., New York?

ANS.—(1) Gray's "How Plants Grow" for the first. Gray's Structural Botany for the second. You will not need any other teacher if you study them assiduously. (2) We have already said so much of this Hydrangea that we must refer you to back numbers. It is perfectly hardy, every stem terminates with a panicle of flowers, from six inches to a foot long. The flowers are first greenish-white, then rose. It is a coarse plant, but has much to commend it. (3) Certainly. Even small plants from last year's cuttings will bloom profusely.

Mason Hamilton, Wyoming Co., N. Y.—noticed in the RURAL, sometime last year, a plan for making a gate. It was fixed so that it could be raised or lowered at pleasure. If it was in the RURAL, please let me know through Answers To Correspondents.

ANS.—An illustration and full description of the gate referred to, appeared in the RURAL of August 18, 1877, under the heading: A Novel Farm Gate.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, MARCH, 11TH.

B. H.—C. B.—L. A. R.—G. M.—Lizzie—R. H. H.—"Young Teetotaler" — "Wildfire" — M. R.—A. D. R. — M. L. D. — S. B. P. — B. E. H.—R. D.—F. D. C. — W. P. G., your friend is mistaken—W. L. McE. — S. R. M. — Alice V.—X.—B. P. M.—C. D. S.— E. E. B.—S. P. —E. M.—M. S.—A. W.—H. H.—W. H. T.—H. B. C.&Co.—"Brown Badger"—"Anken"—"Wild Goose"—"Hired Hand"—Viellard—"A Workingman," thanks, but we have more on this subject than we can well publish—"Romping Rose"— Mrs. S. E. O.— S. R. M.—H.—W. H. — S. & B. — Ida M. — G. A. G. — M. K. P.—"Perle Perdu"—J. B. L., many thanks — W. C.—L. D. — B. P. — M. B. P., not received — H. B. J.—G. A. C. B.—J. M. P.—L. A. R., No. 2.—C.—S. B. P., No. 2.

News of the Week.

NEWS OF THE WEEK.

DURING the past week, news, domestic and foreign, has been extremely meager and uninteresting. At home, Maine has again gone Republican, with a loss of about 1,200 to that party, and a corresponding gain to the Democrats. Montgomery Blair again forced his resolution denouncing the tenor by which Hayes held the Presidency, before the Maryland Legislature, but failed to secure a majority in favor of his views. The air in Washington seems to be full of reports of a projected coalition of discontented Republicans and Democrats with a view of ousting Hayes and installing Tilden in the White House. A bitter attack has been made in the Senate by Senator Blaine on the award of $5,600,000 made in favor of Canada by the Fishery Commission, and incidentally on the Belgian Minister, Mr. Delfosse, one of the commissioners, who is supposed to have been swayed in his decision by British influence. The general opinion seems to be, however, that national honor requires the payment of the award, however distasteful.

Across the Atlantic, the war-clouds temporarily dispersed by the signing of the treaty of peace between Russia and Turkey, are again gathering. The pro-Russian party in England having been silenced by an outburst of popular anger of unexampled violence, the Prime Minister, Disraeli, having the favor of the Queen, a large majority in Parliament, and the people behind him, finds his back-bone marvelously strengthened and is making vigorous preparations to secure weighty consideration for the opinions of Great Britain with regard to the proper settlement of the Eastern Question. At all the dockyards, armories, and manufactories of warlike material throughout the country, men are working until late in the night, hurrying forward preparations for war. Several iron-clads built for foreign governments, and among them one built for the late Confederacy, have been purchased by the Government. More vessels have been sent to the Mediterranean and an addition of four iron-clads made to the fleet in the Sea of Marmora. Permission has been obtained from the Porte to land troops on the Island of Tenedos; and, all together, England boasts of being better prepared for war than she has been for many a day. Austria is also discontented with the terms of the late treaty, and negotiations are in active progress between her and Great Britain with a view of forming a hostile alliance against Muscovite aggrandizement. Russia is by no means idle. Names are being enrolled throughout the empire for a fresh levy of troops; entrenchments are being thrown up across the peninsula of Gallipoli, so as to prevent the advance of any British troops landed at that point; the Muscovite troops have crossed the river between Makri Kol and San Stefano, and occupied three villages near the former euphonious suburb of Constantinople. Nay, despite the protest of Turkey, they have occupied Domousdere, behind Bujerkdere, and at the mouth of the Bosphorus, and declare that England has decided on war and is cavilling only to gain time. Meanwhile, diplomats are busy trying to arrange a peaceable solution of present difficulties, and the telegraph wires are loaded with innumerable contradictory and conjectural announcements. England insists that every clause of the late treaty shall be submitted to the action of the proposed Congress or Conference: Russia consents that all the conditions which the assemblage may desire to review shall be submitted to them, and Germany and Austria are reported to think this quite satisfactory enough. The latest reports, however, say that Bismarck has persuaded the Czar to yield to Great Britain. The date of opening the Conference or Congress has been deferred till the 15th of April, at least, and it is proposed to hold a preliminary council of the plenipotentiaries to decide what questions shall be acted upon. The Pope has given permission to Italian bishops to become reconciled to the Government, thus recognizing semi-officially the loss of the temporal power. He has also written to the Emperor William informing him of his election to the papacy—an act of courtesy doubtless preparatory to a settlement of existing difficulties.

Kosciusko, Miss., is a model place to emigrate to. Butter, 15 cents a pound; rib beef, at 4 cents chickens, 12 cents each; and eggs, 8 cents a dozen are the latest quotations.

Manufacturers of Clothing and ladies' suits find the New Davis Sewing Machine adapted to the full range of their work, trimming, binding, sewing thick and thin goods, over-seams, without any difficulty, and requiring no basting or change of tension. The DAVIS SEWING MACHINE Co. are enlarging their manufactory at Watertown, N. Y., to enable them to supply the increasing demand for their machines.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC Co., Cincinnati, Ohio.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, March 16, 1878.

BEANS AND PEAS.—There is a trifle of better feeling in medium but sales are moderate. Marrows continue quiet; exporters will not invest heavily until Cuban affairs are settled, regardless of the low home prices. White kidneys dull. It is unusual to see these three leading sorts of beans so close in quotations as they now are. Red Kidneys sell fairly at the extreme if choice. Green peas have revived somewhat and now bring $1.15@2.20. Canadian peas, 83@84c. with a fair business. Exports past week 13,350 bush. Southern B. S. peas lower the light demand not supporting the high rates.

We quote:—Beans, medium choice, $1.70@1.72; other, $1.45@1.55; marrows, choice, $1.70@1.75; other, $1.55@1.65; pea, $1.55@1.80. White kidney, choice, $1.70@1.80; other, $1.55@1.95; red, choice, $2.25@2.50; other, $2.35@2.40. Turtle soup beans, $1.50. Lima, $3.

BEESWAX.—There have been small offerings yet but little demand; Western and Southern quoted at 27@28c.

BROOM CORN.—Wants of manufacturers are small and stocks are ample, with prices, however, essentially as quoted last week.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 5@6¾c.; red-tipped, 4@5c., and common red, 3@3¾c.

BUTTER.—Receipts for the week 15780 packages. Fine old butter is reduced to a nominal quantity; nothing remains good enough in quality to make wholesome trade, at the rate of a fortnight ago. An indication of our burdensome surplus of old, is the fact that full dairies are quoted at this late date. There is some export movement in both State and Western, but it is most likely that some stock will go abroad on owners' account; this forcing distribution of stocks will not be apt to lead to a profit. There are enough straggling and regular lots of new white to make the price list we annex. Old Western has merged from grease rates to 11@12c for well procured stock.

OLD.—State dairies, good to choice 23@27c.; fair, 20@22c.; from 11@18c; selected firkins 26@28c; fair to good 18@21c; poor 14@18c; selected half tub 30@31c; other, 24 28c.; choice Full Welsh 28@30c. Fair to prime 20@24c.; Welsh dairies, 25@26c. State creamery, 30@32c; other, 30@32c.; other 23@28c; Western factory, fresh, low goods worth 7@10c.; greese 6½@7c.

NEW.—State, half tubs choice, 32@33; good 29@31. Welsh first, 31@32; second, 27@30c; poor now, 23@26c; Western creamery ranges at 25@35c.

Exports past week, 2697 pkgs.

CHEESE.—Exports for the week, 24,336 boxes. These fair shipments have been brought about by yielding prices. Supplies have been freely offered on account of the early, mild weather and prospects that the new make will be earlier than usual. The best of the factories here have sold at 13@13½c., and these are the top quoted rates, while many very good lots have been sold relatively low.

Fancy factories, 13 13½c.; good and prime, 12½@12¾c.; fair lots, 11@11½c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 11¼@12¾c. for good to prime: 10½@11½c. for fair lots: 8@10c. for skimmed; Western factory, cheddar, 12½@13c. for fine; 11@12½c. for good; 6@10c. for poor.

Liverpool cable, 63s. Gold closes 101¼.

Exports for the week, 24,393 boxes.

COTTON.—There has been but little done for export, and prices have been easy. The English advices have been very tame, and have discouraged export demand.

Latest prices are for March, 10.94@10.95c.; April, 11.02@11.03c.; May, 11.17@11.18c.; June, 11.27@11.28c

July, 11.25@11.26c.; August, 11,41@11.41c.; September, 11.24@11.25c.; October, 10.88@10.89c.; November, 10.76 @10.77c.; December, 10.78c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8⅜	8⅜	8¼	8¼
Strict ordinary	8¾	8⅜	9	9
Good ordinary	9 5-16	9 5-16	9 7-16	9 7-16
Strict good do	9 13-16	9 13-16	9 15-16	9 15-16
Low middling	10¼	10¼	10⅜	10¾
Strict low middling	10⅜	10⅜	10⅝	10⅞
Middling	10 15-16	10 15-16	11 1-16	11 1-16
Good middling	10 5-16	11 5-16	11 7-16	11 7-16
Strict good middling	11⅛	11¼	11⅜	11⅝
Middling fair	12⅛	12⅛	12¼	12¼
Fair	12⅝	12⅝	12⅞	12⅞

Stained.

Good ordinary, 8⅛c. Strict ordinary, 8⅜c.; Low middling, 9⅛c.; Middling, 10c.

DRIED FRUITS.—In apples the higher grades are sought after from home trade sources, and being in limited stock bring full prices; common grades have but little attention. Peaches and small fruits generally are without change, with a slow business.

Apples—State quarters, old, 5¾@6¼c.; new, 5¾@6¼c.; Western quarters, old, 6@6½c.; new, 5⅛@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5¾c. Peaches—Pealed, new, 9@10c.; unpealed halves, 4¾ 5c.; unpealed quarters, 3¾@4c. Pitted cherries, 15@17c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c.

Exports past week, 756 bbls. apples.

EGGS.—Receipts for the week, 18,900 barrels. The market has here seldom so abundantly stocked at the early date with fresh and never has the demand been so apathetic. There is no demand beyond our local one at present and that fact helps to tame the tone. For best Western and Southern 12c. is extreme and there are grades selling down to 11c. Limed eggs are about out of market or what is equivalent, forced out of sight. State, 12@13c.

FEED.—A much better business is in progress and prices are strong. Sales 40 pounds ave. $20; 60 pounds ave. $19@20; 80 pounds ave., $19@20.

FLOUR.—There is a much more general demand for stock suited to exporters' wants, prices for which are stronger. The high grades are so plenty that the improved prices for wheat have scarcely helped them.

Latest prices are $4.10@4.75 for poor to fancy superfine State; $4.75@5.10 for common to fair extra do; $5.10@5.50 for good to choice do.; $4.10@4.75 for superfine. Indiana, Iowa, Michigan, Ohio, &c.; $4.75@5.10 for very poor to good shipping extra do do., (chiefly at $4.90@5.10) and $5.15@5.50 for good to choice extra do.; common to choice white extras, $5.35@6.65; fancy do. at $6.65@7.50; (the latter an extreme); red and amber winter wheat, inferior to choice trade and family, at $5.10@6.35; round hoop Ohio at $4.80@4.25, and trade brands of do, $5.40@6.75, the latter for choice; St. Louis, $5.25@6.10 for poor to fair extra and $6.10@7.00 for good to fancy; (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, $4.85@5.90; Minnesota "straight," common to fancy, at $5.60@6.75, and patent poor to very choice, $6.10@8.25, with a few fancy at $8.35@8.50; unsound stock at $2.25@5.75; city mill extra at $5.85@6.35 for fair to very choice for West Indies; do. for England $4.90@5.00; do. trade and family extras, $6.35@7.50; do. South America, $6.35@ 7.35 for fair to fancy; No. 2 at $2.65@3.00.

Corn meal is selling at $3.@3.10 for Brandywine and $2.50 to $2.80 for yellow Western.

FRESH FRUITS.—Exports of apples 1000 bbls, mostly strong Russets. Apples are quiet but fairly firm. Choice Red and best Russets, $4.50@5 fair to good, $3@4. Cranberries are going out well at former quotations. Strawberries arrive in bad order this season. Oranges scarce and salable $3.50@4. Peanuts quoted as in our last, the demand not as brisk as it should be in this style of weather; best, $1.35; others 85c. @$1.20 per bush.

FURS AND SKINS.—The London sales of the past week, Hudson Bay Company's stock, all show a decline except skunk. Otter declined 10 per cent.; Red Fox, Cross Fox and Fisher, 20 per cent.; Martin 20 per cent.; Mink, 25 per cent.; skunk advanced 25 per cent. or 40 per cent. above September's rates.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₩ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and yigs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₩ lb	1 60@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 5
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

GRAIN.—Wheat has been in stronger export demand, and with reports of a lighter movement forward of supplies than had been expected, prices are better and strong.

Latest sales are of No. 2 red at $1 32@1.33 ungraded red and amber State, $1 32@—; white, $1 40; No 1 Northwest spring, $1 27; No. 3 Chicago, $1 22½; No. 2 red for March at $1 21½; No. 2 Milwaukee spring, $1 27. Rye is a trifle steadier; sales of Western at 73@75c.; State at 71@73c. Barley, 96c for No. 1 Canada; 85@86c. for six-rowed State. Corn is weak and quiet. Latest sales are of New York No. 2 at 59@59½c.; steamer mixed, March, 51c. Oats of New York extra white, at 30½@37c.; do. No. 1, March 35½c.; No. 2 white, 35½c.; mixed Western, 34½@36c.; white Western, 35@41c.

HAY AND STRAW.—With river navigation resumed supplies have increased, but demand is very good and prices are sustained.

Bale hay, 65@70c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@ 50c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

Exports since Jan. 1st, 13,600 bales; about the same as last year this date.

HIGHWINES—$1.08½@1.09 regular.

HONEY.—In a small way has sold as low at 8@10c. for white.

HOPS.—The export movement this week has been very moderate, and there has been a little more of an effort to sell, which has led to a little irregularity in prices for the common and medium grades.

State choice to fancy, 11@13c.; good to prime, 8@ 10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

LEATHER.—Hemlock sole, 20@21½c. for light, 20@ 21c. for middle, 20@22c. for heavy, 18@19c. for good damaged.

MAPLE SUGAR.—Increased supplies are attended with lower prices for molds and strup. Small cakes, 13c.; large, 10@12c. Strup, 75c.@$1 ₩ gal., with can.

OIL-CAKE.—Western is quoted at $30@$36.25 ₩ ton.

POULTRY AND GAME.—Live poultry is now quite an active feature. City dressers are operating quite regularly and fair prices are reported.

N. J. chickens, 10@13c.; W. fowls, 12@15c.; Turkeys, @14c.; Toms, 6@8c.; Ducks, N. J., pair, 57@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1.50.

Fancy Phila. and N. J. turkeys, 12@14c.; good, 8@ 9c.; large or Toms, 7@9c.; chickens, choice, 8@9c; good, 11@13c.; common, 6@7c.; ducks, choice, —@18c.; other, 15@16c.; geese, fancy, 11c.; other, 7@9c. Capons large 21@22c. small and slips, 18@19c.

Our near points can now supply the dressed poultry wants with fair receipts of live.

Warm weather and free receipts of the few sorts of game have depressed the market.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.00@1.25; Red-heads, $1.00; Mallard, 60@75c.; Teal, 25@40c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$1.00. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS.—Hog products have been in freer demand for export and have hardened a little in price.

Mess pork, $10¼@10.40 for spot lots; $10.25@10.35 for March and April. Bacon at 5¼c. for long clear and 5¾c. for short clear. Lard—Western steam, 7 37½c. 7.40c. for short, 7.35@7.37½c. for April, 7.45@7.47½ Tallow at 7 9-16c. for prime. Stearine, 7¾c. for prime Western. Beef hams at $16.50. Beef—New extra mess, $12.00@12.50; plain, $11.00@11.50; new packet, $14.75; family mess, $17.50; extra India mess, $27 for city brands; do. Philadelphia, $25.

SEED.—Grass are in good demand and higher. Clover, 8@8½c. for Western; 8¼@8¾c. for State. Timothy, $1.37½@1.40. Rough flax, $1.50.

TOBACCO.—Demand continues moderate and prices are easy yet, notwithstanding recent figures have been exceptionally low.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3½@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	6 @ 7	7 @ 7½
Good leaf	7½@8½	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	4 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	29 @17
wrappers	30 @50
New York assorted lots, common to medium	8 to 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—There is a weak feeling in potatoes especially in Rose, holders fear sprouting and are anxious to sell.

We quote Peach Blows $1.50@1.75, bulk and double-heads. Early Rose, $1.62@1.87; Peerless, $1.25@ 1.50; Nova Scotia, $1.25@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.00@1.25; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₩ lb., 20@40c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1.50@$2. Cucumbers, doz., $3@3. Rhubarb, doz., $1. Spinach, Southern, $1 75@ @2.25 ₩ bbl. Bermuda, $1.50@5.

WOOL.—There has been but little demand from manufacturers, and the advancing season exerts rather a pressure to sell, with slightly easier prices.

Ohio, Pennsylvania and Virginia—XXX and picklock, 41@42c.; XX, 42@43c.; X, 42@43c.; No. 1, 43@44c. No. 2, 35@37c.; common, 30@35c.; combing, 52@55c.

New York, Michigan, Indiana and Wisconsin—XX, 36@38c.; X, 36@38c.; No. 1, 38@42c.; No. 2, 38@36; common, 32@34c.; combing, 46@50c.

Iowa, Vermont and Illinois—X and XX, 35@37c.; No. 1, 37@40c.; No. 2, 32@34c.; combing, 45@50c.

Missouri, Kentucky, and Tennessee—Washed fleece, 32@42c.; unwashed, 25@30c.; unwashed combing, 30@36c.

LIVE STOCK MARKETS.

NEW YORK, March 11, 1878.

BEEVES.—Receipts for the week, 8,029 head; do., last week, 7,823 do. There is quite an unusual falling off in the demand for meats—dull times and Lent making a severe combination for dealers. Prices at the cattle yards are tame, and the closing rates are quite as low as at our last, being 7¼@9¾c. for ordinary to picked steers. These prices have not been exceeded during the week; choice to extra 10@10¾c; fulls 8.80@9.25 for 100 live. Still fed Texas and Cherokee 8@9¼c; a previous lot of stillers from same points brought 8¼@9c. About 400 fat exporting steers brought 9¾@10¾c. The market all around is fully $1 per head higher than on Wednesday last.

COWS AND CALVES.—Market more than supplied. The nominal quotations are $40@60 ₩ head for good to choice. Late rates are more readily named as we may expect better qualities with spring.

VEAL CALVES.—Not enough live have arrived latterly to establish new rates. Recent rates, 6@7½c. Hog-dressed are neglected, as the weather has been against them—8@9c—ordinary stock say 112 lbs. sold at 7c; "Bobs" are promptly squelched by the sanitary authorities.

SHEEP AND LAMBS.—Receipts for the week, 17,077 head; do., last week, 17,878 do. Receipts continue light, but seem fully equal to the demand, the market, as a whole, seeming weak. Last week 17,677 do Quotations for sheep, 5.35@6.25c. ₩ lb.; choice State lambs, 6.50c. Spring lambs are too small to be attractive. Market unsettled.

SWINE.—Receipts for the week, 25,210 head; do. last week, 27,822 do. Market weak; a sale of Ohio live 4¼c. Country-dressed pork—State and New Jersey, 4¾@5c. for heavy to light.

SPECIAL NOTICES.

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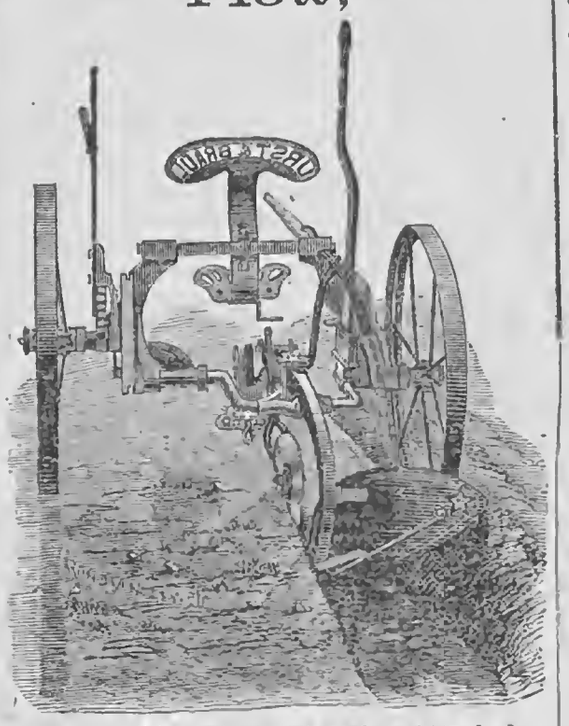

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Reading for the Young.

WHAT CAN I DO?

WHAT if the little rain should say,
"So small a thing as I
Can ne'er refresh the thirsty fields,
I'll tarry in the sky."

What if the shining beam of noon
Should in its fountain stay,
Because its single light alone
Cannot create a day.

Does not each rain-drop help to form
The cool refreshing shower?
And every ray of light to warm
And beautify the flower?

MRS. SKIMMERHORN.

M. E. STONE.

SHE was dead sure enough! An old crape vail hung on the door-knob, and the undertaker had been seen to enter the house—tape measure in hand—with a smile on his face which said plainly, "My errand is not to be in vain this time!" Poor man! he had been called there often before, and his expectations raised by her declaring very solemnly, she didn't think she should live an hour longer, and that he'd better go to work on the coffin. Nor was his errand in vain, for all that was left of MARINDA SKIMMERHORN was laid out in the front room, and her husband, PETER SKIMMERHORN, was sitting beside the corpse.

The deceased had considered herself an invalid for over thirty years, though in what her particular malady consisted physicians could never decide. Some were heretical enough to hint quite openly that it was purely imagination. Suffice it to say she was an invalid (?) and not a day passed over her head but that she *seemed* to fully expect to make her exit. It was always the first thing in the morning, and the last thing at night: "I feel that my arthly end is nigh, PETER." Still, it proved to be pretty long in ending, after all. So long, that when it was known she had really departed, it filled the whole village with surprise. And she might have been living yet but for her own act: Mrs. SKIMMERHORN had poisoned herself. Not that she intended to commit suicide, no indeed; but through some strange mischance she had taken a dose from the wrong bottle, and gave up the ghost.

PETER SKIMMERHORN bore it remarkably well. As he sat by her side in the front room he was able to bear up under the terrible blow with such fortitude that he smiled quite often, and talked quite cheerily with the undertaker about the coffin, while he held one end of the tape measure to get the exact length. "I want a fair to middlin' coffin," he explained; "not too expensive, but one of these ere kind that screw down tight, —*tight!*" he repeated emphatically, for he evidently cherished some inward fears that she might conceive the idea of returning to this "arthly" sphere again if she were not properly confined.

"She looks natural," said the undertaker, turning back the sheet and disclosing to view a screwed-up, vinegar face, which looked for all the world as if she were about to wake up and administer a good round scolding to some one. PETER shuddered and drew back. "Very," he remarked; "but I guess you'd better clap down that ere sheet, for I've heerd tell on as how air turned 'em black."

The undertaker did as he was bid, muttering to himself, "I bet the old 'un took *her!*"

That night PETER SKIMMERHORN poked the fire briskly, and turned up the lamp an inch higher than usual, proceedings which would have filled the corpse with horror, for Mrs. SKIMMERHORN had been very saving and, although an invalid, her eyesight had remained remarkably keen. Nothing ever escaped her. "Turn down that light, PETER SKIMMERHORN," she would have screamed; "shut that stove, this instant. You'll die in the poor-house yet." And he would have complied with trembling haste, for she possessed the faculty of making everybody obey her whether they would or not.

Oh she was a hard woman! a scrimping, pinching, driving woman—as far as others were concerned, with a tongue as sharp as an adder's sting. She could count all the sins of her neighbors for miles around, on her fingers. She knew all their little weaknesses and follies better than they did themselves. How they loved her! No one ever loved Mrs. SKIMMERHORN, not even her spouse, who, if rumor is correct, married her for the little sum of hoarded earnings she possessed. He got the worth of his bargain, as one generally does.

Now she was dead, really dead. As he sat by his lonely hearth he fell to thinking of the widow with the soft voice, and pleasant smile, over the way. He even went so far as to picture her sitting just opposite in MIRANDA SKIMMERHORN'S best chair. Oh, if she could only have known! If she could only have pounced out at him for such vile heresy, and frozen the smile upon his traitorous lips. He was looking really happy. For the first time in over thirty years he had passed a day in peace. No one had fretted or scolded at him, and he had enjoyed it, as I fear we should in a like case.

He bore no love for the still form in the other room, because she had never bestowed an atom upon him. She had never said, "dear PETER I love you." She had never stroked the thin locks from his forehead with a tender touch; she had never drawn out the easy chair and placed his dressing-gown near the fire to warm at night; she had never planned pleasant little surprises in the shape of his favorite dishes; she had never peeped in the glass to make sure her hair was smooth and her collar straight when she heard his steps in the hall. No, she had never done one of these things which are so little themselves, but mean so much.

She shut her heart to all such foolish feeling. Nobody ever expected or looked for sympathy from her. The idea of making others happy never occurred to her. Lifting burdens from other's backs was superfluous, her own was heavy enough. She went through life nursing her own little troubles until they became mountains in her sight. She found fault with her neighbor when she should have been all sympathy and kindness. She continually looked for evil, and passed the good by unnoticed. But now she was dead. The moonlight streamed in through the shutters and shone faintly on the white face as she lay there, in her coffin, all alone, in the dead silence of the night. Yes, all alone Mrs. SKIMMERHORN for your spouse in the outer room has his own sweet dreams to dream, and they are not of you.

The parson, after making a short prayer, turned to speak a few words of consolation to the bereaved husband, but he saw they were not needed. There sat PETER SKIMMERHORN at the head of the coffin, smiling serenly. Alas! he had forgotten himself, and was thinking of the widow again.

Not a soul whispered, "I'm sorry; it's lonely without her." Not a tear had been shed. The sexton filled up the grave with stones, rounded it over with gravel, and went home.

The Puzzler.

REVERSALS.

1. REVERSE before, and find a volcano.
2. A fish, and find a Confederate general.
3. A blow with something soft, and find wicked.
4. Lace in the front of a bonnet, and find a bird-like animal.
5. A native of Tunis, and find an apartment.
6. A measure, and find a mode of entrance.
7. To confer a title on one, and find the germ of a plant.
8. A heavy weight, and find a vegetable production.
9. An adverb of denial, and find fashion.
10. To suppose, and find a reward.
11. A laundry article, and find a conjunction.
12. A river of England, and find a Scotch title like "Ap" or O'.
13. To yelp like a puppy, and find to give money.
14. To pull, and find part of a hospital.
15. A jewel, and find a lady's name.
16. Not off, and find a negative.
17. For shame, and find a preposition.
18. A king of Bashan, and find to depart.
19. To hang down, and find a vapor.
20. A coal wagon, and find a bazaar.
21. A sort of rock, and find to sever.
22. To hit slightly, and find an Irish nickname.
23. The apex, and find a kettle.
24. The margin, and find a hole in the ground.

☞ Answer in two weeks. FLORIDAN.

ENIGMAS.

1. WHY is a door like a walking-stick?
2. Why is a carpenter the most disreputable person?
3. Why is sixteen in an omnibus like a lie?
4. Why is a grate like a piece of music?
5. Why is a turned lesson like *amabam?*
6. If you were to decapitate pale, why would you resemble Mr. Bass?
7. Why is P like the leader of a conspiracy?
8. Why should not a Frenchman describe a circle?
9. Why is an Inverness cape upon a person like a young fowl?
10. Why is very good handwriting like polite literature?

☞ Answer in two weeks. QUIZ.

MRLTESE CROSS.

TOP.—1. A man's name. 2. Obtained. 3. A consonant.

Right.—1. One of the senses. 2. A Scotch river. 3. A vowel.

Bottom.—1. Pauses in music. 2. To place. 3. A vowel.

Left.—1. A poet of old. 2. A turf. 3. A consonant.

Center.—Top, A man's name. Right, An ancient vessel. Bottom, Two letters forming the abbreviation of a railroad and a consonant. Left, Atmospheric. Center, A consonant.

Centrals read downward form a word meaning outrageous, and across a female teacher.

☞ Answer in two weeks. LITTLE ONE.

WORD-SQUARE ENIGMA.

1. A PRIEST. 2. A man's name. 3. Pleasing. 4. Understood.

☞ Answer in two weeks. BALTO.

PUZZLER ANSWERS.—March 9.

GEOGRAPHICAL ENIGMA.—All is not gold that glitters.

HIDDEN BUILDINGS.—1, Hovel; 2, Villa; 3, Hotel; 4, Tavern; 5, Factory; 6, Tower; 7, Theater; 8, Temple; 9, Mosque; 10, Cottage.

DOUBLE CROSS-WORD ENIGMA.—Apricot, Currant.

CROSS-WORD ENIGMA.—Jackdaw.

Sabbath Reading.

BIDE A WEE, AND DINNA FRET.

Is the road very dreary?
Patience yet!
Rest will be sweeter if thou art aweary,
And after night cometh the morning cheery,
Then bide a wee, and dinna fret.

The clouds have silver lining,
Don't forget;
And though he's hidden, still the sun is shining;
Courage! instead of tears and vain repining,
Just bide a wee, and dinna fret.

With toil and cares unending
Art beset?
Bethink thee, how the storms from heaven descending
Snap the stiff oak, but spare the willow bending,
And bide a wee, and dinna fret.

Grief sharper sting doth borrow
From regret;
But yesterday is gone, and shall its sorrow
Unfit us for the present and the morrow?
Nay; bide a wee, and dinna fret.

An over-anxious brooding
Doth beget
A host of fears and fantasies deluding;
Then, brother, lest these torments be intruding,
Just bide a wee, and dinna fret.

S. E. G., in Leisure Hour.

THE PRECIOUS STONES IN THE BREAST-PLATE.

G. P. D.

PRECIOUS stones are often referred to in the Scriptures. David collected them to ornament the temple; the Queen of Arabia presented such to Solomon; while others were brought to him by Hiram's ships from Ophir. Royal ornaments of this description were set in the crown of the Ammonitish king, which David placed on his own head. Inserted in the high-priest's ephod, they were inscribed with the names of the twelve tribes.

But the breastplate of Aaron, the high-priest, claims our special notice. It was originally two spans long and one span broad; but when doubled it was square, and was thus worn. It was fastened at the top by rings and chains of wreathen gold to the two onyx stones on the shoulders, and below by two other rings and a lace of blue to two corresponding rings in the ephod. The breastplate contained twelve precious stones, upon each of which was engraved the name of one of the twelve tribes of Israel.

1. The *sardius* had Reuben's name, and was the sixth in Revelation, a red or reddish stone, supposed by some to be the carnelian, much admired and valued, the finest specimens of which come from Arabia.

2. The *topaz*, with Simeon's name, is the ninth in the Revelation. Critics say that this is rather the modern chrysolite, a transparent stone, beautifully bright, a lustrous green color, often found in Egypt or Nubia.

3. The *emerald*, with Levi's name, and the fourth in the Revelation, its Hebrew word signifying to *lighten* or *glitter*. This stone has a grass-green color, possessing a double refraction, rare, valuable and uncommonly beautiful. Formerly it was found only in Upper Egypt, but now also in South America. This green color adorned the rainbow seen by St. John around the throne of God, the beautiful symbol of Divine grace and mercy.

4. The *ruby*, having Judah's name and the fourth of Revelation. A dark red color gives it the appearance of burning charcoal, whence its other name, *carbuncle*, is derived. Next to the diamond, it is the most costly.

5. The *sapphire*, with Dan's name. This is the second in Revelation. It possesses a fine sky-blue hue, and is next to the diamond and ruby in hardness.

6. The *diamond*, with Naphtali's name. Some say that the Hebrew word should be translated onyx, the sardonyx, or the fifth in Revelation.

7. The *ligure*, having Gad's name, the same as jacinth, or hyacinth, a valuable stone of a red or cinnamon color, with yellow and green shades. Some suppose this gem is the modern opal.

8. The *agate*, having Asher's name. Some think it to be the chrysoprasus, or the tenth in Revelation. It is most finely variegated, seemingly to represent streams, clouds, flowers, the stars, etc., on which account it has ever been prized, but it is of low value among precious stones.

9. The *amethyst*, with Issachar's name, the twelfth in Revelation. It has a strong blue and deep red or violet color. The ancients supposed that it caused dreams, and that wine drunk from an amethystine cup would not intoxicate.

10. The *beryl*, with Zebulun's name, supposed to be the chrysolite of the ancients, the seventh in Revelation. It has a pellucid, bluish-green color, is found in the East Indies, and ranks among the modern topazes.

11. The *onyx*, with Joseph's name, and probably here the *beryl*, the eighth in Revelation. It is a green or bluish precious stone, allied to the emerald. It ornamented the ephod of the high-priest.

12. The *jasper*, having Benjamin's name; not the jasper of the moderns, for in Rev. xxi 11. It is a perfectly transparent stone, of such a brilliant luster that St. John compares it to the glorified body of the Son of man. A common jasper, entirely opaque until polished, would not at all answer for this holy comparison.

The precious stones are also introduced figuratively in the Scriptures. Solomon compares to them the gifts which a man bestows, and by which he acquires honors. St. Paul likens the Church of Christ and the life of a Christian to a structure composed of gold, silver, and precious stones.

Of the high-priest's garments, and the precious stones in his breastplate, doubtless it may be said they were all emblematical of spiritual and holy things, "but of which and in what way," to adopt the language of Dr. Adam Clarke, "no man can positively say." "These were all made for *glory* and for *beauty*," is the general account it pleased the Lord to give of their design.

Miscellaneous.

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PERSONAL ITEMS.

The London News says that the late Pope was an expert billiard player, and when his health permitted, played every evening for several hours.

The advice of Dr. Peabody of Harvard College, for the acquisition of literary style, might safely be commended to others than those to whom it was originally addressed. The doctor recommended the students to read the Bible more and slop novels less, if they would have a good English style.

The Philadelphia Inquirer says it is proposed to give General Grant, on his return next autumn, a splendid reception, and enough money has already been pledged by the most prominent and wealthy citizens of that city to carry out the project. One of the features will be a grand demonstration of all the soldiers from the different parts of the country.

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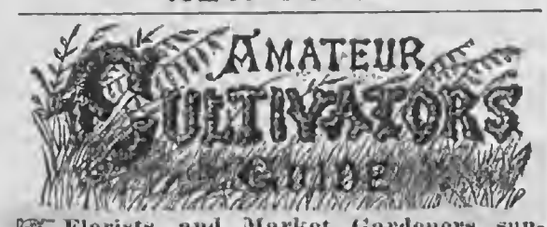

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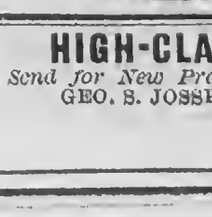

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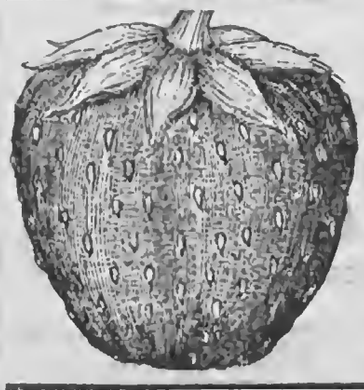

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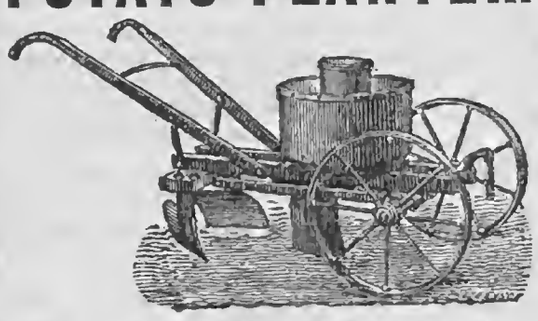

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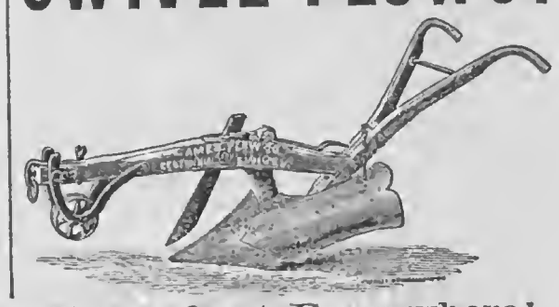

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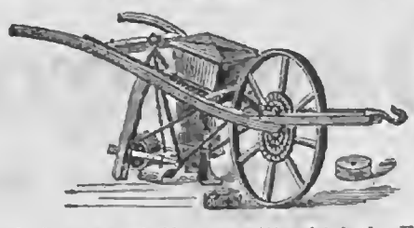

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This PLANTER, at ONE PROCESS, OPENS its furrow, GAUGES, DROPS, COVERS the Seeds and ROLLS them down. ALSO MEASURES and MARKS OFF the DISTANCE for the next ROW or DRILL to be planted. It is changeable from a *Planter* to a

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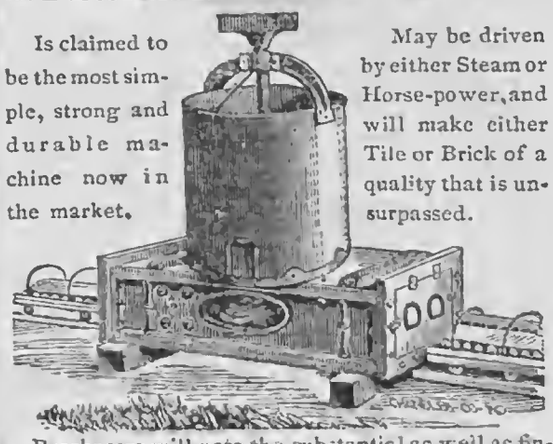

May be driven by either Steam or Horse-power, and will make either Tile or Brick of a quality that is unsurpassed.

Purchasers will note the substantial as well as finished make of this machine; the easy accessibility of its working parts; the means of keeping its plunge-chamber to fit closely, without reference to age or wear; and its general suitability for making Tile at the lowest cost. SEND FOR CIRCULARS.
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A CORRESPONDENT asks, What is the best method of feeding cattle in winter? We don't exactly know. One might prefer to take the ox on his lap and feed him with a spoon. Others would bring him into the dining-room and let him sit at the table with the old folks. Tastes differ in matters of this kind.

The Stinging Sensation

In the gullet called "heartburn," (why, it is impossible to conceive, since the heart has nothing to do with it,) is caused by the acetous fermentation in the stomach of the food contained in it; by an overplus of the gastric juice, which is itself a powerful acid, or by the unnaturally acrid quality of that secretion. The ordinary way of treating this symptom, for it is nothing else, is to administer bi-carbonate of soda, an alkali, to neutralize the acid. But sour stomach cannot be cured by alkalis, which tend to weaken the digestive apparatus. A far better remedy is Hostetter's Stomach Bitters, which strengthens the cellular membrane, the seat of the difficulty, regulates the flow of the gastric secretion, improves the quality if vitiated, and puts the stomach into good working order. Perfect digestion follows as a natural sequence, and there is no more trouble from heartburn or sour stomach. The liver and bowels are also thoroughly regulated by this sovereign alterative.

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PREPARED FROM
Peruvian Guano, Pure Fine Bone, dissolved in Sulphuric Acid, Nitrate of Soda, Sulphate of Ammonia, Dried Blood or Flesh, and Potash Salts.

These manures are not only composed of materials which **in themselves** rank the **highest** as sources of **plant-food,** but contain them in the proportions which practical experience has demonstrated to be best adapted to the wants and habits of **EACH CROP.** They require no other manure, and improve the condition of the land for subsequent crops.

Truck Growers and Farmers report these Manures to be as effective as the *best stable manure,* and to cost less than half as much.

Analyses and full Directions for Use accompany each Package.

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Ammonia 4.50 to 5 per cent., Phos. Acid 10 to 12, Potash 6 to 7.
For 50 bushels shelled corn use 3 bags, 600 lbs.
" 75 " " " " 5 " 1,000 "
Price per ton, $49.50—per bag (200 lbs.), $5.20.

Potato Manure (Ville Formula).
Ammonia 4.50 per cent., Phos. Acid 5.97, Potash 13.64.
For 200 bushels Potatoes use 2 bags, 400 lbs.
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Price per ton, $51.94—per bag (200 lbs.), $5.40.

Mapes' Grass and Grain Spring Top-Dressing.
Use one or two bags per acre for top-dressing winter grain or grass lands—also for hoed crops in hills or rows for producing rapid growth.
Price per ton, $51—per bag (200 lbs.), $5.35.

Mapes' Complete Manure.
Ammonia 6 to 7, Phos. Acid 10 to 12, Potash 3 to 4.
A general manure—a substitute for stable-manure—especially adapted for grain crops and grass lands—on soils requiring more Phos. Acid than Potash.
Price per ton, $500—per bag (200 lbs.), $5.25.

Mapes' Fodder Corn Manure.
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Complete Manure (Ville Formula).
Ammonia 7.69, phos. Acid 5, Potash 7.69.
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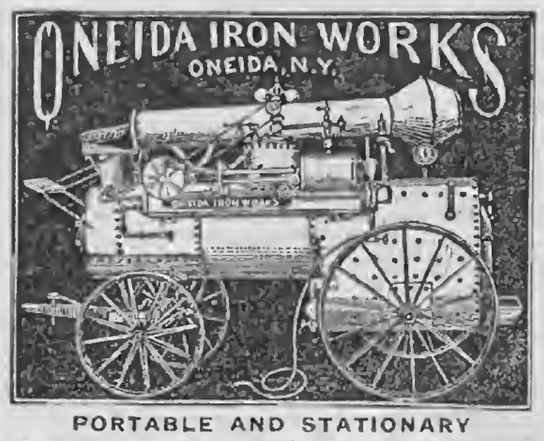

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VOL. XXXVII. No. 13.
WHOLE No. 1470.

NEW YORK CITY, MARCH 30, 1878.

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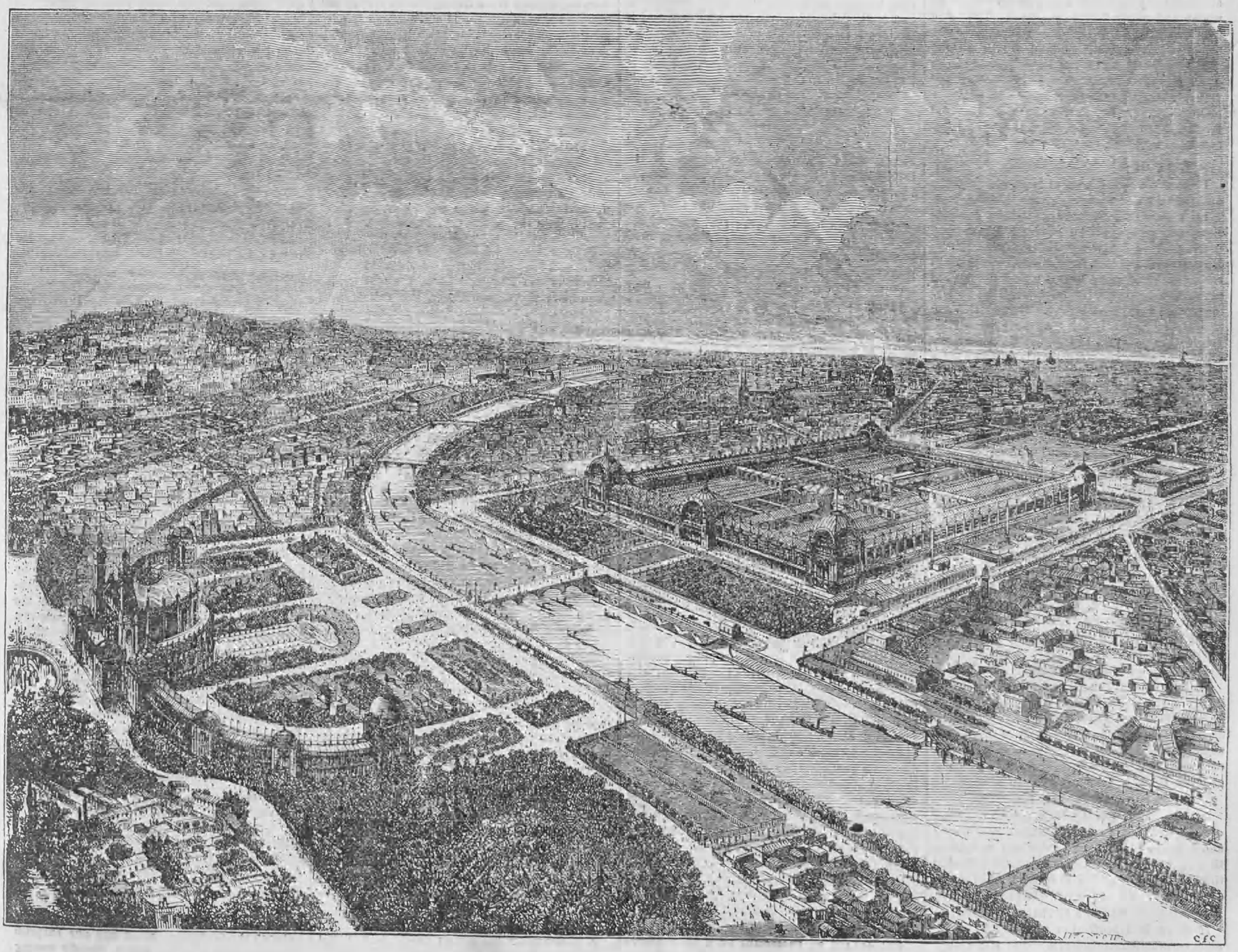
PARIS EXPOSITION.

FOUR vessels belonging to the Government have already left the port of New York for Havre, laden with American exhibits for the approaching French Exhibition; and a fifth will bear away in a few days the last of our contributions to the grand display that will crown the multitudinous attractions of the gay capital of France in the gayest month of the twelve—flower-bedecked May. The Champ de Mars, on which the Exhibition buildings stand, is a large military parade ground, usually bare and sand-strewn, but now covered with long lines of artistic edifices, and carpets of green verdure, spangled with flowers and shaded by groves that have sprung up as if by magical spell. The buildings are already in so forward a condition that there is no doubt of their being finished in ample time for the opening. The French are, of course, the most forward in their arrangements, and, already their show-cases are beginning to fill the spaces allotted to them. In this department there will be nothing worth knowing about France and its brilliant capital which will not here find an appropriate place. Among the features of the Exhibition will be a display of all the latest inventions of the electric light apparatus and of the telephone and its various offshoots, such as the phonograph. The pavilion of the city of Paris, in the center of the grounds, will contain models of everything belonging to that great city, its prisons, public works, its system of paving and drainage, models of its underground sewers, and everything that might interest or please the visitor.

On the elevated ground across the Seine, the palace of the Trocadero, which will be devoted to a display of the Fine Arts and to various kinds of amusement, is advancing rapidly to completion. This vast building can easily accommodate seven thousand people. The concert hall will hold 5000 people and the orchestra, besides 400 performers, can be so extended as to seat one thousand more. Of the external appearance of the building and its flanking pavilions as well as of its beautiful grounds and splendid cascades and waterfalls, an excellent illustration was given in the issue of the RURAL for Feb. 17th 1877.

But magnificent as will be the exhibits displayed at this World's Fair, to most of the visitors, the city of Paris itself will afford still greater interest and delight. Already she is making her toilet for the gay company she expects in May. All the public buildings are being burnished up externally and internally, and those in course of construction are being pushed rapidly to completion. Even to the old man who marveled at the splendor of the city in the days of his youth, its present aspect will be a matter of surprise and admiration. Covering an area of 18,315 acres, and containing a population of about 2,000,000 of the most artistic people on the earth, with 28 theatres subsidized by the government, and 150 other places of public amusement, with magnificent public buildings, long lines of finely-paved streets, shaded many of them, with rows of trees, flanked most of them with six-storied, balconied houses, no city in the world presents so artistic and attractive an appearence. For centuries it has been celebrated as the chief seat of learning in Christendom, but its present beauty of appearance is due almost entirely to the two Napoleons. The Man of Waterloo expended upwards of 100,000,000 francs in embellishing the city; the work thus inaugurated was carried on steadily but slowly during the reign of Louis Phillip and the two Legitimatist Kings, but it was only on the accession of the Man of Sedan to the imperial throne, that, the Nephew set vigorously to work to complete the rebuilding and adornment of the city, inaugurated by his Uncle.



VIEW OF PARIS AND THE EXPOSITION BUILDINGS.

Farm Topics.

NOTES FROM A FARM.

PRIDE ON THE FARM.

THREE years ago my neighbor, Mr. COWELL, built a very large barn which his neighbors, at the time, said he would never be able to fill from his farm with five years' produce; but last year he almost filled it with grain alone. Now how did he do it? He set men to work on his farm, cleared it of stone, bought a seed drill, used a small amount of fertilizers, and gathered with a reaper. The land in this section being about one-third covered with stone, he was enabled with skill, industry, energy and pride, and the aid of approved machinery, to reach this result. Pride is here mentioned, and I wish more farmers had it, if only it prompts them in the right direction; that is, to clear their farms of stone, build good fences, set out trees, paint their buildings and keep their stock in good condition.

ROADSIDE PASTURING.

Four or five years ago I was much annoyed with street cattle and stock, and after losing my garden, which was caused by one of my men leaving the gate open, I consulted my neighbor who had suffered in the same way, and we both concluded to take our roadside bars out and throw our fields open to the commons. This we did and soon learnt that the neighbor who had pastured the road-side had procured pasture elsewhere. To-day our road-sides are set out to fruit and shade trees as the result, and the roadside mowed the same as the fields and everybody happy that there is no stock in the road. At first our course was much condemned, but we have lived to receive blessings from the same men.

A BLESSING IN A HATEFUL DISGUISE.

Last summer, my neighbors were much surprised at the appearance of my corn field. On one quarter of the field the corn was about double the size it was on the other three-quarters. On their inquiring the cause of this, I told them the piece had been cultivated for seven years on account of fruit trees occupying the ground, and that the year before I had sowed it to buckwheat and planted it to potatoes. The large corn was where I had planted the potatoes and the bugs had fertilized the land, also perforated the ground with numerous holes, and let plenty of air into the soil, which scientific farmers say is very essential. Any way, the result was as I mentioned. The whole lot received the same treatment throughout the season. Perhaps potato bugs may be a blessing after all.

INTERCHANGING EXPERIENCE.

Brother farmers, please write your experience and the result of that experience in the agricultural papers that you take, so that by comparing notes, we may all be benefited. I have been much pleased by the "Jottings from Kirby Homestead," and look for them the first thing in the RURAL, and when I cannot find them I am much disappointed. Experience is what we farmers need more than theory. If we fail in our undertakings, do not let us be ashamed to tell it right out just as it is, so that others may not fall into the same errors. It may be a little humiliating to fail in what we try to accomplish, but that failure is worth something, to ourselves as a caution, and, to the public, for the same reason, if it is only made known. W. H.

Greene Co., N. Y.

FARM NOTES.

S. RUFUS MASON.

SETTING OUT RHUBARB.

DIGGING holes for each plant is a decided waste of labor; better plow out a dead furrow, fill in with old manure, in spots three feet apart, plow the earth back again, and set out the plants. A man could do ten times as much in a day in this way as by digging, and the work will be better when done.

THE FARM SLATE.

Keep a slate for the purpose, tie the pencil to it with a string, and make a loop to hang it up by. Write down upon it every little job to be done indoors and out. If you have boys, put their initials opposite such items as you wish each one to attend to, then when any one is out of a job, the slate tells him what to do next.

MANGEL-WURZELS FOR PIGS.

Let every man who expects to raise but a litter of pigs, put in a few rods of mangel-wurzels, and begin to feed out the thinnings as soon as they begin to crowd; keep the corn till fattening time. Instead of having to fatten a lot of stunted shotes, he will begin on 250 hogs at least.

NATURE'S FIRST LAW.

If there is a profession upon earth, which must be practised in order, it is that of farming. There should be a time for everything as well as a place, and more depends upon timing work on a plantation than almost on anything else. Good seed, good sowing, good plowing, good cultivation, are good only when employed at the right time, and many a man, if he looks back over 1877, will see that his failures arose from a disregard of Nature's first law.

ONION SETS FOR HORSES.

Ever since the epizootic year I have given my team a pint of onion sets every morning during winter and spring: they kept off the epizooty then and twice since, when it became threatening. I am satisfied they are very beneficial in other ways, as my team are never sick or off their feed. I use the "top onion," merely because they are plenty with us, and cheaper than other kinds, otherwise they are no better. They are always eaten before the corn.

QUERIES ABOUT MAPLE SUGAR MAKING.

I READ, this morning, Hector Bertram on maple sugar making, and agree with him on all points but one. Do not use the ax to make the box, but take the ax in the right hand and a sharp inch-and-a-half chisel in the other; hew off the rough bark with the ax; set the chisel, with flat side down at such an angle as you wish; strike lightly so as to cut through the bark, that it may not pull off about the cut; then place the chisel a half inch up the tree, driving it some distance into the wood; once more return to the cut at the bottom and drive the chisel in as far as you wish to go; now return once more to the top slit, and a blow or two on the chisel there, will bring the sloping cuts to an angle, making a neat and small cut that can be freshened at will with the chisel, and when the season is through you have but a small scar that will soon heal.

Such, I believe, to be the very best way to tap the trees, but there are other things I would like to learn about maple sugar making: First, how long will tin pails last, with good care, for catching sap only? I have always, since the days of troughs, used wooden pails and believe them not what is wanted—too much work to clean them on putting them up and out, and moreover they are liable to fill up with sweet that will sour and hurt the sap with the best of care—am I right or wrong? Are our common sheet-iron pans the best for boiling the sap in, considering cost? How do the galvanized iron last, and is the metal free from all poisonous substances? Let those posted, answer, that we may make this most delicious sweet as pure as possible.

New London, Ohio. B. P.

GETTING RID OF ARTICHOKES.

I NOTICE in Answers to Correspondents, March 23d, you say artichokes once established are troublesome to get rid of. There is nothing easier to eradicate than artichokes, if you try the right way, which is to cut off the tops when they are two feet high—some people who have used tops for fodder have learned this fact when they least intended it. Keep the tops of any plant cut in and the roots must die, as certainly as a man without lungs. L. A. R.

[KILLING plants by cutting off the tops is a pleasant sort of theory, and as a rule efficacious, but there are hundreds of plants that are not appreciably harmed thereby. Their stems take the place of leaves, generate chlorophyll and elaborate sap. Artichokes may be eradicated as our correspondent states, especially if growing in poor, sandy, bottomless soils. But, as a rule, we think it fair to say, even by the decapitating process, that "Artichokes are troublesome to get rid of," when once established.—EDS.]

Dairy Husbandry.

AN EXHIBITION OF DAIRY PRODUCTS.

J. M. PETERS.

THE project to repeat this year, at the East, the National Dairy Fair, which was held at Chicago last December is one which should commend itself to the dairymen of the State, and should secure from them a stronger support than they accorded either to the Philadelphia Centennial Exhibition or to the one at Chicago. The usefulness of conventions is pretty generally admitted, and our more enterprising and progressive dairymen find profit in visiting the meetings held in other counties than their own and even in other States. The West and Canada learned the rudiments and much of their proficiency in dairying from New York State, and it must be admitted that the pupils are now in a position to give some valuable hints to their teachers. The plan of holding the American Dairymen's Association Convention at Cleveland, this year, was intended to afford the East and West an opportunity of meeting on central ground, and if the object was not as successful as it should have been, it proved an entering wedge for wider intercourse in the future. Now that the Western men propose to bring their products East next October to exhibit in competition with the goods of this section, it is to be hoped that their enterprise will meet the hearty co-operation of all Eastern producers, and that the latter will be represented by such a display of their best goods that their Western competitors will not carry off the laurels, as they have heretofore done, for either the extent or excellence of their exhibits.

The place at which the Fair is to be held, is not yet decided, but the choice probably lies between New York City and Utica. There should be no question, I think, as to which place should be selected. Utica, as the center of an important dairying section of New York State, and as a large interior market, is all very well for the meeting of dairy associations in which consumers are not at all interested, and which are not very largely attended by merchants, but for an exhibition of the dairy products of all the States, and it is to be hoped of Canada and European Dairying Conventions as well, New York is by long odds, the better point. The Rink, at 63d street and Third Avenue, where the exhibitions of the American Institute are held would be an admirable place for an exhibition of butter and cheese, and such a fair as is proposed to be held would certainly attract the attention of a larger number of consumers here than could possibly be reached at Utica. This would be a most desirable result, and would add materially to the value of the exhibition, which should be not only a competitive display of the products of different sections of this and other countries, for the benefit of producers, but should also be an advertisement of dairy products such as they have never before received. It is an unfortunate fact that the majority of people in large cities know very little about the best American butter and cheese, and if a chance were offered them to learn the highest standard set up by dairymen themselves, it would doubtless be very largely improved. Visitors and exhibitors from out-of-town can find accommodation in New York as cheaply as they can at Utica or any other interior city, and the slight additional expense of railroad fare which would fall upon a few who reside near the latter place, would be more than compensated for by the increased benefits to the dairying interest from having the display in the commercial metropolis, and should be willingly incurred. This city being, also, neutral ground, so to speak, would be likely to attract a fuller exhibit than could be obtained at Utica from which local jealousies might keep many who would be willing to meet the dairymen of Herkimer away from home.

An effort should be made to obtain samples of English and Irish cheese as well as of other foreign dairy products for comparison with our own. This could be easily accomplished through some of the English shipping houses here, and it would form an attractive feature of the exhibition.

BUTTER COLOR.—I have read several articles in the RURAL on butter-coloring. For the benefit of the RURAL readers, I would like to give them my experience in the matter. All butter-makers know that there is a time in the summer and winter seasons when they cannot make handsome yellow butter of the natural color. I know that if they would use Wells and Richardson's Perfect Butter Color, they need not have any poor, white, unsalable butter. It gives a natural yellow and a good flavor without any extra work in using it, and the butter will not become streaked or lose its flavor by being packed in the usual way for any length of time. I wash the buttermilk out of the butter with cold water, then put in the salt. I then turn the color on the salt and work it all in together. Let it set over night, work over thoroughly, and you will have beautiful yellow butter that any good housewife need not be ashamed of. I can recommend it to all as being just what it is represented to be, and after you have tried it on one churning of white butter, you will not want to be without it. [Our correspondent refers, probably, to the color made by WELLS, RICHARDSON & Co., Burlington, Vt.]

A. D. RICHARDSON.

Washington Co., N. Y.

ABORTION IN CATTLE has been exciting a good deal of attention and discussion of late in England, and among the causes of the mishap one of the most common in some districts is found to be the presence of ergot on rye and several other grasses either on pasture or meadow lands, for the pest is equally injurious either on grass or hay. The specific action of ergot on the womb has long been known to medical men who have often employed it with beneficial results. In addition to its tendency to produce abortion, it is also a frequent cause of gangrene as well as of several minor derangements of health.

A METHOD OF IMPROVING rancid butter and restoring it almost to its original excellence, long ago mentioned in the RURAL, has at length found its way into German agricultural papers. However well butter may be washed and worked a small portion of casein is retained, the decomposition of which is accompanied with the formation of butyric acid which is the cause of the unpleasant taste and smell known as rancidity. This butyric acid is readily soluble in fresh milk, and hence the rancidity it produces can be easily got rid of by kneading well the tainted butter in fresh milk, and then washing it thoroughly in cold water to which a little salt has been added.

The Poultry Yard.

BROWN AND WHITE LEGHORNS.

HENRY HALES.

ALTHOUGH both these varieties of fowls are called Leghorns, they differ in some essentials. After keeping the two varieties under the same treatment as near as could be done, to test their comparative merits, from my own observations I have come to some conclusions which may be interesting to RURAL readers.

The White, no doubt, originally came from Europe, but their original color and form have been so transformed that they vary very much from the type now found in Spain, or Mediterranean countries. Climate and breeding have worked a great change in them; so much so, that in England they are considered an American rather than a European breed. Tuscany seems to lay no claim to them—we will. They are as much an American breed as the Plymouth Rock with its Cochin back, tail, and comb. Yet in the prize-lists of our poultry shows, Leghorns are classed with Spanish, while Plymouth Rocks and Dominiques are the only two varieties claimed as American breeds. The large eggs laid by these hens make them a favorite standby on the farm. Nothing pleases the farmer's wife more than to bring in a basketful of large, clear white eggs.

The Brown Leghorn is much nearer its original European type. I have seen imported birds very similar to the usually accepted type of our show birds; but woe to the pains of those who breed from them with the idea of improving their stock by such imported birds! As far as color is concerned, they breed off to all kinds of splashes and mottles, and their combs are very variable; one lot I know of, have cup-shaped combs, almost, making a crown on their heads. They did not breed true to color; but they were a fine lot of strong, heavy, prolific hens. The fancy demands dark-hackled birds, but I have noticed finer, larger specimens with hackles rather light.

Now for the comparison between the Brown and White: the Brown lays at an earlier age than the White or any other breed, lays rather smaller eggs, also lays the most eggs, according to my experience; but taking weight of eggs for a given number of hens for a considerable time, the advantage would then rest with the White. But the greatest drawback to the Browns is a disposition of the cocks to fight; partaking of the color of their original progenitors, the wild game (*Gallus Bankiva*), they naturally share some of their traits. Even when they have many hens around them, they will fight, while the White are much more docile under the same circumstances. As to hardiness, the Brown chicks are the strongest, but I do not think they maintain stronger constitutions when grown up; some of the Brown will sit.

POULTRY NOTES.

M. E. PRINCE.

DEATH TO THE POTATO BEETLE.

THE plan for destroying the potato beetle by the use of Guinea fowls, proposed by that neighbor of Col. CURTIS, as stated by the latter in the RURAL of January 12th, brings to my mind a little experience of my own in that line. When first the "bugs" made their appearance in Northern Pennsylvania, I was breeding several varieties of fancy poultry mostly in confinement, and among others Sebright Bantams, whose coop was just at one side of the patch of Early Rose. When the vines were nearly ready to bloom the beetles made their appearance in strong numbers and our hopes of early potatoes were dismal. We knew of only two modes of relief, namely: hand-picking which we had not the time to attend to, and an application of Paris-green, but this was thought to be unsafe so near the house where the children were wont to play and it was also feared that the poultry might get a taste of this deadly poison. A friend said, "Turn out the Bantams" which we accordingly did, though without faith, as we had read that no member of the feathered or any other tribe could be induced to touch the ravagers. What was our surprise to see the little beauties march directly among the potatoes and greedily devour the insects as

fast as they were found! Neither were they satisfied with one meal but continued the good work until not a beetle was left, and we harvested a fine crop. Now the secret was this: the Bantams had been a long time in confinement with but little animal food, and no doubt their appetites were particularly sharp for food of that nature and the Colorado beetle being the first they found, were tried and found to be satisfactory. Thus a taste was formed, the warfare continued and our potatoes were saved. I believe that, unless some similar plan is adopted in order to educate the Guineas to the work, the disappointment to follow will be almost certain.

GORDON SPANGLED SEBRIGHT BANTAMS.

In these days of "big things" our small breeds of stock seem to be neglected and falling into disrepute. Especially does this seem to be the case with poultry. I have never bred but two of the many varieties of Bantams and one of them a long time ago, I will therefore write of the Golden Spangled Sebrights only. Visitors, when viewing them at home or on exhibition, say, "Yes, very pretty, but what are they good for? I always reply, "I have bred many kinds of pure, grade and cross-bred fowls but none that paid me so high a price for the food and care they received as these same little birds." The Black Spanish and Houdans are remarkable for the size of their eggs, still the Sebrights give larger eggs in proportion to their size than any other breed with which I have become acquainted. Moreover, under the present mode of buying and selling by count, if produced for market the price received for these eggs is the same as that for any others. The birds can be allowed the range of the garden and lawn, where they are very useful insect destroyers, doing but little damage as compared with a twelve-pound Brahma which scatters a hill of potatoes with one or two strokes of its great clumsy foot or devours the largest head of cabbage at one *sitting*. I am ready to admit that for the table, some other breeds are preferable, but for clear profit in eggs, at large to range where they please, or in a close coop, these Spangled Sebright Bantams are surpassed by none. I could give more reasons for preference, but perhaps this article is large enough for so small a subject. I will therefore desist until our *savants* have settled the Brahma question which is now before the RURAL readers.

Sheep Husbandry.

A SMALL GRAIN RATION FOR SHEEP.

E. W. STEWART.

THE American farmer seems to think the necessity for grain feeding of sheep or other stock a calamity. He imagines that grain is a more expensive food and must, as compared with hay, always be fed at a loss. This opinion, as I have said, is based upon imagination, and not upon analysis or experiment. The opinion has grown up from the habit by farmers of raising grain for sale, and hay and other fodder for home consumption. They suppose it more profitable to sell the grain because it brings more per ton, and many times more per bulk. But let us see how the grasses, commonly used, compare with grains:

HAY.	Water.	Albuminoids.	Carbohydrates.	Crude fiber.	Fat.	Ash.
Meadow Hay	14.3	8.2	41.3	30.0	2.0	6.2
Aftermath	14.3	9.5	45.7	24.0	2.4	6.5
Red Clover	16.7	13.4	29.9	35.8	3.2	6.2
Timothy (Phleum pratense)	14.3	9.7	48.8	22.7	3.0	4.5
Orchard Grass	14.3	11.6	40.7	28.9	2.7	4.6
Blue Grass (Poa pratensis)	16.14	8.2	38.2	30.0	2.8	4.8
Average of the six	15.00	10.0	40.2	28.5	2.7	5.4

These analyses show hay in its best state, except Red Clover, which sometimes shows a greater proportion of albuminoides. They were made by Drs. WOLFF and VOELCKER. Now let us examine the various grains usually sold from the farm, under the belief that they are worth more to sell than to feed:

GRAINS.	Water.	Albuminoids.	Carbohydrates.	Crude fiber.	Fat.	Ash.
Rye	14.3	11.0	61.2	3.5	2.0	2.0
Barley	14.3	9.5	66.6	7.0	2.5	2.6
Indian Corn	14.3	10.0	56.9	10.3	6.0	3.0
Millet	14.4	10.0	68.0	5.5	7.0	2.1
Buckwheat	14.0	14.5	62.1	6.4	3.0	3.0
Peas	14.0	9.0	59.0	15.0	2.5	3.4
Flax-seed	14.3	22.4	52.3	9.2	2.5	3.5
Oil cake	12.3	20.5	35.1	7.2	37.1	5.0
Wheat Bran	13.1	16.0	48.0	17.8	3.8	5.1
Average of all	13.6	15.7	58.6	9.2	7.6	3.6

We give flax-seed, which perhaps is raised only over narrow belts of land, and is very little known, practically, as a feeding grain, but it is a most excellent addition, in very small quantity, to the rations of wethers and dry ewes, and for ewes after lambing, as it is a very fattening food and keeps the stomach and bowels in as good health as grass. It is not safe to feed flax-seed to ewes in lamb, but a little oil-meal may be safely given.

Now, if we compare the four grains most raised,—rye, barley, oats and corn,—we find the albuminoids to average 11.4 per cent., carbohydrates 65 per cent., fat 4.4 per cent.; while the average of hay is 10 per cent. albuminoids, 40 per cent. carbohydrates, 2.7 per cent. fat. This would make those four grains worth for feeding 53 per cent. more than hay; but when we consider that the nutriment in these grains is more digestible, that it is contained in so much smaller bulk, and may be taken in addition to the bulky food and produce so much more rapid growth, it is safe to say that a pound of grain is worth 75 per cent. more than a pound of good hay. And hay usually brings, in all our Eastern markets, three-fourths the price of grain per pound. The great mistake made by farmers is that they do not often enough combine grain with hay and other fodder in feeding sheep. During the cold season sheep can only digest about hay enough to keep up animal heat and supply waste. Where, then, are the growth and fleece to come from? The principal profit generally comes from the wool, and a bountiful fleece can only grow upon a sheep in fine condition. Young sheep must also make a good growth of body besides growing the wool, and if this growth is not made there will not be a profitable fleece. If farmers would but consider the fact that the principal cost of keeping sheep is in keeping them alive, without growth, and that the extra food which produces the growth and the fleece is but small, they would not withhold this small amount of grain which would give them a liberal profit. All the profit comes from the extra food.

The Swine-Herd.

DOES IT PAY TO SELL BONE.?

FEW farmers take into consideration the weight of bone, when deciding whether to raise large or small breeds of swine. Yet there is no element of a virgin soil so completely exhausted from what we call worn-out lands, as is the bone forming material, neither is there an element so difficult to restore. In the face of the fact that the continual drain of bone material from the soil, is slowly but steadily telling upon its productiveness, we must: First, make the demands upon the soil for bone material as small as possible. Second, restore all the fertilizers of this nature that are available. In order to lighten the demands upon the soil, I would advise breeding with two points constantly in view: First, small bone of fine texture, such as that found in Berkshire, Essex, Jersey Red, and some other breeds: Second, early maturity. These points must of course be in addition to those all good breeders endeavor to obtain. Small breeds have the reputation among some breeders and shippers, of breaking down and becoming helpless when fat. This is because the small breeds put on flesh more rapidly when young, and carry much more flesh in proportion to the weight of bone, than larger, slower-maturing breeds. Every farmer knows that when following the sow with slops and grass, pigs can be made to weigh from one hundred and fifty to two hundred pounds, with but little corn, by good management. My experience is, that the limit of profitable feeding is reached at about two hundred pounds weight with early-maturing breeds. It costs the feeder, at least, ten times as much to grow one pound of bone, as it does to grow the same weight of meat. The growing prejudice against the use of swine's flesh for food, would soon be removed by using the small, early-maturing breeds for family use, as with proper variety of other meats and well-fattened pig pork there could be no argument for a Christian to base prejudice on. My plan is to raise as much meat, and as little bone as I can; hurry my pigs into market at as early age as possible; and winter no hogs except my breeding sows. ENOS L. MARSH.

THAT MODEL PIGGERY.

I THINK the pig-pen illustrated and described by Mr. J. W. LANG, in the RURAL of February 16th, may well be called a "Model Piggery." My idea, in my inquiry, was to build a pen by digging down two or three feet and laying up a wall five or six feet high. Put the pen in this cellar, and have the hogs over it, and have the whole so arranged that the manure could drop into the cellar below. This would be high enough to allow a cart or sled to be backed in to draw out the manure. I think I understand Mr. LANG to say he keeps his hogs in the cellar, and again I think he doesn't. He says his pen has a shallow cellar beneath for making and saving manure, etc.: the floor and sides of each pen are firmly cemented for some three feet high; and later he says the foundation may be sunk two or three feet in the ground, the whole forming a tight, shallow cellar, the walls coming two feet above ground, (which would be five feet high.) Now, if Mr. LANG keeps his hogs in this cellar, (as I think he does, since he says he throws the manure out of the windows,) what does he mean when he says the pens are cemented some three feet upwards? Now, if I am wrong, or in other words, if the hogs are kept above the cellar, how does he get a cemented floor and wall for each pen over the cellar and how does he get the manure into it. Will Mr. LANG please explain?

L. LEHMAN.

THE PIGGERY IMPROVED.

IN your plan of a model piggery, on page 105, of date Feb. 16th, I notice in the extension, which is 26x20, more room allowed for bins than is needed. By leaving out bins 5 and 6, putting up a crane so arranged as to swing over the boiler, and thence to hanging hooks or poles, introducing a movable cleaving table, guttering the floor so as to allow the blood and water to flow outside the building, and adding some other little conveniencies that would readily suggest themselves, a convenient room for slaughtering hogs would be added to the plan. By means of the crane, hogs could be scalded, carried to the table, hung ready for dressing with none of the hard lifting so common to such labor.

I would also add a large cistern into which all the water from the building should be conducted, with a pump so provided with tubes or hose that water could be pumped into the boiler or used to cleanse the pens and floors. E. L. M.

Veterinary.

LOCKED-JAW IN HORSES.

WILL the RURAL please inform me whether locked-jaw in horses and mules can be cured, and how this disease affects the system?

Atlanta, Ga. C. D.

ANS.—Locked-jaw in horses—and the same remarks are equally applicable to the guileless mule — is frequently curable, especially if treated in the early stages. It is usually the result of some severe injury to the nervous system, the most frequent causes being, piercing the sole by "picking up" a nail or a prick in shoeing, and the operations of docking, pricking, castrating, etc. When the result of wounds, it is technically called tranmatic, when caused by disorders of the stomach, bots, and worms in the intestines or unknown causes, it is termed idiopathic. Yet another distinction—when it is confined to the head and neck it is styled trismus, but when extending to all parts of the body it is called tetanus. The usual symptoms are rigidity of certain muscles, especially of the lower jaw, completely locking the jaws together; one or both sides of the neck are rigid, the head in the former case being turned to one side, and in the latter stretched stiffly out, the nostrils dilated, the eyes retracted with the haws thrust over them, the ears erect and fixed and the countenance horror-struck; the gait is stiff and straggling, the manner of standing fixed and rigid. As the disease advances, control of the muscles throughout the body is lost, and they become stiff and rigid like those of the head and neck. The action of the pulse varies a good deal, the bowels are generally costive, and the urine often scanty. Among the best veterinarians there is a good deal of disagreement as to the most effectual methods of treatment, as each seems wedded to the mode which, in his practice, has secured favorable results. Some object to purging as tending to weaken the animal when strength is most needed, and bloodletting is now almost universally abandoned. The best results, however, have generally followed a free evacuation of the bowels as early as possible.

For this purpose a pint of castor oil and six or eight drops of croton oil should be poured down the throat by means of a syringe and tube. If the jaws are too firmly locked to admit of this, a solid aperient, such as a ball of aloes whose action is strengthened by a couple of drachms of calomel instead of the croton oil, should be introduced into the mouth; and if both of these are impracticable, copious injections, either of castor oil and turpentine, or soapsuds, should be employed. After evacuations, injections of meat broth and flour gruel may be beneficially used to strengthen and stimulate the animal. Chloroform has been highly recommended by some, as well as opium and blistering the back from the head to the tail; but the latest practice tends towards the rejection of these modes of treatment, although their use is still strongly advocated by some of the most successful practitioners. Any disturbance is extremely injurious to the afflicted animal, and he should therefore be placed apart where he may have plenty of air, little light, and no sound or visitor to disturb him. Place, where he can easily reach it, a bucket of cold, thin flour or oatmeal gruel, which should be renewed every day and kept sweet. Some of this he may be able to suck through his teeth. Whatever wounds or injuries have caused the trouble should be examined, any extraneous matter removed. If the horse has been pricked in the foot, take off the shoe; enlarge the outer orifice of the hole where the nail entered with the point of a knife, remove any foreign body, and having cleaned the part, use as a poultice: hemlock bark, lobelia and slippery elm, equal parts, moistened with boiling water, with a handful of soft-soap added. Generally when the disease terminates favorably, the change occurs on the fourth or fifth day, although there are many cases where it ran its full term of 16 days without killing the animal. In all cases, care should be taken not to suffer the starving wretch to gorge himself as soon as he may recover the use of his locked jaws.

Horticultural.

OUR NATIVE NUTS.

No. I.

C. W. IDELL.

THERE is one peculiar feature connected with our native wild fruits, which I have studied with interest, and yet have never been able to explain, that when Nature has given us one or more variety in abundance, these are the ones most likely to be neglected. Yet, I might say, with truth, that Nature has forced this fact upon us—that so far as the nut-bearing trees are concerned, their timber is among the most valuable of all the forest trees, and we plainly see how well they are adapted to the soil and climate for cultivation; still so far, we have failed to recognize this truth or take advantage of it.

All of us are aware of this one fact, that our forests are being destroyed rapidly. The nut-bearing trees are the first to be cut down, and in a few years they will become scarce and very valuable, while the nuts will disappear from our markets unless our citizens begin to cultivate these serviceable trees.

When I was a lad, there was but little demand for our native nuts outside the family that gathered them. They could not be sold at the country store, but now few such places refuse to purchase them, while the majority advertise for them. In a measure the same state of affairs existed in regard to the timber, there was but little demand for it.

With me it is questionable if any material improvement can be made in the nut of the walnut tree by cultivation, sufficient to make it popular; but I do believe that it will pay to grow the tree, for the nuts will pay all outlay of cost, and the timber is one of the most valuable and popular woods of the day, on account of its beauty and being so well adapted for ornamenting our homes. The Hickory is increasing in value yearly, and always meets with ready sale in the market. The Chestnut as a nut-bearing tree, is valuable, and the nut is susceptible of great improvement by cultivation; consequently those who are the first to begin to cultivate them will necessarily meet with success. Be that as it may, there are but few farmers in this country who cannot well afford to devote some portion of their cheap lands to this experiment, and should they even fail to improve the quality of the nut, the timber will repay them for their trouble and expense.

On looking into the history of the walnut tree, I find that several species different from ours, are grown in other countries and, in every instance, it is considered one of the most valuable trees, for every part is made use of by the inhabitants. Such was the demand for the timber by France in 1806, to make gun stocks, that 12,000 trees were required for that purpose. I find the curious fact connected with this tree in a German province, that no young farmer was permitted to marry till he had brought proof that he was the owner of a stated number of these trees.

Our native species, the Juglans nigra, is the common Black Walnut. In 1862 it was shipped to Europe for propagation, and is now thoroughly appreciated there for its good qualities. The increased demand for this wood in our country is already so great that all parts are searched for it, and even the church and door yards of our own State are invaded, and this valuable tree cut down and carted to the saw-mill to meet the demands of fashion or necessity.

The leaves are so strongly impregnated with alkali, that in foreign countries, they are sometimes gathered and burned for manure. The husks of the nuts yield a strong dye that was

formerly used by cabinet-makers to stain the light-colored woods a dark brown, and any one who has at any time hulled a quantity of the nuts, is thoroughly convinced of the lasting quality of this dye. The sap of the tree is said to contain a large percentage of saccharine matter, and in the Old World is occasionally converted into sugar, or distilled into spirits; but I know of no instance of its being in this way tested in this country. The flesh or kernel of the nut is of a dark color, largely impregnated with oil, pleasant to the taste, but still they are not as popular with consumers, as the Hickory or Chestnut, and generally sell for about fifty cents per bushel at wholesale. A bushel of these nuts is estimated to weigh fifty pounds.

The Butter-nut, Juglans cinerea, is a species of the Walnut, but is not so extensively grown. The wood, however, is even more valuable on account of its peculiar beauty, and is used chiefly by cabinet-makers. The bark possesses considerable medicinal properties, and is used in this country as a purgative. The sap contains a larger proportion of saccharine matter than the Black Walnut, and NUTTALL states that it contains as much as the Maple, and instances a case where four trees yielded, in one day, nine quarts of sap from which was made one and a quarter pounds of sugar. The fruit is oblong in shape, containing a kernel highly charged with oil, hence its name, Butter-nut, and, like butter, it will soon turn rancid on being exposed to the air. There is but a limited demand for this nut, and it never makes its appearance in the New York markets in large quantities. It generally sells from $2.00 to $3.00 per barrel.

The Hickory-nut is a native of our country, being, if I mistake not, confined to the country East of the Rocky Mountains. As a timber, it ranks next to the Walnut in value, and is used largely by carriage builders, and manufacturers of handles for edge tools, and for various other purposes. The color of the wood is quite light, except the heart, the timber is very firm in texture, susceptible of a polish, and when painted or oiled, it will resist the elements for many years. I believe the cultivation of it would improve the quality and increase the size of the nut fully fifty per cent. One can see the great difference in size and shape of the nut by examining those grown upon his own land; for while some are small, round, and rough, with thick shells, others are oblong, graceful in proportion, with a thin shell, containing a plump, rich kernel.

In our own State I know of but three varieties; the Bull, Shag or Shell-bark, and the Pig-nut. Although the kernel of the first named is sweet to the taste, the shell is very thick, and hard to crack, the kernel is removed only with difficulty. The second variety is the popular one, and the one from which I would recommend the growers to obtain their seed, as choice stock only is desirable for cultivation. The last variety is so named from the fact that, owing to their very thin shells, pigs can eat them readily, but the kernel is too small for table use.

A few days since a gentleman informed me that in 1842 he was working on a farm in New York State, and every morning for breakfast they were served with a drink called "coffee" made from Hickory-nuts, and they all liked it very much. They would crack the nuts, roast them, kernels and shells, and pour on water the same as they would for the coffee-berry, using molasses for sweetening purposes instead of sugar.

There is one feature connected with this nut that is practical and of the highest importance to those who gather them to ship to the city markets. In order to get the highest price for them, it is necessary to preserve the shells bright and clean, for any discoloration reduces their value. They should, therefore, be gathered as soon as they fall, placed under shelter in thin layers to dry, then when fit to ship, they should be thoroughly cleaned and all imperfect ones thrown out; for they are worth nothing when you ship them, add to the expense of transportation, and depreciate the value of the good ones. Now some may think this is taking too much trouble for nuts, and will say, "Oh, nonsense! shovel them in, they are good enough as they are." But just stop and think a moment. You do not notice how many bad ones you are sending off or perhaps you don't care. Remember, however, that every nut that is used, must be cracked, and each defective one is then detected and rejected, and when many are found, next time that person buys, he will refuse those among which are many imperfect ones, and take the best; consequently your imperfect or damaged nuts will not meet with ready sale.

FREEZING OF SAP IN PLANTS.

L. J. TEMPLIN.

FROM early childhood I have been familiar with facts bearing directly on this subject; having been raised principally on a farm and in close proximity to a forest where I had ample opportunity to make observations on subjects of this nature. Without any previous theory on the subject, my observations led me to the conclusion that the sap in vegetables exposed to the weather and that survive the winter, does freeze solid without in any way impairing their vitality. Nor did I dream of the existence of a different opinion till some thirteen years ago when I began to study the vegetable world in its relations to surrounding conditions, when I found that the wise ones of the world had differed very widely on this subject. This led me to scrutinize the facts more closely; and to add to my interest in this investigation I was, a few years ago, led into a discussion of this subject with Mr. THOS. MEEHAN, editor of the Gardeners' Monthly, whom I consider without a superior in the country, as a vegetable anatomist and physiologist. Differing with such men led me to doubt the correctness of my own views on the subject, so I turned to nature for a settlement of the question. The following are some of my observations and the conclusions drawn from them:

I observed that forest trees became hard frozen during very cold weather. This is proven by the fact that, on cutting into the wood, it will be found changed in its consistence and solidity from its former condition. Its resistance to cutting tools is such that in many cases it cannot be worked while in this condition. Every woodman knows this to be the case, and can tell on sticking an ax into a piece of timber whether it has been exposed to a freezing temperature long enough to be frozen, even though he were blind. To settle this matter in another way, I took a chip from a beech tree during a hard freeze and exposed a fresh surface of it under a microscope, when the frozen condition of the sap was plainly seen; and yet the tree from which it was taken, even after being wounded with the ax, survived and flourished. As to the comparative amount of sap that remains in the tree during the winter, I have never determined with care, but that it is considerable does not admit of a doubt. I have often noticed that if cions for grafting were cut and handled while frozen, they were injured, but if permitted to thaw on the tree, no injury resulted from the freezing.

Observations were also made on herbaceous plants, that proved to my mind that, in some cases, at least, they may have their sap frozen and yet survive. A cabbage plant that had failed to head, was left standing in the place where it had grown, and, though the winter was of average severity, it survived it all and grew with vigor in the spring. Many times during the winter its leaves were frozen till they were like thin plates or sheets of ice. Many times I have seen the leaves of beets and other hardy plants frozen till they would break like plates of glass, and yet not only live but grow afterwards. Turnips, radishes, onions, cabbage, etc., may be frozen as hard as our winters can freeze them, but if slightly covered with soil or other protecting material and not in any way disturbed till fully thawed out, they will often come out in the spring with their vitality apparently uninjured and their vigor undiminished. Small turnips often stand in the ground all winter and grow in the spring. If the sap in these plants does not freeze it is because either they have no sap, or it cannot be frozen by cold; neither of which propositions can be entertained for a moment by one who knows anything about the facts in the case.

Hutchinson, Kan.

Floricultural.

WILD PLANTS AS GARDEN FLOWERS.

No. I.

WILLIAM FALCONER.

THE variety and beauty of the Wild Flowers of the United States need no advocation, but it sometimes requires keen intercession to gain a place for them in our gardens, though many of them are genuinely worth the position. Yes, from the woods, meadows, and waste places of our individual neighborhoods we can exclusively furnish our gardens with trees, shrubs, and herbs, intrinsically beautiful, and able to afford us flowers from April till November. But it is not this contractedness that rivets admiration; no, we should get the choicer plants of near and distant localities, which though charming enough by themselves, are much more so when associated with welcome foreigners.

Indeed, we cannot fully appreciate our Wild Flowers till we grow them side by side with the finest foreign introductions; then our feelings warm towards home and we feel convinced that America's meadow-blossoms are just as pretty as Europe's Alpine gems. Many and lovely are the flowers of our waysides, prairies, woods and bogs; why, therefore should we be without a garden when Nature's nursery welcomes us?

The Alps and Appennines with transient glory in their floral treasure, and that garden-empire Japan, draped and clothed in evergreen, come to the aid of, but alone cannot fitly furnish the garden lots around our homes. Our native wilds teem with beautiful plants, constitutionally better fitted for home adornment than are exotics, and which with selection, perpetuation, hybridization, and extraordinary cultivation may be made to far excel their primitive condition. Indeed when seen in their natural habitats, most secondary is the beauty of many of our wildlings—bent, straggling, broken, trampled under, starved, suffocated, riddled by insects, nibbled by quadrupeds—compared with the luxuriance and perfection they attain as cared-for garden plants.

Of course, different genera or species may grow under different circumstances, but with some knowledge of their nature, and suitable conditions in our gardens, we can accommodate all. Some plants love bogs, others gravel banks, some like shady places while others glory in sunny positions; some grow on hill-tops while others prefer sheltered ravines; some grow among rocks, others in sand, some like loam, others peat, some prefer lime-stone lands while others despise such earth, and many grow in saline soils, as by the sea-shore, which would be death to many others. Notwithstanding this diversity of conditions and partialities, side by side in a little garden we can grow plants of the most divergent tastes, and that too often in the same soil.

Plants that enjoy lime or salt will grow flourishingly without them, but on the other hand, plants that dislike those substances, if brought in contact with them, may show their aversion in decline or death. It does not necessarily follow that a bog-plant must be grown in a bog; no, it may thrive amazingly in the ordinary garden border as do the Lady's Slipper, Cardinal Flower and Loosestrife; but it would be absurdity to plant Cactuses in swamps or Pickerel Weeds on dry gravel banks.

Most plants indigenous to our woods, particularly spring-bloomers, prefer shady places, while many of our summer and fall bloomers and prairie flowers enjoy an open position. Bog plants growing in spongy swamp or shallow water, often enjoy a full sun exposure, and as the sunniest portions of our gardens are usually the driest we must modify matters, by reserving a shady place for the inmates of bogs. Water plants are and will be aquatics, for, as everybody knows, it would be folly to plant Pond Lilies and Columbines in one common plot. Many persons unless they find the Wild Plants in blossom cannot determine them, whereas others can often identify the genus, and sometimes the species by the leaves or roots. It is the most certain and satisfactory method, however, where practicable and convenient, to mark by a stick, label or other means, the whereabouts of the plants, and thus leave them till the more appropriate season for transplanting them.

Soon after Spring Beauty, Smooth Lungwort, Wood Anemones, Bluets and Mandrake have bloomed, their leaves die down and the whereabouts of the plants are lost unless previously marked. Others again, as Twin-leaf, Soloman's Seal, Dicentras, and Violets, retain their leaves till frost comes, By their persistent foliage Mitrewort, Liver-leaf, Pentstemons, Helonias, Moss Pinks, Irises, and many others, can be detected at any time. As in the case of False Soloman's Seal and Indian Turnips, the "berries" mark their places when the leaves are gone. Many, as Asters and Sunflowers, are surface-rooting; the Ground Nut, has a set of chain-like tubers that run two to eight inches under ground: some Lupins, Columbines, and Monkhoods have branchy tap-roots: the bulbs of Lilium superbum bury themselves one or two feet deep in our bogs, and Solanum Torreyanum, Euphorbia corollata, and Man of the Earth Creeper send their roots deep into the earth penetrating some distance into the hard-pan or sub-soil. Fibrous and surface-rooted plants commonly transplant successfully almost at any time; but tuberous and deep-rooting ones seldom retain a ball of earth, consequently had better be transposed in spring or fall. A spade, trowel, or strong knife is convenient for digging with, and a basket, tin or wooden box or pail for carrying the roots in. Wild plants may be gathered and transposed to the garden at any practicable season during the year but preferably in fall or early spring. If done in summer, it should be after a rain, as then a goodly ball of earth and intact roots is likely to be secured, and because of the atmospheric moisture, the evaporation from the leaves will be more moderate than would be the case in dry weather.

Spring is the best time to transplant autumn-bloomers. If speedily and carefully transplanted in spring, even though plants be in flower at the time, they may go ahead blooming and growing as if nothing had happened. In fact, I have gathered Birth-roots, Blood-roots, Twin-leafs, Violets, Mandrakes, Hepaticas and others when in full bloom in April and May from all ends of the place and transplanted them, and they went along as kindly—without prematurely shedding a leaf or a petal—as if they had remained undisturbed. And what surprised myself too, the Spring Beautys I transplanted when they were in full blossom and their roots as bare of earth as Crocus corms in a seedsman's store, continued to bloom and perfect their leaves as if they had been unmoved.

Summer planting is a matter of greater uncertainty, a convenience perhaps, but can be safely practised in moist weather, say just after a rain. From lifting to setting out, the plants should be kept moist and shaded, and self-denial enough should be practised to cut off all the flower-stems. In the case of Andrew's Gentian, Bellworts, Lilies, Coreopsis and the like, the stems should only be cut over one-half or two-thirds their length. When planted, a mulching of decayed leaves or old manure placed around, or a twig of Hemlock or other Spruce or any leafy branch stuck into the ground beside, so as to lean over and shade the plants, helps them along wonderfully. In very dry weather good waterings may be beneficially given, but dribblings are worse than useless.

Fall is the best time of the year to transplant spring and early summer-flowering herbs from the woods to the garden, and the earlier it is done after the first thorough autumn rain the stronger will the plants become. They take firm hold before severe weather sets in, and if protected in winter by a thin mulching of leaves, arise in spring as bright and lovely as if they had been left undisturbed in their native wilds. Lobelias, Asters, Cone Flowers, Golden Rods, and other summer and autumn bloomers, can also be transplanted with absolute certainty in the fall.

Bad planting is a serious evil and a great source of failure. A flat-bottomed or basin-shaped hole is the common practice, and such are prejudicial, as the roots therein after planting are likely to be arranged in inverted umbrella-fashion, or the plants are often dumped in with the rootlets bent and crumpled under them like chickens under a hen, or matted on one side like a broom bent in brushing, contrary to nature and adverse to every principle of good cultivation. The soil in the bottom of the hole should be loosened with the spade, packed gently with the hand or feet, raised a little in mound-fashion, and the roots disposed on all sides with a horizontal to downward tendency, and fine earth inter-worked among them to prevent their being matted together. The planting should be firm and no deeper than was the case before.

Some Wild Plants are very easy of cultivation, in fact, many of them merely require to be once planted and they will thenceforward take care of themselves, but all are benefited and have their beauty intensified by good cultivation. The May Flower (Epigæa repens), so beautiful and plentiful in some of our woods, is extremely difficult of cultivation in our gardens, and the common Dogs-tooth Violet (Erythronium Americanum) which grows so luxuriantly and blooms so profusely in our waste places, I find grows thriftily enough but blooms sparingly as a garden flower.

Our bogs and mountains, in proportion, yield us most of our prettiest Wild Plants; indeed in a horticultural sense the Alleghanies and Rocky mountains are more to America than the Appennines, Pyrenees, and Alps are to Europe.

We have plants for almost all conditions and uses: Abronia fragrans, Phlox divaricata, and some others are sweetly scented; Evening Primroses, nocturnal; Cactuses, as Opuntia vulgaris, Rafinesquii, and Missouriensis, and Talinum teretifolum and parviflorum, Sedum pulchellum, S. ternatum, S. Telephium, and S. telephioides, for dry and stony places; and bog, pond, climbing, and annual plants in abundance. As a silvery edging plant what can be prettier than the Rocky mountain. Artemesia frigida? For the subtropical garden few subjects are more effective than young plants of the Kentucky Coffee Tree, Hercules Club, and Spikenard, with their immense and much divided leaves; some of our army of Sunflowers, notably that umbrageous and brilliantly floriferous giant, Helianthus argophyllus, and the neater, much smaller, brighter and more profuse H. cucumerifolius, both annuals of Texas. Our Hibiscuses too, Moschentos, militaris, and Californicus, will maintain a first rank for the same purpose. H. coccineus of the Southern States with its upright noble habit, and many glowing carmine ten-inch-wide blossoms can scarcely be surpassed, but unfortunately it is not hardy North; but it can be safely wintered in a cold pit.

Golden Fumitory, Pursh, and some others bloom uninterruptedly from early spring till fall. Columbines from spring welcome summer, and Blue Lobelia, Cone-flowers, Grass-of-Parnassus, Hibiscus militaris, and others from summer

step into autumn. Many species have differently colored blossoms in different plants as in the case of Lupinus polyphyllus, blue to white; Veronica Virginica, white to pink; Centaurea Americana, pale purple to very deep rich purple; Hibiscus Moscheutos, pale rose to white; and Drummond Phlox, the wildlings of which I have seen as various in hue—red, white, purple, variegated, &c., as I ever saw in Northern Gardens.

Miscellaneous.

TALKS UPON THE PRAIRIES.

The Timber Culture Act.

FRONTIER.

This act provides that any person having a homestead-right can enter an additional 160 acres of Government land upon compliance with the following conditions: That one-fourth of the land entered shall be planted to trees within four years from the date of entry, providing, however, that one-fourth of this (or ten acres) shall be planted within two years from the date of entry; another one-fourth within three years, and the balance in four years; that the trees shall not be less than twelve feet apart each way; and that they shall be cultivated and kept in a good healthy growing condition for eight years from the time of entry.

This law originated, no doubt, in a purpose to aid one of the most important enterprises that can engage the attention of our Western people. But unfortunately there are some provisions in the law that render it, to a very great degree, inoperative. Hence "Frontier" is not alone in the belief that the interests of the prairie country demand either an essential modification of this "Timber Culture Act" or its repeal. The great objection to this law is that it demands the planting of too much land to trees, and at the same time requires the planting of too small a number of trees. That is, in one direction it demands too much and in the other too little. Now the breaking of 40 acres, the planting of the same to trees, and the culture of these for eight years, will cost much more than the original 160 acres were worth without making allowance for possible losses by drought, grasshoppers and fire. Hence few will carry out the provisions of the act in good faith. Probably not one in a hundred has the means of supporting his family and fulfilling the terms of the contract, even if disposed to do so. Then trees planted twelve feet apart may answer for an orchard, but not for a forest on the plains. So the plantation will be virtually useless to the farmer if the provisions of the law are carried out. Now, if the farmer attempts to plant thickly, as a wise regard to his own interests demands, the cost, in 99 cases out of 100, will exceed the means of any planters on the frontier.

A large number of timber claims have been taken, most of them by men who knew little of the cost of tree culture, and if the Government adheres to the provisions of the law the great mass of these claims will be ultimately abandoned, at a very serious loss to a class of men who can ill afford to throw away their time and money.

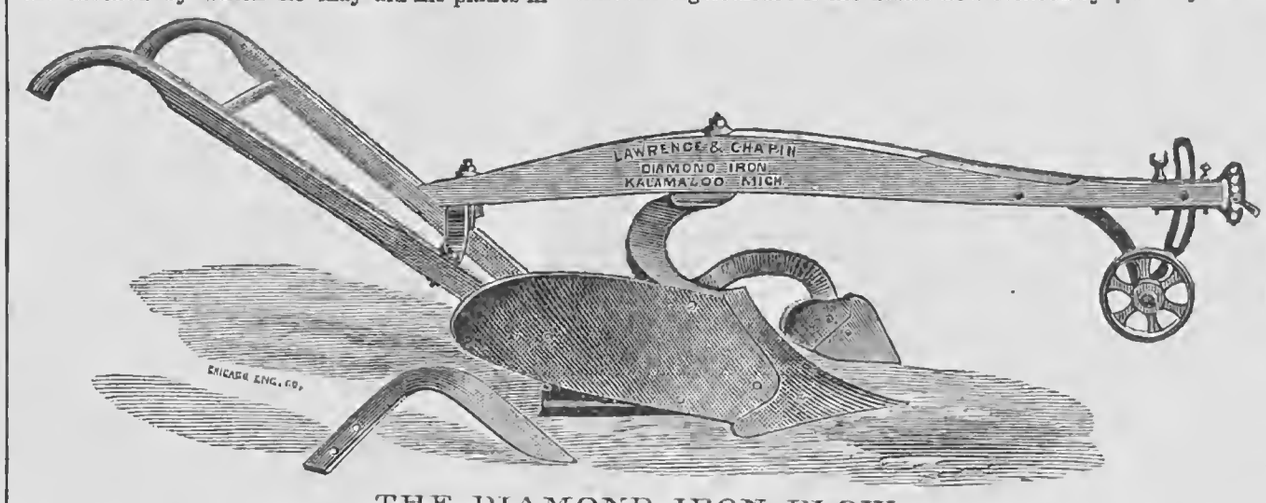
We find that 12,160 trees spread over 40 acres will answer the terms of the law, too much land and too few trees, hence the idea of a forest is lost altogether. Suppose that we could reverse this order of things, and require a much larger number of trees planted upon fewer acres, requiring at the same time that these trees should be planted with special reference to general protection, in the form of shelter-belts. Suppose that the Government had required one acre in sixteen to be planted in trees at a distance nowhere exceeding four feet by four (and better if two by four feet) in such shelter-belts as would most effectually protect the farm, thus increasing three or four-fold the number of trees and decreasing four-fold the amount of land required, the whole question of forest culture and protection for the plains would have been far nearer a settlement than it is to-day.

By such a change as this, a compliance with the provisions of the act would have been almost certain. Close planting would have secured mutual protection which is one of the essential conditions of success here. Then after the third year closely planted trees will need little further culture. By this means we should have a forest in place of an orchard growth, and at an early period an abundance of timber that would serve important purposes upon the farm. It is certain then that this whole subject of forest culture for the plains, needs careful consideration at the hands of our law-makers, and while some are proposing to repeal the existing law, it would seem to be far wiser to so modify it that it shall have a practical application to the peculiar conditions of this prairie country.

THE INFLUENCE OF AIR IN THE GROWTH OF PLANTS.

PROFESSOR LEVI STOCKBRIDGE.

Though the soil is the theater of the farmer's operations in the production of crops, yet the known fact that, on the average, ninety-five pounds in a hundred of the dry weight of our agricultural plants come either directly or indirectly from the air, and only five pounds from the soil, should lead him to diligent inquiry for the method by which he may aid his plants in



THE DIAMOND IRON PLOW.

gathering this material, or secure its active influence in developing materials needed in plant structures. To incite him to action in this direction the farmer should accept it as an axiom, that nearly all the substance of the plants of field and forest growth, are taken from the air in the form of gasses by the leaves, or by water which conveys them to the leaves, and thence to all the growing parts, and that by chemical change and combination, these gasses are changed to solid structures like the tough, hard, elastic timber of the oak or hickory.

Air is a compound of oxygen, nitrogen, carbonic acid, nitric acid, ammonia and ozone, and its office in promoting the growth of plants is: first, to furnish the organic elements of plant-food; and second, to start such chemical action in the soil as will develop and make available soil plant-food out of its mineral elements.

The soil is composed chiefly of minerals which are a chemical compound of bases with silicic acid and called silicates. The soil, or minerals, as such, do not feed the plant; but the bases and some of the mineral acids are its food when they are separated from the silicic acid which holds them, and thus made solvent in water. This decomposition of silicates, resulting in the liberation of lime, potash, magnesia, soda, phosphoric and sulphuric acids, which are actual plant-food, is the result of the action of the mixture we call air, when brought in contact with moist soil; and to this action and the methods of securing it, special attention should be given. A large proportion of our soils are a water deposit, and all of them, but especially those which contain an appreciable per cent. of clay, lime, or iron, have a tendency to become hard and solid. This tendency is much increased by the drenching and packing of heavy rains, and when broken up by the plow, they soon return to their original condition and become so compact that the air is excluded and chemical activities deadened. Chemical action, and this alone, develops the materials which cause the growth of crops, and it is the special business of the farmer, if he would secure a bountiful yield, to supply them in abundance. A very great acquisition can be made in this direction by separating the solidified soil into particles, and bringing each and all in contact with the air, and fresh volumes of air in diurnal change, by the arts of tillage.

Thus it is apparent that tillage, plowing, harrowing, crushing and pulverizing the soil, is an efficient method of supplying to crops their necessary food. And this should be the first thought when the plow, the harrow, the cultivator and the clod-crusher are used, instead of the reflection that the land is being made easier to hoe. On such soils as have been named, and to a reasonable extent, this is a cheaper way to obtain the food of plants, than in the form of yard manure or commercial fertilizers. In fact, the two last methods should never be employed, until the first has been carried to its utmost extent, or only in connection with the practice of the first. He who expends money to supply the land with manure in any form, and then neglects its tillage, does not regard good husbandry, or business principles, but expends capital without proper effort to enable it to produce paying results.

Tillage means fertility, it means increased crops, regard being had to both the soil and to manurial substances applied to it. And the farmer who most thoroughly and judiciously tills his fields will, other things being equal, secure the largest returns and the highest per cent. of profit. These thoughts and facts have a pertinence and force at this spring season of the year, when farm operations are commencing. All nature with its effective though silent forces is at the farmer's service, if he will but comply with, or prepare the way for their operation. Nature works ceaselessly, and he must not be idle. Whether his area of arable land be large or small, he can always find paying, profitable employment in cultivating his fields, not only at seed time, but during the greater portion of the period of crop growth.

MANURE EXPERIMENTS.

One of the most encouraging signs of the times in Agriculture is the desire now evinced by farmers to institute experiments for themselves to ascertain what their land needs, the outgrowth of which must prove of almost incalculable benefit. Farm manures supply to crops all the kinds of food that they need. But different plants require certain ingredients in different quantities and farm manure treats all alike. It follows therefore that by continuous cropping the soil becomes exhausted of a particular ingredient, though it may furnish all others in excess.

Now we want to find out what that ingredient is, the replacement of which would alone restore fertility to the soil. Home-made manure would accomplish this, if it could be supplied in sufficient quantity, but this would necessitate the waste of an immense amount of food with which the soil is already surfeited. Now, is it potash, phosphoric acid or nitrogen that my land needs? Ascertain this and the land which is surfeited with three of them will become at once fertile upon receiving the fourth.

At a very much less expense and trouble than most farmers suppose, each may answer this question for himself during the present season. Let him prepare as we have already several times explained, five plots 33 feet square, one-fourtieth of an acre, and together one-eight of an acre. Upon one let him spread commercial fertilizers containing the greatest percentage of potash; upon another phosphoric acid; upon another nitrogen; upon another stable dung; and leave the fifth unmanured. Then plant corn and cultivate all alike. Other plots might be advantageously added and lime, farm manure or certain combinations of the chemical fertilizers applied. A comparison of results of the yield, of course, would determine the special fertilizer which that field most needed and the next season instead of spreading over it the usual quantity of farm manure, the same effect might be produced by a very small quantity of the special fertilizer. Thousands of such experiments will be tried this summer about the country and we earnestly wish that readers of the Rural may not be behind in the benefits which, no doubt, will accrue. It is a question which each farmer must settle for himself. Then he can go to the reliable dealer and purchase the fertilizer his land needs and will no longer be obliged, as heretofore, to purchase this, that or the other for his corn because it benefits his neighbor's wheat or be influenced by the ignorant assurances of know-everything agents.

Prof. W. O. Atwater of Middletown, Conn., has developed a simple plan of experiments which will enable any farmer to ascertain with very little trouble what manurial ingredients are required for his own soil and his own crops. The pamphlets, directions for use in the field, and full particulars may be obtained free of cost by writing to the Mapes' Formula and Peruvian Guano Co., 158 Front St., New York, with whom arrangements have been made to supply all these fertilizers of guaranteed purity for the experiments under the direction of Prof. W. O. Atwater.

These are furnished free to applicants, and we suggest to our readers that they send for them and examine them fully; and also that they read with due attention whatever is calculated to enlighten them upon this important subject.

Industrial Implements.

A NEW PLOW METAL.

The amount of thought and well directed experiment devoted to the improvement of plows has simplified and improved the work of plowing to an extent that surpasses reasonable expectations even. While the form of the plow has been modified in as many different degrees, as there were colors in Joseph's coat, it is in the metal used that the greatest improvement is noted. A new combination of metals, which in their fused state have been christened "Diamond" by the founders, Messrs. Lawrence & Chapin, Kalamazoo, Mich., is a valuable improvement. Steel, wrought iron and cold-blast charcool cast-iron are fused by a process analogous to the Martin process; that is, "bodies differing in fusability are readily melted in the presence of each other, and united in a new homogeneous body." This composition, it is said, produces a very hard, fine-grained, close metal, with an average test strength of from 3000 to 3300 pounds, as indicated on a twelve inch bar of the material. Such a metal is admirably adapted for plows, as it combines lightness and strength, takes a very high polish, and does not crumble. Any practical farmer will appreciate such points of excellence.

The plow shown in the illustration is known as the "Diamond" Iron Plow, and is constructed in part of this metal. Its advantages may be briefly summed up. It is very light in actual weight of metal and light of draft, because the hardness and toughness of the iron permits of its sparing use, and its close, fine grain causes it to scour freely. The construction of the plow, aside from the metal used, is such as to give it, according to the makers, a true center draft, a good wheel, a perfect "spread round," steady running qualities; and a simple, convenient device for holding the handles.

The jointer, an important part, is, it may be seen, attached to the land-side of the plow, and is adjustable at both ends of the wrought-iron arm. This keeps it always in place, and unaffected by a change of beam. It works equally well at any depth at which the plow may be worked. The coulter being attached at the same point is subject to the same conditions, when used.

Messrs. L. & C. have added five new patterns to their already large list, and altogether the plow comes to us so highly recommended that we think it to the interest of our readers to procure fuller information concerning the implement, if they are interested in the subject of plows. Inquiries addressed as above will meet with courteous attention.

AN IMPROVEMENT IN SEWING MACHINES.

Improvements in sewing machines may be said to have begun a very short time after the first machine was made and practically tested; and they have increased and multiplied from that time. These improvements, however, were more a matter of detail than innovation, and were what an artist would call "finishing touches." It is almost proverbial that the "last" finishing touch has never been given to a picture, and the same holds good when reference is had to sewing-machines. It is so rare that it becomes noteworthy when we can make mention of an actual modification in sewing machine construction that has the effect of creating a new price of mechanism out of a familiar object. This is precisely what the Davis Vertical Feed, as applied to the Davis Sewing Machine, does. It is unnecessary to say that the "feed" is a most important part of a machine. Upon its accuracy depends regularity, strength, evenness and perfection of stitch. The vital fault has been, heretofore, that the under-ply, moving faster than the upper, because of the presser-foot holding back, while the feed is moving forward the fabric, both ends of the goods would never come out evenly, and the under-ply had, necessarily, to be pulled a trifle. Then when a strain is put upon the seam the stitches are liable to break at the gathering, or wherever the goods are more elastic than the thread. Tailors for this reason cut the under-ply longer.

It has always been, until now, a problem how to solve this difficulty, and banish the defect. An explanation of the new Vertical "feed" will, we think make this important improvement clear. This "feed" is arranged above the shuttle plate, the goods resting upon a smooth surface, and being held firmly down by the presser foot until the needle has penetrated the fabric, at which time the pressure on the fabric is being transmitted from the presser foot to the Vertical Feed-Bar, (which comes down on the goods close behind the needle,) by means of a lever connecting the two and also with the needle bar, so that at the time the needle has reached its lowest point the full pressure is transmitted to the feed-bar; and at which time the needle-bar and feed-bar are both moved, laterally, the desired length of a stitch, both moving in unison at their highest and lowest points; thus the presser-foot is always raised from the fabric when the feed takes place, thereby presenting no resistance to seams or ridges while feeding.

The needle being in the fabric, moving with the Vertical-feed with its full pressure on the goods, renders the feed sure and strong and the stitch uniform in length.

The needle being in the goods at the time the feed takes place, renders it impossible to full one piece wile the other is stretched. The Vertical feed-bar being behind the needle, renders it capable of sewing elastic goods, making a smooth and flexible seam with stitch alike on both sides, thus enabling the sewing of any number of thicknesses without basting, and operating with equal facility on the heaviest as well as the lightest fabrics.

The samples of work we have seen are really handsome and free from the objections common in machine work.

This "feed" is exclusively applied to the machines made by the Davis S. M. Company, Watertown, N. Y., who make the Davis machine. There are a number of minor improvements not found in other machines, which, altogether, go to make a sewing machine that is most desirable. Samples of work, pamphlets and information as to details will be gratuitously supplied by the company.

The Querist.

ANSWERS TO CORRESPONDENTS.

Indications of Water. Horizontal Wells.

W. L. G., Herkimer Co., N. Y., wishes to know 1. the RURAL's opinion of the use of hazel-rods for detecting veins of water. 2. Whether wells made in side-hills are likely to prove successful.

ANS.—All over this country and many other lands also, there is a large number of country folks who regard the power of detecting veins of water by means of hazel rods as a peculiar gift with which some persons are endowed; and the implicit faith these have in individuals so gifted, their frequent errors and the best arguments of others are powerless to overthrow. Yet there is no doubt but that this faith and the pretensions that give birth to it are equally nonsensical. There are, however, several indications of water which any one acquainted with the land can easily notice. These hazel-rod experts, besides having, as a rule, a good deal of personal experience in searching for water and determining the spots near which it is likely to be hit upon, are generally covertly inquisitive before deciding upon the place where the rods are to turn down over the water vein. Wherever water is accustomed to stand in winter or late in spring, where grass remains green in dry weather or late in fall, water is seldom very far off: 2. In hilly land with a clayey subsoil water is very often obtained by digging into the hillside wherever there are indications of a supply, Indeed this is often found to be the most convenient way of furnishing a constant supply of living water in pastures, and not rarely for household purposes. A spring once obtained in this way, is as good and permanent as a natural one, and many experts say that by digging horizontally in a suitable location a vein of water is more likely to be met with than by digging downwards the same distance. We have seen several very excellent springs of this kind. When water has been struck, the trench leading to it should be walled up at the head, three or four feet, like a well, and the drain leading to the outlet laid with tile or covered securely with common stone.

The Use of Soot as a Fertilizer.

L. S. Glover, Fauquier Co., Va., inquires about the worth of soot as a manure, the plants most likely to be benefited by its application, and the best method of applying it.

ANS.—Both science and experience prove that soot is a valuable fertilizer. As a top-dressing to grass its effect is excellent. On peas, asparagus, strawberries, raspberries, and indeed on nearly all growing crops the application of soot produces marked results. When sown broadcast some of the ammonia in it escapes into the atmosphere and is wasted. It should, therefore, be mixed with water, say at the rate of twelve quarts of soot to a hogshead of water, and used as a liquid manure. A mixture in the above proportion makes a very powerful fertilizer. It would be well for farmers generally to bear in mind that manures, when reduced to a liquid state before their application, yield much more readily their nutritive properties as plant-food, and are therefore most economical and efficient in their effects. It would often pay well, especially in garden cultivation, to reduce fertilizers to a liquid condition before their application.

The Christ Plant.

W. P. G.—What is your opinion of the following extract from the letter of a correspondent to a N. Y. paper. Is it not a fraud? A friend told me about "The Christ Plant" and on my declaration of disbelief, brought this slip to convince me. If there is such a thing, why wouldn't it bloom on any other as well as Christmas eve? Answer in question column and oblige.

ST. PAUL, Minn., January, 18, 1878.

MESSRS. STREET & SMITH:

Dear Sirs:—Being a constant reader of your paper for over four years, and seeing in No. 11 of the New York Weekly, your description of what you call a "Christ Plant," owned by Mr. Holtzschoider, of Philadelphia, I thought I would let you know we have had a Christ plant in our family for the past ten years. We have always heard it called, and I think correctly, a "Jericho Rose."

The one you described in your paper is precisely the same in every respect but one, and that is that it does not remain open so long. When ours is put in a tumbler of water, on Christmas Eve, about nine o'clock, it begins to open and show signs of life by eleven o'clock, and by twelve it is in full bloom. It stays so about ten minutes, when it begins to close again, and in two hours it is the same dry flower as before, with nothing to show that it ever was open. The peculiarity of it is that it only blooms at that time. If it does not, it is said it is an omen that some one will die out of the family during the year. I never was a believer in omens before, but when the rose did not open as usual a year ago last Christmas, and my uncle's wife died a short time after, I concluded that there was some truth in it, and that indeed truth was stranger than fiction.

Its origin, extends back to the time when Christ was on this earth; and many of its kind grew on the wayside when our Saviour passed through. H. G. FRIEND.

ANS.—This is an old, old story—a very little of truth and a good deal of error. The Rose of Jericho, called by botanists Anastatica hierochuntina, is a little plant five or six inches high, with branches spreading out from a central root. As soon as it blooms, the leaves fall and the branches shrivel, curling up towards the center and forming a loose ball, They are readily uprooted by the wind, growing as they do in sand and tossed hither and thither. Held by a hollow or by whatever they happen to strike, there they remain until rain. Then the dry, dead stems unfold; the seed vessels open and the seeds drop out, where in due time they germinate. The stems will close and open as often as they are dried and moistened. But the operation is purely mechanical. The monks of old invested this plant with wonderful powers and hence the people regarded it with superstitious veneration. But the fact is, it will unfold just as well, if moistened at one as another time, and *bloomed* once for all before it left its native sands.

Wire-Worms.

Sylvester Parsons, Broome Co., N. Y.—Last spring I broke three acres of sod ground and planted it to corn the 18th of May. The wire-worm commenced to eat the kernel before, or as soon as it sprouted; some never came up. I planted again with the same result. The crop proved an entire failure. The ground being very rich I used no manure. I wish to sow it to spring wheat this spring. Will the wire-worms remain in the ground? Will they injure the wheat? If so, what shall we use to prevent them? or had we better put some other crop in the ground? Please oblige by answering through RURAL.

ANS.—We presume the "wire-worms" referred to are the young of "Click-beetles" (Elateridæ), although some other insects are so called. In this case the wire-worm will remain in the ground for two or three years longer, if it can get any roots to eat. If wheat or corn is planted, it will be eaten. If the ground goes back to grass the worms will keep along on that. Either the ground must be kept broken and planted with nothing or with strong-rooted crops for two or three years, or else, if it will pay, sliced potatoes or turnips must be scattered between the hills of corn or other crop, and visited early every morning to catch the worms which will gather under the slices. We suppose wheat could not be planted economically under such conditions. It is not unusual for newly broken ground to be full of wire-worms, and some worms live in the ground five years before they are fully grown and able to fly away as beetles. As some persons have recommended sowing salt, ashes, lime and the like, we might as well say that most good authorities advise that it should not be done. We should like to have Mr. PARSONS send us ten of the wire-worms that trouble him.

That Turnip Crop.

J. W. S., Attica, O.—I would say, in answer to this correspondent of the RURAL, in issue of March 9th, that the turnip crop, described in my communication published in RURAL of Jan. 12th, was rather an informal affair. The seed sown was what I call odds and ends; that is, I gathered up the leavings of all kinds from broken packages of turnips and ruta-bagas, after former years' sowing; mixed them all together and sowed the mixture, amounting to about one and one-half or two pounds. The varieties were Strap-Leaved Red-Top, White Norfolk turnips, and perhaps some others. The seed was sown about the first of June. But I think the successful crop in this case was due more to the fresh, new soil than to the variety of seed sown. J. R.

Freedom, Wis.

Hedges.

J. N. Williams, Crawford Co., Pa., intends to construct 300 rods of road and line fence in hedge, land sandy loam, some black muck, very well drained, planted to potatoes last season, sod plowed previous fall. He asks as to the best kind, the manner of setting out, and whether it will pay.

ANS.—We have already stated that except a first desideratum be to turn stock, American Arbor-Vitæ and Red-Cedar are the best evergreen hedges in our opinion. For Crawford Co., Pa., we should choose the Osage Orange for a deciduous hedge to turn animals. To raise from seed, soak the seed in warm water for a day and retain in moist sand until sprouted, or they may be kept in sand during the winter—then sow in well prepared soil in drills made with a small plow, and cover two inches. Hoe and keep clear of weeds. Under favorable circumstances of growth they may be transplanted the next spring, having been cut well back in the fall. For setting these plants in hedge-rows, break up the ground a foot or more deep and eight or ten feet wide. The soil should be made as uniform as possible in quality and thoroughly harrowed and prepared. Draw a line through the center and plant eight inches apart. The plants (one year) can be bought for $5.00 per thousand—seeds $9 per bushel.

Miscellaneous.

T. B. C., Cornwall, N. Y.—Will the RURAL please give the names of books, with their authors and publishers, that will instruct and benefit the rural resident—treating of country life, its beauties, etc., showing the advantages and enjoyments of country town life—also how country places can be improved?

ANS.—The Art of Beautifying Suburban Home Grounds, by F. J. Scott, published by Appleton & Co.; Downing's Landscape Gardening. An enumeration of the books you indicate would fill half a column. We advise you to send for catalogues of Lee & Shepard, Lockwood, Brooks & Co. and Estes & Lauriat, Boston; G. P. Putnam's Sons and the American News Co., New York.

E. H., Hoopestown, Ill., wishes to learn (1) The average yield per acre, in pounds, of the following essential oils: Wormwood, pennyroyal, wintergreen, peppermint, mustard, tansy and thyme, with suitable soil and cultivation to produce at least an average crop. (2) Probable cost of a still for collecting the oil. (3) Whether the services of a chemist would be necessary. (4) The name of a reliable work on the subject. (5) Would such a business pay?

ANS.—(1) Some of our readers may kindly give the average yields per acre. (2) $50. (3) No, a man of ordinary education and some intelligence could manage the matter with some little practice. (4) Write to Van Nostrand, publisher, N. Y. City. (5) This would depend on so many circumstances that it would be imprudent for us to venture a prophesy.

Hattie E. Mc C., West Jersey, Ill., wishes to learn whether, as a subscriber, she is now entitled to share in the RURAL distribution of flower seeds.

ANS.—The free seed distribution for 1877 was limited to those who applied before Jan. 1st, 1878. The next distribution will be announced in the fall of this year.

Isaiah Gale, Preston, wishes to learn of a glass factory that makes pressed glass works—such as tumblers, etc.

ANS.—Whitehall, Tatum & Co., New York.

C. D. Sicklin, Saratoga Co., N. Y., inquires where he can buy a hand machine for clipping horses; also the rotary hand machine for shearing sheep.

ANS.—American Shearer Co., Nashua, N. H.

J. D. G., Meadville, Pa.—I am taking all the stumps from twenty acres of land, from which the timber was cut one year ago—soil, sandy and clay loam. (1). I wish to crop it with corn, potatoes, oats, buckwheat, and barley. Some farmers tell me, the three last crops will lodge and cause me loss, as the ground is too rich. (2). Can I raise beets, mangels and turnips successfully on soil so new?

ANS.—(1). We should try those crops on the cleared land.

(2). Yes.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MARCH, 23D.

A. H. S.—T. W. C.—J. W. L.—E. N.—J. J.—L. S.—M. B. D.—B. P. M.—R. N. B. — N. S.—J. E. McC.—L. A. R. — M. E. S.— W. F.—A. W. M. —"ROSS"—J. L. N.—H. H. H.—M. D.—L. M. L.—M.—A. G. B., *one* "Exchange" only a season—T. B. M. —H. H.—W. H. W. — H. G. — Dr. G. — J. M. — J. M. G. — F. D. C.

Everywhere.

NOTES FROM TEXAS.

HARRIS CO., Tex., March 8.

SPRING-TIME is in full force here. Peaches and Plums are shedding their blossoms; grape vines are pushing. Taking the average temperature of the past winter, it has been a rather cool one with prevailing rain-spells, though deprived of its usual extremes.

Vegetable gardens are in full trim. First-planted potatoes are from six to eight inches high; no beetles as yet. Corn, beans, cucumbers, melons etc., are up and growing nicely. Hardy vegetables exist in every stage of growth, from the plant in the seed-leaf to the one of full maturity. The woods are ornamented with flowering shrubs and trees, such as the Flowering Dogwood (Cornus florida), the Wild Peach or Cherry-Laurel (Prunus Caroliniana), the Virginian Fringe tree (Chionanthus Virginica), the Redbud or Judas tree (Cercis Canadensis), the Yellow Jessamine (Gelsemium sempervirens) and others.

Oranges, too, begin to show their flower-buds. There prevails at present a fever here for these much coveted trees. Many of those that stand in sheltered localities, have been, and are still, loaded with fruit. During the last six or seven years we did not have any frost severe enough to kill the trees to the ground. Now, it takes an Orange tree, when once frozen down to the roots, just about as long until its growth matures sufficiently to bear fruit again, as it would one that had been started from seed at the same time. Only one hard, olden-time frost will suffice to kill both—the trees and the mania for them—for at least half-a-dozen long years to come.

Nothing in the line of hardy flowering bulbs seems to do so well here as Hyacinths. The display they make at this time in some gardens is simply gorgeous. Far from degenerating they seem to improve from year to year, yielding in succession sometimes from two to four, or even more, racemes of flowers so thickly loaded with pips, that they need support to keep them up. It is the long season most congenial to their growth which they enjoy, that seems to produce this favorable result. If one has once a start of them, he can multiply his stock with but very little trouble or attention.

The Coco-grass (Cyperus Hydra), this pest of the Southern States, is spreading here through field and garden at a fearful rate. If it keeps on in such a way it will assuredly at last take possession of every nook and corner. It comes on in such an unassuming manner, that it takes the greatest watchfulness on the part of the cautious farmer and gardener to make on it a good, thorough onslaught at the first signs of its appearance. G. MARTI.

RURAL SPECIAL REPORTS.

DENMARK, Tuscola Co., Mich., March 13, 1878.

OUR old-fashioned winter has given us the slip this year. We have had no sleighing and no cold winter weather; but plenty of rain and mud. Frogs have been singing for over a week. Snakes and butterflies are in profusion, and worst of all, mosquitoes are so abundant as to be troublesome. Such a winter never was seen by us in Northern Michigan, and every one is wondering whether it will do to begin spring work in consideration of the "Jog to the South." Wheat looks well so far, despite unfavorable weather. Money scarce, work more so, business not very brisk. Plenty to eat, not much sickness and splendid preaching. ALPHA.

BROOKS, Waldo Co., Me.

SNOW entirely gone from open land. Traveling very bad. March has been a month of rare mildness. We have had a truly Southern winter; this has helped out the haymows. Stock doing quite well. Hens have laid all winter on account of mild weather. We are looking for a good hay and fruit crop the coming season. Hay is worth $10 to $14, pressed for market. Potatoes from 20 to 40 cents. Most of lumbering teams and crews have come out of the woods owing to roads and streams breaking up. Much lumbering has been done. More wheat and corn will be planted the coming season than for many years past. Maine is trying to raise her own bread. She can soon. J. W. L.

GALVESTON, Texas, March 11, 1878.

I DON'T remember having ever seen an "everywhere" in the RURAL from this city. Yet next to New Orleans it is in reality the chief city on the Gulf. We have now a population of 30,000, and the place, like the country back of it, is constantly receiving settlers from Europe and still more largely from all other parts of the South, while our northern accessions make up in energy and means for their smaller number. This being a business letter I must close, but will write at greater length next week. F. M. C.

RACINE, Wis.

WE have had a very open winter and plenty of mud. The roads are now drying up, and flax which is our principal product, is coming into market and bringing good prices—from $1.25 to $1.50 per bushel. Our people are feeling good, and looking forward to better times. We have every prospect of a good fruit crop; last year it was a failure. B.

WEST JERSEY, Stark Co., Ill.

WE are having very mild weather for this month—more like May than March. Fruit buds are swelling, and grass will soon do to pasture if this weather continues. There is no frost in the ground, nor has there been for the last month. H. E. McC.

WHITNEY'S POINT, N. Y., March 18, 1878.

THE weather has been very warm and spring-like during this month. Mud very deep. The last week of February and the first week of this month were good "sap weather." Maple sugar is worth about 10 cts. a pound here, and eggs 10 cents per dozen. M. B. D.

WHAT THEY SAY OF IT.

FOURTH WEEK.

THIRTY-ONE ACKNOWLEDGMENTS IN A DAY.

A GENUINE HAPPY HIT.

"HOW CAN YOU DO IT?"

A STORM OF CONGRATULATIONS.

MESSRS. PUBLISHERS — GENTLEMEN : — The "Cricket" arrived last evening. Should I express my opinion of it you would think me "gone mad" on adjectives ; so, rather than have my philological sanity called in question, I'll content me with marking my emotions! !! !!! The appreciation of the clock is not confined to myself. Thinking to ornament my store I placed the "Cricket" on a bracket, never dreaming it would be the occasion of any trouble. But my customers have all day tormented me with questions as to the price and reliability, and several have wanted to purchase it in spite of my reiterated "It's not for sale." They have been so persistent in their demands, that I momentarily expected to see one of the most valiant leap over the counter and carry it off, whether I would or not. Now, compassionate the sorrows of a poor, lone storekeeper, and tell me if you can not arrange to supply me with "Crickets" enough to satisfy the demands of the importunate natives of Mackinac. If you refuse, I cannot answer for the consequences. I doubt not but that a tragedy will be enacted as far-reaching and calamitous in its effects as the one so graphically set forth in the "Mystery of Gilgal." Dare you make yourselves responsible for such a "catastrophe?" Awaiting your reply, I subscribe myself an enthusiastic "Cricketer."

JANE H.

[We are certainly pleased to receive such evidences of the favor with which the "Cricket" is received ; but think that Mrs. H. has permitted her enthusiasm to color her endorsement of our premium. The clock is, however, creating a genuine interest wherever sent.—EDS.]

THE RURAL "Cricket," despite the tossing and agitation of a long journey, arrived here a week ago, chirping merrily, and ever since has continued to report each passing moment with admirable accuracy. "Nothing new under the sun," sighed my satiated namesake three thousand years ago ; but in the matter of novelty, his present imitator is much more fortunate, in that it is something very new indeed to find a periodical offering so handsome a premium for so trifling a service. Among the dazzling treasures of Zion's sage, none so admirable as the "Cricket" charmed the beholder. Nor was there one approaching it in value in view of the accumulation of science, skill, and ingenuity, of which this neat little time-piece is the ultimate result. Had the ancient Solomon the happy chance of securing such a masterpiece only by conferring on his friends the advantage of an introduction to the rich columns of the RURAL, his sageship would have straightway girded up his loins and started briskly out on a canvassing trip. The modern Solomon intends to do what his prototype, similarly circumstanced, would have done. SOLOMON G.

Terre Haute, Ind.

THE package came all right on Thursday the 11th. "A perfect gem." By looking at the back we discovered by the arrows around the stem-winder which way to turn the stem to wind it up ; also discovered that the bright little wheel in the center of the back regulated the hands. Having regulated and wound it up, the mystery still was, how shall we set it going? By taking the clock in the hand and turning the hand first to the right and then to the left a few times, to our joy the little thing showed unmistakable signs of life, by ticking quite loud, and it has been the admiration of all who have seen it.

Mt. Morris, N. Y. H.

THE "Cricket" came all right, and I tell you he is a lively little fellow ; but what bothers me now is, how can you afford to send such a valuable little gem as a premium for two new subscribers? When I first saw your advertisement in the paper, I told my wife I would send for one, but she said it must be a humbug.

"Humbug!" says I. "I'll risk that. I never knew the RURAL to offer anything as a premium on its paper that did not turn out all right."

Cherrytree, Penn. D. A. K.

THE little clock was received last evening. The "Cricket" was *chirping* when it was brought to me from the express office. It was not injured in any way on its journey of more than a thousand miles. The "Cricket" is a most useful ornament, and I should think every RURAL reader would want one. We would not part with ours for three times its value, if we could not get another. M. G. R.

Lyons, Iowa.

THE "Cricket" came to hand in good order. My wife says its a perfect little gem. All I will say is, that we are more than pleased with it. I think you will get more orders from this place, soon, for I have taken great pains to show the "Cricket" to every one, and they all like it. I shall send an order in a day or two for one or two more ; wishing you success, I remain yours.

MILLER'S STATION, Crawford Co. Pa. J. B. H.

I RECEIVED the "Cricket" clock in due time. It was not injured by the long journey, looks bright as a jewel, keeps good time. They are selling "Cricket" clocks in our neighborhood, but they will not compare with yours ; they are not so well finished. J. W.

Lovettsville, Va.

THE "Cricket" came to hand safe and sound, and is the admiration of the household. After a test of 36 hours I find it keeps *absolutely perfect time*. Its beauty and time-keeping qualities make it a valuable premium. WM. P. G.

104 Randolph St., Chicago.

THE "Cricket" has now honored my sitting-room mantel for several weeks, and to-day I like it better than when I first saw it. It is a beautiful little clock, a handsome ornament, and an excellent time-keeper W. F.

Cambridge, Mass.

PLEASE accept thanks ; received in fine order. We will send club of five next week, we think. Success to the paper which gives the greatest good to the highest number. MRS. J. M. W.

Klickitat Landing, W. T.

I RECEIVED the clock all right. It keeps good time and we are very much pleased with it.

Miller's Station, Pa. J. B. B.

WE are much pleased with our clock, and thank you sincerely. M. B. R.

Rochester, N. Y.

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OGDEN FARM, NEWPORT, R. I., Feb. 7, 1878.

GENTS :—I have thoroughly tested the cans and chest (Cooley's) that we had of you last fall, and am now using that system in preference to that employed by Col. Waring in former years. I feel that I can fully recommend it. MELVILLE BULL.

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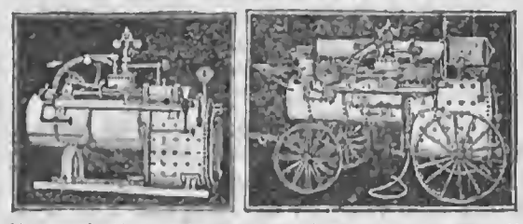

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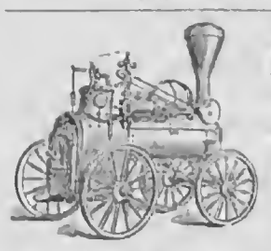

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:
French International Exhibition ... 197
Notes from a Farm ... 198
Farm Notes ... 198
Querries about Maple Sugar Making ... 198
Artichokes, Getting rid of ... 198
Dairy Products, an Exhibition of ... 198
Butter Color ... 198
Abortion in Cattle ... 198
Improving Rancid Butter ... 198
Brown and White Leghorns ... 198
Poultry Notes ... 198
Small Grain Ration for Sheep ... 199
Does it Pay to Sell Bone ... 199
That Model Piggery ... 199
Piggery Improved ... 199
Locked Jaw in Horses ... 199
Freezing of Sap in Plants ... 200
Wild Plants as Garden Flowers ... 200
Notes from the Rural Grounds ... 201
Talks upon the Prairies ... 201
Influence of Air in the Growth Plants ... 201
Manure Experiments ... 201
New Plow Metal ... 201
Improvement on Sewing Machines ... 201
Answers to Correspondents ... 202
Notes from Texas ... 202
Rural Special Reports ... 202
What They Say of It ... 203
Domestic Economy ... 208
Piths ... 208
Domestic Recipes ... 208
Querries Answered ... 208
Typhoid pneumonia—Cloasma ... 208
EDITORIAL PAGE:
Figures that Preach ... 204
Farmers and Fruit Growing ... 204
Look to Your Young Trees ... 204
Strawberries ... 204
Japanese Progress ... 204
Seasonable Subject ... 204
Salsify ... 204
What would they have ... 204
Chalk ... 204
Brevities ... 204
LITERARY
Poetry ... 205, 206, 207, 210
Our Cousin Charley ... 205
Cora ... 205
Washington Letter ... 206
Recent Literature ... 206
Magazines ... 206
Letters from a Country Girl ... 207
Chapter on Country Visiting ... 207
Bewitched Door-yards ... 207
Reading for the Young ... 210
Letters from Boys and Girls ... 210
Puzzler ... 210
Scripture Words and Phrases ... 210
Wit and Humor ... 212
Personals ... 211
News ... 208
Markets ... 209
Advertisements ... 203, 109, 211, 212

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.
Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, MARCH 30, 1878.

THE article (to be completed next week), by Mr. WILLIAM FALCONER of the Botanic Garden, Cambridge, Mass., is one of the series announced last year. It has been prepared with care and thought, and must prove instructive to those interested in "Wild Plants as Garden Flowers."

FIGURES THAT PREACH.

ST. PAUL tells us that he who while befriending others neglects those of his own household, is worse than a heathen, and until human nature has been developed to a degree of perfection far higher than it has hitherto attained, it will continue to be each man's duty to look primarily after his own interests and those of his kindred. Of the numerous responsibilities imposed on man by divine and human ordinances, it is extremely doubtful whether any one is so faithfully discharged in individual cases as this, but the obligation, in this connection that lies on a man with regard to the welfare of his immediate family, presses with only a modified weight upon him with regard to the weal of the class to which he may belong, with whose common fortune his own special interests are as a rule closely connected. Now with regard to their responsibility in this matter, the farmers of this country are marvelously remiss, especially politically. Even the simplest of them old enough to cast a vote, ought to know that the welfare of his class will be more faithfully and earnestly promoted by those who belong to it than by members of other avocations whose interests are often opposed to those of agriculture. Yet, despite the self-evident nature of this truth, farmers, year after year, persist in electing as their representatives to State and national legislatures, men belonging to other callings, notwithstanding that past neglect, broken promises and frequent indignities have shown the unfitness of such a choice. Of the 336 members composing the two houses of Congress, 239 are lawyers, 20 physicians, 19 bankers, 17 merchants, 15 editors 7 manufacturers, 5 railroad officers, and 5 school teachers, while there are only 17 farmers and planters to represent 4,000,000 agricultural voters, and the untold millions invested in farm pursuits in the greatest agricultural nation in Christendom.

FARMERS AND FRUIT GROWING.

THE lost paradise of the first man was in a garden, and naturally by the old rule we seek for happiness where it was lost. In the culture of fruits and flowers men and women come as near the original Eden as they well may. The subject is one of the greatest practical importance. How to be happy is the chief object of human endeavor. The old Roman Emperor was not so far wrong when he offered a reward to whomsoever would discover a new source of pleasure. Had not his mind and conscience been dulled by unlawful indulgences, and had he restricted his reward to joys which leave no sting behind, his philosophy would have been the hight of human wisdom, instead of being as it was, the outgrowth of beastly sensualism.

In this country pomological science has made such progress, and the practical culture of the finer fruits has become so general that it would seem as if there need be no lack. Walking up and down the streets of New York city we find such variety of luscious fruits in their season that we might infer that every family through the length and breadth of the land had an abundance. How far this is from being the fact! The great metropolis absorbs everything and has to be supplied though the rest of country suffers. It is a disgraceful fact that often the most lucious fruits are more easily obtainable in New York city than in the localities where they are or may be grown. The rural population who ought to have the most and the best of such luxuries, too often have least of all. Before we begin to talk of a glut in the fruit market let us at least make sure that the six millions of farmers and their families in these United States have an abundance of the choicest varieties in their season. The field for missionary effort in this regard is the largest and most promising that the most enthusiastic pomologist could desire.

Apples are the standard fruit whose cultivation seems to us almost universal. They can be grown everywhere but inexorable statictics prove that through the whole country less than one-half, aye, less than one-fifth of the rural population are supplied with this wholesome fruit. Of the most delicate fruits, pears, peaches, plums, cherries, grapes, strawberries, raspberries and the like, not one family in ten thousand has an adequate supply during the year. Is it not time that this disgrace should be done away with? The man who owns or tills the soil is entitled to the very best that it will produce. If not, will some one tell us who is? Times may be hard; but low prices have affected trees and plants far more seriously than they have the products which the farmer sells. The unprofitableness of ordinary farming should be a hint to diversify agriculture; to grow something else than the crops which pay so poorly. The farmer does his part in growing the food which the world requires; but let him not neglect to provide the best for his own household and self.

Possibly the high prices of fruit which prevailed years ago may not return, nor is it desirable that they should. Fruit growers who understand their business and practice what they know, are making more money than any other class of peo during the past few years. Fruit culture requires more skill and intelligence than native farming; but greater skill and more brains are what is needed everywhere. Where fruit growing is combined with farming, the latter is greatly improved, as the habits care and neatness which the cultivation of fruit necessitates make their impress on everything which the farmer does.

LOOK TO YOUR YOUNG TREES.

There are thousands of young trees, those planted in streets particularly, that are being ruined by having their stems too tightly bound, or by rubbing against the frames by which they are enclosed. The first stops the growth of the tree where it is encircled and causes an effort to grow over the obstruction, injures its appearance and strength, and the last damages it by wearing away the bark. By a few moments' attention all this difficulty can be remedied.

We do not approve staking or tying up trees when they are transplanted, except in cases when they are so large that the roots cannot be kept in proportionate size. When properly set there should be sufficient root support to hold them in position, even if to secure this the roots require fastening in their places by wooden hooks or otherwise. There are exceptional positions perhaps as, for instance, where there is protection from wind except in one direction, when a support would be beneficial.

Trees planted in streets are liable to be damaged by horses, cattle, and boys, and from these protection by frames is advisable. In such cases care should be taken to pad or cushion the frame in such a way as to prevent the rubbing of the tree so as to injure the bark. A little attention to these things will often save the tree.

NOTES.

Strawberries.—Some of our readers will be asking themselves "Shall I plant strawberries now or wait until summer or fall?" We say, plant now. This will insure a full crop for next year. If it be deferred until late in the season, a partial crop only will result next year. Select young plants which may be known by their fibrous, whitish roots, while those of old plants are longer, darker and more stringy. For home use, use manure without stint, of almost any kind. Ashes—bone-dust are excellent. But barnyard manure will suffice. Plant in rows two feet apart and eighteen inches apart in the row. Triomphe de Gand, Jucunda, Boyden 30, Charles Downing are fine varieties. Capt. Jack with us is preferable to the old Wilson. Try the Gt. American, Beauty, Pres. Lincoln. Upon a number of plants we last year tried the effect not only of a combination of all the manures at hand, but we also applied liquid manure bountifully. The result was a surprising growth of leaves such as we have never before seen in the strawberry and very large berries, but fewer than those borne by other plants not so treated.

Salsify.—Many are very decided in their praise of this vegetable and we are among them. It is not cultivated enough, and generally where it is cultivated, too little care is given to the manner of cooking it. It needs about the same management as parsnips or carrots. Sow the seed an inch deep in drills a foot apart and thin out the plants to six inches apart when two or three inches high. They may be eaten in the fall or left in the ground until spring or taken out as needed. Respecting cooking — scrape them and throw at once in water to which a little vinegar has been added. Then boil in fresh water until it has evaporated—add butter, pepper and salt, mash, form into patties and roll into cracker crumbs and fry the same as an oyster. We think those of our readers who will "try this style of cooking salsify or the vegetable oyster," as it has been well named, will ever after find a little place in the garden for its cultivation.

What Would They Have? — Ever since we can remember there has been a class who have looked upon the politics of the country as all wrong and wish the time might come when our rulers might be free from the dictation of Party. And now when we have a President, who by his action in doing after he was elected what he said he would do before; who is opposed and thwarted by nearly all of one party because he is not of their election, and by a large majority of the other, those in Congress at least, because he chooses to act as he pleases, instead of as they please, they don't seem to be a bit better satisfied. It was once thought a majority of the people would like to be emancipated from party rule; now they have a president without a party, do they rush to his support? Who is wise enough to say what the public want? Was BARNUM right in saying they delighted to be humbugged?

Japanese Progress.—On the 24th day of January last, the Mikado of Japan formally opened an Agricultural College at Komaba. The plan of the institution is largely that of our American Agricultural Colleges, with such amendments and improvements as have been suggested by the observations of government agents sent to the different European countries for that purpose. Probably no country in the world has evinced so much good sense, wisdom and liberality in discriminating between the good and bad institutions of other countries as Japan, and certainly none has made such rapid strides in the last twenty years by the adoption of foreign ideas. This system rigidly adhered to, will eventually put our celestial friends in the first rank of nations, and we are glad of it.

Chalk.—In an old agricultural paper of forty-seven years ago, we learn that it is a good plan to put a piece of chalk in the pen with the young calves. They will lick it and thus correct the acidity of their stomachs and assist digestion and prevent dyspepsia, which often leads to scours. There is no doubt but that this is a most excellent practice. Prepared chalk is often prescribed by doctors as a remedy for heart-burn which is a symptom of dyspepsia, and for diarrhea. The crude chalk (carbonate of lime) is unquestionably a good preventive and remedy for similar disorders in stock. The prepared chalk is the crude with all the gritty particles worked out.

A Seasonable Subject.—"Better late than never" is an old adage belied in the opinion of most farmers and gardeners by the tardy appearance of winter last night, driving the mercury down to 18° below freezing point to the sight and to 20° below zero to the other senses. Perhaps after all, however, it may only be the very leonine exit of a March whose entrance was truly lamblike.

BREVITIES.

NORTH of New York, do not uncover protected plants yet.

It will be observed that Domestic Economy and the Querist have changed places.

IT is stated by a contemporary that the climate of Maine is better than the world affords!!!

RURAL GROUNDS, March 25, 6 o'clock, A. M.—Thermometer 14° above zero. Green Peas up!

THE effect of soap and honey upon a bee sting is marvelous. It will make one feel glad he was stung.

THE impression seems to be general that excessive corn-feeding is the cause of what is called hog-cholera.

LEGHORN eggs average ten to eleven to a pound. Those of Light Brahmas average between six and seven.

THE Mich., Pom. Society, gives two stars to the following apples: Baldwin, Maiden's Blush, Red Astrachan, Red Canada.

DURING the rains we are having now, mark the little spots where water remains longest. In plowing or working the soil these may easily be filled in.

THE price of milk is to be reduced in some counties of this State. Is this decrease in the price of milk or an increase in the price of water?

IN purchasing plants for bedding, do not select those in bloom. We have known persons to buy Hyacinths, Japan Lilies, Ten-weeks-stock in full bloom to plant in the garden.

RACINE, Wis., will be well represented at the Paris Exhibition. Messrs. J. I. CASE & Co., have just shipped a thresher more handsomely finished than the one displayed by them at the Centennial. They have also sent a single-geared four-horse grain-heading machine. A. P. DICKEY has sent over one of his celebrated Fanning Mills made of California red-wood and finely silver-plated.

THE Germantown Telegraph thinks that strawberries are almost poisonous to some persons. The editor saw a belle at a fashionable watering place, three or four years ago, who was obliged, much to her discomfiture, to confine herself to her room for ten days from eating a plate of strawberries in the evening. But how does the editor know that the young lady was thus sickened in consequence of eating strawberries? We advise the editor rather to put his faith in strawberries than in belles.

IN transplanting remember: Dig wide holes—cut off all broken or marred roots, spread out the roots in a natural position, set the tree a little above its previous depth, fill in with good soil (no manure), work it between the roots with the hand, do not pull the tree up and down, and finally press the earth firmly down and if there is a likelihood of dry weather spread a mulch over the surface. Bear always in mind that plants are injured if their roots are exposed to sun or wind for even a few minutes.

PRES. ROOT says: "It is not National or State indebtedness, as many suppose, that necessitates our increased taxation, it is the robbery, the plundering and extravagance in all official places, from the town constable to the highest places of trust." He also says: "What then are the needs of our farmers of to-day? Plainly it is intelligence." About forty-five per-cent of the adult population of the U. S. are engaged in agricultural pursuits. Couldn't Pres. ROOT tell us what are the pressing needs of the other fifty-five per cent?

Literary Miscellany.

ONLY ONE DAY.

BY M. C. P. ASSONET.

"MAN'S work's from sun to sun;
But Woman's work is never done."
[*Old Proverb.*

THERE was a man who lived in the woods,
And this you may plainly see;
For he said he could do more work in a day
Than his wife could do in three.

"So be it," the good wife said,
"But this you must allow,—
That you will work at home to-day,
And I'll go follow the plow.

"You must milk the pretty, brown cow,
For fear she should go dry;
And you must feed the little fat pig,
That lives in yonder sty.

"You must watch the speckled hen,
Or she may lay astray;
And you must wind the bobbin of thread
That I spun yesterday."

Then the woman took the staff in hand,
And went to follow the plow;
Her husband took the shining pail,
And went to milk the cow.

Tiny she hinched, and Tiny she flinched,
And Tiny she stuck up her nose,
Then gave the old man such a kick in the face
That the blood ran down to his toes!

"Soh, Tiny! Ho, Tiny!
My pretty brown cow stand still,
If ever I try to milk you again,
'Twill be against my will!"

He went to feed the little fat pig
That lived in "yonder sty,"
And struck his head upon a beam,
Which caused his brain to fly.

He could not watch the speckled hen,
And so she laid astray;
He forgot to wind the bobbin of thread
His wife spun yesterday.

The dinner to get, the table to set,
The beds to make up smooth,
The house to sweep, the bread to knead,
"Too much for him, in truth!"

Dried apples to string, a patch to set on,
These she said nothing about.
"Enough for a week," in despair thought John,
And he was no lazy lout.

"The windows to wash, the stove to make bright
The beans to put baking for Sunday;
And all to be done before it comes night—
Too much for only one day!"

So Jonathan saw, by the light of the moon,
And the green leaves on the tree,
That his wife could do more work in a day
Than he could do in three!

[*Woman's Journal.*

OH! COUSIN CHARLEY.

MARGARET LIVINGSTON.

"COUSIN Charley's coming home!—Cousin Charley's coming home!" cried little, twelve-year-old Maud Bentley, darting breathlessly, full of the important news, into the breakfast-room. "Pa has just had a letter. I heard him telling mamma, in the dressing-room, as I went in to kiss her."

Her elder sister, Kate, who presided at the urn, changed color, and her heart began to beat fast; but she said nothing, an ommission which excited Maud's indignation.

"Why don't you say something, Sister Kate?" she cried, shaking her by the sleeve.

"Are you not glad? If I were a boy, I'd hurrah."

"I'll hurrah for you," said Master Freddy, a youngster of eight, with his mouth full of buttered toast. "I don't remember Cousin Charley, but they say he's a brick. He'll bring me, maybe, a big knife with twenty blades from New York! Jim Stanley has a stunner, that his father bought there for him. Hurrah!"

"Freddy, dear," said Kate, mildly, "don't use such slang phrases, please. Gentlemen never do."

"Just so," answered Freddy, coolly. "But, then, you see, I'm not a gentleman yet. I'm only a school-boy." And he went on stuffing himself with toast.

Notwithstanding her assumed indifference, Kate's heart was beating like a forge-hammer. Up to four years ago, when Cousin Charley had gone abroad to finish his education at a German university, Kate and he had been all in all to each other. She was, at that time, nearly sixteen, and he four years older. Charley had been, as it were, brought up in the family, for when his parents died he was only five years old, and as his father had been Mr. Bentley's, cousin, the boy had been committed to the latter's guardianship. All Charley's holidays, therefore, had been spent at the Bentley's; in winter at their town-house; in summer at their country seat. As Kate developed into girlhood, he and she became inseparable. He would have no other partner at the children's parties they attended together in town. In the country she would go out with no one else fishing, or rambling in the woods. It was one of those childish attachments at which the elders of the family smile good-naturedly, aware that they generally come to nothing. It began to look more serious, however, when, at twenty, Cousin Charley still persisted in his devotion.

"He is going abroad, however, for four years," said Mr. Bently, when his wife expressed some anxiety on the subject; "and when he comes back, he will probably have forgotten Kate. Of course there is no objection to Charley in himself. He has a good fortune, and is everything that is desirable. But Kate, at least, is too young to think of marriage."

Cousin Charley received a hint of his uncle's opinions on this subject, and went away without any formal engagment to Kate. It must be confessed she was surprised. But she remained true, nevertheless. A year after, when she began to go into society, his image still had such power over her that no one of her many suitors was able to surplant it. Thus she had reached the age of twenty, and was still unmarried. People called her cold. Even her parents thought it odd, for they had long ceased to connect her and Cousin Charley together.

But now we know why Kate's heart beat so fast on that December morning; and why, nevertheless, she assumed such an air of unconcern.

Cousin Charley, came and more than realized her maiden ideal, for he was still as merry and kind-hearted as of old, with the most distinguished manners superadded. But alas! for poor Kate, there was no renewal of the old intimacy. At their first interview she held back and Cousin Charley had little to say—in fact, seemed rather embarrassed. The secret was soon out. Kate had an old school-mate who had come that day to spend the holidays with her, a beautiful, Juno-like girl. The moment that Livia Randolph entered the room, Cousin Charley's whole manner changed. It came out that he and Livia were old friends, and had spent most of the preceding winter in Paris together. Kate was quite left out of the conversation. Nevertheless, she could not help admiring Cousin Charley's quick wit, his eloquent language, his warm enthusiasm as to all things noble and good.

"I am nobody," she said to herself, with a sigh. "He forgets the old times altogether."

As the days went on, and Christmas drew near, this conviction became more fixed. Cousin Charley came constantly to the house; but it was always with Livia he talked. There seemed a complete understanding betwen them. She was invariably in the drawing-room, awaiting his visit, and before he had been there long, she and he managed to be togother on some distant sofa, whispering. Kate could not help thinking this was rude; but her heart was sore, and she forgot that the same law cannot be applied to lovers as to others. Now and then Cousin Charley, as if recollecting his good manners, would address himself to Kate, but it was always in a stiff, constrained way; and Kate instinctively, answered in the same cold and reserved fashion.

Great preparations were being made at the Bentley's to celebrate Christmas and New Year. There was to be a dancing-party and a supper on Christmas Eve, and the dining-room was to have, suspended from a chandelier, a huge bunch of mistletoe; and woe to the pretty girl that was caught under it, for the old-fashioned penalty of a kiss would be sure to be exacted. The arrangements were superintended by Kate herself, she being practically housekeeper, her mother having been for years very much of an invalid. All day Kate was busy, going and coming. She even denied herself to callers. But Livia, as a guest, was of course free from all these cares, and sat in the drawing-room, resplendent in beauty, receiving visitors till late in the afternoon.

Just before dusk, Cousin Charley came. Kate happened to be passing through the back part of the hall, and heard him ask the footman if Miss Randolph was in. She noticed particularly that he did not inquire for her. "He knew I was to be busy," she said, "and has chosen this day on purpose: I have no doubt he is going to propose for her. Well, I wish with all my heart they may be happy." But alas! poor girl, her sigh and her woe-begone face belied her words.

About fifteen minutes later, Kate, returning from the kitchen, glanced into the back drawing-room, the door of which was just opposite the foot of the hall staircase. Livia and Cousin Charley were standing by the mantel-piece, in full sight. Cousin Charley was handing Livia a miniature, which she began immediately to kiss passionately. They were so absorbed that they did not hear Kate's footsteps, which indeed were hardy audible on the thick Axminster carpet, and in a moment she had darted up the staircase, and was out of sight.

"Oh! oh! oh!" she cried, when she had gained her own room, and locked the door behind her, and she pressed both hands on her heart, which she thought would break. Then she flung herself on the bed, face downwards, and burst into an agony of tears.

She had thought she was prepared for the blow; but she found she was not. A little hope, after all, had lingered in her heart, fed by looks that Cousin Charley gave her now and then, or that she fancied he gave. But now even this slight bit of comfort was gone. She had seen, with her own eyes, the engagement. Cousin Charley had given Livia his miniature, and the passionate way in which she kissed it showed how she loved him.

Poor Kate! We draw a veil over the next half hour. By-and-by she washed her eyes, readjusted her hair, and went back to her household duties. Then she met the family at dinner, and talked as cheerfully as if nothing had happened, and was particularly amiable to Livia, who, it was plain to see, was in the most extravagant spirits. The conversation was principally about the ball in the evening, which everybody predicted was going to be a great success.

"You must look your prettiest, to-night, Sister Kate," said the talkative Freddy, "for everybody says that you and Livia are the two handsomest girls in town; and it wouldn't do, you know, to be pretty, and not do justice to it; and a stunning dress goes a great way." And the precocious young critic nodded his head as sagaciously as Lord Burleigh, while everybody laughed.

Kate had no heart for fine clothes; but she knew it was expected of her that she should look particularly elegant; so she chose a stiff, white silk, which, with its appropriate trimmings, everybody declared made her look bewitching. She finished her toilet early, in order that she might make the tour of the rooms, to be sure that nothing was neglected. She first visited the drawing-room, and then passed on to the dining-room. Here she saw that the tables were set for the guests, and that nothing remained but to serve the supper at the proper hour.

Suddenly she heard a step behind her, and turning quickly, found herself in Cousin Charley's arms, and directly under the mistletoe. Instinctively she struggled to get free. But Cousin Charley was too strong for her. Half laughingly, yet radiant with triumph, he clasped her by the waist, held her tight and kissed her.

Kate's first feeling, on finding herself in those dear arms—shall we confess it?—was one of exquisite bliss. And if she could have lain there for ever, sure of Cousin Charley's love, she would have been perfectly content. For just one moment she gave herself up to this delicious dream. For just one moment she let Cousin Charley's heart beat against her own. Only she looked up at him, half-shyly, half-beseeching, blushing furiously, and whispered, in maidenly protest:

"Oh Cousin Charley!"

Then all at once, she remembered Livia, and the scene she had witnessed that afternoon. The whole current of her feelings was changed in an instant. With an angry gesture, she freed herself from Cousin Charley, crimsoning redder than ever, but this time with shame for herself and indignation at him.

"How dare you? How dare you?" she cried, passionately; and then breaking down she covered her face with her hands, and burst into tears.

Cousin Charley drew back frightened, and began to stroke his moustache, looking at her with wide-open eyes, the very picture of dismay and bewilderment.

"It was mean, cowardly to take agvantage of a girl, because she was weaker than yourself," she sobbed.

"But—but," stammered Cousin Charley rallying at last, "I thought it was understood that when a girl was caught under the mistletoe one had a right to kiss her. 'Pon my word, I did. I'm awfully sorry that I've offended you, Kate. I didn't mean it, I'm sure. I've been on the lookout for days for a chance to speak to you alone." Kate, in spite of her tears, opened her eyes wide. "I came early to-night, hoping to catch you before others arrived. I thought I was the happiest fellow alive, when I found you here. But I see how it is. You've hardly spoken a kind word to me since I came home. The old days are forgotten——"

"Stop!" interrupted Kate, angrier than ever, for she did not believe a word of this. She believed, on the contrary, that he was trifling with her. He had learned in Paris, she said to herself, to do these things. "Don't think you can talk to everybody, she went on, vehemently, "as you talk to Livia. Go to her, if you want"—sobbing—"if you want—kisses."

Now if Kate had been herself she would never have said this. No well-conducted young lady would. But Kate was tormented out of all self-control by jealousy and outraged maidenliness.

"Livia! What has Livia to do with it?" said Cousin Charley, more astounded than ever. "It isn't Livia I love—it is you."

His voice, as he spoke these last words, quivered with emotion and tenderness. In his eagerness he drew nearer to Kate again.

"Me?" cried Kate, moving away quickly. She could not believe it. This was only another form of insult. Was he a Grand Turk, to throw his handkerchief to everybody? "Don't touch me. I know you too well. Didn't I see you this afternoon leaning over Livia—giving her your miniature—and now you dare to speak to me in this—this way!"

"Good heavens!" cried Cousin Charley, beside himself with despair, "how you misconceive! Don't leave the room," stepping forward to intercept her. "Or only hear one word first. I thought everybody knew—you, especially—that Livia was engaged to Harry——"

"Engaged?" interrupted Kate.

"Yes, engaged to Harry Johnstone, whom I left in London. He and Livia met last winter in Paris. I brought Harry's miniature over, which he had just had painted, to give to Livia; but I mislaid it stupidly, and only found it again this morning. Confound it! I'll never do a kind action again!" And he turned away wiped his forehead, where great drops of agony had gathered.

There was silence for a moment. Then came a soft, low voice:

"And—and—you don't really love Livia?" it said. "It was all a mistake?"

"I've never loved anybody but you," answered Cousin Charley, with his face still averted; "and it's cruelly unjust to a fellow."

There was another moment of silence. Then Kate drew near, and stole a little hand into his.

"You won't be angry with me, Cousin Charley, will you?" whispered the soft, low voice.

"Angry with you!" cried Cousin Charley, turning quickly. Then he saw what made him catch her in his arms. "And you mean to say you love me? Bless you, darling! Oh! how can I thank you?"

Before the evening was half over everybody in the house knew that Kate and Cousin Charley were engaged.

CORA.

FOR the benefit of those of our subscribers who have been unable to procure the earlier chapters of "Cora" we give below a brief compendium of the story up to the present issue.

The story opens by introducing to us the heroine Cora Sinclair and her brother Harold, a young artist, who are living in comfortable circumstances on the outskirts of London.

They visit London on the occasion of a grand illumination and Cora becomes separated from her brother by the dense crowd from which she is extricated by Viscount Almane, who now comes upon the scene, and takes in the situation at a glance. Of course, this is the commencement of a very agreeable acquaintance. Lord Almane visits the Sinclair's at "The Tryst," as their cottage is called, and one day on his way thither he is thrown from his horse and carried to them with a broken arm, and remains their guest in consequence, until entirely recovered from his accident. Meanwhile the young Lord conceives a passion for the beautiful and unsophisticated Cora, and she in turn, dazzled by the handsome and graceful nobleman, gives up to him her fresh young heart without reserve. This state of affairs is divined by an old Italian servant who has long been in the family, and cherished the brother and sister as her own children—old Marianna. She confides her suspicions to Harold and he realizes for the first time the danger to which his sister has been exposed. Upon inquiry he ascertains from a friend and brother artist, that Lord Almane's character is by no means above reproach, and that he is already engaged to be married to his cousin, Lady Lucie Belmont. Young, handsome and fascinating, he has been spoiled and petted by the society of his world—he has become hard, selfish and unscrupulous, and now, his fortune being dissipated, his marriage with an heiress of his own rank his become imperatively necessary. Harold on his return congratulates Lord Almane in Cora's presence on his approaching marriage—in hopes the warning to the latter would yet be in time. Lord Almane's influence is already sufficiently potent to induce Cora to keep a midnight tryst with him to give him an apportunity to "explain," which he does by representing himself a passive victim of circumstances and his engagement to have been brought about through no volition of his, and declares his undivided love for Cora, who now, almost heart-broken, makes her way to her apartment. This conversation has been overheard by old Marianna. The following day Lord Almane leaves "The Tryst," meets his fiancee in the vortex of London fashionable society and vainly strives to exorcise the spell the artless Cora has woven around him. But his old pleasures pall on him, he becomes dull and distrait, and not accustomed at any time to deny himself the gratification of any selfish whim, he once more seeks the Sinclairs. Arrived at the Tryst he finds the "Birds flown" and the closest investigation fails to give him a clue to their whereabouts.

The story has now arrived at the point where Lord Almane upon driving Lady Lucie to visit her friend Mrs. Colston, espies at one of the windows the well-remembered features of the lost Cora.

Mrs. Colston was a handsome, good-natured woman of five and forty, highly educated, but by no means thoroughbred, and perfectly well satisfied with herself and her belongings. If she really loved any creature, it was Lady Lucie, whom she had almost entire charge of from her childhood; but her easy good nature often prompted her to do kind things which made most of her friends and acquaintances regard her as a thoroughly kind-hearted woman.

"And you are feeling as well as looking quite well, my dear?" she said, as she sat with Lucie's hand in her's.

"Oh, yes! perfectly well," replied Lucie, laughingly. "I ought to have come to see you before this, but could not find time. However, Stanley indulged me to-day."

"And I am very grateful to his lordship," said Mrs. Colston, smiling. "It is a long time since I had the pleasure of seeing you both together—quite eight years ago."

"Is it really so long?" said Lord Almane, with a smile, which belied a sigh. "Lucie must have been a wee girlie then."

"Yes, and you were a young officer, very proud of your grand uniform," answered Mrs. Colston, laughing. "I remember perfectly that I wished then that I might live to see—what I hope I shall see before very long."

Lucie blushed at the significant words; and to relieve her embarrassment, asked a question which Lord Almane was anxiously expecting:

"Have you any one staying with you, Emma? I saw a strange face, and a very pretty one, at one of the windows,"

"Yes, a young friend who is staying with me during her brother's absence abroad. I will introduce her to you, my dear. She is a pretty creature."

So saying, she rang the bell, ordered some tea, and desired the servant—a footman in most startling livery—to ask Miss Sinclair to come down.

"She is not so much a friend of ours," she explained, turning to Lucie, when the man had disappeared; "but Mr. Colston's partner, Mr. Ferrier, is intimate with her brother, and I was so pleased to have her. He was afraid of Rome for

her at this season. In fact I think it hardly safe for anyone, but he was obliged to go on business, I believe."

Very impatiently, but with all outward calm, Lord Almane awaited Cora's entrance. Twice the door opened, but it was only a servant bringing afternoon tea on a massive silver salver, served in cups painted in the brightest and most vivid colors. But as the man was leaving the room, he stepped back, holding the door open, and Cora came in with a slow, gliding step and haughtily erect head. She was looking a little pale; and in her eyes Lord Almane saw some uneasiness, and a hardly defined expression of fear, but her answer to Lady Lucie's greeting was quite composed and graceful.

Then Mrs. Colston, with no small importance, was about to present his lordship, but he interposed.

"I have had the pleasure of meeting Miss Sinclair before," he said, holding out his hand, and taking Cora's unwilling little fingers. "Indeed, I owe her and her brother a large debt of gratitude for kindness received. Lucie," he added, turning to his *fiancee*. "You were wishing one day you could know Miss Sinclair, and thank her personally. I did not dare to hope that you would so soon have the opportunity."

"I am very glad, indeed, to have it," answered Lucie, simply. "Stanley has told me of all your goodness to him, Miss Sinclair, and I hoped that some day we should become friends."

Lucie had risen, and taken Cora's hand in hers, looking eagerly into her face. Both girls were about the same hight, but there the resemblance ended. Both in face and dress they presented a perfect contrast. Lady Lucie wore a complicated and be-furbelowed dress of blue silk, while Cora's simply-made soft gray robes fell gracefully around her, and hightened the beauty of a form which needed no embellishment.

She was silent for a moment; then, lifting her eyes, met the gentle blue orbs which looked into hers, and a smile, very sweet, but very sad, came to the sweet lips. It was enough answer for Lucie; she bent forward, and touched her lips to Cora's, and from that moment the girls were friends.

"Will you give us some tea, Cora?" said Mrs. Colston; and while the girl set about her graceful task, she resumed her chit-chat with Lady Lucie, and Lord Almane was at leisure to watch the graceful, deft little hands as they moved among the gay cups and saucers, and then he moved forward to take them from her hand as soon as filled.—[To be continued.

NEW POTATIES.

T. D. SULLIVAN.

I.

Welcome to our homes once more,
Fairest gift of bounteous Erin;
Joy comes in on every floor
Upon the date of your appearin'.
Och, the poor old spuds were gone;
Black and blue they turned completely;
Out of every ten, not one
Could mortal man make use of lately.
Welcome, food for young and old,
For rich and poor for lords and ladies,
White as milk, and bright as gold,
Bursting, laughing, New Potaties.

II.

Many fruits our island yields
Above the soil, likewise below it:
Gardens, orchards, parks and fields
Are full of sweets, and well I know it;
But go praise them all who will,
I'll maintain, for that I'm able,
'Taties, sound and clean, are still
The pride and glory of the table.
Welcome, food, for young and old,
For men and babes, for lords and ladies,
White as milk and bright as gold,
Sweet and wholesome New Potaties.

III.

I'll make bowld and free to say,
Despite the way some people go on,
Bits of bread and drops of tay
Are not the things for men to grow on:
Och, 'tis quite a sartin case,
There must be matchless sustentation
In the food that feeds the race
That's plainly batin' all creation.
That's the food for young and old,
For sick and hale, for lords and ladies,
White as milk and bright as gold,
Healthful, beautiful New Potaties.

IV.

Men there are of pampered wills
Who feast on viands strange and various—
Ah, but then come draughts and pills
To cure some ills both sharp and sarious;
Not a thing with them goes wrong
Who use the simple food of Erin;
Lives are theirs serene and long,
And virtue's bright beyond comparin'
Welcome, joy of young and old,
Of rich and poor, of lords and ladies,
White as milk and bright as gold,
Grand and glorious New Potaties.

[*Dublin Nation.*

WASHINGTON LETTER.

MARY GAY ROBINSON.

Washington, D. C., March 9.

Society now goes to Congress for its entertainment. The exquisite toilettes of the ladies for hops and levees have been sorrowfully laid by for the present, and street costumes are made the most of with the touch-up of white kid-gloves, white lace veils and dress hats. In the Senate or House-galleries on pleasant days—and nearly all days are fine now—are to be seen the most fashionable ladies, their cards sent in soon bring to their sides the legislators who are their special friends, and they enjoy wit and conversation quite as much as at the evening parties when dancing is the rage.

The galleries watch the game of legislation as if it were a game of chess, but only those who have once been in the melee or are now in it, can fully understand which way the wind blows or where the ship of State is heading to. In the mens' gallery the most august visitor yesterday was Eagle Plume with his young American interpreter. At the far-off door there entered the huge blanketed figure which was at once shown to a seat. Very soon executive session drove all visitors out, but the delay, to watch Eagle Plume, made obedience to the order, "Clear the galleries" slow. The Indian Chief was bare-headed, his long straight hair hung down on each side of his broad face and a small braid fell over behind. This face in expression was placid and blank as the windowless side of a house, for out of the eyes, the soul's windows, there looked forth the spirit of a great infant that had been led thousands of miles to see the face of the White Father and the white leaders of the mighty Yankee Nation that has been swallowing up the Indian for the last few hundred years.

Eagle Plume had but a few minutes to look on the Senate to-day. That look brought wonder to his face. No doubt the statesmen appeared as strange to him as if they had been inhabitants of the moon. Ladies stopped to admire the Chief's costume, which consisted of red woolen-plaid shirt and trowsers, immense blanket, strings of wampum, silver ear-rings with many pendants that almost touched the shoulders, and moccasins handsomely embroidered with bright-colored beads. There was the making of a distinguished man, brains enough but they were dormant, strength enough but unskilled, shut out by the little gate of speech from making any communication with the crowd about him.

Eagle Plume is a Chief of the Kaw nation, in the Indian Territory. Government built for this people brick cottages in good style, but our Indian friends took off doors and windows, sold them to the nearest White people, stabled their cattle and horses in the cottages and put up the wigwam for their own abode. Civilization and its customs do not go on as easily as one might imagine: our aboriginal friends take the vices before the virtues of civilization—our least valuable habits first.

A noted writer says, "Every one takes care that his neighbor shall not cheat him; a day comes when he begins to care that he does not cheat his neighbor, then all goes well." We have not quite reached that day with the Indian, therefore we have had trouble—neither have we reached it with the Chinese, or the strikers. It is not the thing to listen to loafers who insist upon it they starve while Chinamen earn the bread they wish to earn—rioters who hinder honest workers and promote strikes. The world is wide and broad and no race of people are pushed faster upon new and unwrought fields than there is need. The best opinion on the matter seems to be to modify the treaty with China. We must not permit slavery on our shores or allow the slave owners of China to work their slaves on our land. General O. O. Howard is now in the city, just arrived from the Pacific Coast. He believes in limited immigration and tells of converted Chinamen and converted Indians that there is plenty of hope for them if Christianity will only do its duty.

Among the speeches in Congress this week, Senator Beck of Kentucky made a long one advocating the doing away with the sinking fund. Senator Beck is a large man with curling black hair and gray beard; he is the most rapid talker in the Senate, but reading his speech made him a little less rapid. He is a Scotchman by birth and in the days of slavery was Superintendent of a Southern plantation; now with Senator McCreery he is Superintendent, in a certain sense, of the whole State of Kentucky.

Another Southern Senator, Matt. W. Ransom of North Carolina, served throughout the war in the Confederate Army and was promoted to be Major-General. He was almost shot to pieces in the war and now suffers from the effects of wounds and injuries. Whenever he speaks he gets so wrought up as almost to die; he is taken into the cloak room, rubbed down and a physician sent for, and slowly he recovers from the unusual excitement. Senator Gordon of Georgia carries a deep seam in his face where he was wounded, and it is said his wife was one of the most heroic women of the South, following her husband from battle-field to battle-field, refusing to obey orders to return, declaring, "naught but death shall part thee and me."

Congressman James H. Blount of Macon, Georgia, like most of the Southern members, is a fine speaker. He is more temperate, less impassioned than a good many, does not get carried away by too much excitement. He said he wished to see, in regard to Southern interests, the spirit of fair dealing—not of war—and his whole speech was to that intent. Mr. Blount is now on his third term in Congress.

The Senate adjourned from Thursday to Monday but the House has worked six days this week. If they wasted less time filibustering they might do their work in five days at longest, but when measures do not go to suit them three hundred legislators seem to find no other resource than that one party weary the other by delay and subterfuge, so that they cannot accomplish what they are striving for. The first experience in filibustering must take by surprise a dignified clergyman just graduated into the estate of legislator—we should think he would prefer to go back to the pulpit, where his authority seems undisputed.

Every Wednesday Vinnie Ream holds her receptions in the evening, conversation and music render the hours delightful; for she has the rare tact of making every guest feel perfectly at home. Colonel Boudinet, the educated Indian half-breed, with two other gentleman, sang finely, quite eclipsing several ladies who sang opera solos; the popular ear is much better pleased with simple ballads sung by rich voices with some soul behind them, than by all the vocal gymnastics that were ever performed. Vinnie Ream sang and played upon the harp, the special grace of which consisted in her easy unaffected manner: she is more sculptor than musician. Her reception rooms were draped with dark worsted curtains that give a room a warm look in winter and serve as a most favorable back-ground for statues and works of art. As we pass out, the door into the studio is open and we are invited to come and see her at her work. Vinnie Ream's statue of Lincoln is one of the ornaments of the Capitol.

The Roman Catholics use what is called the Douay Bible. Few know why it is so called. Accounts of the edition of the Douay Bible will be found in the General Introduction to the Sacred Scriptures, by Dr. Dixon, the Catholic Archbishop of Armagh, and in Dodd's Church History of England, vol. ii. p. 121. The New Testament was published at Rheims in 1582; the Old at Doual in 1609 and 1610. The New Testament was afterwards published in a smaller form at Antwerp. In 1750, Dr. Challoner's edition of the whole Bible, with the phraseology modernised, was published in London. This is the Douay Bible generally in use among English Catholics. This edition consequently is considered the standard. The original editions of both Old and New Testaments received the approbations of the Ecclesiastical authorities and theological doctors of the Universities of Doual and Rheims, which are prefixed to all the editions.

Reviews.

RECENT LITERATURE.

Letters of John Keats. New York: Scribner, Armstrong & Co.

Who killed John Keats?
"I," says the Quarterly,
So savage and Tartarly,
"'Twas one of my feats."

But not Lord Byron's satirical rebuke to the critics, Shelley's Elegy nor Lord Houghton's Memoirs have, it seems, secured for the poet, after life's fitful fever, that immunity from discord and trouble that was denied him during his life. Now he is exhumed for a post mortem exhibition, and the editor of this volume lays bare with ruthless scalpel the heart of hearts of the Poet to the gaze of an indifferent throng, who can have no possible interest in the matter either for instruction or entertainment. Even one impelled by a morbid curiosity to learn wherein differs the love letters of a dead poet and —— his own, perhaps, shrinks with an instinctive consciousness of treading irreverently upon consecrated ground. He has before him the most sacred and tenderest emotions, the most delicate sentiments, intensified and refined by the essential elements of a poet's nature, given expression to but for one heart out of all the world—the only one of all the world capable of comprehending and appreciating his confidences, his hopes, his fears, his egotisms.

In the introduction we are told there were some facts considered too sacred for revelation. We are at a loss to conceive of what nature these facts could be. Had all the letters been suppressed, the introduction could have been published in better taste.

Bound in Honor. By J. T. Trowbridge. [Cloth, $1.00; paper, 50 cts.] Boston: Lee & Shepard.

This is one of the author's most fascinating tales for boys. It is a story of a youth with many manly and noble qualities and generous impulses who, in an evil moment, allows himself, through the influence of bad company, to become implicated in a disgraceful "scrape." A false sense of honor entails upon him many others—as is frequently the case—and he becomes a fugitive from home and friends. His adventures and experiences are entertaining and often amusing, until the prodigal returns to find his fault condoned and forgiven, and resolves to reap a rich harvest of experience from that early crop of wild oats, and to sow no more. Callow youth is naturally prone to tread the primrose path, and is more susceptible to good or bad influences than later, when contact with the world has taught him discrimination. Throw the influence of bad company into the scale with youth and exuberant spirits and health, and right and morality are apt to kick the beam, however strong in honesty and principle the individual may be.

Good Old Times, one of the same series, and uniform in binding and price, is by Rev. Elijah Kellogg, and is a stirring narrative of the struggles of the early settlers in Maine, and their adventures with Indians—their hardships and privations, and the shifts they were put to preserve their scalps intact.

Hector Servadac. By Jules Verne. [Cloth, gilt; $3.00. Illustrated.] New York: Scribner, Armstrong & Co.

The Munchausen-like audacity of the author is pronounced in this story. The reader is carried with Capt. Servadac, a young French officer on topographical duty in Algiers, near the Mediterranean coast, his orderly, a Russian count, and their friends, through a series of varied and marvelous adventures, inaugurated by a convulsion of nature which, with its consequences, none but the brain of Jules Verne could have conceived or, with any degree of plausibility, described. Throughout, so artfully—not to say scientifically is the line of demarkation concealed between the probable and the improbable—or rather between the possible and the impossible, for the author's genius spurns the limits of the merely possible—that the reader's interest and wonder go unquestioning with the characters unflaggingly to the end; while the quaint and inimitable humor which crops out, ever and anon, adds an unspeakable zest to their adventures.

We forbear giving an outline of the story, as it is replete with surprises, which to anticipate, might detract somewhat from the reader's interest, but those whose privilege it has been to read "Ten Thousand Leagues under the Sea," "A Journey from the Earth to the Moon," etc., will readily understand the characteristics of this work, and be prepared to find it equally wonderful in conception and execution.

The Devoted Bride; or, Faith and Fidelity. By St. George Tucker of Virginia. [Cloth; $1.00.] Philadelphia: T. B. Peterson & Bros.

If this title is suggestive of the Dime Novel or Yellow Back Literature, the reader will be agreeably disappointed in the work. It is a charming story, charmingly told, of the "good old colonial times." The scene is laid in Virginia, and Mr. Tucker, himself a Virginian, takes an evident pride in the characters and incidents he depicts. It is a love story, of course, the interest centering in the fortunes of the various characters during the famous Bacon insurrection of 1676. The trials of the heroine win at once our affection and sympathy for her, while we follow the hero through those stirring scenes with sustained interest to the end.

In the chapters describing the Ball at the palace of the Governor at Jamestown, at which we are introduced to the Ludwells, Berkeleys, Temples, and others of the old Cavalier stock, whose names have become identified with the early history of the Colonies, we have depicted not only the homely manners and customs of the times and country, but the happily imperfect efforts of the loyal gentlemen to reflect, in the yet unformed society of the Old Dominion, the follies and vices which disgraced the Court of Charles after the Restoration.

Home Interiors. By G. C. Gardner. With Illustrations. Boston: Jas. R. Osgood & Co.

There is no lack of books on "Interior Decoration," and it may be that some will be disposed to regard this unpretentious work as a superfluity; but our word for it, the book is a valuable contribution to the literature of Art, as applied to the household. Most books of this class address themselves almost wholly to people of means, and they of the limited income can only admire the exquisite illustrations, with no hope of ever beautifying their home in a like artistic manner. Poor folks can gather many useful suggestions from Mr. Gardner's book. In his preface he says: "I have not attempted, in these pages, to indicate a royal road to the summit of fine art in the finishing and decorating of houses, but rather to plant simple stepping-stones for those who are likely to be left somewhat behind in the headlong race for greater refinement of taste and a higher degree of æsthetic culture."

A glance at the title of the chapters will show that Mr. Gardner touches on all points which can possibly interest householders. Paper-hangings, walls, floors, blinds, wood vs. paint, wall-painting, doors and screens, casings, caps, window seats, stairways, tiles, fire-places, are each treated at length, and the final chapter is devoted to ways and means of renovating old houses, various decorations and furnishing. The author's style is chatty, and those not posted need have no fear of being confused by the frequent recurrence of art terms with which they are not familiar.

Woman's Words. An original Review of what the Sex is Doing,—published at Philadelphia, by Mrs. Juan Lewis,—deserves the generous support of the women of America. The March number contains a biographical sketch of Mrs. Clara J. Moore, the eminent author, with portrait, beside contributions from Margaret B. Harvey, Clara J. Moore, Mrs. E. C. Lewis, Helen M. Cooke, and others. The first installment of the new serial, Link by Link, The Story of a Strange Inheritance, by Col. Juan Lewis, also appears in this number.

MAGAZINES.

The Domestic Monthly and magazine contains illustrated articles on Seasonable Fabrics, Trimmings, Hosiery, Millinery, Coiffures, *Lingerie*, Fancy and Needle Work, etc. An abundance of fresh and reliable information concerning every department of fashion is provided, and the wants of ladies are judiciously consulted. They will find in it every thing they may need for guidance and instruction in supplying their needs at this season. The colored plate represents two views of a very stylish street costume.

Among the literary contents, we find another installment of Mary Cecil Hay's charming serial, "Her Three Lovers;" several entertaining sketches, entitled "Kitty's Count," and "A Story of the Transvaal;" poems by Sara Jewett, "Dorr," and others, and No. 7 in Eben E. Rexford's interesting series of "Flower Talks." The ever-enjoya-

ble Miscellany, sprightly Small Talk, instructive Household Department, elaborate reviews of new books, and not a little to the rare interest of the number, while the "Mosaics-Man" is peculiarly happy.

THE ATLANTIC for April opens with the fifth part of the romance "Detmold" by W. H. BISHOP. Of the prose contributions, a review of the works of OMAR KHAYYAM, entitled "A Persian Poet," will be found entertaining. The twelfth paper of Crude and Curious Inventions at the Centennial Exhibition treats of shoes, combs, ornaments, etc., at the Chinese, Indian, New Zealand and other exhibits, for the benefit of those who had not the good fortune to see them. "Lincoln's Triumph in 1864" a contribution from GIDEON WELLES, gives us interesting information concerning that dark period of the nation's history. A critical review of "Avis," Miss PHELPS' latest story, and of one or two other recent publications follows. RICHARD GRANT WHITE furnishes a paper on "Americanisms." "The Russians on the Bosphorus" is a timely historical sketch of the endless struggles for territory between the Slavonic races and the Turk from an early period.

"The Lobby, its Cause and Cure," is discussed by ARTHUR SEDGWICK. CHARLES DUDLEY WARNER is represented by the fourth paper of "The Adirondacks Verified." The subject "A-Hunting of the Deer" is treated in his inimitable style and from his humane point of view. Other contributions and some gems of original poetry with these make this number a peculiarly good one. Altogether the Atlantic for April will be found made up of unusually interesting matter.

ST. NICHOLAS for April is replete with good things. "Under the Lilacs" sustains its interest, while the short papers oscillate from lively to severe in unison with the temper of the month. Altogether a most attractive number.

Of the eighty cuts in Scribner for April, twenty-three are devoted to the illustration of life and sport "Among the Thousand Islands." The text of all the original sketches, and most of the wood-drawings are by Howard Pyle, George B. Prescott writes of "The Telephone and the Phonograph." The revival of "Macrame Lace" calls forth a little paper by Clarence Cook. This month's contribution to the "Occasional Papers on American Sports" is a personal narrative of "Deer-hunting on the Au Sable (Mich)," by W. M. Laffan.

"Two Saints of the Foot-hills," by Bret Harte, is said to be in his first and best manner. For people interested in the present Queen of Spain, or in convent school life in Paris, there are letters from an American schoolmate of Mercedes, entitled "A Queen at School." In her second paper in advocacy of "Twenty-six Hours a Day," Mary Blake discusses the reasons why women should cultivate habits of reading and study, and the difficulties to be overcome. C. B. Warring discusses the relations of the "Mosaic Creation and Modern Science," maintaining that there is no important discrepancy between the two. The poetry is by Maurice F. Egan, Annie R. Annan, Mary Alnge De Vere and others. "Bric-a-Brac" is given over to a piece of Irish dialect, which is already in demand for public readings—"Biddy McGlunis at the Photographer's." This number completes Volume XV. of the magazine, which is now half way through its eigth year.

HARPER'S MAGAZINE for April is an exceptionally entertaining number, and, considering the usual standard of excellence maintained by this magazine, that is high praise. Among other interesting articles may be mentioned "The American Clyde:" The Normal College of New York City (with portraits of some lovely girls); The Electric Time System; In the Heart of the Alps; The City of the Winds. All the foregoing are fully illustrated. Aunt Kerammick's Art Studies is the narrative of a lady's laughable attempts to keep abreast of the extreme and latest development in Art. The author of "Debby Ann" (a short story) does the cause of woman's advancement good service by pointing out that invalidism is not the normal condition of woman, but that it is the result of wrong dressing and wrong living. "The Perfect Canoe," with 12 illustrations, will probably attract the attention of "the boys." We quote an item or two from the article, with the hope of interesting the boys in the subject:

"Canoeing contains all the delights of yachting, and in addition many other delights of which the yachtsman knows nothing. It is the active principle of yachting set free from costly suppers, tyrannical sailing-masters, and the endless war of keel and center-board. The canoeist cruises not only on the Sound and the sand-girt bays of the Atlantic coast, but on the wild and rapid rivers of the remotest wilderness. To have lived and loved was considered by a German poet to be a very satisfactory thing, but the man who can say 'I have lived and paddled,' has alone known perfect happiness."

SUNDAY AFTERNOON.—A new "Magazine for the Household" is quite a new departure in Sunday reading. The contents comprise complete stories; serials, poems, and general articles, among which are political discussions, etc., with a more or less religious and scientific flavor, judging by the names signed to the articles. Its staff of contributors is such as to assure strong articles. We note among the writers HABBERTON, SUSAN COOLIDGE, ELIZABETH E. PHELPS, SARAH O. JEWETT, J. W. DAWSON, EDWARD ABBOTT, etc. Its price ($3.00 per year) is not too much for the class of matter published.

WERE I, O God! in churchless lands remaining,
Far from all voice of teachers or divines,
My soul would find in flowers of thy ordaining
Priests, sermons, shrines.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE FLOWER OF THE FIELD.

THERE grew a poppy in a plot of corn,
And three men went thereby, before the heat
Had drawn from out the field beneath their feet
The freshness of the dewdrops and the morn.
Then did the lovelines of that lone flower
Strike in upon the sense of all the three;
And one, a youth, spake in that thoughtful hour,
And said, "Methinks this poppy well might be
Some rich dark southern beauty, sleepy-sweet,
Girt with a bending ring of gracious men."
The second, one that was of riper years,
Made answer, "Nay, a blood-red banner, torn
By steel of strife, and blown by winds of war,
And guarded round by ranks of shining spears."
Then spake to them the third, whose head was hoar,—
"Death comes to love and war; what aid they then?
The flower has one speech only unto me,
That man is as the grass, and all his pride
Of war, and beauty of love shall suddenly
Fade like the flowers in the sad autumn-tide;
The wind sweeps over them, and they are gone!"
And thereupon those three went silent on,
And the low sunlight lay uncrossed by shade,
Until a maiden came, who hummed a song
For very gladness, as she tripped along,
The freshness of the morning in her eyes;
Nor was she moved as they, in any wise,
To any thought of that which makes afraid,
But stopped and plucked the poppy from the ground,
And set it on the whiteness of her dress,
And so passed on, with added loveliness,
No hidden inner meaning had she found,
Nor thought of strife or death to make her sad,—
The sole sweet beauty was enough for her;
She took God's thought, the poppy, and was glad,—
So was she nature's best interpreter.

[*Spectator.*

LETTERS FROM A COUNTRY GIRL.

MARGARET B. HARVEY.

No. 3.

IN my first letter, I said that the home began to improve; in the second, that the neighbors showed interest. Now I want to say *how* I think it will improve and in *what* they will become interested. So I shall talk a little about ornamentation. Here I am somewhat at a loss. So much has been written on this subject, so many good suggestions have been given regarding home decoration, that I fear I may be unable to suggest anything very new or valuable. But I shall simply tell what *we* did when we moved into a house which had been long neglected, and which we wanted to make as pleasant as possible. First of all, we said we must consider the place, as a *whole*, so we must think of improving it all, inside and outside. Let us see what we had to begin with. And we found we had just what *you* have, if you are the woman whom I supposed in the first letter to have made her house warm and bright and clean, and banished her gaudy ornaments and put fresh, light paper on her walls, and clean, white curtains to her windows. We had a good solid foundation upon which to rear whatever of beauty we could.

We surveyed our bare parlor. There was a pretty paper, of a soft, gray tint, with a graceful little vine, the whole lighting up to a delicate pink-shell, or a pale gold in the sunlight. Besides this, nothing noticeable, but a marble mantel and clean paint. The old carpet would not fit at all, so we had to buy new.

Just now a great deal is being said about correct and artistic ways of decorating houses after the fashion of EASTLAKE, and CLARENCE COOK, and the Misses GARRETT. We are told that the floors must be polished walnut, the carpets rich, the curtains heavy; that ceiling and walls must have their tints, and friezes and dadoes. All very well for those who can afford this style,—but as a practical woman, it is my humble opinion that if the generality of people, especially in the country, wait until they can have the approved appliances before beginning to decorate their homes, they are doomed to spend a long, weary interval of waiting amid dreary ugliness. Therefore, in giving my suggestions, I don't pretend to advance them as authority. I merely state what can be and has been done, with satisfactory results as to comfort and beauty at least, though the extreme of high art be not attained.

When we chose our carpets, we had regard to our surroundings, and our purses. For the small, simply-furnished parlor of a country-house, we did not think anything could be better than a good, small-figured, light-colored ingrain. Small-figured, to correspond with the room, and not give it the appearance of being crowded with large objects. Light-colored, because a light carpet invariably gives a cheerful air and a clear tone, and keeps its beauty longer than any other. Strange as it may sound, a dark carpet shows every spot, every thread, while it is almost impossible to make a light carpet dirty. (Ours contained a great deal of white.) And with our delicate wall-paper and carpet, simple as they were, our room appeared almost pure enough for a fairy-bower.

To correspond best with this style, light furniture is most appropriate. The dark and heavy is always out of place in the country, where all around is light, airy, and graceful. In thought of this, we purchased small, light, compact chairs, with cane seats; and it was because we knew that it is always the best economy to pay at once a little more for a good article that will last, that we were careful to select a set having oiled walnut frames, and fine, white canes, and avoid the stained, enamelled frames and open, yellow canes. This is something worth knowing. The difference may not be noticeable by the ordinary observer, but once known it is never forgotten.

We had our sofa, and organ, and marble-topped table. So the rest of our energies devoted to the parlor were spent in the little artistic touches. And on these, after all, depend the character of a room, exactly as a lady's tasteful appearance depends more on her *lingerie* ribbons, and jewels, than on her solid dress. But as we had little to spend, we knew that our ornamentation must be very simple.

First, as to the pictures: We decided that the old chromos should *not* go into the new parlor, which we girls determined to have after our own hearts. Only our own drawings, we said, should. So, in the recess, on the left of the chimney and mantel we hung "The Wild Boar," a large crayon piece, representing this animal being torn by five great dogs; on the right, "Comin' thro' the Rye," of the same size. Over the mantel-piece, a picture of PAPA'S head. On the other side of the room, opposite the chimney and over the sofa, were, highest up, the thorn-crowned head of CORREGIO'S "Ecce Homo," while on a line below, forming a triangle with it, a fruit and a flower-piece in pencil. In front, between the windows were four little pencil sketches. On each end of the mantel, leaning against the wall, two in water colors; one, a sprig of rosebuds, the other, a bunch of grasses and daisies. Twelve in all;—and besides these, our "sweet girl's graduate's" diploma hung over the organ which stood against the back wall. They were all in simple walnut frames.

Now, I have a chance to say to every woman who can draw, that you need never be at a loss to decorate your home tastefully, for drawing materials are cheap; the work and skill give the picture its value. To every one who cannot I would say, learn how right-away. If you cannot afford instruction, teach yourself a little by taking a simple landscape and copying it, line by line, shade by shade, and continue to do so until you can draw at least some little flowers and landscapes. Carefully executed drawings neatly framed, always give a room an air of refinement. Engravings, heliotypes, and photographs of celebrated paintings are beautiful. But above all things, avoid gayly-colored lithographs in staring gilt frames. First, because they are usually hideous. Second, the money might be better employed. Third, even were they all they pretended to be they would not correspond with your simple appointments. Of chromos—*real* chromos, I shall tell you more another time.

Our parlor now looked quite pretty, but not yet was it finished. On the crowning part we could afford to lay out a large proportion of our little savings, and we did. We bought eight, pretty carved brackets, each pair unlike; two pair for the corners, two for the sides. In each corner of the two recesses on each side of the chimney, we hung one; while of the others, the two large ones were placed low down on each side of the diploma; the two small were separated, one being in the base of the triangle, formed by the three pictures over the sofa, the other in the center of the rhomboid made by the four sketches between the windows. We stood in the center of the mantel, between the water-colors, an exquisite bust of Apollo, in Parian marble. On the corner brackets in the right recess, farthest from the windows, two smaller busts of MILTON and SCHILLER. On those nearest the windows, two pots of Kenilworth Ivy, the delicate green vines trailing almost to the floor. The low brackets on each side the diploma and over the organ, held two tapering glass vases inwrought with ferns, in which at one time we kept cut flowers; at another, some slips of Tradescantia which we trained to twine up around the diploma. Under the "Ecce Homo," upon one of the little brackets we had a large fan made of pressed ferns and sumac; and on the other one between the windows, a pretty rose bud vase, containing a tiny bouquet in wax. Finally, on the table which stood between the two windows we arranged our few books; on the organ, our music; embroidered a bright cover for the organ-stool, laid a soft rug before the sofa, made for its center a delicate spatter-work tidy, and wreathed around the picture cords some drooping, gray, Florida moss. The room looked simply perfect.

Before I close, I would like to express what I have often thought. Why is it that so many people spend so much and have nothing after all? Beauty does not necessarily cost much. I have marveled again and again why we do not oftener see these exquisite accessories of the beautiful among the generality of people. Once procured, they never wear out. "A thing of beauty is a joy forever." It must be because the persons in question have not taken notice. But if they will spend an hour in an art store, they will begin to understand. I will tell what the most expensive of my pretty things cost: The brackets averaged fifty cents per pair; vases one dollar per pair; the wax-work, a dollar and a-half for the little spray,—two half-blown roses nestling in leaves. The busts, one dollar and a-half a-piece for Milton, and Schiller, three dollars for the Apollo. I have seen lovely busts of Bacchus, Clytie, Lesbie, Beatrice and Diana, at prices ranging from two to four dollars.

We have lately read a great deal about purchasing plaster casts of famous statues to adorn our homes—but to me this is only another kind of sham. I would say that if you wish to beautify, get a tiny, choice bit in Parian; if to study, a fine photograph of an original; this, too, will be an ornament. Then what you have will be true to itself. This is not all we did, as I shall tell you next time.

A SHORT CHAPTER ON COUNTRY VISITING.

MRS. A. E. STORY.

GENERALLY speaking, when a country woman sees her way clear for an afternoon's release from the labors and cares which are peculiarly hers, the first thing she asks herself is: "Whom shall I visit to-day?"

Now, these interchanges of visits—these "tea drinks," as we hear a grandmother call them—are not to be condemned because some one, having weighed them in the balance, has found them wanting. They ought rather to be encouraged as affording at times the only possible escape valve for the low spirits engendered by the turmoil and weariness of every day life.

It is only the tittle-tattle, the soul-narrowing gossip over other people's affairs that is to be condemned. True, some women cannot talk at all unless it be to pick their neighbor's characters to pieces bit by bit, or rattle on in a way nonsensical enough to shame a magpie; and why really intelligent and in every way superior women should feel called upon to exchange visits with such, is a problem for the strong-minded to solve. They derive no benefit themselves from the intercourse, and they can impart none, for no lever can be brought to bear on these women's minds potent enough to lift them out of the narrow groove in which they delight to run. Anything sensible thrown in as an idea to turn the current of the talk of these rattle-brains but serves as oil to make their tongues run the faster; and the more they talk the less they say, if that is an allowable expression.

But why *must* every woman living in a country neighborhood feel bound to visit every other woman living there, and that with clock-work regularity. No skipping one here and another there for her own pleasure or convenience. And why *must* she, when her own turn to "have company" comes, make such elaborate preparations for the supper, as though she expected her friends had had nothing to eat for a week. If they come to her house merely to be fed, then, perhaps, this superabundance of food is permissible; if not, it is needless, to say the least. The average woman has a good deal to learn in this respect.

In many homes, the announcement that company is coming to tea is enough to set everything, from one end of the house to the other, in a state of commotion. Carpets must be swept that are as innocent of dirt as a new glove, furniture must be dusted where no dust is visible, stoops must be scrubbed, and the kitchen floor mopped, for Mrs. So-and-So always *will* go into the kitchen whether she is wanted there or not. Cakes and tarts, and cookies, and doughnuts, and what not must be made, and all this, perhaps for a person for whom you in reality care less than nothing, between whom and yourself there exists not the least degree of sympathy, and whose tastes and instincts are precisely what yours are not.

Life is too short and its necessities too stern and real to be frittered away in idle pursuits or profitless companionship.

Those women who are bringing up sons and daughters should, most of all, give these meddlesome nobodies a wide berth.

Children are apt to take pattern in speech and manners, and even habit of thought, from those with whom they are brought in familiar contact, and your gossips are always ignorant and superstitious in a greater or less degree, and brew mischief as naturally as storms are brewed in air.

They are not always idle ne'er-do-wells: more's the pity for humanity; they would be shunned more if they were, for idleness is to the thrifty what vice is to the virtuous, something to be avoided and guarded against as men avoid and guard against a pestilence.

You may be called "proud" and "stuck-up" if you break from the association of these people; they may even vent their dudgeon by saying worse things of you. But what of it? It will be but as the "crackling of thorns under foot," and you will gain more than you can possibly lose.

We admire the independence of spirit of a certain old lady, who said: "I take it as a high compliment to be called proud. When people mean by it that I am particular in my choice of society. I *am* proud."

THE BEWITCHED DOOR-YARDS.

J, E. M. C.

I no not know how the fairies came to be so affronted with the good house-wives of Ghoram, but they played them a very funny trick one bright May morning, a good while ago, when fairies were suffered to be more energetic than they are now-a-days.

The spring was forward that year and the good ladies had their front yards tidied up in the neatest manner. The flower beds were as neat as could be, and spikes of Pinks, and gay little Polyanthus Blossoms were beginning to peep, while the Blue Flags and Jonquils had long ago hung out their banners to the spring breeze. Each fence was whitewashed, and the gravel path swept up clean, and boilers full of boiling suds had been poured over it to kill off every weed and grass spire that might show its head among the stones. Most folks had finished their house cleaning and were settling down to take their comfort.

Yet there was something about most of the premises that did not suit the fairies. So what do you think they did one moon-shiny night when the village was wrapped in slumber? They turned the yards "hind side before." Every house-mother saw in the morning her back-yard in front of the house, and when she opened her kitchen door to throw out the dish-water, she plumped it into a posy-bed! Oh what consternation in the town! An earth-quake could not have shaken them up more! But they had no time to study over the problem. There was work to be done and that in a hurry.

"Run Mary Jane and scratch up those old tins and scraps of crockery out front, before any body goes by, and Sam make haste to slick up your wood-pile and set things a little more to rights. Look at those fence-corners! What a collection of old duds they do hold! Father, never mind the cattle, they can wait, but hurry out with your rakes, and clean up the yard. What in the world will folks think? If I had time I should wonder how it happened, but I have'nt. I remember hearing my old grandfather say that he did'nt believe the world turned around because, if it did, his wood-pile would sometimes be in front of the house. I guess the world has turned around in the night."

If there ain't an old hoop-skirt on that briar-bush just before the door, and the hens have got in to the flower beds. Dear, dear, run children every one of you and see what you can do in less than no time."

And that was the way it was all over town. Nobody liked the idea of having the old order of things reversed, however well kept they had thought the premises. Somehow things looked very different when brought to the front, for the inspection of all passers-by.

By night things were measurably reduced to a system, but the house-wives had had a busy time as the fairies the night before. The women-folks took a long breath of relief as they settled back in their straight backed rockers, and now "the wonder grew." That the town was bewitched was a pretty general belief, and some apprehension existed as to what the morning might have in store for them.

Nothing very disastrous did happen, and every body was well content when they found things in the morning returned to their former order. The world had turned around again. But their back-yards had not had such a clearing up since the time that the houses were built.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

PITHS.

— Butter-milk is drunk by many dyspeptics.

— Use carbolic acid and water to purify sinks, drains, etc.

— Make a paste of soft soap and emery for polishing steel.

— Dip candle wicks into spirits of turpentine and then dry before using.

— Old paint pails and cans may be thoroughly cleaned with strong, hot lye.

— When washing cambries, do not allow soap to come in contact with the fabric.

— Ink stains on silver can be removed by rubbing with a paste of chloride of lime and water.

— A small quantity of turpentine added to stove blacking will make the stove easier to polish.

— To keep stoves from rusting during the summer: rub with kerosene and wrap well in papers.

— A bottle of flaxseed oil, chalk and vinegar mixed to the consistency of cream, should be kept in every house for burns, scalds, etc.

— Housewives, provide yourselves with a bottle of ammonia and a package of borax before commencing your semi-annual renovations.

— A few drops of glycerine in a bottle of mucilage will cause the mucilage to adhere to glass when used upon labels.

— Quick-silver beaten up with the white of an egg and applied with a feather to every crack and crevice of a bedstead, is the very best bug preventive.

DOMESTIC RECIPES.

Fried Lettuce.

Chop lettuce very fine and, if liked, the tops of two or three young onions; add two well-beaten eggs and a little salt; put a piece of butter the size of an egg into a frying-pan and when melted pour in the mixture; turn when of a light brown and serve with or without vinegar.

Asparagus.

Wash and scrape very clean the white part of the stalks of asparagus and throw them into cold water; tie into bundles; cut the root ends even and tie the bundles in a piece of muslin to preserve the tops; fill a wide sauce-pan with water and when it boils put in the asparagus with a spoonful of salt and boil for about twenty minutes—longer if the asparagus be old; toast some thin slices of light bread nicely on both sides, butter, cut into squares and place upon a platter; take up the asparagus and lay upon the toast. Serve with melted butter in a tureen.

Strong Beef Tea.

Cut up two or three pounds of lean beef into square dice and put into a jar; cover over and stand in the oven for three or four hours. This rich stock can be mixed with hot water to the strength required. ECONOMY.

Bath, N. Y.

Ginger Bread.

One pint of molasses; one cup of sugar; one cup of butter; four eggs; six cups of flour; one pint of butter-milk; two tablespoonfuls of ginger; one tablespoonful of cinnamon; two tablespoonfuls of soda.

Jelly Cake

Two eggs; one cup of sugar; butter the size of a walnut; two-thirds of a cup of butter-milk; and one half teaspoonful of soda; three cups of flour; flavor to taste. Bake in layers.

Cream for Cake.

One cup of sweet milk; put one half on to boil, thicken the other half with a beaten egg and a little flour and pour into the milk on the stove, stirring constantly; let it boil up, then remove from the fire, sweeten and flavor to taste.

Sponge Cake.

One cup of sugar; three eggs; one cup of flour; one half teaspoonful of soda dissolved in two tablespoonfuls of cream-of-tartar.

Ohio. FARMER'S WIFE.

Rice and Cheese.

Boil one teacupful of rice until about tender and dry, careful to preserve the grains whole. Slice some cheese very thickly and into a pudding pan put: first, a layer of rice seasoned with pepper, salt and a very little butter; then cover the rice with a layer of the cheese; again rice and cheese and so on until the pan is full, the cheese being the last layer. Over this pour a pint of milk and bake in a good oven one-half hour. This dish we prefer to macaroni. E. M.

QUERRIES ANSWERED.

As the fly season approaches, I am tempted to ask you for a recipe for home-made fly poison. I find purchasing fly paper from our grocer not only expensive but at times the paper is utterly worthless. ECONOMY.

Bath, N. Y.

ANS.—In reply I give you the proportions of quassia, molasses and water which we have used in our family with satisfactory results: Steep one-fourth ounce of quassia chips, procured at any druggist's, in one pint of water; when the stength is out of the chips, strain, cool and add two or three spoonfuls of molasses. Flies drink this eagerly and are soon destroyed. It may be necessary to allow more quassia to a pint of water according to its strength; of this, however, you must be the judge.

Will you please tell me how to make baking powder for buscuit, cake, etc?

MRS. CLAYTON.

ANS.—Powder and thoroughly dry separately three-quarters of a pound of *pure* bicarbonate of soda; one-half of a pound of tartaric acid and three-quarters of a pound of corn-starch; pass through a sieve several times and *press* into tin boxes which should be covered tightly to preserve the powder from moisture and air. These ingredients had better be purchased at a druggist's as the success of the powder depends upon the purity of the soda and tartaric acid.

WHAT is celery vinegar and how is it made?

A. S.

ANS.—Celery vinegar is simply vinegar to which *bruised* celery seeds have been added—proportions, three-quarters of an ounce to a quart of vinegar.

Hygienic Information.

TYPHOID PNEUMONIA—CLOASMA.

C. J. S., asks Dr. GOODENOUGH to enlighten him with regard (1,) to typhoid pneumonia, (2), also to give his opinion concerning the cause and possible cure of cloasma.

ANS.—There is no form of disease with which pneumonia may not be associated, especially when the powers of resistance have been enfeebled by the results of previous illness; and among these complications, what is called typhoid, asthenic, adynamic, or nervous pneumonia is by no means uncommon. What definitely constitutes this malady has not as yet been unanimously decided; pneumonic affections as to which some physicians give other names, are classed by others under this head. One form is a complication with typhoid fever, when it is either of a mild or malignant type. In the former case, it ordinarily begins suddenly with a strong rigor, the pneumonic expectoration begins early, and the infiltration can be detected by physical examination; in the latter, its access is slow, the sputa characteristic of pneumonia are often absent, or instead of their usual bright red or rusty-brown color, they are of of a dirty-brown. Early in this disease the nervous symptoms become so prominent that it is sometimes mistaken for typhus or meningitis. Lobular pneumonia, a frequent complication or sequel of typhoid fever, is sometimes called typhoid pneumonia. It often comes on at the hight of the disease when it only shows itself, as a rule, by an increase of fever, sometimes with rigors, but without an increase of cough or pain. It also frequently supervenes during convalescence in which case it is likely to follow the ordinary course of croupous pneumonia.

What is generally held to be genuine typhoid pneumonia occurs in persons who, from some cause or other, are in a weakened condition. Hunger, abuse of alcohol, previous or still existing disease, excessive bodily or mental exertion, advanced age and very frequently bad hygienic conditions, are the most common causes. There are a few medical men who say they can detect idiopathic features in this disease, which constitute it a distinct ailment; but there is little or no doubt but that the difference between it and the ordinary form of pneumonia is quantative not qualative, in degree not in kind.

For account of pneumonia see next issue.

(2.) Cloasma is a cutaneous affection marked by one or more broad, irregular-shaped patches of a yellow or yellowish-brown color, occurring most frequently on the front of the neck, breast, abdomen, and groin. The forehead, eyelids, cheeks, and upper lip are also sometimes affected, which then take on a dark-brown color. In women, in addition to the causes that produce it in man, it is often associated with disorders peculiar to their sex. Among males it frequently happens after long-continued malarial diseases, and also in affections generating a bad habit of the blood. Long continued action of the sun's rays, especially in a moist atmosphere, protracted labor during the summer hoats in tropical climates or even in our own; many cutaneous affections as well as disorders resulting from vicious practices, also cause a pigmentary deposit, while it sometimes is merely the result of scratchings. In many cases sulphur applied externally in any form, will speedily remove the discoloration, and should an ordinary application fail, its use in baths or urmigation is likely to prove more efficacious. The removal of the pigment is nearly always readily accomplished by any means that cause a superficial inflammation of the skin and the desquamation of the epidermis. Cover the affected portion of the skin with a piece of linen, accurately fitted and kept moist for three hours with a solution of corrosive sublimate, (five grains to an ounce of water); keep the edge of the cloth constantly dried, otherwise the solution will collect and destroy too deeply. A safer remedy, however, in ordinary hands can be found in repeated applications of iodine or iodized glycerine.

News of the Week.

NEWS OF THE WEEK.

THE remark made last week with regard to the lack of general interest in domestic and foreign news, might be justly repeated this week. At home, Anderson, member of the Louisiana Returning Board lately convicted of forgery in connection with the Presidential election, has been released by the Supreme Court of that State, on the ground that his offence did not amount to forgery under the law. It is said Gov. Nicholls is much relieved by this decision, as he had promised Hayes and the "visiting statesmen" to pardon the prisoner, and would have incurred much odium from extreme Democrats by doing so. The trials of Wells, etc., will probably collapse owing to this issue to that of Anderson. Secretary Sherman on Tuesday the 19th, made a powerful argument before the Senate Finance Committee in favor of early resumption of specie payment as the present law ordains. It is said here his representations were so strong that hostile action is hardly probable. The largest dry goods house in this city has already resumed, paying out, in change, indifferently gold, silver or greenbacks. It is highly probable that the charge of the Indians will be transferred from the Interior to the War Department. Officers of the army may be a trifle rough with the red-skins, but the rankest army-hater has never accused them of trickery or dishonesty in their dealings with them. Great preparations are being made in anticipation of an extensive Indian war when the weather gets milder. Sitting Bull and his braves are expected to take a hand. At moderate calculation the Indians likely to be on the war-trail will outnumber our troops two to one. The Committee on Railroads report favorably on a bill for the construction of a freight railroad connecting the Mississippi Valley with Atlantic tide-water, and so greatly cheapening transportation charges, an end devoutly to be wished for. On the 18th, St. Patrick's Day was celebrated by Irish societies throughout the country, and in Montreal, a visit and harangue of the pardoned Irish convict and recent bankrupt, O'Donovan Rossa, led to a fierce conflict between the Catholic and Protestant Irish, or Orangemen of that town, resulting in several *murders* and many severe injuries. Pity that immigrants to whom this country gives the food, shelter, and protection denied them at home, cannot leave their paltry bigotries and partisan animosities behind them! Polk, doorkeeper of the House of Representatives, has been dismissed, merely because he bled the national purse by appointing unnecessary assistants, etc., to repay the Congressmen whose votes elected him! Contrary to the old saying, "A mild winter, a fat churchyard," during the past winter the health of this city was very exceptionally good. The present cold snap seems pretty general throughout the North, and news just from Europe show it has been equally severe over there. Three Molly Maguires to be hung to-day at Bloomsburg, Pa.

Across the Atlantic diplomats are still exchanging views, and busy writing and telegraphing; but all the while soldiers are sharpening their swords and getting their powder ready. Indeed the chances seem to be growing stronger that England and Russia will soon be at loggerheads. The published text of the treaty fully confirms the correctness of the version already given to our readers. England still insists that every clause shall be submitted to the congress. Russia virtually concedes the point, but declines to do so explicitly through dictation from another Power, but meanwhile the English and Russian *people* are becoming mutually inflamed and it will probably require a good deal of bloodletting and misery to cool them. The Austrian ministry has got from the legislature the 60,000,000 florins asked for to put a part of the army on a war footing: vote 39 to 20. There is a report of a Russian-Austrian alliance which is highly improbable, just yet, and another of a Russian-Turkish alliance, much more likely to be true. Oman Pasha, Reouf Pasha and Gen. Ignatieff have returned to Constantinople, and are strongly urging such a step. The Rusians are still encamped about Constantinople, ready to occupy it on the outbreak of hostilities, England is thinking seriously of seizing upon the Asiatic side of the Bosphorus, and rails for a railroad along the coast have been already purchased. The last reports are: German interests not affected; the only hope of peace rests upon the speedy assemblage of the proposed congress, and the chances for its assembling at all are daily dwindling. A great international pedestrian contest has nearly eclipsed the war excitement in London. A match was made with prizes—$2,500 to the first; $500 to second; $250 to third; contest open to all comers; $50 entrance money; prizes awarded to those who came in ahead at the close of six days by pushing on in any way without support, either by walking, trotting or running. The Star-spangled Eagle once more screamed as his representative, O'Leary, lately of Chicago, and formely of Cork, Ireland, came in first. Distance 520 miles and a bittock, six days, less about 4½ hours, the best pace on record.

A sympathetic but inquisitive young man, who was visiting a county prison, gently asked a girl prisoner the cause of her being in such a place. "Oh," said she, with a contemptuous toss of the head, "I stole a watermill, and got off safe, but, like a fool, I went back after the stream that turned it, and was arrested." The sympathetic young man left immediately.

The uncalculating enthusiasm which often accompanies temperance revivals was peculiarly illustrated recently in Arkansas, where a club of young men pledged themselves to abstain from the use of alcoholic liquors, and then celebrated the occasion by getting drunk on beer.

It is said that there was never before so much lumber put into the Aroostook waters in Maine in the same time as within the past two weeks. The woods are full of men and teams.

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC CO. Cincinnati, Ohio.

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THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, March 23, 1878.

BEANS AND PEAS.—Medium beans continue to decline and the abundance of cheap spring produce does not warrant an early revival of local business. Marrow are weak and dull, and likely to be until affairs in Havana assume a solid condition. White Kidneys are dull and seem to be dropping to marrow figures. Red have some small sale. Pea beans quiet and lower. Black are a more manageable stock. Canadian peas in bulk and bond steady at 83@84c. Green peas held with rather more confidence. $1.15 for fair; $1.20 for selected. Southern were neglected at the former high rates and the shading does not bring buyers. Receipts for the week 3,000 bbls beans; exports 551 do.

We quote:—Beans, medium choice, $1.60@1.65; other, $1.45@1.55; marrows, choice, $1.60@1.62; other, $1.50@1.55; pea, $1.50@1.65. White kidney, choice, $1.50@1.65; other, $1.85@1.95; red, choice, $2.10@2.30; other, $2.35@2.40. Turtle soup beans, $1.75. Lima, $3.

BEESWAX has increased demand and is somewhat stronger in price; Western and Southern quoted at 27½@28¾c.

BROOM CORN.—Is in moderate stock and steady in price.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 4@5½c.; red-tipped, 4@5c., and common red, 3@3¼c.

BUTTER.—Receipts now include a fair quality of new, but old is adding unfavorably to the supply. Fine old is scarce, in fact really high grade is about gone, but there is a line of trade that asks for table quality old as long as it lasts. There has been a material marking off in some lines of State that ought to have been marked off long ago; now owners have have both to drop figures and hunt up customers. In some useful stock now exposed 20c. is quoted as weak as 25@26c, was quoted strong at one period. Shipment or grease will be the likely fate of much State stock before May. New butter sells well and prices are full; buyers will not lay in much while, and the market may be easily crowded if not overstocked. Western butter is active for the moderate lots of nice factory that come; but rather easier in tone.

NEW.—State, half tubs, choice, 28@32; good 29@31. Welsh first, 27@31; second, 27@30c; poor new, 23@26c; Western creamery ranges at 35@36c.

Exports past week, 3330 pkgs.

OLD.—State dairies, good to choice 26@27c.; fair, 23@24c.; from 15@18c; selected firkins 24@25c; fair to good 18@23c; poor 14@16c; selected half tub 29@30c; other, 26@28c.; choice Fall Welsh 28@30c. Fair to prime 20@24c.; Welsh dairies, 24@26c. State creamery, 30@32c; other, 26@28c.; other 19@20c; Western factory, fresh, low goods worth 19@20c.; greese 6½@7c.

CHEESE.—Exports for the week, 13,488 boxes. With the advanced season, and more winter-made stock coming forward than had been looked for there is a weak and irregular market, and the outside price made only for the very best stock.

Fancy factories, 13@—c.; good and prime, 12½@12¾c.; fair lots, 11@10½c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 11½@12¾c. for good to prime; 10@11¼c. for fair lots; 7@9c. for skimmed; Western factory, eheddar, 10½@11½c. for fine; 11½@12c¾. for good; 6@9c. for poor.

Liverpool cable, 67s. Gold closes 101¼.

Exports for the week, 14,538 boxes.

COTTON.—Export demand has been slow and the market closing weak.

Latest prices are for March, 10.93@10.94c.; April, 10 92@10.93c.; May, 11.17@11.18c.; June, 11.09@11.10c; July, 11.25@11.26c.; August, 11.23@11.24c.; September, 11.04@11.05c.; October, 10.81@10.85c.; November, 10.72 @10.74c.; December, 10.75c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8 1-16	8 1-16	8 3-16	8 3-16
Strict ordinary	8 13-16	8 13-16	8 15-16	8 15-16
Good ordinary	9¼	9¼	9⅜	9⅜
Strict good do	9⅜	9⅜	9⅜	9⅜
Low middling	10 3-16	10 3-16	10 5-16	10 5-16
Strict low middling	10 9-16	10 9-16	10 11-16	10 11-16
Middling	10¾	10¾	11	11
Good middling	11¼	11¼	11¼	11⅜
Strict good middling	11 9-16	11 9-16	11 11-16	11 11-16
Middling fair	12 1-16	12 1-16	12 3-16	12 3-16
Fair	12 9-16	12 9-16	12 11-16	12 11-16

Stained.

Good ordinary, 8¼c. Strict ordinary, 8⅝c.; Low middling, 9⅜c.; Middling, 10c.

DRIED FRUITS.—General trade is slow; the high grades of apples are scarce and firm, but otherwise prices are scarcely settled.

Apples—State quarters, old, 5¾@6¼c.; new, 5½@6c.; Western quarters, old, 5@5¾c.; new, 5½@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 5@5½c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@16c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c.

EGGS.—Receipts for the week, 24,415 barrels, do. last week, 18,381. There is a fair demand but the enormous receips have kept prices low, in fact for a steady quotation eggs have not sold at their present point for over 20 years. There has been some speculation, but the mild tone of trade has checked the enterprise. Quality is good and dealers expect early good business. Poor stock would be rejected by all at present rates. Near points 11c.; fresh Western and Southern 10½@11c. poor 9½@10c.

FEATHERS.—Geese are dull and unsettled; 40@c. is bid for prime but not accepted. Turkey wing and tail feathers are being used by manufacturers. Mixed 15c.; tail 25c.

FLOUR.—The tamo look of affairs on the other side, and the opening of lake navigation which will give earlier full supplies of wheat weaken the market and tend to free offerings at the reduced prices.

Latest prices are $4.15@4.75 for poor to fancy superfine State; $5.00@5.15 for common to fair extra do; $4.90@5.10; $5 10@5 60 for good to choice do.; $4.15@4 75 for superfine, Indiana, Iowa, Michigan, Ohio, &c.; $4 75@5 15 for very poor to good shipping extra do do., (chiefly at $4.90@5.10) and $5 15@5 50 for good to choice extra do.; common to choice white extras, $5.35@6.50; fancy do. at $6.50@7.50; (the latter an extreme); red and umber winter wheat, inferior to choice trade and family, at $5.10@6.25; round hoop Ohio at $4 80@5 25, and trade brands of at do. $5.40@6.75, the latter for choice; St. Louis, $5.25@5.85 for poor to fair extra and $5.10@7.00 for good to fancy; (with a few brands of very fancy quality quoted up to $7.25@7,50); Minnesota clear, $4.85@5.00; Minnesota "straight," common to fancy, at $5.50@6.65, and patent poor to very choice, $6.10@8.25, with a few fancy at $8.35@8.50; unsound stock at $2.35@5.75; city mill extra at $5 90@6.30 for fair to very choice for West Indies; do. for England $4.85@5.00; do. trade and family extras, $6.35@7 50; do. South America, $6.35@ 7.35 for fair to fancy; No. 2 at $2.50@3.80.

Corn meal is selling at $2.50@2.95 for Brandywine and $2.85 for yellow Western.

FRESH FRUITS.—Exports of apples 1000 bbls. mostly strong Russets. Apples are quiet but fairly firm. Choice Red and best Russets, $4.@6.50 fair to good, $3@4. Cranberries are going out well at former quotations. Strawberries from Florida and Charleston, 50@1.25 quart. Oranges firm and salable $5.80@6,80; hot-house berries down to $2. Peanuts quoted as in our last, the demand not as brisk as it should be in this style of weather; best, $1.35@1.40; prime 85@-1.20. Pecans, Texas, $@10 lb.; Hickory nuts $1.00 per bush.

FURS AND SKINS.—There is no change to note, No. 1 quality.

	Nor. & East.	West & N. W.
Otter, ₩ piece	$3 00@4 00	$2 00@2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and ylgs.	1 00@2 00	1 00@2 00
Florida deer skins.	15@ 18	
Fisher	5 00@6 00	4 00@5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₩ ℔	1 00@1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

GRAIN.—The probabilities of an early adjustment of the difficulty abroad, the early opening of navigation, and larger supplies looked for soon weakens prices.

Latest sales are of No. 2 red at $1 30@— ungraded red and amber State, $1 30@—; white, $1 40; No 1 Northwest spring, $1 27; No. 3 Chicago, $1 22½; No. 2 red for March at $1 23; No. 2 Milwaukee spring, $1 27. Rye has been very active, purchases within a week reaching fully 250,000 bush, largely for the German markets, closing at 72c. for Western; 76@77½c. for State and 76c. for Canada. Corn is weak and quiet. Latest sales are of New York No. 2 at 54@55½c.; steamer mixed, March, 51c. Oats of New York extra white, at 34½@40c.; do. No. 1, March 31½c.; No. 2 white, 35½c.; mixed Western, 31@31½c.; white Western, 38@39c.

HAY AND STRAW.—Supplies are larger, and buyers are not purchasing much beyond actual needs in hopes of an easier market.

Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@ 55c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

HOPS.—The export movement this week has been very moderate, and the demand from receivers small, but stocks are now excessive, and prices are held as before. Quotations are:

State choice to fancy, 11@12c.; good to prime, 8@ 10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

MAPLE SUGAR.—Increased supplies are attended with lower prices for molds and syrup. Small cakes, 13c.; large, 8@11c. Syrup, 75c.@$1 ₩ gal., with can.

OIL-CAKE.—Western is quoted at $30@$30.25 ₩ ton.

POULTRY AND GAME.—There is a good demand at fair prices. Southern live is largely included in the receipts with some young chickens at $1.25 per pair.

N. J. chickens, 10@13c.; W. fowls, 11@13c.; Turkeys, @14c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1.50.

Dressed poultry has a fair demand with a reasonably supplied market. Chickens sell the best, turkeys have been plentier than wanted as the supply includes many frozen parcels. Vermont frozen has brought 22c.

Fancy Phila. and N. J. turkeys, 16@18c.; good, 8@ 6c.; large or Toms, 7@9c.; chickens, choice, 8@9c; good, 11@13c.; common, 6@7c.; ducks, choice, 15@20c.; other, 21@22c. small and slips, 18@19c.

Game is generally lower.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.00@1.25; Red-heads, $1.00; Mallard, 35@40c.; Teal, 25@40c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$85c. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS.—Hog products have been in freer demand for export and have hardened a little in price.

Mess pork, $10¼@10,40 for spot lots; $9.85 @10 for March and April. Bacon at 5¼c. for long clear and 5¾c. for short clear. Lard—Western steam, 7.37½c. 7.40c. for short, 7.41@7.45c. for May, 7.54.755; Tallow at 7 3-16c. for prime. Stearine, 7½c. for prime Western. Beef hams at $15.50. Beef—New extra mess, $12.00@12.50; plain, $11.00@11.50; new packet, $14.75; family mess, $17.50; extra India mess, $27 for city brands; do. Philadelphia, $25.

SEED.—Grass are weak. Clover, 7¾@7¾c. for Western; 7¾@8c. for State. Timothy, $1.35. Rough flax, $1.45.

TOBACCO. — The new crop comes in more freely, while demand is not showing any improvement and prices are easy.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3¾@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	6 @ 7	7 @ 7½
Good leaf	7½@8½	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	19 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—There is a weak feeling in potatoes, holders fear sprouting and good qualities are offered low.

We quote Peach Blows $1.50@1.75, bulk and doubleheads. Early Rose, $1.00@1.25; Peerless, $1.25@ 1.50; Nova Scotia, $1.95@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.00@1.25; white, $1,25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₩ ℔., 40@50c. Radishes, 100 bunches, $1@1.50. Lettuce, small, dozen, 75c.; large, $1@$1.50. Cucumbers, doz., $2.25@2,75. Rhubarb, doz., $7@8. Spinach, Southern, @2.25 ₩ bbl. Bermuda, $4,50@5.

WOOL.—There has been but little demand from manufacturers, and the advancing season exerts rather a pressure to sell, with slightly easier prices. There is a desire to urge business a little by making concessions.

Ohio, Pennsylvania and Virginia—XXX and picklock, 44@46c.; XX, 42@44c.; X, 42@43c; No. 1, 43@44c. No. 2, 35@37c.; common, 34@35c.; combing, 52@55c.

New York, Michigan, Indiana and Wisconsin—XX, 26@38c.; X, 36@38c.; No. 1, 38@42c.; No. 2, 38@36; common, 32@33c.; combing, 46@50c.

Iowa, Vermont and Illinois—X and XX, 35@37c.; No. 1, 37@40c.; No. 2, 32@34c.; combing, 45@50c.

Missouri, Kentucky, and Tennessee—Washed fleece, 32@42c.; unwashed, 25@30c.; unwashed combing, 30@36c.

LIVE STOCK MARKETS.

NEW YORK, March 25, 1878.

BEEVES.—Receipts for the week, 9,863 head: do., last week, 8,029 do. A noticeable feature was the unusually fine condition of the droves. As the supply was not heavy the pens were quite readily cleared on the several market days, a good export demand helping trade. Prices have advanced a shade since Wednesday last. At the close light steers brought 9@9¾c.; good weights, 9¾@10¼c; heavy and extra quality, 10¾@10¾c.; fancy, 1,500@ 1,600 lbs., 11@11¼c.; fat bulls, $3.75@4 per 100 lbs.

COWS AND CALVES.—Few extras arrive at this time, new butter being an inducement for dairymen to hold good milkers, and interior trade in cows is about as good as it would be here. Old prices for ordinary stock nominal, say $40@50 per head.

VEAL CALVES.—Live are easy at 5¾@7½c. for ordinary to good; extras, 8@8¼c. Hog dressed nominal at 6@10c. prime fresh in fair demand.

SHEEP AND LAMBS.—Receipts for the week, 16,150 head; do., last week, 17,878 do. A brisk trade has ruled at 6¾@7c. for sheep; yearlings $5.30@625 for 100 lbs.; spring lambs lower, $4.50@7 each, the latter for prime 45 pounders.

SWINE.—Receipts for the week, 17,405 head; do. last week, 25,240 do. A mixed price at the close was 4½@4¾c. Market dull and unsettled. Country pork, 5@6¾c. for heavy to light State and New Jersey.

SPECIAL NOTICES.

"A Farmer's Son or Daughter." See Adv.

Costs One Cent to find out about the cheap ROTARY JOB PRESS, made by the CROWN PRESS CO., Pike, N. Y. Send Now.

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The San Juan Mines.—The LA PLATA MINER, published at Silverton, Colo., is a reliable medium through which to obtain information from this rich silver region. Address as above. Sample copies 10 cts.

Hints on Punctuation and use of Capital Letters, by A. F. BLAISDELL, A. M. This little work is the most complete of the kind ever published. Price 10 cents. F. PERCY GOSS, Publisher, Provincetown, Mass. Sent to any address on receipt of price.

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Keeps the road in **fair better** condition, and at half the present cost. Circulars free.
SAMUEL PENNOCK, Ithaca, N. Y.

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CROSMAN BRO'S CATALOGUE AND GUIDE
FOR 1878
To the Flower and Vegetable Garden. Beautifully illustrated, and will be *mailed Free* to any address.
Address CROSMAN BRO'S,
(*Established* 1840.) ROCHESTER, N. Y.

GREGORY'S SEED CATALOGUE
My Annual Catalogue of Vegetable and Flower Seed for 1878, rich in engravings, will be sent FREE to all who apply. Customers of last season need not write for it. I offer one of the largest collections of vegetable seed ever sent out by any seed house in America, a large portion of which were grown on my six seed farms. *Printed directions for cultivation on each package.* All seed *warranted to be both fresh and true to name;* so far, that should it prove otherwise *I will refill the order gratis.* ***New Vegetables a Specialty.*** As the original introducer of the Hubbard Squash, Phinney's Melon, Marblehead Cabbages, Mexican Corn, I offer several new vegetables this season, and invite the patronage of *all who are anxious to have their seed directly from the grower, fresh, true, and of the very best strain.*
JAMES J. H. GREGORY, Marblehead, Mass.

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HONEST FERTILIZER
Ammoniated Bone Super Phosphate,
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Pure Ground Bone.
The purity of these goods is guaranteed, and their standard proved by regular analyses of Prof. G. A. Liebig, and other eminent chemists.
No Rock Phosphate, Mineral Guano, Land Plaster, Salt Cake, Spent or Sind. o Acid, and other inferior materials, enter into the manufacture of my Phosphate, which is solely made of **Bone, Meat, Blood, Pure Acid and Potash Salts.**
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BECAUSE THE BEST.
PREMIUM BONE
For all crops. Made only by the EXCELSIOR FERTILIZER WORKS, Salem, O. Circulars free.

BONE DUST.
FINE GROUND, WARRANTED PURE.
Manufactured by S. H. MORGAN, Toledo, Ohio.

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THIS NEW
ELASTIC TRUSS
Has a Pad differing from all others, is cup-shape, with Self-Adjusting Ball in center, adapts itself to all positions of the body, while the BALL in the cup PRESSES BACK the INTESTINES JUST AS A PERSON WOULD WITH THE FINGER. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.
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SAW MILL
For $188.
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See illustrated article in RURAL, March 16th.

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"Vibrator" Threshers,
WITH IMPROVED
MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
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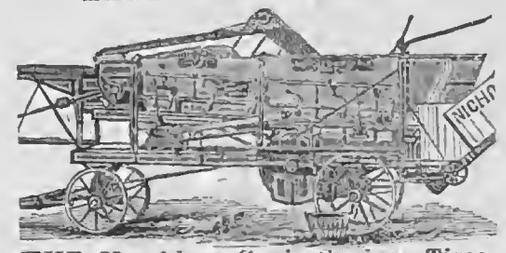

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GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior Work done by the other machines, when once posted on the difference.

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Reading for the Young.

SWING, CRADLE, SWING.

Baby is a sailor boy—
Swing, cradle swing!
Sailing is the sailor's joy—
Swing, cradle, swing!
Snowy sails and precious freight—
Swing, cradle, swing!
Baby's captain, mother's mate—
Swing, cradle, swing!

Never fear, the sails are set—
Swing, cradle, swing!
Stormy gales are never met—
Swing, cradle, swing!
Little eyelids downward peep—
Swing, cradle, swing!
Anchored in a cove of sleep—
Swing, cradle, swing!

LETTERS FROM BOYS AND GIRLS.

From Honolulu.

Here I am again; hope you are not tired of seeing me. Uncle True, I am glad you liked those ferns so much so as to think of having them mounted. If I come across any pretty specimens of mosses and ferns I will send you some if you like; perhaps you will be astonished to hear that we have over 300 different kinds of ferns on our islands. I am the possessor of 21 of these. I keep them mostly for "spatter-work." You say if you knew me by any other name than "Hawaii nei," you would get even with me. I like "to give better than receive" and I will keep you in ignorance of it for a time, at least.

"Rose Geranium" I thoroughly agree with in regard to a home library. I am passionately fond of reading, and eagerly peruse everything that happens in my way; it is to be hoped that it is of the instructive kind. I have copies of Shakspeare, Tennyson and Longfellow, the two latter are my favorites. We have the whole set of Dickens' works. I have been presented with "Alice and Phœbe Cary's Lives and Works," I enjoy this book very much, also a book of elegant extracts, "History of Josephine," and two volumes of miscellaneous home readings. (Next time, if you like, I may tell you of the "parlor entertainment," some of us young people intend giving soon, consisting of three dialogues taken from one, of the latter two volumes mentioned.) I like history, and remember pretty well the English history. I learnt at that most dreaded place to most girls namely, "A convent boarding school," but as I look back, I find I have spent many happy hours there.

I had the pleasure, not long ago, to take a moonlight horse-back ride to the beach, three miles distant, and there, for the first time in my life, to look through a telescope. Venus in the phase of a new moon, Saturn with his belts and satellites, and Sirius's bright light, were magnificent to behold! But here I am rambling on at a great rate; hope Y. B. is not present. Oh, dear! "Slayerofconceit" be quiet a little longer, and then you may sputter all you like.

Cousin, "Loretta," it was real kind of you to tell us about your good time at Christmas. Our Sunday-school had a tree, a very pretty tree too, but we were minus a Santa Claus; nevertheless many very pretty presents were distributed. I was the lucky receiver of six from the tree; in all, my presents number thirty. They are beautiful, some costly, and all useful, so you see though I lack brothers and sisters, I have many kind friends. You thought I would relate to you my adventures with my fellow cannibals, at stewing picnics? Well, here is one if you like to hear about it; but perhaps my letter will be too long: will it? You seem to say no, so I'll proceed:

Ten of us were to start at 8 A. M., on the 16th of November, (our Sovereign's birthday), for Kapiolani Park; nine of us met at appointed time, tenth was missing, so we proceeded to meet him. (Allow me to mention here that we young ladies, as we style ourselves, rode side-saddle, most of us wore green wreaths called Malie leys, pronounced Myll lays; they are very sweet!) We found our tenth, after one of our party had fallen from his horse in attempting to rescue a bag which contained some tongue sandwiches, (Sandwich Island tongues, too.) Our tenth sprang into his saddle as he thought, but suddenly found he was over on the other side of his horse grasping terra firma. Well, we started and had no more mishaps, but whiled away twelve hours, riding, walking on the beach, and eating lunch and supper with a hearty relish, under the grand stand at the park; came home, well satisfied with our holiday, but too tired to attend the ball that took place in the evening.

Many thanks for your kindness in listening to "Hawaii nei," who bids you good-by with "Aloha nui," in which Uncle True may have a small share. Hawaii Nei.

A Sensible Suggestion.

Dear Cousins:—Don't jump so at the sight of a strange cousin who comes to join your quarrelsome circle. To help you all along, if she can, to quarrel? I hear some one say. No, by no means, just to have a sensible chat, in a cousinly way, and give her opinion on some little points. Let me look around a little before I commence and see my cousins. Why here is "Madcap Mollie" extending her hand to bid me welcome! So much has been said about "Slayerofconceit," that I should think he would soon get tired of hearing his name, but perhaps it pleases him. It is too bad to have the girls against him; it is always better to have them on one's side. Bivalve, I want to hear something more from you on books. I like to spend my leisure moments over some good book. But I do not have much time. We live on a large farm and it keeps us busy to do the work in the house. We might tell each other about fancy-work and send patterns to the Rural for each other. I am making a rug now. I have a toilet set completed, made of perforated card board. Should like to have some one tell us how to make paper flowers. Well, Uncle True, if you don't throw this in that horrible waste basket I will try again. I will try and get enough subscribers if I can to secure the "Criket," for I think it would surely be a household pet.

Bitter Sweet.

Again.

Well cousins, I've come come again whether you welcome me or not. I have written two letters before. There seems to be a lull in the storm that raged so furiously for a while in the young folks' column, but it is getting dark again, so girls look out for another squall. "Miss Bertha" had best be careful, or she may arouse the temper of "Slayerofconceit." I tell you Young Bach there is a chance for you now. Carrie B. H. would like to arrange a correspondence with you. It is probable that if you comply, you will never be able to assume the name of Old Bach.

M. P. H. would like to know how to prepare autumn leaves. I will tell you how I did mine: First press them till they are thoroughly dry, then dip them into melted bees-wax, removing them as quickly as possible. Care should be taken to keep the wax hot, or the leaves will not be smooth. When they are finished they look very much like wax. They are very pretty twisted on wire, and arranged in vases.

West Millcreek, Pa. Cousin Emma.

Something about Nothing.

Dear Cousins:—I suppose you wonder why I have come again so soon. Well, for two reasons. One is that Uncle True was so kind as to print my other letter, and the other is to correct a mistake.

Referring to the question that I asked Katie and Susie, I wish to again ask if the initials of the boys' club were not B. O. C., instead of B. O. T.? I hope that "Jim Crow" will write again to notify us that so much work and study have not made him ill. I am very much obliged to Lillie Lee for the information she gave in her last letter, and I hope she will write again and tell how to make some of the candles she spoke of. Could she tell this poor Cousin how to make pop-corn balls with sirup?

I would say to Lottie King: Do not think that your letters are not read with as much interest as some of the older ones, for I assure you they are—by myself, at any rate.

At present I am reading "Other Girls," by Mrs. Whitney, and "The Hero of Falcon's Island." The last is about a boy who played Robinson Crusoe. I hope that "Madcap Molly," "Ivy," and all the other Cousins will write often.

Brown Badger.

Of Course, Certainly.

Dear Uncle and Cousins:—I should like to join the band of Cousins who write to each other through the Rural, and I think must have a very pleasant time. That is the reason I should like to join with you, for I am always ready for fun. So here I am. What do you say, may I join? I live on a farm and enjoy many country pleasures. My father has taken the Rural for fifteen years and we all like it very much. I am thirteen years old and have no sisters, but I have a brother older and one younger than myself. Wild Cherry is so proud because she can do some boy's work. I should like to have her come and eat some of my cake and see how I can clean up the table, etc. A few weeks ago there was a temperance lecturer here and he created quite an excitement. I was one of his disciples. Therefore I sign myself.

Coxsackie, N. Y. Young Teetotaler.

From Lizzie.

Dear Uncle and Cousins:—This is my first attempt at sending, but not at writing, a letter to the Rural. I live in the country, and pity the girls that have to live in the city. We have pleasant times here. Why do not some of the Cousins write about flowers. I like flowers very much. We have a Conservatory at my Grandma's. We have two lemon trees, one has nearly sixty lemons and plenty of blossoms on it. We have Calla Lilies in bloom; and I cannot tell all the others we have, in this letter. We have two pet dogs whose names are Dot and Curly. I would like to see Uncle True and the Cousins very much. I would like to get two subscribers for the Rural, so I could get a Rural "Cricket." Will "Lillie Lee" please send those candy recipes, and she will greatly oblige. Lizzie.

River Edge, N. J.

As Soon as the Roads Dry.

Dear Uncle True:—Here I am again, but I hope you are not displeased. As soon as the roads get dry enough I intend to try to get up a club for a "Cricket." The roads now are so muddy that when I go to town I don't pretend to go on them, but go back almost to the woods and take the railroad. Saturday I was rather late, and I came home on the road; I sunk in the mud over my rubbers. I should like to correspond with Lillie Lee and Madcap Molly. Will Rose Geranium publish the name of the little girl who wins the prize she offers? I can and do darn my own stockings. I like the Rural *ever so much* and I missed it greatly last year. We are having beautiful weather now, or did have last week; it was quite like summer. Jennie E. V. A.

Ft. Howard, Wis.

She Encouraged Him.

Dear Cousins:—Will you admit me into your circle? I am a constant reader of the dear old Rural. I will gladly join "Madcap Mollie" in her good work. A word to "Wildfire:" Come again, sir, and don't let Miss Bertha drive you from the field. I don't think "Slayerofconceit" any more conceited than the rest of us. Come out with your better virtues and show the fair Cousins that you are not half so bad as they are trying to make you appear! I, for one, am not against you. Blue Bell.

Elm Point, Ill.

Capital Advice.

Cousins all:—I have just finished reading this week's Rural and feel as though I must have my say again, if my former letters did not make such a stir as some others. I want to speak a word in favor of "Slayerofconceit." If you have read his last letter you have found that it was straightforward and gentlemanly, showing that he really meant nothing discourteous, and I say that he was a regular trump to write it. Let us write such letters as Lillie Lee's last. I am sure they are more instructive and will not make us gossips, but a set of jolly, old-fashioned cousins. Alice V.

Wildfire Ablaze.

Dear Cousins:—No doubt some of you thought that "Snowdrop's" sarcastic and talented (!) letter would effectually silence me, but it is not so. "Snowdrop" seems, (as a young man said in our Lyceum the other night,) to simmer everything down to the climax. I will own that boys as well as girls, do go to extremes in fashion; but fashion must be followed if it kills, at least the girls, or most of them seem, to think so. But enough of this. If Uncle True prints this, I will try and write something more sensible next time.

Wildfire.

The Puzzler.

HISTORICAL ACROSTIC.

1. A Grecian general. 2. A king of Ethiopia. 3. The father of Charlemagne. 4. A Carthaginian general. 5. A king of Pontus. 6. The wife of Julius Cesar. 7. A Grecian battle. 8. A State of Central America. 9. A classic writer. 10. A king of Sparta. 11. Theban general. 12. A Persian king. 13. A Roman emperor. 14. A ruler of Greece. 15. A water nymph. 16. A French general. 17. A general under Alexander. 18. A bishop of Antioch. 19. A Grecian hero of bravery. Initials form a celebrated Greek Congress.

☞ Answer in two weeks. Little One.

MISCELLANEOUS ENIGMA.

I am composed of 21 letters:
My 20, 5, 11, 17, 20 16 a man's name.
My 21, 3, 5, 12, 2, 10, 19 a color.
My 1, 13, 4, 6, 15, 5, 12, 9 part of a house.
My 13, 11, 15, 10, 8, 17 an article of dress.
My 14, 2, 7, 1 a kind of grain.
My 18, 1, 8, 2, 13 a man's name.
My whole the name of a British poet.

☞ Answer in two weeks. S. C.

BIBLICAL ACROSTIC.

1. A governor of India. 2. A king of Babylon. 3. A king of Israel. 4. A country of Africa. 5. A son of Ham. 6. A prophet in Jeremiah, chapter xxv. 7. The father of Jonah. 8. A grandson of Ham. 9. The father of Ishmael. 10. The wife of Ahasuerus. 11. A disciple of Jesus. 12. A governor of Judah. 13. A son of Sennacherib. 14. A king of Syria. Initials form a king of the Jews.

☞ Answer in two weeks. Dr.

DIAMOND PUZZLE.

1. Myself. 2. Satisfied hunger. 3. A country of Europe. 4. A shade tree. 5. A vowel (sometimes). Centrals form a country of Europe.

☞ Answer in two weeks. May.

DROP-LETTER PUZZLE.

Th - - sh-lt n-t b - - r f-ls- w-tn-ss -g - - nst th- n - - ghb-r. Fill with vowels and find one of the commandments.

☞ Answer in two weeks. Jenny.

NAME PUZZLE.

Place ten female names so as to form an eleventh.

☞ Answer in two weeks. Quiz.

WORD-SQUARE ENIGMA.

1. A fish. 2. To assert. 3. A lady's name. 4. To implore.

☞ Answer in two weeks. Balto.

PUZZLER ANSWERS.—March 16.

Pyramid Puzzle.—

H
BEE
BERTH
POTOMAC
GREENLAND

Sabbath Reading.

THE OLDEST CHRISTAIN HYMN.

[In Book III of Clement of Alexandria is given, (in Greek) the most ancient hymn of the primitive Church. It is there (one hundred and fifty years after the apostles) asserted to be of much earlier origin. The following version will give some imperfect idea of the spirit:]

Shepherd of tender youth
Guiding in love and truth,
Through devious ways;
Christ, our triumphant King
We come thy name to sing,
And here our children bring
To shout thy praise.

Thou art our holy Lord!
The all-subduing Word,
Healer of strife!
Thou did'st thyself abase!
That from sin's deep disgrace
Thou mightest save our race,
And give us life.

Thou art wisdom's High Priest
Thou hast prepared the feast
Of holy love,
And in our mortal pain
None call on Thee in vain;
Help thou dost not disdain
Help from above.

Ever be thou our Guide,
Our Shepherd and our pride,
Our staff and song.
Jesus, thou Christ of God!
By the perennial word,
Lead us where thou hast trod,
Make our faith strong.

So now, and till we die,
Sound we our praise on high,
And joyful sing.
Infants, and the glad throng,
Who to thy Church belong,
Unite and swell the song
To Christ our King.

SCRIPTURE WORDS AND PHRASES.

We propose first to call the reader's attention to a couple of monosyllables which deserve more notice than is generally bestowed on them. These are "his" and "its." The former is employed very frequently by our translators in places where we should now use the latter; indeed, the neuter possessive form "its" does not appear to have obtained a decided place in our language until some years later than 1611, though a few examples may be found in earlier writers. In Gen. i. 12 we are told that "the earth brought forth grass, and herb yielding seed after *his* kind, and the tree yielding fruit, whose seed was in *itself*, after *his* kind." In this verse it is quite plain that "his" must refer to "herb" and "tree" respectively, and that the pronoun must be accepted in the neuter sense; and many similar passages will occur to the mind of every careful Bible student. But there are cases in which the use of the masculine "his" in this way may lead to ambiguity: thus, in Matt. vi. 33—"Seek ye first the kingdom of God, and *his* righteousness," the modern reader is apt to take "his" as referring to "God" just preceding; but it is intended to refer to "kingdom," and is in fact equivalent to "its." Again, in 1 Cor. xv. 38, the authorized version has—"but God giveth it a body as it hath pleased Him, and to every seed *his* own body." In this case it will be evident to any one who reads the context with ordinary care that "his" must refer to seed; though a less attentive reader might suppose the pronoun to have relation to the word "God" just above.

Instances of this mode of diction are extremely familiar to students of our old writers. Lord Bacon supplies us with one—"Learning hath *his* infancy, when *it* is but beginning." Caxton, our first English printer, published a work treating of "Europe and *his* contrees; of Affrique and *his* regyons and contrees," etc.

The use of "his" as the sign of the genitive case, where we now employ a change of termination in the noun ('s), is less frequent in our Bible. In the chapter head of Ruth iii., indeed, may be seen a notable example in the edition of 1611, where it reads—"By Naomi *her* instruction, Ruth lieth at Boaz *his* feete." This has been since modernized, as the reader will see on turning to the Bibles of later date. Similar phraseology was very common in our old writers, and may be found in Common Prayer-book, in the "prayer for all sorts and conditions of men;" "and this we beg for Jesus Christ *his* sake." Spenser furnishes us many examples, *e. g.*,

"For that same Brute, whom much he did advance
In all his speech, was Sivius *his* son."

that is, was the son of Sylvius. And Lord Bacon, in his 29th Essay, has the following example—"Edward the Second of England *his* queen had the principal hand in the deposing and murder of her husband."

It is to be observed that "its" occurs but once in our version of Scripture, and in that place it is an innovation that has crept into the text since the time of James I. The instance may be found in Lev. xxv. 5, "That which groweth of *its* own accord," etc., where the ancient copy has "*it* own accord," such being a not uncommon way of writing the possessive case of the neuter pronoun in the Elizabethan age. Sylvester, the translator of Du Bartas (1605), gives us this instance:

"Much like a candle fed with *it* own humor
By little and little *it* own self's consumer."

In the Geneva version of the Scriptures, Acts xii. 10 is thus rendered: "They came into the iron gate that leadeth unto the city, which opened to them by *it* own accord."

Before us is a list of many Scripture words, to which we propose to call the teacher's and student's attention; but space forbids our extending this paper beyond its present limit. J. S.

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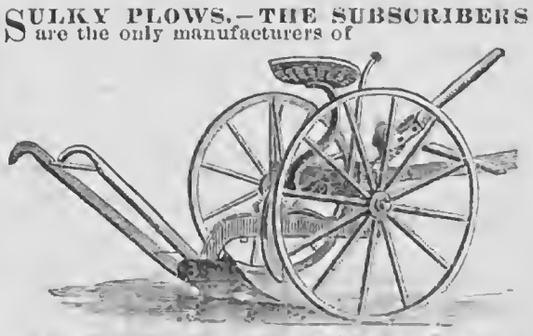

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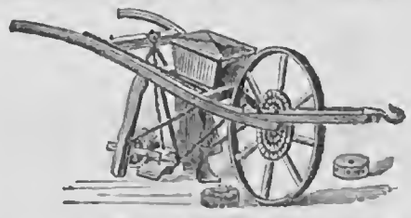

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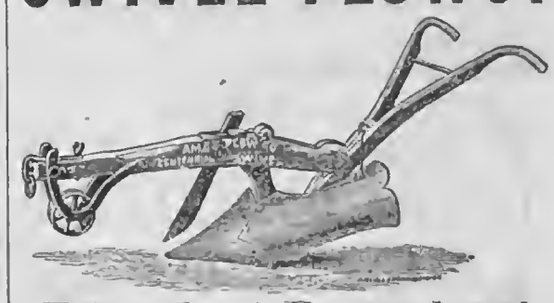

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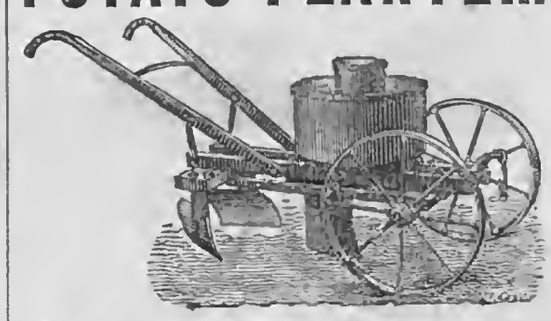

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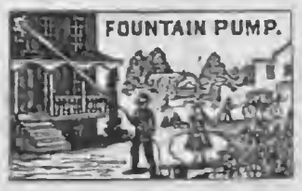

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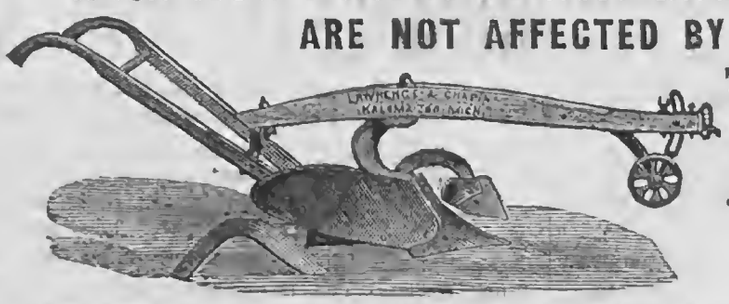

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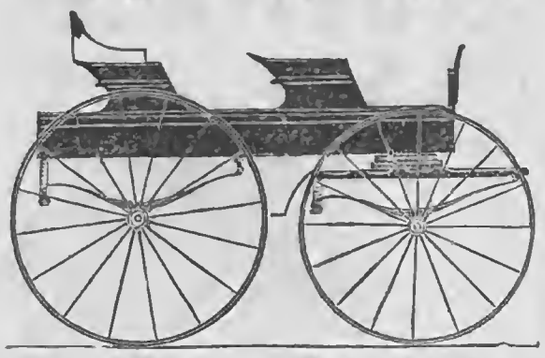

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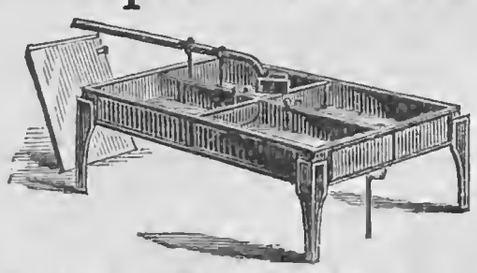

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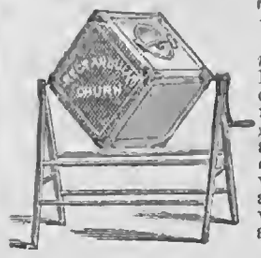

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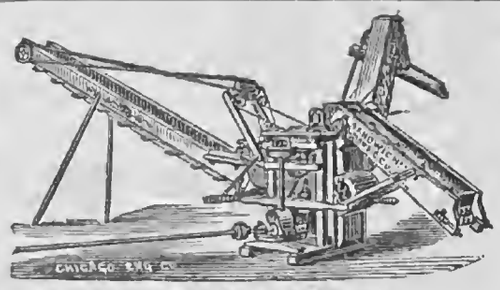

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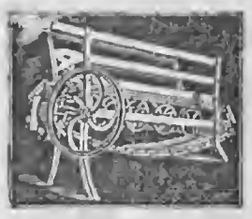

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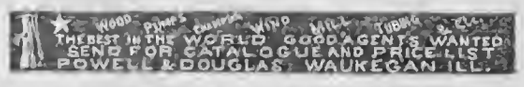

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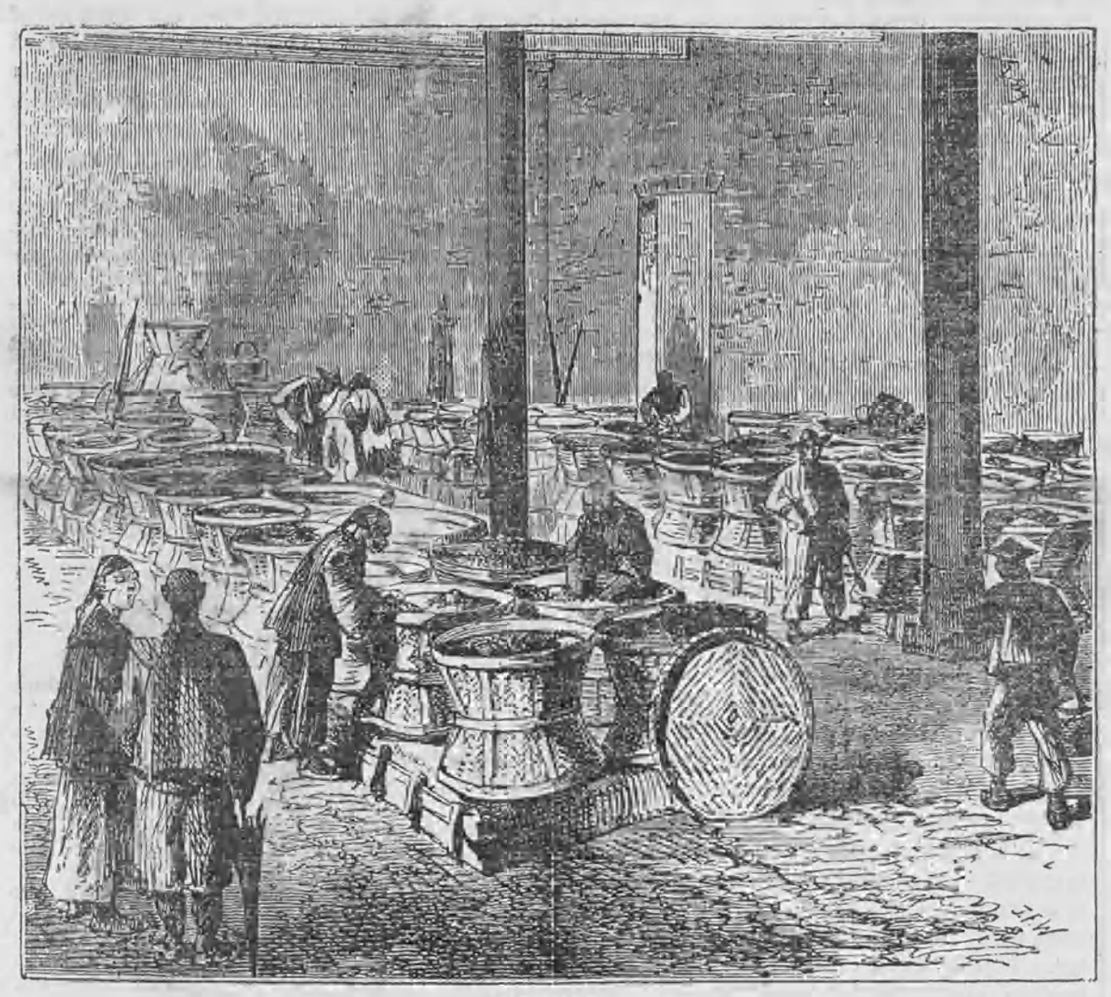
Industrial Topics.

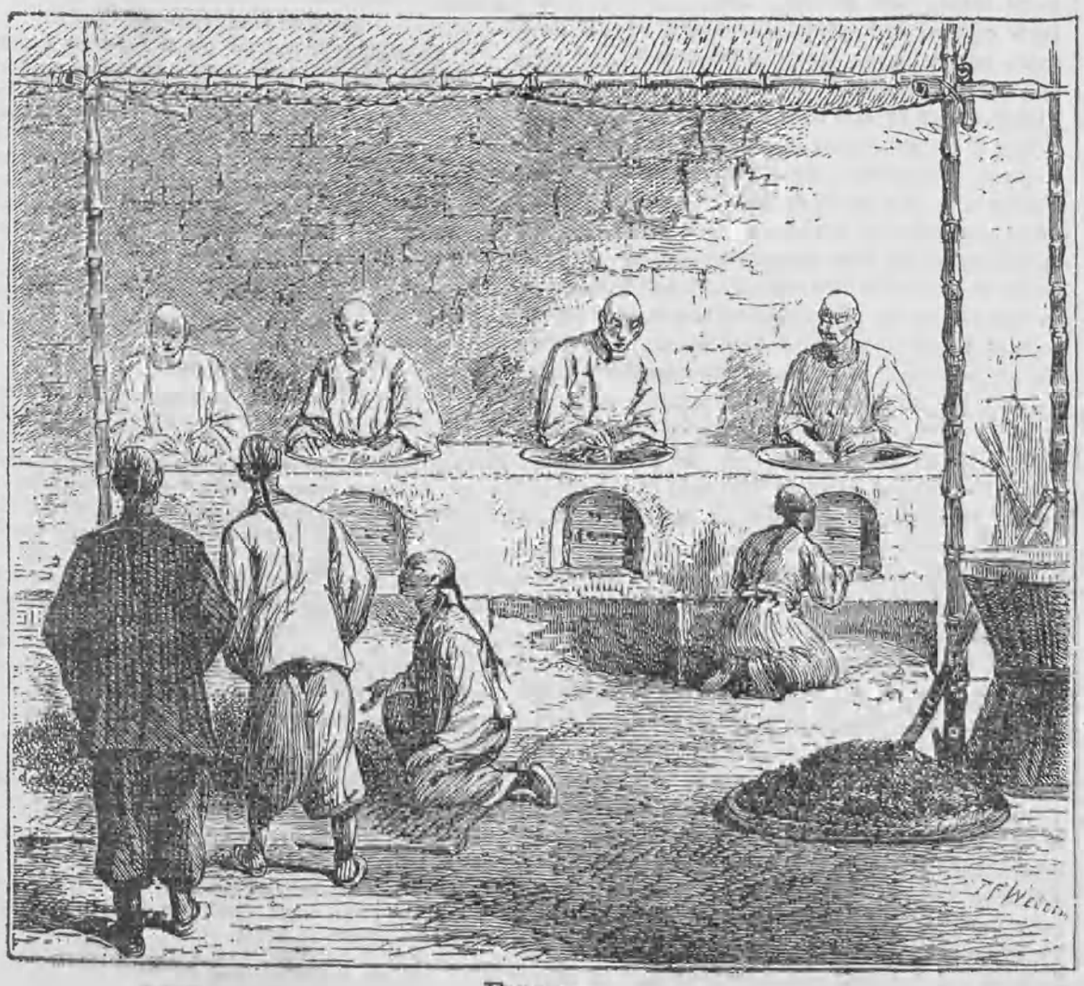
THE TEA PLANT AND ITS PRODUCT.

Besides the natural curiosity felt with regard to a plant whose product enters so largely into the daily consumption of all civilized countries, special attention has lately been attracted to the tea plant among us by the efforts of the Commissioner of Agriculture to introduce its cultivation among the ordinary branches of industry in those parts of the United States favorable to its growth. With this view a hundred thousand plants have been already raised under his direction in the national conservatories at Washington, and are intended for free distribution for experimental purposes throughout the country. Already numerous experiments in its cultivation have been made in different States, notably by Dr. Smith of Greenville, South Carolina, whose labors as well as those of others show that there are localities in the Southern States well adapted to the production of excellent tea, and that its profitable production in this country is merely a question of the price of labor. On the Pacific Coast where the climate is especially favorable for broad-leaved evergreens, both native and exotic, the tea plant flourishes much farther north than at the East, but even there a recent experiment in its culture undertaken by a colony of Japanese has been attended with poor results. Although our hopes of its remunerative cultivation in this country are by no means sanguine, solely

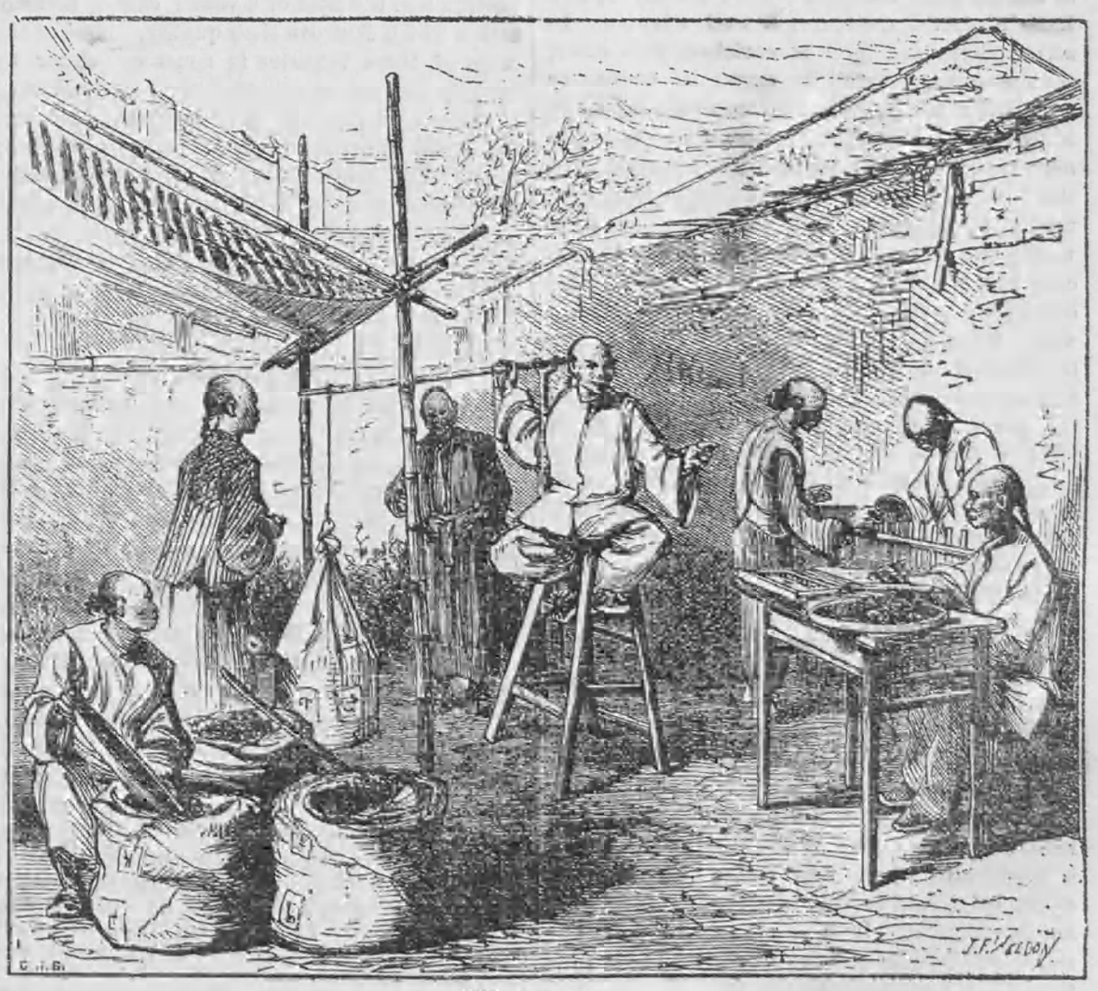


Drying.

Picking.



Firing.



Weighing.

PREPARATION OF TEA.

on account of the cost of labor, still so long as there is any reasonable doubt on a matter of such high importance, perhaps it is well that the question is about to be tested by the only decisive means—numerous experiments under various conditions of soil, climate and treatment.

The early

HISTORY OF THE TEA PLANT.

is shrouded in the mists that envelop all remote time among semi-barbarous nations, nor is its original country certainly known. It has been found growing quite wild in Assam and was cultivated in China so far back that no account remains of its first introduction. That its use in India is comparatively recent is inferred from the fact that there is no name for the plant or its product in Sanskrit, the ancient language of that country. It was introduced into Europe by the Portuguese early in the 16th century, by the Dutch a century later, and in 1664 the English East India Company made the Queen of England a magnificent present of two pounds of tea. The first considerable importation into that country was made three years later in 1667, when the same Company, which held a monopoly of the traffic until 1834, imported 4,713 pounds which was sold at the rate of from $30 to $50 a pound, and supplied all demands for several years. Considerable difference between this early importation and that of 1877, which amounted to 1,880,000 pounds! The Chinese districts which supply the export-demand lie between latitude 25° and 35° North. It has long been extensively cultivated in Japan, and lately very large exports have been made from that country. The British Government strongly encourages its cultivation in various parts of India, from which large supplies are annually shipped to England. It is also cultivated in Java and Penang, and, about 1850, the plant was introduced into Brazil. Great hopes were at first entertained of its extensive culture there by means of Chinese Cooly labor, but of late years little mention has been made of the results.

THE TEA PLANT—SEE CUT.

is an evergreen shrub with long, leathery, thin and very hard leaves of a rich dark green, not unlike those of the laurestinus. In November it produces, in China, a profusion of single white flowers, which are axillary and nodding, and though only an inch across, closely resemble those of a single camellia. Usually there are five sepals and petals and numerous stamens, while the fruit or pod is generally three-celled with a single large seed in each cell. The plant in its wild state is a bushy shrub, sometimes a tall tree, but in cultivation it is kept pruned down to a light of five feet. Like other plants long in cultivation, tea has produced several marked varieties which have sometimes been described as distinct species, but botanists generally agree that these all belong to one species, the *Camellia Thea*, and that the difference in size and appearance is mainly due to differences in soil, climate, mode of culture and the preparation given to the leaves. Tea produced on the hills differs from that on the low-lands and that which receives but little care is inferior to that which has been highly cultivated.

For the

CULTIVATION

of the tea plant almost any good arable soil, free from stagnant moisture, is well adapted. In some places the land is enriched with litter, sewage—always carefully saved in China—or with other fertilizers. The seeds are gathered in November, but are not properly ripe until the next autumn. They are then kept in sand until the following spring when they are sown, commonly in seed-beds, but sometimes in rows where the plants are to grow. In the former case the seedlings when a year old are planted out in rows from three to six feet apart each way. When the plants are about 18 inches high, the leading shoots are pinched to induce them to become bushy. They yield a small picking in the third year, and attain their maximum yield in the eighth or tenth, after which they deteriorate and give way to young plants. The average yield per acre is from 300 to 400 pounds according to the locality, but it requires about four pounds of fresh leaves to make one pound of dried tea.

The earliest

PICKING,

about the first of April, consists of the buds and the very youngest leaves, a second gathering about the end of the month, or early in May, consists of leaves more fully developed and yields the most important crop. An inferior quality of leaf is gathered in July, and in some localities another picking of old and poor leaves is made still later. The picker has a basket slung by a cord around his neck, to leave both hands at liberty. With one hand he holds the shoot, and breaks off the blade of the leaf with the other; for except in the earliest picking of the very young leaves, no portion of the leaf-stalk must be gathered with the finer kinds of tea. As the work proceeds, the picker frequently turns the leaves with the hand so as to prevent the lower ones from fermenting, which would spoil the whole plucking. With the late pickings the leaf and leaf-stalk are plucked together and separated, if at all, in

THE PROCESS OF PREPARATION.

This differs according to the various kinds of tea to be produced and the locality, for each part of the country has traditional methods of treatment supposed to be necessary to produce the best results. In all, however, the main object is to facilitate desiccation and prevent fermentation. With this end in view, so soon as the leaves are plucked they are exposed in shallow baskets to the sun and air which wither and partly dry them. Having been straightway removed to the tea-house and there allowed to cool, they are thrice beaten for ten minutes, at intervals of half an hour, by clapping them between the hands, throwing them up and letting them fall. This, together with subsequent rolling and heating, is necessary to develop from the resinous substance of the leaf the essential oil that gives to tea its peculiar aroma. They are then placed in small quantities in shallow copper or iron pans, heated by charcoal or other fuel and rapidly stirred. At the proper moment they are swept out into other appropriate vessels or upon a table where other workmen rub the leaves between their hands in order to roll them into the form they finally retain. This is a very delicate operation and "the art of rolling" is held in high repute among the very practical Celestials. This alternate heating and rolling is repeated two or even three times. They are then placed in drying baskets, two and a half feet high, two feet in diameter at top and bottom and eighteen inches in the middle where bamboo sieves are stretched across, on which the tea is spread in thin layers. The whole is then placed to dry over a charcoal fire, which must give off no smoke, and be carefully regulated. The choicer teas are spread out on a table or placed in shallow bamboo trays to be assorted before packing; all imperfectly rolled leaves are removed and the dust and fragments sifted out. The chest with its leaden lining being ready, and the amount of tea for each weighed, one bare-footed Mongolian gets into it, another gradually pours in the leaves, which the first treads down firmly, and as soon as the case is full the leaden cover is soldered down, and the tea is ready for shipment to the Western Barbarians.

Of the

CHINESE TEAS

the principal black sorts are bohea, congou, souchong, caper, oolong and pekoe. Of these bohea is the coarsest, and pekoe the finest, consisting of the very youngest leaves of the first picking. When these are so young that they are still clothed with down, they constitute the flowery pekoe, a choice sort not very often found in the farmerine's teapot. Among the green teas are twankay, hyson skin, young hyson, hyson, imperial, and gunpowder. The gunpowder in green tea corresponds with the pekoe in black and, like that, is from the first gathering. Imperial, hyson, and young hyson, are grades made from the second and third pickings, while the inferior, light leaves, winnowed from the hysons, make the hyson skin, the chief market for which is found in this country. The finest teas, both black and green, are seldom seen in the United States, as transportation in the hold of a vessel causes fermentation which destroys their quality. Most of the crops of these luxuries is consumed either by wealthy Chinese or exported overland to Russia.

The evaporation of water from the leaf and the drying process change its color to brown or black. The green teas of commerce are merely black teas dyed by a preparation of Prussian blue and gypsum, applied at the last heating. The green tea used in China is from the first picking, and is never dyed and seldom or never exported.

The

ADULTERATIONS

to which tea is subjected are innumerable, from the "lie tea" concocted in China out of the dust of tea, rice-husks etc. by the aid of gum, to the ingenious product of the leaves of the sloe, hawthorn, elder, plane, poplar and other trees which has, not infrequently, been palmed off on simple humanity by the grocers of England and the United States. To escape these deleterious concoctions, if for no other reason, it would be a blessing should tea culture prove remuneratively practical among us, but apart from the tedious labor of picking the crop leaf by leaf, before it is ready for use there is a multiplicity of other small operations needed to prepare the different kinds. These the limits of this sketch prevent us from particularizing here, but all together they consume so much time as to render it a very doubtful problem whether tea can be profitably cultivated in this country until inventive ingenity shall have devised some mechanical contrivance to supersede human manipulations.

The cuts that illustrate this article will give our readers a fair idea of the tea plant—page 217—its cultivation and manufacture.

Farm Topics.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

APPLICATION OF MANURE.

The subject of the application of manure to the soil in a manner to receive the greatest benefit therefrom, has ever been, and probably ever will be, one of much dispute among farmers. Speaking for myself, I would seldom apply manure to spring crops. If we would receive the full benefit of its fertilizing qualities, we must have it in a well-rotted condition that it may be readily commingled with the soil. Drawn directly upon the ground from the yards in spring, this result cannot be obtained. The coarse manure should be drawn out in spring and piled in some convenient place until fall, adding from time to time, as convenient, the refuse from the stables, the piggeries, and the leach. By seeding time in the fall, the whole mass has become well-rotted and in fit condition for application as a top-dressing for wheat, the crop that really needs the assistance of manure more than any other of the cereals. We derive more benefit from the application of manure in fall, than in spring. The late rains and snows of winter carry the fertilizing qualities into the soil, while the hot sun of summer draws these properties away from the plants they are calculated to nourish. The finer scrapings of the yards may be applied to the land in spring—no doubt with good results.

I consider the best manner of doing this to be an application directly after plowing, harrowing it well into the soil with the grain. If it is spread upon the surface after sowing, we lose nearly or quite half the nutritive elements. Where it becomes advisable—or necessary—for us to apply in the spring the manure accumulated in the yards during the winter, I always do so before plowing. The benefit derived from its use in this manner, is not so speedy, but more permanent. I would *never* apply barn-yard manure to corn ground. The seed of barn-grass, smart-weed, and other noxious weeds are nearly always mixed with it, making it unadvisable to do so. I always endeavor to have a clean clover sod to turn each spring for corn. Corn planted after clover requires much less cultivation, and I scarcely ever fail to secure a first-rate crop. I have heard men affirm that you could not make ground too rich for corn; but such is not the case. Where too much manure is applied, there is an immense growth of stalks, but they are usually scantily eared. If I have a good clover sod, and plenty of ashes and hen manure, I can raise good corn on nearly any ground. The assertion may seem broad, yet, nevertheless it is true. You never see a good growth of clover on poor land, and the elements essential to the free growth of clover are likewise necessary for corn. If the manure is plowed in every spring, the land will be kept in good condition—provided enough is applied—for any crop of grain, for an indefinite number of years, yet I would never raise more than three successive crops without seeding. This is the great secret of keeping the land up, in any country. We can keep a small quantity of land in good condition by the use of manure; but when it extends to a hundred or more acres, this becomes impossible, almost. By a careful and systematic saving of all the extra straw, leaves, etc., the manure heap may be largely increased during the year, and turned to advandage in fall as a top-dressing. By applying it in the spring, we cannot turn these to so good an account. Swamp muck and plaster, scattered in the yards or stables, to absorb the urine, are valuable additions. To sum up: for spring crops let the manure either be plowed under or applied before sowing and well harrowed in with the crop. Scattered on the surface after sowing, there is much of the ammonia lost in the atmosphere. A neighbor experimented with manure last spring. After the grain—barley—was sprouted, he drew out barn-yard manure and scattered over the surface. In reply to my remonstrance, he assured me that "I'd see," and I *did* see; his grain came up yellow and sickly, actually rotted by the contact of the young plants with the manure. From an acre, he harvested five bushels of barn-grass, and other foul seed—and barley.

SPRING SOWING.

The time has come when spring crops demand our attention. Which varieties can we sow with best results, and most profit to ourselves? In my opinion every farmer of any pretensions, should cultivate one variety mainly, whether of wheat, barley, or oats. I never could convince myself that the two last were really profitable. The idea that one must sow a *little* of each, is a poor one. If we devote our attention to one variety we are better acquainted with its peculiarities and the most successful manner of cultivating it. To be successful with any spring crop we must get it in early, as a general rule be it understood. Occasionally, it is true, a crop sown late does well, yet we lose by making it a practice. I was once acquainted with a farmer who became repeatedly a loser by this habit. A crop of oats once sown by him the first of June, yielded enormously, and thereafter he became known as the "afternoon man," from his partiality for sowing grain late. Yet, mark you, he never was heard to brag on any crop but one, although oats do better when sown late than either spring wheat or barley. These should be sown just as early as the state of the soil will admit. By early sowing I don't mean in March, or the first few days of a cold wet April, but when the soil becomes dry and warm, so that it can be pulverized, and is of the right temperature for the grain to sprout immediately and grow rapidly. We lose by cultivating the soil too early, even more than by cultivating it too late; for besides the loss by an inferior crop, the good qualities of the soil are greatly diminished. Spring wheat alone is an exception. This *must* be sown early.

Rolling after sowing I have become convinced is of great importance. The earth is pressed firmly about the seed, causing it to sprout sooner and more evenly. Moreover on stony ground where the grain is cut either with a reaper or cradle, the surface is left smooth, the smaller obstructions crushed down so that they are no impediment to the sickle-bar, or hand-rake. Where grass-seed is sown in spring, it should be done either before the last harrowing or "bushed in" afterwards. When sown directly on the surface and not covered, much of it will never germinate, especially if there should be no heavy showers immediately after sowing. The best time to sow grass-seed upon winter wheat is, in my opinion, when the last snow of spring is melting. As it melts and is absorbed by the soil, the moisture carries the seed with it into the earth sufficiently deep for germination.

PUMPKIN SEEDS FOR MILCH COWS AGAIN.

In a recent number of the RURAL, "Clinton" ridicules the idea of pumpkins or their seeds being injurious to milch cows. He states that for years he and his father fed them to their cattle with no bad results, while he, himself esteemed the seed a great luxury. I would like to inquire whether he ever kept geese and, if so, whether he ever allowed them to eat the seed, and with what results. Or did he ever feed part of his cows pumpkins, and for the remainder, substitute carrots, beets, or cornstalks? I have talked with many farmers on the subject, and four-fifths of them assert, with me, that pumpkins, as food for milch cows, are not a success. They are excellent for fattening purposes, but diminish rather than increase the flow of milk.

FARM NOTES.

S. RUFUS MASON.

DEEP OR SHALLOW PLOWING.

Did any one ever hear of the temple of Janus, that stood in the center of a plain? It had a hundred sides, no two alike, approached by a hundred roads, each of which ended butt up against its special side, with no way of retreat but to go straight back again. No pilgrim to this shrine ever saw but one side, and his "tale of wonder" when he got home again was of that alone.

"Deep or shallow plowing" is a myth of the sort. If a farmer finds shallow work the best on his farm, let him show his sense by sticking to it; but if another has proved deep furrows the best for him, don't let us try to argue him out of it. What is the use of a hundred men standing around a temple and scolding each other while none of them can see any of the others?

EXPERIMENTAL FARMING.

All knowledge is gained on a farm by experiment. It may be made very profitable or very ruinous. Now, in the spring, is the time to try on any unsatisfactory piece of land, different methods of developing its capabilities. A little deeper plowing, a little more fertilizing, a coat of clover or buckwheat plowed under, liming, plastering, hoed crops or sowed crops, grass top-dressed, or even frequent cultivation with no crop, are modes applicable to most varieties of land sickness. If the trial is made on a small surface there can be but a small loss at the worst, while extensive experiments are sure to "make or break" one.

THE FEET OF HORSES.

"No foot, no horse"; although every farmer knows this maxim, it seems as if many (by the size they keep their animals feet at) expected to double their teams by a contrary interpretation of it. A hoof spread out of all likeness to its original form, cracked nearly to the quick, the frog pared till it is as thin as paper; the sole cut away till the frog touches the ground at every step, toes turned in, and sore knees from frequent stumbles, are no credit to a farmer now-a-days. If every man who is guilty of causing the above defects, were compelled to keep his own feet in a similar manner, there would be a revolution somewhere. It is not necessary to employ a farrier to trim a horse's foot. A plank to stand on, a sharp two-inch chisel, and a good mallet, in the hands of a careful man will, if used once a month, keep hoofs in perfect order and improve them constantly.

FARMERS' MAXIMS.

Slow and sure, if you are poor. Small ventures small risk. The best of seed is what you need. If you do your work well, the profits will tell. Gentle boss, gentle beast.

"Keep what you've got,
And get what you can,
Honestly, if you'd be a man."

"When you go out to buy,
Shut your pocket and open your eye."

Farm Economy.

EXHAUSTION OF SOILS.

J. B. LAWES,
Rothamsted, England.

THERE is no subject on which more difference of opinion exists than on that relating to the exhaustion of soils; but this is not surprising when we consider how extremely complicated it is.

The late BARON LIEBIG who employed abilities of the very highest order in the inquiry, gave it as his opinion that the exhaustion of the soils of England was due to a deficiency of phosphate of lime, and further, that if a cheap and abundant source of this substance could be discovered, we might grow all the wheat required by our population. For the last quarter of a century our farmers have had at their disposal abundant supplies of phosphate of lime: for a few cents they can purchase all that is contained in a bushel of wheat. Each year, however, finds us importing more and more corn, and at the present time fully one-half the population of these Islands is supported entirely upon bread made from foreign wheat. It was also the opinion of BARON LIEBIG, and this opinion is very prevalent at the present day, that the constituents of the soil which are removed by crops should be returned to it in some form of manure or chemical salt. Such a procedure would doubtless be an effectual remedy for the exhaustion of soils, but it ignores the fact for which I am disposed to contend, that soils are meant to be exhausted. All soils which have never been cultivated by man possess a natural or standard fertility belonging to their geological formation, and a more readily available fertility arising from the accumulation of living and decayed vegetable matter on their surface. The latter state of fertility has long ceased to exist in England, while the former is as distinct as ever after centuries of cultivation, and is appropriately designated by farmers under such terms as "very fertile," "rich" "poor" "hungry" etc.

Now the most vehement advocate for the non-exhaustion of the soil would hardly be disposed to contend that the surplus fertility of of a newly cleared settlement in the States does not form part of the natural wealth of the country; or, assuming that it takes the form of 100 bushels of maize on the acre and is followed by two or three more of large but probably diminishing crops, that such an exhaustion of the soil is not perfectly legitimate; also that in such operations, to attempt to restore to the soil the constituents removed by the crops would be absurd. Now it appears to me that from the starting point where I have assumed that the removal of plant-food from the soil without its restoration, or, as it is commonly called, the exhaustion of the soil, is perfectly legitimate, there is none in the successive stages of such exhaustion at which it is possible to say that it ought to be arrested. Judging from my own soil which has been subjected to the most rigid process of exhaustion that could be brought to bear upon it, I should say that soils have a wonderful power of resisting exhaustion. A few years of corn-growing without manure would, I used to think in the early days of my experiments, be sufficient to bring its corn-producing powers to a stand-still, but at the end of nearly forty years we are discussing whether the decline in produce which the last of two equal periods of years shows over the first period, is due to greater exhaustion, or to a larger proportion of unfavorable seasons in the latter half of the period than in the former.

In the United States where the owner of the soil is also the cultivator, the question with regard to the exhaustion, or the restoration of the fertility of a soil, is not complicated as it is in England, where the interests of the owner and of the cultivator of the land are conflicting. The United States' farmer probably pays but little regard to the effect which his operations in husbandry may have upon the soil at some far distant period. When he applies manure to his land it is with the idea and hope that the increased produce will repay the cost of the operation. A visit to the United States and an inspection of its agriculture, although it would add immensely to my general knowledge, would add little or nothing to what I already know in regard to the food of plants and the exhaustion of soils. Maize is the great crop of the States and the principal food of the nation, but it is quite evident to me that the great value of maize as a food, depends upon the starch it contains, and that it is one of the same botanical order of plants as wheat and barley, taking up, and exhausting the soil of, the same ingredients as the other cereal grains.

What we really want in order to advance our knowledge with regard to the exhaustion of soils are careful and accurate statistics of the amount of produce carried off from farms and of the manures brought on to them for a considerable number of years. If such figures could be obtained over a sufficient area of land in the various geological formations, we might be able to calculate the rate of exhaustion which each soil is capable of bearing without apparent injury, but the general statistics of a country are of no avail in such an investigation as this. We might indeed arrive at some general idea of the collective amount of ingredients removed from the soil of a country or State, but we should only obtain the sum of the whole. One farm or district might be increasing the fertility of the soil, while another might be greatly reducing it, and the special points of interest in the two would thus be lost in the general average. Accurate statistics not being attainable, I have been endeavoring to make use of such materials as we do possess in order to compare the agriculture of the United States with that of England. Independent of several difficulties of a minor nature, which will be apparent as I proceed, there are two of a very serious character in the way of such an undertaking. In this country we have no statistics of produce. The agricultural returns for the last ten years do indeed give us the acreage of the various crops grown and also the number of the various kinds of stock kept, but no attempt has been made to ascertain the yield of the various crops; we are therefore left to form the best conclusions we can on the subject. The statistics of the agriculture of the United States are, on the other hand, most ample, and I take this opportunity of returning my thanks to the Head of that Department for his kindness in furnishing me with a set of this most valuable publication. The difficulty of making use of these statistics in the manner I first intended, arises from the vast changes in the agriculture of the United States which take place in comparatively small periods of time. Those acquainted with agriculture are fully aware that, owing to the influence of seasons, any general conclusions derived from the produce of one year only are of little value. An average of 10 years is by no means too long a period to adopt, and in the field experiments on my farm, we consider that 20 years is not too long a period in writing upon any experiments on field produce.

Taking the United States statistics for 10 years, from 1866 to 1875, as the latest in my possession, I find that during that period such vast tracts of new land have been brought into cultivation that for my purpose these statistics are not suitable. An increase of 10 million acres of Indian corn brought into cultivation, of a still larger quantity of wheat, besides an increase of all the other crops grown, except buckwheat, gives us some notion as regards the wonderful energies of the inhabitants of the United States, and at the same time leaves little doubt as to the cause of the depressed state of the agricultural interest in the United States and in this country. The State of New York, however, may be brought into comparison with a country like England, as the fluctuations in its agriculture in a limited period are not of that startling nature which characterizes the agriculture of the United States in general. I shall therefore take the agriculture of the State of New York in the following comparisons with that of England. In our statistics of agriculture a line is drawn through the centre of England, dividing it into two districts; one, containg 21 counties, is called the western and grazing district; the other, the eastern or corn district, also containing 21 counties. As the grazing district more nearly resembles New York State in its agricultural character, I propose to adopt that district in my remarks.

According to the census of 1870 the improved land in the State of New York was a little over 15½ million acres. In the 10 years of 1866-75 the amount of land under hay, potatoes and corn varied from six to a little over eight million acres. These fluctuations, although large, do not appear to be due to any change in the area of improved land, but rather to the influence of prices, reducing or increasing the area of cultivation. In 1866 the area under these crops was 8⅛ million acres: from this point it declined gradually until the year 1871, when it reached the lowest point of 6.16 million acres; advancing again steadily until it reached nearly 8 million acres in 1875. The number of acres of land contained in the 21 grazing counties of England is 12,908,000, or nearly 13 millions. This includes all crops, fallows and pasture, but excludes mountain land and heaths.

During 10 years but little change has taken place in the amount of the various crops grown. Before, however, instituting any comparison between the farming of the State of New York and that of the 21 grazing counties of England, it will be as well to notice some of the most marked points of difference between the farmers of the two countries, and their methods of farming. The New York farmer is the owner of the land, he can do what he likes, cultivate what crops he pleases, adopt whatever system of cultivation he thinks most condusive to his interests. He owns, on an average, 103 acres, of which about 73 are improved land. The greater part of the farm work is done by himself and his family; the amount of wages paid not exceeding, on an average, $2.20 per acre yearly. I have been informed on very good authority, and I can quite believe it, that he works much harder than his brother in England; still his life is one of complete independence and he calls no man his master.

In common, however, with the English farmer, he has been recently suffering from low prices, and much as he may rejoice in the progress of his country, he may possibly think that nearly 30 million acres of land brought into cultivation in ten years may have a somewhat depressing effect upon the value of his own crops. Three of the crops cultivated in New York State are not cultivated in England; viz Maize, the great crop of the United States, which cannot be profitably grown in England for want of sufficient warmth in the autumn months; Rye and Buckwheat. These used to be grown here but have given place to more valuable products. All other crops are grown in both countries. Mangolds and Turnips, which constitute a distinct feature in English agriculture, are not noticed in the general reports. The "New York Transactions" which goes into more minute details and tells us that Sullivan Co. produced 6 pounds of dried apples in one year, also informs us that 4 or 5 thousand acres of Turnips are grown in New York State.

The English farmer does not own the soil; for a fixed annual payment he holds it by lease, agreement, or, in the absence of any agreement, by custom, which settles what he may and may not do; so that he has but little liberty of action. Generally he may not grow two white-straw crops in succession, and he may not sell hay, straw, or roots. These restrictions which were established at a time when nothing was known respecting the food of plants, and when fertility could not be purchased, are much less necessary now; and I have recently made an attempt to get them altered and modified. With distinctions so great between the owner of the land acting with perfect freedom on one side the Atlantic, and the tenant bound by numerous restrictions on the other side, I was somewhat surprised to find so general an agreement on many points as the following table exhibits:

TABLE 1.

Showing the number of acres of land under the various crops in the State of New York, on an average of 10 years, 1866–75, compared with the crops in 21 counties of England called Grazing Counties; also the number in each crop in 100 acres.

	State of New York Acres.	England. Grazing Counties. Acres.	State of New York Per cent.	England. Grazing Counties. Per cent.
Corn crops	2,970,000	2,761,443	19.	21.4
Potatoes	269,000	149,000	1.72	1.4
Other green crops.		978,317	0.	7.6
Fallow	156,000	251,459	1.	1.9
Hay	3,910,000	2,845,541	25.	22.
Not for Hay	8,305,000	5,882,612	53.2	45.6
Total	15,610,000	12,896,872	99.92	99.9

The State of New York contains 2½ million acres more than the 21 English grazing counties; in order therefore to bring them to an equal standard for comparison we must look at that part of the table which shows the amount of the various crops in every 100 acres. It will be seen that the English farmer grows rather less than 2½ per cent. more corn* than the New York farmer and that they have almost the same amount of land in potatoes and fallow. Of other green crops, such as mangolds, turnips and vetches, he grows 7⅓ acres in the 100, while the New York farmer grows an area too small to be appreciable. The latter has, however, a larger acreage of land not for hay, and if we add to the 45⅓ English acres not for hay, the 7⅓ acres of green crops which are always consumed on the farm, we have a close agreement between the two countries with regard to the number of acres employed in feeding stock. This will be seen in the following table:

NEW YORK.		ENGLAND.	
	Acres pr ct.		Acres pr ct.
Not for Hay	53	Not for Hay	45⅓
		Green crops	7⅓
	53		53

With regard to the amount of land which is in permanent pasture, that is to say, land which is never plowed up, there is in the 12-9 million acres of the English grazing counties 7 million acres, or 56 per cent of the whole; but I have searched in vain through the New York transactions for some information relating to permanent pasture in that district. In the returns for 1865 it is stated that 6 million acres were in pasture in the previous year, and about the same quantity in meadow; but this does not give the information I require. The only reference to permanent pasture occurs in connection with some trials of mowing machines. It is there stated that the meadows had not been broken up during Mr. MONSON'S recollection, but how far back his recollection extended is not mentioned. The botanical analysis of the herbage of the meadow is given, and the number of species growing is stated to be unusually large. I find there are, in all, 52 species of plants, of which 10 are grasses, 2 clovers, and 40 are weeds. On the Rothamsted pasture which has been unmanured for 22 years, and from which a hay crop has been carried off every year, there were at the commencement 50 species of plants, of which 16 were grasses, 4 were clovers, and 30 were weeds; and there has been little variation in the amount of species during the whole of the period. On an adjoining piece of land which started with the 50 species, but which has received a very large quantity of chemical salts every year, the change in the herbage has been very great; the weeds and clover have almost disappeared, and of the original 50 species only 16 remained at the end of 16 years. Of these 16, nine were in quantities of only a few pounds per acre, while two grasses, the Dactylis, or Cock's-foot, and Alopecurus or Meadow Fox-tail, which in the original pasture occupied quite an insignificant position, now constituted the greater bulk of the crop. A professed botanist who makes a complete separation of all the plants in each experiment every 5 years, made the weight of these two grasses alone to be 1½ tons of hay per acre. The Cock's-foot and Fox-tail are considered to be amongst the most nutritious of our grasses; thus we have a striking illustration in this experiment of the power of the better sort of plants, under the influence of an abundant supply of food, to drive out those of an inferior nature.

I am disposed to think that permanent pasture does not prevail extensively in the State of New York, but that after one or more years the land is broken up. In the English grazing counties, 56 acres out of the 100 being always grass, we have 44 under arable cultivation, of which one-half is in corn. The greater part of the grain is sold, and also the potatoes. The remainder of the produce is used directly or indirectly to produce meat or other animal products. The New York statistics afford no information respecting the quantity of hay sold off or consumed on the land, nor indeed do those of my own country; but while I can fill up the blank from personal knowledge in one case, I have nothing to guide me in the other. In the following table is given the amount of live stock kept in the two countries over the adopted area, and also the calculated quantity kept per 100 acres in each country.

TABLE 2.

Showing the amount of stock kept in the State of New York, in 1875, on an area of 15.61 million acres; and in the 21 Grazing Counties of England, on an area of 12.89 million acres: also the number calculated in 100 acres.

	State of New York	England. Grazing Counties.	State of New York 100 acres.	England. Grazing Counties. 100 acres.
Horses	697,100	586,739	4.4	4.1
Cattle	2,139,500	2,921,282	13.8	20.
Sheep	1,935,500	9,697,359	12.5	75.
Pigs	563,700	1,068,734	3.6	8.

With the exception of horses, of which the quantity kept for 100 acres is rather larger in New York State than in England, the amount of stock kept in England is very much larger; in sheep more especially the difference is very great and requires some correction. The statistics of Great Britain comprise all the cultivated and pasture land and exclude mountain, heath and other waste land, but they include the whole of the stock wherever kept. The returns of stock in a country in which there is any large area of mountain or waste land show, therefore, more stock, principally sheep, than actually derive their support from the land included in the cultivated acreage. The only means we have of correcting this error is to take as a basis the amount of stock kept in counties where little or no waste land exists, and to deduct any excess which we find in counties where there is much waste land. In a majority of the 21 counties which are included in the grazing districts there are practically no waste lands upon which stock are kept, and several of these keep 20 oxen and 100 sheep per 100 acres, which is more than the average; but those constitute the finest land in the country. Some of the northern counties which have much waste land, carry 133 to 138 sheep on the 100 acres; part of them are certainly fed on waste land, and possibly a reduction of from 10 to 15 sheep per 100 acres over the whole area would meet the case. I have no data to guide me in forming any opinion respecting the amount of stock kept upon the unimproved land in the State of New York. In the follow-

* The general reader may not be aware that the word Corn in England includes all kinds of cereals.

ing table will be seen the number of acres per cent. of each crop grown in the State of New York and in the 21 English grazing counties; also the average produce of each crop.

TABLE 3.

Showing the number of acres in each crop in 100 in the State of New York and in the 21 grazing counties in England; also the produce per acre of each crop.

	New York No. of acres.	England. No. of acres.	New York Produce per acre. Bushels.	England. Produce per acre. Bushels.	New York Total in bushels.	England. Total in bushels.
Maize.....	3.9	—	31.6	—	123.24	—
Wheat.....	3.9	9.8	14.	26.	54.6	254.8
Rye.....	1.4	—	14.2	—	19.88	—
Oats.....	6.7	5.	32.2	40.	215.74	200.
Barley.....	1.7	6.6	22.	30.	37.4	198.
Buckwheat....	1.4	—	20.	—	28.	—
Total.....	19.	21.4			478.86	652.8
Average.....	—	—			25.1	31.

The New York figures are calculated from an average of ten years, 1866-75; the average produce of the English counties is estimated from the best data I have at my command.

I made, some years ago, a very careful investigation of the amount of bread consumed by our population in order to arrive at the produce of our wheat crop; from this it would appear that our average produce per acre amounts to 28 bushels; but as the western half of the country is less adapted for the growth of wheat than the eastern half, I have considered the produce to be 26 bushels, or 2 bushels less. Similar estimates have been made for the other crops. According to the above table the State of New York grows 19 acres of corn in every 100 of improved land, averaging 25 bushels per acre, or 479 bushels altogether; six different sorts of crops being grown. The grazing counties of England grow 21½ acres of grain in every 100, averaging 31 bushels per acre, 653 bushels altogether; three different sorts of grain being grown.

In making any attempt to estimate the relative exhaustion of the soil in the two countries, it would be necessary to obtain a variety of information which I do not possess. The potatoes in England, for instance, are as a rule grown in the neighborhood of large towns or on the lines of railways where town-dung can be obtained, and I am disposed to think that all the soil ingredients taken up by the crop are replaced by the purchased manure which grows it. Artificial manures and purchased cattle foods are also largely employed in England, but it is impossible to say how much of the produce of the English soils is due to their use. The statistics of New York give no information respecting the amount of produce sold off, or consumed on the farms. Hay for instance exhausts the soil largely of mineral matter, especially potash, but no information is to be found with regard to the amount consumed or sold.

In attempting to construct a table, to show the amount of the more valuable ingredients of plant-food which are removed from the soil in the State of New York, I do so more to indicate how such questions will be treated by a future race of farmers, than for any other purpose. The data for the construction of such a table are not in existence, and consequently but little reliance can be placed in my figures. In the following table is given the amount per acre per annum of the three most important ingredients of plant-food; nitrogen, phosphoric acid and potash removed from the land in the State of New York, assuming that the crops grown are in accordance with the table of produce previously given. Being ignorant with regard to the amount of produce actually sold off the farm without restoration, I have constructed the table in various forms to show what would be the removal of these three substances, supposing that some crops were sold and others consumed. In order to ascertain the amount of manure ingredients removed in the animal products, I have taken from the census of 1870 the value of the animals killed in the State of New York, which I find to be $183 per 100 acres. Calculated at 4 cents per pound live-weight, this would give me the number of pounds sold. I have also from the same census-tables estimated the quantity of milk, butter and cheese produced; as however all these can be represented by milk, I think it better to found my calculations on milk alone. It is stated in the "New York Transactions" that the average produce of milk per cow per annum is 1,300 quarts; and as out of the 14 head of cattle kept on every 100 acres, 8 are cows, the quantity of milk is 14,400 quarts.

It will be seen by this table that the average amount of nitrogen removed in grain is 21½ pounds per acre, of phosphoric acid, 6¾ pounds and of potash, 5 pounds. In potatoes the amount of the two former substances is the same; but of potash, 8 pounds instead of 5 are removed by them. Hay removes a much larger amount of nitrogen than corn, and more than three times as much potash. Owing to my ignorance with regard to the number of acres required to keep live stock, I am unable to assign to each acre the constituents removed, I therefore give them altogether. There are 53 acres of pasture in every 100 in the State of New York; and if this area kept the stock, we should arrive at the amount of constituents removed per acre, by dividing the figures I give by 53; or, if the hay is consumed by the stock, by dividing these figures by 80.

TABLE 4.

Showing the amount of Nitrogen, Phosphoric Acid and Potash, in pounds, per acre, removed every year from the land, first, assuming that the grain, potatoes, meat and milk are sold off the farm, the straw and hay being consumed and returned to the land in manure; and secondly that the hay also is sold off the farm.

	Nitrogen. in pounds.	Phosphoric Acid. in pounds.	Potash. in pounds.
Removed per annum, in 19 acres of grain.....	21½	6¾	5
Do. in 19 acres grain, 1.74 acres potatoes.....	21½	7	8
Removed per acre of hay sold.....	35	9	17
Removed in live weight of animals and milk.	122	62	14½
Average per acre over 100 acres, if corn, potatoes, live-weight and milk sold.....	6	2¼	3
As above, with hay sold.....	14¼	4⅛	10½

In either case, it will be seen how exceedingly small is the amount of plant-food removed by animals and in their products. The last line but one gives the amount of nitrogen, phospheric acid and potash removed per acre per annum over the 100, assuming that all the corn, potatoes, live-stock and milk are sold off the farm, and the straw and hay consumed, or returned. The last line gives the same, with the hay sold instead of being consumed. The difference in the removal of these substances when the hay is sold, is very striking, showing plainly how much this crop exhausts the soil. It will, I fear, be some considerable time before figures like these become of any real value to practical farmers; the removal of a few more or less pounds of one substance or another over an acre of land being only bare facts which do not tell him what he wants to know; such as, whether his soil is becoming exhausted of these substances too rapidly; or whether one ingredient is being removed faster than others, relatively to the amount which his soil contains. Neither does it tell him whether it would pay to restore these constituents in some artificial form, nor which of them he should restore to the soil.

As portions of my farm are the only pieces of land in the world where the constituents of the crop removed have been estimated for a long period of years, it may be useful to give the figures obtained in one of the fields here for comparison with the New York figures. In 1840 a field of 14 acres which had been under ordinary arable cultivation for a century or more, was sown with barley unmanured, followed by unmanured crops of peas, wheat and oats. In 1844 and since, wheat has been grown for 34 years. Portions of the field have grown corn without the return of any manure whatever; no attempt has been made to increase the yield by deep plowing or subsoiling, and probably the land has not been stirred to the depth of more than 3 or 4 inches from the surface. Careful analysis have been made of the products obtained; and recently the ash of the mixed straw and grain of the last 10 years, and of the previous 10 years produce, have been carefully analysed.

In the following table I have given the amount of nitrogen, phosphoric acid and potash removed per acre per annum in the State of New York and over the unmanured acre of Rothamsted land, taking the average of the last 20 years.

	Nitrogen. Pounds per acre.	Phosphoric Acid. Pounds per acre.	Potash. Pounds per acre.
NEW YORK.			
Corn, hay, meat and milk sold: straw retained.....	14½	4⅛	10¼
ROTHAMSTED.			
Unmanured land	20	10¼	17

It will be seen by this table that the removal of the three constituents of plant-food from the Rothamsted soil is very much larger than from the soil in the State of New York; and it would be larger at Rothamsted even if I had calculated the New York soil as selling off the whole produce, grain and straw, hay, meat and milk, and restoring nothing. I am disposed therefore to think that destruction of weeds and more careful cultivation would be quite as efficacious in increasing the produce of the State of New York crops as the employment of artificial manures.

As far as practicable the land at Rothamsted is kept free from weeds; the wheat can therefore take up all the available plant-food in it. With how many natives of the soil has the wheat grown in the State of New York to contend for its share of food? As far as I can judge, exhaustion of the soils in your State is not taking place to any alarming extent. There are various processes by which a greater produce can be obtained from a soil, but the selection of these must in all cases depend on a variety of local circumstances, such as the price of labor, the value of the product sold, the cost of the various processes to be employed, etc. A person therefore writing from a distance would be almost certain to commit serious errors if he attempted to profer advice on this complicated subject.

Floricultural.

WILD PLANTS AS GARDEN FLOWERS.

No. 2.

WILLIAM FALCONER.

In the following lists I have classified our Wild Plants, as regards time of blooming and shades of color, from practical observation, and as nearly as is consistent with the space at my command. They are also compiled, just as this article is written, with a view to suit our Northern climate, where they are emphatically hardy plants. Indeed, with a very few exceptions, we cultivate them all at the Botanic Garden here. True, we protect most of our plants with a few leaves or some rubbish in winter, no matter be they ever so hardy, because we find them benefited thereby.

SPRING.

WHITE.—Anemone nemorosa, Wood Anemone; Carex Fraseriana, Fraser's Sedge; Cerastium arvense, Mouse-ear Chickweed; Convallaria majalis, Lily-of-the-Valley; Erigeron flagellare, Creeping Fleabane; Hepatica acutiloba, Sharp-lobed Liver-leaf; Jeffersonia diphylla, Twin-leaf; Podophyllum peltatum, Mandrake; Polygonatum giganteum, Soloman's Seal; P. biflorum; Sanguinaria Canadensis, Bloodroot; Sedum ternatum; Smilacina bifolia, False Soloman's Seal; Thalictrum anemonoides, Rue Anemone; Tiarella cordifolia, False Mitre-wort; Trientalis Americana, Star Flower; Trillium grandiflorum, Large-flowered Birthroot; T. nivale, Dwarf Birthroot.

RED AND PURPLE.—Aquilegia Canadensis, Canadian Columbine; Claytonia Virginica, Spring Beauty; Cypripedium acaule, Lady's-Slipper; Dodecatheon Meadia, Shooting-star; Dicentra eximia; Geranium maculatum, Spotted Cranesbill; Geum triflorum, Rocky-Mountain Avens; Phlox amœna; P. reptans; P. subulata, Moss-Pink; Trillium erectum, Purple Birthroot; T. recurvatum; T. sessile.

BLUE.—Anemone patens, var. Nuttalliana, Pasque-Flower; Aquilegia cœrulea, Rocky Mountain Blue Columbine; Camassia Fraseri, Fraser's Squill; Delphinium tricorne, Dwarf Larkspur; Hepatica triloba, Liver-Leaf; Houstonia cœrulea, Bluets; Iris cristata, Crested Iris; I. verna, Spring Iris; Mertensia Virginica, Smooth Lung-wort; Oxalis violacea, Violet Wood-Sorrel; Phlox divaricata; Viola cucullata, Common Blue Violet; V. delphinifolia, Larkspur-leaved V.; V. palmata, Hand-leaf V.; V. pedata, Bird-foot leaved V.; V. sagittata, Arrow-leaved V.

YELLOW.—Corydalis aurea, Golden Fumitory; Stylophorum diphyllum, Celandine Poppy; Viola Canadensis, common Yellow Violet; V. pubescens, Downy-leaved V.; V. rotundifolia, Round-leaved V.

SUMMER.

WHITE.—Abronia fragrans; Anemone Pennsylvanica; Apocynum androsæmifolium, Spreading Dogbane; Astilbe decandra; Cimicifuga Americana, Bugbane; C. racemosa, Black Snake-root; Clintonia borealis; C. umbellata; Cornus Canadensis, Dwarf Cornel; Cypripedium (Lady's Slipper) candidum; C. spectabile; Euphorbia corollata; Gillenia stipulacea, American Ipecac; G. trifoliata, Bow-man's Root; Habenaria lacera, Ragged fringed Orchis; Mitella diphylla, Two-leaved Mitre-root; Parnassia Caroliniana, Grass of Parnassus; Pentstemon Digitalis; Smilacina racemosa; S. stellata, False Soloman's Seal; Spiræa Aruncus, Goatsbeard; Yucca angustifolia; Y. filamentosa, Adam's Needle.

RED AND PURPLE.—Aquilegia truncata, California Red Columbine; Callirrhoe involucrata; Cypripedium arietinum, Ram's Head Lady's Slipper; Dodecatheon Meadia, Shooting-Star; Epilobium angustifolium, Great Willow-Herb; Habenaria fimbriata, Fringed Orchis; Lilium Philadelphicum, Orange-red Lily; L. superbum, American Turk's Cap Lily; Lythrum Salicaria, Loosestrife; Monarda didyma, Oswego Tea; M. fistulosa, Wild Bergamot; Phlox Carolina; P. glaberrima; P. pilosa; Pentstemon barbatus, var. Torreyii; P. Cobæa; P. grandiflorus; P. pubescens; Rhexia Virginica, Meadow-beauty; Rosa blanda, Early Wild Rose; R. Carolina, Swamp Rose; R. lucida, Dwarf Wild Rose; Silene Virginica, Fire Pink; Spigolia Marilandica, Pink Root; Spiræa lobata, Queen-of-the-Prairie; Verbena Anbletia.

BLUE.—Campanula rotundifolia, Harebell; Delphinium exaltatum, Tall Larkspur; Erigeron speciosum; Gentiana crinita, Fringed Gentian; Iris Virginica, Slender Blue Flag; Iris versicolor, Large Blue Flag; Linum perenne, Perennial Flax; Lupinus polyphyllus, Many-leaved Lupine; Pentstemon glaber; Pentstemon ovatus; Petalostemon violaceus, Prairie clover; Polemonium reptans, Jacob's Ladder; Statice Limonium, Sea-Lavender; Tradescantia pilosa, Western Spiderwort; Tradescantia Virginica, common Spiderwort.

YELLOW AND ORANGE.—Aquilegia chrysantha, Rky. Mt. yellow Columbine; Asclepias tuberosa, Butterfly Weed; Cassia Marilandica, Wild Senna; Coreopsis lanceolata; Cypripedium parviflorum; C. pubescens; Gaillardia aristata; Habenaria ciliaris, Yellow Fringed Orchis; Helenium Hoopesii, Hoopes' Sneezeweed; Hypericum pyramidatum, Great-flowered St. John's Wort; Lilium Canadense, Canada Lily; Lysimachia (Loosestrife) lanceolata; Mimulus moschata, Musk Plant; Œnothera (Evening Primrose) biennis, var Lamarckiana; Œ. fruticosa var. linearis; Œ. Missouriensis; Silphium laciniatum, Compass Plant; Uvularia grandiflora, Bellwort.

AUTUMN.

WHITE.—Aster Tradescantii; Boltonia glastifolia; Eupatorium ageratoides, White Snake-root; E. aromaticum; Heuchera villosa, Hairy Alum-root; Hibiscus Californicus; H. militaris.

RED AND PURPLE.—Aster Novæ-Angliæ, New England Aster; Boltonia latisquama; Chelone Lyoni—the true one; Hibiscus Moscheutos, Swamp Rose-Mallow; Liatris (Blazing Star) punctata; L. pycnostachya; Lobelia cardinalis, Cardinal Flower; Vernonia Arkansana, Arkansas Iron-weed; V. fasciculata, Western Iron-weed; V. Noveboracensis, common Iron-weed.

BLUE.—Aconitum uncinatum, and Monkshood; Aster azureus; A. Curtisii; A. Shortii, etc.; Conoclinium cœruleum, Mist Flower; Gentiana Andrewsii, Closed Gentian; Lobelia syphilitica, Great Blue Lobelia.

YELLOW.—Brachychæta cordata, False Golden Rod; Gaillardia pinnatifida; Helianthus (Sunflower) agustifolius; H. decapetalus; H. orgyalis; H. strumosus; H. trachelifolius; Rudbeckia hirta, Coneflower; R. triloba; Solidago, many species—Golden Rod.

For the benefit of those who live near the sea, I append the following list of plants that will flourish in salt-impregnated soils, and which was kindly compiled for me by B. M. WATSON, Jr. of the Plymouth Nurseries, and Professor of Horticulture at the Bussy Institution, Harvard University.

The following are true water plants:

Lathyrus maritimus; Prunus maritima, white, May, will grow inland; *Epilobium palustre, May, will grow inland; Solidago sempervirens, yellow, pink, July, poor; Solidago sempervirens, yellow, July, very fine; †Statice Limonium.

The following plants will grow on the beach, marsh, and adjoining lands, also on the upland, *i. e.*, away from the sea:

Viola pedata; Hudsonia tomentosa, yellow, May; H. ericoides, yellow, May; † Drosera rotundifolia, in salt marsh; Spergularia salina, white, July; Rhus typhina; R. glabra; Vitis in variety; Celastrus scandens; Prunus serotina, Spiræa tomentosa, June; Rosa lucida; Amelanchier Canadensis; Hyssa multiflora; Liatris scariosa, purple, August, September; †Vaccinium macrocarpon; Clethra alnifolia; Azalea viscosa; Kalmia angustifolia; Ilex verticillata: Calystegia sepium; †Gentiana crinita; Asclepias tuberosa; Corema Conradii, dark chocolate, April; Myrica cerifera; Carya; Cupressus thyoides; Juniperus Virginiana; J. Sabina var. procumbens; †Pogonia ophioglossoides; †Iris versicolor and Lilium Philadelphicum. None of the above plants would be injured by salt in the air nor in the soil in moderate quantity.

WATER AND BOG PLANTS.

The ponds and streams throughout the country furnish us with many beautiful and appropriate plants, that necessarily require to be grown in water,—and surely all pretentious gardens should have water, if not for aquatics, at least as a feature of landscape. We have white and pink Sweet-scented Pond Lilies in the Eastern States, larger White Lilies in the West, Spatter-docks (Nuphar) everywhere, and Water Chinquepins, South and West. All these are suitable for clumps in ornamental waters. A clump of Cat-tail Flag or Burr Reed may be admissible by way of variety, and the Water Knotweed (Polygonum amphibium), on account of its showy red flowers. Blue and Yellow Bladder worts floating about, add interest to beauty. The pretty and showy white flowers of Orontium aquaticum, commend that species to a foremost rank, and the Water Arum amply repays a footing near the margin. Pickerel-Weeds and Arrow-Heads, blue and white flowered respectively,

* These two grow in the wet marshes, the others on dry sand,

† Marsh plants.

bloom freely, and look well enough, but a too free use of these plants impresses a ragged and weedy appearance, hence they should be used in moderation.

It is quite distasteful to see Pond Lilies and other aquatics matted together in dense thickets. To enhance attractiveness, the water should be clean, and all aquatics in suitably large clumps, and under no circumstances interlacing with, or overcrowding one another, otherwise we shall be building with the one hand and pulling down with the other. A good and easy way of planting Pond Lilies and similar plants is to tie the roots firmly to a tough sod and cast it into the water. They don't require much soil to grow in; in fact, those in our ponds here grow too rankly, in a two-inch layer of mold—accumulated sediment on a solid brick-clay bottom.

The bog is the natural habitat of many of our veriest floral gems. The American Turk's Cap Lily, Blue Flags, Meadow Beauty, purple Pitcher plant, "Cowslips" (Caltha palustris,) Cardinal Flower, Sundews, and our host of beautiful Lady's Slippers, Fringed Orchises and other Orchids thrive better in the bog than anywhere else. It does not necessarily follow, however, that because plants are naturally indigenous to swamps, we cannot utilize them in the flower gardens, but, on the contrary, we can employ the most of them when so transposed, with the happiest results. Certainly an arid soil and exposed position will prove fatal to many of them, but surely we have discretion enough to give this class of plants the moistest nook in the garden, and too, a little shade. Cardinal Flowers, Spring Beauty, Mimulus ringus, Irises, Lady's Slippers, Helonias bullata, and many others we grow quite handsomely in moist shady flower-borders, but Sundews, Pitcher Plants, Water Arums, and several others cannot be grown under ordinary garden conditions.

Artificial bogs are sometimes made in gardens and are charming adjuncts. Where they are impracticable the beauty of the neighboring natural ones can be intensified by transposing thither different genera and species from other places, and displacing by plucking over or otherwise, such rank or weedy plants that might presumably choke the prettier subjects. I have seen Sundews, Northern and Southern Pitcher Plants, Pinguiculas, and Venus' Fly Traps grown quite nicely in cold frames, in pots plunged in sphagnum that was kept a living carpet throughout the year.

Besides the plants already mentioned Scutellaria versicolor, Sabbatias, Buckbean, Goldthread, Willow-herbs, Sweet Flag, Water Plaintain, and Myosotis palustris var. laxa are also pretty bog plants.

CLIMBERS AND TWINERS.

These are especially useful in our own gardens for covering arbors, climbing pillars, shading piazzas, draping fences and walls, screening unsightly objects or trailing over rocks or banks; or, as in the case of our Wistaria (W. frutescens), Trumpet-creeper (Tecoma radicans), and Wild Balsam apple (Echinocystis lobata), for their own intrinsic beauty. Such plants abound in the woods and by the waysides, and are particularly plentiful in low rich ground, and in the neighborhood of rivers, creeks, or branches, lakes or ponds, and where they often form almost impregnable networks. Young plants if well cut back and lifted with good roots may be successfully transplanted from their native wilds to our gardens, providing this be seasonably done—say from October to April, and due care be otherwise given them. Or they must be propagated by means of seed, as in the case of the Climbing Fumitory (Adlumia cirrhosa) and Wild Balsam Apple.

Besides our many species of generous Grape-Vines and uncivil Smilax, the following kinds are fast-growing and highly decorative; Ampelopsis quinquefolia, Virginian Creeper; Aristolochia Sipho, Pipe-Vine; Apios tuberosa, Ground-Nut; Bignonia capreolata, Common Bignonia; Calystegia sepium, Hedge Bindweed; Celastrus scandens, Climbing Wax-work; Clematis Virginiana, Common Virgin's Bower; Ipomœa pandurata, Man-of-the-Earth Creeper; Lonicera sempervirens, Trumpet Honeysuckle; Menispermum Canadense, Moonseed; Rosa setigera, Prairie Rose.

FERNS.

Ferns abound by the roadside ditches, in moist shady woods, in springy fields, and in and around swamps. The Wall-Rue is found on exposed limestone cliffs, the Walking Fern on damp mossy rocks, the Common Polypody on rocks and tree stumps, the Maiden Hair and Climbing Fern, in shady woods, and the Chain, Sensitive and Cinnamon Ferns are common in swamps. Mountainous and rocky regions are usually rich in ferns, which delight in crevices and shady ravines, the smaller species being generally indigenous to the higher elevations, and the stronger kinds to the lowermost places. Notwithstanding this divergence of location, we can grow the following kinds to perfection in our gardens, on a little rockery in a moist shady nook, giving them if practicable a peaty in preference to a loamy soil, though peat is not imperative. Neither is a rockery absolutely needful: Adiantum pedatum, Maiden Hair; Asplenium ebeneum; Asplenium Trichomanes; Asplenium Ruta-muraria, Wall-Rue; Asplenium thelypteroides, Asplenium Felix-fœmina, Lady Fern; Aspidium acrostichoides; A. marginale; A. fragrans; A. cristatum and vars; A. spinulosum; A. Goldianum; Camptosorus rhizophyllus, Walking Fern; Cystopteris bulbifera; C. fragalis; Dicksonia punctilobula; Lygodium palmatum, Climbing Fern; Onoclea sensibilis, Sensitive Fern; Osmunda cinnamomea, Cinnamon Fern; O. Claytoniana; O. regalis, Royal Fern; Phegopteris polypodioides, Beech Fern; P. hexagonopteris; P. Dryopteris; Polypodium vulgare, Polydody; Struthiopteris Germanica, Ostrich Fern; Scolopendrium vulgare, Hartstongue; Woodsia Ilvensis; W. obtusa; Woodwardia Virginica, Chain Fern.

Botanic Garden, Harvard University.

TEA PLANT.

NOTES FROM THE RURAL GROUNDS.

AN EXPERIMENT WITH GLADIOLI.

How deep is it advantageous to plant Gladiolus bulbs? The answer can only be given when the character of the soil is known. The following little experiment was made in an ordinary garden soil to which a considerable quantity of sandy muck was added three years since. All were medium-sized, healthy corms of the same variety—an unnamed seedling—and planted May 1st.

No. 1. Planted eight inches deep from top of corm. Up June 1st; bloomed July 26; one blooming stalk four feet high. Taken up after frosts, there was but one new bulb, large, deep and shapely—no bulblets.

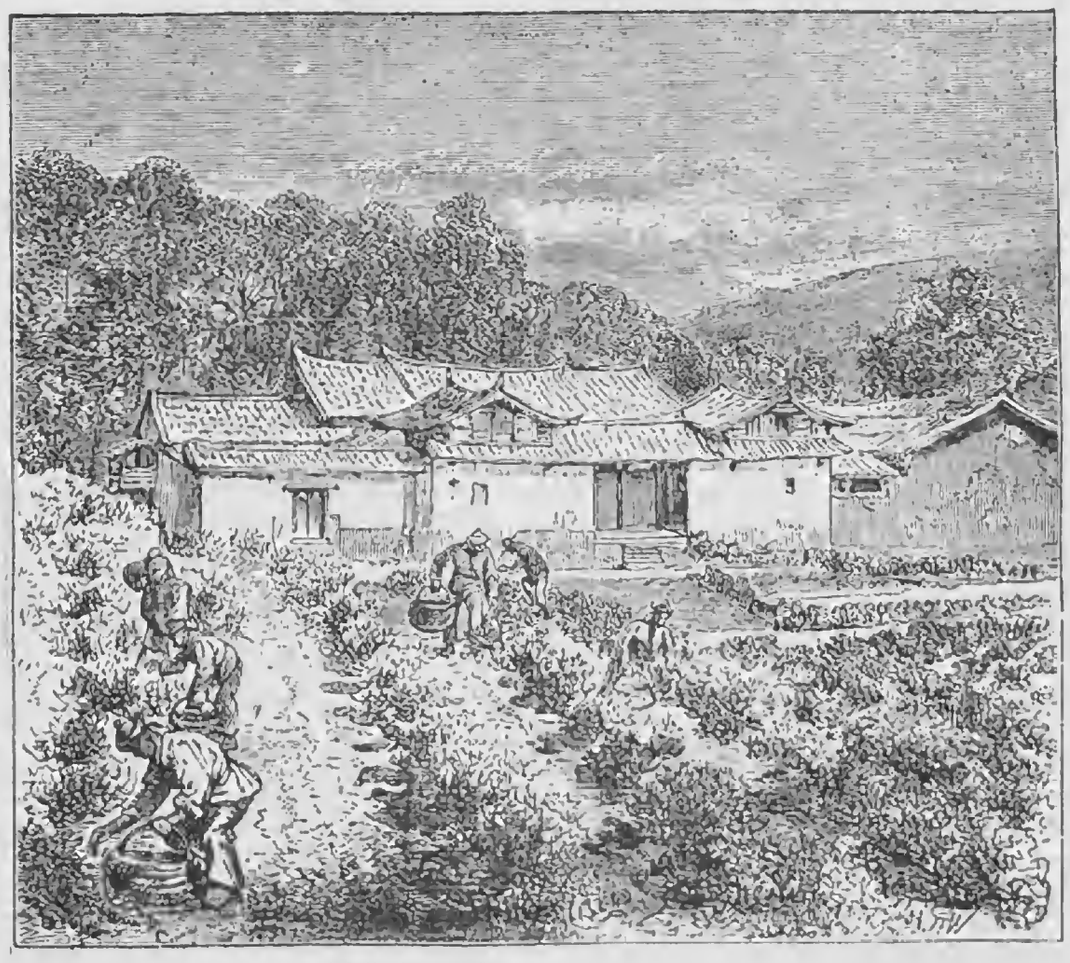
No. 2. Planted six inches deep. Up May 21st; bloomed July 25; same hight as No. 1. Two medium-sized bulbs, ten bulblets.

No. 3. Planted four inches deep. Up May 21st; bloomed July 25; three blooming stalks, three and one-half feet high. Three bulbs, two large, one small; twenty bulblets.

No. 4. Planted two inches deep. Up May 22; bloomed Aug. 1st; two blooming stalks, forty-two inches high. One medium size bulb, four bulblets.

No. 5. Planted four inches deep, upside down. Up June 1st; bloomed Aug. 5; two blooming stalks; large, deep bulb, twelve bulblets. The leaves and flowering stems, instead of growing upright as when the bulbs are planted as they should be, grew at an angle of about forty degrees.

It would appear from this little experiment that in such soil as we describe, the best results are obtained from planting the corms four inches deep, measuring from the top. As regards the



GATHERING THE TEA

BEST TIME FOR PLANTING,

there is some difference of opinion. We have chosen from about the 1st to the middle of April, for the main planting, continuing until the middle of July for succession at intervals of ten days or two weeks. They may be planted six inches to one foot apart and staked as staking becomes necessary. If the plot is sheltered, staking is not necessary except for the taller-growing varieties. A situation in which the blooming stems are sheltered from the sun from ten to three, is to be preferred, and a summer mulch of well-decomposed manure will be found advantageous.

Feb. 20.

Everywhere.

RURAL SPECIAL REPORTS.

SYRACUSE, N. Y. March 26.

WE are now getting genuine, old-fashioned March weather. Several inches of snow have fallen, within the last forty-eight hours, with a stiff northwest wind, and the thermometer at 12 degrees above zero. However, disagreeable March is so nearly gone, that we endure the balance of it philosophically. Farmers are not yet over-burdened with silver. Notwithstanding the "croakings" of the hard money advocates, we shall probably have none too much money in circulation among farmers. All kinds of farm produce are rather low, but officers' salaries and lawyers' fees do not appear to shrink perceptibly. Butter is selling at about 25c. per pound; whole hogs at $4 50@5 per hundred; hay at $10 per ton; potatoes, 40c. per bushel; corn, 45@55c.; wheat, $1.20@1.25. Eggs, 10@12c. per dozen, which is lower than they have sold in many years, and as the old lady said, "It hardly pays for the wear and tear of the hens."

NEW MILFORD, OHIO, SPRING HILL FACTORY

I see by a recent inquiry that one of your correspondents wants to know of a suitable paint for inside work in cheese factories.

Previously we had used the best white-lead and oil for painting our vats and presses, and all inside work in our cheese factory. We found it would not withstand the action of acids, and hot and cold water. Seeking a paint more durable and suitable, we were advised to try the Gutta Percha Paint manufactured by the Gutta Percha Paint Co., of Cleveland, Ohio. We have tested their paint thoroughly, having used both cold and scalding water on it daily for eight months without its sustaining any perceptible injury therefrom. We think it the best paint within our knowledge. Having painted the outside of our dwelling-house and factory, we find it equally applicable for that purpose. These facts are for the benefit of your readers. H. B. CAMP.

SALEM, Ohio.

PURE BONE.—The Excelsior Fertilizer Works, Salem, Ohio, are noted for the superior quality of their bone. A recent visit to the works and inspection of the processes of manufacture, disclosed the cause of their reputation. The best material treated in the most effective manner, is turned out and goes forth into the markets as "Premium, Pure, Odorless, Fine-ground Bone." It is an excellent article and worthy of being most extensively used

JAMESVILLE, Wis., March 22.

WE have had a fine open winter. Wheat is now coming into market. Farmers are getting $1.05 for it. Spring wheat is being planted now and we will have a larger acreage in wheat this year than usual. Barley is our principal crop. We plant it in April. B. C.

Industrial Implements.

THE THOMAS RAKE.

THIS rake has been before the agricultural public four years, and this season appears with improvements that possess practical value. It is a hand-dump, constructed of the best material, in a substantial manner, and has many interesting peculiarities that distinguish it from other rakes. These we have not space to particularize, but they are deserving of the attention of farmers. The circular issued by the manufacturers, J. H. THOMAS & SONS, Springfield, Ohio, will supplement this brief mention admirably. It may be had for the asking. The points in favor of this hand-dump rake are, that the dumping is assisted by the driver's weight, which reduces the power applied by the hand to the lever to a mere nominal start. The teeth are not kept down, while in operation by the aid of the operator nor do they crash on the ground after discharge, irrespective of the will of the driver, thus avoiding jar, damage, and as a natural consequence, repairs. The rake is made to dump at the option of the operator, whether the motion is forwards or backwards, and there is no changing of the feet from lever to chain or the reverse, to distract or confuse the mind.

This rake has large teeth, the axle stands high, and by the application of the cleaner-bar the full circle of teeth is clear for raking. This is an important advantage, permitting a large windrow to be gathered and dumped. Bottom or green hay is turned over well on top, thereby aiding materially the curing process. It is in brief, cheap, simple in action and very durable.

The portable farm engine made by this company is also meeting with marked favor.

THE "COQUILLARD" wagon has a fine reputation, and the manufacturer, A. COQUILLARD, South Bend, Ind., maintains the excellence of his manufacture by personal supervision. Owning a large tract of suitable timber, he has the advantage of selecting only the best material for his own use, and by the adoption and application of improved machinery, it becomes merely a question of time to produce a handsome well proportioned, tastefully finished, light-draft, and strong wagon. The manufacture is not confined to farm wagons. Platform, express, grocers' and other styles of light vehicles are made as well as carriages, buggies and sleighs. Photographs and descriptions of either will be sent on application.

Miscellaneous.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D CURTIS.

THESE are busy times on a stock farm. January weather has set in after a month of spring and everything feels the pinch of cold. The little lambs and pigs which are coming every day are sure to be chilled unless carefully tended and kept in a warm place. To-day, just while the sheep were out of the pen getting a drink, a lamb was dropped in the yard. In five minutes it was stiff and showed hardly any signs of life. It was wrapped up at once in a horse blanket and brought into the kitchen and put into a pail which was filled with hot water, not hot enough to scald, but hot enough to revive this lamb in less than ten minutes. It was then put down behind the stove and covered up, and within an hour afterwards it was taken out to the barn and given to its mother. We would not have taken it out so soon if it had kept quiet but it bleated so hard, and ran around so smart there was danger of its getting its nose burnt on the stove. A little pig got chilled the other day but it died in spite of care. When the weather is too cold it is best to remove young pigs to the house or by a fire as soon as they are born, and about an hour afterwards take them to the mother and if there is danger of chilling take them back. Generally after a young thing has got dry and has sucked it will stand the cold if it is protected from the winds and is in-doors. We have a Jersey cow now which was born in winter. We had a faithful man and he was close at hand to look after the coming pet. He forgot one thing; to dry the end of the tail, so that froze and the shortened brush is a constant reminder, and so no accident of that kind has ever happened since.

Last week we said: "Next Monday we must put in the early peas, the earlier the better." The theory is good yet, but the practice of it must be postponed we don't know how long, for the ground is frozen like a rock. Had we got the peas in the ground they would not have hurt, but they will doubtless be just as early if planted next week. The young plants will stand a severe frost and will grow when the temperature is a little above the freezing point, hence a week or two's the start is important. We always intend to have green peas by the first of July. The Daniel O'Rourke is a good kind, a favorite with us but not quite so early as Carter's (?). The latter were ready for use in our garden last year, the latter part of June. Neither of these are dwarf varieties. We do not like them as they fall on the ground and spoil. They are as much trouble to grow as the best sorts and do not yield nearly as well.

A love for tea is an acquired taste the same as a relish for tomatoes. Why may not Americans educate themselves to like a cup of tea which shall be grown in this country. It might not be so pleasant at first, but after awhile we might get to liking it better than the heathen sort. It won't hurt us to try, and since the Commissioner of Agriculture is willing to supply the plants to those who are willing to try, and we must have tea, why let us try. We have got two tea plants started just for the notion of the thing, and if our climate would admit, we would have a score of them, they will not live above a freezing latitude except under cover. It is best for any people to be as independent as possible of all others both in matters of necessity as well as in things of taste and luxury. A few years ago it was thought we could not make wine in this country, and now American wine goes abroad. We cannot compete with China and prepare tea as the Chinese do, but may be there is some other way which will cost less. Experience will teach us.

Last fall we got a load of buckwheat screenings from the grist mill and put them in the hen-house for the fowls to scratch in and pick over. The dust from the buckwheat poisoned the heads and necks of the turkeys, which caused them to scratch themselves until the red skin became so raw and inflamed, that some of them were nearly blind. Their legs were tied loosely so they could not scratch and they were removed to another place. They are now nearly well. Mr. DAVID SMITH says his turkeys once got sore in a similar way by running in a buckwheat field. The grain will not poison anything as we have fed it to all sorts of animals sheep included without harm.

The low price of produce is causing many farmers in this section to think they must raise their own breadstuffs. Winter wheat has been for many years a risky crop. The old enemies Weevil and Hessian Fly used up the wheat thirty years ago, and most farmers abandoned its cultivation altogether. For the last fifteen years a few enterprising men have grown their own breadstuffs, sometimes getting a good yield which by being kept in the granary would help to bridge over a poor year. Two years ago wheat growers about here scarcely got their seed back again; it winter-killed so badly. Last season the return was beautiful. Winter wheat requires a liberal manuring in the surface with fine well-rotted manure. A few acres make a large draft in the barnyard. Spring wheat is not of so good quality, and the flour under the old processes is inferior and the good wives don't like it. The Minnesota patent process makes the best of flour out of spring wheat. Now if we should all go to raising spring wheat our millers could afford to put this patent machinery in their mills and we could have first-rate flour, the product of our own farms. The old kinds of spring wheat were dark and thick-skinned, closely resembling rye and the flour was sticky and black. Two new sorts of spring wheat are offered which we think are very promising and valuable and much better than the old kinds. They are hybrids produced by Mr. PRINGLE of Vermont. One, the Champlain, is bearded and is an early variety; the other, the Defiance, is beardless and is very productive, with large white kernels. Spring wheat may be sown as late as June. We have helped harvest it in October; a good crop.

LICE EXTERMINATOR.

YEARS ago I discovered that ALOES in fine powder is a specific for the destruction of lice on all animals, and as it has no poisonous properties, its intense bitterness being what kills, it can be freely applied, and as it is to be used in a dry state, its application is as safe in cold as in warm weather, consequently is free from all objections urged against other remedies. My regard for the comfort of animals and the interests of their owners induce me to publish this for the benefit of all concerned, and as this is the season when these parasites are usually most numerous and annoying, an opportunity is afforded for testing its unparalleled merits.

Directions: Fill a large common pepper box with the powder and sprinkle freely into the hair, on the neck, back, sides, and rump of the animals infested, and rub it thoroughly through the hair and on the skin with the ends of the fingers; leave it undisturbed for a week. Then card or curry thoroughly and apply as before, and so continue at intervals of a week, until there is not a living parasite. I have used and recommended this exterminator in numerous cases without a failure, and two different applications, if thoroughly made, generally suffice.

Oneida, Co., N. Y. W. J. P. KINGSLEY, M. D.

CATTLE SALE.

IT just occurs to me that perhaps RURAL readers would be interested in learning the result of the sale of imported Alderney cattle in this city on the 19th inst. Here it is. It will be seen that prices are still maintained notwithstanding the depression in the times, and are prohibitory to persons of limited means.

23 head, all but three, two years old, brought in the aggregate	$8,365.
Average	380.
Two of the cows had calves less than a week old. The B calf brought	75.
The C. calf	120.
	$8,560.
The two Guernseys brought $300 and $170 respectively	470
Making a grand total of	$9,030

Conundrum: How long will it take them to yield enough gilt-edged butter, at fifty cents a pound, to pay for their cost? W.

CATALOGUES, &c., RECEIVED.

WOOLSON & Co., Passaic, N. J. Descriptive Catalogue of Hardy Perennial Plants and Price-list. One of the best and most accurate lists of this class of plants published.

WE thank Messrs. THORBURN & Co. of this city for a case of novelties among vegetable and flower seeds and potatoes to be tested in the RURAL Experimental Grounds.

H. W. HALES, Ridgewood Floral Nursery. Descriptive Catalogue and Price-list of choice plants, Ridgewood, N. J. An excellent list of Geraniums, etc. The bright, plain, little catalogue of 16 pages is free to applicants.

WILLIAM PARRY, Cinnaminson, N. J. Fruits, Grapevines, Small Fruits. The Lady and Brighton Grapes, and the Great American Strawberry specialties.

WOODRUFF'S Eighth Annual Catalogue, and list of choice selected flower, bedding and vegetable plants for 1878. Verbena Cottage, Westfield, Union County, N. J.

EIGHTEENTH ANNUAL REPORT of the Transactions of the Hoosac Agricultural Society for 1877, North Adams, Mass. Thanks to the Secretary, Mr. H. CLAY BLISS.

SEVENTH ANNUAL REPORT of the Secretary of the State Pomological Society of Michigan. This is one of the most accurate, interesting, and instructive works of the kind we have ever examined. CHARLES W. GARFIELD is the accomplished Secretary. It is one of the few reports that one desires to put in his library, and to keep there as a book of reference.

A TREATISE ON POTATO CULTURE, by Mr. WILLIAM HUNT, Waterford, Conn.

THE AMERICAN SALT Co., Syracuse, N. Y. Circulars to the consumers of, and dealers in, Factory Filled Dairy Salt in the U. S.

ELLWANGER & BARRY, Mount Hope Nurseries, Rochester, N. Y. No. 1, with colored plate, 15 cents, plain 10 cents. No. 2, with colored plate, 25 cents, plain 15 cents; Nos. 3, 4, and 5, free.

No. 1—A Descriptive Catalogue of Fruits.

No. 2—A Descriptive and Illustrated Catalogue of ornamental Trees, Shrubs, &c.

No. 3—A Catalogue of Dahlias, Verbenas, Petunias and Select New Green-House and Bedding Plants, published every spring.

No. 4—A wholesale Catalogue or Trade List.

No. 5—A Descriptive Catalogue of Roses; plain, free; with colored plate, 10 cents.

This is one of the oldest, most extensive and and most trustworthy establishments in this country.

EDWARD A. FROST, Genesee Valley Nurseries.

No. 1—Descriptive catalogue of Fruit Trees, vines, &c., 10 cents.

No. 2—Descriptive Catalogue of Ornamental Trees, Shrubs, Roses, &c., 10 cents.

No. 3—Descriptive Catalogue of Green-house, Plants, Bulbs, Dahlias, &c. 5 cents.

No. 4—Wholesale Catalogue, or Trade List, for Nurserymen, &c. Gratis.

This establishment also ranks as among the first in this country.

[We have never before been asked the question so many times "What concern shall I order from?" as during the present season; probably be cause the RURAL has never before given to Horticultural matters the liberal and careful attention that of late it has been enabled to give through the advantages of extensive experimental grounds which are devoted to testing every thing which can be advantageously tested in this climate. Now we desire to state that the firms (or their representative catalogues), noticed in this column are those which, either from having dealt with them ourselves, or from established reputation, we *know* to be in every way honorable and worthy of confidence. Generally their advertisements will be found in other columns.—EDS.]

FOREIGN CATALOGUES.

H. CANNELL, Swanley Junction, Kent, Eng. Amateurs' Gardeners' and Nurserymens' Guide for 1878. An Illustrated Catalogue of 150 pages of popular plants. Also select list of choice florists' flower seeds.

GEO. JACKSON & SON, Waking Nursery, Sursoy, England. A catalogue of 44 pages of Trees, Shrubs, etc.

The Querist.

ANSWERS TO CORRESPONDENTS.

Miscellaneous.

Mrs. S. T. L., Spring Grove, Fla., inquires where she can get Chufas for seed.

ANS.—They are advertised in our columns.

T. W. C., Kalamazoo, Mich.—wishes to know where he can get a good work on raising small fruit, and its price.

ANS.—A work by the Rev. E. P. Rowe published by the Orange Judd Co. of this city is as good as any we know of; price 50 cents.

Webster, Monroe Co., N. Y., inquires whether he should plow his orchard which is pastured by sheep, sow winter rye early, let it get a good start and then turn in the sheep.

ANS.—We should say that it would pay just in proportion as his land is rich and can afford so liberal a supply of plant food.

W. Chapman, Capac, St. Clair Co., Michigan, wishes to learn the nature and price of lands in Stafford and adjoining counties, Virginia; is the land thereabouts good for farming and raising sheep and cattle, and what is the nature of the soil.

ANS.—Of our own knowledge we can give no information. Some of our friends living in that district may answer. Write to Wright, Saunders & Co., Suffolk, Va.; W. A. Parsons & Co., Goochland Courthouse, Va.

M. W., Cleveland, Ohio, and others.—Where can I get the Euonymus and Golden Retinospora you speak of in RURAL of March 2?

ANS.—Ellwanger & Barry, Rochester, N. Y.; S. B. Parsons, Flushing, N. Y.; Thomas Meehan, Germantown, Pa.; Edward A. Frost, Rochester, N. Y.; Smith & Powell, Syracuse, N. Y.

Trimming Rose Bushes

D. G. B., Franklin Park, Middlesex, N. J., inquires how to trim Monthly Rose bushes so as to cause them to flower.

ANS.—Cut out all weakly shoots and the rest back to two eyes. If bushiness is desired cut back the shoots from these to two eyes. Give a light soil and add plenty of old manure.

A Good Chance for Old Friends.

Geo. C., North Linndale, Ohio. — has been waiting for an opening through which old subscribers to the RURAL may have an opportunity of getting a "Cricket" clock.

ANS.—We would state that the offer of $3.50 for the clock and one subscriber is an offer to old subscribers. In all of our offers we have endeavored to consider them first. The seed distribution has been to old subscribers alone.

Liquid Manure Pipe.

F. T. Martin, Preble Co., O. wishes to know the best kind of pipe for liquid manure.

ANS.—Two-inch glazed tile would be a good deal cheaper than lead or iron and less likely to become obstructed by sediment. Place a strainer at the upper end to lessen the liability to trouble from sedimentary deposits, and the more rapid the inclination of the pipe the less annoyance from this cause.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MARCH, 30TH.

Mrs. O. — J. J. — S. F. W. — "Twist" — Mrs. A. L. G. — K. B. — W. H. — L. L. F. — A. L. J. — E. W. S.—B. C.—A. C.—A. O., Jr.—Mrs. S. H. R.—D. M.—Mrs. L. O. P.—H. H,—B. P. M.—M. B. B.—S. R. M.—M. M. W., is respectfully reminded that we require full signature at this office, though not for publication—Mrs. J. E. S.—"Green John"—"Apple Blossom"—F. D. C. — J. C. — "May" — A. D.—H. H.—O. R. B.—Mrs. M. L. C.—W. H. W.—M. G. R.— M. M. — L. A. R. — M. L. M.—F. H. D.—T. C. D.—M. M. B.—"Box Boy"—W. J. F.—Mrs. P. W. A.—H. F. S.—W. S.—B.

The Poultry Yard.

HATCHING CHICKENS.

HENRY HALES.

THIS is the special business of the spring with poultry-keepers, and requires all the thought and care that can be given to the subject aside from other duties of the farm. In the first place, eggs selected for hatching should be placed in trays. Of these a soap box cut through the center will make two. The eggs should not be laid on each other, but placed singly in rows on cut hay or some soft material, and if more than one breed are kept, the variety that laid the egg as well as the day on which it was laid, should be marked on each with a pencil. They should be turned over every day, each end being placed alternately uppermost: that is, one day the large end up and the next day the small one. By this care the eggs will hatch much better than if left on one side, as the yolk floats to the top whichever way the egg is left, and dries to the side, spoiling it for incubation.

A cool cellar is the best place to keep eggs in. When both eggs and hens are ready, the eggs should be marked with ink, for pencil marks become obliterated during incubation. A good way is with a little brush or stick to make a ring round the eggs near either end, but so far on that a glance into the nest will detect any eggs laid therein, during incubation. It is well not to made this ink line around the center of the eggs, as it might interfere with the hatching, if the ink covers that part of the shell where it opens to let out its tenant.

Eleven or twelve eggs are enough for a hen in cold weather, but in warm weather thirteen may be set. Never set a hen in a deep nest, as she will break the eggs when jumping into the nest. The best way to prepare a nest, is to cut a grass sod the size of the bottom of the nest-box: make it a little hollow, so that the eggs may not roll to the side; make the nest on this sod with a little straw near to the top of the nest, box or basket. Whenever you can set a hen where she has laid, do so, unless it is in a place where other hens would trouble her. It is best to give a hen the eggs at night, particularly if you remove her to a new nest. When convenient, set several hens at the same time. Should many eggs prove bad when examined after the first eight days, the good ones may be distributed to some of the hens to make up a full number to each hen, and the remaining hens can have fresh eggs given them. The way to tell whether eggs are good is to hold one at a time up to the sun or lamp light, shading the egg with your hands all round excepting the side towards the lamp and the opposite side turned to the eye, so that the egg can be seen through. Should it appear quite clear it is not fertile. At that stage of incubation, eggs that are not sterile will appear dark almost all over.

To keep hens clear from parasites while sitting it is good to dust a little pulverized sulphur through their feathers and in the nest: all sitting hens should be so treated. Difference of

opinion exists as to letting a hen sit without disturbing her. I prefer looking into the nest daily. In case an egg gets broken, it should be taken out, the eggs that get soiled washed, and the bottom of the nest cleansed. If this is not done the nest becomes foul and unhealthy, not only for the hen but for the chicks. The wildest hens soon become accustomed to being handled on the nest, when this is done carefully.

In cool weather eggs may generally be left without further trouble, but in hot weather sometimes the chicks have difficulty in breaking the shell and often perish in the attempt. To prevent this a little tepid water sprinkled in the nest, from the seventeenth to the nineteenth day, will help the shell to part. During the process of incubation, the shell of an egg becomes brittle, and just at the time of hatching breaks very easily. A little moisture increases the brittleness of the shell, especially if applied a few days before hatching. A hen set on the ground, however, does not require to have her nest moistened. Ducks' eggs hatch much better on the ground than in a high nest. If the hen has been accustomed to being handled, it is best to look to the nest while hatching and take out some of the empty egg shells, as they often impede the chicks that hatch a few hours later than the others, in getting out of the shell. Unless there is too long an interval between the first and last eggs hatching, do not take out the young chicks from the nest: they will do better with the natural heat of the mother, and require no food for twelve to twenty-four hours; for when they leave the shell their stomachs are filled with the yolk of the egg. Sometimes a chick will stick to the shell or rather the inside lining of it will stick to him, in which case the shell can be removed with care, but this must be done very cautiously. If any blood is observed, let it remain longer till it dries.

Horticultural,

OUR NATIVE NUTS.

No. 2.

C. W. IDELL.

THE Chestnut tree for graceful proportions compares favorably with any of our forest trees, particularly when grown single. In the spring it becomes atttractive in appearance with its foliage tinted with a peculiar shade of green, changing its appearance in due time by producing bright blossoms. Then these disappear and the burrs or involucres which contain the nuts make their appearance. When these mature, they open, displaying the fruit clustered in all their beauty. Soon the frost comes hardening it, and changing its clothing of brilliant green to a bright yellow, then brown until it falls leaving the limbs bare.

The timber is valuable. To the farmer it is a favorite to inclose his fields and protect his crops. It is the foundation of our rail roads and with it they are tied together. The carpenters use it largely for trimming our finest houses, and the cabinet makers would not know how to do without it, for it is the wood of which our so-called oak chamber and dining-room sets are made.

The nut is the most valuable one of those named, selling from three to four dollars per bushel when walnuts sell at 50 cents, and hickory nuts at one dollar, and I consider this fruit capable of a greater degree of improvement in size and quality than the others, and I am pleased to be able to state that some of our citizens have begun to cultivate them. During the past season a lot was received in the New York market, and owing to their large size, symmetry of proportions and beauty they sold for nine dollars per bushel when the best of the uncultivated sorts were selling at five dollars.

I hope our farmers will investigate this subject more thoroughly, and plant them, so that in the future, if we ourselves may not live to realize any benefit from the experiment, our children may. We have thousands of acres of cheap lands in this country that might be made productive and very valuable in time by planting these trees. Indeed I do not doubt but that some of us may live to see the day when a grove of Hickory or Chestnut will produce a crop of greater value than many of our orchards now do, to say nothing of the difference in the value of the timber. I would suggest to those who do try it to procure the largest native seed they can, regardless of the cost, for they will take no longer to grow—cost no more to produce and the fruit will be worth fifty per cent more in the market than common fruit.

The nuts grown in Virginia are larger in size than those grown in the north, although in the latter section a few trees that grow singly produce a large, fine nut. It is stated for a fact that the drying of the nut injures the germ, so it will not propagate. That however, is a point still open for experiments and can be tested by any one. [There is no doubt about it.—EDS.]

Our southern shippers are guilty of one serious mistake which those of the north are free from, for as the fruit ripens early, they gather and ship it in close barrels or bags while green, consequently they become so heated while in transit that the germs of the insects they contain are quickened into life—matured, and eat their way out, so that by the time the fruit arrives at its destination, one-fourth of it is spoiled by them, and the shells of the remainder are so blackened that they are unsalable at the market value of good nuts.

Every dealer should understand this point, and be careful not to ship them while green, unless his packages are well ventilated. Even then it would be prudent to spread them out thinly on a floor to cool for a few days before sending them off. Those grown in the north seldom become damaged during transportation, for as the frost ripens it cools them; consequently the shells retain their brightness, and the kernels are free from worms or mold. A bushel of green Chestnuts weighs 60 pounds, and dried ones, 52 pounds, and they are sold in the New York markets at these rates.

Years since the retail nut trade of New York city was confined mostly to the grocery trade. The supply came from the north in good order, and they were sold as received; but of late years a large number of Italians have immigrated to this country and taken up this branch of business so gradually and thoroughly that now they almost monopolise it, and owing to their introducing miniature ovens on their stands for roasting them, they sell large quantities. These men are very particular as to the quality of the nuts they buy. They want them large, bright and perfectly free from worms or mold, and as fresh from the trees as they can get them. They are willing to pay a high price for those that suit them. There is this objection to a dry nut: they will not roast, simply burn, so that one can see why they all want a fresh, plump nut, for as the heat penetrates the nut it engenders steam which in order to escape bursts the shell, leaving the kernel bright and soft, but as the season advances they all become dry. Then they overcome this objection, in a measure, by soaking them until they absorb moisture sufficient to roast, but even then they must be consumed while warm, for if permitted to get cold they become unfit for eating.

The dealers who supply these parties often take great pains to improve the quality and appearance of the nuts. One plan is to place a small quantity of them in a coarse wire sieve and shake them until the furze is removed from the neck of the nut, while at the same time the friction increases the brightness of the shells.

During this process all wormy or defective ones are picked out, which are often saved for fuel, as they make a quick and strong heat. I once tried the experiment of soaking some chestnuts for one hour in warm water, and found it increased their weight three ounces to the pound, or nearly ten pounds to the bushel, besides improving the appearance of their shells and softening the kernels.

In concluding this article it may prove interesting to some to learn that in New York city we receive these nuts from nine different States.—viz.: from Georgia, South Carolina, Tennesse, Virginia, Maryland, Pennsylvania, New Jersey, New York and Connecticut.

New York City.

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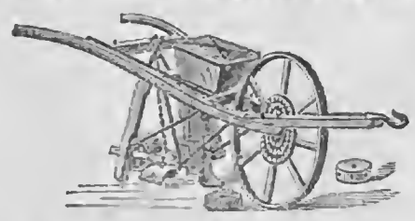

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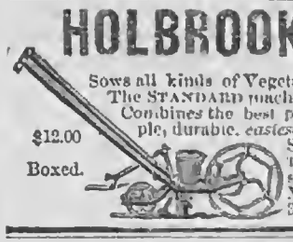

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Tea Plant and its Products 213
Notes from Maplewood Farm 214
Farm Notes 214
Exhaustion of Soils 215
Wild Plants as Garden Flowers 216
Notes from the Rural Grounds 217
Rural Special Reports 217
Thomas Rake 217
The Coquillard Wagon 217
Jottings from Kirby Homestead 218
Lice Exterminator 218
Cattle Sale 218
Catalogues Received 218
Foreign Catalogues 218
Answers to Correspondents 218
Hatching Chickens 218
Our Native Nuts 219

EDITORIAL PAGE:

European War Cloud The 220
Tillage 220
Convict Labor 220
About Strawberries 220
Farmers to the Front 220
Pear Blight 220
Brevities 220

LITERARY

Poetry 221, 223, 221
My Step Son 221
Corn 222
Ladies' Washing Day 223
To be or Not to be 223
Turkish Wives 223
The Hearts of the Lowly 223
Freckles 223
Just Like the Sex 223
Domestic Economy 224
Personals 227
News 227
Markets 225
Reading for the Young 226
A Memorial 226
Comments 226
Puzzler 226
Sabbath Reading 226
Abraham's Prayer 226
The Magazine 226
Formation of Character 226
Rose and Thorn 227
Influence of Little Things 227
Advertisements 219, 225, 227, 228
Wit and Humor 228

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, APRIL, , 1878.

THE original article announced two weeks ago from the pen of Mr. J. B. LAWES, of Rothamsted, England, who has thrown more light upon practical agriculture than any other man, living or dead, is presented in this number.

THE EUROPEAN WAR-CLOUD.

"A SOFT answer turneth away wrath" though an adage coming from high authority, is not always true, and is notably untrue in the dispute that is rapidly coming to a belligerent issue between Great Britain and Russia. How admirable the blandness with which Prince GORTSCHAKOFF agreed, some weeks ago, to the assembling of a Congress to discuss the settlement of the Eastern Question! How plausible his reasons for deferring its meeting until his countrymen had settled the matter in accordance with their own wishes! How benignant his concession that this adjustment should not stand in the way of the proposed Congress! How suave his permission that the plenipotentiaries to it might discuss unimportant points and approve the treaty! And how courteous his firm declaration that in case any difference of opinion arose, Russia was resolved to have her own way, and that on this condition only would she accept the Congress! Yet in spite of all this refined urbanity Great Britain is a-blaze with anti-Russian wrath from Land's-End to John O'Groats and there now remains but little doubt that the baleful conflagration must be quenched in blood. Austria also seems deaf to Muscovite blandishments, and the hereditary enmity between the Maygar and the Slave is likely ere long once more to assert itself in arms. It is by no means improbable that our next issue will record either the actual commencement of another European conflict to which that just closed was merely a prelude, or the adoption by one disputant or the other of some measure that will render such a bloody arbitrament inevitable.

Financially such a catastrophe would be beneficial to this country. By sealing the graneries of Southern Russia and the Danubian Provinces it would afford a profitable market for our heavy grain crops; the arms whose sale would enrich our manufacturers would be doing execution on both sides. A few Russian Alabamas would once more drive under the Stars and Stripes a great part of the commerce lost during the late "onpleasantness"; while the numerous recruiting stations along the Canadian frontier would soon drain from this country much of the surplus labor that adds to our burdens and thousands of the stalwart tramps that add to our miseries.

We refer to these contingent advantages, not as matters for selfish congratulation, but as a sort of consolation for the sorrow all good men must feel at the prospect of widespread death and desolation among kindred and friendly nations.

TILLAGE.

"WHAT is the first essential in good agriculture?" "Good plowing." "What is the second?" "Plowing." "And the third?". "Manuring." Such were the questions propounded and answered two thousand years ago by CATO, among whose many claims to the esteem of his fellow citizens not the least was his proficiency in farming. The advice was good then with regard to the rich lands about Rome, and practical experience during the intervening centuries as well as scientific research during the last, both go to prove the paramount nature of the advantages derivable from the thorough tillage of the soil implied by the ancient philosophers reiterated counsel.

All soils contain immemorially more or less manurial ingredients whose quantity and quality are dependent on their geological formation—on the varying proportions of disintegrated rocks of which they are mainly composed. Moreover, in many of them, there is an admixture of animal and vegetable remains still rich in fertilizing properties. In both cases, however, these properties are imprisoned in an insoluble form and the action of water and air, greatly facilitated and promoted by liberal tillage, is one of the most efficacious means of setting these manurial treasures at liberty and so fitting them for plant-food. The abundant character of this natural supply of nutriment has of late been strongly exemplified by means of an accurate experiment made by Mr. LAWES at Rothamsted, England. For thirty-four successive years he has grown a crop of wheat on the same piece of land, without the application of any artificial manure, and although the crops have had to gather all their inorganic elements, year after year, from the store of plant-food which nature had accumulated in the soil, yet in the yield there has been no decrease which could be clearly attributed to any exhaustion of the supply. Thorough tillage, however, had extirpated all weeds—those greedy gluttons of stolen food—and thrown the way open to the liberating chemical action of moisture as well as of the carbonic acid, oxygen and nitrogen of the atmosphere upon the imprisoned fertility of the soil.

By good tillage, subsequent rains more readily pass through the loosened tilth and penetrate the underlying soil where they remain in reserve against the time of drought. The air penetrates the ground as far as the stagnant water has been drawn off, and the finer the pulverization of the soil, the freer the atmospheric circulation, and the greater the amount of surface exposed to its beneficial chemical action. Moreover, when the earth is cooler than the air above it, the latter is chilled on entering the ground, and in this state, being unable to hold in suspension so much moisture, parts with some of it to the soil, which also absorbs its ammonia as well as some of its carbonic acid and other gasses. Besides the liberating effect these have on the fertilizers locked up in the soil, they are, some of them, notably ammonia, immediately available as plant-food, while without the presence of air no seed-bed can be in a healthy condition. To roots of all kinds air is essential, for if deprived of oxygen for a short time, they die. In heavy soils winter wheat often looks yellow in spring, because its roots have perished on account of the access of oxygen having been prevented by the excess of water in the soil.

The nature of the tillage to be bestowed on different kinds of soil should vary in accordance with their texture. Recent experiments made by Professor S. W. JOHNSON, at the Connecticut Agricultural Station, show that while on clayey lands deep tillage is generally best—to conserve the water of a loose-textured soil, its main tillage should be shallow, so that the bulk of the earth remains compact enough to hold the rain and to transmit bottom-water steadily, by capillary attraction, from the subsoil upwards to the roots of the crops. In such soils the surface only should be loosened whenever it forms a crust. For the same reason, summer tillage also, according to his deductions, should not extend to the roots except in clayey soils to compel them to develop lower down and nearer the water supply, for in unstirred clay soil they can only penetrate a little way and suffer or perish when drought comes. As with fertilizers, so with tillage, the safest guide is experiment. This alone will tell with certainty the depth and frequency of cultivation that will most benefit each sort of crop on all kinds of soil. Careful observation is the foundation alike of scientific theory and intelligent practice, and that farmer will secure the largest measure of success who most accurately notices and records for future reference the relations that exist between his land and its produce under various kinds of treatment.

CONVICT LABOR.

"IF a man will not work, neither shall he eat," has been considered a wise and just saying from time immemorial. That every man should perform some labor, and as producer, exchanger, transporter, or teacher, give an amount of service commensurate in value with the food he eats and the clothes he wears, seems to be a self-evident proposition, and he who does not this, is, as a rule, looked upon with contempt by all right-thinking people. There are thieves who steal, tramps who beg, and confidence men who can be looked upon in no other light than thieves who steal with permission. There are heirs who inherit fortunes and spend them, leading lives worse than those of mere idleness—and gamblers who take advantage of the weakness and folly of mankind—to enrich themselves at their expense; all who take without giving in return forming one great class of which society might well be rid. No man should live at the expense of his neighbor unless in some way he can benefit that neighbor sufficiently to discharge the debt.

It was something in this way we reflected a while since, on our way home from a visit to Blackwell's Island where we saw more than a thousand able-bodied men prisoners, clothed, fed and guarded at a large expense who are not permitted to do profitable work; that is, any work from which the county derives a revenue. They are made of service in making walls, keeping roads in repair, and have aided in the erection of some buildings. They also make most of the shoes used on the island, and have recently built some wagons used by the Commissioners of Charities and Corrections, but nothing that they might, could, would, and should make is allowed to be be sold.

Naturally one looks for the reason of a rule so apparently unreasonable, and on inquiring is told that certain classes of our population object to the manufacture of anything by convicts that will be put in competition with honest labor, and argue that whereas the convicts must be supported at any rate, the articles manufactured cost the county nothing but the material used, consequently the county can put them in market at a price ruinous to manufacturers who pay for their labor. The same general argument is used when it is proposed to hire out the convicts to manufacturers. The wages paid are small because the services rendered are not those of skilled workmen—but small or large, it makes no difference with the objectors—who are of the class that can see nothing which does not seem to promote their own interests; who would destroy all machinery, because it comes in competition as they think with their labor.

An effort is now being made in the State of New York to pass a law for the prisons of the State similar to the one now in force on Blackwell's Island. It will be readily supposed we do not favor such a law. The expenses our criminal population entail upon us in various ways are enormous without adding the cost of food and clothing which every able-bodied man should be allowed and obliged to provide for himself.

ABOUT STRAWBERRIES.

AT this season of the year horticultural papers are every day asked questions as to what varieties of strawberries to plant. Many of them venture specific answers. But when it is considered that the same variety varies from first-rate to next to worthless in different soils and conditions, it will appear that there is but one answer, viz: plant those varieties which from trial are found to succeed best. Each must experiment for himself. Such experiments may be made with so little trouble or expense that it is the fault of the cultivator and not of the strawberry if everybody does not raise upon his own grounds those sorts that will thrive best. Now for one dollar plants of all the best varieties may be purchased. Planted in good soil this spring and labeled, their value and adaptability to a particular place may be ascertained next spring. After that, there need no longer be any doubt or disappointment. Selecting those which prove in size, flavor, vigor, productiveness, the most desirable, every family, with no more trouble than is required to keep down weeds, and form new beds as the old ones wear out, may be supplied with this enjoyable fruit, as far superior to the great bulk of market strawberries as a banana or orange plucked ripe from the plant is superior to those that, plucked green, are left to ripen and decay simultaneously, several weeks afterwards.

The qualities of new varieties of strawberries are now-a-days so puffed up, that those who purchase new plants entertain a vague expectation that the berries will prove sweeter, larger—the vines more fruitful and hardy than any others heretofore known. But experience with the strawberry, as with every other fruit, will demonstrate that man's power of really improving it is very limited, and that he never will be able to combine the best qualities of all in any one variety.

Most of us are very ready to be captivated by size, though size and the characteristic qualities which make a fruit valuable are generally inimical.. We sometimes see strawberries nine and ten inches in circumference. They are curious and pretty. They are nice to pick. They are charming table ornaments. One of them is as large as a dozen wild strawberries. But, just for eating, which had you rather have?

Farmers to the Front.—No Connecticut legislature in late years has had so large a proportion of farmers and so very small a proportion of lawyers as the present; yet it seems the nearly unanimous opinion throughout the State that it has accomplished more work of a practical, needed kind than any of its predecessors in recent days. There has been less "chin-chin," less useless verbiage, less discussion of fine points of no practical importance, and less prophecies about possible contingencies, than usual, but more of the work for which legislators are elected and paid. This is a thoroughly utilitarian country and what the vast bulk of its inhabitants want is plain, practical common sense, in word and deed, not fine-spun theories or elegant verbosity.

BREVITIES.

THERE is no part of the year when cellars in which vegetables are stored, need ventilation oftener than the present. If the cellars cannot be thoroughly aired every day, the vegetables should be removed.

THE American Dairy Fair Committee of the American Dairy Association have selected New York City as the place for holding the fair, next autumn. The time will soon be definitely fixed by the sub-committee appointed to perfect arrangements.

MR. J. B. LAWES in the able article he has written for us, says that the materials do not at present exist which would enable him to treat the subject as he should wish to treat it. He expresses the rather startling opinion that the "destruction of weeds and more careful cultivation would be quite as efficacious in increasing the produce of the State of New York crops as the employment of artificial manures."

UNPRECEDENTED.—Last night we had a high wind and a light shower of rain. To-day I saw a field of wheat that was badly lodged. The greater part of our wheat is more than a foot in height, which is something never before seen in this vicinity, at this season. We have had summer weather for a month—have finished planting potatoes and sowing oats, and are plowing for corn. Peach trees are in full bloom To-day there is a regular "Norther" and the indications are that we are going to have a cold snap.—S. E. H. Milton, Trimble Co., Ky. March, 29.

THE GREAT HORSE SALE, under the auspices and direction of HARK COMSTOCK—Mr. PETER KELLOGG—took place on the 27th and 28th inst. at the American Institute Building, in this City. The highest price realized the first day was brought by Kentucky Prince, $10,700. On the second day, Beaustre by Rysdyk's Hambletonian brought $5,150; King Philip by Jay Gould, $2,900, and Inhernor, dam Lucy, sire Geo. M. Patchen, $1,350. The total sales for the two days amounted to $51.425, and the average of the 93 head sold was $552,95. The grand affair, the best conducted that has ever taken place here, terminated greatly to the satisfaction of all parties.

Literary Miscellany.

MARCH, IN TENNESSEE.

L. O. P.

White, fleecy clouds across the sky are blown
In rapid course the wild wind flies to-day;
But who would sing the praise of March, you say?
No need, I know; he surely sings his own.

Now hear him trumpeting his deeds about!
Now whistling low a sweet and merry tune,
Now breathing soft as any lady June,
And ending with a wild and joyous shout.

He moves the shapely cedar's heart with sighs,
He stirs the shining holly leaves and box;
Now, trilling with the bright blue-birds, in flocks,
Now catching up the mocking-birds' replies.

He stands in awe of grave magnolia's ways,
But darts his piercing, shining shafts of gold
Upon brown buds that certain promise hold
Of cups of snowy bloom in later days.

He creeps along the grave-yard's grassy slopes;
We may not know what whisperings he hears;
What throbbing hearts of half-forgotten years:
What struggling hands of buried loves and hopes.

He wrests dead leaves from off the parent bough.
And vainly tries the wretched wrecks entomb;
They dance with him on beds of violet bloom,
Now kiss the hyacinths, and lips of crocus now.

So jolly, rough and wild each passing day,
So tender, true and kind in quiet hours,
So wooing round our pathway birds and flowers,
Oh, March! we wish you good-speed on your way.

MY STEP-SON.

MARGARET SCOTT M'RITCHIE.

I had been married just a year when my life experienced its first great trouble—a trouble self-increased by the willful pride and rebellion with which my headstrong girlhood met it.

Hitherto my path had been particularly sunny. The only child of wealthy and indulgent parents, I became engaged when eighteen years old to Kendal Darcy, a rising barrister, some years my senior, whom I loved with a warmth only equaled by my satisfaction when I found that the affection was mutual. My father warned him that such a spoilt child would prove troublesome; but Kendal had no fears on that point, and as yet our wedded life had cast little enough of shadow upon us.

Now and then I did indeed notice upon my husband's face a grave, preoccupied expression that I failed to understand, but I knew he was intrusted with important issues, and, loving his profession as he did, it was no wonder that his mind should entertain its concerns even when he rested from its duties in his beautiful home at South Kensington. I guessed not that scenes in his past life were the phantoms so frequently arising before him, haunting him even in his present happiness, unsuspected by his joyous girl-wife.

I was now about twenty years old, and happier than ever, for a beautiful infant boy had crept into life and love. Ah, what marvelous hopes clustered round the rose-pink *berceaunette* wherein reposed what the papers announced as our "son and heir!" Kendal used to pluch my cheeks, calling us a couple of babies, when he watched us together; but I knew he was as proud of our little Frank as myself, though his smile was so quiet and his looks were so subdued as he held the wee dimpled hand in his own.

Never shall I forget the morning when we became aware that baby was not the "son and heir"—that Kendal had a living son, and that I was a step-mother. We were breakfasting together in our favorite room, and the flowers were nodding in at us through the open windows, while the canaries sang their sweetest, when my husband received a black-bordered letter that turned his face ghastly white as he perused it. I hurried to get him brandy, fearing he was going to faint. I guessed that something was amiss in his banking or professional affairs, but I could not annoy him with questions, and silently I knelt beside him, putting my arms around him.

The story was told by-and-by, quickly and abruptly; but it was very long ere I realized the truth—that I was a second wife. In the early days of our acquaintance Kendal had heard me speak disparagingly of a friend's marriage, vowing that nothing should induce me to marry a widower; it was then that he had most unfortunately resolved to keep the fact of his previous marriage private; and I could well understand how much suffering the deception had caused him.

As a youth of twenty-one he had met his first wife, the pretty daughter of a yeoman-farmer, and the belle of the village where his guardian Col. Grant resided. Home from college for his vacation, he was delighted for so pleasant an acquaintance to beguile the tedium of his stay at the Hall, and their dance at the harvest-home was the prelude to a very warm friendship. Their constant meetings in the sunny meadows and shady lanes were a most agreeable change from the hard studies in which Kendal had been engaged. No word save sympathetic friendship had been exchanged between them when he returned to college; but, while his labors there soon drove his pretty companion from his mind, her weaker nature was completely changed by the past few weeks. By-and-by he was recalled to the village by a stern note from his guardian, who informed him on arrival that Alice Graham was believed to be in a hopeless consumption, and that she had despairingly betrayed the secret of her love to her mother, who had, unknown to herself, appealed to Col. Grant for his advice. Kendal was shocked indeed when he saw the change in the girl he had left so rosy and blooming; and, though he knew he did not deserve all the blame his guardian and her friends evidently considered his due, he could not hold himself entirely innocent in the matter.

It was a sad affair. My husband spoke of it with trembling voice, and in deep agitation. It seemed as though the very tendrils of Alice Graham's life were twined round one who realized now that pity was the utmost feeling of his heart towards her. Her father insisted on marriage; his strictly honorable guardian advised the same course, seeing that "the difference of station had not prevented the courting." Her mother "didna speak, but she looked in his face till his heart was like to break," while the village doctor believed it was the one chance for her cure, and Alice herself, on hearing whispers of such a scheme, appeared quite a new creature.

Kendal was married then in obedience to Colonel Grant's wishes and the promptings of his own good feeling, and, on his guardian's death from a fall in the hunting-field, he came into possession of a substantial provision. His legal studies had kept him much away from home, but he always treated his wife with the kindest consideration, and it was a real grief to him when, in consequence of the sudden tidings of Colonel Grant's accident, a premature birth cost the young mother her life. The baby-boy became Kendal's one solace in his double loss. I knew too well what he felt when he held his first-born in his arms, and my heart grew dry and hard at the thought that such emotions had been excited by another than my little Frank.

As Kendal's duties called him away from the village, Alice's mother proposed to take charge of the baby; and, seeing that she had lately adopted an orphan baby of a late neighbor and that it was thriving most admirably, he readily agreed to allow her a certain sum for the child's support. In a year or two however he intended to take a London house for himself, and he made it distinctly understood that the child was to leave his grandparents then to be brought up under his father's roof.

About nine months had elapsed, when he heard from Mrs. Graham that the child had succumbed to an attack of croup. Wifeless and childless, he hurried down to look upon the tiny new-made grave, close to that of the mother—for little Willie was already buried. The farmer was ill with rheumatic fever, and Mrs. Graham was so worried and upset that Kendal did not speak with her long. He put away the past from him as a dream, and from that day to this he had never brought himself to visit the neighborhood again.

What, then, were his feelings on reading the letter received this morning? It was from the Vicar of Springmead, announcing the death of the aged woman Graham, who had been long a widow, and inclosing a letter addressed to "Willie's Father." During her last illness she had fully confessed to the clergyman the imposture of which she had been guilty, begging however that it might not be revealed to her son-in-law till she had passed beyond his wrath. Kendal's boy was still alive and nearly seven years old; it was her neighbor's child that had died in infancy, but her great love for her grandson and dread of losing him had tempted her to take advantage of the circumstance to retain her darling with her. The Vicar had soon traced Mr. Darcy, the barrister, to his abode, and he wrote that Mrs. Graham, even at the last, did not seem to realize the extent of her wrong-doing; it seemed to her partly excused by the indulgent care lavished on the child she had taught to call her "grannie," and by the fact that she had never accepted the help of a farthing from her son-in-law since she had imposed upon him. Since her husband's death the small farm had suffered great misfortunes; it appeared that it was now to be sold, and the proceeds were to pay the debts the widow's slender means had forced her to contract.

"My blue-eyed baby alive," cried Kendal, as if speaking to himself—"given back to me as it were from the grave! I can even forgive the cruel wrong in the joy that is swallowing up every other feeling—the joy to know that my son is not dead!"

At that moment I almost hated my husband; his heart seemed so far from me and my baby that a passion of jealous anger seemed rending my soul. With bitter cutting words did I reproach him for his deceit, and his only answer was a silent look of pain; but when, incensed by his quiet manner, I began to hint that the child's training had not been such as to fit him for our house, I saw my husband angry with me for the first time in his life.

"A child of six or seven," said he, "can scarcely be considered as trained to perfection—even Frank at that age will sometimes need our fond correction; but I suppose he will be no less our much-loved son."

"Frank has nothing to do with the present," was my haughty reply; "my son will always be a gentleman."

I was ashamed of my words as soon as spoken, but Kendal made no reply. He walked up and down the room for several minutes ere he said—

"I am going down to Springmead to-day, and shall probably bring Willie home on Wednesday evening. Come, mamma," he added tenderly, "I know I can trust your woman's heart towards him."

"You are mistaken," rejoined I quickly, "if you suppose I shall trouble myself in the least concerning him. I never arranged for the trying life of a step-mother. Frank's nurse has quite enough to do. But the boy is old enough to attend to himself now. If you take my advice, you will send him to a thoroughly select school for some time before you bring him home."

"You must allow me to decide that matter," said Kendal coldly. "My house is my son's home. I will take care that no trouble concerning him shall fall upon yourself or nurse. Millicent"—and he tried to take my hand—"do not let us prolong our first disagreement. You must know how deep is my love for my wife and our baby, but you would despise me in your heart if I felt no yearning towards my first-born."

"I have no wish to make matters unpleasant," returned I, withdrawing my hand. "I only wish to know where the child is to sleep, for nurse will object to have another in the nursery, and the rooms are all disposed of."

"He can have the small red room for a bedroom," answered Kendal curtly.

I had always meant to turn this room into a day-nursery by-and-by, and I was not at all pleased to find my plans frustrated. Without another word or look towards my husband, I hurried up stairs to my baby to pour into his unconscious ears all my indignant and tumultuous feelings.

My husband tried no more to reconcile me to the fact of the child's residence with us. I saw that he was as displeased with my conduct as I was with his. But surely I had reason to be angry. Not only was I a second wife—a position to which I had a strong objection—but a vulgar farm-bred boy was to come among among us, stealing from my baby the father's love and the rights of the first-born that should have been his.

Bitter tears did I shed that day beside the cradle when Kendal had left for Springmead with a "Good-by, Millicent," called from the bottom of the stairs. I imagined that I had already become less dear to him, and laid the whole blame of the unpleasantness upon the boy who had come between us.

"Never mind, my baby!" I cried, pressing my lips to little Frank's velvet cheek. "We will love and comfort one another through it all."

On Wednesday morning I received a long fond letter from my husband, full of tender words for myself and baby, blaming himself for his secrecy, and pleading very hard for a mother's love for his son, however troublesome he might prove at first. He said that he had already seen my parents, having stopped for that purpose when half-way to Springmead, and that they had treated him with forbearing kindness he could never forget. Instead of adding this letter to the precious packet in my dressing-case, I tore it up after the first perusal; I was far too angry with my fate to be just towards my husband.

I asked my cousin Mrs. Tudor to spend the day with me, and she came to lunch, accompanied by her two children, and her sister Miss Clemence—their presence would take away some of the awkward nervousness with which I looked forward to Kendal's return. I did not enlarge on the facts of the case, but told them simply that Mr. Darcy had been deceived as to the death of his first wife's child, taking it for granted that they were aware of a previous marriage. My cousins showed neither surprise nor curiosity, whatever their feelings may have been. Miss Clemence hoped Willie would be a good boy, and give me no annoyance; and Mrs. Tudor, turning to her boy and girl, expensively dressed in the hight of fashion, hoped they would be good friends with the new cousin that they would see that evening.

It was nearly six o'clock when a cab drove up to the door, and I heard my husband's voice through the open window. A tastefully-spread tea waited upon the table—for we had made the luncheon our dinner, as Archie and Beatrice Tudor could not be kept out late. We were laughing and chatting pleasantly when Kendal came in; little Frank, in his very best lace robe, lay fast asleep in my lap, and I had no intention of waking him by disturbing my position in any way.

My husband greeted my relatives very cordially, though I fancy he was disagreeably surprised at their presence; at any rate, he went back into the hall, saying, "Run up stairs with Martha, Willie, and get yourself tidy, for the tea is quite ready."

"I have engaged a nurse for Willie at a registry-office," said Kendal to me in an undertone; "he is far from strong, and Martha will see to him entirely. Sturdy fellow this!" he added, turning to Miss Clemence as he bent to kiss the baby.

I knew that he wanted me to look at him, that he might read my feelings in my eyes, but I kept my face resolutely bent down, in deep displeasure that a servant had been added to our household independently of my own will and choice.

Kendal was thoroughly nervous when he brought his son into the room, and bade him shake hands all round. My careless glance as I touched his hand revealed a thin, pale child, very awkward and frightened, in a black sailor-suit of country make, presenting a marked contrast to the self-possessed little Tudors who stared at him with the curiosity incident to their age. It was a relief that he was not vulgar-looking; however I chose to mistake his shyness for ill-breeding, and determined to punish Kendal thoroughly through the child. Little Willie sat beside his father at tea, and, finding his child so little noticed, Kendal lavished upon him a fondness that inflamed my jealousy every moment. His first choice at table being a slice of very rich cake, of which the smallest morsel was sufficient for children, my husband, with the thoughtlessness of a man, heaped his plate with it. I knew that such a meal after a long journey would certainly harm the boy, but I had not the grace to clothe my remonstrance pleasantly. I turned to Kendal with the cold remark—

"That slice should be divided between the three children; no child should eat so much rich cake."

"It won't hurt Willie," said Kendal obstinately; and, without noticing me further, he turned to converse with Mrs. Tudor.

I noticed however that after the first taste little Willie only crumbled his food, gazing round the table with crimsoning cheeks, and gulping down his tea as though forcing back something in his throat. I was becoming as nervous as the child, for I had a horror of scenes, and I knew very well what was coming.

"Eat your cake, Willie, like a man," said my husband, as a lull in the conversation took place.

"I am afraid he has a very poor appetite," remarked Miss Clemence; "he has eaten nothing as yet."

Dismayed to find himself the object of general attention, Willie hastily swallowed a piece of cake, and then what I had forseen took place He buried his face in his small thin hands, and pushing away his plate, burst out crying. If my husband had been absent, I must have taken the motherless boy in my arms and hushed him as I did my own Frank; as it was, I looked at the sleeping child on the couch, and remarked that he would be ill all night if suddenly awakened. Miss Clemence told Willie nobody would love him if he was not well-behaved; Mrs. Tudor said something about "spoilt children;" Archie abruptly produced a stick of chocolate from his pocket and forced it between Willie's fingers, and little Beatrice twined her arms around his neck, whispering, "Please don't cry cousin."

"The child is tired," said I; "he cries only from fatigue. He had better go to bed and have something to eat there."

Kendal was very much annoyed at this public manifestation. He gave me a look almost of disgust at the indifference of my tones, and then, raising Willie gently in his arms, he carried him away. The last sound I heard was, "Grannie! I do want grannie!" and the wailing cry haunted me throughout the evening.

From that time a great coldness arose between my husband and myself; while outwardly the same united couple, both were conscious that a barrier, in the shape of little Willie, really separated us. It so happened that this was term-time, when Kendal was constantly occupied from home; but, when we were together, I easily recognized the absence of his former little tendernesses, and my heart grew harder and harder against the child who, I chose to believe, had usurped my place.

Willie was left entirely to the management of his nurse, a person whose cringing manners toward myself at once prejudiced me against her. She was constantly complaining to me of the willfulness of her charge, and I told her at last that he had been under her sole control for several weeks, and I had hoped for a report of a slight improvement at least. My great wish was to get the child away to school; evil passions once encouraged pervert the better nature, and, despite the occasional whispers of conscience, I threw off all responsibility concerning him, disliking even the sound of his voice or the mention of his name. If Kendal was displeased with his home-training, why did he not send him away?

"That boy is always crying," said my husband irritably one morning, as he pulled on his gloves in the hall. "I wonder what is the matter now."

"It is perfectly dreadful at his age," returned I. "Mamma will be here next week, and I am sure the noise will quite upset her."

"Willie must go to school next quarter," said he; "it will be altogether better for him than this house."

He turned toward the door, for our fond adieux were things of the past; but I saw before us a return of the old happy days, when Willie should no longer be an ever-present source of disagreement, and my heart went out yearningly toward my husband.

"You might spare me a kiss said I, coloring and I put my hand on his arm.

There was a sort of affection in his look, as he answered sternly—

"When I have once seen you kiss my child, I shall know you care for such tokens from me. Till then, let neither of us pretend regard, Millicent."

"Be it so," said I, white with angry pride. "You will never see me kiss that boy. I hate the very sight of him!"

"Take care of what you are saying," remarked Kendal quietly; "those are dangerous words to utter."

He had just left the house when Willie's screaming reached a higher pitch than ever, and I hurried up-stairs in a rage, determined to exercise my authority for once, to show the child such an annoyance was unbearable. Pushing open the door of the room where Martha gave him his meals, I beheld a scene that fully accounted for his cries. The nurse held both his wrists in a cruel grasp, and was beating him unmercifully about the head.

"Say I'm tipsy again, you rascal!" said she in thick, stupid tones. "You'll tell your pa I was tipsy all night, will you, when I was rolling in agony with the spasms? I've half a mind to kill you, I have—and I will too, if you go tale-bearing to your pa!"

I wrenched the child from her hold, and confronted the astonished woman. My fear of intoxication was completely overpowered by my indignation, and I spoke calmly and decisively.

"Go to bed, Martha; you are unfit for your duties to-day. When you are better, I shall see you again."

Her angry gaze changed slowly into a dull stare as she perceived my firm expression, and she sank into an arm-chair, where I knew she would sleep off the effects of her over-indulgence. I slipped the door-key into my pocket, and retreated, in my excitement carrying Willie as easily as an infant. Frank's nurse looked thoroughly surprised when I entered her domain with my step-son sobbing hysterically in my arms; but my recital did not astonish her.

"I had no idea it was as bad as that, ma'am," said nurse, "for Martha keeps herself to herself, and seldom allows her fellow-servants inside her rooms; but we all suspected she drank, for we smelt spirits often enough."

"But why did nobody tell me?" I asked crying myself as nurse gently revealed the blue marks on Willie's shoulders. "This child has been treated barbarously."

"Well, ma'am, we didn't think it our place to carry tales so long as you were satisfied. Many a time have I told Martha that Master Willie didn't ought to cry so much, but she always said she had your permission to punish him as she chose when he was troublesome."

I felt the reproach her words conveyed to my conscience, and I knew it was deserved.

"Get him some breakfast, nurse," said I; "the things were only half laid on the table, and he has had nothing this morning. Now, Willie, I want to know all about Martha—come, tell mamma everything."

"She hasn't been quite so bad before," replied the little fellow, looking up into my face, "but she is always sipping some stuff from a bottle in her pocket, and it makes her so cross. Last night she was angry because I was in here playing with baby, and she sent me to bed without supper. She said that I took tales to the other servants, and that I had no business here; she told me you wouldn't have me touch baby because I was only his step-brother, and I was in his way, and you'd be glad if I was dead—but that's a story, isn't it?"

He fastened upon me his great earnest blue eyes, just like my husband's. I was crying fast—crying away all my unnatural hardness—and for answer I stooped down and kissed him.

"I knew it was a story," said Willie, "I do like you to nurse me, mamma; it feels like grannie."

"Did Martha dress you this morning, Master Willie?" asked nurse, returning with some bread and milk and a little minced chicken.

"No, she sat up in the chair all night. She was asleep there this morning when I went to see if breakfast was ready. I had dressed myself, and I woke her up and told her so. I began to cry, and said she was tipsy when she stared so oddly at me, and then she hit me because I tried to get away to tell papa."

"Master told me I was never to interfere with Martha, but just attend to baby," said nurse indignantly, "else I'd have found out directly why he was screaming. Never mind, Master Willie; it's all right now."

"Nurse," suggested I, "I think we could have Master Willie's little bed in here. I wish you could undertake both the children, or, at least, try it for a time. I can rely on you, and of course your wages would be altered. He would not be much in your way."

"I am quite agreeable, ma'am," said nurse. "Baby has taken wonderfully to Master Willie, and he always does what I tell him; but I can't have that naughty cough in my nursery, sir, I tell you."

"I don't cough for fun, nurse," declared Willie. "I'll try to keep quiet—I will indeed."

"He has a nasty hacking cough at nights," said nurse to me, when Willie, with the tears all dried, was playing bo-peep with baby in the *berbeaunette*. "It goes right through you, ma'am. I doubt if he's long for this world after all."

"What a foolish idea!" said I hastily, looking at the white face and slender frame, and wondering, with a sudden flash of horror, if my lack of love was thus to be punished by Heaven. The womanly yearnings, crushed hitherto by jealousy, broke down every barrier then. I was myself at last, and my heart opened wide to take in my husband's child.

I longed to see and speak to Kendal again, and looked forward anxiously to his return. I was sadly disappointed when Mr. Tudor came in to tell me that my husband, who shared his chambers, had been summoned to Exeter on legal business and might be detained some days. He had sent a list of certain requisites, and these I packed at once and despatched to the station to follow him. I could not bring myself to write one line of all that I felt.

Mr. Tudor soon relieved my disquietude as to dealing with Martha. After a brief interview between them, in which he acted for Kendal, she quietly accepted a month's money in lieu of notice, and bestowed herself and her belongings in a cab, with a few threats and impertinences concerning myself and her late situation which highly amused the cabman.

"She's gone!" shouted Willie, clapping his thin hands for joy. "Won't I have a good time now, mamma?"

After this Willie's health did not seem to improve, and, broken-hearted, I realized one morning, as the rising sun was parting the gray clouds in the east, that all my care for my patient was in vain. A slight attack of pleurisy, anxiously watched by myself and a West-end physician I had summoned, had taken a fatal turn on the previous evening, and we had telegraphed directly to his father, who had proceeded to Ireland from Exeter.

Closer my boy clung to me with all his feeble strength. Baby was crying in the nursery, missing my presence there; but even his voice could not draw me from that bed-side. I would have died myself to save my other child, cut off in the very blossom of his days—a victim perhaps to the neglect which had left his warning cough unattended to. Unspeakly dear had Kendal's son become to me of late; his innocent lips had prattled to me of better things than my careless thoughts had hitherto heeded.

One evening footsteps came hurrying up-stairs, and I was quickly pushed aside by my husband's hand. I knew what his first-born was to him as I noticed his evident distress. His emotion palsied the child, who was placid himself with the shadow of coming peace.

"Doctor Steane, tell me there is hope—there must be hope—there must be hope!" appealed my husband to the physician, who stood at the foot of the bed.

"I'm not afraid, papa dear," said Willie faintly, as Doctor Steane sadly shook his head.

"But I cannot let you go, my poor little boy!"

A solemn silence fell over us, broken only by my husband's sobs; my own heart was too full to find relief in tears. I started convulsively when at the last there came a great cry, "My mamma!" and the little arms were stretched towards me. How could I ever have wilfully put away my boy's tenderness? Just then I would at any cost have purchased a renewal of our term of love.

The rest is all to me as a dream—a vision of frightened faces, morning shadows superseding the candlelight, and a little figure calm as the flowers on which the the sun was rising—an indistinct memory of stifled sobs, agitated whispers, a baby's cries, and through it all a boy's clear voice faintly recalling his daily prayer—

"Gentle Jesus, meek and mild,
Look upon a little child."

I knew I was forgiven as I stood in the stillness of the solemn room and tenderly looked my last look at him who would so soon be removed from our sight. The heavenly calm of little Willie's face spoke peace to my troubled soul; the love that had given him rest held pardon too for me. I could not bear to remain there long; one mother's kiss I gave him—a parting kiss that refused to part—and then I left him as before, with the pure white roses strewn around him and the lilies on his breast. And my husband, who had followed me unperceived, took me in his arms with a fondness that had a new element in it.

"Dear love," said he, pressing his lips to mine, "I have learnt all now; and what remains untold I read in his eyes that morning as he looked upon you. Heaven reward you, my Millicent!"

I put down my head upon his shoulder and cried there for the first time since our sorrow—cried out all the feelings I had no words to tell.

CORA.

"I WENT to The Tryst and found you gone," he said quietly, lowering his tone a little; and having handed tea to Mrs Colston and Lucie, he came back for his own cup. "Has your brother left England?"

"Harold has gone to Rome," she replied, trying to speak unconcernedly, and to prevent her hands from trembling as she poured out the tea and handed it to him. "He had an unusually good opportunity of studying, and I urged him to accept it."

"He was wise not to take you. Rome is neither agreeable nor healthy at this season."

A momentary silence ensued.

"I did not think to meet you here to-day," he said then. "How long are you to remain here, Cora? I beg your pardon," he added, quickly.

"Harold may be away, two, or perhaps, three months," she replied looking a little troubled and sorrowful.

"You are happy here?"

"Mrs. Colston is very kind," she answered, quietly.

"Do you know what I felt when I went to The Tryst and found it empty?" he said, speaking in low, eager tones, as he bent slightly forward. "Do you know what it costs me to meet you thus?"

"Hush!" she murmured; "I pray you do not speak thus, Lord Almane."

"Ah, forgive me," he rejoined, quickly; "but you said we might be friends, and now, in your brother's absence you must let me be your friend. Are you alone here?"

"Yes. My brother took Marianna to Rome," she answered. "She longed to see her country."

Again there was a silence, then, with a heavy sigh, the Viscount set down his cup, and moved away. In a moment he came back to her side.

"See," he whispered, eagerly; "I am trying to do as you wished, Cora. Lucie is happy, and you wished her happiness more than mine."

"Not more, ah, not more," she replied, gently. "I wish yours above all earthly things."

She spoke the last sentence in a low tone of restrained earnestness; the dark, handsome face lighted up.

"I will remind you of these words some day,' he answered. "Cora, such love as I have for you cannot be vain; since that day when we parted, that night when I last held your hand in mine, I have known no happy moment. You are a woman, and can forget. I can never do so."

Cora's face warned him that unless he wished her emotion to be remarked he must cease now; but one question more he must ask.

"Did your brother know of our love?" he asked, with repressed anxiety.

"Oh, no. How could he?" whispered Cora, raising her eyes for a moment.

"Because Marianna knew of it," he replied, and moved away from her, leaving Cora surprised and uneasy, and wondering why the old nurse had not told her that she had discovered her secret.

Lucie Belmont had been surprised and delighted with Cora's beauty; she had not a spark of selfishness in her nature, and not a particle of envy mingled with the honest admiration she felt for the girl's great loveliness. Besides, her trust in her cousin, her faith in his love and honor, were too entire to allow her to be jealous; and it never entered her head that it was dangerous to either the Viscount or to the girl herself to be much in each other's society. She had been drawn towards Cora on their very first meeting by the witching sweetness of the wistful, almost mournful eyes which had met hers, and she gratified her desire for more of the girl's society in every possible manner.

Almost against her will Cora found herself a constant visitor at Lady Martyn's—a constant visitor and a most welcome guest. The old lady was charmed with her, and with the simple grace, the unconscious dignity, which characterised her every movement—with the quiet repose of her manner, the dainty simplicity of her dress; which were all so different from "the girls of the period," for whom Lady Martyn entertained such a righteous horror. She was always kind and cordial to Cora, and the girl was pleased to escape from the pompous fussiness and glare of the stuccoed Brixton mansion for the quiet, harmonious calm of the well-appointed West-end household, over which the stately old lady presided with such perfect courtesy and high breeding.

These visits had, too, a dangerous charm for Cora; although, after that first day, Lord Almane had carefully avoided any direct allusion to his affection for her. It was pleasant to her to see him, to hear his voice, to touch his hand, and feel for one moment of greeting or parting its lingering pressure over hers; to note that, careful as he seemed not to alarm her or remind her of the past, his voice softened, and took a lower, more caressing intonation even, when he made a trivial remark to her.

Cora was too young to see the folly of it—the danger of playing with edged-tools. She was happier in his society than when he was absent; and with an imprudent disregard of the future, she gave herself up to the pleasure of the present.

It was a pleasant day-dream, but the awakening was exceedingly bitter.

CHAPTER IX.

The hot July sun was pouring its fierce rays through the stained windows of the old dilapidated palace in the neighborhood of Rome, and large and lofty as the rooms within were, it was powerful enough to be unpleasantly felt, especially in one, which surely had served as an oratory in the old days of grandeur and magnificence, for it faced the east. It was a vaulted room; ceiling as well as walls richly decorated with frescoes, whose colors had faded and grown so dim with passing years that even the subjects of the paintings could hardly be discovered. There was a good deal of gilding, now tarnished and soiled, about the room; the floor was marble, and handsomely inlaid, but it made but a comfortless bed-room for any one suffering and in pain. The furniture matched the room itself for faded splendor and magnificence; the windows were uncurtained, but they needed but little shading, for the glass was stained with the rich colors and designs of a bygone age—colors which, with all our progress and advancement, we cannot surpass now.

The doors were thrown wide open, but they admitted no air, and Harold Sinclair, lying on the old couch near the open windows, sighed impatiently as he felt the parching heat around him.

His stay at Rome had greatly changed the young artist; almost from the earliest period of his residence there he had felt the bad effects of the intense heat; but he had disregarded, in his professional ardor and eagerness to complete his studies, the growing langor and debility which were coming over him, and it was only when he was perfectly prostrate with the low fever of the country that he recognized that he had been imprudent and careless.

That he was very ill, no one who watched him could deny; he was dreadfully weakened and emaciated, and dark violet circles had hollowed themselves out under the blue eyes, and a hectic flush burned on the thin cheeks. His companions and brother artists had been kind and attentive enough, but during Marianna's absence at her own home, a little village not far from Florence, Harold's chief friend and nurse was a young Englishman, who was studying sculpture at Rome and who had delayed his departure on purpose to be of use to the sick man.

Sitting beside him, with the volume of Tasso, which he had been reading to Harold, who had closed his eyes in weariness or sleep, resting on his knee, Sir Alan Vincent contemplated, sadly enough, the worn face, and thin white fingers, and unconsciously contrasted them with his own muscular hand. He himself was an unusually powerful specimen of the *genus homo*. He was over six feet high, broad in proportion, and splendidly built. As he strode through the streets, many an Italian painter and sculptor turned to admire the stately proportions, and to mark the resemblance between him and the statues of the brawny gladiators who had striven and wrestled in the arena of the Roman forum.

They liked him, too, as much as they admired him. They were pleased by his cordial, hearty, and yet gentle manner; the perfect straightforwardness and uprightness of every word and action they could appreciate, though they might not feel inclined to follow his example. Harold had liked him specially; during the period of their acquaintance they had been great chums, and when he had fallen ill, Sir Alan had become his kindest and most constant attendant.

There were others, too, of his party who were kind and attentive. George Leeson, who had been one of the chief originators of the visit to Rome, had been especially so also, but Harold preferred Sir Alan; he liked to feel some one so strong and yet so gentle about him, he said.

They were aroused, the one from his doze, the other from his reverie, by the entrance of the doctor, a quiet, elderly Englishman, whom both men liked and trusted. Harold greeted him with a faint smile; but he was too weak even to stretch out his hand in greeting. The doctor made his inquiries in a cheery tone, but Sir Alan Vincent, watching his face, saw that, as he proceeded with his examination, a shade came over it, a shade of sorrow, pity and regret. He waited a few moments, chatted about trivial matters, all the time watching Harold's face with close attention and then prepared to take his leave.

"I am coming round this way in the evening," he said; "will you give me some coffee if I look in? Good-bye until then."

Sir Alan followed him out, and in the lofty, marble vestibule of the old palace, both men paused.

"You think him very ill, doctor?" said Sir Alan, in anxious inquiry.

"Yes," the other replied, with a grave shake of the head; "I fear there is but little chance of rallying. Has he no friends—no relatives who would come to him?"

"You do not think it is so bad as that?" exclaimed the baronet, greatly shocked. "He is so young; surely there must be hope."

"I have but little," was the sad reply. "I do not say there is none; but it is a very faint one, Sir Alan. I think he ought to send for his people.

"He has only a sister, I believe," said Sir Alan, mournfully.

"Why is she not here?" said the doctor, quickly.

"She does not know he is ill," was the answer. 'He seems passionately devoted to her, and anxious to avoid giving her any anxiety. Even yesterday he insisted on writing her a few lines, pleading press of work, and not saying one word about his health."

"She should be sent for," said the physician. "If she cares for him, it is cruel to keep her in ignorance of his danger, Sir Alan. As his friend, you ought to send for her."

"He is afraid of the malaria for her as well," answered Sir Alan. "Must I really broach the subject to him?"

"I think it is your duty to do so," was the reply. "Try to alarm him as little as possible. I will call again this evening."

Sir Alan returned to Harold's bedside, trying in vain to show no trace of his discomfiture and sorrow at the doctor's tidings. To him, in the flush of health and strength, it was terrible to think that this man, whom he had known a few weeks since, well and strong as himself, should be dangerously ill, sick unto death; and notwithstanding all his efforts, his face was very grave and disturbed as he returned to the sick-room.

Harold was lying with closed eyes, and a sorrowful expression on his face, although, during his illness, he had been generally cheerful.

He did not speak when his friend entered; but when Sir Alan arranged his pillows with a tenderness and lightness of touch few women could have excelled, he opened his eyes, and smiled.

"What a fellow you are, Vincent," he said, looking at him with wistful wonder and admiration in his eyes. "Such a giant for strength, and yet with such a gentle touch. Why Cora's own little fingers could not be gentler."

His words gave the baronet the opening he needed; but for a moment his voice faltered so that he could not speak.

"What's the matter, old fellow?" said Harold, in his faint voice.

"Nothing, of course," was the quick answer. "I wonder you don't send for your sister, Sinclair; it would be so much pleasanter for you to have her than a great clumsy fellow like me."

"It would be selfish to bring the child to Rome at such a season," said Harold, musingly.

"But the great heat is dying away," said Sir Alan. "It will soon be cooler, and I think it is hardly fair to keep her in ignorance of your illness."

Sir Alan was a bad dissembler. As he spoke, his earnest gray eyes avoided Harold's glance, and the color mounted to his usually pale cheek.

Harold was too quick not to note the uneasy manner; but, for a moment, he did not reply.

"Are you getting tired of your sick-room attendance, Alan?" he said then, a little wistfully, but with a great deal of affection in his tone.

The baronet flushed deeply, as he answered at once;

"By no means, Sinclair! but,——"

"I know, old fellow," interrupted the invalid. There was a short silence.

"That was an ungrateful speech of mine," said Harold in a minute. "Forget it, Alan. Never had any one a kinder, truer friend than you have proved yourself."

"Nonsense," was the reply.

But Sir Alan put his strong hand on Harold's and his slender, weak fingers closed over it.

"What has Dr. Crosby been saying to you?" said Harold with a faint smile. "Did he tell you I was dying, old fellow?"

"I shall begin to think that you are raving if you talk such nonsense," said Alan, with an impatient movement.

"You cannot disguise it, Alan. Why should you? I have thought it some days myself, and always with the most earnest thankfulness that I had you with me to help me through it, and to break the news to my poor Cora now, and, if you will, to be a friend to her when I am gone."

Sir Alan's lip quivered a little, and it was with some difficulty that he spoke again in his light tones.

"I don't know what you have taken into your head, Harold," he said, "but I think you are getting light-headed. I only know this, that if I had an only sister whom I cared two straws about, I would not do her the injustice of keeping an illness from her. I tell you, Hal, that if I were ill, and situated as you are, the very first thing I should do would be to send to my mother, and she is a delicate old lady; and your sister is not either the one or the other."

"Shall I send for Marianna?" said Harold, smiling faintly. "Will that satisfy you?"

"Send for her by all means, old fellow, but don't behave so cruelly to your sister."

"You are strangely persistent, Alan," murmured Harold, smiling faintly; and then he closed his eyes, and Sir Alan desisted, feeling that he had failed ignominiously in carrying out the physician's wishes.

The hours passed by slowly. Harold lay silent, and apparently asleep, while Sir Alan kept his motionless station and guard by the bedside, rising sometimes to moisten the parched lips, or to make the sick man take some light nourishment.

Twice he was disturbed by visitors. First came the old Italian maestro with whom they were studying, very sorrowful at the illness of his most promising pupil, and a little annoyed with Sir Alan Vincent for allowing his friendship to surpass his ardor for art, and so missing his own golden opportunities and hours of study, for Sir Alan was a sculptor and a diligent worker. After him came George Leoson to cheer the invalid with studio chit-chat and art *jargon*, which amused and brightened Harold for the moment. But after he was gone the exhaustion and langor were still more apparent, and Sir Alan rather anxiously awaited Dr. Crosby's next visit.

The physician came and went, going away with a very anxious face; and Sir Alan, returning to his mournful watch by the bedside, felt his heart sink and grow heavy as he noticed the sharpened profile and the shade on the handsome face.

Towards evening Harold roused up. The last rays of sunset stole in through the open door, and lingered over the faded paintings on the walls, and a faint, pleasant air had sprung up, and played refreshingly over the sick man's brow as he opened his eyes, and met Alan's anxious glance with a faint smile.

An Italian servant belonging to the house had come up with a pleasant inquiry after the *Signor Inglese*, and a graceful present of fruit—luscious purple grapes, with the bloom on them, and some peaches ripened into sweetness and richness under the hot southern sun.

Harold had murmured his thanks, and given the lad a pleasant smile, but it had not prevented Tonio's dark, bright eyes from filling with ready tears, and his lips from taking a mournful droop, which hid the gleaming white teeth, as he noticed the change in the invalid.

When he was gone Harold turned to Sir Alan with a playful sadness. He had put his strong arm under the pillows, and was supporting Harold in a sitting posture in such a manner that he was not the least fatigued, and it rested him after such a long spell of a recumbent position.

"Did you see the boy's face, Alan?" he said, smiling faintly. "He, like you, thinks me doomed, old fellow. Do you really advise me to send for the child? I should so like to see her once more."

"Harold, you pain me horribly," said the baronet, entreatingly. "Send for your sister, by all means; by the time she comes you will be convalescent, and she will be here just as you will be getting disagreeable, and trying all our patience to the uttermost."

"Well," sighed Harold; "let the child come. Alan, I know you will be good to her if anything happens. You must promise me this."

"My mother shall be as hers, old fellow," said the baronet, gently and tenderly. "Only I won't send for her at all if you get so despouding. I had better write at once to catch the night's post. What is the address, Harold?"

"Nay, if Cora is to come you must go for her," said the sick man, quietly. "How can she come from London alone? and I have no friends there who would bring her to me. The people she is with now are almost strangers to us; but they are very kind to her, and she was so anxious that I should come, Poor Cora!"

"I? How can I leave you, Hal?" said Sir Alan, hesitatingly. "Surely your friends could find her an escort."

"Then that must end it," Said Harold, positively. "I should not like her to come with anyone else."

"But you, Hal?" said Sir Alan, again.

"Marianna would come if you send for her. She and Tonio will surely be enough for me. Alan am I presuming on your friendship in asking you this, the last service I think I shall ever need at your hands!"

"I will bring her," said the baronet, simply.

"Let me go now, Hal, I must tell Tonio to start at once and return with Marianna. When she comes I will start and bring your sister to you with all speed."

And Sir Alan went to make his arrangements, his heart heavy with foredoding. Would Harold Sinclair live to see the sister he loved so tenderly?—[To be continued.]

For Women,

[CONDUCTED BY MISS FAITH RIPLEY.

THE ANSWER.

BY ELIZABETH STUART PHELPS.

"That we together may sail,
Just as we used to do.
—*Carlto n's Ballads.*

And what if I should be kind?
And what if you should be true?
The old love could never go on
Just as it used to do.

The wan, white hands of the waves,
That smote us swift apart,
Will never enclasp again,
And draw us heart to heart.

The cold, far feet of the tides
That trod between us two,
Can never retrace their steps,
And fall where they used to do.

Oh, well the ships must remember,
That go down to the awful sea,
No keel that obisels the current,
Can cut where it used to be.

Not a throb of the gloom or glory
That stirs in the sun or the rain,
Will ever be *that* gloom or glory
That dazzled or darkened—again.

Not a wave that stretches its arms,
And yearns to the breast of the shore,
Is ever the wave that came trusting,
And yearning, and loving, before.

The hope that is high as the heavens,
The joy that is keen as pain,
The faith that is free as the morning,
Can die—but can live not again.

And though I should step beside you,
And hand should lean unto hand
We should walk mutely—stifled—
Ghosts in a breathless land.

For I am as dead as you are,
And you are as dead as I;
He who burns souls down to ashes,
He only can answer why.

And what if I should be kind?
And though you should be true?
The old love could never, never
Love on as it used to do.

—*Andover.*

WASHING-DAY.

MRS. A. E. STORY.

FRIDAY, as we are sagely informed, is hangman's day, an unlucky day, a day on which no new work must be begun, no journey undertaken, no plans for the future laid. For on Friday, of all days,

"The best laid plans of mice and men
Gang aft agley."

Saturday is peaceful, quiet, serene—the day of preparation for the Sabbath. Wednesday and Thursday are the bone and sinew of the week, given to bearing burdens and bearing them silently and without complainings. Tuesday is like Friday, under a ban. But what has the unhappy Monday done, that its groanings must go up in clouds of steam to the very skies! It is ushered in by the seething of boilers, the shrieks of washing-machines, by the din of pounding barrels, by the odor of suds, the crying of babies, and the general discomfort of everybody but the women who are at the head of affairs, and who turn the crank, which is their emblem of authority, with a vigor worthy of the day.

Monday is washing-day.

A woman possessed of any spirit, would sooner be caught in a hail-storm with her best bonnet on than fail to do out her week's washing on Monday.

The very brutes about the house learn to know the day and tremble.

The cat vacates her corner by the stove and curls herself up on a beam in the wood-shed, where, if she sleeps, it is with one eye open. The dog plants himself on the front stoop and howls plaintively. The children go off to school with molasses on their faces and with unbuttoned shirt bands. *Paterfamilias* fills his pipe on the doorsteps and smokes it on the wood-pile. Beds are left unmade, floors unswept, dishes unwashed. The baby has the tongs and the tea-kettle to play with. He pinches his fingers, blacks his face, and tumbles into a pail of water trying to climb on the table.

Pandemonium is let loose. It is washing-day!

At noon the scene is changed. The clothes are on the line. The tubs are put out of sight. The slops have been cleared away. The "good man" has had his "picked-up" dinner and smokes his pipe by the kitchen fire with the baby tugging at his trousers' legs, while the mistress of the day is stretched out on the lounge, completely exhausted but, oh, so happy, for did she not get out her whole wash before so much as a single rag fluttered from one of her neighbors' lines?

She ought to have attended to the churning this morning, she knows, and there was baking that needed doing. The cream will only be a little more sour and the churning larger, that is all, and as to the baking, the children can eat mush and milk for their supper. It is healthy and easy to get. She should, by rights have mended JOHNNY'S jacket. He tore it Saturday afternoon and she *supposes* she ought to call on a friend in whose household there was a death last night, but she cannot let the washing go. JOHNNY can wear his Sunday jacket and her friend must take the will for the deed. What was Monday made for if not that she might wash

Tooth-ache, head-ache, back-ache! she may have all these, but what are they that they should keep her out of the suds? She will do up her jaw in a mustard poultice, bind towels dipped in pain-killer around her head and put porous plasters on her back, but not even this once will she let Mrs. Flyabout or Mrs. Cleansweep get ahead of her with her washing. Seriously, what advantage does Monday have over other days of the week beyond the one conveyed in the old couplet:

"They that wash on Monday
Have all the week to dry,"

for the doing of the family wash? It has numerous disadvantages, not the least of which is the necessity one is under, if the work is to be begun early in the morning, of "picking up" the wash and making other preparations on the Sabbath.

But, wisely or not, custom has uttered a decree and like the laws of the Medes and Persians, it altereth not, and so long as we are slaves to custom we shall go on doing our weekly cleansing of linen on Monday with no regard to our own personal convenience or desires.

TO BE OR NOT TO BE?

JOSEPH.

To what has science brought us? The theories that seem promulgated only to turn the world upside down have reached even to regulating the number of our children, as a wise farmer regulates his stock. It teaches us that our aim in life should be to live at ease, and not spend our lives in the nursery. Such doctrine is very discouraging to many farmers' wives whose hands are full, and who have comforted themselves that "cradle tending" *was one* of woman's highest, noblest duties. Must large families necessarily be "dirty, ill-favored or ignorant?" Is it not rather the result of surroundings? and if differently situated the "brood" might become better citizens than the "solitary American child," brought up to selfishness by its very isolation. Queen VICTORIA had nine children when her husband died in the pride of manhood, and I read in a late RURAL that MURAT HALSTEAD was the father of eleven children, yet with a noble and cultivated wife; and Mr. EVARTS, too, is the father of about the same number, if newspaper reports are true. It is, to say the least, deplorable that women sneer at each other in this respect, or pity their sister women who are mothers of large families. Such feelings expressed are apt to prove as clouds in a weak woman's sunlight. Has she not, through all her hours of trial, been sustained by the thought that each dear, helpless being sent to her weary arms, was a gift from the GOD in whom she trusted? And now, to be told He has no part or lot in the matter!

If the matter of health is taken into consideration, it is only necessary to remember the women of the last generations, who brought up large families and accomplished more work than any three women attempt to-day, to know that it is the childless and those who tamper with GOD'S laws in this respect, who die young, of unexplained diseases, or live for years in a state of invalidism. The one American child, for whom the parents scrape and save—who is made to believe *I* the most important letter in the alphabet—is not likely to grow up as self-helpful, kind or observant as the one among a crowd, who must practice self-denial, protect the weak, and do his share of the work at an early age.

Mrs. Potiphar "talks of scriptural authority" and seems to forget that *all* the Bible through gives as one of the choicest blessings bestowed upon man the gift of *children*. To "increase and multiply" to become the "joyful mother of children," and to "bring them up in the fear of the Lord," are sentences of frequent occurrence in the Bible. But science shuts the Bible on this subject. It is behind the age! Ah! mothers, do not be discouraged by this needless sneer at "nursery" and "cradle-tending." Do you think women are happier in the Court House, on the rostrum, or jostling with men in the galleries or lobby of congressional meetings? It is false to every instinct of our sex to say, yes. Nor can fame so fickle in its favors compensate for a loveless home or the happy faces and voices of children. Take courage. Think still that the GOD of the past is the GOD of the present and that He watches over you and yours. The hymns you sing when cradle-tending give more pure enjoyment than if the applause of a multitude greeted your efforts, for they would forget you when a fresher voice came before them, but your words; your looks, your love, will live in the hearts of your children when they can see you no more. It will require your best and highest nature to make your home a heaven on earth for your dear ones, for nowhere else can a cultivated woman realize such grand possibilites as in training the children GOD has given her.

TURKISH WIVES.

Having obtained a wife, it is worth while to inquire how a Turk treats her. She has not much to complain of generally from the personal ill-treatment of her husband. As a rule the Turk if a fair husband. The Turk in ordinary life is not unkind or cruel. The wife's misfortunes arise from her position. As husband and wife see little of each other, they are not specially given to quarrelling. But she is a woman, possibly purchased outright in the slave-market—for it is a pure illusion to suppose that the slave trade in Turkey has been abolished—and being a woman, she bears about her on every hand the marks of degradation.

It is her duty to wait on her husband, if he is poor, at meals. Her accommodations in the house are inferior to his. In all things she is a slave. If the wife is the daughter of a wealthy man, her lot is not a hard one. As the law regards marriage merely as a patnership, she keeps her own property, and the husband has to be on his good behavior to obtain a share of it. If she is of poor origin, she can scarcely be said to have any rights. When a harem is on board a vessel, the husband keeps in the saloon, living well and sleeping in a comfortable cabin. The poor women are penned up as deck-passengers, living on wretched food which they take with them.

"Only a few weeks ago," says a traveller, "I was in a steamer carrying a harem, where there were probably twenty women wives and slaves, who were shivering under a canvas, which was quite insufficient to keep out the pelting rain. I know that it is a thing almost unknown for a harem to have cabins taken for it. The husband takes care of himself—has perhaps, unlimited champagne—and leaves his women huddled together on deck to take care of themselves:"

THE HEARTS OF THE LOWLY.

ONE day, three or four weeks ago, a gamin, who seemed to have no friends in the world, was run over by a vehicle, on Madison Avenue, New York, and fatally injured. After he had been in the hospital for a week, a boy about his own size, and looking as friendless and forlorn, called to ask about him and leave an orange. He seemed much embarrassed and would answer no questions. After that he came daily, always bringing something, if no more than an apple. Last week, when the nurse told him that Billy had no chance to get well, the strange boy waited around longer than usual, and finally asked if he could go in. He had been invited to many times before, but had always refused. Billy, pale and weak and emaciated, opened his eyes in wonder at the sight of the boy, and before he realized who it was the stranger bent close to his face and sobbed:

"Billy, can ye forgive a feller? We was allus fighting, and I was allus too much for ye; but I'm sorry! 'Fore ye die won't ye tell me ye haven't any grudge agin me?"

The young lad, then almost in the shadow of death, reached up his thin, white arms, clasped them around the other's neck, and replied:

"Don't cry, Rob. Don't feel bad. I was ugly and mean, and I was heaving a stone at ye when the wagon hit me. If ye'll forgive me, I'll forgive you, and I'll pray for both of us."

Bob was half an hour late the morning Billy died. When the nurse took him to the shrouded corpse, he kissed the pale face tenderly, and gasped:

"D-did he say anything about—about mo?"

"He spoke of you just before he died. Asked if you were here," replied the nurse.

"And may I go—go to the funeral?"

"You may."

And he did. He was the only mourner. His heart was the only one that ached. No tears were shed by others, and they left him sitting by the new-made grave, with heart so big that he could not speak.

If under the crust of vice and ignorance there are such springs of pure feeling and true nobility, who shall grow weary of doing good?—*Independent.*

FRECKLES.

The most effectual means of removing freckles, is the use of those chemicals which dissolve the existing combination. The freckles are situated in the middle or second membrane of the skin, and before any other application it will be advisable to soften the surface by the use of some mild balsam or paste.

Paste for freckles—one ounce of bitter almonds, one ditto of barley flour; mix with sufficient quantity of honey to make the whole into a smooth paste, with which the face more particularly where the freckles are visible, is to be anointed at night and the paste washed off in the morning after a few days the skin will be prepared for a chemical remedy.

To decompose the freckles by laying hold of the iron: the following mixture may be applied. Take one drachm of muriatic acid, half a pint of rain water, half a teaspoonful of lavender; mix well together and apply two or three times a day with a camel's hair brush. The acid seizes upon the iron and the oxygen is disengaged.

"JUST LIKE THE SEX!"—"Did I love any other girl?" repeated a prospective bridegroom, in answer to the tearful query of his intended. "Why, darling, of course not; how could you ask such a question? You are my first my only love! This heart knew no waking until the sunshine of your love streamed in, and woke it to ecstasy!" And then he kissed her tenderly and went home, and said to himself: "I must hurry them things out of the way right off, or there'll be a row;" and he collected a great pile of letters, written in all kinds of feminine hands, with lots of faded flowers, and photographs, and locks of hair, and bits of faded ribbon, and other things; and, then the whole collection had been crammed into the kitchen grate, he drew a deep sigh, and said to himself: "There goes all that is left of fourteen undying loves—let 'em flicker!"

—WILL some of your correspondents please tell me through the columns of the RURAL, a remedy for the large black ants which infested my cupboards last summer, and have already, this nice weather, sent out spies, intending no doubt to follow in regiments soon.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

THE month of March has been to us a miracle of alternate smiles and tears, more like the "May" we usually have in Canada. Sowing peas and making hot-beds, is not often our work at this season, for April generally finds the "Kitchen-fire" a necessity, and of permanent value. But for several weeks our cellar doors have been opened wide, to sun and air, the vegetables looked over carefully and only the very best retained. Until asparagus comes I think there is nothing better, as a diet, than good vegetables plentifully used, celery, beets, turnips, parsnips and the good old Hubbard squash, for which Gregory deserves a medal as introducer. Then if apples still hold out and give the children a plentiful supply—there is sulphur in them that as a purifier is superior to, and pleasanter, than the proverbial "brimstone and treacle." If showing signs of decay, there is no better plan for using apples than in a simple form half-preserve half-canned that I will give the readers who are tired of apple sauce. Pare and core, cutting the pieces into as even size and shape as possible, and to prevent discoloring by exposure to the air before cooking, place directly into a dish of cold water. Have ready a sirup made of water and loaf sugar boiled to a proper consistency, place the apples in this when it does not readily run from a spoon and simmer gently for about ten minutes. Take out carefully into a jar which can be afterwards corked, or closely covered, boil the sirup a few minutes longer and pour over the fruit. In this way a choice fresh preserve is made, at a season when many housekeepers are getting short. It is a great pity that apples have been so scarce in many localities this winter, as I have no doubt they contribute largely to health keeping, which is better than health getting. As a mild and a pleasant cure for an ordinary sore throat baked apples eaten hot, are a remedy we have often found efficacious. The RURAL and other horticultural journals that aid us in selecting and planting orchards, by their advice and experience, are doing a work for the future health of our children, greater than all that can be accomplished by our medical men, for keeping the blood pure, and wholesome is one of the great secrets of health, and this the apple eaten freely will aid to accomplish.

DOMESTIC RECIPES.

Soups.—Beef Soup.

Crack the bone of a shin of beef and put on to boil in as many quarts of cold water as there are pounds of meat; add a teaspoonful of salt for each quart; simmer slowly, at first, skimming as often as any scum arises; let boil two hours, then add four large onions sliced; two carrots, scraped and sliced; one root of celery cut into small pieces—or a teaspoonful of celery salt. When the vegetables and meat are done, strain the soup and return to the kettle, adding a tablespoonful of rice for each quart, and boil until tender; add pepper and salt to taste. If the soup is preferred clear, omit the rice and thicken with a very little flour and water. A shin of veal is nice for soup but it should be soaked in cold water an hour before using.

Corn Soup.

Take twelve ears of sweet corn; cut the corn from the cobs and boil the cobs in two quarts of water until the sweetness is extracted; take out the cobs, add the corn and boil from twenty to thirty minutes; then add butter the size of an egg; pepper and salt to taste; one quart of sweet milk; let come to a boil and serve.

Vegetable Oyster or Salsify Soup.

Scrape and slice very thin a quantity of the salsify; boil in water sufficient to cover well until tender, adding one-half teacupful of finely picked-up codfish (which is to boil as long as the salsify) to about four quarts of the soup when it is done; when tender add butter, pepper, and milk to taste, with three or four rolled crackers, adding the salt when ready to serve. This method of cooking salsify gives to it the flavor of the real oyster.

Soups are not as common as they ought to be in private families. I believe that a dish of good nutritious soup—not grease—to warm and tone up the stomach before taking into it the more hearty and solid food, is a great aid to digestion, and that the health of our families would be increased were we to eat it at least once a day. MRS. MARY OLIN.

Yates Co., N. Y.

Bread Pudding.

Take any pieces of dry bread; cut into small bits and pour over sufficient boiling milk to soak it; beat smooth with a fork; sweeten to taste; add a little nutmeg; the peel of a lemon grated and half a pound of raisins; then add three well beaten eggs and bake about one hour and a half.

Date Pudding.

Remove the stones from one-half pound of dates and chop; add five ounces of chopped suet; six ounces of sugar; a little nutmeg, salt and two beaten eggs. Mix well together and boil in a basin or form four hours.

Apple Batter Pudding.

Peel and take out the cores from six good sized apples, fill with sugar; but into a pie dish and cover with a light batter. Bake one hour in a moderate oven.

Boiled Rhubarb Pudding.

Line a buttered basin with a good suet crust; cut rhubarb into small bits and fill the basin with alternate layers of rhubarb and moist sugar; cover with crust; pinch the edges together and tie over it a floured cloth; put into a kettle of boiling water and boil from two hours to two hours and one-half. MRS. M. M.

Owego.

QUERIES ANSWERED.

Is there anything which will prevent the formation of a crust in tea-kettles? IRENE.

ANS.—Yes, keep an oyster-shell in your tea-kettle.

My hands so perspire in summer that I find it ruinous to wear kid gloves. Is there anything I can rub upon my hands which will absorb the moisture? MRS. W. Z.

ANS.—The simplest as well as the most efficient remedy I know of for excessive perspiration is cornstarch. Rub dry upon the hands before drawing on the gloves.

MRS. M. G.—Try poulticing your stye with bread and milk or a poultice of linseed meal. In the beginning a stye may be checked by a free application of spirits of camphor.

YOUNG HOUSEWIFE.—Your childs' ear-ache may be relieved by mixing equal quantities of chloroform and laudanum and applying upon cotton to the ear. Sometimes a small quantity of ground pepper tied up in a little cotton, then dipped into sweet-oil and inserted in the ear is beneficial.

Correction.

IN the recipe for Sponge Cake, contributed by "Farmer's Wife," "dissolved in cream-of-tartar" should have read "dissolved in water."

E. M.

News of the Week.

NEWS OF THE WEEK.

AT home they have had a million dollar fire in Philadelphia. Senator Howe of Wisconsin made a bitter attack on President Hayes' Southern policy, on Civil Service Reform, the Cabinet in general, but especially on Secretary Schurz. This seems to be the first of a series of aggressive movements projected by Republican Senators against the Administration. Five Molly Maguires were hung this week in Pa. The new tariff bill before the House has gained the first victory—it tends toward freer trade. Judgement has been given against Mr. Tilden in the matter of his default to pay full income tax during the war and for some years afterwards. This merely settles the legal points; a jury will have to decide the amount: probably $150,000. Smyth, Superintendent of the Insurance Department in this State, who has been impeached before the Senate for culpable carelessness, if not worse, has been acquitted. Much grumbling among the "Simon Pures" who believe him guilty. There seems a suicidal mania throughout the country among farmers. Half-a-dozen have "stepped down and out" in the last few days. There is a large increase in the acreage under wheat all over the West, and the reports from that section are highly promising. A bill has been introduced and favorably received in the Legislature to compel liquor dealers in this State to use the Moffet bell-punch to register the drinks taken, paying a tax of 2½ cents on each drink. By no means a bad idea! Another Savings Bank in this city, has got into difficulty through the culpable mismanagement of its directors. The Republican Senators held a secret caucus on Friday to concoct measures against the Administration.

That war cloud across the Atlantic is gathering terrors as the days go by, and is likely soon to burst over the continent, scattering ruin and disaster. Negotiations are still in progress, but Russia and Great Britain have assumed positions which cannot be reconciled and from which neither can with honor well recede. Russia lays all the blame on England's captiousness, declares she is at Constantinople and may decide to stick there, and has been straining every nerve to induce the other continental Powers either to side with her or remain benevolently neutral in her struggle with the restive islanders. Europe, however, seems coming round to the English view of the consequences of the late treaty, to see that a Slav principality extending to the Ægean amounts, not to Russian preponderance, but to Russian rule in Turkey. Austria has declined to listen to the sweet voice of Ignatieff, who has just returned to St. Petersburg unsuccessful, while an Austrian army of 400,000 men are being rapidly mobilized, according to latest reports, and will soon be ready to move into Servia, Herzegovina and Bosnia, so menacing the Russian line of communications. An Anglo-Austrian alliance is not improbable, as England wants Austrian help, and Austria wants England's gold. War would be highly popular in Hungary. England proposes to land an expeditionary force in Greece, and has already landed a vast amount of stores and ammunition at Tenedos. The English reserves have been called out, on which Lord Derby, who is strongly opposed to war, resigned from the Cabinet. England expects 100,000 troops from Canada, and our friends across the border expect to recruit at least half of these from the States. It is said Russia is about to insist that the British fleet shall quit the sea of Marmora, England will peremptorily refuse, the Russians will enter Constantinople with the passive acquiesence of the Turks, and war will be at once declared. The Emperor of Russia is reported to be about to start for the army; so to be among his troops on the outbreak of hostilities. Germany will remain as looker-on without approving Russia's policy—watchful of France, which is engrossed apparently with the approaching World's Fair to be opened next month in Paris. There have been terrible wind, rain and snow storms in England. The Eurydice, Her majesty's training Brig, was upset while under full sail by a sudden squal near the Isle of Wight, and 300 men and boys lost, two only escaping. There is every indication that a more friendly feeling is growing up between Italy and the new Pope. Gen. Grant paid him a visit on Friday, was introduced by Cardinal McClosky and very graciously received. The Pope's friendly letter to the German Emperor has been answered in a like spirit and there is a prospect of speedy settlement of difficulties. The Roman Catholic hierarchy has been re-established in Scotland after an interval of nearly 300 years. Osman Pasha has been publicly thanked by the Sultan for his heroic defence of Plevna, and appointed Commander-in-chief of the Turkish forces. Roumania will not cede Bessarabia to Russia unless forced to do so, and in this she is said to be supported by Bismarck.

VARIOUS.

In the Maryland Farmer, Southern Agriculturists have an able journal devoting a large space to their exclusive interests. It is a monthly, printed on good paper with clear type, and always replete with timely topics. A sample copy will give one a clear idea of the scope of the Farmer, and we recommend interested readers to send for one.

During the recent famine in India not less than two millions of people died of actual starvation. The amount spent by the Government in relief work and in camp charity was about $30,000,000, and the contributions, chiefly from England and Australia, amounted to $2,500,000. The famine is considered at an end, as the new crops are coming in, and are safe from damage.

A Silesian farmer has adopted a method of imparting to butter an aroma as delicate as that secured from cows pastured in the most fragrant meadows. He suspends in the empty churn a calico bag filled with fragrant herbs, keeping the churn carefully closed. When churning, he substitutes four smaller bags, attaching them to the beaters of the churn. The result is thus secured in a perfectly legitimate and harmless manner.

The English sparrow is voted a nuisance all over the country. He drives away the birds that used to keep down noxious insects, banishes songsters, like the bluebird and robin, eats the buds of fruit trees, devours the young grain, and hasn't a single redeeming virtue. New England ornithologists propose a war of extermination against the trouble some bird-immigrant.

California is cheerful over the benefits which will result from the late flood. The Colusi Sun says it is estimated that 10,000 acres of land heretofore comparatively unproductive have been covered from six inches to two feet with a rich alluvial deposit. The "hard pan" covered with this sediment makes the very best grain land.

Gen. Robert Toombs says that tea-growing in Georgia is not a new thing—that for the last forty years "tea-trees" have been grown there. They were planted by Dr. L'Acce, who failed in his tea culture only because he did not understand the treatment of the leaves. The General holds that when Americans understand the manipulation of the leaves as well as the Chinese do, the former will produce as good as, if not better tea than do the latter.

A London correspondent of the New York Times writes that he has been assured by a journalist who ought to know that Mr. Stanley has really declared his readiness to undertake the discovery of the North Pole. If he has, says the correspondent, there will be an end of that old secret, if the problem is within the compass of mortal man to unravel it; for Stanley is as patient and persevering as he is resolute and courageous.

The number of people now pouring into the State of Kansas is without parallel in the history of the West. Twenty-seven car-loads of passengers came in one day from Atchison and Kansas City, on the Sante Fe road, mostly for settlement in the Arkansas Valley; besides these, large numbers came in on the Kansas Pacific road. It is estimated that the State will receive 200,000 additional to its population this year.

The prairie grouse is gradually following the progress of the railroads from the Nebraska prairies westward. California's effort to introduce and acclimate them has failed.

John Bright said in a recent speech at Rochdale, England, that one-third of the whole land of the United Kingdom, being no less than 23,000,000 acres, belongs to 935 men.

CORINTH, Maine, Feb. 12, 1878.

TO THE DAVIS SEWING MACHINE CO., Watertown, N. Y.—*Gents:* We are manufacturers of clothing; have been engaged in the business for the past fifteen years, manufacturing largely for Miner, Beal & Hackett, Isaac Fenno & Co., A. Sherman & Co., Smith, Richardson & Bates, Prager, Bock & Co. and Leland, Rice & Co., all of Boston. We have used the Davis Vertical Feed Sewing Machine for the past four years in manufacturing our clothing, and we know that it is better adapted to our business, and possesses superior advantages over any of the under-feed sewing machines.

Within the last three months we have had occasion to seam our clothing with double thread, and we find that the Davis Vertical Feed Sewing Machine (and no other family sewing machine) will do the work as well and easily as with the single thread. Yours, truly, T. BRACKETT & SON.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC CO., Cincinnati, Ohio.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, March 30, 1878.

BEANS AND PEAS.—Beans of all kinds continue weak and there is no demand that will stimulate prices. Receipts are heavily ahead of wants of consumption. Marrows show an important decline and exhibit the singular feature of being cheaper than mediums. Green peas are dull and lower $1.12½@1.15. Canadian peas nominal Southern B. E. peas $2.80@3 per two-bushel bag a light stock rate.

We quote:—Beans, medium choice, $1.50@1.55; other, $1.40@1.45; marrows, choice, $1.50@1.55; other, $1.50@1.55; pea, $1.50@1.65. White kidney, choice, $1.40@1.55; other, $1.55@1.95; red, choice, $2.10@2.30; other, $2.35@2.40. Turtle soup beans, $1.75. Lima, $3.

BEESWAX has a better trade and is stronger. Western and Southern quoted at 28@29c.

BROOM CORN.—Is slow and unsettled.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 4@5½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Old State butter is struggling out of market where grade has any table recommendation and the price makes a retail profit certain. Every advancing day increases the independence of local buyers as new arrives freely and good enough to satisfy much of the upper trade; in fact a number have relinquished the search for fancy old. Common old drugs will be subject to chance sales until the close. Owners losses will be heavy in the crop of '77. Receivers are giving their annual growl at the wonderful yellow with which some shippers spoil stock. There are numerous inquiries as to best artificial methods of imparting June tint to hay and early butter. Here is a short one, don't attempt it. White butter should be allowed to stand upon its merits and about all that can be done is to give it selling table merit; this means extra care at the dairy, but it also means "a market."

OIL.—State dairies, good to choice 25@—c.; fair, 18@22c.; from 15@18c; selected firkins 24@25c; fair to good 18@23c; poor 14@16c; selected half tub 28@30c; other, 26 28c.; choice Fall Welsh 27@28c. Fair to prime 20@26c.; Welsh dairies, 24@26c. State creamery, 23@30c; other, 26@28c.; other 19@20c; Western factory, fresh, low goods worth 19@20c.; greese 6½@7c.

NEW.—State, half tubs, choice, 28@32; good 29@31. Welch first, 27@31; second, 27@30c; poor new, 23@26c: Western creamery ranges at 35@35c.

Exports past week, 8,547 pkgs.

CHEESE.—Exports for the week 18,450 boxes. The market has commenced to drop on other than fancy lots, on account of tame English advices. Really choice stock is scarce and one parcel has sold as high as 13½, with 13 the outside price for average fancy lots, prices are:

Fancy factories, 12¾—c.; good and prime, 10½@11¾c.; fair lots, 9@10½c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 11¾@12¾c. for good to prime; 10@12c. for fair lots; 7@9c. for skimmed; Western factory, cheddar, 10½@11¾c. for fine; 11½@12c¾. for good; 6@9c. for poor.

Liverpool cable, 67s. Gold closes 101¼.

Exports for the week, 14,533 boxes.

LITTLE FALLS.—Offerings of choice light, a few shipped on commission. Farm dairy quoted 10½@11c. Sales of butter light, quality improving; average price 27c. with light demand.

COTTON.—The English news has depressed the market and closing weak.

Latest prices are for March, 10.62@10.63c.; April 10 68@10.69c.; May, 11.17@10.76c.; June, 11.0@10.86c; July, 10.95@10.96c.; August, 11.01@11.02c.; September, 10.81@10.83c.; October, 10.65@10.66c.; November, 10.57@10.78c.; December, 10.60c.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8 1-16	8 1-16	8 3-16	8 3-16
Strict ordinary	8 13-16	8 13-16	8 15-16	8 15-16
Good ordinary	9¼	9¼	9⅜	9⅜
Strict good do	9⅜	9⅜	9⅜	9⅜
Low middling	10 3-16	10 3-16	10 5-16	10 5-16
Strict low middling	10 9-16	10 9-16	10 11-16	10 11-16
Middling	10¾	10¾	11	11
Good middling	11⅛	11⅛	11⅜	11⅜
Strict good middling	11 9-16	11 9-16	11 11-16	11 11-16
Middling fair	12 1-16	12 1-16	12 3-16	12 3-16
Fair	12 9-16	12 9-16	12 11-16	12 11-16

Stained.

Good ordinary, 8⅛c. Strict ordinary, 8⅜c.; Low middling, 9⅜c.; Middling, 10c.

DRIED FRUITS.—There has been a very dull feeling throughout but prices fairly steady.

Apples—State quarters, old, 5¾@6c.; new, 5¾@6c.; Western quarters, old, 5@5¾c.; new, 5½@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 4½@5c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@16c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c.

EGGS.—Receipts for the week, 2,289 bbls. do. last week 21,115. The market is fairly active and it should be at the prices, but receipts are so heavy that dealers despair of seeing rates down to a point that will permit even the paying temporary advances, that they are accustomed to in Lent. Western are of fine quality and some speculation exists. Southern run small and are not packed as attractively as others, hence the under rate.

Near points, 11½@12c.; State, 10@10½c.; Western, prime, 10c.; Southern do., 9½c.; off quality stock, 9c.; Duck, 18@20c.; Goose, 38@40.

FLOUR.—There has been an advance of 25 to 50 per cent. on the upward turn in wheat values, through the warlike look of affairs abroad, and an active inquiry.

Latest prices are $4.25@4.30 for poor to fancy superfine State; $4.90@5.25 for common to fair extra do; $5,00@5.25 $5.25@5.65 for good to choice do.; $4.65@4.90 for superfine, Indiana, Iowa, Michigan, Ohio, &c.; $4.85@5.25 for very poor to good shipping extra do do., (chiefly at $5.00@5.25) and $5.25@5.75 for good to choice extra do.; common to choice white extras, $5.50@6.65; fancy do at $6.40@7.50; (the latter an extreme); red and amber winter wheat, inferior to choice trade and family, at $5.20@5.35; round hoop Ohio at $5 00@5 35, and trade brands of at do. $5.50@6.75, the latter for choice; St. Louis, $5.40@6.00 for poor to fair extra and $6.00@7.75 for good to fancy; (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, $5.00@6.15; Minnesota "straight," common to fancy, at $5 50@6.75 and patent poor to very choice, $6.00@8.25, with a few fancy at $8.75@8.50; unsound stock at $2.25@5.75; city mill extra at $5 90@6.30 for fair to very choice for West Indies; do, for England $4.85@5.25; do, trade and family extras, $6.50@7.50; do, South America, $6.40@7.35 for fair to fancy; No. 2 at $2 75@3.40.

Corn meal is selling at $3.15@3.20 for Brandywine and $2.75 for yellow Western.

FRESH FRUITS.—Exports of apples 415 bbls. Choice apples have advanced but there are few holders of lots that command the extreme. The best round sale of the week was 300 pounds best stored at $8. Similiar stock now quoted $5.50; good Russets $4@4.50; crimson or wasty lots 2.50@3. Cranberries weaker with the advanced date but with the diminished stock of apples and their evidently settled high prices, a steady call from bakers here and outsides will close up the remnant of berries satisfactorily. Strawberries regularly and are lower. Peanuts are moving at full prices, but the market is not busy enough to warrant a proposed advance. Fancy hand-picked Va. $1.35@1.40, common to good 85c.@$1.25, Pecans, Texas, 8@10 llb.; Hickory nuts $1.00 per bush.

FURS AND SKINS.—There is some little revision of prices following the London sales now closed: but the trade is very dull.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and ylgs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₱ ℔	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

GRAIN.—The probabilities of an early adjustment of the difficulty abroad, the early opening of navigation, and larger supplies looked for soon weakens prices.

Latest sales are of No. 2 old at 60c—ungraded red and amber State, $1 30@—; white, $1 40; No 1 Northwest spring, $1 27; No. 3 Chicago, $1 21½; No. 2 red for March at $1 23; No. 2 Milwaukee spring, $1 27. Rye has been very active, purchases within a week reaching fully 250,000 bush. largely for the German markets, closing at 73c. for Western: 76@77½c. for State and 76c. for Canada. Corn is weak and quiet. Latest sales are of New York No. 2 at 54@55½c.; steamer mixed, March, 51c. Oats of New York extra white, at 31½@40c.; do. No. 1, March 31½c.; No. 2 white, 35½c.; mixed Western, 31@34½c.; white Western, 36@39c.

All articles have been affected by the situation abroad, and with an active inquiry from exporters prices are much higher: latest sales of wheat are of ungraded spring at $1.20@1.25; bush. No. 3 spring at $1.22@1.23½, No. 2 northwest spring at $1.28@1.29; New York No. 2. spring at $1.27@1.27½; Chicago spring at $1.29; No. 2 Milwaukee spring at $1.29@1.30; No. 1 Milwaukee and Minnesota spring at $1.34@1.35; ungraded red $1.35@1 36; No. 1 red at 1.38; No. 1 white at $1.42, white State, a $1.46@1.47; No 2 red, March delivery, at $1.37; No 2 red, April delivery, at $1.36½@1.37; New York No 2 spring, March delivery, at $1.28½@1.29; do., April delivery, at $1.26½@2.27; do., April delivery (in store), at $1.27; No. 2 northwest spring, March delivery at $1.30; Rye at 78@79 for State, and 73 for Great Western.

HAY AND STRAW.—The arrivals are larger, but demand is rair and prices sustained.

Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@55c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

Exports since Jan. 1st, 17,250 bales; same time last year, 14,850 do.

HONEY.—There are no late sales except for show and druggists use. It looks as though much comb will be crrried over.

HOPS.—There has been more doing for export strictly fancy lots, which are scarce would probably bring something above quotations but otherwise buyers have the advantage.

State choice to fancy, 11@12c.; good to prime, 8@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do, 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

MAPLE SUGAR.—The demand does not keep pace with the free supply and the low rates of 8@11c. are full; few parcels bring the extreme. Sirup, 75c.@$1 ₱ gal., with can.

OIL-CAKE.—Western is quoted at $30 ₱ ton.

POULTRY AND GAME.—Live arrives in excess of use, though city killers have generally begun operations. Prices are weak and with large arrivals due sellers are taking inside rates.

N. J. chickens, 10@13c.; W. fowls, 11@13c.; Turkeys, @13c.; Toms, 6@8c.; Ducks, N. J., pair, 87@$1.12; Geese, N. J., $1.75@2.00; Western, $1.12@1.50.

Dressed poultry is in fair supply though city and country killed. Prices have fallen during the last week. Shippers should now send only light hen turkeys.

Fancy Phila. and N. J. turkeys, 16@18c.; good, 8@6c.; large or Toms, 7@9c.; chickens, choice, 8@9c; good, 11@13c.; common, 6@7c.; ducks, choice, 15@20c.; other, 21@23c. small and slips, 18@19c.

Game is scarce but the demand is moderate.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.25@1.75; Red-heads, $1.00; Mallard, 35@40c.; Teal, 25@40c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$1.00. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS.—Are generally higher and active.

Mess pork, $10½@10.¾ for spot lots; $9.90 @ 10 for March and April. Bacon at 5¼c. for long clear and 5¾c. for short clear. Lard—Western steam, 7 37½c. 7.40c. for short, 7.44@7.46c. for May, 7.54 755; Tallow at 7 3-16c. for prime. Stearine, 7¾c. for prime Western. Beef hams at $15.50. Beef—New extra mess, $12.@12.25; plain, $10.50@11.50; new packet, $15. family mess, $17.50; extra India mess, $27 for city brands; do. Philadelphia, $25. Beef hams at $15@15.50; Tallow at 7½ for prime

SEED.—Grass are weak. Clover, 7@7½c. for Western; 7¼@7½c. for State. Timothy, $1.40. Rough flax, $1.45.

TOBACCO. — The new crop comes in more freely, and export demand is better.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3 @ 3½	3 @ 3½
Good lugs	3½@ 4	4 @ 4½
Low leaf	5 @ 5½	5 @ 6½
Medium leaf	6 @ 7	7 @ 7½
Good leaf	7½@8½	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	13½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	19 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—There is a weak feeling in potatoes, holders fear sprouting and good qualities are offered low.

We quote Peach Blows $1.50@1.75, bulk and doubleheads. Early Rose, $1.00@1.25; Peerless, $1.25@1.50; Nova Scotia, $1.90@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.00@1.25; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ₱ ℔, 40@50c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1@$1.50. Cucumbers, doz., $2.25@2.75. Rhubarb, doz., $7@8. Spinach, Southern, @2.2a ₱ bbl. Bermuda, $4.50@5.

WOOL.—There has been but little demand from manufacturers, and the advancing season exerts rather a pressure to sell, with slightly easier prices. There is a desire to urge business a little by making concessions.

Ohio, Pennsylvania and Virginia—XXX and picklock, 44@46c.; XX, 42@44c.; X, 42@43c.; No. 1, 43@44c. No. 2, 35@37c.; common, 33@35c.; combing, 52@55c.

New York, Michigan, Indiana and Wisconsin—XX, 36@38c.; X, 36@38c.; No. 1, 38@42c.; No. 2, 38@36; common, 32@34c.; combing, 46@50c.

Iowa, Vermont and Illinois—X and XX, 35@37c.; No. 1, 37@40c.; No. 2, 32@34c.; combing, 45@50c.

Missouri, Kentucky, and Tennessee—Washed fleece, 37@42c.; unwashed, 25@30c.; unwashed combing, 36@38c.

LIVE STOCK MARKETS.

NEW YORK, April 1, 1878.

BEEVES.—Receipts for the week, 10 748 head: do., last week, 6,563 do. Quality continues good; and the fact is quite encouraging after the alarming reports that indicated a glut of common droves in the country. The market showed some of the lull that is likely to occur in Lent and last week's prices were not repeated. Best 16.00@1100 llb.; steers were well sold at 10¾c. and some very prime stock were at 10¾c.; medium to good steers quoted pretty regularly at 9@10c. very common car-loads and fair grade 7¾@7¾c. Estimates paid 9¾@10c; at bulls, $3.25@3.24 per 100 lbs.

COWS AND CALVES.—The receipts include but few prime milkers; occasionally a nice fresh cow with calf by her side brings $70. Others range from $40 to $65, the lower rate for rough badly wintered stock.

VEAL CALVES.—There has been a fair business, but stock to bring 8c. had to be very extra; good general prices are 5¾@7½c. for common to prime to live. Young but passable calves a slight grade above, bulls hold at $2.50@4.00 per head. Hog dressed calves 5¼@9c.

SWINE.—Receipts for the week, 17,405 head: do. last week, 35,340 do. A named price at the close was 4¼@4¼c. Market dull and unsettled. Country pork, 4¾@5¾c. for heavy to light State and New Jersey. Good Ohio selling at the close at $4 per 100.

SHEEP AND LAMBS.—Receipts for the week, 17,377 head: do., last week, 16,459 do. The demand at the close was light; heavy course sheep were an objectionable feature, but the light opening made some competition among butchers. Poor N. Y. sheep ruled at $9; clipped Kentucky sheep 95 lb. average had a bid of 43½c.; Ohio, Indiana and Pennsylvania sheep sold at a range of $6.88@7 per 100 lbs.; lambs $4@7. per head; the the extreme per good weighty ones.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

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SPECIAL NOTICES.

"A Farmer's Son or Daughter." See Adv.

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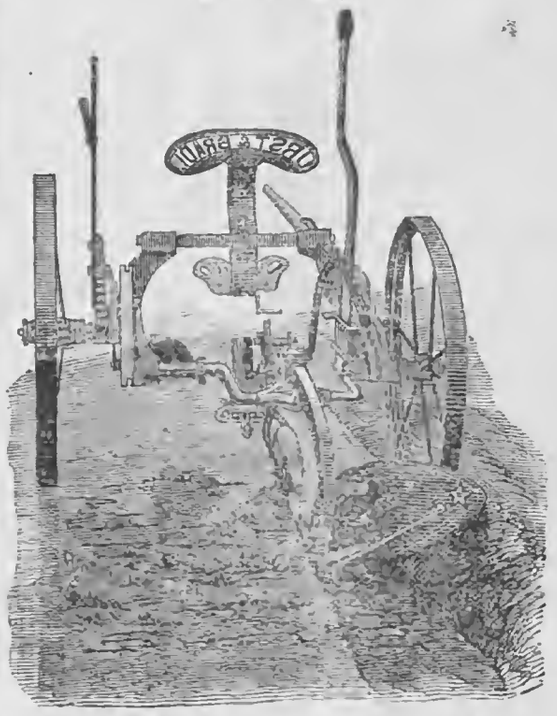

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from Falling Out, to encourage its growth, and to give it an attractive appearance, use Dr. Jayne's Hair Tonic. A useful toilet article, and a safe remedy for diseases of the scalp.

Reading for the Young.

A NAMELESS LAMB.

O. C. JR.

Oh, mama, such a dashing lamb
As we have seen to-day,
We met him coming from the woods
As we went out to play.

We knew that he was some one's pet,
Because he was so tame,
He frisked about, then came up close,
But could not speak his name.

We called him Nannie, Tom, and Jack,
And lots and lots of more,
But he shook his head, just so, mama,
And capered on before.

Yes, on he ran, then turned around,
With such a comic look,
And mama, you would laughing die,
To see him jump the brook.

He stood upon his two hind feet
And give a big, big jump,
And down he came on t'other side
All in a little lump.

We was so 'fraid he kill his self
We didn't know what to do,
But up he got, and looked to see
If we could jump it too.

But we went up a little way,
To walk the plank, you see,
Where papa said if we look sharp
We would find a beechnut tree.

Well! we found the tree, where papa said,
But lost our little pet,
But found him way, way down the brook
His frizzy back all wet.

And when we told him he must stay,
And not go out the wood,
He shook his head and wagged his tail,
And I guess he understood.

For he went and lay down on the grass,
All curled up in a heap,
And if we had not woke him up,
He would lay there yet asleep.

But we holler'd, Nannie, Tom and Jack,
Why do you sleep all day,'
When little girls come 'way out here
To have a jolly play.

Then up he jumped, and ran around,
And jumped, and jumped so high,
Oh dear! I know our fuzzy cat
Was never half so spry.

A MEMORIAL.

BERTIE A. WINKLER.

It was a bright spring morning. The sun had just emerged from behind the drapery of forests, and was dipping his golden beams into the dew-filled petals of early flowers when HARPER ARGOW slowly limped along the village road returning the cheery salutions of passing neighbors with a pleasant smile and a faint "good-morning."

HARPER ARGOW was lame, but in spite of that he was the pride of the village; the boy to whom every father pointed as a model for his sons; the boy whom every other boy claimed for his comrade; the boy who was always called upon to arbitrate in every quarrel. He was on his way to the play-ground to which his comrades had invited him after a whole week of conclaves and mysterious gatherings from which he, their leader, was, for the first time excluded.

Arrived on the grounds where upwards of thirty boys had gathered he said, with a faint touch of reproach in his voice, "Well, what are you up to now, so early? Some mischief, I guess or else you would not have kept your secret from me so long."

"Wrong, HARPER, wrong!" they replied with merry twinkles in their mischievous eyes," we got you out so early because we wanted to enjoy your surprise undisturbed by any passers-by. Here," said ASHLEY GREY, producing a handsome new crutch from behind the nearest tree, "I present you this in the name of your comrades as a memorial of your heroic deed this day two years ago." Then turning quickly to the rest he whispered, "Boys, I've seen tears in his eyes, let's give him three good cheers while he masters himself."

"Hurrah! hurrah! hurrah! for HARPER ARGOW," rang through the clear sky while HARPER looked through the mist before his eyes first at his new crutch, then at his old one, then again at his comrades whose hats were tossed in all directions in an excess of delight at the happy issue of their plans, drowning his words of thanks in the united exclamation of "All right ARGOW, we'll do more than that for you, we'll vote for you for Governor some day."

While they are enjoying the surprise of their comrade who is comparing the merits and beauty of his new wooden walking-companion with his old one we will relate the events of that same day two years ago when HARPER was fourteen years old.

ASHLEY GREY and HARPER ARGOW were on their way to the mill with four bags of wheat on their light spring wagon. About four miles from home they heard a loud crash in the neighboring wood and a man's cry of alarm. Hastily jumping from the wagon to ascertain the cause of the noise they discovered MAX ROBERTS, nick-named by the village-boys as the Mexican Robber, ever since he chased them with a cow-hide for playing base-ball in one of his fields, lying in a helpless, bleeding condition beneath a huge tree which had fallen across the rail road track. ASHLEY was about to harangue his unfortunate enemy about his cow-hiding but HARPER, silencing him with one sharp word of reproof, scrambled down the steep banks and placed his ear close to the man's lips who, after telling him that in endeavoring to fell the tree the rope, which was to pull the falling tree from the direction of the track broke, and the branches catching his garments, pulled him along as it fell into the track.

HARPER realized the terrible situation at a glance and calling to his companion to aid him they took long poles and drove one after the other as a wedge between the track and the tree until it was sufficiently raised to relieve the man from the pressure which had broken his arm.

"Now, ASHLEY," he said, to his frightened companion, while the perspiration stood in large drops on his forehead, "we are not strong enough to take him away, but you run to the nearest neighbors and get them to do it, and if possible to build a fire on the track in case I should not be in time to stop the train at the station."

"Hurry, ASHLEY, for your life," he cried, after the fast vanishing form: "the train is due in twenty minutes!" Then rushing to the wagon and unhitching the horse, he swung himself on his back.

For a moment he paused to consider: "I have no matches to build a fire; nothing to give the signal of danger, I must go and risk it. In ten minutes the train will be at our village station, and I have four miles to ride in that time with an old horse. Now, Dolly, do your best," he muttered, as he lightly swung his whip and sped away to race with time. Past fences, and trees, he flew: hills, forests, and fields followed each other in quick succession. Cattle grazing in the meadows stared in mute, lazy astonishment at the flying rider; people in blank amazement hastily drew aside to let the escaped madman, as they thought, pass. But on, on, he sped, paying no heed to shouting, wondering people; thinking of nothing but the wounded, senseless man he had left, whose life depended on the speed of his horse, and the train full of passengers swiftly whirling towards destruction. Seeing nothing but his horses flying mane and frothy mouth, hearing nothing but the clattering hoofs and the short gasping breath of his almost exhausted steed.

There was a narrow foot-path leading through the forest which would cut off a considerable distance. Into that he directed his horse. Fortunately there was no underbrush, and by hugging Dolly's neck he could just escape the branches of the trees. At this moment the shrill whistle of the train nearing the station reached his ear. Three minutes more and he would be too late. Again the horse dashed forward while HARPER, clinging close to him, left shreds of his garments hanging on most every branch. At last he emerged from the woods; the village was in sight; he saw the puffs of steam from the waiting engine; a minute more and the train would start. Already his horse was nearly exhausted; he could not hold out much longer. Once more he gently urged him on and in another instant he dashed hatless, coatless, ragged and livid into full view of the station.

"All aboard," cries the conductor, another shrill whistle, and the wheels begin to move.

"Too late!" muttered HARPER, almost beside himself. He tried to shout but his voice failed him. His heart sank within him as he saw the train start. Suddenly he caught the eye of the switch-tender, who, seeing the desperate motion of the boy's arm towards the train, swung his red flag and rushed up to the engineer, pointing towards the wild horse and still wilder-looking rider.

The train stops, the conductor jumps off, passengers look from their windows just in time to see the horse flag, stumble, and fall over his rider in a trembling heap. HARPER is dragged with a bruised, broken leg from under the animal; he tells his story in a broken sentence: "tree across the track, four miles," and he fell back insensible.

The man, train, and passengers were saved, but HARPER ARGOW was a cripple for life.

This is the event which brought his comrades out so early, and to none of the boys does the recollection of that day come more vividly than to HARPER, as he, sadly smiling, looked again at his new crutch and said, "Well boys, it is better to lose one leg than a hundred lives."

COMMENTS.

A NEW comer is "Wild Goose," who at once fears the evil designs of "Slayerofconceit," and writes briefly. It does seem as though the Cousins should be able to find more inviting themes than personal criticism.

Our much injured Cousin, "Young Orator," sends me a long and somewhat spirited defence of himself against the strictures of the irrepressible "Slayerofconceit." I think the controversy had best end, as it would be a sorry spectacle indeed to see the Cousins engaged in a general wordy warfare. Let us have peace, and a pleasant time. "Young Orator" wishes to know how Andrew Jackson acquired the *sobriquet* "Old Hickory?" Most every Cousin should be able to answer this.

A new Cousin HATTIE P. H., writes her first letter, standing the while in mortal dread of that ogre the waste-basket. She is still quite young and regrets that school will close so soon. Now that Miss HATTIE finds she has escaped the capacious man that devours so many choice thoughts, she will no doubt venture again. Always welcome. And here is "Bob White," who has come from the Far West to say a word to Miss BERTHA WEEKS. "Bob" is the harbinger of Spring, but if he continues as he begins by the awful statement that the girls are very conceited, he may rely upon finding himself in water considerably above the boiling point. He gives the young ladies some practical advice about arranging their gowns, and yet he is only eight years old, and studies at home. He says, in effect, that he has the courage of his opinions and means to act the part of echo: he will always talk back! His flag is nailed to the mast-head, and the tail of his coat trails the ground. Now, look-out.

Here is some homely wholesome advice from Bonnie. She says:

"DEAR COUSINS:—I have been very much interested in reading your letters. And now I am going to write a letter too. It is my first attempt. If UNCLE TRUE does not wish to publish it, that will neither surprise, nor offend me. What prompted me to write, was, that I wanted to tell the Cousins I did not like so much sharp-shooting at each other. I think the letters should be more to instruct and amuse, and not to say things that will injure the feelings of any one. I would much like to have questions asked for information—such as History, Botany, Geography, or from anything that will help us to advance in knowledge. I am living on the wild prairies of Kansas, with but little society or means of amusement. We take the RURAL, and I cannot tell you with what eagerness and delight we hail its coming." Finally little Miss "Z." adds her protest against the exhibition of temper commented upon above, and I have no doubt that hereafter there will be an "era of good feeling" and an improved tone in the letters.

The Puzzler.

GEOGRAPHICAL CHARADES.

1. A PRONOUN, a girl's nickname, a verb, an interjection; whole forms a Southern river and valley.

2. A French preposition, a French article, merchandise; whole forms a State, bay and river.

3. A lover, to spoil, a verb; whole forms a town of Anglesea Island.

4. A school-boy's romp, a pronoun; whole, a river of Spain.

5. A French pronoun, a French preposition, to leave; whole forms a river of Portugal.

6. A vowel, scampered; whole forms a city of Africa.

7. An interjection, anger; whole, a river of France.

8. A cape of Corsica, to do wrong; whole forms a city of Zealand.

9. A boy's nickname, a vowel, a verb; whole, a river of Prussia.

10. A sailor, an article, a preposition; whole, a gulf of Italy.

11. A preposition, female fowls; whole, a city of Greece.

12. To stumble or fall, an article; whole, a range of mountains in Turkey.

13. An animal, a river of North Carolina, a vowel; whole, a city of Dalmatia.

14. The curse of nations, observed; whole, a city of Poland.

15. A river of Italy, a French article; whole forms a city of Austria.

16. Part of bedstead, a lady's name; whole forms a city of Austria.

17. Fighting between armies, just so, noise; whole, a city of Austria.

18. Part of the human body, a horse, a vowel; whole, a city of Italy.

19. Obtained, a sound of laughter; whole forms a city of Germany.

20. Kitchen utensils, an animal mother; whole forms a city of Prussia.

21. A young girl, a vowel; whole, a city of Prussia.

22. To twit, not off; whole, a city of New England.

23. A kind of cheese, earth; whole, a country of Europe.

☞ Answer in two weeks. LITTLE ONE.

MISCELLANEOUS ENIGMA.

I AM composed of 14 letters:
My 3, 5, 9, 11 a church official.
My 6, 2 a negation.
My 1, 4 a pronoun.
My 7, 2, 9, 13 keeps our spirits up.
My 1, 8, 14, 6 a cape or South America.
My 6, 10, 12, 13, 14 signifies not to be.
My whole should be our watchword.

☞ Answer in two weeks. BALTO.

PUZZLER ANSWERS.—March 23.

REVERSALS.—1, Ante, Etna; 2, Eel, Lee; 3, Dab, bad; 4, Tab, bat; 5. Moor, room; 6. Rood, door; 7. Dub, bud; 8. Tun, nut; 9. Not, ton; 10. Dam, mud; 11. Tub, but; 12. Cam, Mac; 13, nap, pay; 14. Draw, ward; 15, Gem, Meg; 16. On no; 17, Fi, if; 18. Og, go; 19. Sag, gas; 20, Tram, mart; 21. Trap, part; 22, Tap, Pat; 23, Top, pot.

ENIGMAS.—1, Because it has a knot in it. 2, Because he chisels and screws. 3, Because it is a cram. 4, Because it is composed of bars and a rest. 5, Because it is imperfect. 6, You would make pale ale. 7. It makes a lot plot; 8, He makes a revolution. 9. Because it is a capon. 10, Because it is composed of belles letters.

MALTESE CROSS.—

```
      S I M O N
        G O T
    H       N       T
  O S   A S A   E A
  M O N I T R E S S
  E D   R R K   K T
  R       O       E
        P U T
      R E S T S
```

WORD-SQUARE ENIGMA.—

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M O N K
O D I N
N I C E
K N E W
```

Sabbath Reading.

NO ROOM FOR JESUS.

O plodding life! crowded so full
Of earthly toil and care!
The body's daily need receives
The first and last concern, and leaves
No room for Jesus there!

O busy brain! by night and day
Working with patience rare,
Problems of wordly loss or gain,
Thinking till thought becomes a pain;
No room for Jesus there

O throbbing heart! so quick to feel
In others' woes a share,
Yet human loves each power enthrall,
And sordid treasures fill it all;
No room for Jesus there.

O sinful soul! thus to debase
The being God doth spare!
Blood-bought, thou art no more thine own;
Heart, brain, life, are his alone;
Lest soon the bitter day shall come
When vain will be thy prayer
To find in Jesus' heart a place;
Forever closed the door of grace,
Thou'lt gain no entrance there.

[*N. Y. Christian Advocate.*

ABRAHAM'S PRAYERS.

THE first full length prayer is Abraham's touching plea in behalf of Sodom (Gen. xviii. 22, 23), See in it the characteristics of acceptable prayers:—

A sinner feels he is "but dust and ashes," deserving "anger," not favor.

The sinner stands before God, believing in the promised Saviour—no other warrant.

The sinner full of faith, that is, resting wholly on Messiah, is "the friend of God." God meets him, and stays to hear what he has to say.

This believing sinner yearns over perishing souls.

He perseveringly urges requests in behalf of the perishing.

Then we find (xix. 27-29) he looked after his prayers, and found results.

Men of faith, oh be men of prayer! A world perishing. Our country needs it. The churches of Christ need it. The Jews need it. The heathen need it. Some at your very door need it. And surely there would be results.

THE MAZARINE.

THERE are only two copies of the Mazarine Bible in America and only six in the world. Two years ago two copies where sold at auction in London in the same sale, and one, printed upon paper, brought $14,000 gold; the other, on vellum, brought $20,000. Usually a vellum copy of any work brings four or five times as much as a paper one; but the history of the Mazarine Bible raises the value of the paper copies relatively to those on vellum. Guttenberg printed the first copies in 1455, and all these were on paper: in 1456 Faust got possession of the types and his edition was partly on vellum. These consequently, are not so complete or original. One of the American copies is owned in Hartford It is one of the genuine Guttenberg prints, and is a marvel of the printer's work. Its equal could not be made to-day.

FORMATION OF CHARACTER.

IF you ever watched an icicle as it formed, you would have noticed how it froze one drop at a time until it was a foot long or more. If the water was clean the icicle remained clear, and it sparkled brightly in the sun; but if the water was slightly muddy the icicle looked foul, and its beauty was spoiled. Just so our characters are formed. One little thought or feeling at a time adds its influence. If every thought be pure and right, the soul will be bright and lovely, and will sparkle with happiness; but if there be thoughts and feelings impure and wrong, the mind will be soiled, the character depraved and darkened, and there will be final deformity and wretchedness. How important then that we should be on our guard against every evil impulse and desire!

ROSE AND THORN.

I heard Philosophy sigh,
"No rose is without thorn;"
And faith made sweet reply,
"Of thorns are the roses born!"

Kimball.

INFLUENCE OF LITTLE THINGS.—Chemists tell us that a single grain of the substance called iodine will impart colour to seven thousand times its weight of water. It is so in higher things; one look, one habit, may affect the whole of life and character.

APELLES.—As Apelles the painter much lamented if he should escape but one day without drawing some picture or line: so ought a Christian man to be sorry if that any day should pass without some good work or exercise.

As soon as we are awake, our hearts should be in heaven. We owe God in the morning the first of our reason, before we think of other things; for every day is but the lesser circle of our lives.—*Dr. Manton*

PERSONAL ITEMS.

Under the patronage of King Humbert, an International Exhibition is to be held at Milan in 1879.

The rumored shooting at Plevna of the Communist Gen. Cluseret is denied. He lives, and has abandoned warfare for war correspondence.

Ex-Minister Washburne will go to the Hot Springs of Arkansas as soon as he has recovered sufficiently from his illness to make traveling possible.

A pious man has hired space in the Ellenville (N. Y.) Journal's advertising department, in which he publishes every week, in large type, a verse of Scripture.

Gen. Le Duc, Commissioner of Agriculture, has established an exchange with the Khedive of Egypt, giving young American trees for specimens of the date palm. The latter are to be planted in Colorado.

Emperor William is eighty-one. He looks exceedingly hale and hearty, although the fatigue of the Berlin season has been great. For a fortnight scarcely a day passed without his attending some ball or other entertainment.

The Chancellor of the Exchequer is, so to speak, principal schoolmaster of the British House of Commons, the length of holiday at Easter and Whitsuntide being entirely in his hands. Members are just as anxious for the recess as are boys at school.

Mr. J. B. Knight of the Franklin Institute, in Philadelphia, a scientific engineer, has made a thorough investigation of the Keely motor during a period of five months, and reports that it is a fraud, and that the various parts of its apparatus have been constructed with intent to deceive.

Trees, Seeds, Plants, &c.

WHITE WATER LILY
NYMPHIA ODORATA.
I will send Roots bearing these *beautiful and fragrant flowers* to any address, post-paid, with instructions to grow them in ponds or tubs, for 25c. each, or $2.50 a dozen. They can be sent in April and May. B. K. LANGWORTHY, Rockville, R. I.

2,500,000 *Strawberry, Raspberry, Blackberry, Currants, Grapes, Asparagus Roots, Peach Trees*, etc. 100 SELECTED VARIETIES. *Great American Strawberries*. Largest and best. Berries 3 oz. each, 9 in. around. By mail, 10 for $1; 100 for $5; 1,000 for $40. *Wilson Albany, Chas. Downing, Monarch of the West, Kentucky, Green Prolific*, $2 per 1,000. *Capt. Jack, Cumberland Triumph, Sterling, Jucunda*, $5 per 1,000. ALL PURE. Catalogue free. Cut this out. JOHN S. COLLINS, Moorestown, New Jersey.

ROOT'S RELIABLE SEEDS.
Send for MANUAL for 1878.
"Fresh, practical and sensible."—*Am. Agricult'st.*
Address J. B. ROOT, Rockford, Ill.

Evergreens for Lawns, Cemeteries, and Ornamental Grounds.

Norway Spruce, 3 to 4 feet high, strong and bushy, for shelter belts at very low rates by the car load. Also the largest stock of Nursery grown Evergreen and Forest Tree Seedlings in America. Evergreen seeds. Send for Catalogue. ROB'T DOUGLAS & SONS, Waukegan, Ill.

Send Your Address to

LOVERS OF RARE FLOWERS. It will astonish & please Free to address. ELLIS BROS., Keene, N. H.

SEEDS E. A. REEVES, SEEDS
58 Cortlandt St., New York,
FOR HIS
DESCRIPTIVE CATALOGUE OF SEEDS FOR 1878.
Contains over 100 pages, and is fully illustrated.
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Our Annual Catalogue and Priced List of Seeds is now ready and sent free to all our customers, without writing for it, and to all others inclosing stamp for postage. As the best seeds are always the cheapest, we invite the attention of Farmers, Market Gardeners and others, to our specially fine stock of Home Grown Vegetable Seeds of all the staple kinds; and also of Florists and others, to our very large collection of the best strains of Flower Seeds, Novelties, &c. Seeds sent by express and mail to all parts of the United States and Canada, and guaranteed to reach purchasers. HOVEY & CO.,
16 South Market St., Boston, Mass.

STRAWBERRY RASPBERRY PLANTS
And all the other SMALL FRUITS. Choice new kinds and pure. First-class. A specialty. *Send for catalogue.* Address E. P. ROE, Cornwall-on-the-Hudson, N. Y.

BEFORE YOU BUY SEEDS, send for Free Price List to S. H. MARTIN, Marblehead, Mass.

THE DINGEE & CONARD CO'S
BEAUTIFUL EVER-BLOOMING
ROSES
We deliver Strong Pot Roses, *suitable for immediate flowering*, safely by mail, at all post-offices. 5 Splendid Varieties, *your choice*, all labeled, for $1; 12 for $2; 19 for $3; 26 for $4; 35 for $5; 75 for $10; 100 for $13. Send for our NEW GUIDE TO ROSE CULTURE, and choose from over 500 finest sorts. Our Great Specialty *is growing and distributing Roses.* THE DINGEE & CONARD CO., ROSE-GROWERS, West Grove, Chester Co., Pa.

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Catalogue of New, Rare and Beautiful Plants,
will be ready in February, with a colored plate. Many new and beautiful Plants are offered for the first time, with a rich collection of Green-house and Hot-house Plants; Bedding Plants; new and choice Roses; Dahlias. Well grown and at low prices. Free to all my customers, to others 10 cts.—a plain copy free.
JOHN SAUL, Washington, D. C.

SEEDS.
Garden, Flower & Field Seeds,
Reliable, fresh and pure, at reasonable prices.
(ESTABLISHED 1839.)
STAIR & KENDEL,
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IMPORTANT FOR GARDENERS.
Growing plants and transplanting made easy and safe by the use of Soluble Pots. For Circular, containing valuable information, address, with stamp, TUSCO GREINER, Naples, N. Y.

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A valuable new Seedling Potato, with robust health. Yields 385 bushels to the acre, under ordinary field culture, without manure. Also, GRAPE VINES for sale. Send for proofs and prices to
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The largest and most complete assortment of Nursery Stock in the country.
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The Lightest Running and Most Perfect Scouring Plow in the Market.

For Ease of Handling, Simplicity of Construction, Adjustability and Simpleness of Repairing, this Plow has no equal. Manufactured only by
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EVERY MACHINE FULLY WARRANTED.
All orders received on or before April 15th, 1878, will be entitled to a special discount.
Address OTTO E. C. GUELICK
Manufacturer, Utica, N. Y.
Circulars and full description free.

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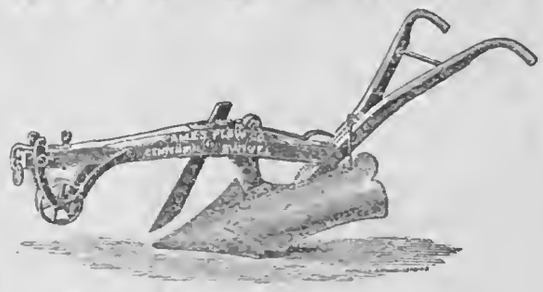
SWIVEL PLOWS!



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With New Patent Jointer and Coulter that
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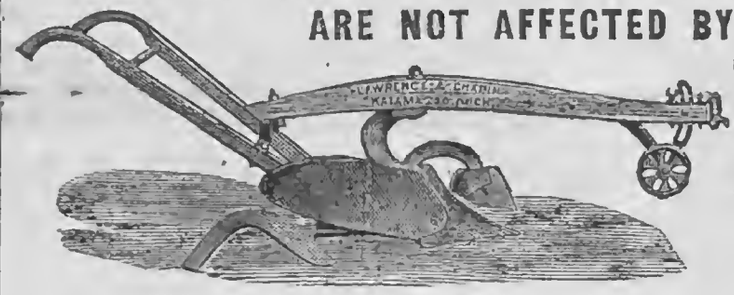

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The Best Self-Discharging Rake in the market. Its simplicity makes it very durable; being less number of pieces which all duplicate, can be put together quicker than any other rake before the public. Has a wide range of quick adjustment. No grass ratchets, etc., exposed to the wind. It is controlled by the will of the operator, leaving both hands free, and is so easily handled that a child can operate it. *Farmers, before purchasing, are invited to give this rake a close inspection*; and if there is not one in your vicinity, write for full particulars to
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N. B.—Also manufacturers of the celebrated Remington Patent Steel Shovels, Scoops, Spades, &c.

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Our No. 1 Plantation Circular Saw Mill is designed for farm and plantation use, and to be run with agricultural engines of eight to twelve horse power. The Mill is complete, except saws, and will be put on cars or steamer at Cincinnati, for above price. Illustrated Catalogue furnished on application to the
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BUY THE
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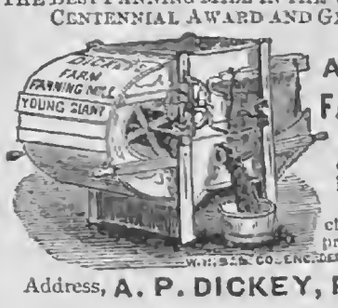

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A medium quality well cleaned brings a better price than the nicest grade in dirty condition.
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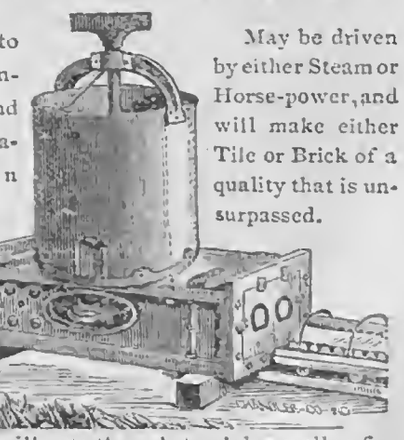
The Phœnix Drain Tile Machine



Is claimed to be the most simple, strong and durable machine now in the market.
May be driven by either Steam or Horse-power, and will make either Tile or Brick of a quality that is unsurpassed.
Purchasers will note the substantial as well as finished make of this machine; the easy accessibility of its working parts; the means of keeping its plunge-chamber to fit closely, without reference to age or wear; and its general suitability for making Tile at the lowest cost. SEND FOR CIRCULARS.
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CIDER PRESSES AND GRATERS.
BOOMER & BOSCHERT PRESS CO., Syracuse, N. Y.

Wit and Humor.

THEY MET.

ROBERT TURNEY.

THEY met—'twas at the garden-gate;
The moon shone bright—the hour was late;
No prying eyes were round to see—
And he was there, and so was she.

They wandered through each well-known walk,
They talked the talk all lovers talk.
The moonbeams peeped through bush and tree—
And she was there, and so was he.

"Thou art my life, my soul," he cried;
"There lives not on this world so wide
An Angel without wings like thee"—
And he was there, and so was she.

And from her lips these accents fell:
"My love for thee words fail to tell;
'Tis boundless, dearest, as the sea"—
And she was there, and so was he.

Sweet moon, 'neath thy inspiring rays,
What pranks mysterious Cupid plays;
A *moonshine* little god is he—
And he was there, and so was she.

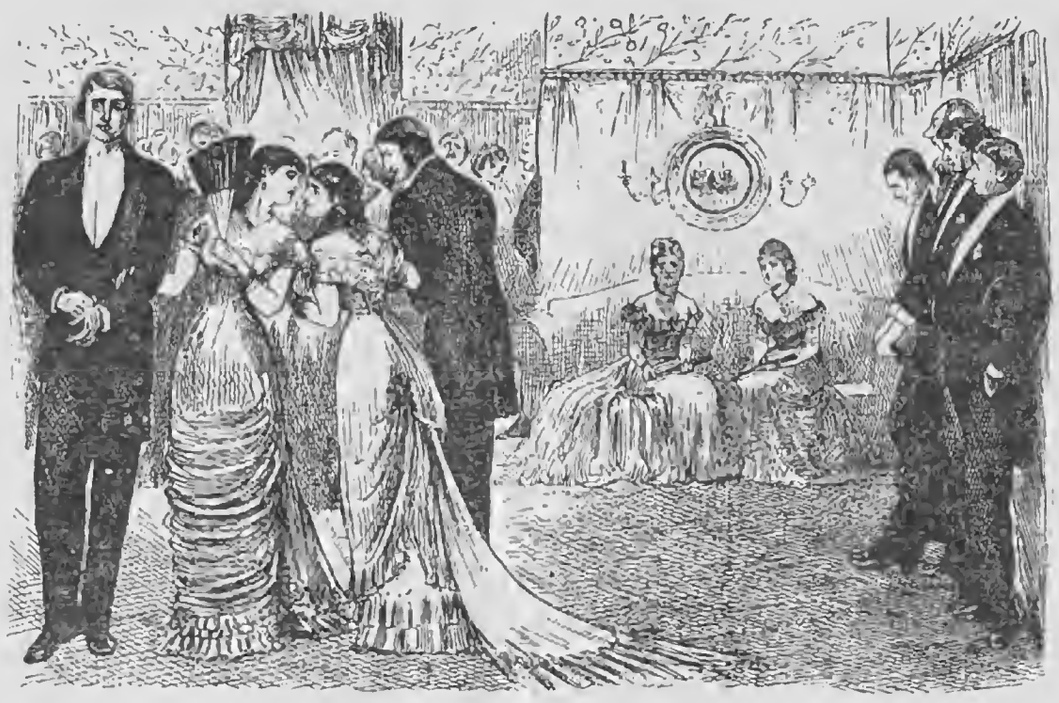
"Hector—good dog!" the old man said,
"You maudlin fool should be in bed.
My noble hound, I'll cut thee loose;
We'll cook you midnight-wanderer's goose."

"Adolphus, fly!" the maiden cried,
"Here Hector, with mouth open wide,
And eyes that glow like balls of fire,
Comes, followed by my wrathful sire."

He shook the dew-drops from his boots;
Like meteor through the air he scoots;
But Hector rushes like the wind,
And grabs the flying man behind.

A growl—a rip—ah! never, never,
Did pants from ties so quickly sever;
Freed from his clothes, Adolphus starts,
And o'er the fence like lightning darts.

The modest moon still brightly shone;
Such sights she oft has gazed upon;
Such sights, while Time remains, she'll see—
And she was there, but where was he?



HOSPITALITY.

(Applicable to more than one phase of life.)

Maud (*Daughter of the House.*). "There are those two Miss Tomlinsons—horrid things! I wonder who asked them!"

Eva (*ditto*). "I did. Papa made me. But we needn't find them Partners, you know!"

Incurring a Tremendous Risk.

They incur a tremendous risk who sojourn or emigrate to reside in districts where malarial disease is prevalent, without medicinal means of fortifying their systems against the periodic scourge. The danger to bilious subjects, and to those who lack bodily stamina, is particularly serious. A preventive and curative agent of known anti-malarial efficacy should be frequently used and constantly kept at hand by such persons; and on none can they rely with such certainty of protection and aid as Hostetter's Stomach Bitters. This grand specific roots out every vestige of the malarial poison from the system, and endows it with an amount of vital activity and repelling power that nullifies the influence of miasma. It also prevents and remedies disorders of the stomach, bowels and liver, which are particularly prevalent in malarious regions, and is a incomparable general invigorant.

$250 in Premiums.

PRINGLE'S NEW HYBRID SPRING WHEATS.

CHAMPLAIN.—A bearded variety—a cross between the Black Sea and Golden Drop. Its strong and vigorous straw, growing 6 to 12 inches higher than its parent varieties, stands erect, frequently bearing, even in very ordinary culture, heads from 5 to 6 inches in length, containing from 60 to 75 kernels each.

DEFIANCE.—Another variety of spring wheat of the highest promise, the result of a series of experiments, to incorporate superior qualities upon the hardy stock of our common Club Wheat, by hybridizing it with one of the finest, whitest and most extensively grown sorts of the Pacific Coast. This variety displays great productiveness, vigor and hardiness. It is a beardless, white chaff wheat, with heads frequently 5 to 6 inches long, very closely set with large white kernels, frequently numbering 75 to 80 to the single head.

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In order to induce Wheat Growers to give these new sorts a thorough and universal trial, we offer **$250 IN PREMIUMS** for the largest quantities grown from 1 lb. of seed, also for the 20 largest heads. For particulars see our Wheat Circular, mailed free to all applicants.

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Chufas or Earth Almond, (Cyperus esculentus). Better than corn for feeding hogs, sheep and poultry will yield three times as many bushels per acre. Price 60 cents per quart, by mail prepaid; $2.50 per peck; $8 per bushel.

Prickly Comfrey.—Recommended for the feeding and fattening of stock, and for increasing the milk of cows; enormously productive. Price of roots, $2 per lb., by mail, prepaid.

Compton's Early Field Corn.—Was exhibited at the Centennial Exhibition, where it received honorable mention for its extreme earliness. Price 60 cents per quart, by mail, prepaid; $1.50 per peck; $5 per bushel.

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Originated by Prof. Stockbridge, Prof. of Agriculture in the Massachusetts Agricultural College.

Made for each crop, furnishing the plant food which each requires. They have been used for five years with such success that in 1877 they were applied on over 10,000 acres with excellent results. **Send for Pamphlet. Mailed Free.** Also for sale, Agricultural Chemicals.

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The greatest labor-saving machine in use; will do more work in the same time and space than any other machine of the kind manufactured. Is very durable, easily put up and operated, and has the capacity of hoisting 2,000 lbs. and carrying it back any distance required. It has the merit of being readily adapted to any kind of a building. It has been awarded premiums at a great number of State and County Fairs, and received the highest prize—a Diploma and Medal—at the Centennial Exhibition—as the simplest and best of its kind. Exhibit shipped to Paris Exhibition. Over 5,000 have been sold since Sept. 1st, 1874, which have given entire satisfaction. A price-list and full particulars, with instructions how to put up and operate, will be sent on application to the Patentee and Manufacturer.

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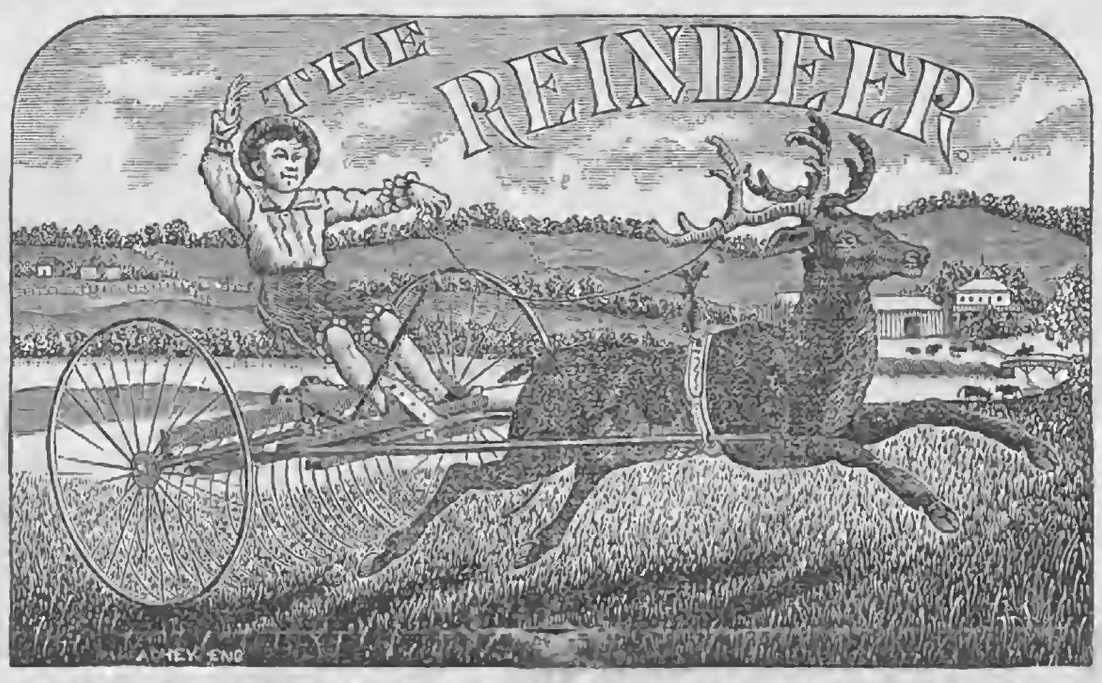

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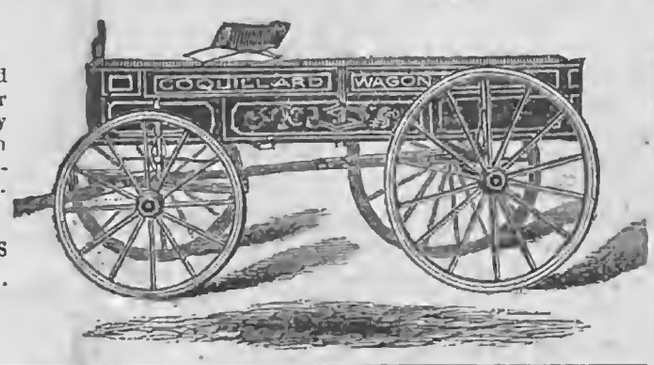

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EXCELSIOR

MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

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The Naturalist.

FLYING MAMMALS.

Among the transition animals which serve as connecting links between the principal masses, so as to form an unbroken chain from the most imperfect up to the most perfect, not the least interesting are those which, while they distinctly belong to the mammalian class in the Animal Kingdon, yet by their peculiar conformation link it with the class immediately below—that of birds. Of those there is quite a large number of species and genera belonging to several families and to three orders—the Cheiroptera or wing-handed; the Quadrumanous, or four-handed; and the Rodentia, or gnawing animals. In common language these orders are represented respectively by all the bat tribes, some members of the monkey, and some of the squirrel races.

Between the various species of the bat family there is a vast difference in size and appearance, ranging, as they do, from the hideous little nocturnal prowlers of our own neighborhoods to the rather handsome Flying Fox of Africa, Polynesia, and Southeastern Asia, which attains the size of a squirrel, and often measures four feet across its extended wings. The bats may well be regarded as the chief representatives of the transition line of animals, both on account of their vast numbers, their widespread distribution over every part of the habitable globe and the fact that the membraneous webs extending between their limbs, serve all the purposes of veritable wings, enabling them to soar about with an ease and power denied to many members of the feathered races.

Among the flying representatives of the monkey race the largest and best known is the Flying Lemur, also called the Colugo, or Cat Monkey. There are several genera of the family, ranging from the size of a rat to that of a cat, all inhabitants of the East Indian Archipelago. The body is surrounded by a hairy lateral membrane, extending from the sides of the neck to the base of the feet, embracing the wrists, continued between the legs and inclosing the tail, as in many bats. When extended this serves as a parachute to sustain the animal in its astonishing leaps, often of 100 yards, from tree to tree. When traveling among the branches the female carries her young in an abdominal pouch; their food consists chiefly of insects, small birds, eggs and fruit; their color varies from light gray to russet; and although emitting a somewhat disagreeable odor their flesh is considered palatable by the natives. They constitute the connecting link between the monkeys and bats.

Of flying squirrels there are three genera and a multitude of species. Their common characteristic consists in their being provided with wing-like membranes extending along the flanks between the anterior and posterior limbs. These membranes are covered with hair, like the other parts of the body, and constitute, when outspread, veritable parachutes, which enable them to sustain themselves in mid-air longer than the commonality of animals, and to clear from 50 to 100 yards at a single bound. Of them the Taguan is the best known species. When the creature wants to take one of its marvelous leaps it stretches its four limbs to their fullest extent and is up-borne through the air on the parachute-like expansion which extends along its sides. Its total length is nearly three feet, the tail measuring about one foot eight inches. The color of the animal is a clear chestnut, deepening into brown on the back, and becoming more ruddy at the sides. The little pointed ears are covered with short, soft fur of a delicate brown; the tail is heavily clad with bushy, grayish-black hairs. The parachute-like membrane is delicately thin, and covered with long fur, chestnut on the upper side and beautiful silvery grayish white on the lower. The Taguan belongs to the genus Pteromys, whose members are much larger than those of the other two genera and inhabit Southeastern Asia and the Indian Archipelago. The Sciuropterus are the smallest of the family. They inhabit the northern parts of the globe, including our own country; and intermediate in size are the Anomalures, dwelling on the west coast of Africa.

TAGUANS—(A Species of Flying Squirrel.)

The Vineyard.

GRAFTING THE GRAPE FOR HYBRIDIZING.

D. S. MARVIN.

There are so many persons now interested in trying to improve our native grapes that a few notes by the way, of the processes, experiments, failures and successes, of the writer will doubtless interest many of the readers of the Rural. Even if it were otherwise desirable, however, space and time would forbid me to detail all my experiments, carried on now for quite a number of years. But one series of experiments and their results are so interesting that I will attempt to sketch the processes and speak of the reasons for their hopeful results, as it points to the way and manner that will probably lead to important improvements, and give us, in a generation or less, results that have required thousands of years to accomplish in Europe, by slow increments of gain, through the natural processes of amelioration by cultivation.

It was long ago observed, in the attempted improvements by growing seedlings of Pears, Apples, Plums, etc., that seedlings from grafted fruit yielded better results than from natural fruits. The seeds were lessened in quantity and the fruit enlargod, for the stock, being different from the top, the sap thus generated being blended and commingled complicated the result, greatly increasing the chances and tendencies to produce sports, when, if the normal seed of the native plant alone had been used, it would have repeated itself, and no variation would have ensued. It is by the production of sports that we are enabled to go beyond the ordinary variations accomplished by nature through ameliorating circumstances of propitious surroundings. Such are the conjunction of a genial climate and a favorable soil to the seed of some plant carried by accident in the coat or intestines of some animal, or the favorable contiguity of two plants of like or kindred botanical classification happening to blossom at the same time and mingling pollen from one upon the other, the seed dropping and germinating where it could, yet finding the proper surroundings for full development. Why some one has not thought out and applied grafting long ago for improving our native grapes, only shows how young we still are in this important culture. Another most potent reason for retarded improvement has been that so much precious time has been wasted, in trying to utilize Vitis vinifera, the European grape, on the Atlantic seaboard, when, in reality, it will only succeed for hot-house culture. We are only now just realizing and beginning to act energetically upon this stubborn fact. But to show that it is not even yet comprehended in its full import, some hybridists continue to use pollen from V. vinifera to the present time, thinking that they can, by some hocus-pocus, overcome the laws of nature in mixing.

After studying and thinking over the subject, some eight years ago, when the Eumelan was first introduced, and recognizing it as an æstivalis grape, I grafted it upon an Iona root for hybridizing purposes, and have now for three years fruited a number of seedlings grown from the first cluster of grapes grown upon this vine, hybridized with pollen from Delaware, Iona, Concord, Adirondack, Martha and Walter. I used pollen from so many sources purposely, to complicate, if possible, the result, and was enabled to see that I had made the desired impression, for the cluster was full and compact, while the normal clusters, every one who has fruited the Eumelan knows, are more or less emasculated. I chose the Iona for the stock because, in my judgment, it is itself a hybrid between V. Labrusca and V. cordifolia, although classed in the books as Labrusca.

The Eumelan being a genuine V. æstivalis, I had the strains of two, if not three, botanical classes united, from which to grow my seedlings, and am now making experiments with double grafted hybrid seedlings, but have not fruited them yet. I did not take the pains to cut off the stamens of the Eumelan, for I had the idea that I could, in part, preoccupy the stigma with the transported pollen, on account of the preference of

plants for pollen from other sources, and I should be glad of a partial self-impregnation, if I could bring it about. I was aided by the stigma of the Eumelan being so much more conspicuous than those of some other varieties. I could see just where I was placing the pollen, and I simply used clusters from the other vines, touching the stamens of the transported clusters, with their fresh pollen grains adhering, to the waiting pistils at the right moment,—just after the viscid water appeared thereon in the morning,—repeating the operation next day upon the stigmas which showed, by the viscid water reappearing, they had not been fertilized. Of course, pollen can only be had in this way, where vines blossom together, or nearly at the same time; but by shading to keep them back, or throwing artificial heat upon others with boards set up on the north side to reflect the heat of the sun and hasten blossoming, fresh pollen can always be obtained. It is so much more certain to succeed than pollen that has been retained any length of time, that the little extra trouble is well repaid. I would add here, to illustrate the matter and increase the pertinency of such experiments, that I have grown a great many unhybridized seedlings, from all sorts of vines, and in all sorts of ways, only to reject them with disgust after fruiting, for we already have enough of crude varieties. There is seldom any gain; hardly one in a thousand will sport enough to show an advance. Nor have I had any good results from mixing the pollen with the same botanical classes for varieties; nor yet in using pollen from V. vinifera hybrids with our native classes, or their seedlings. All of my experience goes to show that any admixture of V. vinifera with our native classes is at the expense of the health of such seedlings, and my advice to others would be to depend wholly upon improving our own classes and varieties. The Eumelan, in my judgment, is invalnable as the pistillate parent, though imperfect in itself.

Few Americans like the pulpy, insipid taste of some European grapes: the more sprightly and healthy acids of our natives are preferred, but seeds at the expense of pulp enlarging the berry, are even less desirable. Herein is one of the marked defects of our native grapes, especially of our Labrusca class. How to eliminate this excess of seeds is one of the problems to be solved, and to which those studies are, in part, directed. Nature, under normal conditions, cares only to perpetuate her kind; all the processes of the plant seem to be directed to this end, viz. the production of seeds.

The important part to man in our fruits is the covering, but man by taking advantage of certain tendencies, can make what is only an accessory to become the principal object, and he has been enabled, by working through long periods of time, to direct and control these minor forces, so as to develop for his sustenance the rich fruits we enjoy. Still too much of the energy and natural forces of our vines are wasted in the development of so many seeds. To ripen these and develop their harder or stony parts is wherein the great call upon the forces of the vine is made. If the clusters be too abundant, the call is sometimes so enormous as to almost kill the vine, the ripening processes fail and the season is worse than wasted. If by grafting or any other process the seed can be lessened in numbers and diminished in size, then more of the energies of the vine may be directed to maturing the pulp and enlarging the berry, thus maturing more bulk of fruit at greatly lessened expense to all the vital energies of the plant.

Now for the results of the experiment above alluded to: After rejecting the imperfect ones I find the fruit of some of these hybrid seedlings rivals in hight, pure tone, and delicacy of flavor Vitis vinifera, the European grapes of California. I am an ex Californian and know whereof I speak. The emasculated clusters of the Eumelan are replaced by full, compact clusters, (some of them are a week earlier) with abundance of pollen, perfect pistils and stamens, never failing to set fine large compact clusters, more than the vine can possibly carry. The colors of some of them, too, are new ones in American grapes. In one or two the skin and pulp are so transparent that the seeds can be seen, and what is pertinent and important, the seeds are smaller and less in numbers. This is just where the gain from grafting was desired, and what the experiment was made for and expected to accomplish. I have only come short of my hopes in failing to increase the size of the berry up to the standard of the popular taste, but the failure is more apparent than real, for the experiments must be repeated again and again from such improved vines. I have more pulp and less seeds. Our people admire every thing large, but I do not despair. We have in the Union Village a rival of foreign grapes in size of berry and bunch, if I can refine and bring up its low standard of quality, put pulp in place of seeds, and retain its size, I shall feel that I have not lived in vain.

Let me add here I have no new seedling grapevines to sell nor will I ever have, unles I obtain decided improvements.

If any readers who are *bonafide* workers in this speciality and per-consequence in the possession of practical experience in this department of horticulture, entertain different views, or have valuable experiments to communicate, or if a number of them desire more specific directions for carrying on their hybridizing processes, then write to the RURAL NEW-YORKER to that effect. Let the public reap the benefit of the knowledge. Exchange of views based upon such foundations will always interest. Persons writing for information should study up the subject, and begin their experiments at the present state of our knowledge, not repeat old experiments. There is usually much time lost here. The study is an enticing one. The interested student will be impatient for the annual procession of the seasons. His life will be beguiled and robbed of many of the ills that fall to the lot of man. He will be enticed and carried close to, and perchance may penetrate into, some of the hidden secrets and mysteries of nature, and science.

Jefferson, Co., N. Y., March 1878.

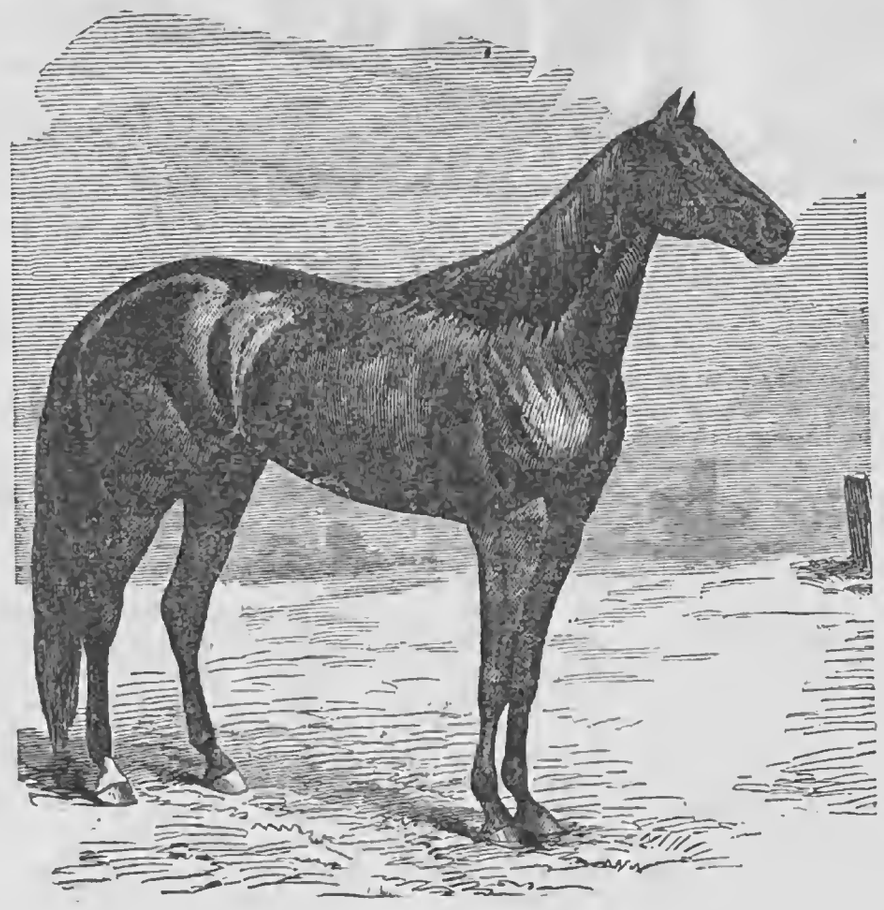
The Horseman.

NOTED TROTTERS. NO. 4.

YOUNG POCAHONTAS.

POCAHONTAS, the younger, is interesting to the public mainly from the circumstance that she is a very fast-trotting daughter of the famous pacing mare of the same name. Before she had done more than give promise of great speed, she was purchased by Mr. BONNER and thus withdrawn permanently from the trotting track where she would doubtless have made a very excellent record. Her sire was the noted trotter Ethan Allen and she inherits the beauty of form which distinguished him in his prime, while her mother bequeathed to her a great deal of her marvelous staying qualities. A few years ago her owner declared that she was able to outspeed Dexter anywhere on the track, and at a private trial she went to the half-mile pole in 1.04½ and at earlier trial sped over a full mile in 2 m. 18 s.

Old Pocahontas, the most remarkable pacer that ever spurned the trotting track, was foaled in 1847 in Madison township, Butler Co., Ohio. Her sire was Irons' Cadmus, by American Eclipse, but so little was thought of her in early days that as a two-year-old she was knocked off at a public sale to the highest bidder for $30. She was engaged chiefly in farm work until 1853, having passed through several hands in the interval. At the latter date on a trial under saddle she showed a 2 58 gait, and was at once subjected to a system of training. Her first contest was with a very fast pacer, Ben Higdon, whom she easily beat in 2.34. In 1854 she distanced Tecumseh and Dolly Spanker at New Orleans in 2 20, though the contest took place only two months and nine days before she dropped a foal. After this remarkable display of speed and pluck, it was for some time impossible to match her at any odds; and at a private trial on the Queen's Course, L. I., in the fall of 1854, when placed on the track in excellent condition and accompanied by a running horse she made a mile in 2 08½. Her best public record, however, was made in her match with Horo, June 21, 1855, she to wagon, he to harness, when she distanced him in the first heat in 2 17½. After this it was impossible, in those days, to get her matched, and she was put to breeding, and Young Pocahontas was her second foal.



YOUNG POCAHONTAS.

The Poultry Yard.

ORIGIN OF BRAHMAS.

HENRY HALES.

I HAVE read the articles contribnted to the RURAL by Mr. MINER and Mr. WALLACE on the origin of the Brahma, and am also acquainted with the claims of Mr. G. P. BURNHAM in the same connection. This subject has at times produced much acrimonious dispute as to claims of priority. Mr. WALLACE says he saw Light Brahmas at Capt'n. STEWART'S estate, in Ireland, in 1846. For this statement he is sharply taken in hand by Mr. MINER. Now, I say distinctly, I have no wish to enter into this Brahma controversy which has been already made a subject of notoriety; yet I can see no reason why fowls brought either from China or India may not have produced in Ireland or England birds somewhat like the American bred birds, which were brought originally from China to this country. Of course these would not be called Brahmas, as the name was not then known.

From 1843 to 1852 great numbers of Asiatic fowls were imported into England from China; yes, and from India too; but fowls of this kind brought from India were fowls that had been taken there from China. The extensive trade which exists between the two countries easily accounts for this. East Indians are people fond of breeding poultry and pigeons—a fact well known. As two shipments of these birds are claimed by Mr. BURNHAM to have come from China, one to New York and the other to Philadelphia, and as Mr. MINER claims that another from which Mr. CHAMBERLAIN'S were bred, came from India, why should the probability ever be denied that some such birds may have reached England, especially when the trade between England and those countries is of such great magnitude compared with their trade with America. It is asking a trifle too much of our credulity to require us to believe that while these three American shipments of fowls all produced Light Brahmas, yet none could be produced in England. And still in London alone there is a large dock of splendid vessels continually going and coming between England and India, and taking their name of East-Indiamen from their occupation. Many of these are manned by East Indians, and are always bringing over everything in the way of novelties that the East produces both from China and India.

I do not say that birds were so introduced that bred Brahmas in the United Kingdom; but I do think it very probable that birds may have been bred there very much the same as our Brahmas, quite as early as if not sooner than we had them here, without its being generally known. Every year thousands of people are going to and fro between India and Great Britain; trade between India and China is largely carried on by British; now, why should it not be probable that birds similar to those that came here three times should have been landed there too.

"But," says Mr. MINER, "Cap. STEWART'S fowls were probably Chittagongs." Why Chittagongs? Cochins were introduced at that time. From 1843 to 1846 many importations took place. The Queen had them on exhibition at the show of the Royal Dublin Agricultural Society, in April 1846, and they were very common a few years later. In 1852 I was present at the Poultry Show held in Madame TUSSAND'S Rooms, Baker Street, London. Immense numbers of Cochins figured there of all the colors now known. The step from White Cochins to Light Brahmas is not a very deep one. I have often seen White Cochins—or birds exhibited for such—so much the Brahma shape that they only required the penciling on neck, and black on tail and wings to make them perfect Light Brahmas, with single combs, like those of many at that time. Mr. MINER asks why Captain STEWART did not exhibit his fowls at poultry shows. Does not Mr. MINER know that in 1846 poultry shows were scarcely established anywhere except the local shows in some counties in England, where some breed was made a hobby of, and local rivalry was brought out, as in Yorkshire with the Mooneys? Poultry were also an adjunct to Agricultural and Zoological Societies. One cannot but feel a little surprised at a gentleman of Mr. MINER'S experience and knowledge on this topic, asking such a question. Where were the poultry shows at which they could be shown? The great London Show of 1852 may justly be called the first great poultry show in England in which the public took interest.

Mr. MINER also says English officers and French clergyman, are not likely to be judges of poultry. I know nothing of French clergymen, but I do know that many British officers are men reared in country homes with stock of all kinds surrounding them, as well as aviaries of birds, game, etc., and that they would be just the men to appreciate a good fowl. I am acquainted with a number of American Army officers and, singularly enough, they are all poultrymen; why should British officers be an exception?

Dairy Husbandry.

DAIRY PRODUCTION THE YEAR ROUND.

E. W. STEWART.

OUR great dairy interest is represented by 11,000,000 of cows, absorbing a capital of $500,000,000 in this stock, and the land necessary to maintain these cows cannot be less than fifty millions of acres, which at even $20 per acre, represents a value of $1,000,000,000. This great industry is gradually being reduced to order and system. The factory system has revolutionized cheese-making and is fast doing the same for butter-making. Dairy butter has been undergoing a fearful ordeal during the last few years in competition with creamery butter, and it is now only a question of time when all our market butter will be made in creameries or upon the creamery system. The old haphazard way employed in private dairies could not stand against any regular system; even oleomargarine, (caul-fat butter) is preferred to it. The time has already come when this miscellaneous class of dairy butter can be sold only for grease or baker's shortening. It will not therefore be produced much longer; the loss is so great that it cannot longer be borne. It has not for the last year even paid for the labor of production. This unanswerable argument will compel the patronage of cheese factories or the establishment of creameries for the improvement of this large class of dairy product.

The art of keeping butter, which has been made in good order and flavor, is so little understood that many millions of pounds are spoiled, every year, in endeavoring to hold for a better market. In fact, the public taste is fast demanding fresh butter during the whole year. The summer or fall made butter is passed by for fresh-made winter butter having a pleasing artificial color. The art of coloring has been so much improved that city people, in looking at these pleasing tints, can smell the clover fields in January. They spread this delicacy upon their bread with such absolute confidence in its flavor, that straw, bran and meal are transformed into the nectar of the grasses.

The drift is now all toward fresh made butter, and this is well for the dairy interest, because a much larger proportion of butter is passable, even agreeable to the taste if used fresh than if kept, even for one month. There can be no doubt but the present state of the art of butter-making requires the product to be used within ten or twelve days after making; and this system in full practice would save a loss of thirty to fifty millions per year to dairymen.

To carry out this system, one-half of the cows must drop their calves in October or November, and the other half in spring. It is not necessary that each herd should be thus divided, but different dairymen may follow the spring or the fall system. Yet in large herds, it would

probably pay better to make butter throughout the year, and supply the same set of customers both summer and winter. There is much in a cultivated or habitual taste for a particular make of butter, and a dairyman has the advantage of this taste when he supplies the same set of customers constantly.

Winter dairying is generally supposed to be more expensive than summer dairying, but this opinion is not well founded. It is based upon the supposition that pasturing is cheaper than stall feeding, yet the dairyman is able, generally, to winter a cow upon one acre of good meadow, whilst he uses three or more acres to pasture her in summer. Certainly, this labor of cutting and storing the grass upon one acre and feeding it out in winter, cannot be worth more than the use of two acres of land. This subject presents so many points for consideration that I shall continue it in another article.

Rural Architecture.

A GENERAL-PURPOSE BARN.

We give below the plan of the basement and ground floors of a general-purpose barn, having a strong bias in the direction of a stock barn, and costing $4,000. It is calculated, as its name implies, for that system of farming commonly called "mixed husbandry," in which the growth of grains, of forage plants, and stock raising have about equal prominence in the general farm economy.

This barn is 97 feet long and 48 feet wide, one story and basement. The basement is 9 feet 6 inches and the upper story 16 feet in hight. It furnishes hay-room, with good mowing for 200 tons of prairie hay, or its equivalent in other fodder or straw; its granaries will contain 2,000 bushels of grain; and it has stall room for 32 head of cattle and 7 horses, with 4 box stalls for bulls or for cows requiring extra room.

The plan of the building was furnished to us by Professor E. M. Shelton, of Kansas Agricultural College, and was made with reference mainly to the wants of Kansas and other prairie farmers, and in the hope that it might furnish to them some useful hints in the construction of farm buildings.

CATTLE STALLS.

The single tiers C C and the double tier A are all arranged upon the same plan, the heads of the animals in either case being turned towards the main passage-ways, from which all feed is supplied. Into these passages the hay is conveyed from above, through feed shafts not shown in the cut. Each stall is 4x8 feet, including manger. At the rear of the stalls is a manure gutter six inches in depth and twenty inches wide; and beyond, next the wall and box stalls, is a passage, on the level with the floor, 2½ feet in width. The double tier A has a similar gutter four feet in width, separating the two tiers of stalls. The very simple form of manger in use in these stalls has given perfect satisfaction. It is of variable width, the front being simply a 2x10-inch plank sliding in cleats in the partitions, and resting on the floor. The advantage of this arrangement is that this front of the manger may be placed well forward or back to accommodate the animal, compelling him to lie in such position as to void in the gutter.

FEED BINS.

The feed bins, marked G, are 4x12 feet, supported two feet from the basement floor, and having sloping bottoms so that the feed slides easily to the front, where it is drawn out by a spout in the front of each bin. The feed is poured into the bin from the floor above, through hoppers not shown in the cut.

ROOT CELLAR.

The root cellar will hold nearly or quite 2,000 bushels of roots. The roots are poured from the wagon on the outside of the barn through the window into the cellar, and are taken from there to the slicer in the alley and distributed to the cattle on either side.

BOX STALLS.

The four box stalls marked Q are two of them 10x10 feet and two 10x11 feet. They are chiefly for bulls and other animals requiring more room and stronger quarters than ordinary stalls furnish. There is a great advantage in using these boxes for cows during calving time and for sick animals generally. The boxes are boarded up with rough lumber to the hight of six feet, and have earth floors. Each stall opens into the alley D, through which the animals are led and the manure wheeled. Hay for the animals is conveniently obtained from the great bay E, which extends from the roof to the floor of the basement.

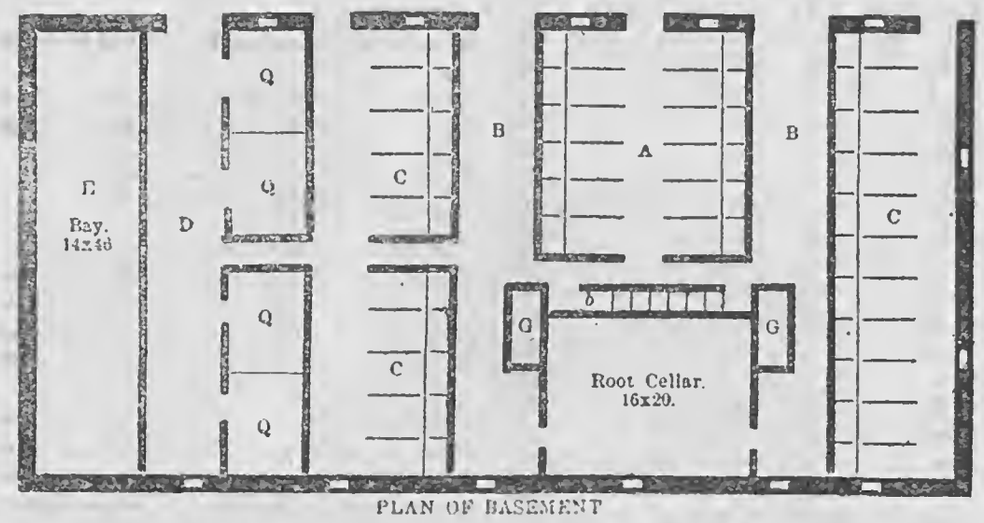
The main floor is about three feet above the ground level, and entrance is gained either at the front or end of the building, by easy approaches of earth and short bridges of slight slope. The width of these main door-ways is 12 feet, and the main and threshing floors are 13½ feet, a space amply sufficient for the easy passage of the largest loads.

BAYS.

The bays need little description beyond that given in the cut. In addition to the bays, the lofts over the horse stable, granary and tool-room furnish a great extent of mow room; while even this may be increased if desired by covering over most of the main floor and employing this loft for the storage of grain and hay.

THE GRANARY,

marked K, is 15x20 feet deducting stairway, and is divided, by firm partitions, four feet in hight, into five bins of variable size. The alley opening into the main floor is six feet in width, furnishing ample room for operating a fanning-mill, stowing sacked grain, etc.



PLAN OF BASEMENT

THE HORSE STABLE

occupies a space on the ground floor 16x34, and consists of five single stalls and one double one, Each stall is 5x9 feet, including manger, and exclusive of the alley seven feet wide passing at the rear. At the rear of the stall is a blind gutter, sunk six inches beneath the floor and covered by a plank on a level with it, which carries the liquid excrement to the basement drain at the rear of cattle stalls.

THE VENTILATORS,

marked *a* in the cut, are shafts 3x3½ rising perpendicularly from the floor to near the roof, the direction of which they follow to the apex, where they terminate in two double-roofed cupolas. These shafts are made of smooth-planed lumber, and are provided with trap doors in their sides through which fodder is pitched to the cattle in the basement. Additional ventilation is provided for in the basement by the thirteen area windows each of which is hinged at the top, and by means of rope and pulley may be opened or closed as may be needed. Thus far, the light and ventilation of the basement, obtained by these simple means, leave almost nothing to be desired.

The stairway leading from basement to ground floor is indicated by *b* in both cuts.

THAT MODEL PIGGERY.

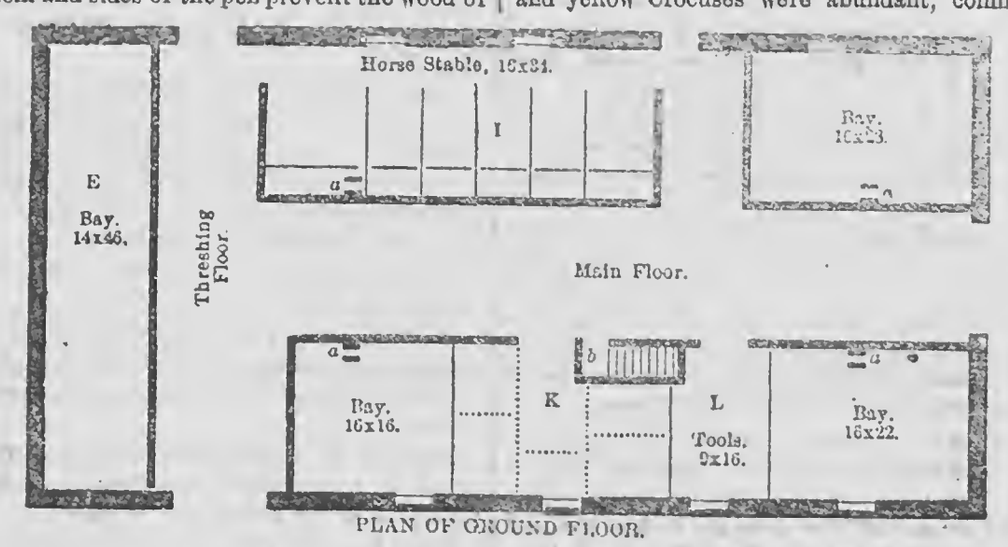
To make it clearer to the inquirer, Mr. Lehman, I would say that I do not believe in a cellar under a piggery, but a shallow, tight half-cellar which, cemented at bottom and sides, serves as a foundation for the wooden upper portion of the building, and also to make and save manure in. The depth can be regulated to suit one's convenience. I would have it not over two feet in depth when completed, if it extends two feet above ground. About three feet below the window stools will be found to be the right thing.

In this shallow cellar the litter is supplied in generous quantities, and the amount of manure made will be surprising to one not accustomed to utilizing the hogs in this way. The cemented bottom and sides of the pen prevent the wood of the piggery from destructive contact with the hogs and manure. Nothing is much more injurious to wood than hogs and their excrements.

The improvement suggested by E. L. M., is a good one, and I accept it with thanks. In the elevation view, the artist made one mistake, and that is in the roofs, which should be reversed. The main building is represented as the extension and *vice versa*. I would use cast iron feed troughs and spouts. If desired the cellar can be divided by walls under each separation between pens.

J. W. Lang.

Waldo County, Me.



PLAN OF GROUND FLOOR.

Floricultural.

RARE FLOWER SEEDS.

In looking over the numerous seedsmen's catalogues, I am struck with the great additions in the shape of novelties, that have been made in the lists of flower seeds. I note the following especially as worthy at least of trial:

Dwarf Large-flowering Cineraria, from France—a new and beautiful strain and of elegant habit, one a pure white and the other a metallic red, both said to come true from seed; the only objection to them being the price, which I notice is *only* $2 a paper.

Eryngium Leavenworthii, from Texas—one of the most showy decorative annuals introduced for many years.

Eschscholtzia Californica, Mandarin, from England. The flowers of this improved variety are of a most brilliant orange-crimson, said to be entirely distinct from the old variety.

Liatris pycnostachya, from Kansas—a tall-growing, beautiful perennial, with spikes of purple flowers.

Pentstemon Cobæa var. purpurea, from California—a magnificent variety of this tall-growing and large-flowering sort, with purple flowers.

Petunia, Large-flowering double fringed, from Germany. The flowers are said to rival the Double Poppies and, in richness of color and delicacy of tint, the finest Carnations.

Phlox Drummondii grandiflora splendens. The richest and most beautiful of all the annual Phloxes.

Vernonia Lindheimeri, from Texas. Growing from two to three feet high, and producing flowers of a beautiful purple; one of the best novelties of the present season.

x.

THE FLOWER GARDEN.

W. Falconer.

PLANTS IN FLOWER.

An exceptionally open winter and early spring have given us flowers in March that we seldom look for till April. On March 1st, yellow Crocuses (C. Susianus) and Snowdrops opened their first flowers; on the 5th, these became more abundant and the Crimean Snowdrop and another yellow Crocus (C. Oliviore) and a bluish one (C. reticulatus) also bloomed out; on the 8th, the Christmas Rose or Hellebore reared its large snowy blossoms above the mulching of leaves; and by the 10th, Snowdrops and yellow Crocuses were abundant, common blue and white Crocuses began blooming on the 11th, and on the 18th, the lovely blue Squill (Scilla Sibirica) displayed its first flowers, as did also the Winter Aconite (Eranthus hyomalis). On the same day, on removing the thin mulching from off English sweet-scented Violets, I found some flowers of them and likewise of Pansies. To-day (20th.) Iris reticulata is bursting its blue blossoms and the buds of Cyclamen coum and Hepaticas promise to open in a couple of days.

HERBACEOUS PLANTS.

Remove the mulching from these and if any of the plants have grown under it and present a bleached appearance, loosely scatter some dry strawy rubbish over them to remain for some days, otherwise the sunshine and sudden exposure may hurt them badly. The removed covering should be cleared right away so that the wind may not blow it about and litter the place; the rough stuff, as straw and stems, may be put in the rot-heap, and the tree leaves in a pile by themselves for leaf-mold. The wetter and more decayed the leaves may be the better, but free them from sticks, and if any part of them be mixed with pine-tree needles don't use that portion in the leaf-soil heap, but, instead, pile it in the rot-heap. Asters, Bergamot, Veronicas, and many others often overroach their limits, hence reduce the clumps; better have a few good stems than a host of starvelings. Sometimes the clumps got run out by impoverishment and in this case lift, manure heavily, dig deeply, and replant. In the case of many plants you will now observe "hollow crowns," that is, a hollow in the middle of the clump and, as such is detrimental, fill it up with earth or lift, and reset the plant. This is an excellent time to lift, divide and transplant herbaceous plants, and the sooner it is done the better. Do not disturb Lilies if you can avoid it, and spring-bloomers usually flower better if unmolested at this season. Cut over all remaining old flower-stems, and push ahead all manuring, digging and fixing up generally. Such work can now be done more easily and spiritedly than if delayed later, and it is better for the plants.

LAWNS.

If there be any grading and seeding-to-grass to be done, do it at once, and give the young grass the best chance possible before the advent of hot weather. Where practicable, edge newly-formed lawns with sod, particularly along the walk verges. Sodding done now should take kindly. Some people mulch their lawns over winter with manure while others do not apply it till March; at any rate rake off the roughest before active growth begins. Now is the time to rectify inequalities, as hollows or hacked sod, in the lawn; sometimes the affected part had better be skinned and leveled and at other times a top-dressing of soil smoothened over and lightly rolled rectifies inequalities. All lawns may be beneficially rolled in spring, but I would rather leave it undone than use a very heavy roller. Mossy grass, as that in shady places and under trees, also grass thickly set with weeds, had better be raked deeply and rigidly with a long-toothed iron rake, and the moss and weeds removed as much as possible, and a good top-dressing of rich soil and some grass seed applied.

SHRUBS.

The sooner deciduous trees and shrubs are now planted the better for themselves; I like to give them a fair foot-hold before they begin to grow. For common shrubs ordinary digging may give them depth enough, but for trees, if the holes be made deep and wide and filled up with a mixture of good soil, the effect will be afterwards visible in the extra promotion of growth and withstanding of drought. Plant no deeper than they were in the nursery or wherever else they were grown; spread out the roots somewhat horizontally, introducing the soil between the rootlets, and if necessary apply at once a strong stake as a support. If any doubt exist as to the safety of a transplanted shrub or tree, cut it well back and it will be almost sure to start. If manure be given to the soil at planting time, apply it broad-cast and plow or dig it under, and under no circumstances put a mass of it in the hole under a tree. To newly planted trees if not objectionable, a summer mulching of decayed manure or leaves is highly beneficial by partially preserving coolness and moisture in the soil. Finish pruning. Save the cleanest and straightest of the prunings for stakes, and burn the remainder. In pruning leave a goodly supply of flowering wood, remove over-crowding stems and branches, debilitated shoots and useless spray, and aim at having robust specimens full of strong young wood, rather than gnarled decrepitude.

BULBS FOR THE FLOWER GARDEN.

W. C. L. Drew.

TIGRIDIA.

One of the most curious and beautiful of plants is the Tigridia. It is a native of Mexico whence it was introduced into European gardens, creating a *furore* among amateurs only equaled by that caused by the introduction of the Fuchsia. It is frequently called the Mexican Tiger Flower.

The flowers are from three to four inches in diameter, the center of each flower being de-

pressed and resembling shell work, the depressed portion is marked and variegated in the most fantastic of manners. It is from this odd marking the cognomen of Tiger Flower was derived. The outer half of each petal, though presenting a broad surface, is very light and airy, and of one color only, according to variety.

There are two varieties in cultivation, T. conchiflora, the center of which is a brilliant yellow variegated with black, and the outer portion a deep orange. T. pavonia has a golden yellow center variegated purple-brown, the ends of the petals being a brilliant crimson or scarlet.

The only objection to the Tigridia is the short life of the flower; it appears very early in the morning and on a cloudy day or if planted in a cool, shady corner, it will remain open nearly all day, but an hour or two of sunshine destroys the beauty of the flower. The next morning, however, a fresh supply of the queer blooms appears. Indeed a small bed of them will very seldom be without flowers every morning. The foliage resembles that of the Gladiolus, the flower stems attain a hight of twelve to sixteen inches.

The bulbs which resemble those of the Tulip, though usually smaller, should be planted in May in a light, rich compost. They should be set in a place where they will be shaded until noon at least. Set them two inches deep and four inches apart; on the appearance of cold weather take up the bulbs, dry them off as you would Tulips, and pack in tight boxes to keep from mice and rats; gophers are very fond of them also.

TRITOMA.

The Tritoma, though not exactly a bulbous plant, is classed among the summer-blooming bulbs and tubers. During its season of bloom, which is in September and October, it forms a very conspicuous object in the garden. It is particularly adapted to growing on the edges of ponds or lakes, but while thriving in such situations it is equally adapted to garden culture, and forms a magnificent addition to foliage beds.

European florists offer a number of varieties, but there is very little difference in them, certainly not enough to make them desirable. Tritoma Uvaria is the variety in general cultivation: it is a strong-growing plant, enduring the winter in the open border in all except the Northern States of Maine and Minnesota. [It is not hardy north of Philadelphia. Eds.] The flower stem attains to a hight of four to five feet, crowned by a spike, twelve to eighteen inches long, of red and orange pendent blooms. The Tritoma is frequently known as the Red Hot Poker from the supposed resemblance of the flower spike to that well known kitchen appendage. The foliage in the Southern and Pacific States, lives through the winter.

It likes a light soil, well mixed with decayed manure: when coming in bloom it should have plenty of water. The root should not be divided oftener than every three years.

EXCHANGE.

As the RURAL seems to be a medium for the exchange of flower seeds, I would like to avail myself of the opportunity to exchange those that I have in superabundance for others I am short of. I have: Flowering Almonds; Straw-colored Lily very fragrant; Peony, Perennial Phlox; Oxalis, common pink, and white; Bowiea, pink and yellow; Gladiolus seed. I would like to exchange these for Pansy and Aster seeds, Compton's Centennial Prize Field Corn, or Prof. MURDOCH'S Yellow; 100 Days' Tomatoes, Lily bulbs, except Tiger; Pinks or any colored Campanula, except white. M. M. W

Box 35, Pittsfield, Mass.

I HAVE the Early Ohio, Snowflake, Victor, Burbank's Seedling, Genesee Co. King, White Victor, Ruby, Acme, and other new and choice varieties of Potatoes, a few of either or all of which I would like to exchange for other new varieties such as the Leader, Superior, Compton's Surprise, Dunmore, Climax, Centennial, Triumph &c.

I also have a considerble quantity of Flower Seeds, several choice varieties, a few of which I will agree to send to any reader of the RURAL sending me a post-paid and adressed envelope, as long as the supply lasts.

Windham, Ohio. CLINT HIGLEY.

NOTE.—We apologize to our friends that for want of space we have been unable to publish the "Exchange" propositions received during the past month. Indeed, we have received ten this year where last year we received one. We shall publish all that we have space for. [EDS.

FENZLIA DIANTHIFLORA.

ON p. 168 of the RURAL, MRS. COX refers to this plant. Judging from her notice I presume her plant is Gilia dianthoides, a beautiful little Californian annual that bears a profusion of delicate, rosy-tinted flowers with a yellow throat surrounded by five dark-colored dots. The tree Fenzlias are Melastomaceous shrubs and natives of tropical New Holland. The above Gilia is, nevertheless, often grown and distributed under the name of Fenzlia, an appellation to which it has no right whatever. W. F.

Miscellaneous.

MATERIALS FOR MULCHING.

PROFESSOR W. J. BEAL.

MULCH is placed about plants to prevent the sun from evaporating the moisture. In many cases it takes the place of cultivation. No doubt, if it were not for the expense and trouble, it would be more extensively used about herbaceous plants. We have found, in our trying climate, that a fine mulch of manure completely covering the ground is an excellent thing for bedding plants. With trees and shrubs, a serious objection to the use of mulch is its liability to harbor mice which may injure or destroy the plants. For strawberries mulch is used to keep the fruit clean as it ripens and to protect the plants in winter and spring. For strawberries we have had the best success in applying the mulch quite late in autumn and in leaving the materials thin enough over the plants to barely expose a few of the leaves. The more changeable and severe the seasons, the greater the need of mulch—and mulch in generous quantity. There is a great variety of materials employed for mulching. I have heard of the use of beach sand or fine gravel with excellent results. The inexperienced gardener can try old clover hay, as I have done, and get a good crop of thrifty young clover to kill out the next spring; or he can employ ripe timothy or June-grass, and soon find the ground seeded with a crop he was not prepared for. Or again, if he like better, in the spring he can mulch with oat-straw not half thrashed or full of chaff containing oats still plenty. Then he can dig young oat-plants all summer among the strawberries. Digging out the young plants of clover, grasses, oats, etc., is healthful exercise and stirring the soil will not hurt the strawberry plants.

I once tried all the above methods. I also tried forest leaves for autumn mulch adding corn-stalks to hold them down and thought I had a good thing. In spring, after an open windy winter, the leaves were not to be found. A few at a time, they had blown away. Having tried all these to my satisfaction, I now prefer clean straw, old or new, or marsh hay or corn fodder cut two inches long less or more. Pine-shavings get into the soil and are a nuisance. The same objection may be urged against tan-bark or any other material which does not decay readily and help to enrich the soil.

Agricultural College, Lansing, Mich.

TEXAS AS AN INVALID RESORT.

IN penning you this letter I do not propose to write up Texas and to encourage hither immigration, "by painting an Arcadian scene." That is being done already by railroad and land agents and parties having lands for sale and by others who desire to see the resources of the State speedily and fully developed. My object is to call the attention of those of your patrons who have weak lungs and with whom cold and rigorous winters do not agree, to the fact that the climate of Texas will prove a balm to them. I speak from my own experience and from the testimony of hundreds who, like me, have made Texas a home, not from choice, but necessity. For I can assure you I came to this State with many misgivings as to its people, its insects, its reptiles and the heat of its summer. In all these apprehensions, however, I have been most agreeably disappointed, and must state that Texas is a goodly land—but it is to a great extent undeveloped.

Seven years ago I left New York; took the advice of HORACE GREELEY and went West to "grow up with the country." Kansas City was my objective point. But one winter there satisfied me I had gained nothing by the change. From parties from Texas I learned that all my misgivings had no foundation in fact, and that if I would go to Texas, especially to the western part, I would immediately realize a change for the better, and soon would become hale, hearty, and sound of lungs. Concluding that such might be the result, I set out for Dallas in May in 1872. Then I bought a pony and equipments and began to travel over the State. I have been more or less over all of Northern, Southern and Western Texas.

When I came here I only weighed 125 pounds, I hardly cared to live. I now weigh 165 pounds, am free of cough and strictures in the breast and feel and am able to do any kiuk of work, or to undergo any kind of hardships. I have found and met hundreds from the Western and Northern States who attest the same experience. I know thousands (?) in the Northern and Western States—men and women—with whom the winters do not agree and never will. All such I can safely and conscientiously advise to come to Texas. JOHN MORRISON.

Colorado Co., Texas.

IRRIGATION.

AT the annual meeting of the Western New York Horticultural Society, the undersigned were appointed a committee to investigate the subject of irrigation and report at the meeting to be held in January next. The committee, desiring to embody in their report the results of actual experience, request persons having practical knowledge of the subject to communicate to the chairman of the committee such facts as they may be able, in regard to the methods, cost, difficulties, profits &c. of irrigation; and the committee will endeavor to send a copy of their report, when pulished, to those who comply with this request. If those who are situated so that they can make accurate experiments during the present season will send their address to the committee, blanks will be furnished them to fill out.

Committee.—S. Reed, Scottsville, N. Y., C. H. Dann, Warsaw, N. Y., W. R. Lazenby, Ithaca, N. Y.

PINUS AYACAHUITE.

IN the RURAL of Feb. 2d. we notice that Messrs. ELWANGER and BARRY condemn the Pinus Ayacahuite as quite unreliable for hardiness, while Mr. C. S. SARGENT, in the RURAL of March 16th, considers it unsuited to any climate north of Georgia.

Now, of course, we do not wish to question the result of these gentlemen's experience and investigation, and there is certainly much reason for this belief independent of actual experience, in the fact that the Pinus Ayacahuite comes from the mountainous regions of Mexico, where all other native pines are ill suited to our climate. Nevertheless the opinion expressed quite astonishes us for we have grown this pine with success for twenty-five years and sold it throughout the country without any complaints coming in of a character to make us doubt its hardiness. In view, however, of the opinions referred to, it would be interesting to hear further evidence in the case from different sections of the country. Many explanations of this behavior might be offered with considerable show of reason, but, after all, hardiness must be for nearly all plants a relative term, as scarcely any adapt themselves to all the peculiarities of our climate.

SAMUEL PARSONS.

[This is rather a contradictory case. We would be glad to hear from any who has tested it. For ourselves, we have never seen a plant out of our own grounds, and this we have had but a short time.—EDS.]

RAW BEET SUGAR.—We have received from D. W. PAYNE, Corning N. Y. a sample of this sugar which presents a fine grain, and ought to yield a superior product when clarified. This industry should be stimulated. It has almost driven cane sugar out of use in France, and is one of the leading sources of wealth of the nation. We congratulate MR. PAYNE.

CATALOGUES, &c., RECEIVED.

H. M. THOMPSON & SON, St. Francis Nurseries. Illustrated Wholesale Price-list of Nursery-grown European Larch, Evergreens, Fruit, Ornamental, Shade, and deciduous tree seedlings, St. Francis, Wisconsin.

Fourth Annual Report of the Commissioner of Agriculture of the State of Georgia, for 1877.

KANSAS AS IT IS. A complete review of the resources, advantages, and drawbacks of the great central State, by L. D. BURCH. Published by C. S. BURCH & Co., 164 Randolph Street, Chicago, Ill. An interesting and well illustrated work of 145 pages.

THE SUGAR BEET in North Carolina. Report to the Commissioner of Agriculture on the results of experiments with the Sugar Beet in ten counties, by ALBERT R. LEDOUX, Ph. D., Chapel Hill, N. C.

CROSSMAN BROTHERS' Illustrated Catalogue and Guide to the flower and vegetable garden for 1878—72 pages. This contains all necessary information. The firm invites a comparison of prices with those of any other responsible house. It is furnished free to all applicants.

REPORT of the Directors of the Central Park Menagaric for 1877.

A. WHITCOMB'S Descriptive Catalogue of new and popular bedding and greenhouse plants, Lawrence, Kansas. A neat little pocket-book of 16 pages.

WILLIAM H. DYER, Mulberry Grove, Providence, R. I. Catalogue and Price-list of trees, shrubs, flowering plants, &c. 8 pages.

SOME REASONS FOR TILLAGE, as based on the relations of water to soils and to crops, by Professor S. W. JOHNSON, published by the Case, Lockwood and Brainard Co., Hartford, Conn. This neat little pamphlet of 28 pages contains a lecture by Prof. JOHNSON delivered at the Convention of the Board of Agriculture at New London, Conn., Dec. 13, 1877. Probably no man in this country, and few elsewhere, have contributed so largely towards popularizing agricultural science and intelligent practice as the author who in this little work has condensed the instructive results of numerous experiments, extensive studies and much reflection.

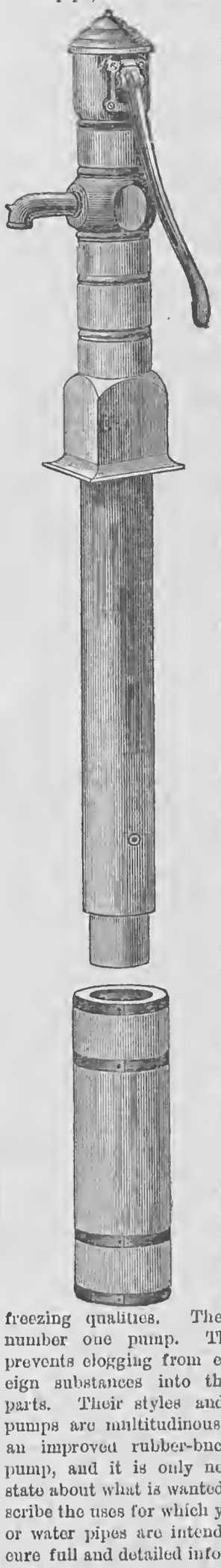
FOREIGN CATALOGUES.

CHARLES TURNER, the Royal Nurseries, Slough, England. Catalogue of Greenhouse and Bedding plants.

Industrial Implements.

THE BABCOCK PUMP.

NUMEROUS inquiries have been received of late concerning the adaptability of wooden water-pipe, and its relative cheapness; we now take occasion to say something regarding its manufacture and to present an illustration of an improved pump. We are indebted for our information to Messrs. H. H. BABCOCK & SONS, Watertown, N. Y., whose experience in the manufacture of these articles, extending over a period of thirty-three years, gives value to their suggestions.



They consider the Michigan white pine the choicest material for these purposes, and when selected and treated with care it will withstand destruction for a great length of time, ranging from ten to twenty years according to circumstances. This firm manufacture their material from the green wood, and then allow it to season from twelve to eighteen months. The work is then carefully inspected and imperfect wood rejected before the final completed product is offered for sale. This practice insures sound, flawless wood. The water pipe is of from one to four inch bore, and is used to good advantage in creameries, factories, and for farm purposes, especially for the use of stock where it is desirable to have a flow of pure, untainted water.

The pumps made by this house have gained an enduring reputation because of the excellence of their manufacture, their good suction and non-freezing qualities. The illustration is the number one pump. The patent iron cap prevents clogging from casting foreign substances into the working parts. Their styles and sizes of pumps are multitudinous including an improved rubber-bucket chain pump, and it is only necessary to state about what is wanted, or to describe the uses for which your pumps or water pipes are intended to secure full and detailed information of a practical character. We refer our readers who are interested in the subject to this house, feeling sure they will receive the most courteous attention.

THE CHAMPION PAN.

THE work of the dairy has been so improved and simplified by novel appliances that the old, tedious methods are fast becoming mere traditions. This is especially true of milk pans. The weary method of lifting pans to and from shelves, entailing great waste, and uncounted back-aches is relegated to the limbo that contains the *debris* of many other antiquated processes. By the use of stationary pans there has ensued a saving of labor, a larger yield of butter which is of better quality, and hence an increase in the

value of the product. These alone are cogent reasons for the success of the system. Small as well as large dairies are gainers by the use of the most approved implements; in fact, to keep pace with the demand for a high-class article their use becomes a matter of necessity.

It is said that "paper is made in the engine;" that is on the careful preparation of the stock and pulp depends the quality of the product; so may it be affirmed that butter is made in the pan, as on the neat, cleanly and successful treatment of the milk while the cream is rising, will the quality of the butter be decided.

The "Champion" milk-pan, made by WILLARD & HAMMOND, Randolph, N. Y., is deserving of taking high rank as a simple, effective and not costly apparatus that has stood the test of practical work, and received the official approval of judges capable of discriminating between the practicable and impracticable.

The chief features of this pan consist in the arrangement of four single pans within one large water pan divided into four compartments. The circulation of water may be controlled so as to move freely about one, or all of the pans at the convenience of the operator. These pans are firmly set in a wooden frame, and the character of the materials employed in their construction, and the construction itself leave nothing to be improved upon. The device for the management of the water is ingenious, and secures an equable temperature, while the construction of the pans permits of deep or shallow setting.

Space forbids an extended mention, but what has been said sufficiently indicates the value of the "Champion," and those who take a pride in thoroughness in the dairy can secure details by writing to the firm above mentioned for completer information.

PLAN FOR A CIDER MILL.

GEO. B. BOOMER.

CIDER making, like most other industries, is rapidly changing. Instead of the small mills scattered about the country for the convenience of farmers, we now find them built on a larger scale, located within easy reach of the great lines of transportation, and owned by energetic business men who ship the "juice," as fast as made to dealers in the large cities; or manufacture it into refined cider, jelly, and vinegar on the premises.

That this system must eventually crowd out the small mills, seems quite as reasonable as that the choose factory should gain the ascendency it has in that branch of farm business.

The plan herein submitted comprises a mill capable of making a car-load of cider in a day, that it may be sent to its destination before fermentation takes place.

In the ground plan, Fig. 3, A, is the press room, 28 by 36 feet, and 12 feet high. The boiler room on the side is 10 by 20 feet, and contains the six horse-power boiler, B. The engine E, is connected by belt with the line shaft in the second story. The power press P, including double platform, requires a space 8 by 10 feet, leaving 6 feet between it and the side of the building occupied by the railroad track, T, upon which runs a car to carry off the refuse pomace. The grater G, is placed 7 feet from the press, and about 8 feet above the floor. A shute connects it with the apple hopper which occupies a space 14 feet square on the floor directly above. M. M. is an iron track ½ by 3 feet suspended from the joists above, and extending from either side of the grater, around to, and joining over the middle of each cheese.

Two tubs, each 30 feet in diameter, and 30 feet deep, are suspended from this track. The grater is provided with a tilting shute, and the whole arranged so that while one tub is being filled, the other is run to the press, dumped, and returned to its place ready to receive the pomace when its mate is filled. The weight of the tub when filled is made to tilt the shute, thus accurately weighing the pomace for each layer.

No apples are stored in the building, but in the bins, O. O. outside. These bins are 12 feet long, 3 feet 2 inches wide, and 4 feet 2 inches high, each holding just 100 bushels, or two bushels per inch in depth. Two rows of these are placed one foot apart. The belt carrier runs between them, beneath the floor, to carry the apples into the mill, and discharge them into the hopper on the upper floor.

A wagon road extends around the outer ends of the bins. As each customer arrives, he is directed to a bin, unloads his apples, levels them, and by marks in the corners, reads the depth of apples in inches, which doubled, gives the number of bushels. If the boards forming the partitions of bins are sawed just 10 inches wide it will facilitate the measurement.

The cellar 25 by 33 feet contains six tanks of 3000 gallons capacity each, and the second floor two of the same size. A tank is also sunk four feet below the cellar bottom, from which a power pump, with fifty feet of inch hose, throws the cider to any part of the building.

The line shaft two inches in diameter making 250 revolutions per minute, is located 8 feet above the upper floor and 16 feet from the rear of the mill. It is sometimes economy to rent power in the neighborhood of a cider mill, in which case it is safe to transmit it 1000 yards with a wire rope ⅝ of an inch diameter.

In operating this mill but two men are required. They commence in the morning by laying the first cheese, which takes from 20 to 30 minutes. While that is pressing they lay the second, and have nearly an hour to spare, during which one elevates apples, while the other looks after the press, cider &c.

A cheese contains ten layers of 8 to 10 bushels each. It requires from sixty to ninety minutes to press it. The yield should be four gallons per bushel of 50 pounds. From 7 to 10 pressings are made in 10 hours, not including the dinner hour which may be partially utilized in pressing.

The cost of erecting a mill of this kind will not vary much from the following figures:

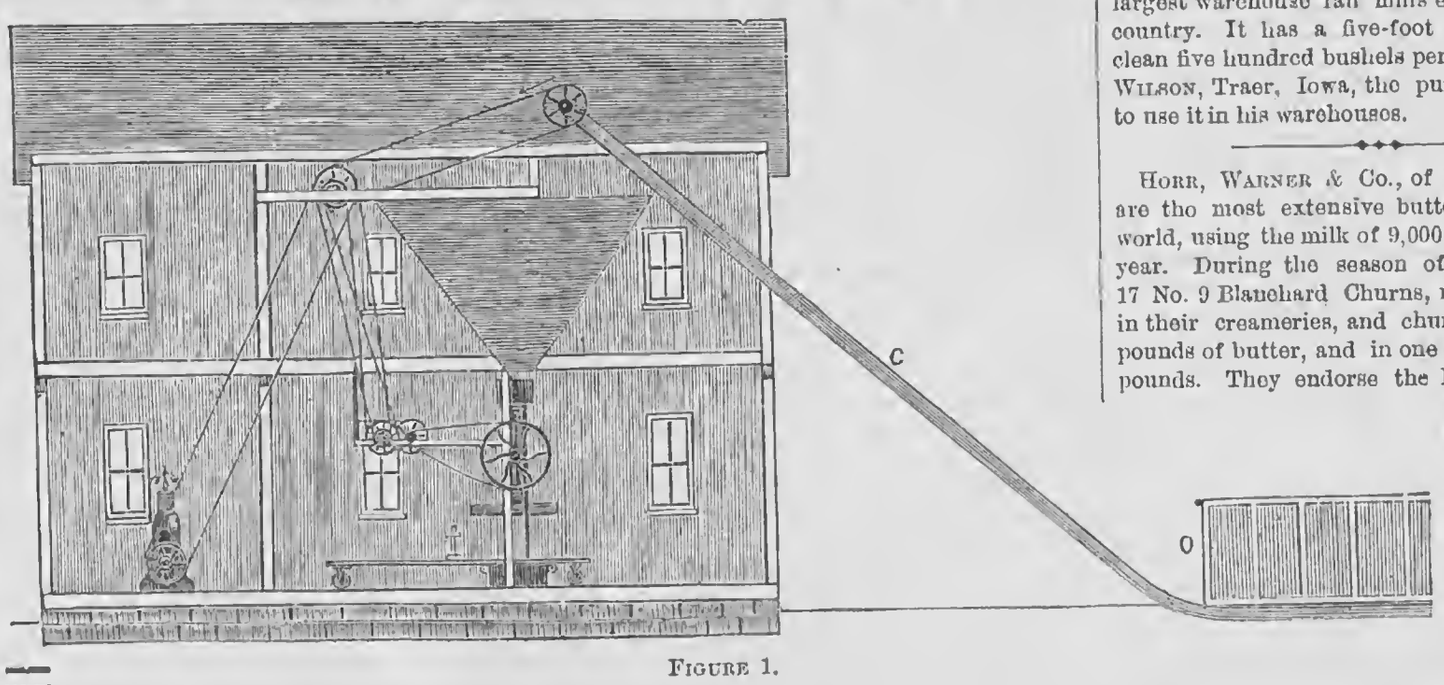


FIGURE 1.

Building, including apple bins	$500
Engine and Boiler	600
Press, with cloths, racks &c.	525
Grater	60
Elevator	100
Shafting, belts, pullies, &c.	100
Tanks	300
Pomace tubs, and elevated track	100
Pomace truck and track	25
Pump, Hose, &c.	50
Total	$2,360

To a cider-maker of the old school this may seem like a large outlay; and compared with the old nut mill, and wooden screw it is: so is the mowing machine compared with the scythe; the reaper with the cradle; or, the modern separator with the flail; but people who make money use them, and it will generally be found that those who are alive to modern improvements are the men who succeed.

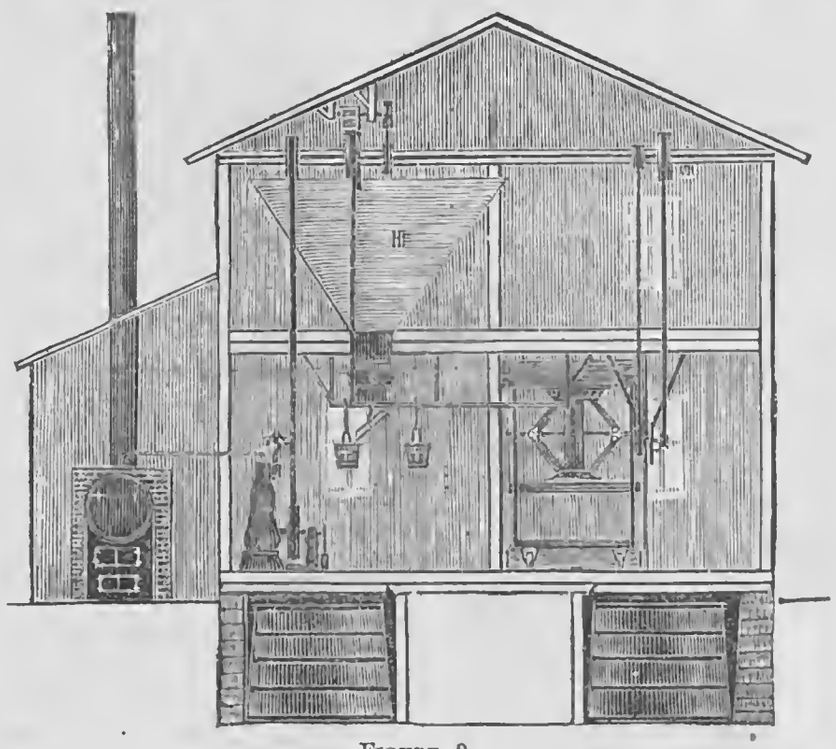


FIGURE 2.

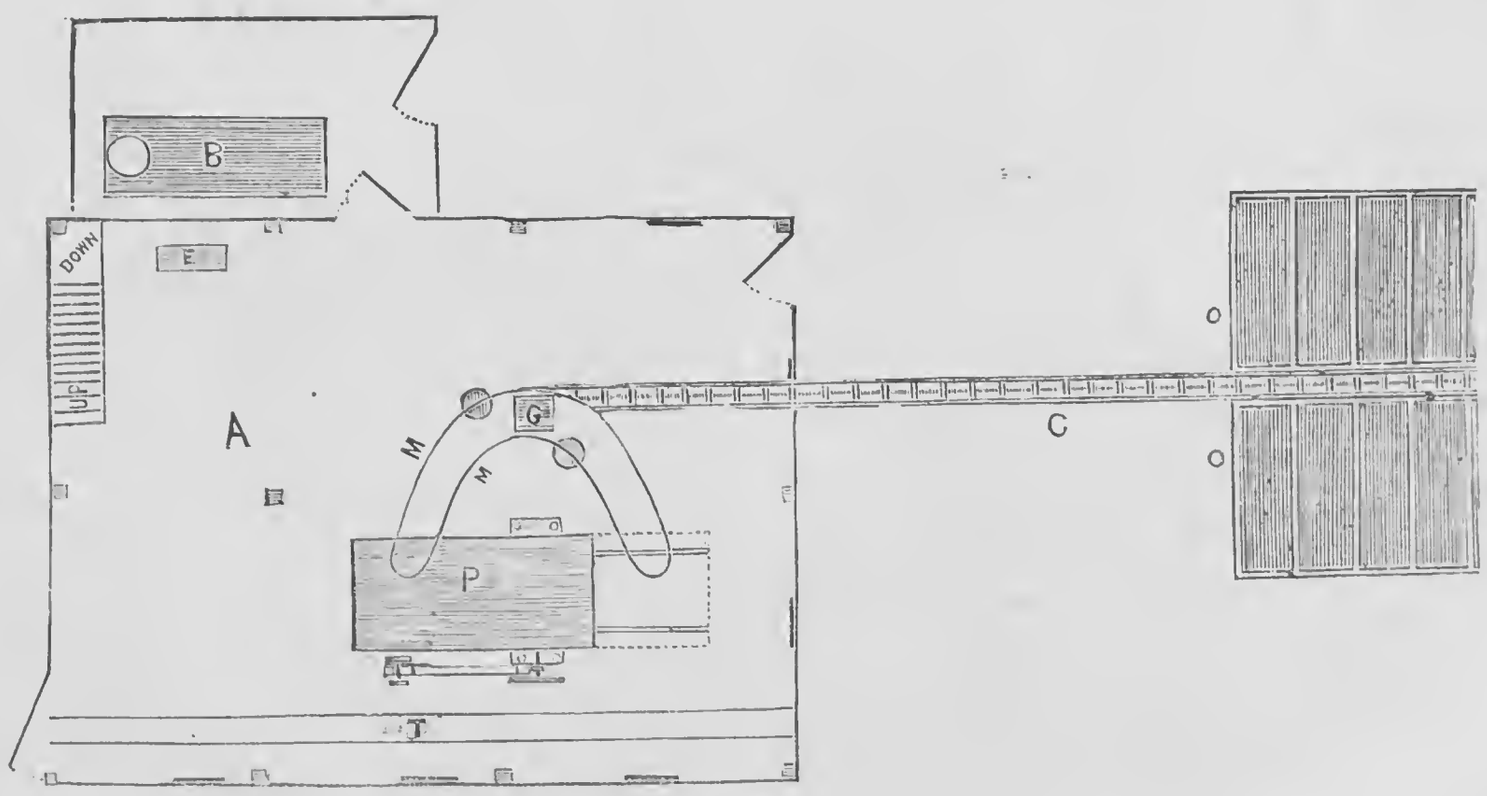


FIGURE 3.

THE United States Wind Engine and Pump Co., have sent to the Paris Exposition a twelve foot Halladay Standard Wind Mill finished off in the American colors. This Company have just shipped to Cuba a forty foot (18 horse) mill for grinding sugar cane and are now completing a sixty foot (40 horse) for the same market.

A. P. DICKEY the pioneer of fanning-mill manufacture, has just completed one of the largest warehouse fan mills ever made in this country. It has a five-foot hurdle, and can clean five hundred bushels per hour. Mr. WEST WILSON, Traer, Iowa, the purchaser, proposes to use it in his warehouses.

HORR, WARNER & Co., of Wellington, Ohio, are the most extensive butter makers in the world, using the milk of 9,000 cows the present year. During the season of 1877, they used 17 No. 9 Blanchard Churns, made in this city, in their creameries, and churned over 400,000 pounds of butter, and in one churn over 39,000 pounds. They endorse the Blanchard Factory Churn as the best they have used or seen in operation. —*Independent Statesman, Concord, N. H.*

THE Cortland wagon is deservedly popular.

WHAT THEY SAY OF IT.

FIFTH WEEK.

EDITOR RURAL:—The "Cricket ock was received all right. Are well pleased with it, and thank you for so nice a premium. J. B. B.
Miller's Station, April 6, 1878.

WE received the clock all right, and are much pleased with it. It keeps excellent time and is a handsome ornament. We thank you for it.
Waterville, N. Y., April 1, '78. A. W.

I HAVE had my "Cricket" for over a week and I am very much pleased with it. It is just what I wanted, and it keeps good time. J. R. B.
Tilsonburg, Ont., March 23, 1878.

I HEREWITH send subscription and inclosure for "Cricket Clock." My brother received his clock last Saturday and thinks it splendid, so my little girl must have a "Cricket" too. T. M.
Porter's Mills, Wis., March 28, '78.

WE have received several premiums from the RURAL and from other papers—but never before one that was worth as much as it was set forth to be worth. The "Cricket" is worth more.
Paterson, N. J. A. S. P.

THE Cricket Clock is quite different from any other I have ever seen. It combines, as you say, the clock and watch—is a pretty ornament, and best of all, keeps almost perfect time. I have never had a clock or watch to keep better.
Youngstown, Ohio. J. B. C.

"CRICKET" received. Very well pleased. As we did not need it, I talked of selling it, but my daughter said that if I talked that way she would hide it, which, by the way, would be rather hard to do, if it was kept wound, as it is very noisy for so small a fellow. MRS. C. M. R.
March 28, 1878.

WE are all delighted with the "Cricket." I wound it up when I got it home, and set it by the side of my clock, and the latter quit running right off. I reckon it got insulted at the little "Kicket" as my little Willie and Kate call it. The children are perfectly carried away with it. My wife joins me in many thanks to you for the "Cricket." W. T. T.
Salisbury, N. C., March 30.

THIS morning the "Cricket" came in all right. I have set it a-going and it goes nicely. I am very much pleased with it. It looks much better than I expected, and makes quite an ornament for my sitting-room shelf. My family are very much pleased with it.
ALEX. Mc W.
Thornton's Ferry, N. H.

THE "Cricket" came by express in due time, and I am very much pleased with it. It is a handsome little clock, and then it keeps such correct time, that it is at once a great favorite in my school-room. I also think a great deal of the RURAL, and believe it to be one of the best—of the *very* best of its kind published. L. S.
Pattenburg, N. J., April 1.

The Querist.

ANSWERS TO CORRESPONDENTS.

Water Sprouts for Grafting.

T. W. C., Jackson, Susq. Co., Pa., inquires whether cions cut from water sprouts, or sprouts that make out from the branches or trunk of a tree where it has been trimmed the year before, come into bearing as soon as cions taken from the ends of the branches.

ANS.—Yes. If well matured and sound, the water sprouts will produce branches or tops which will bear as soon as the new growth of the graft is large enough to bear, or as soon as it should be allowed to bear. The earliness of bearing of cions depends on several things: the varieties selected, the rapidity of growth, care of the tree, soil, etc., etc.

Starting Grape Cuttings.

Mrs. A. C. H., Roanoke, Ind., says:—Will the RURAL please tell me how to start grape cuttings; when and how to cut and plant them; and what care and treatment they will require.

ANS.—The best time to make the cuttings is in the fall or a little earlier than now for your climate and to plant them about the 1st of April. Prepare a bed a foot in depth of rich sandy soil. It cannot be too rich. If manure is used, it must be entirely decomposed or, in other words, it must have become soil. The cuttings may have three or four buds, and had better be close-jointed. A heel of two-year-old wood may be cut out or a small section of it left when it is called a mallot cutting. Place these inclining a little in the bed so that one or two eyes are left above ground, and pack the earth firmly about them. Until frosty nights have passed, it is well to cover lightly with hay or straw. Plant the cuttings six inches apart in rows—the rows a foot apart. Allow but one bud to push.

Blood as a Fertilizer.

C. F. Graham, Hamilton Co., Ohio, inquires what is the value of blood as a fertilizer, to what crops should it preferably be applied, and in what manner.

ANS.—The value of blood as a fertilizer depends on the nitrogen it contains. Of fresh blood about 80 per cent. is water. A gallon of it weighs not far from eight pounds and contains 1.6 pound of dry matter of which 15 per cent. is nitrogen. Four gallons therefore contain about a pound of nitrogen, which in this form is worth fully 18 cents, and that is accordingly very close to the manurial value in cash of four gallons of fresh blood. Its free application to corn, root crops etc., as well as to all garden crops will prove highly beneficial. Mix it with dry muck or mold, say at the rate of a gallon to a peck, or even more liberally. The composition of air-dry blood and flesh is almost identical, the former containing about five per cent. more water.

About Sundry Plants.

Jno. J. W., Jamestown, R. I.—I would like to avail myself of the benefit of the RURAL'S Answers to Correspondents. I subscribed for it at the commencement of the present year. Since then I have sent for a number of catalogues advertised therein, and from five of the firms they represent have ordered either seeds or plants from $1 upwards. From B. A. ELLIOT of Pittsburg, and the DINGEE & CONARD Co. I have received my orders—nice plants with liberal extras. From Mr. JOHN SAUL of Washington, I have ordered over 600 trees—grape-vines, rose bushes, shrubs and green-house plants, and it is in reference to some of these I ask for information: 1st. Are Chinese Arbor-Vitæ hardy where the thermometer is liable to fall ten degrees below zero? 2d. Are Magnolia grandiflora and tripetala hardy in the same climate and how large trees do they make? 3d. How large does the Kilmarnock Willow grow? 4th. Is the Wistaria surer to live in the shade? I have some, twenty-five feet high, that bloom well on the north side of large Norway Spruce and on the west of Austrian Pine where they get no sun until late in the afternoon, while I have failed three times with those set south of my piazza. 5th. Will Azalea amœna which is marked hardy in the catalogues, stand the above-named cold? 6th. I expect to receive my order from Mr. SAUL by the 10th of April of which there is to be quite a lot of Tea, Hybrid-perpetual Roses and Zonale Geraniums, will it do to plant any or all of them out at that time, if they are covered with boxes by night? Or would it be best to grow them in pots and boxes a few weeks? By answering these questions you will confer a favor on one and I doubt not on many subscribers.

ANS.—1st. Yes, if by Chinese Arbor-Vitæ Biota orientalis is meant. Varieties of this (Aurea c. g.) are harmed occasionally in this climate.

2d. Magnolia grandiflora is not hardy even in the Middle States. M. tripetala will stand ten degrees below zero. The first is a large, the second a low tree.

3d. We presume the weeping variety of Salix caprea is referred to. It is usually grafted on stock of the species and grows downward in the form of an umbrella. Its hight, therefore, depends upon the hight of the stock.

4th. The Wistaria suffers less in the winter if shaded.

5th. Azalea amœna is not hardy in the Rural Grounds.

6th. We should prefer to wait until danger of severe frost is passed before putting out the Pelargoniums.

Hedge Plants.

Two years ago I bought hedge plants (Honey Locust) and set them out along the road ten inches apart. They grew finely and I did not lose a single plant. Last spring, the first of April, I cut them back, leaving only about three inches of the last year's growth. Last summer they grew splendidly, some shoots growing four feet long. To-day, March 29th, I have cut them back again, leaving about ten inches of last season's growth. In two years more I expect to have a hedge that will turn any kind of stock. I would advise J. N. WILLIAMS, of Crawford Co. Pa., whose letter appeared in RURAL for March 30th, to buy or raise Honey Locust plants in preference to Osage Orange. They are hardier, will grow faster, will make a better hedge and do not have to be set so close together: ten inches is quite close enough. I would advise any one setting out any kind of hedge to sort their plants, keeping the large ones together and the small ones together. If a small plant is set between two large ones it will be so shaded that it will not do well. HEDGER & DITCHER.

Crawford Co., Pa.

Applying Gypsum and Lime.

T. L. E, York Co., Pa. wishes to learn the best way of applying gypsum and also lime, and the average quantity of the latter that should be used.

ANS.—Sow gypsum early in the morning while the dew is on the ground and there is no wind. It may be mixed with muck.

Spread lime from small heaps with a shovel or from the tail of a cart. The amount may vary from the least quantity that can be spread evenly to from 300 to 500 bushels per acre. The nature of the soil must determine this point. Heavy lands of a moist or mucky character or those dark from vegetable mold will bear much more than light soils: from 50 to 100 bushels is an ordinary application. To apply small quantities it is best to mix the lime with muck or soil, especially in garden culture. Always remember that the effects of lime on soil are the same as those it produces in the compost heap.

Unhealthy Cyclamen.

Mrs. C. McC., wishes to be told what is the matter with her Cyclamen. It is now considerably older than four years, has had its soil changed every fall, and received the same loving care bestowed on her other floral pets, yet the ingrate is always dormant or nearly so, seldom gladdens her eyes in summer with more than a single leaf or happily two once in a while; and even when placed in a sunny window, as cold approaches, its only signs of gratitude are a few long-stemmed, scraggy-looking leaves with never a blossom to give promise of a possible offspring more healthy and grateful than its progenitor.

ANS.—From now till the first of June keep it moderately dry, then turn it out of its pot, shake away most of the old soil, and plant out in a somewhat shady part of the garden, in free open soil, burying the corm ("bulb") nearly an inch. About the middle of next September lift it carefully and put it into as small a pot as you can get it into without cramping the roots, this time keeping the corm at the surface, and using a very free soil, say with a considerable admixture of sand and old leaf-soil or much decayed cow-manure. Keep shady for a day or two, expose gradually, and before the advent of frost, promote to a sunny place inside the window. Never give very much water, just keep moderately moist.

Dead Animals as Manure.

H. C. L., Herkimer Co., N. Y., wants to know a good way of using dead horses and other defunct animals for manure.

ANS.—A good way is to cover the carcasses with dry muck or rich soil, let them lie for a few months and work the mass over well when sufficiently decomposed to admit of ready fermentation, adding plenty of plaster. Use the compost liberally where needed. See answer to C. F. Graham for plants most benefited by the application.

Miscellaneous.

H. G. Touissant, Paraje, N. M., says 1. Where can I get a strong mowing machine, to cut Gama-grass, one for a two-horse machine, and I am ambitious to own the best in the market, and am surprised that none is advertised in the RURAL. 2. Where can I get Canary birds; 3. Name of some cage-maker; 4. When does my subscription run out.

ANS.—Write to the Warrior Mower Co., Little Falls, N. Y.; Aultman, Miller & Co., Canton, O.; Bradley Mfg. Co., Syracuse, N. Y.; Eureka Mower Co., Towanda, Pa., and the Johnston Harvester Co., Brockport, N. Y. These firms make excellent machines, and their circulars will give you the points of difference. It is not quite the season for advertisements of Mowers to appear. 2. Any bird fancier in New York city (of whom there are numbers), will supply Canaries. This is the chief importing point. 3. Lindemann & Co., 254 Pearl St., N. Y. 4. June 1st, No. 1476.

A Subscriber inquires whether the Sherman Telegraph Co. of Oberlin, Ohio, is a reliable institution.

ANS.—There has been a change in the management of the institution, and we know nothing about its trustworthiness.

Mrs. D. S. M., New Haven Co., Ct.—We acknowledge all communications, whether published or not.

T. C. D. Detreville, Va.—Where can I get a small metal check to be used in the canning business: to pay by the piece—something that cannot be imitated, but very cheap?

ANS.—We should think that the best thing for your purpose would be a piece of tin of irregular shape, stamped with a peculiar device. You could cut the tin to suit your fancy, or have a stamp made to do the work with precision. A die-sinker will supply the device. We advise you to write to the following addresses, stating your want: H. Wasdell, 193 William St., F. B. Smith & Horst, 95 Fulton St. and Kinsey & Co., 143 Fulton St., New York.

D. M., Pittsfield, Ill.—Having seen an extract from the RURAL relating to the evergreen White Thorn—Cratægus Pyracantha—wishes to learn where he can get some.

ANS.—Ellwanger & Barry, Rochester, N. Y.; S. B. Parsons, Flushing, Long Island.

E. C. Stebbins, Hempstead, L. I.—"New Rochelle" Raspberry is, we believe, a seedling of Catawissa. Mr. CARPENTER advertises it in our columns. There are several excellent reports of it from good men. It has not fruited with us.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, APRIL, 6TH.

M. W. F.—D. H. F.—E. E.—J. W. G., Jr.—Mrs. J. E. McC.—W. F.—S. E. H.—W. J. B.—A. L. J.—C. E. P.—M. B. H.—J. W. L.—E. W. S.—H. & D.—L. F. G.—Alex. McC. W.—W. M. F.—S. B. P., N. Y.—L. L. P., thanks—W. H. O.—"Myrtle"—S. B. P., Michigan—C. W. M.—D. H. E.—G. M., thanks—W. J. B.—O. H.—B. A. G.—D. C.—Mrs. M. P.—Mrs. B. C. D.—M. B. P.—A. W. M., thanks—"Rose Geranium"—D. H. E., box not received—C. H.—J. E. E.—M. G. R.—G. P.—L. A. R.

Everywhere.

NOTES FROM NORTH CAROLINA.

ALTHOUGH there has been some very severe weather in the western part of our State, the winter has been very mild in the central portion. Here we have had but few really wintry days. But it has not been so warm as the winter of 1875 and '76. Then I remember to have fed green rye on one of the last days of January. This year, I began to cut and feed to my cows on the 9th of March.

About the 11th instant the peach trees began regularly to bloom, and in a day or two they were arrayed in full colors. I do not remember ever to have witnessed so sudden an appearance of blooms. They sprang forth as by magic. The Plums, Cherries and Apricots are also adventurous enough to be equally exposed. We fear that the frosts or the northeast winds will blight them. For several days we have experienced a cool change, but the weather has moderated considerably, and we are in good hope. I can recall one year when the fruit was not injured, although the Peaches were in bloom in February. The Apples are backward, not a tree yet showing a single open flower. They are just beginning, generally, to show their first buds.

Noticing some of the trees that are indigenous to Asia, I have the opinion that they are rather peculiar in that they show their buds and blooms more in advance of the leaves than many, at least, native to other lands. It is true of the Peach, partially so of the Pyrus Japonica, also of the China Tree, if I remember correctly. Does it apply to other varieties which you have observed?

Spring seems to have opened now. In addition to the fruit trees, the Red-bud decks the forest, Hepatica has been blooming for some time, the wild Violets are beginning to open, the yellow Jonquil has bloomed and is fading, a species of Syringa in my yard is covered with white flowers, and a modest Lily is spreading itself to the sun. The clover and grass are rapidly growing. A piece of rye on my lot confirms me in the view that every farmer ought, in autumn, to seed at least a small quantity for early feed. Mine was tall enough to cut well on the 9th of March. Now it is beginning to head. The cattle are very fond of it, and it is certainly a contributor to the milk-pail. It is really a pleasant sight to see the cows feasting so early upon the succulent stems and blades, after being so long restricted to cured provender. They appear to be quite as fond of it as of clover. I do not know whether your colder winters would suit it; but I *do* know, from repeated experiments, that it is a most desirable help here. It can be cut several times. It comes just in time to introduce the green feeding and bridge the way to the clover. I think that any one who tries it once will be encouraged to repeat the experiment. I do not allow even a calf to graze upon it, at any time. When I need the ground for other crops, I have, in the stubble and the roots, a good deal of fertilizing material, that tends to make the soil lighter or looser. Last year, after cutting off the rye, getting more than one stand, I also raised corn and then peas on the same ground. I know that tends to rapidly impoverish the soil, but I also know that the soil should be regarded as a machine to take, as often as possible, the raw material in manures and convert it into that which is suited to our wants. Debts cannot be too heavy or expenditures hurtful, if plenty of money is furnished. So the exaction upon the soil cannot be too heavy, if plenty of manure is added by way of compensation.

There is quite an increase, I think, in the demand for clover and grass seed. A druggist in our place who, two years ago, sold but two bushels of clover seed and but little orchard grass, has already disposed of several times the quantity of the former,—and after selling twelve bushels of the grass seed, has ordered more. The grasses in demand here are timothy, herd's-grass and orchard grass. The last is the favorite for mixing with clover. It holds it up in the field and renders it more easy to cure safely. There is also, I think, an increased demand upon the nurserymen for fruit trees. I have indulged, with much pleasure, in amateur grafting, of which I may report before long.

Our State Chemist having made an unfavorable report upon the Poplein fertilizer, the firm have furnished him a quantity of their brand for careful experiments by the side of popular compounds. Several intelligent and trustworthy farmers have taken a lot for this purpose; and I hope to give you the results. Perhaps some of your readers may not have thought of the convenience and value of a compost heap, as near the house as health and cleanliness will allow. By heaping the leaves from my shade trees on a poor spot, I formed the beginning of such a heap, and during nearly the whole year I threw upon it all the litter and waste that came to hand. During the winter I found that what I had not already applied made a fine top-dressing for the adjacent clover and grass. I have started it again. It helps to keep my premises clean. M.

Chapel Hill, N. C., March 19, 1878.

RURAL SPECIAL REPORTS.

CORNING, N. Y. March 23.

LIKE J. W. S. of North Carolina, I am much interested in "Everywhere," and think that a few notes from this locality will not be out of place. We are having a very fine time to forward spring's work. Roads are getting dried off, some fields are being plowed and some farmers have sowed timothy and clover seed; and all, or nearly all, are preparing for active service. Of course we have some farmers, just as all other places have, who "take no thought of the morrow," and, consequently are always behind time. We can boast of a very fine locality for farming. Our river flats, on the Chemung, are very fertile, and produce large crops of wheat, corn, tobacco, etc. Less attention is given to the vile weed and more to wheat raising than a few years ago; and if tobacco were abandoned and wheat and corn should take its place entirely, a far more useful production would be the result. As to the land on the hills three or four miles back from the river, it is also very productive; and with the same amount of capital invested per acre, as on the river, I do not doubt but as good returns can be received; and, to my idea, the hill farm is to be preferred for a home, for I think it pleasanter; we also have there a better atmosphere and escape the fogs of the flats. On the hills can be had some fine views of the flats—their villages, farms, railroads, river, etc.

Apples, pears, cherries, grapes, and the smaller fruits, do well here. There are some large and very fine apple orchards around here, but as to the other fruits, they are not grown very extensively for market, although I see no reason why they should not be. Last year some of the pear trees were affected by blight. Those who did not dispose of their surplus

apples last fall, sold them this winter at one dollar per bushel, which is a paying figure and at that price I believe orcharding to pay as well as any other crop we can raise. Some farmers believe to the contrary, however, and take but little care of the orchard.

As to our facilities for shipping produce, they are first-c ass; for since the completion of the Syracuse, Geneva and Corning R. R., we can ship in any direction. This is now one of the best places for manufacturers to locate in, in this part of the State, considering our railroad connections with all points nor h, south, east or west; and we hope soon to see new business enterprises spring up in our vil.age. At present we have some very important manufacturing establishments, among which may be mentioned two engine and boiler works and foundries, railroad shops, glass-factory, monumental works etc.

For a year or more, business has been steadily improving until now it gives employment to many of those who have been standing around the streets with their hands in their pockets for three or four years, waiting for something to turn up. Of course we farmers hail these signs of better times with pleasure, for the more other business there is done, the more success to the farmer, for he can dispose of his surplus products more readily. Hence, we are inclined to look on the bright side, as regards the future, expecting some "greenbacks" for our labors.

F. H. D.

HARRIS CO., TEX., March 31, 1878.

ALL through the month of March we had uniformly calm and clear weather, with a day temperature of from 70° to 84°. Everything is growing and doing finely. Irish potatoes are blooming. I fairly believe we are for once rid of the Colorado beetle. Last year though they were in legions, still the damage they did was reduced to a minimum, for while the winged insects deposited their eggs freely, there were hardly any larvæ to be seen. It could not have escaped the attention of an observer that at the same time multitudes of small, yellowish-green beetles spotted with black, would swarm about the potato plants diligently and busily searching them, leaf after leaf, from top to base. No sooner did the eggs of the Ten-liners hatch than the young larvæ fell a prey to these little cannibals. And very effectually must they have done their work, since, up to the present not a single specimen of the potato-beetle can be detected, while at other seasons they used to commence to make their appearance as early as the first part of February.

Roses form now-a-days the chief attraction of flower gardens. All the so-called tender varieties, are perfectly hardy here. Nobody that has never seen them growing in a climate congenial to them, has any conception of the gorgeous display in colors, forms, and quantities of flowers they are capable of exhibiting. A well trellised Marechal Niel, Solfaterre, Chromatella, or in fact any other Noisette Rose, covered with hundreds, nay, thousands of white, red, or golden balls, is a pleasurable sight. G. MARTI.

ELDORADO, March 23.

IT is raining again to-day. We have had seven or eight days of fine weather, and you may be certain the most was made of it, trimming grape-vines, pruning trees, grafting good varieties on poor, and such work has kept all busy. Peach, pear and apple trees are in full bloom, and a rich harvest is promised. Strawberries are white with bloom. In the flower garden everything is thriving. Among my Daisies I notice a very deep crimson, the flowers are very full, the petals are very full and quilled, not a flat petal being in the bloom; it is the deepest red I have ever seen among Daisies. It is a seedling. My Bleeding Hearts stand two feet high and are loaded with flowers. I somewhere heard or read of a white variety, but do not know where now. Lilium candidums are finer than I ever had them before; they stand now fully two feet high. WM. C. L. D.

RAISIN CENTRE, Mich., March 30.

RAISIN CENRE is a small place, about five miles northeast of the city of Adrian. The country about here is level; the soil, a sandy loam. Corn is the main crop, although wheat, rye, etc., are raised in abundance. Fruit of every description grows here. Pork has been so low this year that some are nearly discouraged, while others have from 50 to 100 pigs growing for the early markets of next fall. We have had a very mild winter, the greatest depth of snow did not exceed six inches. Grass and winter wheat never looked better this time of year. Our garden was plowed the 7th of March, planted the 9th. Thermometer has stood as high as 82° a few days. Peach trees are in blossom, leaves are peeping forth, and everything betokens an early spring. W. M. F.

BROOKS, Maine, April 2.

THE past week has been one of a dreary, disagreeable overcast kind. The wind has been strong and cold and the traveling is very bad; the bottom has fallen out of the roads and been filled up with holes. Wild geese fly northward—a sign of early spring. The maple sugar season has been of only moderate returns. The best runs of sap were early in March. Stock doing well, especially cows, sheep, and hens. Eggs ten cents per dozen and hens have struck for a fairer lay. Veal calves from two to five dollars, more at former than at latter price. The mild winter makes hay plentiful, even though there was a short crop last year. This is an argument in favor of warm stabling. Potatoes fifteen to thirty cents per bushel. No demand for them.

T. W. L.

VOLINIA, Cass Co., Mich. March 23.

WE have in this place an excellent Farmers' Club and at a well-attended meeting held on Wednesday the 20th inst., the following resolution was passed unanimously:

Resolved, By the Volinia Farmers' Club that this society tender its thanks to Prof. Beal of the Agricultural College, for testing and reporting on vegetable and other seeds sent out by the various seedsmen; also to the agricultural journals that have had the independence to publish the same, and especially to the RURAL NEW-YORKER.

The Secretary was instructed to furnish a copy to each of the county press, and to send a copy to Prof. Beal. A RURAL ADMIRER.

ROYALTON, N. Y. March 30.

ALTHOUGH I have been engaged in selling stock for fifteen or twenty years, yet during that time I have never known milch cows to be in better demand than during this spring; ordinary good cows sell in this section for from forty to fifty dollars, and extra good ones higher. Good work horses are coming up every day; hogs and sheep sell well, so do almost all kinds of farming utensils. Wheat and grass look very promising. RURAL'S AGENT.

GREENWICH, N. Y., March 31.

THE potato beetles when plowed up lie in the sun a little while and are soon warmed into life. We are expecting a greater quantity than ever.

M.

HARVARD, Clay Co., Neb., March 24.

I CAME to this place from Wisconsin, and bought a farm. It is a very rich country and immigration is setting fast to this part of it.

E. A. K.

MEADVILLE, Pa., April 3d.

IT is warmer to-day and we have escaped the frost, so that fruit is still promising well here.

WM. H. K.

Entomological.

PUBLICATIONS RECEIVED.

ANNUAL REPORT OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO FOR 1877.—This is another of the valuable annual reports which we owe to the enlightened liberality of the Legislature of Canada. How easily the Legislatures of our own States might secure the publication of similar contributions from resident entomologists! The Entomological Society of Ontario publishes a 20-page monthly magazine, called the Canadian Entomologist. The second number of the tenth volume (February, 1878,) now lies before us. The nine completed volumes contain a very large amount of valuable information, embodying some of the results of the labors of the best entomologists in North America. Although no line can be drawn between so-called "scientific" and "practical" writings—indeed the most scientific writings are the most practical—yet these volumes contain much which is eminently practical in every sense of the word. The Provincial Legisature grants $750 a year to the Society, which makes possible the continued publication of the magazine and secures the preparation, every year, of such a report as that here noticed. The magazine is distributed to subscribers, a copy of the Annual Report being thrown in; thus non-residents may obtain a copy of this Government report, on demand, and without having to beg it as a favor,—an advantage which attends the printing (we cannot say publication) of few other Government reports with which we are acquainted. The subscription price of the Entomologist (to be paid to J. WILLIAMS, Esq., London, Ontario) is one dollar in gold for Canadian subscribers, but, in spite of the circumstance of equal cost to the publishers, United States subscribers have to pay one dollar and twenty-five cents, currency. The articles of special value in the present report treat of the food and reproduction of the "Colorado" Potato-beetle, a moth destructive to pine-trees, and some beetles boring in pine, maple, locust and apple trees and raspberry bushes. The pamphlet contains iv + 59 p. (25×15 cm.), one pl. and 50 fig. It is marred by numerous typographical errors, and most of the figures have been published many times before.

We give this extended notice not as a favor to the publishers, who make no private gain from the magazine, but for the benefit of those of our readers who are not to be classed with the man portrayed on page 180 of the present volume of the RURAL NEW-YORKER.

New Advertisements.

USE THE BUFFALO
HONEST FERTILIZER
Ammoniated Bone Super Phosphate,
AND
Pure Ground Bone.

The purity of these goods is guaranteed, and their standard proved by regular analyses of Prof. G. A. Liebig, and other eminent chemists.
No Rock Phosphate, Mineral Guano, Land Plaster, Salt Cake, Spent or Sludge Acid, and other inferior materials, enter into the manufacture of my Phosphate, which is solely made of **Bone, Meat, Blood, Pure Acid and Potash Salts.**
My Works are always open for inspection to every consumer of Fertilizers.
Highest Premium and Medal of Honor awarded to my Fertilizers by the Centennial Commission, Philadelphia, 1876.
Send for new Spring Circular, containing full directions and testimonials. L. L. CROCKER.
252 Washington Street, Buffalo, N. Y.

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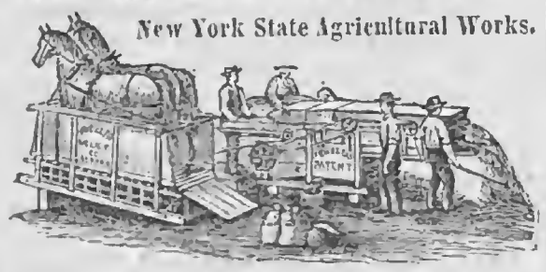
New York State Agricultural Works.



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Railway, Chain and Lever Horse Powers, Threshers and Cleaners, Threshers and Shakers, Clover Hullers, Feed Cutters, Wheel Horse Rakes, Horse Pitchforks, Shingle Machines, Straw Preserving Rye Threshers, Portable Steam-Engines, Cider and Wine Mills and Presses, Dog and Pony Powers, Etc., Etc.
WHEELER & MELICK CO.,
ALBANY, N. Y.
Send stamp for Circular and report of Centennial trial.

A FARMER,
A Farmer's Son or Daughter,
taking orders for five of NELLIS' HARPOON HORSE HAY FORKS and FIXTURES will (in addition to the profits,) receive FREE a complete rig of Nellis' Fork and Patent Conveyor, for depositing Hay or Straw in mow or on stack. Also man'frs Nut Shell Hay Carrier, Pulleys and Grapples; Agt'l Steels. Nellis' Cast Tool Steel Castings (Plow-Shares from this steel can be welded, worked into chisels or edged tools); Ornamental Fencings for public grounds, cemeteries or farms. Pamphlets Free.
A. J. NELLIS & CO., Pittsburgh, Pa.

Matthews' Garden Seed Drill,
-Matthews' Hand Cultivator,
Matthews' Drill & Cultivator combined, surpass all others. Send for Circular before you buy.
Manufactured only by
EVERETT & SMALL,
Boston, Mass.

CHOICE BUTTER.
Over 1,000 Dairies and Creameries have introduced the Cooley System. Read what people say about it who have used it:
(From Massachusetts Agricultural College Farm.]
AMHERST, Mass., Feb. 9, 1878.
VERMONT FARM MACHINE CO.:—We are so well pleased with the Cooley Creamer that I feel bound to say a word in its favor. It takes us only twenty minutes to churn, and the extra yield of butter is wonderful. I have cheerfully recommended it to to the Japanese Government above all other systems. A. A. SOUTHWICK, Farm Supt.
OGDEN FARM, NEWPORT, R. I., Feb. 7, 1878.
GENTS:—I have thoroughly tested the cans and chest (Cooley's) that we had of you last fall, and am now using that system in preference to that employed by Col. Waring in former years. I feel that I can fully recommend it. MELVILLE BULL.
Send 3c. stamp for Circular to
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Pat. Oct. 31, '76 & Apr. 3, '77

The Boss Sickle Grinder.
[TRADE-MARK PATENTED.]
Every Farmer should Have One.
Simplest, most durable and perfect Sickle Grinder in the World. A boy can run it. Can be changed from an Oscilating to a stationary Stone in a moment. Is the best Grindstone in use for all purposes. For Sale by all dealers. Good Agents and canvassers wanted. POWELL, STEVENS & DOUGLAS, Waukegan, Illinois.

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AND
TILE MACHINE.
20 YEARS standing as a TILE MACHINE, and without a rival as a BRICK MACHINE.
For Circulars address
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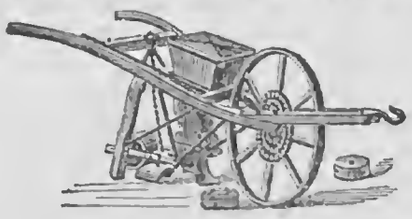
THE ALBANY CORN PLANTER



The only low-priced Planter with which the Farmer can sow his Corn perfectly both ways. Will plant Corn, Beans, Turnip and small seeds with precision. It will
SAVE ITS COST THE FIRST SEASON.
This PLANTER, at ONE PROCESS, OPENS its furrow, GAUGES, DROPS, COVERS the Seeds and ROLLS them down. ALSO MEASURES and MARKS OFF the DISTANCE for the next ROW or HILLS to be planted.
It is changeable from a *Planter* to a
HORSE HOE
in two minutes' time, and is altogether the most complete Implement for the purposes designed in use. Price greatly reduced for 1878.
Send for Circular, &c., to O. H. P. CORNELL,
Proprietor Albany Ag'l Works, Albany, N. Y.

Miscellaneous.

SEND TEN CENTS for SAMPLES of
IMPORTED SCRAP PICTURES
For Ornamenting Scrap Books, Pottery, Japanese Jars, &c.
Satisfaction guaranteed as to price and quality of goods. OSCAR. W. YOUNG, 60 Fourth St., Brooklyn, E. D., New York.

ESTABLISHED 1837.

The "Phœnix Brand"
PURE WHITE LEAD
IS MANUFACTURED BY
THE OLD DUTCH PROCESS,
the only true method to make the best lead; and, as we make perfectly pure lead only, consumers can always rely on its quality.
ECKSTEIN, HILLS & CO., Cincinnati, O.
SOLD BY DEALERS GENERALLY.

ATTENTION SHEEP-GROWERS AND FARMERS!
THE LEICESTERSHIRE
TICK & VERMIN DESTROYER
Effectually destroys ticks, lice, worms or grubs to which sheep, horses and cattle are subject. It enables the animal to *thrive*, and in sheep *increases the growth and luster of the wool*. It is put up in tin boxes, price 30c. and 60c each. One box is sufficient for 20 sheep. Sold by all druggists and grocers. Manufactured by C. M. BRIGGS & BRO., 181 Main St., Buffalo, N. Y. S. W. SHELDON & DUNSCOMB, Wholesale Agents, No. 55 Reade St., New York.

The Science of Life;
OR, SELF-PRESERVATION.
Two hundredth edition, revised and enlarged, just published. It is a standard medical work, the best in the English language, written by a physician of great experience, to whom was awarded a gold and jeweled medal by the National Medical Association. It contains beautiful and very expensive steel plate engravings, and more than 50 valuable prescriptions for all forms of prevailing diseases, the result of many years of extensive and successful practice. 300 pages, bound in French cloth; price only $1, sent by mail. The London Lancet says:—"No person should be without this valuable book. The author is a noble benefactor." An illustrated sample sent to all on receipt of 6 cents for postage. Address DR. W. H. PARKER, 4 Bulfinch St., Boston. The author may be consulted on all diseases requiring skill and experience.

SUFFERERS from NERVOUS DEBILITY etc., can learn of a certain and speedy remedy, *free*. Address DR. JAQUES & CO., 130 W. 6th St., Cincinnati, Ohio.

TAKE WARNING. A Barometer by mail for 5c or 2 green stamps. Tells storms and changes beforehand; reliable. E. S. HEATH, Clintonville, Pa.

25 NEW YEAR CARDS, with name, 20c. 25 Extra mixed, 10c. G. I. Reed & Co., Nassau, N.Y.

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"The Best Thing in the West"
— IS THE —
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LANDS IN KANSAS.
12 years' credit, with 7 per cent. interest.
33⅓ PER CENT. DISCOUNT FOR CASH.
Fare over A., T. & S. F. R. R. refunded to purchasers of Land.
Circulars, giving full information, sent FREE.
Address A. S. JOHNSON,
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FARMS in the best part of MARYLAND at *great bargains*. For catalogue and prices address Mancha & Gibson, Centreville, Md.

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KIRBY HOMESTEAD, Charlton, N. Y.
STOCK FOR SALE.
Ayrshire and Jersey Bulls, from $40 to $75 each. A superior Jersey family cow, $200. Victoria Pigs, best white breed, medium in size; Duroc, best large breed, mostly red in color. Spring Pigs shipped by express for $10 each.

Agents Wanted.

$350 A MONTH.—Agents wanted. 36 best selling articles in the world. One sample free. Address JAY BRONSON, Detroit, Mich.

SALESMEN WANTED **$125** A Month and Expenses willing to DEALERS SAMPLES FREE. Send 3c STAMP to insure answer. S. FOSTER & CO., Cincinnati, O. **CIGARS**

$2500 A YEAR. Agents wanted. Business legitimate. Particulars free. Address J. WORTH & CO., St. Louis, Mo.

$1200 Salary. Salesmen wanted to sell our Staple Goods to dealers. No peddling. Expenses paid. Permanent employment. Address S. A. GRANT & CO., 2, 4, 6 & 8 Home St., Cincinnati, O.

$3 GOLD PLATED WATCHES. Cheapest in the known world. *Sample Watch Free to Agents.* Address, A. COULTER & Co., Chicago.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Flying Mammals ... 229
Grape, Grafting for Hybridizing ... 229
Young Pocahuntas ... 230
Brahmas, Origin of ... 230
Dairy Production the year round ... 230
General purpose Barn ... 231
Model Piggery ... 231
Rare Flower Seeds ... 231
The Flower Garden ... 231
Exchange ... 232
Fenzlia Dianthiflora ... 232
Materials for Mulching ... 232
Texas as an Invalid Resort ... 232
Immigration ... 232
Raw Beet Sugar ... 232
Catalogues Received ... 232
Foreign Catalogues ... 232
Babcock Pump ... 232
Champion Pan ... 232
Cider Mill, plan for ... 233
U. S. Wind Engine and Pump Co. ... 233
Answers to Correspondents ... 234
Notes from North Carolina ... 234
Rural Special Reports ... 234
Annual Report of Ontario Entomological Society ... 235

EDITORIAL PAGE:

Bells ... 236
Stewart's Hotel for Women ... 236
Brevities ... 236
Notes ... 236

LITERARY

Poetry ... 237, 238, 229, 240
Cora ... 237
Seasonable Hints ... 238
How we can "Circumwent" the old man ... 238
Clock of Clocks ... 238
The Husbands' Ceramics ... 238
Character ... 238
Recent Literature ... 238
For Women ... 239
Husbands and Wives ... 239
Jennie's Economies ... 239
Mother's Influence ... 239
Reading for the Young ... 240
Letters from Boys and Girls ... 240
Puzzler ... 240
Sabbath Reading ... 240
Talent and Tact ... 240
Losing a Day ... 240
Work and Wisdom ... 240
The Beacon Light ... 240
Advertisements ... 235, 241, 243, 244
Wit and Humor ... 240
Personals ... 243
News ... 240
Markets ... 241

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, APRIL, 13, 1878.

BELLS.

JOYOUSLY ring the birth-day bells, greeting the welcome advent of a diminutive stranger in the neighborhood; merily peel the bridal bells, giving gladsome tongue to present bliss, and confident promise of future happiness and progeny; dolefully tolls the passing bell, sadly telling the flitting of another soul to judgment and eternity; loudly clamor the church-going bells, importuning the faithful to prayer or prompting the unregenerate to display; gleefully jingle the sleigh bells, enlivening the silence of winter's scenery; loudly clangs the cow-bell, telling where mild-eyed Brownie nibbles the grass; hastily jangles the front-door bell, calling Biddy from the kitchen and Arabella to the window; gaily laugh society belles, charming the hearts of their favorite worshipers; while bells of victory and even the terror-spreading tocsin come also trippingly on the tongue, sung of, most of them, for generations by poets, and rhymed of, all of them, for years by poetasters; but the Moffett bell—the bell of the future—is as yet alike unknown to the bards of Castalia and to those of Grubb Street.

In Virginia, although in use barely a twelvemonth, it has already won a goodly multitude of greenback if not golden, opinions, as the treasury can testify; in Washington it will, probably ere long, check the chronic guzzling even of thirsty politicians; while in our own State and still more in this city its introduction would do much to refill the coffers plundered by TWEED and his associates, and this out of the pockets of his staunchest supporters—the topers of the community. Accurate statistics compiled by prohibitionists, and moderate estimates therefrom, show that 140,000,000 glasses of alcoholic liquor and 1,120,000,000 glasses of ale and beer are drunk in this city every year, costing at least $70,000,000. Under the Moffett law, levying two cents upon every glass of "hard" liquor, that class of drinks would yield $2,800,000, and a tariff of half a cent on every glass of ale and beer would give $5,600,000, making an aggregate of $8,400,000 revenue per year, aside from specific license fees. This income would be about sufficient to pay the interest on the dept of the city, and would relieve the tax-payers of about one-third of their burthen. Nor could it always escape the mind even of the most besotted toper, as he fumbled for the price of his liquid destruction, that

> Of manhood and thrift, with the Moffett bell,
> The Imp of the Bottle was ringing the knell.

STEWART'S HOTEL FOR WOMEN.

THIS building, begun some time before the death of Mr. A. T. STEWART, has at last been completed and was opened for guests on the 3d inst. It has been so often and fully described, we will not repeat it here.

That the enterprise is a commendable one and will do much good we doubt not, but it is questionable if the original design of the founder will be satisfied. It was generally supposed his idea was to benefit working girls, such as could earn not more than five or six dollars a week, and who could find no respectable places in which they could obtain board for such price as they could pay.

The price in the Womans' Hotel is fixed at from six to ten dollars a week. There seems to be no good reason why it should be so high unless there is much expense incurred in furnishing the tables with a greater variety of dishes than is necessary, which we suspect. We understand the building furnished in all its details, is really a gift to the women of New York and held in trust for them and as there is no rent to pay there seems no good reason why the prices of board should not be made lower. In comparison we would note the Business Women's Home in Brooklyn. This institution was organized a few years ago by some ladies noted for their connection with all good work, and has been in successful operation from the first. With a little money and a large mortgage they obtained possession of a suitable house that accommodates about fifty, and the price for board has at no time exceeded five dollars for the best rooms, with lower rates for those on the upper floors—there being no elevators. At these prices the Home is self-supporting, and we have never heard complaint of the quantity or quality of food, nor of the proper attention to rooms. That the management both financial and otherwise is excellent the result proves, and the managers certainly deserve to be known as business women.

The Women's Hotel is a palace fitted up with all conveniences. The value of the premises is enormous, and the taxes alone form a considerable item of expense. It is not to be supposed for a moment that Mrs. STEWART will allow it to be a place where managers or superintendents will be permitted to enrich themselves at the expense of working women, and it may be presumed that when the receipts will warrant the prices will be reduced.

We cannot speak too highly of such homes properly managed. Any single woman who has had experience in seeking a boarding place in New York and remembers the manner, unkind if not insulting, in which in most cases she has been repulsed with the reply "We don't take single women" will rejoice that there is to be in the future places where spinsters will not be looked upon as objectionable as inmates and we heartily commend the establishment of such institutions in all cities and large towns to those who, having money, desire to use it where it will do most good. At the same time we would suggest that the two above referred to be examined and compared as we think it will be found that more good can be done with the same money in less elegant, costly and ostentatious buildings, than STEWART'S Hotel for Women.

The Best Time to Transplant.—The sooner that shrubs and trees are transplanted now the better. Indeed, the past has been one of those winters when transplanting might have been safely conducted at almost any time. Many advise waiting yet awhile before evergreens are removed, but we repeat that early removals have with us been attended with the best success. It is only needful to *protect* the *roots* from drying winds. We also advise the cutting back or at least the disbudding of evergreens the same as decidious, ornamental and fruit trees are cut back when transplanted. We have by slow degress arrived at the conclusion that evergreens are more benefited by this procedure than the others. If the leading upper buds are removed more vigor is thrown into the lower ones and that bushiness of the base is insured in after years without which, the evergreen is shorn of half its beauty.

What Fertilizer is Needed?—If a farmer does not know what special fertilizer his land is deficient in and can not experiment, stable manure is the safest and probably the cheapest for him. This furnishes all the ingredients of plant food, though probably not in the quantities needed by his crops. This can only be ascertained by experiment. In very small plots, potash, nitrogen and phosphoric acid may be used separately, and the crop so treated which yields most, answers the question what fertilizing ingredient the land most needs for that particular crop. An experiment with potatoes may be made at a small expense and may lead to valuable knowledge. Plant one section and use only old stable manure—upon an other sow a small quantity of muriate of potash. Fifteen or twenty pounds of this may be purchased for fifty cents, which would suffice for a tenth of an acre. Compare the results of the two crops. As we have already advised our farmer readers to do, we have laid out parts of our farm in plots thirty-three feet square and upon each we propose to try the effect of different fertilizers upon the same and different plants.

The Rural.—We are often told now-a-days by good, conscientious people that the RURAL is now the best journal of its class. The RURAL has in days gone by claimed this for itself when it would have been as well to have kept silent or claimed less. Whatever editors may say of the journal they edit, people will after awhile judge for themselves, and as that is just what we want them to do now, we refrain from any expression of opinion other than that the RURAL is experiencing a success greater than it has known during the past six years. We shall earnestly strive to merit this success and to force its recognition upon all the good people of our country.

NOTES.

Improving Corn.—For your seed, do not forget to plant a patch by itself on excellent well-tilled soil. Plant rather thinner than common to give each plant a good chance. Before the tassels are ready to shed any pollen, cut out all the feeble stalks—those which do not promise to ear well. By so doing you will select good male as well as female parents to all your kernels of corn. This is one step in advance of the common practice of farmers—and is practised and recommended by our correspondent, Professor BEAL.

Pear Blight.—There have been so many experiments made on this subject, is it not about time that some expert collected them all in the form of a recipe book? If these had a good index, they would make an interesting volume and no doubt save much time and money in repeating experiments and in writing them up for the agricultural press or the waste-basket. Many persons have tried various means which they acknowledge have failed, while there are still many others who have found a certain (?) remedy.

Chickens a Remedy for Insects.—For pickles, do not be in too much of a hurry to plant cucumber seeds very early. When the weather gets warm and settled the young plants grow faster. Arrange the matter so as to have several coops of chickens scattered around among the plants. If you have no chickens, borrow some, for there is no better remedy to keep away the insects than plenty of young chickens a few weeks old. No one who has ever tried it will be satisfied to give up this plan.

Planting Peas.—In light soil for the main crop they should be planted much deeper than is the common practice. Try this experiment, as we have, and satisfy yourself. Plant some four, and some six, and some eight inches deep and we think you will be satisfied that those do the best which are down five to seven inches. They are less liable to mildew and they bear longer and more seeds.

Seedling Potatoes.—If you wish to raise new sorts, remember that they can be raised very easily by starting them early and treating the young plants the same as you would tomatoes. If well cared for each of the best should produce a good yield of fair-sized tubers in the first year—we mean that there should be found six to eight pounds of tubers to the plant.

BREVITIES.

THERE was a large meeting of stock men in Indianapolis April 3.

CHARLESTON strawberries have been in the N. Y., markets since the 1st of April.

IT pays well to keep the poultry house and yard clean and tidy. The same may be said of the pig-pen.

A MIXTURE of powdered hellebore and sulphur is good to sprinkle upon the backs and around the nests of sitting hens.

OUR first page this week presents the first of a series of fine engravings which we shall lay before the reader from time to time.

EVERYBODY that has water privileges upon his farm or grounds should plant, at this season, the beautiful, sweet-scented Pond Lily, Nymphæa odorata.

IT is thought that Doryphora has had a good, sound refreshing sleep the past winter and that she will awake to resume the spring campaign with her best energies.

TAKING high rank among exquisite nuisances is the Spitz dog. Question: Is it worse that one person should die of hydrophobia or that the entire race of dogs should be exterminated?

ONE of our best contributors writes: "The longer I live, the more I learn, the shyer I become of deciding for certain the truth about anything." We commend this to all "smart" men generally and to editors in particular.

WE have an idea that if many farmers knew the amount of commercial fertilizers that they annually waste upon their lands because they do not contain the manurial ingredients which the lands need, that they would enter with a hearty interest into the experiments which we have advocated in late issues.

Do not *ever* sow oats or other grain with grass seed upon the lawn. The blades of the oats, it is true, will shade the tender grass. But except in periods of drought, this is not needed; and during droughts, the oats will do more harm by extracting moisture from the soil than good by the shade they give.

THOSE who buy currant or gooseberry bushes as late as this, will do well to cut them severely back. No fruit would be borne this year if this were not done, and the expanded leaves not receiving a sufficiency of sap from the roots will exhaust the stems and cause weakness from which it may require a year or so to recover.

OUR respected correspondent, Mr. S. B. PECK, states, in the Report of the Michigan Pomological Society:—"Were I some forty years less than seventy-two of age, I would make a mark upon this shore (Michigan) that would show up the capabilities of the region; but my age and infirmities warn me that I had better let the cremation of my one thousand fruit trees of the past season wind up my pomological career."

THERE are few others plants that will do well in a greater variety of soils and climates; no other whose fruit is more delicious; no other that may be cultivated with less trouble than the grape. There is no other that all this may be said of that is so neglected, especially among the farming community. We have said to our friends "plant a grape-vine." We can only repeat our advice now that the planting season has arrived.

WHEN seeds, either in the cold frame in pots or pans or out-of-door seed-beds, come up too thickly, it is well to cut off the first leaves with sharp pointed scissors rather than pull them up, which deranges the soil and interferes with the delicate roots of those that are to remain. The tiny plants are at this stage dependent upon the first leaves for life. The same may be said of radishes, lettuce &c., which sowed too thickly in rows, have to be thinned out.

PROFESSOR C. S. SARGENT, in his valuable "Notes on Trees and Tree Planting," gives the following table of the actual prices, in the Boston market, of the principal American woods employed in cabinet-making, to show the comparative estimation in which they are held:

Black Walnut	$75	per 1,000	feet.
White Oak	65	"	"
Cherry	60	"	"
[illegible]	50	"	"
White Ash	40	"	"
Sugar Maple	40	"	"

PROF. BEAL says that he has, from considerable observation, decided that the lack of apples some years is due to poor male organs in the flowers. This has come under his notice while crossing apples. Some years he finds it almost impossible to find pollen to use in crossing, and these are the "off years" with the apple crop. Now what we want to know is how to improve the male organs so that they may supply plenty of pollen the "off year."

THE third number of the first volume of the South Georgia Agriculturist, published at Thomasville, Georgia, and edited by L. C. BRYAN, has just reached us. It is a small monthly magazine of 34 pages, mainly devoted to the diffusion of agricultural, literary and scientific knowledge among farmers and their families. The form is neat, the typography excellent and the contributions, selections and editorial supervision good. We wish this new claimant to public patronage all the success it promises to deserve.

Literary Miscellany.

TOM'S LETTER.

Now Mollie, lay your knitting down, 'tis after set 'o sun,
And soon the stars, like angel's eyes, will peer out one by one
From where they hide the whole day long, deep hidden in the blue,
And look upon the evil and the good that people do.

I've got a letter here from Tom—nay, wife you need not start—
The boy is well, there's nothing here to pain a mother's heart.
He says he's gathered in the grain, a goodly golden store;
He says he's paid the mortgage off and laid up something more.

Well, wife, tain't quite two yeras ago, one sultry summer day.
When I was working in the fields and getting in the hay,
A carriage drove up to the door, and there alit a chap.
With laughing eyes, like yours, that looked from underneath his cap.

He helped a little maiden out, with sunny, gleaming hair,
And deep blue eyes that looking in you seemed to read a prayer;
I tried to make out who they was, but wife, I did'nt know:
I could'nt make the team stand still, and kept a hollerin' "Whoa,"

I saw him point across to me, and heard him something say;
I could'nt make the words out, their heads were turned away;
But then an idee struck me quick, just like a ray 'o dawn
Although I did'nt know the girl, I knew the boy was Tom—

My boy who ran away from home so many years before,
Our Tom, whom we had mourned as dead a dozen years or more.
I left the team a standin' still, and threw the whip away—
The hull they might ha' gone to smash, I would'nt ha' cared that day,

I reached the house before 'em wife, but naught to you I said;
Somehow, harsh words I'd said to Tom, kept poppin' thro' my head;
I could'nt help but think perhaps, I'd been too quick to strike—
I'd learned that men like horses, wife, is seldom two alike.

They never stopped to knock at all, but open flung the door—
"Well, father, I've come back," Tom said, "to see you all once more."
I threw my arms around his neck, broke over all may rules,
You did the same, we laughed and cried together—both like fools.

When all was still we found the girl with blue eyes was Tom's wife,
A little daisy he had won to brighten all his life.
How well we learned to love the bride; and when they went back West,
They wanted the old birds to come and see them in their nest.

"Go and read the letter!" why I've read the letter thro',
Hold on, now, here's a postscript, with perhaps a word for you,
Good gracious! what a funny thing, it takes my breath away—
"Tell mother,"—say wife look at me; is my hair turning gray?

And grandma call me grandpa, just to see how it will seem,
Oh, wife, I think I feel as big as Sheba's famous queen,
"Tell mother"—kiss me quick and lay your head upon my arm—
'God sent a little baby down to visit at the farm."

—R. L. CARY, JR., *in Cleveland Herald.*

CORA.

CHAPTER X.

MRS. COLSTON was sitting in her dressing-room preparing for conquest—in other words, adorning her handsome, portly person for a party she was giving at her house at Brixton. With Mrs. Colston, adorning was by no means a slow or unimportant process. She was fond of rich heavy silks and vivid colors, and it was only by the judicious advice of her maid that she was prevented from making herself a little ridiculous by her affection for crimson and purple. On this particular evening she was looking annoyed and out of temper, and the patient abigail had had much to endure during the hair-dressing process, although she was at a loss to know what had annoyed her mistress. The green satin robe, which had been sent home that afternoon, fitted to perfection, and had surely a sufficient amount of gold embroidery and heavy lace. Mr. Colston's last present—a handsome set of emeralds—was lying before her on the dressing-table, glittering in their soft satin bed, and it was hardly likely that that should have aroused her ire; but it is certain that she did not appear at all on good terms with herself, or the world in general, and for once she seemed anxious to get rid of the important business of dressing.

It was over at last. The folds of the green satin were arranged for the last time, the emeralds were clasped on the rounded arms and still handsome shoulders, and when the maid had handed her mistress her fan and lace-trimmed handkerchief, she rather anxiously awaited her dismissal.

"Hand me my gloves, Eliza," said Mrs. Colston, adding, as the order was obeyed: "Go up to Miss Sinclair's room, and, if she is dressed, ask her to come down to me for a few minutes."

"Yes, ma'am."

And Eliza curtseyed; and disappeared.

In a few moments Cora came in, and Mrs. Colston, looking up from her gloves, surveyed her young guest with very dissatisfied eyes.

Cora was dressed with much simplicity, in fleecy black skirts, with black lace falling over her white shoulders and shading the fair, rounded arms. Her ornaments were of gold, quaintly designed after the pattern of ancient coin jewelry, and the only adornment of her graceful head were the shining masses of her rich hair, which was drawn softly back from her pale brow.

She was looking most beautiful, and an innocent satisfaction smiled out of her large gray eyes.

"Eliza says you want me, Mrs. Colston," she said quietly.

"Yes," replied the lady, coldly; "I have a few words to say to you. Will you sit down?"

A little surprise appeared on Cora's face as she took a seat, and sat quietly playing with her fan, until Mrs. Coltson should speak again.

"It is very unpleasant for me to make any complaint, Mis Sinclair," she began, in a complaining tone, which made Cora raise her eyelids in surprise. "I should much prefer not to be forced to do so; but it is my duty. Whilst you are under my roof I must consider myself as your guardian, and, to a certain degree, responsible for your conduct."

Cora opened her eyes wide, and looked at her hostess, astonishment plainly visible on her beautiful, wondering face.

"You are very young," went on Mrs. Colston, a little more complaisantly and fluently as she proceeded, "and perhaps a little bewildered at the rank of those with whom you have been brought in contact, and been intimate to a certain degree. But you must not set too much store on such pleasant attention from those above you. I am willing to believe that, blamable as your conduct is, you have erred through ignorance only, not from any evil intention."

"Blamable — evil intention — my conduct!" stammered Cora. "In what way do you mean, Mrs. Colston?"

"I mean with regard to Lord Almane," said Mrs, Colston, sharply. "There is no use pretending ignorance when the way you monopolize his attention is the source of universal remark and censure."

Cora's eyes blazed with indignation; but before she could speak Mrs. Coltson went on:

"Even his lordship has noticed, and commented upon the indelicacy of your conduct towards him," she continued, with increased severity. "Even under other circumstances it would be unladylike, and unbecoming to a degree; under the present, the manner in which you throw yourself at the head of an engaged man is most shocking."

Cora rose, trembling in every limb, all her girlish delicacy and refinement outraged, every nerve quivering at the coarse words; but again Mrs. Colston's interposition prevented her from speaking.

"There is no use in your flying into a passion and adopting mock airs. You cannot deny that you have tried to lead Lord Almane on in every possible manner, and that Lady Lucie has been very unhappy about it."

"I deny it!" said the girl, passionately, finding her voice at last. "How dare you insult me so? How can you so cruelly take advantage of my position alone here? If Lord Almane has said——"

"If!" interrupted Mrs. Colston, rising angrily. "Do you then accuse me of falsehood, Miss Sinclair? Do you think I could assert it, were it not the case?"

"Then he has spoken falsely," returned Cora. "He knows it is not so, and you know it too, Mrs. Colston; how dare you repeat such a calumny?"

"You use strong words, Miss Sinclair," said her hostess, with suppressed passion. "You forget yourself strangely in speaking thus to me. Leave my presence at once, and to-morrow, at some more fitting time, and when you are calmer, we will resume our conversation. It seems to me but too true," she concluded, with scorn in her tone and gesture, "that Lady Lucie has indeed cherished a viper in her bosom, and one who would strive to wound her in her tenderest affections."

Cora left the room, hardly able to stand, from conflicting emotion; and when she reached her own room she let herself fall upon a chair and gave way to a passionate burst of tears. She had tried so hard, poor child, to steer clear of the rock of Almane's passion for her, taking care in every way not to give him an opportunity of speaking words she did not wish to hear; and now to be thus misjudged and insulted seemed more than she could bear. Could it be true that Lord Almane has spoken so untruly, and that Lady Lucie whom she loved had believed the falsehood? What could she do? To whom could she turn? That very night she would write to Harold and confess that she had deceived him, and ask him to come back to her and not leave her again. She would tell him that she had suffered Lord Almane to care for her, that she had loved him in return; that during her stay at Mrs. Colston's she had met him constantly, although she had never mentioned this meeting to Harold in any of her letters; and he, Harold, would pity and forgive her, and take her away somewhere—away from the fascination of the beautiful face, and low tender tones which had sounded so dangerously musical in her ears. She could never be happy again; but she did not deserve to be so; her deception towards Harold could not be too severely punished.

She heard the carriages succeeding each other up the drive, and rose from her seat to go to her writing-table to make her confession to her brother. But she had scarcely prepared her paper and pen when a slight knock came to her door, and Mrs. Colston's maid said:

"If you please you will come down, Miss Cora? The dancing has begun."

"Very well," said Cora, quietly, as she locked away her writing materials and bathed her eyes to efface the tear-marks from her eyelids. As she did so there came a dangerous longing over her, a longing to tell Lord Almane all, and receive his assurance that Mrs. Colston's assertion was false, and to have her misery soothed by his tender words and glances.

When she reached the gorgeous, glittering drawing-rooms, which set Lord Almane's teeth on edge with their bright colors and gaudy adornments, she found them already filled, and dancing going on vigorously.

Among the dancers she saw Lady Lucie, who gave her a little smile of greeting, which seemed cold and constrained to Cora: but Mr. Colston, who came up to introduce a partner to his pretty guest, prevented any more thought upon the subject, For three or four dances Cora's time was fully occupied, and it was only at rare intervals that she caught sight of Lord Almane's handsome, distinguished face, as he stood in the doorway without an attempt to dissemble his *ennui*. But just as one of Miss Sinclair's partners had relinquished her, after a polka, his lordship made his way towards her, and obtained a seat by her side.

"At last!" he said, with a sigh of content, "I thought you would be unattainable this evening, and was almost in despair. I hope your programme is not quite filled up."

"No," she answered, lifting her restless shining eyes, full of sorrow and pain, to his; "I kept some free for you. I want to speak to you, Lord Almane."

"What is it?" he asked, gently, noticing the sudden gravity of her manner. "Are you ill, Cora?"

"I am not ill," she replied. "but am very unhappy. Let me speak to you quietly, Lord Almane, and you shall know the cause."

"Come, then," he said, drawing her hand through his arm, and leading her through the crowded rooms into a smaller room opposite the conservatory, which as yet had not been discovered, and was empty and quiet.

Cora sank down on a low seat, growing very pale now when the moment of explanation had come, while the Viscount took his seat beside her.

"What is it?" he asked again, noticing her pallor. "I am sure you are ill, Cora! Let me get you something, my child."

Cora laid her hand on his arm to detain him.

"Do not go," she said: "I want nothing—but truth."

"Why this strange solemnity, dear Cora?" he asked, smiling a little, "Is it something very serious which occupies you? Come, tell me quickly. I shall begin to image all kinds of horrors, if you keep me in suspense."

"Perhaps you will think lightly of it," she answered; "but I cannot do so. Oh! be frank with me, Lord Almane. Has anything in my conduct since I met you here, in this house, deserved your contempt? Have I betrayed by look or word the love which—Heaven help me—I could not help feeling for you?"

"My contempt!" he repeated. "Cora—love—how——"

"Ah, hush!" she interrupted. "A truce now to the fair words and sentences by which you beguiled me once. I do not deny my love for you—it, in itself, is no sin; but were I to indulge it, and allow you to speak of it, it would be so. I want only that answer. Have I deserved that you should despise me and that even strangers should censure, in the plainest terms, my behavior to you?"

"Who has dared to do so?" he said, haughtily. "Who has dared to remark upon your conduct or mine?"

"Many, it seems," she answered, sadly. "Even you yourself, it is said, have commented upon mine."

"It is false!" he replied, vehemently. "Cora, you know it is false. My darling, whoever spoke thus to you lied foully and utterly. Can you have believed for one moment such a baretaced falsehood?"

"I did not know, I could not tell," she faltered; "I hardly thought it possible, but still——"

"Do you think that, loving you, I could breathe one word against your fair fame, my dearest?" went on the liquid musical tones, as he fixed his dark velvety eyes upon her face. "Against you, whom I hold as sacredly as I might my dead mother—upon you, whom, were it but possible, I would make my wife to-morrow! Cora," he continued, with loving reproach, "I could not find it in my heart to be angry with you."

"You must not speak thus," she answered, faintly. "I ought not perhaps to have spoken, but the thought almost killed me."

"My poor, poor love!" he murmured, fondly. "Ah, Cora, why are things so hard for us?"

Large tears had gathered in Cora's eyes, but she would not allow them to fall.

"Can you forgive me for the trouble I have brought to you, my child?" he asked, tenderly. "Will the time come when you will wish we had never met?"

He rose and paced up and down the little room for a moment. Cora, a prey to almost uncontrollable emotion, bowed her head upon the sofa-cushions, and tried to recover her composure, but it was some moments before she was able to speak calmly.

"Do not let us blame ourselves for what could not be helped," she said faintly. "Go back to the ball-room now, your absence will be noticed."

He bent over her for a moment, murmuring a few words of farewell, and left her. Cora sat still for a few minutes; then she rose, pushing back her hair from her brow with a troubled gesture, and started with astonishment when she found she was not alone. A young girl, in shimmering pale blue robes and sapphire ornaments, was standing beside her, and as she looked up she met Lady Lucie Belmont's blue eyes, full of silent reproach and sorrow.

Neither spoke, but Cora's head sank again upon her hands, and the silence in the little room grew almost oppressive.

Suddenly her name, spoken by several people, struck on Cora's ear. She rose in some agitation and alarm, and stood expectantly. Then simultaneously she and Lady Lucie moved towards the ball-room.

At the door Mrs. Colston, with some consternation legible on her face, was talking to a tall man wearing a loose traveling suit, and looking both weary and travel-stained, who was apparently apologizing for his intrusion.

As the girls drew near Mrs. Colston turned to them.

"Ah! here is Miss Sinclair," she said, as she went forward to meet Cora and took her hand in hers. "Come this way, Sir Alan," she continued, as she led the way into the room Cora had just left, closing the door when they had entered.

Cora looked from one to the other in astonishment. She saw that Mrs. Colston looked grave and compassionate, that the tall stranger seemed agitated; but there was nothing familiar to her in his grave gray eyes and rugged, massive, but handsome features, and she waited in some anxiety for him to speak.

Sir Alan saw a pair of lustrous eyes fixed upon him questioningly, and the carmine lips parted in expectation; and his voice failed him when he attempted to impart the sad news he brought.

"This gentleman has come from Rome, Cora," said Mrs. Colston, quietly.

"From Rome!" said Cora, breathlessly, turning to him. "Then you bring me news of Harold. Do you know him? He is quite well? Why do you look at me so sorrowfully?" she went on, passionately, as she met the pitying gray eyes.

"I have come to bring you to him," said Sir Alan, gently. "He has not been quite well since he went to Rome, and——"

"You are hiding something from me!" And Cora sprang to his side, and caught his arm with both her little trembling hands. "He is ill, perhaps—no! no! no!" and her voice rose almost to a wail, in her agony of terror—"he is not dead—not dead?"

"No, on my honor," said Sir Alan, quickly. "But he is very ill, and he wants you. I have been too abrupt," he continued, sorrowfully, as he saw the color fade and the large eyes close, and holding out his arms received into them the inanimate form of Harold Sinclair's sister.

CHAPTER XI.

By dint of traveling day and night Cora and Sir Alan arrived at Rome not too late; but the latter's first glance at Harold when they entered his room showed him that the end was near.

"So you have brought her to me, Alan?" said Harold, smiling, as he folded his sister in his weak clasp, and turned his blue eyes in grateful recognition on his friend. "Has he taken care of you, Cora?"

But Cora, with her face hidden on the pillow beside her brother, could not answer; and Harold let the first bitterness of her sorrow pass unnoticed, while he asked Alan about their journey; and then the young baronet went softly away, and left the brother and sister together.

Inexperienced in sickness as Cora was, she could not fail to see that there could be no hope of Harold's recovery; and in that moment of sorrow, of grief unutterable, the girl felt as if her heart must break with its load of anguish. Harold had been so much to her—father, mother, and brother in one—and he had loved her with such an entire devotion that, in losing him, she lost all. It was no wonder that she gave way, although Dr. Crosby, who had met them on their arrival, had warned her gently of the ill effects of any excitement on Harold.

"I am afraid it is hard for you, darling," said Harold, softly, after a pause. "But Alan has promised me that he will be good to you, and take my place. Ah! you think no one could now, little sister; but you would not have always said so, you know."

And he went on with the tender, consoling words, until Marianna came in with a sharp reproof to Cora for tiring her brother, and an imperative injunction that she should go instantly and change her clothes, and rest.

"I can rest here," entreated Cora, as she rose. "Hal, do I tire you very much? I may come back, may I not?

"You must let her be with me as long as she can, Marianna," said Harold gently. "Why, what a dusty, travel-stained girl it is! Go and make yourself presentable at once, and put a red ribbon in your hair, mademoiselle."

Tedious as young Sinclair's illness had been, his sweet temper and patience had never failed him, and he had greatly endeared himself to all around him. There was not one among his acquaintances, not one among the servants in the

gloomy old palazzo where the artists had taken up their residence, who did not regret the golden-haired young Englishman who was passing away from among them.

"I wonder what has become of Alan?" said the dying man towards evening, as he lay raised up by pillows, having rallied a little with the excitement of his sister's arrival.

"He is in the house signor," answered Marianna, quietly from her seat near the window; "but he was afraid he might disturb you and the signorina."

"Ask him to come," said Harold.

And Sir Alan coming in, found Cora, in her pretty, fresh garments, sitting by her brother, who greeted him with a smile.

"You would not have been *de trop*, old fellow," said he. "I wanted to thank you for your kindness to this child. It was a foretaste of the brother's part you are going to act towards her when I am gone. You don't know what a fellow he is, Cora," he added, smiling—"as strong as a lion, and as gentle as a woman!"

Shortly after, Dr. Crosby came in, followed by George Leeson; and when the physician left the room both Cora and Alan followed him.

"Have you brought a good stock of courage with you, my dear?" said the doctor, as he took the young girl's hands in his. "You must be brave to-night, and to-morrow you shall cry. Your brother will not suffer many hours now."

Cora turned from him with a gesture of despair, while a fit of shuddering came over her, and she trembled so exceedingly that the baronet called Marianna, and left the girl to her care, while he returned to Harold.—To be continued.

INTEMPERANCE.

C. C. W.

ONCE upon our nation's honor
Lay a dark, unsightly stain;
We of that great crime were guilty,
Buying, selling, "souls of men."
And we fought and prayed against it—
Prayed God to remove the stain;
And He did it—not in our way,
In His own. He broke the chain.

Now another mighty evil
Threatens to destroy our peace;
Daily binds unnumbered victims;
In our streets its thousands slays.
Friends and neighbors, they are dying;
They are falling all around;
And our brother's blood is crying—
Crying 'gainst us from the ground.
And the voice of God is calling:
"Who is on the Lord's side, who?
Take unto you trusty armor,
And go forth to meet this foe.
Long enough hath this Goliath
All our Israel's hosts defied."

Courage, brethern, we shall conquer;
Truth, and right are on our side.
Not with carnal weapons fight we
'Gainst this great and crying sin;
But with spiritual ones, and mighty;
Weapons that are sure to win.
"In the name of God," like David,
Go we forth with sling and stone;
Never need we go unaided,
For the battle is His own.

SEASONABLR HINTS.

MARY A. E. WAGER-FISHER.

I WISH to commend to the RURAL farmerines who cultivate flowers, the convenience and advantage of using what is called the "German Hot-bed" in the germination of flower seeds. Last year, I sowed over eighty varieties of flower seeds in hot-beds, of this sort during the last week in March, and excepting Lantana seeds all were successful. The hot-beds are constructed in the usual manner, except that in lieu of using window sash and glass for covering, we stretch and nail to a frame snugly fitting over the box, cheap muslin (at six cents per yard) and then give the muslin a coating of raw linseed oil into which an egg has been stirred—three eggs to a pint of oil. This preparation makes the muslin water-proof and translucent. The advantages this cover has over the glass, are in its lightness to handle, and its complete protection to the plants against sun-burn, covers of this kind if well taken care of will last for two seasons. Flower seeds that will not germinate to complete satisfaction in a "German Hot-bed" are surely of "no good," while delicate seeds that often perish from lack of proper conditions when sown in open borders, will thrive marvelously under the muslin cover. Seedsmen are often blamed for selling poor seeds, when the fault lies in the gardening solely. Moreover, most seedlings will give the florist double enjoyment by being given an early start.

Another thing which I wish to commend in this connection, is a wire chicken fence for the flower garden. The feathered tribe and flower-beds and borders were never born for neighborliness. The florist who has to contend with the chicken tribe knows better than anybody else the meaning of "vexation of spirit," while flower beds in a lawn, with which the poultry is on intimate terms, present an appearance too forlorn for comment; while to brush or wire beds, is to cultivate flowers under too great a disadvantage to be enjoyable. What one wants is a spot of ground into which neither fowl, nor beast does enter. Having once upon a time the depredations of poultry to contend with, I inclosed a portion of the lawn upon which a back piazza opened, with a fence which cost in money outlay for wire, $2.15—a bunch of galvanized iron wire of seven or eight hundred yards, costing that much. The posts used were made from saplings brought from the woods and planted at intervals of five or six feet—bark left on. The wire stretched on the outside line of the posts was held in place by large-headed tack nails. The fence, when done, was scarcely noticeable a few rods away; but in midsummer it was a curve of beauty, being overrun with climbers of various sorts, for which it served as a trellis, Morning Glories, Cypress vine, Maurandia, Nasturtiums etc. Petunias I think would be better to plant in the border following the fence, than vines even, as when trained against a wall or frame, they often present a superb appearance. As my chicken fence kept out all sorts of depredators, and cost so little, and proved so ornamental, there is no need to add that it paid for itself many times over.

I am glad to see WILLIAN FALCONER advocating the culture of native flora, since so many people can never see the beauty in common things, until some one points it out, and they become fashionable. The Germans cultivate corn in their gardens, for its stately beauty, as we do Cannas—corn being far handsomer to my mind. The French cultivate our common road-side and field Daisy—they call them Marguerites and a pretty bouquet of white bloom they make in a gay border.

One of the pretty uses made of Morning Glories last summer, that I noticed, was the way in which they were trained over a rude fence that surrounded a very elegant dwelling. The fence was nearly draped with them, and to drive past there of a morning and see the incomparable blossoms, white, crimson, blue, violet—illustrating the beautiful text "My mercies are new every morning"—was to see a sight well-worth seeing. But then, I go "daft" over Morning Glories—one way to enjoy them is to cut off a vaseful of the opening buds at night—put it on the table for breakfast, and next morning you will have a vision of beauty at your morning meal, lovely and exquisite enough to humanize, refine and delight you for at least twenty-four hours to come.

In preparing a lawn, the people are wise who plant a part of it thickly with the common wild blue Violets—those fragrant blossoms with "spurs" that the children love to gather and use for "nghting," purposes, nipping off their heads with eager delight. They are among the earliest spring bloomers, are quite hardy, take care of themselves, are always a sight to see, and masses of them in bloom form an expanse of rich color hardly to be surpassed.

Strawberries as a Poison.

Apropos of the poisonous effect sometimes produced by strawberries, which a late number of the RURAL commented on as being altogether improbable, I will mention the case of a gentleman whom I know, who has twice nearly lost his life from eating that delicious fruit. The first time he ate them was when he was a mere lad, and they acted upon him as a powerful poison. It was not until many years later, that he dared repeat the experiment, which he did and suffered again in precisely the same manner. Being extremely fond of the berry, it is quite a deprivation for him to be obliged to pass through life without the privilege of enjoying them except at the hazard of his life.

HOW WE CAN "CIRCUMWENT" THE OLD MAN.

N. J. SANDPIPER.

THE case of the old Mr. LORD seems at last to have been completely settled, but to prevent a recurrence of trouble of this sort, we seem to need some special legislation.

If a man is poor, having merely enough to support himself from day to day, it makes little difference how long he may choose to live, but it is a wretched shame that old men who have plenty of money, should persist in living on, year after year, long after their relations think they should be dead and buried.

In case a bill regarding this subject should be brought before the Legislature, an expert would be needed to put it into proper shape, but the substance might be somewhat as follows:

Whereas, it is a matter of complaint that certain rich men, by virtue of a strong constitutions and care for bodily health, do succeed in living to a great age, and whereas, by so doing they grievously wrong those who are waiting for their death and for their money; and such gross misconduct being not now punishable under the present laws, as it should be,

It is hereby enacted that on reaching the age of seventy any man who may have any considerable sum of money, shall upon application of his legal heirs, immediately give up his said money, and make over any and all of his property—so much of it, at least, as may be worth accepting—provided always that he be allowed to retain one suit of old clothes and such other personal outfit as decency may require.

And in case the said rich old man shall refuse to give up his said property, he shall be compelled to do so at once by force of law, any court being held to have jurisdiction in such matters, for the more speedy furtherance of the ends of justice.

And be it enacted that this law is to take effect immediately..

It may be said that the motto "give the old man a chance" is too fully carried out in the above, but it must be borne in mind that the public is not prepared for more severe legislation. It is a hardship, undoubtedly, to wait till a man is seventy, before getting hold of his money, especially when those who are waiting are so much better able to spend the money *intelligently* than he is himself; but we are continually having our feelings hurt by the contemplation of just such hardships. It is a dismal sight to see hungry dogs yelping about a well-filled butcher's shop; and when boys prepare a "slide" on the sidewalk for the purpose o upsetting the passers, it is hard for them to see the folks keeping their balance, and nobody going by "on his ear." But times are out of joint.

As a suggestion, it may be said that cases not quite reachable by the above bill might be somewhat hastened by delicate and indirect methods; for instance, put on the old man's breakfast table a placard to the effect that "Watched pot is long a-boiling," or introduce in the same way the poet's sentiment, "The good die first," or leave about the house, in odd places, the business cards of some undertaker, stating that funerals will be furnished at short notice—that is, of course, all but the corpse. Leave the old gentleman to guess who will furnish that.

Some undoubtedly will be calm and comfortable in spite of these hints, saying, in often-quoted words, "None of these things move me." With such old fellows as these, there is nothing to be done but have patience.

THE CLOCK OF CLOCKS.

IN Mengel's building is now on exhibition, in all probability, the most wonderful clock in the world. It was built by Stephen D. Engle, a watchmaker at Hazleton. He is about forty-five years of age and was about twenty years in perfecting the clock. Mr. Reid paid Engle $5,000 for it. Engle never saw the Strasburg clock. In fact, he has not traveled more than two hundred miles from home at any time. This clock stands eleven feet high. At its base it is about four feet wide and at the top about two. It is about three feet deep at the base; gradually less toward the top. Its colors are brown and gold. The Strasburg clock is thirty feet high, yet its mechanism is not so intricate nor has it as many figures as the Hazleton clock. The Strasburg clock's figures are about three feet high and the American clock's about nine inches.

Three minutes before the hour a pipe-organ inside the clock plays an anthem. It has five tunes. Bells are then rung and, when the hour is struck, double doors in an alcove open and a figure of Jesus appears. Double doors to the left then open, and the apostles appear slowly, one by one, in procession. As they appear and pass Jesus, they turn toward him. Jesus bows, the apostle turns again and proceeds through the double doors in an alcove on the right. As Peter approaches, Satan looks out of a window above and tempts him. Five times the Devil appears, and when Peter passes, denying Christ, the cock flaps its wings and crows. When Judas appears, Satan comes down from his window and follows Judas out in the procession and then goes back up to his place to watch Judas, appearing on both sides. As the procession has passed, Judas and the three Marys disappear, and the doors are closed.

The scene can be repeated seven times in an hour, if necessary; and the natural motion of the clock produces it four times per hour, whereas the Strasburg procession is made but once a day, at 12 o'clock. Below the piazza is the main dial, about thirteen inches in diameter. To its right is a figure of Time, with an hour-glass. Above this is a window, at which appear figures representing youth, manhood and old age. To the left of the dial is a skeleton, representing Death. When the hour-hand approaches the first quarter Time reverses his hour-glass and strikes one on a bell with his scythe, when another bell inside responds. Then Childhood appears instantly. When the hour-hand approaches the second quarter, or half-hour, there are heard the strokes of two bells. Then Youth appears, and the organ plays a hymn. After this, Time strikes two and reverses his hour-glass, when two bells respond inside. One minute after this a chime of bells is heard, when a folding door opens in the upper porch, and one at the right of the court, when the Saviour comes walking out. Then the apostles appear in procession. The clock also tells of the moon's changes, the tides, the seasons, days and day of the month and year, and the signs of the zodiac; and on top a soldier is constantly on guard, walking back and forward. As the hours advance Manhood, Old Age, and Death take part in the panorama.—*Reading Eagle.*

THE HUSBAND'S CERAMICS.

SOME women are loth to credit their husbands with good intentions, or to give them the credit due their genius and enterprise. Such a woman lives hard by. She was fairly crazy about ceramics, but in the midst of her pottery decorations she was summoned to New England to see a sick relative. Her husband, good soul, decided to ceramic that house to the most complete extent during her absence, and he invested money enough in transfer pictures to have bought his winter's coal. He pasted old Roman heads on the newel posts, bordered the edges of the stairs, had a paper monkey climbing up each leg of the extension table, pasted an alligator on each panel of every door, had sailors tumbling over each other on the water pitcher, ran a border along the baseboard of the parlor, pasted the teapot with red roses, bordered all the mirrors with lean dogs running after fat rabbits, and gummed the head of a trotting horse on the back of every chair. The panels in the bedsteads blossomed with giraffs reaching out for weeping willows, and serpents trained around the legs of the piano shot mad glances at small mules with their heels in the air.

Some men would have stopped here, and waited to be patted on the back, and encouraged to go ahead. This man waited only long enough to lay in a new supply of pictures and to make some paste. He whacked a dozen giraffs on the tea-kettle, two or three of which seemed intent on going up the spout, fastened an elephant to the handle of the spider, and made the stove boiler fairly howl with its burden of camels marching up and down with their backs all humped up. When every door-knob had been ornamented with the phiz of Queen Elizabeth, and the family camphor bottle had been made the ground-work for a Spanish bull-fight, then the husband threw the shears, four knives, two spoons and his paste pail over the alley fence, and waited for his wife's return.

She arrived the other day. He sent her home in a carriage from the depot, and waited an hour or so before following her. When he thought she had time to thoroughly inspect his work, he went home. Several boys were playing on the walk, and as the husband was unlocking the door, they saw a woman's hand suddenly reach out, seize his collar, and haul in on him, and as his heels twinkled in the air a voice filled with emotion called out:

"I'll paste rhinoceroses on you till you can't wink!"

They are in a scrape in that house—they are scraping ceramics into oblivion, and engaged in a lively discussion.—*Norristown Herald.*

CHARACTER

CHARACTER is so much more than wealth or knowledge, fame or power, that it is the measure of the man. When a man is placed in a prominent position of any sort whatever, we say at once, "what is he worth?" not "what does he know? but "what sort of a man is he?" That is the momentous question that involves all. All others are secondary. Wealth, knowledge, fame and power, are most desirable accessions for a good man; but otherwise they add strength in a wrong direction. I wonder if the young men, and boys in our land, realize that character is the most important capital in any and all business transactions. If a man of large business is looking for a partner or employe what does he require first and of all? An honest man or boy. Wealth and position, with this first requisite, will be no detraction, but nothing without it.

What pillars are to a building, what the foundation is, and the corner-stones thereof, so is a good character to a man or a woman, boy or girl. The wise man said, "A good name is rather to be chosen than great riches," and he had no lack of wealth. Remember, boys—and it will harm none to remember—that what you are is of infinite importance; while what you have is finite in its value; its end is the grave, while the former will grow and enrich its possessor through all the ages of immortality. Strive for it as for your life, for life is naught without it; if a man die for his house, he is an everlasting hero; while if he die for his wealth, he is a sordid fool. We honor it in death, if not in life. "So teach us to number our days, as to apply our hearts unto wisdom."

RECENT LITERATURE.

The Study of Words. Lectures addressed (originally) to the Pupils at the Diocesan Training School, Winchester. By RICHARD CHENEVIX TRENCH, D. D., Archbishop of Dublin. With an exhaustive Analysis, additional Words for Illustration, and Questions for Examination. By THOMAS D. SUPLEE, Head Master of St. Augustine's College, Benecia, California. [12mo.—pp. 335. $1.50.] New York: W. J. Widdleton.

WHEN HAMLET, in reply to the question of POLONIUS, said he was reading "*Words, words, words,*" he may have had an idea of the full significance of his answer, and he may not. That question, however much open to discussion, we do not propose to take up at the present time.

What are Words? is a question susceptible of several definitions, each of which may be entirely true; as, Words are two or more letters of the alphabet in combination used to represent certain sounds; Words are vocal sounds used to represent ideas; Words are representatives, written or spoken, of ideas, which, taken in combination, constitute Language.

How many readers ever stop to think that there was a time when there were no words, or how certain words came to be used to represent certain thoughts or ideas; how language has grown, and is still growing, or how new words are constantly being introduced from foreign languages, or constructed entire? To those who have not seen the book above named, it will open a fountain of instruction and entertainment. Dr. TRENCH, in speaking on this point, quotes the words of a writer who says:—"In a language like ours there are few modes of instruction more useful or amusing than that of accustoming young people to seek for the etymology or primary meaning of the words they use. There are cases in which knowledge of more value may be conveyed by the history of a word than by the history of a campaign."

Take as an example (condensed from the "Study of Words,") the derivation of our word frank—meaning free, open and honest. A German tribe, proud of their liberty, gave themselves the name of "Franks," or free men. They conquered Gaul and gave it their name—now France. They were superior to the Gauls and Romans in Gaul, in their love of freedom and of truth, in their uprightness and true manliness,—and thus it came that the name of the tribe or of its members—Frank—became the synonym of high moral qualities. So of the word *slave*. The conquering Teutonic races, in the olden time, were enabled to keep their markets for servants supplied from the Sclavonic tribes, and the name Sclav became sig-

nificant of servitude—a slight change in the spelling made our word slave.

We could fill an entire number of the RURAL with extracts from this book, but our space will not permit. We hope, however, to be able to awaken the attention of our readers to its merits.

Most words have a derivation. There are few used exactly as at first spoken. All names were originally given to the things named for a reason, although that reason may, in many cases, be now hidden from us. Names, as now applied to towns, post-offices and counties in this country, are, in many instances, far from original—having been most foolishly conferred to gratify the pride of a politician or the vanity of some purse-proud ignoramus, while others are duplicates of those used in older countries, where they were conferred in the first instance with a meaning. We will notice Cambridge, situated in England, on the River Cam, at a point where a bridge is built over the river. [We never found why the short a in Cam was changed to long a in Cambridge.] All places with names ending in bridge will be found to have been similarly located. So will names ending in mouth—as Dartmouth, Weymouth, &c.—be found to have been first applied to towns situated at the mouths of rivers. The termination ham, or hame, is a corruption of home—as Nottingham, the home of the Nottings. Such corruptions sometimes make strange names. A party of French Protestants—objects of religious persecution—came from the vicinity of the river Waal, in the Netherlands, and settled on Long Island, opposite New York. They were called Waaloons or Walloons, and the water adjacent to their settlement Walloons Boght or Bay, now known as Wallabout. [We once heard it stated this name came from the fact that the Navy Yard, that occupies land bordering on the Bay, is surrounded by a high wall!] Brooklyn is from Breuck landt, signifying Broken land.

Most of the imported names applied to American towns are used not only without the slightest show of reason, but with great impropriety. New York has its Rome, Athens and Corinth, eighteen States have a Paris and eight a London, while Toledo (from Toletum), meaning the Mother of the People, is adopted both by Ohio and Iowa.

As to the origin of language, our author accepts the ideas more prevalent at the time he wrote than now. His theological teachings and surroundings doubtless had influence to bias his judgment. While he has general ideas of the evolution of words, he holds man was created with reason full and complete, and with power to use words, as is shown from the fact that ADAM named all creatures at sight. "God did not teach him words as one of us teaches a parrot, from without, but gave him a capacity, and then evoked that capacity."

He was not alone in his opinion, and was probably in advance of many able writers, who held that language was originally revealed from heaven, and that as the first man was created full and complete, physically, so he was mentally, and endowed with the power of language, which employs both the physical and mental in its production. To explain how there are now so many languages instead of the one given by Divine inspiration, the supporters of this view point us to the confusion of tongues at the Tower of Babel. Others, and we think more correctly, hold that language is of slow growth. That in the beginning ideas were few and crude, and were conveyed by a single sound, and that as man has, in successive ages, passed from one degree of intelligence to another, so has his power of conceiving and expressing ideas increased. This, the evolution theory, has made rapid progress in the past few years, and had the "Study of Words" now to be re-written, we presume its teachings relative to the origin of language would be much modified.

This book should not be confounded with another entitled "Words and their Uses," by another author, which, commendable as it is for its general purpose, originality and terseness of expression, occupies a different field. The work under notice aims to incite a desire, in the mind of the reader, to get an understanding of the word, by finding how and why it or its derivation was first used.

The present edition excels the former ones, inasmuch as Prof. SUPLEE has added a complete and exhaustive analysis of the revised text—prepared a set of questions which enable the general reader to fix more readily and firmly in his memory the principal topics, and added many words intended to encourage original research on the part of the student,—thus rendering it better adapted for classes in schools and seminaries.

MAGAZINES.

DEMORESTS' Magazine for April is an unusuaally fine number. It is without exception, the best journal of its class published in this country and the high encomiums lavished on it abroad, lead us to the conclusion that it stands without a peer "across the pond." Usually, periodicals designed for women are vapid to the last degree, but this journal is an honorable exception. Besides the fashion intelligence (amply illustrated) there are stories, sketches, travels and general miscellany, hints on etiquette, and a correspondence department. It would take a column to merely enumerate the good things it contains. So we'll content ourselves with merely stating there is this addition to the Magazine's usuals attractiveness—the April number contains a little gem of art entitled "Easter Morning."

DU CHAILLU is full of comforting assurances for the fair sex. He says that cannibals take women 16 to 24 years old in a roasted shape. When they are 55 they boil them. After all we like the American style. We toast them.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

AN APOLOGY FOR FLIRTATION.

"AH! women are fickle! you tell me,
"Well—yes—if by fickle you mean
A trifle less false than you men are;
And greatly more true than they seem,"

"But women are cruel—so cruel!
They flatter and coax for awhile,
Then tread on the hearts that we give them,
And deal us a blow with a smile!"

"We are cruel—it may be; but cruel
In a million of charming ways:
So sorry at times to have hurt you,
So kind on the gloomiest days.

"But you men!—you calculate nicely
How near you may go, or how far,
Nor never one moment you soften,
Nor pity the hopes you mar.

"And when you at last are successful,
And the flower floats down to your feet,
Its colors are no more so perfect,
Its perfume is no more so sweet.

"You leave it to lie on the roadside
(First trampling it down on the dust),
And fancy that such is your right here,
To break and to outrage our trust.

"You think us so weak till we sting you,
And give you at last your deserts;
And then you turn round in your anger
And vow that all women are flirts.

"Believe me, that if you would let us
Be honest and true, as we are
(Not striving to conquer us always).
The world would be better by far."

Temple Bar.

HUSBANDS AND WIVES.

MRS. CHARLOTTE E. FISHER.

I DO not say the husband is always to blame. The wife often makes home unhappy; too often both are in fault. Yet I think the husband is more apt to become careless and neglectful of little attentions soon after marriage than the wife is. A trusting, loving girl gives up her freedom forever and goes out from under the sheltering roof of the old home, to bless and brighten the new. Goes to be his own in sickness or health, for "better or worse," until one of the twain shall rest from all earthly labors.

Before marriage he was all attention as to his personal appearance; eager to gratify her every wish. He admired the rosebud she selected to wear on her bosom, but thought his own chosen rose-bud much lovelier. He admired the dress she wore, the ribbon in her hair, truly she could do nothing to please him that failed of its object. And he told all his love and admiration in actions, and what was still pleasanter, in words.

Now they are wedded, both sure of the other's love. The days are full of light and joy, she knows a shadow can never darken their home for is she not his darling; his own happy little wife and does he not tell her so every day? She does not believe any change comes after marriage unless it is greater and more perfect love and trust. Years pass. Have they carried the bloom of life with them? He has business to look after, but he loves his wife just the same, she will not believe otherwise. Yet, sometimes when he goes to his work, with only a hasty kiss and never once noticing the lily buds in her hair, or that she has on his favorite jewels, sometimes, I say, a feeling of disappointment clouds the joy in her heart. The full glory is dimmed. He continues to grow more neglectful. She wears the colors that used to please him; she strives to beautify his home in every possible manner, but he speaks no word of praise. He even finds fault with her once in a while; but what pains her most is his constant indifference, and he has too, a habit of putting her second instead of first in nearly everything. Occasionally, when he does happen to notice her he wonders at the worn face and quiet manner; and, doubtless thereby, she has become very careless of home enjoyments and love. Does he never remember the many times a gentle woman has stood beside him, lifting the hair from his brow or parting it with soft fingers, or caressingly laying a white hand on his hand. He used to kiss that same hand; holding it in both his own, and say many kindly things. Now she lingers near him, but he never lifts his eyes from his book to the face beside him, or finds one little word of endearment for his wife.

Oh, if the walls of her room could speak, would they not echo the words that had so often been spoken to them. "Oh! God, what have I done? What have I failed to do, that life is not as it once was? Oh! how have I frighted away all the tender words; all the caresses that once were mine? Oh why did I not die when every word and action were full of love? Better—far better, to have gone away from earth ere the bridal roses faded; than to have lived until my heart calls out vainly, day and night for the glory of departed days!"

THE NEGROES OF THE SOUTH.

E. F. M.

THE African race remains unchanged in many of its ideas and superstitions, living in many respects the old primitive life in the very midst of the discoveries and inventions of the new age. The contrivances of a negro who farms his little piece of land, his rude wagon, out-of-doors kitchen, etc., are as simple and rough as those of centuries ago; and like most ignorant people, every common action is fettered by numberless superstitions, signs, and traditional observances.

It is ill luck to use the wood of a tree that is blasted by lightning; ill luck to burn anything belonging to the dead—it must always be buried also. It is daring unknown misfortunes to carry fire from one place to another without spitting in the ashes first; ill luck for a girl, who is only a child to stir soap while it is being made; ill luck for a cat to be moved, or a dog to howl, or a Whip-poor-will to perch near the house, and certain death to begin a piece of work on Friday or Saturday which cannot be finished the same day. As for planting, sowing seed, killing hogs, all these processes are entirely under the sway of the moon, and should be done at certain favorable times.

Their religion is characterized by the same spirit as their everyday labor, and is won by visions and watching. They have their yearly meetings, where their preachers deliver impassioned and fervid discourses, and those who are "*seeking*" (as they call the desire of being converted,) are assisted by the prayers and exhortations of the members of the church. Those who are "*seeking*" often sit up night after night—not allowing themselves to sleep—for this would indicate culpable lukewarmness—and sometimes wandering alone in solitary and dark places in the woods. He is not considered to have *found* religion, until from over excitement and strained nerves, he has had a vision of hell and its horrors; the loveliness of heaven, and the Lord Himself who appears and declares that his sins are forgiven. After this, there succeeds a state of ecstasy, during which those who are "happy" dance together, spring into the air, shout aloud and clap their hands, and often fall to the ground at last in a swoon of sheer exhaustion. Their hymns are strongly characteristic and emotional in their wild, irregular rythms, their wistful cadences, their jubilant choruses, they breathe the very spirit of longing and desire.

It is said that the music of every exiled race tells the story of their exile, and certainly it is true that through the gayest negro tune, such as "Dixie," "Camptown Races," runs a minor tone of sorrow under its wild merriment. Some of their religious recitations and hymns are strangely picturesque, possessing a wild vividness which throws the scene into bold relief before you; as for instance the one on MOSES leading the people of Israel forth to freedom, while the dark waves rolled over PHARAOH'S army, and the many hymns which describe the appearance of GABRIEL,

"When louder yet, and yet more dread,
Sounds the loud trump that wakes the dead."

And the triumphant coming of the Lord as the Bridegroom is believed in the most literal manner, and their voices ring out—

"Who shall drive the hosses
When the Bridegroom comes?"

with a wild earnestness that is startling in its effect. Some of their more monotonous and sadder hymns have a certain slow cadenced whirr in the time which reminds one of a spinning-wheel accompaniment; and undoubtedly many were sung while the women spun and wove.

"Lord, send me wings, and I'll fly home
To the New Jerusalem!"

is the oft-repeated chorus to one of these.

No one can live in the South without growing familiar with these peculiar musical airs. You hear them from the nurses as they put the babies to sleep, from the kitchen, the field, the corn crushing, the road, the church; the watchers by a sick bed croon an old tune as they sit up, and on Christmas night they solemnly watch the dawn come in with prayers and wild hymns.

I have never been able to discover among any of them any story of their native land, any memory of Africa, or any desire to return. They have by no means thoroughly acquired the English language and phraseology. Indeed, Mrs. MALAPROP fades into insignificance beside many of them. One enthusiastic old negro woman, whom I knew, dated every event from the "*vaccination* (meaning evacuation) of Richmond." Another respectfully spoke of the Penitentiary convicts as "*converts*," and one old negro man, with a low bow, and his hat, or a fragment of a hat, held deferentially in his hand, assured his mistress that "Before I do anything, missus, I always *insult* the Master" (for *consult*).

With all their peculiarities the negroes are generally a docile, kind-hearted, simple race with a ready sympathy which renders them invaluable as attendants in a sick-room or nurses to children. Little folks are always attracted by them, and no hours of a Southern girl's or boy's youth are more delightful than those spent listening to his "Mammy's" wonderful narratives. The passage from "Aurora Leigh," which a friend of mine has quoted in regard to them, is truly descriptive for

"They know a simple, merry, tender knack
Of tying sashes, fitting baby-shoes.
And training full sense into empty words."

and the moral which Mrs. Browning draws, is well worthy of being regarded in these days of too early education.

"Children learn by such
Love's holy earnest in a pretty play."

nor lose a single bloom of the simplicity and innocent ignorance of their first fresh years.

JENNY'S ECONOMIES.

J. E. M'CONAUGHY.

"THAT is too good a broom to scrub a porch with, JANE," said Aunt LIDDY reprovingly, looking over the tops of her iron-bowed spectacles.

"Oh, this isn't my best broom, Auntie," said JENNY cheerily, as she scrubbed away.

"It is good enough to be," said Aunt LIDDY. "Haven't you a poor one?"

"Oh yes, several. But it is hard work to scrub with a worn-out broom."

"Ah, that's the difficulty," said Aunt LIDDY, with the air of a cat that has caught a mouse. "Afraid of hard work! That is the way with young people, nowadays. They can't afford to be saving, because they begrudge the labor."

"But I consider myself a *very* saving housekeeper," said JENNY, with a twinkle of her blue eye. "I save myself all I possibly can."

Aunt LIDDY looked a volume of indignant rebukes and protests. In her day and generation, a woman was considered smart and capable according as she overdid herself in works of supererogation, day by day, just as a man was accounted famous according as he lifted up his arm against the thick trees. Such heresy as "saving one's self" was unheard of in those good days.

"I don't wonder young men are afraid to marry," said Aunt RUTH, piously.

"That is their say," said JENNY. "The fact is, the girls are afraid to accept them, they are such an extravagant set at the present day. All but HORACE," she added.

"I am afraid HORACE will find it hard work making headway," said Aunt RUTH, with a sigh and a downward pucker of her mouth, "when you are so opposed to hard work and so wasteful about your brooms."

"Come, Auntie, take this easy rocker," said JENNY, as she washed and dried her pretty hands, of which she took most excellent care. "Sit down by the east window, and see me make little FANNY a slip before she wakes up. I have to sew spry these days, but I can, with such a sprite as this sewing machine. You see, Auntie, it is just HORACE that has put me up to this kind of saving I am telling you of. 'Save yourself, JENNY, all you possibly can,' he says. 'I want you to last as long as I do.' Now, honestly, Auntie, in those hard-working days, of which you tell so much, did not nearly every man have his third wife?"

"It was pretty common," Auntie admitted.

"We both think," said JENNY, as she deftly turned a hem, "that economy of one's health, strength and life-power is the very best economy one can make, and that helps along every other. For instance, how much faster and more comfortably I can turn off this sewing-work, because I have not wearied myself out with trying to scrub that long porch with a stub of a broom. A small illustration, but it will explain the principle. So in dozens of other small matters through the day. Because I take good care of my hands, I can wash far more swiftly and neatly than if I let them get hard and stiff by bad usage. They look prettier, too," she said honestly, looking at the swiftly-flying fingers with evident satisfaction.

"We are pretty ambitious, auntie, and it is a little hard to stop work sometimes when we ought to. I *have* washed and ironed the same day, but I have decided not to do it any more, because I think it is wrong. Bring a strong sense of duty to bear on any subject and it makes it easier. I intend to preach my kind of economy among my young housekeeping friends, and I think, Aunt LIDDY, I could have preached it to you, in your younger days. How many of these aches and pains and weary days and nights it would have saved you, if you had only practiced this wise economy in your youth."

Baby FANNY now put in her protest against mamma's work, and the economy sermon came to an end.

A MOTHER'S INFLUENCE.—It is hard for a young mother, who has not yet overcome the wayward tendencies of her own youthful nature, to realize the influence she exerts over her little ones. She is constantly surrounded by critical imitators who copy her morals and manners. As the mother is, so are her sons and daughters. If a family of children are blessed with an intelligent mother, who is dainty and refined in her manners, and does not consider it necessary to be one woman in the drawing-room and an entirely different person in her every-day life, but who is a true mother, and always a tender, charming woman, you will invariably see her habits of speech and perfect manners repeated in her children. Great, rough men, and noisy, busy boys, will always tone down their voices and step quietly, and try to be more mannerly when she stops to give them a kind word or a pleasant smile—for a true mother will never fail to say and do all the kind, pleasant things she can, that will in any way help to lift up and cheer those whose lives are shaded with care and toil. The mother of to-day rules the world of to-morrow. Think of it, dear sisters, and guard well your home-treasures.

THE essentials to a little home interior seem to be a shelf with an old vase or two, a plateau, or old dark bronze, or china plate, a casket of embossed brass, a slab of malachite, a slender vase of Venetian glass, supported by a small stand of silver, and the whole softened and subdued by a somewhat near curtain of thick, dusky drapery, swung on a rod in place of a door. Supposing a room not too much out of character with the general ensemble, these objects will certainly lend to it an air of what is considered æsthetic refinement.

Materials for lacquer work can be had of DE VOE & Co. Fulton street, N. Y.

WILL Mrs. BETTIE HARRIS, late of Rural Hill, Tenn., please send her address to FAITH RIPLEY, care of RURAL NEW-YORKER.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

LITTLE ECONOMIES.

THE "kitchen club" held its last meeting for this season at our house yesterday, and the subject of discussion was "little economies," which were chiefly and pleasantly shown to us in MRS. BUNSTER'S article. "There is nothing so plainly shows the character of a housekeeper," she told us, "as the care she gives to small domestic saving. The woman who allows all the grease of the kitchen to go into the swill pail, is guilty of a waste of which she may not be aware, but it *is* a waste. The bone that would make a Frenchman a dish of good soup is too often thrown to the dog with the best part unconsumed, and the choicest parts of our potatoes are, in like manner, wasted by thick peeling. When I hear a housekeeper asking each member of a family for a piece of string, I wonder why no bag, or spool is kept in which the pieces coming from the store could be saved; and when in the March winds the clothes-lines break and the clean clothes trail in the dirt and have to be re-rinsed, I think to myself how much less trouble it would have been to take in the cord after using, thus keeping it clean and preventing rotting by winter rain and sun exposure.

Come back, I called to little four-year old, as he dropped part of a slice of good bread on the snow in his haste, and as I put the remnant away I told him that wilful waste makes woful want, and he might have to say

"Oh! how I wish I had the bread
That once I threw away."

and as I gave the soiled bread to kitty I told the children that our Saviour taught economy in little things even at his feasts; for after he fed the multitude by a miracle, he gave his command, "Gather up the fragments that *nothing* be lost."

When I was a little girl I often saw the housekeeper with her drawers full of linen, yet take a thin sheet, and cutting it through the middle sew together the selvages at the side and then hem the sides cut down, making a sheet almost as good as new. It seemed to me then a small economy among such a plentiful supply. I cannot begin to go through all the cases of waste in each family; experience will teach every housekeeper where she has failed. But we should remember that it is not simply for the *saving* of the trifle, but the example we may be to younger members of our family and the principle we are striving to inculcate. If a young girl sees her mother open the oven door with her apron instead of keeping large fresh linen holders for the purpose, you may be sure that some day she will do the same with her dress, if nothing else is handy, and in that way learn lessons of waste, and untidy habits that will last a lifetime. It is our duty to see that in our domestic affairs each of us obeys the Saviour's mandate. 'Let nothing be lost.'"

We listened attentively to the advice of our neighbor each taking in her own need in the way of special improvement, and as we shook hands at parting with regret we promised each other to renew our pleasant club early in autumn.

DOMESTIC RECIPES.

Buckeye Cake.

One half pound of butter; three-quarters of a pound of sugar; six eggs well beaten; half a pint of sweet milk; one pound of prepared flour; flavor with vanilla.

Puff Cake.

Two cups of sugar; one cup of butter; three beaten eggs; one cup of milk; one teaspoonful of soda and two of cream-of-tartar; three cups of flour; bake in small pans.

Sugar Drops.

Rub to a cream six ounces of powdered sugar with three ounces of butter; add three well beaten eggs; half a pound of sifted flour and half of a nutmeg. Drop this mixture by the spoonful on buttered tins several inches apart. Sprinkle small sugar plums on top and bake at once.

Cocoanut Cake.

One-half pound of sugar; one-fourth pound of butter; five eggs; one gill of sweet milk; one-half teaspoonful of soda and one of cream-of-tartar; three-quarters of a pound of flour; one-half pound of grated cocoanut. Stir well before putting in the cocoanut and soda.

Soda Cake.

One-half cup of butter; one cup of sugar; three eggs; one cup of sweet milk; one teaspoonful of soda and two of cream-of-tartar; two cups of flour; spice to taste.

River Edge, N. J. MISS CRONK.

Corn Bread.

Two cups of Indian-meal; two cups of wheat flour; one cup of sugar; one beaten egg; one teaspoonful of soda; two teaspoonfuls of cream-of-tartar; a little salt, and sweet milk enough to make a thick batter. Bake in shallow pans—it should be when done, about an inch in thickness and eat warm for breakfast. This makes the best corn bread ever eaten according to my taste.

SUBSCRIBER.

Rhubarb Shortcake.

Two heaping teaspoonfuls of baking powder sifted with a quart of flour; one-half teacup of butter; two tablespoonfuls of sugar; a pinch of salt and enough sweet milk to make a soft dough. Roll thick enough so that when baked it can be split open or roll thin so there will be three or four layers. When done, butter and fill with stewed rhubarb plentifully sugared.

Rhubarb Pie.

Stew rhubarb; add the grated rind and juice of a lemon; the well-beaten yelks of two eggs, and sweeten with white sugar; line pie-tins with good crust and fill with the rhubarb; bake until the crust is of a delicate brown; beat the whites to a stiff froth—it will be necessary to add the white of another egg—and add three tablespoonsful of powdered sugar; flavor with vanilla and spread over the top of the pies; return to oven until of a light brown. The eggs and lemon given are enough for two pies.

Baked Rhubarb.

Many prefer rhubarb baked when served as a preserve. Cut the pieces about an inch in length; weigh, allow as much moist sugar as rhubarb and bake in an earthen-ware dish; put into the dish in layers; add a mite of water; cover closely and bake.

Cinnamon Custard Pie.

Beat six eggs thoroughly; add three pints of rich, new milk and a tablespoonful of cornstarch, stirred smooth in a little milk; sweeten to taste and sift in a tablespoonful of cinnamon. Pour into tins lined with crust and bake.

E. M.

QUERIES ANSWERED.

WILL you please give directions for washing *point lace?* MRS. G. S.

ANS.—Baste the lace to be washed very carefully with *fine* thread upon two thicknesses of white flannel. Put to soak in a strong, white castile soap-suds in which a teaspoonful of powdered borax has been mixed. Let soak for a day and night, longer if very soiled, changing the suds meanwhile two or three times. After this let it lie in clear water for half of a day, changing the water twice. Then squeeze—do not wring—the flannel and lace out of this clear water and when partially dry place the flannel, lace down, upon three thicknesses of dry flannel and press the damp side with a moderately heated iron until perfectly dry—the lace can then be ripped off.

How can the taste of cod-liver oil be disguised so that a child will take it?

Plainfield, N. J.

ANS.—Put a spoonful of orange juice in a glass, pour in the oil and squeeze a little lemon juice on top, rubbing the edge of the glass with the juice, or a little porter in the bottom of the glass and on top of the oil helps to disguise the nauseous flavor.

What will polish old black-walnut furniture which has been varnished? JANE B.

ANS.—Take of shellac two parts, boiled oil one part, shake well, apply with a cloth and rub briskly for a few minutes.

If EMILY MAPLE can tell me what will remove match stains from off my marble mantel, I will be very much obliged. GRACE BENINGTON.

ANS.—Sulphide of Carbon.

News of the Week.

NEWS OF THE WEEK.

AT home, Montgomery Blair got his resolution about the Presidency passed by the lower house of the Maryland Legislature, and there is still a good deal of talk in Washington about bringing the matter before the Supreme Court of the United States. Probably the object is merely to keep the question before the public with a view of influencing the next Presidential nominations and election. Returning Board Anderson has been released from "durance vile," and is being vigorously pushed for the Collectorship of New Orleans—nomination not improbable, confirmation nearly impossible. Returning Board Wells is in his war-paint in Washington urging the nomination. There is a powerful railroad lobby at Washington in favor of the Union Pacific Railroad, and Senators Edmunds and Thurman made a bitter attack early in the week upon the manœuvers of the lobbyists. A majority of the Committee of the House in charge of the question, have reported in favor of electing all future Presidents by a direct vote of the people without the intervention of "Electors," and of giving the office to the candidate having the most votes throughout the country, without regard to the division of States. At present a President can, and often is, elected by a majority of States though his beaten opponent has had a majority of the popular vote. A terrible collission of oil and freight trains at Slatington, Pa., 22 killed and wounded. At Boston, a terrific boiler explosion in a stamping factory hurled the boiler through a brick wall, an outside wooden wall, across a canal 130 feet away, sweeping three men to destruction with it, wounding another fatally and six more severely. The "National Party," made up largely of farmers, have shown very unexpected strength in Michigan—indeed, wherever farmers have combined throughout the country, they have either swept the field or nearly so. At Bath, N. Y., the Insane Asylum was set on fire by a frantic patient, the building burnt, and fifteen of the inmates lost, and over forty rescued.

Across the Atlantic things have a slightly less belligerent aspect. From the Iron Man at Berlin comes the suggestion that the projected Congress which, last week, was held to be an impossibility, should soon assemble, and, to spare Muscovite pride while yielding to British and Austrian demands, that the treaty of Paris as well as San Stefano should be reviewed. The suggestion may be adopted, as it is so powerfully backed by the character of its proposer. Austro-Hungary, especially the Hungary part of it, is steadfastly opposed to the late treaty, and Hungary would go to war rather than permit a Slave State to be established on her southeastern borders. England is still pressing war preparations and never had so much ammunition, military stores and troops on hand as at the present time. She is about to seize Crete, and has induced the Khedive of Egypt to declare that if Turkey forms an offensive alliance with Russia he will declare his independence. Over 100,000 Turkish troops have been concentrated about Constantinople, and it is believed they could hold the city against the Russians until relieved by British reinforcements, in case of war and their alliance with Russia's enemies. Roumania is fiercely opposed to Russia on account of the latter's peremptory demand for the retrocession of Bessarabia. The Premier of that State has visited Vienna on the matter and is now in Berlin. Gortschakoff haughtily said he would listen to no discussion of the matter, but would disarm the Roumanian army, whereupon Prince Charles hotly declared that the Roumanian army might be destroyed, but that in his lifetime it should not be disarmed. The campaigning season is just about to open, both sides are pretty well prepared. The English and Russians are at the boiling point, and it will require strong outside pressure to prevent a collission. Russia has 200,000 men within striking distance in Turkey, is occupying strategical points in Bulgaria, recruiting her forces at home, and is said to have 200,000 men to the southeast of Khiva, on the road to British India. France, while expressing herself friendly to Russia, has declared she will form no alliance in any way hostile to Great Britain.

The Co-operative Employment Bureau of the Bowery Branch, Young Mens' Christian Asssociation, 134 Bowery, have abolished the fee of one dollar which they lately charged. Employers of labor can now be furnished with male help of all kinds free of expense. Unemployed men can register for situations, but responsible references must be given.

At Cannes, in front of a small boot-maker's shop, the English tourist may find the following: "Repairs hung with stag-coach." After long and anxious thought he may arrive as the cobbler's meaning, who only wishes to inform his numerous patrons that "repairs are executed with diligence."

Happy tidings for nervous sufferers, and those who have been dosed, drugged and quacked. Pulvermacher's Electric Belts effectually cure premature debility, weakness and decay. Book and Journal, with information worth thousands, mailed free. Address PULVERMACHER GALVANIC CO. Cincinnati, Ohio.

CORINTH, Maine, Feb. 12, 1878.

TO THE DAVIS SEWING MACHINE CO., Watertown, N. Y.—*Gents:* We are manufacturers of clothing; have been engaged in the business for the past fifteen years, manufacturing largely for Miner, Beal & Hackett, Isaac Fenno & Co., A. Sherman & Co., Smith, Richardson & Bates, Prager, Bock & Co. and Leland, Rice & Co., all of Boston. We have used the Davis Vertical Feed Sewing Machine for the past four years in manufacturing our clothing, and we know that it is better adapted to our business, and possessed superior advantages over any of the under-feed sewing machines.

Within the last three months we have had occasion to seam our clothing with double thread, and we find that the Davis Vertical Feed Sewing Machine (and no other family sewing machine) will do the work as well and easily as with the single thread. Yours, truly, T. BRACKETT & SON.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, April 6, 1878.

BEESWAX.—The offerings are small, and full prices are asked. Western and Southern quoted at 27@28c.

Exports past week, 6,250 pounds.

BROOM CORN.—Manufacturers are buying moderately and prices are sustained.

Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 4@5½c.; red-tipped, 4@5c., and common red, 3@3½c.

BEANS AND PEAS.—Beans of all kinds begins to improve for marrows but other grades are unchanged Perhaps it should be remembered that there is less pressure to sell fine mediums at the late low rates. Fair orders are expected from Havana for marrows and White kidneys. Turtle soup beans higher. Receipts of beans for the week 3418 bush. Peas of all kinds weak; green lower. Canadian field in bulk and vine 83@84c.; Southern B. E. $2 80@3; green $1 22.

We quote:—Beans, medium choice, $1.50@1.55; other, $1.25@1.45; marrows, choice, $1.60@1.65; other, $1.50@1.55; pea, $1.50@1.65. White kidney, choice, $1.25@1.55; other, $1.85@1.95; red, choice, $2@2.35; other, $2.35@2.40. Turtle soup beans, $2.20.

BUTTER.—New butter now absorbs the chief local demand when full prices are to be paid. The fine lines of old are not obtainable in a regular way, and all of the useful styles of old are offered easier. In some parcels not as prime, full dairies and serviceable half tubs the decline has been quite abrupt, but no one has dropped too soon, as a settled spring is now beyond a doubt, so far as dairy products are concerned. New butter is increasing in supply from all points, the West adding materially to state. Prices are showing daily as much of the fodder fed grades soon deteriorate in flavor, and it is injudicious to carry it over. Exporters are working off many of the low grades, but have to be allowed their ideas as to price. Receipts for the week 18,600 pkgs.

Exports past week, 1,580 pkgs.

Comparative receipts and exports:

	Receipts, pkgs.	Exports, firks.
June 1, '77, to Apr. 1, '78...	1,088,970	16,068,0
June 1, '76, to Apr. 1, '77...	10,852,230	1,135,469
June 1, '75, to Apr. 1, '76...	9,659,19	322.46
June 1, '74, to Apr. 1, '75...	887,130	44,860
June 1, '73, to Apr. 1, '74...	852,497	238.37

NEW.—State, half tubs, choice, 28@30; good 29@31. Welch firsts, 28@28; second, 24@25c; poor new, 20@22c; Western creamery ranges at 34@35c.; other 28@32c.; W. dairy good to choice 23@26c.; fair 20@21c.; fair to good 15@21c.

OLD.—State dairies, good to choice 21@23c.; fair, 15@17c.; from 15@18c; selected firkins 20@22c; fair to good 18@23c; poor 14@18c; selected half tub 22@24c; other, 15 20c.; choice Fall Welsh 22@88c. Fair to prime 20@26c.; Welsh dairies, 23@23c, State creamery, 23@30c; other, 26@28c.; other 19@20c; Western factory, fresh, low goods worth 19@20c.; greese 6½@7c.

CHEESE.—Exports for the week 17,162 boxes. Strictly price is easier and early brings 13, and some special lots up to 13½@13¾; but otherwise there is but little being done and prices easy and a desire to get the stocks as closely sold up as possible.

Fancy factories, 12¾—c.; good and prime, 10½@11¾c.; fair lots, 9@10½c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 11¾@12¾c, for good to prime; 9@9½c, for fair lots; 7@9c. for skimmed; Western factory, cheddar, 10½@12c. for fine; 12¼@12½. for good; 6@9c. for poor.

Liverpool cable, 63s. Gold closes 10¾.

Exports for the week, 17,261 boxes.

COMPARATIVE RECEIPTS AND EXPORTS FROM JUNE 1ST.

	Receipts, pkgs.	Exports, lbs.
June 1, '77 to Apl. 1, '78.....	2,224,461	103,864,235
June 1, '76 to Apl. 1, '77.....	1,923,842	82,941,819
June 1, '75 to Apl. 1, '76.....	2,309,887	90,640,618
June 1, '74 to Apl. 1, '75.....	1,884,070	88,615,152
June 1, '73 to Apl. 1, '74.....	1,869,680	84,904,163

LITTLE FALLS.—There has been an increase in offerings. Cheese is of poor quality and few transactions recorded. Butter averages about 25c.

COTTON has fluctuated sharply as the advices from the other side have been favorable or otherwise, closing about ¼ above the lowest prices of the week. Latest prices are for March, 10.62@10.63c.; April, 10 74@10.76c.; May, 10.89@10.90c.; June, 11.00@11.01c; July, 10.09@10.10c.; August, 11.01@11.02c.; September, 10.95@10.96c.; October, 10.75@10.76c.; November, 10.66@10.67c.; December, 10.68c.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	7¾	7¾	7¾	7¾
Strict ordinary	8¼	8¼	8⅝	8⅝
Good ordinary	8 15-16	8 15-16	9 1-16	9 1-16
Strict good do	9 7-16	9 7-16	9 9-16	9 9-16
Low middling	9¾	9¾	10	10
Strict low middling	10⅛	10⅛	10⅜	10⅜
Middling	10 9-16	10 9-16	10 11-16	10 11-16
Good middling	10 15-16	10 15-16	11 1-16	10 1-16
Strict good middling	11⅛	11⅛	11⅜	11⅜
Middling fair	11¾	11¾	11⅞	11⅞
Fair	12¼	12¼	12⅝	12⅝

Stained.

Good ordinary, 7¾c. Strict ordinary. 8⅛c.; Low middling, 9c.; Middling, 9⅜c.

DRIED FRUITS.—There has been a very dull feeling throughout but prices fairly steady.

Apples—State quarters, old, 5¾@6c.; new, 5¼@6c.; Western quarters, old, 5@5¾c.; new, 5¼@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 4½@5c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@16c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c. Exports for the week 153 bbls dried apples.

EGGS.—Receipts for the week, 24,372 bbls. do. last week 22,890. There has been an active demand but mostly for local use, and as receipts are heavy sellers miss the customary trade to other cities. Present prices have ruled nearly a fortnight, at the close there is some firmness for extra stock but the general run of grades are offered freely. Since the plan adopted of not charging for barrels some shippers are sending poor packages. This is unprofitable in the long run as wastage is sure to attend insecurely packed bbls.

Near points, 11@12c.; State, 10½c.; Western, prime, 10c.; Southern do., 9@10c.; off quality stock, 9c.; Duck, 18@20c.; Goose, 35@40.

FLOUR.—In the early portion of the week while the situation abroad looked very threatening on active business was in progress largely for export, but within a day or two a quiet feeling has prevailed and prices easing are off.

Latest prices are $4.15@5.00 for poor to fancy superfine State; $5.00@5.20 for common to fair extra do; $5.00@5.25 $5.20@5.60 for good to choice do.; $4.15@5.00 for superfine, Indiana, Iowa, Michigan, Ohio, &c.; $4.90@5.20 for very poor to good shipping extra do do., (chiefly at $5.10@5.20) and $5.25@5.65 for good to choice extra do.; common to choice white extras, $5.50@5.65; fancy do. at $5.54@7.50; (the latter an extreme); red and amber winter wheat, inferior to choice trade and family, at $5.35@6.50; round hoop Ohio at $5 00@5 35, and trade brands of at do. $5.50@6.75, the latter for choice; St. Louis, $5.40@6.00 for poor to fair extra and $6.10@7.25 for good to fancy; (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, $5.00@6.15; Minnesota "straight," common to fancy, at $5.75@6.75, and patent poor to very choice, $6.00@8.25, with a few fancy at $8.75@8.50; unsound stock at $2.25@5.75; city mill extra at $6 10@6.25 for fair to very choice for West Indies; do. for England $5.15@5.20; do. trade and family extras, $6.50@7.10; do. South America, $6.40@7.35 for fair to fancy; No. 2 at $2.85@4.10.

Corn meal is selling at $3.15@3.20 for Brandywine and $2.80 for yellow Western.

FRESH FRUITS.—Exports of apples 275 bbls. The stock is quite run down and all sound stock is firm; demand mainly for Russets. Other sorts too tender for the advanced season. Selected, $4 50@5; poor to fair, $2.25@4. Strawberries arrive regularly and in quantity. Prices becoming more popular, 40@60c. per quart. Hot-house berries $1. Cranberries dull but likely to be used. Prime to fancy crates, $2.78@3; other, $1.75@2.50. Peanuts fairly active at $1.35@1.45 for hand-picked Va., common to good 85c.@$1.00. Pecans, Texas, 6@8 lb.; A novelty in market this week was a consignment of large Mulberries from Florida. Some of them fully one-half inches long.

FURS AND SKINS.—The tone of the market for raw skins continues weak; and the advent of war in Europe would tend to completely silence trade here.

No. 1 quality.	Nor. & East.	West & N. W.
Otter, ℔ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and ylgs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ℔ lb	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

HOPS.—The export movement has been very small this week, but prices steady and unchanged. State choice to fancy, 11@12c.; good to prime, 8@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

HAY AND STRAW.—The arrivals are larger, but demand is fair and prices sustained. Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@55c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

Exports since Jan. 1st, 17,250 bales; same time last year, 14,850 do.

GRAIN.—Wheat since our last report has been very much excited, with large transportations, representing chiefly export purchases, and prices advancing, are wholly due to the situation; around here for the last day or two a graver market has been noted and prices easing a little.

Latest sales are of No. 2 old at 60c—ungraded red and amber State, $1 45@1 46—; white, $1 47; No 1 Northwest spring, $1 27; No. 3 Chicago, $1 22½; No. 2 red for March at $1 28; No. 2 Milwaukee spring, $1 27. Rye has been very active, purchases within a week reaching fully 250,000 bush. largely for the German markets, closing at 72c. for Western: 76@77½c. for State and 76c. for Canada. Corn is weak and quiet. Latest sales are of New York No. 2 at 54@55½c.: steamer mixed, March, 54c. Oats of New York extra white, at 34½@40c.; do. No. 1, March 34½c.; No. 2 white, 35½c.: mixed Western, 34@34½c.; white Western, 36@39c.

All articles have been affected by the situation abroad, and with an active inquiry from exporters prices are much higher: latest sales of wheat are of ungraded spring at $1.20@1.25; bush. No. 3 spring at $1.22@1.22½. No. 2 northwest spring at $1.28@1.09: New York No. 2, spring at $1.27@1.27½; Chicago spring at $1.29; No. 2 Milwaukee spring at $1.29@1.30,; No. 1 Milwaukee and Minnesota spring at $1.34@1.35; ungraded red $1.135@1 36; No. 1 red at 1.38; No. 1 white at $1.42, white State, at $1.46@1.47; No 2 red, March delivery, at $1.38; No, 2 red, April delivery, at $1.36½@1.37; New York No 2 spring, March delivery, at $1.28½@1.29; do.. April delivery, at $1.26½@1.27; do., April delivery (in store), at $1.27; No. 2 northwest spring, March delivery at $1.30; Rye at 72@74 for State, and 73 for Great Western.

LEATHER.—Hemlock sole quoted $19@21; for light 19@21c. for middle, 19@21c. for heavy and 17½@18c. for good damaged.

MAPLE SUGAR.—The supply is liberal and the low rates of 8@10c. should work it off faster. Retailers keep the market slow by aiming for too large profits.

OIL-CAKE.—Western is quoted at $30.50 ℔ ton.

POULTRY AND GAME.—Trade in live is light to killers and free Western and Northern receipts over stock the market with fowls and turkeys. N. J. chickens, 10@13c.; W.fowls, 9@10c.; Turkeys, @12c.; Toms, 6@8c.; Ducks, N. J., pair, 50@75c.; Geese, N. J., $1.75@2.00; Western, $1.00@1.50.

Cheap live poultry keep country killed low. Receipts of dressed, however, are moderate and there is not much interior interest at this time of the year. Ducks very scarce. Only choice small turkeys have any sale.

Fancy Phila. and N. J. turkeys, 12@14c.; good, 8@6c.; large or Toms, 8@10c.; chickens, choice, 8@9c; good, 12@14c.; common, 8@10c.; ducks, choice, 15@20c.; other, 21@22c. small and slips, 27@28c.

Wild pigeons have been abundant and low; to-day they are firmer.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.25@1.50; Red-heads, 60@80c; Mallard, 50@60c.; Teal, 25@40c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50. Partridges, pair, 75c.@$85c. Grouse, $1.00@1.50; poor, 90c.@$1.10.

PROVISIONS.—Hog products generally have varied but little, closing steady. Mess pork, $10.15@10.25 for spot lots; $9.90 @ 10 for March and April. Bacon at 5⅝c. for long clear and 5⅝c. for short clear. Lard—Western steam, 7 37½c. 7.40c. for short, 7.44@7.45c. for May, 7.37½@7.40; Tallow at 7 9-16c. for prime. Stearine, 7¾c. for prime Western. Beef hams at $15.50. Beef—New extra mess, $12.@12.25; plain, $10.50@11.50; new packet, $15, family mess, $17.50; extra India mess, $27 for city brands; do. Philadelphia, $25.

SEED.—Grass are weak. Clover, 7@7½c. for Western; 7@7½c. for State. Timothy, $1.40. Rough flax, $1.45.

TOBACCO. — The new crop comes in more freely, and export demand is better.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	3⅛@ 3½	3 @ 3½
Good lugs	3½@ 4½	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5½@ 6½	5½@ 7
Good leaf	9½@7½	— @—
Fine Leaf	— @—	— @—
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10	@—12
fine, do.	18	@23
medium	12½	@14
selections	25	@35
seconds	9	@12
Fillers	6	@ 7
Seconds and fillers, shipping	9	@11
Pennsylvania assorted lots	19	@17
wrappers	20	@50
New York assorted lots, common to medium	8	@ 9
Good	10	@12
Ohio assorted lots	7½	@10
Wisconsin assorted lots	7½	@ 9

VEGETABLES.—Exports past week 2,380 bbls. Potatoes are quiet; outside rated sell quicker than off quality. It is thought a good many common will be lost as potatoes have had a trying carrying season.

We quote Peach Blows $1.25@1.62, bulk and double-heads. Early Rose, $1.00@1.25; Peerless, $1.25@1.50; Nova Scotia, $1.95@2.00; Sweet, $2.25@2.50. Cabbages, 100, $3.00@4.00; red, 5@6. Marrow squash, bbl., $1.50@2; Hubbard do., $2.00@2.50. Russia turnips, 75@87c. Carrots, 75@87c. Beets, bbl., 62@75c. Red and yellow onions, $1.00@1.25; white, $1.25@1.75. Celery, doz., 75c.@$1. Hot-house mushrooms, ℔ lb., 40@50c. Radishes, 100 bunches, $4@4.50. Lettuce, small, dozen, 75c.; large, $1@$1.50. Cucumbers, doz., $2.25@2.75. Rhubarb, doz., $7@8. Spinach, Southern, @2.25 ℔ bbl, Bermuda, $4.50@5.

WOOL.—There is a depressed and dull market still on account of the slow trade in goods and the small transactions are at easy prices.

Ohio, Pennsylvania and Virginia—XXX and picklock, 44@46c.; XX, 42@44c.; X, 42@43c.; No. 1, 43@44c. No. 2, 35@37c.; common, 33@35c.; combing, 52@55c.

New York, Michigan, Indiana and Wisconsin—XX, 34@36c.; X, 36@38c.; No. 1, 38@40c.; No. 2, 33@35; common, 32@34c.; combing, 44@48c.

Iowa, Vermont and Illinois—X and XX, 33@35c.; No. 1, 37@40c.; No. 2, 31@33c.; combing. 45@50c.

Missouri, Kentucky, and Tennessee — Washed fleece, 37@42c.; unwashed, 25@30c.; unwashed combing, 30@35c.

LIVE STOCK MARKETS.

NEW YORK, April 6, 1878.

BEEVES.—Receipts for the week, 9,253 head: do., last week, 9,563 do. There was an active buying feeling, and the moderate supplies were easily closed out. There was no disposition, however, to pay strong prices and a range of 8½@10c. with a number of car loads at 9½@9½c. expresses the market for useful to prime steers. Aside from the regular butchers' business at the above prices, selections of special stock for export brought 10½c.: Rough State oxen sold at 7½c.; Texas oxen, 8c.

COWS AND CALVES.—The bulk of the sales were at $35@55; occasional singles $60@70 but stock equal to the latter in quality is worth about as much in the interior for new milk.

VEAL CALVES.—Receipts, 1,348 head; do last week 1,218. The demand for live moderate at 5½@7½c. for good to choice; bulls held at $1.50@3.50 per head. The Sanitary Board seizes all under 60 lbs. weight. Hog dressed calves 5@9c.

SHEEP AND LAMBS.—Receipts for the week, 16,324 head; do. last week, 16,459 do. The market has ruled weak and broke on Thursday last. Medium to good wool sheep, 5½@6½c.; yearlings, 7@7½c. Some holders withdrew their stock at the prices. Spring lambs at Washington Market $3@6 per head.

SWINE.—Receipts for the week, 32,377 head; do., last week, 17,405 do. Market steady $4.06¼ per 100 quoted last for Ohio country dressed quiet at 4½@5½c. for heavy to pigs.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

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Fifty per ct. extra for unusual display.		
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Business "	80	"
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☞ No advertisement inserted for less than $2.

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"A Farmer's Son or Daughter." See Adv.

Ayer & Son's Manual contains more information of value to advertisers than any other publication. *Sent free.* Address N. W. AYER & SON, Advertising Agents, Times Building, Philadelphia.

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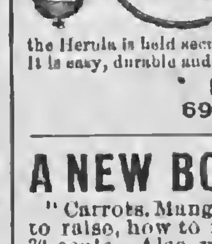
FARM IMPLEMENTS & SEEDS.

Call on or write to **R. H. ALLEN & CO., New York,** for whatever you want of the above. Address 189 & 191 Water St.



THIS NEW ELASTIC TRUSS

Has a Pad differing from all others, is cup-shape, with Self-Adjusting Ball in center, adapts itself to all positions of the body, while the BALL in the cup PRESSES BACK the INTESTINES JUST AS A PERSON WOULD WITH THE FINGER. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.

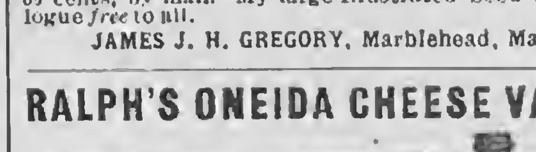
ECCLESTON TRUSS CO., 69 Dearborn St., Chicago, Ill.

A NEW BOOK FOR FARMERS.

"Carrots, Mangolds and Sugar Beets. What kinds to raise, how to raise, and how to feed." By mail, 30 cents. Also, my three works, on "Cabbages, and How to Grow Them," "Squashes, and How to Grow Them," "Onions, and How to Grow Them." Full of just such minute details as farmers want. Each, 30 cents, by mail. My large Illustrated Seed Catalogue *free* to all.

JAMES J. H. GREGORY, Marblehead, Mass.

RALPH'S ONEIDA CHEESE VAT.



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JONES, FAULKNER & CO., Sole Manufacturers, Utica, N. Y.,

Dealers in Dairy Supplies and Furnishing Goods. Also, Manufacturers of Steam Boilers and Engines and STEAM DAIRY APPARATUS, for Cheese Factories and Creameries.

TO ADVERTISERS! We will send free to all applicants who do any newspaper advertising, the THIRD EDITION of **AYER & SON'S MANUAL FOR ADVERTISERS.** 160 8vo.pp. More complete than any which have preceded it. Gives the names, circulation, and advertising rates of several thousand newspapers in the United States and Canada, and contains more information of value to an advertiser than can be found in any other publication. All lists have been carefully revised, and where practicable prices have been reduced. The special offers are numerous and unusually advantageous. Be sure to send for it before spending any money in newspaper advertising. Address N. W. AYER & SON, ADVERTISING AGENTS, Times Building, Philadelphia.

"LIVE AND LET LIVE."

ALBION N. MERCHANT'S

Auxiliary Newspaper List.

Democrat and Sentinel, Burlington, Vt., Home Visitor, St. Albans, Vt., Recorder, No. Hero, Vt., Herald Nicholville, N. Y., News, Plattsburgh, N. Y., Journal, Champlain, N. Y., Record, Port Henry, N. Y., Star, Chateaugay, N. Y., Journal, Moira, N. Y. Each paper $2 per year in advance. Their large local subscription lists make these Newspapers most valuable advertising mediums. Advertising space can be secured at reasonable rates. Correspondence solicited. Orders from respectable and responsible sources receive prompt attention. Address

A. N. MERCHANT, Burlington, Vt.

GENESEE VALLEY FARMS FOR SALE. Some of the finest residences in the Valley, near R. R. Inquire soon of JOHN SHELDON, upon the premises, at Moscow, Livingston Co., N. Y.

BIG GIANT CORN MILL.

Every Man His Own Miller.

The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use. Grinds twice as fast as any other Mill of same size and price. Manufactured by

J. A. FIELD, SON & CO. 922 N. 2d St., St. Louis.

☞ HELP!

FOR THE WEAK, NERVOUS AND DEBILITATED!

The afflicted can now be restored to perfect health and bodily energy, at home, without the use of medicine of any kind.

PULVERMACHER'S

ELECTRIC BELTS

AND BANDS,

For self-application to any part of the body, meet every requirement.

The most learned physicians and scientific men of Europe and this country indorse them.

These noted Curative appliances have now stood the test for upward of thirty years, and are protected by Letters-Patent in all the principal countries of the world. They were decreed the only Award of Merit for Electric Appliances at the great World's Exhibitions —Paris, Philadelphia, and elsewhere—and have been found the most valuable, safe, simple, and efficient known treatment for the cure of disease.

READER, ARE YOU AFFLICTED?

and wish to recover the same degree of health, strength, and energy as experienced in former years? Do any of the following symptoms or class of symptoms meet your diseased condition? Are you suffering from ill-health in any of its many and multifarious forms, consequent upon a lingering, nervous, chronic or functional disease? Do you feel nervous, debilitated, fretful, timid, and lack the power of will and action? Are you subject to loss of memory, have spells of fainting, fullness of blood in the head, feel listless, moping, unfit for business or pleasure, and subject to fits of melancholy? Are your kidneys, stomach, or blood, in a disordered condition? Do you suffer from rheumatism, neuralgia or aches and pains? Have you been indiscreet in early years and find yourself harassed with a multitude of gloomy symptoms? Are you timid, nervous, and forgetful, and your mind continually dwelling on the subject? Have you lost confidence in yourself and energy for business pursuits? Are you subject to any of the following symptoms: Restless nights, broken sleep, nightmare, dreams, palpitation of the heart, bashfulness, confusion of ideas, aversion to society, dizziness in the head, dimness of sight, pimples and blotches on the face and back, and other despondent symptoms? Thousands of young men, the middle-aged, and even the old, suffer from nervous and physical debility. Thousands of females, too, are broken down in health and spirits from disorders peculiar to their sex, and who, from false modesty or neglect prolong their sufferings. Why, then, further neglect a subject so productive of health and happiness when there is at hand a means of restoration?

PULVERMACHER'S ELECTRIC BELTS AND BANDS

cure these various diseased conditions, after all other means fail, and we offer the most convincing testimony direct from the afflicted themselves, who have been restored to

HEALTH, STRENGTH, AND ENERGY,

after drugging in vain for months and years. Send now for DESCRIPTIVE PAMPHLET and THE ELECTRIC QUARTERLY, a large Illustrated Journal, containing full particulars and INFORMATION WORTH THOUSANDS. Copies mailed free. Address,

PULVERMACHER GALVANIC CO.,

Cor. Eighth and Vine Sts., CINCINNATI, O.

☞ *Avoid bogus appliances claiming electric qualities. Our Pamphlet explains how to distinguish the genuine from the spurious.*

Marsh's Cylinder Bed Foot Lathe.

This is a NEW LATHE, on a NEW PLAN, having a Cylinder Bed, which is much more simple and convenient than the old style. It has attachments for circular and scroll sawing and bracket molding. New. Novel, and the Best Invented. Manufactured and sold by the

BATTLE CREEK MACHINERY CO., BATTLE CREEK, MICH.

Send for Circular and Price List.

TRADE MARK. 'VIBRATOR' Reg. March 31, 1874.

THE ORIGINAL & ONLY GENUINE "Vibrator" Threshers,

WITH IMPROVED

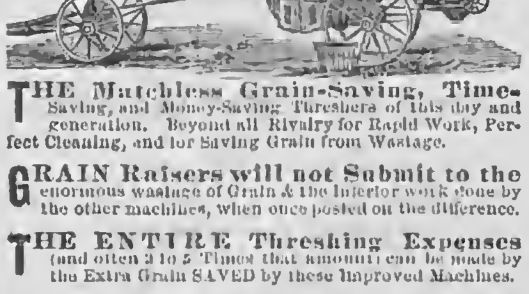
MOUNTED HORSE POWERS,

And Steam Thresher Engines,

Made only by

NICHOLS, SHEPARD & CO.,

BATTLE CREEK, MICH.



THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Raddles, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse size, and two styles of Mounted Horse Powers to match.

STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

IN Thorough Workmanship, Elegant Finish, Perfection of Parts, Completeness of Equipment, etc., our "VIBRATOR" Thresher Outfits are incomparable.

FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which we mail free.

Use the Anti-Friction Hay Carrier.

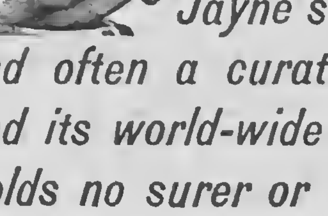
For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and moves horizontally any desired distance. No trouble about getting over high beams and to the end of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "B" to U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

USE THE PERFECT BUTTER COLOR! WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop's, Burlington, Vt.

CHEAPEST FERTILIZER. BECAUSE THE BEST.

PREMIUM BONE

For all crops. Made only by the EXCELSIOR FERTILIZER WORKS, Salem, O. Circulars free.



FOR ALL LUNG TROUBLES,

as well as Complaints of the Throat, Dr. Jayne's Expectorant is certainly a palliative and often a curative, as the testimony of thousands and its world-wide reputation attests. For Coughs or Colds no surer or more effective remedy can be found.

Reading for the Young.

MY LOVER.

EMMA MORTIMER WHITE.

At last I am blessed with a lover,
Just what a lover should be—
Devoted and constant, and handsome.
Handsome as handsome can be.

Devoted!—devoted, believe me!
He never has left me a day;
I am ever his pride and his darling—
Without me he cannot be gay.

He cares for no lovelier lady;
To him I am very fair;
Contented he rests on my bosom,
Kisses my lips and my hair.

Handsome!—his cheeks are like roses.
His head is run over with curls,
His forehead is as white as a snow-drift,
His teeth glimmer clearer than pearls.

His eyes, they are bright as the sunshine,
With lashes that cannot be beat,
And then I know that you've never
Seen such hands and such feet.

Wealthy? He's careless of money—
Money to him is but dross;
Silver and gold, for my lover,
Are only for pitch and for toss,

He must have been born to a fortune—
He's lived at his ease ever since;
If you'd see but the style of his dressing,
You'd probably think him a prince.

Shirts thick frosted with stitching,
Silken embroidered socks;
I think the most of his money
He keeps in a painted box.

He'll show you a golden guinea
On which he cut his first tooth,
Strung on an azure ribbon,
Tied with a love-knot, forsooth!

Of teeth he has half a dozen,
Set to the cunningest mold;
For I am my lover's mother—
For he is but one year old!

LETTERS FROM BOYS AND GIRLS.

How to Make Candy.

DEAR UNCLE TRUE.—I see that several of our Cousins would like to know about making candy, and I am happy to tell them, because it is fun to make it and fun to pull it and more than fun to eat it. But just let me tell "Brown Badger," that he can make corn balls out of sirup, either maple or West India, just as well as out of sugar, only he will have to boil it longer. The balls do not look quite as nice, but they taste just as well, and Grandmother says, the "proof of the pudding is in the taste;" so with corn balls.

Now cousins "Lizzie," and "Jennie," we will talk about candy. I suppose you will not start on a great quantity at first, so we will take a pound of granulated sugar to commence with; then your corn, when you choose, double or quadruple the amount. Take one pound of white, granulated or coffee crushed sugar, put into a porcelain kettle, dissolve two spoonfuls of cream-of-tartar in half a teacup of warm water, turn it in with the sugar, set it on the stove, and let the sugar melt slowly; when melted, set it over the fire, and let it boil quite fast. To know when it is done drop a little into a cup of cold water; if it sinks in a little ball to the bottom of the cup, it is done; now is the time to put in your flavoring; you can use essence of peppermint, cinnamon, sarsaparilla or extract of lemon, you will need two tablespoonfuls to flavor the quantity you are making; stir it well into the boiling sugar.

Butter a deep platter, and turn the sugar from the kettle, into the platter. Have your hands clean, and rub a little butter over them; and when the candy is cool enough to hold, take as much as you can handle into you hand; look out, and do not burn your fingers, for that would spoil the fun. There ought to be three to work at it at one time; now commence to pull it gently, and work lively; as it grows colder, and more elastic, you can put it all together, and all of you pull on it; it will at first be a cream-color. Some like it so better than to pull it till it is snow-white; you must not taste of it too often while pulling it; because it evaporates very quickly, if you begin to let it; when it grows brittle and hard, take a sharp knife, and pull the candy into strips, and cut it off, in equal lengths, and lay it on the buttered platter, set it in a cool place, and you will have some splendid candy; and will be pretty likely to have permission to practice the art, quite often.

For lemon drops, make your candy, and season it with lemon extract, if it is winter have some snow packed in pans, and drop the candy on the snow to cool; if in summer, a cake of ice will do just as well; you can drop it from a spoon, in large or small drops, or turn it through a tin collander, they are just luscious, and they are clear as crystal.

Maple sugar candy is made with the same recipe, only instead of cream-of-tartar we have to use sharp vinegar, this is to keep the fluid from graining, instead of being stretchy. Some people use tartaric acid; it is not good for the teeth, as it destroys the enamel and makes it crack, the teeth decay and ache. Fresh lemon juice is the best acid, but you cannot always get them, so we use cream-of-tartar instead.

Molasses candy is made of West India molasses, with vinegar in it; a half cup of vinegar to a quart of molasses and pulled just like our sugar candy.

Once upon a time, not very many years ago, some cousins of mine,—they were none of Uncle TRUE'S correspondents, but my own kin,—came to stop a few weeks with us. Father and mother went away to be gone a few hours and we asked them if we might make some molasses candy in the evening. Mother said, "Yes, if we would be careful and not get burnt or spill it over the stove." She told us to take a quart of molasses and put it into her six-quart porcelain kettle. I knew how to make it and promised to do all right.

Well, we started it; but the kettle was so big that the molasses looked small and so one of the boys said there would not be enough to go round, and they took a jug and went to the store and got a gallon more and turned it into the kettle, made up a good fire and while we were waiting for it to boil we got to play and forgot all about it and the first we knew, it boiled over and ran all over the stove and floor. Just think how I felt! I had never tried to mop a floor but that was the first time! We had good candy of what was left in the kettle but it did not taste very good to me, and every step I took my feet stuck to the floor; and the rest were just as bad.

When mother came home she was astonished. You never saw such a looking house! We had tracked the molasses on to the sitting-room carpet and everything we had touched with our hands stuck. I knew mother would not scold; but I was grieved to see how hard she had to work to clear it up. She showed me how to clean the chairs; but it was a sorry job for all of us. The reason she had us take so large a kettle was, that it could not run over; but when you put a gallon of molasses into a six-quart kettle, no wonder it ran over.

I never forgot that candy meeting; and the boys didn't either. It was a good lesson for all of us.

LILLIE LEE.

One Boy's Experience.

IN a city not a great many miles from Cleveland, lives a boy whose experience may help to counteract the pernicious effect of the mass of sensational literature furnished to the boys of to-day.

His parents are in comfortable circumstances, and the boy has never been remarkable for anything except a mild form of laziness, which exhibited itself in a disinclination for either work or study. He was kept in school so long as he learned anything, and then entered a store as errand boy.

Here his spare time was spent in reading papers (?); his spare cash devoted to their purchase. He learned from the fascinating stories furnished by these "papers" that the hero always began his wonderful career by running away from home. It was the correct thing to begin at the bottom of the ladder. If the boy lived near the sea, he invariably enlisted as cabin boy, and, after years of hardship and danger, returned to the poor town of his birth with untold wealth, and a vocabulary of profanity absolutely horrifying to the "old fogies" who lived honest lives and tried to do as they would be done by.

If the hero lived in some inland town, he ran away to the nearest large city and began his career as newsboy or bootblack. The laws of nature, the laws of trade, the laws of society, were set aside for his especial benefit; and from his lonely position he rose by a series of impossible advontures and occurrences to wealth and power and notoriety.

So, after a while, our would-be hero, having accumulated a few dollars, provided himself with all the apparatus of a first-class bootblack, and started for Cleveland. A note left behind, informed his parents that he had "gone to seek his fortune."

No sooner had he shown himself in Cleveland, however, than the young bootblacks of that city sought him with a zest and earnestness wholly unexpected by our hero. In about fifteen minutes all desire for the life of a hero had left that boy, together with his coat, his blacking-box, his hat and the contents of his pockets. In return he gained nothing but a black-eye and a bloody nose.

The police finally rescued him and, instructed by a telegram, sent him back to his father a sadder and an infinitely wiser boy.

A CONTRIBUTOR.

Instruction and Comment.

DEAR RURAL COUSINS.—Noticing in a late RURAL that "Bitter Sweet" would like to know how to make paper flowers, I will try and tell her how to make roses. I do not know how to make any other kind.

Take tissue paper and cut fifteen round pieces, of three different sizes, each size about an eight of an inch smaller than the preceding one. Make a small hole in the center of each, and cut into each piece eight slits, (care should be taken not to cut them too deep so they will tear out,) slightly rounding the corners. Next, take a fine wire and wind it with green paper, (the color of the rose,) and tie over it a smooth piece to make it round; then slip the pieces on the wire. When this is done, cut the same kind of a round piece as the other from green paper, only a great deal smaller, and put that on last. It is to represent the outer leaves of a rose, I have made them this way and they are very pretty; but if any of the girls know of a better way I should like very much to hear of it. I hope that I have explained it so that "B. S." can make roses without difficulty.

One thing I should like to say to the Cousins is this, I think it a perfect shame after the Editor has so kindly given quite a space, in his worthy paper for the benefit of the young people, that it is filled week after week about nothing but one of the Cousins, who is undoubtedly no worse than a good share of us. I am sure I would not give much for a person who did not have some conceit, of course I do not believe in too much of a good thing, but probably it is just as natural for "Slayerofconceit" to be self-conceited, as it seems to be for the other Cousins to run theirs down. Now I say let us change the subject, and allow him rest, for a while at least. Why isn't it just as easy to talk about books, fancy work and a host of other things? I am sure it would be far more interesting. I wish some of the Cousins would write and tell how to make some kind of fancy work. I have made considerable and perhaps some time will write and tell of some of my attempts. Until then adieu. MYRTLE.

Fredonia, N. Y.

How to Fill the Basket.

"I DON'T see why I can't get this lesson," exclaimed FRANK impatiently as he looked up from the grammar he was studying.

"I know," said KATE, "your head is too full of trash to hold your lesson." FRANK looked puzzled. "Well I'll explain," said KATE laughing; and taking a small basket she filled it with chips; then with a very wise look on her young face, she proceeded to the pantry and brought a pan of apples which she placed beside the chips.

"Now, FRANK, this basket of chips is your head—"

FRANK laughed.

KATE seeing her mistake blushingly tried to explain that she wanted the chips to represent the nonsense in his head, and the apples to represent his lessons. "So you see in order to get the apples in you must empty out the chips." She had now gone as far as she could, but FRANK becoming suddenly interested, emptied out the chips and filled the basket one by one with apples. As he did so a shade of disappointment crossed his face.

"The basket will at last be full," he murmured, and suddenly all his exalted notions about being a great man were dashed to the ground.

"Oh I know how you can get more apples in the basket," exclaimed KATE joyfully, "just peel them."

"That's so," said FRANK, "and then we could quarter and core them; by that means we could get more in, besides what we did have would be the real stuff." Still as he saw in his imagination the basket of quarters, he was not satisfied. He stood looking at them for some time, then suddenly his face brightened. "I see," he exclaimed, "I'll dry the quarters." He picked up his grammar, and went on with his study with a satisfied air.

GRACE GOLD.

The Puzzler.

ENIGMA.

My parents bred me to the sea;
I've been where man could never be.
Oft times I've raged the ocean wide,
Where all force of storms I defied,
And lowering clouds obscured the sky,
And foaming billows mounted high.
I left the sea, grew fond of show,
Dressed neat, and soon became a beau.
I, like a bridegroom clad in white,
Among the ladies, I delight.
No more a seaman bold and rough,
I shine at balls and am fond of snuff.
I attend when Chloe goes to rest—
Chloe is by my presence blest;
No ghost nor goblin can she fear,
Nor midnight hag, when I am near.
At length a burning fever came,
Which quite dissolved my tender frame,
And I at last light headed grew,
Of all my friends not one I knew,
Great drops of sweat ran down my side,
And I at last by inches died.

☞ Answer in two weeks. C. B. H.

GEOGRAPHICAL ENIGMA.

I AM composed of 18 letters:
My 5, 18, 3, 14, 10, 6, 14 a city of New Jersey.
My 12, 2, 17, 1, 5, 3, 18 a county of Pennsylvania.
My 10, 3, 14, 14, 17, 4, 9, 3, 17 one of the United States.
My 18, 7, 16, 3, 14 a French city.
My 2, 14, 18, 11, 14 a lake of North America.
My 8, 17, 18, 16 a State of South America.
My 15, 16, 17 a French pronoun.
My 12, 13, 18, 14, 11 a mountain peak of Europe.
My whole forms a comedy by Goldsmith.

☞ Answer in two weeks. DR.

PUZZLER ANSWERS.—March 30.

HISTORICAL ACROSTIC.—Amphictyonic Council.

MISCELLANEOUS ENIGMA.—Samuel Taylor Coleridge.

BIBLICAL ACROSTIC.—Nebuchadnezzar.

DIAMOND PUZZLE.—

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   A T E
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DROP-LETTER PUZZLE.—Thou shalt not bear false witness against thy neighbor.

NAME PUZZLE.—Winifred, Ilione, Lucinda, Helena, Eugenia, Leonora, Magdalene, Ixia, Nancy, Alexandrine; initials form "Wilhelmina."

WORD-SQUARE ENIGMA.—

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C A R P
A V E R
R E N A
P R A Y
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Sabbath Reading.

"THE CHURCH OF THE FIRST-BORN.

(PARAPHRASE FROM PSALM 87.)

On the holy mountains founded,
Zion stands adorned with grace;
God her walls and towers hath bounded;
Shines on her, His smiling face,

Well Jehovah loves his Zion,
More than all on earth beside;
His, is love to her undying,
'Twas for her that Jesus died.

Glorious things of thee, oft spoken,
Fill the bright prophetic page;
He, whose pledge has ne'er been broken,
Stand thy guard through every age.

Babel, Tyre, each haughty nation,
Once thy foes—now, 'mongst thy sons,
Soon will share thy great salvation,
When thy day of Glory dawns.

But O Zion (wondrous story,)
When thy splendors eye shall see—
Earth shall boast her chiefest glory,
That her sons were born in thee.

Aye, 'twill never be forgotten,
When the Lord makes up his count,
That his chosen were begotten,
Each one in thy Holy Mount.

Well Jehovah will remember,
When he notes the sons of men,
That in thee, each mystic member,
Of his house was born again.

Then let earth's high princes, Zion,
Joyfully thy praises sound;
For in thee, the never-dying,
All our springs of joy abound.

[*Christian Observer.*

TALENT AND TACT.—Talent is something; but tact is everything. Talent is serious, sober, grave and respectable; tact is all that, and more too. It is not a sixth sense, but it is the life of all the five. It is the open eye, the quick ear, the judging taste, the keen smell, and the lively touch; it is the interpreter of all riddles, the surmounter of all difficulties, the remover of all obstacles. It is useful in all places and at all times; it is useful in solitude, for it shows a man his way into the world; it is useful in society, for it shows him his way through the world. Talent is power, tact is skill; talent is weight, tact is momentum; talent knows what to do, tact knows how to do it; talent makes a man respectable, tact will make him respected; talent is wealth, tact is ready money. For all the practical purposes of life tact carries against talent ten to one.

LOSING A DAY.—Every day is a life, and our whole is but a day repeated; whence it is that old Jacob numbers his life by days, and Moses desires to be taught this point of holy arithmetic, to number not his years but his days. Those therefore that dare lose a day are dangerously prodigal; those that dare mispend it, desperate. We can best teach others by ourselves; let me tell your lordship how I would pass my days, whether common or sacred, that you—or whosoever others, overhearing me—may either appear my thriftiness or correct my errors; to whom is the account of my hours more due, or more known? All days are His who gave time a beginning and continuance; yet some He hath made ours, not to command, but to use.

WORK AND WISDOM.—How may the Christian teacher learn to adapt his instructions to those whom he is called upon to guide? Let him be instructed by the diligence and care of the husbandman. No wise farmer would think of sowing all his lands with the same kind of seed. Before he began his labors he would study the nature and capabilities of every field, to discover whether it were fit for pasture, for cereal crops, or for an orchard, and act according to the best of his judgment. Nor by doing this would he be disregarding the power of the Lord of providence. After all his care the same sunlight, rain and dew would need to descend upon every part to make it fruitful; and only by the blessing of Heaven could his work be crowned with success.

THE BEACON LIGHT.—To what shall we liken the warning given us by those who have made a wreck of life?

It is the beacon-light that burns above the pile of sunken rocks. No mariner is attracted by it to warm himself at its blaze; but as soon as he sees it he carefully steers away. Through the darkness of the night it sends forth a gleam like a lurid meteor, and it only shines because there is destruction around it.

MANY are miserable by loving hurtful things; but they are more miserable by having them. It is not what men enjoy, but the principle from whence it comes, that make men happy.

WHERE grace is improved to a considerable hight, it will work a soul to sit down satisfied with the naked enjoyment of God without other things.

THE mercy is the waiting man's, but the waiting man must give God leave to time his mercy for him.

PERSONAL ITEMS.

Victor Hugo is engaged on a poem entitled "La Pape."

Shakespeare's favorite flowers were the violet, pansy and cowslip.

The divorced wife of Brick Pomeroy, now an actress, has married again.

The Governor of California receives $9,000—the highest salary among Governors.

Victor Emanuel's moustaches were so long that he was never able to eat without fastening them up on each side of his face. Consequently he never ate in public, even at state dinners, though he sat through them all with great patience.

The Grand Duke Nicholas is described as tall, strongly built, and soldierly in person, but with no indication of capacity, and certainly none of refinement, in his countenance. His forehead is narrow, his glance fierce but without penetration; his features are altogether rather coarsely molded. He is filled with bluster. His Highness is one of the best linguists in the Russian empire.

Pope Leo XIII. has given orders to sell the elaborate carriages and large black horses which have long been maintained by the papal establishment They have been used by the employes of the Pope's Secretary of State for transportation to and from their homes, but his Holiness suggests street omnibuses. If these should not prove acceptable, he thinks the employes had better reside near the Vatican.

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GARDENERS!—DO YOU WANT TO RAISE vegetables from two to four weeks earlier? Use Soluble Transplanting Pots! For particulars, how to make them, etc., address, with stamp,
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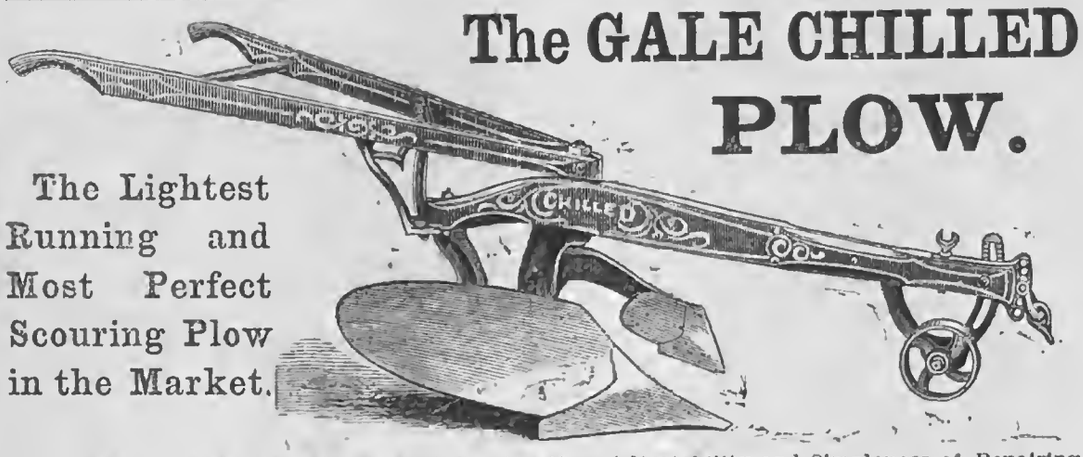

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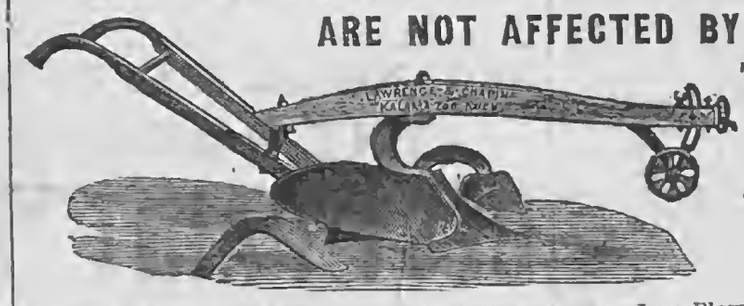

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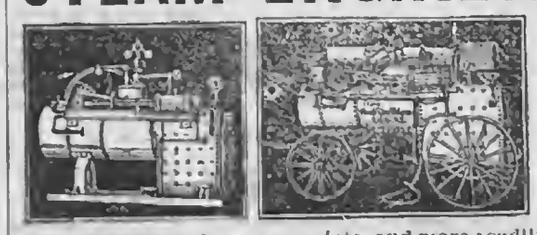

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A moustache—a vine—
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A whisper—"Mine?"—"Thine"—
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Orange flowers—a veil—
And fears—
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Last phase.
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Squire.—Well, things look a little that way, Uncle Tommy. Why?

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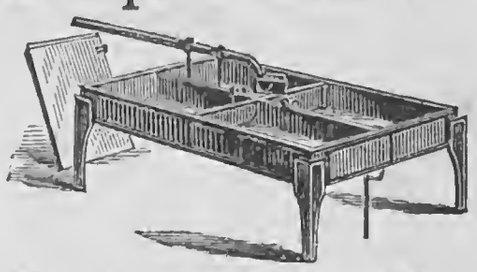

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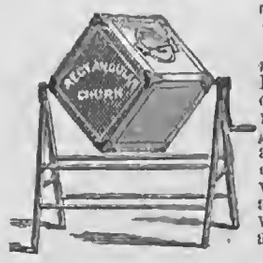

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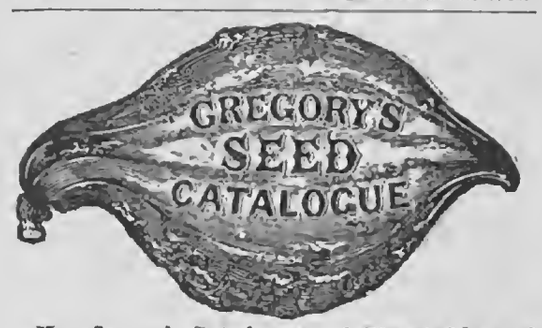

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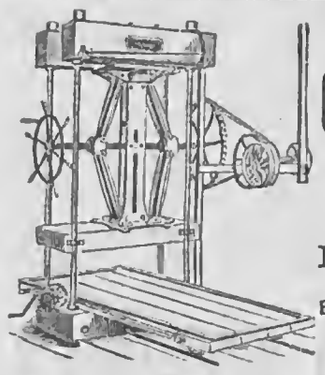

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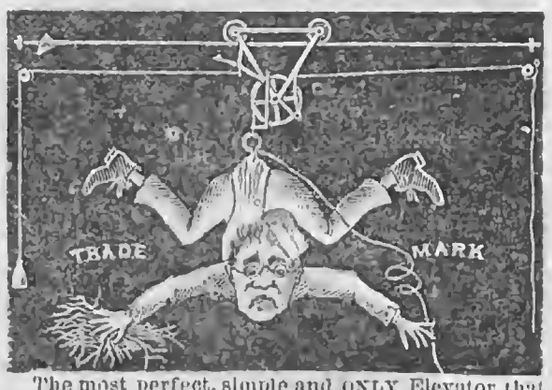

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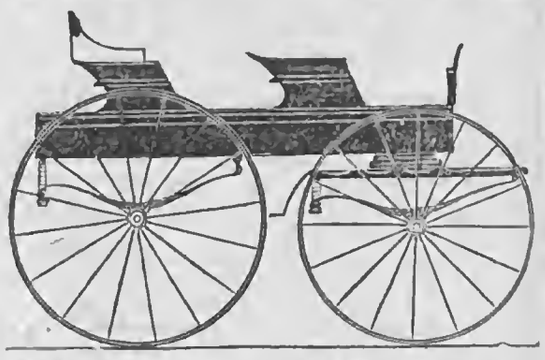

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CHEAPEST AND BEST
Platform Spring Wagon made.
Every Wagon fully warranted.
If there is no agent or dealer in your town, send for Circular and Price List to the
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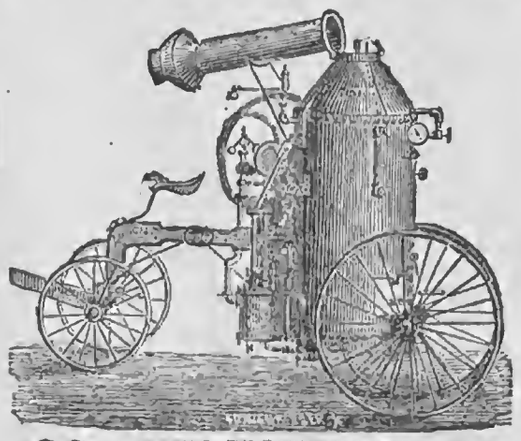

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 16.
WHOLE No. 1473.

NEW YORK CITY, APRIL 20, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

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Rural Architecture.

PLAN OF A COTTAGE COMPLETE FOR $3,900.

L. F. GRAETHER.

THE following is a description of the plans of the cottage herewith represented: (For plans see page 248.)

Cellar and basement plan—A represents the hall; B, kitchen, (14 by 17.3) containing sink, wash-tubs, boiler and range, &c. C, pantry (4 by 5.5) with shelves and dumb-waiter; D, cellar steps; E, vegetable cellar; F, coal and wood cellar and heater.

First story—A, piazza; B, vestibule; C, hall, with main stairs; D, parlor, (15 by 18); E, sitting-room, (15 by 15 3) sliding doors between parlor and sitting-room; F, dining-room, (14 by 19.3); G, pantry, with dumb-waiter, wash-stand, etc.; H, green-house (12.10 by 19.3) connected directly by a door with the dining-room.

Second story—A, D, E and F are bed-rooms of the following dimensions respectively: 15 by 12, 15 by 11, 10 by 19 and 14 by 14; between A and D are closets, and one wash-stand; C is the hall with stairs to attic; B, wardrobe (4.6 by 6 2); G, bath-room, (4 11 by 10) with wash-stand, bath-tub and water-closet; H, entry to bath-room with tank; J, roofs.

The main dimensions of the building are shown on the plan; two additional bed-rooms can be arranged in the attic; a small winding staircase leads to the tower room.

The lowest estimate for this building (including heater, range, etc., all modern improvements) amounts to a trifle over $3,900. This is the cost at which it can be built in the immediate neighborhood of New York, where materials and labor are both dearer than in many other parts of the country; and in calculating the expense of this and of other structures, the plans of which are from time to time given in the RURAL, and the figures given must be scaled in accordance with local conditions in these respects.

Farm Topics.

THE BEST WAY TO MANAGE WEEDS.

PROFESSOR W. J. BEAL.

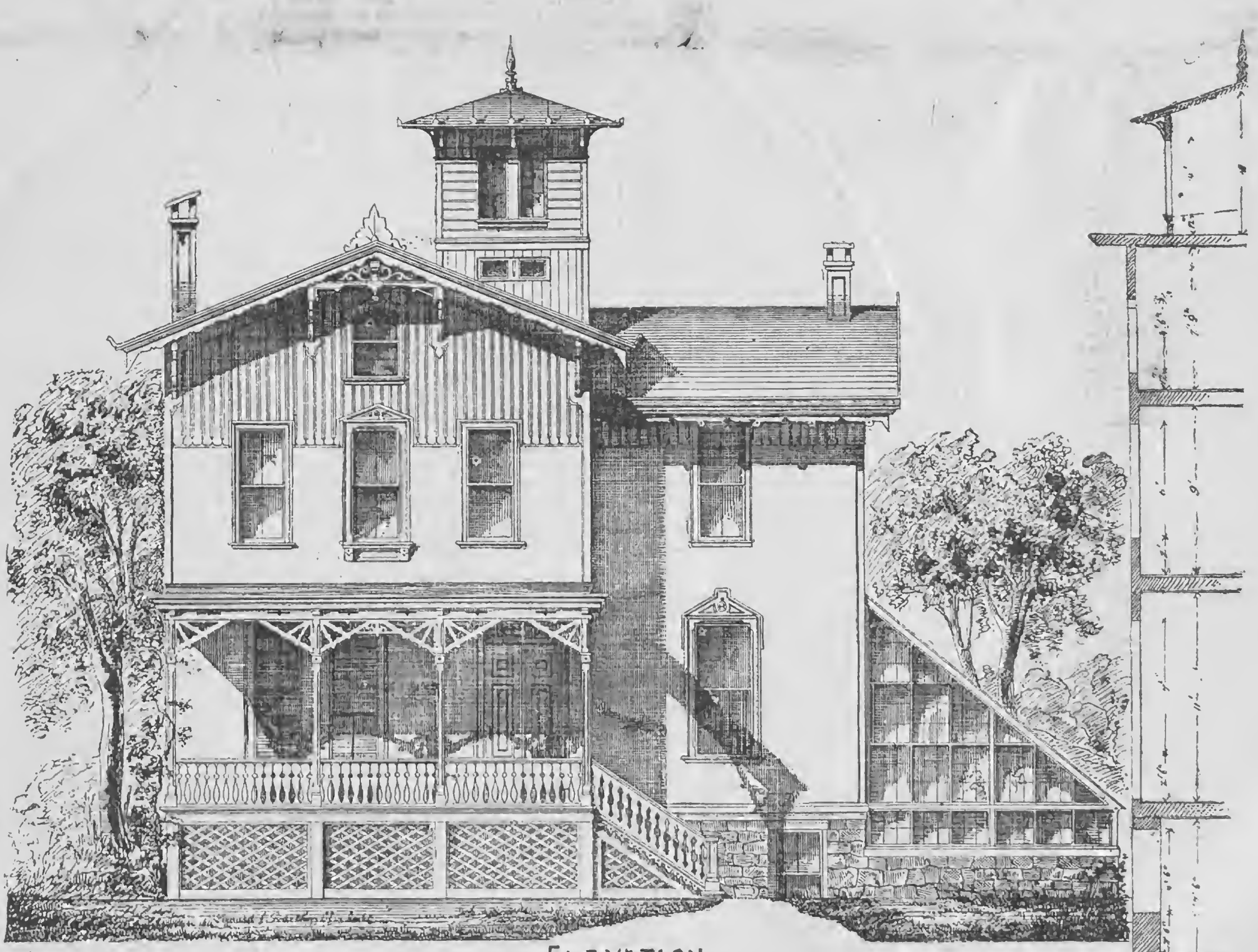
A PLANT may be classed as a weed in one country and not a weed in another. Purslane is not troublesome in England, nor chickweed in a dry, warm climate, but reverse the plants and each becomes troublesome.

Some writers define a weed as a plant growing out of place. Perhaps this is as good as any definition, but I like the one given by R. W. EMERSON the other day. He said: "A weed is a plant whose virtues have not yet been discovered." And he adds, "Every plant probably is yet to be of utility in the arts. There is not a plant in the whole magazine of material nature that cannot be made a power in the hands of thinking men." Certainly this is a hopeful view of the case, and a view quite in advance of the one generally now maintained by most farmers. Biennials and perennials are most troublesome in pastures and meadows while annuals are the worst for the garden and cultivated field.

A large majority of our most enterprising weeds come from Europe, Asia, or from the South. They have been brought in by mankind in the seeds selected for the field and the garden, in the fleeces of sheep and in a great variety of other ways.

Of weeds which may be called troublesome and which are never of any known value, we have perhaps eighty species, while twenty or thirty others are quite annoying.

It is quite a common opinion with many people that hoeing and cultivating are mainly carried on to kill the weeds which cover the ground. This is, or ought to be considered a mistake, even so far as the weeds are concerned. We should cultivate to prevent their growing—to destroy them before they get out of the



ELEVATION.

COMPLETE COTTAGE FOR $3,900.

ground or while they are yet too small to attract attention. Many times the farmer begins in the spring with good courage and determination to keep the weeds down. This he succeeds in doing for a time while the weeds are small and few and grow slowly, and the land is soft and easily worked, but haying and harvesting and other work or sickness crowd upon him and before he knows it, the weeds have got the start of him. The increasing heat of summer brings on a reinforcement of weeds. The ground becomes harder, and the surface matted over. The farmer rallies again to his work of extermination; but many of the weeds have, to a great extent, accomplished the object for which they grew. They have riponed seeds which will fill the ground for other plants in future years. These weeds are usually left on the ground to decay and drop their seeds. Let any one examine carefully a pig-weed or an amaranth, and no doubt he will be surprised at the immense number of little black or brown seeds concealed along the stem where he supposed there were no signs of seeds, nor even yet of blossoms which precede the seeds. By estimate, a good-sized plant of purslane produces a million and a quarter of seeds. In this way the soil soon becomes filled with them.

A few years ago, I took in hand a garden which had been very weedy for several years previous. I cultivated well and often, and for three years took great pains to remove all weeds which had been overlooked or missed by the cultivator. In hot weather and late in the season we went over the ground each time before the land was cultivated and picked up any weeds containing seeds. These were carried off the garden and kept out of the pig-pen and compost heap. Another point was rigidly adhered to where many fail. The soil was cultivated often till late in autumn, as long as there was any chance for the weeds to grow. In this way, we kept the seed from the ground, and kept stirring the soil to encourage all the seeds to germinate. Near the close of the third year, we found that boys needed no baskets to carry weeds from the garden, as they could carry in one hand all they found in three rows of onions, twenty-five rods long.

Considering the abundance of foul stuff in the manure purchased, and the ease of keeping down annual weeds by frequent cultivation, I doubt whether it is profitable to be so nice in taking out every weed and in removing it from the ground.

Somewhere I have read, that JOSEPH HARRIS of Rochester, said three-fourths of the farmers of New York lose one-half of their profits annually by weeds, equaling $50,000,000. He added, "It is easier to hoe four times where there are very few or no weeds, than to hoe once where the soil is weedy."

J. J. THOMAS is ever making apt contrasts between the best way and the poorest way of doing things. By his watch, a bed of flowers containing eighty square feet is raked once a week in four minutes, for each raking, and for May, June and July, forty-eight minutes. In another bed of equal size it required over an hour to clear all out by hoe and hand. This must be repeated every three weeks for three or four months, and even then the plants will not do nearly so well as by frequent raking over.

By the watch and actual testing, it takes only *one-fifth of the time* to rake every few days that it does to weed once in two or three or four weeks during the entire season. By carefully watching the work, I am confident that the above statement is near the truth. No stronger argument, then, can be drawn for frequent cultivation. It is much the *easiest* way as well as the *best*. It is often hard to make the boys fully understand this. If no weeds are prominent, they will not always go over all the ground well but skip now and then a patch which very soon tells of slighted work. The practice of cultivating every three to six days is common with many of our best gardeners, but it is not the practice in all gardens, especially in the gardens of farmers. It is hard to tell how much this old truth would be worth to our farmers if they would only act accordingly.

Weeding gardens once in two to four weeks is up-hill work, especially if done by hand when it takes during the season five times as long as it would to cultivate every few days. Then, destroy the weeds just as they are germinating in the soil. Let us all try by example and precept to do work in the easiest as well as in the most economical manner. We hope every reader whether satisfied or not satisfied with the evidence given, will try some experiments on this subject the coming season.

In closing I must tell how I have several times killed patches of quack-grass. It was not by digging it all out root and branch. I failed when I attempted that mode. There is no secret about it. I kept the land cultivated every three or four days (never more than that) when I killed the grass quickest. The leaves were not allowed to show themselves. I gave it no peace in its bed, but kept it turning over and over. A small piece growing on black, rich soil rather inclined to be moist, was plowed very late one autumn. It was cultivated as above mentioned till time to sow rutabagas, when no quack-grass was to be found. None has since appeared.

Agricultural College, Lansing, Mich.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE have been looking at the different kinds of feed to see which was the cheapest. Wheat bran without a particle of flour in it, costs $18 a ton; buckwheat bran at least half of it flour, we can buy for $16 a ton; oil-cake meal $2.25 per hundred; corn meal $25 a ton; and oats 30 cents for 32 pounds. Barley is the best feed for a sow with a litter of pigs. It is healthy and will make more milk than any other grain. As soon as the barley meal is gone we shall give the sows oats, as this grain is next to barley as a good grain for animals suckling. The lambs are growing finely, showing that the quart of oats each one gets daily is making milk. A ton of oat-meal will cost $20 as we must add one-tenth to the price of the grain, $18.75, to pay the miller. This with an allowance for waste will make $2. We save this by feeding the grain whole to the hogs and the young pigs will thrive nicely on the oats. Most farmers would say "Buy corn-meal at $25 a ton and feed that." Corn meal is well enough in its place when you want to fatten an animal; but when you want bone, muscle, and tissue, you require kinds of food which will produce them: corn meal is not the feed for young animals. Wheat bran being so high and so poor, we are giving the young calves buckwheat bran and oil meal, twice the quantity of the former to one of the latter. As soon as we get some oats ground we shall add one quart of oat-meal. A peck of buckwheat bran is fed to each cow daily and they are doing well. The old hair is coming off, and the milk makes fine butter. On the whole, the buckwheat bran is the cheapest. The big colt has got fat on his four quarts a day, and his coat shines, showing that his stomach and bowels are in good order and that he has got rid of the worms. Good wheat bran with one-third of its weight flour, is excellent feed for young animals. It should be scalded for pigs, and be mixed with a little oil-meal for calves. We have wintered two calves, born at the beginning of December, on this feed, with part of the milk of one cow divided between them. They look so well that we are proud of them.

The barley ground is dry enough to sow, but this grain should never be put in until the ground is warm and it is fine growing weather. Barley, unlike oats, is tropical in its nature, and does best when the temperature is well up—hence, it should be sowed late. The land must be mellow for barley, and a sprinkle of manure on the surface harrowed in with the seed, will greatly improve the crop. It is very useful grain on the farm and barley cakes made from the flour are nutritious and very palatable. Two bushels and a half of seed will sow an acre. Last year we raised a crop at the rate of forty bushels an acre. The straw cured good is excellent fodder. It should be cut as soon as the berry is out of the milk. It grows quickly and may be harvested early enough to raise a crop of turnips on the same land. It is an excellent crop to seed with, being next to wheat and rye in this respect. It is not exhausting to the land for other crops, but will exhaust the soil for producing its own kind. This was proven so effectually years ago in all this section of the country that its culture had to be abandoned, and no barley of any account was raised for twenty-five years. After this long rest the same fields now produce well. The two-rowed is the favorite sort grown.

Berkshire hogs are not so liable to get mange, which is caused in all animals by an insect burrowing under the skin, but they are more liable to get *lousy* than white ones. We saw a stock boar, awhile ago, alive with lice, big fellows like sheep ticks. We recommended that he be washed with brine; no use, they were as lively as ever afterwards—next soft-soap—and this finished them. After three or four days the hog was rubbed over with grease. We once saw, at a fair of the N. Y. State Agricultural Society, the Berkshires of a noted breeder very lousy. We never saw one on a white hog.

Like the rest of mankind, we are inclined to do as "father did." Fathers were sometimes mistaken, and never more so than when they told us that "a lamb must have but a very little milk." Following this advice we have been starving lambs: we have been obliged to raise by hand all our lives, and they did too. No wonder under this rule two-thirds of the poor little creatures died. It grieves us, and always will, that we were so blind and blindly cruel. A lamb we were trying to feed died the other day. It got weak and one morning its jaws were set and it would not swallow. We knew it had not been sick; what made it die? As this important query went through our mind, we happened to look at another lamb born at the same time—a big fat rollicking fellow so full of life that he could not keep still, but had to skip and play, while one lamb was stiff and cold in death and had not grown a bit. What made the difference? Milk. This big fat lamb, judging by the size of the ewe's bag, had at least two quarts of milk and maybe three every twenty-four hours, while the dying one had never been given a pint. A few days afterwards we had three lambs to raise by hand, and, our fathers to the contrary, they were allowed to suck through a rubber nipple all the Jersey milk they wanted. These lambs grow and are a convincing argument that instinct is a better guide than old notions, at least for lambs. Another thing, a lamb from a large breed requires a great deal more milk than from a small one: so of any animal, we must feed according to the size.

Farm Economy.

GETTING OUT MANURE.

W. J. FOWLER.

EVERY spring and fall much time and team-labor are wasted in badly contrived methods for drawing out manure. The most common sight is a man with team and wagon, which last is loaded, drawn out and unloaded by the same person. It is slow work at the best. Fully half of the time the team is idle while the wagon is being loaded, and this too when team work is worth at least two dollars per day. But this is not the only or chief loss. Not one half of the farmers in this section clean their barn-yards so thoroughly as they should. The loss of the use of manure from spring until fall or even from fall until spring is twice what it should cost to get every load on the growing crops. Manure left in the barn-yard through the summer is usually more than half wasted by fall from evaporation or washing by rains. What shall we say then of the practice of some of leaving manure from year to year from inability to get it on the land? Talk about the necessity for buying commercial fertilizers! I believe in this, but it is a fact that fully one-half the farmers don't use what manure they have, to say nothing of at least two-thirds of the remainder who do not feed so much stock and don't therefore make so much manure as they should.

It is possible to make land poorer by purchasing commercial fertilizers and removing all the crop without making any other return. A light dressing, one or two hundred pounds of guano or superphosphate, will sometimes nearly double the crop of wheat or other grain. The small quantity of concentrated manure in close contact with the seed enables the plant root to extend rapidly and draw a larger amount from the soil than would otherwise be possible. Now if none of this crop is returned to the soil as manure, it must result in an absolute decrease of fertility. But there need be no fear of this if the farmer makes, saves and uses all the manure that he can. In such case larger crops, however obtained, mean an increase of the productive capacity of the soil. It is not possible to grow a crop without either making the soil richer after the crop is taken off or giving the farmer the means of making it so. Hence there need be no hesitancy in using all the fertilizers that can be procured, first from the farm itself, and afterwards by the purchase of such commercial fertilizers, gypsum, phosphate or guano as experience has proved to produce good results.

GOOD TOOLS.

"GOOD tools are half the battle in farming," some one has said, and I am inclined to think there is more truth than poetry in it; I know it is a great deal easier to work with good tools than with poor ones. I have tried both and am decidedly in favor of the former. Good tools are far cheaper in the end than poor ones. It is true poor ones usually cost less to begin with, but the purchaser cannot do so much work with them as with good ones, and then again, there are many more repairs to be made on them, so that in the end they are the most expensive. For instance, a farmer wants a wagon; his neighbor has two which he must sell, therefore he offers them cheap. One is nearly as good as new, while the other has been run many years and is weak in many parts. He doesn't know which to buy, but finally concludes to take the old one, as it is a few dollars cheaper and he thinks it will do for his business as well as the other. So he takes it home and goes to work. It does very well for a few days, but finally he gets on too heavy a load, drives over a little stone, and whoa! his wagon has broken down. Now he is in a sad fix; his team must lie still a day or two, his work must be neglected (perhaps it is planting time, or he has a lot of hay out) and he must go off right in the rush of work and get his wagon repaired, costing him more than it would to have got the best one which his neighbor offered him. Now, wouldn't he have been better off if he had got a good wagon in the first place? So it is in regard to plows, mowing-machines, horse-rakes, and indeed all other tools which a farmer uses. It is my opinion, and that of many other farmers that "the best is the cheapest." Therefore, when you want any tools, first find where you can "get the best," and then buy them.

F. H. D.

Field Crops.

ARTICHOKES AGAIN.

IN a note I sent the RURAL, printed in issue March, 30 I said: "There is nothing easier to eradicate than artichokes if you try the right way," and added. "Keep the tops of any plant out in and the plants must die."

The RURAL takes exceptions to this and says: "Killing plants by cutting off the tops is a pleasant sort of theory * * but there are hundreds of plants that are not appreciably harmed thereby."

Now, one of us is evidently wrong unless we do not understand alike what cutting off the tops means. I well know that pinching in, pruning, or in any way removing a part of the top of a plant often strengthens it, and this is not what I meant at all. I divide the plant into top and root and still insist the root cannot live without a top. Not even a Canada thistle. It or any other plant will undoubtedly endeavor to form a new top from the stub, but let the decapitation of these be attended to, and I am confident the desired result will be obtained. If the RURAL will name one or more of the "hundreds of plants that are not appreciably harmed thereby," I shall be glad to give them a trial. But so far as the artichokes are concerned I can give you instances where they have been destroyed unintentionally by cutting the tops for fodder. Consequently I cannot agree with you that "artichokes are troublesome to get rid of."

L. A. R.

REMARKS.—We did and do admit the efficacy of the rule. But there are exceptions and in many instances the destruction of weeds in this way is impracticable. Just the same as it is impracticable to exterminate Thistles, Dandelions, Plantains etc., by applying oil of vitriol to every one.

The antichoke forms many tubers a considerable distance from the stem, say three feet. From these, scores of plants will appear the next year and hundreds the next. Hence we say "when established," the antichoke is "hard to get rid of." Now, if anybody knew just the time that the tubers had exhausted themselves and before new ones were formed and were to cut off every leaf close to the root at that time, probably the crop would receive a death-blow. But we submit that the method involves some "trouble."

As to naming "one or more" of the hundreds of plants that are not appreciably harmed by decapitation; Crab Grass (Panicum sanguinale) Bermuda and many other grasses the stems of which will root at every joint; Purslane (Portulaca oleracea); Docks, such as Rumex crispus, R. obtusifolius, R. acetocella; Asparagus; Clerodendrum fœtidum. It seems moderately plain that *any* plant if persistently deprived of every leaf as soon as it appears, must die. Plants derive nearly all of their sustenance from the air and it is not to be supposed that a root buried in the ground can survive beyond the time when its store of nutriment is exhausted in vain attempts to develop buds and leaves. But there *are* hundreds of plants whose stems seem for periods to take the place of leaves and whose roots will, if cut into small bits, push buds as readily as seeds germinate.—[EDS.

PRICKLY COMFREY.

I KEEP a few cows, and have for years sowed sweet corn in drills for fodder—when pasture begins to grow short. Last spring I bought some of the Prickly Comfrey. The pieces of roots were so small I put them in moist dirt, kept them where it was warm, and when they had made a few leaves, set them three feet apart, placing the piece of root about two inches below the surface. The ground was rich. I cut the comfrey three times in the course of the season. Judging from one hill the product of which I weighed at each cutting, the yield per acre would be over thirty-three tons. My cows with one exception ate it readily, and a Jersey bull which I had to keep confined, ate it in preference to the corn fodder. I have been taking up roots to increase it, and find some are very badly eaten below the crown, and the roots be-

low rotten. It must have been done late in the fall. I would recommend to any one who is going to grow it, to get the pieces of roots growing (if they are small), before putting it out, and to make the land rich. D. M. C. BETTIS.

Tolland Co., Conn.

PEARL MILLET.

MR. WM. H. CARSON, 125 Chambers St., N. Y., is making a speciality of this. Among a great number of testimonials which he has received during several weeks past, we selected the following as conveying a fair idea of all:

KINGSBURG, Fresno Co., Cal., March 16.

"I entirely agree with you as to its great value. 'Tis very common here." A. S.

MILLTOWN, Berrien Co., Ga.

"If your Millet is the Millet we raise here, (and I think it is) there would be no particular trouble for us to raise or grow for seed. It is a slow seeder even with our long seasons, but we can cut it five or six times and then let it head for seed." T. E.

TALLAHASSEE, Fla.

"I have been planting it for several years both as forage for stock of all kinds, even hogs—and as grain for chickens for which it answers an admirable purpose and I consider it the most valuable crop for most purposes I have ever raised." R. N.

We have prepared to test this Millet in our own grounds and we have some confidence that the result may prove in harmony with the many good things that have been said of this plant.

Entomological.

APPLE TREE BORER.

AN article in the RURAL for March 23d, entitled "To kill the larvæ of the apple-tree borer," has attracted my attention. It, I think, greatly magnifies the difficulty of destroying the "worm." Let me hazard an opinion in regard to the arrangement therein described for killing the pest. It is not practical to any extent. It would be of no use unless the nozzle were inserted directly into the chamber he has excavated for himself and where he is; for the idea of ever forcing any liquid through the mass of *debris* he leaves behind him, would in nine cases out of ten utterly fail; for it would escape through the orifices in the bark, which he makes to dispose of the surplus *debris*, when it is in his way. Enough for that.

I have dug out thousands of these pests, having had a large experience among orchards not my own and also among nursery trees. I never found a hole where one had entered closed by the growth of the tree. Having removed the soil around the base of the tree to expose the presence of the "worm," on clearing the bark by scraping it with the back of a knife, his presence is indicated by a little spot, and the extrusion of a greater or less amount of chips. If he is a *juvenile*, hatched the current year; or only one year old, he will be found near and a little below the orifice and is easily destroyed; as he has cut but a small place beneath the bark and has not as yet hurt the tree at all. If two years old, he will be found further down the root, having cut a somewhat tortuous and continually widening path and packed it hard with *debris*, involving more and more the woody structure. This downward path is generally about four inches long, very seldom six. He then turns and cuts his way up, generally keeping near the other path and passes the place of entrance, whereupon he commences to cut deeper, making a path in the sound wood and keeping entirely away from the bark. He continues his path upwards to about a foot above the place of entrance, cuts to near the surface, retires to the excavation he has made and goes through his last change, getting his wings ready for an active out-door life.

I think the injury to the tree is principally done the first two years, while he is cutting between the bark and wood. If there is a hole through the bark in the body of the tree above the place of entrance, it is too late to look for him. He is gone—but if there is no hole, he has not yet got away. In that case cut down after him, remove the dead bark and *debris*, and follow his path until you find an open chamber, and then it is not generally difficult to dislodge or destroy him with a fine wire. An acquaintance of mine takes a small bit, and after finding his bearing, bores in and follows him up that way. It is a benefit to the tree to clear the path made of *debris* and dead material. I have noticed that as long as the dead matter remains, no young wood is formed at the edges; and the healing process does not go on; but as soon as the dead matter is removed and the edges cut fresh and smooth, a new deposit of wood is made and the scar commences to heal up, and if the wound is not too great, it heals over. I have found some trees with so many old fellows that they were entirely girdled and could not be saved.

The method of prevention mentioned in the article referred to, is good; but not infallible—perhaps no method is infallible. The nearest to that, is to wrap the bottom of the tree, from an inch or two under to a foot over ground, with cloth or paper, from the first of May till the middle of September, when it should be removed, to enable the bark to harden that it may not be injured by the freezing of winter. Another method of preventing mischief is to bank the trees with earth, four or five inches high, in the early part of the season; and remove it in the fall and cut out any borers that may be present, before they have done any harm. Whatever preventive may be employed, the trees should be carefully examined once or twice a year.

Have any of your readers observed that buckwheat sown in an orchard will keep away borers? I have lately come to take charge of a large orchard, and find on examining the trees, that in a part of it where buckwheat was raised last year, there were none of the young larvæ. Was the buckwheat the cause?

OBSERVING INSECTS.

B. PICKMAN MANN.

LIKE other sayings which are sensible and true, the valuable words of Mr. GARFIELD, on page 74-75 of the present volume of the RURAL NEW-YORKER, can be applied to other subjects than those for which they were written. I wish to apply them to my subject. The time of year is upon us when insects are coming forth from their winter rest to begin active life once more. The insects which work for us, the insects which work against us, and the insects that concern us only on grounds higher than gain or loss of property are coming forth together. Who knows what they may be, or where they may appear, or what they may do? Who will tell us, after they have come, what they have been, or where they have appeared, and what they have done? "Our people want facts that are the result of careful observation and experiment," as Mr. GARFIELD says. Perhaps few of the people can command the time or the means to experiment usefully, but all can observe, and observation is the basis upon which all our knowledge rests.

Let, then, all who have the time and inclination, collect and observe the insects as they come forth. Let them also observe the birds and the beasts and the flowers, if they can and will; the more the better. Do not wait till the season is over before you try to tell what you have seen, or you will forget a part and perhaps get the rest mixed. Keep a note book and put down every day what you see, or, if you do not put it down that day, then when you put it down say you made the observation "yesterday," or "a week ago," for in this way you guard against the danger of giving the same authority to long-remembered observations as to those that are fresh in your mind. Make collections at the same time that you make observations. The most skilled entomologist sometimes mistakes in naming things he has only seen and has not had in his hand, or does even worse than that. Sometimes entomologists carry their collections from one museum to another in this country or even to museums in Europe, to make sure that they have given the right names to their specimens. How much more necessary is it then, for unskilled observers to back up their statements, by showing the specimens they have observed! If Mr. JOHN SMITH sends me a beetle which has been eating his potato-vines, and tells me what he has observed about its habits, it does not matter to me whether he calls it a beetle or a bug or a weevil or a fly, because I can find out what it really is, but if he tells me what he noticed and does not send me the insect, I cannot tell which of the hundred thousand beetles or twenty thousand bugs or weevils or flies it is, unless I knew beforehand all that he tells me, and then his story has no news in it.

If he wants to follow up his observations, let him mark the specimen No. 1 or No. 2, or whatever else he pleases, and write in his note-book what he observes about it; then he can get a name for it sometime.

Middlesex Co., Mass.

The Garden.

DOES THE VEGETABLE GARDEN PAY?

PROFESSOR A. W. MANGUM.

THERE are two classes who say that it does not. One class resides in town and the other in the country. The town skeptic says "Labor is so high and there are so many little expenses involved, that I regard it cheaper to buy my vegetables than to raise them; and therefore I will not cultivate them."

This may be true of a few kinds of garden products, at least in the first preparations; but it is far from true in the average. Of course, I speak of those who have the ground that they may devote to the purpose considered. A simple calculation of the cost of seed and labor, on the one hand, and of the value of the average yield, on the other, will show that my position is correct.

In addition to this economical view, there are many advantages in having a garden. If one raises his own vegetables the earliest are as cheap as any other, or nearly so; whereas he who purchases must pay fancy prices for the first of any sort that appears in market. Generally, the earlier one can obtain any desirable vegetable the more it is enjoyed. From one's own garden vegetables may be gathered and used while they are still fresh—uninjured by transportation. How often are housekeepers compelled to buy stale and unwholesome market supplies, simply because they must have some and can get no others? It is a great privilege to be able to get the articles desired just at the time they are needed. It is also true that the family that has a good garden of its own, will use much more vegetable diet than it would if compelled to purchase every such article from another. Again, one has a preference for certain vegetables, and knows the peculiar taste of his household; thus being able to raise just what is most desired. But I emphasize the luxury of the garden in another sense. Town folk need the extract of the fresh green country which is furnished by garden and lawn. They need the exhilarating exercise of work in the garden. They need the recreation that is secured by taking interest in the growth of what they plant, watching its changes and enjoying its promise, and, at last, going every day or two to gather where they have sown and toiled. More interest in gardens would give more tone to the nerves and more vivacity to the spirits.

The country skeptic says:—"I haven't time to fool with the garden; for I must attend to my crop." He will roughly plant one kind of potatoes, a quantity of late cabbage and some corn-field beans. Through spring and summer he will scarcely realize a change in diet for self or family, until the *late* corn is large enough to use and the late beans and potatoes are ready for the table. Possibly he may have had some turnip salad in early spring. He has been making cotton at a cost of about ten cents a pound, to sell at the same rate. Perhaps he is most busy about corn or wheat that costs him not much less than the market price. His table has had none of those appetizers, none of those natural anti-febrile acids, none of these cooling gifts of the garden, which impart to the wiser so much of pleasure, comfort and health. He might as reasonably wear his winter clothing all summer, as to eat his winter diet all summer. His privation would be more excusable, if it were not at the actual reduction of profit.

Chapel Hill, N. C.

SALSIFY.

WE have endeavored by several notes this season to call the attention of farmers to the value of this toothsome and healthful vegetable. The seeds may be sown as late as the middle of May, and as we have said, the esculent roots left

in the ground until next year to be used as wanted or taken up late in fall and stored in the pit or cellar. Sow seeds in drills a foot a-part and thin out to six inches in the row. For the many different methods of cooking Salsify, see Domestic Economy Department, back numbers. The accompanying cut shows the plant and an easy way of doing it up in convenient bundles for the market.

Pomological.

PLUM CULTURE IN OHIO.

M. B. BATEHAM.

I FIND by letters addressed to me, that much interest is felt by fruit-growers and nurserymen in regard to the success of the extensive plum orchards that are known to have been planted in this State, and also as to whether such planting is still going on.

In reply I would only say that of the 150,000 plum trees which I estimate are set in orchards in Ohio, probably not over one-fourth are as yet of bearing age, and of these the greater part are of Damson and Wild Goose or other native varieties, and located in the southern parts of the State. For two or three years past the crops have been mostly failures excepting of Damsons. These have borne fair crops in most localities, and the older orchards have been quite profitable, though not quite as reliable as was formerly supposed—owing to frequent injury by spring frosts. A good deal of planting of these is still going on, but I do not think that any more trees of all kinds were set the past year than were killed of the larger varieties by the previous winter. The Shropshire Damson is the kind preferred, and the trees are grown on peach roots, budded close to the ground, so that when transplanted the juncture is set a little below the surface; then no injury is done by grubs, and in many cases plum roots are formed above those of the peach. Bearing orchards of such trees are so thrifty and productive as to lead planters to prefer them to those on plum roots; but it is thought that none of the larger Plums do well on the Peach—especially as the kind of soil preferred for plum orchards is more clayey than is congenial to the Peach. It is found that the curculio is less injurious on clayey than on sandy lands. The Damson crops, however, are not commonly much affected by this insect; partly because the fruit usually sets so full that it needs thinning by this or other means. It may be that as the orchards become older the insects will increase in them so as to render it necessary to combat them as is done in the finer plum orchards.

The Wild Goose Plum has been quite largely planted in two or three counties around Cincinnati, but contrary to my advice. Several orchards here fruit five or six years ago, but have failed each year since, owing to the early blooming of the variety, and its consequent liability to injury by spring frosts—hence, no further planting of it is likely to be done, and the orchards will probably be top-grafted or cut away.

Of the finer Plums—Lombards, Prunes, etc.—there are perhaps 50,000 trees in different parts of the State, mostly north of the center. A few thousand of these bore one or two fine crops about five years ago, and some of them were damaged by overbearing. Since then only partial crops have been realized, and some thousands of younger trees have since been killed by severe winters; hence the amount of planting has not been great for a year or two, though I hear of a considerable amount being done this spring; and complaint is made that trees of the kinds desired cannot be found in sufficient numbers at the nurseries.

WINTER KILLING.

I visited the past fall the noted plum orchards of the Messrs. BROWN, in Huron county. They have planted about 7,000 trees, but the greater part of their youngest orchard, two years planted, was killed to the ground by the previous winter—as were several hundred trees of older growth. They have also lost many trees from the same cause in previous years. This winter-killing is not so much in consequence of the severe cold, as the condition of the trees when winter sets in. The mischief is evidently a result of the shedding of the leaves during hot and dry weather in the latter part of summer, followed by the starting of the terminal buds and a fresh flow of sap on account of moist and warm weather early in autumn, leaving the wood sappy during the winter. Frequently it will occur that tufts of new leaves put out at the tips of the young shoots, which continue green until killed by severe frosts in November. Some varieties, I was told, are more liable to this trouble than others; but I could not discover much difference.

The remedy, I think, must be found in the choice of soil, or its preparation for planting—to secure such depth as will induce the roots to go deep enough to resist the effects of drought. Or, what amounts to the same thing, have the soil worked so deeply that it will absorb and hold moisture sufficient to withstand drought; then the leaves will not fall prematurely.

Mulching is another means of contributing to the same end, and will be found immensely beneficial both to plum and pear trees. Apply the mulch any time after the spring rains and surface cultivation, covering the whole ground with

refuse straw, corn stalks, marsh hay or other litter. This can be raked up and stacked in the fall, for a second season, if desired, or left to rot on the ground.

At the plum orchard of 3,000 trees planted by Mr. SHANKLAND, about twenty miles further west, no considerable loss has been sustained by winter-killing. The soil in both cases is a clayey loam, but the latter has more depth than the other, with a less compact sub-soil, rendering it less subject to injury from drought.

BURSTING OF THE BARK

is another cause of very serious damage to plum trees in the BROWN orchards. This is occasioned by the freezing and expansion of the sap, so as to cause the bark of the tree to burst, or to separate from the wood so as to die—usually on the southwest side of the trunk, where most warmed by the sun. This, I have no doubt, can be measurably prevented by the means already mentioned; but in addition I would screen the bark from the sun, on the south and west sides during winter, by means of a couple of strips of thin board, or half-sections of bark peeled from sapling forest trees in June, or even with strips of hard-ware paper fastened with tacks or twine.

AS TO THE CURCULIO,

I have repeatedly stated that this is no hindrance at all to the success of commercial plum culture, but rather an advantage; as the ravages of the insects are sure to prevent people from growing Plums in a small way; for nobody can afford to attend to jarring and catching the beetles every day for a month from half-a-dozen trees, but for a thousand or two the crop is of sufficient value to pay well for having a man, with the proper apparatus, to give the matter regular attention. The labor in such a case is found to be quite small in comparison with the results.

Painesville, O.

Miscellaneous

PUMPKIN SEEDS ONCE MORE.

YOUR correspondent, "Hector Bertram," inquires first, whether I ever kept *geese*; and if so, whether they were allowed to eat pumpkin seeds; and, if so, with what results. I reply that geese were kept on the farm for many years, or at least till a sufficient number of feather-beds were procured to supply a large family—for the days of antipathy to feather-beds had not yet arrived. The geese had the range of the barn-yards and their vicinity, and in the season when pumpkins were fed to cows, were, with perfect impunity, permitted to help themselves to all the seeds they desired, without any injurious results whatever, as far as was ever noticed. I will not venture to assert that they considered these seeds to be such a "great luxury" as your correspondent concludes I did, but our geese were not such *silly geese* that they were ever known to gorge themselves with food that nature never intended that they should eat. That acquired or intuitive knowledge of what is suitable for them for food, with which the God of Nature seems to have endowed all the different species of dumb animals, appeared not to have been withheld even from our geese.

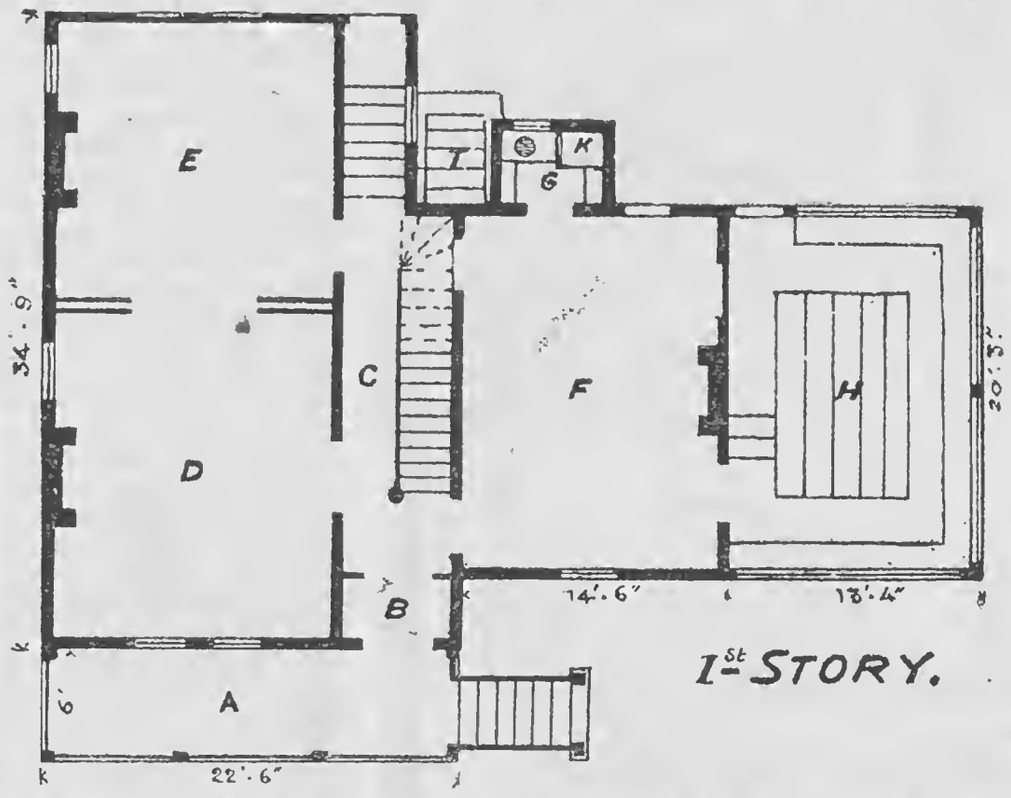
To his second inquiry, whether I ever tried the experiment of feeding a portion of the cows with pumpkins, and another with carrots, beets or corn stalks, I answer in the negative. The rule has ever been, when the pastures become scant, in the latter part of the season, to supplement them, first with green sowed corn, then with pumpkins while they lasted, and then with the root crops which would keep later. Even unmarketable apples are more valuable for such use than to be made into cider. At least *I* so consider them.

As regards pumkins, your correspondent closes by saying, "They are excellent for fattening purposes, but diminish rather than increase the flow of milk." My own experience has induced me to believe directly the opposite, but probably it would require more space than could be afforded in the RURAL for either of us to convert the other to his own opinion. Therefore *I* will not attempt it. It has not been my intention to "ridicule the ideas" of any one on the subject, as your correspondent supposes. My purpose has been, merely, to "speak that we do know, and testify that we have seen." Others have the same privilege. Having an opinion of my own, I trust that at the same time I am not willfully blind or bigoted. CLINTON.

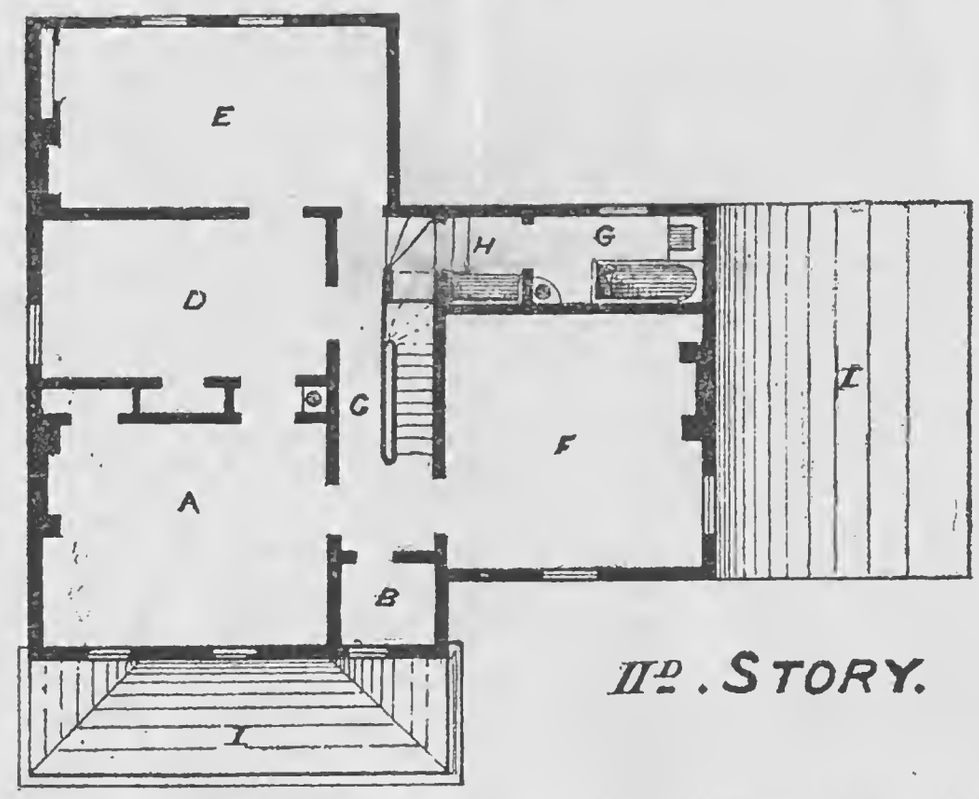
PRESERVE YOUR PAPERS.

READERS of the RURAL should preserve their old papers, and they will prove a source of amusement and instruction in after years, hardly to be estimated. I have the RURAL complete since 1865, and it is a rich treat to look over the old numbers. One will be surprised to notice how the same old questions are asked and answered again, and again, also how nearly we write as did those who came before us.

It is also interesting to examine the list of new fruits that have sprung up from time to time, all said to be better and more desirable than any that had been yet introduced. They were generally sold at high prices, had a brief existence and dropped out of sight to appear again perhaps in a still more "questionable



shape." I can find an account of Strawberries by the score, that were to supersede the "Wilson" and yet the latter still heads the list as a market variety. I have paid as high as 50c. per plant for some of these, the Dr. Nicaise for instance, and only lost my money. We have, again and again, been promised a more profitable Grape than the "Concord," but it fails to be superseded. Then run your eye over the list of new Potatoes, Squashes, Cabbages, and in fact of every kind of vegetable, grain, flour and plant. It is instructive, and occasionally as our eye rests upon something in which we so confidentially invested our money to no purpose, it is perhaps provoking.



But there is another side to this subject. In many instances we have really improved our fruits, seeds, plants, etc. I know of no better way than to invest in these new discoveries as our means will permit, "Proving all things and holding fast to that which is good."

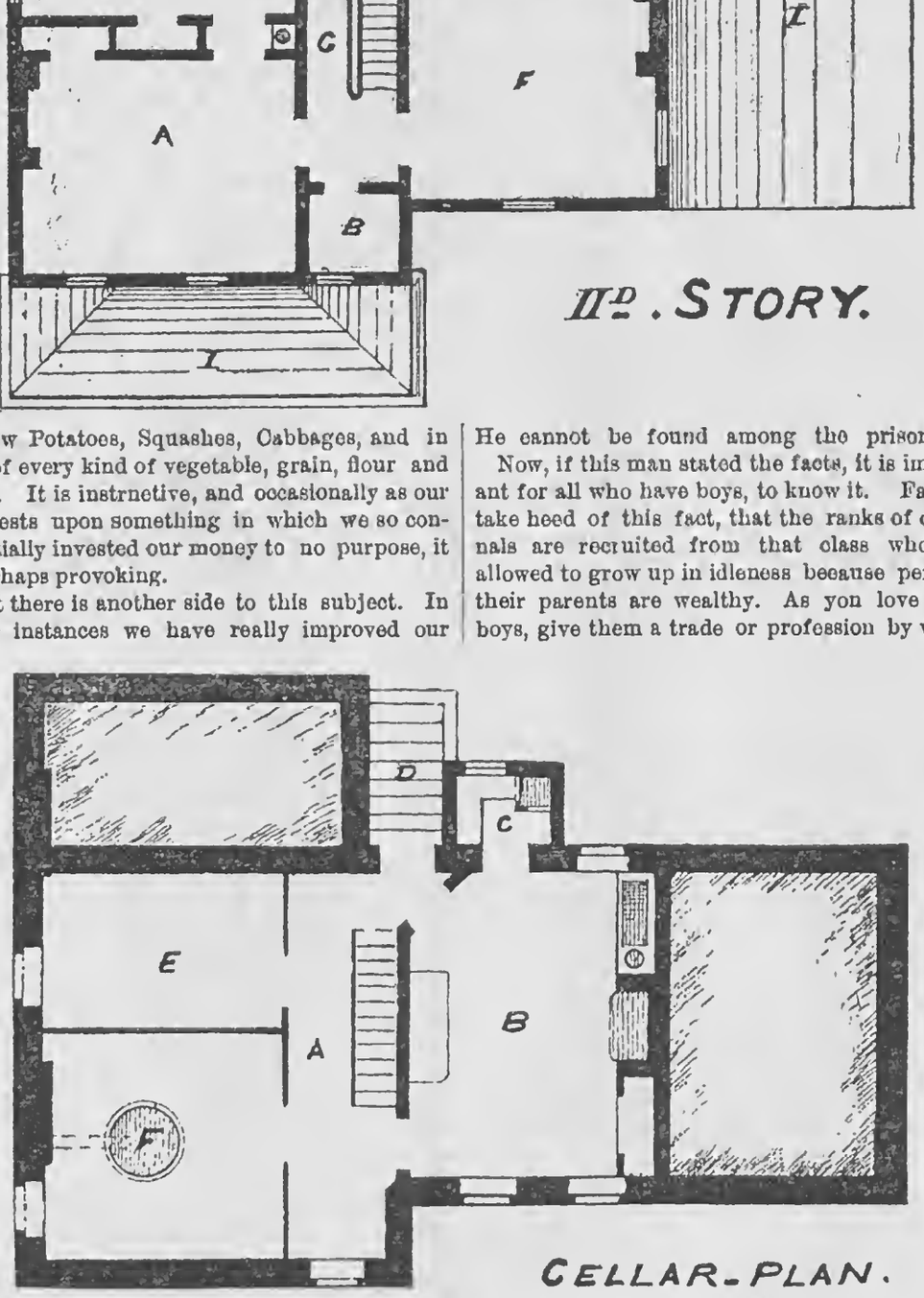
Syracuse, N. Y. NELSON RITTER.

LEARN A TRADE.

THIS is an old threadbare subject, that has been perhaps exhausted, but my attention was called to it again by the remark of one of the overseers in our Onondaga Penitentiary, a few days since. He said that he had had charge of hundreds of prisoners but had never found one that was master of a trade. He said that men came there who would give their occupation as a blacksmith, carpenter, tailor or something of the sort, but on examination it would be found that they had only a slight understanding of the occupation they professed. "I tell you," said he, "good mechanics and farmers *do not* git into *our* penitentiary; at all events, when we wish a good mechanic to superintend any piece of work, we are obliged to hire him outside. He cannot be found among the prisoners."

Now, if this man stated the facts, it is important for all who have boys, to know it. Fathers take heed of this fact, that the ranks of criminals are recruited from that class who are allowed to grow up in idleness because perhaps their parents are wealthy. As you love your boys, give them a trade or profession by which they can support themselves. N. B.

Syracuse, N. Y.



SLITTING THE BARK.

IF you do not deem this subject exhausted, I will offer, through the RURAL, my mite. Cherry trees in my neighborhood, especially those of the fast-growing kinds, are very liable to have the bark split on the south side, and when they do so, it generally uses them up in a few years. In some agricultural paper or book (those being the places where I have learned most of what I know in such matters,) advice was given to slit the bark in June. I did so with some old, cracked trees, slitting upon their north sides, by which I evidently prolonged their lives and usefulness three or four years. Some three years since I found about half of a row of thirty young cherry trees, seedlings not yet in bearing, badly cracked. I slit them on the north side, with a knife, and now all but two are nearly healed and look healthy. S. B. PECK.

PAMPHLETS, &c., RECEIVED.

PREMIUM LIST of Nebraska State Board of Agriculture and State Horticultural Society for the Twelfth Annual Exhibition, to be held at Lincoln, Nebraska, Monday, Tuesday, Wednesday, Thursday and Friday, September 23d to 27th, 1878. Competition open to the World. The brief title of this handsome little pamphlet of 60 pages, explains its object so fully that little remains for us to say beyond a word of praise for the very liberal spirit manifested in the long list of premiums offered for the best of every object of interest or utility to the farmer and his family. Not a little information is also given with regard to the "points" of various kinds of stock, especially of cattle. By the way, our Nebraska subscribers should not foget that "Arbor Day" is the third Wednesday in April, and that the liberal premium of $50 offered by the Board for the greatest number of fruit, forest, and evergreen trees, as well as those of $25 and $10 offered respectively for the greatest number of hard-wood trees, and the greatest number of cuttings set out, can only be obtained by those who have done the planting on that day.

THIRTEENTH Annual Report of the American Dairymen's Association with transactions and addresses for the year ending January 10th, 1878. This neat pamphlet of 134 pages is mainly taken up with a full report of the sayings and doings of the Thirteenth Annual Convention of the American Dairymen's Association held last January, in Cleveland, Ohio, a condensed report of which we gave to our readers at the time. It is published at the office of the "American Dairyman" of this city and as a pithy *resume* of the yearly record of dairy transactions in the country, it should be in the hands of all interested in dairy matters.

CATALOGUES, &c., RECEIVED.

LIST of Wild Plants of New England furnished by mail, post-paid, by ERASTUS S. WHEELER, Berlin, Mass.

CATALOGUE of the Waccabuc Farm, Golden's Bridge, N. Y. Jersey Cattle, Berkshire Swine, English Mastiffs and Deer Hounds.

WE have received from the PARSONS & SONS Co., their new Catalogues for 1878. We do not know of another nursery establishment that more earnestly strive to give their patrons satisfaction. The catalogue of "New and Rare Plants" will interest all who desire the newest of hardy evergreens and deciduous ornamental trees and shrubs. Kissena Nurseries, Flushing, Long Island.

L. B. CASE, Richmond, Ind. Botanical Index to the plants grown at his commercial greenhouses.

SECOND ANNUAL BENCH SHOW of the Westminster Kennel Club, to be held at Gilmore's Garden, May 14, 15, 16, 17.

GARDNER B. WEEKS, Syracuse, N. Y. Illustrated and Descriptive Price-list of Chapman's Railway Pitching Apparatus and Stacking Outfit. Took the highest award at late trial N. Y. S. A. S. Also price-list of cheese and butter factory, and dairy supplies and apparatus. Steam engines and boilers.

"GASOLOGY," a satire. Published by JOHN DONKEY & Co. Trade supplied by The American News Company, N. Y. A very remarkable satirical poem upon topics of the times, such as the Telephone, Blue Glass, Patent Returning Boards, Hell Abolished, etc., which needs to be read to be appreciated.

REPORT on the general condition of the agricultural interests of North Carolina from returns made to the Department of Agriculture, Raleigh, N. C.; L. L. POLK, Commissioner.

VIRGINIA. Her many advantages as compared with other sections of the United States. A list of farms in the Piedmont section. Address W. A. PARSONS, Goochland Courthouse, Virginia.

FACTS AND INFORMATION in relation to the Catalpa Tree. Its value and the importance of its extensive cultivation in groves. By E. E. BARNEY, Dayton, Ohio.

C. H. HOVEY & Co., Catalogue of plants, seeds, &c., 22 Tremont Street, Boston, Mass.

PRICE & KNICKERBOCKER, 80 State Street, Albany, N. Y. Spring Catalogue of the Albany Seed Store. 80 pages well illustrated.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

THE IRIS.

STANDING in the foremost rank of summer-flowering tuberous-rooted plants, we find the Iris in its numerous and richly variegated varieties. It has been a favorite flower from time unknown. It was introduced into England by the Flemish immigrants in the time of Philip II., of Spain; but we learn of it much earlier than this. History tells us that King Clovis, in 485, A. D. placed three '*fleurs de-luce*' on his shield instead of three frogs which had been the coat of arms of his predecessors, which is convincing proof of its being highly esteemed and cultivated at that early date.

The Iris is divided into several sections by botanists and florists. Without further comment we will consider these several sections.

Iris Anglica, commonly called the English Iris, but for what reason it would be hard to tell, inasmuch as it is not a native of England but of Southern Europe, being most abundant in Spain, is conceded by all to be the handsomest. This variety was originally called Angelica which has been corrupted into the present title; its proper botanical appellation is Xiphioides.

The flowers of this section are much larger than those of the other bulbous-rooted varieties, and are much more delicate. Growing in a wild state the flowers are of a delicate blue but in cultivated strains we have them of every conceivable hue, deep purple, blue, white, lilac, violet, bright crimson and cherry, mottled and striped in the most fantastic of manners, self-colored and shaded. The colors so harmoniously blending and shading into each other, the most perfect form and symmetry combine to place Iris Xiphioides among the finest of garden gems.

Iris Hispanica, generally known as the Spanish Iris, botanically as Xiphium, forms as handsome a bed as any one could desire. It was introduced soon after I. Anglica into English gardens. The number of varieties of this section in cultivation is over one hundred. In color they range through brown, lilac, blue, orange, yellow and sulphur, both "self" and variegated. The center petals are usually of a different color from the exterior petals.

Iris Persica, the Persian Iris, is a magnificent variety. The lower petals are a rich royal purple, with white edges and orange streaks, the center petals are delicate blue. This variety is one of the oldest and most popular cultivated varieties.

Iris Germanica, or German Iris, is the finest of the tuberous section. It is now to be had in many beautiful named varieties, and is much more generally cultivated than the other sections. It is to be had in "self" and variegated colors—yellow, rose, blue, white, cream, salmon, royal purple, maroon, and lilac. Many varieties exhibit three or four colors in one bloom. Like all the Iris, they have an exceedingly grateful fragrance.

Iris Iberica is a new dwarf species of great beauty. The flowers are large, pure, satiny-white center petals; the exterior petals are rich brown and purple, spotted black.

Iris Susiana, popularly known as the Lady-in-black Iris, is of the rarest. It is exceedingly handsome, but being a native of the Levant it is seldom bloomed in perfection. The flowers are very large, at least five inches in diameter. It is one of the richest and most singularly variegated of the Iris. The color is a rich dark-rose, tinted and marked brown.

Iris reticulata is a recent introduction of rare merit. It is particularly adapted to pot culture, blooming in January. The blooms are very fragrant, of a rich dark violet hue.

Iris pavonia or Peacock with its handsome butterfly flowers, and I. tuberosa with its black-green edged blooms are both worthy of a place.

Take up, divide and reset the tubers or bulbs in August; they will grow in any soil but well repay a little attention in the way of a dressing with decayed manure. With me the Iris thrives best in partial shade. I use it extensively for growing in the shade of trees, and for this use I particularly recommend it to my friends who require a plant for a shady situation. Try it.

El Dorado Co., Cala.

BEAUCARNEA RECURVATA.

THIS is a greenhouse plant, a native of Mexico, and belongs to the lily family. It is cultivated in our gardens on account of its long, recurved leaves which are tough and leathery and vary in color from bright to metallic green, just according to how much exposure the plants are subjected to. These leaves are thickly produced from the top of an arborescent stem, which from its earliest development presents a remarkable bulbiform or napiform base. Indeed no better idea can be had of the habit of the plant than is shown by our illustration which is true as life. Though of comparatively slow growth

BEAUCARNEA RECURVATA.

this Beaucarnea is a handsome object either in the parlor window, the greenhouse, or "plunged" out-of-doors in the flower-garden in the summer months. When large specimens are isolated (plunged) on the lawn they are very telling, and as vase plants for standing at either side of the front door, they have few equals. They stand with impunity any amount of sun, providing they be properly hardened off before being placed out-of-doors, and if their leaves be kept dry.

For soil they like good fibrous sandy loam with a little old leaf soil, and never too much pot room. They enjoy lots of water while they are growing, but only enough to keep the soil a little moist in winter. They are very tenacious of life, and can be wintered in a good frost-proof cellar, or a room window in the case of small plants, but their proper winter-quarters are the greenhouse.

Their inflorescence consists of a large terminal panicle three to six feet long and bearing thousands of small white, fragrant blossoms. But so far as we know this plant has not flowered in the Eastern States, and as there is no ready means of propagating it but by seeds, those are imported from Mexico. It can certainly be propagated by cuttings, using as such the young sprouts that may sometimes occur or be induced on the stems, but these are not very frequent.

EXCHANGE.

MANY, many thanks for the seeds the RURAL so kindly sent. I have not a large variety of flowers, like some of our RURAL sisters, but I have some seeds I would very much like to exchange, among which are the following: Sweet William, mixed; Marigold, French, two kinds; Solanum; Candy-tuft, white; Pot Marigold; Convolvulus, mixed; Poppy; Carnation; Acrocliniun roseum. I will exchange any of the above for Wall-flower; Lantana; Salvia, Phlox Drummondii, Larkspur, Stock-flowered, or any hardy climbers. I have also Gladiolus bulbs, and Dahlias, three colors, red, white, yellow, that I would like to exchange for other colors. Those wishing to get some seeds and having nothing to send in return, if they will send me a stamped and addressed envelope, I will forward them seed by return mail.

MRS F. K. GRIFFIN.

De Golier, McKean Co., Pa.

I WOULD like to exchange with RURAL readers, flower seeds or rooted slips or plants. I would like Verbena seed, Pansy, Ten Week Stock, Double Hollyhocks, white or pink, and Gladioli sets. I will give for these, Portulaca, Morning Glory, Sweet William, Perennial Larkspur or Bee Larkspur, very hardy and large blue flowers; White Musk plant or seeds very nice for cut flowers; Perennial Peas, white and pink. I have a great variety of hardy Roses, and can furnish rooted sprouts, also Flowering Almonds.

Happy to receive letters, seeds or plants soon, with such direction for exchange as is required, I remain obedient to directions,

MISS LIZZIE M. LUTTS.

Youngstown, Niagara Co., N. Y.

Everywhere.

RURAL SPECIAL REPORTS.

ELBERT CO., Colorado, April 6.

I AM living away out here in what Olney calls the great American Desert. In my school-days I imagined it was a great wilderness of sand where no green or living thing could exist. I find it very different from what my imagination pictured it. The sand is here certainly, and you may travel for twenty miles and not see a tree, but the plains are covered with the nutritious buffalo grass as well as with wild flowers. The buffaloes are not so numerous as they were a few years ago, but there is plenty of smaller game, antelopes, Jack rabbits, ducks, wolves and the mischievous Cayote which we wish were not so numerous. But, best of all, are the great herds of cattle that increase and keep fat on the rich grass. Life on the plains is not without charms. 'Tis true, we are isolated from all the church privileges and public amusements that diversify life in the East; but the free life we lead and the pure air we breathe make up for the loss of society.

About the first of May commences the busy season in this country, and from that time until about the first of November the stock-men are all busy gathering, branding and shipping cattle. Then from that time until the next May we have nothing to do but visit, read, write and enjoy life as well as we can, and we make the most of what few enjoyments we have, and enter into them with so much zest that we get more pleasure out of them than any one could imagine that had never tried. Every man, woman and child have their horse and saddle and think nothing of riding ten, twelve, or even twenty miles to visit a neighbor. We have good roads, a level country and no mud. The land is so sandy that in an hour after a heavy rain the ground is dry. But it very seldom rains—I might say never from November until May, and indeed we do not have much rain at any season.

We cannot raise vegetables without irrigating and there are very few locations where you can command water for that purpose. We are not here, however, to cultivate the ground but to raise cattle.

Many of the RURAL'S Eastern readers will wonder how we can boast of our fat cattle, rich grass and fine flowers in a country where there is so little rain. Indeed were they to see our prairies they would say it was impossible for cattle to live, but when they behold the stock and saw that the majority of them were fat enough for good beef even in March, they would understand that the grass grown on our dry, sandy prairies, though short, is very rich; and were they to transfer our grass and flowers to the East, they would die from excess of water.

M. V. SNYDER.

COSHOCTON, CO., Ohio, Feb. 27.

I WAS very much interested in reading your articles, some time since, on healthfulness of plants in living rooms, as I keep a large number in mine, and would have been sorry to hear you condemn the practice too severely; but I try to keep mine as near as I can to what you recommend in your articles. In the first place, I had some pans made by a tinner, just the length of the window-sill, and wide enough for about three rows of pots, setting the lowest plants next to the window to keep the pan in place. I have two turned legs fastened on a strip to slip under back of the pan. This I keep well painted to preserve it from rusting. It keeps all water off the carpet if I happen to spill any in watering. I slightly warm the water, putting in a small quantity of ammonia, which I think keeps the pets looking healthy. At least such is the effect on mine. Of Geraniums, my double salmon, has not been without blossoms this winter. It does better for me in blossoming than any variety I have. Of Abutilons, Boule de Neige with me has blossomed all winter. With regard to Primroses, I can't say enough in their favor. Maderia Vine makes a beautiful climber, standing almost all kinds of usage in a living room. I have one trained over the window and pictures, which is beautiful with its thick, rich-looking leaves.

MRS. CATHARINE MCCOY.

BROOKSTON, N. C., April 1.

IT may seem strange to hear one speak of a drought in March, but certainly we have had a little touch of it here, the whole month being quite dry, though two fine showers during the past week have brightened the face of nature wonderfully. We had only one severe frost and that on the morning of the 26th. Owing in great measure to the dryness of the earth and atmosphere but little harm was done. Fruit all safe yet. Peaches dropping their petals. Apples, Pears and Grapes in full bloom, and Grapes rapidly pushing out. Wheat is, at least, ten days later than last year, but has a good color. Plowing mostly done except on stiff lands, where the dry time has put a stop to operations. March came and went like a lamb, contrary to all the proverbs of the weather prophets.

M. B. P.

FELTS MILLS, N. Y., April 9, '78.

WE have had a mild winter, and the spring so far, is correspondingly warm. Maple sugar makers have just gathered in their buckets. The make of sugar is below the average. Farmers are busy getting ready to put in their grain. A few pieces of wheat have been sowed in March. There seems to be a general disposition of the butter-makers of this section to go into cheese making the coming season. Some cheese factories have commenced making cheese. Butter is worth 25 cents per pound; maple sugar 7 to 9 cents; eggs 8 cents per dozen; oats 32 cents per bush.; potatoes, 35 cents.

S. W. M.

YATES CO., N. Y., March 30.

MARCH has tried to be consistent and go out like a lion having come in very lamb-like, but it is pretty nearly a failure. Last Sunday, the 24th, was pretty severe; the thermometer here was at 10° with a cutting northwest wind. Peaches were considerably advanced and it was feared that they might be seriously damaged, but the buds look all right as yet.

W. H. OLIN.

WESTBOROUGH, Mass., April 12.

IT begins to look very much as if spring were at hand; plants and trees show the effect of our mild April weather by bursting the leaf envolope.

W. H. W.

MONTGOMERY, Ala., April 5.

WE have hereabouts a very rich prairie soil, adapted to corn and cotton; oats also do well. We have some farmers who are devoting a good deal of their time to stock-raising.

B. C. M.

The Querist.

ANSWERS TO CORRESPONDENTS.

Making Capons.

Chas. Bennington, Otsego Co., N. Y., inquires how capons are made.

ANS.—The best birds for capons, are the large breeds, Asiatics or Dorkings. They should be two to three months old. Before the operation they should be deprived of food for from twenty-four to forty eight hours, so as not to have their bowels distended. There are instruments made for the operation, which can be purchased in most cities.

The bird to be operated on, must be fastened down on his left side to a board or bench through an auger hole; the wings should be drawn together over his back and well secured; the legs drawn backward the upper one drawn out furthest and secured. The feathers must be plucked from the right, or upper side, near the hip joint, on a line with and between the joint of the shoulder. The space uncovered should be about one and a-half inch in diameter on an ordinary-sized bird. Draw the skin of the part backward so that when the operation is finished the skin slides back to its natural position and covers the wound in the flesh, and does *not*, when neatly done, require sewing. Make an incision with a fine sharp penknife (or proper instrument is best), between the last rib and hip, commencing about an inch from the back-bone; extend it obliquely downward, from an inch to an inch and a half, just cutting deep enough to separate the flesh; take great care not to wound the intestines. The wound must be kept open with an instrument with a spring, called a retractor, or with something answering the same purpose, stretching it wide enough to afford room for the work. Then, carefully cut the membrane covering the intestines which, if not sufficiently drawn up, may be pushed towards the breast-bone lightly by a spoon-shaped instrument, or the handle of a teaspoon. The organs to be removed are readily recognized—a small reddish-yellow cylinder attached to the spine on each side, covered with a fine membrane or skin which must first be removed with forceps and a fine hook to draw it away. With the left hand introduce the bowl of a spoon (an instrument is made for the purpose) under the lower or left testicle, which is generally a little nearer to the rump than the right one. Then take the instrument called a cannula, which is a hollow tube with a horse hair passed through it forming at the end a loop which can be tightened by pulling on the two ends of the hair at the other end of the tube. Pass this loop around the testicle with the help of something to place it in position, the cannula has a hook for this purpose, so as to bring the loop to act upon the parts which connect the organ to the back. Then by drawing the ends of the hair-loop backward and forward, and at the same time pushing the lower end of the tube or cannula, towards the rump of the fowl, the cord or fastening of the organ is severed. A similar process is then to be repeated with the uppermost or right testicle, after which any remains of the organs together with the blood around the wound or at the bottom must be removed with the spoon. The reason for operating on the left or lower organ first is to prevent the blood from covering the lower one if left last. When the operation is performed, which if skillfully done occupies but a few minutes, the retractor is taken out, the skin drawn over the wound, which if it was drawn on one side before cutting (as mentioned above), will connect at a place not exactly opposite the wound in the flesh, thereby covering the flesh wound. If skillfully done it requires no sewing. The old French system was to operate on each side of the fowl, but the system here described is considered an improvement on the antiquated Gallic method.

Salt as a Fertilizer.

S. P., Center Village, Broome Co., N. Y., having seen salt recommended as a fertilizer, inquires what quantity should be used and on what kind of soil and crops would its effects be beneficial.

ANS.—The uses of salt in agriculture are far more frequently discussed than they are understood. It is chiefly valuable for the very large proportion of soda contained in it, and this generally exists in the soil in considerable quantity. Its action may be beneficial, is often the reverse and not seldom neutral. For purposes of promoting vegetation it has been found specially useful in inland districts, because to a considerable distance from the sea, rain always brings down an appreciable quantity of salt, amounting near the seaboard, in an annual rainfall of 31 inches, to a deposit of 641 pounds of salt to the acre, according to the calculations of Dr. MADDEN. Numerous experiments in Europe go to prove that its application has produced a considerable increase in the yield of wheat, barley and oats besides strengthening and brightening the straw. Prof. WAY states that ammonia-silicate is much more soluble in a solution of common salt than in pure water, and as the silica in cereals is probably largely derived from this source, and the ammonia is also thus liberated, the action of salt on these crops is readily intelligible. From 10 to 20 bushels to the acre have been applied beneficially to them, experience determining the exact quantity that produces the best results on each kind of soil. Experiments have also shown that lime slaked with a strong solution of brine, is superior as a fertilizer to ordinary slaked lime, with or without a separate application of salt.

The use of salt for root crops is also recommended, and since, on analysis, turnips contain 2 pounds of salt to the ton and mangolds 6½ pounds, the reason why they are benefited by a saline application is apparent. Experiments made by Dr. VOELCKER show that while weak solutions of salt benefit cabbages, field-beans, onions, lentils, annual meadow-grass, radishes, and several noxious plants experimented on, applications progressively stronger had an injurious effect in the following order: A salt solution containing 48 grains to the pint was prejudicial in a month to lentils, chickweed, groundsel and annual meadow-grass. A solution containing 96 grains to the pint, was injurious to cabbages and field peas. A solution of 192 grains to the pint was prejudicial to onions, and nearly fatal to cabbages. A solution of 24 grains to the pint decidedly benefited radishes, onions, lentils and cabbages. Grasses were more readily affected by salt than any plants he experimented upon. Bulbous plants and those with succulent leaves were especially benefited by the application of salt.

BERTHOLLET says that in a calcareous soil salt is decomposed by the carbonate of lime the soil contains, and that by a double decomposition carbonate of soda and chloride of calcium are formed. Now, carbonate of soda dissolves silica so as to supply it to the plant in a readily available form, and is also a solvent of phosphoric acid, organic acids, etc., and may therefore exercise a beneficial effect by carrying these constituents into the vegetable organism. Experience with salt as a fertilizer is not yet sufficiently large to determine on what kinds of land it will produce the best effects; but where it is neutral or injurious to the crops above enumerated, observation has shown the following conditions: The soil has been supplied with sufficient salt from the sea or local deposits; the land is naturally poor and ill manured, and then the application of salt will do little to raise its fertility; salt is given to stock pastured on the land or whose manure goes on it, so that it received an ample sufficiency from the supply necessarily contained in the voidings of the animals.

The whole question of the effects of salt on soils and crops needs more study before an accurate opinion can be formed on the matter. Every farmer who uses the article in this way and carefully notices the result, is an experimenter whose knowledge, if properly made known to the public, would contribute often very beneficially towards the general fund of practical agricultural information.

Dry Yards: Leicester and Cotswold Sheep: Norway Spruce Wind-Breaks.

W. H., Iona, Mich., wants (1.) a plan for keeping his yard dryer, as it is now a mass of mud except where well littered. Building on north side of road; yard open to, and facing the south, inclosed on three sides; land slopes one foot in sixty; soil clay; plenty of small stones at hand, and of sand about a mile away; till obtainable for drainage; but he is very properly anxious to retain all the liquid manure he can. 2. He asks what is the difference between Leicester and Cotswold sheep, and in their wool. 3. He likewise wants to learn at what distance apart Norway Spruce should be planted for a wind-break, and how many rows in width.

ANS.—1. The yard should slope the opposite way and the buildings should have spouts to carry all rain water into cisterns or right-away. Waste water or any little streams running from the road or from any direction and finding their way into the yard should be carefully diverted from that direction. The small stones would be just the thing and might be put thick enough to thoroughly prevent any mud in future. In England wherever stones can be had they are broken small and put two feet thick and, in this instance, if door-ways will allow, the stones could be put so thick on the present lowest part of the yard as to make it the highest. It is a great injury to the manure to have so much moisture. Don't spare the stones and they will be sure to pack without sand.

2. The Cotswold sheep have wool on the top of the head, quite a bunch, and they have more on the legs. The wool is rather coarser and the fleeces heavier. The weight of the Cotswold is greater at a year old by at least 30 pounds, and before dashes of Cotswold blood were given to the Leicesters there was a greater difference. The Leicesters will fatten very quick but there is less lean in proportion to the fat. The wool from the Leicesters formerly made a little more per pound, being of very fine quality.

3. If Norway Spruces are planted for a wind-break or screen in a single row, eight feet apart is about the proper distance. If room can be afforded, two or more rows are better, and then the trees should be set in each row opposite the spaces between those in the next, and at a distance of, say five feet from the center of the space. The actual distance then between the trees will be the hypothenuse of a triangle the other ends of which are five and four feet.

Gas Lime and Barn-yard Manure.

Walter Severly, Venango Co., Pa., inquires 1. WHAT is the comparative value of gas lime as a fertilizer, on what kind of soil and in what quantity should it be used. In his section stable manure costs 50 cents per load at a place from which four loads can be hauled in a day; and gas lime $1.50 per load, at a point whence only three loads can be drawn daily to his farm: Which should be taken?

ANS.—In view of the relative prices of gas lime and barn-yard manure, here given, the greater ease in hauling the latter, its suitability to all kinds of crops and the safety with which it may be everywhere employed, it has in our opinion a very decided advantage over gas lime at the figure quoted. The latter has, in reality, but comparatively little fertilizing value, requires time to fit it for application to any crop except to one of weeds, and, apart from this exception, should always be used with caution. When fresh, it is a mixture chiefly of sulphuret of calcium with carbonate of lime and a variable quantity of caustic lime, and in this condition its application to plants would be disastrous. By exposure to the air for three or four months during which it should now and then be turned over, the poisonous sulphuret of calcium absorbs atmospheric oxygen, and is converted into a cheap sort of gypsum. Spread upon mowing or pasture land at the rate of three tons to the acre, it would have a good effect on the subsequent crop; and its influence, properly weathered, would be beneficial wherever an application of gypsum would produce good results. It should be used in moderate quantity and with caution, as an application of eight tons to an acre, has been known to entirely destroy vegetation.

Broody Hens—Food for Chicks.

A Subscriber, Lincoln, Loudoun Co. Va., has two Cochin hens from which he would like to raise as many chicks as possible, and therefore inquires whether when they become broody, it would be advisable to break them up so as to induce them to lay again. He also asks, what is the best feed for very young chicks and whether broom-corn seed is good.

ANS.—You can sometimes break up the sitting fever of your hens, by putting them in an empty coop on the ground without nest or food, which can be repeated as often as they are inclined to sit. By so doing you can get more eggs from your two hens—many breeders do this. The best food for young chicks is variety, as oatmeal, cracked corn, buckwheat, wheat and rice slightly boiled. Boiled egg is good for them when first hatched for a few days as is paste made of the corn meal, oat meal or wheat meal. As soon as chicks can eat broom-corn seed it is good.

Bone Dust and Barn-yard Manure.

J. W. S. inquires whether it would be advisable to use bone dust as a compost with barn-yard manure.

ANS.—Yes. Many excellent farmers consider such a method of employing bone dust second to none, and in our own experience it has proved highly satisfactory. In piling in the spring, place a layer of manure, say eight inches thick, for a foundation, then a sprinkling of bone dust, say at the rate of a bushel to what will make a ton of manure, and continue these alternate layers until the heap is finished. Turn it over in August and after the winter wheat has been gathered in, the compost will be in prime condition to be applied to grass land. It is an excellent application to permanent pasture or for meadow land intended to be broken up for corn the following spring.

Feeding Sorghum to Horses.

E. H. Field, Kansas, asks how Sorghum should be fed to horses.

ANS.—The seed is sown as soon as the ground is warm—best in drills, and encouraged by some cultivation, especially in weedy land. The green crop may be cut and fed as soon as it attains a suitable hight, and is as acceptable to stabled horses as it is to cows, but it must not be fed so freely as to produce laxity of the bowels. When fully grown and before the seed forms, the stalk becomes quite sweet, and it is then fit to cut for curing like corn fodder—thoroughly wilted, bound in bundles, set up in stooks which are bound at the top like corn stooks to protect them from the weather. Thus drying, when cured it may be fed freely to horses or cattle, best, of course, with hay and other feed. The grain is fed ground usually, but we know no reason why it should not be used like oats or barley.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, APRIL, 13TH.

H. H.—A. L. J.—C. M.—M. V. S.—"Jim Crow"—H. H., No. 2.—S. A. L.—"Wild Cherry"—M. E. S.—F. D. C.—L. K.—W. J. F.—M. G. R.—L. R.—"Clinton"—M. G. B.—S. W. M.—M. O.—T. B. M.—M. M. W.—A. G. L.—J. S.—E. W. S.—W. M. N.—"Glantess"—W. H. W.—T. B. M.—L. S.—M. M. S. R. A.—C. E. R.—"Connecticut"—T. T. L.—A. O. G.—C.—S. R. & Co.—M. I.—J. F.

The Swine-Herd.

MANAGEMENT OF YOUNG PIGS.

PROFESSOR E. W. STEWART.

THE science of feeding animals is becoming much better understood, and the best feeders are fast changing their ideas of the proper management of young animals. It is not long since pig feeders thought a slow, early growth the best for the constitution, and even the profit of the feeder. This was carried to such an extent that pigs were not ready for market till 18 to 24 months old; and it was thought desirable to reach a weight of 400 to 600 pounds. The storing system, or suspended growth, was almost universal. Pigs were kept over winter with little if any increase in weight The feeders did not seem to discover that this food given to store animals was even worse than lost, for the animals took on an unthrifty habit, contracted their powers of digestion, and required, in spring, nearly a month of good feeding to recover from this penurious winter feeding. A thrifty animal, with good management, progresses without check from its first to its last day. When a little attention was given to the matter, it became evident that the profit of growing meat was to be found in pushing the young animal as rapidly as possible, that it cost the least to produce a pound growth in the earliest period of life, and this cost in food grew proportionately greater as the animal increased in age and size. This, then, is the great fact underlying all successful feeding of young animals. The pig is, perhaps, the best exemplification of this law, at least more experiments have been noted in feeding pigs than calves.

Experiments were tried in 1866-68, at the Michigan Agricultural College Farm. In the first, three, and in the last, six pigs were fed upon milk. The pigs were from 4 to 6 weeks old at the commencement of the experiment. The average amount of milk required to produce a pound live weight, was: first week, 6.76 lbs.; second week, 7.75 lbs.; third week, 12.23 lbs.; fourth week, 10.42 lbs. PROF. MILES says the cause of its requiring a greater amount of food the third week is explained by a "derangement of the digestive organs during this week, as shown in a tendency to constipation." He calls attention to the fact that "the milk to produce a pound live weight constantly increases." After ending the experiment in 1868 on milk, he continued it upon corn meal. Pigs and food were weighed as before, and the feeding continued 20 weeks, divided into five periods of four weeks each. Amount of corn meal required for a pound live weight was: first period, 3.81 lbs; second, 4.05 lbs.; third, 4.22 lbs.; fourth, 5.24 lbs.; fifth period, 5.98 lbs. Another experiment was tried in 1869 with a larger number of pigs, with nearly the same result, in regard to amount of meal required to make a pound of live weight, and showing, practically, the same increase in the food required to make each additional pound live weight as the pigs grew older or heavier.

The point here illustrated is of the highest importance and should be carefully studied. It will be seen that in the fifth period, when the pigs were from 24 to 28 weeks old, it took 75 per cent. more of meal to put on a pound live weight, than in the first period, when the pigs were 8 to 12 weeks old. In 1874 the writer tried a similar experiment with ten calves upon skim-milk running through 12 weeks, in which the milk constantly increased from 11.02 lbs. the first week to 17.01 the last week.

That most pains-taking experimenter, J. B. LAWES, of Rothamsted, England, has also settled this question in the same way proving conclusively that all profitable feeding of animals for human food must be made before the animal reaches maturity.

These facts all point to the importance of feeding the young pigs in the most liberal manner. Some breeders think it quite sufficient to stint the pig to the milk of the dam, and thus seldom give any extra food to even a litter of ten pigs. But such breeders have not estimated the amount of food required to feed a thrifty litter of eight pigs. Pigs, at birth, seldom weigh more than three pounds each, and when four weeks old, should weigh 15 to 18 lbs. each and must therefore gain 12 to 15 pounds each, which is an aggregate gain of say, 112 pounds. This requires the sow to yield milk enough, each day, to produce a growth of four pounds live weight; and the production of milk by the sow, weighing, say 300 lbs, equal to that of a cow weighing 800 to 1000 pounds. How important then, that the pigs should be taught to eat other food very early. This subject will be continued.

Erie Co., N. Y.

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The "Rural Cricket" is inclosed in a beautiful circular metallic case of a single piece, and therefore without a seam, which is nickel-plated. The face of the clock is white and has a "second" dial as in watches. The works are securely inclosed so that no dust can penetrate and harm their movement. It is like a stem-winding watch, in that it requires.

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WHAT THEY SAY OF IT.

SIXTH WEEK.

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"CRICKET" clock at hand. It is a pretty little affair and ticks away as if it meant business.
Rolling Prairie, Wis. L. L. F.

I HAVE received the "Cricket" all right, and am very much pleased with it. I set it going with my my old clock and it has not varied one minute in a week. B. M. S.
Lodi, Wis., April 1, 1878.

I THANK you—we are pleased with the clock. I will try and get new subscribers in the future to my best ability in return. Respectfully yours, MRS. L. J.
Bethlehem, Conn., April 8, 1878.

THE Clock came promptly, safe and sure, and a capital thing it is. We are very much pleased indeed with it. It is nicer than we anticipated. I have regulated it to run with a weight and pendulum clock precisely. Please accept our many thanks for the beautiful present, for the RURAL itself is well worth the full amount sent to you. F. S. S.
Litchfield, Conn., April 8th, 1878.

THE "Cricket Clock" arrived safely by express a few days ago, and is an excellent time-keeper and quite a novelty; am well pleased with it and your paper. I am free to say they are all you claim, and are well worth the money. I consider the "RURAL NEW YORKER" the best weekly paper published on Agriculture in the United States. A. D. C.
Keys, N. C., April 8, 1878.

DEAR SIR:—From the premiums I have received from the RURAL, I had reason to expect the "Cricket" Clock to be everything it is represented to be, but I confess I was agreeably surprised when I saw it. It was received a week ago by one of my children who let it fall upon a hard board floor. It seems to have sustained no injury whatever—not even a dent in its solid nickel frame and it has ever since been keeping perfect time. It is certainly a thing of beauty. Next week I expect to get another from you.
Carson City, Nev. J. B. D.

I RECEIVED the "Cricket" Clock. I wound it up and it commenced with a speed which I never saw equaled. It beat the Irishman's watch which he boasted had beaten the big town clock two hours in half a day. The regulator had no effect on it, and at last, after running about 12 hours, it got mad and stopped. I was going to the village where a man is noted for making all time-pieces travel with his regulator. He took it to pieces, found out the trouble, and now it is keeping true time. I like it and would not part with it. D. M. C. B.
Mansfield Centre, Conn.

GENTS—"Cricket" arrived all safe to-day. All who have seen it say it is just splendid. It has been going four days and keeps absolutely good time; a perfect gem in every respect. It now adorns the dining-room mantel. Please accept my sincere thanks for same. J. E. S.
Morrisania, N. Y., April 10, 1878.

N. B.—My brother who has just arrived from Mt. Vernon pronounced it a regular beauty. For the next five minutes I was busy answering questions he asked in regard to it. I need not say that I gave him full instructions; he intends to try and get one. J. E. S.

DEAR SIRS:—Your splendid premium—or gift I prefer to call it—was received last evening. This is my second "Cricket;" the first (which I haven't thanked you for yet) I disposed of after I had had it about ten days, for $2 50. I have had an offer for this one already but shall not sell it until I am sure of getting another. Every one wants the RURAL, and they say it is hard to get along without it, but money is so scarce in this section! I can get several half-yearly subscribers who do not feel like laying out more money just now. If I send you four names at $1.30 for six months each, will that entitle me to a "Cricket" clock the same as two yearly at $2.50 each? MRS. A. M.
Selma, Ala.
[Yes. EDS.]

ALTHOUGH I am rather late in acknowledging the receipt of the "Cricket" sent me, it was not the less appreciated. It came safely, and we return many thanks for it. I kept it a few days only, but in that time I found it such a pleasant little visitor my generosity nearly forsook me when it came time to part with it. I hope sometime I may obtain one for myself. My machinest brother had to see the inside of it, of course, and I believe he was quite satisfied with his examination, finding the works all they are represented to be. He and his wife were much pleased with it. I think it well worth its price. All the young RURAL readers should have one. Placed on a bracket they could not have a prettier or more useful ornament. M. E. P.
New London, Ohio, April 9, 1878.

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Plan of a $3,900 Cottage ... 245
Best way to Manage Weeds ... 245
Jottings from Kirby Homestead ... 246
Getting out Manure ... 246
Good Tools ... 246
Artichokes again ... 246
Prickly Comfrey ... 246
Pearl Millet ... 247
Apple Tree Borer ... 247
Observing Insects ... 247
Does the Vegetable Garden Pay? ... 247
Salsify ... 247
Plum Culture in Ohio ... 247
Pumpkin Seeds once more ... 248
Learn a Trade ... 248
Slitting the Bark ... 248
Pamphlets Received ... 248
Bulbs for The Flower Garden ... 249
Beaucarnea Recurvata ... 249
Exchange ... 249
Rural Special Reports ... 249
Answers to Correspondents ... 250
Management of Young Pigs ... 250
What They Say of It ... 251

EDITORIAL PAGE:

Luck or Labor ... 252
Borrowers and Borrowing ... 252
Florida Alligator Tree ... 252
Spring of 1874 and 1875 ... 252
Brevities ... 253

LITERARY.

Poetry ... 253, 254, 258
Ladies' Spring Fashions ... 253
Cora ... 253, 254
Pere Hyacinthe as a Reformer ... 255
Chinese Maxims ... 255
Recent Literature ... 255
Bric-a-Brac ... 255
Domestic Economy ... 256
China and Gla-s-Ware ... 256
Attics and Cellars ... 256
Domestic Recipes ... 256
News ... 256
Markets ... 257
Reading for the Young ... 258
Private History of an Ear of Corn ... 258
Talk in the Silent World ... 258
Sabbath Reading ... 258
Day in the Life of Jesus ... 258
Personals ... 259
Advertisements ... 251, 257, 259, 260
Wit and Humor ... 260

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, APRIL, 20, 1878.

We beg to call attention to the fact that we have, during the past six months, repeatedly stated that we should endeavor not only to fulfill all of our promises for the present year, but that we should endeavor to do more. We think we have already given substantial proof of the sincerity of those statements. We have now to announce that we have determined upon enlarging the RURAL NEW-YORKER. Further reference will be made to this change at an early day.

As we intimated when the announcement was made, it was intended to offer the RURAL Cricket Clock only for a brief period. We now give notice that the offer will be withdrawn on and after the first day of July. It was our desire that one should be placed in the home of every one of our subscribers, and we think ample opportunity will by that time have been afforded.

LUCK—OR LABOR?

THERE is an old saying, "It is better to be born lucky than rich." We have little confidence in any luck that a man does not make for himself. And a man's luck, so-called, is often traceable to some act done, or to some point in his character, that has been carefully cultivated, not with reference to any particular transaction but on general principles of proper conduct and growth. When one man succeds by *luck* a hundred fail. Witness Wall Street transactions, or gamblers anywhere—what is credited to luck is often due to caution.

In conversation with a man well known in business circles in Boston, who is now the possessor of much wordly wealth, every dollar of which he has made for himself, he said, "I have never embarked in any enterprise thinking how much profit I could make by it. My rule has been to look out for the losses, and to guard against them leaving the profits entirely out of the calculation. Many say profits cannot be made in any business without risk. I have tried to act on a different principle. My first inquiry always has been, if I put money into this or that venture, 'Can I get it back again?' and if the answer seems doubtful I let it alone. I have never been led into speculation by the thought: there is but little risk, and if successful the profit is great. And I have never lost in the end, on any business venture I have ever made."

A good reputation, which never comes by luck, is to any business man a long step toward a fortune. The man who is considered honest by the people among whom he resides, and who is known for being prompt in his payments, has a reputation that will serve him for business purposes, better than property serves one who is tricky and uncertain.

Our attention having been called to the fact that the stock of the Insurance Companies of Hartford sold for much above their "Book value"—that is the amount that could be paid to shareholders from the assets should the company discontinue business at once—while that of the best New York Companies can always be bought considerably below book value although the percentage of dividends paid was about the same, we were curious enough to inquire the reason. We first asked a President of a N. Y. Company, who gave no further information than that all the Hartford stock was wanted for investment by the people of that city and its immediate vicinity, and because it was a favorite with them they willingly paid a high price. He gave no reason why it was a favorite—afterward we inquired of the agent for one of the Hartford Companies located here. The "reason is plain" he said, "it is because of the reputation for soundness and fair dealing we have established throughout the entire country. If our company should to-day sustain sufficient loss to exhaust its entire capital in the payment of it, we could continue. Our reputation is worth more than the entire capital of some companies."

But a good reputation does not come without being sought. It follows in the wake of honesty, integrity, morality; its foundation stones are right thoughts, which must come before actions or words, and which control them.

We do not hold that there are no instances where fortune in its various forms has not come to men without their seeking it. Many have stood in the way of circumstances and have been benefited by them, but what we would impress upon the minds of our readers is that he who waits for luck is usually disappointed. He who would win must work.

BORROWERS AND BORROWING.

SHAKSPEARE, the wonderful expounder of human nature said, "Neither a borrower nor a lender be." A greater than the immortal dramatist has taught the duty of brotherly kindness and timely assistance. We must give respect and obedience to the higher authority. But to this, as to all other divine injunctions, it is not only legitimate but obligatory to apply righteous judgment and carefully to decide every case by its peculiarities. It is certain that it is not required of any one to lend indiscriminately and recklessly. There must be some reasonable limit. Here, as in all matters involving one's relations to his fellow men, duty is made clear when one intelligently and carefully applies the Golden Rule—"Do unto others as you would that they should do unto you." This will guide both the borrower and lender. Let him who would borrow, imagine himself in the place of him to whom he is about to apply; and let him who is asked for the favor imagine himself the applicant. Let each decide what he would regard as reasonable and right in this imagined relation.

Our prime object here is to enter an earnest, considerate protest against the unwarrantable excess to which the practice of borrowing is carried in some communities. It has an evil effect upon both the borrower and lender. It prevents the borrower from making proper efforts to obtain what he needs so as to have his own. It causes him, if he relies on it, to be disappointed often, and consequently to lose the best opportunities to attend to his own interests. It often occasions serious loss of time—and that at the crisis when time is most valuable. The journey to and from the house of the lender consumes, it may be, the best part of the favorable opportunity. The custom sometimes proves very expensive, when that which is borrowed receives injury that must be accounted for. It also diminishes the borrower's self-respect, compromises his independence, lowers him in the estimation of those whom he plies with his frequent requests, and renders him an undesirable and quite dreaded neighbor. It is peculiarly likely to result in practical dishonesty, as the means or instruments are used, worn, injured, in many instances, and no rent or remuneration is paid; so that the borrower owes what he never pays.

The lender is much injured by these borrowing neighbors. He dislikes to appear illiberal, and, therefore, frequently lends when he does not enjoy it, and when he is not able to spare. He does not know, every time, when he will really need that which he is asked to lend. It not unfrequently happens that when there is immediate and important demand for some article, the annoying discovery is made that it is at the house or farm of a neighbor who borrowed it weeks before. Then the pressing interest must suffer, without any prospect of compensation. How often has the farmer been sorely perplexed to find that his plow, or hoes, or spades, or harrow, or harness, or bridles or saddle, or barrow, or ax, or forks, or scythes, or saw, or hammer, or auger, or plane, are away at the house of a troublesome neighbor? How often is a horse, or wagon, or other vehicle, needed just one hour after it is carried off by the borrowing friend? (?). The thrifty and economical man likes to keep his utensils in good condition; but that is impossible, if he has to lend them; for frequent borrowers are generally such as take little care of their own or another's property.

It should be remembered that a discreet, provident man supplies himself with what he thinks his own work requires; and does not add to his stores what his neighbors will need, and ought to get for themselves. If we thought the ladies would read this article we would add a paragraph for their benefit; for the borrowing practice very frequently tells fearfully upon housekeepers. We will, however, simply commend the subject, in this connection, to some of the accomplished female contributors to our columns. We are sure that the whole subject needs more attention than it receives from the various journals that are devoted to the true interests of indiviuuals and society.

There is urgent need for some change in the matter, that will lead to a reform of the inexcusable, borrowing pests. One idea occurs to us as likely to have a good effect in many, though not in all cases. The derivation of the word "borrow" suggests the additional idea of a *pledge* or *surety*. If money is lent, there is generally a pledge to return, with *interest*; and, in addition, there is often, especially in these days, some specified security. Why should not other kinds of property be loaned on some condition of pay, guaranteed by trustworthy understanding? Ought not an honest borrower to return something more than he has borrowed? Would it not be a great relief if every one would adopt such a rule?

Of course we do not purpose to render any one uncharitable or ungenerous. The really needy should be helped, as far as practicable, not only as a duty, but as a privilege; but those who *sponge* upon their neighbors ought to be made to pay for their unjustifiable habit.

"FLORIDA ALLIGATOR TREE."

THE noses of Eucalyptus globulus and of other Eucalypti are out of joint! It has been discovered within the past ten days that the "Florida Alligator Tree" will not only destroy malaria, but that branches or even twigs, if kept in the rooms of our dwellings, will prevent all sorts of diseases whatsoever. No wonder then that of late, hundreds, in fact thousands, of happy men, and ladies and children might have been seen passing to and fro the streets of great New York with a branch of the "Alligator Tree" in their hands. On almost every block bundles of these have been offered for sale at five or ten cents for each branch—"take your pick." "The great Alligator Tree of Florida, Sir. It will cure anything, Sir. You have only to put one of these branches in your room. It will exude a sweet, balsamic odor which purifies the atmosphere and bids defiance to disease!"

In the moist, delightful woods of hill or valley of the Northern States running westward to Illinois and southward, may be found the Sweet Gum. Its leaves are like those of the Maple except that in the Fall they change to a deep purple, sometimes beautifully mixed with orange. When bruised, the leaves emit an aromatic odor at all times; but in the spring, just after they are unfolded, and especially after a shower the air is redolent "with their refreshing ordor." The gray bark, especially upon later growth, is curious for its corky ridges that sometimes form corrugated plates an inch in width. Its botanical name is Liquidambar Styraciflua. Millions of trees may be found within fifteen miles of New Jersey. But how could our city people be expected to know that! When *they* go to the woods they are too enraptured over everything to notice anything in particular!

When, therefore twigs of Liquidambar Styraciflua are offered to them in the streets of New York as the "Florida Alligator Tree," and they are assured of their wonderful powers, is it not quite natural that they should buy a twig or so for ten cents each and hasten on to their homes with a lighter step?

Springs of 1874 and 1875 Compared with this Spring.—We have just been comparing this spring with those of '74 and '75. April 15th, 1874 was the first bloom of Roman Hyacinths in the Rural Grounds. On the morning of the 13th the thermometer fell to 16° above zero. On the 26th, Japan Quinces were not in bloom. On May 4th, we find a note "Country-like winter." On the 9th Hyacinths in perfection. Now (April 15) Hyacinths are in perfection. Japan Quinces are in bloom. In the spring of 1874, May 10, Forsythia viridissima was in bloom. It is in bloom now. On the 16th of April 1875, the ground was so frozen that we failed in an attempt to transplant Hemlocks. On the 29th of April, "a severe frost." May 1st "Willows budding." May 5th, "Sharp frost—ice formed in low places." May 7th, "General appearance of the country is nearly that of winter." Without giving further particulars we find that the verdure of the present spring is as far advanced as it was on May 9th of 1874, and May 12th of 1875. Sad misgivings that the fruit buds, many kinds of which are almost ready to break, will be destroyed, in this section at least, may reasonably be entertained.

BREVITIES.

APRIL.

SWEET April!—many a thought
Is wedded unto thee, as hearts are wed;
Nor shall they fail, till, to its autumn brought,
Life's golden fruit is shed.—*Longfellow.*

COL. REWER of Ithaca, N. Y., thinks a farmer can hardly afford to purchase fertilizers unless he can't raise clover. He keeps his land in good condition with clover alone.

PROFESSOR ARNOLD states in the N. Y. Tribune that those who could not make good butter or cheese last year will hardly be able to do much better this. Unskillful hands cannot be made skillful in a minute, in a month or in a year, though overwhelmed with advice. To make good butter and cheese, like good penmanship and good music, requires long-contined, patient, intelligent and unremitting observation, and practice.

As religious hypocrites darken for the moment the pure luster of true religion, so do humbug scientists throw discredit upon true science. We do not believe farmers despise scientific agriculture because it has done no good but for the harm that has been done in its name. No other medium has equaled the agricultural press as a disseminator of worthless so-called scientific metods of agriculture and, to be candid, we do not wonder that thousands of farmers over the country believe that if they permitted themselves to be guided by the teachings of agricultural papers, it would end in their ruin; and so it would if their own experience did not enable them to sift out the particles of gold from the mass of dross.

In a list of the average duration of the germinative power of some seeds, the London Garden, among others, mentions the following, which at this season may be of service to the reader:

	Years.		Years.
Artichokes	5	Potato	3
Turnips	5	Carrot	4
Balsam	many	Spinach	5
Basil	6	Cucumber	5
Broad Beans	6	Egg Plant	7
Radish	5	Endive	9
Kidney	3	Tomato	5
Rhubarb	3	Leek	2
Beets	5	Lettuce	5
Salsify	3	Melon	5
Cabbage	5	Onion	2
Parsnip	3	Parsley	3
Peas	4		

WE see that several persons have been induced to buy the Dioscorea batatas (Chinese Yam) disguised under the familiar name of "Cinnamon Vine" by the unprincipled vendors. Unprincipled because they deceive and steal at once Deceive in misrepresenting the article which they offer for sale. Steal in appropriating money without returning an equivalent. Both offenses are the meaner because there is no law to punish them. Such acts on the part of a few sneak-thief seed or plant dealers throw unjust discredit upon the entire honorable fraternity of seedsmen and nurserymen. In the instances to which we refer, three dollars have been charged for single roots or bulblets a fair price for which would have been twenty-five cents.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

WOMEN AND WINE.

L. C.

Pop! went the gay cork flying,
Sparkled the gay champagne,
By the light of the day that was dying,
He filled up their goblets again.
Let the last best toast be woman,
"Woman, dear woman," said he,
"Empty your glass, my darling,
When you drink to your sex with me."

But she caught his strong brown fingers,
And held them tight as in fear,
And through the gathering twilight
Her fond voice fell on his ear:
"Nay ere you drink, I implore you,
By all that you hold divine,
Pledge woman in tear drops,
Rather by far than in wine.

"By woes of the drunkard's mother,
By the children that begged for bread,
By the face of her whose beloved one
Looks on the wine when 'tis red.
By the kisses changed to curses,
By the tears more bitter than brine,
By many a fond heart broken,
Pledge no woman in wine.

"What has wine brought to woman?
Nothing but tears and pain,
It has torn from her heart her lover
And proven her prayers in vain;
And her household gods all scattered,
Lie tangled up in the vine;
Oh! I prithee pledge no woman
In the curse of so many—WINE."

SPRING FASHIONS.

THAT "Spring, gentle Spring," is once again in our midst is a fact which will be brought home to the consciousness of the average man with terrible earnestness, when the returns for spring shopping begin to stare him in the face. It is to be feared that his enthusiasm about the coming of the "gladsome season" will be somewhat damped by the contemplation of charges for the items which go to make up the Easter costume. But surely, when the partner of his life appears radiant with the "items" properly arranged and adjusted, he must be a churl indeed who would regret paying a pecuniary tribute for a "beauty of the season." At all events, he must count himself fortunate if the "partner" is able to resist the temptation to lay in a heavy stock of goods, for the fabrics are all so bewilderingly pretty, and a choice is so hard, that self-denying indeed is the woman who can content herself with one dress pattern.

Stripes are prevalent in some of the new wool and silk materials. The stripes are of various widths, plain and shaded, Bayadere and longitudinal. A line of camel's hair materials, twilled with quite a nap and soft and pleasant to the touch, in light *beige* and mode tints, are likely to be much used for early spring and traveling costumes. Indian cashmere for wrappers; light and dark poplins and the new Knickerbocker compositions, in silver-gray, maize, *ecru*, cream and green shades, are among the new and popular lines of goods. There are new designs in grenadines and silks, and what with organdies, lace bourettes, prints, percales and cambrics, there is no lack of material from which to choose.

Colored torchon laces form a pretty finish for lawn dresses. Hamburg embroidery will be popular for piques, cambrics, brilliants and percales. The colored embroideries will be very much in vogue for lawn and thin pique dresses. *Clair de lune* is seen in a multitude of types and will be very fashionable. Silk passementerie is arranged in Vandykes, and covered with pear-shaped Milan balls: around the bottom of the pointed passementerie is attached a short row of short full tassels made of the flat grass fringe. A new garniture is bands of Malines or net embroidered handsomely with graceful vines and blossoms. This style of trimming is applied to silk dresses in an artistic way for evening or dinner costumes. Jet beads are very extensively used on fringe, lace and passementerie.

6170 6170

The only new departure in lingerie are the outside lace, cuffs and deep collars. They are made up in a variety of ways and materials. Pretty sets for morning wear may be made of colored embroideries, crocheted lace, Duchesse point, *applique*, Russian, Smyrna and Valenciennes laces are made up into sets of this kind. Kid gloves will give way a little later in the season to mitts, which come in black, white and all the delicate shades of street and evening wear. They extend half way to the elbow and are elaborately embroidered. Lisle thread gloves are shown with long mitt-wrists of open work.

DESCRIPTION OF CUTS.

AT Fig. 1 (No. 6187, price 30 cents,) we give model of basque and skirt suitable for prints, cambrics or ginghams. It is easily laundried and offers a change from the regulation wrapper. At 6190 is illustrated a handsome coat with a cut-away front. The jaunty effect of the coat is hightened by the dainty vest. Any of the light spring cloakings or heavy dress fabrics will be found suitable in making this coat and bindings, pipings, or machine stitchings are both appropriate and stylish. The vest may contrast with the coat, or it may be omitted if desirable. Price 30 cents.

No. 6170, misses plaited costume. This garment is easily shaped, and is extremely graceful whether made from cheap or costly material.

FIG. 1.

Lace, ruffles, folds or galoon bands may trim the lower edge of the yoke and the wrists of the sleeves. Very little trimming, however, is necessary, as the plaits and sash are sufficient decorations in themselves. Price 35 cents.

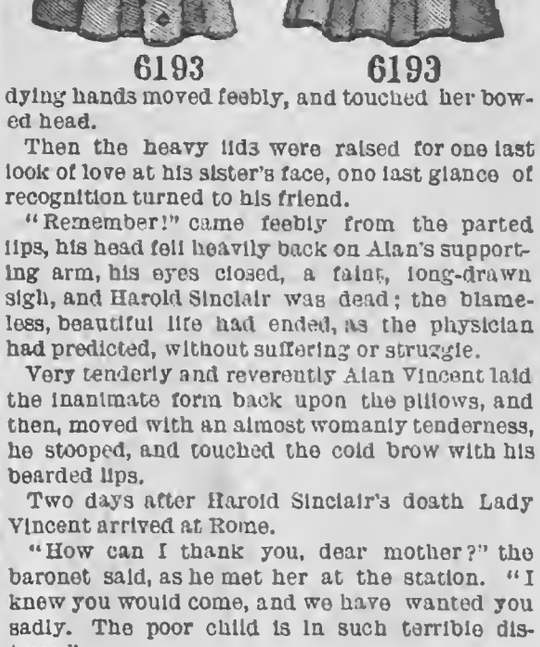
At No. 6193 is shown a box-plaited blouse. It can be made of any of the cotton or woolen dress-goods now in vogue, and on account of its loose yet graceful shape is certain to become popular. A very handsome costume may be obtained by combining this blouse with a kilted skirt. Smyrna lace, Hamburg embroidery, braid, bands of the same, or of a contrasting material, pipings and plaitings will decorate the garment tastefully; any style of skirt and overskirt may be worn with this blouse. Price 25 cents.

The child's costume shown at 6192 may be made of any of the fashionable dress fabrics and trimmed with braids or galoon bands. The vest and belt may be of silk or of the same material in a contrasting color and the cuffs, pocket laps and collar may be faced with same fabric. Narrow Smyrna lace would also form a very pretty decoration for the edges, and if preferred a lace bib may be worn instead of the collar when the garment is intended for a girl. Price 25c.

Childs box-plaited apron 6191, is a dainty little garment, that may be worn as an apron or a dress, the peculiarity of its structure making it available for either purpose. It may be made of cambric, lawn, linen, alpaca or any material usually employed in constructing aprons. Ruffling, Hamburg embroidery, Smyrna lace, tatting or any of the cotton edgings will be found very pretty trimmings for washable fabrics. If the apron is made of white linen, lawn or jaconet a very pleasing effect may be obtained by overlaying the centers of the plaits with insertion and ornamenting the sleeves, and bottom of the apron with ruffles to harmonize. Price 20c.

The new wateau garment, No. 6173, is among the recent provisions for baby's comfort. It is long and may be so warmly constructed as to make long petticoats an unnecessary addition to its out-of-door costume. If a lady would provide one or more of these garments for her tiny infant's use, she would not only find it most convenient and pretty in its first months of existence, but all ready for the time when a shortening of baby's frock and petticoats becomes necessary. This gown is very convenient to slip upon the baby when its toilette is unmade, or when it lacks freshness of apparel and must be exhibited. It may be constructed of cashmere, merino, flannel, cambric, or lawn.

Fig. 2 illustrates a girl's costume in Princess form. The principal part of the dress is made of striped goods, and a very pretty effect therefore results from cutting the back bias, and so that the stripes meet in a point at the center or closing edges. Either cambric or woolen goods are suitable for making it up. Price 30 cents. The hat is in sailor style, trimmed with a band, a bow and ends of gros grain ribbon. Any of the patterns described will be supplied at RURAL NEW-YORKER Office, at prices given.



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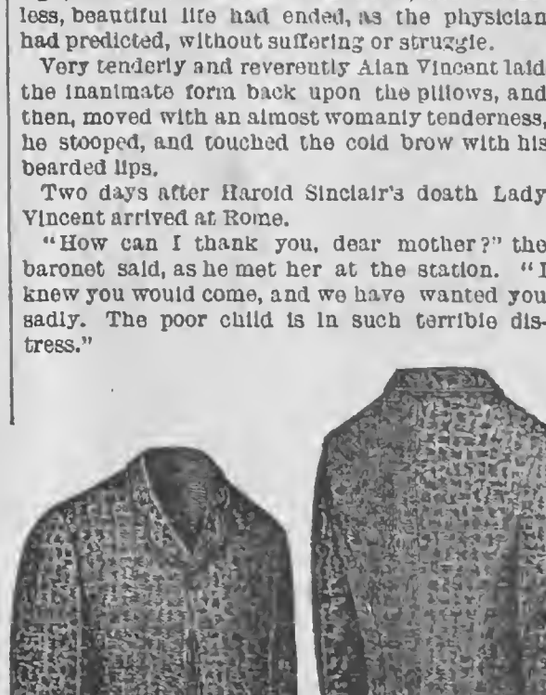

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Literary Miscellany.

CORA.

CHAPTER XI.

GEORGE LEESON was taking his leave with tears in his eyes, but Harold was calm and cheerful.

"My mother will be here in a few days," said Sir Alan, as he took his usual seat by the bed-side. "I saw her in London, and thought she might be of use to your sister. She was not able to travel as fast as we did."

"I can't thank you, old fellow," said Harold, smiling. "I don't think you will let Cora miss me much."

Sir Alan flushed slightly, and there was a pause.

Harold, looking away into the distance, saw the lingering sun-rays turning the windows of an adjoining house into molten gold.

"My last sunset!" he said. "Dr. Crosby does not think I shall suffer much at the last. If I do, Alan, stay with me yourself, but send Cora away."

"Yes, old fellow," was the quiet reply.

Then Cora came softly in; Alan gave her his place, and she laid her cheek upon her brother's hand, caressing it in silence.

"Read to me, Alan," said the young artist, in a few minutes.

And the baronet read in his deep, manly voice, the sacred words which brought strength and comfort for that passage through the dark valley which Harold was so soon to take.

The light had faded in the western sky, but the room was not yet in darkness. Marianna had stolen in and knelt by the window, rapidly telling her beads. The reader's soft, grave tones died away, and he closed the book; during the last few lines his vision had been blurred and indistinct, and when the dying man thanked him faintly, he saw that there were tears in the baronet's eyes. There was a silence then, only the rapid murmurings of the old Italian woman broke upon the silence, when Cora, whose eyes were fixed on Harold's face, uttered a faint cry.

"Raise me," he said, faintly, and Alan supported him in his arms, while the beautiful golden head sank back against his shoulder, and the blue eyes closed heavily.

"Harold, oh! my brother, speak to me just once again!" broke from Cora's white lips; and the dying hands moved feebly, and touched her bowed head.

Then the heavy lids were raised for one last look of love at his sister's face, one last glance of recognition turned to his friend.

"Remember!" came feebly from the parted lips, his head fell heavily back on Alan's supporting arm, his eyes closed, a faint, long-drawn sigh, and Harold Sinclair was dead; the blameless, beautiful life had ended, as the physician had predicted, without suffering or struggle.

Very tenderly and reverently Alan Vincent laid the inanimate form back upon the pillows, and then, moved with an almost womanly tenderness, he stooped, and touched the cold brow with his bearded lips.

Two days after Harold Sinclair's death Lady Vincent arrived at Rome.

"How can I thank you, dear mother?" the baronet said, as he met her at the station. "I knew you would come, and we have wanted you sadly. The poor child is in such terrible distress."

6190 6190

"And my son is looking worn and ill," said Lady Vincent, as they drove through the streets.

Sir Alan smiled sadly.

"It rests me to see you, mother," he answered, quietly.

Lady Vincent was a tall, stately woman, of queenly presence, with silver hair, and calm, restful, blue eyes. She resembled her son in the stately presence, and quiet, high-bred manners;

6191 6191

but while Sir Alan was hot-tempered, and jealous to a fault, Lady Vincent was calm and quiet in disposition, and most impartial in her judgement.

"I promised that you would be kind to her," continued Sir Alan. "She has no relation in the word, and she will be like a daughter to you, mother, when you know her."

"I will help you to keep your word, Alan," she replied, gently.

And they drove on in silence, while the thought flashed through Lady Vincent's mind that perhaps she might become a real daughter to her some day.

Marianna received Lady Vincent with great cordiality, and the lady was pleased with the old woman's courtesy, and felt for her evident grief.

When she had rested a little, she asked for Cora.

"I cannot find her, mother," said the baronet, coming in at the moment. "Perhaps she is in her room. Will you come there now?"

Very quietly they opened the door of the room, where Harold lay in silence.

With quivering lips, Lady Vincent gazed upon the beautiful face, looking like a marble sculptured form as it lay there. Some one—Alan guessed who—had strewn flowers upon the still breast and between the lifeless fingers, where they lingered in their sweet beauty, fading slowly.

"It is a beautiful face, Alan," said Lady Vincent, her eyes filling with great tears. "I do not wonder that you loved him."

Sir Alan did not answer. He had glanced rapidly over the room, and seemed a little anxious at finding it untenanted. His mother stood silent, gently placing some of the flowers, which seemed to have been thrown in a heap at the foot the bed, about the still hands, and on the pulseless heart. Then she moved round, and came to the other side of the bed, and Alan saw her start, and stoop down.

He came quickly round to her side, and saw, lying on the floor beside the bed, a pale, still form, as pale and as still as that upon the bed. It seemed as if Cora, coming in to place her flowers, had failed suddenly, and had fallen there; for the little hands were still full of gathered blossoms—white roses and orange-blossoms.

"Take her into my room, Alan," said his mother, pityingly. "Poor child!"

And as her son bent his head over the pale face, which lay with closed eyes and colorless lips against his shoulder, some transient expression in his face made Lady Vincent recall her supposition of that afternoon, and her wonder whether she had found a daughter indeed.

Cora Sinclair's grief for her brother was very passionate and sincere: she mourned him with bitter tears, refusing to be comforted, and Lady Vincent feared that her sorrow would materially

6192 6192

affect her health. Her ladyship was very kind and patient with her; but Cora seemed more at her ease with Sir Alan than with his mother. Perhaps it was that his gentle manner towards her, his half-serious, half-playful remonstrances reminded her of her brother, for she seemed to regard him with a curious, wistful confidence, half-shy and half-trusting.

But after a few weeks Cora seemed to rally, and Lady Vincent, who was weary of the discomforts of the old palazzo, and longed for her English home, proposed to return there. To her surprise Cora assented with eagerness, and preparations were forthwith commenced for their departure. It seemed as if the girl was animated by some new hope, for she seemed brighter and happier. The color had returned to her cheeks, and light to her eyes, and once or twice she had spoken with a touch of the old wistful playfulness which had been so potent to win any boon from Harold.

Lady Vincent and Sir Alan rejoiced, although the latter seemed to have a regret at what he thought denoted lightness and instability of character. His mother, more experienced and unbiased, saw in it only the elasticity of youth, and was really glad to see the improvement in Cora's health and spirits.

But both were mistaken, it was merely a new hope which had sprung up in the girl's heart, filling it with a happiness which, alas! had no real warrant. A few lines of condolence from Lady Martyn had told her also that Lady Lucie's engagement was broken off, and Cora felt sure that, now he was free to do so, Lord Almane would seek her again honorably and openly. She loved him too passionately not to trust him entirely, and she felt certain now that all would be well. It was this hope which colored her cheeks and brightened her eyes, and though she was happy in it, it saddened her to think that the dear brother who had been so much to her should not know of her happiness.

The night before they left Rome Cora climbed the little hill which led to the cemetery where Harold lay, her hands full of flowers wherewith to decorate his last resting-place. The broken pillar of the Parian marble which formed the monument had been Sir Alan's own work, and most exquisitely had he performed his "labor of love." It was just completed, and Cora, who had not yet seen it, contemplated it with tears of gratitude and delight.

"How good he is," she murmured, softly; and it was with a very softened, tender face that she turned to greet him an hour afterwards when she saw the tall, stalwart form coming towards her, looking grand and imposing as it moved among the quiet graves in the semi-light.

"My mother sent me for you, Cora," he said, gently. "She was afraid of the night air for you"

"Yes, I will come," she answered; then, suddenly turning to him, said: "How can I thank you, Sir Alan? It is so beautiful! It seems to remind me of him!"

His quiet face lighted up.

"I am glad you like it, Cora," he replied, his gray eyes seeking her face with a sudden passion in their depths; but Cora, whose eyes were fixed upon the marble pillar, did not meet his eager glance.

They stood in silence for some minutes, Sir Alan's face had grown very pale, and his lips were quivering under his heavy moustache. Strong man though he was, he was trembling, and could hardly find courage to put the question to this young girl, who held in her hands his future happiness or wretchedness. At length with a long sigh, Cora prepared to go. She rose from her seat on a grassy mound, and, breaking off a rose which was growing beside Harold's grave, bent gently forward, and pressed her lips to the marble in one long, lingering, farewell kiss.

Then, turning to the baronet, she said, quietly:

"I am ready, Sir Alan."

"Stay yet one moment," he exclaimed, in a hoarse voice, putting his hand on her arm to detain her.

Cora looked up in astonishment; but under the passion and ardor of his glance her own fell, and she saw that the strong hand resting on her arm was trembling.

There was a momentary silence, which Sir Alan broke.

"It seems almost absurd," he said, trying to speak lightly, "that one should be such an utter coward. Don't laugh at me Cora. If I were less in earnest, I should find it easier, perhaps, to tell you what I have wanted to tell you for some days past.

He paused.

Cora waited in silence, wondering a little. It may have been that her thoughts were too full of another man to give her a clue to Sir Alan's meaning: but she saw that his agitation was excessive.

"When your brother entrusted you to me," he went on, speaking more calmly, "I hoped to be able to take a brother's place, and replace him as far as possible; but, Cora, that is impossible. I cannot be your brother; I can be nothing to you, unless you can give me a nearer and dearer right to take care of you."

For a moment Cora did not understand his meaning. Then, as it dawned upon her, she grew pale, and trembled exceedingly.

"Child—child," said Sir Alan, his forced calmness giving way, "do you not understand me?—do you not see why I cannot be a brother to you?"

Cora tried to answer him, but her voice failed her; she liked him so well; her brother had loved him, and he was so good to her. The answer she must give him sounded like ingratitude, and she could not force her trembling lips to speak the words which she felt would grieve him so bitterly. She could hear the quick, heavy breathing which told of his great agitation, as he stood beside her, and with a strong effort, a quick prayer for calmness, she bowed her head upon her hands.

FIG. 2.

CHAPTER XII.

"Not Now—Not Ever."

At length Sir Alan spoke, and his voice had lost the suppressed passion of his former tone, as he gently removed the girl's trembling hands from her face.

"I have frightened you, dear child. Forgive me, Cora; I only ask one word from you. I do not wish to hurry or distress you; only tell me whether the boon I ask can ever be mine?—whether now, or ever, you can give me the love I crave?"

"No," said Cora, suddenly mustering all her courage, and with a desperate effort wrenching her hands from his clasp, which, in his earnestness, almost hurt her from its close pressure. "Do not ask me. It cannot be; not now—not ever!"

She turned from him as she spoke, grieved to her inmost soul by the expression of terrible pain she read upon his face; and, choking back her sobs as she went, she walked rapidly homewards, and then, in the solitude of her own room, sorrowed for his disappointment with a keen sorrow.

"I should have so liked to repay his goodness," she sobbed; "but how could I, loving Stanley, and knowing that he is free?"

When Sir Alan returned to the palazzo it was nearly midnight, and Lady Vincent, who was waiting for him, looked up anxiously on his entrance.

"Would you mind much if I let you go back to town alone, mother?" he said, quietly. "It seems a pity to leave my work here yet a-while."

"Not if you think it wiser to stay, Alan," she answered, kindly, reading the suffering on his face, but too wise to remark upon it. "We shall have Charles with us, and no courier can surpass him, you know."

Alan acquiesced; but as he sat, resting his head on his hand wearily, the light from a lamp on the table fell full on his face, and Lady Vincent felt her eyes fill as she marked his haggard, worn look. She rose from her seat, and, coming to his side, passed her arm round his neck, and rested her cheek against his brow. He tried to smile as he returned the caress.

"Is it really better for you to stay, my son?" she said, tenderly.

"Yes, mother," came the low reply; and Lady Vincent desisted from all entreaty; but she sighed as she bent over him to say "Good-night."

He detained her gently, lifting the frank, mournful gray eyes to hers.

"Mother, you will be good to her," he said, quietly; "for *my* sake?"

"Yes, dear Alan."

No other word was spoken between them; but Lady Vincent knew that her son loved Cora Sinclair, and that his love was not returned.

Cora returned to England with mingled feelings, seeming years older than when she had left it, sorrowing for her brother, full of hope of a near meeting with Viscount Almane, and yet pursued persistently by the remembrance of Alan Vincent's grave, handsome face and unfailing kindness. It vexed her sometimes to find how much she thought of him, but while she looked upon it almost as disloyalty to Lord Almane, she could not fail to do so when every day, every hour as it passed, gave her some fresh proof of his thoughtful kindness.

Very soon she was quite at home at the quaint, old-fashioned house where Lady Vincent lived, and which, while it was replete with comfort, had no luxury nor grandeur about it. The servants were few in number, but old and tried, and soon Cora was initiated into the ins-and-outs of the quiet household.

Alan's father, the first baronet, had been a distinguished officer, and had received the baronetcy in return for the services rendered to his country; but he had not been a rich man, and Lady Vincent's jointure was but a small one to support her position. Sir Alan also was one of the poorest baronets in the United Kingdom—a fact which troubled him little. His mother's prayers had alone prevented him from adopting his father's profession, but in the one he had chosen—for he had taken to his art with as much enthusiasm and industry as if he had to earn his living thereby—he bid fair to win both fame and fortune.

For the first few weeks at The Bungalow—for so Sir Paul Vincent had named his house—Cora was almost entirely happy. Lady Vincent's gentle kindness, the favor with which the servants—who pitied the fair young girl in deep mourning—received her, the air of refinement and peace over the house pleased her, and above all she had the hope of soon meeting Lord Almane. Social distinctions and differences of position never entered Cora's innocent head; she believed firmly that now that he was free nothing could hinder the Viscount from openly declaring his love and making her his wife; and Marianna could not fail to notice that there was a kind of repressed exultation about her young mistress. The Bungalow was about ten miles distant from London, and from some of Lady Vincent's visitors she heard chance mention of Lady Martyn and her niece; and once she heard that Lord Almane was in town.

One day came a note for Cora from Lady Martyn, apologizing that her ill-health prevented her from calling on Lady Vincent, and asking Miss Sinclair to spend a few days with her in London. The next morning she sent her carriage and maid for Cora, and the young girl, feeling as if the fulness of her happiness was now indeed come, was carried rapidly to Park Lane.

The old lady received her with all cordiality, petted and made much of her; but it was only on the second day that she mentioned the name Cora was longing to hear.

"Lord Almane called a few minutes ago, my dear," she said, as Cora entered the drawing-room. "He would not allow me to disturb you, but begged I would present his compliments to you."

"Did he know I was here?" said Cora in a low tone, feeling as if she could not have heard aright.

"Yes, I think so; or rather no, for he said when he came in that he would stay to dinner, but when he heard you were here, he said that perhaps you might not care to see chance visitors just now."

Chance visitors! Cora's heart stood still. Could it be that Lord Almane had been only amusing himself at her expense, flirting with her, without any intention of carrying out the words and promises he had spoken to her? Cora loved well, and doubted with difficulty; but it seemed even to her as if he had not acted faithfully towards her.

"I do not think he has got over Lucie's dismissal yet," continued Lady Martyn. "I could never imagine what induced her to break it off; but she was very determined about it."

Cora's thoughts flew back to the time when she was at Mrs. Colston's, the evening of the ball, when Sir Alan had come to fetch her to her brother's death-bed. She remembered the Viscount's passionate words then, and when he had left her, that, looking up, she had met Lady Lucie's blue eyes full of sorrow and reproach.

"Very determined," repeated her ladyship "And yet if ever a woman loved a man she loved Stanley St. Roger. All the family are very sorry for it. Indeed, Lucie's resolution took us all by surprise. I miss her very much, and wish it had not happened. She is away now, living in Paris with the Countess of Chilcot."

When Cora returned to The Bungalow, Marianna, with her quick penetration, immediately saw that a change had passed over the girl, quenching whatever hope had made her eyes so bright and her lips so often part with a happy smile. The old servant was shrewd enough; she soon dis-

covered how matters stood; and knowing Cora's disposition well, she resolved to strike a blow which would cut at the heart of her love for Lord Almane, and destroy it entirely. One evening she was assisting Cora to undress, and was combing out her shining tresses, when she mooted the subject as follows:

"Does the signorina know," she said, quietly, "that the engagement between Lord Almane and his cousin has been broken off?"

"Yes, I know it," said her mistress, reservedly; but Marianna, who was watching the reflection of the fair young face in the mirror, saw that it colored deeply.

"I am glad," said Marianna, sententiously.

"Why?" said the young girl, wonderingly.

"Because Milord Almane is not worthy to have any innocent young girl for his wife."

Cora turned to her in some surprise.

"You are surprised, *signorina mia*; but I am not speaking of what I know nothing. Any man who in return for kindness received could betray him who had been kind to him is unworthy."

Cora made no reply, but her eyes could not meet Marianna's, and she recalled, with a start, Lord Almane's assertion that Marianna knew of their love.

"I am not speaking of what I know nothing," continued the Italian. "You know that he is false and base now, signorina; that when he sought you with his false words of love he meant no good to you—nothing but shame, but disgrace, but dishonor."

"Marianna!" flashed the young girl, proudly.

"But it is true," went on Marianna, coolly. "Said he not these words to me, *donzella mia?* 'Men in my position don't marry any pretty face which crosses their path.' And as he said it he laughed."

"He said that!" broke from Cora's lips; she had risen, and stood facing the old woman, pale with anger, with flashing eyes. "He said that, Marianna?"

"He said that and more, *donzella mia;* and I, poor servant that I am, told him that I would not let him wed you, then, knowing his baseness and his falsehood—that I would rather see you dead."

Marianna's attempt was a successful one. The operation had been most painful; but it succeeded beyond all her hopes. Cora did not speak again; but, watching her face, the old woman saw the storm of contempt, of scorn, of horror which passed over it.

"You are not angry with poor Marianna, my darling?" she whispered, as she bade her good-night; and Cora, raising her hands, drew the old wrinkled face to hers and kissed it warmly.

"Were all the world false, I know you true," she said, softly; and then she broke into a passion of sobs on the old woman's breast.—[To be continued.

FRIENDSHIP AND FLATTERY.

When Friendship first came down to earth.
With heart of generous mold,
And soul of truth and heavenly worth,
'Twas in the age of gold.
She taught the love that came from God
For all humanity;
Sweet Pity in her footsteps trod,
With Faith and Charity.

But Flattery, as the world grew old,
Stole Friendship's honest face;
When Truth's stern accents grew less bold,
And Falsehood taught grimace.
Th' indignant martyr did not wreak
Her vengeance upon men,
Nor soar on refluent wing, to seek
Her home in heaven again.

She left her rival to reign o'er
The sunny paths of life,
And loved the dark ones to explore
With sad misfortune rife.
Both to their own their aid extend,
Each in her way a mother;
Success still finds the one a friend,
Adversity the other. [*Temple Bar.*

PERE HYACINTHE AS A REFORMER.

There has recently been a rather lively controversy between Rev. D. Prime, the editor of the New York Observer and M. Loyson, formerly known as Pere Hyacinthe. Dr. Prime has attended service at M. Loyson's church in Geneva, and finding that the service consisted of a celebration of the Mass, followed by a sermon on the duties of husbands and wives, he expressed in the columns of his paper the conviction that M. Loyson was still a "papist," and a rather unusually undesirable one at that. This hurt the ex-priest's feelings, and accordingly he wrote a letter to the effect that Dr. Prime was a liar and a slanderer, who had wantonly tried to injure a Christian brother. Whereupon Dr. Prime not only demonstrated the truth of his original statement, but added that M. Loyson's sermon on matrimonial duties was simply disgusting. Time has since been called, but M. Loyson has failed to resume the controversy feeling doubtless that it is safer to forgive his antagonist than to provoke him to further remarks.

The career of M. Loyson has been a remarkable one, not in itself considered, but in its success in awakening the interests and sympathies of Protestants. Pere Hyacinthe was at one time the most popular preacher in Paris, and his sermons were regarded as masterpieces of eloquence by the ladies who constituted nine-tenths of his hearers. One day he suddenly renounced his monastic vows, and soon after married an American widow lady, and, removing to Geneva, set up an independent church of his own. Of course the Roman Catholic Church promptly excommunicated him, and, equally of course, ardent Protestants were ready to look upon his defection from the Roman Church as a triumph of Protestanism.

The impression both among European and American Protestants that on leaving the Roman Church M. Loyson thereby became a Protestant, and, as such, was entitled to the utmost sympathy and admiration, was very general. Everywhere the Protestant press spoke of him as a noble reformer, an improved variety of Luther, and a modern Calvin, who was too gentle and merciful to even scorch a steak. Nevertheless, M. Loyson showed no disposition to connect himself with any recognized church or sect. He complacently received the praises of Protestants, but he never accepted any of their distinctive doctrines. Even the Old Catholics, who recognized the leadership of Dr. Dollinger, failed to gain M. Loyson; or, rather, he refused to adopt their creed and practice. When he finally took possession of a church edifice at Geneva, and gathered a small congregation about him, he still maintained his independence, and thus added to the religious bodies of the world an entirely new church, of which he was the sole heirarchy.

The new church was founded upon the great and precious doctrine that it was the right and duty of Mr. Loyson to become a married man. To this leading doctrine was added, as a minor article of faith, a denial of papal infallibility. These two articles constituted the only doctrinal difference between the Church of Mr. Loyson and the Church of Rome. Mr. Loyson believed, and still belives, in the intercession of the saints, the duty of confession, the power of the priest to forgive sins, the doctrine of purgatory, and every one of the distinctive doctrines of the Roman Church, with the two exceptions of the celibacy of the clergy and the infallibility of the pope.

Why this man should have been called a reformer and looked upon as virtually a Protestant when he was simply a Roman Catholic who had been excommunicated for breaking his monastic vow, is a mystery. Nevertheless, until Dr. Prime had the frankness to speak the truth concerning M. Loyson, American Protestants regarded him as an evangelical Protestant, as a pillar of Protestant faith, and an ornament to the city of Calvin. It was full time that this error should be pointed out, and M. Loyson's true position as a religious teacher defined; and Dr. Prime has really done a public service in exploding the popular Loyson myth.—*N. Y. Times*

CHINESE MAXIMS AND PROVERBS.

Great souls have will; others only feeble wishes.

Attention to small things is the economy of virtue.

Who is the greatest liar? He who speaks most of himself.

Men may bend to virtue, but virtue cannot bend to men.

One forgives everything to him who forgives himself nothing.

RECENT LITERATURE.

"The Simple Truth."—A Home Book. By Robt. Colyer, Minister of Unity Church, Chicago, Boston: Lee & Shepard.

This is a collection of some ten essays on every-day topics, which appeal to readers of all classes. The first one "Growing Aged Together," contains some exquisite allusions to marriage and to the beauty and holiness of a sincere and pure affection. To be fully appreciated, the essay must be read entire, but we are tempted to give the following extract in which love is most beautifully defined. "For true love grows out of reverence and deference, loyalty and courtesy, good service given and taken, dark days and bright days, sorrow and joy. It is the fine essence of all we are *together*, of all we do."

Of the other "home sermons" "Softly." "The Burden of an old Song," "Referring Back" "Wild Lilies" and "The Parable of the Prodigal Son" will especially commend themselves to readers for the tenderly beautiful sentiment which underlies them. The author pleads very earnestly for the children. "They are tender, I will lead them gently." All through the volume there breathes a spirit of love and tender kindness for the little ones.

The public generally will find much to admire, and profit by in this little volume but to parents especially it will be peculiarly valuable. The application of the principles which it advances would make many a home happier and better.

The Commonwealth Reconstructed.—By Chas. C. P. Clark, M. D. Price $1.50. New York: A. S. Barnes & Co.

The author goes outside of his profession to give us a very able work of some 200 pages on the political economy of our government since the close of the war, the corruption in high places and the use of official position to promote personal aims. So much has been said and written on these subjects that it could scarcely be expected of Dr. Clark to make any startling revelations in his book, but there is much not heretofore suggested which will furnish food for reflection. Referring to the possible charge of partiality and exaggeration, he says: "I shall admit the justice of the criticism but only in the sense that the redeeming features of the situation are not equally presented with the condemnatory. But to do that did not belong to the purpose I had in view in that description, which was to show that the condition of our political affairs is too shameful and calamitous to be willingly submitted to by an intelligent and virtuous people." It will be seen that Dr. Clark takes rather a dismal view of our political system, the defects of which he says "cannot be justly laid to either the Republican or the Democratic party" but to the short-sighted and narrow-minded policy which dictated the construction of our State Constitutions and to our system of elections. Remedies are suggested which are more or less practicable but the interest of the disquisition is in the comparatively new light in which the subject is presented and the original and lucid manner in which it is treated.

The Story of Elizabeth. By Miss Thackeray. (Cloth, $1.00.) Philadelphia: T. B. Peterson & Bros.

Miss Thackeray's reputation as a novelist is sufficiently well-established to render superfluous the *quasi* introduction given in the title page as "the daughter of Wm. M. Thackeray, etc." Indeed, there is something in her succinct and graceful descriptions, keen and discriminating powers of observation and fine perception and delineation of character which, at times, forcibly recall the great author of Vanity Fair. The "Story of Elizabeth" is an exquisite little story, full of tenderness and delicacy and written in Miss Thackeray's best manner.

From Hand to Mouth. By Amanda Douglas (Cloth, $1.50.) Boston: Lee & Shepard.

This is as dreary a story as its title augurs, and it drags its slow length along through a tedious monotony of vapid incidents and insignificant details which weary out any interest or curiosity the reader may at first have felt in the characters, long before he learns their final destinies. There is no plot to speak of, and whatever of literary merit there may be in the work is obscured by the lack of purity and refinement of the style and diction. The book will detract from rather than add to the reputation of the author.

A Manual of Nursing. Prepared for the Training School for Nurses attached to Bellevue Hospital. New York: G. P. Putnam's Sons.

This is a valuable little work and one which should find its way into every house. No technical terms are employed: the language used is simple and the directions explicit. The chapters on Emergencies, Monthly Nursing, Nursing of Sick Children, Hygiene of Children and Cookery for the Sick, will be of incalculable value to mothers, whilst those who desire to adopt nursing as a profession will find the book replete with information especially adapted to their requirements.

Mother Goose Masquerade. A Delightful Evening's Entertainment, with explicit Practical Instructions for carrying out a successful Programme. Boston: Lee & Shepard.

Here's a fountain of inspiration for those who are interested in amusing the little folks or in getting up entertainments and who are in quest of something novel.

"Mother Goose Masquerades" have become very popular, and yielding to the solicitations of many correspondents, the author of this book has given full directions for the management of a "Masquerade."

The Historical Student's Manual. By Alfred Waites. (Cloth, 75 cts.) Boston: Lee & Shepard.

The publishers announce that the "purpose of this Manual is to show at a glance the duration of the reigns of all the English monarchs, and of those of their contemporaries of France, Germany and the Papacy, from the invasion of William the Conqueror to the present time, with the principal events of celebrated persons." It is the best work of the kind we have ever seen, and no student of history can afford to be without it.

The Accountant. For Public Schools and Academies. By M. R. Powers, M. A. [155 pages; price $1.25.] New York: A. S. Barnes & Co.

This is a full and practical treatise on book-keeping and commercial transactions generally. The lucid manner in which the author defines commercial terms and the fullness with which methods of keeping accounts are illustrated make the work invaluable as a text-book.

The Image of Her Mother, a novel by Ruth Rustic, a lady of Savannah, will be commenced as a serial in the News of that city. The News is a clever journal, and the story no doubt will prove attractive.

The Home-made Bonnet.—One of the most sparkling and clever literary achievements we have seen recently, is a narrative play entitled "The Home-made Bonnet" by Mr. Roland Waters, which has been published in the "*Every Saturday*" of Baltimore. We learn with satisfaction that it is soon to be published in book form and at a price which will put it within the reach of every reader who appreciates genuine literary talent.

The Home-made Bonnet is admirably written, and is constructed in the style of Mr. Wm. D. Howell's "Parlor Car" which has met with such unbounded popularity. It is a one-act comedietta replete with fun and comical situations, while there runs throughout a vein of good-natured satire on fashion's follies of to-day. The characters are irresistibly interesting and the "stage business" is ingenious and sustained with *verve*. This little work will prove an invaluable addition to the resources of the amateur and the parlor play actor, for whom it is peculiarly adapted, besides being a brilliant and charming little story, and a pleasing departure form the stereotyped style of current fiction. It is to be hoped that Mr. Waters, who does not write like a novice, by the way, will undertake a series of such piquant productions, if he has not already done so and that the "Bonnet" will not long be without a companion.

BRIC-A-BRAC.

MARK TWAIN'S HOTEL.

Having lately opened a hashery, I send you these, my rules and regulations:

This house will be considered strictly temperate. None but the brave deserve the fare.

Persons owing bills for board will be bored for bills.

Boarders who do not wish to pay in advance, are requested to advance and pay.

Boarders are expected to wait on the colored cook—for meals.

Sheets will be nightly changed, once in six months or more, if necessary.

Boarders are requested to pull off their boots if they can conveniently do so.

All moneys and other valuables are to be left in charge of the proprietor. This is insisted upon, as he will be held responsible for no losses.

Single men with their families will not be boarded.

Dreams will be charged by the dozen.

Nightmares hired out at reasonable rates.

Stone vaults will be furnished to snoring boarders.

Prince Bismarck was once asked by Count Enzenberg, formerly Hessian envoy at Paris, to write something in his album. The page on which he had to write contained the autographs of Guizot and Thiers. The former had written, "I have learnt in my long life two rules of prudence. The first is to forgive much; the second is never to forget." Under this M. Thiers had said, "A little forgetting would not detract from the sincerity of the forgiveness." Prince Bismarck added, "As for me, I have learnt to forget much and ask to be forgiven much."

A LOVE TOKEN.

Do you grieve no costly offering
To the lady you can make?
One there is, and gifts less worthy
Queens have stooped to take.

Hold a heart of virgin silver,
Fashion it with heavy blows,
Cast it into love's hot furnace,
When it fiercest glows.

With pain's sharpest point transfix it,
And then carve, in letters fair,
Tender dreams and quaint devices,
Fancies sweet and rare.

Set within it Hope's blue sapphire,
Many-changing opal fears,
Blood-red ruby stones of daring,
Mixed with pearly tears.

And when you have wrought and labored
'Till the gift is all complete,
You may humbly lay the offering
At the lady's feet.

Should her mood perchance be gracious,
With disdainful, smiling pride,
She will place it with the trinkets
Glittering at her side.

Sarah Bernhardt, the French actress, has industry enough for three women. In the morning she takes a long ride in the saddle; at noon she turns sculptor, and works on three or four busts, which she is going to send to the exhibition; then she goes with her chisel to her group of "Medea." At two o'clock she takes up the brush and works on a large painting; at nightfall she is writing her memoirs, or rehearsing her *roles*, or attending her correspondence. In the evening she appears on the stage.

I wish young women could be taught that it does not add a cubit to the stature of a house to call it a "residence"; that a church or even a meeting house is as venerable as the "sacred edifice"; that it is no more genteel to say "retire" than to go to bed; that the garment so fondly, slowly covered with side plaitings, so coldly and quickly frayed out along the paving stones, is really a gown and not a "promonade costume"; that it need not bring a blush to the cheek of even Mr. Podsnap's young person to say leg instead of "limb," when leg is meant; that the supper at an evening party is not "the entertainment"; and that there are well-founded objections to the use of "nicely" as an adjective describing the state of one's health. "To clothe low creeping matter with fine language," said old Fuller, "is not fine fancy, but flat foolery." It rather loads than raises a wren to fasten the feathers of an ostrich to her wings.—*Mrs. C. Runkle.*

A little child might well confound,
With almost perfect ease,
The wisest man, though quite profound,
By questions such as these:

First tell across what river lies
That famous work, the Bridge of Sighs?

Then answer, the hardest of things,
From whence descends the reign of kings?

Pray give the weight, and from what stack,
"The straw that broke the camel's back?"

How large a broom ought there to be
To sweep a storm across the sea?

Now name the tree, and tell how high,
That bore "the apple of the eye?"

Who has ever wished or sought
To ride upon a train of thought?

Upon what sea and at what rate
Sails that proud, haughty Ship of State?

Upon whose tender face appears
Wrapped this weary vale of tears?

To what ocean and through what clime
Flows that non-ending river, Time?
[*Cincinnati Commercial.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

CHINA AND GLASS-WARE.

PLEASE give me some idea as to the kinds of china and glass-ware now in use; also as to price of dinner and tea sets. INQUIRER.

IN answer to "Inquirer," a few notes taken during an hour's stroll through the various departments of a large emporium of china, glass-ware, etc., may give her an inkling of what she wishes to know.

Fashion is as changeable in china and glass-ware as in ladies' apparel, and that worshiped goddess decrees that a fashionable dinner service of to-day is made up of twelve different colors, or rather tints. That is, each plate, cup, etc., is decorated with a differently tinted band, an inch or so in width, of blue, green, gray, lavender, and so on. To these sets, made up of many colors, the name of "Harlequin" is given.

Indeed, the demand for decorated china for table use has been so great that manufacturers have been obliged to produce it in inferior wares to supply the popular trade.

In dinner sets we noticed a novelty called the "Crane set." The ware is known as Cooplen's ivory, frangible, of a greenish yellowish cast, decorated with rather light green cranes and straggling, palmately-divided leaves on long petioles. In this set 125 pieces; price $90.

Very pretty dinner sets, first quality of French china, banded in any or every shade, with a gilt line either side of the band, were shown for $35; 102 pieces in the set. For the band the lighter shades of blue, gray and lavender are those most sought for. Tea sets matching this set, $10.50 for 56 pieces.

It is relief for the eye as it rests upon the pretty blue and white English printed ware, similar to the china of a hundred years ago. The neatest was a pattern of light blue grape leaves and fruit for the border, with roses and buds in the center. 175 pieces in these sets; price from $35 to $50.

There is a revival of an old English ware called "Old Spode." Of a light cream color and recommendable for its lightness, combined with durability. A Grecian pattern of red on a black ground was among those we admired. These sets were $65; 176 pieces.

For common usage the best English ware, plain white, imitation of china—and a very good imitation too—is preferred by many. A dinner set, consisting of 12 dinner plates, 12 tea plates, 12 soup plates, 3 meat dishes, 2 covered dishes, 2 vegetable dishes, 1 soup tureen, 1 sauce boat, 1 pickle dish, 12 coffee cups and saucers, 12 sauce plates and 12 butters, can be purchased as low as $15. Tea sets, same quality, 35 pieces, $4.75.

In shape cups, whether decorated or plain, are low, small at the bottom, wide at the top known as "egg shape." In pitchers, the fancy for the moment, is the straight, the "Tankard."

Novel butters were shown, each representing a variegated pelargonium leaf, with the name on the underside, as "Happy Thought," "Md. Pollock." They are of china, decorated by hand, about 3½ inches in diameter, and $10 a dozen. Other pretty butters are offered for $1.25 a dozen, imitating grape and other leaves, not *hand* decorated, true; still pretty.

Little dishes for scolloped oysters, in imitation of the half-shell of an oyster, of French unglazed porcelain, and hand decorated with charming little sea views, 90 cents apiece.

Beautiful fruit desert plates, each decorated with a different fruit. The apples, grapes, and peaches looking as tempting as the fruit itself. $6.50 a dozen.

Salt shakers are used to the entire exclusion of the individual cellars. They come in cut and pressed glass, silver plated caps. $1.50 and upward a dozen.

In glass-ware the "Iridescent" is the newest. It is a Bohemian glass, delicate, fragil, reflecting every color of the rainbow, reminding one of a soap-bubble just before it bursts, only more clear and brilliant if that be possible. In cut-glass goblets the fancy is for uniformity of shape in the set—a short stem and a gradual increase upward to about three inch diameter—but each glass is differently decorated with grasses, ferns, lily-of-the-valley, or all ferns but different species; these last are very delicate. Price ranging from $10 to $14 a dozen. Pretty pressed glass goblets can be purchased for $2 a dozen. The price for engraving an initial and wreath on either cut or pressed is $1.50 for the dozen.

OVINGTON BROTHERS, Brooklyn, please accept thanks for information.

ATTICS AND CELLARS.

IT is a good plan for a housekeeper to make a weekly visit to every part of her dwelling from "garret to cellar." The attic is often the repository of articles of little value, such as worn-out garments, bedding etc. If such articles must be kept they can be neatly packed in drawers or boxes, wrapping woolens of any value in linen or thick brown paper to protect them from moths. Attics and cellars should be so arranged that they can be perfectly ventilated. To some persons the thought of visiting the cellar is anything but pleasant, because the name is associated with darkness, noxious vapors, dampness, small dingy windows, walls and floors which are rarely swept, boxes, barrels etc. in disorder. We have seen just such cellars, but we know of one more cheerful than many parlors. It is light and airy, and in the south windows plants thrive during the winter months, their bright green foliage showing how well adapted the cool atmosphere of the cellar combined with freedom from dust is to their needs. A weekly visit to their cellar answers during the winter, but as spring comes upon us this part of our house requires closer attention.

Vegetables must be examined, and those showing signs of decay, removed. Apples that are slightly unsound can be made into jelly, and my recipe is as follows: After cutting out the imperfect parts, wash the apples and quarter, without paring or coring. Place in a porcelaine kettle, and to four quarts of cut apples add a little less than one quart of cold water. Cook slowly until soft but not broken. Turn into a jelly bag that has just been wrung out of hot water, and hang up to drain. Strain the juice again to make the jelly clear. Boil ten minutes skim, then add the sugar, one pound to a pint of juice, and boil twenty minutes. If the apples are not sour, the jelly will seem thin, but in a few days will be solid, and of a fine amber color.

Lyons, Iowa. M. G. R.

DOMESTIC RECIPES.

Pine-apple and Tapioca Pudding.

Soak a teacupful of tapioca in a pint of water for two or three hours; then add one quart of milk; two beaten eggs; two-thirds of a cup of sugar; a little salt and a tablespoonful of butter; bake in a buttered dish, stirring occasionally at first. When done it must be quite stiff, turn on to a platter and pour over a pint of canned pine-apple, or uncooked pine-apple, previously cut into little dice, sprinkled with sugar and covered tightly for an hour or so before using.

Preserved Pine-apple.

Make a sirup of three-quarters of a pound of sugar and not quite one-half pint of water to each pound of fruit; put over the fire in a porcelain kettle, and just before it boils stir in the beaten white of an egg with a tablespoonful of cold water; as it boils remove the scum until no more rises. Have the pine-apple peeled and sliced or cut into dice; add to the sirup and boil gently until the sirup has penetrated the fruit and the pieces look clear. Put into cans and seal.

Pine-apple Pudding.

Sliced pine-apple substituted for the oranges in Mrs. D. SNEDIKER'S recipe for "Orange Pudding" in the RURAL of January 19, makes a very palatable dessert—serve as cold as possible.

E. M.

News of the Week.

TWEED'S DEATH.

"THE evil that men do lives after them,
The good is oft interred with their bones."

So it is with Wm. M. Tweed, the ex-Tammany Boss, the maker and unmaker of political fortunes, the monumental public plunderer of the nineteenth century, who on the twelfth instant ended miserably in prison an eventful life of fifty-five years. His frequent acts of individual kindness, his staunch adherence to his friends and partisans, his ostentatious liberality with the funds of which he was plundering the public treasury, will be soon forgotten, even by most of those who were benefited by them, but the load of taxation his monstrous dishonesty and that of his confederates has piled on his fellow-citizens, the evils of their example and the official corruption they sedulously fostered, will in their baleful effects long outlive the remembrance of the dead swindler's impulsive benefactions. The sudden death of this notorious malefactor has excited a passing feeling of sympathy in many bosoms that execrated his crimes, but it should be borne in mind that every year witnesses, in the penal institutions throughout the land, still more lonely and miserable ends of hundreds of gray-haired criminals whose offences were venial in comparison with those of which this dead politician was guilty. It has been urged in his favor that he was no more guilty, while more manly, than his dishonest associates who have hitherto escaped the full punishment deserved by their crimes, but these crimes would have been impossible were it not for his bold and unscrupulous leadership, and in a confederacy of guilt, it is the just practice of society to treat the ringleader only with extreme severity.

NEWS OF THE WEEK.

Ex-Governor Moses of South Carolina has been arrested in this city on a requisition from Gov. Wade Hampton, on a charge of forgery. He insists before the Court here that the forgery was committed on invalid documents and was therefore not of such a criminal nature as to justify his surrender by the New York authorities. The squabble over the election of a Door-keeper for the lower House of Congress has terminated in the election of Gen. Field, whose military title was won on Confederate battle-fields. His opponent, Gen. Shields, who was wounded in the Mexican War and again on the Union side during the late unpleasantness, has been highly complimented by Democrats and Republicans, and the House, by an almost unanimous vote, authorised the President to appoint him a Brigadier-General on the retired list of the Army of the United States, which will give him a permanent pension of upwards of $1,000, if it passes the Senate and President. Both Shields and Field are, of course, staunch Democrats. A bill introduced into the New York Assembly for taxing clergymen and church property was badly defeated. The Republican Senators and Representatives held a joint caucus, at which action hostile to the President was discountenanced. The proposition made in the N. Y. Legislature to inaugurate a system of free canals has been defeated for this term, but is sure to come up again in the next Legislature. A bill is being pressed in the State Legislature, seeking to establish a uniform freight tariff of one cent per quart on all milk transported on railroads which now charge a higher rate and which reach the cities of New York and Brooklyn. Rural legislators should look sharp after this, affecting as it does the interests of their constituents, nor should these be silent on the matter. It has been at length decided to officially recognize Diaz as President of the Mexican Republic, in view of his vigorous measures for suppressing border raiding by patrolling the frontier with reliable regular troops instead of militia, who were little better than the robbers they pretended to suppress. At last, after many disappointments, Fitz John Porter has succeeded in securing an order to have his case reopened, as fresh testimony is reported to have been discovered, going to prove that the court-martial that tried and condemned him was over harsh, at least. There are strong reports of anticipated Indian troubles soon from Sitting Bull and other hostiles. Secretary Sherman has been making a very powerful argument before the Finance Committee in favor of the early resumption of specie payments. As the premium on gold was on Saturday, the 13th instant, only ¼ per cent., the step to that issue is not a great one. Several banks through the country have already resumed by paying in gold their notes presented at the counter; and unless Congress interferes, resumption will soon come in the regular order of business. Clarksville, Tenn. has had a $500,000 fire. A bill has been introduced in the State Legislature by which a saving of about $200,000 a year in the salaries of officials in this city will be accomplished. Now petty police justices get $8,000 a year, and higher judges proportionately, so that many of them—second-rate lawyers at that—draw higher pay than judges of the U. S. Supreme Court, while all officials, with scarcely an exception, are enormously over-paid both for the duties of their offices and their own personal, educational and business standing.

Across the Alantic political affairs are still in great doubt, although the latest advices have a more peaceful tone. England has relaxed the urgency of her warlike prepartions, probably mainly because they are already completed, or nearly so. Bismarck, in whose hands the question of peace or war really rests, seems to be making more active efforts to bring about a spirit of conciliation. Russia heavily burthened with debt, and finding it difficult to borrow money even at enormous sacrifices, seems willing to recede somewhat from her arrogant position with regard to most of the questions involved in the treaty of San Stefano. Advices from Berlin give hope of a meeting of that Congress, provided the Powers consent to the retrocession of Bessarabia and the extension of Russian territory in Asia as far as Erzeroum and a pecuniary indemnity; these modest demands granted, Bismarck will use his best efforts to induce Russia to allow the Congress full power to modify the other territorial changes made by the treaty.

Having secured all his own immediate interests, the Czar is willing that those of his late allies, Bulgaria, Servia and Roumania, shall be passed upon by the tribunal to which he refuses to submit questions affecting Sacred Russia. At present, Russian troops are pouring into Roumania despite the remonstrances of the government of of that State, and in view of their arbitary conduct and their treatment of the natives as a conquered race, the Roumanian government is drawing up a protest to be sent to the Powers. In Constantinople defences are being thrown up towards the Russians, and the Government contemplate moving to Scutari, so that in the event of a conflict, Turkey might not be forced to take sides with either party, through the seizure or capture of the present seat of government. The Russian troops have seized upon the passes of Carpathian Mountains, so as to be prepared for an attack from Austria, and are pressing on the construction of a railroad through Bulgaria and Roumania, so as to draw supplies from home independently of the Black Sea, which may be dominated by the British fleet. Italy seems determined to remain rigorously neutral in any event. In Ireland the Earl of Leitrim, a harsh cruel landlord, has been shot and murdered on a part of his estates where 85 of his tenants were under orders of eviction. His coachman and clerk were killed at the same time. At his funeral, some days later, the populace hooted, cursed and were it not for police interference, would have desecrated the remains. Intense excitement in Ireland, and also in England at this agrarian outrage. In the great boat race on the Thames, between Oxford and Cambridge Universities, the former won an easy victory.

VARIOUS.

The Moffett bell-punch register will probably soon be checking off drinks in Pa., N. Y., Ill., D. C. and La., as its introduction in these places is now under favorable discussion.

Mr. R. A. Arnold estimates, in an article in the Nineteenth Century, that were the Church of England disestablished it would retain a surplus of $600,000,000 after all claims had been met.

Mr. P. Powell, senior member of the firm of P. Powell & Son, Cincinnati, O., died at his home, March 28th. The business of the firm will be continued under the usual firm name, Mr. Wm. F. Powell having sole charge of the business.

A solicitor at Manchester, England, has been sentenced to five years' penal servitude. He defended a client who had stolen a portmanteau from Mr. Parnell, M. P., and was convicted of taking payment from his client derived from the stolen goods, knowing the money to have been thus obtained.

Tea is beginning to take a place almost side by side with coffee in Ceylon, and samples of Ceylon grown leaf have been received and favorably reported on in London. The cultivation of the plant is encouraged by the offer of prizes at the colonial agricultural exhibitions, and experienced planters have given a very favorable opinion of the capabilities of the soil and climate of parts of Ceylon for the production of a high-class tea.

CORINTH, Maine, Feb. 12, 1878.

TO THE DAVIS SEWING MACHINE CO., Watertown, N. Y.—*Gents:* We are manufacturers of clothing; have been engaged in the business for the past fifteen years, manufacturing largely for Miner, Beal & Hackett, Isaac Fenno & Co., A. Sherman & Co., Smith, Richardson & Bates, Prager, Bock & Co. and Leland, Rice & Co., all of Boston. We have used the Davis Vertical Feed Sewing Machine for the past four years in manufacturing our clothing, and we know that it is better adapted to our business, and possessed superior advantages over any of the under-feed sewing machines.

Within the last three months we have had occasion to seam our clothing with double thread, and we find that the Davis Vertical Feed Sewing Machine (and no other family sewing machine) will do the work as well and easily as with the single thread. Yours, truly, T. BRACKETT & SON.

Reliable help for weak and nervous sufferers. Chronic, painful and prostrating diseases cured without medicine. Pulvermacher's Electric Belts the grand desideratum. Avoid imitations. Book and Journal, with particulars, mailed free. Address PULVERMACHER GALVANIC CO., Cincinnati, Ohio.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, April 13, 1878.

BEANS AND PEAS.—Beans of all kinds begins to improve. For standards, mediums have advanced 10c and marrows are 20c. better. Trade is not notably large, but reduced receipts have given sellers more holding courage. Marrows are especially strong as an active Cuban call is expected. Pea beans and white red kidneys not active but not neglected to an extent that makes prices suffer. Canadian field peas in bulk, and bond at 83@84c.; Stock very small; export wants supplied from daily receipts. Green peas continue dull at 112½@300 per 3 bush. box. Southern B. E. Peas 2.80@3.00 per 2 bus. bag. Receipts of beans for the week 2394 bush. Exports do.; 225 bbls; exports peas 195,000 bush.

We quote:—Beans, medium choice, $1.60@1.65; other, $1.40@1.55; marrows, choice, $1.80@1.85; other, $1.60@1.70; pea, $1.25@1.55. White kidney, choice, $1.25@1.55; other, $1.85@1.95; red, choice, $2.10@2.30; other, $1.60@1.70. Turtle soup beans, $2.40@2.50.

BEESWAX.—Small lots have been taken, showing 27½@29c, the ranfle for Western and Southern. Notwithstanding the large exportation compared with last year the market is firm. Exports past week, 5,735 pounds.

BROOM CORN.—Corn offerings are not large and the market is fairly supported. Green brush at 6@7½c.; green hurl, 5@6½c.; medium green, 4@5½c.; red-tipped, 4@5c., and common red, 3@3½c.

BUTTER.—Old butter as a rule now depends upon chance sale. Some fine sound firkins will have a place for Southern use until new yellow will stand steamer shipments. The stock of old is not so oppressive as was feared it would be. Still a good deal remains to loose money on. Both sellers and buyers are shaping their regular trade for new and daily receipts pretty nearly fill current wants. After naming creamery as fairly strong in prices; other grades of State are subject to the easy tone incident to this part of the season when Western dairy and factory develop as formidable competitors.

NEW.—State, half tubs, choice, 23@28; good 26@27. Welch firsts, 25@28; second, 23@25c; poor new, 20@22c; Western creamery ranges at 24@35c.; other 26@32c.; W. dairy good to choice 25@27c.; fair 20@24c.; fair to good 15@23c.

OLD.—State dairies, good to choice 20@21c.; fair, 15@17c.; from 15@18c; selected firkins 22@25c; fair to good 18@23c; poor 10@12c; selected half tub 22@24c; other, 15 20c.; choice Fall Welsh 21@23c. Fair to prime 20@26c.; Old Western, 7@12c. for early and 10@11c. for late made.

COTTON has fluctuated sharply as the advices from the other side have been favorable or otherwise, closing about ¼ above the lowest prices of the week. Latest prices are for March, 10.63@10.65c.; April, 10.82@10.83c.; May, 10.94@10.95c.; June, 11.00@11.05c; July, 11.11@11.12c.; August, 11.01@11.16c.; September, 10.85@10.88c.; October, 10.61@10.63c.; November, 10.56@10.57c.; December, 10.57@00.58c.; January, 10.61@10.65c.

Quotations for poor cotton are based on American standard of classification, and on cotton in store

running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	7¾	7¾	7⅞	7⅞
Strict ordinary	8¾	8¾	8⅞	8⅞
Good ordinary	8 15-16	8 15-16	9 1-16	9 1-16
Strict good do	9 7-16	9 7-16	9 9-16	9 9-16
Low middling	9¾	9¾	10	10
Strict low middling	10¼	10¼	10⅜	10⅜
Middling	10 9-16	10 9-16	10 11-16	10 11-16
Good middling	10 15-16	10 15-16	11 1-16	10 1-16
Strict good middling	11¼	11¼	11⅜	11¼
Middling fair	11¾	11¾	11⅞	11¾
Fair	12¼	12¼	12⅝	12⅜

Stained.

Good ordinary, 7¾c. Strict ordinary, 18¼c.; Low middling, 9c.; Middling, 9¾c.

CHEESE.—Exports for the week 13,561 boxes. Stocks have been steadily reduced, the receipts running light, and there are now very meagre assortments of the upper grades. Fine is especially wanted, and when a line can be found just right the full outside price is made.

Fancy factories, 13@13¼c.; good and prime, 10¼@11¾c.; fair lots, 9@10¼c.; poor, 10@10½c.; 7@10c., skimmed. Farm dairy, 11¾@12¾c. for good to prime; 9@9¾c. for fair lots; 7@9c. for skimmed; Western factory, cheddar, 10@11¼c. for fine; 9@10c. for good; 6@8c. for poor.

Liverpool cable, 63@63s. Gold closes 100¾.

Exports for the week, 13,561 boxes.

DRIED FRUITS.—There is nothing doing in large parcels and in a jobbing way trade is of a limited description, with prices in a good degree nominal.

Apples—State quarters, old, 5@5¾c.; new, 5¾@6c.; Western quarters, old, 5@5¾c.; new, 5¼@5¾c.; Southern, new, prime sliced, 7c.; fair to good, 4¾@5c. Peaches—Peeled, new, 9@10c.; unpeeled halves, 4¾ 5c.; unpeeled quarters, 3¾@4c. Pitted cherries, 15@16c. Blackberries, 9@10c. Raspberries, 26c. Plums, 15c. and Southern at 12c. Exports for the week 153 bbls dried apples.

EGGS.—Receipts for the week, 18,900 bbls, do, last week, 24,372 do. Unvaried cheapness is still the Lenten marvel of this branch of trade. There seems to be no outside trade to help work off supplies, and the totals have been weekly more than local wants demanded. Trade must increase next week for Easter, but in view of the lull that is apt to follow that feast, sellers will hardly dare to mark up present rates much.

Near points, 12@13c.; State and Penn., 10¾@11c.; Western, prime, 10@10¾c.; Southern do., 10c.; off quality stock, 9@9¾c.; Duck, 20@22c.; Goose, 38@40.

FEED.—Sales are at $19@19.50 for 40 lbs.; $18.50@19 for 60 lbs.; $19@20.50 for 100 lbs.; $19@20 for rye.

FLOUR.—The pacific character of the foreign news, the advanced season to canal navigation and the prospect of larger supplies together with the decline in wheat have caused a weak and lower market.

Latest prices are $4.15@4.90 for poor to fancy superfine State; $5.00@5 20 for common to fair extra do; $5.00@525; $5 20@5 60 for good to choice do.; $4.15@4 90 for superfine, Indiana, Iowa, Michigan, Ohio, &c.; $4 90@5 20 for very poor to good shipping extra do do., (chiefly at $5.20@5.60) and $5 25@5 65 for good to choice extra do.; common to choice white extras, $5.50@6.60; fancy do. at $6.00@7.50; (the latter an extreme); red and amber winter wheat, inferior to choice trade and family, at $5.35@6.50; round hoop Ohio at $5 00@5 35, and trade and family brands of do, $5.50@6.75, the latter for choice; St. Louis, $5.45@6.10 for poor to fair extra and $6.10@7.35 for good to fancy: (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, $5.10@6.10; Minnesota "straight," common to fancy, at $6.50@7.00, and patent poor to very choice, $6.50@8.25, with a few fancy at $8.75@8.50; unsound stock at $2.25@5.75; city mill extra at $6 00@6.30 for fair to very choice for West Indies; do. for England $5.10@5.20; do. trade and family extras, $6.50@7.50; do. South America, $6.40@7.35 for fair to fancy; No. 2 at $2.85@4.00 for poor to strictly fancy (some very fancy lots quoted up to $4.05@4.10 but these are extreme figures).

CORN MEAL—Is selling at $3.15 for Brandywine and $2.50 to $2.65 for Western yellow.

FRESH FRUITS.—Apples have little of interest to mention. A few extra reds, including "Seeks," are quoted at $5@5.50, but grocers and bakers are obtaining desirable styles of Russets at a range of $3.50@4.50, extra large, showy Russets, for special table use, $5; common stock, $2.50@3 ₱ bbl. Cranberry dealers are making the most of the brief life left for crates; all offering freely at $3 for best and $1.75@2.75 for fair to prime. The Florida orange season is over, and when we say that the fact is regretted, a well-deserved compliment to grove owners is expressed. Strawberries will soon have a good position; reduced prices have already increased consumption. They have arrived at the rate of more than 10,000 quarts per day from South Carolina. Quoted at 25@30c. Shippers are using refrigerator cars in addition to steamer shipments, the crop requiring enlarged facilities for deliveries. Peanuts are supported by prospective good demand. $1.40@1.45 for hand-picked Va.; prime, $1.20@1.30; common, to fair, 85c.@$1.15; Tenn., 75c.@1.10. Pecans, 6@8c.

FURS AND SKINS.—A few common skins are changing hands at old prices.

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece	$3 00@ 4 00	$2 00@ 2 50
Gray Fox	40@ 45	40@ 45
Red Fox	75@ 80	60@ 65
Black Bear	5 00@ 6 00	4 00@ 5 00
Brown cubs and yigs.	1 00@ 2 00	1 00@ 2 00
Florida deer skins.	15@ 18	
Fisher	5 00@ 6 00	4 00@ 5 00
Mink, dark	85@ 1 00	50@ 60
pale	50@ 60	30@ 40
Muskrat, winter	8@ 10	6@ 8
fall	6@ 7	4@ 5
Kitts	@ 2	@ 2
Beaver, ₱ lb	1 00@ 1 25	60@ 75
Raccoon	35@ 45	35@ 45
Opossum	3@ 6	3@ 6
Skunk, black		50@ 60
striped		7@ 30
Wolf, mountain		1 50@ 2 00
prairie		50@ 60

Southern raw skins are worth 20 per cent less than Western.

GRAIN.—The English advices have been very tame through the week, and there have been free sellers of all articles at lower prices without leading to much activity.

Latest sales are of No. 2 old at 60c—ungraded red and amber State, $1 45@1 46—; white, $1 47; No 1 Northwest spring, $1 38; No. 3 Chicago, $1 22½; No. 2 red for March at $1 23; No. 2 Milwaukee spring, $1 27. Rye has been very active, purchases within a week reaching fully 250,000 bush. largely for the German markets, closing at 74c. for Western; 76@—c. for State and 75c. for Canada. Corn is weak and quiet. Latest sales are of New York No. 2 at 53@—c.; steamer mixed, March, 51c. Oats of New York extra white, at 33@36c.; do. No. 1, March 34½c.; No. 2 white, 33½c.; mixed Western, 33@34½c.; white Western, 31@34½c.

HAY AND STRAW.—Receipts have been small, demand has been fair, and prices very well sustained.

Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@55c. for long rye; 45@50c. for short rye, and 40@45c. for oat.

Exports since Jan. 1st, 850 bales; same time last year, 16,450 do.

HIGHWINES.—Is held at $1.08 and $1.07½ offered.

HOPS.—Exports last week only 235 bales and the receipts 914 bales. Prices are without important change, and there is a dull, dragging condition of trade.

State choice to fancy, 11@12c.; good to prime, 7@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Californians, 12@14c.

OIL-CAKE.—Western quoted at $30@30.50 per ton.

POULTRY AND GAME.—Receipts have been unusually heavy. Thirty cars of coops for the week. Low rates for eggs perhaps add to the supply. City killers have operated heavily with prices so much in their favor.

Fancy Phila. and N. J. turkeys, 10@12c.; good, 8@9c.; large or Toms, 8@10c.; chickens, choice, 8@9c; Geese are out of good quality, mostly selling at the lower figures. Near Points, $1.75@2; Southern and Western, $1@1.25; ducks, choice, 87c.@$1.12; other, 50@75c.

Wild Pigeons have a ready sale at $1 per doz.

Hares and rabbits, pair, 20@25c. Canvas-back ducks, $1.00@1.25; Red-heads, 55@60c; Mallard, 55@60c.; Teal, 25@40c.; Quail, prime, $2.75@3.00; soft, $2.25@2.50, Partridges, pair, 75c.@$1.00, Grouse, $1.00@1.50; poor, 90c.@$1.10. Squab, $1.25@1.50, quality fine. English snipe and Plover, $1.12@1.25.

Dressed poultry in light supply and firm for fresh killed.

N. J. chickens, 10@13c.; W. fowls, 9@10c.; Prime small turkeys, including frozen, 13@14c.; other, 9@12c.; Pa. dry-picked chickens, 16@18c.; do. State and Western, 5@11c.; N. J., 11@13c.; Ducks scarce and firm, 14@20c.

PROVISIONS.—Hog products generally weak and dull.

Mess pork, $9.85@10.00 for spot lots; Bacon at 9.85 for June, 9.95 for July, 6.30c. for long clear and 6¾c. for p ahort clear. Lard—Western steam, 7 29½c. 7.30c. for spot, 7.27½c. for May, 7.35 Tallow at 7 9-16c. for prime. Stearine, 7½c. for prime Western. Beef hams at $15.50@1.6 00 Beef—New extra mess, $12.@12.25; plain, $10.50@11.50; new jac'ket $14.00@15. family mess, 17.80@17.50; extra India mess 26.50 for city brands; do. Philadelphia, $25.

SEED.—Grass are steady. Clover, 7@7¾c. for Western; 7@7 ¼c. for State. Timothy, $1.40. Rough flax, $1.45.

VEGETABLES.—Strictly choice quality potatoes are firm, but the bulk of the supply is offered at inside rates and the market rather quiet.

We quote Peach Blows, choice, $1.50@1.62, common, $1.25@1.37. Early Rose, $1.50@1.62; common, $1.25; Peerless, $1 00@1.25; Nova Scotia, $1.9@2.00; Sweet, $2.00@2.25; New Cabbages, bbl. $1@2; old 100, $4@7; Marrow squash, bbl., $1.37@150; Hubbard do., $2.00@2.50. Russia turnips, 25@80c. Carrots, 75c.@$1.00 Beets, bbl., $1.00@1.25; Bermuda, $9. Spinach, Southern, 1.50 ₱ bbl. Kale, 50c. Lettuce, $2.00@2.50. Radishes, 100 bunches, $1@1.50. Green peas, choice, $2@2.25 ₱ crate.; Fla. string beans $7@5, Asparagus, fair to choice, $5 50@8.50 ₱ doz. Red and yellow onions, 50c.@$1.00 ₱ bbl.; white, 75c.@$1.25.

WOOL.—Prices are essentially as quoted last week with no improvement in demand, the trade generally awaiting the marketing of the new clips.

Ohio, Pennsylvania and Virginia—XXX and picklock, 44@46c.; XX, 42@44c.; X, 42@43c; No. 1, 43@44c. No. 2, 35@37c.; common, 33@35c.; combing, 52@55c.

New York, Michigan, Indiana and Wisconsin—XX, 34@36c.; X, 36@38c.; No. 1, 38@40c.; No. 2, 33@35; common, 32@34c.; combing, 41@43c.

Iowa, Vermont and Illinois—X and XX, 33@35c.; No. 1, 37@40c.; No. 2, 31@33c.; combing, 45@50c.

Missouri, Kentucky, and Tennessee—Washed fleece, 37@42c.; unwashed, 25@30c.; unwashed combing, 30@35c.

LIVE STOCK MARKETS.

NEW YORK, April 13, 1878.

BEEVES.—Receipts for the week, 9,009 head; do., last week, 9,253 do. Since Wednesday last the market has declined ¼c; Slightly increased receipts gave buyers a rather independent position, and lower rates for dressed beef, did not give wholesale butchers a sharp buying appetite. Prime to extra bullocks 10@10¾; ordinary to good native steers 8,3¾@9¾c.; Colarado, Texas 9c.; Cincinnatti stillers 9¼c. to dress 56 lbs for bulls 4¾ live. Exporters paid 9¾@10¾c.

COWS AND CALVES.—The bulk of the sales were at $35@55; occasional singles $60@70 but stock equal to the latter in quality is worth about as much in the interior for new milk.

VEAL CALVES.—Trade in live has been very slack, but there is some recovery at the close 5¾c@7c. Hog dressed 5@9c. Receipts for the week 2740 head.

SHEEP AND LAMBS.—Receipts for the week, 17,724 head; do. last week, 16,321 do. The market has ruled weak but rather more active at the close. Ordinary to good clipped sheep, 4¾@4¾c.; per 100 lbs. Unclipped 5.37@5.50; do. Yearlings 7c. Lambs are in demand; fair to good $3@5 per head. Those that weigh 40@50 lbs. here $6@7.

SWINE.—Few in market at the close; no selling price named for live Western. Country pork 4¾@6c. for heavy to light N. J. State should be sent alive; when city killed they sell up to N. J.

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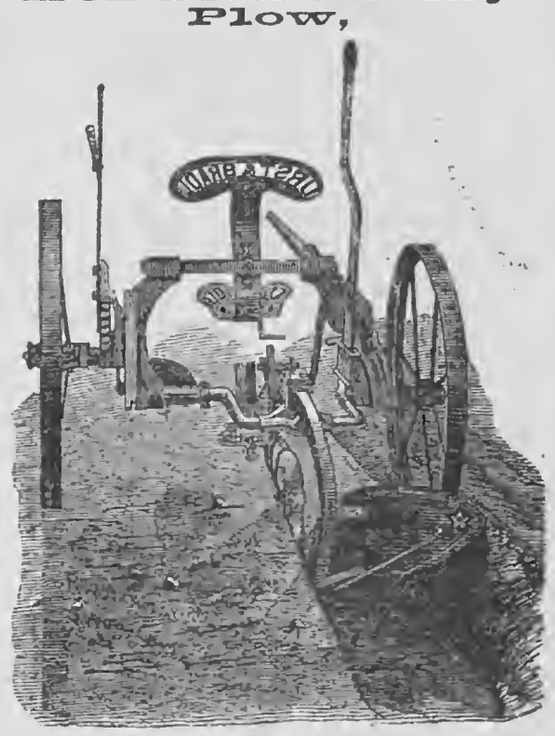

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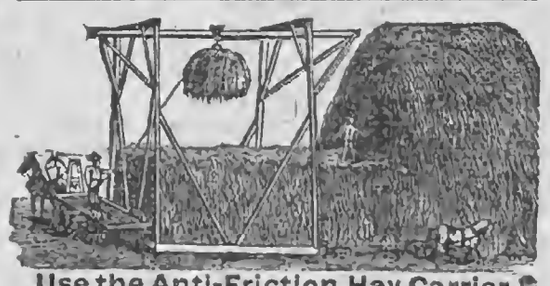

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Reading for the Young.

COPPER TOES.

LITTLE Ned and I were wandering,
Out beyond the maple lane,
Gathering the brown leaves of Autumn,
Listening to the birds' refrain,
When we passed a ragged youngster
Lounging in a mannish pose,
Hatless, but with feet rejoicing
In a pair of copper toes.

From that hour Ned's buttoned buskins
Were regarded with disdain;
Creamy kids and bronzed moroccos
Both were offered him in vain.
When "Our Father" was repeated,
By my side at evening's close,
He would add, "Pease send to Neddy
A new pair of topper toes!"

As the watched-for Christmas neared us,
Every evening darling Ned
Hung his little stocking, slyly,
Close beside his cosy bed;
And behold a paper fastened
To his dainty striped hose,
Covered with queer hieroglyphics,
And a sketch of copper toes.

When I innocently questioned,
Hinting that my eyes were dim,
Taking off the folded paper,
Which was fastened with a pin,
Would he to his precious mamma
That strange cryptograph disclose?
"Santa Claus, pease bring to Neddy
A nice pair of topper toes."

This he read with pleading pathos,
And a conference aside
Quite decided that our darling's
Wish must never be denied.
When he wakened Christmas morning,
With cheeks flushed *couleur de rose*,
How the joyous dimples deepened
As he donned his copper toes!

[*Helen M. Warner.*

THE PRIVATE HISTORY OF AN EAR OF CORN.

BY THE COB.

Our family is an extensive one, but the stalk from which we sprung was select. We trace back to a special variety that was, at the time of our introduction, the subject of extended notice by the unsubsidized agricultural press. Though our family name, Corn, is almost as ordinary as Smith, yet *our* stalk was exceptionally distinguished. Every member of the cob was a kernel!

We were raised with great care: the methods employed in our cultivation assured a satisfactory result. As I look back on the days of our youth, I am sure our subsequent careers could not have been predicted from so calm and ordinary a beginning.

Ah those halcyon days! How fond recollection recalls the familiar field bounded by a fence of elegant proportions that modestly embraced our boundaries, yielding protection without obtruding a visible constraint. The long, even furrows of generous soil; the drills of mathematical precision, and the good-natured rivalry manifested by each grain to over-top its fellows, are never to be forgotten. And later, as we grew to maturity, with what pride we displayed the glossy, flowing silk to the best advantage, and with what secret satisfaction we admitted to ourselves that *our* silk was incomparable; while we damned with faint praise less fortunate companions.

Our immediate family was spared the indignity of being picked for roasting-ears, and while we commiserated the fate of those who were pulled off before their prime, we could not but reflect on the advantages and privileges of springing from a superior variety; such as are not subjected to ruthless interruption at a time when freedom from attack is all important to the attaining of a fair growth. I must repeat those were happy times. During September, we had the first taste of that distinction that afterwards lent the pleasantest flavor to existence. We were distinguished at the State Fair! With what envy less favored corn looked upon us. With what mock enthusiasm they congratulated us when the blue ticket, denoting a first premium, was attached to our side. How they laughed with counterfeited glee as we returned thanks in voices "husky" with emotion!

Shortly after this triumph we passed through our first trial, and our adventures may be said to have fairly begun. We were thrown into a wagon, not too softly, and carried away with a great number of quite common cobs—who from their foolish converse plainly indicated that they had not reached to ears of discretion,—and hurried off to a formidable looking machine up whose inclined plane we could observe numbers of our kind gaily moving. It came our turn presently, and while we felt it our duty to so comport ourselves as to be an example to our uncultivated companions still I admit, in confidence, that I could understand the feeling that prompted their light conduct. They were only about fifty-five pounds to the bushel, and could not be expected to display weight and dignity of manner it is only the fortune of sixty-fivers, moving in best soils, to possess.

We were shocked out of all sense of propriety by an ominous, rumbling sound that presaged a horrid danger. Our family preserved a calm exterior but I felt tremblings along my entire length which conclusively showed that nothing but a high-sense of what was due to their exalted variety restrained them from leaping from their faithful cob, in an agony of fear. But then, being a military family—all kernels, at that—such an action was not to be thought of. We faced the music, and amidst the shrieks of companions in misery, plunged off the scaffolding into a black vortex that seized me with an iron grip, and inhumanly tore each separate grain from the cob. I felt myself enter into the jaws of death—as I thought. I was conscious of a violent wrench, then a heavy pressure and series of excruciating shocks, as each of my devoted relatives were torn asunder and sent bleeding and shrieking under a swiftly revolving fan. Thence they threaded numerous labyrinths, finally emerging into a receptacle placed to receive them, while I, shorn of relatives, denuded, and a miserable demoralized cob generally, was shot up on an incline and off into a waste place where I remained until the following day.

From this time forth I may be excused from obtruding my personal history on the reader of these recollections. Mine was to be, henceforth, an uneventful, sedentary life, mainly of consequence because of my ability to learn and relate the adventures of our family. At this writing, as I rest upon the surface of the earth, slowly disintegrating, I can see how my life has not been without its purpose. It might not be uninteresting to state that previous to my coming here I was for a long time the familiar cob-pipe of a poor, but intelligent country editor. It was from this association that I acquired a taste for literary work, and it may be observed, I think, that my composition has a practiced, cyclopedic, but hurried style that is usual with those who cater to the appetites of intelligent readers, while at the same time they ponder on the ways and means of making the subscriber satisfy their own.—[To be continued.

TALK IN THE SILENT WORLD.

This German system may literally be called the art of teaching the dumb to speak. This will hardly appear impossible if it be borne in mind that the vocal organs of congenitally deaf persons are, so long as they are young, unimpaired. The faculty of producing sound is there, but the idea of sound not being present, no attempt to employ it is made. It is true that by long disuse the larynx loses the vocal property, but in the case of deaf children there is very little difficulty in inducing them to utter articulate sounds, not so clear and musical as those produced from persons who are not deaf, but distinct and intelligible. At the same time the eye of the pupil becomes educated to follow the lips of the speakers, and to gather from their movements the words uttered. The process of teaching children on the German system is curious and interesting. The first aim is to strengthen and expand the vocal organs by gentle exercise, the next to train the pupil to watch the motion of the lips and tongue, and endeavor to copy them. The sense of sound to which the auditory nerve is dead, is next conveyed through the sense of touch, the pupils being taught to feel the vibrations in their own throats and bodies when sound is emitted, and to learn to control these vibrations at will. When a correct understanding and use of all the vowels and consonants have been obtained, the pupils are ready to form words and use them as we do. The building up of language now commences on a plan similiar to that which nature follows when children learn to talk by ear. Simple words and every-day phrases come first, the more difficult being gradually built upon and out of the simpler forms of expression; and the closer the artificial educational plan approaches to the natural ear-taught process, the better will be the result in the end.

In some German schools a a few natural gestures are allowed to be used in the early stages of teaching, but the highest type of the system is steadfastly opposed to all signs, and makes the pupils depend entirely on language as addressed to the eye, the meaning being conveyed by analogy, and language evolved out of language, as one problem in Euclid springs naturally from the one that precedes it. It must not be supposed that extraordinary intelligence is required in the pupils. Deaf children are very observant, and when pains are taken to talk to and with them they soon learn to converse freely with those whom they meet constantly. Conversational language must not be looked for in the first two years of instruction, for it must be borne in mind that a child when its hearing is perfect, takes a long time to learn to talk, but about the third or fourth year pupils of average ability begin to speak very intelligibly. One concession and one only, the deaf children require, and that is, that all speaking to them shall open their mouths widely and enunciate with distinctness, a habit valuable in all, and, as the archbishop of Canterbury remarked, at the meeting at Lambeth Palace, invaluable to clergymen. This is "all that is necessary to put them on a level with others, and to enable them to make their way in the world." In Vienna, a fancy leather merchant, who was born deaf and dumb, employed seventy under him. The Emperor and Empress of Austria visited his workshop before the Vianna Exhibition; he could not only speak the language of his country fluently, but also a little English. The leather merchant had visited England and other countries; was a practical horticulturist, and altogether an agreeable, intelligent, wealthy man—wealthy through his own talents and industry. In a hatter's shop in Friedberg there is a tolo-congenital deaf workman. A man was convicted for theft, principally on the evidence given *vive voca*, in open court by that deaf workman, who stood the test of examination and cross-examinations without any other method of communication being used than word of mouth.

Sabbath Reading.

"ONLY WAITING."

ONLY waiting till the shadows are a little longer grown;
Only waiting till the glimmer of the last day's beam is flown;
Till the night of earth is faded from the heart once full of day;
Till the stars of heaven are breaking through the twilight soft and gray.
Only waiting till the reapers have the last sheaf gathered home,
For the summer time has faded and the autumn winds have come.
Quickly reapers, gather quickly, these last ripe hours of my heart,
For the bloom of life is withered and I hasten to depart,
Only waiting till the shadows are a little longer grown;
Only waiting till the glimmer of the day's last beam is flown;
Then from out the gathered darkness holy, deathless stars shall rise,
By whose light my soul shall gladly tread its pathway to the skies.

A DAY IN THE LIFE OF JESUS.

Luke ix. 10, 17.

The place at which these events occurred was near the head of the Sea of Galilee, where it receives the waters of the upper Jordan. This was one of the Saviour's favorite places of resort. Capernaum, Chorasin, and Bethsaida, all in this immediate vicinity, are always spoken of in the Gospels as towns which enjoyed the largest share of his ministerial labors, and were distinguished most frequently with the honor of his personal presence. The people, removed at a considerable distance from the metropolis of Judea, cultivated those rural habits with which the simple tastes of the Saviour would most readily harmonize. Near this spot was also one of the most frequented fords of the Jordan, on the road from Damascus to Jerusalem; and thus, while residing here, he enjoyed unusual facilities for disseminating throughout this whole region a knowledge of those truths which he came on earth to promulgate.

Some weeks previously to the time in which the events spoken of in this text occurred, our Lord had sent his disciples to announce the approach of the kingdom of heaven, in all the cities and villages which he himself proposed to visit. He conferred on them the power to work miracles, in attestation of their authority, and of the divine character of Him by whom they were sent. He imposed upon them strict rules of conduct, and directed them, to make known to every one who would hear them the good news of the coming dispensation. As soon as he sent them forth, he himself went immediately abroad to teach and to preach in their cities. As their Master and Lord, he might reasonably have claimed exemption from the personal toil and the rigid self-denials to which they were by necessity subjected. But he laid claim to no such exemption. He commenced without delay the performance of the very same duties which he had imposed upon them. He felt himself under obligation to set an example of obedience to his own rules.

It seems that the Saviour had selected a well-known spot, at the head of the lake, for the place of meeting for his apostles, after this their first missionary tour had been completed. "The apostles gathered themselves unto Jesus, and told him all things, both what they had done, and what they had taught." There is something delightful in this filial confidence which these simple-hearted men reposed in their Almighty Redeemer. They told him of their success and their failure, of their wisdom and their folly, of their reliance and their unbelief. We can almost imagine ourselves spectators of this meeting between Christ and them, after this their first separation from each other. The place appointed was most probably some well-known locality on the shore of the lake, under the shadow of its overhanging rocks, where the cool air from the bosom of the water refreshed each returning laborer, as he came back beaten out with the fatigues of travel, under the burning sun of Syria. You can imagine the joy with which each drew near to the Master, after this temporary absence; and the honest greetings with which every new comer was welcomed by those who had chanced to arrive before him. We seem to perceive the Saviour of men listening with affectionate earnestness to the recital of their various adventures; and interposing, from time to time, a word either of encouragement or of caution, as the character and circumstances of each narrator required it.

The lonesomeness of their journey was no longer remembered, as each one received from the Son of God the smile of his approbation. That was truly a joyful meeting.

The Saviour perceived that the apostles needed much instruction which could not be communicated in a place where both he and they were so well-known. They had committed many errors, which he preferred to correct in private. By doing his will, they had learned to repose greater confidence in his wisdom, and were prepared to receive from him more important instruction. But these lessons could not be delivered in the hearing of a promiscuous audience. Nor was this all. He perceived that the apostles were worn out with their labors and needed repose. Surrounded as they were by the multitude, which had already begun to collect about them, rest and retirement were equally impossible. He therefore said to them, "Come ye yourselves apart into a desert place and rest a while." For this purpose, he "took ship, and crossed over with his disciples alone, and went into a desert place belonging to Bethsaida."

The apostles had been for some time past before the eyes of all men, preaching and working miracles. Their souls needed retirement. They would be greatly improved by private communion both with him and with each other. It was for the purpose of affording them such a season of moral recreation, that our Lord withdrew them from the public gaze into a desert place. Nor was this all. Their labors for some weeks past had been severe. They had traveled on foot under a tropical sun, reasoning with unbelievers, instructing the ignorant, and comforting the down-cast. Called upon, at all hours, both of the day and night, to work cures on those that were oppressed with diseases, their bodies, no less than their spirits, needed rest. Our Lord saw this, and he made provision for it. He withdrew them from labor, that they might find, though it were but for a day, the repose which their exhausted natures demanded.

Jesus with his disciples, crossed the water, and entered the desert; that is, the sparsely inhabited country of Bethsaida. Desert, or wilderness, in the New Testament, does not mean an arid waste, but pasture land, forest, or any district to which one should retire for seclusion. Here, in the cool and tranquil neighborhood of the lake, he began to instruct his disciples, and without interruption, make known to them the mysteries of the kingdom. It was one of those seasons that the Saviour himself rarely enjoyed. Everything tended to repose: the rustling leaves, the rippling waves, the song of the birds, heard more distinctly in this rural solitude, all served to calm the spirit ruffled by the agitations of the world, and prepare to listen to the truths which unveil to us eternity. Here our Lord could unbosom himself, without reserve, to his chosen few, and hold with them that communion which he was rarely permitted to enjoy during his ministery on earth.

Soon, however, the whole scene is changed. The multitude, whom he had so recently left, having observed the direction in which he had gone, have discovered the place of his retreat. An immense crowd approaches, and the little company is surrounded by a dense mass of human beings pressing upon them on every side. These are, however, only the pioneers. At last, five thousand men, besides women and children, are beheld thronging around them.

Some of those suitors present most importunate claims. They are in search of cure for diseases which have baffled the skill of the medical profession, and, as a last resort, they have come to the Messiah for aid. Here was a parent bringing a consumptive child. There were children bearing on a couch a paralytic parent. Here was a sister leading a brother blind from his birth, while her supplications were drowned by the shout of a frenzied lunatic who was standing by her side. Every one, believing his own claim to be the most urgent, pressed forward with selfish importunity. Each one, caring for no other than himself, was striving to attain the front rank, while those behind, disappointed, and fearing to lose this important opportunity, were eager to occupy the places of those more fortunate than themselves. The necessary tumult and disorder of such a scene you can better imagine than I can describe.

This was, doubtless, by no means a welcome interruption. The apostles needed the time for rest; for they were worn out in the public service. They wanted it for instruction; for such opportunities of intercourse with Christ were rare. But what did they do? Did our Lord inform the multitude that this day was set apart for their own refreshment and improvement, and that they could not be interrupted? As he beheld them approaching, did he quietly take to his boat, and leave them to go home disappointed? Did he plead his own convenience, or his need of repose, as any reason for not attending to the pressing necessities of his fellow-men?

No, very far from it. The providence of God had brought these multitudes before him, and that same providence forbade him to send them away unblessed. He at once broke up the conference with his disciples, and addressed himself to the work before him. His instructions were of inestimable importance; but I doubt if even they were as important as the example of deep humility, exhaustless kindness, and affecting compassion which he here exhibited. You can imagine yourself the Saviour rising from his seat, in the midst of his disciples, and presenting himself to the approaching multitudes. His calm dignity awes into silence this tumultuous gathering of the people. Those who came out to witness the tricks of an empiric, or listen to the ravings of a fanatic, find themselves unexpectedly, in a presence that repels every emotion but that of profound veneration. The light-hearted and frivalous are awe-struck by the unearthly majesty that seems to clothe the Messiah as with a garment. And yet it was a majesty that shone forth conspicuous, most of all, by the manifestation of unparalled goodness. Every eye that met the eye of the Saviour quailed before him; for it looked into a soul that had never sinned; and the spirit of the sinner felt, for the first time, the full power of immaculate virtue.

Thus the Saviour passed among the crowd, and "healed all that had need of healing" The lame walked, the lepers were cleansed, the blind received their sight, the paralytic were restored to soundness, and the bloom of health revisited the cheeks of those that but just now were sick unto death.—[To be continued. W.

PERSONAL ITEMS.

Spurgeon is solid, and has close cut dark hair and full beard. He wears a soft hat drawn over his face. His great voice is as mellow as ever.

General Joseph E. Johnston is short and slight, but erect; has a short gray beard and a neat style of dress. He expects to be a member of the next Congress.

Gail Hamilton thinks it no impeachment of one's sagacity to be a daughter, sister or friend, but says it's a dreadful endorsement of a man to marry him.

The Crown Prince of Germany is maimed in the left hand, and holds a gun with difficulty. He is a good linguist, and particularly well versed in English.

Gen. John A. Dix is a small man, but also a very active one. Few sportsmen can beat him in bringing down a snipe or a duck, in spite of his years. Gen. Dix regularly draws his pension as a soldier of the war of 1812.

Prince Rudolph, heir to the throne of Austria, who is about to visit the United States and Brazil, is said to be the most arrogant and insolent prince in Europe. His recent visit to Great Britain left a very unfavorable impression.

Mr. Bayard Taylor, our new Minister to Germany, was, a quarter of a century ago, a slight man, but now, what with beer and beef, he has grown heavy. He must weigh over two hundred pounds. He started in life as a printer.

The new British Foreign Affairs Secretary, the Marquis of Salisbury, is described as a tall, thick-set man, with a full black beard, who dresses shabbily and would rather ride in a cab than in his own brougham. He has from boyhood displayed a high order of abilities and is considered the most promising leader of the Conservative Party.

The celebrated one-eyed, Hebrew, French Republican statesman and Deputy, M. Gambetta, recently suffered from symptoms of apoplexy, and his friends fear that if he keeps up his present way of living he will die ere long. He is incessantly reading and writing except when receiving his many visitors. He eats heartily but irregularly, and takes sleep by snatches, as his conferences often last through the early morning hours. He takes no exercise beyond what his carriage gives him in making business visits.

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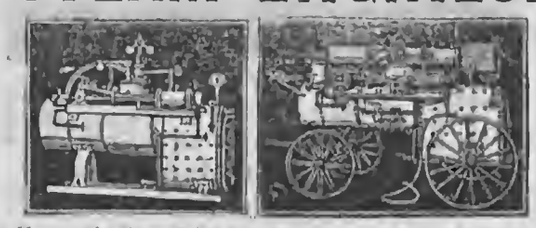

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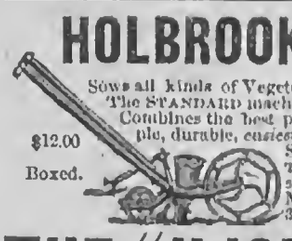

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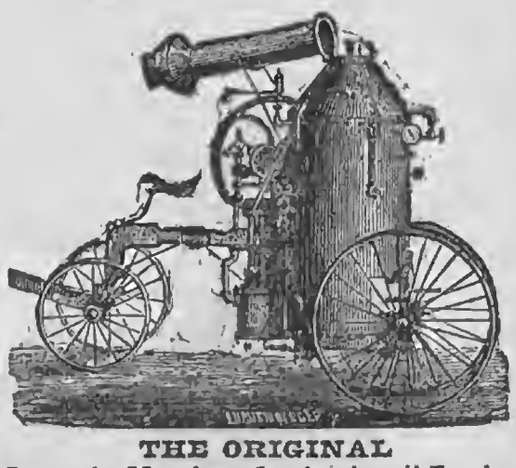

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Send 3c. stamp for Circular to
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For Pumping and Turning Light Machinery. All our Windmills are warranted, when properly put up, to stay and to do what we claim for them; also, manufacturers of the
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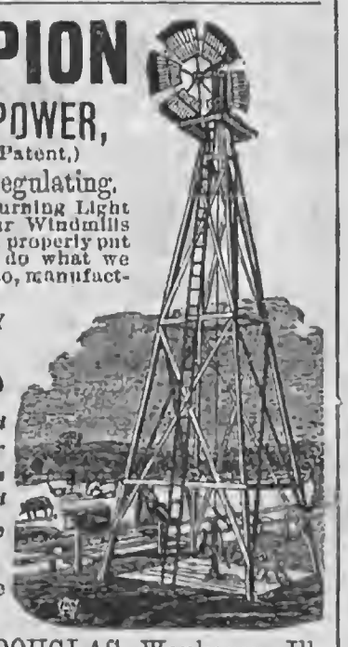

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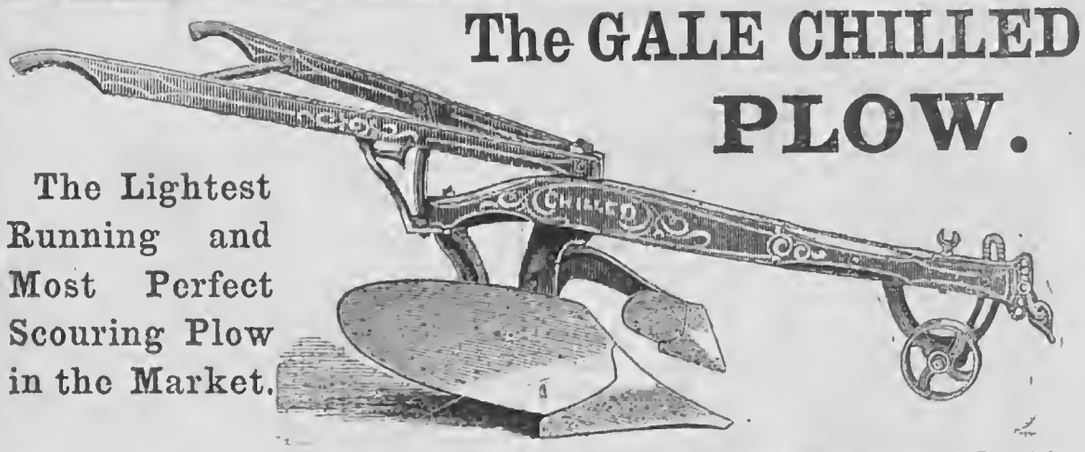

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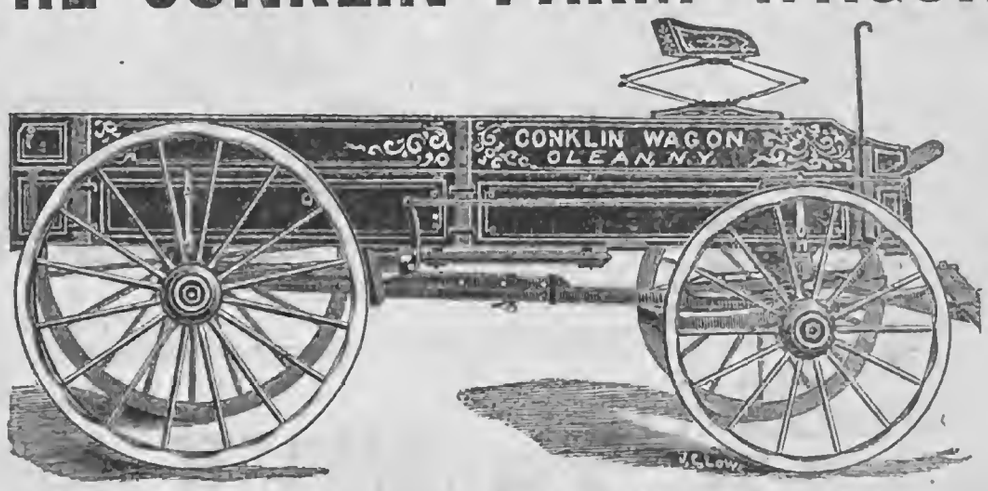

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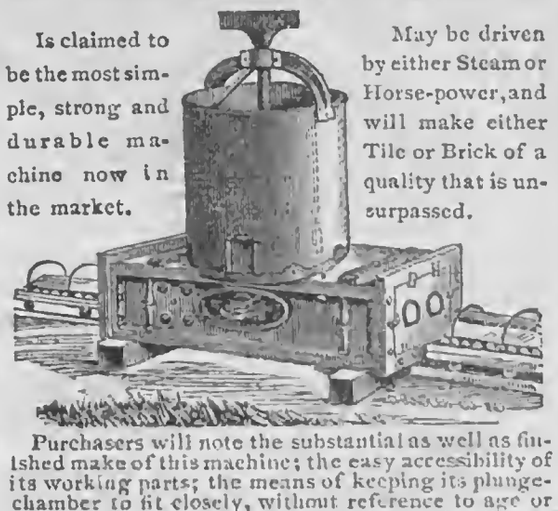
Is claimed to be the most simple, strong and durable machine now in the market.



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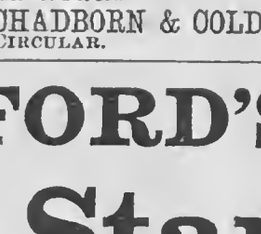

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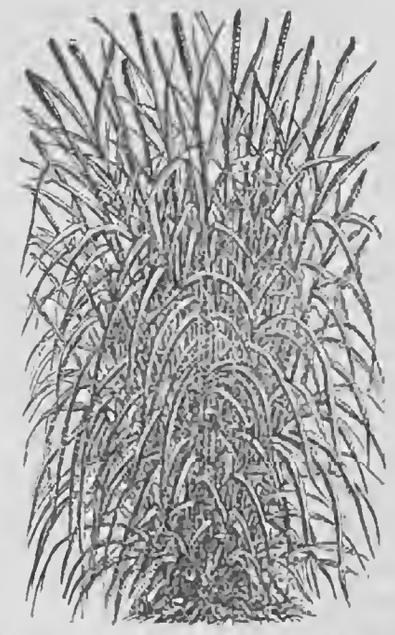

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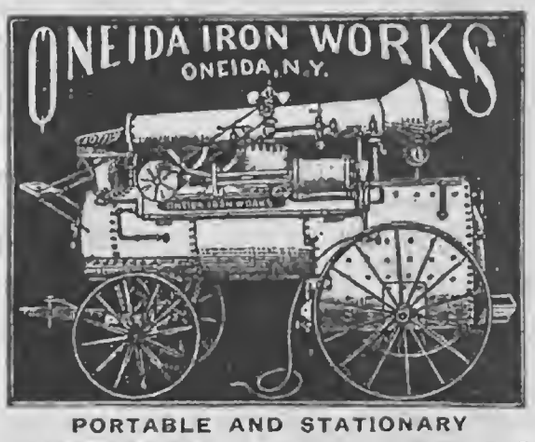

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VOL. XXXVII. No. 17.
WHOLE No. 1474.

NEW YORK CITY, APRIL 27, 1878.

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Industrial Topics.

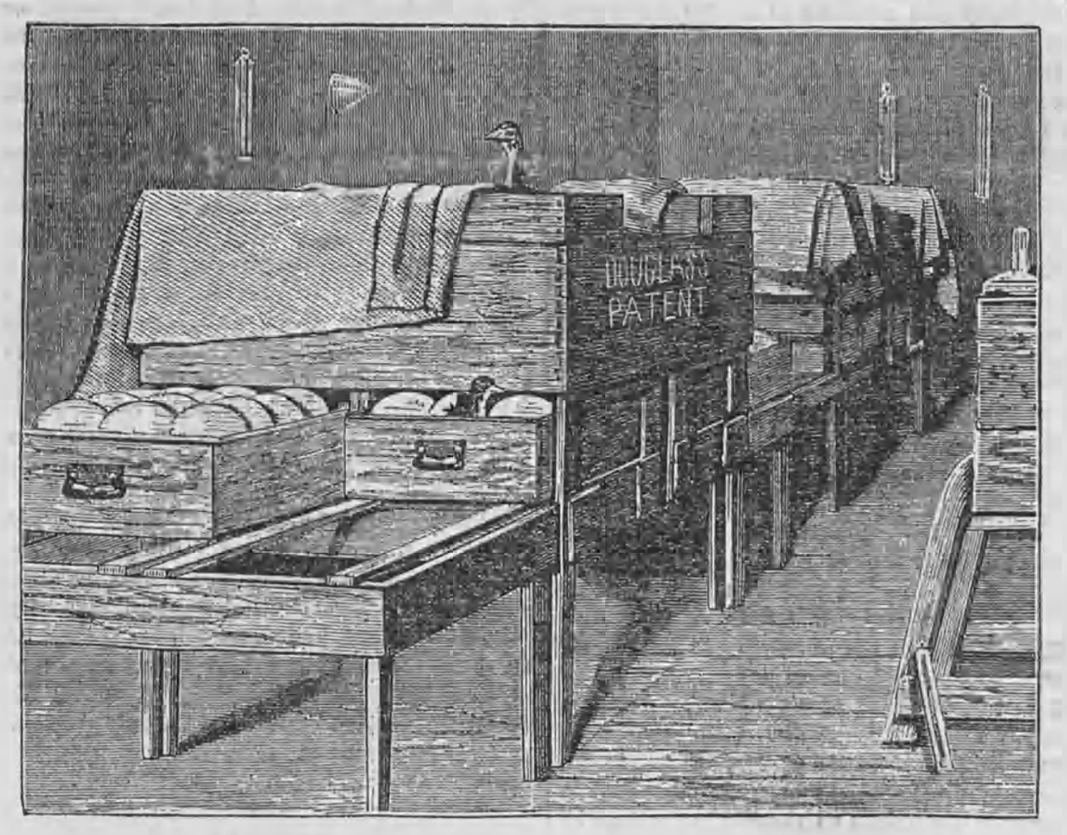
THE OSTRICH.

Of the Bird Class in the Animal Kingdom the group whose members are the largest is that of the Cursores or Running birds, so called on account of their great speed of foot and total impotence of wing, and among these the largest surviving kind is the ostrich. As in the case of the other members of this sub-division of the class, the legs of the ostrich are developed to an extraordinary degree; the bones are long, stout, nearly as solid as those of a horse and almost entirely devoid of the air-cells which give lightness to the bones of flying birds. The wings are almost wanting externally, their bones although retaining the same number and form as those of other birds, being very small, as if suddenly checked in their growth. As the ostrich does not need the powerful wing muscles of flying birds, its breast is devoid of the projecting keel from which these spring, and is smooth and round. Its hight is from six to eight feet, the male being considerably larger than the female and of a blacker tint. In walking while feeding, its stride averages from 20 to 22 inches, when not feeding it increases to 26 inches, and when running, terrified by pursuit, each stride measures from 11½ to 14 feet. When alarmed into flight, it often runs for the first half-mile nearly at the rate of a mile a minute, but its usual running gait is not much over 25 miles an hour. The lower parts of the neck and body of the male are a deep glossy black with a few white feathers interspersed; the color of the female is ashen brown sprinkled with white, and in both, the tail and primary wing plumes are white. These are the white plumes of commerce, while the secondary wing feathers are its long black feathers. The ostrich's voice is a deep, hollow, rumbling sound so like that of the lion that practiced ears have been deceived by it. The weight of an adult male is between 200 and 300 pounds and the birds live from 20 to 30 years. The flesh of a young bird, though a trifle tough to Caucasian teeth, is highly relished by the Bushmen and other natives, but even to these the flesh of an adult ostrich is rank and tenacious. Most of full-grown birds become very fat, and this fat is highly prized. When melted it is of a bright orange color and, mixed with millet flour, it is a feast worthy of a Hottentot chief.

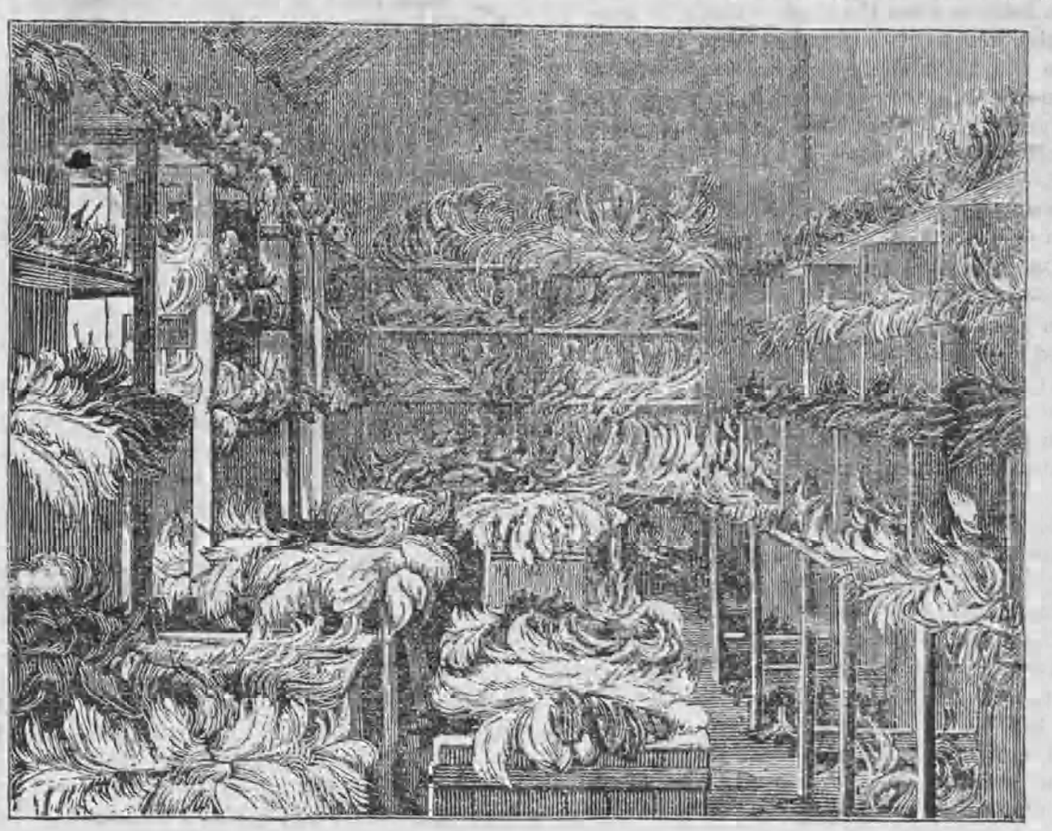
The ostrich is chiefly found in the hot, sandy deserts of Africa where, living often for months without water, its food consists mostly of the wild melons that are scattered over the arid wastes, absorbing and retaining every particle of the moisture condensed in the comparatively cool nights and during the rare but heavy showers that keep alive the scanty vegetation. Grasses, grains and all forms of vegetable life are alike welcome to its capacious appetite, and are ground by its powerful gizzard aided by the stones and other hard substances it gobbles down just as other birds swallow sand or small pebbles. It is gregarious in its habits, associating in large flocks and these are frequently found mixed with vast herds of quaggas zebras, giraffes and antelopes. The male is polygamous, usually having a harem of from two to seven wives

The nest is a mere depression in the sand and in it from 50 to 60 eggs are laid, while a number of supplementary ones are scattered outside around the margin to serve as food for the young brood when first hatched. The male and female take turns in sitting, the hen generally sitting by day and the cock by night, although frequently while the sun is high the eggs are left entirely to its warm influence. It takes from six to eight weeks incubation to hatch out the chicks.

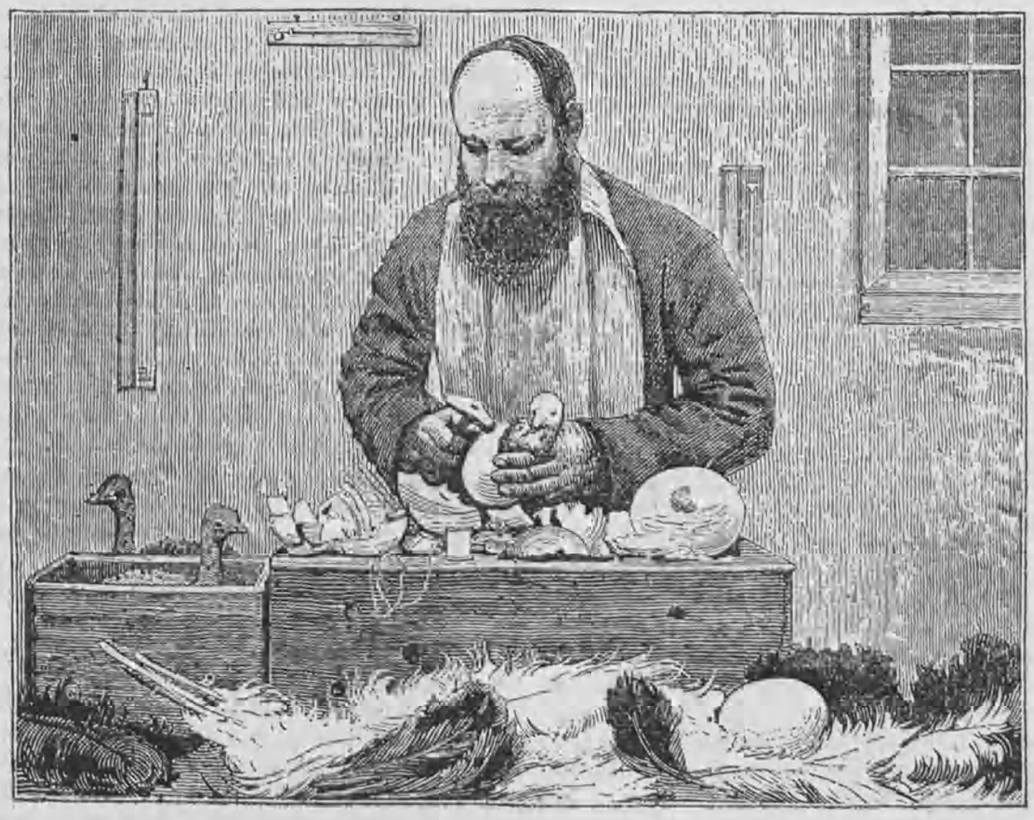
An ostrich egg weighs about three pounds and has the capacity of 24 average hen eggs. They are quite palatable and two of them are frequently eaten by a little Bushman at a single meal. To dress an ostrich egg in the approved fashion: First get the egg; then set it upright



THE INCUBATING ROOM.



THE FEATHER ROOM.



HELPING OUT A WEAK ONE.

COOLIE WITH YOUNG BIRDS.

on the fire; break a round hole in the top; squeeze a forked stick into the aperture, leaving the stem protruding; then twist the stick rapidly between your hands so as to beat up the contents of the shell while being cooked. To make a nice omelet: Stir some melted ostrich fat into the egg while roasting. Within each egg are generally some smooth little bean-like stones composed of the same substance as the shell, which, for the sake of your digestion, it would be well to reject in eating the egg, in whatever way it may be cooked.

Of late, several ostrich farms have been established at the Cape of Good Hope for the purpose of supplying the market with ostrich feathers, and now, next to wool growing and diamond mining, ostrich farming has become the most important industry of South Africa. The most extensive and successful farmer of this kind is Mr. DOUGLASS who originated the business near Grahamstown. He started ten years ago with three wild birds to which eight more were afterwards added. As soon as he found they would lay in confinement, he began his experiments in artificial hatching. For the first three years he met with little success until he invented his patent incubator which has since come into use among all engaged in this branch of industry. It is a low, ugly piece of pine furniture standing on four legs, and is about eight or nine feet long. At each end there are two drawers in which the eggs are placed wrapped in flannel. The drawers, by means of screws beneath, are raised or lowered two or three inches. Over them, along the top of the whole contrivance, is a tank filled with hot water. When open the drawer is lowered, and when closed, it is screwed up so as to bring the side of the egg in contact with the bottom of the tank so as to supply the necessary heat. In the center below the machine one or more lamps give additional warmth. The ostrich turns her egg frequently, so that each side may receive due attention; similarly the ostrich farmer must turn his eggs at least three times a day. A certain amount of moisture is required, as in nature moisture exudes from the sitting bird. The heat must be moderated according to circumstances, or the yelk becomes glue and the young bird is choked. There are certain signs which indicate when the chick is ready to come to light, but it often happens that it cannot pierce the thick shell, and unless helped, as shown in one of our engravings, it would die. Afterwards the ostrich farmer must take upon himself all the functions of an ostrich mother, and must know all that instinct has taught her or he will be pretty apt to fail. So successful, however, have care, study and ingenuity made Mr. DOUGLASS that his eleven birds have been increased to upwards of 900, and stimulated by his success, a large number of imitators have started business in the same neighborhood. Of these some have realized 50 per cent per annum on their capital, while others have sometimes lost their entire investment.

Some idea of the nature of the business may be gathered from the fact that an egg is worth, in gold, $25; a chick just hatched $50, and a full-grown bird $375. A few years ago to purchase either an egg, a chick or an adult bird, these figures would have to be at least doubled. Plucking begins when the bird is 18 months old and two crops of feathers are gathered each year, each bird annually yielding the value of from $45 to $50 in gold. The feathers are sorted into various lots in a room appropriated for the purpose, the white outside rim plumes from under the bird's wings being by far the most valuable. These are sold for $125 per pound.

Some of the arid, waterless tracts of our western territories are excellently adapted for an experiment in this branch of industry. Mr. DOUGLASS' farm comprises 1,200 acres of rough ground formerly devoted to sheep-farming, but owing to a change of grass and other causes, it had so deteriorated that it was no longer profitable for that purpose. Three hundred ostriches, however, find a livelihood on its bushes and grasses without receiving any supplementary food except when sick or very young. In the latter case, a Coolie has charge of about thirty birds, and from sunrise to sunset goes about in the lucern-fields with them, cutting up the lucern or breaking bones for them, besides supplying them with gravel and water. The farm is divided into paddocks, and of birds that are breeding, one cock with two hens occupies each paddock. The younger birds—for they do not breed until three years old—or those which are not paired, run in flocks of thirty or forty. They are hardy brutes which can stand a great deal of heat and cold, can do for long periods without food or water, require no delicate feeding or close attention, and at present prices, yield a very remunerative crop of feathers. It would be unwise, however, for a large proportion of our readers to invest their money in accordance with this hint; for the value of the feathers depends in a great measure on their rarity; Fashion is a capricious deity; and when Biddy wears ostrich plumes, Arabella is pretty apt to lay them aside.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

MR. C——, left two sows together until one had pigs,—result, one left alive out of a litter of eight. The next day the other one had seven—too much bedding—result, five left alive. Then he said he would make up in quality, what he now lacked in quantity, so he turned both sows together after a few days and the two have six pigs. This is after the Shorthorn notion to make several cows suckle one calf. Sows should be separated at least a month before the pigs are due, and not more than a handful of fresh straw should be given to them for a bed. We have known pigs several weeks old to be laid on by a large mother when they had too much bed, and the pigs to be smothered. In an adjoining town more than a hundred sows will not have pigs this spring. They were all taken to one sire. In another neighborhood the dams do not have but two and three pigs each. This confirms the theory that young sires are not as sure as older ones, and certainly not so certain as those which have been tried. Most farmers are stupidly willful, or willfully stupid about stock animals, and this kind of practice once in a while bears its legitimate fruit, and maybe they will learn a lesson. Pigs from a well-bred sire are worth twice as much as scrubs to fatten, which any one can prove by keeping an account of the feed used and amount of pork made by scrubs, and the feed consumed and the pork obtained by the same number of well-bred animals. It is not necessy to have thoroughbreds to do this, but pigs one-half pure-bred will show a marked improvement and profit over common swine. Why? Because they are naturally more fleshy; because they are quiet and do not fret and run their flesh off. More than this; there is not so much food required for waste material, bone, bristles, snout, legs and general hogology, to root, to squeal, to fight, etc., which latter habits a well-bred pig does not have. All these things are so much wear and tear which feed has to supply. Then there is another constitutional proclivity in which a pure-bred pig excels, and that is a tendency to fatten. On this account if designed for breeding, they must be lightly fed or they will be too fat and lack in bone and muscle. The great trouble with the breeding sires is heavy feed and a lack of exercise. When kept shut up in a pen, they cannot be trusted.

Eight pounds of Jersey butter which had been left in the bottom of a stone jar in the cellar for nearly a year without any covering over it, neither salt nor brine, nothing except the cover of the crock, was brought up the other day and reworked and made into two rolls, and brought ten cents a pound more than the highest market price on account of excellent quality. It was so solid and firm that it had kept sweet under circumstances which in our cellar would have spoiled any ordinary butter. We are convinced from this fact that pure Jersey butter will stand exposure and would be valuable for long and trying voyages, or for use when it is necessary to keep it a long time.

When calves are three weeks old they will eat a little meal. We begin with a handful stirred into their milk. At the end of the week they may be given two handfuls, and when six weeks old they will eat a quart and do with less milk. Sweet milk is costly feed to give to calves. Veal calves are not worth fattening this spring as there is no sale. They used to bring $10 when four weeks old, and gradually dropped down to $4 and $5. This year, no demand at any price. Cows keep up in price as high as they have been for several years. This is one of the anomalies in trade, which it is hard to understand. It must be that the low price of grain is causing farmers to increase their dairies. This is a mistake often made; to rush from one thing to another. Better stick to one trade. A few years ago almost everyone went into hops and after a considerable outlay were glad to hop out.

A hen was found so lame she could not walk. Parasites under the scales around the joint just at the edge of the feathers, were the cause. Two applications of turpentine effected a cure, followed by annointing with coal tar. The turpentine killed the insects, invisible to the naked eye, and the coal tar healed the soreness.

An inspection of the baby's nut grove planted a year ago is most gratifying. The filbert bushes are alive and have put forth their spring tassels; the Spanish chestnuts are budding out finely, and the English walnuts do not seem to have minded the winter at all. What jolly times there will be one of these days, if all of these strangers to our high northern latitude continue to grow and do well! We have faith that they will. The native nut trees, chestnuts, shagbarks, (walnuts) butternuts, and black-walnuts are all starting and so are the black mulberries. The latter are not nut-trees, but the fruit is nice and they are new in this region. All of the fruit trees in this section promise abundance this year, not excepting peaches.

HOUGHTON FARM.

GRADUALLY but surely the regeneration of this naturally beautiful estate is progressing. One erection of barns after another, and other conveniences continue to grow into prominence and to be inhabited by every variety of live stock.

The mares had foals, the cows had calves and the sheep have lambs, so that the whole premises are alive with the coming and rising generation. A great deal of road-making was done last year, and substantial fencing commenced, and doubtless another year will complete the improvements which have already produced one immense structure besides minor ones which have been admired by countless hundreds of visitors. Rather more than half way up the East Mountain a good graded road has been made, which opens an easy communication with a fine level pasture on the summit of the mountain where there are more than one hundred acres free from timber.

This fine range of pasture will probably be stocked with young cattle and colts and the flock of sheep will be the chief stock in the fields nearer home till the fat lambs are all sold. On this farm it is intended to feed the stock well from its birth, so that there may be one course of prosperity till the meat goes to market as first-class.

It will be arranged for every animal born to have from its birth a mission which has to be carried out. A lot of lambs intended for the butcher have their mission, which is to become plump and fat and the ewes have the *role* of making as much milk as possible, and the shepherd must do all in his power to cause a good flow of milk which, if he has the food of the right kind, he can easily do if his knowledge is gained from long practical experience. The ewes suckling lambs intended for the butcher must, of course, have first-rate feed and go to grass early and continue to be fed night and morning in the yard with oil-cake and oats.

It requires one continued course of good feeding to produce good lambs, but there appears to be no knowledge of the kind of early "house lamb" which has such a ready sale in London, England, and which is killed very young and is never allowed to eat. The writer of this had 96 Dorset ewes and sold the lambs when about eight week old at from $9 up to $10.50, according to the market and the ripeness of the lambs. He supposes they are much dearer now in London because beef and mutton are. It was twenty-five years ago. G. G.

Horticultural.

JOTTINGS FROM MY NOTE BOOK.

LOOK TO YOUR PLANTS AND SHRUBS.

THE caution in a recent number of the RURAL, against too much haste in uncovering plants and shrubs, north of New York city, was very timely. Plants, shrubs and vines that have been protected during the winter, are frequently injured by the impatient haste of the owner to remove the protection on the first indications of the opening of spring. There is all the more danger of this the present season, in which winter has apparently closed at a much earlier date than is common in our climate. But I wish there had been an additional caution for, not unfrequently, the error runs to the opposite extreme, and the plant suffers in consequence, especially if the covering is deep. I have frequently seen leaves, coarse manure, rubbish, etc., recommended as a winter covering; and the inexperienced, desiring to insure efficient protection, apply an undue quantity of the material. The snows and rains of winter wet this and pack it down so closely as to exclude the air entirely, and the result is that when a few warm days occur in succession, in early spring, the plant is suffocated from lack of air, and becomes moldy, or mildewed, and perhaps heated to such a degree as to destroy its vitality. This is especially the case where too large a quantity of manure is used, even if it be coarse when it is applied.

To guard against such injury, it is well to loosen up the material with a fork occasionally as the warm weather advances, for the purpose of admitting air to the plants, before it is safe to remove the covering material entirely. Where loose dirt is used alone for covering, there is less necessity for looking after the plant, as the earth itself is sufficiently porous, and is not liable to be heated by any process of fermentation. Although these hints come rather late in the season, perhaps it is not too late for them to be profitable in some localities. CLINTON.

Farm Economy.

RYE FOR GREEN MANURE.

WM. J. FOWLER.

THE experiment which I tried last fall in sowing rye to be plowed under this spring is a decided success. The rye already covers the ground in a dense mat and by the middle of May will give several tons of green manure to be turned under. Much of this will be water; but for the crop I intend to plant, (potatoes) a good supply of moisture is quite as important as fertility. I more than half believe that one reason why potatoes are a better crop on rich soil than on poor is because the rich soil retains moisture better in summer droughts. A heavy growth of rye turned under in May will decompose rapidly, furnishing both heat and moisture to the growing crop. Even as early as this, I can see that the rye is helping the land. Its net-work of roots draws moisture from the soil which is thrown off by the leaves, and also gives considerable drainage. I can walk over a mass of rye in early spring, while bare ground plowed in the fall is too spongy and wet to bear my weight. I have no doubt it will pay to sow rye on corn or potato stubble in the fall, when it is intended to plow early and sow oats or barley. For this purpose it should be sown very early so as to get as good a growth as possible in the fall. At the best, there cannot be much to plow under in April; but the increased dryness of the soil, enabling earlier plowing, is very important. The green manure under the furrow will also have a slight effect in keeping the soil from becoming too compact. In other words, it will make the soil warmer and dryer in early spring and moister in the hot dry weather of July and August.

Rye is an excellent crop to sow in orchards to be plowed under as green manure. Young orchards should be kept exclusively in hoed crops; but the serious difficulty is in finding manure to keep the soil in condition. Six or ten acres kept in hoed crops every year will require all the manure usually made on a hundred-acre farm. Either the orchard must be neglected or profitable cultivation of the rest of the farm be abandoned. Clover will not help us out here, for good as clover is everywhere else, it is death to young trees. The clover plant makes its growth during the summer and its roots strike down, robbing the trees of necessary moisture. What is needed for orchards is a crop whose roots do not penetrate deeply and which makes its growth in fall or early spring while the trees are at rest. Rye answers these requirements exactly. Besides, with rye as green manure the ground is plowed at seasons when injuries to the roots by plowing are most easily repaired. When clover is plowed under in midsummer, tearing the roots of the trees often gives them a shock which does more injury than the decaying clover can do good.

On other ground than orchard, clover will and should be the main crop for plowing under. But on every farm there will always be some corn or potato stubble which would remain bare during the winter, and on such fields rye should always be sown. It is always injurious to land to be left naked at any season, and during the winter a growth of rye is about the only practical mode of protecting it.

Monroe Co., N. Y.

MANURES.

JUDGING from letters we are constantly receiving, there is a good deal of misapprehension as to the several objects of experimenting with commercial fertilizers as between the Stockbridge manures and those to which we have referred as best suited to ascertain what particular manurial ingredient any given plot may stand in need of. The principle of the Stockbridge manures is that of furnishing plants the food which by analyses has been found to enter into their composition and which is more or less deficient in the soil. It is taken for granted that most soils are sufficiently supplied with magnesia, silica, iron, &c., but that they need potash, nitrogen and phosphoric acid, which when added in sufficient quantities will restore to the soil all the food which the plant needs.

Now, soils differ. Some may contain a sufficiency of potash—some lime—some phosphoric acid, &c. What we propose is to ascertain, by using special fertilizers on different plots, those elements of plant food which are already existing in the soil in sufficient quantity. If, for example, phosphoric acid were found not to add to the natural product of the land, the experimenter would know that it would be useless to purchase phosphate of lime (bone) or superphosphate. The Stockbridge manures are intended for the same purposes as stable manures. The use of special fertilizers upon small plots, which we have advocated, is intended solely to ascertain, if

this is possible, what special food the land needs, and what special food it is already provided with, so that the farmer may not spend his money in the purchase of what he already has an available stock of on hand.

Field Crops.

CULTURE OF BROOM-CORN. NO. 1.

W. H. WHITE.

To grow the finest and best brush for which broom-corn is grown, requires proper soil and thorough preparation, good seed, seasonable planting, clean culture, timely harvesting, with suitable preparation for market or working, requirements essential to the economical production of any farm crop.

The tall-growing variety is the kind to which my experience and observation are limited, and it is the sort generally grown in New England. The dwarf may be as good, but having never seen it tested, I am not qualified to recommend it. I have heard it condemned as growing brush too slender, on some soils, which would be a serious objection. The seed should be selected from growing plants, previous to harvesting the general crop. Choose those plants which are the earliest and most healthy, with fine, long, thick and compact brush. Let the seed ripen before cutting from the stalk, if possible in the field, if not, cut at the roots and shelter from freezing; then cut, dry, and thresh it separate from the general crop, running it through a fanning mill to clean it of all light and immature seed. Save it through the winter, as you would any choice seed, where it will be free from vermin, moisture, or liability to heating, etc. Such a course of selection continued for a term of years, will surely improve any variety, producing fine crops and those likely to escape early frosts.

The soil proper for broom-corn should be dry; wet or moist soils do not answer at all. A rich and deep loam, or alluvial soil, such as we find on the high banks on the east side of the Connecticut River, or on some of the high grounds further back, is desirable.

To obtain the finest and best brush, the soil should have been cultivated to some hoed crop, one or more years from a sod, as a close sod is apt to grow a heavy, coarse, undesirable brush. If a sod is to be used, clover is best, next, a clover and timothy sod, treated as follows: In the fall, or early winter cart out and spread broadcast, over the sod, a thick coat of good stable or yard manure, and let it lie till spring, when it should be plowed down, breaking and working the ground deeply; pulverize well, after allowing it to lie a few days to settle, etc., and plant to Indian corn, potatoes, or some other hoed crop, fertilizing the same in the hill or drill, the object being to reduce the sod. This such treatment will do and put the soil in fine condition to grow a good crop of broom-corn the following year, provided thorough, clean culture is given this first crop. Strong, or coarse manure applied the same season the crop is grown, is unfavorable to the production of fine good brush; and the land needs a previous dressing to avoid the necessity of high manuring the season the crop is planted. If necessary to fertilize at all, a shovelful to the hill of fine well-decayed farm manure gives the corn a fine early start, and a lively fresh green color.

An important item, in growing a good crop, is in plowing and pulverizing the soil preparatory thereto, and this is one which is apt to receive too little attention generally. Plow deep and well, and make the soil fine by harrowing etc. This should be done in spring, about the same time that we plow and fit our ground for Indian corn. Strike out the rows, preferably north and south, as giving a better sun exposure, three feet apart, with a one-horse plow, and in these drills place the fine well-rotted manure, three to five cords per acre, thirty inches apart for the hills. I prefer hill to drill culture for convenience of tillage. It is essential that the plants start into a quick growth at once, as they are somewhat tender, having only a slight hold in the soil, and are easily affected by unfavorable weather. It is not best to plant till the soil gets warm, following Indian corn rather than going before.

If the best seed is had, ten or twelve seeds to a hill are plenty to guard against accidents etc. Haul a little soil over the manure, drop the seed on that and cover with one-half inch of fine soil. I adapt these directions to small growers who wish to grow *good* crops; when forty, to one hundred acres are grown with only limited help, other modes may be better, but no one should attempt to grow this crop in any such proportion to help if he expects to obtain the highest market price for his crop.

As soon as the plants are up, and the rows can be distinguished—which should be in twelve or fifteen days—begin to cultivate; don't wait for the weeds—it is the corn wants the culture. Early culture gives the plants a start, and they grow all the better for it; follow the horse cultivator with the hand-hoe, carefully freshening the soil in and about the hills and plants. A second dressing needs to be given in ten to twelve days when the plants should be thinned to six or eight; no more than four to six should be allowed to mature in a hill. If the plants do not thrive to suit, give them a dressing of ashes and plaster—gypsum—mixed, about a tablespoonful to the hill, at or before the second hoeing. This dressing is a good one even when the young corn looks satisfactory.

The after culture may be principally done with the horse-hoe, taking care to keep down all weeds, and to keep the crop thriving. As much as possible should be done by horse labor, but clean, thorough culture is essential and especial attention should be given while the plants are young and small.

Worcester Co., Mass.

THE HUMMING BIRD.

Sheep Husbandry.

TRAINING A SHEEP DOG.

Miss F. V. B., Canaseraga, N. Y.—Commence breaking the pup when not older than six months. Pups from well-broke parents and ancestors on both sides of the kennel are most likely to prove sensible and easily trained. The best place to train the pup is on the road. In driving sheep on a journey, he will learn more in a month than in herding on a range during summer. The first thing is to teach the pup to mind your word; call to him kindly by name, and if he doesn't come at once, pinch his ears until he learns prompt obedience. A couple, or more, severe floggings are an almost indispensable part of a pup's training, but be sure he knows for what offence he is being whipped. Let the punishment follow the offence promptly, and if it can't be administered then, don't whip him an hour or two later, or when he has forgotten all about the matter. Nearly all directions to the pup should be given by motion of the hand in the direction you wish him to go, and always accompany the voice by motion of the hand. After your pup has learned to mind the word and is trained to march back and forth from one side of the flock to the other at the sweep of your hand, commence to teach him to pass up the side of the flock. To do this make a motion with your hand up the side you wish him to go, throwing your arm out as you would to direct a man beyond the reach of your voice; and call out "Away up!" until he gets hold of your meaning. To teach him to go clear round a flock and so turn them towards you, repeat the motion of sending him up the side until he gets partly round the head of the flock and then call him down on the opposite side. After he has once learnt to go round the flock, a sweep of the arm from the side whence you wish him to start to the other, is the proper motion, accompanied with the cry "Around them!" Always call his name before giving any order, and be sure to make the directing motion with your hand. To teach him to drive behind the flock in whatever direction you wish to go while leading on ahead: get the flock in a lane, yourself in advance, and if the dog undertakes to follow you, drive him back, and when he has got to his place, keep an eye on him and sing out occasionally "Drive them up!" To train him to bark whenever you wish, make a fuss yourself and so get him excited and then sing out "Speak to them!"

What makes a sheep-dog a shepherd, is the instinct, natural or acquired, which leads him to trot to and fro behind stock, and a well trained animal will take as much pleasure in driving sheep as ours do in following a wagon. Always treat the dog kindly and rationally, and when compelled to whip him, when it is over pat him on the head to show you don't bear malice, and to prevent him from sulking.

DARWIN tells us, in his Researches into Natural History, that in Banda Oriental, South America, it is a common thing to see flocks of sheep guarded by one or two dogs, at a distance of some miles from any house or man. The method of canine education there practiced, consists in separating the puppy, while very young, from its mother and in accustoming it to its future companions. A ewe is held three or four times a day for the little thing to suck, and a nest of wool is made for it in the sheep pen. At no time is it allowed to associate with other dogs or with the children of the family. The puppy is moreover, generally castrated, so that, when grown up, it can scarcely have any feelings in common with the rest of its kind. From this education it has no wish to leave the flock, and just as another dog will defend its master, man, so will this the sheep. On the approach of a stranger, the dog immediately advances barking, and the sheep all cluster in his rear as if around the oldest ram. These dogs can be readily taught to bring home the flock at a certain hour in the evening. Their most troublesome fault when young is their desire to play with the sheep, and in doing so they sometimes gallop their charges unmercifully. They come to the house daily for some meat and as soon as they get it, skulk away as if ashamed of themselves. Away from the flock they seem timid with regard to other dogs, but when with their charge neither domesticated nor wild dogs dare venture to attack them.

WOOL-GROWING AND THE TARIFF.

THERE has been an important conference between the wool-growers and the woolen manufacturers in regard to proposed changes in the tariff as it now stands. The policy agreed upon was to oppose any modification or reduction in the duties upon foreign wools and woolen fabrics. The present tariff was adopted ten years ago and was the result of careful and thorough consideration on the part of the representatives of all those interested in these two great industries. Notwithstanding the protection now received, sheep-breeding has decreased east of the Mississippi River in ten years more than four millions in number. The truth is, growing sheep for wool will not pay in all this vast region, but it can be made to pay with mutton as the basis. Fifteen hundred sheep are now sent in the carcass weekly in the refrigerators to foreign markets and the demand is gradually increasing and would increase faster if there was enough of first-class mutton to be had.

The same is true of the domestic demand. We want more and better mutton and this will beget more consumption and, of course, greater demand. The farmers east of the Mississippi, want to take hold of the subject and work it out to a successful conclusion. The sheep interests are of such magnitude and importance to this country that Congress cannot permit any material reduction in the protective duties, which will jeopardise these interests. West of the Mississippi, sheep breeding has increased many millions within ten years and will go on increasing very fast if the wool-growers are protected. In these vast areas of country growing sheep for wool is a profitable business. The woolen interests are now being carefully watched by a competent committee who are authorized by the late conference to take such action as may be deemed best, having received full and complete instructions in regard thereto.

MALIGNANT ANTHRAX IN SHEEP.

DAVID. M. Pittsfield, Pike Co. Ill. asks what ails some of his flock of thirty sheep: lately five ewes were taken ill very suddenly, and for over two weeks continued getting better and relapsing alternately. Then one died, three were killed to put them out of their sufferings; the fifth got well and is raising twins. They held their heads very high, would lie down and stretch out their feet stiffly and remain so until helped up. Sometimes they would eat a little meal if it was held up to them. They all had dead twins. None of the remaining sheep were affected. Some said "worms" and turpentine was given without effect; others said "poison" and strong coffee was administered without doing any good. The dead animals would have been opened, but they were so offensive even before their death, that the operation was impossible.

ANS.—Although it is impossible to decide for a certainty from this description, there seems little room to doubt that these sheep were affected with a form of anthrax or *charbon*. This disease is always very fatal in its effects and has never been treated with much success in sheep; in fact, American writers on the diseases of these animals have either misunderstood its nature entirely or have given but the most unsatisfactory descriptions of it. The antiphlogistic treatment recommended by English veterinarians is entirely out of place and should never be attempted. The treatment practiced by PROF. LAW with cattle would probably give best results. Give 20 drops nitro-muriatic acid and 40 grains chlorate of potassa in a pint of water twice a day. Be careful to wash well with soap after being around such animals, as the disease is communicable to man.

D. E. SALMON, D. V. M.

The Naturalist.

HUMMING BIRDS.

THE Humming Bird in all its genera and species is peculiar to this Western Hemisphere and the adjacent islands. They belong to the larger family of *trochilidæ*, of which there are three sub-families, the wedge-tailed humming birds, the curved-billed humming birds, and the straight-billed humming birds. The most brilliant species adorn the tropical forests where they flit and flutter amid the rich drapery of the orchids, whose splendid blossoms rival the beauty of these "glittering fragments of the rainbow," as AUDUBON aptly calls them. As the distance from the tropics increases their numbers decrease, and only a few species are found within broad limits of the United States, though some of these are met with as far north as latitude 57°

Everywhere the family may be recognized by their diminutive size, gorgeous plumage, long, slender and acute bill, and peculiar tongue. There are probably 400 species though the range of some of them is very limited. Everywhere too their manners are the same; very quick and active, nearly always on the wing, constantly displaying their brilliant hues as they dart to and fro in the sun. While their bodies are suspended, apparently motionless in the air over a flower in which they are feeding, their wings are moved so rapidly that they become invisible, causing a humming sound

whence their common name is derived. These jewels of the air seem to disdain the ground which they rarely touch, though they readily perch on branches. Bold and familiar they are frequent denizens of gardens in thickly settled localities, sometimes entering rooms and flitting fearlessly close to passers-by. Full of courage, they are very pugnacious and will unhesitatingly attack any intruder coming near their nests. These are usually placed on trees, shrubs or reeds, average about an inch in diameter and the same in depth, are delicate but compact, and lined with the softest vegetable downs. The eggs, one or two in number, are generally about half by one-third of an inch, of a white color, and hatched in 10 or 12 day.

It is difficult to keep humming birds in cages, though they have been kept in rooms and conservatories for months feeding on honey and sugar and water, and the insects attracted by these dainties. Although they are fond enough of honey, insects are essentially their food, and their barbed and viscid tongues are admirably adapted for drawing these from the depths of tubular flowers over which they delight to hover. The bill when closed forms a tube through which the long, divided and thread-like tongue is protruded into deep flowers.

Of the curved-billed humming birds there are more than 100 species, none of which are found in the United States. As represented in the engraving, the bill is long and slightly curved, the tail long, broad and in the males of some species decorated with a couple of protruding feathers. Brazil is the favorite habitat of this entire subfamily.

BEURRE SUPERFIN.

Miscellaneous

PLOWS AND PLOWING.

The season for plows and plowing is again here, and it is well that we take a retrospective view of what has been done the last year and see what is in store for the next. Improvements crowd upon us so fast that we can hardly keep pace with them, and to say that anything is perfect in the way of farming tools is heresy.

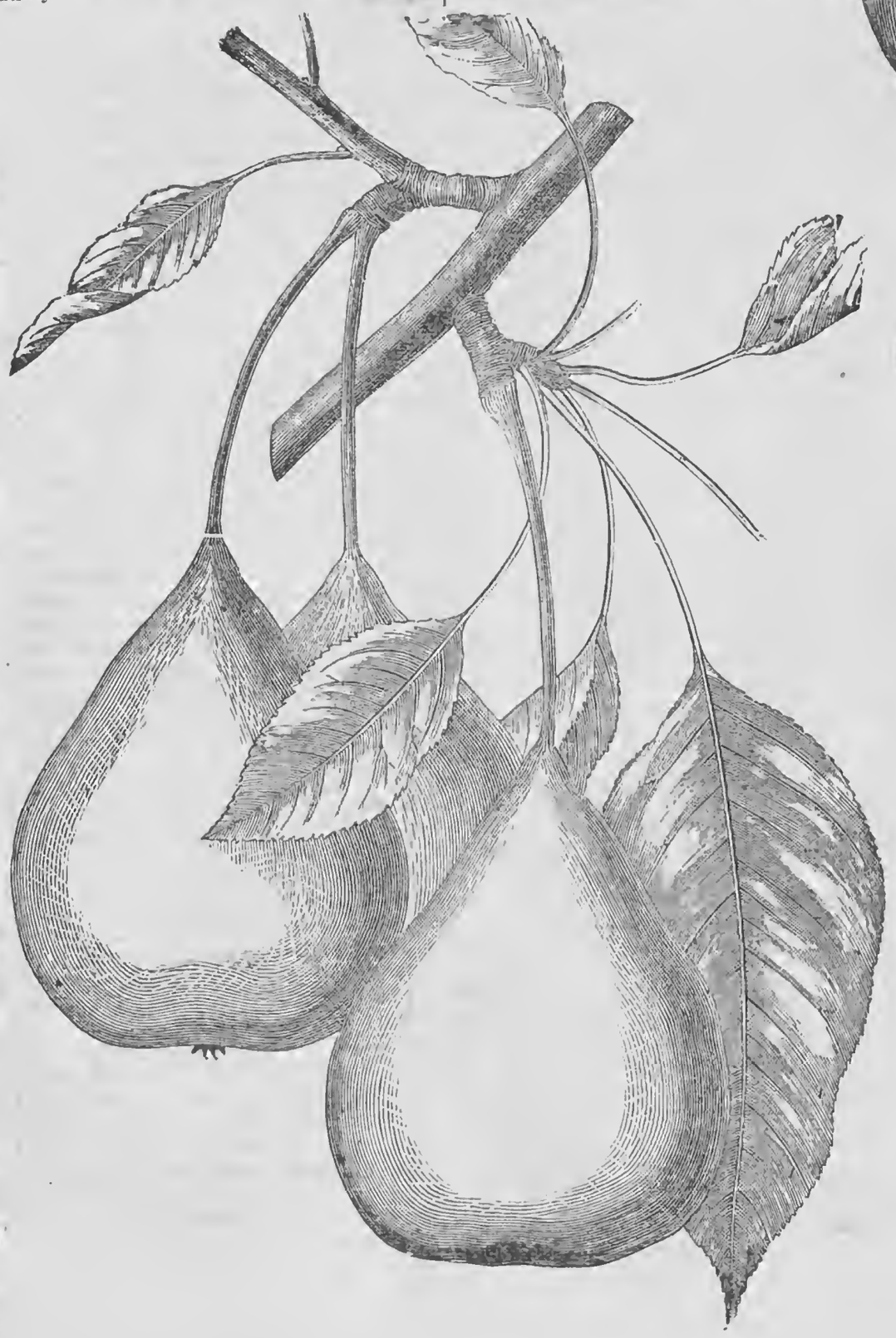
Not quite a year ago we held a plow trial in this township and many good plows were represented, all of which were considered first-class. The new Chilled Metal Plows were in favor on account of their perfect clearing in our muck soils where others failed. While our trial was in progress a strange visitor in the line of Chilled Plows made its appearance on the ground. I refer to the Gale Chilled Plow made by the Gale Manufacturing Co., Albion, Mich. This plow attracted attention because of its peculiar form and lightness of draft. The agents, Messrs. Hahn & Ruhlman, spoke to me in regard to the difficulties of introducing this new plow, as others of good make had the lead, and most of the enterprising farmers were supplied with good plows. I did not encourage the agents in the face of these difficulties, but they secured the agency and went to work selling the plows on trial. The results have been most extraordinary. Farmers seemed to discard their other purchases and now, in traveling over this region, the Gale is seen everywhere. I had thought this plow mania had fastened on to the farmers, and the desire seemed to be for something new at the sacrifice of utility, as I know of many who last fall told me they would not buy any new plow while they possessed a good one, and this spring I see these same parties sporting a Gale. Well, my curiosity led me to ask many how they liked the new departure, (I fancied nice paint and a fine appearance had captivated them), but all replied: It is the best Plow I ever held, as well as the nicest looking.

To satisfy myself I set about a minute examination of the different points in the form, etc. The form at once leads me to think the inventor a thorough genius. The share and entering point of the mold board are of decided Scotch pattern, and enter the ground in a way to get the least possible draft. The form of the turning part of the mold board seems to combine that shape necessary to turn a sod nicely and yet make a good stubble plow. The land-side is formed so as to cause the least friction possible, and care has been taken in the construction to prevent clogging. The beam is adjustable and the draft, for depth or width, is regulated in a moment. The new style handles and the manner of regulating by moving up and down, to suit a tall or short man, is an achievement combining two valuable principles, the greatest of which is this: The point where the handles fasten on to the beam is beyond or in front of the main body or "heft" of the castings. The adjustable bearings of the handles at the rear of the beam and castings are the fulcrum, and the plow is handled with such ease that upon the slightest movement must be apparent. The ordinary style are fastened at the rear of the beam castings, which is the principal cause of what is known as "kicking." This "kicking" is greatly reduced in the "Gale" for the reasons above given. The jointer and colter arrangement is ingenious and practical, combining strength, convenience and style.

I have carefully dissected this plow and must admit it combines so many good points that these admissions are due against former prejudice. I am free to admit that nothing is impossible in the way of improvement, and even the Gale Plow may be improved upon; if so, this plucky firm will soon find it out. It is a fact of every-day repetition that no two men see the same utility combined in the same tool, consequently we need a variety of differently constructed farming implements to suit different ideas, but I have never seen so many united in one implement, and farmers are fast educating themselves to be judges of the tools they use. Hereafter imposition will be next to impossible.

It is not within my province or my desire to disparage other makes of plows as I am using the "Oliver" and others which are indeed good plows, and have a great sale, the Oliver being a great favorite with me in many respects. These hastily written views are not at random as I have tried to investigate and understand the different principles combined in farm implements and hope in my own locality to share the reputation of being somewhat practical in this respect. My efforts are unbiased and with an eye single to promote the general weal.

Boardman, O., April 15 D. B. Raymond.



TYSON.

Pomological.

PEARS.

BEURRE D'ANJOU.

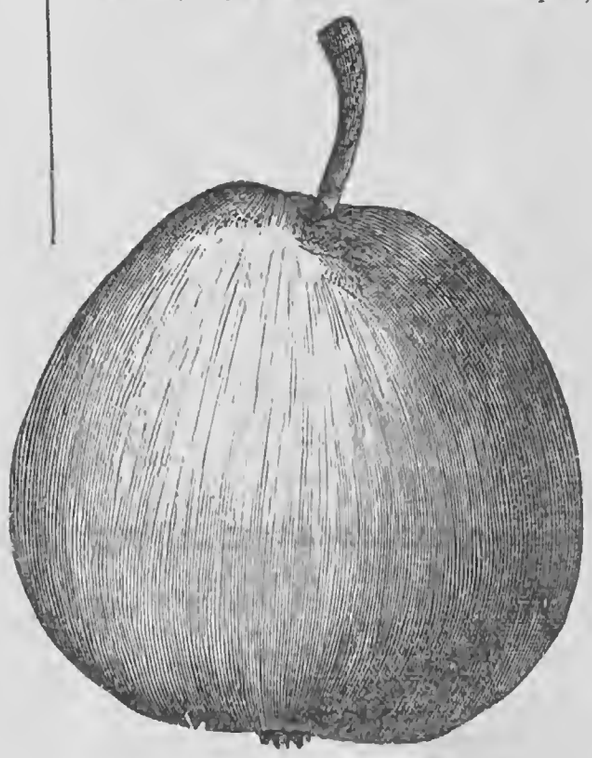
Of all the pears that we have tested in the Rural Grounds, there is no other of which we are enabled to speak more highly for general excellence. See page 265.

The flavor is vinous and rich, the flesh, slightly yellowish, is finely grained, melting, and buttery. It begins to ripen in October and keeps well until early, sometimes mid-winter. The tree is very hardy, of rapid and shapely growth. The fruit is above medium size, regular, greenish yellow with a dull red cheek, somewhat marked with russet. In this location it is also one of the best upon the quince.

The American Pomological Society gives the D. Anjou two stars for the following states: Vermont, Mass., R. I., Conn., N. Y., Mich., Penn., N. J., Md., Va., O., Tenn., Ill., Iowa, Neb., Kan., S. C., Ga.

BEURRE SUPERFIN.

Our only specimens of this excellent pear,



PAUL AMBRE.

planted four years ago in the fall were so injured by the next winter (the coldest for many years) that they have been slow to recover. We first saw the trees and tasted the fruit in the grounds of Messrs. Ellwanger and Barry five years ago. It is a very juicy pear with a decided but very agreeable acidity. The skin is russeted upon greenish-yellow. The tree is vigorous as a standard and does well upon the quince.

The A. P. S. gives two stars to the following states: Mass., Md., and D. C., S. C., Ga.

TYSON.

This is one of the finest of summer pears, of medium size and perfect shape, of a bright yellow color. The flesh is of fine texture, buttery, juicy, sweet, and aromatic. Ripens the last of summer. It grows rapidly on quince or pear but does not come into bearing very early.

The A. P. S. gives one star to the following states: Md., and D. C., Ky.

THE CHURCH.

This pear is very little known when its great merits are take ninto the account. See page 265.

It is very productive and the fruit is uniformly good. The flesh is melting and buttery and the flavor rich, sweet and excellent. Ripens September.

PAUL AMBRE.

Ripens in October. Aromatic melting, buttery. Medium size, greenish-yellow and russet It resembles Beurre d'Anjou. The tree is both vigorous and productive.

There are three varieties of fruits that are fast being superseded by better varieties and we are glad that it is so. They are the insipid Bartlett Pear, the coarse Concord Grape and the sour Wilson Strawberry.

Veterinary.

MALADIES OF STOCK.

ANSWERS BY D. E. SALMON.

POOR APPETITE IN A HORSE.

M. M. A., Wirt Center, N. Y., wishes to know what is the matter with a four-year-old horse. Although the animal has a first-rate appetite for

grain, he won't eat half the hay a healthy beast ought to, and what he does take is eaten without relish in a half-hearted sort of way; consequently he can't stand hard work as well as his mate, and such work makes him fall away in condition speedily.

ANS.—This horse is probably of a different temperament from his mate and may never be as hardy. In such cases medicines at the best have only a temporary effect and are not always satisfactory. Make the animal's surroundings as healthy as possible, *i. e.*, keep in a clean, light stable, see that he is well groomed twice a day, give pure water for drink, feed bright, plump clean oats and first-quality hay. As medical treatment, try one-half pound Glauber salts in two equal doses, morning and night, to be followed the second day by powders composed of eight ounces powdered gentian root and two and one-half drachms of powdered nux vomica, well mixed and divided into doses of one-half ounce each. One dose to be given morning and night.

AILING STOCK.

Miss F. V. B., Caneseraga, N. Y., says they have one two-year-old colt and two yearlings which had the distemper, epizootic—or something of that kind—last August and September. Afterwards through family bereavement, the animals fell into the charge of help who fed them poorly so that they began the winter in ill condition. They have had good hay and four quarts of oats per day; will not eat mashes or potatoes. They eat pretty well, but don't gain a bit, are weak and mere scare-crows. As they are expensive blooded stock, it is important that they should be put in good condition. 2. They have also a four-year-old heifer that gives four quarts of milk a day, has been stabled and fed meal and slop enough to make her fat—but her hair is rough, she has a continual cough, her mother was a superior cow with the ugly drawback of hair standing the wrong way.

ANS.—1. The proper treatment for horses is given in answer to M. M. A. above, whose animal is affected substantially in the same way.

2. Give the cow one pound of Glauber or Epsom salts dissolved in water; the next day give half this quantity; and follow this the third day with the tonic powder which is recommended in the inquiry already referred to for horses in a similar condition. The doses and time of giving should be the same as with horses; it is readily taken mixed with food. The action of the salts would be assisted by adding one or two ounces of powdered ginger to each dose.

[For answer to third question, see Sheep Husbandry.—EDS.]

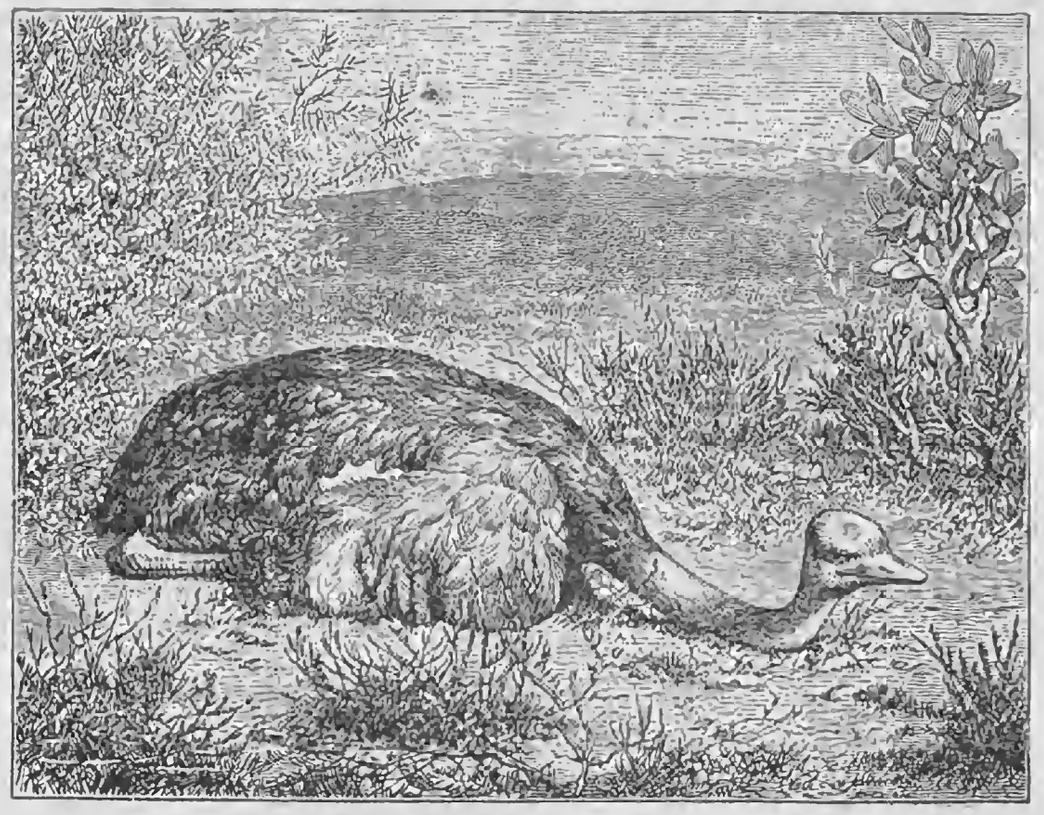
Everywhere.

FALL vs. SPRING SOWING IN NORTH CAROLINA.

LAST fall I wrote a letter of inquiry to the RURAL about sowing grass seed on twenty-five acres for permanent pasture. I was advised to sow the land to rye and have the grass seed all sowed by the 15th Sept. But as it was impossible for me to do so, I did the best I could to get it sowed early. I was necessarily compelled to sow the land to wheat as it was about all the wheat land I had to spare. I had sowed a good portion to red clover last spring and the fall previous. Moreover I had tried rye a time or two before and failed; and there is not much market for rye here at one-third less than the price of wheat.

So I commenced sowing wheat early in October and sowed grass seed as fast as I got the wheat in. I just sowed the seed on the fresh plowed land after the wheat was sowed, without harrowing. The first sowed, about four acres, was a steep hill that was in corn, the only crop that had been on it for at least fifty years, as it had grown up with pines and they were large enough for saw-logs. On that I have as fine a stand of grass and clover as I ever saw. The ground, wherever it is moderately good, is perfectly matted already. The next sowed, about five acres, was fallow land of the same description, except not so rolling. It had been cultivated one year before in corn. On this there is a good catch of grass, but as there was rain on the land after the wheat was plowed in and before the grass was sowed, it did not grow so fast nor did it come up as well. The next sowed was about three acres of old pasture land. Some of it was rich and all considerably rolling. It had been in wheat the year before and in corn the year previous. This was sowed about the 20th of October, and at first I did not intend to sow the grass until this spring as I thought it was too late; but the ground was in excellent order and I sowed the grass seed. On this I have only a moderately good stand. I must here say that the fall was very favorable to grass, as there was abundance of rain, which was the reason that the last was not sowed sooner.

The remainder of the field is about twelve acres of old field, having been in broom sage for several years until last summer a year when it was turned and sowed in wheat. On this I commenced sowing grass seed, following with a grain drill with 160 lbs. of Merryman's dissolved bone to the acre, about four weeks ago, and after sowing about two-thirds of the field I was stopped by rain. On this the grass is up nicely, but I would much rather risk what was sowed in the fall. The remainder of the field has been sowed about two weeks or more, but as there has been no rain since it has not come up yet.



A BIRD SITTING.

The winter has been rather unfavorable to grass as it would freeze hard at night and thaw the next day, and so on, sometimes for a week at a time. I am satisfied that if clover or grass can be sowed in the fall in time to get it up, it is much better than the spring for this latitude. My experience with clover is that, as a rule, it is as liable to die from sun in the summer as from frost in the winter. The former liability is entirely obviated if sown in the fall and it will make a pretty fair crop the first year, which it will not do if sown in the spring.

In this county we can raise almost anything. I made last year 1,400 lbs. seed cotton to the acre on ten acres. I also made 450 bu. of wheat on fifteen acres of old land; also 100 bu. sweet potatoes on a quarter of an acre, and other things in proportion. I always raise mixed crops and it pays best. Everything is low in market: Wheat about $1.10; corn, 50 cts.; sweet potatoes, 60 cts.; Irish, $1.00; country bacon, 8 cts.; butter, 20 cts.; eggs, 7 to 8 cts.; land from $5 to $18 per acre, according to quality and location. S. A. L.

Mill Bridge, Rowan Co., N. C., April 5.

NORTH CAROLINA NOTES.

M. B. PRINCE.

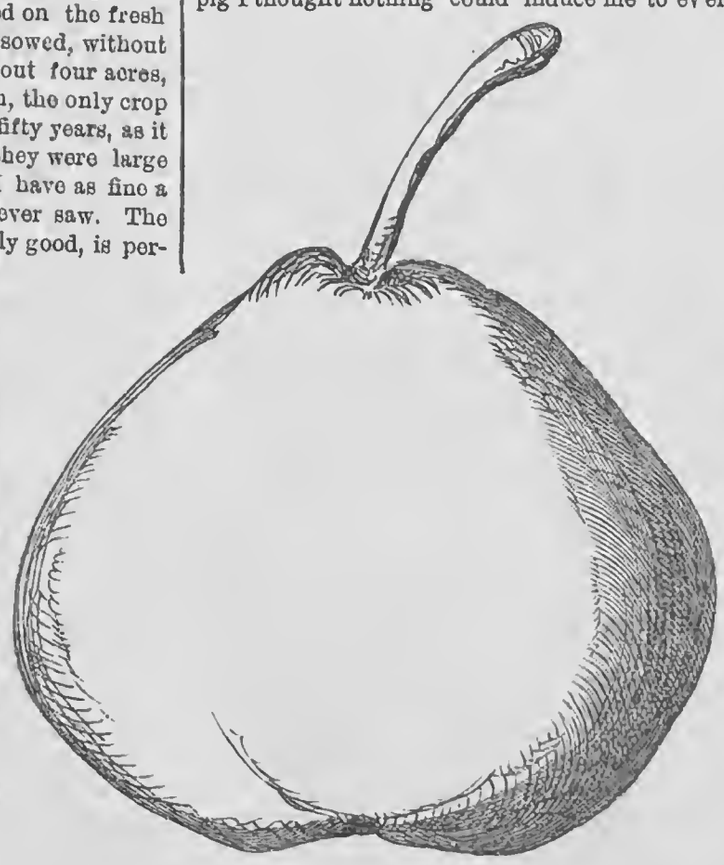
SCRUB HOGS.

AFTER a little experience with a Razor-Back pig I thought nothing could induce me to ever own another, but having lost nearly all my Berkshires last summer, I was obliged to purchase such as were to be had in the neighborhood and among the number were two of the genuine Simon Pures, with not the least indication of Berkshire, Essex, Chester or Duroc. Slaughtered when seven months old, each weighed twenty-five pounds less than a half-blood Berkshire five month old, though receiving the same feed and care. If some of those worthy people who think a hog is a hog and nothing more, will try one or more of these long-legged, long-nosed, fence-jumpers, with hams like a cat and ears like a cabbage leaf, and try to fatten it by the side of any of the improved breeds, I am sure that they will become convinced of the great superiority of the latter when dressed and on the scales if not before.

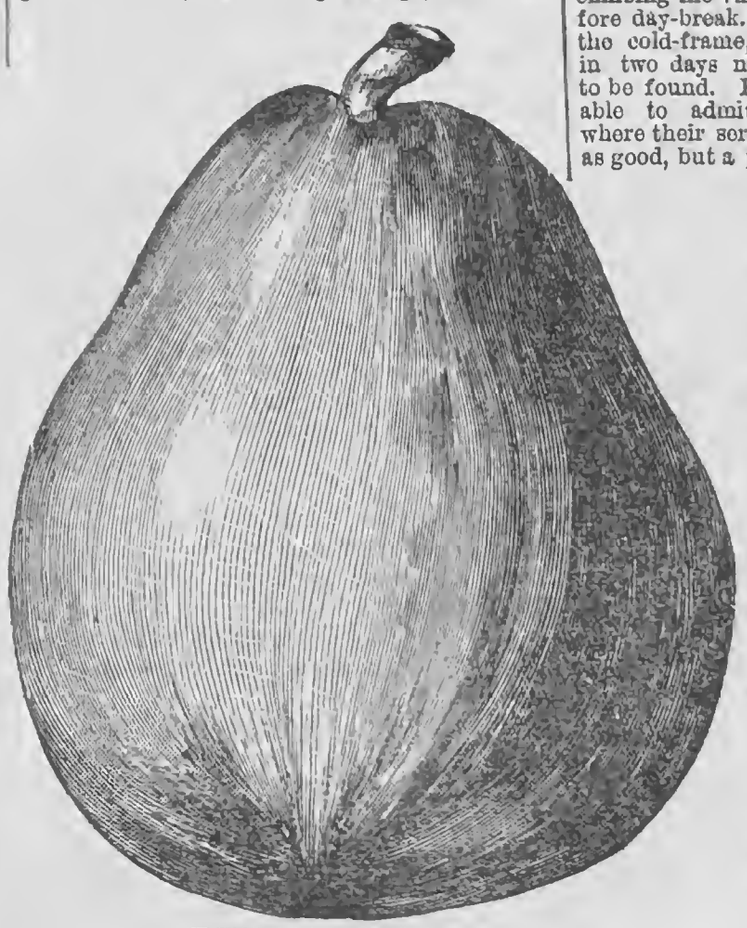
THE COW FOR THE SOUTH.

In this section of the South we have given but little attention to the improvement of domestic animals. Our cattle are what are usually denominated "Natives"—small, scrawny, and giving to the observer every indication of poverty. The bulls are seldom castrated until one or more years old, which gives them the thick, unsightly, stag-horns. They are put to work when two or three years old, usually singly, before the cart and plow, making a very efficient little team, and it is truly wonderful how much plowing a freedman will accomplish with a fair specimen of an "old steer" as they call everything of the ox kind. Several Jerseys, Shorthorns, and Ayrshires have been introduced in different parts of the State, but I am convinced that the Devon is the stock for the South. Being active both in the harness and out they would accomplish nearly the work of a horse and at the same time thrive on our thin pastures. The flesh of our "Natives" is quite inferior, which would give the Devons another advantage. Moreover the latter, as cows, are much better milkers, and though not equal to the Shorthorns as meat producers, or the Jerseys for the butter dairy, yet taking all points into consideration—the demand for working cattle, the price of butter, our thin pasturage, and their adaptability to fatten—all combine to give them the leadership, and to make them popular in the South.

Brookston, N. C.



CHURCH.



BEURRE d'ANJOU.

RURAL SPECIAL REPORTS.

ILLINOIS, April 15, 1878.

ABOUT the seed exchange I offered in RURAL: It has kept me busy, since hundreds of letters have come! The RURAL should certainly be a good advertising medium. Some of the foremost and most noted horticulturists in the country have applied. In all my replies I spoke many good words for the "RURAL." If I were to engage in it again, I should hire a clerk. A. C. W.

FAIRVIEW, Erie Co., Pa., April 16, 1878.

IN looking over the old RURALS of 1872, I noticed a letter from IRENE TURNER of Florida—stating that if any of the readers of the RURAL wished to know anything about Florida, she would answer their questions—the name of the county where she resided was not mentioned or I should have written to her. If agreeable to her I would like to correspond.

MISS S. E. RULE.

Entomological.

CUT-WORMS IN GREEN-HOUSES.

B. PICKMAN MANN.

THE moths, whose eggs produce cut-worms, fly, according to the species, from as early as June 9 to as late as September 9, perhaps beyond those dates. Even the same species does not always lay its eggs in the same way or in similar situations. The young caterpillars feed on roots and stay under-ground, but the older caterpillars mount the stems of herbs or of low trees, eating the buds, leaves, tender twigs or the stems themselves. Some of these caterpillars cut off the stems under-ground; others drag the stems under-ground before they eat them. All have the habit of feeding at night, and those which come out of the ground at night to get their food are snugly hidden again before day. Therefore frequently the twigs of young trees are kept bare, and the cause of their bareness is not known. The caterpillars will be found near the trunk of the tree or at any rate beneath the branches, and not very deeply buried. Most if not all the species are caterpillars when they go into winter-quarters, and wait till some time in May before they sally forth for the food on which they are to finish their growth. But some either pass the winter as moths or in the egg stage, thus coming to the destructive period of their lives later, while others, favored by circumstances, come out earlier.

A case of the latter kind has lately come to my notice. A large bed of Carnation Pinks, grown in a hot-house, was severely injured by the destruction of the buds. Large holes were found to have been eaten in the sides of the buds, and the contents consumed. Fully one hundred dollars' worth of pinks were lost in this way, according to the owner's statement. Upon visiting the house in the night, with a light, some of the caterpillars were caught at their work. An examination of one of these and of the descriptions which have been published hitherto, relating to cut-worms, shows a great resemblance between this caterpillar and that of *Agrotis inermis*, as described by RILEY in 1869. Although precisely such a case as the one now under consideration seems not to have been reported before, it is interesting to know in this connection that the caterpillar of *Agrotis inermis* was found to be destructive to grape vines in a cold frame, coming out of the ground in the night time and climbing the vines to get its food, returning before day-break. Chickens were admitted into the cold-frame, and allowed to work, so that in two days no more of the caterpillars was to be found. Probably it would not be allowable to admit chickens into a hot-house where their scratching would do as much harm as good, but a patient search by the less skilled but more judicious fingers of a human would accomplish the end sought, and the captured prey need not be eaten by the capturer unless it was relished.

The night visitation of the infested plants is another means of putting an end to the evil. The plants may be gently shaken, and the caterpillars thus dislodged and exposed to view. Of course the caterpillars must be killed. They are good travelers and can stand a long fast. Some persons have been sufficiently non-sensible to bury them alive. The parent moths ought to be excluded from the hot-houses. They may be of many kinds, and one or another will be in season all summer. They are especially attracted to lights and sweets, and fly mostly, if not only, at night. Therefore if the windows are not always closed at night the openings ought to be covered with some kind of fine netting. I shall have something to say upon the more general means of guarding against the ravages of caterpillars at another time.

Middlesex Co., Mass.

The Querist.

ANSWERS TO CORRESPONDENTS.

Blowing up Stumps with Dynamite.

A. C. Jr., Arcaster, Ont., and several others inquire how stumps can be removed by dynamite, its cost and where it can be purchased.

ANS.—No. 2 Giant Powder would be the proper kind to use. It is furnished in cartridge rolls which may be safely cut into lengths weighing four, six or ten ounces as required. The consistence of the powder is much like that of brown sugar or damp Graham flour. Each cartridge costs about fifty cents. The fuse is to be inserted in the metallic cap which accompanies the cartridge, and held in its place by indenting the lower rim of the cap upon it. A hole is then made in the end of the cartridge with a stick of the proper size, and the cap with the fuse, is pushed into the cartridge. To make room for the charge, a hole must be made as near as possible to the center of the stump by means of a crowbar or other implement. It is then tramped firmly with earth by the use of a wooden rod. The more compact the ground the better the result. If on sloping ground the hole under the stump should be made from the upper side. When all is ready, the fuse is fired like an ordinary blast. A heavy charge throws out and shatters the stump; a lighter one splits it, twists off the larger roots, and leaves it in a shape to be easily dealt with by the ax and draft cattle. As a very heavy charge throws the fragments of wood and possible stones to a great distance, it is safer to use only so much powder as will bring the stump into manageable condition. The greener, tougher, and firmer the stump the better the results, as the force of the explosion is then mainly expended in shattering it. With proper care dynamite is quite as safe as any other explosive, but from want of skill in handling it, and carelessness often arising from long immunity from accidents or from recklessness, its use is sometimes dangerous. Where a good deal of ground encumbered with stumps is to be cleared in any neighborhood, it would be well for the land-owners to engage the services of a man skilled in the use of the article. The cost of removing stumps in this way would probably average from forty to fifty cents each. This would be a heavy tax on some farmers settled on such lands, who would thus have to pay as much for clearing it as its original purchase cost them; but the extra yield of crops and the greater ease in tilling would in many cases amply repay the outlay. The conditions of each case and the state of the farmer's purse must determine this matter. Dynamite can be purchased in this city from A. W. DESPARD, 26 Cedar street, who would probably furnish more detailed information suitable to the special circumstances of any one who may correspond with him on the subject. Probably the best way for anyone to secure a supply, would be through some dealer in gunpowder in the next town or village, as the dealers in it in this city do a wholesale business chiefly.

Use of a Drained Mill-Pond, Etc.

J. E. E., Sheffield Mills, Nova Scotia, says: We have a mill-pond covering about 100 acres, which has been flowed for nearly 120 years. It is surrounded by cultivated land and fed by several streams. Two years ago it was drained for the purpose of converting it into hay-land, by draining it in summer and flooding it in winter. The land can be easily drained, is quite free from stumps and nearly all of it is covered with an exceedingly rich deposit, from two to three feet thick. Last year we cut over 100 tons of hay, all of which came in naturally, without any seeding. On some parts the crop was from three to four tons to the acre. If flooded in winter, what would be the most profitable seed to sow on it? Can Timothy or Herd's-grass be grown on it successfully? Will Alsike clover do well on such land, or will it die out in winter? (2.) What would be the best kind of wagon for carting off the hay? (3.) How should shoes for horses, fit for traveling on soft land, be made?

ANS.—We think unless the mill-pond is flooded for the purpose of propelling machinery, it would be better to keep it drained and cultivated for a grain crop. Timothy would kill out before a sod would form, and undoubtedly it would be a waste of time and money to seed with any kind of clover. The flooding would destroy it. The variety of grass most sure to succeed, and one of great value as hay for cattle, is Red Top, the Herd's-grass of the Southern States. We have known it to yield four tons to the acre and over. A small percentage of Timothy can be sown with it. The former will help to retain the latter. This has been our experience. It would be wholly useless to sow it alone.

2. For carting off the hay, a wagon with very wide felloes, similar to those in use in the northern part of Indiana, would be best.

3. For horses working on soft ground, wrought plates, made thin and rather wide, are the best. We would have no shoes on the hind feet, unless the land has some stones on it.

Sheep on Permanent Pasture.

T. A. C., Mill Bridge, Rowan Co., N. C., inquires whether it will hurt his permanent pasture to let sheep run on it after wheat harvest until fall, if not eaten too closely.

ANS.—Sheep will enrich land by feeding upon it, as they eat almost everything and convert it into rich manure. Their urine is also a valuable fertilizer, and as they distribute this and their droppings generally over the field, the beneficial effects of pasturing land with sheep are apparent. When the pasture is poor and the growth is stopped on account of drought, they will eat too close for the good of a permanent pasture, but not otherwise. On account of this same tendency they are useful to feed upon fallow ground, as they will keep it clean and free from weeds.

What Ails the Canary?

C. Maxwell, Butler Co., Pa., wants to know what's the matter with a pet Canary. He commenced molting and ceased singing, eight months ago; appears well, but continues to lose his feathers, and though anxious apparently to sing, is unable to do so.

ANS.—All that we can advise is only to keep the bird away from all draughts and change its food. We have never known a Canary affected in this way to resume singing with its previous zest. Does any reader know a remedy?

Miscellaneous.

F. V. Boylan, Allegany Co., N. Y., asks what can be mix with or put on his seed corn to prevent the cut-worm from eating it.

ANS.—We know of no remedy except to open the earth about each plant every morning and kill the worm. It will always be found just under the surface and within a few inches of the plant. We could give a score of said-to-be remedies, but after testing most of them, can recommend only the above tedious but effectual means of extermination. There are various kinds of larvæ known as cut-worms. We presume our inquirer refers to the greasy, ash-gray caterpillars that cut off tender young plants during June and July.

Venoria, Tecumseh, Mich., asks: (1. How soon will Geraniums flower from the seed? (2.) Does the apple-scented variety blossom? (3.) Which are the most desirable varieties to grow. (4.) Will Verbena, sowed the last of April, flower freely this summer?

ANS.—1. If the seeds are planted now, they will bloom by Christmas; if planted in the fall, they will bloom in July.

2. Certainly.

3. There are thousands of varieties and it would be difficult to select. For double we know of none better than Marie Lemoine, rose; Dr. Jacoby, salmon; Dieul de Strasburg, deep rosy-purple. For single, Madame Vaucher, white; Jean Sisley, scarlet, white eye; Mrs. Christine, rose; Wellington, maroon-crimson.

4. Not until the latter part.

M. N. H., Hoboken, N. J., asks for instruction concerning the making and management of an "Incubator" for hatching chickens.

ANS.—From some personal experience and a good deal of information gathered from books and poultry adepts, we have come to the decided conclusion that the making and use of an "Incubator" by one unskilled in the matter, will result in disaster oftener than nine times in ten. If success with one of these devices is attainable, the probability of it lies in purchasing one made in accordance with the results of experience by practiced hands. Should our correspondent make such an investment, ample directions for the management of the special contrivance will accompany his purchase.

S. F. W., Niagra Falls, N. Y., inquires where Fuller's Teasel—Dipsacus fullonum—can be obtained.

ANS.—E. R. Gregory, Skaneateles, N. Y.

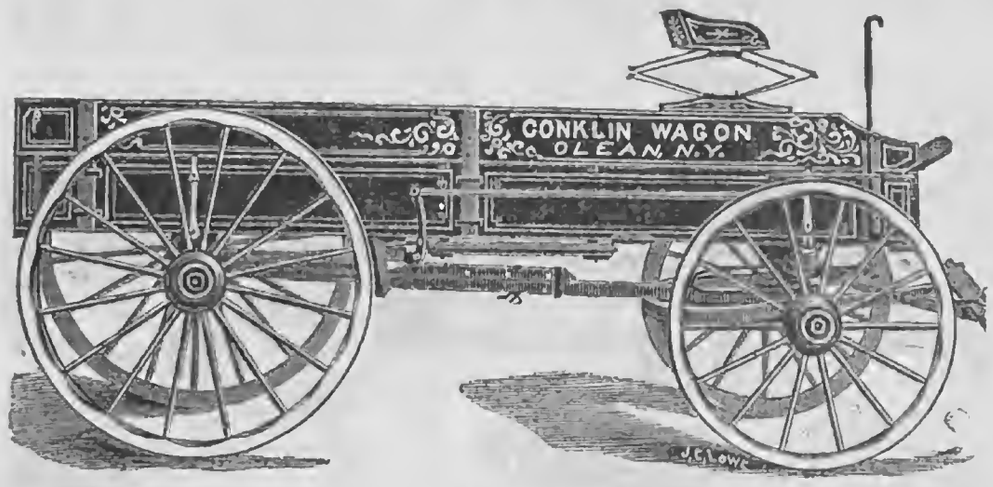
COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, APRIL 20TH.

A. D. — B. S. W.—B. P. M. — F. D. C.—A. L. J.—V. S. H. — M. E. W. — L. A. R.—W. H. N. — "Ida Atwood"—Miss S. E. R.—E. M. S.—A. C.—D. B. R. —B. P. M., No. 2. — B. P. M., No. 3. — W. H. W.—I. O. A. — A. C., thanks — W. J. F. — C. McC. — W. C. L. D. — B. P. M., No. 4. — A. C. W. — A. M.-V. A.—A. E. F.—Mr. Culbertson, accept thanks.—A. R. C. — T.—C. S. R. — J. P. R. — S. A.—"Treadwell."

Industrial Implements.

THE CONKLIN WAGON.

THE advantages of good implements, tools, etc., are never so strikingly apparent as when one has been persuaded, from economical or other motives, to purchase an inferior article and finds, at the most inconvenient time to acquire the knowledge, that it is not well to put



THE CONKLIN WAGON.

one's trust in shoddy. This is strikingly true of wagons. Some of our readers—not many we hope—may recollect with dismal distinctness how a low price and bright colors have induced them to invest in a vehicle that served every purpose until, in a time of great hurry, the wagon was slightly overloaded, and driving over a small obstruction, lo! there are annihilation and a waste of time and temper whose money value outbalances the difference between the price of a good and bad article.

In nothing, perhaps, has one to buy on reputation to so great an extent as in the purchase of vehicles. It is so easy for unscrupulous dealers to substitute unsound for sound timber, trusting to a plausible varnish and pleasing paint to disguise these sins of omission: and they do it.

The Conklin Wagon, made at Olean, N. Y., by W. H. & D. C. CONKLIN, is an honest piece of work. It is constructed of sound, selected, timber and put together with a view to combine lightness, strength, easy draft and durability. The wheels have fourteen and sixteen spokes, well proportioned to the gears, and the tires rarely have to be reset. An extension reach, or coupling, simple and easily shifted, is used. Box is of good length and proportion, with top box and seat. Minor appliances, such as brakes, etc., are the best to be obtained. In fact, everything is complete. All the wagons are set up and fully inspected before leaving the works.

The founder of the firm first made wagons in Wyoming Co., Pa., some forty years ago, with a capital consisting of a thorough knowledge of the business, good health and a conviction that to succeed required industry, intelligence and push. It has been an axiom of the firm that they could only succeed by selling an article worth the money asked for it, and to this belief, put into practice, do they attribute their unvarying success.

The manufacture is personally supervised by the firm, and it is only necessary to add that by strict adherence to these principles the sales have steadily increased, and the reputation of the Conklin Wagon is second to none.

The Poultry Yard.

FOWLS FOR EGGS, TABLE AND HARDINESS.

HENRY HALES.

BEING requested to give the readers of the RURAL advice on the best poultry to buy for eggs, table and hardiness, I must necessarily go over some of the same ground that has been gone over before in the RURAL, but, as the subscribers to the RURAL are constantly increasing, and young members of the families who take the RURAL are growing up, I offer no further apology.

For the farm the Leghorns occupy the first place as layers. The eggs are large, white and of handsome shape; a large basket of them has a finer appearance than a lot of odd sizes and colors, as laid by a mixed lot of barn-yard fowls, and they will sell better on the market. Between the White and Brown Leghorns the difference is principally this: the Browns lay at a younger age than the Whites, and will lay more eggs in a given time, treatment being equal, although many of the eggs are rather small for the market, but if the smallest are picked out they make a good marketable size. On the other hand, on an average the Whites lay the greatest weight of eggs in a given time. In warmer localities, say south of Philadelphia, the Black Spanish, Minorcas, and Andalusians, are the best breeds, as they lay very large eggs without stint. The Black Hamburgs are also hardy, and lay a fair-sized white egg, but I have not known of any kept on a farm in large numbers. They rank high as prolific layers, and bear confinement in a moderate-sized place, with a small grass plot. All the Hamburgs are very handsome and for a family where the eggs are consumed, nothing can equal them in beauty; but the silver golden breeds lay small eggs, yet they are the most prolific layers known. They will not stand keeping many together, nor close confinement, as they are of a restless, active temperament and pine in confinement.

Taking these considerations into account, the Leghorns are the farmer's fowls. They will lay as well, if not better, pure bred than crossed, if the cocks are procured from unrelated stock every year. This must be done in all cases to promote a full development of eggs, but if any cross is made the Light Brahma is preferable; some of them will then sit. I should have said all the above are non-sitters, excepting an occasional hen, and she will generally be a Brown Leghorn.

For sitting hens there are a number of varieties to pick from. First as careful mothers are the Dorkings. They also keep longer with their broods than other hens. The Brahma and Cochins are good sitters but are not adapted for small eggs, as they are heavy and clumsy. They do well on their own for the shells are thicker. But a cross-bred hen of any kind, especially if of part Brahma blood, will do to hatch with.

For the table, Dorkings and Houdans are the first both in flavor, heavy meat, and tenderness. They have long breasts, and small bone for their weight, but I would not advise any farmer to breed them pure for early chickens. Cross with the Light Brahma and you have a bird that will mature earlier than any pure-bred fowl of its weight. They feather quickly, and make fine broilers when eight to twelve weeks old. Other large breeds are too bony at that age. Two cocks, Dorkings or Houdans, will improve the progeny of twenty-five hens and increase their value as table fowls materially. Dorkings or Houdans pure are still better table birds, but they require more care in cold winter. In milder climates they will do well, and are good layers. As farmers' fowls in mild localities they are first-rate; the Dorkings doing their own hatching and being great foragers, cost but little to keep on open ground.

I have not said much, as may be noticed, so far of the large breeds, or Asiatics. Kept for laying or killing, bred pure, they consume too much food for profit, but are just the birds for a small place where fowls must be kept confined. They are so quiet and hardy that the introduction of the Chinese fowls was the greatest acquisition any country ever received in the poultry line. They can stand any climate, are contented anywhere, if only well fed, and lay in winter. For hardiness no other fowl equals them; that is why they are recommended to cross with on a farm. About one-eight Light Brahma blood will make Leghorns hardy, but will not improve their laying. If one has a proper, warm house for his stock in winter, this is not a necessity, but if they have to take the run of cold out-buildings, a lot to which poultry must submit on most farms, then a cross is indispensable in cold climates.

In regard to the cost of these fowls, it depends much on what a person expects. If the "American Standard of Excellence" is consulted, birds bred pretty true to the points there laid down, are expensive; for but few birds of any variety reach near such perfection, nor for utility to a farmer are they wanted. Of underweight birds, if not stunted by being late hatched, Light Brahmas of six or seven pounds are as good as heavier birds or even better. All the others above mentioned that are a little off feather can be procured at a moderate price, from one to two dollars each, but do not expect show birds for the lowest price.

LIGHT BRAHMAS—AN ERROR CORRECTED.

IN the RURAL of April 13th, Mr. HALES bases sundry arguments, in regard to Light Brahmas being seen in England before they appeared in this country, on an allegation, that "three American shipments of fowls all produced Light Brahmas!" I deny that there were ever imported into the United States any Light Brahmas, except the one pair bought and bred by Mr. CHAMBERLAIN, of Hartford, Conn., in 1847; and I hereby agree to pay one hundred dollars to any man who will prove me to be in error. Now, Mr. HALES, give us the proofs that "three importations of Light Brahmas" were made, being the original stock in this country. Mr. BURNHAM never adduced any proofs of such importations, nor has any other man. He has said a good many things about these fowls that are mere bosh, which I have many times shown to be so. Mr. HALES speaks of my asking, why the fowls claimed to have been in England before any appeared in this country, (1846) were not exhibited at Fairs. I asked no such question that referred to that date, but I referred to 1852 and '53 when poultry shows were in existence.

T. B. MINER.

Linden, N. J.

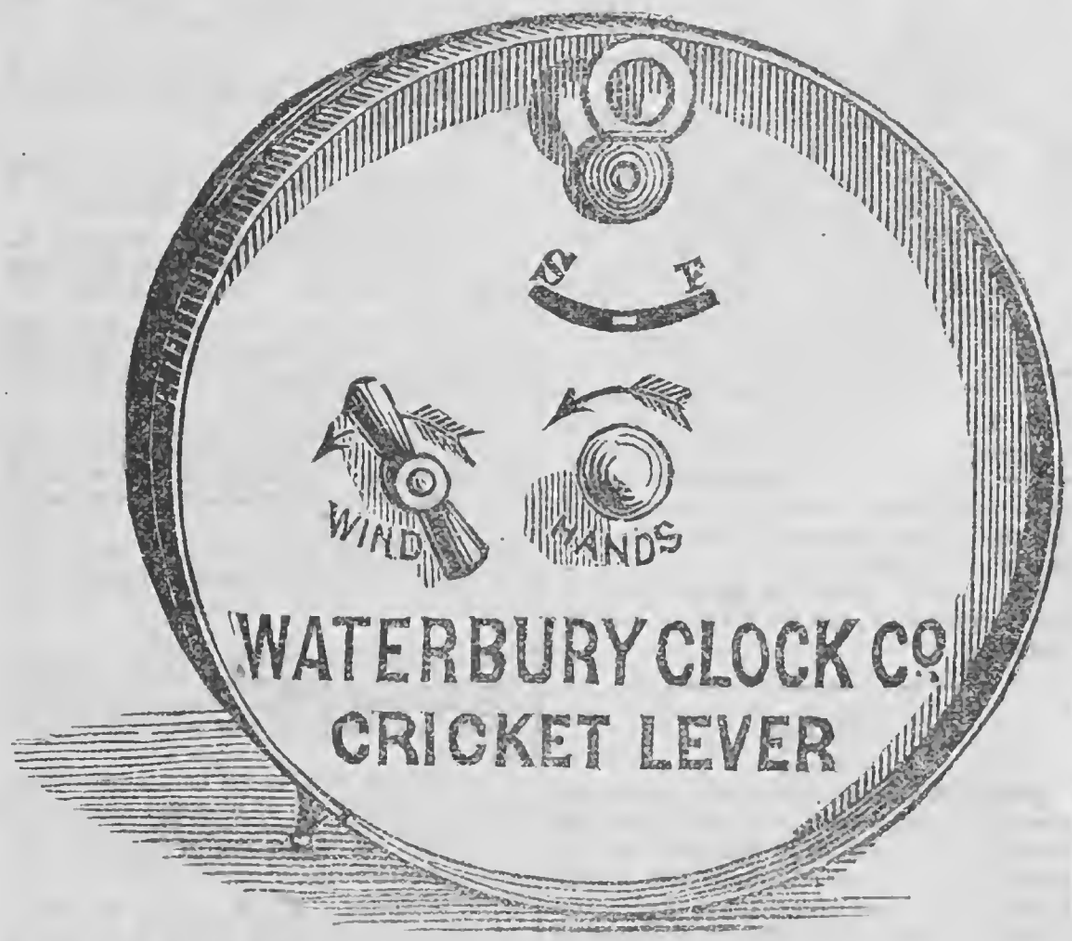
THE MODERN CRICKET ON THE HEARTH

To be Withdrawn the 1st of July.

How to Secure an Elegant Time-piece without Cost and with very little Trouble.

THE OFFER ALL THAT IT WAS REPRESENTED AND MORE.

The Cricket for Two New Subscribers.



IT COMBINES THE BEST FEATURES OF BOTH CLOCK AND WATCH,
And May be Carried from Place to Place in a Trunk or Valise.

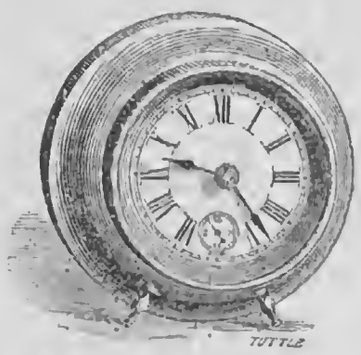
We want the Rural Cricket Clock in the Home of Every Subscriber.

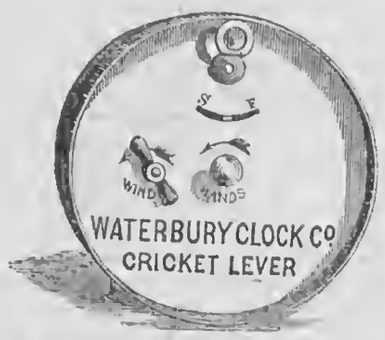
THE MUST BRILLIANT OFFER MADE BY ANY JOURNAL.

To judge by its appearance many who have not seen it before, estimate its value to be ten dollars. We have been enabled, through the facilities afforded by our Experimental Farm (owned and operated exclusively for the benefit of RURAL readers) to make a FREE GIFT to our subscribers of a collection of rare and valuable flower seeds which have been enthusiastically received; and this gift on a still more liberal scale, *will be repeated during the present year*. Meantime, the RURAL itself has been enriched in all its departments, by contributions from the best writers and life-like illustrations, demonstrating that our enterprise has not been at the expense of the paper.

ECLIPSES EVERYTHING!

The "Rural Cricket" is inclosed in a beautiful circular metallic case of a single piece, and therefore without a seam. It is nickel-plated. The face of the clock is white and has a "second" dial as in watches. The works are securely inclosed so that no dust can penetrate and harm their movement. It is like a stem-winding watch, in that it requires.





NO KEY TO WIND IT!

and the hands are regulated without being touched. It runs thirty hours, is a chronometer-balance lever, jeweled, and it is guaranteed to keep as accurate time as the best watch.

IT RUNS IN ANY POSITION,

on its face, on its back, standing up, lying down, on its side, in short, in any position.

SIMPLICITY, ELEGANCE, DURABILITY.

It may be secured without any more effort than is required to tell its merits to a friend or so, and a sample clock will enable anybody so inclined to dispose of hundreds in a week.

THE OFFER.

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Two New Subscribers

secure the clock! The lowest price of the RURAL NEW YORKER, except in clubs, is $2.50. Therefore upon the receipt of $5.00 and two names the sender is entitled to ONE "RURAL CRICKET."

SECOND.

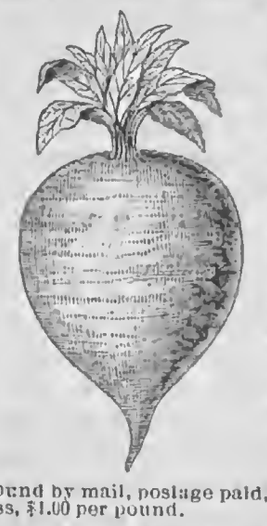
We will send the RURAL NEW YORKER for one year and the Cricket Clock to any one upon the receipt of $3.50.

RURAL NEW-YORKER, 78 Duane St., N. Y.

Trees, Seeds, Plants, &c.

"THE BEST BEET FOR STOCK."

WEBB'S NEW KINVER YELLOW GLOBE MANGEL WURZEL.



Price per pound by mail, postage paid, $1.15; large lots by express, $1.00 per pound.

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P. O. Box 376. 189 & 191 Water St.,
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SANFORD CORN.

Best field corn in cultivation; large, white and hard. 101 bushels per acre last year, common culture. Stalks unequaled for fodder. Seed *carefully selected*. Post free—1 lb., 50c.; 3 lbs., $1; samples, 25c. By express—peck, $1.25; ½ bush., $2; bushel, $3.
H. HENDRICKS, Kingston, N. Y.

LADY GRAPE-VINES.

The finest, perfectly healthy, hardy and reliable extra early White Grape. Also, Brighton, Elvira, Eva, Delaware, Concord, and all other valuable kinds. Small Fruits, Seeds, Trees, and Flowering Plants. Illustrated Catalogues for 3-cent stamp. Address GEO. W. CAMPBELL, Delaware, O.

POMONA NURSERY. 100 acres of Trees, Vines and Plants. *Best Strawberries*, nine inches, *Raspberries*, 3 inches around. Ten acres yielded $4,338. Send for Price-list, free. 40 YEARS Among Small Fruits, telling what and how to plant. Sent post-paid for 20c., *or free to every purchaser*.
WM. PARRY,
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NEW & RARE ROSES.

We offer from our list of over 500 varieties of Roses, Well grown plants from Pots or Field Culture. One-year plants, Hy. Perp., our selection, at $3 per doz., $20 per 100. Teas and China, $2.50 per doz., $16 per 100. Young plants per mail, $1 per doz., $8 per 100. Also the rarest and choicest Evergreen and Ornamental Trees and Shrubs of all varieties for planting in Lawn, Yards, etc.
MILLER & HAYES,
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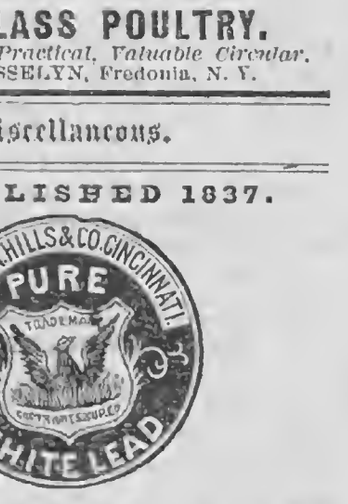

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

The Ostrich....261, 262
Jottings at Kirby Homestead....262
Jottings from my Note Book....262
Houghton Farm....262
Rye for Green Manure....262
Manures....262, 263
Culture of Broom Corn—No. 1....263
Training a Sheep Dog....263
Wool-Growing and the Tariff....263
Malignant Anthrax in Sheep....263
Humming Birds....263, 264
Plows and Plowing....264
Pears....264
Maladies of Stock....264, 265
Fall vs. Spring Sowing in North Carolina....265
North Carolina Notes....265
Rural Special Reports....265
Cut-Worms in Green-Houses....265
Answers to Correspondents....266
The Conklin Wagon....266
Fowls for Eggs, Table and Hardiness....266
Light Brahmas—An Error Corrected....266

EDITORIAL PAGE:

Superserviceable Fools....268
Alkekengi....268
Periodical Sales, Market Fairs, Auctions, Etc....268
Barn Notes....268
A Pretty Contrast....268
Death to the Curculio....268
Mexican Black Sweet Corn....268
Brevities....268

LITERARY

Poetry....269, 271, 274
Mr. Chetwood's Will....269, 270, 271
A few Familiar Quotations....271
Bric-a-Brac....271
A Woman's Home for Women....271
Men's Part in Home-Making....271
Domestic Economy....272
Siftings from the Kitchen Fire....272
Shirt Ironing....272
Ant Exterminator....272
Queries Answered....272
News....272
Markets....273
Reading for the Young....274
A Swiss Cousin....274
The Girl Everybody Likes....274
The Puzzler....274
Sabbath Reading....274
A Day in the Life of Jesus....274
Personals....275
Advertisements....267, 273, 275, 276
Wit and Humor....276

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, APRIL, 27, 1878.

We have decided to lengthen the columns of the RURAL three-quarters of an inch, and to widen the page in proportion. This will enlarge the paper over four columns. In other words it will be equal to issuing a four-page supplement once in four weeks.

We are already making arrangements for the change, which involves considerable expense, and hope to present the new RURAL to our friends early in May.

SUPERSERVICEABLE FOOLS.

Of that wondrous faculty of discrimination which enables the naturalist to discover such a vast multitude of species and other sub-divisions in animated nature, just a trifle is amply sufficient to determine that of the superserviceable fool there are at least two varieties. Totally disregarding the scientific custom of compounding for each class an abstruse, pollysyllabic name from a dead language, these may be briefly styled, in the plain vernacular, the congenital, and the accidental. To the former, nature, from the moment of his birth, has given a legitimate right to the title of fool, while the claims of the latter to it are due mainly to transient circumstances. Widely, however, as they differ in this particular, yet they possess so many characteristics in common that no one gifted with even the rudiments of common sense, would differentiate them more than as two varieties of the same species. The chief distinctive difference between them lies in the fact that the former is incorrigible, while the latter is capable of reformation. Among the mental peculiarities of both are overweening conceit, incontinence of ideas, and insensibility to the fitness of things.

These they manifest in various annoying ways, in and out of season, but especially out. They are the men—and sometimes the women—who persistently obtrude on others their own notions and ideas of what their conduct should be, in the shape of advice, admonition and information, under the vain delusion that wisdom speaks through their lips and that their hearers will disregard her words at their peril. Let an idea, however crude, find its chance way under their hair, and entirely unable to conceal the novel experience, like a hen with a new-laid egg, they must straightway proclaim aloud the circumstance, attaching to it a value not in proportion to its intrinsic worth, but in accordance with its rarity. In private life they are constantly pressing their views and sometimes their services on their acquaintances in entire ignorance of circumstances on which may often depend the prudence of adopting the one or the possibility of accepting the other. In convention, caucus, or any assemblage met for discussion, jack-in-the-box-like, they are everlastingly springing to their feet with another remark, just a word or two more, or an idea (!) that has just struck them, until their exasperated audience heartily wish that the springs of the childish contrivance were broken and the persistent prattler at rest. It is one of these also who, in company, is forever interrupting conversation by the introduction of subjects foreign to the matter under discussion, but which having just occurred to the thing of his he flatters by calling it a mind, he cannot for the life of him refrain from instantly cackling about.

The congenital variety of superserviceable fools has seldom anything to say worth listening to, is insensible usually to slight or reproof, and incapable always of amendment, and should therefore be promptly squelched. The accidental sort, on the other hand, whose folly is mainly due to want of training, tact and modesty, often has a respectable fund of useful information and opinions, is, as a rule, sensitive to a rebuff, and always capable of improvement—a happy consummation that can be most effectually accomplished by a severe course of instructive snubbing.

ALKEKENGI.

Few who have raised this plant and preserved the fruit as it may be preserved, are indifferent to its culture. It possesses all of the good flavor of the tomato with less either of its acidity or the characteristic harshness which renders it unpalatable to most people when eaten raw. Canned or pressed it rivals the strawberry or cherry, resembling the latter in appearance and possessing a distinct aroma that reminds one of the former, from which circumstance one of its familiar names—Strawberry Tomato—is derived. Winter Cherry, and Barbadoes Gooseberry are other familiar names. It is a hardy annual, attaining a hight of about three feet. It should be cultivated in good soil and treated much the same as the Tomato.

The fruit is the size of a small cherry, half an inch or more in diameter, bright yellow and inclined to transparency when well-ripened. It is inclosed in a papery, membranous, inflated calyx, something like the Balloon-Vine (Cardiospermum halicacabum), of a light green before maturity and a dried-leaf color afterwards. The fruit stem is not strong or persistent, so that most of the fruit fall to the earth spontaneously when ripened.

When this has been raised for one season, plants from self-sown seed appear abundantly the next year if the soil is not worked too early, when they may be transplanted or thinned out as desired.

The fruit is rather small to be gathered in large enough quantities to be served as tomatoes. But stewed, like cranberries, with a little lemon-juice added, or canned or preserved like peaches, quinces, plums or cherries, this Physalis is well worth the little trouble required in its cultivation.

Alkekenzi is really a distinct species that bears scarlet berries, and ought not to be applied as a familiar name for the species of which we have written, which is Peruviana—or P. edulis of some authors. We have never learned that any attempt has been made to improve this fruit by selection, crossing or hybridizing; but the fact that some of the berries are twice as large as others is proof enough that it might be improved by such means.

PERIODICAL SALES.—MARKET FAIRS.—AUCTIONS, ETC.

In all those sections of the country distant from regular markets and not upon or near great lines of transportation, especially in rather sparsely settled districts, all occasions when unusual numbers of people are brought together, are embraced by those who have anything to sell to offer their goods at auction or otherwise. We at the East know very well how it is at "trainings," "musters" "camp meetings" and even surrounding the peripatetic circus and menagerie. At the West and South court days bring the crowd, hence these are the times made the most of by the auctioneers and other venders. In some cases periodical sales have been established in conformity with this custom, or tendency, or necessity of the people to come together upon court-days, and have had some success. We do not know particularly about those sales or Market Fairs and would be glad to hear directly from those who are familiar with them and their management.

There have been a good many attempts made to establish Market Fairs in New England, and perhaps in the Middle States, but though apparently well organized and fairly conducted they have not proved successful, the reason being that communication with great market centers is too easy, and every seller hopes for better prices, not putting his wares or cattle or products fairly upon the market to be sold at the best price he can get. The only way to make any such sale a success is to have every article absolutely sold, as if the auctioneer or the seller were under orders from the sheriff, and the goods were surely to go for what they would fetch.

The above is given in answer to several inquries which we have of late received.

NOTES.

Barn Notes.—We must be careful nowadays while the barn-yard is wet and mussy, or a great deal of fodder will be wasted. It is now too late in the season to feed straw, but plenty of it will be required for beds. The calves and young animals must be kept clean if they are expected to be healthy; a foul stable will cause a young thing to lose its appetite. This is one of the common failings on a farm; to put off cleaning stables; and it is a most unprofitable form of shiftlessness. It makes pigs scurvy and lays the foundation for mange; it gives calves the diarrhea and makes sheep and lambs sick. The cows are suffering for lack of the curry-comb and brush; soap-suds and a sponge are needed back of the horns and on the withers and on each side of the tail, to clean out the dirt which has accumulated. The cattle cannot reach these places themselves—hence they should often be cleaned. The itching must be almost intolerable and if the cattle could speak after a good currying and sponging there would be loud-spoken thanks.

A Pretty Contrast is that which the Golden-leaved Spiræa and the Purple-leaved Filbert present when planted side by side. The leaves of the first, in this earliest of springs, are nearly unfolded and their color is bright yellow. The leaves of the second are a dark purple. Both plants are before us as we write and we wish we could describe their charms so that the reader could see them as they appear to us. He would add them to his spring orders, even though he were obliged to go without tea and coffee for two weeks as a penalty, which deprivation would probably pay for the cost. The botanical names are Corylus Avellana atropurpurea and the Golden Spiræa (Neillia) opulifolia.

Death to the Curculio.—We are informed by one who has tried it, that if a small quantity of salt is sprinkled under the plum trees just as the fruit is forming, it will kill the curculio and prevent the young plums from being stung. The same person says wood-ashes spread underneath the plum trees will also drive the curculio away. He applies both of these remedies and always has nice smooth plums and a bountiful crop. Perhaps both are effectual; the ashes will, at least, promote a vigorous growth, and the salt can do no harm if it is used sparingly.

Mexican Black Sweet Corn.—There are two objections to this corn. One is the size of the ears. They will not average over seven inches. The other is the color of the kernels which, when mature, become a dark-slate or lead. But when first fit for use, the color is as white as that of other varieties of sweet corn. The plant grows about five feet in hight. The ears are eight-rowed and the kernels much shriveled when mature. For sweetness; however, for buttery richness, we prefer it to any other variety of sweet corn we have ever tried.

BREVITIES.

Arsenical candor is prevalent.

Do hay elevators raise the price of hay?

Is it easier to prevent or to destroy weeds upon the farm?

Col. Curtis says that "Milk makes big, fat lambs—our fathers to the contrary."

Mr. Idell thinks "Beauty" the gem of Mr. Durand's noted seedling strawberries for amatuers.

In selecting trees and shrubs, be careful to select those which are hardy in the climate for which they are selected.

It seems to us that a very effective political party might be organized upon the basis of opposition to the postal laws of our country.

The Agricultural Gazette of England defines a tramp to be "a laborer who has degenerated in the absence of capital and work" (!)

"Among many jewels," says Mr. H. B. Ellwanger, "Catherine Mermet, Marie Van Houtte and Marechal Niel are the fairest of the fair." He is talking about Roses.

The farmer is always ready to stand and talk an hour with a neighbor or friend, even in his busiest season. The merchant that would do this would be considered a poor business man.

Magnolia Lennei is at this date (April 21) blooming in the Rural Grounds. The petals are, outside, of a claret-purple, and inside nearly white. Last year this Magnolia bloomed May 15.

Mrs. Myra Clark, Gaines apropos of Woman Suffrage: "The method you employ makes the very thought of suffrage obnoxious to men, and women, too. It is too foolish." Who will Gains-ay her?

It is well at this season that every farmer should impress upon his mind the necessity of so managing his children that they shall grow up to take a deep interest in all matters appertaining to the farm.

Dr. Pendleton says: Numerous experiments have clearly demonstrated that the proper application of nitrogen with soluble phosphate of lime will restore these soils (Georgia) up to and above their pristine fertility, at least in the production of cotton.

According to Schloesing and Muntz, nitrification is no mere chemical process. It is the work of a living organism which thus acts in bringing about a chemical change, just as the yeast-plant does in promoting the fermentation of saccharine solutions.

It should be borne in mind that every farmer who will take the trouble to keep up a tasteful appearance about his house, not only performs a good work for his own family, but stimulates his neighbors to imitate him. Nothing is more contagious than the desire for gardening when once it gets a footing.

After awhile we shall settle down not to think so much of size in potatoes as we are wont to do. We should bear in mind that perfection of form, smoothness and color of skin depend upon the soil. A sandy loam, well cultivated and manured with phosphates and potash, are what the potato needs.

One of the objects of pruning is to induce trees to take on unnatural forms. Those who consider that a certain amount of pruning *must* be done and who go forth in and out of season with pruning knife in hand, are invited to study the above definition before they begin their ofttimes needless and destructive work.

The soil of the onion beds cannot be stirred too often. There is no success without weeding thoroughly. No crop is surer to the experienced, careful propagator; none more uncertain to the beginner, than this. Better for the latter to gain his first practical knowledge by small ventures, or to place himself under the direction of those competent to instruct.

Secretary Garfield answers the question "Why should we beautify the home grounds?" thus: First, for the beauty itself. Second, for what beauty will effect in man. As results flowing therefrom he notes: (1) an added refinement; (2) a satisfaction of possession; (3) developement of a new set of faculties; (4) an exhibition of benevolent spirit; (5) a higher appreciation of the created things of God.

Mr. Hance, chairman of the Fruit Committee of the New Jersey State Horticultural Society, among the newer strawberries mentions the following as promising well. Forest Rose, Cumberland, Triumph, Duchess, Prouty's Seedling and Sterling. The Raspberry season commenced with Highland Hardy, and in the order named by Doolittle's Black-cap, Miller's Early, Mammouth Cluster, Brandywine, Winant, Philadelphia and Cuthbert.

The following are the names of the strawberry plants which we are this season testing in the Rural Grounds. We make no mention of a number of new seedlings varieties not yet offered. Duchess, H. 75., Pres. Lincoln, Beauty, Great American, Duncan Kerr's Prolific, Triumph of Cumberland, Sterling, New Dominion, Harrington's Market, Prouty's Seedling, Belle de Lyrons, Donaldson's Seedling, Golden Defiance, Cap. Jack. Most of them fruited with us last summer, though as they were planted in the preceding spring or fall, it would have been unfair to judge of their merits.

Literary Miscellany.

THE EVENING TIME.

TOGETHER we walked in the evening time.
Above us the sky spread golden and clear,
And he bent his head and looked in my eyes,
As if he held me of all most dear,
Oh! it was sweet in the evening time!

And our pathway went through fields of wheat;
Narrow that path, and rough the way,
But he was near, and the birds sang true,
And the stars came out in the twilight gray.
Oh! it was sweet in the evening time!

Softly he spoke of the days long past,
Softly of blessed days to be;
Close to his arm, and closer I prest—
The corn-field path was Eden to me.
Oh! it was sweet in the evening time!

Grayer the light grew, and grayer still,
The rooks flitted home through the purple shade,
The nightingales sang where the thorns stood high,
As I walked with him in the woodland glade.
Oh! it was sweet in the evening time!

And the latest gleams of daylight died;
My hand in his enfolded lay:
We swept the dew from the wheat as we passed,
For narrower, narrower, wound the way.
Oh! it was sweet in the evening time!

He looked in the depths of my eyes, and said,
"Sorrow and gladness will come for us, sweet;
But together we'll walk through the fields of life
Close as we walked through the fields of wheat."

[*Good Words.*

MR. CHETWOOD'S WILL.

J. H.

"BUT, Dolores, how's a fellow to live if he hasn't anything?"

"You knew all that a year ago, Guy; and William told you how it would be."

"William is an old screw," was the impatient rejoinder; and Dolores made no answer.

Sitting by the fire, brother and sister had had a long conversation on that wintry afternoon, and it was getting quite dark now—so dark that even the shabbily-furnished room looked quite cheerful, as the firelight flashed and flickered on the walls and on the fair face of Dolores Chetwood, sitting on the hearthrug, with great wistful eyes looking into the burning coals, Guy looking into the fire too, with his chair tilted back and a cigar between his lips.

"If you didn't smoke, Guy," began Dolores; but he interrupted her, bringing the fore-legs of his chair down to *terra firma* again abruptly.

"Hang it all, Dolores, I can't give up everything!"

As yet Guy Chetwood had not given up anything, but he liked to talk as if he had.

"It was a great pity you ever thought of the Army at all," said Dolores, a little bitterly. "Every one said nobody could live nowadays on ninety pounds and their pay."

"Every one is a fool! And pray what is the difference between nowadays and thenadays? Why, Dolores, you are turning on me now, I do believe!"

"You are all I have, Guy"—and she looked up at him brightly—"and we must never turn against each other."

"Of course not. Where's William?"

"I don't know; he went into the town, I think."

"To minister stern consolation to the afflicted," said Guy. "William, parson though he be, is the last man on earth I would go to in trouble."

Dolores said nothing; she had no great love for her step-brother herself, partly because he was hard on Guy, and partly because, child though she had been then, she knew and remembered how William had always disliked her own mother. Father and mother were both dead, and to William Chetwood the name of "mother" never passed Dolores' lips; she could not bring herself to speak of the dead he had never loved through life. And yet he was kind enough to his step-brother and step-sister, and had done his duty by them conscientiously. All his life through he had been hard on Guy; he rather disliked the boy, who was high-spirited and too like his mother, who had come between him and his father. He rather liked Dolores, and respected her from the day, long before, when upon one occasion he punished Guy unjustly, and Dolores wound her weak, childish arms around her brother and exclaimed, with passionate earnestness and a look in her eyes he never forgot:

"William, Heaven is just; a servant of Heaven ought to be just too."

Guy was twenty-one, and Dolores eighteen; he had been in the Army for two years, and had seen and tasted the pleasures the world could give, and she had lived all her life in the dull little country town, and was sometimes a little discontented—that was all. But Guy was home on leave now, and it would have been cheerful enough, but that the young soldier had been living a little too fast, and debts were beginning to be felt. The first cloud was leaving its mark on the freshness of his bright boyish face, and Dolores thought Guy was changed; he was not so gay and light-hearted as he had used to be. They had had a long talk that afternoon, and he had told her a good deal, but not all. Dolores opened her blue eyes.

"Oh, Guy," she said, with a little gasp; and he answered, sulkily—

"One must do what other fellows do; I couldn't isolate myself and live like a hermit."

"I wish I had plenty of money," said Dolores.

"It doesn't so much matter for girls," said Guy, "They marry—at least the pretty ones do."

"And what happens to the ugly ones?"

"Oh, you've nothing to do with that!" replied Guy, looking down at his sister's upturned face. "You are pretty enough for anything, Dolores. Why, when we were quartered in Dublin last winter, they were raving about girls not one half so much the thing as you."

"Oh, nonsense, Guy!" And Dolores flushed up to the roots of her hair at her brother's praise.

Guy was right, though. Many girls would have envied the fair face that was lit up by the soft violet eyes that looked dreamy and wistful through their long lashes. Very slight and delicate-looking was Dolores Chetwood, with a low, soft voice, and silky brown hair that lay soft and even on her white forehead.

Guy returned to his own woes. He was going back to his regiment soon, and he was sadly out of pocket. Presently Dolores took a long look at his handsome, troubled face, as she sat gazing morbidly into the fire; then, with a little sigh, she got up, and, going over to the table, unlocked her desk and came back to the fire with something in her hand.

"Guy, dear, would this be of any use to you? I have saved a little—only ten pounds, though."

When sixpences had been all Dolores's pocket-money, they had found their way into Guy's pocket—and it was just the same now. A passionate remonstrance on his part, a little persuasion from Dolores, and there was no chance of the new silk dress she had been saving for, and Guy was the richer by ten pounds—and she loved him so that she thought nothing of the sacrifice.

"You aren't going to uncle Hal to-night, are you?" said Guy, presently.

"Oh, yes, I promised him!" said Dolores, jumping up. "You will walk with me to the door, won't you, Guy?"

"If you like; but how can you waste your time with that cross old man passes me. If he had money, it would be different."

"Don't be so mercenary, Guy."

"Nonsense. If uncle Hal had anything to leave, he would be much better worth looking after. Does he ever say a civil word to you, Dolores?"

"Sometimes. Poor old man, he suffers a great deal—and that makes him cranky."

Dolores was soon dressed and ready.

"Put something more on you," said Guy, standing in his thick great-coat, and looking down at his sister's thin jacket.

"I am warm enough. Come, Guy, it is late."

Down the little street they went, and stopped at a small house at the other end, a dreary, two-storied house, with the light from the fire within flashing upon curtainless windows.

"Look at him," said Guy. "He is sitting by the fire. Dolores, I don't envy your taking tea with that old chap."

Through the window, in the firelight, the figure of a tall old man could be seen bending over the fire, holding out his hands to the blaze.

"How dreary he looks!" replied Dolores. "Don't forget to call for me, Guy. Come at nine."

"All right." And Guy went humming up the street as Dolores disappeared within the door, which was opened by an old woman with a candle in her hand.

Nobody ever knew anything about old Hal Chetwood, as he was called; none in the parish of Kiblaney could tell how he lived, or what he did all the long days. A strange, sour, crabbed old man he was, with never a kind word for any one—not even for his niece Dolores Chetwood, who bore with him patiently, and somewhat had got to have a kind of liking for the poor cross-grained old man. He was crosser than ever this evening, and was bitter and cynical to a degree.

"I wonder you come to an old man for nothing," he said, peering over his spectacles as they sat by the fire after tea. "Guy doesn't trouble his head about me. He is a nice boy, isn't he?"

"He is no worse than others, uncle Hal," returned Dolores, flushing up in hot championship of her brother.

"I knew it; he is perfection of course, if all William says is to be believed;" and the old man laughed softly to himself, in a sneering sort of way.

Dolores lifted pleading pathetic eyes to the hard cynical face opposite to her.

"Guy is all I have, uncle—could I be hard on him?"

The soft girlish voice quivered a little. Mr. Chetwood, leaning forward, his hands resting on his knees, looked keenly at her for a full minute before he spoke.

"You would make any sacrifice for him, I suppose, child?"

"I don't know," Dolores answered, gravely; "but I would do all I could for him, and he for me."

"I doubt the last part of your speech; from the little I have seen of that young gentleman, I doubt it exceedingly."

Dolores made no reply, but only closed her lips tightly and sat silent, the firelight shining in her eyes. Mr. Chetwood changed the subject abruptly.

"I have a friend coming to me to-night from London—I expect him every minute; he telegraphed to say he would cross over by this morning's boat from Holyhead."

Dolores looked up in amazement. A friend coming to see uncle Hal! She did not know he had such a thing in the world. Mr. Chetwood went on, talking quite eagerly, for him.

"He is coming for a purpose, this Brian Mannering, his father was the only friend I ever had. When we were lads we would have died for each other, till a woman came in the way. You are a child; you can't know why I never spoke to my old friend Brian Mannering after he won the woman I loved. I never saw him again; he was killed in the Mutiny in India, and so was she, and his last words were—'Tell Hal Chetwood to look after my boy.' A brother-officer of his, who escaped, gave me his message. But, Heaven bless me, that is years ago! Brian was at school then—he is thirty now. Time I was looking after him, eh?"

The old man told his story in short jerks. Dolores, listening, pitied him, for she fancied that that little glimpse into his past life showed her why his heart was hardened against the world.

"He ought to be here now," said Mr. Chetwood, looking up at the shabby little clock ticking on the chimney-piece; and even as he spoke a car was heard driving up the street and stopping outside. A loud ring went pealing through the house; and then the door opened, and Dolores, looking up, saw a tall man entering the room, enveloped in a long ulster coat—a man with a dark rugged face and a short brown beard; and, as he came forward smiling, she caught a glance from a pair of pleasant gray eyes. Mr. Chetwood held his visitor's strong brown hand in his long white fingers, and looked him full in the face.

"You are welcome, Brian," he said, slowly. "I haven't seen you for ten years, lad, and time is telling on us both."

Brian Mannering laughed a real mirthful laugh.

"You are looking first-rate, Mr. Chetwood—and I am not gray yet!"—putting up one hand to his thick, short brown hair.

"Dolores," said Mr. Chetwood, "this is Mr. Mannering—Brian, my niece."

"I have heard of you before," observed Brian, smiling, and looking down with his pleasant eyes at the shy girlish face; and Dolores, as he clasped her hand in his, wondered where he had heard of her, and when. Her brief questioning glance told him her thoughts, but he only said, "And your face is what I thought, only——"

"Only what?" asked Dolores, laughing a little as she met his friendly glance. He laughed too.

"I will tell you another time," he said—"when we know each other better."

"What sort of passage had you, Brian?" inquired Mr. Chetwood, abruptly. "Was it rough?"

"Not very. We got into Kingstown in good time."

"You'll sleep here, Brian—your room is ready."

"Thanks; but I have sent my traps down to the hotel."

"As you please; you would only have been uncomfortable here."

Dolores, sitting silent, wondered who Brian Mannering was, and what was the purpose he had come all the way to Kiblaney. Looking up she encountered his gray eyes fixed half quizzically on her, but the smile changed to earnestness.

"Do I puzzle you very much?" he whispered, leaning his elbow on the chimney-piece and looking down at her.

"How do you know what I am thinging of?" said Dolores, coloring.

The clock on the chimney-piece struck nine, and was answered immediately by a great clock in the bare hall which boomed out the hour, echoed by another somewhere in the region below-stairs, and a few minutes later two more clocks pealed out nine in shrill trebles. Clocks were a perfect mania with old Mr. Chetwood, but Dolores always shuddered as she heard them tolling out the hour through the empty house. She got up now.

"Guy was to call for me at nine. Good-night, uncle Hal."

"Good-night, child"—taking her hand in his. "So Guy is to meet you, is he?" and again the sneering smile came about the corners of his mouth.

Dolores' hat and jacket were in the hall, and she went to fetch them. Brian came out with her, and Dolores, standing in the light of the one dip-candle sputtering and flickering on the table, held out a shy hand to say good night. There was more pity than amusement in his eyes this time, as he clasped her hand with a friendly pressure and said good-night.

Guy was waiting outside smoking, with his hands in his pockets. He started as he saw the tall figure of Mr. Mannering in the doorway.

"Who is that fellow?" he asked, as Dolores joined him. "By Jove!" he ejaculated, when she had finished her story. "I wonder where he comes from."

"Well," said Mr. Chetwood, impatiently, as Brian came back slowly into the room, "what do you think of her, lad?"

Brian looked thoughtfully into the smouldering fire.

"I think, Mr. Chetwood," he said slowly, "that you ought to reconsider your decision."

The old man's eyes glittered.

"I won't," he said, and then added, "Are you disappointed?"

Brian lifted his eyes frankly to Mr. Chetwood's.

"No—only it's very hard on her, poor little thing."

"She's pretty, isn't she?"

"Yes," was the brief rejoinder; and then there was silence between them. Mr. Chetwood was watching the man's face opposite to him, wondering what he was thinking of as he sat smoking thoughtfully. "Mr. Chetwood," he said suddenly, "do you think you are right in this?"

"I think I may do what I like with my own," was the answer.

"And if I won't keep to my part of the agreement?"

"You must, Brian; you wouldn't be such a fool."

"It shall never be against her will, any way," said Brian, in a low voice; and, getting up, he paced up and down the dimly-lighted room, with his head bent and his eyes fixed on the carpet, for fully five minutes without speaking; then he came back to the fire again, and stood in his old attitude, with one elbow on the chimney-piece. "Your proposition is unfair and unjust," he said; "it places us both in an awkward and disagreeable situation. For the sake of right and justice you ought to change your decision."

There was a kind of quiet earnestness in his voice and manner that ought to have carried conviction of the truth of his argument. But old Mr. Chetwood was not like other people; he stood up when Brian had finished, and laid one hand on his broad shoulder, looking straight into the steady gray eyes regarding him.

"If you talked all night, Brian Mannering, it would make no difference; no argument you could bring forward would shake me one bit."

"For my mother's sake!" said Brian, in a low, deep voice. "If you have no pity for that child who was here to-night, do what is right and just for the sake of my mother's memory."

But harder grew the stern old face looking so fixedly into his own.

"No," he said, slowly; "not even if your eyes were ten times as like hers. Good-night, Brian; you have upset me, lad."

They shook hands, and Brian left the house and walked slowly down the empty street, where nothing but the echo of his own footfall was heard as he wended his way to the hotel, as it was called. But it was long before he went to bed; he sat smoking and thinking till the night was well-nigh morning.

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It was the day of Guy's departure; he had left that morning after breakfast, after a stormy interview with the Reverend William, who expressed his mind pretty freely, without stopping to weigh his words, or soften any of the hard things he felt it was his duty to say to the hot-headed young fellow who faced him in his study with no sense of regret for the errors he had committed and the debt he had fallen into, but only exasperated beyond measure by William's stern reproofs and still less welcome advice.

"You must mend your ways and give up all your extravagances, or——"

"Or what?" burst out Guy, hot and passionate.

"Or I will stop your allowance," was the withering rejoinder; and then they parted with a cold hand-shake, and Guy, angry and agitated, went to say good-by to Dolores.

"Guy darling," she sobbed, as he held her in strong young arms, "you will be prudent for my sake—won't you, Guy?"

"I will try, Dolores—I will indeed. Good-by, dear; don't cry. I will give up smoking, or anything in reason; there—I promise,"

With tearful eyes Dolores stood at the window and watched him going off, sitting on the car and looking back smiling to the loving face watching him; and then William came in, with a stern look on his hard features, and repeated what he had said to Guy, and more besides, to Dolores, who defended Guy and gave way to tears.

"It is all your fault, Dolores; you encourage him in everything, and you are as much to blame as he is. From a child you have taught him to set my authority at naught; and when he goes to the dogs you may blame yourself."

And William, having given vent to his feelings by a just exhibition of his wrath, left the room again, leaving Dolores to spend a long, unhappy day. It was the afternoon now, and the red sun, golden and hazy, was sinking behind the town. Dolores was sitting in the window that looked out on the straight, narrow garden, bending over her work, turning and remaking a dress. She was very miserable, and tears rolled down her cheeks and fell upon her hands.

It was three weeks since the night when Brian Mannering had so unexpectedly arrived, and whenever she went to Uncle Hal's he was there too; and then Dolores had left off going, and had spent that last week all with Guy. William's speeches that morning were still rankling and smarting, and she was feeling very disconsolate indeed, when the door opened and Brian Mannering was shown in to see Dolores, her hands over her face, sobbing piteously. He was touched at the sight of her distress, and yet, when, covered with confusion, she brushed away her tears and stood up, all her work slipping off her lap and lying at her feet, he only took her hand and held it for a moment, never looking at her downcast, quivering face, and then gravely gathered the scattered reels on the floor, and laid the dress she had been busy with on a chair, giving her time to stop the sobs that were coming with every breath.

"You must miss Guy very much," he said, gently.

Dolores lifted her wet eyelashes and looked up at him gratefully.

"Yes," she replied, with a little sigh. A gleam of the setting sun touched her hair and lay across her sad face.

"But you mustn't fret," said Brian, standing back in the shadow, so that only the outline of his face was visible, and looking keenly down at the sad, wistful eyes gazing out at the garden in the sunlight. "Brothers cannot be always at home, you know."

"I know." And Dolores smiled at his simple, honest words.

"Can you come down to Mr. Chetwood?" he asked, presently. "He is not very well, and he wants to see you."

"I will come now," said Dolores, wondering a little why he spoke so gravely; and she went away to dress, leaving him standing in the window, from which the bar of sunlight had faded.

"Where is he?" Dolores asked, as they entered Mr. Chetwood's house.

"Up-stairs. He did not get up at all to-day."

"I will go up to him now."

"Stop one moment," he said, laying his hand over hers as it rested on the balusters and then

suddenly withdrawing it. "No—go up to him; it is better as it is."

Dolores looked wonderingly into his face, which was strangely agitated, but he turned away, and she went slowly up the uncarpeted stairs and knocked at Mr. Chetwood's door.

"Come in," he said; and she went in and up to the bed where he lay in the twilight. "You have come," he went on. "Good. Get a candle, child, and put it where I can see you—I have a great deal to say to you."

Dolores got the candle and placed it on the little table at his side, his eyes restlessly following her every movement.

"There, that will do—sit down." A roll of paper lay on the bed, Mr. Chetwood took it up. "Read this," he said—"it concerns yourself."

Dolores opened the paper, read a few lines, and looked up surprised.

"Go on," said the old man, impatiently; and Dolores read on with a changing face.

It was the draft of her uncle's will, leaving her and Guy fifteen thousand pounds each, upon one condition—that she, Dolores, was to marry Brian Mannering within a year's time; if not, the whole thirty thousand pounds went to him. What did it all mean? Had old uncle Hal gone mad? Dolores lifted a very white face and looked at him, but did not speak. No word came from her trembling lips.

"I am not mad," he said—"I am as sane as you. Now listen, Dolores Chetwood, and don't interrupt me. I have thirty thousand pounds to leave to whoever I choose. You all thought me a beggar but I am not. Well, as you see there, I have made ample provision for you and Guy. It all rests with yourself. That will is to be sealed up and not opened till a year after my death, and then, if you have not fulfilled the condition therein, all the money goes to Brian Mannering. Now you may speak."

Dolores clasped her hands together, while her breath came fast.

"Uncle," she said, speaking in a very uncertain voice, "of course you may leave your money to whom you choose; but you are not just."

"Possibly not. Well, it all rests with you. Don't look so scared, child, I am sure Guy won't be sorry to get fifteen thousand pounds down." Keenly he read the girl's white agitated face, and noted the trouble in her eyes as he spoke. "If you care for Guy," he said, "you will do what I wish. Brian——"

The blood surged over Dolores's face; tears started to her eyes.

"Does he know of this? Oh, uncle, you are very cruel!" And then came a sound of bitter weeping, and amid her choking sobs Dolores heard Mr. Chetwood urging her to give a promise, but made no answer.

The moonlight was lying in white patches on the bare wooden stairs when Dolores came slowly down, with sad, weary steps. She had crossed the hall, and her hand was on the lock, when the door of the dining-room opened, and Brian Mannering came out and quietly took her hand in his own.

"You are not going like this," he said. "I want to speak to you."

"No, no!" cried Dolores, in a broken, troubled voice. "Oh, please, I must go indeed!" But the strong hand held her fast, and there were wondrous pity and tenderness in his low manly voice when he spoke.

"Only hear me for one moment. I know what you are feeling and suffering now. And Heaven knows, poor child, how I pity you. I have fought against this will. I asked him to let me arrange things in my own way, but all to no purpose. And now"—bending low, to try to see her face in the moonlight, while his voice grew as agitated as hers—"would it make it any easier for you to do as he wishes, not for Guy, not for the sake of the paltry money, but for my sake, because—because, Dolores, I love you?"

"No, no, no!" she cried, wrenching her hands from his clasp. "Oh, please let me pass!" she added, in a voice of such anguish that he cried out—

"Heaven forgive that old man for the wrong he has done us both!"

He caught a glimpse of her white face as he opened the door and they went out into the cold moonlight, he walking by her side, listening to the sobs that could not be repressed, and looking down pitifully at her.

"Don't let this distress you," he said, at last. "Dolores, I have brought you nothing but pain and trouble."

"It was not your fault," she answered, in a low voice, and she held out her hand as they reached the house. "Good-bye."

He held it tenderly, the poor hand that trembled as it lay on his own.

"Is it good night or good-bye?"

Dolores turned away with a little pitiful gesture that pained him.

"Good night," he said. "Heaven bless you!"

Next day was Sunday. Dolores had a headache and did not go to church in the morning, and William went to inquire after old Mr. Chetwood; the old man would not see him however—William was no favourite of his—and it was Brian Mannering who told him Mr. Chetwood was very poorly.

Afternoon service was at half-past six; it was always very badly attended, and the candles flickering from their tall candlesticks shed their light generally on empty seats. William did all the service himself in the evening and preached; the Rector, living four miles out of Kilblaney, did not drive in a second time on cold winter nights.

The service had commenced when Brian Mannering entered the church and took his seat. Looking across the aisle, he could see Dolores' profile bent over the prayer-book in her hand, and he did not pay much heed to the sermon; his gray eyes were forever straying to the pew where Dolores sat with sad, weary eyes looking up at the preacher's face. Brian sighed. Did the knowledge of his love make her look like that? He looked straight before him for the rest of the sermon; and when he lifted his head after the brief prayer that followed the blessing Dolores was gone. He did not try to overtake her, but turned and went through the churchyard, where the moonlight was lying white and cold upon the graves. A figure was kneeling on the grass, leaning in an agony of weeping against a white head-stone.

"Mother, mother!" he heard; and at the sound of that voice he came forward and laid one hand on the bowed head.

"Dolores," he said, very gently, "may I not comfort you here by your mother's grave?"

"Mother, mother!" cried the broken voice, wildly, the weeper laying her head against the marble stone, and sobbing as if her heart would break.

Brian waited for a few minutes and then sat down at her side.

"Oh, go!" pleaded Dolores, turning a piteous face to him in the white moonlight; and he answered, almost sternly—

"Not till I tell you what I have come to say. You must hear me."

"Very well"—moving a little way from him—"only I don't know that anything you could say could make any difference"—looking away beyond the tombstones, a sort of desperate expression coming over her face.

"Do you think I had any hand in Mr. Chetwood's will?" Brian asked.

Dolores turned her head, and looked into the straightforward honest eyes.

"No," she answered.

"You are right," he said; "and, Dolores, Heaven knows I don't want to force you into a marriage with me—on the contrary, I tell you I would never make you my wife unless I knew you loved me. But I want to say to you here now, so that it may all be plain between us, that I love you fully and entirely for your own sake."

But to all Dolores made no answer, she had stood up, and he got up too, and walked beside her. "He wants to make me his wife out of generosity," she kept repeating to herself; and at last she spoke, bitterly—

"Why talk of all this now? Uncle Hal may live longer than either of us."

"Dolores, I tell you," said Brian, passionately, "you are misjudging me. Before Heaven I swear that Mr. Chetwood's money has nothing to do with it; and yet you willfully misunderstand me."

"I understand you very well," she returned, looking up at him wearily, and putting her hand to her forehead. "You are very good; but we can never be any more to each other than we are now."

"Why?" came short and stern from his firm-set lips.

Dolores made no reply; she would not say to him, "I will not be your wife, because you ask me out of pity," for she knew he loved her well; and he repeated his question, adding gently—

"Tell me, Dolores."

She answered him then, bringing out the words bravely enough—

"Because you would all your life think I had married you for Guy's sake."

"My darling, must this separate us? Oh, Dolores, could you not get to care for me?" There was a short, sharp struggle with herself, and the girl's white face was turned to him.

"No," she said, simply, and she held out her hands. "Please, oh, please say no more!

He caught her hands, and held them fast.

"Be it so. Good-bye, love, good-bye!"

The next morning Brian Mannering left for London; and when Dolores went to see old Mr. Chetwood she found him very bitter against Brian and a little more gentle than usual with herself.

"You look out of sorts, child," he said, in a voice quite kind for him; and then he added half to himself, "Blood is thicker than water after all." And after that Brian Mannering's name never passed his lips; and so the spring crept on.

One day Dolores received a letter from Guy, which, in her pleased surprise, she read aloud to William.

"I have a piece of news for you," he wrote. "I have discovered a hidden talent that necessity has called into being. Only fancy, Dolores—I have taken to authorship! and an obliging editor, who sees my productions in the same light as I do, buys them from me. And who knows what I may come to some day? It's awfully jolly. I have given up smoking and everything; and the first thing I mean to do is to send you the jolliest present I can get."

Dolores looked up with glistening eyes,

"I am so glad. Dear old Guy? I knew there was plenty in him. I wonder what he writes—Don't you William?"

The Reverend William looked gravely at Dolores' pleased, excited face.

"Something for a sporting paper, no doubt. That kind of thing would be in his line."

"I thought you would have been so pleased, William," said Dolores, reproachfully.

"So I am—very glad he can do something for himself. He won't be so hard on you now."

With burning cheeks Dolores put away her letter—William was always so unjustly hard on her darling Guy—and from that day she told him no more of Guy's literary success; but when a gold locket came from Guy, with a photograph of himself inside, she showed him that, with such conscious pride and love for the giver that William said, bitterly—

"I should be a happier man, Dolores, if any one loved me as you do Guy."

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A day came that old Mr. Chetwood was summoned to go on the last long journey, and the blinds were drawn down, and crape hung from the brass knocker on the shabby door—for the old man lay dead up stairs. As he had lived so he died—unloved, unregretted. Dolores was with him at the end. Hers were the only eyes which shed tears over the poor, lonely old man. He held fast to her warm, soft hands in the last awful clinging grasp; it was her voice that whispered of peace and forgiveness, and she alone heard his last words. To the surprise of every one, Brian Mannering came all the way from London for the funeral, and after that the will was read.

"Poor old man," said William, as the lawyer unfolded the paper, "he had'nt much to leave; and he cast a glance round the barely furnished room.

A strange expression flitted across Brian Mannering's face.

"I think," he remarked quietly, "you will find yourself mistaken." And then he leaned back in his chair, with his arms folded across his broad chest, and watched the surprise dawning on William Chetwood's face, when the dry, dusty little lawyer read out, in a high-pitched, squeaky voice, that to Dolores Chetwood was bequeathed the sum of thirty thousand pounds.

"Is it true?" gasped William, turning very white. "I had no idea—I thought my uncle was a poor man."

"Yes," said Brian, bitterly—and his eyes were hard and stern—"the world neglected the poor old man—all but your sister; and it is very right she should have all."

"She ought to be told. Come, Mr. Mannering, and be the bearer of this good news."

Over Dolores's face came a great look of sorrowful surprise and agitation when William told his news, with Brian standing gravely by, watching with keen observant eyes. Dolores looked up at his face, her own very pale.

"This is your doing," she said.

"Yes. I insisted on justice being done," he answered, and he turned away with eyes dark with pain; for was there not an insuperable barrier between them now—a barrier placed there deliberately by his own hand?

William had gone to his study to get over his surprise at Dolores' good fortune, and she and Brian were alone together.

He, standing looking out of the window, watched a string of carts piled up with turf winding their slow, weary way down the street, not thinking of the things his eyes mechanically saw, but wondering what was passing in the mind of the quiet figure at the table, sitting so still, with her head laid down upon her folded arms; and then he heard the sound of low, convulsive weeping that made the blood rush to his forehead. And yet he did not speak—he only bit his lip and looked out steadily into the blazing sunny street. And then William came back, and the opportunity was gone forever.

"I think I will say good-by now," Brian said, speaking in a voice rather unlike his own. "I must catch the mail to-night. He came over and stood beside the table. "Good-by, Dolores."

She lifted her head, and for one instant their eyes met; then his grew hard and stern again.

"I don't suppose we shall ever meet again," he said, adding, bitterly, "What might have been can never be now."

So he went away, and Dolores, the possessor of thirty thousand pounds, wept the bitterest tears she had ever shed in her life, and the letter that reached Guy telling of uncle Hal's legacy was so blurred and blotted with tears that he could hardly read it.

"I fancy Mr. Mannering was disappointed," said William to Dolores that same evening. "I have never seen a man with such an almost broken-hearted look on his face; and yet what right had he to expect anything?" And then he stopped, amazed at the look that came into Dolores' eyes.

"William," she cried, passionately, "you do not know what you are talking about. Let me tell you that had it not been for Brian Mannering our uncle would never have left me one penny; and he could have had the whole thirty thousand pounds himself if he had liked, for uncle Hal meant it all for him." She vouchsafed no further explanation, but from her manner William had no doubt of her words.

Guy got a week's leave when he received Dolores' letter, and hurried by the first train to Kilblany.

"Why, Dolores, you don't look half pleased!" he exclaimed, when he caught sight of her face. "I thought you would have been so glad. You are an heiress now—a live heiress!"

"So I am glad, Guy," replied Dolores, coloring a little—"and most glad of all for your sake, dear; you won't have to be so economical now, Guy."

"You dear, little thing!" he said, stooping and kissing her. "But I am not going to live on you, Dolores; I was a brute ever to do so."

"But you won't refuse to let me help you, Guy—for what will be the use of all that money to me?"—smiling a little sadly as she spoke.

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"Can nothing persuade you to come, Mr. Mannering?"

"You are very kind, but you know I am no lover of balls and parties; I came down to Harry Grant's only for the shooting."

"And didn't expect to be so victimized!" laughed Mrs. Haycroft, a sprightly matron with four marriageable daughters. "But I am determined to force you out of your shell by fair means or foul. Mr. Grant tells me you are a regular hermit."

"And mean to remain so," decided Brian, inwardly, as he thought of the four gushing Misses Haycroft; but he only smiled a little wearily, and looked out at the trim croquet-ground, with its ribbon-border blazing in the sunshine and the two youngest Misses Haycroft, attired in the latest extravagant fashion, playing Badminton.

"Would you like to play?" asked Mrs. Haycroft, following the direction of his glance. Brian answered, quickly—

"Thanks, no; I think it is rather hot—don't you?"

"Well, perhaps so—but the girls don't seem to mind."

And then Mrs. Haycroft's mind went back to her dance again. It was hard work beating up recruits—gentlemen were hard to be procured. There was not even any barracks near to import officers from; and Brian Mannering was good-looking and eligible—so, after further consideration, she returned to the siege with renewed energy.

"But won't you really come to my party? You might not find it so bad as you expect."

"I am sure it would be very pleasant," Brian answered—"but really I haven't been to a dance for five years or more."

"All the more reason to turn over a new leaf. We have an heiress too. She is from Ireland—and such a nice girl."

"She must be different from most heiresses, then," said Brian, smiling.

"Oh, yes, she is so pretty—the loveliest face I have ever seen, and the possessor of thirty thous——"

"What is her name?" asked Brian suddenly turning away his face.

"Chetwood—Dolores Chetwood. She is only two-and-twenty. Her fortune was left her in a most romantic manner. An old uncle died, who was always supposed to be poor, and left this delightful sum to Miss Chetwood, who had always been kind to him. Was it not strange?"

"Very," replied Brian, thinking how much more romantic the real story of Mr. Chetwood's will was.

"And she is pretty?" he asked, carelessly.

"Oh, more than pretty! Her eyes are beautiful."

Brian got up and walked to the window. Only too well did he remember the beauty of those deep violet eyes with their dusky lashes. For a full minute he did not speak. Then he said—

"I wonder the heiress isn't married, with her youth and beauty and wealth. It is odd some lucky fellow hasn't carried off the prize."

So calmly he spoke that Mrs. Haycroft never guessed the interest he took in her answer, or how his heart was beating. She was quite ready to tell him all she knew about the heiress, especially as all the time he was watching the Badminton going on in the garden.

"Every one is wondering," she began, "that Dolores Chetwood does not marry. I myself fancy she is very hard to please. She has admirers in plenty, but treats them all equally coolly, and only last week refused the great catch of the county—Sir Frederick Tempest. He was in an awful state, and went off to Paris in despair. Mr. Haycroft said he never saw a man so cut up about anything; but he acknowledged that Miss Chetwood never gave him the slightest encouragement."

"Then he had only himself to blame," remarked Brian, shortly, and he abruptly changed the subject; but as he took his leave, he promised to come to the party, and so artfully did he announce his decision that Mrs. Haycroft never suspected his real reason for changing his mind so suddenly.

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It was three years since Brian Mannering had seen Dolores—three long years—and now he was unexpectedly to meet her again. It was very late when he arrived at Mrs. Haycroft's on the night of the ball, and he stood with a knot of men in the doorway, watching the dancing, but seeing only one face, that of Dolores Chetwood, who seemed the center of attraction and admiration.

She was charmingly dressed in pure white, soft and shimmering, with pearls on her neck and arms. To him she appeared changed. With all her wealth and beauty, she did not seem happy; there was a weary, dissatisfied look in her eyes; and when she was not smiling her mouth was pensive, almost sad. Yet none but the keen gray eyes watching her every movement so intently saw aught but a young lovely face, whose eyes had a touch of seriousness perhaps—nothing more.

Brian made his way through the room at last, and went straight to Dolores. A sudden flush and tremor of excitement came over her face as the sight of him brought back the recollection of the old time so keenly; and then, as she laid her hand for a moment in his, she turned white to the lips.

"I have startled you," he said, in his old well-remembered voice. "Can you give me one dance?"—taking her programme out of her hand. "There is one left—may I have that?"—scribbling his name on the scrap of gilded pasteboard, and never noting that her lips were quivering so that she could not answer.

Brian waited patiently for a whole hour or more, when his turn came at last, and he and Dolores took one turn round the room; and then he said, looking down at her with pitiless eyes and firm mouth—

"I came to see how you bore your honors. Have they brought you much happiness?"

"As much as I expected they would," answered Dolores. "Please stop—I am tired."

"It is nice and cool on the terrace—will you come?"

Side by side they stood in the soft dusky night, Brian was the first to speak.

"You don't look happy, Dolores."

"Don't I?"—with a little nervous laugh. He laid his hand on the small one that trembled so sadly on his arm.

"And yet you have everything to make you happy."

Dolores, looking up wistfully at him in the gloom, returned, with a little catch in her voice, "Why do you talk of these things?"

He looked down at her and said, almost sternly, trying to shake the calmness of the white upturned face—

"I am going to try life in the New World. I don't suppose I shall ever see you again. May I ask you one question, Dolores?"

"Yes," was the brief reply; and Dolores, slipping her hand from his arm, leaned against the marble balustrade and waited for him to speak.

"Why did you not marry Sir Frederick Tempest? I mean, what was your true, real reason?"

"I did not care for him," replied Dolores, simply.

Brian laughed a laugh not pleasant to hear.

"Why not? Who thinks of caring when money and title are concerned?"

"You have changed your opinion then," said Dolores, her voice betraying more than her words.

"I have not," was the firm rejoinder. "I was only quoting the world's opinion. But why could you not care for Sir Frederick?" Though he could not see her face, Dolores put up one hand quickly to shield it from him. "Do you care for any one else?" he asked, in the same hard voice he had used all through; and Dolores answered, with a burst of weeping—

"Yes;" and then, low and passionately she added, "Oh, why will you make us both miserable?"

He grasped her wrist tighly, speaking hard cruel words.

"And you tell me this—me of all men, whom you have made the most miserable on earth! Well, good-bye! You know now what it is to feel as I have felt for three long years. I am going now. Good-bye forever!"

With a cry Dolores held out her hands.

"Brian, Brian, why will you be so blind?" He turned and caught her hands in his.

"Dolores, do you mean this?" he asked, feeling as if his whole life hung upon her answer. "You said you cared for somebody else."

"I have never cared for any one but you!" she sobbed. "And, oh, Brian, I couldn't let you go away when you were too proud to speak!" And, as Brian held her tightly to his heart, he whispered—

"Nothing but death shall come between us now, darling!"

People said that Brian Mannering was a lucky man, but no one but himself and Dolores ever knew upon what a mere chance their life's happiness had hung. In after life they used to laugh and say they owed a good deal to Mrs. Haycroft's ball.

A FEW FAMILIAR QUOTATIONS

Not Found in the Bible, Shakespeare, Pope, or Hudibras.

Music hath charms to soothe a savage breast.—*Congreve's Mourning Bride.*

Hell hath no fury like a woman scorned.—*Ib.*

She walks the waters like a thing of life.—*Byron's Corsair.*

How happy could I be with either, were 'tother dear charmer away.—*The Beggar's Opera.*

Man's inhumanity to man makes countless thousands mourn.—*Burns.*

Nursing her wrath to keep it warm.—*Burns' Tam O'Shanter.*

'Tis sweet to hear the watch-dog's honest bark bay deep-mouthed welcome as we draw near home.—*Byron's Don Juan.*

Between two world's life hovers like a star upon the horizon's verge.—*Ib.*

'Tis distance lends enchantment to the view.—*Campbell's Pleasures of Hope.*

Like angels' visits, few and far between.—*Ib.*

His back to the field and his feet to the foe.—*Campbell.*

Procrastination is the thief of time.—*Young's Night Thoughts.*

A gilded halo hovering round decay.—*Byron's Giaour.*

They also serve who only stand and wait.—*Milton.*

The stern joy which warrior's feel in foemen worthy of their steel.—*Scott's Lady of the Lake.*

A little round, fat, oily man of God.—*Thomson's Castle of Indolence.*

His pity gave ere charity began.—*Goldsmith's Deserted Village.*

Even his failings leaned to virtue's side.—*Ib.*

To party gave up what was meant for mankind.—*Goldsmith's Retaliation.*

To point a moral or adorn a tale.—*Johnson's Vanity of Human Wishes.*

A little bench of needless bishops here, and there a chancellor in embryo.—*Shenstone's Schoolmistress.*

Made a sunshine in a shady place.—*Spenser's Faerie Queene.*

Airy tongues that syllable men's names.—*Milton's Mask of Comus.*

As idle as a painted ship upon a painted ocean.—*Coleridge's Ancient Mariner.*

God tempers the wind to the shorn lamb.—*Sterne's Sentimental Journey.*

A flower of meekness on a stem of grace.—*Montgomery's World Before the Flood.*

'Tis not in mortals to command success; we'll do more, deserve it.—*Addison's Cato.*

Like Dead Sea fruit that tempts the eye, but turns to ashes on the lips.—*Moore's Lalla Rookh.*

Coming events cast their shadows before.—*Campbell.*

All went merry as a marriage bell.—*Byron's Childe Harold.*

Where youth and pleasure meet to chase the glowing hours with flying feet.—*Ib.*

BRIC-A-BRAC.

By flowers, understand faith; by fruit, good works. As the flower or blossom is before the fruit, so is faith before good works; so neither is the fruit without the flower, nor good works without food.—*Quarles.*

The new French life-saving mattress is highly commended. It is formed of two rows of blocks made of cork cuttings, lightly compressed by machinery within a waterproof case, and the whole covered with canvass. It forms, ordinarily, a mattress, which is intended to be placed in every cot or berth, and makes a bed which is said to be very elastic and easy to lie upon. Its weight is about six pounds, and it is constructed in such a manner that it can be quickly put about the person, forming then a double belt, and attached in such a way that it cannot possibly be displaced by the winds or waves.

Shamoy skins are, as every one knows, largely used for many purposes—for inside linings of gloves, etc., and for cleaning purposes in many departments. It is not derived from the skin of the chamois, as is sometimes ignorantly supposed from the sound of the name, which results from the process, but from the flesh side of the sheepskins which have been split. The skins, after having been passed in the ordinary way through the earlier processes of washing, etc., are soaked, first in lime-water and next in a mixture of bran and water, or in a weak solution of sulphuric acid, after which they are beaten in a mill till no moisture remains in them. Fish-oil is then poured over the skins, which are again beaten till they are thoroughly impregnated with it. This is done over and over again until the skins can receive no more oil, and then they are hung for a short time in a room heated up to a certain temperature. They are then carefully washed in a solution of potash, which removes any oil that may still remain about the leather; and thus we have the shamoy skin of daily use.—*Good Words*

TO MRS. B.

Black thy dress is as the glancing
Shadows on our parting night;
Black thine eyes are as the dancing
Lakelet in the full moon's light;
Black thy locks are as the shifting
Branches of the chestnut tree,
Through whose leaves, the moonbeams sifting,
Quivered o'er thee, Mrs. B.

Witching is the maiden's shy glance
To the youth of softer heart;
But the magic arming thy glance
Surely is the true black art.
Luckless he who feels its slightest
Touch; he has no power to flee.
Blackest clouds flash lightnings brightest;
Thine have pierced me, Mrs. B.

Masked thy batteries are by lonely
Bombazine and dusky crape;
When we find they 're hidden only,—
Ah, 't is too late to escape.
Crafts that sail 'neath colors sable
Give no quarter to their prey;
Mrs. B., how wast thou able
So to pluck my heart away?

[*A. S. T.*

During the winter evenings, when the children were engaged with their lessons, our tame rat, Billy, was usually to be found on the table rummaging among their books and catching at their pens; which latter amusement he enjoyed very much after the manner of a kitten running after a knitting-needle drawn quickly up and down the table, but as these amusements rather interfered with the studies, Billy would occasionally be dismissed to the kitchen, to which he had a great dislike. He never stayed there longer than he could help, but on the first chance would rush up stairs and scratch, or rather, I should say, gnaw for admittance. Speaking of this gnawing leads me to observe that one objection I had to receiving him was the fear that he would be very mischievous; but fortunately I never found him so. He had free access to a pantry where a variety of eatables, usually considered dear to a rat's heart, were to be found, but I never knew him to injure anything, or even to cut the paper covering of any parcel, no matter what it contained. No doubt it was partly owing to his being so well fed that he was not driven to theft by hunger. I generally scattered for him on the shelves some grains of rice or pieces of starch, and to those he helped himself when inclined. From soap or candles he turned away in disgust, being far too well-bred a rat to indulge in such low tastes; but he dearly loved a bit of plum-cake; and, shall I confess it, he was by no means a teetotaler. If ale was used at dinner, he would rush eagerly about the glasses until he was supplied with some in a spoon. I believe, before he came to us, he had been accustomed to even stronger potations, in which, however, we did not indulge him. I have said he was not mischievous, neither was he, as mischief among rats is generally understood; but there is no rule without exception, and Billy had a decided penchant for kid gloves. If any were left carelessly about he was sure to get hold of them and have the fingers eaten off in a few minutes. I cannot tell how many gloves he destroyed, until repeated lessons of this sort enforced more steady habits. I must not omit to mention his love of music; when he heard the piano he would rush to the drawing-room and spring to the performer's knees, where he would remain perfectly quiet, evidently listening with much pleasure. When he first came he was very restless, seeming to live in a state of perpetual motion; but he soon learned to come upon the knee to be caressed and have his head rubbed, which operation afforded him intense enjoyment. He would have lain in supreme delight for an hour if anyone would have rubbed his head for so long.—*Chamber's Journal.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

ROCK OF AGES.

F. L. STANTON.

"Rock of Ages cleft for me,
Let me hide myself in thee!"

Sang the lady, soft and low,
And her voice's gentle flow
Rose upon the evening air
With that sweet and solemn prayer
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

Yet she sang as oft she had
When her heart was gay and glad,
Sang because she felt alone,
Sang because her soul had grown
Weary with the tedious day;
Sang to while the hours away.
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

Where the fitful gaslight falls
On her father's massive walls.
On the chill and silent street
Where the lights and shadows meet,
There the lady's voice was heard.
As the breath of night was stirred
With her tones so sweet and clear,
Wafting up to God that prayer:
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

Wandering, homeless thro' the night,
Praying for the morning light,
Pale and haggard, wan and weak,
With sunken eye and hollow cheek
Went a woman, one whose life
Had been wrecked in sin and strife;
One, a lost and only child,
One by sin and shame defiled;
And her heart with sorrow wrung,
Heard the lady when she sung,
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

Pausing, low her head she bent,
And the music as it went
Pierced her blackened soul, and brought
Back to her (as lost in thought
Tremblingly she stood) the past,
And the burning tears fell fast,
As she called to mind the days
When she walked in virtue's ways;
When she sang that very song
With no sense of sin or wrong;
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

On the marble steps she knelt,
And her soul that moment felt
More than she could speak, as there
Quivering, moved her lips in prayer,
And the God she had forgot
Smiled upon her lonely lot;
Heard her as she murmured oft,
With an accent sweet and soft,
"Rock of Ages, cleft for me,
Let me hide myself in thee!"

Little knew the lady fair,
As she hung in silence there,
That her voice had pierced a soul
That had lived 'neath sin's control!
Little knew, when she had done,
That a lost and erring one
Heard her—as she breathed that strain—
And returned to God again!

A WOMAN'S HOME FOR WOMEN.

An enterprising young lady in New York has conceived the idea of providing a home for business women, where they will not only be provided with the comforts of a home, but where a woman's self-repect will not be insulted by stringent rules. The indignation created among women by the regulations adopted at Stewart's Hotel shows how keenly the indignity cast on them by the restrictions there enforced is felt, and women will doubtless promptly avail themselves of this opportunity to obtain, not only good accommodations at reduced rates, but what is little less important, courteous consideration. Miss Leggett has very wisely decided to treat her guests *as guests*, and not as pensioners, which latter is the case in most "homes."

We give the circular entire for the benefit of our rural girls or women, who may think of establishing themselves in New York. A word as to the projector of the enterprise. Miss Sarah H. Leggett is a lady who, to culture and refinement and a most pleasing address, unites excellent business ability, and who has really the good of women at heart. That this is *not* a money-making scheme, must be patent to all, for the low price charged for board, and the absence of "extras" preclude the possibility of there being "millions in it." We wish for the enterprise the success it deserves.

The spacious and elegant dwelling No. 61 Clinton Place, second door east from Fifth Avenue, has been rented by Miss Sarah H. Leggett, who proposes to open it as a Boarding-house for young Business Women.

Her desire to provide a home for this deserving class of society, where every attention shall be paid to the comfort of the inmates, and where they will enjoy every social advantage without being subjected to any other restraint than those which are necessary to every well-regulated household.

The entire building has been thoroughly painted and repaired, and will be ready for the reception of guests April 15th.

Meanwhile, applications for rooms and all inquiries may be addressed to the housekeeper, who will be on the premises after Saturday, April 6th.

The meals will be of the best quality, well cooked, and nicely served, and at hours to suit the convenience of all.

Sewing machines will also be provided for the use of the inmates.

Board, including use of the bath-rooms, parlors, library, piano, and every privilege of the house, will be $4 per week.

The library will be furnished with the best reading matter, and also with the leading periodicals and journals, which have been generously contributed by the publishers of New York.

If any lady desires to have a room alone, an extra but very moderate charge will be made.

In cases of sickness, meals will be served in the rooms, and attendance provided, without extra charge.

As the object of the founder is to establish a really home-like home for herself and guests, no element will be introduced which will not be in sympathy with trades-working and business women.

If further particulars are desired, Miss Leggett will be happy to see her friends, and answer all inquiries, either at her book and stationary store, No, 1184 Broadway, between 28th and 29th Streets, where she is occupied during the day, or at her residence, No. 61 Clinton Place, during the evening.

References will, of course, be required.

References given: Mr. Peter Cooper and Mr. William Cullen Bryant.

MEN'S PART IN HOME-MAKING.

Most of the preachments we have seen from the text of happy homes have been aimed at the women. This is natural enough, for they are the home-makers of the world; but just now we desire to nudge the heads of the households, and ask them how they are performing their responsible part in the realm of home. Their forte lies in breathing and enjoying the atmosphere after somebody else has made it—and not a few can't get along and make known their authority without "raising a breeze" in it. Men are too busy, too much pre-occupied, too impatient and thoughtless, and—it must be said of some of them—too selfish to do their fair share of that pre-eminently millennial work, the creating of a happy home, wherein love reigns supreme, and amiability, affection, cheerfulness, joy and peace are the natural conditions of family life.

Now in certain things man has been a constitutional *shirk* from the time of Adam—if the scientific gentlemen have left us any Adam—down to this day. Men will fight for their homes, and make slaves of themselves to their business to maintain them; but like the proverbial man who would die for a woman, but would never bring up a scuttle of coal, they can't tell what their children are studying at school, who their mates are, what they are learning of good or evil, nor hardly anything else that a father ought to know concerning his offspring. It is so sad a fact as to spoil the satire, when it is said that many a father finds his Sundays and holidays too few to enable him to "become acquainted with his boys." But we maintain that a man who *hasn't time to be a father to his children, with all that includes, has no right to have any.* He wrongs them, robs himself, puts an unjust responsibility upon the mother, and neglects his highest duties, human and divine.

There are so many ways in which a father may contribute to happy home-life that it seems strange the number of *houses* should greatly exceed the *homes.* It takes so little to make children happy at home, that it is a wondrous pity so many little ones are miserable, or uneasy, or discontented. If for an hour after the evening meal the father should give himself to his children, would the mother wear out so fast, or the children be so lawless, troublesome and uncomfortable? What a ministry for good to both parties is a papa's frolic with the babies! What an interest is added to the books, the drawings, the games, or even the studies if the father enters into them!

Aside from the children, and in homes where haply there are none, men still have a more direct part than most of them are ready to bear, in making the daily life pleasant. We hardly need say that a man should set the example for the family in patience, cheerfulness, courtesy, forbearance, and all the amiable moods and graces that are the soul of home happiness. The sort of men who display all their suavity and politeness on the street or at their business places, and save the storms, and sulks, and sourness, and all the evil brood of devilish dispositions that they characterize by the convenient euphemism of "moods"—well, we have our opinion of them! and if they will come within range, we don't mind expressing it privately; but we are afraid it wouldn't look well in print!

The whole tribe of home tyrants—men who make the entire household revolve around them as the center; whose tongues are chronically "furred" in the morning, and nerves so upset in the evening that the family must keep silence while they read and smoke; who "can't bear" the noise of innocent and natural mirthfulness; who have to be toadied and tended and humored; they ought all of them to be doomed to pass their days in a shabby-genteel boarding house, without sight of wife or children—with hash for breakfast, warmed-over pancakes for lunch, and lean mackerel and centennial hens for supper, with the lodger overhead always learning the trombone and servant girls that steal the hair-oil. They don't deserve a home, and no man does who will do nothing to make it. For man's rights do not include the right to all the comforts of a home without any of the work, or worry, or self-sacrifice, or thoughtfulness and well-doing incident to its creation and maintenance.

A good many men think they have done their full duty if they pay the bills, more or less grudgingly. But one might as well try to warm a room with a fire-place and a pair of silver-plated andirons, and no fuel or fire, as to make a home with money. The money simply makes a place for the home; to complete it the man must put in himself, and the best part of himself at that.—*Golden Rule.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

APRIL is in one of her sullen moods to-day, for the sky is dark and lowering; a mingled snow and rain drips from the leaden clouds and the birds hide shivering in the evergreens, while we stir up the kitchen fire to a brighter blaze. The boys have made bird homes of hollow logs, and carried out sheaves of grass seed and grain to feed the feathered friends that have returned too early to their last summer haunts. It is a good deed for the birds, and teaches our children to be kind-hearted, and to act as protectors, instead of destroying the pretty songsters. So tame were they during the last storm that they came into workshop and barn, and flew about unmolested. Very fine has been the weather lately and we have been thinking seriously of house-cleaning. Yet experience proves to me that it is often wrong to trust to the first fine days of a season, which are often followed by a cold rain. The rooms cleaned will gather dust, fires are necessary, and the work has often to be done over again. I find it a better plan to spend the time attending to the spring outfit of clothing, packing away unnecessary garments with camphor in paper bags that are impervious to moths, and looking over and lengthening the children's clothes, often found too small after their winter's vigorous growth. Then, when in early May the settled warmth is an assured fact, an extra hand to help and plenty of soft water, soap, and ammonia will take off easily the smoke and dust stains that will accumulate, and the fresh sweet air can penetrate to the heart of every room. I do not find this generally unpleasant task half so grim and odious as it is portrayed. A little system—the fact of beginning and finishing one part at a time—creates very little family disturbance and quite involuntarily, as the double windows are taken off and the cool green blinds take their place, I find myself singing a stanza of Whittier's beautiful poem:

"The west winds blow, and singing low
I hear the glad streams run;
The windows of my soul I throw
Wide open to the sun."

One summer the ants found their way to a certain cupboard where sweets were kept and, for the benefit of the lady who inquired in the RURAL for a remedy as well as of others so troubled, I will give my plan of proceeding. When house-cleaning the next season I removed everything and washed the shelves and sides of the cupboard with clean water; then went over the ground again with a water in which red peppers had been boiled to which was added a little ammonia and carbolic acid. The doors were left open awhile before we put anything in, and as a precaution, I placed frequently a fresh bone on the shelves to attract them and kept out such things as sugar for that season. But the ants never returned. If they had they would have gathered on the bone and could easily have been destroyed by scalding. Carbolic acid is very useful but needs to be in experienced hands on account of its burning nature. It is a good disinfectant and can be used in many ways during the period of house-cleaning. I hope all the ladies who read the RURAL keep a scrap book in which the good things floating in newspapers may be kept. I would say for their information that any starch left over from the washing is just as useful as a paste made on purpose and saves time when a few choice pieces are on hand and in danger of being mislaid.

SHIRT IRONING.

IN looking over some back numbers of the RURAL, I noticed an article on shirt ironing by "One Who Tries to Learn," asking for suggestions, or the experience of others. Thinking my method superior and less laborious, I most willingly give it. Dissolve two large tablespoonfuls of starch in one quart of cold water; let stand and settle; turn that water off carefully, which removes the gummy substance which is the principal cause of the iron sticking. Then add a very little fresh water, sufficient to make it thin enough to pour into boiling water, letting it boil up nicely, and to one pint of starch add a teaspoonful of kerosene oil. Starch your goods, letting them dry before ironing; then sprinkle the same as other clothes. If wished very stiff, dip them again into the starch. When ready to iron, rub a little beeswax on the iron and wipe thoroughly on a piece of clean paper. Smooth shirt-bosoms evenly, rubbing them with a clean dry cloth before ironing, or a damp one if too dry. I have no trouble with the iron sticking to the goods since I have learned to dissolve the starch in cold water and pour it off before using. The same holds good for cold starch which I use as often, adding a pinch of salt instead of the kerosene oil. I trust those who try this will be as much benefited as myself.

Yates Co., N. Y. MRS. MARY OLIN.

ANT EXTERMINATOR.

PLEASE accept a perfect ant exterminator of either the large or small black or the red. Spread plentifully upon the shelves in closets visited by ants *common salt*, also filling all crevices in wall or wood-work. As the salt will adhere to anything placed upon it, I spread newspapers over it. After a short time the salt becomes damp; you may then put on fresh paper but do not remove the salt during warm weather. Jellies, custards, cake, sugar in fact nothing will tempt them to forage where salt is plentifully sprinkled. The above I know from experience. MRS. M. G. B.

Sandusky.

QUERIES ANSWERED.

PLEASE furnish me with a No. 1 recipe for Mock Turtle Soup? May I also hope for directions for preserving natural flowers so that they will retain their color and form? I would like to commence with roses, lilies and some of our lovely wild flowers. MRS. M. G. B.

ANS.—No. 1. The following recipe for Mock Turtle Soup I think you will find very good. Clean and wash one large calf's head and two pig's feet; put to boil in four quarts of water—the kettle must be covered tightly throughout—until the meat will slip from the bones of the head. Select enough of the fatty parts from the cheeks and top of the head to fill a teacup and with the brains set aside. The meat from the head should be reserved with the brains until the next day. Chop the tongue very fine and with the selected fat add to the stock. Season with pepper, salt, majoram, thyme, cloves, mace, allspice and nutmeg. *Simmer* for two hours longer, removing the bones of the feet when the flesh falls from them. Then take from the fire, pour into an earthen dish and set aside until the next day. One-half hour before dinner remove as much of the grease as desirable, boil, strain and add the reserved meat cut into little squares. Thicken with a tablespoonful of browned flour rubbed smooth in a little water. Five minutes before removing from the fire add the force-meat balls made as follows: Rub to a paste in a bowl the yolks of four hard-boiled eggs gradually adding the brains, a tablespoonful of melted butter and a little salt. Mix with this two well-beaten eggs and with floured hand form into little balls the size of a small marble. As the soup is dished add a large claret-glass of sherry wine and the juice of one lemon. Three pints of this soup are amply sufficient for *ten* persons, or even more.

No. 2.—Many flowers may be preserved for months by dipping carefully when gathered in limped gum water; when drained they can be arranged in a vase when their shape and color will be preserved long after they are dry. Another method to preserve natural flowers is to dip them into melted paraffine, quickly withdrawing them. The paraffine should only be hot enough to maintain its fluidity. Hold the flower by its peduncle and move about an instant to get rid of air bubbles. The flowers should be fresh-cut and free from moisture.

News of the Week.

NEWS OF THE WEEK.

THE sensation of the day is the confession of Mrs. Tilton that the charge made by her husband with regard to her and Henry Ward Beecher, is true. Beecher has explicitly denied that she was guilty, as she now alleges. The unfortunate woman has so often made charges and afterwards retracted them and contradicted herself, twice under oath, that this confession is robbed of the force it would have had, if the woman's conduct and words had not been so unsatisfactory. Probably no further legal steps will be taken in the matter. Those who have believed Beecher innocent, will, as a rule, continue to regard him as the victim of a foul conspiracy, whereas those who have thought him guilty will be confirmed in that conviction. Beecher and Tilton are both now on lecture tours, the former in rural New York, the latter out West. Rumors are contradictory about Mr. and Mrs. Tilton living together again; and it would be hazardous to venture an opinion on the future conduct of such erratic people. 'Tis unfortunate that this hideous scandal should be reopened to the detriment of public morality.

Blair's bill to test the Presidential title was introduced in the lower House of Congress on the 15th, and referred to the Judiciary Committee where it will probably remain without any action being taken on it. A shipboard of colored emigrants has left Charleston, South Carolina, for Liberia, Africa, and the movement is rapidly spreading throughout the State. It is partly a religious movement, fostered by hopes of great worldly advantage in the growing colony. Should it prove successful it will certainly injure those sections of the South from which it will draw the laborers who now do all or nearly all the field-work. More Indian outrages are reported from Western Texas, where the adherents of Lerdo are reported to be actively exciting trouble on the frontier, with a view of disturbing the friendly relations at present existing between Mexico and this country. A political sensation was caused about the middle of the week by the publication in a New York paper, of an alleged interview with Senator Conkling. The brilliant New York statesman handled the President, Cabinet, their conduct and policy without gloves; but although the thing was spicy reading, it turns out to be only one-half true, as Conkling denies a great deal of it although he does not specify which parts are false. An amendment to the House bill with regard to Gen. Shields has been made in the Senate adding the names of Gen. Grant and other meritorious officers no longer in the public service to the name of Shields, to be placed on the retired list of the army with pensions. The whole thing was a mere political dodge to escape the odium of preferring Field to Shields as doorkeeper. There has been a great deal of shooting all over the country this week—principal cause, intermeddling criminally with other men's belongings in the shape of wives, daughters and sisters. At Coal Creek, Ind., there has been a bloody miners' riot between white and colored workmen—three killed, a number of others more or less severely wounded.

Large shipments of horses are being made on most of the steamers leaving this port for England, ostensibly for tramway purposes mainly, but many believe in part at least for cavalry use. Fernando Wood insists that his tariff bill looking towards freer trade, will have a majority of 23. Senator Blaine has made a vigorous speech against the measure before a friendly audience at Chester, Pa. All over the country there is much talk about immediate resumption of gold payments. Some banks, in most of the States, are already redeeming their own notes in gold, and several factories have paid their hands in the same coin. The movement is far more general West than East, for money-changers are loath to give up their pickings and percentages, and the East is their stronghold. A vigorous effort is being made in Congress to reimpose the income tax: income is certainly better able to pay than poverty. There is a fresh rumor that ex-Governer Fenton will be nominated instead of Gen. Arthur as Collector of this port. Another fight between Conkling and the administration with the odds this time in favor of the latter. Just now (April 21 and 22) a fearful snow-storm and flood are making things uncomfortable in the Black Hills, and moreover hostile Indians have put in an appearance.

Over the water political affairs are still intricately confused. There is yet a vast amount of talk about the possibility of preserving peace and a good deal of vigorous action looking to the probability of war. The fact is that the season has hardly yet arrived for commencing military movements, and both England and Russia are straining every nerve to get their forces and supplies in an efficient condition, to bespeak the favor of public opinion and to isolate each other, while each of them is doing its utmost to secure the friendly neutrality or gain the actual support of other nations. The Czar has succeeded in raising among his own subjects a considerable loan, fresh enlistments are swelling his armies, depleted regiments are sent home, ostensibly with a view to rest, but really to recruit their thinned ranks from the new levies; princes, nobles and people are raising funds to fit out a swarm of privateers to prey on the rich fleets of British merchantmen that whiten the ocean with their sails or darken the air with their smoke in every part of the navigable globe; and all the while the Muscovite resolution is growing stronger to keep a tenacious hold on the advantages secured at the cost of Muscovite treasure and Muscovite blood. In England public opinion seems to have petrified into a firm determination to protect, even at the risk of a bloody war, the vast interests which elevate to the rank of a first-rate Power the narrow area of the British Isle, and which the nation sees seriously menaced by the results of the late conflict. The people remember that in all late continental wars in which their country has been involved, although she may have been isolated for a time, her mighty financial resources and the broad grounds of European safety and welfare on which her action has been, as a rule, based, have ultimately won to her side powerful allies by whose assistance she has always finally triumphed.

Meanwhile, at the same time that she is industriously increasing her forces at home and fitting out a fleet which can sweep the seas, not only of the Russian flag, but even of the combined fleets of the world, she is summoning to her aid the dusky legions of British India as well as her ardent children from the distant colonies of Canada and Australia. With the exception of a few Radical soreheads, all her people are united, and the royal family are as enthusiastic in their support of all measures tending to maintain British honor and British interests as the most thoughtless shopman who draws his inspirations from the political doggrels of the streets and the music-halls. Bismarck has still hopes of a peaceable issue to the present complications, and while trying to clear the way for the meeting of the long-deferred Congress, is urging the simultaneous withdrawal of the English fleet from the Sea of Marmora and of the Russian army from the neighborhood of Constantinople. Such a measure would prevent the mutual exasperation arising from the proximity of discordant elements, and the possibility of this exasperation finding vent in some hostile action that might inevitably hasten the dreaded crisis. Each party at first agreed to this measure in order to throw the blame of an outbreak on the other, but when it came to actually carrying the thing into action, each has discovered numerous difficulties in the way of its performance, for each is afraid that thereby its rival might secure some advantage. Roumania and Russia are still at loggerheads. The former has concentrated her forces along the Carpathian mountain range so that the Russians cannot cut them off from Austria; the Muscovites have occupied nearly the whole of Bessarabia and the chief strategical points throughout the whole country. Gen. Todelben has succeeded the Grand Duke Nicholas in command of the Muscovite forces at San Stephano, and the latter is about to return to St. Petersburg. A strong anti-Russian feeling is springing up in Servia, and that State will remain neutral, if possible, in any future conflict. Austria is still on the fence; Russia is making large concessions to her; England is promising larger. As usual, Austria is sure to decide solely according to her own interests.

Grand preparations are being made in Paris for the opening of the French Exhibition on the first of May. The American department is in an advanced state of construction; a majority of the exhibits are already placed, and despite the tardy action of Congress, our countrymen have so vigorously exerted themselves, that our display will well represent the advanced position of the country in industry and the arts as well as its inexhaustible resources. Upwards of 100,000 operatives in the cotton and woolen mills of England are on a strike against a reduction of 10 per cent. on their scanty wages. Both employers and hands seem equally determined and a long period of dire distress is not improbable. In Russia there has been an *emute* of medical students and socialists; 3000 students took part in it in Moscow: 12 were killed; a large number wounded and still more taken prisoners who will doubtless swell the ranks of Siberian exiles. It was a movement of Nihilists, a sect or rather political organization, which has its secret members in every rank of Russain society, and whose tenants are confined to a belief that the whole order of society, as at present constituted, should be overthrown; that there is no hereafter; no spiritual existence "no nothing" except the present world, and that this is sadly in need of being set right.

VARIOUS.

Gortchakoff is in his 82d year—beating Lord Palmerston, who died in harness at 80.

Twenty-six gardeners are employed in the Vatican gardens. The number during the temporal power was forty-five.

The shipment of 600,000 pounds of buffalo hides from Fort Worth, Texas, this spring, indicates the extent of the winter's slaughter on the plains.

Castle Gandolfo, near Albano, has been prepared for the reception of the Pope, but, unless the weather grows unusually hot, he has decided to pass the summer at his post, in the Vatican.

An organ of the tobacco trade asserts that if the tobacco consumed annually, about 4,000,000,000 pounds, could be made into a roll two inches in diameter, it would encircle the world sixty times.

In the province of Nassau, Prussia, the common nettle has been treated like hemp, and is found to yield fibre quite as durable and as fine as silk. Factories have consequently been started for its manufacture.

President Wm. Orton of the Western Union Telegraph died in New York City on Monday, April 22d, at 11 A. M. Cause, apoplexy. Mr. Orton was the most widely known and influential man in this country in the business to which he has devoted most signal abilities.

The Berlin Housewife's Union seems to have been a great success. It supports a newspaper for the discussion of all housekeeping questions, a co-operative store, which supplies 4,000 families and an agency for servants, which in the past four years has supplied 16,000 persons with places

A free negro woman was kidnapped in Cincinnati twenty-five years ago by a slave dealer, and sold into slavery in Kentucky, where she remained until the close of the war. Recently she sued Sheriff Ward of Little Rock, the kidnapper, for $15,000. A long and closely-contested trial resulted in a verdict for $5,000.

The British "commerce destroyer," Shah, which so sadly battered the Peruvian ironclad last year, has gone home to be recoppered. She is said to be more than a match in speed and armament for any two Russian cruisers in the Pacific. In case of a war it is thought that she will make short work of the Russo-American "privateers," should any such be launched.

During the thirty-six years of its existence the income tax has brought into the coffers of Great Britain and Ireland the sum of £265,000,000, or $1,325,000,000 in gold. The highest rate—1s. 4d. on the pound—was in 1856-7, the years following the Crimean war. The lowest in 1875, was 2d., while the present tax, including the increase from the "six million" vote, is only 5d. (about 2 per cent.) on incomes above £160.

The late Lord Leitrim who was lately murdered in Ireland, did not go in for popularity. A few years ago he advertised for some one to fill up the vacancy in his Donegal agency. Three hundred applicants wrote to him, and in answer to one of them he said that he wished to appoint a military gentleman used to shooting natives in Australia and New Zeland, as he wanted a wholesome lesson given to the tenants on his estate.

The bottom facts of the far-famed "Malta Scandal" in which the Duke of Edinburgh, husband of the Czar's daughter, was implicated, appear to be as follows: A Lietenant Scott-Stevenson, belonging to the garrison, had an extremely pretty wife to whom the Hon. H. Monson, one of the Duke of Edinburgh's equerries, paid assiduous court. The matter coming to the ears of the husband, he promptly challenged the equerry who as promptly declined. The affair was noised about the island, and the Duke, to save his friend's reputation challenged Lieut. Stevenson himself. The Lieutenant declined on the ground that he had no quarrel with the son of his sovreign, and the matter was ultimately compromised by Mr. Monson consenting to leave the island. It subsequently appeared that Mrs. Stevenson had indiscreetely communicated the facts of the case to a lady friend. Mr. Monson returned. On the quay he was met by the irate husband, who publicly caned him in the presence of a dozen brother officers. It was only after a court of inquiry had been summoned, and the conduct of all parties pronounced "honorable," that the affair was suffered to drop.

CORINTH, Maine, Feb. 12, 1878.

To THE DAVIS SEWING MACHINE Co., Watertown, N. Y.—*Gents:* We are manufacturers of clothing; have been engaged in the business for the past fifteen years, manufacturing largely for Miner, Beal & Hackett, Isaac Fenno & Co., A. Sherman & Co., Smith, Richardson & Bates, Prager, Bock & Co. and Leland, Rice & Co., all of Boston. We have used the Davis Vertical Feed Sewing Machine for the past four years in manufacturing our clothing, and we know that it is better adapted to our business, and possessed superior advantages over any of the under-feed sewing machines.

Within the last three months we have had occasion to seam our clothing with double thread, and we find that the Davis Vertical Feed Sewing Machine (and no other family sewing machine) will do the work as well and easily as with the single thread. Yours, truly, T. BRACKETT & SON.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, April 20, 1878.

BEANS AND PEAS.—Mediums beans have merely their seasonable activity and that does not require much wholesale movement. The few buyers seem to want only best grades and they prefer paying the extreme to risking under quality. Marrows are very quiet and likely to be until the Havana market allows a margin for shippers. Late rates are nominal, Pea beans a shade better. Kidneys are not above plenty and both red and white are fairly steady at quotations. Black beans strong at a further advance. Canadian peas go out fast enough to hold up prices: bulk and bond, 82@84c.; green peas quiet but a little stronger in price; $1.10@1.12½ Southern B. E. peas per two bush. bag, $2.80@3.

Receipts of beans, 2,200 bush.; exports. 116 bbls.; exports peas, 19,600 bush.

We quote:—Beans, medium choice, $1.60@1.68; other, $1.30@1.50; marrows, choice, $1.80@1.85; other, $1.55@1.70; pea, $1.35@1.65. White kidney, choice, $1.35@1.65; other, $1.85@1.95; red, choice, $2.05@2.40; Black, $2.50@2.75.

BEESWAX.—Is offered lower, being in fair supply quoted at 27@28c. for Western and Southern.

Exports past week, 9,925 pounds. Receipts 204 packages.

BROOM CORN.—Has rather a freer demand.

Moving time in New York largely increases the demand for brooms; and the fact generally strengthens the market for corn.

Quoted at 6@7½c for hurl and short brush; 5@6½c.; for medium green, 4@5c. for red and red-tipped, ℔ lb.

BUTTER.—Old butter is passing out without interfering with new, though had the quality of last year's crop averaged fine, there is enough yet included in the receipts to have weakened white. As it is, a few extra saved state lines bring 22@26c for firkins good to prime, poor 10@12c; fair to good Welsh 19@23c., poor 11@14c., Summer made western 7@12c; sound winter 10@11c.; Grease 6@6½c. It is now late enough to caution shippers against packing two or more shades of new into one package. White had better be allowed to take its chance, while pure grass will make its position. Arrivals of new are liberal notwithstanding the general opening of cheese factories. Creameries are largely included in the receipts and the deliverences of that style of butter promise to be heavy from both State and Western points. Receivers are putting it closer to fine half tubs than usual, though tender grade would prompt quick sale at this season. Still it is thought that the distribution of creamery will be quite extensive this year, and the range must be made to suit old purchasers of other prime stock. Prices for new this week are lower than they have been before this season, enlarged receipts and good quality of Western acting as a check upon State All inside rates are for stock that has missed sale twenty-four or thirty-six hours.

OLD.—State dairies, choice 30c., other 26@29.; half tubs and pails choice 27@28c.; fair, to prime 24@26c.; poor 21@23c; Welsh tubs prime 26@27c; other 21@25c.; Western, creamery, best 30c., other, 26 29c.; good to choice dairy 22@25c.; fair 20@21c.; factory fresh 22@23c.; store packed or streaked 15@21c.

Receipts for the week 14766 pkgs.

Exports past week 1536 pkgs.

CHEESE.—Small lots of new are coming in and they are taken close at 12@13c. for full cream and 7@10c. for skimmed and half skimmed. Old is being closely sold up, and prices have not varied.

Fancy factories, 13@13½c.; prime, 12@12½c.; fair lots, 9@10c.; poor, 10@10½c.: 7@10c., skimmed. Farm dairy, 11½@12½c. for good to prime; Western factory, cheddar, 10@11½c. for fine; 12½c.; for good, 9@10c.: for poor, 6@8c.

Liverpool cable, 63s. Gold closes 100½.

Exports for the week, 13,957 boxes.

Receipts, 12,988 do.

LITTLE FALLS.—New cheese is offering quite freely. The last market day was attended by prominent buyers. The cheese was mostly skim, some "every-other-day," and a few lots full milk. There was an indisposition among buyers to handle except on commission, and among factorymen to meet their views. Prices ranged from 7½@11½c. The last price was for full milk, average price about 8¾c. Herds are in fine condition and will, it is thought, be turned to pasture in about two weeks, or sooner.

COTTON has ruled stronger most of the week with increased trade.

Latest prices are for April, 10.86c.: May, 10.93@10.94c.: June, 11.00@11.01c; July, 11.07c.; August, 11.10@11.11c.; September, 10.77@10.79c.; October, 10.56@10.58c.: November, 10.46@10.48c.: December, 10.47@10.49c.: January, 10.54@10.56c.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	7 13-16	7 13-16	7 15-16	7 15-16
Strict ordinary	8 9-16	8 8-16	8 11-16	8 11-16
Good ordinary	9	9	9¼	9¼
Strict good do	9½	9½	9⅞	9⅞
Low middling	9 15-16	9 15-16	10 1-16	10 1-16
Strict low middling	10 5-16	10 5-16	10 7-167	10 7-16
Middling	10⅝	10⅝	10¾	10¾
Good middling	11	11	11⅛	11⅛
Strict good middling	11 5-16	11 5-16	11 7-16	10 7-16
Middling fair	11 13-16	11 13-16	11 15-16	11 15-16
Fair	12 5-16	12 5-16	12 7-16	12 7-17

Stained.

Good ordinary, 7 13-16c. Strict ordinary, 8 9-16c.; Low middling, 9 1-16c.; Middling, 9 11-16c.

DRIED FRUITS.—The general market has been stronger, and more active.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia 10@11c.; good to prime Georgia; 8@10c.; unpeeled halves, 4½c.; quarters, 4c. Pitted cherries, choice new 18@19c.; Raspberries, 26@27c. New York State plums, 14@15.; southern plums, 10@12c. Apples—State quarters, old, 4¾@5½c.; do sliced, prime, 6@7c.; Western quarters, 4@4½c.; Southern, at 6@7c. prime sliced, 5@5½c. for fair to good.; Southern quarters at 4¼@4½c.; Tennessee quarters, in bags, at 2½@3½c.; prime fancy and North Carolina sliced at 8@12c. Exports for the week 503 bbls. Apples chiefly old on private terms, but understood to be low.

EGGS.—Receipts for the week, 20,125 bbls. The demand for Easter wants during the past week has only stimulated prices a trifle. A good deal of stock has been worked of, including low grades. Many of the latter can be utilized at this celebration by being colored for show. Confectioners also use many simply by preparing the shell for fancy purposes. Good qualities may sell steadier than is usual after Easter, as prices are attractively low.

Near points, 12c.; State and Penn., 11@11½c.; Western, fresh, 11c.; Southern, 10@10½c.; inferior, 9½@10c.; Duck, 21@23.; Goose, 43@45. The call for the last two sorts subsides with the close of Lent.

FRESH FRUITS.—In apples Russets only have a commercial place. A few reds, $5@5.50: Russets, $4@4.50 prime, poor, $2.50@3. Cranberries quoted $2@3 as winding up rates. Strawberries have had a wide range many not paying the cost of freight which is 15c. per quart, poor to useful sold at 5@15c.; good to prime, 30@35c. the latter picked out. Hot-house Black Hamburg grapes, $2@2.50 per lb. Peanuts dull with heavy supplies, receipts 2,000 bags. Hand-picked Va.: prime, $1.35@1.40; good to choice $1.15@1.30; common, 85c.@1.00. Pecans, 6@8c.

FLOUR.—Fluctuates in prices as the advices on the other side are warlike or otherwise, closing with free sellers and diminished business.

Latest prices are $4.15@4.90 for poor to fancy superfine State; $5.00@5.20 for common to fair extra do; $5,00@525.; $5 20@5 60 for good to choice do.; $4.15@4 90 for superfine, Indiana, Iowa, Michigan, Ohio. (the latter an extreme); &c.; $4 50@5 20 for very poor to good shipping extra do do., (chiefly at $5.20@5.60) and $5 25@5 65 for good to choice extra do.; common to choice white extras, $5.60@6.00; fancy do. at $6.60@7.50; red and amber winter wheat, inferior to choice trade and family, at $5.85@6.20; round hoop Ohio at $5 00@5 35, and trade and family brands of do. $5.50@5.75, the latter for choice; St. Louis, $5.45@6.10 for poor to fair extra and $6.10@7.25 for good to fancy: (with a few brands of very fancy quality quoted up to $7.25@7.50); Minnesota clear, very inferior to very choice, $5.10@6.10; Minnesota "straight," common to fancy, at $5.75@7.00. few brands going above $5.50@6.60, and patent poor to very choice, $6.50@8.25, with a few fancy at $8.75@8.90; unsound stock at $3.25@5.75; city mill extra at $5 90@6.25 for fair to very choice for West Indies; do. for England $5.00@5.10; do. trade and family extras, $6.50@7.50; do. South America, $6.40@7.35 for fair to fancy; No. 2 at $2.85@4.15 for poor to strictly fancy (some very fancy lots quoted up to $1.05@4.10 but these are extreme figures).

CORN MEAL.—Is selling at $3.15 for Brandywine and $2.50 to $2.65 for Western yellow.

GRAIN.—Receipts of all articles are light and there has been considerable inquiry through the week, impelled by the English advices at advanced prices closing however easier.

Latest sales are of ungraded spring at $1.15@1.18; bush. No. 3 spring at $1.20, No. 2 northwest spring at $1.26; New York No. 2 spring at $1.24@1.25 Chicago spring at $1.25½; No. 2 Milwaukee spring at 1.27; No. 1 Milwaukee and Minnesota spring at $1.31; ungraded white $1.43@1.46; white State, at $1.45@1.45; No 2 red, April, $1.36½@1.36¾; New York No 2 spring, April delivery, at $1.25@1.25½; do., May, $1.23½@1.24, closing with $1.22½ as the best offer; do., June, at $1.22½@1.23; No 3 Milwaukee spring, first half May, at $1.21; No. 2 Milwaukee spring, first half May, at $1.25. Rye at 70@73½c. for Western. Corn—Latest sales are of New York No 2 at 55c.; New York No. 3 at 52½@53c.; New York No. 2 white, 55c.; steamer mixed, 53½@54c.; steamer yellow, 54c.; low mixed, 51@54½c.; white southern, 55c.; yellow southern, 56c. ungraded mixed, 50@54c.; round yellow, 56½c. and Jersey yellow, 54@56c.; No. 2 April delivery, 55½@55c.; No. 2, May delivery, 54c.; No. 2 June delivery, 54½c.; steamer mixed, April delivery, 53@53½c.; do., May delivery, 52½c. Oats of New York No. 1 extra white, at 40c.; New York No. 2, 35c.; No. 2 white, 35½@35½c.; New York No. 3 white, 31½c.; mixed State, 33@35½c.; white State, 35½@39½c.; mixed Western, 34@36c.; white Western, 36@40c.

HAY AND STRAW.—Supplies are largely of medium goodness, which are at easy prices.

Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@55c. for long rye; 35@45c. for short rye, and 35@45c. for oat.

Exports since Jun. 1st, 1522 bales; same time last year, 18,025 do.

HOPS.—Export demand has been very slack, and brewers have been buying sparingly with prices easy.

New Yorks, good to prime, 7@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

LEATHER.—Hemlock sole at 19@21c. for light, 19@21c. for middle and heavy. 17½@18½c. for good damaged and 15@17c. for poor damaged.

MAPLE SUGAR.—Prices better with diminished supplies 10@12c. for sugar and 75c.@100 per gallon for sirup including can.

OIL-CAKE.—Western quoted at $30@30.50 per ton.

PROVISIONS.—Hog products have been rather weak and fairly active.

Mess pork, $9.75@10.00 for spot lots; $9.75 for April, $9.80 for May, $9.85 for June and $9.95 for July. Bacon at 5½c. for long clear and 5¾c. for short clear. Lard—Western steam, 727½c. for spot, April and May, 7.30@7.32½c. for June and 7.40 for July. Stearine, 7½c. for prime. Tallow at 7¾c. for prime Western. Beef hams at $16.00@16.50 Beef—New extra mess, $12.@12.25; plain, $10.50@11.50; new packet $14.00@15. family mess, $17@17.50; extra India mess $26@26.50 for city brands; do. Philadelphia, $24@$25.

POULTRY AND GAME.—Supplies have gone out readily, owing to the celebration of the Jewish Passover. Prime turkeys have sold quickly. Prices at the close are easy but as Lent is over some extra demand is looked for as city killers are not working against much country dressed.

Fowls, choice, 11@12c.; do. Western and Southern, 9@10c.; Roosters, 5@6c.; Turkeys, choice, 12@14c.; other, 10@11c.; Ducks, extra, 87c.@$1.12; other, 50@75c.; Geese, N. J., $1.25@1.75; Southern and Western, 75c.@$1.

There is no special call for dressed, and stock from Philadelphia and special N. J. points is all that arrive with any regularity.

Fresh-killed turkeys, choice, 14@16c.; poor to fair, 9@11c.; frozen, small, 16@17c.; capons, 32@33c.; slips, 28@30c.; Philadelphia fowls, dry-picked, 12@13c.; N. J., 11@14c.; State and Western range 8@12c.; Ducks, 12@18c., without much call.

Game is quiet, pigeons decidedly so, under a report of poisonous feeding at the Western nestlings. Retailers are at times compelled to open birds to show the presence of beech nuts in the crops. Wild ducks will be outlawed after May 1st. Only a few Canvas-backs find sale at $1.12@1.25. English snipe, $1.12@1.25. Plover, $1@1.12. Wild Pigeons, 75c. Squab, $1. Sand Snipe, 40@50c. Pigeons in feather pick badly; future shipments should be in ice. A good complement for a barrel, so as to allow sufficient ice, is twenty-eight dozen.

SEED.—Grass are firm, with small receipts. Clover at 7½@7⅞c. for Western; 7¼@7¾c. for State.

TOBACCO.—Export movement is more active, and the market is in better shape Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3½	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¼	6½@ 7
Good leaf	6¼@7½	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	9 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—A few extra Maine, Early Rose command 174@200; but most of the railroad stock is weak at the ranges. Peach Blows, $1.12@1.50. Early Rose. $1.25@1.62; common, $1.00@1.25; Bermuda, $9. Sweet $1.75@2; onions have advanced; Roy 112@137; white $125@175; R. Turnips 47@62; carrots 75@100; Marrow squash $1.25@150; Hubbard do., $2.00@2.50; Southern produce is low. Asparagus coming from all points. Oyster Bay opened at $9 a doz; other $2@4. Green peas, mostly poor 50@1.25.; string beans $1@250. Radishes, 50@1.00; spinach $1.50@175. Kale 25@50. New cabbage bbl. $1@3; old 100 $4@6; cucumbers (hot-house) $2.50@3 a doz. Rhubarb do. 300 do.; mushrooms 45c. 1lb. Fla. cucumbers have appeared.

WOOL.—There is an apathetic condition of trade yet, and not much life is expected until the new clips are marketed. Quotations are:

Ohio, Pennsylvania and Virginia fleeces 42@45c. for XXX and picklock, 40@42 for XX, and X, 42@44c for No. 1, 35@37 for No. 2, 33@35 for common, and 48@50 for combing.

New York, Michigan, Indiana and Wisconsin at 35 to 38 for X and XX, 37@42 No. 1, 33@36 for No. 2, 32@34 for common, and 45@48 for combing.

Iowa, Vermont and Illinois—34@36c.; X and XX, 36@40, for No. 1, 45@48 for combing.

Missouri, Kentucky, and Tennessee—Washed fleece, 35@40c.; unwashed, 25@28c.: unwashed combing, 28@32c.

LIVE STOCK MARKETS.

NEW YORK, April 20, 1878.

BEEVES.—Receipts for the week, 8,671 head; do., last week, 9,009 do. There was a fair total of good quality for Western steers, and the demand quite satisfied sellers, the advance being ¼ over the previous market. Ordinary to fair native, 8½@9¾c. to dress 56 lbs.; good to prime 10@10½c., dress 57 lbs.; extra 10¾@11c. dress 15 lbs., the highest rate paid by an exporter. Fat bulls 3.40½@3.75 per head.

COWS AND CALVES.—The bulk of the sales were at $35@55; occasional singles $60@70 but stock equal to the latter in quality is worth about as much in the interior for new milk.

VEAL CALVES.—Receips for the week 2624 head, do last week, 2740 do.; choise N. J. and Bucks Co., live 7½@8½c. good state 7c.; other 5@6½c. Hog dressed, calves at West Washington market prime 8@9c½c.; common 5½@7c' Receivers discourage further shipment, the weather begins to hurt dressed stock. The demand has been only fair.

SHEEP AND LAMBS.—The market has ruled dull and prices have been in buyers' favor. Thin unshorn Colorodo sheep 3½c rough Missouri 1½c; price to prime Western and State 5½@6½c. A car load of fine western taken for export at $8½ per 100; clipped sheep sold at $4.50@4.88 per 100; fair to choice yearlings 6½@7½; fair to good spring lambs $4.50@5.80 per head, southern lambs sold at 8@10c. lb.

SWINE.—Receipts for the week, 29,748 head; do. last week 27,326 do. Ohio hogs 170 lbs., average sold at 3½c. The week's trade was broken by the closing of Change on account of Good Friday. Country pork 5@5½c.; medium 5½@5¾, light. State must be killed here to realize above figures.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

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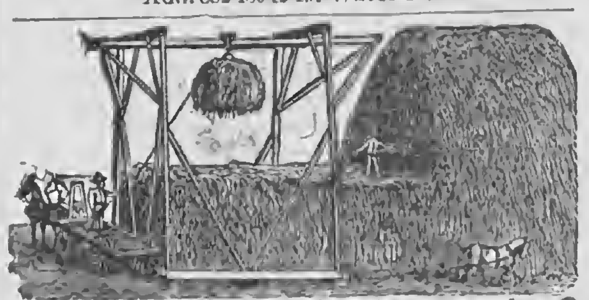

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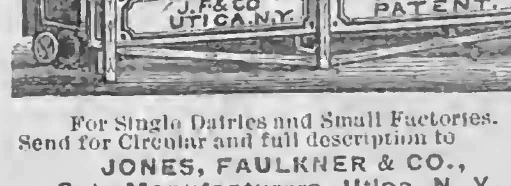

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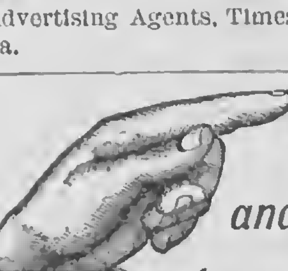


WEAK LUNGS are cruelly racked, and the general strength gradually wasted by a persistent Cough, which Dr. Jayne's Expectorant may be relied on to cure. It will certainly benefit you also, if troubled with either Asthma or Bronchitis.

Reading for the Young.

THE SUNSHINE'S CALL.

"WAKE up little daisies, awake,"
The sunshine stooped warmly to whisper;
"Come daffodils, sleeping so late,
And bluebell, sweet hyacinth's sister.
Shy violets, bright eyes unclosing,
Creep under gay peony's shade;
Pale primrose in white drifts reposing,
Narcissus so dainty and staid,
Break, lilacs, break into glad blossom,
Toss the wealth of your spicery plumes;
Old apple boughs clustering so gladsome,
Fill the air with your subtle perfumes.
Come over the hills and the meadows,
O clovers, with blooms red and white,
Hide under the beeches and hedge-rows,
Fairy lady slippers so white.
Come cowslip and tulip and lily,
Sweet dwellers in garden and field;
White roses swaying so stilly,
Red roses that blush as they yield.
My sweethearts come over, come over,
The grasses are green for your feet;
Bees sigh for the breath of the clover,
And droop for the lily-cups deep.
On sweet lips I long to press kisses.
In sweet hearts I long to lie hid,
To be steeped in the magic of blisses
That fold under pink and white lid.
So wake, my flower darlings, nor linger,
Brave crocus is leading the way,
I have banished the cold chill of winter;
Come bloom and be glad while you may."

[*E. T.*

A SWISS COUSIN.

UNCLE TRUE:—Perhaps I am too old to get enlisted in the friendly circle of your Cousins whose letters I read very often with great pleasure, but having not quite attained the lawful age required to act as man in political questions, I regard myself still as a boy and will risk a refusal as a Cousin from your young folks. In the first place, I will make you, Mr. Editor, and all our Cousins acquainted with my history up to this date, as most of the Cousins do when they apply for admittance into the Cousin family circle.

Born in Schaffhausen, Switzerland, I have passed away the early years of my existence just as you generally do here, with playing, going to school, etc. When I was twelve years old I passed the examination to enter the college of my native city, where I remained three years, during which I learned the first lessons in modern and ancient languages, in theology, astronomy, geometry, philosophy and natural sciences. During that time I had the ardent desire to acquire a thorough knowledge of French and English, which two languages are used not very seldom in the German part of Switzerland by American and English travelers who spend there the summer, admiring the beautiful scenery of lakes and rivers, climbing the famed Alps to cool their feet in eternal snow, or restoring their health in the numberless watering places of Switzerland. My parents helped me in my purpose and, supplied with sufficient funds, I went to Lausanne, on the Geneva Lake, and from there to Paris, where I succeeded in learning the French language throughout, frequenting in both places higher schools. Returned back home again after a two-years' absence, I decided to follow my parents' business, which consists in farming, and having heard and read so much about the American mode of agriculture, I took the resolution to go myself to America for the purpose of learning that branch of science practically.

It is now exactly three years since I took that resolution, and five weeks afterwards I found myself landed safe in New York without any friends or relations; nobody could understand my German and I could not understand or talk English. After a hard struggle I found a Frenchman to whom I complained of my desolate situation and asked him for further advice; my money made him take some interest in me and we started together for Montreal and from there to Plattsburgh, N. Y. Very soon he found occupation for me in that place on a large farm and he hired me out to the proprietor of it for a whole year. My new master could talk only English and consequently it was a hard task for me to get along; but natural pluck surmounted all the difficulties. The first week of my new career, when my master wanted something to be done, he was obliged to get some French-talking individual to interpret his orders to me, and plenty of mistakes happened quite often. After I worked the time I was engaged for out, I was offered a more favorable situation by a gentleman I am living with at present, and I accepted it. Last winter I went to school and improved considerably in the English language; of course, I make yet, from time to time, some mistakes in writing or speaking English, as you may find out in the present letter.

Mr. Editor, I wish you would excuse this long letter with nothing but personal items in it, but if the Cousins should like it, I would be very willing to write to them the next time about farming and other matters in Europe or Switzerland especially, to which country I shall return next fall. Anyhow, I am decided to take Friend RURAL with me and keep up through him communication with "Young America."

Clinton Co., N. Y. JOHN SCHROYN.

[I print our new "Cousin's" letter almost entirely as it was originally written, because it seems to *me* an admirable thing to have mastered the English tongue as well as he has in the short time he has been permitted by circumstances to apply himself to the task. I am sure I can welcome him heartily to our columns in the name of myself and my young relatives, and trust he will write often, telling us of his home and his European experiences. If he returns to Switzerland, we may be permitted to express the hope that it will be only for a temporary sojourn, and that instead of farewell, we may say *au revoir*. U. T.]

THE GIRL EVERYBODY LIKES.

M. E. STONE.

SHE is not beautiful—Oh no! nobody thinks of calling her that. Not one of a dozen can tell whether her eyes are black or blue. If you should ask them to describe her, they could only say, "She is just right" and there it would end.

She is a merry-hearted, fun-loving, bewitching maiden, without a spark of envy or malice in her whole composition. She enjoys herself and wants everybody else to do the same. She has always a kind word and pleasant smile for the oldest man or woman, in fact, I can think of nothing she resembles more than a great sunbeam which brightens everything it comes in contact with!

All pay her marked attention, from rich Mr. Watts, who lives in the mansion on the the hill, to negro Sam, the sweep. All look after her with an admiring eye and say to themselves. "*She* is just the right sort of a girl."

The young men of the town vie with one another as to who shall show her the most attention, but she never encourages them beyond being simply kind and jolly; so no one can call her a flirt: no, indeed, the young men would deny such an assertion as quickly as she.

Girls,—wonderful to relate—like her too! for she never delights in hurting their feelings or saying spiteful things behind their backs. She is always willing to join in their little plans and assist them in any way. They go to her with their love affairs and she manages adroitly to see George or Charlie, and drop a good word for Ettie or Minnie, until their little difficulties are all patched up and everything goes on smoothly again,—thanks to her.

Old ladies say she is "delightful." The sly witch knows how to humor them. She listens patiently to complaints of the rheumatism or neuralgia, and then sympathizes with them so heartily that they are half cured.

But she cannot be always with us. By-and-by a young man comes from a distant town and marries her The villagers crowd around and tell him what a prize he has won, but he seems to know it pretty well without any telling, to judge from his face. So she leaves us, and it is not long before we hear from that place. She is there the *woman* everbody likes.

The Puzzler.

POLYSYLLABIC ANAGRAMS.

1. BUT LIS is at Nio. 2. Tune numb prices. 3. Pour great ryc so. 4. U ran pure salt. 5. Ralph an Al reap! 6. Bran mouse came. 7. My subtile rain. 8. I diet or mash pie. 9. No I Eliza Martini. 10. A calf it is if on. 11. Malt fireman. 12. Dun men lay flat. 13. Come to Tragle. 14. Foul dew and n—n. 15. I cap Charles Pla. 16. Be led at Ire. 17. Rat's cart, Io. 18. Pue's theater. 19. An ant in Coti. 20. Come in Lib, try Hin's pie. 21. Come surly man, I bit. 22. O lit a quince. 23. In a great gloom. 24. Mad in his rat. 25. Jut and stem.

☞ Answer in two weeks. LITTLE ONE.

MISCELLANEOUS ENIGMA.

I AM composed of 23 letters:
My 3, 10, 20, 21, 15 is a man's name.
My 1, 19, 18, 13 a place we all like.
My 2, 14, 22 a metal.
My 4, 17, 4, 5 a perfume.
My 6, 12, 8 a personal pronoun.
My 9, 2, 23, 11, 7 forward.
My whole is what all should do.

☞ Answer in two weeks. A. G. L.

DOUBLE ACROSTIC.

1. A HOOD of disguise. 2. Valuation by authority. 3. A vagrant. 4. Senseless. 5. A French article. 6. A vegetable. 7. A man's name. 8. A city of Illinois. 9. Part of a gentleman's attire. 10. A man of the Bible. 11. Cooling. 12. A number. 13. Entrance. 14. Sufficient. 15. A pest house. 16. To languish. Primals and finals form two of Dickens' novels.

☞ Answer in two weeks. FLORIDIAN.

WORD-SQUARE ENIGMA.

1. To insist. 2. A dance. 3. An embryo. 4. A man's name.

☞ Answer in two weeks. JENNY.

PUZZLER ANSWERS.—April 6 and 13.

GEOGRAPHICAL CHARADES.—1, She-nan-do-ah; 2, De-la-ware; 3, Beau-mar-is; 4, Tag-us; 5, Mon-de-go; 6, O-ran; 7, Lo-ire; 8, Corso-or lerr); 9, Dan-u-be; 10, Tar-an-to; 11, Al-heus; 12, Balk-an; 13, Cattar-o; 14, War-saw; 15, Po-la; 16, Slat-Ina; 17, Waras-din; 18, Leg-nag-o; 19, Got-ha; 20, Pots-dam; 21, Lass-a; 22, Taunt-on; 23, Switzer-land.

MISCELLANEOUS ENIGMA.—Hope on, hope ever.

ENIGMA.—Sperm candle.

GEOGRAPHICAL ENIGMA.—She stoops to conquer.

Sabbath Reading.

THE LITTLE MAID THAT SLEPT.

SOMBRE folds the windows shroud,
Phantom figures come and go—
Hearts that must not break too loud,
Muffled footfalls, whispers low,
Cool deft hands—about a bed
Where, 'neath fever's scorching sway,
Lies a little restless head,
Tossing, tossing, tossing aye.
But the hour of fate draws nigh,
And the mid-sun overhead
Shrieks and drops from out the sky—
Yea, the child is dead!

But she lies so dimpling-fair,
In her bed-gown long and white,
With her waves of heavy hair
Drowning neck and shoulder bright,
With the flower-lips just apart,
Half way budded to a smile—
Pure young heart, O sweet child heart,
Hardly smirched with human guile!
Life so bright on cheek and brow
And those thin white lids of hers—
Fancy whispers, "Softly now,
Softly—see, she stirs!"

But the twin hands fairy small,
Crossed above the bosom's snow,
Never rise and hang and fall.
With the breath's soft ebb and flow.
Yea, the breaking mother heart,
Throbbing close, in anguish prest,
Vainly would its warmth impart
To the blue-veined marble breast;
Kisses win no kissed reply.
Yea, the pet name softly said
Lures no smile to mouth and eye—
Truly, she is dead.

* * * * * *

First to heaven He turns His eyes
One long moment, as in prayer,
Then upon the maid that lies
Wrapt in slumber still and fair,
Lo, His hands just touch her clay;
"Little maiden, wake, arise!"
And the sharp sweet light of day
Smites in lightning on her eyes,
And the blood's swift tide again,
Like a stream its chain that breaks,
Sings through every tingling vein,
As she sighs, and smiles, and wakes,
Lips that laugh and eyes that weep,
Throat that thrills with stifled scream!
Little maiden, thou didst sleep—
Oh, to know thy dream!

[*Good Words.*

A DAY IN THE LIFE OF JESUS.

Luke ix, 10, 17.

The work to be done for the bodies of men was accomplished, and there yet remained some hours of the summer's day unconsumed. The power and goodness displayed in this miraculous healing, would naturally predispose the people to listen to the instructions of the Saviour. This was too valuable an opportunity to be lost. Our Lord therefore proceeded to speak to them of the things concerning the kingdom of God. We can seem to perceive the Saviour seeking an eminence from whence he could the more conveniently address this vast assembly. You hear him unfold the laws of God's moral government. He unmasks the hypocrisy of the Pharisees; he rebukes the infidelity of the Sadducees; he exposes the folly of the frivolous, as well as of the selfish worldling; he speaks peaceably to the humble penitent; he encourages the meek, and comforts those that be cast down. The intellect and the conscience of this vast assembly are swayed at his will. The soul of man bows down in reverence in the presence of its Creator. As he closes his address, every eye is moistened with compunction for sin. Every soul cherishes the hope of amendment. Every one is conscious that a new moral light has dawned upon his soul, and that a new moral universe has been unveiled to his spiritual vision. As the closing words of the Saviour fell upon their ears, the whole multitude stood for a while unmoved, as though transfixed to the earth by some mighty spell; until, at last, the murmur is heard from thousands of voices, "Never man spake like this man."

But the shades of evening are gathering around them. The multitude have nothing to eat. To send them away fasting would be inhuman, for divers of them came from far, and many were women and children, who could not perform their journey homeward without previous refreshment. To purchase food in the surrounding towns and villages would be difficult; but even were this possible, whence could the necessary funds be provided? A famishing multitude was thus unexpectedly cast upon the bounty of our Lord. He had not tempted God by leading them into the wilderness. They came to him of themselves, to hear his words and to be healed of their infirmities. He could not "send them away fasting, lest they should faint by the way." In this dilemma, what was to be done? He puts this question to his disciples, and they can suggest no means of relief. The little stock of provisions which they had brought with them was barely sufficient for themselves. They can perceive no means whatever by which the multitude can be fed, and they at once confess it.

The Saviour, however, commands the twelve to give them to eat. They produce their slender store of provisions, amounting to five loaves and two small fishes. He commands the multitude to sit down by companies on the grass. As soon as silence is obtained, he lifts up his eyes to heaven, and supplicates the blessing of God upon their scanty meal. He begins to break the loaves and fishes, and distribute them to his disciples, and his disciples distribute them to the multitude. He continues to break and distribute. Basket after basket is filled and emptied, yet the supply is undiminished. Food is carried in abundance to the famishing thousands. Company after company is supplied with food, but the five loaves and the two fishes remain unexhausted. At last, the baskets are returned full, and it is announced that the wants of the multitude are supplied. The miracle then ceases, and the multiplicaton of food is at an end.

But even the provident care of the Saviour is manifested. Although this food has been so easily provided, it is not right that it be lightly suffered to perish. Christ wrought no miracles for the sake of teaching men wastefulness. That food, by what means soever provided, was a creature of God, and it were sin to allow it to decay without accomplishing the purpose for which it was created. "Gather up the fragments," said the Master of the feast, "that nothing be lost." "And they gathered up the fragments that remained, twelve baskets full."

Dissimilar as are our circumstances to those of our Lord, we may learn from this latter incident a lesson of instruction.

We can more easily maintain ourselves in the most difficult position, God being our helper, than in apparent security relying on our own strength.

From this portion of the narrative, we may, I think, learn that if we act in faith, and in the spirit of Christian love, we may frequently be justified in commencing the most important good work, even when in possession of apparently inadequate means. If the work be of God, He will furnish us with helpers as fast as they are needed. In all ages, God has rewarded abundantly simple trust in him, and has bestowed upon it the highest honor. We must, however, remember the conditions upon which alone we may expect his aid, lest we be led into fanaticism. The service which we undertake must be such as God has commanded, and his providence must either designate us for the work, or, at least, open the door by which we shall enter upon it. It must be God's work, and not our own; for the good of others, and not for the gratification of our own passions; and in the doing of it, we must, first of all, make sacrifice of ourselves, and not of others. Under such circumstances, there is hardly a good design which we may not undertake with cheerful hopes of success, for God has promised us his assistance.

Perhaps, also, we may learn from this incident another lesson. If I mistake not, it suggests to us that in works of benevolence we are accustomed to rely too much on human, and too little on divine aid. When we attempt to do good, we commence by forming large associations, and suppose that our success depends upon the number of men whom we can unite in the promotion of our undertaking. Every one is apt thus to forget his own personal duty, and rely upon the labor of others, and it is well if he does not put his organization in the place of God himself. Would it not be better if we made benevolence much more a matter between God and our own souls, each one doing with his own hands in firm reliance on divine aid, the work which Providence has placed directly before him? Our Lord did not send to the villages round about to organize a general effort to relieve the famishing. In reliance upon God, he set about the work himself, with just such means as God has afforded him. All the miracles of benevolence have, if I mistake not, been wrought in the same manner. The little band of disciples in Jerusalem accomplished more for the conversion of the world than all the Christians of the present day united. And why? Because every individual Christian felt that the conversion of the world was a work for which he himself and not an abstraction that he called the church, was responsible. Instead of relying on man for aid, every one looked up directly to God, and went forth to the work. God was thus exalted, the power was confessed to be his own, and, in a few years, the standard of the cross was carried to the remotest extremities of the known world.

With such facts before us, we surely should be encouraged to attempt individually the accomplishment of some good design, relying in humility and faith upon Him who is able to grant prosperity to the feeblest effort put forth in earnest reliance on his almightiness.

Such were the occupations that filled up a day in the life of Jesus of Nazareth. There was not an act done for himself; all was done for others. Every hour was employed in the labor which that hour set before him. Private kindness, the relief of distress, public teaching, and ministration to the wants of the famishing, filled up the entire day. Let his disciples learn to follow his example. Let us, like him, forget ourselves, our own wants, and our own weariness, that we may, as he did, scatter blessings on every side, as we move onward in the pathway of our daily life. If such were the occupations of the Son of God, can we do more wisely than to imitate his example? Every disciple would then be as a city set upon a hill, and men, seeing our good works, would glorify our Father who is in heaven. "Then would our righteousness go forth as brightness, and our salvation as a lamp that burneth."

TEMPTATIONS make Christians more serviceable and useful to others. None so fit and able to relieve tempted souls, to sympathize with tempted souls, to succor tempted souls, to counsel tempted souls, to pity tempted souls, to bear with tempted souls, and to comfort tempted souls as those who have been in the school of temptation.

PERSONAL ITEMS.

Cluseret, the Communist general of 1871, is believed to be in Persia, drilling the Shah's troops.

The Emperor of Austria's father, the late Archduke Francis Charles, left a third of his estate of $12,000,000 to the poor.

Mr. Tennyson received for his ballad, recently published in the Nineteenth Century, the sum of $1575, and its a rather second-rate poem at that—for him.

Pope Leo sends this word to the tramps and beggars who call at the Vatican for alms: "It is God's will that man should earn his bread by the sweat of his brow."

General Joe Lane, Democratic candidate for Vice-President on the ticket with Breckinridge in 1860, is now a hale and hearty veteran of 77 years, enjoying life at his beautiful mountain home in Douglas county, Oregon.

John Ruskin has started a new Socialistic society called the Guild of St. George, among the tenets of which is that every member will strive to love his neighbor as himself, and, even when he cannot, will act as if he did.

An English peeress, the Viscountess of Kingsland, was recently discovered living in direst poverty in London. Lord Beaconsfield has recommended a grant from the royal bounty fund of $500 to the distressed lady.

The Count de Chambord, known as an aspirant for the throne of France, under the title of Henri V., has bought a small island in the eastern Mediterranean for his winter residence, where he can be monarch of all he surveys, with no one to dispute his title.

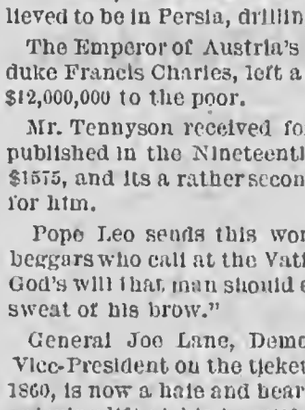
Leo XIII. has three brothers. Carl is eighty-eight-years old, bed-ridden, and apoplectic; Johann is the head of the family; the third is an ex-Jesuit and secular priest. Besides the Pope has two married sisters and a nephew, who is a volunteer in the Italian army.

The new Doorkeeper of the house of Representatives, Gen. Charles W. Field, is six feet three inches high, admirably proportioned and a handsome man. If his countenance does not belie him, and the science of phrenology is not at fault, when he says a thing he means it, and will stick to it.

Dr. Mary Walker was once a Mrs. Miller, but twenty long years ago she freed herself by a divorce from the restraints of matrimony, set the wayward Miller adrift and donned the trowsers herself. Beneath an odd and brusque exterior she carries a patrotic heart, and for valuable services rendered during the war, Congress voted her a gold medal.

Instead of dying in "a dark, damp cell," Tweed's room was a large and comfortable apartment on the first floor of Ludlow street jail, well and comfortably furnished, and was supplied with an abundance of books and papers, which afforded the prisoner abundant entertainment during his leisure hours. His beard and hair had turned snow-white and his face was very thin, but the dimensions of his figure had not been perceptibly reduced.

Implements and Machinery.



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Price $10.

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They pay for themselves in a single season.

N. B.—The first 500 machines will be sold at $7.50 each.

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New York State Agricultural Works.

1st Premiums at all Competitive Trials.

Railway, Chain and Lever Horse Powers, Threshers and Cleaners, Threshers and Shakers, Clover Hullers, Feed Cutters, Wheel Horse Rakes, Horse Pitchforks, Shingle Machines, Straw Preserving Rye Threshers, Portable Steam-Engines, Cider and Wine Mills and Presses, Dog and Pony Powers, Etc., Etc.

WHEELER & MELICK CO.,
ALBANY, N. Y.

Send stamp for Circular and report of Centennial trial.

GARDEN ENGINE AND FIRE EXTINGUISHER, For Washing Windows, Carriages, etc, Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

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EVERY FARMER SHOULD HAVE ONE.

Nichols' Patent Double and Single Header Wind Mills, and Challenge Feed Mills. Horse Powers, Wood Saws, Pumps, Etc. For Circulars, address
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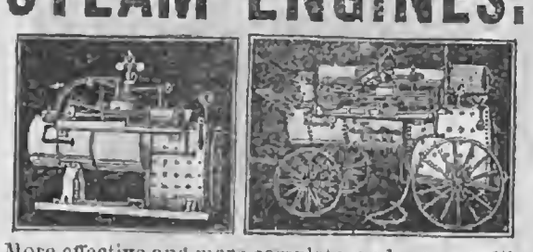

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Send for Circulars, descriptive, and containing testimonials concerning our PORTABLE, STATIONARY and AGRICULTURAL STEAM ENGINES.

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HORSE POWER & Premium Thresher. This Power produces much more power than other railway powers, with much less elevation.

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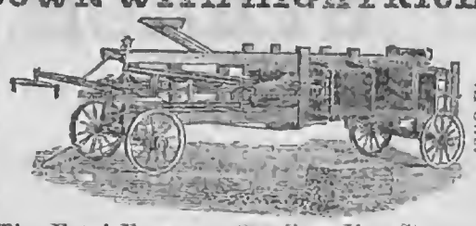

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Highest Award. Medal of Honor at the Centennial and Vienna Exhibitions.

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No Cogs or Ratchets. Easiest Hand or Horse Dumping. Purchasers prefer them to all others for Durability and Efficiency. Fully guaranteed; so no risk is incurred in ordering from us. Responsible Agents wanted, where we have none.

Send Stamp for Catalogues of Rakes, Threshing Machines, &c.

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BIG GIANT CORN MILL.

Every Man His Own Miller.

The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use.

Grinds twice as fast as any other Mill of same size and price. Manufactured by
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BRADLEY'S REVERSIBLE HARROW.

Two Harrows in One, And sold at the price of one.

A PERFECT SMOOTHING HARROW, Combined with a vertical or straight tooth.

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The Boss Sickle Grinder.

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Every Farmer should Have One.

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McClellan's "VETO" SEED DRILL & "NEW" Hand Cultivator sow and cultivate all kinds vegetables. Do work of 10 men. Best and cheapest. Price $12.50 combined.

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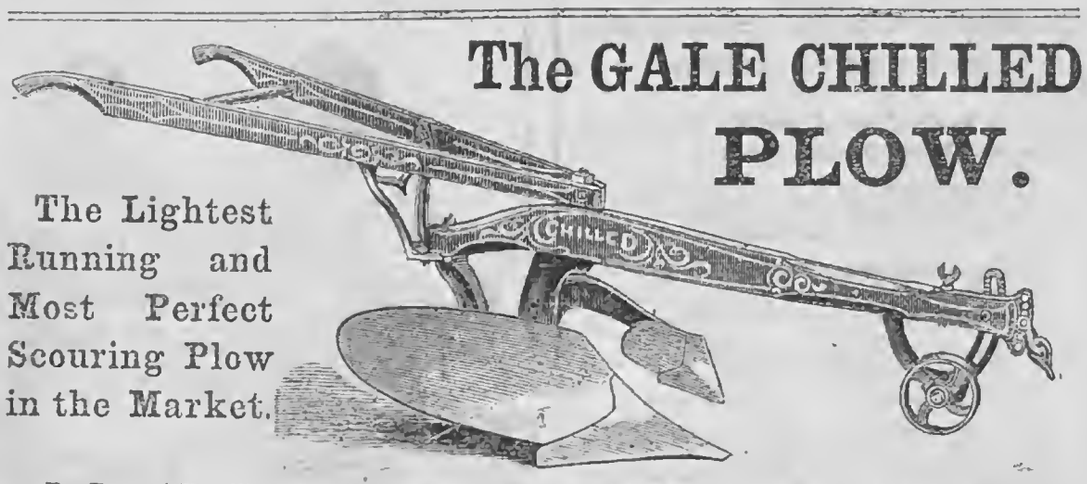

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For Ease of Handling, Simplicity of Construction, Adjustability and Simpleness of Repairing, this Plow has no equal. Manufactured only by
THE GALE MANUFACTURING CO., Albion, Mich.

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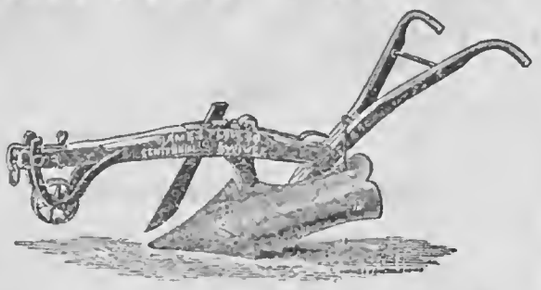
SWIVEL PLOWS!



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Accepted by the New England and Maine State Agricultural Societies. Superior to any for Level Land and Hillside.

AMES PLOW COMPANY,
SOLE MAKERS,
53 Beekman St., New York.
Quincy Hall, Boston, Mass.

☞ Liberal discount to dealers and agents. Send for Circular.

LA DOW'S JOINTED
Pulverizing and Smoothing HARROW.

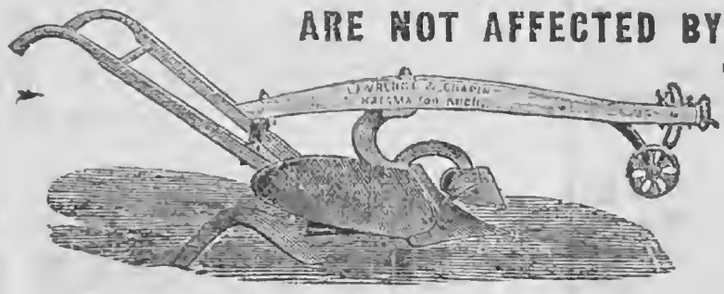
Light, Simple, Cheap. Durable and Flexible.

Will pulverize and leave ground smoother and in better condition and cover seed better, by once going over, than twice with ordinary Harrow. Acknowledged the best in use. Being jointed in the center, it accommodates itself to uneven surfaces, such as dead furrows, ridges, &c. Made with both Chilled Metal and Cast-Steel Discs.

Responsible agents wanted where we have none. Manufactured by WHEELER & MELICK CO., Albany, N. Y., for the United States, except New England States. EVERETT & SMALL, BOSTON, Mass., Manufacturers for the New England States.

DIAMOND IRON PLOWS.

With New Patent Jointer and Coulter that ARE NOT AFFECTED BY CHANGE OF BEAM.



The only Plow WITH Wrought Iron JOINTER STANDARD ADJUSTABLE To any Depth.

25 to 30 lbs. lighter than any Chilled or common Iron Plow. Harder, Stronger, More Durable, Lighter Draft, Easier Handled, better Scouring qualities, and Stay in the Ground better than any other Plows made. All wearing parts are made of same metal. Every Plow warranted. Send for Circular. Made only by LAWRENCE & CHAPIN, Kalamazoo, Mich.

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HAY LOADER.

A perfect machine for rapidly pitching hay, barley and all loose grain on the wagon in the field. Saves as much time and money as the mower and horse rake. Thousands in use by the best farmers in the country. Prices reduced. Send for Circulars to the manufacturers, STRATTON & CULLUM.
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AHEAD OF ALL COMPETITION
1878.

SEVEN SIZES FOR HAND USE.
Weighing from 32 to 51 lbs.
THREE SIZES for HORSE POWER.

These Machines did an amount of work on the Centennial Grounds, equal to 10 years of ordinary use, without loss of time for sharpening or repairs—completely distancing all competitors in that celebrated trial of 6 months' duration.

GRAHAM, EDLEN & PASSMORE,
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Send for Descriptive Catalogue with prices.

THE BEST FANNING MILL IN THE WORLD. OBTAINED CENTENNIAL AWARD AND GRAND MEDAL.

BUY THE
A. P. DICKEY FANNING MILL

No good Farmer can afford to market dirty grain.

A medium quality well cleaned brings a better price than the nicest grade in dirty condition.

Address, A. P. DICKEY, Racine, Wis.

SULKY PLOWS.—THE SUBSCRIBERS are the only manufacturers of

OSBORN'S SULKY PLOW,

the only Plowing Machine that has proved a perfect success in all kinds of soil. Any kind of plow can be attached. The plowman rides and handles the plow with ease, regulating the depth and width of furrow. The draft for the team is materially less, and the ordinary laborious mode of plowing is reduced to one of comfort and ease.

THE MEADOW KING MOWER,
and other Agricultural Implements.
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The THOMAS PORTABLE ENGINES are made to meet a want long felt by Threshers, viz., Lightness of weight, with strength and durability. They are the lightest made, and are guaranteed to do the same amount of work as those 800 to 1,000 pounds heavier, and with much less fuel and water and less amount of steam pressure. Nothing equals them. Send for Circular. Made by
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PENNOCK'S
Patent Road Machine

Keeps the road in far better condition, and at half the present cost. Circulars free.
SAMUEL PENNOCK, Ithaca, N. Y.

Matthews' Garden Seed Drill,

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Matthews' Drill & Cultivator combined, surpass all others. Send for Circular before you buy.

Manufactured only by
EVERETT & SMALL,
Boston, Mass.

Wit and Humor.

SPARKS AND SPLINTERS.

THE St. Louis Journal peacefully pipeth the pleasures of house-cleaning thus:

"The housekeeper giveth a cheerful hop,
And we hear the musical flipperty flop
Of the moisty, misty, maddening mop.

And lo, the maddening horrors rush
Athwart our souls at the soapy gush
Of the slippery, slimy scrubbing brush.

From early morn till evening gloom
We hear the scratching in hall and room
Of the boisterous, busily-bobbing broom.

And now there cometh a woesome wail—
That augurs a gen'rally gusty gale—
From a man with his leg in the scrubbing pail."

MAN proposes, but—he is not always accepted. —*Camden Post.*

THE death of the Pope, it is said, caused over a million pairs of black gloves to be sold in Paris. [EX.—Proving that His Holiness was mourned on all hands.—*Phila. Bulletin.*

A Florida negro mistook a mule for a ghost and poked it with a stick. The verdict recited that he came to his death by using too short a stick in probing the unknowable for evidences of a future existence.

Do you believe in the use of the rod, my dear Professor?" asked a lady whose children were making life a burden to all the guests in the hotel. "In some cases, madam; but there are others," glancing at her gambolling darlings. "where I prefer the revolver."

"Where was Bishop Latimer burned to death?" asked a teacher, in a commanding voice. "Joshua knows," said a little girl at the bottom of the class. "Well," said the teacher, "if Joshua knows, he may tell." "In the fire," replied Joshua, looking very grave and wise.

THE future of the phonograph.—Ardent lover: You ask for some proof of my affection, my devotion. What proof can I offer you? Stay! I have it! I am ready to breathe my vows into the Young Lady's Best Companion, or Breach-of-Promise-Self-Registering-Evidence-Phonograph.

THE early strawberry, at a dollar a quart, puts on aristocratic airs and looks with scorn and contempt upon hungry humanity. By July he will get down from his lofty eminence and hide himself between the strata of a fifteen-cent saleratus short-cake, and howl for a customer.

AN old, rough clergyman once took for his text that passage of the Psalm, "I said in my haste, all men are liars." Looking, apparently, as if he saw the Psalmist standing before him, he said: "You said it in your haste, David. If you had been here, you might have said it after mature deliberation."

An exchange says that a new way of fastening on ladies' hats is to bore the tops of their ears, put in gold hoops and have the hat strings tied through them. Thus, step by step, we tread the pathway to perfection, and ere the darkness of death envelops all the world man will have utilized his nose in holding up his pants or pulling on his boots.

Alternately Shaken and Scorched

By the paroxysms of chills and fever, the wretched sufferer for whom quinine has been prescribed essays in vain to exterminate the dreadful disease with that hurtful palliative, which at best only mitigates the violence of the fits, and eventually proves highly injurious to the system. In order to effect a *thorough cure* of malarial fever, whether intermittent or remittent, or to render the system impregnable to its attacks, Hostetter's Stomach Bitters should be used daily. That this medicine is a searching eradicant of diseases generated by miasma, and a reliable safeguard against them, is a fact so widely recognized in this and other countries that to adduce evidence in support of it is unnecessary; but were it either essential or desirable to do so, it may well be supposed that from the testimony corroborative of its claims, which has been accumulating during the last twenty-five years and over, sufficient proofs might be gathered to convince the most inveterate skeptic.

STOCKBRIDGE
MANURES

Originated by Prof. Stockbridge, Prof. of Agriculture in the Massachusetts Agricultural College.

Made for each crop, furnishing the plant food which each requires. They have been used for five years with such success that in 1877 they were applied on over 10,000 acres with excellent results. **Send for Pamphlet, Mailed Free.** Also for sale, Agricultural Chemicals.

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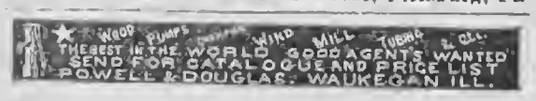
GUNS and Revolvers. Illustrated Price List free. *Great Western Gun Works*, Pittsburg, Pa.



PRIDE, ARROGANCE, SELF-CONCEIT, WORLDLY GLORY.

—"To see ourselves as ithers see us."

KINGSFORD'S
OSWEGO CORN STARCH,

For Puddings, Blanc Mange, Cake, Etc.

PURE AND DELICATE—PREFERABLE to BERMUDA ARROW ROOT.

☞ Inferior and spurious articles are often sold as **Kingsford's.** ☜

To avoid GROSS IMPOSITION see that **T. KINGSFORD & SON** is on each **Box** and on each **Package.**

ALWAYS USE THE BEST.
THE RUBBER PAINT IS THE
BEST PAINT IN THE WORLD.

It is mixed ready for use and there is no Paint manufactured that will resist water equal to it; and it is in every way THE BEST PAINT for either inside or outside painting. It is Smooth, Glossy, Durable, Elastic, Beautiful and Economical. Its being impervious to water makes it the Best Paint for ships and other vessels that is known, and for painting houses it is equaled by none. If we have no agent in your nearest town, write direct to one of our Factories for sample card and full information.

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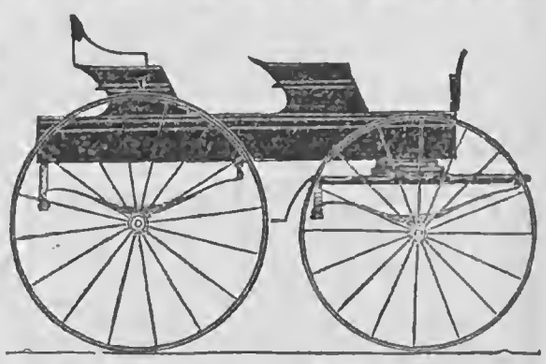
506 West St., New York; 83 West Van Buren St., Chicago, Ill.; 210 S. Third St., St. Louis, Mo.; and a Wholesale Depot at Wm. King & Bro., No. 2 North Liberty St., Baltimore, Md.

THE CORTLAND
Platform Wagon.



To the Farmer and Dairyman, to whom a light-draft, easy-riding Wagon, capable of carrying from ten to fifteen hundred pounds, is a necessity, this is the

CHEAPEST AND BEST

Platform Spring Wagon made.

Every Wagon fully warranted.

If there is no agent or dealer in your town, send for Circular and Price List to the

CORTLAND WAGON MF'G CO.,
Agents wanted. Cortland, N. Y.

TEAS

This is a combination of capitalists to supply *consumers only* throughout the *United States* with **PURE TEAS** on the mutual principle, by getting up clubs. Send for New Price-List.

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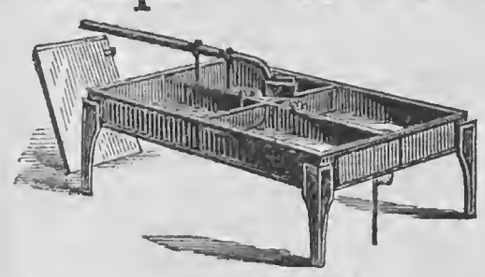
P.O. Box 5509. No. 8 Church St., New York City

Champion Milk Pan



The Best, Cheapest and most Economical Milk Pan in the Market. Saves the Butter Maker both time and money. Saves labor in handling the milk. Makes the best butter, and excels all others in durability and simplicity of construction. Illustrated Circular, giving full description of its working, sent free on application to WILLARD & HAMMOND. Randolph, Cattaraugus Co., N. Y.

The Rectangular Churn

Simple, efficient and *always reliable.* No inside fixtures. Fifty per cent. in labor saved over *any other churn.* 5 sizes made. The Highest Award given over all competitors at the late Dairy Fair in Chicago. An energetic man wanted in every town, to act as agent. One churn sent at wholesale where we have no agent. **CORNISH & CURTIS,** Fort Atkinson, Wis.

TEAS REDUCED

OUR TERMS ARE THE BEST.

Send for our New Reduced Price List.
THE GREAT AMERICAN TEA COMPANY
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J. M. THORBURN & CO.
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For years the largest importers of seeds of **superior Roots** for cattle feeding, beg to remind their friends that their stock this season is unsurpassed.

Warden Orange Globe Mangel Wurzel.
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White Silesian Sugar Beet.
Long Orange Carrot.
Improved American Ruta Baga, &c., &c.

Send for our Catalogue. Reduced rates in large quantities.

TRADE MARK.
'VIBRATOR'
Reg. March 31. 1874.

THE ORIGINAL & ONLY GENUINE
"Vibrator" Threshers,
WITH IMPROVED
MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
NICHOLS, SHEPARD & CO.,
BATTLE CREEK, MICH.

THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Raddles, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse size, and two styles of Mounted Horse Powers to match.

STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

IN Thorough Workmanship, Elegant Finish, Perfection of Parts, Completeness of Equipment, etc., our "VIBRATOR" Thresher Outfits are Incomparable.

FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which we mail free.

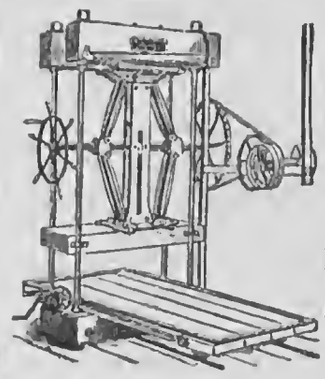
THE AMERICAN HAY ELEVATOR.

The most perfect, simple and ONLY Elevator that raises the hay from wagon and carries it in barn any required distance. Economical, durable, labor-saving. Send for Illustrated Circulars and prices to
J. R. FITZHUGH,
1708 Barker St., Philadelphia, Pa.
Branch Office: 55 Beekman St., New York.

The "Eclipse" Victorious
(See Centennial Judges' Report.)
STRONGEST WIND MILL MADE.

Tested 10 years. Thousands in use. A solid wheel without joints. Produces 15 per cent. more power, and will not blow away.

WE BUILD 13 SIZES MILLS for pumping and power purposes. Illustrated Circulars free.
Eclipse Wind Mill Co., Beloit, Wis.



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Cider AND Wine
PRESS.
WITH
Double Platform

BOOMER & BOSCHERT
PRESS CO.,
Syracuse, N. Y.

EXCELSIOR

MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 18.
WHOLE No. 1475.

NEW YORK CITY, MAY 4, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

Horticultural.

A BOWER.

We offer the accompanying sketch as a beautiful effect produced at little cost, and one that any farmer that can see beauty in a flower, shrub or vine, can reproduce about his own home. Such delightful, shady, inviting nooks are far too infrequent in our American gardens.

We are too fond of imposing artificial effects that display wealth rather than that homelike, quiet, generous arrangement of plants, lawns and walks that is suggested by a love of home, and refined taste, untutored though it be.

There are many hardy vines suitable for such arbors as that represented in the engraving. Either one, or several, might be planted in one small plot and trained for two or three seasons to a central column, and then carried over upon wires or light frames of any kind. The hardy Akebia quinata would answer the purpose admirably. The Wistaria, Periploca Græca, Honeysuckles, Virginia Creeper would answer the purpose separately or together. For a single vine, however, for this climate, we think of none that we should employ for this purpose in preference to the old and well-tried Trumpet Flower, Tecoma radicans (see page 281). This is very hardy, of rapid growth, and attaches itself by its leathery rootlets to whatever it touches.

THINNING AND DIGGING.

With amateurs and in many cases with professional gardeners, it is usual to plant the shrubbery borders very close. In most cases no harm, but much good comes of thick planting, if timely thinning is practiced. As soon as it becomes apparent that they begin to crowd each other, some of the plants must be removed. This is imperative and, in so removing, the especial welfare of the plants left rather than the good of those removed, should be carefully studied. The reverse of this is the usual practice with quite all gardeners, the thinnings must be cared for and made to grow at all hazards, and without regard to the loss of roots to the remaining plants.

These remaining shrubs, as is too often the case, instead of being improved by the thinning as is intended, date their decline from that time forth. The reasons for this, (and there are several,) should be apparent to any observer. In the first place, plants growing closely together naturally protect each other; it follows that after a free thinning, the plants left get chilled, arresting growth and impairing their constitution. This is the result of the thinning being carried to excess; a little at a time is the only safe rule, and one which should never be forgotten for a moment while at work in the shrubbery.

Will it be necessary to speak of the second reason for the decline of thinned shrubs? It is the wholesale loss of roots. In our endeavor to get a good ball of roots for the removed plants, we cannot help doing considerable damage to the roots of those left. Does it pay to try and save the thinnings? Most certainly not, when it has to be done at the risk of destroying the remaining plants.

Another great wrong is done to the shrubbery by the semi-annual digging practiced by two-thirds of the gardeners. Hardly have the roots made a fair start in the surface soil, when down must go the spade and cut them off. What is the use of manuring and mulching, if we must cut the roots off every fall and spring, as soon as they get a fair start to work. I do not say the weeds must be allowed to roam and flourish. The surface should be kept clean by hoeing the weeds when small, and the crust should be kept from baking by the judicious use of the rake, but no spade should touch the ground between the shrubs. If necessary to loosen the soil, do it once a year with a strong garden fork. Much injury is also done to our shrubbery by improper pruning and trimming, but of this time and space will not allow me to speak. It is a wonder how some plants have ever thrived, subject to the cruel and barbarous treatment that has been given them. Study the welfare of your plants if you would succeed.

El Dorado, Cala. W. C. L. Drew.

Arboricultural.

WHAT SHALL I PLANT? No. 2.

SAMUEL PARSONS.

In my last paper I noted briefly some of the best flowering plants for massing or using singly on the lawns. Flowers appeal to the most careless eye, but very many enjoy as they pass the varied colors of foliage without understanding or even thinking why they receive such pleasure. By touching here and there, briefly, on certain deciduous tress and shrubs remarkable for foliage of attractive shape and color, I hope to indicate somewhat how this agreeable effect is produced on well-planted lawns.

The Maples rank especially high, not only on account of their vigorous and rapid growth and general health, but also from the varied forms and color their leaves assume in the different varieties. These massed together or planted singly, present rich and delicate hues quite unsurpassed in their way. The Sugar Maple is perhaps the best known and appreciated even in its most purely ornamental character for its autumnal garb of crimson and gold. Then there is the Norway with broad, shadowing foliage, well suited for single positions on the lawn, or for skirting the edges of other groups in clusters of two or three. The Scarlet is honorably known for the unrivaled coloring of its robes in fall. Both good in their way, the Silver-leaved and Ash-leaved, with their light or fresh-looking foliage, have a minor degree of value for lawn planting, although still very useful in their way.

By grouping these Maples with the Scarlet or Pin Oak and Liquidambar most effective combinations may be formed for the exhibition of fine autumal coloring, and I only wonder that more attention is not given to this branch of lawn planting. I would like to dwell at length, did space but permit, on the exquisite beauties of the Japanese Maples with their lace-like leaves, golden, purple and tri-colored. This much must be said for them, that no lawn can dispense with their hardy beauty, any more than it can spare the peculiar fitness their dwarf nature gives them for certain positions near the path or house.

The cut-leaved and purple forms of the White Birch have great value for the lawn planter. In the true sense of the word elegant, their white bark stands out among other trees with great prominence and the drooping, graceful foliage relieves the shores of lakes or edges of woodland with great effectiveness.

For sturdiness, for richness and massiveness, nothing can much surpass the different varieties of Beech, Purple and glowing, cut-leaved, symmetrical, and weeping with great irregular sweeps of the branches, all habits seem to afford it new capacity for astonishing us by its noble and varied forms. Nor must we forget that the shade cast by the Beech has been esteemed specially delightful from early classical days.

The sturdy qualities of the Oaks also recommend them highly for lawn planting. Their outlines and curiously-formed branches and leaves render them always picturesque, and their longevity is almost unsurpassed. Maturity with them does not come early, but their grand and even elegant forms remain with us so comparatively unchanged that they seem at last part of ourselves, something that we have always with us, like the "everlasting hills." Quite as much as other trees, they take on purple, and golden, cut-leaved or weeping forms. Indeed Quercus concordia is one of the most permanent and best golden trees we have. There are two purple forms of Oaks: one, nigricans, grows well and is hardy, but does not retain the purple strongly-marked throughout the summer; the other, atropurpurea, is rare, richly and permanently colored, of very slow growth, though not very hardy while young, in many sections of America. The Scarlet Oak is well-known for its fine autumnal coloring.

Not common, and of very rich coloring is the Purple-leaved Hazel. Then we have the Liquidambar, just now of "Alligator Tree" celebrity, with its star-shaped leaves and dark-red color in autumn, and the Kilmarnock Willow, of light foliage and regular weeping form, but defective longevity.

I must, however, conclude my brief remarks by noticing only two more very ornamental genera of trees: the Lindens and Cypresses or Taxodiums. The Linden is silvery, symmetrical and massive, golden-twigged, shining and graceful, but always a tree of very great beauty and value. Cypresses are not appreciated. There is nothing among trees more graceful than their weeping curves, or more delicate and elegant than their light colors and feathery foliage, especially in the forms termed Weeping and Chinese. Elms certainly deserve, at least, a passing notice, but most varieties are quite familiar, except probably the Weeping Slippery Elm, the vigorous growth and persistent, healthy foliage of which give it a value hardly at all, as yet, recognized. I might mention many curiously formed and colored shrubs, such as Purple Berberry, Japan Silver-leaved Oleaster, Sea Buck-thorn and variegated Wiegela, did space permit me.

LAWN OR GARDEN BOWER.

JAPAN PERSIMMON.

Whatever may be said against the hardiness of the Japanese Persimmon throughout the North, and very little is really known of the matter, this much is certain, that for the South it is going to prove a valuable acquisition. Careful notes should be taken, in various lo-

calities, relative to its hardiness, health, etc., and forwarded from time to time, to the leading horticultural journals. We have tasted the candied or dried fruit of the Japanese Persimmon lately with much satisfaction and appreciation of its toothsome qualities. Excelling the dried fig in flavor, it is richer, reminding one somewhat of the date, whence arises probably, one of its names, the Date-plum. S. B. P.

Field Crops.

CULTURE OF BROOM-CORN. NO. 2.

W. H. WHITE.

HARVESTING ETC.

We here come to a point in broom-corn culture where the practices of different cultivators vary somewhat; still all aim to attain the same end, namely the best brush. Some break the stalks a foot or more below the brush some little time before cutting, after it has matured to the stage they think proper, and let the brush hang, tips down, beside the stalks. Others "table" it, which consists in breaking two rows together about two feet from the ground, laying the tabled portion horizontal with the ground, some two feet above it. Others again, let it stand as it grows till time to cut, and then cut as it stands. Others still, break down only the crooked brush, and leave the rest till a day or two before cutting, when the stalks are all broken to hang one way, usually toward the rising sun.

I believe all are agreed that if the stalk is bent or broken over without entirely severing it from the root, previous to mature growth, the brush will not grow in length, but will grow coarse and harsh. It is always an object to have the least possible amount of crooked brush, as it is usually coarse and difficult to work to advantage. This usually detracts from the value of an otherwise desirable lot. Broom-corn should be harvested before hard frosts, as frost injures it materially; and for this reason, in our northern climate, it is essential to give it good early culture, to induce an early, rapid growth and maturity. It is also necessary to give it good soil well warmed up with well-decomposed manure, ready to impart pabulum as needed by the young plants, which are somewhat tender.

As good a course as any, in harvesting broom-corn, is, I think, to let it grow till a day or two before cutting, which should be done when the major part of the seed is in the dough state, none fully hard, as then the brush is in the best condition and will bring the best price, if properly cured, etc. Then "table" it, which is done as above described. After a day or two, cut the brush, using a butcher or a carving-knife, not very keen-edged, for if it is not so sharp, the leaves are less likely to be cut off and bothersome. Cut so as to leave only six or eight inches of stalk below the point where divergence commences, keeping clear of all leaves, laying the brush straight all one way; spread on the "table" formed by the stalks. A good deal of labor and vexation is saved by keeping, in every manipulation, the brush even and straight, not thrown together like hay. After lying awhile to dry somewhat, the brush should be gathered into small bundles and bound with corn-leaves or other tying material. It should then be hauled and spread under cover on the day it is cut. Thus cured it keeps a better color, and the brush retains its elasticity better. A greenish cast of color suits some markets best: this is best attained by cutting before fully ripe, and directly hauling it and curing it under cover of sheds or well-ventilated, airy buildings. It should be spread on racks suitable for the purpose. These may be set up to any convenient hight, and formed of open slats one above another with a space of a foot between.

Our next step, after the brush is well cured, is to divest it of the seed. This is acomplished in different ways by different cultivators, the method depending somewhat on the quantity grown, conveniences, etc. Some take two pieces of hard-wood board, with square, sharp edges; one may be of any desired length and fastened conveniently edge-up; and the other of a convenient length to hold in one hand. The brush is taken by the stems, in the left hand, and drawn through between the edges of the two boards, the one in hand being pressed on the brush, and turned a little to allow the corners to strike the seed. Quite rapid work may be accomplished by an active man in this way. Others take an iron scraper and use it in a similar way. Some use a broom-corn hatchel, which consists of a row of iron teeth, three-eigths by one-half an inch square, six to eight inches long, two-thirds their length beveled to a point, the back side thicker than the front. Set the teeth firmly in a plank, so that the points will be about half an inch apart. This can be fastened to something firm and convenient to work at, then draw the brush through the comb till clean of seed.

Where the quantity is large, a cylinder made for the purpose, some two feet long and ten or twelve inches in diameter, with teeth three inches long and one-fourth of an inch square, pointed and set in rows three-eights of an inch apart in the cylinder, and this driven by horses or other power, is used and made to do rapid execution. This works overshot with a concave; four or more hands can work at it—two to hold the brush to the machine, while two others prepare and hand it for cleaning; a fifth will find full employment in taking away and binding or spreading again the brush after the seed is off. If the brush is not fully dried out, it should be again spread on the racks to dry fully, so that it can be put in bulk or bales without danger of heating or molding, etc. After suitable drying, it is made into bundles of about ten pounds, butts out and the brush lapping. These bundles are well compressed and firmly bound with strong twine or other tying material. It may now be put in larger bales and sent to market, or sold and delivered without baling, to the manufacturer when near-by.

TETOFSKY.

The profits of growing broom-corn are variable, depending upon supply and demand. There is always demand, however, and at remunerative prices when the market is not already stocked with the raw or manufactured article. Some seasons, in the past, I have known the price to go as high as twenty or twenty-five cents per pound, and even more; while in others, when the supply was large, the price fell to six cents or less. The product per acre also varies with different seasons and also with the culture given; but with such culture as before recommended, and a suitable rotation, never growing the crop two successive seasons on the same ground, or planting to follow sorghum, the crop may be as sure, nine times in ten, as Indian-corn, and the cost of production but very little greater, while it will bring considerably more, as prices generally average.

If all the directions hitherto given are followed with judicious closeness, an average product of marketable brush of eight hundred pounds should be obtained with fifty bushels of seed which will be worth for feeding purposes, ordinarily, as much per bushel as oats, or even more. With this product as a basis, anyone can estimate the income from an acre from prices in his own locality. I have here understated, rather than otherwise, the products realized under favorable circumstances of good seasons.

My aim has been to give a fair average, rather under than over, of the results for a number of years in my own vicinity where my experience and observation have extended and where thorough culture is the rule.

Worcester Co., Mass.

THE USES OF MILLET.

Millet has often been recommended as a forage plant, for which it has special advantages as it can be sown late in the season when the other crops are out of the way. It may be successfully grown upon land too wet for putting in oats or other early spring crops, or it may be sown on land after a crop of barley or grass has been gathered, and mature sufficiently for forage. The common millet will ripen its seed within sixty days after sowing and it will then make good hay, besides affording a large quantity of seed valuable for poultry, or, if ground, excellent to mix with corn or other grain to feed to cattle and pigs. The seed of millet is worth all the crop costs to raise, leaving the hay for a profit. As the crop can be put in and harvested at seasons of the year when other work does not press upon the farmer's time, its culture is made easier. It is an excellent crop to put upon a stubborn piece of ground to kill out weeds, such as thistles, dock, &c., for if the land is well plowed and the surface made mellow, the millet will soon shade it thoroughly and kill out the foul stuff. A little manure on the surface harrowed in with the seed will often double the crop. Time should be given to allow the seed to ripen before frost. The crop may be run through a threshing machine, or if bound up into bundles, threshed with flails to separate the seed. A half bushel of seed is abundant for an acre.

The Golden or German millet is the best for a forage plant and resembles corn in its growth, as it throws out a broad, corn-like leaf. The stalk is also soft and edible. This sort of millet requires nearly the entire season to mature its seed, and should, in a northern latitude, be sown by the first of June. For forage alone it may be put in the last of June when it will make full growth of stalk but not mature the seed. It requires stronger land than the common to make a vigorous growth. On rich land the amount of forage is immense. Stock will eat either of these grain-grasses with a decided relish in winter and they are most excellent for a change. For green feed they are also good. As a supplementary crop, when the meadows are light, millet is most valuable. A meadow with a slim prospect for hay might be turned over, and be made to yield a satisfactory crop by sowing to millet, and at the same time be fitted for a crop of grain the next year. If the frost holds off, the seed will not mature when the golden is sowed late, as it requires a requisite degree of heat which is not afforded after September. It should always be cut before any frost touches it, or its value for feeding will be greatly injured. Like corn, it blanches and dries off when frozen. The seed of Hungarian grass is not equal to millet for feeding stock. It is not much if any better than that of our native summer grass which it very much resembles. The latter which is often plentiful in a grain crop, is good for cattle if ground up and mixed with bran or meal. Fed alone it is too laxative.

YELLOW BELLEFLEUR.

VAN'S VIEWS.

GROWING POTATOES CHEAPLY, ETC.

One of the farm crops which we will soon be thinking of is potatoes, and our system of growing them has of late years been much simplified. In the Centennial year prices were so low that we had to seek new methods and endeavor to grow them cheaper. Those of us who said that potatoes could be grown at a profit, for twenty-five cents per bushel, received much abuse and were denominated "paper farmers" and other complimentary names. But time has brought changes and we hear men tell of their crops raised without using the hoe, which average fully as high and usually higher than those grown the old way.

There is no patent on our system and I will in brief explain it:

A plowman who can always strike a straight

furrow begins on one side of the field, lays out a land, "back furrowing," plows three rounds, turning a furrow as near as he can to twelve inches wide and six deep. He then lays out another, and after that a third, so that he can go from one to the other. A boy follows with the potatoes, cut to *single* eyes, and drops them in each third furrow about one foot apart; the next furrow, of course, covers them and our potatoes are planted. After the field is finished, harrow; when they are just appearing harrow again, and keep this up, till the potatoes are six inches high. This looks rough, but it agrees with the potatoes and we are satisfied. These harrowings keep the weeds down and the potatoes have now such a start that they will choke out any weeds in the row, and between the rows a shovel plow will keep things clear.

Now, don't go and try this plan on a piece of land "too poor to grow white beans," and then call us who follow it, humbugs; but take a *good* piece of sod or good land well manured, and plant *close* in the rows, and you will have no cause for complaint.

We also find the harrow very useful in our corn-field. Some think it does more harm than good, but it depends largely on the soil. On a heavy loam it is a success. Corn-growing is not a success with us for about one year out of five; we lose our crop by early frost.

Who has tried vetches as a soiling crop? Who has tried soiling anyway, and what has been his success?

We are just having our first spring rain and the faces of our lumbermen and farmers begin to assume their natural rotundity. The thought of a field or two that should have been sown, mars one's rejoicing in a measure, but, to change an old saying: "There's no great gain without some small loss," and our loss is small in comparison with the gain of the region about us.

Pomological.

CAN WE HAVE BETTER FRUIT.

No. 1.

GEN. W. H. NOBLE, BRIDGEPORT, CT.

WHY not! The ways are known if not well trod. Our glorious climate promises bright rewards to trial. It matters not that the best are due almost as much to chance as to any method in the selection of their seed. Excellence in a chance seedling is not all chance. Calling a choice fruit a chance seedling is only another way of telling our ignorance of the ancestry and parentage from which its excellence has sprung. All we know about the descent of fruits as well as of animals, makes it sure that before the birth of any choice variety its progenitors struggled through many generations of slow development. No one perfect thing whose history we know, has ever reached perfection at a leap. Whether left to the slow happenings of chance, or patiently sought through studious trials, it has taken many generations of men and tree growth to place a luscious fruit upon our table.

The Dutchesse d'Angoulemo and the Seckel, are chance seedlings. Many of like or near excellence have come by chance; were found in hedges or outlying lands. But all we know about how better fruits have followed patient trials, tells us that some unrecorded excellence has fathered the luscious fruit that comes by chance, as well as those whose parentage we know.

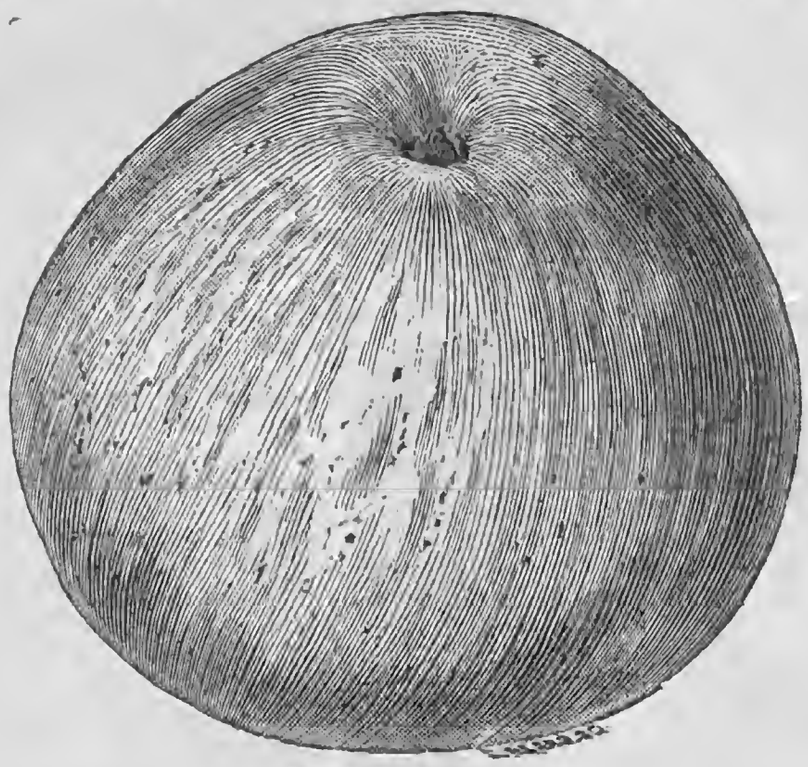
No old choke pear, self-impregnated, ever yielded, right from its puckery pulp, a seed from whose planting sprang fine fruits. Whether planted with method and a purpose, or by chance, such come only through seed one at least of whose parents bore a choice kind. The way may be unrevealed by which the choice seedling gets that in its germ which grows to excellence. Whether pollen floating in the air, or borne by bird or bee, or mated with a purpose, gained for our choice fruit its lightest type and promise, matters not. It's enough to know that races are only lifted to higher levels by that better blood which comes as a heritage through lineal heirship from some ancestral excellence.

The signal betterment of animal and vegetable kinds, which our century boasts, has come from faith in that heritage and close study of Nature's ways. That study has revealed but two methods through which Nature holds the good and helps to better kind. One is by straight, lineal family descent, in an unbroken line. The other seeks a better progeny through mating the choicest families in each race, which is cross-breeding.

Of these, the first is especially known on the turf and in the stock-yard as breeding in-and-in. This, as near as you can breed in-and-in through the seed germs and growth of trees, was the method in Van Mons great experiment after better fruits, at the gardens of Louvain. Some fifty years have gone by since the great Belgian gave us its results in many of our finest fruits. The story of his trial is a wondrous chapter in the history of the garden. Such profound knowledge of fruit-tree life, such heroic patience in toil and trials, such a triumphant harvest of luscious fruits, and then after a special term of generations for each kind from seed to fruitage, their failure to reward his method with better sorts, make up a rare record in human and plant life. His calm and philosophic register of that failure, the lucid story of the theory and phases of his trial, and the real wonders which he wrought, have won for Van Mons the homage and lasting memory of all to whom the garden is a pleasure and a pride.

It is true that cross-breeding alone insures both to animals and plants lasting and higher grades of excellence. Yet neither its more enduring results, nor the failure of Van Mons to fulfill the earlier promise of his method, should dim his glorious name among men. His gains upon the rude ancestry of his rapid generations record a wonderful feat. The failure in the lift toward higher and higher grades of tree and fruit only warns against his practice as a continuous method. It should not dishearten hopeful trust and search for special helps along the pathway of his trials. The glorious fruitage that crowned his work proves that somewhere beside his tireless footsteps there lurks a secret promise of brighter results. The cross-breeders glorying in the rich returns of their placers, have mostly passed by and forgotten the older diggings of Van Mons, and his methods of work.

Now Van Mons' theory and plan were these: he held that stalwart wood-growth and fine fruits were not congenial; that to repressed tree-growth came the better fruitage; that the progeny of old established sorts tended the most readily towards primeval crudeness; that rapid reproduction, therefore, from seedlings just taking to a better fruitage, would sooner return us luscious fruits.



THE WEALTHY APPLE.

So he began away back with seeds of healthy trees a little advanced from their aboriginal estate. The seed of this fruitage he planted right along in one unbroken line of strict family descent. By every means known to those skilled in the garden, he checked their wood growth and hurried up their fruitage. After several such hastened generations, varying with each kind, luscious fruits crowned his patient work. But after the number at which each variety reached its highest grade, both in tree and fruit, all promise of a better future failed.

Van Mons doubtless erred in many things. No special plan grasps all Nature's ways in animal or plant development. Yet starting without pioneer or guide, the brief years of his experiment out-stripped all that chance or skill had won through all the generations gone before. To few among men has such a triumph been vouchsafed, in any line of human effort. He deserves a high place among the benefactors of our race. Such are not, more than greatness, always to be measured by success. The world in every line of life owes more to the earnest struggles of the many whose failures have broken the way, than to the few who out of the dangers and toils of others, "have plucked the floweret of success." Besides, we often sadly err, both in our praise and estimate of men and of their work. Fame's wreath is ever ready for the triumphs of our baser nature. History makes much of wars and warriors, of state-craft and intrigue, of provinces overrun and people crushed out by rough riders. Not but that deeds of arms and heroic daring in defence of home and country and human liberty, merit praise; yet there are less boastful and noiseless human triumphs equally deserving the plaudits of men. Thus fruitage and flowers, the garden and gardenesque, are given small place among the forces lifting our race to higher levels of civilization. Yet when such factors get their true measure as motors toward human betterment, those like Van Mons will be rendered their rightful place in the hearts and ranks of men.—[To be continued.

CANADA REINETTE.

APPLES.

YELLOW BELLEFLEUR. PAGE 278.

That this is a popular apple the markets of the large cities will testify during its season. The tree likes a light soil, for which reason perhaps we have never been able to do anything with it in the RURAL Grounds which are rather clayey. The young trees seem to exhaust themselves in blossoming. No fruit has ever set and very little new wood formed. The apple is pale yellow. Flesh tender, fine, juicy, agreeably acid and excellent. The American Pom. Society gives two stars to the following: Nova Scotia, California, and one star to Vermont, Mass, Conn., Mich., Oregon, Penn., Md., Virginia, Ohio, Indiana, Kentucky, Iowa, Missouri, Nebraska, Utah, Ala., Louisiana.

THE TETOFSKY APPLE. PAGE 278.

This Russian apple has proved itself a valuable market sort. Fruit is of medium size, oblate, conic or sometimes quite round, yellow striped with red. Flesh white, sprightly, juicy, aromatic and agreeable. Ripens in August and succeeds well in Iowa and most of the northwestern states, and also in Louisiana.

WEALTHY.

Of medium size as our engraving shows, the Wealthy apple has white, fine-grained flesh which is tender and possesses a sprightly, subacid flavor. The tree is very hardy, originating in Minnesota. The fruit growers of Minnesota speak in high terms of praise of this apple. It is very showy and of good quality.

CANADA REINETTE.

A WINTER apple of medium size. It is a greenish-yellow color—flesh white growing tender, juicy and possessing a sub-acid, lively flavor. It has been found to do well in New York, Ontario, Michigan, Ohio, Alabama and Louisiana.

RAWLE'S JANET.

(*Rawle's Jennetting, Neverfail.*)

This for certain parts of the country, as will be seen below, is a valuable apple. The tree is of slow growth, but a great bearer though usually a part is under-size and knotty. Medium size, striped red and yellow. Flesh fine, juicy, crisp, rather acid. It is a winter apple and keeps well. The Am. Pom. So. gives two stars to the following: Maryland and D. C., Virginia, Kentucky, Iowa, Missouri, Kansas.

PROFITABLE PEARS.

YESTERDAY I asked a neighbor, who has grown several acres of pears for years, what variety he had found most profitable. His pear orchard consists mainly of four varieties; Bartlett, Seckel, Winter Nelis and Lawrence. It would have yielded thus far twice as much clear profit if all the trees had been Bartletts. Now, however, this variety is blighting badly, while some other kinds are coming in its place. The Lawrence is a poor bearer while young, but is healthy and more productive as the trees get old. My friend has not had such good success as he should in disposing of Winter Nelis, a late pear which needs to be sent to Boston, New York, or Philadelphia to secure a good market. Excepting the Bartlett, the Seckel is probably the best pear for profitable marketing. The tree is mostly free from blight, and the fruit, though small, is always in demand. There is this to be said in favor of the Bartlett that though it has blighted badly of late, the trees have paid for themselves before the others began to bear much. For quick returns there is no better variety. Beurre Clairgeau is a coarse, poor pear; but so fine-looking that it always sells well. Flemish Beauty, on the contrary, though equally fine-looking, is more apt to glut the market than any other. Much of the profit in orcharding depends on judicious selection of varieties. Other sections may need other favorites, but for Western New York the above hints will be of value.

W. J. F.

Monroe Co., N. Y.

Farm Topics.

WESTERN FARM TOPICS.

PROFESSOR E. M. SHELTON.

THE impression exists in the minds of many Eastern people that the wheat crop which figures so prominently among the agricultural products of this State, refers wholly, or in good part, to the spring varieties. This is a mistake: the amount of spring wheat actually grown being little more than one-fourth of the total wheat product. Moreover, while the cultivation of winter wheat has increased enormously within a few years, the growth of the spring variety has made slow and uncertain progress. Thus—to quote from the Reports of the Secretary of our State Board of Agriculture—the product of spring and winter wheat of the State in 1870 was, in round numbers, something under 2⅓ million bushels of each sort, the yield of both kinds being then nearly equal; in 1877 the spring wheat product had only increased to 3½ million bushels, while that of winter wheat had risen to the enormous total of 10½ million bushels. All the "large yields" and "big fields" of wheat, so often mentioned in the papers, without exception, refer to winter wheat.

Within two years there have appeared many indications of a reaction in favor of spring wheat, and I am satisfied that during the present season a larger area has been sown to this variety than ever before in the history of the State. Some careful observers go so far as to assert that the area of spring wheat has been more than quadrupled the present season; and should a good crop be harvested the next two seasons, I should not be surprised to see the position of the two sorts nearly reversed. Thus rapidly do these young communities change their methods in this, the most conservative of arts.

There are several reasons for this change in the opinions of our farmers: the chinch bug, that pest of the spring wheat plant, has for several years done but little damage, while the winter wheat has for two years past been badly injured by rust and grasshoppers. But more than anything else, the introduction of the

ODESSA OR GRASS WHEAT

has tended to produce this change. This wheat may be familiar to your Eastern readers, but in this part of the State it has only been cultivated during the last two or three years, and then on limited areas. Of its origin and history I am unable to speak positively. Rumor assigns to the Agricultural Department the honor of having first introduced the seed into this section.

I am not prepared to indorse all the claims put forward for this variety; but certainly it has proved the most valuable spring wheat ever grown here, and in some respects superior to the winter sorts. It is claimed for it that it is proof against the chinch bug, at least it has not thus far been injured by this omnivorous pest, and that it is a more certain crop, and generally gives larger yields than any similar wheat. To these must be added a third and most important advantage—it may be sown at any time between late fall and May following. It is probably not a true spring wheat, but rather it occupies the border-land between these two sorts.

The millers give the Grass Wheat a good name, but thus far have failed to back their recommendations with any increase of price as compared with other spring sorts. This wheat has probably received its name from its grass-like habit of growth, in the young state. At this time and until it begins to "joint," the blades are of a pale-green hue, very numerous, long and glistening, and in general appearance the plant is quite like Perennial Rye-Grass during the first year's growth.

I shall look with much interest for the results of this year's experience with Grass Wheat, for, without doubt, it will either confirm us in an old practice or mark an important change in our agriculture.

We are passing through the most remarkable spring that I have ever yet experienced. On this 16th day of April I have finished all spring seeding, including corn planting. Last year I finished corn-planting, June 9th. Peaches are as large as the end of the thumb; white Rye is in full bloom; and I have just measured single stalks of Alfalfa sixteen inches in length. The weather is as warm as that of June ordinarily, and the season generally is fully a month-and-a-half in advance of the almanac.

State Ag'l College, Manhattan, Kas., April 16.

RURAL NEW YORKER.—By request of J. H. REALL, Esq., of your city, I forward you a copy of the United States milk record. If you wish to make editorial comments upon it you are at liberty to do so on condition of sending me a copy of your paper wherein it appears.

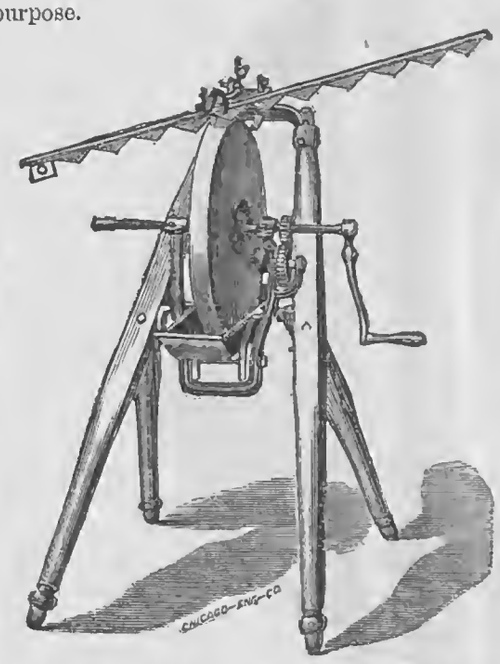
Respectfully yours, JOHN LORENTZEN.

The milk record above referred to is received. We do not wish to impose upon anybody's benevolence and so refrain from editorial comment.

Industrial Implements.

THE BOSS SICKLE GRINDER.

EVER since the introduction of mowers and reapers, the greatest difficulty to contend with has been to grind the sickles successfully, and every farmer who has ever owned or used one of these machines will quickly understand the value of a good and economical appliance for this purpose.



After many attempts and failures this end has been fully attained in the Boss Sickle Grinder, manufactured by POWELL, STEVENS & DOUGLAS, of Waukegan, Illinois, of which the accompanying cut is a good illustration. They first experimented with an emery stone, but it had two serious objections that could not be overcome, viz:—they could be used for no other purpose, and would take the temper out of the sickle. They next tried a V-shaped stone, but found it impossible to make it wear even, as the center would wear down faster than the sides; consequently, the sickles could not be ground true. All of these objections have been finally overcome in the Boss Sickle Grinder, which consists of a strong, durable frame, a flat-faced stone and a sickle-holder that will hold any kind of sickle made, and can be turned to one side out of the way whenever it is convenient to use the stone for other purposes.

This machine was first introduced to the public last season, and was widely distributed throughout the United States, but more particularly in the West, giving general satisfaction. It was exhibited at hundreds of Fairs, both State and county, and in no instance did it fail to receive the first awards. Benefiting by their first year's experience, the machine for this season has been greatly improved. It is now suitable for all of the purposes for which an ordinary grinder is used, aside from the sickle grinding attachment. It is simple and practical, and any one that can turn a grindstone can grind a sickle perfectly, and in less time than two men by the old method. A cam has been substituted for the thumb-screw in the holder, and can be moved from section to section about as quickly as though held by hand.

It will admit a stone 20 inches in diameter, and can be adjusted to wear it down to six inches. The machine is furnished with either Berea or Huron stone, of the best quality, 18 inches in diameter, and 2¼ to 2½ inches wide, averaging about 50 pounds in weight. In short it is a very practical, convenient little apparatus, well designed for the uses for which it is intended, and as it is well to prepare for the season before it is at hand, now is a good time to send to the makers for descriptive circular, etc.

AN IMPROVED SULKY.

So much has been said in these columns concerning sulky-plows, and we have expressed ourselves so clearly in stating their merits that more need not be advanced. There are some kinds of plowing that cannot be done as acceptably by any other implement, and on large places they should most certainly form part of the farm equipment.

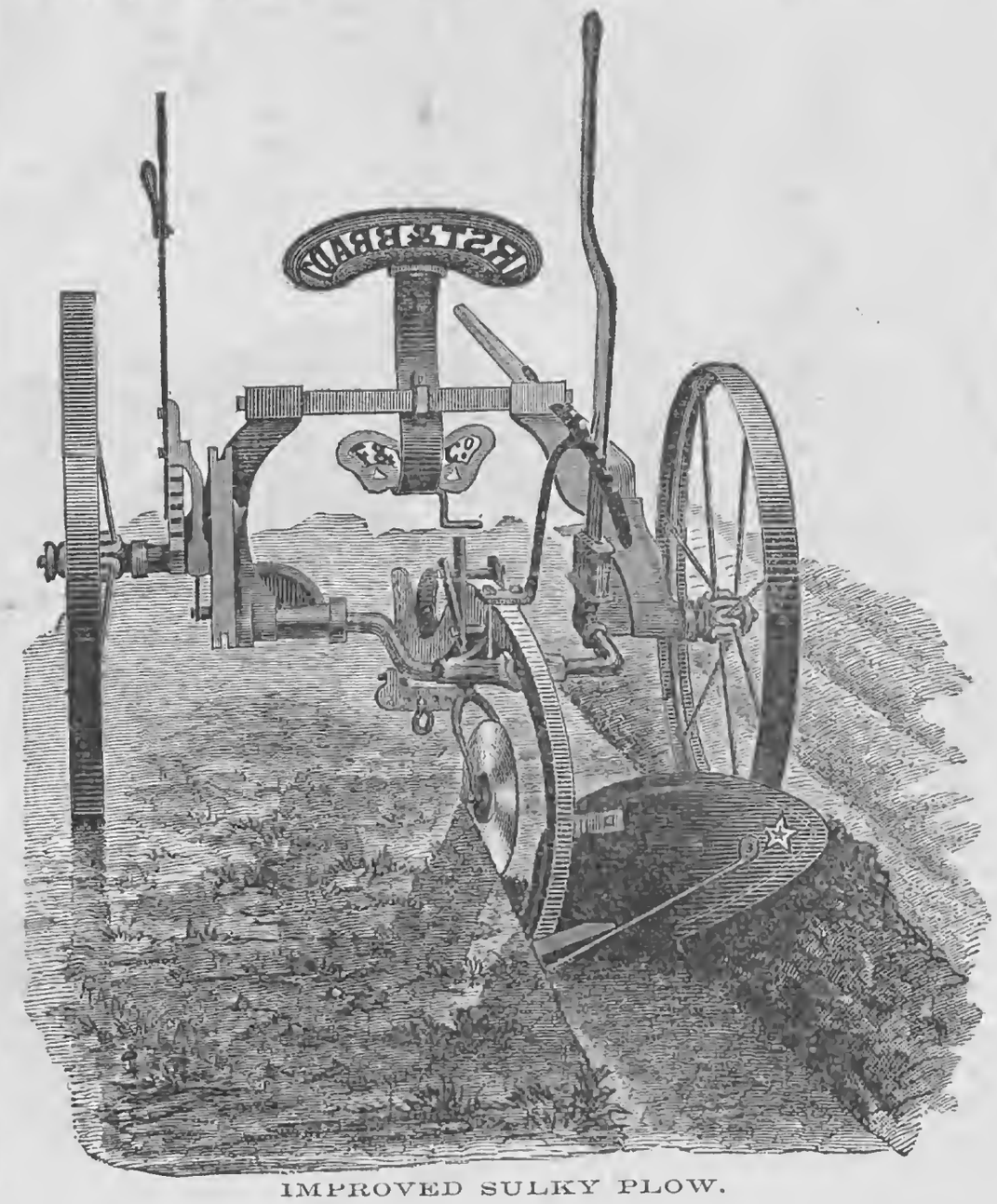
The illustration we print is a very fine and correct representation of the FURST & BRADLEY Mfg. Co's. improved sulky. It is made in Chicago, Ill. It is designed to combine strength and lightness, all superfluous material being discarded. Parts subject to strain or wear are however, fully strengthened. The wheels are exactly opposite each other and are readily maintained in that relative position. They run perfectly at different depths of plowing, so that in leveling up, or regulating depth of furrow, the direction of the plow remains unchanged, and side-draft is avoided.

The "compound leveling lever" throws the wheel up or down perpendicularly, and the depth is changed without stopping team or dismounting. The frame is independent of the main lever, allowing the plow to run at a uniform depth. This lever is also locked to the plow itself which prevents the pole being influenced by the movement of the plow. The pole is, therefore, steady, and does not press upon the animals' necks. Two or three horses abreast can be employed at the option of the operator. Stress is laid on the fact that when the lever is locked in the rack, the pivoting point is thrown forward from where the plow is attached to the crank axle, to the center of the wheel. This makes the plow run much more steadily, while the land wheel is passing over uneven surfaces, such as corn rows, or other elevations or depressions, as the up and down motion of the wheel is brought to bear upon the plow much nearer the end of the beam, and affects the running of the plow proportionately less. Still another feature of importance is, that in raising out of the ground, the point comes out first.

The mechanical construction of the sulky is admirable. Around the axles are sleeves which fit into the hubs of the wheels. These sleeves are stationary upon the axles, so that the hubs of the wheels turn upon them. As the hubs are cast upon a chill rendering them extremely hard, it follows that the wear must come upon the sleeves only, which, when worn out, can be instantly replaced at a nominal cost.

The handsome pamphlet issued by the makers gives much detailed information both respecting this sulky, and the numerous other admirable implements that are well and widely known in various sections. Sent free.

ZIMMERMAN'S PORTABLE DRYER and oven which appears in this issue is a sufficient answer to the many inquiries about dryers that have reached us recently. This one is economical, durable, portable and fire-proof. We have examined it and find it an admirable apparatus, well adapted to the purposes for which it is made. We advise our friends to send for circulars as a sufficient inquiry to all questions.



IMPROVED SULKY PLOW.

The Herdsman.

CALF FEEDING.

PROFESSOR E. W. STEWART.

A VERY important adjunct to dairying is the raising of calves, both for food and to replace the cows disposed of. Dairymen have not, however, given this legitimate branch of their business proper attention. It is very common, at meetings of dairymen, to hear them say they cannot afford to raise heifers for the dairy, and much less to raise calves for beef. I do not propose, at present, to take up the latter branch of the subject, but it has always seemed to me a strange conclusion that general dairymen could not afford to raise the cows to supply their own herds. The natural question to ask would be; "Can dairymen afford to allow anybody else to raise the cows to replenish their herds?" The treatment of the young animal has everything to do with the capacity of the matured cow for yielding milk. A cow cannot give a large quantity of milk without large digestive capacity, and a young animal, grown in a pinching and unthrifty way, has never had its digestive organs fully developed, and the digestive and assimilating capacity of such an animal can seldom be fully developed at a later period by the best feeding. This consideration, alone, is ample ground to show the profit of dairymen raising their own cows. But there are many other considerations, such as the attachment an animal forms to a place, and the unfavorable effect of change. The latter is often observed in feeding for beef animals that have been removed to strange quarters, and the effect is still worse upon cows in milk. I have often said that a good dairyman could better afford to raise his own cows than to have those raised for the market given to him.

RATION FOR THE YOUNG CALF.

Many dairy men are deterred from feeding calves because they think whole milk necessary to raise a good calf. Such persons have not studied the nature of food. It is true that milk, as it comes from the cow, is exactly adapted to the growth of the young calf, and that when any essential element of the milk has been separated from it, it has so far lost its perfect character of food. In butter-making the cream is taken from the milk, and the residue consists of casein, whey or milk-sugar and the mineral elements. But these remaining elements are the most valuable in milk. If, now, we can supply the oil which has been skimmed off, with something of less value than the cream, but having the same feed value to the calf, we are practicing true economy. The cream from the milk to supply a vigorous calf is worth 21 cents per day, at least, and sometimes 30 cents. Now this can be supplied for four cents in the oil from boiled flax-seed, and the flax-seed also contains a large proportion of albuminoids and the mineral constituents necessary to grow the muscles and bones of the calf. I have tested this so many times, and with such uniform success, that I can recommend boiled flax-seed as a full complement for the cream taken off.

A calf then may be fed skimmed milk when one week old, with the addition of one gill of boiled flax-seed, increasing this ration gradually to a pint per day when four weeks old, and then adding fine middlings or corn and oats ground together, or a pint to one quart of oats unground. Flax-seed gruel with plenty of skimmed milk will produce a very fine growth, leaving the calf as mellow to the touch as if sucking the cow. I have produced a growth of over three pounds per day, upon calves two months old upon this ration. The oil taken off in the cream can be replaced for one-fifth of the money value of the cream. Butter dairymen may raise a calf, to each cow, upon the skim milk and a little additional food, such as indicated, and get one-fourth to one-third as much profit out of the refuse milk as out of the butter. Selling butter robs the land of nothing valuable only carbon which has no manurial value.

Erie Co. N. Y.

Floricultural.

APRIL WILD FLOWERS.

THE wild flowers of April and May are far more delicate and graceful than the later summer blossoms. Those mentioned below may be found without difficulty in the New England woods and fields in April.

1. Dirca palustris. Leather-wood. Early in April the flower-seeker notices an irregular bush with angular branches, growing beside the mountain brooks. It has no leaves, but numerous yellow flowers grow on the branches in clusters of three or four, — the flowers are tubular and each tube has two contractions and a spreading border. The leaves appear some time after the flowers, and the shrub is called Leather-wood from the toughness of its branches which are composed of interlacing fibers, and is interesting from being almost the first that ventures to expose its blossoms to a New England spring.

2. Hepatica triloba. (Liver-leaf.) Almost before the snow leaves the woods the bright Hepaticas open their many-tinted blossoms of white, pale blue, French blue, very dark blue, purple, and in some localities they are of a very fine rose color. They are found in abundance around the roots of old forest trees and on sunny woodland hills, and are easily known by the three-lobed, evergreen leaves and straight, downy-flower-stems four or five inches high, each crowned with a pretty blossom. If transplanted to the garden these nice little plants bloom early in the spring and often become double by cultivation. They do well also in a Wardian case, blooming in mid-winter. The writer has had more than thirty blossoms from these roots during the last December and January.

3. Sanguinaria Canadensis. (Blood-root.) Very early comes the pretty Blood-root, snowy white in spite of the sanguinary name. They start up in multitudes beside the fences and along the borders of meadows and fields. In the early stage they look like tribes of green-wood fairies, each wrapped in a little green cloak made of a closely clasping leaf, which allows only the fair white bud to peep over the top. This plant also blooms early if set in the garden.

If the young botanist will follow the fortunes of one of these plants through the summer, he will find it interesting. After the blossoms depart, the leaves continue to grow, till by midsummer they are so large and so changed in shape as to appear like different plants. The root exudes a red juice, whence the name. The leaf and bud which are formed in the autumn for the next spring's bloom, are so nicely and definitely packed up, that with a magnifying glass they can be distinctly seen and even the stamens counted.

4. Anemone nemorosa. (Wind-flower). This vernal blossom is perfect in delicate grace. It is found abundantly in the woods and beside old fences and stone walls; the stem is six or eight inches high, with an involucre of pretty, tri-foliate leaves about half way up, and above these a solitary, drooping, bell-shaped flower of white shaded with purplish pink.

5. Thalictrum anemonoides. (Rue-Anemone.) A near relative of the preceding and choosing the same localities, differing from it in having an umbel of several flowers, sometimes called "Hen and chickens," the central flower, being larger, is the protecting hen, and the little chickens are the five or six smaller surrounding flowers. A charming little plant, sometimes found double, the petals white with often the most delicate pink tinge.

6. Epigæa repens. (Trailing Arbutus. May-flower). One of the loveliest and most fragrant wild flowers, growing in profusion in pine woods and most interesting to search for, yet the uninitiated may walk the woods all through the spring-time and yet be unable to find one. But let a person acquainted with its habits stoop down and scrape away the old dead leaves from under the tall pines and around the mossy rocks, and there are the hidden treasures with no stain from the surrounding rubbish on their perfect purity, and it is a rare delight to draw out the long, rough, rusty-looking stems upon which are clustered these waxen white-and-pink blossoms unequaled in delicacy and delicious fragrance.

To these few peculiarly pretty spring flowers others might be added, which in favorable seasons open in April, particularly the yellow violet and one or two species of blue violet, but as a general thing, many which are *said* to bloom in April, reserve their charms for the more assured sunshine of May. [The present season is an exception. ED.]

In the Middle States many flowers are found which do not appear in the colder climate of New England, among them the following which are in bloom in April.

1. Delphinium tricorne. (Dwarf Wild Larkspur.) Flowers bright blue,—sometimes white: found in open woods.

2. Zanthorhiza apiifolia. (Shrub yellow-root.) A low shrub, the stems and roots bitter; the flowers brownish purple in drooping racemes: found on the banks of streams.

3. Hydrastis Canadensis. (Yellow Puccoon.) A low herb with a single radical leaf and a flower-stem terminated by a solitary greenish-white flower: found in rich woods.

4. Asimina triloba. (North-American Papaw.) Shrubs with lurid, dull-purple flowers, and banana-shaped, yellowish fruit, ripening in autumn: grows in rich soil, beside streams.

5. Jeffersonia diphylla. (Twin-leaf) A singular plant with two-parted leaflets and large white flowers, called also Rheumatism-root: found in rich woods, growing ten or twelve inches high.

6. Erigenia bulbosa. (Harbinger of spring.) A small plant five or six inches high, blooming very early, often in March, with two or three divided leaves and an umbel of white flowers: found on shady banks: called sometimes "Pepper and Salt" from the contrast of the purplish-brown anthers with the white petals.

Many others might be named, which can be found on New Jersey hills, and in the woods of New York and Pennsylvania, and the *enterprising* seeker can easily find one new one every day.

M. D.

EXCHANGE.

I WILL exchange Cactus for different kinds of Yucca or Spanish Dagger and Abronia for any bulbs or hardy perennial

River Bend, Colorado. M. V. SNYDER.

The Garden.

A KITCHEN-GARDEN.

MY IDEA OF A KITCHEN-GARDEN AND HOW TO MAKE IT.

I WOULD have the plot intended for a kitchen-garden slope to the southeast, clear of stones and stumps and surrounded by a picket fence, base-board 12 inches and pickets 5 feet long with 2 inch space between, 16 eight-foot panels square, making my ideal 128 feet square. I would place my gate on the west side 45 feet from the southwest corner. East of the gate, half way across, I would run a 3 foot walk with border on each side. From the terminus of this walk to east line, I would set twelve grape-vines, six on each side, with 8 feet between them, and train them for an arbor 12 feet high, the higher the better for fruit. I would set four Concord, four Delaware, two Martha and two Goethe (Rogers' No. 1). I would dig trenches, 2 feet wide and 3 feet deep and fill half full of small stones or brick-bats, broken crockery, pieces of earthen-ware and all the bits of glass and tin about the premises (a good place for such dangerous things) with a layer of old leather and small bones on top. Then a foot of the first should be thrown out and mixed with some well-rotted hen manure, tree leaves and sand, if the soil is destitute of it, and lastly the bottom earth of the trench should be put on top. Set the vines in the fall and cut back to three or four buds, and after these have started leave only the best one to grow. Train to a stake and pinch off top when 4 feet high; pinch out the suckers as fast as they appear, keep the ground mellow and free of weeds and grass and give each vine an occasional dose of soap-suds. Here I must leave the grapes.

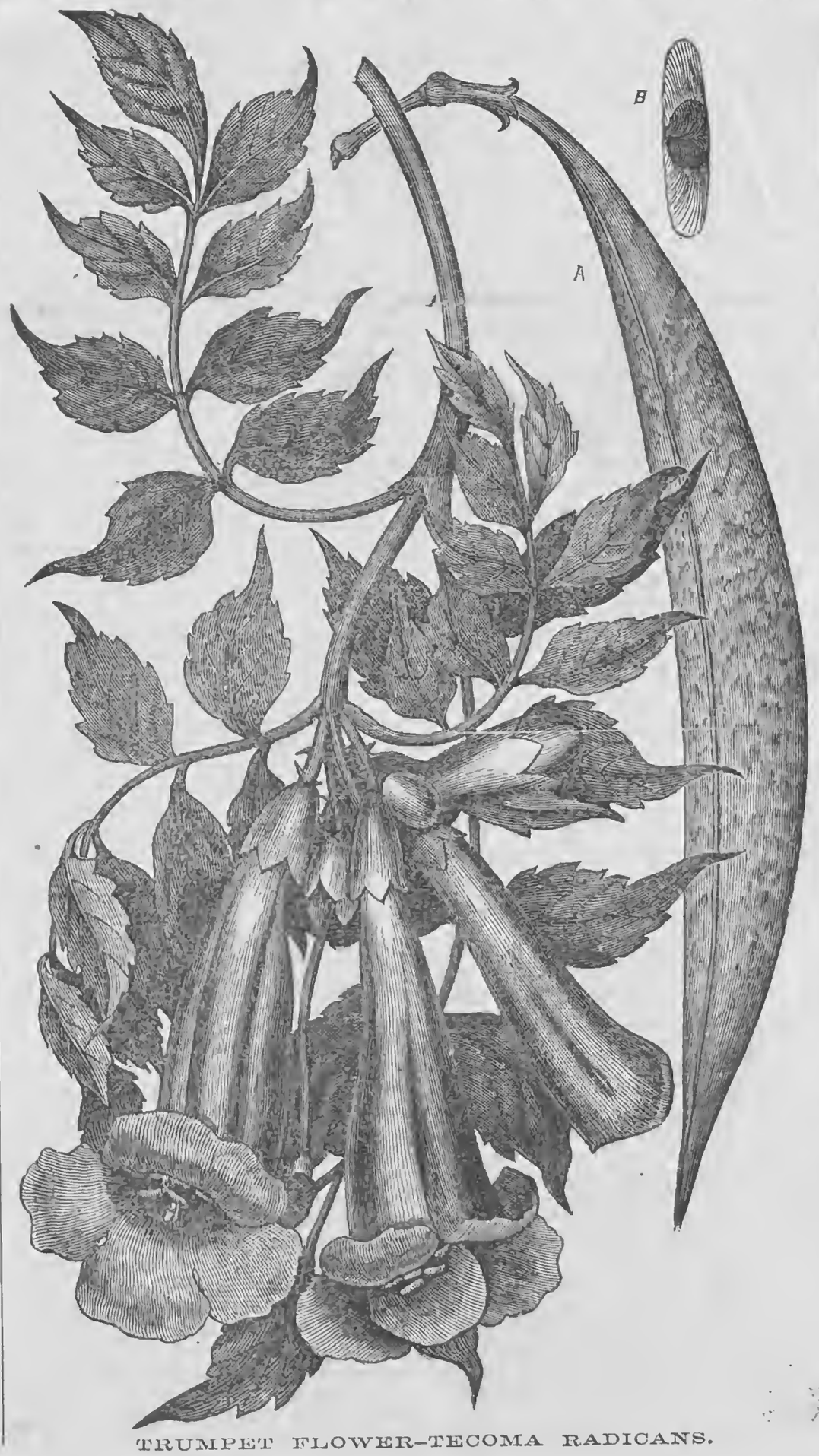
On entering the garden there must be a two-foot walk all around next the fence—the first things on the right and left are two standard Rose-bushes—now don't laugh for I want flowers in my kitchen-garden too—then down each side of the walk, on the borders, Verbenas, Pinks, Portulaca, Candytuft, Carnation, Mignonette, Pansies, dwarf Roses, etc., with a standard Rose on each side at the end. From here a like walk extends 45 feet either way, along the borders of which I will raise mint, parsley, sage, horseradish, pepper, thyme and all other aromatic and sweet herbs that are useful or ornamental. From the first Rose-bush to the southern line are ten currants, five each of red cherry and white grape; opposite these, extending north, are ten Houghton gooseberries. From currants to cross-walk are four beds, 2 feet between each; in the first are dwarf peas and onions; next, tomatoes; next, beets and parsnips; and last, bush beans (black wax), lettuce and radishes. Beyond the cross-walk we have: first, four rows of Jersey Wakefield cabbage, the rows running from the grapes to the southern line; next, five rows of Early Vermont potatoes—these are nearly as early as Alpha, and very prolific, of good quality, and keep better than the Alpha; then four rows Limas; next, twelve hills of watermelons which will finish up the south side.

Beginning at the north end of the cross-walk and running to gooseberries we will plant five rows of sugar corn, two of Early Minnesota and three of Stowell's Evergreen. Between this and the first walk I would set Strawberries, principally of the Wilson, Charles Downing and Kentucky varieties, and some of the new kinds for the purpose of testing them. Now for the northeast square: I would cut off ten feet from arbor to end of walk; one-half of this bed I would plant in cantaloupes and the other in celery, Sandringham and Boston market. Then eight ridges of sweet potatoes the length of this bed; then, four rows of peanuts; then, two rows Champion of England peas, and last a row of rhubarb (Linnæus). Now I have occupied 89x128 feet of my garden, leaving 39x128 along the north side, which I would plant in dwarf pears, cherries, quinces and Siberian crabs—set 12 feet apart each way and plant a few rows of raspberries and Kittatinny blackberries between.

Before laying off the garden, plow and subsoil to the depth of 20 inches, and work in thoroughly well-rotted barn-yard manure, ashes and lime and sand if needed. I would use a garden cultivator, spade, hoe and steel-toothed rake. Work often and, a couple of days after using the cultivator or hoe, go over with your rake and lift any weeds or grass that may have got trodden in the soil. Plant peas, onions, beets and parsnips as soon as the soil will work well; and beans, squashes and cucumbers as soon as danger of frost is over; plant squashes in the sugar corn rows and cucumbers between tomatoes; set some second early cabbage between the Wakefields and, when you "lay by" your sweet potatoes, make a hill in the center of four potato hills and set your winter cabbage. About the first of August, dig potatoes and hill up well your cabbage. When peas and beans are done bearing, save the ripe ones, clean away the vines and prepare for turnips by adding manure and working in well.

The last of July or first of August cover the ground with unleached ashes and dig it in with a rake; level off and sow seed, rake lightly and tramp in. A pair of No. 10 brogans under 170 lbs. of animated humanity, is the best contrivance I know of for this purpose. If the sun is hot, in 48 hours the little plants will begin to appear—don't soak the seed. When well up and when the dew is on, give a dusting of soot and air-slaked lime half and half, watch close and apply again if there are little holes cut in the leaves; after the rough leaves come on they will need no more dusting. Work cabbage when the dew is on, but work beans and other vines when dry only. If worms take your cabbage, use dry dust when the dew is on, or weak lime-water, or a little coarse shorts with a small quantity of salt mixed in. Plant dwarf peas allowing ten days between first and second planting, and do the same with cantaloupes. Plant tomatoes as soon as danger of frost is over, and as late as first of July and a planting between the two. The last planting will be ready for variety and sliced catsup. If any are left on the vines after this and there is danger of frost, pull up and hang them away in a sheltered position and they will continue to ripen. Keep the suckers well rubbed off and prevent the vines from falling over if you can. I use what I call a tomato crib which I think is better than stakes or poles. Pull onions as soon as the tops have dried up, and store in a cool, dry place. Cover the bed deeply with manure, spade this in as soon after Christmas as convenient, and so soon in spring as the ground is in working order put on a barrel or two of ashes and chop it in with a rake. The rows should be twenty inches apart and the plants three inches apart in the rows. Work often, but not too deep: hill up slightly until the stalks get ¾ of an inch in diameter, then work the soil from them gradually until ⅞ of the onion is exposed. Mulch fruit trees and berry canes and keep the ground mellow between. As soon as your vegetables have matured, remove them and manure and turn over the soil. This done in the fall, will save work in the spring. Change all vegetables from one bed to another annually except onions.

J. W. SWINDLER.



TRUMPET FLOWER—TECOMA RADICANS.

PEAS.—We remind our readers that McLean's Little Gem is conceded to be one of the very best varieties. For the latest we have already recommended British Queen as one of the best.

The Querist.

ANSWERS TO CORRESPONDENTS.

Plant Lice Etc.

D. H. Elliott, Suwannee Co., Fla., has sent us specimens of insects which prey upon all the plum trees in his orchard with a request to give their name. He also inquires what produces the dark-colored insects surrounding the stem and whether they are the cause of the decay and fall of the young fruit; what has the longer insect pinned to the accompanying plum to do with the damage; what attracts the flies, samples of which are sent along, and which gather so thickly as to sound like bees swarming. For several years the plum trees in his neighborhood have been injured by these pests.

ANS.—The dark-colored insects surrounding the stems are plant-lice (Aphis). What the particular species is cannot be said, both because too little attention has been paid yet in this country to the discrimination of the species, and because the specimens are in too dry and injured a condition. In their general characters, however, all aphides agree, inasmuch as they are produced throughout the warm season directly in an active condition from other aphides; that is to say, they come after the first spring generation, not from eggs but from buds; they puncture the tender parts of plants with their beaks and suck out the sap, thus weakening or destroying the plant; they exude a sweet liquid from special organs, and by the overflow of this liquid cause the leaves to become coated with a viscid, honey-like matter called honey-dew.

The longer insect had become detached from the plum, but among the debris shaking about in the box were found fragments of two or three forms of insects which feed upon the plant-lice.

One six-legged black insect, having the general appearance of an alligator, and dotted with red dots on the back, is the immature form of another which occurred in the box and may be generally known as a Lady-beetle; the latter is a rather flat, circular beetle, red with a black dot on each wing-cover above, and black beneath. The beetle lays its eggs in small-scattered patches on the leaves, and the young catches and sucks the blood out of the plant-lice. It is called a Coccinella.

A gray-striped, flesh-colored, legless maggot, slender in front, thick behind, and seeming to have had its hind end cut off squarely, was also found in the box. This maggot catches the plant-lice and sucks out their blood. It develops into a Gay-fly, more accurately called a Syrphus.

The flies are attracted by the sweetness of the honey-dew, which they drink. Ants are the particular visitors to herds of plant-lice, and treat the plant-lice with as much care as women give to the treatment of cows, milking them and sometimes carrying them from and to pasture.

Sumach.

M. F., Tioga Co., N. Y. inquires: 1, for what purpose the sumach of commerce is used; 2, who will buy the article that grows abundantly in this State, and what would be its value in the market.

ANS.—The sumach of commerce until lately consisted entirely of the imported leaves of Rhus coriaria of southern Europe and northern Africa, which greatly resembles in appearance our stag's-horn sumach, and like that forms a small tree. It is largely cultivated in Sicily whence most of that used in this country is imported. In growing it, suckers are planted in rows about four feet apart, and the shoots are yearly cut back to within a few inches of the ground, the crop for the following year being furnished by the new stems that push from the stumps. The shoots are dried and threshed; the leaves ground and bolted, and the powder put in sacks of 163 lbs. each, for shipment. The pure product contains from 30 to 35 per cent of tannin. This sumach is used for tanning light-colored leathers and in dyeing and calico printing. With different mordants it yields a great variety of tints. It is only since the civil war that any attention has been given to the American varieties, and only in Virginia where the headquarters of the industry are at Richmond. The smooth, the stag's-horn and the mountain sumach are collected indiscriminately and as these, especially the first, grow wild so abundantly, no cultivation has hitherto been attempted. The gathering begins early in July and continues until frost. The leafy tops of the plants are broken off and carefully dried; the best being that dried in the shade. When dry it is beaten with sticks and the leaves are taken to the mill to receive the same treatment to which Sicilian sumach is subjected. The American article contains from 15 to 20 per cent of tannin. Lately the luxuriance with which the more valuable varieties flourish in California has attracted considerable attention in some parts of that State, to the possibility of utilizing it there. There is no doubt but that in the rush and bustle of American life, many sources of wealth and profitable industry are for the time overlooked. Among the crowded population of Europe, content with moderate profits, these would long since have been brought into use, and will doubtless, ere long, be utilized here. The sumach that flourishes wild in many parts of the country will probably be then turned to profitable use, but at present inquiries in different parts of this city have failed to discover any market for the domestic product except for that from Virginia.

Miscellaneous.

Young Farmer, Chenango Co., N. Y. wants 1, a description of a cheap, serviceable and convenient farm gate, not liable to be unfastened by cattle and horses: 2, information about raising Pekin ducks; 3, the name of a reliable commission merchant in New York city.

ANS.—Cuts and descriptions of two kinds of gates that fill the above bill, can be found in the issues of the RURAL for the 18th of August and the 1st of September, last year; and a cut and description of an excellent gate-latch in the RURAL for March 23, this year. We cannot impress too strongly on our readers the advantages of preserving the back numbers of the RURAL, for in a file of old papers there will always be found a valuable fund of information on all topics connected with their business. Regard for the interests of the great body of our friends forbids us to repeat in these pages articles which have only lately appeared in them; and hence we have often, by letter and otherwise, to refer inquirers to back numbers. 2, An article on the Pekin duck appeared in RURAL for 19th of last January. They require no special care in raising, beyond that bestowed on the successful keeping of ordinary ducks. 3, For a commission house considered trustworthy, see answer to JNO. WELFARE, Jr. We must absolutely decline to recommend, in these columns, any special business house in this city or elsewhere, beyond stating plainly either the general reputation of the firm, or an opinion formed from our own dealings with it. In no case do we undertake any responsibility in the matter, except that of giving an honest opinion.

Jno. Welfare, Jr., Williamstown, Mich., asks us to state in Questions and Answers if WALTER, CARR & Co, Produce Commission Merchants, New York are trustworthy.

ANS.—This house is one of the largest in its line. We know nothing about their mode of treating customers, but their credit is considered above question. This answer will also serve for several others who have inquired for the name of a reliable commission house in this city.

An inquirer asks for the name and publisher of a work on capon raising.

ANS.—We know of no work specially devoted to this subject; but several poultry books treat of it in connection with ordinary poultry keeping, notably Dixon & Sear's "Ornamental and Domestic Poultry" published by Butler & Co., Philadelphia, Pa., and "The American Poulterer's Companion" published by Saxton and Miles, New York city. The former of these bears date 1855; the latter, 1845.

A Reader inquires: Will some expert state how he takes up and lays sod on a lawn, giving particulars; also the manner of laying a strip of sod along the edge of a path? Give some errors likely to be made by a beginner.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, APRIL, 27TH.

N. C. — E. M. S. — G. C. — G. R. H.—J. J. C. — S. S. O.—M. B. D.—Miss Smith—S. B. P.—W. J. B. —S. S. — R. M. C.—F. D. C.—M. L. S.—"Marguerete" — M. B. P. — B. F. T. — F. G. F. — H. S. F.— E. W. S. — M. C. — G. M. S. — J. W. W. — H. O. — F. H. D.—D. E. S. —R. L. S.—O. I.—E. G.—A. K.— R. E. M.—J. T — J. D.—"Olive Irwin"—F. D. C., No. 2.

Everywhere.

EMIGRATION TO NORTH CAROLINA.

PROFESSOR A. W. MANGUM.

IN view of the efforts being made to induce emigration from the North to the South—especially to this State—it is believed that plain and candid information and advice on the subject, from a disinterested party, will be duly appreciated. I am a native of the State, have resided in widely-separated portions, and traveled from the western boundary to the ocean. I was raised on a country-farm, have had immediate connection with agricultural interests, and have always kept myself in sympathetic relations with the industrial classes around me. I have no motive, but the best wishes for all concerned, to prompt what I shall write.

Without hesitancy I can indorse the statements which have been published as to the variety of the climate. The Blue Ridge mountains of the west descend, in diminishing undulations, into the hills of the center; and these gradually melt away into the broad plains of the east: all, together, constituting a remarkably varied territory, and offering what, in this respect, is an unusually favorable field for the gratification of diverse tastes. The summers are generally very warm, but the sea-coast and the mountains furnish delightful resorts. The winters, severe in the west, are, on the average, mild in the center and comparatively free from intense cold in much of the east; but they are marked by such sudden, frequent and great changes, at least in a large part of the State, as make them quite trying to feeble constitutions. This changeableness I consider the most unfavorable peculiarity of the climate.

As to healthfulness, that may be inferred, in part, from the indications of the climate. The west, like all mountainous districts, is very favorable to health. The air and water there are priceless boons. In much of the central portions, the air is quite pure and bracing, the water is generally cold and good, and no local causes of disease exist, except in narrowly limited communities. In the east there has long been a decided tendency to malarial diseases; but this has been to a considerable degree modified by draining the lands, putting many of the swamps in cultivation, and discovering, perhaps, better modes and means of medical treatment. The clay lands, down there, are healthier than the sandy lands. As a rule, very little attention is given to sanitary matters in the State; even the larger towns neglecting the most simple and inexpensive precautions.

Every intelligent emigrant would be glad to know about the relative productiveness of labor and the prospect of success in different occupations. I will speak first of farming. In this many who have come South have been grievously disappointed. The causes of their disappointment are easily explained. They came with notions and customs and methods adapted to an entirely different climate and soil, and they acted presumptuously on their mistaken judgment, to early and serious loss, if not financial ruin. They came to deal with a kind of labor that is altogether different from that employed on Northern farms; and from that they may have suffered much before they learned how to manage it most successfully—if, indeed, they ever learned. It must be remembered that we have long, hot, often dry summers. Hence there is need of deep plowing. But the plow must not run deep where the soil is shallow; and such is much of the soil in the State, particularly in the uplands; aye, even on many of the old bottoms. As an extreme illustration, take this case: A northern farmer came to the State and purchased a worn-out farm. He mistook the red clay (denuded of soil) for the soil itself, and affirmed that he would plow so deeply as to find the bottom of the soil. Result: His plows with the clay-stains far up the handles, were soon for sale at the door of the Court House. Of a colony from Pennsylvania, all but two comparatively failed. One of these was discouraged and decided to move to Missouri. The other rejected the advice of native farmers, to an extent, and regretted it afterwards. But he moved cautiously, worked faithfully, and is now decidedly succeeding. It is said that he was the only good manager—the only one who understood farming—of all the company.

In much of the State there is a clay subsoil that guarantees profitable results to wise methods of cultivation looking to the improvement of the land. Clover and the grasses grow finely. Pea-vines, rye, clover furnish ready means for increasing the fertility. Field hands get about $10 and board per month; from $14 to $15 when they board themselves. The division of the State lying between Raleigh and the Blue Ridge and the Virginia boundary and a line running due east and west from Charlotte, contains what is probably the most inviting portion for small farmers, or, indeed, for any farmers that have been accustomed to raise the common products of the North. In that division there are respectable facilities for transportation by railroad; though other lines are greatly needed. This division embraces some cotton territory and the lands that produce the finest tobacco; and the greater part is adapted to the several cereals. Mere laborers who cannot buy and stock a farm and live for a year on means that they bring with them, will not be apt to meet with success, if they come. Renters rarely become land-owners to a respectable or comfortable degree. Mortgaged farms, run on credit, do not pay for themselves. Laborers who hire for wages seldom rise to any better condition. Even when they can buy a few acres and erect a cabin, they seem to improve their fortune little if at all. Besides, labor is not in special demand. The people who have farms are generally without the means to employ much more labor than they have had. It is hazardous for a man to come with the expectations of making a support by working for wages. He does not know how to obtain employment readily, and our people have not yet learned to interest themselves in behalf of strangers so much as to help them to get remunerative places. The immigrants are left to shift for themselves. They generally receive attention according to the money they have, and not according to the money they need. They are quietly welcomed to the community, on fair and equal relations, and expected to take care of themselves. Plenty of people are ready to sell their land, and will if asked, give them such advice as they are capable of giving. So far as the Bureau of Immigration is concerned, it appears to be free from all pecuniary considerations, and will, no doubt, extend all practicable help to those who apply for information. I may follow this with other articles, bearing upon other kinds of occupation. If any of the readers of the RURAL wish candid statements on any subject connected with immigration into this State, I will gladly furnish what they desire, as far as I can, through the columns of the paper.

Chapel Hill, North Carolina.

FRUIT AND AGRICULTURAL NOTES FROM CALIFORNIA.

W. C. L. DREW.

OUR orchards at this season of the year never looked more promising; pear trees are masses of snowy bloom, while apple, plum and peach blooms completely cover the trees. Orchardists are somewhat behind-hand with their season work, owing to the many and too frequent showers. The last few days have been very pleasant and warm. All hands have made the most of it, and pruning and grafting, plowing and spading, have been the rule of the hour. With reasonably fair weather from this forward and a few good showers during May, our brightest hopes will, no doubt, be realized.

The planting of ornamental trees has been more extensive than in any former year. The Eucalyptus is being planted very extensively in all our towns and along the road-sides. Experience has demonstrated that it can be grown successfully in nearly all sections of our State, making in a few years fine specimen trees, thirty to fifty feet high. The Eucalyptus is propagated only from seed. There are many varieties, but only one—E. globulus, the true Blue Gum—is being extensively planted.

The seed is sown in cold-frames in March, transplanted into nursery rows in May, where they only require proper irrigation to make good trees from three to ten feet high. I find by experience that they do best transplanted in December or January. In removing them it is very necessary to keep the roots covered. Another popular ornamental tree is the Cypress. Of this we have several native varieties, C. McNabiana; C. macrocarpa or Monterey Cypress, and C. Goveniana. These are all evergreens and are the handsomest trees I am acquainted with. In some sections the Magnolia thrives remarkably well; and where it does grow there is nothing any prettier. The most popular tree we have for cemetery decoration is the Italian Cypress—C. pyramidalis. Lemons, Limes, Oranges and the new Japanese Persimmon will also occupy a place among ornamental trees in many sections, where it will not pay to grow them extensively.

In the small fruit departments, everything is rushing. Strawberries, all masses of bloom. In our section there is a greater interest being taken in small fruit, and another season bids fair to see many acres set out in strawberries, raspberries, currants, gooseberries and such. In the vegetable gardens all looks fine.

Feed is finer than it has been for many seasons and stock is doing well. As a dairy season this will be a remarkably prosperous one; stock is worth from two to three times what it could have been purchased for six months ago.

El Dorado Co., Cala.

RURAL SPECIAL REPORTS.

HUMBOLDT, Tenn., April 20, 1878.

OUR spring is about three or four weeks in advance this season, and up to this date, at least one-half the time too wet to plow, consequently crops of corn, cotton, &c., are not all planted yet. Warm growing weather. Wheat was thought to be unusually promising, also oats: a larger average sown than usual in Tennesco. The warm and wet weather now while heading, it is feared is damaging, as rust has already made its appearance. Clover and grass look fine: a fine prospect for fruit of all kinds. Strawberries ripening and we expect to ship largely from this section. Caterpillars are again abundant in orchards and unless destroyed, must do great damage to apple and plum orchards, not only destroying the crop of fruit, but in many instances the trees. We presume all danger of frost is now over, and we are safe on that score. Grapes and blackberries now blooming, I think much earlier than usual with us.

B. F. T.

WHITNEY'S POINT, Broome Co., N. Y., April 22.

WEATHER has been very mild during this month. Last night was the coldest night we have had. Thermometer, at sunrise, denoted 36°; at 8:15 o'clock, 66°. Vegetation very forward; cherry buds swelled to bursting; apple buds full; wheat looks nice. Eggs, 10c.; oats, 35c.; potatoes, 30c.

M. B. D.

WHAT THEY SAY OF IT.

EIGHTH WEEK.

The Rural Cricket to be Withdrawn, positively, the 1st of July.

The most Liberal and Valuable Present ever offered by any Journal.

ALL ARE PLEASED AND THE RURAL IS HAPPY!

ALL are delighted with the "Cricket" and the RURAL. J. B.
Tallahassee, Fla.

THE "Cricket" arrived safely, and I soon had it running. It is a perfect little gem, admired by every one who sees it. E. A. P.
Loudon Grove, Pa., April 23.

THE "Cricket" the merry little cricket, came to hand all right; it exceeded my expectation as a neat little time-piece. My sister, who is teaching, has it in school and says it is a perfect little gem to keep time. W. S. M
Lewistown, Pa., April 10, 1878.

THE "Cricket" was promptly received unharmed. We have it mounted on a bracket where it "ticks" merrily day and night, not seeming to get weary at all. We are very much pleased with it. Please accept thanks.
Rutland, Vt., April 19. J. P. S.

THE Cricket Clock arrived safely by express. I am very much pleased with it. It is nicer than I anticipated; I am free to say it is all you claim, and is well worth the money. It is a pretty little affair and ticks away as if it meant business. H. E. M.
Litchfield, Conn.

PLEASE pardon my dilatoriness in acknowledging the receipt of the "Crickot" which came duly to hand. It is a beautiful ornament for the bracket and a splendid time-keeper. The RURAL has my sincere thanks and best wishes for its prosperity. G. O. P.
Batavia, Ill., April 18th, 1878.

I HAVE received the "Cricket" (which is rightly named, as it rivals the cricket in noise,) and like it very much; now that I have it regulated it keeps right along with my eight-day clock, and although it is the sixth time-piece in the house I do not care to part with it. S. C. G.
Clinton, N. J., April 15th, 1878.

I RECEIVED the Cricket Clock the 19th of this month. It came all right; it keeps first-rate time so far and I should hate to part with it for considerably more than it and the RURAL both cost me. It is like the RURAL, "hard to beat." I shall never, willingly, stop taking the RURAL NEW-YORKER. H. F. S.
Shelburne, Vt., April 22.

THE "Cricket" Clock came to hand ten days ago with only one blemish upon its character, and that was nothing that ought to be spoken aloud, for many of us are in the same fault: that is being "too fast," but a regulator, you know, has a wonderful effect, sometimes, and it proved so in this case. It is just right now in every respect. Many thanks for this "thing of beauty," and I am sure it will be a joy as long as its life lasts. One cannot very well be lonesome in the room with it, it speaks so loud and clear, click, click, click. MRS. E. B.
North Cambridge, Vt., April 13.

I received the "Cricket Clock" the 11th; the reason I haven't written you before is, I thought I had got sold on the clock. I wound it up, as I supposed, but it stopped two days in succession: after that I wound it clear up, and it hasn't stopped since. I feared breaking the spring if I wound it away up, so I concluded that was all there was the matter with it. I am very much obliged to you for so nice a gift: it keeps excellent time; am very much pleased with it. It reminds me of what the girls say when they got a new bonnet; "it is perfectly splendid." D. A.
New Labanon, April 22.

WE received the Cricket Clock in good condition. I at once wound it up, and it started right off on duty just as though it knew how, and I guess it did; for with a very little regulating it has proven itself to keep as correct time as the old clock, and by the way, makes much more noise. Please accept our thanks for such a beautiful and useful ornament for the dining-room shelf. The RURAL is a weekly visitor at our home and among seven papers it is our choice. Its valuable teachings and instructive lessons should be a sufficient compensation to all its readers for a little extra work to promote its best interests. J. D. R.
Bettsville, Ohio, April 22.

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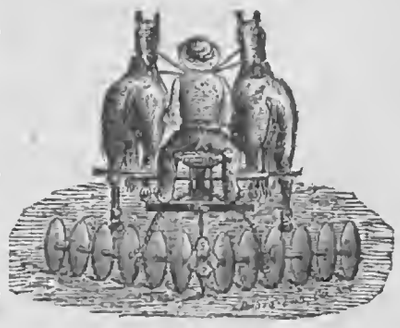

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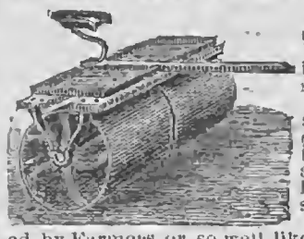

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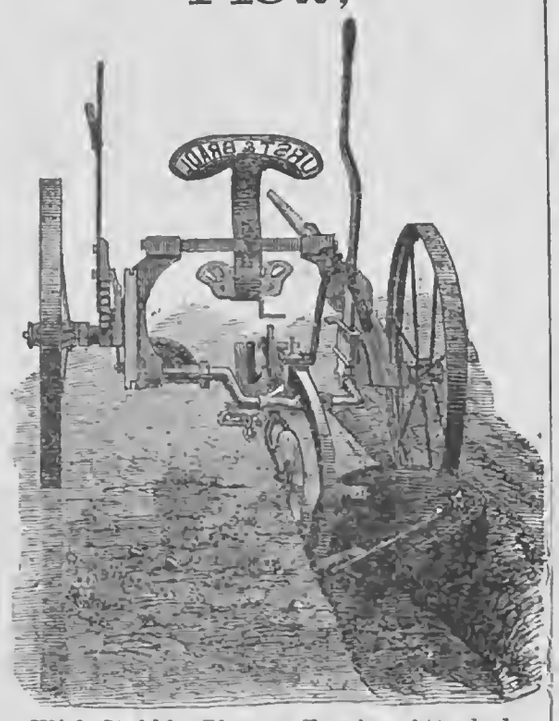

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Bower 277
What shall I plant 277
Japan Persimmon 277
Culture of Broom-Corn 278
Uses of Millet 278
Van's Views 278
Can we have better Fruit 278
Apples 278
Profitable pears 278
Western Farm Topics 280
Sickle Grinder 280
Sulky Plow 280
Calf Feeding 280
April Wild Flowers 281
Taking Notes and Making Plans for the Garden 281
A Kitchen Garden 281
Answers to Correspondents 282
Emigration to North Carolina 282
Fruit and Agricultural Notes from California 282
What they Say of it 283

EDITORIAL PAGE:

Improvement of Varieties 284
The European Embroglio 284
Who is in Fault 284
Stock Raising 284
Brevities 284
Notes 284

LITERARY.

Poetry 285, 287, 290
Cora 285
May-day Scene 285
Chinese Maxims 286
Recent Literature 286
Magazine Notes 286
Bric-a-Brac 287
Tobacco 167
Aunt Susan's Experience 287
Plea for the Minister's Wife 287
Cheap Pretty Ornament 287
Domestic Economy 288
Household Hints 288
Leamon's Dyes 288
Domestic Recipes 288
Queries Answered 288
News of the Week 288
Markets 289
Reading for the Young 290
Deeds of Kindness 290
Our Industry Club 290
Grandmother Speaks 290
Sabbath Reading 290
A Typographical Crime 290
Value of Beauty 290
Personals 290
Advertisements 283, 289, 291, 292
Wit and Humor 292

THE
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PUBLISHED EVERY SATURDAY.

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SATURDAY, MAY 4, 1878.

UNLESS something, which we cannot now foresee, happen to prevent, we shall present the new RURAL to our readers next week.

IMPROVEMENT OF VARIETIES.

THE ancients had very mixed ideas respecting the functions of the stamens and pistils in plant economy. Many vague notions were entertained and TOURNEFORT, late in the seventeenth century, rejecting the idea of fertilization, considered the stamens merely as excretory organs. We believe that SEBASTIAN VALLIANT, who was a disciple of TOURNEFORT, was the first to point out the phenomena of fertilization, explain the office of the stamens, and thus to open up a field for future investigations of which the present age is making a practical use the value of which we ourselves but imperfectly estimate. France may therefore claim a discovery which, if not among the most important discoveries of man, is at least the most important that has ever been made in the science of botany. A few years later, LINNÆUS by writings distinguished for accuracy and patient rearech, popularized the facts of VALLIANT.

That we can improve the quality of our crops by selecting the best seeds, is well known. Being well known, it is a wonder that farmers and indeed horticulturists as a rule, avail themselves of the benefits of careful selection to such a limited extent. But they can do more than this. The same as the best traits of different breeds of animals may be combined in their offspring, so desirable characteristics which reside in different varieties of plants, may be combined so as to produce in new varieties an improvement upon either parent or, it may be, a combination of their best qualities.

The word *hybrid* has been abused by horticulturists all over the world of late years. Hundreds of plants of no especial merits over others of the same species, have been lauded as "hybrids" of surpassing excellence. But among the mass of rubbish a considerable number which are improvements upon any of their kind hitherto known, have been introduced and to these we point as evidences of what may be accomplished by patient and persevering efforts in the way of discriminating crossing.

Many plants possess sexual organs which do not mature at the same time. Hence each pistil is therefore dependent upon the pollen from some other individual for an effectual pollenation. But here there is no selection, since it is as likely to come from an inferior as from a superior plant. It is the same with diclinous plants or those which have the sexes in different flowers, whether upon the same individual or not.

Many plants are self-fertile from the seeds of which through successive generations no improvement, from seminal causes at least, need be anticipated.

But he who is interested in producing new and superior varieties of plants, whether of grain, potatoes, fruits or what are generally known as ornamental plants, may select his own parents and bring about a union of blood which he believes may eventuate in combining those qualities which in the highest degree may be rendered subservient to his needs.

"If at first you don't succeed
Try, try again."

The farmer, we fear, will not feel that he is interested in the above remarks, and yet it is he whom we would specially interest. Let him not cast it aside as the vagaries of science, but begin the present season a series of experiments to test its value in practice. If, for instance, he would add to the sweetness and richness of the Black Sweet Corn, to which we referred last week, the size of the Evergreen, let him select a few kernels of each from the best ears and plant them, side by side, away from any other variety.

As soon as the tassels (which are panicles of male flowers) develop or, at any rate, before the pollen ripens, cut all of them off from either the one or the other variety. The silk, which is the thread-like pistils or females of the plants which have had the tassels removed, will then receive pollen only from the other variety and a cross between the two must result.

This is as simple a method of crossing as we can think of. In crossing other plants, such as potatoes, beans, grapes or currants—each flower of which has both pistils and stamens—the principle is the same. In order to prevent self-fertilization, the stamens must be removed before the pollen is shed, and then pollen must be applied by the aid of a brush or point of a knife, to the pistils. If fruit and seeds form, we know a union of the two has been effected. It is true insects—perhaps wind—may interfere. A gauze covering will insure against this.

THE EUROPEAN EMBROGLIO.

EACH day's telegrams from the other side of the Atlantic, although usually contradictory in matters of detail, are constantly becoming more bellicose in their general indications. Since the close of the late war, early in March, diplomacy has had ample time to effect some arrangement which would at least hold out a promise of a peaceable solution to the present complications. But despite the high character of the diplomatic chiefs who now direct European politics, despite the abundant facilities for rapid interchange of views afforded by the ubiquitous telegraph, despite the reiterated anxiety of all parties for a pacific issue to the existing entanglement, diplomacy has hitherto signally failed, not only to bring about an adjustment of discordant interests, but even to check the accelerating drift of the antagonistic elements towards a belligerent settlement of the questions in dispute. The meeting of the Congress from which so much has been hoped, which has so often been regarded as almost a certainty, is now more improbable than in the week in which the signatures of Russia and Turkey were put to the treaty of San Stefano. Even in the improbable event that Bismarck's influence should bring the assemblage together, the chances are even that its deliberations would merely defer not prevent hostilities.

Neither Russia nor England makes any secret of its determination that in case of an adverse decision on certain points which each considers essential to its present interests and future prosperity, it would refuse to be bound by the action of the body, and seek a more favorable verdict by force of arms. That some of these hitherto undivulged points on which each is resolute to assert its own views, should not be identical in both cases, is hardly possible, and in the probable event of both Powers insisting on an auspicious decision on the same condition, it would be impossible to satisfy both, and the disappointed malcontent would be very likely to nullify all the labors of the assemblage.

From present indications the preservation of peace depends: first, on the meeting of the Congress, which is unlikely to take place; secondly, on its accomplishing a well-nigh impossible task—to reconcile irreconcilable differences, or, at least, to compromise the resolute claims of two powers, both haughty, arrogant, and jealous, and each confident in the justice of its pretensions, and its ability to vindicate them by war. Viewing the European predicament from all sides, the conclusion is, therefore, inevitable that while peace is still possible, war is far more probable.

WHO IS IN FAULT?

The editor of the Germantown Telegraph notices that a certain nurseryman on the Hudson (shall we put it nurseryman-on-the-Hudson?) has gained access to the columns of a large number of newspapers, agricultural and religious periodicals, to proclaim the superiority of certain raspberries. His name and residence are given in full so that those tempted to purchase may know whom to address. By such means "this enterprising man must have obtained a thousand dollars worth of advertising." "We are amazed" says the Germantown Telegraph "that our contemporaries should be so easily hoodwinked by a sharper." We are glad that attention is thus called to this method of advertising, which is now-a-days far from uncommon. The objection seems to us to be that the reader becomes interested in special articles not knowing that the writer is advertising his own goods, for which reason he naturally places more trust in the writer's statements than he otherwise would. For several seasons past we have received "timely" articles from a nurseryman-on-the-Hudson, which last fall and this spring we declined to publish. The same articles appeared shortly afterwards in quite a large number of other papers, the editors of which we have little doubt knew full well the writer's motive. It is our impression that this person and he to whom the editor of the Germantown Telegraph refers are the same. He may be a "sharper." We do not know. The articles in question were written well enough and, so far as we know, were trustworthy. But we do not believe the editors who published these articles were hoodwinked in the least.

NOTES.

Stock Raising.—Experienced farmers agree that stock-raising, in its various departments, ought to be made a leading and in fact the most prominent feature of farm operations in Kansas. Corn is entitled to be crowned king of farm products. Its valuation for 1876 is estimated at $19,217,332.24, according to the Fifth Agricultural report of that State, or 42 per cent. of the aggregate valuation of all crops. Add to this the enhancement in value of that portion of the crop which is consumed by $32,489,293.00 worth of live stock, together with the invaluable factor this great staple is in maintaining the fertility of the soil by virtue of its flesh-producing qualities, thereby being fed to stock more than all the other cereals combined, and its claims to supremacy cannot be controverted.

Food For Canary Birds.—People who keep canary birds may grow nearly all the seed the birds require by sowing a small patch of Millet. The birds will do well on this with a little hemp and poppy seed for a change. The latter with the Millet are imported and are expensive, costing from ten to fifteen cents a pound retail. The aggregate consumption in this country amounts to many tons in a year.

BREVITIES.

THIS is a grand season for Tulips.

A CURE for sleepiness: Caross Laportea Canadensis.

IF a horticulturist is not zealous, he is not worth a cent.

"NOT only choose a proper mate, but proper time to marry."

IT is always wise to relinquish outposts that have become untenable.

"HARD crabs from Norfolk are packed in grass without ice." Crab grass?

WHEN you begin to suspect you are getting the worst of it, use oracular and grandiloquent phrases.

THERE are now 85,880 office holders. How can it be expected that such a gripe as this should ever let go.

THIS is about the season to advertise plans and specifications for chicken coops. The edible spring chicken will soon be around in paying numbers.

A WEED is a plant the supply of which is greater than the demand, that, while its merits are not appreciated, knows how to take care of itself in the struggle for existence.

CAMDEN Co., S. C., has produced $200,000 worth of turpentine this year. S-tar-tling intelligence. We can now comprehend the resin of the State's now prosperity.

IN the RURAL of April 20, an article upon the Apple-Tree Borer appeared in its appropriate place without signature. It was from the pen of WM. H. OLIN.

MR. J. J. THOMAS says: And what more enduring memorial of valuable service to posterity can we render than to trasmit a fine fruit which shall survive when we have passed from our labors on earth?

SPEAKING of the retirement of Mr. J. B. LAWES from participation in the Woburn experiments, the London Farmer says: "No person in the world is more competent to conduct practical experiments in scientific agriculture than the *savant* of Rothamsted.

MR. HEMSLEY mentions in his interesting and instructive series of botanical articles published in the London Garden, that he once traced the roots of Sanfoin to a depth of seven or eight feet and that their average depth in the field was five feet. He has also traced the roots of wheat to a depth of seven feet. There are records of it reaching a much greater depth.

OUR contributor, MR. E. PICKMAN MANN writes us: "I doubt the efficacy of washes for fruit trees unless the substance applied is of such a disagreeable nature as to repel the parent beetles and is kept on the tree. Rubbing with a bar of hard soap so as to fill crevices and leave a solid basis for new solutions whenever the rain falls, is better than any application of solutions ready made."

A LITTLE learning is a dangerous thing. There are other dangers of this sort that Lord BACON might have added. For instance, a little of truth and a good deal of deceit—an ingenious mixture which in these funny days is infused rather freely into the veins of the great mercantile animal. The secret lies in telling frankly a homely truth or so which does not cost too much and then, while the breath of candor is still upon the lips, uttering the falsehoods from which the gain is to be derived.

M. REVEL, the author of a prize essay on the milking of cows, states that owing to an unfortunate spirit of rivalry common among young milkers, they often make it a point of honor to try and get their pails filled in the quickest time possible; consequently they only draw from each cow as much of her milk as is given down rapidly and readily, and leave a considerable quantity behind; or, again, in the case of an easy-milking cow, they will drain her to the last drop, and leave nothing for the calf. In this way they may fill their pails rapidly, but the interests of the owner suffer for it ultimately; and he will do well to assure himself from time to time by personal trial that one cow is not left for another till she is fairly milked out.

ANTHRAX in cattle, according to the Report just published by the Royal Prussian Committee on Veterinary Affairs, has greatly diminished in that country in districts where drainage has been introduced. It also states that the disease is often caused by a contagium of very persistent vitality present in the soil, and that the existence of this contagium is to be ascribed to the insufficient burial of animals that have fallen victims to the disease. It is much to be wished that we had in this country, at least, if not in each State, a society whose duty it should be to collect and periodically publish for the benefit of the community at large, facts gathered from experience in every branch of knowledge of use to the agricultural and all other interests.

THE past week, ending Monday April 30th, has been one of clouds and rain though not too much of the latter. As we look over notes of past years and look upon vegetation, it is not easy to realize the earliness of the season. The air and the ground are warm, and grass, leaves and flowers are growing and developing so fast that the change is perceptible from morning to night. April 13, 1875, we had snow all day. On the 14 the trees were heavily laden with snow. Protection was not removed from beds or trees. On the 25th, we had an inch fall of snow. On the 5th of May we had a sharp frost, ice forming in places. Grape vines were not quite so far advanced in leaf on May the 15 of 1875, as they are now. May 15 of that year was the first bloom of cherry trees. This year cherry trees bloomed the 19th (April.) From other comparisons, we think the present spring is nearly three weeks earlier than the average spring of this section of the country.

Literary Miscellany.

THE SWEETER MUSIC.

A BROOKLET, playful flowing
Adown the rocky steep
Where ferns are greenest growing
And forest shades are deep,
Makes music, wild and sweet,
Among the trees' rough feet.

The forest warblers, singing
With many a happy trill,
Their gay notes outward flinging
As careless as the rill,
Through all the summer heat
Make music, gay and sweet.

Yet, not the brooklet, going
Its winding, wandering way;
Nor breath of breezes, blowing
Amid the leaves at play;
Nor birds on pinions fleet,
Produce the tones most sweet.

A baby's laughter ringing,
A sound of pattering feet,
The lips of childhood singing,
Makes music far more sweet
Than brook, or breeze, or bird
That mortal ever heard.

[*Boston Tran script.*

CORA.

CHAPTER XIII.

LIKE a skillful surgeon, Marianna had cut deeply; for though Cora suffered acutely, she came out of the suffering cured. She was too proud, too true to herself, to love anybody she could not esteem and trust; and by the death-blow to her esteem her love was killed. It was not momentarily extinguished, ready to rise again from the cinders at a moment's notice, but utterly dead; and in her heart there was no feeling towards him but scorn unutterable. She would not marry him now, she told herself with truth, were he to sue her on his knees; and whenever she recalled the honeyed words and gestures she had so delighted to dwell upon, it was with a shudder of disgust.

But still she suffered, suffered keenly, and the suffering changed her from a girl to a woman; colder and prouder, perhaps, than in the old, happy days—less impulsive—less easy to impress, but infinitely more worthy of love, infinitely more precious to win, than the Cora of old. More beautiful, too, in her quiet repose; and, though gentle and easily led by a word from one she loved, more reserved and distant to all others.

And so two calm, quiet years passed away, and Sir Alan was still abroad, though Lady Vincent yearned to see her son, and Cora grieved that it was on her account he remained away. If she had thought much of him after her return to England, when her heart was full of Lord Almane, she thought more of him now. On every side she heard him spoken of in the highest terms, and she recalled often and often the tender consideration which had marked his conduct to her at Rome. She thought of his kindness, his womanly tenderness, towards her sick brother: she remembered how, even after her own, Harold had sought his face with a last gleam of recognition and love; she recollected many a proof of his unselfishness, his unfailing goodness towards herself; and then, with a thrill of joy and pain, there would come back to her that last interview, when he told her how much he loved her, and had prayed for her love in return. She felt now, as then, unworthy of that love; and yet, were it offered now, Cora knew that her answer would be a very different one, and that the honor, the reverence she entertained for Alan Vincent would want but little to change them into love.

Christmas was drawing near—the second Christmas since Cora had come to The Bungalow; and one morning Lady Vincent came down to breakfast, her face radiant.

"What good news have you written on your face?" said Cora, coming in from a walk round the lawn, with bright eyes and glowing cheeks.

Lady Vincent kissed her and laughed.

"You shall guess," she answered. "Nay," said Cora, smiling, "unless it be about Sir Alan, I cannot guess."

"But it is about Alan," replied her ladyship, gaily.

Cora hesitated a moment; the glowing crimson faded a little when she spoke again.

"Is he going to give you a daughter?" she asked, smilingly.

"Perhaps—yes, I hope so," said Lady Vincent. "At any rate, he will be able to receive our congratulations in person, for he is coming home."

"Coming home! I am very glad dear Lady Vincent. How happy his return will make you!"

And Cora busied herself with the tea-urn, and said no more.

The news spread like wildfire through the household, and each one partook of Lady Vincent's satisfaction. Charles, the old soldier who had served under General Vincent, and left the army with him, living with his old general as butler, valet, and friend combined, was frantic with delight.

"Now we must keep Christmas Cora," said Lady Vincent. "It must not be dull for Alan, and I will do something to celebrate his return. What shall it be? An old-fashioned Christmas party: invite the little people first, and let them enjoy themselves, and let the grown-up children dance afterwards. Cora, what a prosy child you are! Cannot you imagine that you have a grown-up son coming home after a long absence?"

Three days after his letter came Sir Alan himself, and his delight at seeing his mother again was contagious.

"How well you are looking, mother darling!" he said, holding her at arm's length to gaze upon the still beautiful face. "Who has taken such care of you? I don't think you have missed me in the least."

"A daughter will not replace a son, Alan," she said smiling; "I want both my children with me. Why, where is Cora? She was here a few minutes ago."

But Cora had stolen softly away to let the mother and son have their first meeting alone; and it was only when Lady Vincent sent for her that she came down.

Sir Alan rose, and went forword to meet her with perfect cordiality, but with no trace of embarrassment; and his manner put Cora at her ease. On that first day he adopted towards her the tone he always afterwards used—perfectly familiar and friendly, kind and thoughtful, but with no trace of any deeper feeling.

Try as she would, Cora could not but feel disappointed. She had told herself again and again that he could no longer care for her, and yet his tone of indifference, kind though it was, pained her greatly.

One afternoon Cora had walked across the common to carry one of Lady Vincent's presents to some of her poor people. She was accompanied by a pretty young country girl, who was living at the Bungalow as under-housemaid. Although they had hastened to finish their business, it was dusk when they turned homewards, and it was almost dark when they reached half-way across the common. Neither felt nervous, however. The maid had been used to lonely country places, and Cora was naturally brave; still, both started a little, and quickened their pace, as they heard rather unsteady footsteps beside them, and a thick, husky voice said:

"It is rather a late hour for two pretty girls to be out alone."

They made no reply, but hastened on.

"Wouldn't you like an escort?" continued the man—a huge, hulking fellow, who had evidently paid more than one visit to the alehouses upon his way. "Only too happy to be of use to you ladies."

So saying, he put his hand on the housemaid's arm, and stooped to look into the girl's face. She attempted to disengage herself, but in vain.

"Pray allow us to proceed," said Cora, haughtily. "We are anxious to return home."

"Are you indeed?" he answered, with a coarse laugh; and Cora's courage almost failed her at the insolence of his tone.

"Let us run, Jane," she whispered; and they set off swiftly."

"Two can play at that game," laughed their tormenter, quickening his steps also.

Cora glanced back in despair. There was not a house in sight, and their only chance of assistance consisted in meeting any passer-by.

The man was gaining on them rapidly. Cora could hear his footsteps close beside her. She turned despairingly.

"How dare you molest us?" she said, trying to steady her voice. "You shall be punished if you do not desist."

"Punished!" he said, laughing, "Give me a kiss, my pretty one—that will be my only punishment to-night!"

"Will it?" said a low, stern voice, and the man felt himself seized by the collar, lifted off his feet, and thrown into a heap of furze and brambles in the bottom of a dry ditch which skirted the common.

CHAPTER XIX.

IT had been the work of a moment, and Cora hardly discovered that assistance had arrived when she heard Sir Alan's voice speaking in low, deep tones of indignation.

"Lie there, you scoundrel!" he said. "I cannot wait to give you your deserts now; but I owe you a hiding, and if we meet again you shall have it with interest."

"I'll pay you out, my fine swell," shouted the other, foaming with rage. "It's your turn now; but mine will come, and then we'll see."

Sir Alan laughed as he turned from him, and came back to the two girls.

"I am afraid you have been annoyed, Cora," he said, quietly. "It was fortunate my mother sent me to meet you. You must not take these long walks unattended for the future. Charles should accompany you, or I am at your service whenever you like."

How the quiet, cold tone jarred on Cora's excited nerves as they walked on. She was pale and trembling, and already wearied by her long walk, had some difficulty in keeping up with Sir Alan's hasty strides.

When they came into the lighter village streets, he perceived her agitation.

"Have I been walking too fast for you?" he asked, in the same quiet tone. "I have been unused of late to walking with ladies. Will you take my arm?"

Cora thanked him coldly, and declined.

Sir Alan glanced down at her in some surprise.

"You had better, I think," he said. "You must be very tired."

She shook her head impatiently, tears of anger and mortification at his cool manner rising in her eyes; and when they arrived at The Bungalow, she ran up stairs angry with him, with herself, and very thoroughly unhappy.

When Lady Vincent came into the drawing-room ready for dinner, she found her son already there, standing in the attitude dear to an Englishman's heart, with his back to the fire, looking handsome, and distinguished, but rather gloomy.

"What is the matter with Cora?" said Lady Vincent, as she sat down, and arranged her soft gray silk skirts to her satisfaction. "I just looked in upon her *en passant*, and she had evidently been crying."

"I suppose with annoyance at having to walk home with me," he answered, gloomily, as he told her the circumstance which had occurred that evening, concluding: "I believe the child hates me, mother. You wrote me that she seemed quite happy."

"So she did until you came," said her ladyship, quietly.

"Then let me go back," he said, impatiently. "Mother, don't be angry; but I was happier at Rome, and if I make the child unhappy——

"She is no longer a child, Alan," said his mother, half smiling.

"Child or woman, I think she hates me!"

And Sir Alan gnawed his heavy moustache, and stood looking fiercely down at the hearth-rug the picture of bearded annoyance.

"Well, that is a good sign," said Lady Vincent, smiling outright at Sir Alan's perturbation—"a very good sign."

"Don't, mother mine," he replied, imploringly. "I cannot joke about it."

Lady Vincent rose, and put her hand on his arm.

"My dear Alan, I am not joking. Nothing is so good as a good hatred—except love itself, of course."

"Did you ever hate my father, mother?" he answered, smiling sadly. He was too deeply in earnest to jest about his affection for Cora.

"Never hated him, Alan," she said, gently; "but I may have pretended to do so."

The last words were spoken *avec intention*, as the French have it; and Sir Alan started a little at the meaning she applied.

"Will you not trust to an old woman's wisdom?" she asked. "I think Cora's feeling towards you is anything but hatred. Will you give me leave to find out, Alan? I will not compromise your dignity in the least."

"Nor pain her mother?" he said, doubtfully.

"You may trust me, Alan," she answered, gently.

At this moment Cora entered. She was dressed very simply in black silk, with silver ornaments, and a silver comb fastening back her dark hair.

Sir Alan's face colored as he saw her; it would have been almost impossible for clouds to remain upon it with such a sweet vision in sight. Lady Vincent turned to her as she entered.

"Cora," she said, gaily, "we want your congratulations. Alan is going to give me a daughter."

Sir Alan started, but his mother's rapid glance told him that her words were but the beginning of the "finding out" she had spoken of. Watching Cora, he noticed that her face did not change; Lady Vincent, more observant, saw how the girl for a moment clasped her hands together as if in sudden pain.

"Congratulate me, little girl," she said, gaily, again taking Cora's hand in hers, and looking down smilingly into the dark eyes which met hers with a hunted look of pain. "Yes, I do," said Cora, a little confusedly. "Very sincerely."

Then, turning to Sir Alan with a sudden impulse, she held out her hand. "With all my heart, Sir Alan, I wish you every happiness."

Sir Alan was a bad dissembler, but he managed to say a few smiling words of thanks; and to Cora's great relief Charles announced dinner, and so put an end to any present conversation.

For the next two or three days Lady Vincent narrowly watched her young guest. Cora seemed restless and ill at ease, busied herself with almost feverish energy with the preparations for the coming party and seemed to avoid any time, for rest or relaxation. All these evidences of a restless state of mind were not unpleasant symptoms to Lady Vincent; on the contrary, she seemed well pleased; and Sir Alan, who was too unhappy him-

A MAY DAY SCENE.

MAY comes again, bright, sunny May!
To light the earth with purer ray,
To chase the mists that linger still
Adown the stream, or on the hill.
The woods with happy voices ring,
The fragrant breath of bursting spring
Pours gladness through the morning air,
And fields are green, and skies are fair.
Away cold winter, and dark night!
The world awakes to life and light.

self to be observant or really to enter into his mother's conspiracy, could not understand her satisfaction. He remembered too clearly, and with too sharp a pang, even now, Cora's passionate "It cannot be; not now, not ever," to have hope; and yet rarely were truer words spoken than "woman often changes."

He loved Cora now with a much deeper, more steadfast love even than the affection he had once offered her, and if she could not love him, no other woman should be his wife. He loved her, too, with a love characteristic of his ardent and jealous temperament; he almost hated any man to whom she spoke civilly; and this "green-eyed monster," which certainly was the young baronet's beselting sin, led him to be morose and abrupt in his manner. He knew it himself; but he excused himself with the thought that it was the uncertainty only of his position; that if he could be sure of her love being his, it would torment him no longer.

It was the morning of the day fixed for Lady Vincent's "old-fashioned Christmas party," and, the final preparations being made, Lady Vincent was resting from her labors in her own sitting-room, the only room the decorators and upholsterers had left intact in their operations.

Sir Alan had taken refuge there also, and was sitting in a cushioned recess, deep in a volume on sculpture, which was making a noise in the art world, and partially hidden from view by a heavy curtain which fell over the recess, and effectually shut it off if need be from the room.

The mother and son had been sitting in silence for some minutes, when the door opened quietly, and Cora came in.

"You look tired, my dear," said Lady Vincent. "You must have a rest before to-night."

"I am not tired," she answered, slowly. "Lady Vincent, can I speak to you for a moment, as you are alone?"

"Of course, my child," and Lady Vincent sent a rapid, entreating glance to Sir Alan not to disclose his presence, of which Cora was evidently unaware.

The young girl drew a stool to Lady Vincent's side, and taking her hand in hers, caressed it in silence for a moment, then, still with her face bent and hidden from view, she said:

"Lady Vincent, you will not think me ungrateful for your kindness, if I leave you?"

"Leave me!" said Lady Vincent, in a tone of some surprise, which was admirably feigned, for she expected something of the kind. "You can only leave me on one condition, Cora."

The girl lifted her eyes in questioning surprise.

"Only for a happy home of your own, dear," said her ladyship, smiling. "On that condition only will I consent to give you up."

The color flashed up for a moment in the fair face; but fading, left her white as death. She shook her head.

"Listen, dear Lady Vincent," she said, very quietly, with a strange, forced calmness. "When you consider, you will not keep to that resolution. I have been very happy here, and no mother could have been kinder to me than you have been. Ah! believe me, I can never forget it; but you will soon have another daughter—a real daughter—to love, and——" she hesitated, evidently speaking with difficulty—"you will not need me then."

"My experience of one daughter only makes me wish for another," answered Lady Vincent smiling. "What nonsense you are talking, Cora. The Bungalow is big enough for you and for Alan's wife,"—she felt the little fingers tremble as she clasped them—"when she comes." "No, no," began Cora, nervously, "Lady Vincent, don't urge me; it might make unpleasantness; it is better not. Sir Alan, I am sure would wish it so. I should not like——"

"Perhaps I have already consulted him," said Lady Vincent, with another entreating glance in the direction of the recess. "He thinks with me, that his wife and my Cora will get on very well together. You need not fear, my child; she is a sweet girl, and worthy even of my son's love—no small praise from a mother's lips"

She concluded with a light laugh; but Cora seemed distressed, and almost terrified.

"Lady Vincent," she said imploringly, "you will let me go. I could not stay—you do not know—I should feel as if——I cannot tell you; but do not urge me to stay; it is better that I should go."

"Why better, Cora?" Lady Vincent asked, coolly. "For our sakes or for your own? Or is it that you are tired of our quiet ways?"

At first the young girl eagerly denied; then she tried to contradict, and stammered something about "wishing to travel.'

"So you would like to travel?" was the elder lady's quiet remark. "You and Marianna? I am sure Sir Alan would not allow it."

There was a momentary silence; then Lady Vincent took pity on the silent distress, which Cora tried to repress all signs of, and she put her hands to either side of the girl's face, and gently forced her to lift it to her view.

"You tell fibs badly, Cora," she said, smiling. "Tell me, dear, why is it better for you to leave us?"

Her tone was very gentle and kind; but her eyes were fixed on Cora's face with a very searching glance.

The girl could not meet it. She struggled to free herself; but Lady Vincent's clasp, though gentle, was very firm.

"Nay; but I must be answered, Cora, even if I answer myself."

Cora uttered a little cry of pain, and her head sank forward on Lady Vincent's knee. For a moment her ladyship hesitated.

Sir Alan, looking very pale and agitated, half rose; but an imperative movemnnt of his mother's hand repressed his desire to betray his presence.

"Is it as I think, dear child?" said Lady Vincent, very tenderly. "Am I right? Cora—my dear Cora—don't sob so. Do you think I shall love you less for loving him?"

Cora shivered, and drew closer to her. Lady Vincent put her arms round the girl, and drew her into her tender, motherly embrace.

"Hush, my poor child," she said. "You will be ill if you distress yourself so much. I understand now; but do not make up your mind until to-morrow. Even if Alan's wife should not please you we need not separate."

"I could not stay here," sobbed Cora, passionately. "Heaven knows how I long, how I pray for *his* happiness; but I could not bear to see *hers* yet."

"You must wait," said Lady Vincent, decidedly; and she spoke as much for Sir Alan as to Cora now. "You shall see her to-night, and—well, to-morrow we shall talk it over. Now, Cora, you must go and lie down, and I will send Marianna to you. I cannot have red eyes to-night."

She kissed her tenderly, and dismissed her.

Hardly had the door closed, when Sir Alan emerged from his hiding-place.

"Well," said Lady Vincent, triumphantly, "who was right?"

"Oh, mother!" said Sir Alan, "you have made me so happy, and yet I feel like a thorough——"

"Oh! yes, I know," laughed Lady Vincent, enchanted at the result of her diplomacy; "but all is fair in love, you know, and to-night you must introduce poor Cora to my embryo daughter-in-law."—To be continued.

CHINESE MAXIMS AND PROVERBS.

The pleasure of doing good is the one that never wears out.

Receive your thoughts as guests, and treat your desires as children.

For him who does everything in its proper time one day is worth three.

The less indulgence one has for one's self the more one may have for others.

He who wishes to secure the good of others has already secured his own.

Towers are measured by their shadows, and great men by those who are envious of them.

The dog in the kennel barks at his fleas, but the dog that is hunting does not feel them.

He who finds pleasure in vice, and pain in virtue, is a novice both in the one and the other.

The truths that we least wish to hear are those which it is most to our advantage to know.

The wise man does not speak of all he knows, but he does nothing that cannot be spoken of.

RECENT LITERATURE.

Francatelli's Modern Cook Book. A Practical Guide to the Culinary Art in all its branches. Comprising, in addition to English Cookery, the most approved and *recherche* systems of all kinds of French, Italian and German Cookery, adapted for the use of Hotels, Restaurants, Cake Bakers and the largest establishments, as well as for the use of all private families. By CHARLES ELME FRANCATELLI, pupil of the celebrated Careme, and late Maitre d' Hotel and Chief Cook to Her Majesty, Victoria, the Queen of England. With sixty-two illustrations of various dishes. Reprinted from the 9th London Edition, revised and enlarged. One volume, Cloth, price $5. Phila. Pa.: T. B. Peterson & Bros.

THE whole of the above, comprising 1,462 recipes, is in one large royal octavo volume of 600 pages, printed on the finest tinted paper, strongly bound, and forms the largest and only complete work on all kinds of cookery, of various dishes, and bills of fare for all days in the year, ever published. Every family, every cook, every restaurant, every eating house, every boarding house, every hotel and every cake baker should have a copy of this new edition of "Francatelli's Cook Book."

Scola, Price $1.50. Boston: Lee & Shepherd.

SCOLA has been denominated a "unique romance" and it certainly may be said to possess the merit of originality of design. Milton has bequeathed us Paradise Lost, but it was reserved for the author of Scola to give to the world in these matter-of-fact days a romance in prose of primeval interest. It is easy to believe that the general idea of the work as well as some of the leading incidents, were suggested by the great poet's masterpiece but the sublimity of the Miltonic conceptions is never attained. The descriptions of the gorgeous palaces of the Devas, the marvelous architectural grandeur of Sippera the "City of the Sun," and the miraculous exploits of the "Giants in the earth in those days," read like the fanciful creations of a fairy tale and, though treating of historical characters of antediluvian fame and the imposing wickedness of Lucifer and his fallen angels, it is wanting in the realism which would impart the dignity essential to the success of such a work. The descriptions of Lucifer and his court form the main theme though it purports to be the biography of Scola. She is the neice of Noah and finally marries her cousin Japhet. The interest centers in the temptation of Scola and her mother by Hesperus and Lucifer respectively. The latter yields and is destroyed, while Scola's influence does more than "raise a mortal to the skies"; through love of her Hesperus, the fallen archangel renounces Lucifer and renews his allegiance to Heaven. The description of the flood which overthrows Lucifer's dynasty and destroys all living things upon the face of the earth, does not accord with the Biblical account of that event. The author,s fertile imagination revels in the terrible accessories of earthquakes, volcanic eruptions and frightful tempests, while the spirits of the air join in dreadful conflict.

If a suspicion of anachronism is sometimes suggested by a latent idea or turn of expression, it is disarmed by the prefatory explanation that the manuscript was hurriedly and imperfectly translated. Notwithstanding these defects the book will be found very entertaining, the appendix and notes abundantly illuminating the dark passages.

Buried Treasure. By HARRY CASTLETON. Price $1.25. Philadelphia: Porter & Coates.

WE highly commend this book to young readers. Although there are frequent allusions to "Yanks" and "Rebs," there will be found no sectional or partisan spirit, such allusions being generally ill-natured emanations from old "Godfrey," who is the incarnation of covetousness, dishonesty and all uncharitableness. It is simply a story for boys about boys and hunting, riding and other out-door sports, with enough of plot and diversity of incidents to insure very enjoyable reading.

MAGAZINE NOTES.

HARPER'S MAGAZINE for May well befits the month, with its Italian poets, its Western song birds, and its beautiful Easter poem.

The Number opens with a beautifully illustrated paper entitled "Coast Rambles in Essex," by S. A. Drake, the author of "Nooks and Corners of the New England Coast."

The "Song Birds of the West" is contributed by Robert Ridgeway, our great ornithologieal authority, and is exquisitely illustrated by Gibson and Beard.

Eugene Lawrence contributes an interesting illustrated paper on the "Italian Poets."

Mr. Frances L. Mace contributes a beautiful poem, entitled "Easter Morning."

The third paper of the series of "Old Flemish Masters" is about Rubens, and contains some beautiful engravings after his most celebrated pictures.

The Emperor William's summer palaces are described in an illustrated paper, entitled "Along the Havel," by Arthur Venner, who, in the course of his articles narrates an interesting adventure of Carl Schurz's younger days.

The two great serial novels of the year—"Macleod of Dare," by William Black, and "The Return of the Native," by Thomas Hardy—grow in interest with every monthly installment. There are also in this Number, besides the illustrated story already mentioned, two interesting short stories.

A very suggestive paper on a subject, always timely, is contributed by William Blaikie, entitled "Free Muscular Development," showing by how simple methods the best physical training may be secured.

The Hon. F. H. Morse contributes a brief but important paper on the English Civil Service, with especial reference to its consular and diplomatic branch.

Henrietta Hardy's poem, "May Flower," concludes the body of the Magizine.

SCRIBNER FOR MAY—Is the medium of introducing to its readers eight new draughtsmen, from the ranks of the painters, viz.: F. E. Church, S. R. Gifford, H. W. Robbins, L. DeForest, Will. H. Low, Frederick Dielman, J. Alden Weir, and Walter Francis Brown, most of whom have contributions in the present National Academy. Among the engravings of this number are two by Marsh, and two by Cole, with blocks by many others of the leading American engravers.

The opening paper, "Merry Days with Bow and Quiver," is by Maurice Thompson. The present paper, which is the outgrowth of the increasing interest in this sport, is made up of fresh material including an account of an unique shooting-match between Gen. Lew Wallace's rifle team and Mr. Thompson's archers, in which the latter came off victorious. Another illustrated paper is by Edward Eggleston on "The New York Post-Office."

Under the title of "Bohemian Days," Margaret B. Wright gives glimpses of the light and shade of artist life near Paris. William M. Tileston writes of non-sporting dogs, with cuts of some of the purest-bred St. Bernards, Yorkshire terriers, Dandy-Dinmots, pugs, etc. "Camps and Tramps about Ktaadn" is a paper descriptive of the wood-life of painters, with suggestions to campers-out in general, who may also see the humorous side of the thing in "Camping-out at Rudder Grange"—a droll sketch by Frank R. Stockton. The first of Dr. Brewer's papers on the curiosities of "Bird Architecture" is given in this number.

"An Impossible Sory," "Lissy," "Little Rose and the House of the Snowy Range," and a light essay, "Concerning the Use of Fagots at Geneva," by Leonard W. Bacon, together with the usual excellent editorial departments make an unusually fine number.

SUNDAY AFTERNOON, May number, sustains the reputation of the first number, and steadily advances to the attainment of its ideal. "Periwinkle," by Eggleston, opens the number. "The Donkey's Miracle" and "In the Church Tower" complete the short stories. Satisfactory installments of the serials "Tom's Heathen" and "The Crew of the Sam Weller" are also given. "College Morals," by C. F. Thwing, is a most pertinent subject. Dr. Bacon gives his opinion concerning "The Constitution of Benevolent Societies," and Geo. A. Jackson writes on "The Alexandrian Schools." "Reminiscences of Washington Allston," tells pleasantly of the great artist. "Dr. Franklin's Investment," by Horace E. Scudder, unearths a but little known project of the illustrious philosopher in behalf of posterity. Every one who ever had anything to do with a church fair, should read "Ways and Means." "One Summer's Work" tells of a recent commendable philanthropic effort. The Editor has a very interesting department of his own, managed in a clever way quite out of the common. Edward Everett Hale will begin in the June number a serial entitled "Aunt Huldah's Scholars."

THE May number of the Eclectic Magazine presents an exceptional variety of subjects. The leading paper is a biographical sketch of Lord Melbourne, by Lord Houghton; and there is also a brief sketch of Il Re Galantumo. In science there are a very suggestive article entitled Can we separate animals from plants? and the first installment of a series on The Earth's Place in Nature, by J. Norman Lockyer. The European Situation, by M. John Lemoinne; Modern Greece, by J. P. Mahaffy; Popular Superstition of the Turks, and Pope Leo XII. are timely. The poetry includes Tennyson's Ballad of the Fleet, the longest poem he has published in some time; German Universities, French Home Life: the Influence of Women, On the Decay of Fine Manners, a touching story entitled Only Jean, Albatross Notes, and four more chapters of Mr. Black's Macleod of Dare, also a fine steel-engraved portrait of Sir John Lubbock, with biographical sketch make an attractive number.

LIPPINCOTT'S MAGAZINE for May contains an illustrated paper on Roumania, by Edward King. Also one entitled "A Mountain-Holiday." There is a variety of short and interesting articles. H. A. Huntington summarizes the entertaining career of Colley Cibber; G. H. Putnam describes the quaint streets and houses of Old York; Mary Dean utters a humorous "Counterblast at the Married Folks;" Frank Furness, the architect, gives some useful "Hints to Designers;" and Charlotte Adams has some reminiscences of Gustave Courbet, the Communist artist; while Mrs. R. H. Davis writes about Cremation, and Mrs. Lucy Hooper about the Paris Theaters. "Theodolinde," by Henry James, Jr., is a story of Parisian life, in the author's peculiar vein: "Hephzibah Guinness" is by Dr. S. Weir Mitchell; "His Excellency 'Old Ugly,'" by Rev. Wm. R. Baker, and "A Tragedy of Sedan," which is a story in verse, by Anna C. Green; the whole forming a most delightful and entertaining number.

THE Atlantic for May has an unusually varied table of contents. Recent Florence, by H. James, Jr., and From Ponkapog to Pesth, by Aldrich, are two excellent articles in the department of travel. Mark Twain and C. D. Warner contribute the funny element, while the editor speaks of some recent volumes of verse. Who Pays Protective duties, and The Silver Question Geolgically Considered are pertinent. H. H. Trowbridge, and Boyeson contribute the poetry. R. G. White continues to define what are, and what are not Americanisms. Mr. Bishop's Delinoid increases in thrillingness. The first death has occured and the gloom and misery of the climax seems to be engulfing the devoted reader. The contributors Club is piquant, and Recent Literature is amply criticised.

THE ELMIRA FARMER'S CLUB has recently been discussing the question of cooking feed for stock. Carefully collected statistics from dairies fed on cooked food and from dairies fed on raw food are given. The club has has handled this subject with that thoroughness and intelligence which have made it so famous. The weekly reports of the discussions of the Elmira Club are a prominent and valuable feature of the Husbandman. Our readers should send for sample copies of that agricultural paper and make the acquaintance of the most prosperous and useful Farmers' Club in America. Address the Husbandman, Elmira, N. Y.

THE AMERICAN NATURALIST for May opens with a very interesting article from the clever pen of W. J. Beal on Hairs and Glandular Hairs of plants. Their forms and uses. C. V. Riley continues to talk On The Transformations and Habits of the Blister-Beetles. An Examination of Professor Leo Lesquereux's Theory of the Origin and Formation of prairies is made by O. P. Hay. Notes on Indian Manners and Customs by Edward Palmer is very interesting. General Notes, Recent Literature and Scientific news departments are as ample as usual.

"WOMAN AT WORK" (Louisville, Ky.,) appears this month (April) in a new dress, and one which reflects great credit on the taste of the publisher. It now contains 20 large royal octavo pages, printed on the finest book paper, cut and stitched ready for binding.

This magazine is devoted to the interests of women who are obliged to support themselves, and it aims to advance the welfare of the sex by ennobling labor, encouraging industry and promoting education and culture among women. So meritorious an object should commend the magazine to the patronage of all women who care for the welfare of their sex.

ST. NICHOLAS opens with a story by Mary H. Foote, illustrated by herself. L. P. Hale continues the "Peterkins," Irwin Russell tells about "Sam," and these together with poetry and illustrations and serials meet the demands its exacting young readers have been educated to make upon it.

BRIC-A-BRAC.

SHIP-BRED—Sailors.

MADE of awl-work—Shoes.

EVENING prayers—Burglars.

SLAY-RIDE—A cavalry charge.

GOOD name for a wood-cutter:—Hugh.

"BEAUTIFUL Ile of the Sea"—whale-oil.

BLUNT men sometimes say cutting things.

EVERY dove has a cote, and every dog pants.

AN admirable illustration of the sternness of English conventionality is furnished in an anecdote about a young lady who attended the last reception held by Queen Victoria at Buckingham Palace. This young lady was horrified at being approached by one of the functionaries, who informed her that her hair was coming down. She explained that her hair was not coming down at all, but that a *coiffeur* had expressly dressed it in that manner. "Put it up," was the order; and she was compelled to do so. A species of supervision is exorcised over each lady who enters, to see if there is anything in her costume that transgresses the rules.

TO BAYARD TAYLOR.

To-day, to thee two nations stretch their hands;
The palms of one, down bent and closing, tell
Of Love's distress at Duty's forced farewell;
The other beckoning, open-palmed, demands
Exultantly thy coming. Prideful stands
Thy Guild beside thee. Simultaneous swell,
With not a single unaccordant bell,
The chimes of two benignant Brother-lands,
In pœan each. To thee thy own hath said:
"We can to thee no plenary powers impart
Already are not thine. Envoy thou art,
'Extraordinary' by culture, to the head,
'Plenipotent' by nature to the heart,—
By every grace to every Grace 'accredited'!"

[Springfield Republican

POET'S CORNER, Westminster Abbey, is not so much of a poets' corner as it is popularly supposed to be. The remains of Shakespeare, Milton, Shelley, Byron, Wordsworth, Elizabeth Barrett Browning, Fletcher, Pope, Gray, Cowper, Keats, Coleridge, Marvell, Thomson, Collins, Goldsmith, Crabbe, Mrs. Hemans, Marlowe, Beaumont, Herbert, William Browne, Vaughan, Waller, Herrick, Shenstone, Chatterton, Hood, Moore, Southey, Leigh Hunt and Kemble do not repose there. Burns was buried at Dumfries, and Scott at Dryburgh Abbey. When one thinks of the multitude of England's singing birds, it is rather the exception than otherwise to find a poet buried in the abbey. It is true that in Poets' Corner are buried Addison, Jonson, Macaulay, and Lord Lytton, and they all wrote more or less poetry. But they were not, strictly speaking, poets. It is their prose writings that have gained them their reputation with mankind.

"BUCKET VERSUS BOTTLE."

Suggested by Samuel Woodworths' Poem, "The Bucket."

Athirst, in my dreaming, I sought for the bucket,
Immortalized now by the pen and the press,
I found it still hung in the well of the poet,
Away on the skirts of the vast wilderness:
"The old oaken bucket, the iron-bound bucket,"
Away on the skirts of the vast wilderness.

A hand in my dream, seem'd to hold out a bottle
And tempt me to drink; but the tempter was screen'd;
"Resist!" was the word, and the power came with it
And splash went the bucket and off flew the fiend:
"The old oaken bucket, the iron-bound bucket,"
And splash went the bucket, and off flew the fiend.

'Twixt hurry and skurry, he let fall his bottle,
Which dash'd into fragments, the liquor dispers'd:
An emblem, methought, of the ruin that follows,
When man to the bottle resorts in his thirst,
And not to the bucket, the health-giving bucket,
When man to the bottle resorts in his thirst.

Then come to the bucket, and fill up your glasses,
And turn not away from the drift of the dream;
There's death in the bottle, however attractive,
And life in the bucket, whate'er it may seem;
"The old oaken bucket, the iron-bound bucket,
The moss-covered bucket," whate'er it may seem.

WIT is sometimes of good service to the statesmen or diplomatist. When Queen Elizabeth first proposed to Defoe, the famous civilian, to employ him on a diplomatic mission to Flanders, she told him among other things, that he should have twenty shillings a day for his expenses, which at one time was thought a liberal allowance. "Then, your Highness," said the doctor, "I will spend nineteen shillings a day in your Majesty's service." "What will you do with the odd shilling?" said the queen. "Oh, I will reserve that for my wife and two children." This answer had the effect intended, and a considerable increase was made in his allowance. Notwithstanding this, he was pressed for money during his stay in Flanders, and thought of a novel plan to get a supply; he sent in a packet to the Secretary of State two letters: one addressed to the Queen and the other to his wife, which he misdirected, so that the letter to his wife was addressed "To her most excellent Majesty," and that to the Queen inscribed "To his dear wife." The Queen, having opened the letter, was surprised to find it beginning with "Sweetheart" and afterward interlarded with "my dear," "my love," and other affectionate expressions. It concluded with requesting her to be very economical, for he could send her nothing, as he was very short of money, and could not think of trespassing on the bounty of her Majesty any further. Whether the queen suspected the trick, or believed in his necessities, is not certain, but an immediate supply of money was sent both to the doctor and his family.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

DRAWN!

THIS is a lady's sketching book,
Left careless in her favorite nook,
For any person who comes to find.
This is the landscape, looking hence;
This thing is probably a fence;
And—am I blind?—

A portrait! Seems to me I've met
The gentleman before—and yet
I *can* not know this fearful guy.
And yet—this coat—those trousers—that
Dilapidated Alpine hat—
By Jove, it 's I!

I really was not aware
I was so very short of hair—
And such an overpowering forehead!
And it may be that is my nose.
Peculiar, very! I suppose
She calls me "horrid."

Who is she, then, this artist fay
Who makes the hapless poet her prey,
Whom woodland solitude allures;
Who, under pretext of a sketch,
The unsuspicious, wandering wretch
Caricatures?

What saucy little fingers deft
These misused pages thus have left?
And did she know this was my path?
I wished that she would venture near;
She has no special cause to fear
My righteous wrath.

I am not very fair to see,
But for all that, sweet, I may be
A little wise—a trifle witty.
And I can only hope that you
Are very sweet and very true,
And very pretty.

Some day, just as I'm strolling now,
I'll meet you; and I hereby vow
I'll make you, ere I let you by me,
Raise that—presumably—fair head
While I from lips I know are red
Indemnify me.

[Puck.

TOBACCO.

STARR MORIS.

Although reform is the order of the day hardly anything is said against the almostuniversal use of tobacco nor of its deleterious effects upon the human system. Occasionally some Temperence lecturer includes it among the stimulants to be avoided, but as a general rule, the pernicious habit is passed by in silence.

In the Popular Science Monthly of November 1874, there was a paper by Mr. FRANCIS TERRY FAIRCHILD in which he gave with great minuteness, the details, of his investigation of the effect of tobacco upon himself. GODEY, of the Ladies' Book, in his review of the article, says, "men are inclined to believe that the opposition to smoking is a woman's notion, but MR. FRANCIS T. FAIRCHILD is a well-known and celebrated professional man, and his investigations were conducted in a most careful and rigorous manner. We have not space for detail: sufficient to say that tremor, sleeplessness, bad dreams, craving for stimulants, and general ill health, always attended the use of tobacco, and always disappeared a few days after the cessation of the habit"

Mr. GODEY further remarks "The disagreeable effects upon the senses of others, produced by the tobacco-user, it may be in vain to insist upon."

And this is the point to which I wish to draw attention: the effects produced upon those who are in close contact with the tobacco-user. For I have had an experience so unexpected and startling, that I should like to give it to the readers of the RURAL, premising only that that of which I write occurred before Mr. FAIRFIELD'S investigations were published, so I was not influenced in any manner by anything I had read.

I had for a long time been troubled with what I called terrible nights, nights spent with wide open staring eyes, or if I slept at all, my sleep was filled with such fearful dreams that I felt as Job did, when he said "Thou terrifiest me with visions." The trouble culminated after a short illness that had left me in a weak, nervous state. Then terrors took hold of me and my life became a burden. However quiet and peaceful my days and evenings were, as soon as I retired and fell asleep, the most dreadfull terrors assail me. I was plunging off a precipice down, down, into utter darkness, or I was being crushed under a railroad train, or I was drifting, alone in an open boat, in the wide ocean at the mercy of the wind and tide. Huge monsters of the deep threatened to drown me; the dreadful sea-serpent lifted his awful head over me and pierced me with his sinister eyes. The clouds dark with tempest closed down around me, while forked lightning lit up the awful scene.

Horrible forms surrounded and crowded upon me, fiends seemingly from Dante's Inferno leered and jeered and threatened me, until I awoke bathed in a cold sweat and trembling with fright to spend the rest of the night trying to assure myself that it was only a dream.

These experiences were all the more strange as I am not timid but am naturally strong and courageous. Physicians were consulted, anodynes were prescribed but without effect.

"The nights, just like the night before
In terror passed away:
Nor did the Demons vanish hence,
Until the break of day.

I noticed that sometimes, when away from home, I slept well and so concluded that something was amiss with my sleeping room. I repapered and painted it, but found no relief except at short intervals, occasionally.

At length we changed our place of residence and for some months I slept like a child and congratulated myself that I had left the cause of all my trouble in our distant home.

When upon retiring one night, tired and sleepy, all the old terrors returned and Oh! the horrors of that night I cannot describe.

In the morning, while thinking over what I had suffered the past night, I suddenly remembered that once, when I turned to my husband for sympathy I noticed a faint odor of tobacco on his breath. The cause of all my trouble flashed in an instant upon me.

My husband is rather erratic in his habit of smoking; sometimes smoking a great deal and then not smoking at all for weeks or months, as the notion takes him, and I knew that he had not smoked for some time past. Upon inquiry, he said he had smoked the evening before. Here, then was a revelation. The odor of tobacco when inhaled from his breath, had the same effect upon me that opium has upon others, with this exception, that their sensations are sometimes of a pleasureable nature, while mine were of the opposite character.

Now I do not dislike the odor of tobacco. Indeed, I rather like the smell of a good cigar and never thought of attributing my trouble to that. Upon comparing notes with my husband I found that in every instance, as far as we could recollect, my troublesome nights corresponded with his seasons of smoking—my restful ones with his abstinence from it.

To convince ourselves we tried experiments and found invariably, that the same cause produced the same effect. He, being rather incredulous, would sometimes smoke away from home and keep at a respectful distance after his return. I would retire unconscious that he had done so, only to spend the night in misery. So the habit was abandoned with some reluctance on his part I will admit, but with good results for me. I can count the time, not by weeks or months, but years, in which my sleep has been restful and quiet, undisturbed by the phantoms of a diseased brain. Now, if inhaling the odor of tobacco from the user's breath produced such an effect on a strong, robust person, what may not be its effect on delicate women and children?

We are called a nation of nervous invalids, and this is true of a large proportion of our women, and may not the cause be traced, in some measure, to the almost universal use of tobacco by husbands and fathers? It is said that the care of the life and health of the men of the family are entrusted to the women of the household; and that the women should be able to persuade their sons to abstain from *all* stimulants, as a rule of healthy life. I am afraid that it would be hard to persuade them against the constant example of their fathers.

It also may be said that some foreign nations smoke immodcrately, and yet their women are healthy. I think it might also be said that the women of those nations spend most of their time in the open air and in many instances occupy separate sleeping-rooms.

Leaving this question for others to discuss, I will only say that if my experience gives some poor, feeble, sleepless sister a hint to profit by, I shall feel amply repaid.

AUNT SUSAN'S EXPERIENCE IN DOOR-YARDS.

B. C. D.

THERE was an old-fashioned quilting at Mr. JONES', and the farmers wives from far and near were gathering in. Aunt SUSAN BROWN seated at one corner of the quilt beamed a kindly welcome on each arrival. In spite of her sixty years she was a general favorite. Presently a young farmer's wife whose face was marked with lines of care, and whose brown hands betokened hard labor, passed around and seated herself next to "Aunt SUSAN," greeting her with a wistful smile as if longing for a word of sympathy. While they were nearly alone in their corner, the younger woman said, "Now that I have a chance I wish to ask you how you manage to have such a nice dooryard. It is always a treat to me to pass your house and look at your plants and flower beds. I long so for such surroundings. When we moved on our place six years ago, I told JOHN that the mustard and pig-weed in the front yard made me feel homesick. He said that after this and that improvement was made, he would fix up everything in the yard in good shape, and he meant to, but so many things came along, one after another that must be done, that I seem just as far as ever from having what I prize so much. Something seems wanting in my life. You know that I have two small children and do my own work, and it seems like too great an effort to attempt anything alone. So I thought I would ask you how you had succeeded so well." "I think I can help you said Aunt SUSAN heartily. "When we started on our farm years ago it was a dreary looking place. We only had a zig-zag rail fence around the house and garden, very poor at that, and I know my husband had enough to do with looking after his crops, so I was left to my own devices. I had noticed that nearly every one failed by undertaking too much; they wanted a great many varieties of every sort, making in short a disagreeable hobby of their flowers

So I began moderately, first with a single root of red peony, and a damask rose-bush. I kept the sod away from the roots and gave them the benefit of fertilizing earth, from the barn-yard, and if I could only carry a spadefull a day—I always tried to do as much as that. The next year I added one or two more to my stock, but never more than I could keep in fine condition. I often had to let some of my sewing or housework go to attend to things in the garden, but it paid me in the end in health and enjoyment. I set out some phlox and honey-suckle between the currant bushes, and they grew and bloomed to my heart's content. The former owner had left a huge pile of stones, near the front gate, which troubled me a great deal until I thought of turning it to account. I took off the stones from the top, filled the hollow space with dirt, and sowed flower seeds in it, and when they came to blossom it was no longer unsightly, but on the contrary very ornamental. I worked in this way slowly, but by the time my oldest boy was large enough to help me I had quite an array of blossoms, which all the family have since taken pride in keeping in order. But when a common practical farmer like your husband and mine, will, after doing the regular farm work in his line, take interest enough in a door-yard or flower garden, to do much work there, he is too perfect a specimen for this world. We women who love the beautiful must take the first steps to gratify that love and we must hold fast to our innocent and elevating tastes, or else in the hurrying cares of life, they will never be gratified. If we are sneered at or ridiculed, for wasting our time on things which have no money value we need not argue the case, only work right on silently and persistently. Men grow to prize the beautiful things by seeing them and will often then lend a helping hand without being invited to do so. I see you get my idea." And Aunt SUSAN had the satisfaction of seeing her younger friend leave her side with a brighter expression of hope than she had worn of late, and she doubted not that the good seeds she had sown would in the future bear "abundant fruit."

A PLEA FOR THE MINISTER'S WIFE.

GRANDMOTHER.

I HAVE been thinking a good deal lately about ministers and their wives. Perhaps the reason is that the wives wear out so soon. I have seen women who, only a little while ago, were young, blooming brides, grow pale and thin, and look as careworn as women of fifty, while their husbands were young and bonnie as ever. I do not believe that a real healthy minister's wife can be found in all New England; that is, after they have been married half a dozen years. I think they are an abused class of humanity. Who cares how hard they have to work? No purses are ever made up to send them on European tours. Who ever thinks of the unending stream of visitors that are forever going to the minister's, to visit and call, not counting every minister that comes to make a hotel of the parsonage. Then the minister's wife must attend every prayer and conference meeting, in all parts of the town; she must be president or chairman of all the societies that are gotten up for various charitable purposes; she is expected to do her full amount of sewing for the *Circle*, and in fact about three times as much work as any other woman in the town.

Now, if I were a minister's wife (and I reckon it is a nice arrangement for some people that I am not), I should rebel. If they expected me to work for the society and the church, I should have a salary; and if I did more work than the minister did, I should demand a salary accordingly.

What right have a community to expect, or require, all these things of a little, inexperienced, delicate woman? Just because she happened to fall in love and marry a clergyman, is it any reason why she should be made a slave, for the convenience of the people in his charge? Her husband works for the good of his church and society at large, and he *has his pay for it*. Why should not his wife have pay too? She might then be expected to have an outside interest, and well afford to hire her own work done.

It is all wrong to demand more from the minister's wife than from the deacon's wife or the doctor's wife. Does society expect these women to devote their time and strength outside of their homes and families? Oh no! but a minister's wife is a different person entirely! She can do so much good! Pay her for the good she does, I say; and remember that she is mortal, and do not expect her to suffer martyrdom for the sake of the church and people.

A CHEAP BUT PRETTY ORNAMENT.

L. E. K. T.

I SAW a pretty cross the other day that perhaps some of the Rural girls would like to imitate. For the foundation, the pasteboard was rolled up and fastened in hollow cylinders (such as are used to wrap pictures on when shipping them.) The ends were closed with white paper. Letter paper was used for the one I saw, but if it had not been ruled it would have been prettier. A sheet of paper that had been doubled together and cut into fine strips, to within a quarter of an inch of each edge was then pressed out, doubled together and fastened around the cross with the cut part left rounding to give it a feathery appearance. These papers were fastened close together the feathery part of one overlapping the fastening of the one before it. At the crossing the fastenings were hidden by a rosette of the cut paper. The cross was fastened to a firm foundation and was about eighteen inches high. It was very dainty looking and many admired it.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

HOUSE-HOLD HINTS.

A good housekeeper takes pleasure in seeing everything fresh and bright as well as clean, and the heart of the "house-mother" sinks with dismay as she looks at the spotted, faded paper and worn paint, and remembers the collapsed state of the family purse. There is no reason why you should not do your own painting and papering. Any painter will mix the paint for you. At paint stores in cities are found ready-mixed paints of all shades that will give perfect satisfaction. This paint will sometimes require to be diluted with linseed oil towards the bottom of the pail, but it adheres evenly and looks beautiful when finished. You will need a large flat brush, and a small sash brush for windows. An old shaving-brush will do for the windows and corners, if you have no small brush. Do not fill your brush too full. Commence at the top, and paint down, taking as long a sweep as you can, spreading the paint evenly. If your paint is not white, it is always a safe and good rule to have the wood-work of the same shade as the ground of the wall-paper. For doors, a warm gray shade for the frame, and a darker shade for the panels are pretty. A little burnt-umber mixed with white paint makes a good pink shade, while a good deal makes a dark brown. My mother painted four rooms, (one coat,) this spring, at the cost of $1.60, or 40 cts., a room. All varnished paint should be washed with cold tea; for white paint, take a flannel rag, wring out and dip into a dish of whiting, and rub your paint until it shines. Rinse off with a clean cloth dipped in cold water. If your ceiling is very soiled, pour liquid blueing, freely, into the white-wash.

In choosing paper, you will have ample opportunity to exercise your taste. Even the yellow-backed kitchen paper may be put on with the wrong side out, presenting an even, buff shade that makes a good back-ground for pictures and looks well. This comes at 10 cts. a roll; better qualities at 20 cts; satin-faced at 25 and 30 cts., and gold papers at 75 cts. per roll. The plain satin papers are pretty, but very difficult to put on nicely. If your wall has been white-washed, wash the surface with vinegar to make the paper stick. If you find any difficulty in removing the old paper, make some very thin starch, and while quite hot, wash the paper, giving a second coat in a few minutes after. The paper will then strip off, in long pieces.

A good way to make paste to put the paper on with, is to soak white glue over-night, then boil until dissolved; rub flour and water together until smooth; add, and boil until like starch. Measure off the paper, and cut a number of lengths by it, being very careful to see that the figures match. Lay the lengths, with the face down, on the table, spreading the paste on the top one with an old white-wash brush. Double the bottom of the paper over, so the under sides will go together, stick the top fast, unfasten the bottom, and brush down with a soft rag, or whisk broom. Be sure and match the design, and bring the edges evenly together.

Kalsomining is cheaper than papering, but harder work. Take a quarter of a pound of white glue to six pounds of Paris White; cover the glue with water and let stand until soft; then put the vessel containing it, into a kettle of hot water, and stir until thoroughly dissolved. Put the Paris White in a pail and add hot water gradually, stirring all the time, until it is smooth and creamy; then add the dissolved glue, with water enough to enable it to work well under the brush. Put on with a fine white-wash brush. This can be tinted any shade you choose

If your carpet is badly worn in the centre, rip the seam and reverse the carpet, after the manner of turning sheets. For grease spots, a little fuller's earth, dissolved in hot water laid on the spots and scoured with a brush, is the most effectual remedy. A bullock's gall added to two quarts of water, is an excellent thing for reviving faded colors and removing dirt. Holes can be nicely mended with worsteds of colors to match the carpet. If the plating around the door knobs is worn off, put together in a glass vessel one ounce of nitrate of silver, two ounces of cyanuret of potassa, four ounces of prepared Spanish whiting, ten ounces pure rain water, cleanse the article to be plated, and apply with a soft brush, burnishing with chamois skin.

Curtains are a great help towards a pretty room, and cheap ones can be made from unbleached muslin, chintz, plain or dotted Swiss muslin. Even those of bleached muslin, trimmed with a fluted ruffle along the edge, are dainty enough to please any one. Unbleached muslin is now used to a great extent, and looks well. Colored canton flannel, in blue, brown and crimson, makes an effective trimming; put one or two deep bands of this across the bottom of the curtain stitched on in feather stitch with yellow silk or zephyr. A piece of muslin, two yards long and 18 or 20 inches wide, bordered with a couple of colored bands, and edged with fringe, is laid in deep plaits, and fastened to the cornice. Lambrequins are such an addition to a room that every one should make them. Chintz edged with a ruffle and pinked on either edge are easily made, and even the common red-and-white striped cotton goods, trimmed with fringe look well. Old curtains which are too short for the window can be pieced down under the lambrequins. If your window is low, you can greatly add to its apparent hight by placing the lambrequin on the wall above.

A divan for your room can be easily made by asking John to make you a box two feet wide, two feet high and six feet long. Spread straw on the top of the box, but do not allow it to come too near the edge. The straw should be covered with refuse cotton, laid on evenly, or with an old blanket; be sure and cover the sharp edges with the cotton. Cover the cotton with coarse brown muslin, and tack the chintz over this; the sides should also have a cover of cotton. Large square pillows stuffed with shavings, and trimmed with cord and tassels are laid against the back of the sofa. There should be a binding of braid for the cushion, to match the chintz. Barrels make easy chairs by sawing one-third in two, about 18 inches from the bottom, and sawing the staves in a curved shape for the back. The head is nailed in for a seat, and the back and seat are padded with straw or hay covered first with an old quilt, and then with the chintz. Ottomans to match are made of cheese or soap boxes.

A book-case can be made of two packing-boxes, set upon each other; shelves nailed in, and a cheap molding fastened to the edge of shelves and sides. If the boards are not perfectly smooth, sand-paper, then stain with walnut stain and varnish. A tiny valance of pinked leather fastened on the edge of the shelf is a great improvement. A foot-mat is beautifully made, by taking old pieces of woolen rags and cutting an inch wide on the bias; gather one edge with a strong linen thread, and sew the gathered edge on to an old piece of carpet, as a foundation. Make a center three inches in diameter of crimson-edge this black, then scarlet, next gray, then black, crimson and gray in order, and fill out the square with black; this is the design of mine. These mats have a velvety look, and are pretty enough for any sitting-room. Ida Atwood.

LEAMON'S DYES.

I received from the Editors of the Rural an assortment of Leamon's Aniline Dyes manufactured by Messrs. Wells, Richardson & Co., of Burlington, Vt., requesting me to give them a careful trial and to report the results without fear or favor. The trial has been made and I am pleased to state with results eminently satisfactory. Heretofore I have not had much faith in home-dyeing of goods, and with little expectation of success, I made my first attempt with these dyes, viz., that of coloring a soiled white ostrich-tip light-lemon. The feather was valueless as it was, but when colored and curled looked almost new. I have colored white stockings dark-blue, light-blue, brown and pink, dyeing a skein of darning-cotton with each color, to mend with as needed. They are free from spots and do not crock. A brown dress recolored was improved very much and I shall never feel that it is necessary to send another garment away from home to be dyed, as has heretofore been my practice. I also used them with satisfaction for baskets, grasses etc. Indeed, I fancy from my own tests that there is scarcely any articles that cannot be colored by their use. This does not involve much of either time or trouble and is certainly a decided saving of expense.

DOMESTIC RECIPES.

Batter Pudding.

One pint of milk; four well beaten eggs; two cups of flour; one teaspoonful of salt and a pinch of soda. Bake three-quarters of an hour or boil in a buttered mold or floured bag two hours; serve with sauce and eat at once.

Lemon Jumbles.

One egg; one cup of sugar; one half cup of butter; three teaspoonsfuls of milk; one-half teaspoonful of soda and one of cream-of-tartar; juice of two small lemons, and the grated rind of one; mix stiff.

German Puffs.

Three beaten eggs; three cups of milk; three teaspoonsfuls of melted butter; three cups of flour; a small spoonful of salt; pour into nine well buttered cups, same size as used in measuring; bake to a fine brown and eat as soon as done with sauce.

Ginger Snaps.

One coffee-cup of butter and lard mixed; one coffee-cup of sugar; one coffee-cup of molasses; one-half cup of water; one tablespoonful each of ginger and cinnamon; one teaspoonful of cloves; one teaspoonful of soda dissolved in a little hot water; flour to mix. Miss Alice Demarest.

River Edge, N. J.

Almond Rice Pudding.

Wash twelve ounces of rice and put into a stew-pan with little more than one quart of milk; eight ounces of sugar; four ounces of butter; four ounces of almonds blanched and pounded; add a little salt and boil *very gently* on the back of the range until the milk has become absorbed by the rice; remove from the fire and when cool mix in the yelks and whites—beaten separately—of four eggs; blanch and split into halves four ounces more of almonds and strew equally over the inside of a mold previously buttered; pour in the rice and bake for one hour and a half. Turn out and serve with any kind of preserve around the base.

Strawberry Cream.

Pick the calyxes from two quarts of strawberries and crush them in an earthen-dish with one-half pound of sugar; put through a sieve and mix with a pint of whipped cream, adding one ounce and a half of dissolved isinglass; pour into a mold and when firm turn out and serve.

E. M.

QUERIES ANSWERED.

Will you please give me a recipe whereby I can successfully can green corn and peas? I have tried several times and failed.

Deer River, N. Y. Mrs. S. S. C.

Ans.—Cut the corn from the cob and add water sufficient to cook; have dissolved one ounce of tartaric acid in one-half teacupful of water and when the corn is about one-half done, add of the acid solution one tablespoonful to every two quarts of corn; when done seal air-tight in glass or tin; the latter is preferable. Many punch a small hole in the top of the can the day after sealing to allow the gases to escape, resealing at once. To prepare for the table, pour off the sour water; add water, a little soda and sugar and boil; then season with cream, butter, pepper and salt the same as fresh corn. I have had no experience with canning peas, nor have I a trustworthy recipe. I will, however, give you my method of preserving peas for winter use. Shell and boil in salt water eight minutes; drain, dry on a cloth, and when perfectly dry, put into wide-mouthed bottles, not quite filling them, and cover the peas with melted mutton-fat, sealing air-tight with rosin or wax.

News of the Week.

NEWS OF THE WEEK.

At home, Mr. Gorham, of California, has been again elected Secretary of the Republican Committee. Mrs. Tilton's example of last week, has been followed this week by disgraceful confessions of rascality on the part of several officials and others who were connected with counting the votes in Florida at the last presidential election. Dennis, and M'Lin are the two chief self-confessed scoundrels whose fraudulent manipulations of the votes of some of the back-woods sections of the State placed Hayes in the White House instead of Tilden. It is said, however, that it is the latter's money that has awakened their consciences to a public confession of their villainy. Doubtless disappointment at their failure to get promised offices, together with a little encouragement from malcontent republicans has also had something to do with it. Then again even the *vilest* sinners may reform! It is very doubtful whether any Congressional action will be taken in the matter. The President says he will subscribe to the Republican fund for the coming campaign and will not object if office-holders do the same—so much for another item of his Civil-service Reform! To the disappointment of Packard, Anderson and Co., a Geo. L. Smith has been nominated for Collector of New Orleans, and seems to be acceptable to all factions in the Pelican State. This is one of the Republican Smiths. The President knows that third-rate men often meet with less opposition than those of first-class reputations. Savings Banks continue to burst up all over the country, but especially in this State; surely it's time to pass some stringent laws with regard to their management, and to place more of their managers behind prison bars for safe keeping. The President has been "swinging around the circle" a little in Pa: well received by the people at large, but neglected by politicians.

The present bankrupt law has been repealed by the House and Senate and will be signed this week doubtless, by the President. This does not affect proceedings taken before its passage. There have been terrible hurricanes in some parts of the West and South: barns, houses, fences, etc., destroyed; trees uprooted, a large number of people killed, some of them under ruins of buildings, and others by being taken up into the air by the force of the whirlwind. The Wood tariff bill seems doomed to defeat in the House, a majority there being counted upon against it. The movement to resume specie payment is spreading considerably, though there is little doubt that it is often a mere advertising dodge on the part of institutions which make a single payment or two in specie, in order to get their names before the public. The Moffet Bell Punch is now one of the legalized institutions of La., much to the disgust of the liquor dealers.

"We don't want to fight, but by Jingo, if you do,
We've got the men, we've got the ships, we've got the money, too."

Such, for the last six months or more, has been the chorus of the most popular song that has fired the British heart as it echoed from lips of street urchins and music-hall favorites in the towns and villages, or in rustic accents and various dialects, broke the stillness of thorn-hedged lanes and other country places. The belligerent spirit this lively doggrel has helped not a little to rouse, is likely, ere long, to find ample exercise; for across the Atlantic the prospect of peace is daily growing more gloomy. Already a second army corps is about to be got ready for service, and England has nearly completed her preparations for war. Gradually both at home and abroad, the conviction is growing stronger that amid the conflicting rumors that fill the public with uncertainty and doubt, a steady hand at the helm of the ship of State, is steadily steering her into battle, that Lord Beaconsfield—better known as Disraeli—has from the first resolved unalterably upon war in the event of England's demands being disregarded. Bismarck is still pressing the assemblage of a Congress at Berlin, and to clear the way for it, is urging a preliminary conference of ambassadors from the Great Powers in that city. Before accepting his invitation, however, England demands an explicit declaration from Russia that the latter will allow the whole Eastern Question to be treated as a matter of European not merely of Russian concern. Just here is where the hitch has been all along, and it has not been yet removed. Italy, prompted probably by Germany or possibly by Russia, has asked England to state openly what alterations she wants made in the treaty of San Sefano. England, unwilling to show her hand to her astute opponent, evaded the question by saying it would be useless to make such a statement until Russia had agreed to accept European intervention in arranging all the terms of settlement.

On the 30th Gen. Todelben succeeds to the command of the Russian forces in Turkey instead of the Grand Duke Nicholas, who returns to St. Petersburg on the 1st of May, on account of his health. He has just been raised to the rank of Field Marshal. Latest advices say that the English fleet will withdraw to the Dardanelles and the Russian army to Adrianople—a desirable consummation, but hardly probable. A fierce revolt has taken place in Bulgaria and upper Roumelia. The Bulgarians began to avenge past subjection and cruelty on the Turks resident in the country by out-Herodingd Herod in pillage, outrage and murder. The Turks hadn't yet learnt submission to brutality, flew to arms, retaliated, were joined by some of the Ottoman regular troops and hosts of disbanded soldiery that had found refuge in the mountains, and now the worst scenes of destruction and barbarity that ever disgraced the land are enacted therein. Several detachments of Russian troops have been defeated by the insurgents, and the Muscovites are calling loudly on the Porte to order the battling Turks to submit to whatever may be in store for them. Great mortality from fever is said to be prevalent among the Russians. Bismarck reported to be tired of his fruitless efforts at mediation. Servians again preparing for the field; Roumanians still recalcitrant; Russia may be content with a slice of Bessarabia—if she can't get more.

An agrarian offence of a novel character has, it is alleged, been committed by a man named Hyffe, now in the county jail at Limerick, Ireland. Hyffe it seems, rented some orchards at Adare, but he was, for some reason, evicted by the owners to whom his tenancy did not give satisfaction. It was discovered that all, or nearly all the fruit trees had failed; and the prosecutors allege that the prisoner, with an auger, bored a hole in each of the trees and destroyed their vitality by introducing a quantity of vitriol into their trunks.

Corinth, Maine, Feb. 12, 1878.

To The Davis Sewing Machine Co., Watertown, N. Y.—*Gents:* We are manufacturers of clothing; have been engaged in the business for the past fifteen years, manufacturing largely for Miner, Beal & Hackett, Isaac Fenno & Co., A. Sherman & Co., Smith, Richardson & Bates, Prager, Bock & Co. and Leland, Rice & Co., all of Boston. We have used the Davis Vertical Feed Sewing Machine for the past four years in manufacturing our clothing, and we know that it is better adapted to our business, and possessed superior advantages over any of the under-feed sewing machines.

Within the last three months we have had occasion to seam our clothing with double thread, and we find that the Davis Vertical Feed Sewing Machine (and no other family sewing machine) will do the work as well and easily as with the single thread. Yours, truly, T. Brackett & Son.

THE MARKETS.

PRODUCE AND PROVISIONS.

New York, Saturday, April 27, 1878.

Beans and Peas.—Mediums beans are firm without much activity. The demand however is quite equal to ordinary spring trade and holders are not anxious to sell. Marrows are a degree more active still the exportation is not large enough to give much buoyancy to the market. There has been some activity in pea beans but they close dull. White kidneys firm and held higher. A small trade in red. Black beans quiet. Green peas trending lower, $1.07½@1.10. Southern B. E. peas nominal at $2.80@3. Canadian in bulk and bond hold their old rates of 83@84c.

Receipts of beans, 3,550 bush.; exports peas, 21625 bush.; exports, beans 756 bbls.

We quote:—Beans, medium choice, $1.65@1.70; other. $1.30@1.50; marrows, free to vessel $1.85@1.87; fair to good, $1.60@1.75; pea, $1.35@1.55. White kidney, $1.40@1.70; red, $2.10@2.40; Black (Turtle Soup) $2.50@2.65.

BEESWAX.—Small sales are being made at 27@28c. for Western and Southern.

Exports past week, 4,331 pounds. Since Jan 1st, 76,600 do., or double the quantity of this date last year.

BROOM CORN.—A small trade is in progress.

Quoted at 6@7¼c for hurl and short brush; 5@6¼c.: for medium green, 4@4½c. for red and red-tipped, ₩ lb.

BUTTER.—The butter market is proverbially an uncertain one between "hay and grass" and the present period is not an exception to the rule. Regular and liberal receipts give buyers considerable independence, especially as the supply is chiefly white and must not lose an early sale. The business of the week has suffered from one or two rainy days and the accumulation that formed was sufficient to break down prices. Thus we have fine creamery pails and choice half tubs selling quite closely in prices. No style of purchase in State exceeds 25c. Western is very weak for white as some samples yellow are already coming forward.

State and Western creamery, choice 24@25c., other 20@23c.; State half tubs and pails selected, 23@24c.; good, 20@22c.; poor State 17@18c; Welsh tubs prime 22@23c; other 17@20c.; Western, dairy best 20@21c., other, 16 19c.; factory 14@18c. Old butter nominal at 22@23c.; fair to prime poor State and Western, 7@11c.; grease, 6@6½c.

Receipts for the week 16378 pkgs.
Exports past week 1940 pkgs.

COTTON has fluctuated only a trifle, having been very dull.

Latest prices are 10.85@10.90 for April, 10.92c. for May, 11@11.01c. for June; 11.07c. for July; 11.10@11; 11c. for August; 10.78@10.80c. for September; 10.59@10.60 for October; 10.48@10.50c. for November; 10.49@10.51c. for December; 10.57@10.59c. for January; 10.67@10.69 for February.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	7 15-16	7 15-16	8 1-16	8 1-16
Strict ordinary	8 11-16	8 11-16	8 13-16	8 13-16
Good ordinary	9¼	9¼	9¼	9¼
Strict good do.	9¾	9¾	9¾	9¾
Low middling	10¼	10¼	10¼	10¼
Strict low middling	10 7-16	10 7-16	10 9-16	10 9-16
Middling	10¾	10¾	10¾	10¾
Good middling	11¼	11¼	11¼	11¼
Strict good middling	11 7-16	11 7-16	11 9-16	10 9-16
Middling fair	11 15-16	11 15-16	12 1-16	12 1-16
Fair	12 7-16	12 7-16	12 9-16	12 9-16

Stained.

Good ordinary, 7 15-16c. Strict ordinary, 8 11-16c.; Low middling, 9 3-16c.; Middling, 9 13-16c.

CHEESE.—Exports for the week 13,700 boxes. The new cheese have been arriving moderately only and closely taken up, with about the opening prices sustained. It is presumed that with next week's supplies prices will scarcely be maintained.

For new 12½@13c. for best lots 11@12c. for good 9½@11c. for half skimmed, and 5½@7½c. for whole skimmed; old at 13@13½, for fancy; 12@12½c. for prime; 10½11½c. for good; 8@10c. for fair. Western factory good to prime, at 10@11c.; strictly fine, 12½c.; fair to good at 9@10c., and poor at 6@8c.

Liverpool cable, 63s. Gold closes 100¾.
Exports for the week, 13,583 boxes.
Receipts, 16,503 do.

DRIED FRUITS.—Apples of the higher grades have fair inquiries and rule strong in price but the common lots are dull and depressed. Peaches and small fruits generally are firm.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia, 10@11c.; good to prime Georgia; 8@10c.; unpeeled halves, 4½c.; quarters, 4c. Pitted cherries, choice new 23@25c.; Raspberries, 27c. New York State plums, 13@14.; southern plums, 11@12c. Apples —State quarters, old, 4¾@5½c.; do. sliced, prime, 6@7c.; Western quarters, 4@4½c.; Southern, at 6@7c. prime sliced, 5@5½c. for fair to good.; Southern quarters at 1½@4½c.; Tennessee quarters, in bags, at 2½@3½c.; prime fancy and North Carolina sliced at 8@12c; Blackberries 10½c. Exports for the week 700 bbls. apples believed to be mostly on owners' account.

EGGS.—Receipts for the week, 9,635 bbls. The week following Easter is apt to be a quiet one in the egg trade. Consumers become more or less cloyed during Lent, and spring table items are abundant and low enough, this season, to turn the current of trade into other channels. Hence, though receipts are falling off, prices are easy, without prospect of suddenly favoring sellers. Southern eggs are almost out of date. A few invoices of fine Canadian have appeared; not quoted above Western choice. Duck and goose weak with the close of the Easter feast.

New Jersey, 12@12 <c.; State and Penn., 10½@11c.; Western and Canadian, choice, 10@10½c.; Southern, in good order, 9½@10c.; inferior, 9c.; Duck, 16@17c.; Goose, 30@35c.

FEED.—Sales are at $17.50@18.50 for 40 lbs. and 60 lbs.; $18@19 for 80 lbs.; $19@20 for 100 lbs.; $18@19 for rye feed, and $20@21.50 for sharps.

FEATHERS.—Selling in a small way at 45@50c. for prime, and 40@42c. for mixed, which is better.

FLOUR.—There has been a more active business for export, and low grades are held firmly. The higher grades are plenty and easy in price.

Latest prices are $4.15@4.90 for poor to fancy superfine State; $5.00@5.20 for poor to good extra do; $5.20@5.60 for good to very choice do.; $4.15@4.90 for superfine, Indiana, Iowa, Michigan, Ohio, &c., (the latter in extreme); &c.; $4.90@5.20 for inferior to good shipping extra do., (mainly at $5.05@5.10 for lines); and $5.25@5.65 for good to choice extra do.; common to choice white wheat extras, $5.50@6.00; choice to fancy do. at $6.10@7.50; red and amber winter wheat, inferior to choice trade and family, at $5.30@6.50; round hoop Ohio at $5.00@5.35, and trade and family brands of do. at $5.50@6.75, the latter rate for very choice; St. Louis, $5.45@6.10 for very poor to good extra, and $6.10@7.25 for good to very choice (with a few brands of fancy quality quoted up to $7.25@7.50); Minnesota clear, very inferior to very choice at $5.10@6.10 (a few fancy brands selling as high as $6.15@6.25); Minnesota "straight," inferior to very choice, at $5.75@6.75 (few brands going above $6.35@6.50, and patent poor to fancy choice at $6.10@6.75; unsound stock at from $2.25@5.75; city mill extra at $5.20@6.25 for fair to very choice for West Indies; do. for England at $5.00@5.10; do. trade and family extras, $6.50@7.50; do. for South America, $6.40@7.35 for fair to fancy; No. 2 at $3.10@4.35 for inferior to very fancy.

CORN MEAL.—Brandywine quoted at $3.10@3.15, and Western yellow at $2.25@2.65.

FRESH FRUITS.—Apples are nearly out; quotations are merely made from regular customers for the remnant. Baldwins, $5@6; Russets, $4@5; poor, $3@4. Strawberries have been in light supply; Charleston prime, 30@40c., inferior to fair, 5@20c.; a few early Norfolk, 35@50c. Hot-house Black Hamburg grapes, $1.75@2.25 per lb. Cranberries are over with commercially. Peanuts continue dull. Handpicked, $1.35@1.40; fancy, $1.25@1.30; common to prime, 85c..@1.20.

GRAIN.—The English news has encouraged export operations, and with small receipts prices generally higher.

Sales of wheat are of ungraded spring at $1.20@1.33; New York No. 2 spring at $1.33; No. 1 Chicago spring in store $1.29; No. 1 Milwaukee and Minnesota spring at $1.33@1.34; red Western at $1.35@1.37½; amber Western, $1.40; ungraded white do. $1.13; New York No. 2 red at $1.37½@1.38; No. 1 red at $1.40; No. 1 white, at $1.41; extra white at $1.45; extra white to arrive by May 10 at $1.47; No. 2 Chicago spring, first half May, at $1.25; No. 2 Milwaukee spring, next weeks deliveries at 1.23; choice red State to arrive at $1.41; No. 2 northwest spring, May delivery at $1.26; New York No 2 spring, April delivery, at $1.27½@1.28; do. May, $1.24½@1.25; New York No 2 red, April, $1.38. Rye at 73@74c. for Western and 75@76c. for State. Corn—Latest sales are of New York No. 2 on the spot at 55½@56c.; New York No. 2 old at 57½c.; New York steamer mixed, 54@56c.; steamer yellow, 55½c.; ungraded mixed, 52@54½c.; No. 2 April delivery, 55½c.; No. 2 May delivery, 53½@53½c.; No. 2 June delivery, 54½c.; steamer mixed, April delivery, 55c; do., May delivery 51½c. Oats of New York No. 1 white, at 40½c.; New York No. 2 white, 36@36½c.; white State, 26@39c.; white Western, 35@39c.; mixed Western, 35@36½c.; New York No. 1 at 36½c.; New York No. 2 at 35½c.; No. 2 Chicago, May delivery at 35c.

HAY AND STRAW.—Receipts are higher and demand is very fair.

Bale hay, 60@65c. for shipping, and 75@85c. for retail qualities; clover, 40@50c. for prime. Straw, 45@55c. for long rye; 35@45c. for short rye, and 35@45c. for oat.

Exports for past week 637bales; since Jan. 1st., 23,000 bales; same time last year 20,100 do.

HOPS.—Exports for the week have been only 185 bales. Trade is very dull, and prices are wholly nominal.

New Yorks, good to prime, 7@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

LEATHER.—Hemlock sole at 19½c. to 21c. for light, 19½ to 21 for middle, 20 to 21 for heavy and 17½@19 for good damaged.

MAPLE SUGAR.—The market does not warrant new supplies, and many of the prominent producing point have discontinued shipments this week. Prices from at 10@12c. for sugar, 75c.@100 per gallon for sirup including can.

OIL-CAKE.—Western quoted at $30@30.50 per ton.

PROVISIONS.—Hog products generally have been stronger in price with a more active export demand.

Mess pork, $9.75@10.00 for spot lots; $9.75 for April, and May, $9.85 for June and $9.95 for July. Bacon at 5½c. for long clear and 5¾c. for short clear. Lard—Western steam, 7.27½c. for spot, lots 7.25c. for May, and 7.35c. for June. Stearine, 7¾@7¾c. for prime and choice. Beef hams at $15.00@16.50 Beef—New extra mess, $12.@12.25; plain, $10@11.50; new packet $13.50@11.50 family mess, $15@16; extra India mess $25@26 for city brands; do. Philadelphia, $24.

POULTRY AND GAME.—Live poultry is in light supply and the advanced rates are strong for fowls. Ducks and geese have no special call. Spring chickens are quotable but in size are unattractively small.

Near point fowls, 12@13c.; Southern, 11c.; Western 12c.; Roosters, 6@8c.; Turkeys small but weighty, 12@14c.; other, 11@11½c.; Ducks, choice, 87c.@$1.12; other, 50@65c.; Geese, N. J., $1.25@1.50; other, 60c.@$1.

New Jersey and Pennsylvania dressed poultry combine most of the receipts, these are mainly contracted for at this season and city killers have almost the full market trade. Fine country dressed is strong.

Turkeys, prime, 16@17c.; good, 13@15c.; large 9@11c.; frozen, 16@17c. selected. Fowls are not extra in quality: fair to best, 11@13c.; other, 8@10c. Capons are lower, 28@30c.; slips, 25@27c.; Fancy Philadelphia chickens, 18@20c.; spring do., 30@35c.; winter, 23@25c.

Game is quiet with easy prices; the low rates for pigeons are higher than they have been as supplies have been large. Wild ducks out of market. Wild pigeons and squabs, 65@75 ₩ doz.; English snipe, $1.12@1.25.; Sand Snipe, 35@40c.; plover, 90c.@$1.

SEED.—Clover is quoted at 7¾@7¾c. for State and 7¾@7¾c. for Western; Timothy at $1.30 to $1.40.

SUGAR.—Refined at 9¾ for cut loaf, 9¾ for crushed, 9¾ for powdered, 9¾ for granulated, 8¾@9¼ for soft white and 7¾@8¼ for soft yellow.

TOBACCO.—Export demand has been fair and the local trade is improving with prices generally strong.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¼	6¾@ 7
Good leaf	6¾@7¾	— @—
Fine leaf	— @—	— @—
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do.	18 @22
medium	12¾@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	9 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7¼@10
Wisconsin assorted lots	7¾@ 9

VEGETABLES.—Export potatoes for the past week 8,229 bbl. Peach Blows to bring $1.37½@1.50, must be faultless; a good deal of stock is offered at 75c. in bulk and 100@125 in lbs. Florida new $3@6 lbs. Bermuda, $750@800. Sweet have kept elegantly this season and Delaware bring $1.75@2; onions have advanced largely and suddenly; Red and Yellow 2@3; white $3@3.75 all Eastern. Chester new higher $2@2.50. R. Turnips 18; carrots 75@100; Green peas, crate 50@75c. Norfolk and N. C. now lead the trade range per bbl. 4.50@7.00; string beans low 4.50@5; Fla. do. $1.@2; cucumbers $5@6: Asparagus is in large supply Oyster Bay 3@30.50 N. J. and Del. $2@2.75; Southern $1@1.75. Radishes 50@1.25 per J. W. Kale old $2@25c. Lettuce bbl. 2@3.50. Cabbages, Norfolk, bbl. $2@2.50. Spinach bbl. $1.@125.

WOOL.—There has been but little life to the market, and prices easy and unsettled.

Ohio, Pennsylvania and Virginia XXX and picklock, 42@45; XX, 40@42c; X, 40@42; No. 2, 35@37; No. 1, 42@44c.; common 33@35; combing, 48@50.

New York, Michigan, Indiana and Wisconsin, XX, 35 to 38c.; X, 35@38c.; No. 1, 37@42c.; No. 2, 33@36c; common 32@34c.; combing 45@48.

Iowa, Vermont and Illinois—34@36c. X and XX, 36@40 for No. 1, No. 2, 32@34c.; combing, 45@48.

Missouri, Kentucky, and Tennessee—Washed fleece, 35@41c.; unwashed, 26@28c.; unwashed combing, 28@32c.

LIVE STOCK MARKETS.

NEW YORK, April 27, 1878.

BEEVES.—Receipts for the week, 10,600 head: do., last week, 8,674 do. Average quality runs well. Receipts have weighed enough upon the market to weaken it, and prices are lower than at our last. Corn-fed Cherokees and Texas sold at 8¾@9¼c.; fat bulls, part stall-fed, 3½@4c.; medium to good native steers, 8¾@10c: selected, 10@10¾c. Trade in live for export steady.

COWS AND CALVES.—Receipts are moderate and the former ranges are still current: $35@40 for fair: $60@70 for really good to extra milkers.

VEAL CALVES.—Receipts for the week, at the yards, 3,870 head; do. last week, 2,624 do. The market has ruled weak without really being dull. Dealers think the decline is checked. The range for common to prime has been 1@6¼c. Buttermilk calves, 3½@5½c. Hog-dressed dominal: 5@6c. fair to good; poor, 3@4½c.

SHEEP AND LAMBS.—Receipts for the week, 18,517 head; do. last week, 17,887 do. Market firm at both Jersey City and 60th Street. Poor clipped sold at 3c. ₩ lb.: medium to fair sheared, 4½@5½c.; unshorn, 5½@6¼c. Lambs run fair in quality; quoted 6¾@9c.

SWINE.—Receipts for the week, 25,397 head; do. last week 29,718 do. The market at the close was a shade firmer. Ohio, 152 lbs., sold at 5¾c.; country-dressed, 4½@6c. for fat heavy to medium and their pigs.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

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WHITE AND BROWN LEGHORNS, Light and Dark Brahmas, and White, Black, Buff and Partridge Cochin EGGS for $1.50 per 13 by express. S. M. LIVINGSTON, Humphreyville, Columbia Co., N. Y.

Marsh's Cylinder Bed Foot Lathe.

PLEASURE FOR THE AMATEUR.

BUSINESS FOR THE MECHANIC.

This is a NEW LATHE, on a NEW PLAN, having a Cylinder Bed, which is much more simple and convenient than the old style. It has attachments for circular and scroll sawing and bracket moulding. **New, Novel,** and the **Best Invented.** Manufactured and sold by the BATTLE CREEK MACHINERY CO., BATTLE CREEK, MICH.

Send for Circular and Price List.

TRADE MARK. 'VIBRATOR' Reg. March 31, 1874.

THE ORIGINAL & ONLY GENUINE "Vibrator" Threshers,

WITH IMPROVED

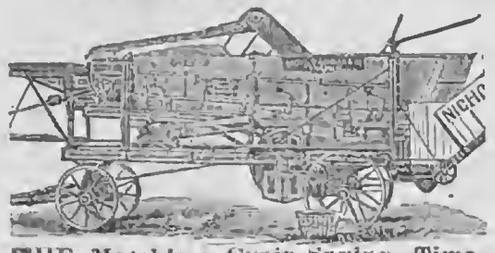
MOUNTED HORSE POWERS,

And Steam Thresher Engines,

Made only by

NICHOLS, SHEPARD & CO.,

BATTLE CREEK, MICH.



THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Rubbers, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than One-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse Size, and two styles of Mounted Horse Powers to match.

STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

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FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which We mail free.

Use the Anti-Friction Hay Carrier.

For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and to the end of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "J," to C. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

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HONEST FERTILIZER

Ammoniated Bone Super Phosphate,

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Pure Ground Bone.

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No Rock Phosphate, Mineral Guano, Land Plaster, Salt Cake, Spent or Sludge Acid, and other inferior materials, enter into the manufacture of my Phosphate, which is solely made of **Bone, Meat, Blood, Pure Acid** and **Potash Salts.**

My Works are always open for inspection to every consumer of Fertilizers.

Highest Premium and Medal of Honor awarded to my Fertilizers by the Centennial Commission, Philadelphia, 1876.

Send for new Spring Circular, containing full directions and testimonials. L. L. CROCKER, 252 Washington Street, Buffalo, N. Y.

CHEAPEST FERTILIZER.

BECAUSE THE BEST.

PREMIUM BONE

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TWO MEDALS

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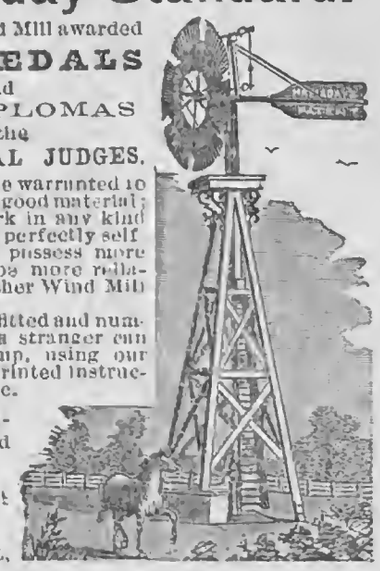

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LADIES IF YOU WISH TO COLOR—

Use Leamon's Dyes.

Warranted the best and cheapest Dyes for all family and fancy dyeing. Dresses, Cloaks, Coats, Ribbons, Ties, Feathers, anything, can be colored any shade. Anyone can use them. The expense is trifling. We especially recommend the Black as much better than logwood. Sold by druggists, or any color sent by Mail, large size, 25c., small size 15c. Send for Dye Book and beautiful Samples, Free.

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THE HAIR is Rendered Soft and Pliable, and its vigorous growth promoted by the timely use of Dr. Jayne's Hair Tonic. Being a good dressing for the hair, and an excellent tonic for the scalp, any one threatened with baldness should give it a trial.

Reading for the Young.

OUR SCHOOL DAYS.

BY T. HAGAN.

CROWDED back, we look upon them
Past, yes past—forever gone—
Scenes of pleasure, hours of treasure,
Sweet to gaze and look upon;
Past, yes, like a fleeting moment,
Oft they constitute an age;
Budding forth from early childhood,
Soon we turn life's gayest page.

Mingling with our infant comrades
Life stamped naught upon our mind:
But when school-days dawned upon us,
Footprints then were left behind:
Traces of a new-born era
On the way by which we trod,
Like the plow which marks its furrow,
Leaves behind the upturned sod.

Thus do we in pensive silence
Wander thoughtfully through the field,
Gathering flowers of early childhood,
Fragrant with life's morning seal;
Straight, perhaps, our course has led us,
Sweetly smells each glowing flower,
Planted well and watered duly,
Index of a happy hour.

Not alone we find we've labor'd,
Many hands came to our aid;
Cheering words, like dews of heaven,
Gave a vigor not to fade.
Helping hands and toiling comrades
Made our interest all but one,
While our troubles, light and narrow,
Soon were lost in blithesome fun.

Pass'd we've now the span of boyhood,
With its memories flooding on,
As the bosom of a river
Ever bears its tide along.
Launched upon more rnffled waters
And beset thy greatest fear,
Swift our bark floats down the current,
And the verdant leaf grows sere.

Pause we then—yea, stop to wonder
How our happy school days sped;
Years rolled by and days long number'd
Would we could again but wed.
Thus we look upon life's morning,
Ushering in a noonday sun;
Veering round, it shrouded leaves us—
Thus the race of life is run.

DEEDS OF KINDNESS.

Sequel to "A Memorial."

BERTIE A. WINKLER.

IT was a sultry day in June when HARPER ARGOW, exhausted by the heat and fatigue of the long walk, seated himself on a log in the shady lane leading to the home of ASHLEY GREY. Pulling his hat over his eyes he wearily leaned his head on his crutch. Midday silence reigned; only at long intervals a harmless locust would break the stillness or a grasshopper disturb the languid air as, snapping his wings, he flew from stalk to stalk on his destructive errand.

In deep thought, he paid no heed to the youthful figure which approached on tiptoe, and only turned with a slight start as he felt his hat removed and the well-known face of ASHLEY GREY peering anxiously into his.

"Sick, HARPER, or asleep?" he asked, taking a seat beside him.

"Neither, ASHLEY," HARPER replied, cheerfully, "I was merely planning while I was resting."

"Just like you for all the world, ever busy with brain or hand. Some new game for the boys, eh?"

"Well, not exactly. I was just on my way to look for you—" he broke off abruptly, "Have you anything to do?"

"No. I'm just ready for some fun. Come tell me your plan," he urged as he saw HARPER hesitate.

"Well, ASHLEY, you know widow BROWN whose twenty acres join your father's woods? Mother sent me to her this morning, and when I asked her about the crop, she commenced to tell me of her troubles; how the only farm-hand she had was suddenly taken sick during haying, and being unable to hire others while the farmers were all so busy, she is in a bad way. Her hay is to be gotten in before the rain which I don't think is very far distant. "Suppose," here he continued the conversation in a whisper until his companion interrupted him with a loud "Bravo, HARPER! that will be capital fun for us. You ought to have the first prize as the inventor of——"

"Hush," said HARPER quickly, "let's go, keep your compliments until it's done."

Arrived, after a brisk walk, near Mrs. BROWN'S premises they concluded that ASHLEY should go ahead and see if the field was clear, in which case he would signal to HARPER. Silently ASHLEY crossed the stream and crept cautiously along the thick underbrush which answered for a fence about the orchard. Five minutes elapsed and no sign of his comrade, HARPER was growing impatient, when a low, prolonged whistle came across the fields, and HARPER hastened to join his friend who with a proud smile on his face, said, "Good news, HARPER, the house is closed, no one in sight. She has no doubt gone to get help. We must hurry or she'll catch us."

This said, ASHLEY crawled through the window of the stable and noiselessly opened the door to admit his comrade. To harness the horse and hitch him to a wagon was the work of a few minutes. Fortunately the lane was covered with soft green sward which effectually muffled the noise of wheels as they drove off, all the while casting furtive glances behind. Arrived on the hay-field they began work in earnest. Ashley conveying the bundles of hay to the wagon, while HARPER was busy with hands, feet, and crutch in loading.

They had cleared more than half the field when, pausing to rest, HARPER pointed to the western horizon where thick black clouds came rolling up. ASHLEY understood the mute language of his friend and with renewed vigor turned to his work. Neither spoke; every minute was precious, every muscle was strained to meet the emergency. Never did boys work harder, and never did HARPER regret the loss of his leg more than now, as with a frown of impatience he flung his crutch over the wagon.

The gale blew fiercer, the lightning flashed sharper, and the horse was growing restless. There was still a large patch of hay to be gathered.

"Oh, for some kind angel to hold back that tempest for a few moments longer," murmured ASHLEY, almost breaking beneath the heavy load he was reaching up to the wagon.

"Hello, boys! What are you doing here. Have you hired yourselves out?"

With a startled look, as though caught in some guilty act, they turned and faced the new-comer.

"Oh! GUY, you're just in time to do us a favor; come lend us a helping hand. I will tell you all about it when we're done," cried HARPER greatly relieved to see it was one of the boys.

"All right, ASHLEY, jump on the wagon, I will bring you the hay while HARPER holds the horse" laughed GUY as he reached his hand to HARPER to help him from the wagon.

The three soon finished their work, and when the horse was comfortable in his stable, hay safe under the shed, HARPER told GUY the whole affair: how they thought they would have some harmless fun, by quietly spiriting Mrs. BROWN'S hay from the field and lodging it under her shed, and him warned not to say a word about it to any one.

"Good! good!" laughed his companions. "That's one of the best tricks you ever played, HARPER. Won't she look, though, when she finds her hay high and dry! She'll begin to believe in spirits."

Suddenly HARPER started and exclaimed "Boys I've lost my watch!" All started in search of it, but after a long vain search on the field HARPER turned for home full of vexation and grief. The watch had been sent to him, when he was lying half dead with his shattered leg, by a strange lady who passed through the village on the train he saved from destruction. It was therefore priceless. After his companions were out of sight, HARPER seated himself on the same log where, in the beginning of the story, he had so hopefully planned a deed of kindness to a neighbor. "Is this my reward?" he murmured almost heart-broken; in spite of his efforts the big tears welled up to his eyes. He sat there until the sun was sinking in the west. He concluded at length to make another search for his lost treasure, when he was confronted by Mrs. BROWN'S flushed face.

"Ah! HARPER ARGOW you are just the one I want. It will save me the trouble of going to your house. "There," she said dropping a gold watch into his hand, "my help found it in the hay he was unloading, I knew it was yours the moment I saw it. I don't know how to thank you enough, though, for getting that hay in before the rain," she murmured as she laid her hand gently on his shoulder and, with eyes beaming with pleasure and gratitude added "your mother may well be proud of such a SON."

"It was'nt me altogether Mrs. BROWN," replied HARPER, his face beaming with joy at his recovered treasure, "ASHLEY GREY, and GUY FORBES did the main part of the work and——"

"Never mind. I known you well enough to know you must have been on the wagon loading it, for it was there your watch was found. I am going to have a grand party in your honor as soon as the busy season is over, will you come?" she asked.

"Yes, if you will invite *all* the boys" he said hesitatingly "Oh! certainly, *all* the girls too." she replied with a merry twinkle in her eye.

OUR INDUSTRY CLUB.

The Queen of the Darners!

IT is over! The prize was justly carried off by a little six-year-old maiden, Miss Elinor Baldwin, of Chula, Virginia.

Any little striped stocking ought to be proud of a pair of such dainty darns, and as for the mother of the little darner——well! we *think* she ought to be a happy woman.

Miss Flora Barton besieged a rent of mammoth proportions and wrought it more skillfully than work we have seen executed by young ladies with college diplomas in their bureau drawers. She is certainly entitled to the position of First Maid of Honor—and to a second prize.

It seems such a pity to abruptly close these pleasant relations that we have decided, with the Editor's permission, to establish an "Industry Club," that shall be permanent—*at least until it closes!*

We had in our mind, for future use, an offer for that class of persons too often overlooked—the boys. However, it does not seem exactly fair that they should wait while the girls are enjoying the benefit of their pets—for we have long since discovered that boys are quite as appreciative admirers of Flora's treasures as are the girls. So we make the following offer:

For the best specimen of fret-saw work (any small article), done by a boy of not over fourteen years, his choice of two dollars' worth of hardy plants from a very fine list which we will send.

The girls shall have an opportunity to compete for a plain-sewing prize. For the best specimen by a girl under ten years, her selection of four beautiful, hardy plants from our list.

After we have awarded the prizes, lists will be sent to the successful competitors.

These offers will close upon the 25th day of May.

ROSE GERANIUM,
Care RURAL NEW-YORKER.

GRANDMOTHER SPEAKS.

I DECLARE! I do not know what this world is coming to. So much extravagance! so much idleness, shiftlessness, thriftlessness and a universal good-for-nothingness! Talk about every generation growing wiser! The wisdom of the present generation is foolishness. Call it croaking, the querulousness of old age or what you please, I know that the girls now-a-days cannot hold a candle to the girls of fifty years ago. Now, how many hours in a day do young ladies sit perfectly idle, with folded hands? If a stranger calls, if a friend drops in for an hour, if they have gentleman-callers in the evening, they must sit still and entertain them. It is not fashionable to do anything; you must devote all the time to the particular entertainment of your company.

When I was in my girlhood, if company called I always had some nice needlework at hand, ready to catch up; and I embroidered yards and yards of nice edging and insertion, and made elegant collars and cuffs in just the very time the young ladies now do nothing at all. I know you can buy Hamburg embroidery so cheap that it does not pay to embroider; I have heard that till I am tired of it. It is not half as nice as that you could make yourself, and does not wear as well, either; and where is the money coming from to pay for Hamburg?

Money does not grow on bushes any more than it did when I was young. A penny saved is better than a penny earned, and if girls only knew how much prettier they look when they are busy than when sitting idle they would do something. It makes me sad to see girls try so hard to be graceful: first try one posture, then another; and if they only had some work in their hands they could be graceful and at ease. Then think of the hours that are lost. Time is money, or ought to be. How much they would give if they could only have a few of these very hours that they squandered away—doing nothing!

I tell you what, girls! I believe in being polite, in treating guests hospitably, and the best rule I ever saw for true politeness is to do to others as you would that they should do unto you. You will find this the best rule for etiquette, ever laid down; and no one would enjoy a call, or a visit, one whit less if you were employed while they were present, in some light work. You can converse just as well if your hands are busy, and sensible persons would be very apt to tarry longer if they saw they were not delaying your work than if you sit like a statue trying to be genteel and interesting. I should rather cut up paper and make lamp-lighters when I had calls, than to be idle. Don't you know the good Dr. WATTS said, "Satan finds mischief for idle hands to do?" and it is just as true as preaching.

No, I din't mean the new-fashioned preaching. I just mean gospel preaching; the preaching that tells us to be good, and we shall be happy. It is a strange pass that this world has come to, but let me tell you the religion that makes ourselves and our neighbors happy, that does good to all, is the genuine article. Those whom I would trust are the every-day Christians that *live* religion. I never had faith in Sunday Christians, any way. But I was telling about girls, not religion. You turned the switch, throwing me off the track. I suppose you don't like me to talk to you about being idle; but really, it makes me feel sad to see the young girls grow up in such a useless way. They don't consider how hard their mothers have had to work to take care of them from babyhood up to childhood, night and day.

But mothers or grandmothers won't last forever, and at the rate girls go on there will be a lack of hard work in the household. Sewing machines, will not patch, darn or do half the work nimble, well-trained fingers can do. I am not sure that the invention of sewing machines is a blessing. I think that girls are not as well off in our country to-day as they would have been if these things had never been made. They might have been well enough if they had not been made to pamper extravagance but, oh dear, when one thinks of the hosts of suits that girls have stitched their very lives away in ruffling, flouncing, and all the superfluousness that machines brought into fashion, the rattle of the thing has a melancholy, knell-like sound to my ears.

There, who has turned the switch this time? Well, I have gone so far off the track this time that I will not try to get back at present, but take another day to finish in. GRANDMOTHER.

DO EVERYTHING WELL.—If you have something to attend to, go about it coolly and thoughtfully, and do it just as well as you can. Do it as though it were the only thing you had ever to do in your life, and as if everything depended upon it; then your work will be well done, and it will afford you genuine satisfaction. Often much more does depend upon the manner in which things, seemingly trivial, are performed than one would suppose, or than it is possible to foresee. Do everything well, and you will find it conducive to your happiness, and that of those with whom you come in contact.

Sabbath Reading.

HOLY COMMUNION.

"As the living Father hath sent me, and I live by the Father; so he that eateth me, even he shall live by me."—ST. JOHN, vi. 57.

"Amen, Alleluja!"

WE sing the everlasting truth
Of words that Jesus said:
There is a holy human life
Upon the earth we tread.
It was poured out our faith to win,
It has prevailed against our sin,
It brings eternal glory in,
E'en here among the dead.

O Lord of all the angel host
And of the church above,
We know Thee in the midst of us
By thy descending dove.
When in our prison stained and dim,
With cherubim and seraphim,
Lift up to thee the heaven-born hymn
Of joy and praise, and love.

Hail, bread of God that men may take!—
His spirit teaches how,
The dying soul that eateth thee
Shall even live as thou.
"Come, eat," the faithful witness saith
To sinners breathing mortal breath,
"And live forever after death;
Yea, live forever now."

This being, with its ransomed powers,
Oh let that body feed,
And make the very life it lives
An endless life indeed.
With faith in thy anointing shod,
It chooses paths which thou has trod,
And offers to the living God
Its whole immortal need.

Soldiers and servants by thy grace,
But heirless children first,
We gather round or Father's board
In hunger and in thirst.
Bold through the love which thou has shown,
Rich without substance of our own,
We give thee, not our best alone,
But all our least and worst.

The treasure worthless in our hands
Transformed in thine we see.
Thou takest from us what we are,
How spoiled soe'er it be.
In thy participating name,
We pour our sorrows, tremblings, shame,
The empty hope, the failing aim;
And then we feast on thee.

It is for service that we live,
Destroyer of our sin.
It is to keep the children's place,
With all its discipline.
But sweet be our communion song,
The whole contented way along,
God gave us thee, and we are strong
For life to triumph in. [*Sunday Magazine.*

A TYPOGRAPHICAL CRIME.

IF one must be singled out and doomed never to receive decent typographical treatment, it should be any other rather than the Bible. I should like to see what would be the effect of giving it a fair chance. I believe it would be read if it were made readable. We ought to have one edition of it without marginal references and without footnotes—unless in the rare cases where these are absolutely necessary. Where the italicised words are necessary to a complete and idiomatic rendering they should be printed in plain Roman; where not thus necessary, they should be dropped. Instead of verses we should have paragraphs, and all figures or other indications of the verses abolished. Conversation should be printed in broken paragraphs, with quotation marks, just as in a novel. Poetry should be printed as poetry. Instead of being crowded into one volume, the book should be in four or five moderate duodecimo volumes, with large type and good paper, so that it could be at once held without tiring the arm and read without straining the eyes. Finally, this book should have a good analytical index, and does not serve the purpose of one. If presented in such a form, the Bible might be enjoyed as literature and perhaps better understood as a divine authority.—*Rossiter Johnson, in Sunday Afternoon for May.*

THE VALUE OF BEAUTY AND UTILITY.—Which is the more valuable, the cup-shaped blossom of the purpled convolvulus, or the ripened ear of corn?

Each has its value, and probably in value neither exceeds the other. We prize the flower, although its bravery lasts only a day, since every beautiful object delights the soul and is in truth a smile from God. And we likewise prize the ear of corn, which is also a thing of beauty, though of a humbler kind, for it has a mysterious power by which it sustains the strength of man, and fills his heart with joy.

THERE is no other name, no other nature, no other blood, no other merits, no other persons to be justified and saved by, but Jesus Christ. All the tears in the world cannot wipe off one sin, nor can all the grace and holiness that is in angels and men purchase the pardon of the least transgression. All remission is only by the blood of Jesus Christ.

GOD keeps an exact account of every penny that is laid out upon him and his, and that is laid out against him and his; and this in the last day men shall know and feel, though now they wink and will not understand.

PERSONAL ITEMS.

James Gordon Bennett is said to have made $60,000 on O'Leary's walking victory.

It is said that the Prince of Wales has none too much of the hair apparent about him.

Senator Cameron and Miss Sherman are to be married in Cleveland on the 9th of May.

Ex-Queen Isabella will sell in July in Paris a large proportion of her finest jewels, the value of which estimated at $2,500,000.

Henry Ward Beecher at sixty-five is very red in the face and puffy, and seems always in earnest, even when he walks. There is an idea, when you see him, that he is rushing, as if he might lose a train.

A brother of the late Vice President Wilson politely opens the door for visitors to the Senate chamber, and a brother of Senator Blaine, who only slightly resembles him, helps fold speeches, etc., in the document room.

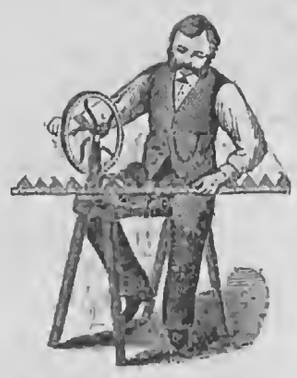
Senator McCreery does well for a humorist, because he is comical in appearance. His large head is completely bald, except a fringe of black hair to border it. He is tall and broad-shouldered, and always wears a swallow-tail coat. His face wears a solemn expression, that renders his jokes all the more surprising.

When Eugene Hale married Miss Chandler, Papa Zach. Chandler gave him $100,000 for a wedding present; and at the advent of every grandchild, a check for $20,000 is forthcoming, to be placed to the credit of the child as a nucleus of its future fortune. Babies are never unwelcome in that household.

Mrs. Charles Dickens has become reconciled to her sister, Miss Hogarth, who, after the separation of the novelist and his wife, acted as the former's housekeeper. The two sisters are now living together. It was of Miss Hogarth that Dickens said: "She was the truest and best friend man ever had."

Hon. Montgomery Blair resides in one of the most elegant mansions in Washington, directly opposite the Executive park and the magnificent State, War and Navy departments. He has a country residence in Montgomery county, Maryland, and thus secures a seat in the Legislature. He has a charming family, and an invitation to a *soiree* at the Blair Mansion is considered the acme of social superiority.

Implements and Machinery.



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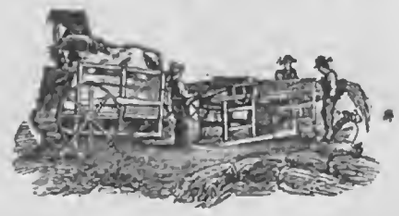

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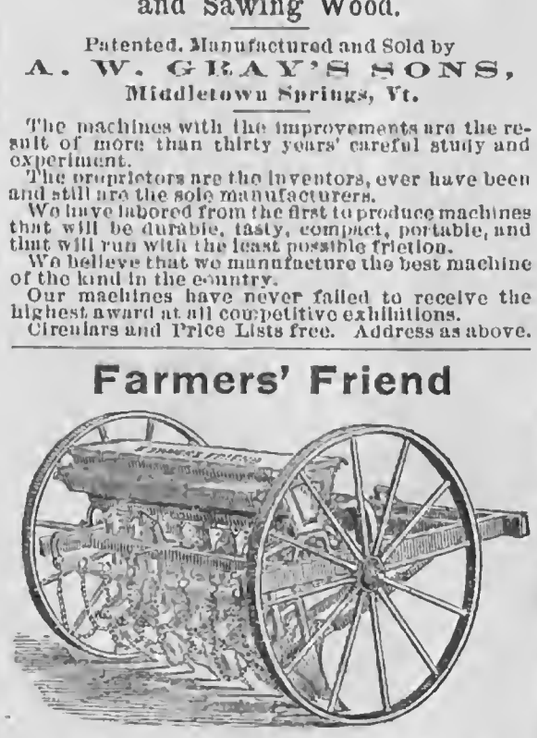

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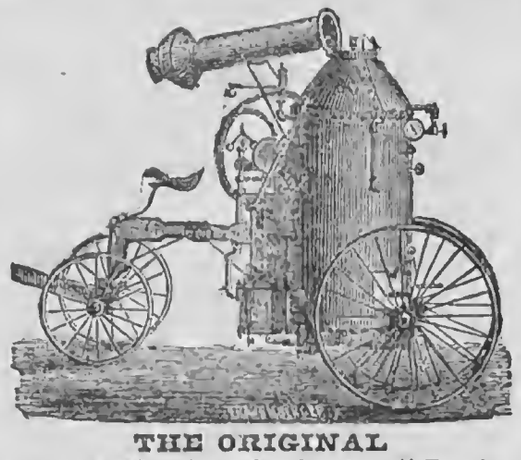

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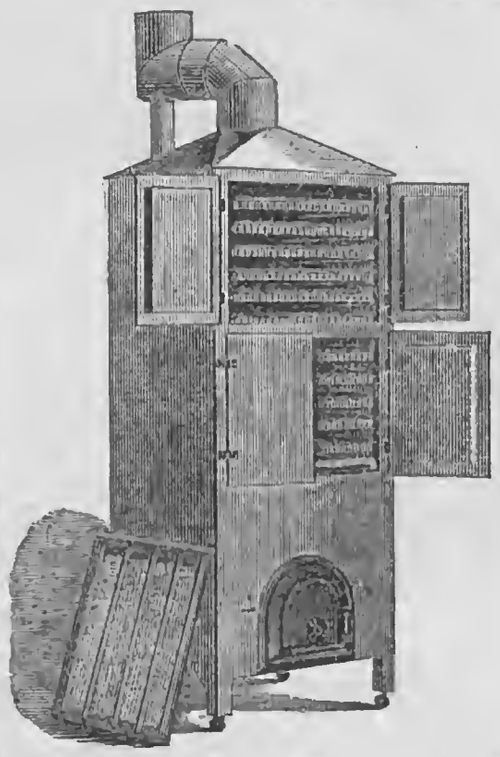

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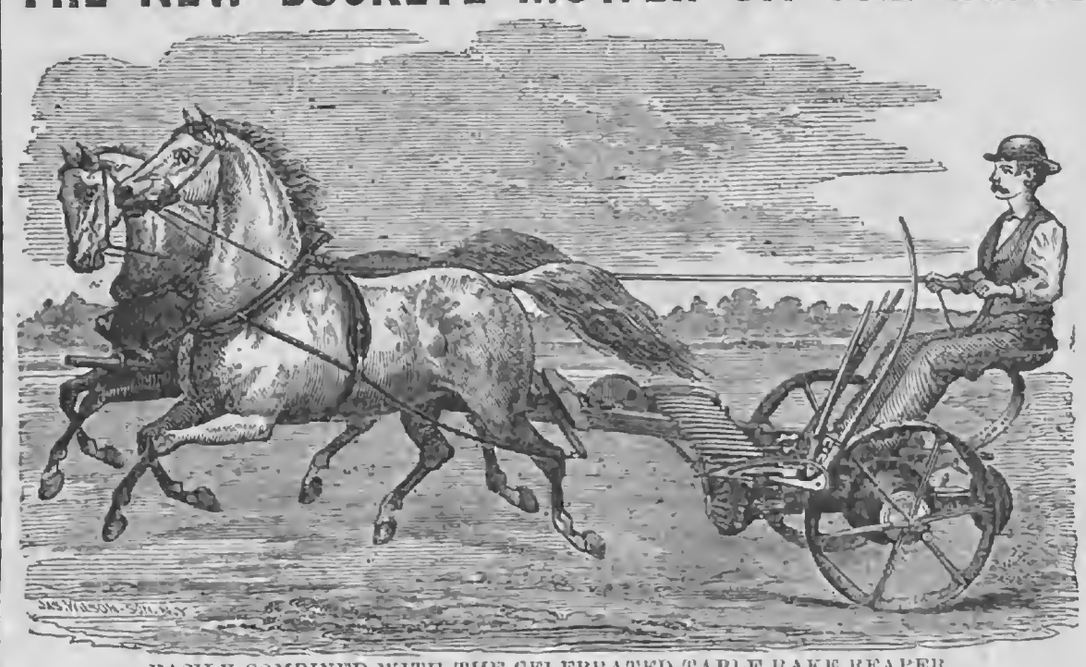

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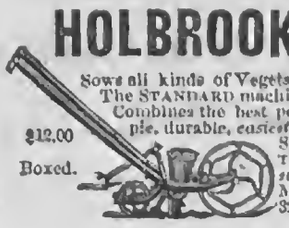

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No wonder a ship is called "she." She has shifts, stays, an apron, hooks and eyes, pins, caps and ribbons, hoods, poppets, and a husband.

KANSAS teacher: "Where does all your grain produce go to?" Boy: "It goes into the hopper." Teacher. "Hopper? What hopper?" Boy, (triumphantly): "Grasshopper."

"GENTLEMEN, I introduce to you my friend, who isn't as stupid as he appears to be." Introduced friend, with vivacity: "That's precisely the difference between my friend and myself."

REV. JOSEPH COOK said that "Darwin's hypothesis of pangenesis involves several untenable subsidiary hypotheses." Very few people supposed it was as bad as that.

A VACUUM would be the best place for a fellow to fall into, wouldn't it Bill? for then, you know, he wouldn't fall against anything." "Yes, he would, though," stoutly answered Bill; "he would fall against his inclination."

Two wealthy wood carvers in Massachusetts have founded a home for destitute members of the craft. Why don't some of our wealthy poets found a home for destitute poets? This could be done by roofing in one or two continents.—*Danbury News.*

A BOSTON girl fell while dancing on New Year's night and broke her arm.—Exchange. Her brother should have taken her partner out and schottisch head off.—Harrisburg Telegraph. We have red ow a better way than that, but less fatal. Hit him on the head a few time s with a polka.—Norristown Herald. This would doubtless have the effect of putting a quadrillateral head on the poor fellow.—Oil City Derrick. Waltz the matter with your fellows? Such puns are enough to make the strongest man in Virginia reel.—Fulton Times.

A Suggestion to the Traveling Public.

Tourists, emigrants and mariners find that Hostetter's Stomach Bitters is a medicinal safeguard against unhealthful influences, upon which they can implicitly rely, since it prevents the effects of vitiated atmosphere, unaccustomed or unwholesome diet, bad water or other conditions unfavorable to health. On long voyages, or journeys in latitudes adjacent to the equator, it is especially useful as a preventive of the febrile complaints and disorders of the stomach, liver and bowels, which are apt to attack natives of the temperate zones sojourning or traveling in such regions, and it is an excellent protection against the influence of extreme cold, sudden changes of temperature, exposure to damp or extreme fatigue. It not only prevents intermittent and remittent fever, and other diseases of a malarial type, but eradicates them, a fact which has been notorious for years past in North and South America, Mexico, the West Indies, Australia and other countries.

NOT QUITE THE SAME THING.

SMALL CHILD (whose favorite Aunt is "engaged.") "Grandma, where is Auntie May?"
GRANDMAMMA.—"She is sitting in the Library with Captain Herbert, my dear."
SMALL CHILD (after a moment's thought.)—"Grandma, couldn't *you* go and sit in the Library with Captain Herbert, and Auntie May come and play with me?"

To OUR READERS.

WE beg to announce that the RURAL NEW-YORKER issue of May 11th, 1878, and thereafter will be enlarged to the extent of four columns. This will be in effect the same as issuing a four-page supplement every four weeks. In other words by lengthening and widening the columns we shall give our readers what is equivalent to seventeen of our present pages.

This change which involves considerable expense, we submit, is in accord with our reiterated statement that we should by every means in our power respond to the gratifying appreciation which has been extended to the present management of the RURAL NEW-YORKER.

We take some pride in the fact that no other family paper in this or any other country has, during the past eight months, placed before its readers, in its several departments, a higher class of writings, and offer this as an earnest of what may be counted upon for the rest of the year.

The price of the RURAL NEW-YORKER will remain, at least for the present, the same as heretofore.

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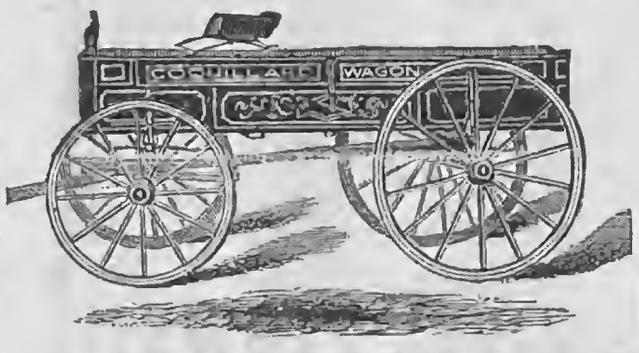
A. COQUILLARD,
South Bend, Ind.



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Entomological.

CARRION BEETLES.

NATURE'S means of protecting one portion of her children while providing for another portion, are illustrated excellently in the workings of scavenger insects. The rapid dissolntion which follows the death of the bodies of animals would fill the atmosphere with noxions gases, were this dissolution to take place solely under the influence of the elements. By the intervention of insects the dead remains of animals are converted quickly into living tissues, and that part of the animal creation which would otherwise suffer from a tainted atmosphere is providentially delivered from annoyance and danger.

The accompanying figure represents some of these scavenger insects at their beneficent work The principal insects which are represented as attacking the mole, belong to four families of beetles and one family of flies. If we take up these families one by one, we may get a clear idea of the several parts which they play in the order of nature.

The Short-winged beetles, called Staphylinidæ in the books, are easily recognized by the character which gives them their name. Two large ones and one smaller one are figured near the middle of the body of the mole, others are represented on the grass and flowers in the lower part of the figure. More than four thousand species are known. Most of them live on the ground in companies, nnder decaying matters, many of them in manure, in carrion, in woody fungi and quickly-perishing mushrooms, or under the bark of trees, under stones, or in sandy places; a few live in the colonies of ants and others upon flowers.

The "Carrion beetles" which are by the best rights entitled to monopolize their name, are called Silphidæ by the naturalists, and like other beetles here represented, have the tips of their six feet developed into five joints. The antennæ, those wonderful organs of touch, taste, smell, hearing and perhaps social intercourse, are usually eleven-jointed and thickened gradually towards the tip, but sometimes they end in an abrupt knob. The hip-joints of the front and middle legs of the Silphidæ are conical, projecting freely from their sockets, and the rings of the belly are six in number and freely movable; by these characters the Silphidæ are distinguished from all the rest of the five-toed beetles which have clubbed antennæ. They are all found abont the carcases of animals, either eating them or laying their eggs upon them, and have a bad odor. If choice food is lacking, they eat decaying vegetable matter, each other, or other living insects. They have a very acute sense of smell, and are attracted from great distances by the odor of decaying bodies. Four hundred and sixty species are known in the world, and a large proportion of these occur in North America. The two principal genera of this family are called Necrophorus, or the burying beetles, and Silpha or the special "Carrion beetles." In the figure the lowest insect at the left hand is a Necrophorus; the one next to the right of the left hand, a fly; the similar one nearly above it, and the other similar one higher up in the same direction are Silphas. So also is the larger one, resting on the ground near the Necrophorns.

The larvæ of the Silphas feed upon carcases as they lie, but are sometimes so nnmerous that their usual food does not occur in sufficient qnantities; then hey have been known to do considerable damage to turnips by eating the young leaves. In some regions, where sugar-beets are raised in great qnantities, the larvæ have been fonnd on the young plants in broad daylight in such quantities as to make the plants look black, althongh usually the larvæ remain hidden.

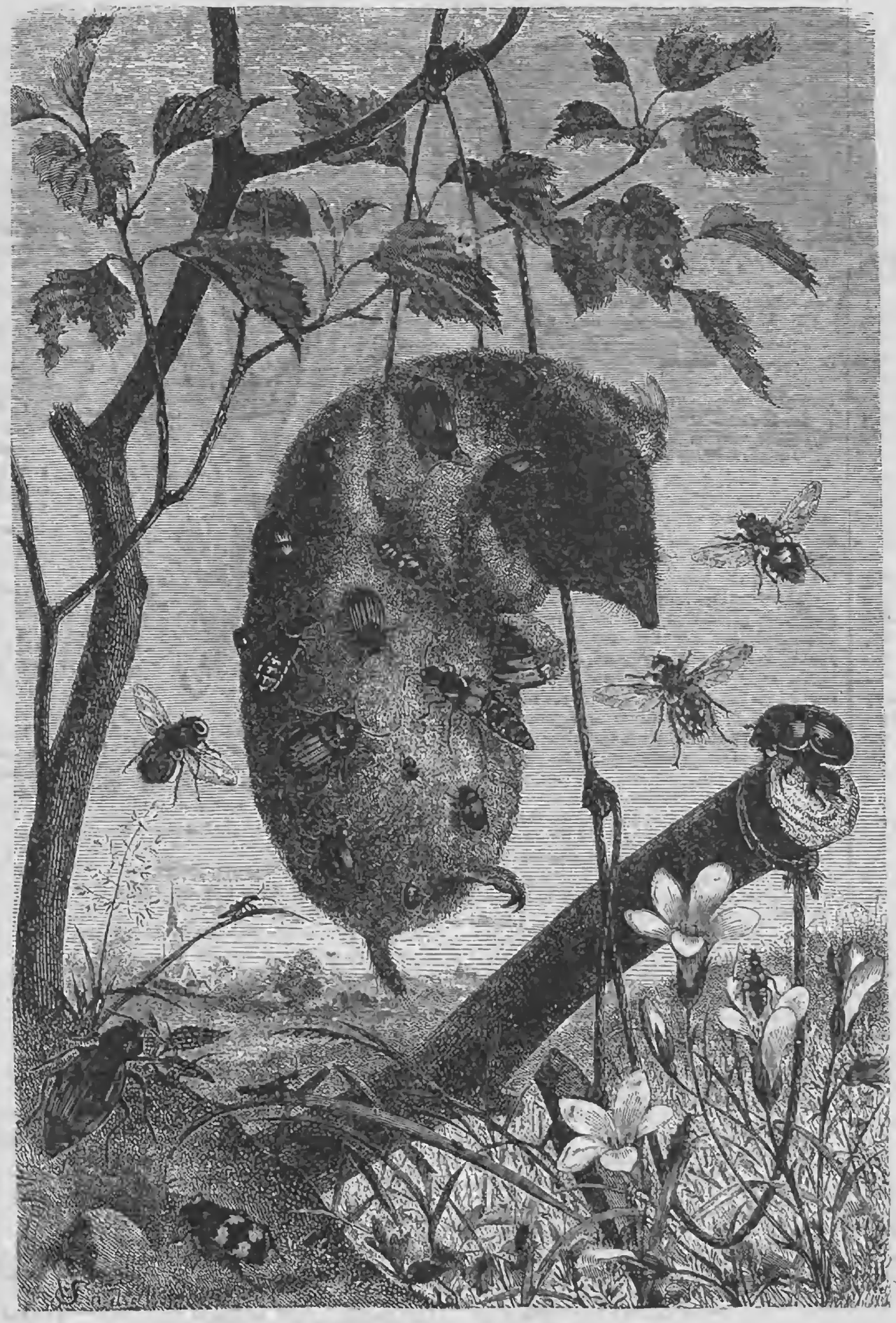
The third family of beetles which are represented as attacking the mole is that of the Histeridae. To this family belong the beetle near the tail of the mole, just below the lowest Silpha, and the two similar beetles on the back of the mole. These beetles are very compact and hard, and, when frightened, draw the head and legs so close to the body as to seem destitute of limbs. They feed on decaying vegetable or animal matter, in manure, in fleshy fungi, under bark or in ants' hills. On account of the very small size of their months they can only feed upon liquid food. Eleven hundred and fifty species are known.

The fourth family of beetles is that of the Scarabæidæ, or the Leaf-horn beetles, so called because the club of the antennæ has the form of three or four leaves laid face to face together. To this family belong the beetle highest up on the neck of the mole, the one just above the hind leg and the one on the end of the stick. About six thousand five hundred and fifty species are known, and these have very unlike habits. The ones figured usually feed upon and lay their eggs in manure, but content themselves at times with the flesh of carcases.

The flies which are figured are different kinds of blow-flies, whose maggots consume decaying flesh.

Hornets do not disdain to eat the flesh of newly-killed animals, nor bntterflies to drink the juices of animals, even when they are far gone in putrefaction.

By their united labors the insects make quick disposition of wasting organisms and make room for the growing ones to develop in their stead.



CARRION BEETLES.

Farm Economy.

ARTIFICIAL MANURES.

A Letter from J. B. Lawes, of Rothamsted, England.

DEAR SIR:—You ask for some hints upon the subject of artificial manures, to aid your farmers who are about to experiment largely with them.

Assnming that these experiments have for their object to ascertain whether artificial manures can be profitably nsed, I do not think there can be mnch doubt in regard to the snbstances which should be employed. I am often told that the experiments carried on here have but little valne beyond the boundaries of the farm. I see no reason for such restrictions. An English pig fattens perfectly well upon maize grown in the States, and your home-grown pigs would doubtless fatten upon English-grown barley. Why? Because both contain the same chemical ingredients, although in slightly different proportion. The food of a cereal crop cannot differ, in whatever part of the world it may be grown. Until experiments prove I am in error, I shall certainly assume that the soils in the United States are more likely to be benefited by nitrogen in some active form, such as nitrate of soda, salts of ammonia, than by any other snbstance, and after that by phosphoric acid in some solnble form.

The United States is essentially a grain-producing conntry, and the statistics show that cereal crops occupy 77 acres ont of every 100. For reasons which I have explained in several papers, land under constant grain crops is exhausted more rapidly of its nitrogen than of mineral constituents, such as potash and phosphoric acid. While, therefore, I should be disposed to say that experiments should be tried with nitrogen in some active form, alone, and in combination with solnble phosphate of lime, and that in all probability one or both these manures will supply all the requirements of the crops, I do not pretend to give any opinion in regard to the profit which would be derived from the use of these manures, as I know nothing in regard to the cost of them, or the value of the products grown. I will, however, point out how this question of the profit attending the nse of artificial manures should be considered. Our cereal crops (straw and grain together), as we harvest them, contain about one per cent. of nitrogen, and as nitrogen is by far the most costly element in purchased manures, the profit or loss from its use will depend more than anything else upon the amount which can be recovered in the crop. To give a plain illustration of my meaning, I will take the case of an application of 100 lbs. of sulphate of ammonia to an acre of maize. Maize is so low in nitrogen, compared with the other cereal crops, that probably 100 lbs. of the total crop would contain less than one per cent. of nitrogen; but calling it one per cent., 100 lbs. of sulphate of ammonia ought to increase the crop by 2,000 lbs., as sulphate of ammonia ought to contain 20 lbs. of nitrogen. On an average of seasons the increase obtained will certainly be less than this.

In my experiments where grain crops

are grown continuously, and receive the same amount of nitrogen every year, I do not recover more than one-half the quantity of nitrogen in the produce, and I generally obtain a better result where I use nitrate of soda as the source of the nitrogen. If experiments are tried with nitrate of soda in comparison with sulphate of ammonia, the proportion of the two substances supplying equal amounts to the soil, should be 80 lbs. sulphate of ammonia to 100 lbs. nitrate of soda. In 1847, or a little more than thirty years ago, I directed attention to the question of recovery of nitrogen, and to make it plain, I said that it required five pounds of ammonia to add one bushel increase to a crop of wheat. Although the farmers of this country have used artificial manures continuously ever since the time I name, they have never grasped the idea, nor does the question of increase in relation to the supply of nitrogen in the manure, ever become the subject of discussion amongst them.

Whenever the agriculture of a country demands a more concentrated produce than the soil can furnish from its own resources, the supply of nitrogen in manure and its recovery in crops, assume an importance superior to all other questions relating to manures. Both as a question of science and economy the subject is equally interesting, and should your agriculturists view it in the same light as I do, they will hardly allow thirty years to pass without attempting to measure growth by the amount of force supplied to the crop.

SOMETHING ABOUT GOOD TOOLS AND A GOOD TEAM.

PROFESSOR W. J. BEAL.

For a beginner it is better not to buy a very large assortment of tools at the outset. His expenses are likely to be large and he may not know exactly what he wants. Of this he may be certain that poor tools are not economical. Remember that a day's work of a man is often worth a dollar or a dollar and a half, while a good hoe can be bought for half that amount. Labor that is performed with a dull, rusty hoe that is loose on the handle, will cost more than that performed with a nice new implement. It is economy to throw away poor tools and buy good ones. To some extent the same is true of a team. It takes as much time of the driver to care for and drive a poor team as it does a good one, while the cost of feeding each may be about equal. The wages of a driver will cost about as much as the wages of a team of two good horses. Why waste a half or a third or even a quarter of the labor of a valuable man in setting him to work with a cheap, light or inferior team?

A good handy *fast-walking* team is more economical at a high price than a team which walks slow or which is awkward or of poor quality. A poor tool or a poor team is always dear at any price and is one of the signs of mismanagement and poverty. An implement should be as light as is consistent with strength. There is a great satisfaction in handling excellent tools. It is well to be a little shy of patent high-priced implements of all kinds, unless you have plenty of money to spare.

The thrifty man, on garden or farm, will take care of the tools and the team. He will paint the former, oil them, clean them, and house them. The careless man will leave them in the open air, scattered about the premises where they were last used, or he will leave them along the road or in the lane, or in front of his barn or dwelling-house. We can nearly always judge of a farmer's care, and generally of his success, by seeing his tools and how he takes care of them. Many men are heavy-fisted and twist and pry and break or soon spoil nearly every implement they lay their hands on. They are proud of displaying their strength. They are very unlucky. Others, or the best of hands, take hold of tools with care and use them properly. Such men are handy, lucky (?) and profitable to employ. To which class will each of my young readers strive to belong: the handy and expert or the clumsey and slow? These remarks will apply to men everywhere, in all trades, in every business or even in the professions.

The gardener or farmer will need a few carpenter tools. It will be very fortunate for him, if he has had some instruction and practice in the use of such tools and in keeping them in good repair. Other things being equal, the natural mechanic will have much the advantage over the one who has no tact in using tools. Mechanical ingenuity is a priceless gift, but those who have not this gift can learn to do much better than they usually do. Some of the most profitable and interesting work I ever performed was in planning and in making suitable places for all of my tools and implements. When of suitable size and shape, an implement always looks better when standing up or hanging up. For small tools, a sort of cupboard, four feet wide eight feet high and twelve or eighteen inches deep, is convenient. Two doors swing open in opposite directions. A narrow strip, up and down the center of the front, will hold the doors closed when desired. Such a case will hold a surprisingly large number of tools. They may be hung on the inside of the doors on convenient blocks or pins made for the purpose. On each side of the inside of the case I have made small pockets for an assortment of nails, screws, bolts, rivets, wire, gimlets, cold-chisels, twine, a vice, small rope, and numerous other small articles which cost but little and are often needed in cases of an emergency. A person will save much time and perplexity by thus being a little fore-handed. In saving perplexity, he enjoys life the better, makes money faster and will probably live the longer.

A small slate or shingle should hang near, on which should be noted down at the time whenever any article gives out. This may be consulted each time before going to town and the supply should then be replenished. The proprietor can thus save much time and be saved many journeys to town in going for small articles without which it is impossible to proceed in his work. After a little it will be a good thing to have an extra plow, hoe, rake, spade, fork, saw, hatchet etc., in cases of an emergency. Often half the value—yet, the full value of an implement—may be saved by having it on hand in case of breaking something or in case of wanting to employ more help. It is not always economy to use the fewest number of tools possible.

The Garden.

THE FARMER'S GARDEN

In times gone by and even now too frequently the farmer's garden was a quarter acre, more or less, of land inclosed by a fence, and where well cultivated, it contributed largely to the health and comfort of the family as well as to the prosperity of the farmer himself. But these little gardens are expensive luxuries, requiring a large outlay of severe, back-aching work. Where land is so plentiful, as on most farms, the model garden will be so arranged that all crops can be cultivated by horse-power and some one of the many improved implements adapted to the work.

Where necessary to inclose the garden, leave, for turning a border of grass, about twelve feet wide, on all the four sides. Plant no trees on this border, for unless an ample space is occupied they will soon cast a shade over a large share of the area. Plant in rows running the whole length and far enough apart to allow a horse to pass. These must be regulated according to the varieties planted and the training of the horse. I remember working successfully a well-trained horse attached to a common cultivator of one tooth among carrots only fifteen inches between rows, thereby saving time and hard labor. I sometimes plant double rows of onions, lettuce, etc., that is, every second space is just wide enough to admit of using a hoe while the others are wide enough for horse cultivation.

I have found fall plowing beneficial, especially on heavy lands. When the earth is thrown up in rough ridges it gives the frost a better chance to operate on the soil during winter. On the arrival of spring, when soil and weather are propitious, then let the cultivation commence.

Begin at one side with long rows of the early kinds which, when large enough to be seen, can be safely worked with a light cultivator, using common harrow teeth as being cheap and effective, in lieu of something better and more costly. As often as you work that portion already planted, go over the whole, thus destroying a vast number of weeds and preparing, for the later plantings, such a fine seed-bed as will push the vegetables to their best growth and require much less labor than where the weeds are allowed to riot until planting time. Then, again, as the early crops are removed and no second crop is to follow, give that portion a thorough fall fallowing. Some advise planting the coarser vegetables in the field with the corn; but as is often the case, since the cornfield is a half mile or more away, the overburdened house-wife will find the walk rather too much on a hot morning when the butter must be worked and the bread watched in the oven; hence it is quite likely the good man would find but few vegetables on his table after they were grown. I plant my beets, beans, peas, onions, potatoes and everything else that can be grown in that way, in hills instead of drills and find a great saving of labor, especially hand-weeding. I admit that a larger crop may be grown by close planting, but yet I grow vegetables by my plan at a less cost, and moreover the "no time" excuse for a poor garden will not apply in this case, as a half-hour's work per week during the season for each member of any farmer's family, will produce an abundance of the usual vegetables.

M. B. Prince.

TAKING NOTES AND MAKING PLANS FOR THE GARDEN.

PROFESSOR W. J. BEAL.

Where several varieties of one or more species are raised, they should be accurately labeled. Do not trust to memory for a single day. You may be ill or called away from home or wish to entrust the harvesting of the crops to new persons.

Nice suitable labels can be bought much cheaper than they can be made by hand. To prevent errors by loss or misplacing of labels, a small plan of the grounds should be made. Even a rude pencil sketch which is not mathematically drawn to a scale, may often save confusion. On the plan, record the name, relative position of the plants and number or number of rows of each, their length etc. This will aid in making accurate experiments.

These simple notes, requiring but little time, will also often serve a useful purpose in arranging for a rotation of crops in succeeding years, and serve to aid in planting the right amount of each variety and in determining the proper time to plant it.

To aid in keeping the sorts pure and unmixed, samples of plants, like strawberries, raspberries or any other thing which is likely to spread, should be planted in squares or blocks with considerable space between them; or still better, separate the varieties which look alike by a plot of some other crop. The nearer any two kinds look alike, the greater the need of leaving a broad space between them or of planting unlike things between them. Small seeds of new plants and all seeds which start slowly should always be sown in rows or drills, never broad-cast. This will aid in early weeding.

The careful gardener will take notes of his successes and failures; the merits and demerits of this and that variety; the proper time of sowing ripening etc. These notes will be taken every few days in the field, not trusting to memory. He will thus preserve and make use of all his good ideas. They will be impressed on his mind.

The plans should be well studied and worked over during the early part of winter. Most people never have a definite plan of operations, but shift often and work in many ways to a great disadvantage. Every person can accomplish more with less labor and consequently with greater profit by working to some plan. In case of an emergency, he is the better prepared to change with intelligence, success, and little loss of time.

Agricultural College, Lansing, Michigan

OKRA, OR GUMBO.

The seeds of Okra may be treated the same as coffee and answer very well as a substitute. It is usually cultivated for its fruits, however, which when green are cut up and used as a flavoring for soups. Sometimes they are used pickled, the same as capers.

Okra (Hibiscus esculentus) is a half-hardy annual, needing a rich soil and a warm, sheltered situation. The seeds should be sown in drills a foot apart and the drills three feet apart. There are several varieties, of which that known as "Improved Dwarf" is as good as any. The cut shows the leaf and fruit.

CULTIVATION AND USE OF OKRA.

Okra is grown here extensively, though not in as large quantities as most other sorts of vegetables. It is very productive and of easy culture, so that almost any family that possesses only a small garden, raises a few plants to draw its own supply from. It would not pay the professional gardener therefore to devote much labor and space to its growth.

At corn-planting time, about half-a-dozen or so seeds are dropped in hills, from three to four feet apart, in properly prepared ground. When about four inches high, the plants are all thinned out to one, kept hoed and clear of weeds. Any ground of medium fertility suits it, provided it is not too much shaded. In order to keep the plants bearing through the whole season, the pods ought never be allowed to harden or form seeds. There are two varieties of it, the long-podded tall, and the short-podded dwarf sorts. The latter is generally preferred.

Okra is used in soups; it is also stewed and served like asparagus or salsify. French cooks make a sort of dish—called gumbo—by conglomerating a variety of vegetables, herbs and spices; the chief ingredient of it being okra. The ripe seeds are sometimes used as a substitute for coffee. Parched and ground, they are sometimes given in the last stage of yellow fever, it being the popular belief that they are a specific against the black-vomit. Okra stalks, treated like bass-wood bark, yield a tough fiber which is not unfrequently used by market gardeners for the purpose of tying their vegetable bunches. Okra as an aliment is considered wholesome.

Harris Co., Texas. G. Martel

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

Old places are always interesting, but an old farm-house and grounds which have been in the hands of thrifty owners, are especially so. We love to hear the children say, "Grandfather planted that tree; that bush was a favorite of grandmother; father raised that tree, and mother set out that shrub." Old homesteads should have hallowed associations. They should link us with the past in life, and the future in death. Here our ancestors lived, and from here they went, waiting for us to follow. The very air is to us not like other air, but filled with memories so tender, and the rustling of the leaves, and the murmurs of the branches overhead and all around, are so suggestive and so full of memories that it is all sacred. We must teach our children to have more respect and veneration for age. Let them guard carefully what our fathers planted, and have a jealous care for the things they loved.

How welcome spring is to the animals! They look over the barn-yard fences as one would look out of a prison, and long for the green grass. Instinct tells them it is the very medicine they want to clear their systems of fever, to purify the blood, and renew all the functions of life. Get them out as soon as possible, and at night feed a little hay so that the change may not be too sudden. We had a cow abort once by turning her abruptly out to pasture. Sheep will not eat much hay after they go out to grass, but they will eat oats, and this will keep up their strength. The first grass, or rather the young grass, is weak, immature, and stock need something with it or it will make them too loose; generally there is more or less old, dry grass mixed with the new to act as an antidote or check, but this is not always the case, and then they should have some dry fodder; straw is better than nothing.

We turned the sheep out into a lot we are going to sow with oats, and as it was surrounded by a stone wall they have got into a way of climbing over it. To-day they have been put into the regular sheep pasture. If this experiment of keeping them a few days, or trying to, in the oat lot results in making them unruly, we shall regret it. Last year they did not get out once, because the field was fitted for them. It is a poor practice to let stock of any kind run out in the spring before the fences are fixed, and then they should be put into the lot intended for them and kept there without changing, as long as possible. This is one objection to changing pastures, as it is apt to make stock uneasy and breachy. We have taken up dividing fences and made the fields larger so stock could range longer without being moved from one lot to another. With a large range a poor fence will keep animals, while in a small field the fence must be higher and stronger.

The pet lambs are growing finely, showing that instinct was, and is, a better guide than old notions. They have got too big now to eat through a rubber nipple and have been taught to drink. What a stubborn instinct that is which makes a lamb, or colt, or calf, look up to find food when first born, and how hard it is to make them look down and drink! These lambs have grown as fast as the best ones in the field. What rollicking fellows they are!

Old Jack sprained his ankle two months ago. Bottles of liniment and gargling oil were applied. He was used a little, but it made him lame, and so, finally, he was condemned to the hospital and another horse put in his place. We made up our mind that rest was the best medicine for sprains, so his water was carried to him and he was not taken out of the stall for a month. Meanwhile nothing was put on. He simply stood still or lay down as he liked. The swelling went down, and now he is out to grass and does not limp at all. He is going to have another month of rest to give the muscles time to recover their natural tone and strength, and then old Jack will be himself again. By the way, he is twenty-four years old this spring and a veteran of the late war.

We sigh every day for rye straw. It is so nice and clean for bedding the little pigs and calves. Oat straw gets so broken up by the

machines and it is dusty and wets up so quickly. Rye straw would be clean and would last five times as long for a bed as oat, and then the pigs would be so much cleaner. The old hogs have all had to be scrubbed with soap-suds. It did them good. No animal will thrive when dirty. It took the man a half of a day to scrub the hogs, and it was time well spent. He put a slipping-noose on their upper jaws and tied them up, and with a scrubbing-brush get the dirt off and made them look really handsome. When tied up he put rings in their noses and now they are ready to go out to pasture as soon as the grass gets a little larger. A rainy day is a good time to wash the hogs, and the cattle too. Use warm water and rub them quite dry so that they will not get cold.

Veterinary.

MALIGNANT ANTHRAX.

I wish to inquire if any of the readers of your excellent paper can give a cure for or preventive of black leg in cattle. I have just lost three good yearlings. When first taken they were a little lame in one hind leg; the hip soon swells and feels spongy. They died in twelve or twenty-four hours after first noticing them. Examination shews the leg and side very dark and bloody. (All were in good condition.) In former times I have lost six in about the same way.

Wright Co., Iowa. O. E. French.

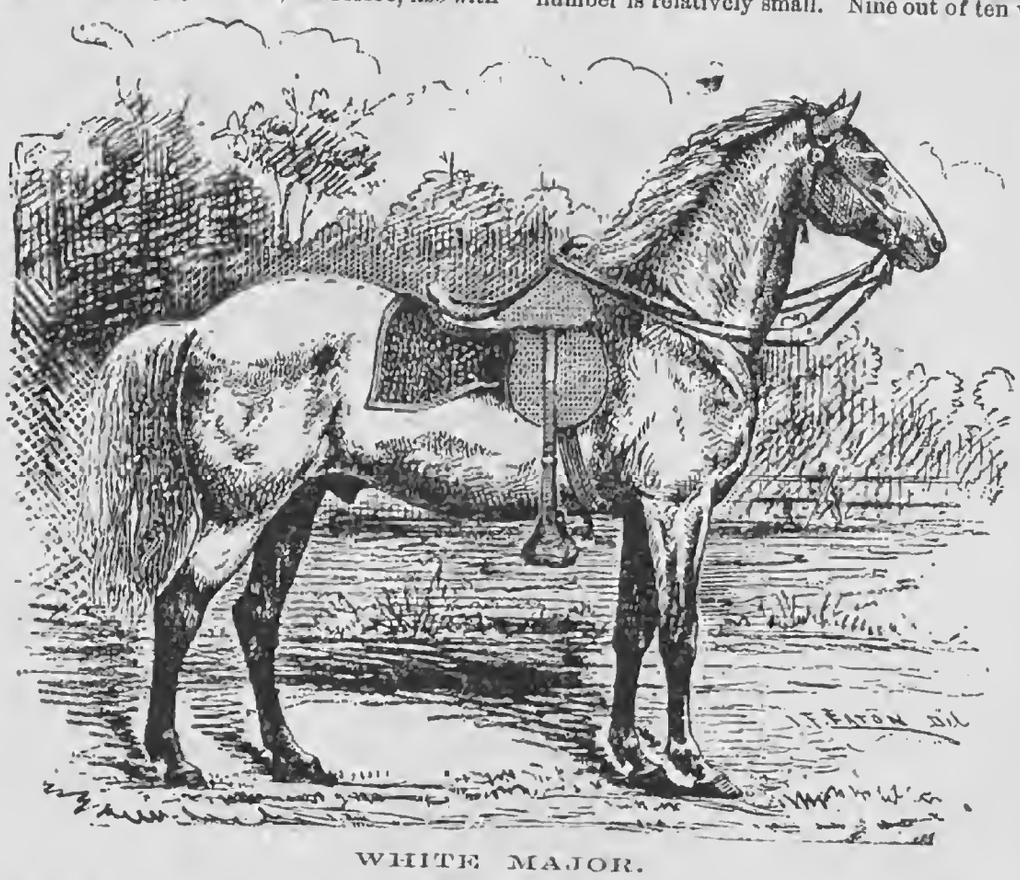
ANSWER BY D. E. SALMON, D. V. M.

Black leg is one form of the disease known as malignant anthrax or charbon; and as there are so many inquiries in regard to the different varieties of this trouble at this time of year, I will give such particulars as are necessary to an understanding of its nature. Anthrax is a disease of the blood and belongs to that class of maladies known as contagious fevers. Whatever the form of the disease, there are certain peculiarities by which it may be known; the chief of these is the condition of the blood, which has a black, tarry, viscous aspect, becomes red but slowly by contact with the air, does not coagulate, or at best coagulates but imperfectly; the globules are broken down or dissolved so that it leaves a dark, peculiar stain on tissues with which it comes in contact, or even passes through the walls of the vessels, causing large black patches of flesh (extravasations). In addition, the blood contains certain microscopic bodies known as bacteria, which have been considered as peculiar to the disease, and by some as its direct cause; there have lately been some experiments made in Germany which tend to confirm this latter supposition. But, even if such experiments should prove conclusive, they are far from having the importance that has been ascribed to them. We know, for instance, that bacteria develop in blood from healthy animals, which is allowed to decompose in contact with the air; consequently, such spores must be continually floating in the air, and as all animals are not affected with anthrax, it shows that there must be a certain condition of the system, caused by the food or surroundings, which assists the development of the disease. And of this we were equally certain before these experiments were made. In this disease the spleen, liver and lymphatic glands are enlarged, the mucous membranes are often a dark red color, there is a great tendency to decomposition, which makes the animals very offensive, even before death; there is also formation of gases in the tissues, which causes the crackling sound when handled.

In some cases we find only the changes in the blood and internal organs—this is *anthrax without localization;* in other cases there are swellings on the limbs, tongue and different parts of the body—this form is called *anthrax with external swellings*, and is commonly known, according to the point attacked, as *black-tongue, black-quarter, black-leg*, etc. In all these cases the disease is essentially the same; there are the same condition of the blood and the same contagious properties. And here is an important point that every one should remember: it is now well established that anthrax may be communicated from any animal to any other one, or to man; contact with the blood, saliva, excretions, etc., is sufficient, especially if these touch a sore or abraded surface.

This disease is much more liable to develop on certain farms than on others; and low, wet soils, without drainage, are looked upon with reason as causes of the disease. As prevention, therefore, drain such soils, or keep animals from such pastures; see that they are supplied with pure water, and have healthy surroundings and food. See that animals dying from the disease are deeply buried, with their litter and manure; that the places where they have been are thoroughly disinfected; and be sure that dogs, pigs or other animals are unable to get to their bodies to eat them and thus spread the disease. Keep sick animals at a distance from healthy ones; if you value your own health or life, cauterize all raw sores, no matter how small, on the hands and face, with lunar-caustic; be careful not to get blood or saliva on you, if possible to avoid it; wash well with soap and water in which a small quantity of carbolic acid has been dissolved, both before and after you go around such animals.

When the disease first appears there is usually little opportunity for treatment, as the animals die in twenty-four to forty-eight hours; later, when the disease is less rapid in its course, there is more hope of success. First, act upon the bowels with Glauber salts, then use mineral acids, antiseptics, tonics and stimulants. Remember that acids corrode the flesh, destroy clothing, etc., with which they come in contact before being largely diluted; therefore, use with great care. Dr. Law's treatment, to which I called attention lately in answering an inquiry of this kind, has been the most successful of any, and every farmer should have his book on the diseases of animals. I will give a modified form of this treatment, which may be used by any one with the precautions against contracting the disease which I have mentioned. For cattle, give morning and night a drench composed of sixty drops nitro-muriatic acid, three grains bichromate of potassa, and two drachms chlorate of potassa dissolved in two quarts of water; and at noon give a drench composed of thirty grains of sulphate of quinine, one drachm iodide of potassium and two drachms of bisulphite of soda in a pint of water. If chinoidine can be obtained it may be substituted in double the dose for the quinine as it is much cheaper; in case bisulphite of soda cannot be obtained, use the sulphite or hyposulphite; if one of these is not to be had, give the other ingredients as directed. In case the animals show signs of weakness and sink rapidly, give every hour a solution of camphor in sweet spirits of niter, made by dissolving an ounce of gum camphor in eight ounces of liter and dividing into four doses; each dose should be mixed with a pint of water before giving.



WHITE MAJOR.

DOCTORING ANIMALS.

D. E. SALMON, D. V. M.

Is there any reason why the principles and practices recognized in the treatment of disease in people should not apply to the treatment of sick animals? Each is made up of the same apparatus, organs and tissues; by microscope or chemical analysis of similar tissues of the bodies, we find cells in the one case that are almost identical, and in the other, a resemblance so close as to preclude any attempt of the chemist to distinguish between them. Going farther, we find each affected by the same local disease; that both people and animals have inflammation of the lungs, stomach, bowels, heart, of the mucous and serous membranes, and indeed, of almost every organ which goes to make up their bodies. There is a difference in the frequency of certain diseases, but this depends rather on the use to which the affected organs are put than on any essential difference between them. Thus, people are more subject to diseases of the nervous system, because that is more highly developed than with animals; horses are oftenest affected by diseases of the locomotive, digestive and respiratory apparatus, and cattle by those of the digestive and milk-producing organs and those in sympathy with them, because in each case such organs are most used. Coming to the contagious diseases, there is more difference; still a large number of them are intercommunicable; as, for instance, glanders, anthrax, hydrophobia, trichina, cow-pox and epizootic aptha.

Admitting this similarity, no one can fail to see that it must be as difficult to recognize the diseases of animals as those of people, in some cases even more so, because of the depth at which the affected organs are seated, and of the lack of ability to communicate the feelings. Again it is not difficult to understand that the treatment of similar diseases must be based on similar principles, and that this treatment, with animals as with men, must be varied to suit individual peculiarities, or the peculiarities or complications of the disease. In other words it requires the same knowledge of the structure and uses of the different organs, and the modifications to which they are subject, to recognize a disease with animals as with man, and to treat it, requires the same knowledge of the properties and effects of remedies in the one case as in the other.

But how many stock-owners are there who recognize these facts? I am sorry to say their number is relatively small. Nine out of ten will say when a horse is sick, "Mr. ——, has been brought up in a stable, has always been with horses and he ought to know what to do if any one." But what nonsense this is! Haven't we all been brought up among people, associated with them when sick and well, talked with them about their feelings, nursed them when sick, and, after all, what do we know about their diseases or the proper remedies to use, unless we have made the subject one of special study? And how can it be supposed that a stable-man is going to learn more about horses!

Then, there is another class of people who depend on their agricultural paper for prescriptions for all the troubles affecting their stock. No matter how good a veterinarian may be within call, he is utterly ignored, and a letter dispatched to the paper for information, which is duly supplied in the course of a few weeks. In case the animal does not recover the doctor may be called; but then it is usually too late for profitable treatment, or the disease has been aggravated by improper remedies. And if the doctor gives a different opinion from that furnished by the paper, as he often is obliged to do, he is denounced as an ignoramus and his services dispensed with—for has not the paper said otherwise, and can a paper be wrong!

Now, I want to ask if every step in this proceeding is not just as ridiculous as to suppose that a man brought up among people or in a stable should necessarily understand the diseases of his associates, or the actions and uses of medicines? Every observing man knows that there are many cases in which a physician is put to his wits' end to diagnose a disease, when he has the patient under his eye and can make the most careful examination. And who would write to the most skillful physician, and expect him to treat an obscure disease without seeing the patient and having only the most general description of his condition? The thing in most cases is utterly absurd, but no more so than it is to expect a man to prescribe for similar diseases, under similar conditions, with animals.

The symptoms generally given by inquirers are those which might arise from a dozen diseases, and to answer with certainty is impossible. I seldom take up a paper with a column of such inquiries and answers, without seeing one or more where the advice will obviously do more harm than good; in some cases the recommendation, if carried out, would ruin the animal; in other cases it would require a large and useless expense. In these cases the writer has made a plain mistake in diagnosing the disease, or has prescribed improper treatment. But this system often brings disaster from other causes. The dose of medicine should be graduated according to the size, age and temperament of the animal, and data for this are seldom given; the time required to get an answer often makes it useless when received; very few farmers understand the nature of medicines and are liable to injure themselves or their animals by improper precautions with poisonous and caustic agents which in many cases must be used; and, finally, animals are frequently injured and *very often* killed by want of care in giving medicine. It requires understanding and experience to give medicine safely to horses, and many people pour it into the air-passages oftener than into the stomach.

Taking all these things into consideration, it is incomparably safer and cheaper to employ a veterinarian at professional pay than to accept advice through a paper, though it cost nothing. Of course, much general information in regard to the nature, causes, symptoms and treatment of diseases can be obtained from agricultural papers, and the publishers of these deserve the greatest praise for their efforts to disseminate such knowledge; but a person ignorant of the subject attempting to apply this to individual cases will, excepting diseases of little gravity, fail oftener than he succeeds. It is safe to say that the more our farmers know about the diseases of animals, the more will they desire and appreciate the services of competent veterinarians.

And, just here, there is one more very important point to which I wish to call attention. The millions of capital invested in live-stock make it a matter of importance that our country should have enough educated veterinarians to supply every part of it; and can it be expected that this profession will increase to such an extent while its members are treated as an inferior order of beings; while quacks and ignoramuses are systematically given the preference; and while treatment prescribed in a newspaper is more relied upon than the judgment of a practitioner who sees the animal? No; when there is a demand there will be a supply, but not before. At present, there is little inducement for a young man to enter this profession, which should be as lucrative and honorable as any, though the practice is more laborious and less pleasant than some others.

The profession needs national and State recognition; it needs laws for the protection of its members; it needs a national veterinary school; but more than all, it needs that encouragement and appreciation which the farmers and stock-owners alone can give. When it gets this, nothing can prevent its growth and prosperity; while this is lacking, its members will be few, and the great mass of farmers will be unable to avail themselves of its assistance.

Buncombe Co., N. C.

The Horseman.

"WHITE MAJOR"

We have had "White Major" engraved as an excellent illustration of the sprightliness, vigor and beauty which may distinguish a horse to an advanced age provided he receives kind and judicious treatment. The animal belongs to our friend and correspondent Mrs. M. G. Rand, of Lyons, Iowa. As to his pedigree: He is half Morgan and half St. Lawrence. He was "born and bred" on a farm in Schuyler Co., N. Y. where he was kept until nearly seven years old. He was bought for a carriage horse about fourteen years ago. "Major" is now, therefore, in his twenty-first year, but he does not act or look half that age. His picture is pretty good, though he is much more beautiful than is here represented. He is gay and spirited, but easily managed and is a noble specimen of what a horse can be, under kind and gentle treatment. His health is so perfect that he is at all times full of vigor; never having a dull day. Once in two or three years, his shoes are taken off, and he is allowed to run in pasture for a few weeks in autumn. "Major's" eyes are large and bright, the nostrils finely formed; and on the whole his face has an amiable, and very intelligent expression. When a colt, his hind legs were slightly dapple-gray, but he soon lost that, and for years has been everywhere known as "White Major." He is noted for the pure white of his coat, mane, and tail, the only color about him, being on the extreme end of the nose, which is a beautiful pale slate or drab.

In regard to feeding: Oats and hay of the best quality only, are ever put before him, and at regular hours. His breakfast hour is 6. A. M. and the currying process begins as soon as the bedding is removed and his stall swept. The stable is always clean and well ventilated. Each stall has a good window that opens at the top, with wire grating inside to protect the glass, and awnings outside to protect the horse's eyes from the sun. "Major" is never driven hard, therefore never over-heated: but even if a little warm after exercise, he is not fed for an hour, and not watered until one hour or two after feeding. An open bridle is generally used on account of his apparent dislike to blinders; and then it is a pleasure to have his beautiful eyes in sight. He travels well alone or with another horse. By many people the Morgan horses are said to be naturally inclined to lameness, but such is not the case with "White Major," though pains are always taken to have him properly shod.

In view of the beauty of form so eminently possessed by the horse, his grateful appreciation of kindness and the valuable services he is constantly throughout life rendering to man, surely he deserves much higher consideration and much better treatment than generally falls to his lot. If our conduct towards him were regulated by the value of the services he has rendered to us, this noble animal would be a pet throughout the land, and so far as he was concerned, Mr. Bergh's society would have no cause for existence.

Hygienic Information.

PNEUMONIA.

DR. GOODENOUGH.

PNEUMONIA, peripneumonia, or lung fever, is an inflammation of the spongy substance of the lungs. There are numerous varieties of the disease, founded on the different portions of the lungs, or the different constituents of the portions, that may be inflamed; on the relation of the disease to other diseases with which it may be associated, and upon the character of the accompanying fever, or the state of the system. Pneumonia is called lobular, when small, isolated parts of the lungs are affected, which is common n children; double, when the inflammation involves both lungs; vesicular, when it affects only the air-cells; inter-vesicular, when its seat is in the cellular tissue intervening between the air-vesicles; pleuro-pneumonia, when large portions of the pleura are affected; typhoid, when associated with a low or typhons condition of the system; bilious, when complicated with disorders of the bile; primary, when it is the only ailment; secondary, when it is a sequence or accompaniment of other maladies; acute, when it is of short duration; chronic, when it is of long continuance; and lobar or croupous pneumonia, when a considerable extent of the lungs continuously is affected, embracing a whole lobe or a large portion thereof, or even the whole lung. This is the common form of the disease, and the one usually meant by the simple term, pneumonia. It is to a brief description of this that the present article is necessarily circumscribed.

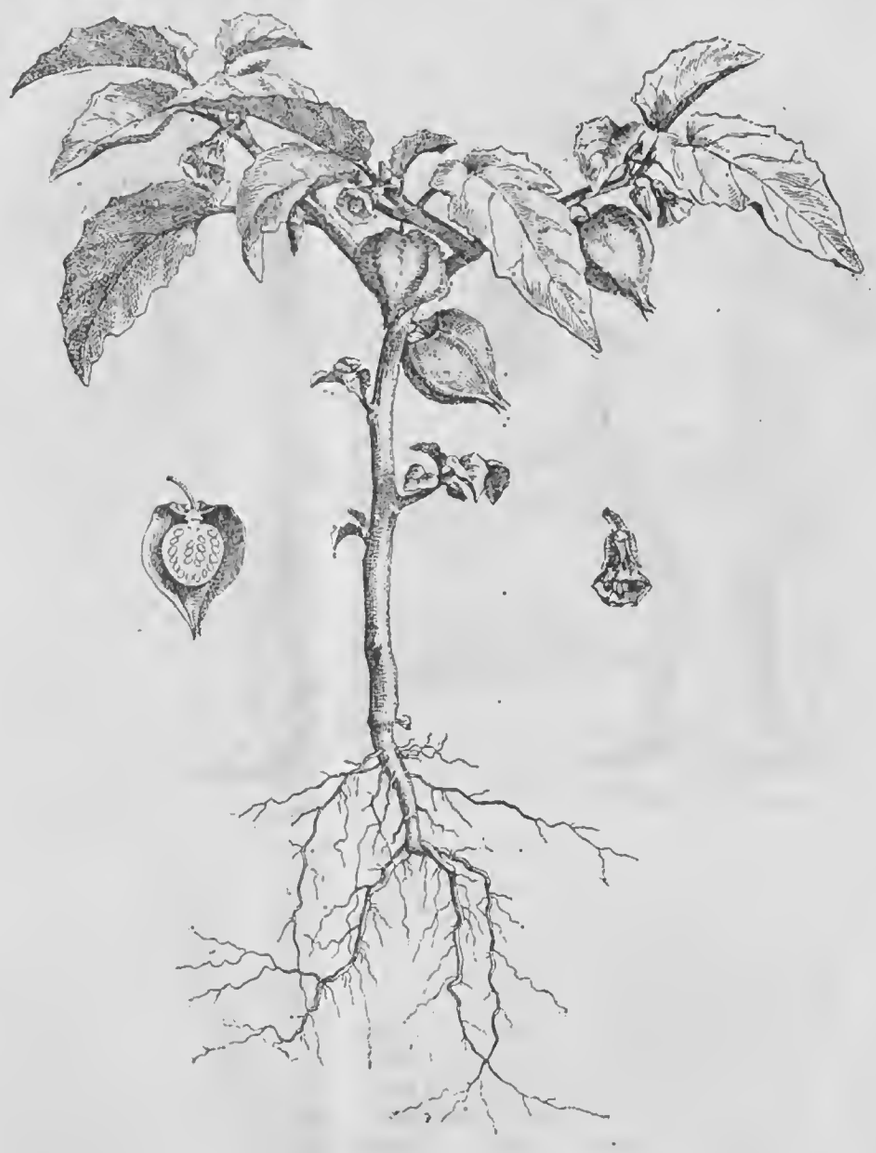
Pneumonia is one of the most frequent forms of inflammation, and carefully compiled statistics show that, next to consumption, it is the most dangerous enemy to human life. On an average three per cent of all ailments that afflict humanity, and 6-4 per cent of all those of an internal nature, are due to this disease, while of the total motality from all causes 6-6 per cent, and of that from internal maladies 12-7 per cent are the result of this scourge; and in these percentages cases of so-called secondary pneumonia are not included. It occurs in all latitudes and does not seem to be more frequent in one latitude or climate than in another. The widest differences in mortality from it are found in places very near each other and possessing the same climate; while statistics show the same ratios in localities widely separated and whose climatic conditions are entirely dissimilar. About two-thirds of all cases occur in winter and spring, and only one-third in summer and fall. Tables of mortality lately compiled for London, Paris, Vienna, Berlin, Stockholm, and several other large European cities, show that for an insular climate the maximum of deaths occurs from December to February; the minimum from July to August; while for a continental climate, the maximum mortality is from March to May; the minimum from September to November.

Owing to its numerous complications, and the differences in the number of these included by various cities under the head of pneumonia, in their statistical compilations, it is at present impossible to ascertain with satisfactory accuracy the average proportion of deaths to attacks of this disease; but from a careful comparison of the different tables of mortality a fair approximate estimate can be made. While to a vigorous child, the malady is not dangerous, feeble children rapidly succumb to it, and the bulk of the 10 per cent, who fall victims to it under the age of 10 years belong to this weakly class. From 10 to 20 the rate of mortality falls, the ratio amounting hardly to six per cent. From 20 onwards, there is a gradual increase in the proportion of deaths to cases until old age comes on, when this increase becomes rapid. Contrary to the general opinion, pneumonia is not dangerous to a man in vigorous health, provided his physical powers are unimpaired by excessive labor or exercise, or by immoderate use of alcoholic drink. From 20 to 30, the average ratio of deaths to attacks is only about nine per cent.; from 30 to 40, say 11 per cent.; from 40 to 50 about 15 per cent.; from 50 to 60, it jumps up to 24 per cent., and after 60, half those who are attacked die in Paris, and elsewhere a very large proportion. As an instance of the great differences in the compiled ratios of mortality in different places—while the average proportion of deaths to cases, at all ages, amounts to 24 per cent. in Vienna, it is only 13.83 per cent. in Stockholm.

Although it is often impossible to assign any cause for this malady, rapid changes in the daily temperature are certainly productive of it. Those who lead mostly an out-door life suffer less from it than those who are sheltered within doors. Women are somewhat less liable to it than men, but among them the ratio of deaths to cases is considerably greater—in proportion of three to two. One attack predisposes to another. Among the recognized exciting causes are: prolonged exposure to cold; a sudden chilling of the body when warm and perspiring; intemperance; violent exertion or emotion; over-crowding in ill-ventilated apartments; poisonous exhalations; and physical injuries to the lungs. In its secondary form it is also a frequent accompaniment of bronchitis, measles, whooping-cough, consumption, small-pox, scarlatina, erysipelas, and it is probably most common between 20 and 35.

There is no disease that presents so great a variety of aspects as pneumonia, the only features always present being a change in the lungs, manifest to the physician by percussion and auscultation; and an increase in the frequency of the respiration in comparison with that of the pulse. The ordinary relation of four pulsations to one respiration is disturbed, and the breathing becomes disproportionately quicker until, in very severe cases, it is sometimes as rapid as the pulse. In upwards of one-half the cases a chill, lasting seldom more than four or five hours, is the initial symptom. Then follow quickly difficulty of breathing, pain in the side or back of the chest, and a short cough attended with severe pain in the side, but generally at first, with no expectoration; headache, vertigo, heaviness in all the limbs. Soon the face becomes flushed, the muscles of the nose often begin to twitch, the cheeks assume a purplish tinge and the countenance an anxious expression; the cough grows interrupted, hoarse and harsh; the pulse increases in frequency; the patient is tormented with an intense thirst, and within a few hours the disease has already reached its hight. At other times, for several days before the actual invasion of the disease, the patient feels unwell and chilly or feverish; then the affliction is ushered in by one or more fits of shivering and the usual symptoms. Or, the chill may be absent and the scene opens with convulsions and complete loss of consciousness. Or, again, a frequent initial symptom is vomiting, either before or with a chill, especially in the case of children, and generally this is repeated. If there is a chill the illness may be dated from that point; and in its absence, from the moment at which the patient, having previously been in good health, can fix with certainty that the change commenced. Usually for the first 24 hours at least, the signs are uncertain, but if the patient has had the chill and has a pain in the side, rusty expectoration and a high fever there can be little doubt but that he is suffering from pneumonia.

The course of this disease is usually marked by fever with the temperature of the body varying from 104 to 106, falling from 2 to 2½ degrees in the morning and rising as much in the evening. The pulse varies from 100 to 110, and is generally still higher in children; the respiration is from 30 to 50 per minute, and sometimes as high as 80: headache, vertigo, exhaustion, thirst, difficulty of breathing, pain in the side. This pain is not indicative of the seat of the disease, but is caused by an accompanying inflammation of the pleura: the lung is comparatively insensible. The pain is sometimes absent, though not often, as Grisolle found it present in 272 patients out of 301. The skin at first dry, usually becomes moist about the third day, at least temporarily. The expectoration at first mucuous, then slightly purulent, becomes more and more bloody until the ensanguined streaks extend over the entire expectorated mass: its color is reddish-brown; quantity always small: it is mixed with air-bubles and clings tenaciously to the vessel that contains it. The urine is less, dark-colored, heavy and on cooling deposits a brick-dust sediment; in three-fourths of the cases the bowels are constipated; the tongue is generally moist and coated with a white or yellowish-white fur, sometimes clammy, dry, red or cracked. Generally towards the close of the first week, an abatement of the symptoms takes place; the pulse becomes softer, and slightly irregular; the cheeks less congested; the perspiration more profuse, especially on the forehead; but the temperature does not fall, nor does the patient feel any improvement. Within from four to 16 hours, the temperature becomes normal, the pulse and respiration diminish in frequency, and all the symptoms abate. At the same time the whole surface of the body breaks out into a warm, free perspiration; a deep, continous sleep follows, and on waking, the patient feels comfortable, relishes his food, and convalescence commences, and in course of usually about a fortnight, all local signs have disappeared and health has fully returned. If the attack terminates without any marked crisis, the restoration of health is more gradual, there are occasional temporary relapses, and convalescence can scarcely be said to begin until towards the middle or end of the second week.



PHYSALIS VISCOSA.

Death takes place sometimes within a few days, with intense heat, severe cerebral symptoms, convulsions, and delirium. Usually, however, it occurs from exhaustion of the heart towards the end of the first week. Then the deep red color of the cheeks becomes more and more bluish and at last takes a deep yellowish tinge, the patient falls into a low delirium, talking little and moving his hands. He understands what is said, but answers in a low, indistinct tone. The skin becomes insensible to pain; the breathing gasping, coarse and loud; the sufferer can swallow nothing; anon, the respiration grows feeble, interrupted by pauses, longer and longer; the pulse can no more be felt; the tip of the nose first grows cold; then the extremities, and death closes the scene, generally a couple of hours after the commencement of the crisis. Occasionally the patient rises suddenly in bed, gasps, and falls back a corpse. In elderly persons the struggle is generally brief, and the end a collapse.

Of course, all these symptoms are manifested in only very few cases, while many of them, together with others not here enumerated, are seen in every instance.

Out of 721 cases mentioned in a recent Vienna statistical report, 279, or 38.7 per cent, terminated on even days, and 442, or 61.3 per cent on odd days, the fifth and seventh days being the two most critical, 120 of the cases terminating on the former and 165 on the latter. Among the even days the eighth was the most decisive, 86 cases having terminated on it. According to the figures therein given, the ratio between the even and odd days is as two to three, and the most critical period is from the fifth to the eighth day, though the cases terminating each day dwindled gradually down to only one out of the 721 on the nineteenth day.

The favorable signs are: moderate fever, temperature not above 104° F. in the morning hours; spontaneous remissions; regular, full pulse; not averaging above 110; respiration not very frequent, ratio to pulse one to three; deep respiration possible without much pain; no continued paroxysm of cough; expectoration entirely absent or only moderate in amount; rusty-brown, not changing in color; and eruptions on the face. The latter come on usually from the second to the fifth day, and are decidedly a favorable symptom. Of 182 cases of pneumonia marked by facial eruptions, only 17, or 9.3 per cent, died; of 239 cases without eruptions, 70, or 29.3 per cent, died. Of these 421 cases, 159 were over 30 years old. Of these, 50 had eruptions and 10, or 20 per cent, died; 109 had no eruptions, and 58, or 53.3, died. The unfavorable symptoms are the reverse of these, and also profuse sweating with high temperature and markedly livid checks; a yellowish white appearance at the angles of the mouth; and, in females, pregnancy.

There are few diseases in which special treatment adapted to individual cases, is more important than in pneumonia; for the measures that would be salutary in one case, would be injurious, or even fatal, in another. In the belief, therefore, that such general directions as could be given in the limited scope of this article, would be likely to do quite as much harm as good, the few remaining remarks shall refer to the office of nurse rather than to that of doctor: The patient should lie with his shoulders somewhat elevated. In protracted and debilitated cases, his position should be changed occasionally in order to prevent the settling of the blood in any part of the lungs. Care should be taken to expose the chest and body as little as possible. The air of the sick-room should be of a uniform temperature, and warm, yet purified by sufficient ventilation. In early stages, what little diet the patient can take, should be farinaceous drinks, such as gum-water, barley-water, thin gruel to which may be added a decoction of ripe fruit or the juice of oranges or fresh grapes, the indigestable portion being carefully rejected. As the fever abates, give tea with toasted bread or crackers or a little rice; then, Indian mush, milk, broths, lighter meats, eggs, oysters. In this as in other diseases, nature powerfully aids a sound constitution, and with good nursing, little medical treatment will very often suffice.

Horticultural.

PHYSALIS.

BOTANISTS differ as to the species of Ground Cherry. Physalis Alkekengi, the strawberry tomato, is by Gray said to bear a bright red berry.; Others say that the berry is of a greenish-yellow others that it is yellow; others that it is of an orange color.

Physalis viscosa—see engraving—is common in dry fields and road-sides, both here and in Canada. This is also called P. heterophylla, P. nyctaginea, P. viscido-pubescens, P. Pennsylvanica, P. tomentosa. Physalis Pennsylvanica is also called P. lanceolata and P. maritima, while Gray makes P. lanocolata a variety of P. Pennsylvanica.

We call attention to our remarks two weeks ago, respecting P. Peruviana which is the species generally cultivated in this county, and suggest to those who have the time and inclination to experiment with a view to cross-breeding, that there is yet time this season to do so.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

NEW HAVEN, Ct., April 6.

I WISH to express the gratification I have experienced from the series on "Bulbs" by W. C. L. Drew. He mentions and describes several which I have never seen mentioned in any catalogue, and new species also of old sorts. Is W. C. L. D. a florist? mercantile I mean, as in that case one might procure some of the new beauties. G. H. ALLING.

PITTSFIELD, Mass.

I HAVE flowering Almonds, straw-colored, sweet-scented Lily, Perennial Phlox, Gladioli bulbs; Peony, Oxalis bulbs; viz. Bowiei, bright pink, common white and pink; straw-colored variegated Ledum; these I wish to exchange for Pansy and Aster seeds, Centennial seed field-corn and Murdock's corn; Lily bulbs except Tiger; Campanula, except white.

MRS. M. M. WASHBURNE.

WILL CO., Ill.

I HAVE never seen in American catalogues the "English Vegetable Marrow" mentioned. There are many thousands of them sold in the London markets annually, and wherever I have given one for trial, the request has been made for seed. In case you may not know it, I inclose you a few seeds. They require the same treatment as pumpkins or squash; only want to be cut and cooked when young, and before they begin to ripen; boil half an hour and serve up with butter-sauce, taking out seeds and cutting into quarters. A. E. BEADLE.

CARROLTON, Pickens Co., Ala., April 21, 1878

MANY thanks for the plants sent. I received them in good condition, and as they are all new to me I am very much obliged for them. I should like to join in your exchange, but as it commences too late in the spring for most of my bulbs, I will have to try and find some one that will exchange in the fall with me. I have fresh Hyacinths from the open garden for the Christmas holidays, and most of the Spring-

blooming bulbs are then showing their leaves. I have single and double white, and single and double blue, and a single black (?) Hyacinth. Then single and double Narcissus and lemon and orange color and white Polyanthus Narcissus and the Pheasant-eye Narcissus, but as they ought to be sent in the fall I will have to write to some of your exchanges. I have other kinds of bulbs. I should like to get in exchange some Dahlias and Gladioli and Peonies. I want to get shrubery and bulbs rather than annuals. I will exchange seed of such as I have for Pansy and Verbenas. I have a large yard and have been trying to get Roses to fill up the space. I have a good many, but most of them are spring-bloomers. They are in full bloom now. Then sweet-scented evergreen Honeysuckles and red and yellow coral Honeysuckles are all in full bloom. I love flowers and love to work with them, and succeed well with what I plant. I have a Madeira Vine which is ten feet high that has grown this spring. For annuals, I plant Morning-glories in variety and Thunbergias, Ipomœas and ornamental gourds: I have a fine show of vines in summer. I have some hanging-baskets that are nice. I should like my flowers to look pretty but my baskets do not show well. I have a few Geraniums that are growing nicely. I shall try some in the open yard this year. The sun shines so hot here in summer that such things do better shaded. I had a Coleus, but it died in the winter. I was very sorry, for I think they are very pretty. I plant my seed in a mixture of well-rotted cow manure and leaf mold with a generous supply of sand, and they do well. All pot plants get the same to grow in, and I always meet with success, if my plants are not bruised when I receive them. ALABAMA.

CATALOGUES, &c., RECEIVED.

A CIRCULAR from the State Agricultural College, Kansas, calling the attention of Western breeders of Berkshires to the importance of securing a permanent record for their herds in the pages of the American Berkshire Record.

NINETEENTH Annual Edition Sorgo Hand-Book. A treatise on the Chinese and African Sugar Canes—varieties, culture, and manufacture. Blymer Manufacturing Co., Cincinnati, Ohio. Also catalogue of Cane Mills and Evaporators, Steam Engines etc., manufactured by them.

ABRIDGED New Catalogue of flower seeds and plants. WILLIAM E. BOWDITCH, 645 Warren Street, Boston, Mass. House established in 1837. Free.

PROCEEDINGS of the New Jersey State Horticultural Society at its Third Annual Meeting held at New Brunswick, Feb. 6 and 7, 1878. GEO. SUCH, President; E. WILLIAMS, Montclair, Recording Secretary; B. B. HANCE, Red Bank, Corresponding Secretary.

The Swine-Herd.

WE invite the attention of our readers to the liberal offer of Col. Curtis found in the advertising columns. Now is the time to get a fine pig at half the usual rates.

SOME NOTABLE BERKSHIRES.

BERKSHIRES are a very fashionable stock both here and in England, and that they are profitable needs no demonstration other than the satisfactory bank balances of those who breed successfully.

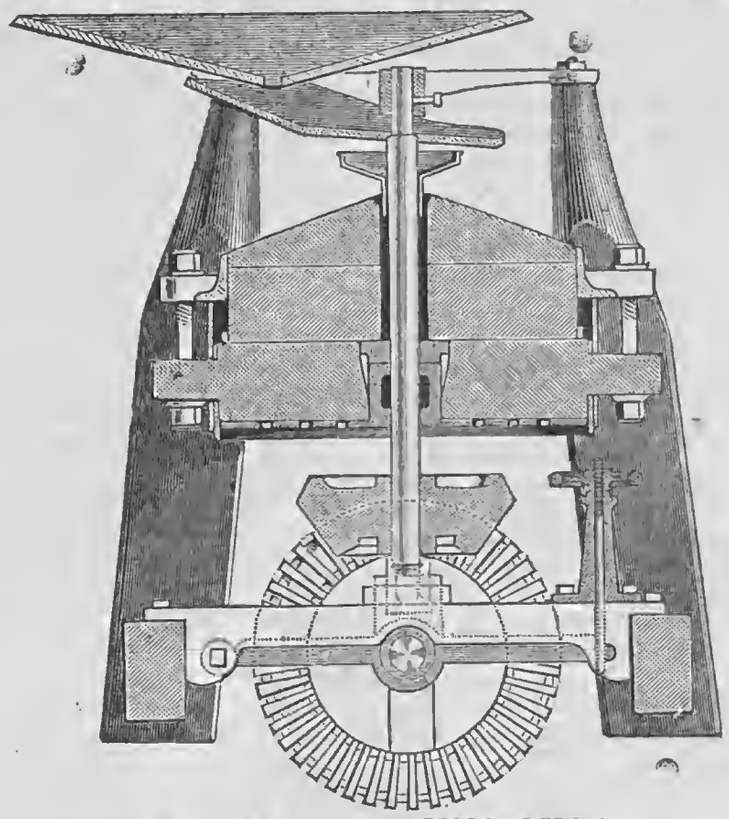
Foremost in the ranks of this class is Mr. T. S. COOPER, who by his judicious selections from the best English herds, and his subsequent careful breeding has produced one of the most admirable lot of Berkshires to be found in this country. Mr. COOPER imported his first lot, gathered together by personal selection, in 1875. Such men as STEWART, SWANWICK, HUMFREY and BAILEY supplied the animals. At intervals since then, in person or by proxy, he has added to previous purchases, until he has at present in his herd as breeders, nine boars headed by Hillsmere, and forty-one sows whose names are a record of the best blood.

We illustrate three sows, Prima Donna 1st, Belladonna's niece, and Prima Donna 2d. These animals are shown in the illustration in the order named, beginning at the left hand, Belladonna's niece being the middle animal in the background.

Prima Donna 1st was bred by Mr. HUMFREY of England and imported in 1877. She was got by Duke of Swinetown, dam Belladonna's sister. Her aunt, Belladonna, was the Sweepstakes sow of the Centennial, an animal for which her owner refused sixteen hundred dollars: This sow's last litter is most promising. The get was by Royal Maybourn and the ten youngsters at birth weighed twenty-nine pounds, and a week later came within one pound of doubling this weight.

Belladonna's niece is also from Mr. HUMFREY and was imported in August, 1877. This sow is a full sister to the above mentioned animal. Soon after her arrival in this country she was exhibited at several prominent fairs, notably at St. Louis, where she took the first premium as the best Berkshire on the grounds.

Prima Donna 2d was imported from the same source, May 1877. She is hardly the equal of her excellent sister, but possesses in a concentrated degree and smaller compass the qualities of a good Berkshire. The trio are exceptionally fine representatives of the breed and those who secure their produce will not, we think, regret the purchase.



AN UNDER-RUNNING MILL.

Industrial Implements.

AN UNDER-RUNNING MILL.

IN answer to an inquiry concerning under-running mills, we give an illustration of one, and the points claimed in its favor. Our cut is a representation of the mill known as the "Queen of the South," and we are under obligations to the Straub Mill Co. of Cincinnati for the information we now give.

In these mills the under stone is the running stone in all cases, and on this account, it is claimed, grain may be run in through a very small eye, and be ground nearer the center. It will not choke. As gravitation tends to force the running stone away from the upper one, there is little fear of injury to either stone if the mill runs empty. There is no bush in the mill, and the gearing being below the stones—in sight—is easily oiled. The admirable construction of the mill, the perfect face of the stones, and the precision of motion, no matter what the speed, cause a superior product to be run off, without undue heat or dissipation of carbon—in short, cool grinding. These mills are made of varying sizes, and can be operated by any man of ordinary intelligence, without special training as a miller; hence they are well adapted to farm uses. Steam, water or ordinary farm powers will operate them. During a business career of upward of thirty-four years this firm has put in operation over seven thousand of these mills, which is a good test of their popularity.

The following brief description of the improvements in the structure of this mill will, with the aid of the illustration, make its claims clear.

(1.) A cast-iron back with hub extending upwards through the running stone, where it is secured with iron wedges and metal; it is also secured by the band around the stone. The hub of this plate is bored out with a taper reamer, and the spindle is fitted to this taper hole, and prevented from turning by a feather secured in the spindle.

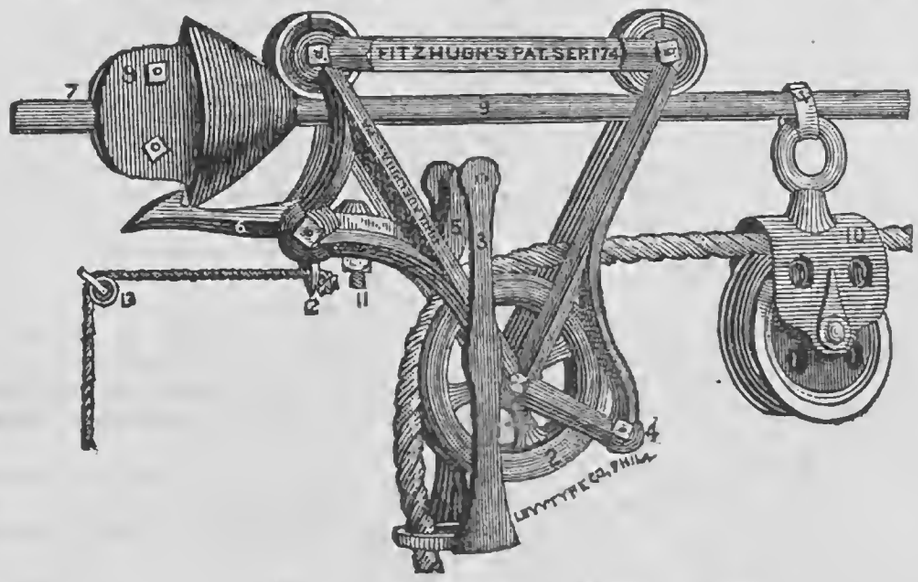
(2.) The cast-iron bridge-tree is provided with a lighter-bar, post and regulating screw, and is secured to the girths of the mill; the link passes down through a bored seat in bridge-tree, and rests on the lighter-bar, giving a perfect center lift to the spindle.

(3.) The counter shaft in geared mills is hung to the lighter-bar, keeping the gear always to a uniform depth.

(4.) The device for framing consists of a long nut in the frame of mill, through which passes a stud with a jam nut under the frame to prevent the stud from turning; on the upper end of the stud is a six-sided collar, on which the lug of the bed or upper stone rests, and above this lug is another nut to fasten the bed stone to the stud and frame. Three of these studs are used (instead of five as in the old plan), making it much easier to adjust the bed stone to the runner.

(5.) The upper box of the spindle is made of cast-iron, lined with Babbitt-metal, and is adjustable by means of four set bolts, through the hopper stool. There are other minor improvements, such as style of finish, etc.

The Company issue an interesting and instructive pamphlet on mills, that it would be well for our readers to read. Its distribution is free on application.

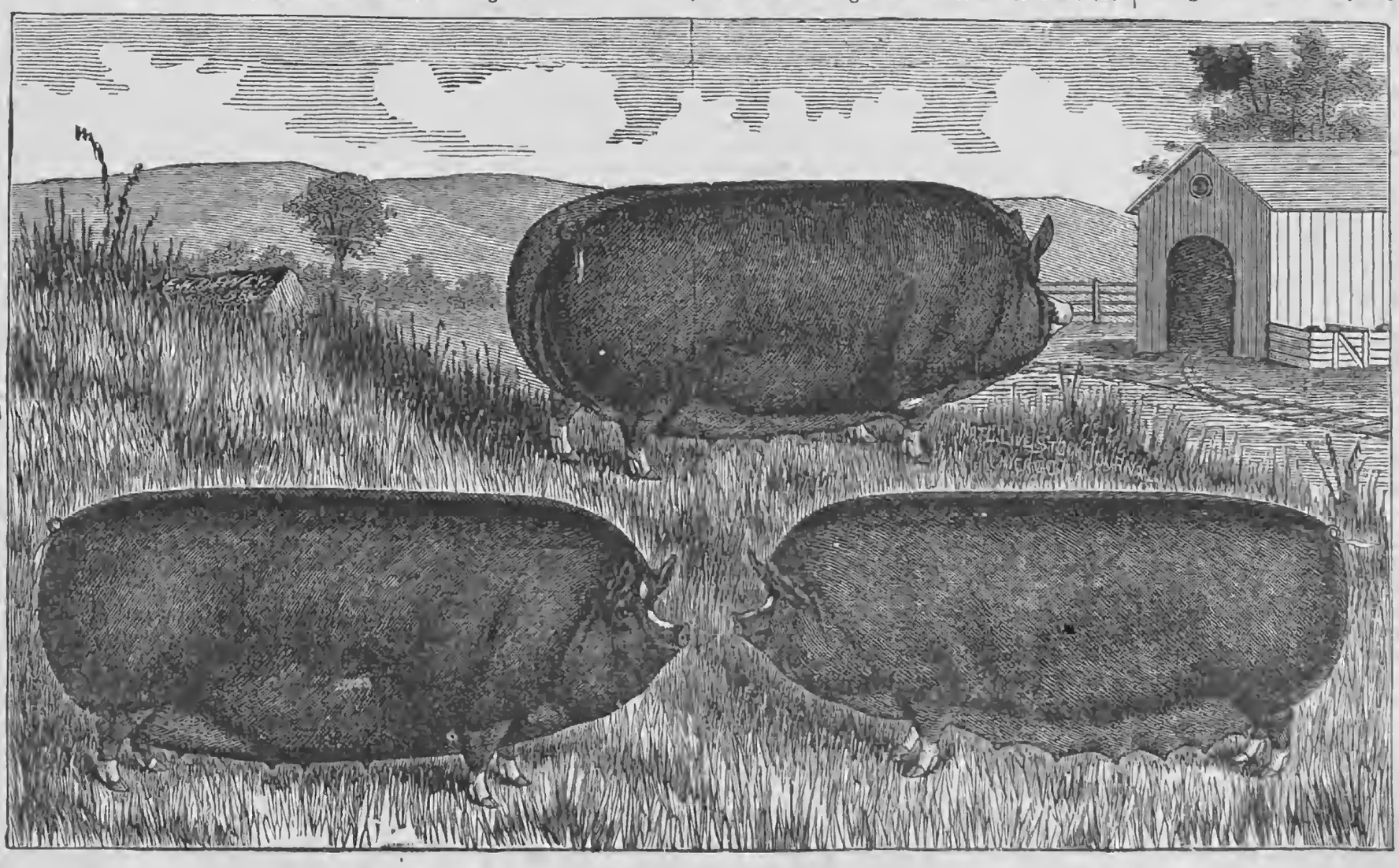


THE AMERICAN HAY ELEVATOR.

THE AMERICAN HAY ELEVATOR.

THIS elevator first attracted our attention at the Centennial. The cut we present showing single-geared implement tells the story without much explanation being required. This cut is an exact representation with numbered parts, which will be found duplicated on the castings for convenience in adjusting elevator. The single gear has some advantages over the double, viz.: the horse travels one-third the distance, requiring a third less rope, while raising the hay one-half faster. In the double gear there is a double purchase which gives an advantage of nearly one half of raising hay. A practical and important feature of this machine is the eccentric brake which holds the hay up after the car is unlatched and while passing back into the mow. This brake is automatic and works perfectly without the aid of springs, ratchet, or rings on rope. Figure five in the cut shows its position. The car in operating, is brought back to the "catch" by means of a weighted cord, and when the longitudinal distance to be traversed is greater than hight of barn a "spool" is used in connection with this cord which does away with any assistance on part of operator, as the car runs back promptly. The advantages of this elevator may be briefly summed up. It is made of the best malleable iron, and is without springs, or traps. The track is of ¾ inch iron rod, well braced, and as the elevator runs on both sides of this rod jumping the track is out of the question. The rod and wheels of elevator presenting a beveled surface to each other, the car swings with ease to any required angle, consequently the hay can be handled at either end of the load while the draft is always from the center of the elevator, avoiding side pulling, straining, and rope-cutting. The return spool brings the car back from any distance, accomplishing automatically a task that heretofore has devolved on the operator. Hay may be loaded from within or without the barn, and in short the "American" is a convenient, low-priced, serviceable implement. Mr. FITZHUGH, the inventor, has met with flattering success both in this country and abroad. The elevator may be seen, or circulars procured by addressing J. R. FITZHUGH, 1708 Barker Street, Philadelphia, Pa., or 55 Beekman Street, N. Y.

THE Towanda Eureka Mower Co. have shipped two of their New Direct Draft Mowers to Australia, and six to New Zealand, this season.



PREMIUM BERKSHIRES.

The Querist.

ANSWERS TO CORRESPONDENTS.

Adams Co. Wis.

H. B., Peoria, Ill., asks for information about the climate, soil and state of society of Adams Co., Wisconsin, and its adaptability for farming purposes.

ANS.—In reply our friend Mr. S B PECK, who is extensively acquainted with the north-west, says:

I know little about Adams County, Wis., but have an idea that it is a fair farming county, but I can tell H. B. that the same latitude in this State has many decided and important advantages over the region of which he speaks. Among these are its special adaptation to fruit in all the Lake Shore counties and to winter wheat all over the State, there being a difference in favor of the east side of Lake Mich., over the west side, in the extremes of winter's cold and early and late frosts, of from 10 to 20 degrees of Fah. We never have floods or tornadoes, and though we have fewer rainy days, we have also less droughts in these Lake Shore counties than east or west of us. Furthermore, the fact that the counties of Muskegon, Oceana, Mason, Manistee, Benzie and Grand Traverse are engaged mainly in lumbering has a two-fold tendency; first, to cheapen the price of lands for agricultural purposes and, second, to raise the home market price of all farm produce. Now all the facts I mention are not only susceptible of proof but of the most lucid explanation, but this would take more time than I could spare and more room than the RURAL would allow me. Those coming into these counties to settle in the farming business, must expect either to clear up their farms or purchase small and rather rude improvements, for what this country lacks most of all is practical farmers, and next, manufacturers in other industries than lumber. Its shipping facilities are hardly equaled, its climate unequaled east of the Rocky Mountains in this latitude; its fruits of world-wide renown, and its people remarkably healthy. Owing to the peculiar situation of this country in regard to early thoroughfares of travel, it has, until within a very few years, been little known abroad.

About the Arkansas Valley.

Henry Oliver, Baltimore Co., Md, asks 1. whether the lands in the Arkansas Valley, along the Atchison, Topeka and Santa Fe Rail Road are good for farming; 2. whether there are any Government lands close by; 3. what are the prices there of ordinary farm horses and what are cows selling at.

ANS.—From a trustworthy source we learn that the lands along the A. T. & S. F. R. R. are as rich as can well be found anywhere; excellent for all kinds of farming. 3. For Government lands, it will be necessary to go further west than old frontier settlers think it prudent to go. The further west, however, the dryer and more uncertain the climate. 3. Good horses suitable for farm work, can be bought for from $75@125; good grade stock cows just now can be got for about $25 a head.

Strawberry Mixing.

N. Williams, Montgomery Co., N. Y., asks whether two varieties of Strawberries planted side by side, mix so as to affect the varieties; in other words, will runners from each plant or variety be affected? Will the fruit also mix? Which is the best variety for garden or home use without regard to its adaptability for transportation.

ANS.—No, except as they become entangled and it is difficult to tell "which is which." There is no mixing. Strawberries can only be mixed (crossed) through the seed. Some flowers are perfect (*i. e.* possess both stamens and pistils); some possess only pistils. These latter, if they form fruit, must receive pollen from other flowers which possess stamens as well. The edible portion of a strawberry is not the fruit properly speaking. It is a fleshy growth of the receptacle. What we call the seed is really the fruit. There is a general notion that melons and cucumbers mix. The seeds may. But the effect is shown only the next season in the fruit raised from the mixed seeds. In our own grounds we prefer Borden 30. But it may not do well with you.

Lawn Mowers.

L. D., Hempstead, L. I., makes certain inquiries respecting lawn-mowers.

ANS.—When your lawn becomes hard and the sod close and thick, a roller can do no good. Lawn-mowers with large iron rollers are excellent for seeding grass, at least for the first year and also for sodded lawns until the sod is established and has become level. Otherwise a light-running machine without an iron roller would answer your purpose. The "Philadelphia" is as good as any we know of, and the 18-inch may be managed by a strong boy twelve years old. It is a simple contrivance and except that it should be oiled often, may be regulated once for the entire season. 2. This is the lawn-mower which was used upon the lawns at the Centennial. At least we saw it in use there and noticed no others. R. H. Allen & Co., 189 Water St. are agents for this city.

A Cheap Green-House.

E. A. Beadle. Will Co., Ill. says: I have taken the RURAL for several years, and although only a mechanic, I am much interested in it especially in its designs for houses. I would ask as a favor, that it would tell me how to construct a small green-house on a cheap scale, as I have at present more time than money, and could do the work myself.

ANS: BY MRS. ANNIE L. JACK.

Knowing that our contributor, MRS. JACK, had constructed a green-house in an economical manner, we submitted the above question to her and and here give her answer:

For years we have gathered every summer a few choice plants, and last season one of the RURAL editors sent us a box of green-house plants, so fresh and lovely that we were a family of exclamation points. But the winter so long and severe, with the unequal heat of our sitting-room, the coal gas, and dry atmosphere, had a direful effect on our pretty treasures, and this spring I hinted to the head of the house-hold my desire for a miniature green-house of my own—not expensive, of course, but suitable for our needs. I left home for a few days, before the spring work began, and on my return, a new and unusal noise at the back door caused me to proceed thither.

It was the "guidmon" and all the boys at work in an excavation, six feet below ground, the length of the kitchen, and altogether 21 feet long by 12 feet wide. This cellar-like place was built round with stone, gathered at times on the farm and laid aside to be utilized as building-stone whenever needed. The lime cost about $1 50, the sand was obtained near-by, and the work so far was done by the willing hands of the household. About six inches of stone above ground, and two panes of glass on the straight, then a slope over one of the kitchen windows, giving 14 feet of glass. This window was cut down to form a door half glass, and from the kitchen range we intend to place a pipe for hot water to heat the building in the coldest weather, while the heat from the kitchen will be sufficient in moderate winter weather; but this is a matter to be decided only by close observance of the thermometer. A door at the south end is useful as a passage-way through which to carry the plants out and in and, in the summer, we intend to train a couple of Black Hamburg grape-vines over the rafters. These are to be planted outside and taken in through holes left for the purpose in the wall. The carpenter's work was such as any mechanic could do, the children being able to assist with glazing, and helping in many ways. There are seven hand-made sashes, 14 feet long by three wide costing, each, two dollars. The wood for rafters and plate cost three dollars. The glass, seven by nine, can be procured cheaper in many places than with us. The carpenter's work of framing, outer door, and steps, amounted to ten dollars, and the benches and stands we make at home. This green-house is specially constructed to suit our cold climate, the depth below ground causing it to be easily kept warm. It is suitable for green-house but not for stove plants, and any mechanic having time to spare, can save everything but the actual cost of material.

The "Cricket" Again.

C. E. M., Spring Hill, inquires whether in case of his sending a dollar, he could get a "Cricket Clock."

ANS.—The offer of the Clock was made to induce old subscribers to influence others to take the RURAL, and to give them a valuable consideration for their efforts. All along the effect intended has been to increase the number of our readers. If C. E. M. will send us five dollars in payment for two new subscribers, he will have aided our efforts to this end, and be handsomely rewarded with a *gift* of a "Cricket Clock." We could not accede to his proposition without violating our contract and, moreover, losing money. Our main object, we repeat, is an addition to our subscribers, not to our coffers. Could we consistently do so, it would give us pleasure to gratify him and hundreds of others who have made a similar request.

Blue Stone, Blue Vitriol and Copperas.

Charles Mungham, Lambton Co., Ontario, asks what is the difference between blue stone, blue vitriol and copperas.

ANS.—Blue stone and blue vitriol are two names for the same substance, sulphate of copper. It is best prepared by dissolving oxide of copper with dilute sulphuric acid; a large quantity is also produced in the process of roasting copper ores. The salt crystalizes in large, prismatic crystals, which contain almost exactly one-fourth their weight in metallic copper. It is used in dyeing, preparing various pigments, in medicine as an emetic, and also to destroy the germs of smut in wheat, by soaking the grain in a solution of the salt. COPPERAS, known also as green vitriol, is sulphate of iron, and forms green, transparent, prismatic crystals, readily soluble in water. It is largely obtained by the decomposition of iron pyrites as well as by dissolving metallic iron in dilute sulphuric acid. It is used in dyeing, tanning, the manufacture of pigments, and making black ink, and in medicine as a tonic. The term copperas was formerly synonymous with vitriol and included blue, green and white vitriols, respectively the sulphates of copper, iron and zinc: now, however, it is applied only to the sulphate of iron.

Miscellaneous.

W. H. Perry, Jefferson Co., Neb., being entirely a novice on a farm, inquires for the name of a book of some kind that will help him in learning "how to farm it."

ANS.—There is no one book that will give you the information you need. Many topics, such as drainage, dairy, poultry, manures, cattle, etc., etc., all of which constitute important farm interests, are treated separately and at length. If "How to farm it" could be treated exhaustively in one book, there would be little need of agricultural literature. The following books occur to us which, no doubt will render great assistance:

Mason's Agricultural Cyclopedia; Waring's Elements of Agriculture; Johnson's Elements of Agricultural Chemistry; Jacquo's Manual of Garden, Farm and Barn Yard; Bossingault's Rural Economy; How Crops Feed—How Crops grow, by Prof. Johnson; Allen's New American Farm Book.

Mrs. R. C. Kerr, Richmond Co., Ga., asks where the following plants can be purchased:

1. Camphor; 2. Guava; 3. Coffee; 4. Pine-apple; 5. mouse-colored Iris; 6. Fine, large Pelargonium, such as the old Lady Washington, now never advertised; 7. She also inquires whether she can get a Cricket, and 8, some of the plants and flowers gratuitously offered by the RURAL.

ANS.—1. The Camphora officinarum (Camphor Tree) is an evergreen of large size. Dryobalonops camphora, a tree from which a far more costly article of Camphor is obtained, is a native of Sumatra, also a tree of large growth. Do not know where they can be obtained.

2. The one best known is Psidium guaiava of which there are several varieties. This is a small tree, a native of the West Indies, and may be cultivated under glass for its pretty foliage and flowers as well as for its fruit. Try Geo. Such, South Amboy, N. J.

3. The botanical name of the coffee plant is Coffea Arabica, a native of Abyssinia and Western Africa. It will not stand frost and in this climate can only be grown under glass. Perhaps Commissioner LE DUC can supply you with a plant.

4. The pine-apple is Ananassa sativa, probably a native of Brazil. The fruit may be raised in any greenhouse in which the proper degree of moisture and temperature can be maintained. Can be obtained of any florist that deals in stove plants.

5. We do not know of any Iris of this name. There are many varieties which might be called "mouse-colored." Those of Iris Germanica are very pretty. Woolson & Co, Passaic, N. J.; Hoopes and Bro. Thomas, West Chester, Pa.

6. There are hundreds of varieties of what were once called "Lady Washington." Almost any florist can supply them.

7. See answer to C. E. M. 8. Our next seed distribution will be announced later in the season, when an application will be duly attended to.

M. W. F., Bryn, Mawr, Pa., would like to know how and where to propagate such shrubs as Wiegela, Spiræas, Tartarian Honeysuckle, Box—the evergreen shrub—and what is commonly called "Mist Tree"—a handsome ornamental shrub.

ANS.—Wiegelas are best propagated from cuttings of the half-ripened wood in the fall, though cuttings of this and the others mentioned (except Mist Tree) may be struck from mature wood. Box is propagated freely by divisions of the plant or by cuttings. We would advise our inquirer to plant seeds of Wiegelas next fall. They germinate readily, making fine plants in a year and often run into well-marked varieties. By "Mist Tree" we presume the old but beautiful Rhus Cotinus is meant. This is best increased by pegging down layers and covering them with earth.

A. G., Seneca Falls, N. Y., inquires where he can procure President Lincoln, Gt. American and Downing Strawberries.

ANS.—E. P. Roe, Cornwall-on-Hudson, T. B. Miner, Linden, N. J., E. & J. C. Williams, Mount Clair, N. J.

F. K. G., De Golia, Pa., asks whether the name China Pink, given thereabouts to a tender biennial plant with very showy flowers, is the correct one, and sends us seeds from which to determine.

ANS.—The seeds are, no doubt, those of the China Pink, Dianthus Chinensis.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MAY, 4TH.

S. A. L.—P. J. M.—G. M., thanks—M. W. F.—J. B. L.—C. H.—A. L. J., thanks—I. M. A.—J. C.—"Cornwall"—T. D.—A. R. C.—S. B. P.—E. M. A.—E. G. S.—A. C.—M. V. S.—F. D. C.—T. T. L.—C. W. G.—Miss E. H. R.—W. F.—L. A. R.—A. L. J.—D. E. S.—J. S.—P. H.—C. M.—A. L. J., No. 2—R. E. O.—W. J. F.—F. H.—C. C.—N. O. B.—P. M.—S. R. M., thanks—W. W. R.—B. T. W.—E. G., thanks—K. S. B.—W. G.—L. D.—C.—L. A. R., No. 2.

Everywhere.

RURAL SPECIAL REPORTS.

ST. CHARLES, Kane Co., Ill., April 28.

THE past week has been one of almost continuous rain; consequently but little advancement was made in farming. A good deal of corn-planting would have been done, had it not been so wet; but as it is, none has been planted hereabouts as yet. Should this week prove as fair as the present weather promises, most of the corn will have been planted by the middle of next week. So far this country never had a better prospect of an abundant yield of all her products than she has the present season. All the fruits promise exceedingly large crops. All the farmers have to fear at present in this neighborhood is that the prices of milk, butter, etc. will drop too low to leave any margin for dairy products; and just now it seems to me as though this would be the case during the summer months. As this country is eminently a dairying region, the prices of those products affect us more than those of all others. This is, indeed, the "banner" dairy county of this State, as some of the readers of the RURAL must, of course, well know. J. B. T. W.

HARRIS CO., Texas, April 28, 1878.

THROUGH the month of March, and as far as the present in April, we have had but very little rain, consequently the ground is dry. Irish potatoes are being dug. Though a fair crop, they would have yielded still more had they had a little more rain. There has been an immense quantity of them planted here. The first ones sold for about half the price brought by Irish potatoes last year. Before the season is over, they will come down very low, since we have no means here to preserve them any length of time. Plums and peaches are all curculio-stung. Pears, though they have bloomed finely, did not set well on account of the dry weather during their time of blossoming. Figs and grapes look promising. Japanese Medlars are ripe.

In flower gardens, Lilies, Amaryllis, Funkias, Clematis, Allamandas, Meyenias, Rhincospermums, Chinese Hibiscus, Clerodendrums, Pomegranates, Oleanders, Yuccas, Magnolias, Tecomas, besides a host of perennials and almost all of the annuals are in bloom. Roses rest a little; they are through the first crop of flowers. Gladioli show their spikes. G. M.

SANTA CRUZ CO., Cal., April 9th, 1878.

I SEND you a package of flower-seeds for distribution, also a few Shell-Flowers Seeds, as I saw a request in the RURAL for all your friends had to spare. They are not the seeds from those received from the RURAL Office last season, as those did not germinate, but these are from flowers belonging to a lady living in the Valley. They were planted in the fore part of July and remained green till January, although we had several sharp frosts. The Aster Seed are nearly all from very fine flowers, and the Pinks are from the best strains that are cultivated, and of 10 or 12 colors, all from double flowers and, in fact, they are all from very fine flowers. If you have any seed of Tailby's Hybrid Cucumbers I would like to have a few, as I can get none from the seed stores. The seeds sent by the RURAL came all right, for which accept many thanks. A. CULBERTSON.

REYNOLDS, Rock Island Co., Ill., Ap'l 20, '78.

WE have had a very mild winter, our heaviest snow, March 28 9, lasted but a short time. Apple, Cherry and Plum trees are in blossom. Corn in the ear 23c. per bushel, shelled 26c; potatoes 40c. per bushel; hay from $5@$6 per ton. Wheat and oats up and looking fine. Some have planted corn—most think it too early. Ground nearly all ready. Nearly all the young men wear the blue ribbon. Temperance meeting every Friday evening. C. H.

Miscellaneous

WESTERN ECHOES.

KITTATINNY and Lawton Blackberry briars have winter-killed with me badly every winter, despite all the cutting back, stockiness, and hardening of the branches I could render them, until this last winter when I gave them protection, and this spring upon raising them, they have withstood the winter well, which of course is not at all new, and I only refer to it to say that it pays one to give them space and any care at all, to add a little more work, and lay them down and protect them. In this connection, I will say that from close observation of the reports of those throughout the West, who are trying them, the Snyder is *the* Blackberry, all things considered. I came to this conclusion after eliminating the testimony of those who have the Snyder for sale.

Since a great deal is being said about the germination of commission seeds, I will add that to test the matter for myself, last year I procured

twenty-four packets of flower seeds I had strong reasons to suspect as being very old and worthless, and the result was, not a single seed germinated under favorable circumstances.

With one bare exception strawberries have never been grown in this part of Illinois, unless you would so regard putting out 25 to 50 plants of some unknown sort, in a waste corner of the garden, and then see them no more until fruit is expected the next year. To see which sorts would do best, last season I set out thirty varieties, beginning with Wilson and ending with Great American, and so far as I can judge at present, no sort is going to stand our climate, with all its winter vicissitudes, like Capt. Jack: yet all the varieties we set out wintered well except Patapsco, and Pantuxent, which were procured at Washington and put out *after* several hard freezes, and it is but fair to add that Capt. Jack was procured in the same locality, and put out the same day.

As I have before said in these humble articles, the grape will never be beneficially grown, as an apple is, by farmers in general here. While at a neighbor's to-day, who interests himself more in growing fruits than any of his fellows, I was asked with great solicitation, if I thought his one-year-old grape-vines, probably 18 inches in hight, would bear this season; I did feel sorry for him as I tried to explain all about pruning, growing fine large roots first, and expecting a crop in two or three years.

DR. A. C. WILLIAMS.

Hugo, Ill., April 13, 1878.

ACKNOWLEDGMENTS.

WE have to thank Mr. JOHN SAUL, of Washington, D. C., for a case of about sixty new or rare plants. The perfect, fresh, undisturbed condition in which they were received shows the great skill which many florists and nurserymen display in packing and shipping their goods. We would have been willing to guarantee their arrival in England in an unimpaired condition.

LINDEN, N. J. April 22, 1878.

I SEND you to day by mail the *cream* of all my new grapes: One Carlotta, (white), the best grape in the United States; one Victoria, (white), about as good as Carlotta; one Augusta, (white), fine; one Lexington, (black), a splendid sort; one Rockingham, (black), no equal in this country.

As none of these grapes will be *sold* for some years, you will please not to allow a *vine* or *cutting* to leave your premises till I give consent.

Please label *durably* so that you can report on the varieties when they fruit. T. B. MINER.

Received with thanks.—[EDS.]

REPORTS, &C., RECEIVED.

FIFTH ANNUAL REPORT of the State Board of Agriculture to the Legislature of the State of Kansas for the year ending Nov. 30, 1876, embracing statistical exhibits with diagram of the agricultural, industrial, mercantile and other interests of the State and sectional maps, well executed in colors, of each organized county, showing size, location, railroad and public lands, towns, school-houses, etc., etc. A valuable work of 312 pages. ALFRED GRAY, Secretary.

Implements and Machinery.

BIG GIANT CORN MILL.

Every Man His Own Miller.

The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use.

Grinds twice as fast as any other Mill of same size and price. Manufactured by

J. A. FIELD, SON & CO.
922 N. 2d St., St. Louis.

EVERY **FARMER** SHOULD HAVE ONE.

Nichols' Patent Double and Single Header Wind Mills, and Challenge Feed Mills, Horse Powers, Wood Saws, Pumps, Etc. For Circulars, address CHALLENGE MILL CO., Batavia, Kane Co., Ill.

GARDEN ENGINE AND FIRE EXTINGUISHER. For Washing Windows, Carriages, etc. Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

Pat. Oct. 31, '76 & Apr. 3, '77

The Boss Sickle Grinder.

[TRADE-MARK PATENTED.]

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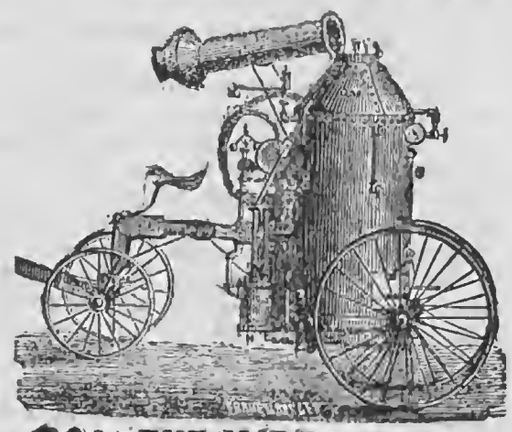

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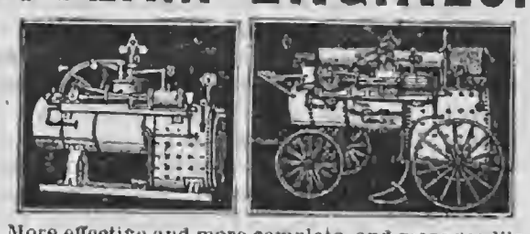

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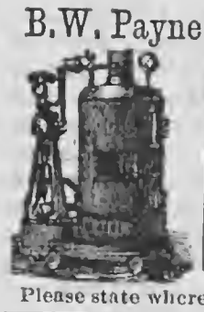

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Carrion Beetles (Illustrated)..... 293
Manures, Artificial—J. B. Lawes..... 293
Tools and a Good Team, Something about—Prof. W. J. Beal..... 294
The Farmer's Garden—M. B. Prince..... 294
The Garden, Taking Notes and Making Plans for—Prof. W. J. Beal..... 294
Okra or Gumbo (Illustrated)..... 294
Okra, Cultivation and Use of—G. Martl. 294
Jottings from Kirby Homestead—Col. F. D. Curtis 294
Anthrax, Malignant—D. E. Salmon, D. V. M..... 295
Doctoring Animals—D. E. Salmon, D. V. M..... 295
"White Major" (Illustrated)..... 295
Pneumonia—I r. Goodenough 296
Physalis (Illustrated) 296

Extracts from Correspondents' Letters:

New Haven, Ct 296
Pittsfield, Mass..... 296
Will Co., Ill..... 296
Carrollton, Ala 296
Catalogues, Etc., Received..... 297
Berkshires; Some Notable (Illustrated)..... 297
Mill, An Under-Running (Illustrated)..... 297
Hay Elevator, the American 297

Answers to Correspondents:

Cricket Again, The..... 298
Adams Co., Wis..... 298
Arkansas Valley, About..... 298
Strawberry Mixing..... 298
Lawn Mowers..... 298
Green-House, A Cheap..... 298
Blue Stone, Blue Vitriol and Copperas 298
Miscellaneous Answers 298

Everywhere:

Kane Co., Ill..... 298
Harris Co., Texas..... 298
Santa Cruz Co., Cal..... 298
Rock Island Co., Ill..... 298
Western Echoes—Dr. A. C. Williams..... 298
Acknowledgements..... 299
Reports, Etc., Received 269

Domestic Economy:

Siftings from the Kitchen Fire..... 304
A Strawberry Chapter 304
Markets..... 305

EDITORIAL PAGE:

A Secretary of Agriculture 300
Hard Times..... 300
Capt. Cuttle's Advice..... 300
Larix Kæmpferi..... 300
Notes... 300
Brevities..... 300

LITERARY:

Poetry 301, 303, 306
Mrs. Hayes in Philadelphia—M. W. F..... 302
Bric-a-brac..... 303
Letters from a Country Girl—Margaret B. Harvey 303
To Clean Gloves or Shoes—Mrs. J. E. S..... 303
News of the Week..... 304

Reading for the Young:

Pocket-Money for Young People—Annie L. Jack..... 306
The Private History of an Ear of Corn: No. 2 ..By the Cob 306
The Puzzler..... 306

Sabbath Reading:

Communion with God—J. H. Newman..... 306
Personals..... 307
Wit and Humor 308
Advertisements 299, 305, 307, 308

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, MAY 11, 1878.

WE beg to announce the first of a series of practical articles entitled "Pocket Money for Young People." The first, by Mrs. ANNIE L. JACK, appears in this issue. We believe these articles will be an attractive feature, and prove of real benefit to our young readers.

A SECRETARY OF AGRICULTURE.

A BILL to make the Bureau of Agriculture a separate Department of the Government and to raise its chief to a seat in the Cabinet has been reported in the lower House of Congress within a week. The Committee on Appropriations had, as compared with the previous year, reduced nearly all the items for the support and efficiency of the department, but despite the efforts of these pseudo-economists, the House towards the close of the week, almost in every instance, increased the appropriations. In view of the previous proposition to raise the agricultural Bureau to the dignity which the RURAL NEW-YORKER has always claimed to be its due, the several votes enlarging the means for its efficient maintenance, are not without significance.

In Congress and in the columns of some of the journals that, once in a long while, deign to notice the agricultural interests elsewhere than in the special editions published for their bucolic subscribers, one of the chief objections to doing justice to the agricultural department seems to be the alleged inefficiency of its chief. With regard to the truth or falsehood of this allegation we have no intention of speaking here, and moreover the Commissioner has already found more than one able defender on the floor of the House. But even granting that the head of the present Bureau would not be as admirably fitted for the same position in the projected Department as these discriminating gentlemen might wish, cannot the same charge be made, with perhaps more justice, in regard to the heads of other Departments of the Government? Have not similar assertions been made concerning the chiefs of various Departments in every administration from Washington's downwards? And has the notorious unfitness of the officials in some cases, or the reiterated assertion of their inefficiency in others, ever been considered a valid reason why the interests the offices had in charge should be debarred from a just representation in the Government?

Moreover, while the agricultural interest of this country, the basis of its prosperity and a good deal of the superstructure, demands as a right a representative in the Cabinet of the nation, it claims no right to nominate Gen. LE DUC as that representative. An equitable influence in conducting the affairs of the country, and a fair proportion of advantages from the taxation to which it is subjected are the rights the farming community is entitled to. These it cannot secure so long as it is unrepresented in the Administration, yet this influence with its adjunct, a place in the Cabinet, farmers are bound, ere long, to achieve, through the present members of Congress if practicable, if not, then through the more fair-minded successors whom the agricultural vote will send to Washington in their stead.

HARD TIMES.

"How is business?" is a question asked a thousand times a day, and almost invariably the reply is, "Very dull—but little doing." And we hear reports from all over the country of mills lying idle, manufactories working on half-time and thousands of people out of employment. The quantity of goods manufactured and sold is very much less than it was ten years ago, and people are asking with fear and trembling: "What is to be the end? Will better times never come?"

It has occurred to us that our whole community may possibly be laboring under a mistake; may not clearly apprehend what good times really mean. If we carefully examine the matter, perhaps we shall find, after all, that there is quite as much business done at the present time as is necessary—as much as is well for the public good.

The majority of our people are agriculturists. Have there been any complaints from this class that, on account of the diminution of manufacture, they have been compelled to do without articles of necessity—or luxury? Or is it true that the full demand of the country is supplied?

Notice the comparative amount of imports at the present time and it will be found much below the average of former years. If it were three times as great, would it add anything to our prosperity as a nation or otherwise? Every million dollars' worth of foreign goods sold helps to make business lively, and gives employment to a class whose labor as producers would be much more advantageous than as traffickers. And who are benefited thereby? The importers and their clerks mainly. The money to pay for the goods goes out of the country, when it could be well employed at home.

This increase of imports, however, has really but little effect on the amount of business done. If the goods were really needed they would be produced here, if not imported.

As an example of the effect of this stagnation in business, let us take any branch of manufacture—say of hats. Why is it not as flourishing now as ten years ago? Simply because the people buy cheaper hats and less of them. He who spent five dollars for a hat then, contents himself now with one worth three—and not only so, but he will make the three-dollar hat serve him longer than the other used to do. The same is true of all other branches of manufacture.

Do you point to the list of failures—petitions in Bankruptcy and all sorts of insolvency—and ask the reason? Our answer is simply this—there has been too much business done and this is the result. Credit has been given too generally. The desire to sell has been so great that traders have neglected to ask in relation to their customers the question that should be first—is he honest? They have allowed their desire to do a large business to overcome their prudence. They have offered bribes for rascality when they gave credit to men without sufficient capital. Many, not all, have gone into business with the intention of failing, knowing well that settlements with creditors are easily made—too easily for the good of morality.

Another reason is, the inflation of currency during the war gave a fictitious value to property, and induced speculation. Many were induced to buy what they could not pay for, getting credit for a large percentage of the amount. Values seemed to increase, and they thought they were rich and spent their money accordingly. This lavishness pervaded all circles. The mechanic who received five dollars for eight hours' work, saved no more than when he had half that amount for laboring ten hours. The whole community was blinded. Now their eyes are opened. He who thought he was rich finds his debts more than his property is worth. JOHN RANDOLPH said the philosopher's stone was "Pay as you go." Unbounded credit has ruined thousands.

Look at this question and answer it truly. Is not this country better off both as regards real property, and its capacity for production than it was ten years ago? Will not the next census show a marked increase? Is there not more capital now than then?

It is true capitalists are fearful—their money is not in circulation. Manufacturing is not profitable, they say, and trade is hazardous. They do not know one thing that they ought to have learned years ago, *i. e.* that the safest bank of deposit is a bank of earth. There is not a dollar of spare capital in the country that could not be safely and profitably invested in improving the soil, or where, as in some portions of the great West, it needs no improvement, in bringing it under cultivation, plowing and stocking it. Such manufactories as are needed, will be kept at work, the rest can stop without detriment to the country. The capital invested in them can be put to other uses, and the operatives become industrious and independent workers of the soil.

When agriculture in this country receives the attention it deserves, we shall hear no more of *Hard Times*.

CAPTAIN CUTTLE'S ADVICE.

A GLANCE at our agricultural exchanges in connection with the questions that flow in steadily upon us, indicates that the average farmer is not in the habit of taking CUTTLE'S advice. It seems not to have occurred to him, when a good thing is found, to "make a note of it," hence questions are iterated, and advice reiterated on subjects that have been bandied about editorial rooms so long as to have become household words.

To be sure we are always ready to proffer such advice as is asked for, but we suggest that a little method on the farmer's part would add greatly to his stock of practical information, and save him a world of trouble.

There is any amount of good advice, the outcome of experience, proffered each week in this and other journals. It should be made a note of for future use. Among the simplest means to accomplish this end is a common-place book. Any old book may easily be converted to this use. Index it according to subject or alphabetically, and when an item of value is read, clip it, paste it, index it. The pith of long articles may be crystalized into a few words and transferred to the book whenever necessary, with a reference to where and when the article appeared.

The RURAL is indexed with great care annually or semi-annually and this index will always be found of value for purposes of reference; but not infrequently it happens that an important fact is reported in the body of an article whose title, as read in the index, would give no clue to the subject sought for. Such items should be recorded in the common-place book with a memorandum of the volume, page and article in which they are to be found. This is peculiarly applicable to our Questions and Answers.

If our friends would try this plan, they would speedily become convinced of its utility, and thank Captain CUTTLE for the suggestion. It is no small saving of time to have in a condensed and available shape, ready for immediate reference, the essence of the experience of practical men in the adaptation of the best means to an end.

LARIX KÆMPFERI.

THE London Garden of April 20, 1878, in answer to an inquiry, states that the Larix Kæmpferi is hardy under ordinary circumstances but that it "often loses its leading shoots through growing on too late in autumn." It is of slow growth, says the Garden, when young even when in permanent quarters, and in favorable situations it makes only moderate progress. "There are no large specimens of it in this country"—meaning England—'and even young, fair-sized plants, from 10 to 15 feet high, are scarce." It is interesting, in view of these remarks, to call the attention to a specimen of Larix Kæmpferi in Flushing, that stands in perfect health and grace, 25 to 30 feet high. It has probably few superiors or equals in the world, for in America this tree is extremely rare of any size. This climate, however, seems to favor it more than that of England, for we have found it invariably hardy, though slow of growth. There seems to be no other really practicable method of propagating this Larch than from seed.

NOTES.

Wholesome Comment.—We have received a letter from the editor of one of the oldest and most respected weekly journals of this country, from which the following extracts are taken: "I forgot in my last to thank you for your noble article backing up Professor BEAL'S courageous exposure of certain seedsmen. The whole press—a few papers possibly excepted—is, as you know, practically subsidized—if that is the right word—by advertisers, and so there are many 'crying evils' that not only unrebuked but absolutely encouraged, 'wax fat' from year to year. But 'the world is given to lying'; there seems to be very little 'religion of business'; practically men in trade are 'rogues in grain' even though 'veneered with sanctimonious theory.' I verily believe that GOD would greatly prosper any man—including newspaper publishers—who would go straight forward, regardless of present consequences, and all the devices of workers of iniquity. — — — Your brave stand in the articles I mention pleased me greatly, and so I thank you."

The American Pomological Society and Willard C. Flagg.—There is no similar work that we know of, that at all compares with the Proceedings of the American Pomological Society in point of value to those whom it concerns. We had not the pleasure of a personal acquaintance with the Secretary of this Society, the accomplished and well-beloved WILLARD C. FLAGG whose death makes a gap that it would seem could never again be so acceptably filled. But we look over the pages of the volume—his last—and see his familiar name and are sad that he is dead. And so we can, at least, sympathize with the many who knew this worthy man.

Agricultural College Professors.—A writer in Home and Farm, speaks of the Illinois Agricultural College as "a concern upon which several millions of the public money have been spent with no visible, appreciable or sensible benefit to agriculture or agriculturists of the State, and to nobody indeed, unless to a crowd of pedagogues and professors who get three dollars pay for every dollar they earn." So far as the above remarks apply to the professors of agricultural colleges throughout our country generally, we differ with them in so far as to believe that professors get one dollar where they well earn three.

BREVITIES.

THE coming industry, the production of beet sugar.

FRESH clover is good for little chicks that are confined.

WHEAT, wheat everwhere—and it is everywhere looking well.

ACROSS the Atlantic the talk is yet of a possible peace, the preparations are those for a probable war.

WHY is not the Tulip tree (Liriodendron tulipifera) more extensively planted in streets and parks?

A SUBSCRIBER sending for several back numbers and inclosing two ten-cent pieces, writes: "Oh! for the convenient shin-plaster again."

GLADIOLI may be planted for succession as late as the first of July. A little less than three months may be allowed from planting the corms until bloom.

IN Bergen County N. J. the Leghorn fowl is considered the best layer. But it will fly like a pigeon and can never be trusted to sit for the allotted time.

"I AM getting along in years," remarked a neighbor of the RURAL Grounds, "and I have never before seen rye headed in these parts by the middle of April."

MR. CHARLES DOWNING says in the Weekly Tribune that, as a rule, no variety of apple can bear large crops annually, except on rich, deep soils, or where made so by enriching materials annually, and even then, he thinks, at the expense of the life or age of the tree; that is, trees bearing large crops annually will not live as long as trees bearing moderate crops annually, or full crops alternate years.

THE variable effects of plaster on different land are well known. Is not this fact of itself proof of the value of experiments with commercial fertilizers? Why does plaster benefit some soils and not others? Is it because it fixes certain gases of the earth? Is it because it renders potash and phosphoric acid available? Suppose on one plot, plaster is used; on another, potash; on a third superphosphate; on a fourth potash and superphosphate; on a fifth potash and plaster; does it not seem reasonable to suppose that the best yields will enlighten us as to what manurial ingredient is most needed on the experimental field?

Literary Miscellany.

WILLY.

R. H. STODDARD.

I take his picture from my knee,
And press it to my lips again;
I see a hundred in my brain,
And all of him, and dear to me.

He nestles in his nurse's arms,
His young eyes winking in the light;
I hear his sudden shriek at night,
Startled in dreams by vain alarms.

We walk the floor and hush his moan;
Again he sleeps—we kiss his brow—
I toss him on my shoulder now—
His majesty is on his throne!

His kingly clutch is in my hair;
He sees a rival in the glass;
It stares and passes as we pass;
It fades. I breathe the country air;

I see a cottage leagues from here;
A garden near some orchard trees;
A leafy glimpse of creeping seas;
And in the cottage something dear;

A square of sunlight on the floor,
Blocked from the window; in the square
A happy child with heavenly hair,
To whom the world is more and more.

He sees the blue fly beat the pane,
Buzzing away the noontide hours;
The terrace grass, the scattered flowers,
The beetles, and the beads of rain.

He sees the gravelled walks below,
The narrow arbor draped with vines,
The light that like an emerald shines,
The small bird hopping to and fro.

He drinks their linked beauty in;
They fill the thoughts with silent joy;
But now he spies a late-dropped toy,
And all his noisy pranks begin.

They bear him to an upper room
When comes the eve; he hums for me,
Like some voluptuous, drowsy bee
That shuts his wings in honeyed gloom.

I see a shadow in a chair;
I see a shadowy cradle go;
I hear a ditty soft and low—
The mother and the child are there!

At length the palm of sleep is shed;
One bed contains my bud and flower;
They sleep and dream, and hour by hour
Goes by, while angels watch the bed.

Sleep on, and dream, ye blessed pair!
My prayers shall guard ye night and day;
Ye guard me so, ye make me pray—
Ye make my happy life a prayer.

CORA.

CHAPTER XV.

No expense and trouble had been spared to render Lady Vincent's party a success; and the pretty suite of rooms presented a brilliant and tasteful *coup d'œil* as Lady Vincent entered, ready to receive her guests.

Early in the evening troops of little people arrived to have their party, and to be regaled with all seasonable dainties—a huge Christmas tree, over which Cora presided.

She was looking pale but her loveliness hardly needed much coloring; and she was very fair to see as she stood on a stool, and dispensed the toys of all sorts, shapes, and sizes, with which the tree was adorned. At Lady Vincent's entreaty she had laid aside the mourning robes she had worn so long, and to-night she was attired in a dress of rich cream-colored silk, trimmed with soft lace, while round her neck she wore a black velvet band, clasped by a diamond star; the only piece of valuable jewelry Cora possessed.

Sir Alan, who watched her keenly, saw no trace of the agitation of the afternoon; but once, when by chance her eyes met his, he fancied he read in their lustrous depths a shadow as of some deep sorrow. Later in the evening, when the little folk, "worn out with pleasure," had gone home to roost, and the real festivities began, although Sir Alan had his hands full, his scrutiny did not relax. He saw that among the male portion of his mother's guests Cora was a favorite, but he saw also that she gave to no one any mark of particular preference; that while she was kind and gracious to all, even his jealous watchfulness could detect nothing further. One thing, however, could not fail to escape his notice, namely that to one of the young men at The Bungalow Cora was the object of especial interest, and that wherever the girl moved, Ralph Graham's eyes followed her.

He was a handsome young fellow, of good family and good means; by no means a despicable rival: and when Sir Alan noticed the firm resolve in his frank mouth and honest blue eyes, he felt that he had made up his mind to know his fate, and that shortly. Nor was he wrong, for while he himself was engaged in an apparently desperate flirtation with Lady Flora Venue, who was a belle and a coquette to boot, he saw Cora leave the dancing-room, leaning on Mr. Graham's arm.

Lady Flora thought that her host seemed absent and *distrait* after that, and soon dismissed him for a gayer companion.

As he passed his mother, Lady Vincent stopped him.

"What a laggard you are, son Alan," she said smiling. "Don't let Cora accept another suitor in the meanwhile."

"If she loves him, I am willing," he said, moodily.

"Is it likely?" replied Lady Vinent. "Ask yourself, Alan, whether Cora loves anyone else after the scene you witnessed this afternoon. Only as the poor girl labors under a misapprehension, she might imagine that if she is not to possess the love she needs, it is her duty to make some one else happy, if she can."

His mother's words quickened Sir Alan's steps, and he passed through the dancing-room into the quiet, dimly-lighted conservatory. As he entered it, he met Ralph Graham on his way out; and even in the half-light he noticed the pallor which overspread the young man's face and the pain legible there. As he passed, Sir Alan felt, with a sudden sharp pang, that in a few moments he too might have a similar answer to his suit, and leave Cora "with a life-long hunger at his heart." He found the young girl sitting among the flowers, her head resting upon one little hand.

She started at the sound of his footstep, and as she looked hastily up Sir Alan thought he saw tears upon her face. Sir Alan sat down on the cushioned lounge by her side, and his thoughts flew back to an evening two years ago, to a quiet country house in a distant land—to a fair, pale girl, in sable garments, leaning against a broken marble pillar—to a bowed girlish head, and a broken voice saying:

"Not now, not ever!"

As he did so, his courage almost failed him; but the remembrance of Cora's face as she sat at his mother's feet that afternoon renewed his confidence. The girl was the first to speak; but her voice was a little husky, and her manner ill-assured.

"Our friends seem to be enjoying themselves," she said nervously. "I think everything is going on well."

"Yes," answered Sir Alan, absently. He was not much interested in the amusement of his mother's guests as he sat there by Cora, his strong white hand pulling nervously at his heavy moustache.

"My mother tells me that you are thinking of leaving her, Cora," he said, at length. "But as the guardian your brother gave you, I must seem impertinent, and ask your reasons for wishing to do so."

Cora trembled and for a moment could not find an answer.

"Have you not been happy here?" he continued, quietly. "I promised Harold to care for your happiness you know."

Still Cora did not reply.

"Well?" he said, gently.

"Lady Vincent told me you were going to give her a daughter," she said, with a quiver in her sweet voice. "She will not need me then."

"The second daughter will not take the place of the first," he answered. "She will always love you best."

The girl shook her head.

"That is not your reason, Cora," he pursued, unpityingly, although he saw that she was greatly agitated.

As he spoke he put out his hand and took hers into his. His manner was perfectly quiet, and for a moment Cora contrasted it with the passionate eagerness he had displayed in the interview with her at her brother's grave.

"Can you not give me the true one, Cora?" said the baronet, playing with the little fingers he held.

"No," the girl answered suddenly and almost fiercely.

"Ah, well, never mind," said Sir Alan; adding, after a few minutes' pause: "you have not wished me every happiness, Cora."

"I do—I do," she said eagerly. "With all my heart, I hope—I pray you will be happy."

"Thanks."

And Sir Alan bent his head over her hand; and touched it with his lips. Starting as if the touch hurt her, Cora withdrew her fingers from his clasp.

"Why do you take your hand away, Cora?" he asked. "I have offended you, have I?"

"Oh, no no!" she answered, quickly.

"Have you no curiosity to see my mother's daughter?" he said, as he repossessed himself of her hand. "Shall I introduce her to you, Cora?"

"If you wish," she answered, as if the words hurt her.

"Don't you care to know her? I hoped you would be good friends, Cora. Have you no interest in the girl I love?"

She was trembling violently.

Sir Alan smiled to himself, well pleased.

"Will you come to her now?" he went on, rising, and looking down at her from his tall height, his eyes full of tenderness, lingering over the lovely troubled face.

Cora rose, but her agitation was so great that she sank down again on the cushions.

"I am afraid you are not well," he said, gently. "I will get you some wine, dear child. Stay quietly there until I return."

He disappeared, and Cora's head fell forward on her clasped hands.

"How shall I bear it?" she thought. "I who love him, to meet the girl he loves!"

In a few moments Sir Alan returned with some wine, which he made her drink; then when she seemed calmer, he said:

"Shall we go, Cora? My darling is tired, and ought to be in bed. I don't want to keep her up any longer."

Cora shivered as he led her out of the conservatory, through the ball-room into the little sitting-room, which had been held sacred from the intrusion of any of the guests. To the young girl's surprise it was empty.

"There is no one here," she said, trying to speak lightly.

"Is there not?" he answered, softly. "Sit down here, Cora."

He drew her to a sofa, and sat down quietly beside her.

"I ought to have told you," he said, "that to make my engagement sure the consent of one person is lacking."

Cora was bewildered, and lifted wondering eyes to his face; but she saw nothing there to help her to read the riddle.

Sir Alan smiled.

"Yes the consent of one person. That person is yourself, Cora."

"Myself?" said the young girl.

"No other. Will you make me quite happy, and give it? Sisters have sometimes a word in their brother's choice, and I shall not be happy unless you approve of my future wife. Turn your head Cora she is waiting behind you to receive it."

Cora turned her head quickly with a nervous start, but the face she met as she did so was her own face reflected in a Venetian mirror which was fastened against the wall—her own face, which she saw looked pale and startled, and an undefined terror in her dark eyes.

"Well, dearest, do you like her?" said Sir Alan, softly, in a few minutes. "Will you say 'yes' to me, Cora?"

"This is a cruel jest, Sir Alan," said Cora, turning from him, and bursting into a passion of tears.

Sir Alan caught her in his arms.

"It is no jest my darling; it is all true. I want your 'yes' to complete my happiness. My mother knows that there is but one woman in the world for me, and without her love I cannot be happy. Is it mine, Cora?"

Cora's face was hidden in her hands as he held her in his arms, and no words came in answer to his eager question. Sir Alan waited; then he bent over her again, and in a voice, lowered to the softest whisper, he repeated it:

"Is it mine, Cora?"

"Do you really care to have it?" whispered Cora lifting her head, and looking at him with eyes very full of love, but as if unable yet to believe in her happiness.

"What do you think, my darling?" he replied, lightly. "Oh! my child," he added, passionately, "ever since I saw you first, it has been the wish of my life to win it. Are you sure, quite sure that you will give it to me?"

"I cannot give you what is yours already," she said, softly, resting her head against him with a sigh of perfect content; and as he bent over her and pressed his lips to hers, he said tenderly:

"My darling, my own love, now and ever!"

"Do you know how unhappy I was that night when you sent me away, Cora?" he said, after a long, happy pause. "It seemed as if the whole world had changed to me, and the sight of you seemed to hurt me. Something in a letter from my mother brought me home at last. She told me that as yet no one had seemed to find favor in Cora's eyes, and wondered why I had not courage to try again. When I came your distant manner almost reduced me to despair, but something in your dear eyes seemed to tell me that I might hope."

Cora's thoughts flew back to the past, to the hopes which had been hers when she first returned to England, and a chill fell upon the happy heart when she thought that she ought to tell Sir Alan of her love for Lord Almane. Must she tell him she wondered? Must she risk the love which was so precious to her? Not yet—not yet—she could not chance it yet. She would wait until she knew him better—until she was sure of the love he had given her, and then——

"You are very silent, my darling," said his tender voice, breaking upon her reverie, "and you are looking very tired. Shall I send you to bed?"

"Oh, not now, Alan," she entreated. "You have not danced with me once to-night."

"Let us have a waltz now, then," he said, smiling, as they returned to the ball-room; and Lady Vincent's eyes brightened as she saw their happy faces, and knew that all was well.

"How do you like my son's future wife, Cora?" she asked laughingly, as they paused near her. "Do you think you will get on together?"

Cora laughed and blushed, for Sir Alan's eyes met hers, full of laughing meaning.

"We will try not to quarrel," she said, gaily.

"You had better not," said the baronet, laughing. "I will allow no one but myself to quarrel with her; no one but myself to scold her; no one but myself to love her!"—To be continued,

THE COUNTRY COUSIN.

CHAPTER I.

"Now, girls, stitch away; there's lots to do yet, and none too much time to do it in. Here's the trimming to put on my dress, and the lace on Fanny's skirt, besides that white wreath to alter. Oh dear, how I do wish I could afford a new one!" said Sophy Harrison, with an impatient jerk at the flimsy fabric on her lap.

"Could I do anything?" asked a plainly dressed, quiet-looking young girl, who had been for some time surveying the scene in silence

"Of course you can," replied Sophy; "but it is a shame to set you on to work so soon. Besides, perhaps you have something to do for yourself?"

"Oh no, my dress is all ready. Shall I tack that lace on?" and without waiting for an answer, Maggie Cameron was soon working away as busily as the rest.

"What are you going to wear, Maggie?" inquired Sophy, after a pause, during which needles and thread had been swiftly flying to and fro.

"I have but two evening dresses with me," replied Maggie; "a white muslin and a blue grenadine. I will wear whichever you like."

"Oh not blue, I beseech you," said Sophy; "it would quite spoil the effect of my peach blossom. White will suit you admirably, and a red rose will look delicious in your dark hair."

"Frank Wilford is to be at the party to-night," said Fanny.

"You don't say so!" exclaimed Sophy, dropping her work with a sudden start; "I wish I had known that before, and I would have had a new wreath!"

"Ah, but Kitty Ansell is going, too," said Fanny. "So there's not much chance for you or anybody else."

"I don't know that," said Sophy. "At any rate it's no harm to try; and who knows what may happen. '*Nil desperandum*' is my motto. Are there any nice young men about your place, Maggie?"

"I don't know, indeed," said Maggie, laughing; "I go out so very little at home."

"Oh I forgot," said Sophy. "My aunt is very strict, isn't she, and makes a little nun of you? I should hate that. It is so charming to go to balls, and plays, and concerts; only one's obliged to cut and contrive one's dress, so, and that's horrid."

"You should have white muslin," said Maggie, innocently; "that always washes and looks new again."

"Yes, but that's as old as the hills, child," replied Sophy. "Nobody wears anything but grenadine and tulle, unless, indeed, one could afford lace. Now, the dearest wish of my heart is to wear a black lace—real lace, mind you—over pink satin. Oh, wouldn't it be heavenly! Lotty Stephens has one over amber silk—such a beauty!—but then she's going to be married, and can have anything. Heigho! I wish I was."

"There, that's done!" exclaimed Fanny, jumping up and throwing down her thimble; "make haste, girls, it only wants ten minutes to five, and we must be ready soon after eight. How long do you take to dress, Maggie?"

"Oh, about half an hour, I dare say," was the reply; "but——"

"Half an hour!" screamed Sophy; "hear her! Why I am going up now, and I shan't be ready one bit before the time. I shall be an hour, at least, doing my hair. What a little rustic you are, Maggie!"

Maggie's color rose; but she only said, quietly, "Mamma does not like me to spend so much time over my dress, cousin; so I shall be ready to help you, if you like."

"That's a darling," said Sophy; "so you shall for I want to look killing to-night, I can tel you."

The Harrisons were a large family, three girls and as many boys; and Mrs. Harrison and her daughters being excessively fond of show and company, it was almost as much as they could do to make both ends meet at the year's end, particularly now when the girls were all "out," and doing their best to get off. Their cousin, Maggie Cameron, who had been brought up in a very different way, had come to spend the winter with her aunt and uncle in the large, bustling town of Winterbury, where there was always plenty of gaiety in some shape or other the year round. The eldest Miss Harrison, Sophy, was nearly three-and-twenty, and her settlement in life was becoming a matter of very serious consideration, for visiting and late hours are not favorable either to eyes or complexions, and a fair beauty soon fades.

By eight o'clock on this particular evening Maggie was dressed, and down stairs long before the others, who, as is usual with young ladies on such occasions, were fully half an hour behind the time. At length, however, they all sailed in, dressed in the extreme of fashion, with their heads an elaborate mixture of frizzles, puffs and flowers, and their skirts so voluminous, that how they ever got into them must have been a puzzle to the uninitiated.

Maggie's costume was a decided contrast,—a plain white muslin, tastefully yet simply trimmed, and made, too, without that sacrifice of modesty in which young ladies delight at the present day, for it actually did cover the fair smooth shoulders, and really had sleeves, and not shoulder-straps. A single flower of deep velvety crimson nestled in the glossy brown hair, and a handsome pearl locket, suspended by a piece of black velvet round the throat, completed the simple costume.

Maggie had never looked so well. Her cousins surveyed her in silence, and only Sophia exclaimed, "My gracious, child, you've no bracelets, or bouquet, or fan, or anything! But it's too late now; make haste,—the carriage is waiting."

Maggie had never been at so large a party before; and the sudden plunge into so much brilliancy and fashion fairly dazzled her at first. But this feeling soon wore off, and the music was so exhilarating that she felt almost ready to dash off and join the dancers there and then.

"Does not your cousin dance?" inquired young Wilford, whom Sophy had successfully manœuvred to get for the first round dance.

"Oh yes, I suppose so,—I wonder mamma has not found her a partner," answered Sophy, not quite pleased at the inquiry.

"Perhaps you will introduce me," he continued, as the music ceased, and they found themselves nearly opposite Maggie, who was half hidden by Mrs. Harrison's satin skirts. Sophy complied, rather ungraciously, and then seated herself by her mamma, exclaiming that she was tired to death, and should like an ice of all things. Of course there was nothing to be done but to comply with her request, and offer his services to escort her to the refreshment-room, which afforded a delightful opportunity for a little quiet flirtation. Before they returned, Maggie had another chance of dancing; and, after that, she found no lack of partners for the rest of the evening, which passed away much too quickly for the fresh young girl, whose early bloom had not been sullied by any of those scenes of childish dissipation known as "children's parties."

"And how did you like the ball, Maggie?" said Fanny, as she yawned over a new novel the following morning.

"Oh, so very much!" exclaimed Maggie, enthusiastically; "and the music was perfectly delicious; it almost makes me dance now to think of it."

"You queer child," said Sophy, who sat resting her feet upon the fender; "I did not think it nice a bit, and the music was simply horrid.'

"Oh, but it was my first ball, you know, and it all seemed delightful to me," said Maggie

"I dare say you felt exactly the same at first."

"Oh I don't know," replied Sophy; "it is so long since my first ball that I forget all about it. I've gone to balls regularly these ten years, and really one gets tired of everything in time."

"Ten years!" exclaimed Maggie, in astonishment; "why, you must have been quite a child."

"Of course I was," replied Sophy; "twelve or thirteen perhaps, not more. To be sure they were only children's parties, but we used to go on pretty much as we do now, flirting and all, in a small way."

"Oh Sophy, how ridiculous!" exclaimed Maggie.

"Ridiculous!" said Sophy; "not at all. I'm sure I enjoyed myself then much more than I do now. It was so very delightful. But how do you like Frank Wilford, Maggie?"

"Oh pretty well," said Maggie, slowly, for she had not been very favorably impressed with the gentleman in question, who dropped his r's, parted his hair down the middle, and said, "No, thanks;" all of which were capital sins and offences in Maggie's eyes.

"Only 'pretty well,'" repeated Sophy; "why, he's the richest fellow in the place, besides being the best dancer."

"Well, you need think nothing about him, Sophy," said Fanny; "Kitty Ansell will take care of him, depend upon it."

"I don't believe a word of it," returned Sophy, pettishly; "but if he prefers her to me, why I hope he'll take her, that's all. There's as good fish in the sea as ever came out of it."

"Now that's a very vulgar saying," put in Harriet, who was the fine lady of the family; "and you only use it when you're vexed."

"I vexed, indeed!" said Sophy; "I'm not vexed. But if it comes to that, I think Maggie has almost as good a chance as Kitty Ansell. I'm sure he admired her, and he asked for an introduction; which looks suspicious, to say the least of it."

"Do set your cap at him, Maggie," laughed Fanny; "and cut out these other two girls. What fun it would be!"

Maggie looked from one to the other in silent astonishment, for she had never heard young ladies' "chaff" before.

"Look at her, how grave she looks!" said Sophy. "Oh, Maggie, what a little rustic you are."

"Well, but seriously, Maggie," said Fanny, "I should advise you to think about it. How nice to be the wife of Frank Wilford, Esq., of Temple Lawn, with carriages, and horses, and servants, and no end of money. Why, you would have a house in town, and an opera box, and go to no end of balls, and be presented at Court. Only think of it!"

"Besides making all these other girls, who have tried and could not get him, mad with rage and envy," chimed in Sophy. "Kitty Ansell would be ready to bite her fingers' ends off with jealousy. But dear me, how late it is! Do come and dress, girls. I declare I had almost forgotten the crysanthemum show, and some of them are sure to be there."

Maggie felt half inclined to refuse; but her uncle, who had taken quite a fancy to the quiet little country girl, would not hear of her staying at home; so she put on her "Sunday dress," a pretty gray merino, and went down stairs to wait for the others. As usual she was ready fully half an hour before her cousins, who came in radiant with the newest fashions.

"Why, Maggie," exclaimed Sophy, "you are surely not going in that plain French merino and felt hat? Why, you look like an Arcadian shepherdess."

Maggie colored slightly at this rude attack on her dress; but she only said, "Don't you think it will do, cousin? I have only got two light silks besides, and I thought those would be too dressy for morning."

"Too dressy, child! What nonsense!" exclaimed Sophy. "There's nothing too dressy in these days; but you don't understand such things. Never mind; nobody will notice you, I dare say."

But Sophy was mistaken; for somebody did notice her: and more than that, admired the fair, modest-looking flower; and all the more for the contrast she exhibited to the gorgeous blossoms beside her.

"Who is that young girl with the Harrisons?" asked young Hamilton, the most impassive and fastidious of all the Winterbury set.

"Haven't the faintest idea," answered his friend. "Wilford, do you know?"

"Yes, she's a sort of cousin, or something," he replied. "I danced with her at the ball the other night. She's a nice little thing enough, and rather refreshing after the usual run of girls; a sort of daisy, you know, amongst a cluster of exotics," and evidently thinking he had said something witty, Mr. Frank Wilford pulled up his shirt collar and deliberately lounged away.

In a few minutes the Harrisons, whose acquaintance had previously been of the slightest, had the supreme delight of receiving a very cordial greeting from Mr. Claude Hamilton, who by a dexterous movement contrived to place himself next to Maggie, and gradually drew her into the conversation. She had too much good sense to be bashful, but spoke with a quiet modesty, which contrasted very favorably with the sparkling chatter of her fashionable cousins; so that when Mr. Hamilton lifted his hat and said "good morning," it was with a determination to make a further acquaintance with the Harrison's country cousin.—[Concluded next week.

A COUNTERBLAST AT THE MARRIED FOLKS.

MARY DEAN.

To attack the married folks requires the daring of the boy who, probably hoping to see a free menagerie, cried out to a bald-headed man, "Go up, baldhead! Now fetch on your bears!" The married folks have had their own way a long time. They have managed affairs so that the women of our period are not so strong nor so happy as their right is to be. Now let the single rise up and protest.

Everybody loves power, women as well as men, but that natural love and source of strength is taken out of women by an artificial education, it not being considered suitable to married life. Men are as strong as lions, and women are naturally strong as lionesses; yet women are forced to become weak in order that they may be adapted to marriage. The attempt to put woman into perfect subjection to man has reduced her to a point where she is weaker than her task, so that she now performs her mission not in glad strength, but in shuddering dread and anguish. To be weak is nothing, but to be weaker than one's task is dreadful.

To suit married folks' notions, women are trained to the greatest possible feebleness and timidity—are not only trained to fear general enterprise and every undertaking that requires energy, but are also trained to fear little harmless things—mice, worms and beetles. So soundly are women grounded in this sort of education that those women who have native health and courage, and are naturally able to take the world on their shoulders and pad along with it, make believe to be afraid of little things, and refrain from their natural bent and turn lest they should look mannish and be thought to resemble strong-minded women who go straddling about on men's business. Girls' minds are ground down to a pale unanimity. They study too many books, like Watts on the Mind, Kames's Elements and Paley's Theology—works that were considered mediocre by the literary world when they were written, have never been read by reading people, and contain not a single thought that would not occur to the meanest capacity.

It would be well if we could imitate more closely the models on which our republic is founded. The Greek sister, the Roman matron, would be better models for us than are the women of Europe, still in feudal vassalage. How refreshing is the memory of Terentia, the wife of Cicero! Cicero said of her:—"Terentia meddles in affairs of government much more than she allows me to meddle in the affairs of our household." Happy Terentia! She had never heard of that round bore, woman's "sphere"—that circle destitute of money, and reeking with soapsuds and pancake-smoke. Imagine the effect if girls were trained to Grecian strength—to walk, for instance, with long, free paces, graceful as you will, instead of with these—oh, so irksome—mincing steps of to-day! Nature's strength is wasted pitiably now. Millions exist among us who with a strong education would have been self-reliant and thoroughly able, but who have been made objectless and terror-stricken creatures, that they might be manageable by men. Men want wives conspicuously inferior to themselves. The married folks think with Pinchwife in the old play:—"He is doubly a fool who does not marry a fool." A smart man wants a wife warranted not to be smarter than he is, and a dull man wants a wife duller than a great thaw. Disraeli's Lady St. Aldegonde is the ideal wife:—"Beaming with brightness, with a cloudless temper, she had from the first hour of her marriage concentrated all her intelligence on one object; and that was never to cross her husband on any conceivable topic." There you have it. "Beaming with brightness" and always agreeing! What sort of a person is this always-complying wife? She is an opinionless incapable: her household is without economy, her family is without subordination; she is the honeysuckle wife, who injures what she clings to, and her husband is early tired of her. Her beaming brightness does not last. Whether people marry or part, love soon comes to an end, and after that they have to depend for cheerfulness on health and a sound brain. A feeble-minded woman is not apt to be cheerful. Women, indeed, are not so cheerful as men: women depend too much on the success of others to be cheerful, and their unnatural weakness and apprehensiveness render them peevish, fretful and repining. Laborers returning at nightfall chat and laugh on the road, but at the threshold a sulky face silences them. Most married folks live like Giant Despair and his wife Diffidence in Doubting Castle. At the wedding they have eaten their loaf: nothing but the crust remains to them.

There is so much discomfort in wedlock, whoever wants to be happy had better keep out of it. To begin with, life is too interesting to be wasted in coquetries, and then men and women cannot live comfortably together. There is a possibility of content under peculiar circumstances, such as are seldom combined, but it is well not to run the risk. "None marries but repents," says the French proverb. "*Il y a de bons mariages, mais il n'y en a point de delicieux*," says M. le Duc de La Rochefoucauld. "Wife and child create for a man his deadliest anxieties," says De Quincey. "Family life has interminable chafing, deep anguish and horrible responsibilities," says George Sand. "'Twould be a pity, Trim,' quoth my uncle Toby, 'that thou shouldst ever feel sorrow of thy own, thou feelest it so tenderly for others.' 'Alack-a-day!' replied the corporal, brightening up his face. 'Your Honor knows I have neither wife nor child: I can have no sorrows in this world.'" People who mean to be happy had better fall into the procession with Tasso, Cervantes, Gibbon, Hume, Humboldt and Kant, and work, travel, read, write, talk and worship "whatever gods may be" in holiness and chastity, living a life of peace and free from care. Of course characters like Miss Fribsby in Pendennis, who had read novels until she was so absurdly sentimental that in her eyes life was nothing but one immense love-match, must marry. To such persons the entire universe—books, music, art, all forms, all perspectives, all illuminations, all horizons, all voices—have but one suggestion—marriage. Let them marry!

The married folks have succeeded in arranging society so that at present it is the business of spinsters to run with hot flannels, to stir gruel, to take care of house and children while the married folks go out, and to be thankful that they have flannels to heat, gruel to stir and other people's houses to take care of. Moreover, it is their strange doom that the flannels are never hot enough, the gruel is never stirred enough and the houses are never enough taken care of.

Now, our spinsters ought to do very different work. Let them get a few masculine ideas into their heads, and let them transfer their infinite system, sharpness and pertinacity from the "sphere" to some plane where work pays, and they will soon make a success of life; they will soon be able to live with retired leisure in trim gardens, and will enjoy what is dearer to woman than anything else whatsoever—pecuniary independence.

The test of ability is success. Three-fourths of all the men in the country are poor, but three-fourths of all the women engaged in business are not poor. Women make a success of business-ventures when they undertake any, because they are cautious, fond of accumulating and have inexpensive habits. Women are rich in the fewness of their wants if not in the abundance of their earnings. Small gains are to them competence. A man must have cigars, newspapers and a thousand other things women do not want.

A man cannot take out his old linen suits in the spring and rip them, make them over and do them up himself: he must buy new or go about looking ridiculous in his old ones. Neither can he make himself a new hat better than the hatter can. Women can, and they care nothing for newspapers. Clever women prefer old books to newspapers: they read not the Times, but the Eternities, like Thoreau. Let the spinsters strike out for themselves, and success awaits them. Let the vestals once start from the "sphere," and they will straightway become the peers of their brothers the bachelors, who are so proud of not being married, and do so congratulate themselves. No wonder!

Who'd be a married man,
Wretched and sad,
Looking like one who has
Gone to the bad?
I'd be a single man,
Jolly and free;
I'd be a bachelor
With a latch-key.

See what smart, managing widows some very stupid wives become. Legions of women with capacities for making fortunes, spend their whole lives in darning old carpets, dyeing old rags, gluing old chairs, cementing old crockery and benzining old grease-spots. In fact, three-fourths of the married women are doing it, being married to this huge majority of poor men; and very miserable they are. Besides, one woman in every seventeen is married to a drunkard. Look at that! There is no greater torture than what energetic women endure while waiting for odious lazy, unfortunate, poor men to provide for them. Poor, poor, thousand times poor woman! they wait on with hollow eyes and holes dug in their cheeks until too old to do anything but sit with their toes in the ashes of the pinched chimney-corner. Girls are not taught technical pursuits because they are expected to marry, but since most of them marry men of the sort who have nothing but their heart and lute to offer, both badly damaged and cracked, girls would certainly do well to learn trades and arts.

The married folks are always talking about "the crown of womanhood," as if it were something that might be lost in the battle of life, or if it might be knocked off and clapped on again and worn bent, like Betsy Trotwood's bonnet. It is a fashion with the married folks to say that women must stay at home minding the nest while men go abroad to get bread, just as mother-robins sit on the nest while father-robins go in quest of worms. As if there were any comparison between sober, industrious, vigorous robins and listless, debauched men! It is a lamentable fact that men in common do not play the robin role to an at all satisfactory degree, most of them being occupied in providing themselves with drinks and smokes. Now and then you find a genuine robin-man, but even he gives his wife what she wants so grudgingly it is not worth having.

Horace Greeley once wrote a regular married folks' pamphlet called The Ideal Man and the Ideal Woman, in which he sought to prove that woman ought to be contented, forgetting that the mere fact of her discontent proves something wrong. Greeley's ideal man performed great tasks with vast delight and in the most scientific manner. His ideal woman painted pictures, practised music and did housework, and was not in the least interested in the politics of the present nor of the mighty past, or in public affairs of any sort. She was a *petite morveuse*. You can imagine what sort of music she would play—The Battle of Prague, without putting any spirit even into "the groans of the wounded and dying;" and what sort of pictures she would paint—papery cabbage-roses and insufferable, horrid baskets of strawberries—upset, always upset. It would be dreadful to live in the same house with her, impossible to refrain from scolding her and abusing her pictures and music. Oh give me a woman of *nous*—one who loves dominion, and would grasp the ballot if she could from the tobacco-chewers and rum-sellers of this raw nation.

Don't begin to be tired: I am not. Woman sits like a dog at the table of man, taking whatever he gives her; and an impudent dog he thinks her if she takes it discontentedly. She depends on man for all she has. She is a parasite and an incumbrance in her own family. She would like a different arrangement, but is not allowed to alter things. Still she must endure contumely on account of this arrangement—men talk, books, newspapers constantly contain contemptuous allusions to her condition. This is vexatious. Men should be pleased with their own construction of society, though women are not; but men are not pleased with it, and they blame women for their own dissatisfaction. The man most anxious to keep women dependent is the most constant complainer about the burdens of domestic life: it is he who keeps up this perpetual growl about bills and extravagance. The man who is loudest in denouncing woman's rights is the identical individual who complains so of woman's silliness, incompetence and extravagance. You would not expect the man who with Mrs. Skewton wants "more heart," and not so much strong-mindedness around, and thinks the "sphere" big enough for any woman, to speak contemptuously of the "sphere"; but he does. He says there is no need of his wife's spending the money she does on housekeeping, and if she does not hasten to say she is tired to death at night, he wants to know what she has been doing all day, and why she has not done a multitude of other things. He declares she has nothing to do but enjoy herself. He accuses her of whining, he finds fault, with her weakness, he despises her incompetence, and yet he is furious when you aver that she ought to be as potent and self-sustaining as he is. People who strain at gnats generally have to swallow camels.

Now, then, let women adopt a new course. No longer standing in a meek row to be chosen, let them walk up and down the world as men do, taking possession of whatever they can lay their hands on, and asseverating, "There are no spouses worth having." I could say more.—*Lippincott's Magazine.*

MRS. HAYES IN PHILADELPHIA.*

M. W. F.

"Why not give Mrs. Hayes a reception?" asked a Philadelphia woman as every body was discussing the coming hither of the Presidential party. Somebody else said, "Why not?" and the enthusiasm to do honor to the large-hearted, level-headed Ohio lady who honors her country by being in the "White House," spread like a train of powder set on fire, and resulted in a most brilliant reception in the Academy of Fine Arts. Four thousand invitations were issued by the ladies having the matter in charge, and the Academy, already splendid with its "Spring Exhibition of Pictures," was rendered still more so by the profusion of flowers with which it was further embellished—lilies, roses, palms and ferns, and the grand stairway hedged with alternate groups of Astilbe Japonica and crimson Azaleas. Although there was one continuous stream of arriving people from (eight until eleven,) there was no confusion nor "crush." Philadelphia knows full well how to manage such affairs, and her women are "so capable."

Soon after eight o'clock, the band crashing a musical welcome, Mrs. Hayes made her appearance attended by a group of Committee Women, and the people made a wide way for her as she moved graciously, smiling and bowing, toward the place assigned her, which was canopied by a large bell formed of blush and crimson roses—a very individual-looking woman. Kind and matronly looking, too, and a face in which goodness and strength are, to an unusual degree, expressed and blended. She is of medium hight, "snugly built" (as the lamented Colonel Harris aptly described her,) with black hair dressed in a plain, old-fashioned way, and with a tortoise-shell comb at the back. Her frock was of white silk, quite elaborately made, but giving the effect of simplicity, and she wore crimson roses for ornament, and carried an immense bouquet of tea and Bengal roses, each half of solid sameness of color. Her manner is full of warmth and genuineness, and she had a real heartful smile for every person presented to her—no made-up, superficial gleam of brightness—and, considering the hundreds and hundreds that she had to smile on, well, she must have an inexhaustible fund of loving kindness somewhere.

An hour later the President himself arrived and "received" in another room—a fine-looking, ruddy-faced man, benevolent and kind, but with less strength of character manifested in his face. As he had held a public *levee* in Independence Hall in the afternoon and shaken hands with half the hands in the city, one could but sympathize with him in again being at the mercy of the awfully tiresome task of welcoming the people. But he set bravely and business-like about it. At one side of him stood George W. Childs, the Philadelphian so widely known for his great wealth and his great benevolence—a plain, Quaker-like looking man, short and somewhat stout, and looking very modest and practical. Near by was Governor Hartranft, a strikingly handsome man, and one of the few handsome men who "handsome does." As everybody invited had been particularly requested to come in evening dress, the spectacle was brilliant in the extreme. I was glad to see so many of the best men present, although wearing white neckties and white kid gloves, attired in frock coats instead of the immodest, ugly, ridiculous swallow-tail that has so long been *de rigeur* for full dress. Everybody will be glad to see it, as a fashion, dead and buried.

There was plenty of ice-water to drink—nothing stronger. Even at the Union League banquet wine was not served—out of deference to Mrs. Hayes. So much for a woman's influence!

But the best thing of all in the reception, was the triumph won by common sense, which it so splendidly illustrated, being given in honor of a very exceptional promulgator of that scarce article. Mrs. Hayes has demonstrated beyond all cavil that a woman may be in "high life" and still obey her highest principles and carry into execution her best impulses. The moral sense of a nation is nearly always right and will applaud good sense in preference to fashion, every time, if any one is brave enough to manifest the one instead of weakly yielding to the other. After the victory is once won, how comfortable one feels! It is the only way to be free—to do exactly what one feels to be the right thing to do. If Ohio has another such woman, let us pray that she may succeed Mrs. Hayes in 1880, as *President*.

* This should have appeared in our last issue but copy was not received in time.—ED.

BRIC-A-BRAC.

THE graduating class of the Woman's Classical and Bible College, Binghamton, N. Y., have presented Colonel Robert Ingersoll with their just completed text-book on Moral Philosophy, thanking him "for the greatly increased strength their religious convictions received from his recent infidel lecture in that city, and expressing the hope that when he stands up from time to time to ridicule the Bible, he may remember that they are praying for his speedy conversion to religion and common sense."

TO A COW.

WHY, cow, how canst thou be so satisfied!
So well content with all things here below,
So unobtrusive and so sleepy eyed!
So meek, so lazy and so awful slow!
Dost thou not know that everything is mixed—
That naught is as it should be on this earth,
That grievously the world needs to be fixed,
That nothing we can give has any worth,
That times are hard, that life is full of care,
Of sin and trouble and untowardness,
That love is folly, friendship but a snare!
Prit! cow, this is no time for laziness!
The cud thou chewest is not what it seems!
Get up and moo! Tear round and quit thy dreams? [*David L. Proudfit.*

THE English crown diamonds have arrived at the Paris Exposition, and are valued at $8,500,000. They are in a thick iron chest, and are guarded by sentinels day and night. There is a diadem of eighty-six diamonds of various sizes, in the middle of which is the celebrated Koh-i-Noor, alone valued at $320,000; also a collar of one hundred and eight diamonds, in the centre of which is an emerald, said to be the purest and most beautiful extant. A second diadem is a blending of diamonds and emeralds. In the center is the large Kaudavassy diamond, valued at $600,000. It would be rated at a higher sum were it not for a slight defect. These and many other valuables of the kind, belong to the English crown. A portion are used by the Princess of Wales on special occasions; the others are reserved for the Queen. The Kaudavassy was formerly the eye of a one-eyed Hindoo deity, and has been but lately added to the collection.

HOW SHE GAVE THE CENSUS.

WHEN the census-taker rapped at the door of a certain Detroit cottage on Crawford street the other day, and wondered if the woman would set the dog on him or douse him with dish-water, a great disappointment awaited him. She opened the door softly, snuffed the air to see if he smelled of lightning rods, and then threw it open for him to enter.

"Madam, I am making a canvass of the city," he began.

"Ah! sit down," she replied, and as he began opening his book she continued, "There are five of us in the family, and we paid $100 down on this place. My husband's name is Peter, his age is forty-two, and he came from a mean family. His father was always having lawsuits about dogs, and his mother was the greatest gossip in Elmira. Have you got that down?"

"My name is Alvina Sarah, and I was born in ——"

"I don't care to know where you were born, madam," he interrupted.

"Well, I care!" she exclaimed; "it makes a great deal of difference whether I was born in Africa or Boston, and I want it put down. As I was saying, I was born in Boston in 1838. Put down that I came of a good family."

"Madam, you don't understand—you—"

"Don't I understand that I came of a good family? I'd like to know of a Boston family which carried their noses higher than the Rogerses! Put down that my father was in the Mexican war."

"You have three children, madam?"

"I have'nt any such thing, sir! Put down that my mother was killed by an explosion in a quarry. Her mother and father were—"

"How many children have you, madam?"

"Have you got mother down?"

"No, madam. You see I am taking the census of the city."

"Well," she said, giving him a dangerous look, "I had the typhoid fever at the age of fifteen, and for weeks and weeks I hung on the edge of the grave. I bore up as well as I was able, and—"

"Five in the family—how many children?" he asked.

"Put down that I bore up!" she commanded. "And that one night when the watchers were asleep, I crept out of bed and took a drink of—"

"This is foreign to the subject, madam. How old are your children?"

"Haven't you put down that I hung on the edge of the grave?"

"No, madam."

"Aren't you going to?"

"No, madam. You see I am simply taking the census of Detroit. I desire to ascertain—"

"You can't ascertain it here, sir!" she snapped. "If my sickness which cost over $200, isn't good enough to go in the book, then you don't get a line here!"

"Let me ask you—"

"No use asking for any of our photographs, sir. If you get 'em anywhere and put our pictures in that book we'll make it hot for you! Good day, sir, good day!"

He stood on the step, sighing, and she called through the door—

"My grandfather was also bitten to death by an alligator, but I won't give you any of the particulars! You want to walk."

He passed on, sorrowfully wondering if the next woman's mother was blown off a bridge or carried down the river on a haystack.—*Detroit Free Press.*

SWALLOW-TAILS have been "disestablished" at the court of King Humbert as "too monarchical," and American callers are requested to appear in the more republican walking suit. What a delightful fellow the new King must be!

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

OLD LETTERS.

BY EDGAR FAWCETT.

WITH rosy ribbon's faded ghost to bind them
Long forgotten amid things we all forget,
In a chest of ancient souvenirs I find them,
Faintly scented from old crumbled mignonette.
And as now I slowly read them, solemn-hearted,
I imagine, with a vague, phantasmal dread,
That among their yellowed pages I have parted
The invisible ceraments of the dead!

Here are words that shine with sunny expectation
Of returning over sea to friends and home:
"When at last this gaudy Carnival's elation
Discontinues, we shall tear ourselves from Rome."
Like a brook the merry language ripples brightly:
Well she loved, that happy sister, what life gave!
Let me think how many years it is that nightly
Stars have glimmered on her lonely Roman grave!

Here is writing that I almost held as holy:
He was such a light of learning, Brother Ned!
Equal gentleman to lofty or to lowly,
With his candid Saxon eyes and golden head!
Father chided him too sternly, always crying
At his boyish college love for cards and wines!
Ah, how often I have dreamed I saw him dying
Far away among those Oregonian mines!

Here are leaves where still the soul of summer lingers:
Come to-morrow, love: the country is so dull."
Oh, the perfume of those cottage-door syringas,
And the twilight of the meadow's languid lull!
Oh, the fire-flies, with their dizzy glitters woven
Through the boskage of the copses dark and damp!
Oh the rapture while she gently played Beethoven
In the parlor where the moth was at the lamp!

It is lately as last August that I met her
At the crowded Newport ball, where I had strayed
One a widower of sixty-two and better,
One a dowager with feathers and brocade.
Was it fancy that sometimes looked severely
At her pretty daughter's partner in the waltz?
Could it happen that a meager income yearly
Was conspicuous among his youthful faults?

Drear momentoes of these disannulled affections,
Like the rays from planets that no longer glow,
With your tidings that are ghostly resurrections,
It were wiser to have burned you long ago!
Yet, alas! what wasting flame's intenser flashes,
With the reddest greed destruction can endow,
Could have made you the irrevocable ashes
That annihilating Time has made you now!

LETTERS FROM A COUNTRY GIRL.

MARGARET B. HARVEY.

WE girls could not do much with the chambers,—mamma had already arrayed them in snowy curtains and drapes and spreads, with, as in the parlor, light carpets as foundations. But we did hang up our drawings and wall pockets and cornucopias, relieving the whiteness.

Nowadays a great deal is said about the ceramic fever. Jars and vases are decorated with bright flowers and gay birds, many of them being really beautiful. Yet I do really think we ourselves had more than a glimmering of the art before it became fashionable. Certainly, so far as we were concerned, the idea was original.

For instance, we placed a large decalcomania rose in the bottom of a wash-basin, and on the fullest part of a pitcher, at equidistant points, four smaller sprays. The decorations were of the kind covered by a layer of gold-foil, which is hidden when the white paper foundation is drawn away. We used the sets constantly, the pictures not washing off for a long time and looking very pretty while they lasted.

Then we had some clear, solid, glass bottles of a very graceful shape, in which had been bears-grease. Having thoroughly washed and dried these until they shone like crystal, we placed on each a shepherd and a shepherdess, separated by wreaths of roses. Filled with water, these transformed vessels seemed the most appropriate, the most elegant things imaginable in which to start some slips of ivy.

As regards the outside of the house, we wanted flowers, of course. So we had to have, first of all, the fence thoroughly repaired. And when every pale was on, every hinge tight, every latch in working order, and all whitewashed, we found out that *some* farmers once in awhile forget,—that a good fence around a lawn adds, in a large measure, to its attractive appearance, even if nothing else is done to it. Then we talked about flowers and flower-beds.

Do we want Marigolds and Four-o-clocks and Lady-slippers? we asked. Will the old-fashioned flowers that delighted our grandmothers satisfy us? Are they not, after all, coarse and gaudy and common?

No, not altogether. They are dear to us because those dear to us have loved them. They are beautiful because our Father has made them. But we think the smaller portion of the ground might be devoted to them, a greater to those which will better meet our wants. For we cannot twine Zinnias at our throats and in our hair; we could not place a spray of Cock's-comb in a vase; we could not send a Sunflower to a sick friend. We will bring nearest to us what will do most good, not thereby ignoring what will do us less.

So, off at one side of the lawn, near enough to present a brilliant mass of color in the sunlight, not near enough to distract the attention from our more delicate favorites, were our old, homely acquaintances; nearer our door, to delight us with their exquisite forms, their fragrant odors, and their beautiful colors, were our Geraniums, Heliotropes, Mignonettes, Carnations and Pansies. Two distict classes. And as we have no strays from the one to the other, we did not bury any of our choice flowers among our common ones, nor did we overshadow our finer friends by any of our coarser ones.

I cite this because I would like some women to think of *littered* flower-beds that they have seen. Annuals and Perannials, choice and ordinary, tall and short, odorous and disagreeable, crowded together in one small space, so that searching for any particular flower is like plunging into a miniature wilderness. And once having thought of such a thing,—don't *have* it.

One place, right under the parlor windows, worried us. The ground was hard, yellow clay, shaded continually both by the house and the two large maple trees. We dug and raked and fertilized, and sodded and sowed grass seed. But it was all of no use. Half the summer passed away, and still nothing grew, and the bare patch was as bare as ever. At last we concluded, in very desperation, to cover the soil completely up. So the little boys with their wagons and the big boys with their wheel-barrows were dispatched in all directions for stones. More and more was ever the cry of the girls, as they piled them up, until at last the whole space was covered with a symmetrically-shaped *rockery*.

Boys and conveyances, girls and baskets. We soon had it filled with thick, black earth from the brookside, mingled with leafy soil from the woods. And then began our task of beautifying.

Ferns first. From the woods we brought the delicate beauties and crowded them into the rocks. In the center rose a tall, feathery Asplenium, while smaller fronds rose from the many crevices. The leaves of the columbine were still beautiful though the flowers were gone, and some of this we added. Down in the damp ground near the spring-house reveled the luxuriant wild Tradescantia, and much of this found its way to our stone-pile, to wreath around it. We were a little afraid that we could not succeed moving the plants so late in the season. But a day or two of slight rain helped us, and until late in the fall, we had a beautiful sight in place of the bare ground. And when in the following spring, our delicate ferns, our trailing vines, our graceful columbines came up again, we believed we had fully solved the problem of shady gardens. That is, first, good soil; second, plants that love the shade.

FIG. 1.

Talking of ferns and vines reminds me that there was at that time an obstreperous stump, that would get in our way. If we took it down to the bottom of the garden, it would surely get to the top. If we threw it over the fence, the boys or the dogs would bring it back. At last we concluded that something must be done, and the only thing we knew was, capture it. It was an odd, irregular little affair, all knots and holes and sharp points. We dug out the inside, filled it with earth, and planted in it a little fern, with a vine or two to fall over. We passed a leather strap through two holes in the back, and knotted it, forming a loop to hang it up by, which never showed. After awhile the fern and vine grew so that we thought our stump not fine enough for them, and undertook to varnish it. We sent little JULIA to the drug-store for dark varnish and she brought us—*black slack*. Not until we had our stump arrayed in sable did we discover our mistake. Oh, how bitterly we lamented our folly! At first it looked like honest wood' now, like soiled tar. But we "builded better than we knew." In a few days the black sank in, and some of the wood peeled off in places, and our improvised hanging-basket was beautifully mottled in black and ash-color. It was so pretty that we had it in the dining-room window all winter. The moral is if there are any old stumps about, and they are soft enough, dig into them, settle them somewhere, fill them with earth, plant something in them, and if you like (provided there are no natural markings like knots and patches of barks) vary them a little by a few touches of black.

There is no end to the pretty things that can be made by one in whom the inventive faculties have been stimulated and trained by familiarity with beautiful objects.

DESCRIPTION OF CUTS.

NO. 1.—FANCY BOX.—Take pasteboard for a foundation and cover it with pink or blue paper-muslin; over this plait white Swiss edged with Smyrna lace, finish with cording and a loop, and you will have a pretty and convenient addition to the toilet table. Be careful to turn the glazed side of the muslin next to the pasteboard.

NO. 2.—SET OF SHELVES.—This can be made of either White Pine, or Walnut. (If any difficulty is experienced with the curve in front, it can be omitted.) Cover the shelves with dark cloth, finish the three upper ones around the edge with gimp and small brass-headed nails, and ornament the lower one with a drape. The drape may be decorated with flowers—a small piece of brocade answers very well, or it may be painted or embroidered. If preferred, a small bunch of decalcomania flowers may be gummed on. Shelves so covered form an effective back-ground for the art collections which it is the pride of the house-wife of the day to own and to display.

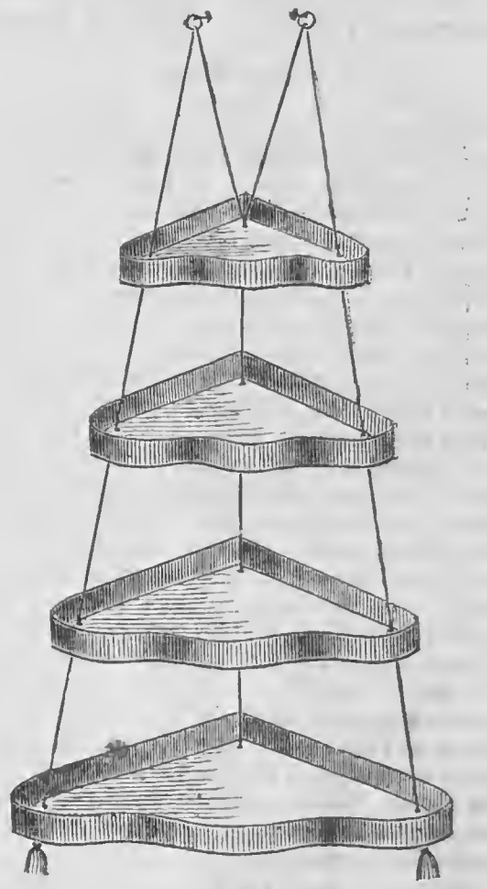

FIG. 2.

NO. 3.—SCREEN.—A round block of wood and a rod of wood or iron are the requisites for the frame. The screen itself is made of dark-green cloth with cording and tassels of green and gold. An embroidered butterfly ornaments the center. A novel device in screens is to inclose a piece of bright-colored silk between two pieces of perforated board, fasten the edges together with ribbon same color as the piece of silk, and ornament with pictures or embroidery.

WOMAN'S COURAGE AND DEVOTION.—During the whole of Lord Dundonald's arduous services and romantic adventures in South America, his wife accompanied him, to sooth his anxieties, to sustain his hopes, to animate his exertions, to share his dangers. One night, whilst he was in command of the Chilian fleet, his ship got becalmed under a battery, from which he was assailed with red-hot shot. His men were seized with a panic, and deserted their guns. If the fire from the shore was not returned, it would speedily become steady, sustained, and fatal. He went down to the cabin where his wife lay. "If a woman sets the example," he said, after telling her his difficulty, "they must be shamed out of their fears; it is our only chance." She rose and followed him to the deck. The first object that met her eyes was the battery, with its flaming furnaces, round which dark figures were moving, looking more like incarnate demons than men. A glance at her husband's impressive features, and

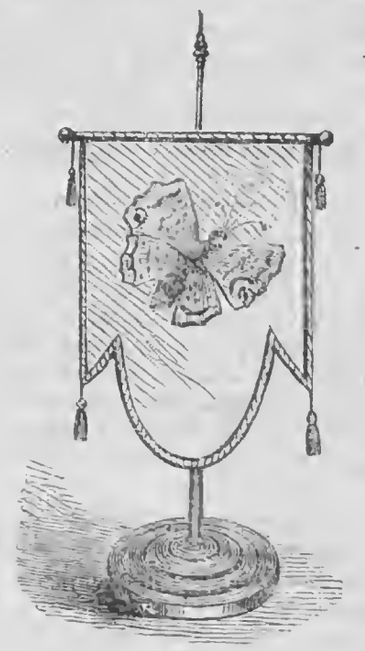

FIG. 3.

his "terrible" calmness, reassured her. She took the match, and fired a gun when he had pointed it. The effect on the crew was electrical: they returned to their posts with a shout, and the battery was speedily silenced.

TO CLEAN GLOVES OR SHOES.

MRS. J. E. S.

BUY one quart of benzine (cost ten cents) pour half a teacupful into an earthen dish, put in the gloves and squeeze with the hand until they are thoroughly cleaned. Wetting them freely does not injure the gloves, neither does it shrink them. After they are cleansed straighten them to shape, lay upon a clean cloth and put into a current of air to dry them and also to deodorize them.

White shoes are cleaned by rubbing them with flannel moistened with benzine.

THE extraordinarily low prices quoted in the announcement of LORD & TAYLOR in this issue for spring millinery goods and laces, embroideries and gloves, should secure the hearty patronage of our lady readers. These articles are latest importations. Their system enables all at a distance to purchase to as good advantage as those in the city.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

WE have just been washing sheep-skins to make mats. They are, when colored nicely, a very comfortable covering for a floor, and as our living-rooms are of hard-wood ash and cherry alternate, and oiled, we dispense with the use of carpets and all their dusty results. The skins were rolled up fresh with a sprinkling of salt and saltpeter, and now we wash in strong suds to which is added a little kerosene and ammonia. When quite clean they were soaked a day in salt water with a little alum and then hung to drain. When about half dry, we called the boys to bring a ladder and they nailed them, wool side in, to a side of the barn where the eaves would prevent their being rained on. They will need some attention yet, for they must be rubbed well with alum and saltpeter, on the skin until perfectly dry. Then with a blunt knife all impurities must be cleaned off, and they must be rubbed with pumice stone. The skins are afterwards trimmed off, the tail sometimes left on, and lined with coarse toweling. They are pretty, durable and warm, as I have found when the children curled down upon them by the fire-side some cold winter nights. The tag ends and clippings, if pulled out fine, make good fillings for chair cushion or sofa pillow in constant use.

One of the problems of a household where there are small boys, is what to do with them in rainy summer weather. They cannot sit down quietly in the house if they are at all healthy irrepressibles, and when the steady pour, pour, comes where can they go? Happy then is the mother who, like myself, has a husband whose forethought has fitted up a pleasant workshop and supplied good wood, where they can practice and experiment. Something will come of it, and the natural mechanic of the family will surprise you with a specimen of his handiwork done "all my own self." Encourage him and praise his perhaps rough-edged efforts; he will do better next time. It is what every farmer should have, and it is a saving of money in the end to purchase tools and teach his boys how to use without abusing them.

WANTED—QUILT PATTERN.

I SHOULD be very glad of something new in the way of a pattern for what is called a variety quilt. I do not believe in cutting up whole cloth to sew together again, nor have I the time, but if I had I should put it to a much better use. I have, however, some pieces that were given me by loved ones who have passed on to the spirit land and I would like to preserve them by piecing them together into a quilt. Who can favor me with something more ornamental than the "flat-iron" shape, which is so common? If I spend the time to piece them, I would like something that will be pretty, and well repay me for my labor. MRS. MARY OLIN.

A STRAWBERRY HAPTER.

Strawberry Sho. -Cake.

ONE quart of flour; a piece of butter the size of an egg; one teaspoonful of soda and two of cream-of-tartar; sweet milk to mix. Sift the cream-of-tartar with the flour; rub the butter thoroughly through the flour and dissolve the soda in the milk; mix soft and bake in a flat tin; when done, split open, butter and spread thickly with crushed berries, cream and sugar or berries and sugar only; spread fruit over the top or cream and sugar.

Preserved Strawberries.

Three-quarters of a pound of fruit and a pint of water to seven pounds of sugar. Put the sugar and water into a porcelain kettle and boil from seven to ten minutes according to thickness; then add the fruit previously washed and drained and boil four minutes; skim out the fruit; turn the sirup into tin pans and set in the sun adding the berries as soon as it is cool; let stand in the sun—protecting from insects—the sunny part of two days; put into glass and screw down; it is not necessary, however, to have them air-tight.

Canned Strawberries.

Fill glass cans with fresh, whole strawberries sprinkled with sugar in the proportion of one-half pound of sugar to a quart of fruit; put on the tops and *screw down at once* as tightly as possible; fill a wash-boiler with cold water, previously placing some old dish at the bottom—I have a perforated tin made to fit my boiler, which is a great improvement upon old plates, &c.—and stand in the jars. The water should be within two inches of the tops; when the water boils, note the time and boil twenty minutes; draw to the back of the store; take out the cans and stand on a piece of flannel; screw down again and as the cans cool, causing contraction of the glass, turn down again and again until air-tight.

Strawberry Jelly.

Crush the fruit and strain through a coarse linen bag and to each pint of juice allow one pound of sugar; boil ten minutes, skimming as necessary; pour hot into jelly glasses and stand the glasses in the sun as for preserves for two days. MISS CRONK.

Spring Valley.

Strawberry Rice Cakes.

Boil one-half teacupful of rice; and when cold add the beaten yelks of three eggs; a little salt and one quart of new milk; then add the whites beaten to a froth; flour sufficient to make a batter and two teaspoonsfuls of baking powder; bake on a griddle and spread while hot, first with butter and then crushed strawberries and sugar; roll up neatly; cut off the ends; sprinkle with sugar and serve.

Strawberry Jam.

To six pounds of fruit allow four pounds of sugar; remove the caylxes; crush and put into a preserving kettle and cook one-half hour over a moderate fire stirring constantly; remove from the range and add the sugar; mix the sugar with the fruit, and again boil twenty minutes stirring as before. To tell when sufficiently cooked: take out a teaspoonful on a plate and if no juice gathers about it and it looks dry and sparkling, it has cooked enough. Every housekeeper should be provided with a miniature apple-butter stirrer for jams, &c.

Strawberry Short-Cake.

Sift two heaping teaspoonsfuls of baking powder with one quart of flour; add one-half teacupful of butter and lard mixed; one-fourth teacupful of sugar; a little salt and milk enough to make a soft dough; roll out quite thin and bake in two pans, which should be large enough to allow of the cakes being cut in half, so as to make four layers when done; crush the fruit if large and spread each layer, which should be buttered plentifully with berries and powdered sugar. Eat with cream and sugar flavored with vanilla.

Strawberry Sirup.

For five quarts of fruit allow twelve pounds of sugar and one pint of water; sprinkle the fruit with some of the sugar and let stand over night; then crush the berries, strain, washing out the pulp with the pint of water; add the remaining sugar and bring to the boiling point; again strain; bottle and cork at once; keep in a cool place. E. M.

DOMESTIC RECIPES.

PLEASE give recipe for a good spring beer? MARY B.

ANS.—Boil one-half hour in two gallons of water, one ounce each of spruce, hemlock and sarsaparilla bark, dandelion, yellow-dock and burdock; strain and add ten drops each of oil of spruce and sassafras; when cold, add one-half pound of light brown sugar and a half cup of yeast; let it stand over night in a jar, cover tight, and in the morning bottle. This makes a very refreshing drink when iced and withal being healthy, purifies the blood and prevents billiousness.

Crackers.

I noticed that a housewife wished a recipe for soda crackers. I send mine, knowing it to be good.

Take fourteen cups of sifted flour; a cupful of butter and lard mixed; a teaspoonful of soda and two of cream-of-tartar; a little salt and about two cups of milk. Roll thin, do not pound; cut into squares and prick with a fork. Bake in a moderate oven.

Egg Crackers.

Eight eggs; sixteen tablespoonfuls of sweet milk; eight tablespoonfuls of melted butter; mold with flour twenty minutes, roll thin.

Round Crackers.

One cup of sweet cream; one cup of water; a teaspoonful of salt and flour enough to make a stiff batter; pound and roll one-fourth inch thick. AUNT KATY.

News of the Week.

NEWS OF THE WEEK.

AT home, the chief political talk during the week has had reference to the Florida disclosures, and to promises of other revelations equally shameful from Louisiana. An effort is being made in many quarters to belittle the odium that justly belongs to the rascals who confess themselves the chief instruments in perpetrating the frauds; but it must be remembered that by such nefarious means the suffrages of the entire nation may at each general election be nullified by the dishonesty of a few knaves; the expense and business derangement necessitated to bring out a full vote neutralized; and the very foundation of the Republic weakened. If they lied formerly, their proper place is the penitentiary; if they lie now, public execration is their due; in either case they deserve little credit and great opprobrium. The desire of making capital for the next election may induce Congress to investigate the matter, and in case the inquiry is full and free both Republicans and Democrats say they can make disgraceful revelations about each other—and very likely in this both speak the truth. President Hayes' title to the office will, however, hardly be called in question, for among the best authorities it seems the general opinion that that matter was definitely settled by the Electoral Committee—if not by the votes of the people. An effort is being made in the Legislature of this State to introduce the Meffet bell-punch register at any rate into this city, but it may be defeated by the union of two extremes, the blatant advocates of free rum, and the impracticable sticklers for teetotalism.

There has been a good deal of talk and some apprehension lately about the rapid spread of Communism. Bands of socialists are said to be drilling in Cincinnati, Chicago, St. Louis, San Francisco, and some other large towns and many threats of violence are reported to come from them. There is little doubt that the movement is growing in large cities, but in country places it seems to have no foothold. There is much distress and lawlessness in the land, and distress is always anxious for a change, while lawlessness is constantly on the outlook for a revolution, and the communistic movement is liberal of promises on both there points. The new organization seems to be rapidly affiliating with labor societies, and later on in the year, in the not improbable event of another strike, not a little public injury and bloodshed may result from the ill-omened union. Up in Montreal, Orangemen and Roman Catholics are still almost every week piously committing a murder or two and any number of violent atrocities in vindication of their own religious views and of the public conviction that prompt measures should be taken to suppress such disgraceful exhibitions of Celtic pugnacity and bigotry. The Mexicans, having been nearly a year without a revolution, have just started another, several towns as well as some guerrilla and robber chiefs having pronunciamentoed against Diaz and in favor of Lerdo. No public cause is assigned for the movement, but history shows that with Mexicans a revolution never needs a motive beyond the prospect of plunder and change. Escobedo and several pettier chiefs of the defeated faction, are enlisting forces in Texas, and will doubtless ere long cross the Rio Grande to increase the turmoil, unless again arrested by Uncle Sam's boys in blue. Away up on the Canadian frontier Sitting Bull is said to be inquisitive about the terms on which he would be permitted once more to enter the United States—peacefully this time. "Surrender of guns and ponies for cattle and farming implements" says Phil. Sheridan. The Great Mother is not so liberal with gifts to the Red Man and Brother as the Great Father, while her laws are more stringently enforced, and her soil and climate less conducive to the support and comfort of the wild hunters of the plains. On Wednesday May 1. John Morrissey at the time State Senator officially and gambler professionally, ex-congressman, ex-assemblyman, ex-prize-fighter and ex-rowdy, died at Saratoga much to the regret of all classes in the community—except perhaps a few jealous political opponents. Without the advantages of early education, respectable associates or respectable reputation, and with the drawbacks of his rowdyish, pugilistic and gambling professions, by sheer force of pluck, indomitable resolution, a good deal of rough manhood, and a good deal of non-professional honesty, he had proved successful in nearly every project he took in hand, and won the respect, good-will and votes of thousands who reprobated his professional career. Another noted character has also been cut down by death in the person of W. S. O'Brien, of San Francisco. Within a score of years or so he had risen from the position of a rum-seller to be one of the founders of the firm of Flood and O'Brien, the California Bonanza Kings. A quiet unassuming, liberal man—such is the reputation the old bachelor left behind him along with about $20,000,000.

Last Friday, Commissioner Le Duc had a pleasant little treat in Washington. A party of gentlemen who had been in India and Japan, and are well acquainted with foreign tea culture, plucked some young leaves from the tea plants in the conservatory of the department of Agriculture, deftly manipulated them and brewed some tea which was pronounced equal to the best from the imported article. Of course, a wholesale grocer now offers $1 a pound for the native sort—and would like in this way to get his name into print to secure free advertising. There is a report that Fenianism is again about to become troublesome in the event of war between Great Britain and Russia. Acting on the adage that "England's difficulty is Ireland's opportunity," and on the principle that if the mother can't be whipped, her child at any rate can be pinched and worried, a number of these bold warriors are said to be preparing for a raid into Canada, but only after the Canadian troops are out of the way, taking part in the trans-Atlantic conflict. Uncle Sam, however, having pocketed $15,000,000 damages for England's remisssness in allowing her territory to be made a basis for operations hostile to the Union, is not likely to render himself liable to similar penalty by permitting these mischief-makers to annoy or injure, from behind the shelter of his broad back, the inoffensive children of their ancestral oppressor. In preparation for a tussle with England, Russia is reported to be negotiating in this country for the purchase of a number of fast steamers to be metamorphosed into war vessels for the purpose of depredating on British commerce. Their crews will, so it is said, be composed mainly of Russian sailors, 600 of whom are reported to have arrived in American waters on board the Cimbria, which has been chartered for a year as a Russian transport, and is now off the coast of Maine. Until war is actually declared, our government can take no action in the matter; afterwards to preserve neutrality according to its own principles, it is in honor bound to take reasonable care to prevent the sailing of such craft. In olden wars "letters of marque" used to be issued to private ship-owners, authorizing them to fit out privateers, the crews of which were responsible only to the owners who paid to the Government that commissioned them a percentage on their captures. This system was abolished by European nations by the treaty of Paris, in 1856. But the sea may still be covered with mercantile vessels converted into men-of war, provided their officers and crews are responsible directly to the Government whose commission they cruise under, and are bound by its maratime laws and regulations.

On the 3rd inst: the House passed an amendment to the appropriation bill, increasing the salary of the Commissioner of Agriculture from $3,000 to $4,500 and also increasing the compensation of the different officers of the department to the amount allowed by law. The appropriation for collecting agricultural statistics was increased from $5,000 to $10,000; that for the distribution of seeds from $70,000 to $75,000. The representatives of the nation are beginning to feel they can no longer entirely neglect the agricultural interest—the world *does* move, colored parson Jasper, of Richmond, nothwithing.

Manufacturers of Ladies' Suits, that use the Davis Vertical Feed Sewing Machine, are doing the sewing in the most elegant manner, and entirely without basting, or showing the stitches, by the use of very simple attachments. The invention and introduction of the Vertical Feed is an invaluable addition to Sewing Mechanism. The old under-feed machines will be rapidly superseded by this new and more perfect device for sewing, as it is adapted to every variety of work. The Davis Sewing Machine Company are building an addition to their large manufactory at Watertown, New York.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 4, 1878.

BEANS AND PEAS.—Receipts of beans have been unexpectedly let loose and though about last week's figures are repeated sellers are not quoting them with previous confidence. Mediums have merely the small spring call, buyers preferring the best selected stored. Cuba promises to be a better buyer of mediums, exporters however do not follow late advices with animation; they would rather wait until there is a decided development in their interest. Pea beans a better inquiry and prices are stiffer. White Kidneys are improving with the stronger phase of marrows; they take the place of marrows for some W. I. use Red Kidneys steady. Green peas $1.05@1.10, dull. Southern B. E. p as two bushel bag $2.80@3. Canadian peas 83@84c. for late business in bulk and bond.

We quote:—Beans, medium choice, $1.65@1.70; fair to good, $1.30@1.50; marrows, free to vessel $1.85@1.87½; fair to good, $1.50@1.75; pea, $1.40@1.65. White kidney, $1.50@1.75; red, $2.10@2.40; Black (Turtle Soup) $2.50@2.60.

BEESWAX.—A small trade is in progress at 27@28½c. for Western and Southern.

BUTTER.—For many years past it has been the custom of dealers in State to hold up prices until Western yellow compelled the marking down. This season however is a prominent exception particularly as State grass butter will precede Western many days—a circumstance out of commercial record. During the past week it has seemed that sellers could not reduce prices fast enough or low enough to work off the liberal supplies of white. In fact State yellow is already moving sufficiently to endorse its early arrival in quantity as sellers are nervous with reason. They know that just as soon as pasture shades present any collected array, white must retreat into doubtful quarters. Hence we give a range of prices this week that are liable to fluctuate further in buyers' favor before we go to press.

Comparative receipts and exports for past five years:

	Receipts. pkgs.	Exports. firks.
June 1, '77, to May 1, '78...	1,170,768	173,430
June 1, '76, to May 1, '77...	1,160,069	148,988
June 1, '75, to May 1, '76...	1,549,973	33,059
June 1, '74, to May 1, '75...	951,036	49,888
June 1, '73, to May 1, '74...	923,016	32,032

State creamery, choice 21@22c., other 18@20c.; half tubs and pails selected, 19@20c.; other 14@18c.; Welsh best 18@19c; other, 14@17. Western, creamery finest, 21@22c., other, 18@20c. dairy choice 17@18c. other, 12@15c.; factory fair to prime 10@14c.

Receipts for the week 24,085 pkgs.
Exports past week 2065 pkgs.

BROOM CORN.—Has a lighter sale.
Quoted at 6@7½c for hurl and short brush; 5@6½c. for medium green, 4@5c. for red and red-tipped, ℔ ℔.

COTTON has been very dull and fluctuating sharply closing as follows:

Latest prices are 10.80c for May; 10.90@10.91c. for June; 11 11.01c. for July; 11.03@11.04c. for August; 10.73@10.74c. for September; 10.56@10.57 for October; 10.45@10.47c. for November; 10.45@10.46c. for December; 10.55@10.57c. for January; 10.64@10.66 for February; 10.74@10.77c for March, and 10.84@10.88 for April.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texa*
Ordinary	7 13-16	7 13-16	7 15-16	7 15-16
Strict ordinary	8 9-16	8 9-16	8 11-16	8 11-16
Good ordinary	9	9	9⅛	9⅛
Strict good do	9½	9½	9⅝	9⅝
Low middling	10	10	10⅛	10⅛
Strict low middling	10 5-16	10 5-16	10 7-16	10 7-16
Middling	10⅝	10⅝	10¾	10¾
Good middling	11	11	11⅛	11⅛
Strict good middling	11 5-16	11 5-16	11 7-16	11 7-16
Middling fair	11 13-16	11 13-16	11 15-16	11 15-16
Fair	12 5-16	12 5-16	12 7-16	12 7-16

Stained,

Good ordinary, 7 13-16c. Strict ordinary, 8 9-16c.; Low middling, 9 1-16c.; Middling, 9 11-16c.

CHEESE.—Exports for the week 21,300 boxes. A steady decline has been necessary all the week to keep the increasing supplies sold up. The factories are now all at work, and larger supplies can be looked for right along: with this in view, exporters except as they get favorable terms do not exceed in purchasing actual needs. The closing market is weak, and 12 the best price for fancy factories while stock a trifle off is decidedly under this at once, very good grade being available at 11c. Prices are:

For new 12c. for best lots 11@11½c. for good 9½@11c. for half skimmed, and 5½@7½c. for whole skimmed. Western at 11½@12c. for fine; 10½11½c. for good prime, and 5½@7c. for skimmed.

Comparative receipts and exports of cheese have been as follows:

	Receipts, pkgs.	Exports, firkins.
June 1st, '77 to May. 1st, '78	2,382,584	107,182,584
June 1st, '76 to May. 1st, '77	1,910,641	81,210,670
June 1st, '75 to May. 1st, '76	2,348,549	95,307,211
June 1st, '74 to May. 1st, '75	1,966,510	98,235,840

Exports for the week, 23,426 boxes.
Receipts, 28,893 do.
Liverpool cable. (old cheese) 64s.
Gold closes 100½.

DRIED FRUITS.—There has been only a moderate jobbing trade, with prices, however, generally steady.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia. 10@11c.; good to prime Georgia; 8@10c.; unpeeled halves, 4½c.; quarters, 4c. Pitted cherries,

choice new, 23@25c.; Raspberries, 27c. New York State plums, 13@14.; southern plums, 11@12c. Blackberries, 10½c. Apples—State quarters, 4½@5½c.; do. sliced, prime, 6@7c.; Western quarters, 4@4½c.; Southern at 6@7c. for prime sliced, 5@5½c. for fair to good; Southern quarters, 4½@4½c.; Tennessee quarters, in bags, at 2½@3½c.; prime and fancy North Carolina sliced at 8@12c.

Exports for the week, 350 bbls. dried apples.

ESSENTIAL OILS.—Peppermint in tin, $1.75@2.00; glass, $2.50@2.70; Wintergreen, $1.90@2, large pkgs.; small, $2.10@2.15; Sassafras, 42@45c.

EGGS.—Receipts for the week, 9,963 bbls. The market is gradually working up from its late depression; still rates will have to be kept more or less popular until the danger of accumulation is passed. Receipts are favorably moderate.

Near points, 13½@14c.; State and Penn., 12½@13c.; Western and Canadian, fresh, 12c.; poor or inferior held stock, 10@11c.; Duck, 14@15c.; Goose, 27@28c.

FEATHERS.—Choice white goose, picked, 45c.; mixed, 40c.; scalded, 35c.; duck, 20c.

FURS AND SKINS.—Late sales at Leipsic developed nothing favorable for our home market, and the recent table of prices is only nominal.

FLOUR.—Has been declining, in sympathy with wheat, and closed weak except for Minnesota grades, which held higher on account of the destruction by fire of several more important mills in Minneapolis.

Latest prices are $4.15@4.75 for poor to fancy superfine State; $4.80@5.15 for poor to good extra do; $5.15@5.50 for good to very choice do.; $4.15@4.75 for superfine, Indiana, Iowa, Michigan, Ohio, &c., (the latter an extreme); $4.80@5.10 for inferior to good shipping extra do., (mainly at $4.90@5.05 for lines); and $5.15@5.50 for good to choice extra do.; common to choice white wheat extras, $5.35@6.50; choice to fancy do. at $6.50@7.50; red and amber winter wheat, inferior to choice trade and family, at $5.15@6.35; round hoop Ohio at $4.85@5.25, and trade and family brands of do. at $5.35@6.65, the latter rate for very choice; St. Louis, $5.25@6.00 for very poor to good extra, and $6.00@7.00 for good to very choice (with a few brands of fancy quality quoted up to $7.25@7.50); Minnesota clear, very inferior to very choice at $4.20@6.00 (a few fancy brands selling as high as $6.15@6.25); Minnesota "straight," inferior to very choice, at $5.75@6.75 (few brands going above $6.50, and patent poor to fancy choice at $6.00@8.75; unsound stock at from $2.25@5.75; city mill extra at $5.10@6.15 for fair to very choice for West Indies; do. for England at $4.85@5.00; do. trade and family extras, $6.35@7.50; do. for South America, $6.30@7.25 for fair to fancy; No. 2 at $3.85@3.75 for inferior to very choice (fancy lots held as high as $4).

FRESH FRUITS.—Apples are scarcely in stock enough to quote by. Red and extra Russets nominally $5@6 ₱ bbl.; poor to prime Russets, $3.00@4.50. Strawberries arrive from several points, and Maryland will be added next week. Norfolk, good to best, 20@30c. per quart; fair 15c.; North Carolina, 20@30c.; Charleston, 20@30c., inferior, 5@15c. Cranberries have closed out as a prosperous crop; a remnant of crates, $4. Peanuts still lack their wonted spring demand; prices weak. Va. hand-picked, $1.35@1.40; good to fancy, $1.15@1.30; common, 85c.@1.00. Black Hamburg grapes (hot house), $1.75@2.00 ₱ lb.

Receipts of peanuts, 1,475 bags.

GRAIN.—All articles have declined on account of the pacific character of the news from the other side, closing with an active business. Latest sales of wheat are:

New York No. 2, red at $1.32@1.33; red State at $1.32. State steamer white at $1.39, prime white State held at $1.45 and $1.48 offered; No. 1 white at $1.39@1.40. No. 2 Toledo red at $1.32; No. 3 red at $1.26½@1.27; ungraded red western at $1.10 to $1.35; No. 2 Milwaukee spring at $1.24@1.24½; No. 2 Chicago spring at $1.22½@1.23; New York No. 2 spring at $1.22@1.23½; ungraded spring at $1.18@1.22½; New York No 2 red, June delivery, at $1.31½; No. 3 Milwaukee spring, May delivery, reported at $1.23½; New York No. 2 spring, May delivery, at $1.22@1.22½. do. June delivery, at $1.21½@1.22; No. 2 northwest spring, May delivery, at $1.23½@1.24, do., June delivery, on private terms, quoted at $1.23. Rye at 71@76c. for State and 72@73c. for Western Corn—New York No. 2 brought 51½@51¾c.; do. old, 55½@56c. New York No. 3 at 50@50½c.; New York steamer mixed, at 52@52¾c.; low mixed at 54c.; ungraded mixed at 48@57c., and yellow southern and Pennsylvania at 51c.; No. 2 May delivery, at 52@52¾c.; No. June delivery, 52½@53¾c.; No. July delivery, 53¾c., steamer mixed May delivery, at 50c.—Oats, No. 2 Chicago at 35@35¼c.; white, State about, at 35½c., do., in lots, at 35½@38½c.; mixed and white State together at 35½c.; mixed State at 34@35½c.; white Western at 35½@39c.; mixed Western, 34@35½c.; New York, No. 1 white at 38c.; New York No. 2 at 35½@35½c.; New York No. 3 white quoted at 34½c.; New York No. 1 at 35½c., New York No. 2 at 34½c.

HAY AND STRAW.—Receipts have been moderate and prices very regular.

Bale hay, 55@60c. for shipping, and 70@80c. for retail qualities; clover, 50@60c. for prime. Straw, 40@50c. for long rye; 35@40c. for short rye, and 40@45c. for oat.

Exports for past week 618 bales.

HOPS.—Shipments the past week have reached 960 bales. There has also been a freer demand from brewers. Low and irregular prices have been accepted and the position is wholly nominal.

New Yorks, good to prime, 7@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

MAPLE SUGAR.—It is too late to ship cakes. The remnant brings 8@10c.; sirup has some demand at 75c.@100 per gallon with can.

OIL-CAKE.—Western quoted at $30.50 per ton.

PROVISIONS.—Hog products have been weak, reaching the lowest prices yet, and dull.

Mess pork, $9.75@10.00 for spot lots; $9.50 for June and $9.57 for July. Bacon at 5c. for long clear and 5¾c. for short clear. Lard—Western steam, 7.20c. for spot, lots, 7.20c. for May, 7.22½c. for June and 7.27½c. for July. Stearine, 7½c. for prime. Tallow, 7½c. Beef—New extra mess, $12.@12.25; plain, $10@11.50; packet $13.50@14.50 family mess, $15@16; extra India mess $25@26 for city brands; do. Philadelphia, $22@23.

POULTRY AND GAME.—Live poultry has a ready sale, the market trade prefers any bright city killed, to ice packed country dressed. The few lots of the latter go to hotels and steamers. Live fowls seldom run as steady in prices as they have during the past week. Spring chickens are mostly too small to be attractive.

We quote N. J. and Pa. fowls, 13@14c.; Southern and Western, 12@13c.; Roosters, 7@8c.; S. chicks, 50@90c. ₱ pair; Turkeys 12@14c.; Ducks, choice, $1@1.12; other, 50@87c.; Geese, N. J., $1.25@1.50; Southern and Western, 60c.@$1.

Dressed poultry is quoted at 15@17c.; for good to prime turkeys, 10@12c. for poor or extra heavy. Dry picked Philadelphia fowls 14@16c.; New Jersey, 12@14c.; odd lots of State and Western, 10@13c. for fair to prime. 8@9c. for poor. Capons, 28@30c.; slips, 25@27c.; spring and winter Philadelphia chicks, 25@30c.

Game is scarce and without special inquiry. Stall-fed pigeons are the new feature, selling at $1.50 ₱ doz.; flight, 75@85c.; squab, 75@85; English snipe, $1.90@2.; plover, $1.50; Sand Snipe, 45@50c.; Philadelphia squab, $2.50@3.

SEED.—Grass is dull but firm; clovers quoted at 7¾@7¾c. for State and 7¾@7¾c. for Western; Timothy at $1.30 to $1.40.

TOBACCO.—Is essentially as last week as respects prices. More interest is shown by exporters and the general trade is fairly active.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¼@ 3¼	3 @ 3½
Good lugs	3½@ 4½	3½@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5½@ 6½	6½@ 7
Good leaf	6½@7½	— @—
Fine leaf	— @—	— @—
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	9 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—Export potatoes now arrive more or less soft or sprouty, and the extreme is seldom made. Choice Peach Blows and Early Rose bring $1.50@1.62; others $1.00@1.28 and many offered at 75 without bbl, a good deal of stock is offered at 75c. in bulk and 100@125 in lbs. Florida new $3@6 lbs. Bermuda, $7.50@8.00. Sweet have kept elegantly this season and Delaware bring $1.75@2; onions have advanced largely and suddenly; Red and Yellow $2@3; white $3@3.75 all Eastern. Chester new higher $2@2.50. R. Turnips 75; carrots 75@1.00; Green peas, crate 50@75c. Norfolk and N. C. now lead the trade range per bbl. 4.50@7.00; string beans low 4.50@5; Fla. do. $1.@2; cucumbers $5@6; Asparagus is in large supply Oyster Bay 3@3.50 N. J. and Del. $2@2.75; Southern $1@1.75. Radishes 50@1.25 per L. W. Kale old 20@25c. Lettuce bbl. 2@3.50. Cabbages, Norfolk, bbl. $2@2.50. Spinach bbl. $1.@1.25.

WOOL.—There has been a dull stupid market through the week, the trade holding off for the new clips, and business possible only at easy prices.

LIVE STOCK MARKETS.

NEW YORK, May 4, 1878.

BEEVES.—Receipts for the week, 10,277 head; do., last week, 10,600 do. "Moving day," which usually interrupts city business in meats did not have its customary effect this First of May. At both yards a steady sale of cattle is noted and prices at the close higher than on last Wednesday. Choice steers brought 10½@10½c.; ordinary to prime, native steers 9@10c.; bulls, 3½@4¾c.; Cherokee, 8½c. Export demand steady.

COWS AND CALVES.—Few arrive and few wanted unless extra. Milkmen would pay 50@65c, but the quality they want are worth as much at home.

VEAL CALVES.—Receipts have been liberal and prices are easy; good to prime, 5¾@6¾c. Buttermilk, 4½@5½c.; common, 3@4c. Hog-dressed veal has no reliable rate, the weather has turned very warm.

SHEEP AND LAMBS.—Receipts for the week, 20,539 head; do. last week, 18,517 do. Market inactive, quality somewhat against quick sales; fair to good clipped sheep, 4¾@5½c. do. unclipped, 5½@6c.; good to extra lambs, 8½. 10¾@11c.

SWINE.—Receipts for the week, 30,390 head; do. last week 25,397 do. No late sale of live; sold Thursday, $3.65@3.75, good corn-fed. Country dressed dropped.

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LADIES' ALL SILK HANDKERCHIEFS, 15c., 18c., 20c. and 25c.

FRENCH FLOWERS,
5c., 10c., 15c., 18c., 20c., 25c. up to $5.

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A LARGE VARIETY, AT VERY LOW PRICES.

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HAMBURG EDGINGS,
3c., 5c., 7c., 9c., 10c., 11c., 12½c., 15c., 17c., 20c., 25c., just half the prices for these goods.
BLACK FRENCH LACES,
20c., 25c., 27c., 30c., 37c., twenty-five per cent. less than regular prices.
TORCHON LACES,
5c., 7c., 9c., 10c., 11c., 12½c., 15c., 17c., 20c., 25c., very cheap.
A LARGE LOT OF LADIES' FOUR-PLY LINEN COLLARS at 16c., worth 25c.
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LADIES' SCOLLOPED EMBROIDERED HANDKERCHIEFS, all linen, 25c.

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JOB LOT, 2 button, all shades, 25c. and 35c.
PREMIER KIDS,
2 buttons, 75c.; 3 buttons, 90c.
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2 buttons, $1; 3 buttons, $1.35.
LORD & TAYLOR KIDS (first quality),
2 buttons, $1 40; 3 buttons, $1.65.
JULIEN KIDS,
4 buttons, $1.20; 6 buttons, $1.50.
TREFOUSSE KIDS.
2 buttons, $1.65; 3 buttons, $1.90.
4 buttons, $2.20; 6 buttons, $2.70.
MISSES' KIDS,
2 buttons, 70c.; 3 buttons, $1.25.
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cure these various diseased conditions, after all other means fail, and we offer the most convincing testimony direct from the afflicted themselves, who have been restored to

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Reading for the Young.

BABY MARION IN CHURCH.

BABY Marion went to meeting
To hear her grandpa preach;
"Tis 'Tismas time, I must be dood,
I mustn't laugh nor skeetch.

"I've got my new boo dess on,
And my petty feddered hat,
And my han'chief in my 'ittle muff
That's like Aunt Jane's white cat."

So Marion went to meeting.
As a rosebud sweet and fair,
She piped up in the singing,
And bowed her head in prayer.

She waved her wee lace handkerchief
To her little playmate Grace,
And tried to wipe a sunbeam
From off her mamma's face.

She threw kisses to a lady
Who sat across the aisle;
Gave Dr. Meade some candy,
Which made the Deacon smile.

She climbed upon a footstool,
Whispering, "Danma, ain't I tall?
I wish danpa'd look down here,
But then, perhaps he'd fall."

Then Marion went home again
And jumped on papa's knee;
"'We all have been to meetin'
'Cause we are dood, you see.

"'And danpa preached: 'A 'ittle baby
Slept in the barn with cows;
And men came and div him presents,
And then they made him bows.'"

[*Christian Register.*

THE article on "Pocket Money for Young People," which appears this week is the first of a series which I hope will prove not only interesting but of real value to my young relatives. There can be no reason why the farm and home should not become places of absorbing interest to young people, and not the sources of discontent that, unfortunately, is too frequently the case. It is intended that these articles shall be practical in scope, and show the way to the profitable employment, for their own account, of the superabundant energy of our young agriculturists. Mrs. Jack's article will be followed by others from her own facile pen, in addition to the contributions from writers whose experience makes them trustworthy teachers. The incentive, pocket money, is secondary. It is hoped that experience, self-reliance and the formation of habits of observation will be the finer fruitage which will fit the young farmer to prosecute with increasing intelligence as he grows older, one of the most complex, least popularly understood of the sciences, farming. If more detailed information is requisite by those who propose to try for "pocket money," any questions bearing on the subject will be cheerfully answered by UNCLE TRUE.

POCKET MONEY FOR YOUNG PEOPLE.

ANNIE L. JACK.

GARDENING! The bright May days bring fresh energy, and the desire to plant and sow that we may reap, becomes an epidemic with us. For years the children have had each their plot of ground where they grow whatever they choose for pleasure and profit; and an apple tree, the fruit of which is all their own. But during the last few years these ambitious boys and girls have required wider scope for their increasing needs as regards pocket money, and take part of the garden for different crops as they may determine on "opening day." For the first day of seed sowing is really an era in the year, and of course the whole family must assemble to assist by advice and labor.

We proceed to divide the land, laying off the hillside into ridges. Jamie wishes to try

SQUASHES,

of which we have plenty of seed of June Hubbard, procured from Gregory. He knows that we can sell them in autumn to advantage, and also that the seed, if carefully washed and dried, sells to the seedsmen of the city, who take our word for it that they are not *mixed*. Seventy-five cents a pound will pay Jamie well for all the labor expended, which is hoeing the hills and keeping off the squash bug; for the work is chiefly done by horses, the hills being eight feet by six apart. But in winter he will have to clean the seed, and to watch that mice do not eat them before marketing. These are slight cares for a boy of ten who can easily realize *a dozen dollars from a small plot of ground*.

Our twelve-year-old daughter perseveres in

SAGE,

and all the savory herbs. The ground must be raked fine and seed got in early, for it takes quite a while to start; but there are dollars in a sage bed, and since it has been recommended as a *hair restorer* it is in greater demand than before. When cut at the right season, and neatly packed in boxes for market, it brings about $1.50 per hundred bunches, and, if kept over until spring, often double that price.

Willie thinks he will stick to

POTATOES,

although they are just now a drug on the market. Last spring the crop of the previous year sold at nearly a dollar per bushel, while this spring thirty cents is the average.

It so happened that late in June, 1876, there was a piece of grass land which we intended as a future bed for small fruits. So the boys took it from papa on shares and planted potatoes on the sod,—the work being satisfactorily done,—even little six-year-old trying his best to put in a few rows for pocket money. Long before the shoots were seen above ground, the land was harrowed, then on the appearance of the shoots the cultivator was run between the rows, the hoe applied, and by a little attention weeds were kept down and a fine crop of potatoes the result. In autumn papa refused his *share*, and the boys counted joyously 120 bushels of fine, large, Early Rose potatoes put into the barn cellar, where they kept firm and sproutless till the following spring, at which time they were well rewarded for their industry. How many things were bought with *potato money!* gifts to us and to each other, a trip to the city with money in the pocket, and the eldest ambitious youth gave his order to the cabinet maker, with an air of supreme importance, for a brand new cabinet—long coveted—in which to keep his collection of insects.

The family poet cultivates

FLOWERS,

not for sale as bouquets, but one ridge of ground is given to the growing of ornamental grasses and Everlasting flowers, and this is the poet's province,—with an eye to money making. The flowers are as simply grown as any of the annuals, and must be cut frequently, which is pleasant employment. They are hung in a dark room, head downwards, the stalks tied together in little bunches, and here they remain until early December, at which time we collect in the woods the various Lycopodiums, and use the flowers in the tasteful arrangement of winter decorations for Christmas. Poetry, good taste and close working for a fortnight, will result in a fine assortment of wreaths, crosses, stars and sprays. These are put into barrels and sold to city dealers at the rate of seven or eight dollars per barrel. Two years ago, by constant application through the last two weeks of December, three little girls of this household made six barrels of this trimming, and thoroughly enjoyed their well-earned pocket money.

Next week I will tell you of other things we have tried in vegetables and fruit and found successful, for the simple reason that we did not shirk, and were not afraid to work.

THE PRIVATE HISTORY OF AN EAR OF CORN.—No. 2.

BY THE COB.

THE worst member of a family is commonly held in the most affectionate esteem. We always have the redeeming qualities of a prodigal placed in the most attractive light, while the faithful, trustworthy, elder brother remains in a sort of trance of perpetual goodness and no praise accrues to him. It was so with our poor sheep. JOHN was always full of spirit. It proved his destruction, alas! When he parted from me he dropped his warlike title and became plain Mr. CORN—or as the register has it, JOHN BARLEY CORN. He went to Chicago and became known to a distiller. Being young, full of spirit, as I have mentioned, and withal confiding, this bad man soon "wormed" his inmost soul out of the boy and converted him into high-wines—something very bad indeed, I am told.

It was long before I heard from him again. When the news came that he had been "rectified," which I understood as meaning corrected, or set right, I took heart. But I was not long in finding out that this "rectification" was only another step in his distressing career. It was merely gilding refined gold—making him more seductive, that he might the more easily involve others in his ruin! A siren always sings sweetest when bent on thorough destruction, so our poor JOHN was none the less dangerous to himself and society because of being placed in a cut-glass bottle and prowling about under the *alias* of "Maryland Club Whisky." He was sold into slavery: a bright young man, the sole dependance of a loving mother and charming sister, paid a sum and took JOHN into his family.

Each day JOHN and this young man became more intimate, until at last they became inseparable. JOHN was none the better for this companionship, and the young man was decidedly the worse for it. And they did not agree very well together at first, either. After having "made a night of it" as the young man explained, he found himself possessed of a violent headache and other ills too indelicate to mention. But a resort to JOHN BARLEY CORN "toned him up," he said, until finally this "toning up" process became habitual and the baleful friendship was cemented beyond dissolution.

Then the misery began. Night after night these two made the earth hideous with their orgies. They called it having fun. I said it was slow and painful self-destruction; it was more, because their ruin involved the down-fall of the innocent, protesting, heart-broken mother and sister.

They became the fast friends of vice, and her handmaiden, drunkenness. They postured as ornamental monstrosities, pendant from lamp-posts. The gutter was their not unfrequent abiding-place, and when by chance they went reeling home at three in the morning, tipsy, jocularity suggested that it was early, as three was only a quarter of twelve!

It was not long before this young man, the only support of his mother and sister, lost the power of being useful to his employers, and with it his income. But the "fun" went on all the same, only now the sister was made to exchange places with the dissolute brother, becoming the bread-winner for the family; and it was little more than actual bread that was gained. A woman's work is rarely rewarded in proportion to her endeavor. The young man and JOHN had their good time nevertheless, which accounted for the gradual transfer of everything negotiable to the pawn-shop, until the destitution, moral and physical, was indeed extreme. The fast whitening hair of the mother, and the broken health of the daughter, should have given pause to their besotted career; but no, the fiend had them firmly, and merely grinned when the sheriff dispossessed the family of the trifle that remained.

I know I will be excused from continuing this painful history. It is not the pleasantest task in the world to record the destruction wrought by one's kin, and I somehow feel a part of the odium of having ruined a young man, driven a desolate mother to the poor-house, and consigned a sister to worse than death. If it were not that JOHN'S brother, of whom I shall next speak, tried to atone for such destruction by a life of usefulness I should be disheartened indeed. Even at the sacrifice of family pride I assert that I see no reason for the existence of JOHN B. CORN; he was as useless as a grave-stone after the resurrection, and infinitely more harmful.—To be continued.

The Puzzler.

CURTAILMENTS.

1. CURTAIL a river of Scotland, and leave an insect's egg.
2. A tree, and leave a pronoun.
3. Damp, and leave a pronoun.
4. A Maine county, and leave the noise of a dove.
5. Profound, and leave a river of Great Britain.
6. A Confederate general, and leave a noble title.
7. A garden pest, and leave tiny.
8. A masticator, and leave to blow a horn.
9. A twist of rope, and leave consanguinity.
10. A tumor of the fingers, and leave wholesale fighting.
11. What keeps us from despair, and leave to jump.
12. A cape of South America, and leave a mountain of Syria.
13. A city of France, and leave a libertine.
14. A pronoun, and leave emaciated.
15. A game of cards, and leave an exclamation.
16. Plunder, and leave the covering of a man's foot.
17. A goddess, and leave a waistcoat.
18. One of the Hebrides, and leave a cane.
19. A character of Shakspeare, and leave a city of Italy.
20. A verb, and leave a small speck.
21. A fruit, and leave a vegetable.
22. A bird, and leave a brave man.
23. Came together, and leave a pronoun.
24. A vegetable, and leave an insect.
25. A wager, and leave a verb.

☞ Answer in two weeks. LITTLE ONE.

TRANSPOSITION.

Si tl ont weste, cvolbed hoyut,
Ot over ghourth rudesonltl robswe,
Dan luel het logend surlit fo hurtt,
Nad tarheg scyanf britlnall slofrwe?

☞ Answer in two weeks. S. C.

PUZZLER ANSWERS.—April 27.

POLYSYLLABIC ANAGRAMS.—1, Subtilization; 2, Superincumbent; 3, Superogatory; 4, Supernatural; 5, Paraphernalia; 6, Membranaceous; 7, Mensurability; 8, Mediatorship; 9, Mineralization; 10, Falsification; 11, Firmamental; 12, Fundamentally; 13, Galactometer; 14, Newfoundland; 15, Archepiscopal; 16, Deliberate; 17, Aristocrat; 18, Therapeutics; 19, Incantation; 20, Incomprehensibility; 21, Commensurability; 22, Equinoctial; 23, Agglomeration; 24, Administratorship; 25, Adjustment.

MISCELLANEOUS ENIGMA.—Honor thy father and thy mother.

DOUBLE ACROSTIC.—Initials, David Copperfield; finals, Old Curiosity Shop.

WORD-SQUARE ENIGMA.—

U R G E
R E E L
G E R M
E L M O

Sabbath Reading.

NOT MINE, BUT THINE.

THY way, not mine, O Lord,
However dark it be;
E'er lead me by thine own right hand,
Choose out the path for me.

Smooth let it be or rough,
It will be still the best;
Winding or straight, it matters not,
It leads me to thy rest.

I dare not choose my lot,
I would not if I might;
But choose thou for me, O my God,
So I shall walk aright.

The kingdom that I seek
Is thine; so let the way
That leads to it, O Lord, be thine,
Else I must surely stray.

Take thou my cup, and it
With joy or sorrow fill:
As ever best to thee may seem,
Choose thou my good and ill.

Choose thou for me my friends,
My sickness or my health:
Choose thou my joys and cares for me,
My poverty or wealth.

Not mine, not mine the choice,
In things or great or small;
Be thou my guide, my guard, my strength
My wisdom and my all.

[*Anon.*

COMMUNION WITH GOD.

PSALM XXVII 4.

J. H. NEWMAN.

WHAT the Psalmist desired, we Christians enjoy to the full,—the liberty of holding communion with God in His Temple all through our life. Under the Law, the presence of God was but in one place; and therefore could be approached and enjoyed only at set times. So, for the greater part of their lives, the chosen people were in one sense "cast out of the sight of His eyes;" and the periodical return to it which they were allowed, was a privilege highly coveted and earnestly expected. Much more precious was the privilege of continually dwelling in his sight, which is spoken of in the text. He desired to have continually that communion with God in prayer, praise, and meditation, to which His presence admits the soul; and this, I say, is the portion of Christians. Faith opens upon us Christians the Temple of God wherever we are; for that Temple is a spiritual one, and so is everywhere present. "We have access," says the Apostle, "by faith into this grace wherein we stand, and rejoice in hope of the glory of God." Prayer, praise, thanksgiving, contemplation, are the peculiar privilege and duty of a Christian and that for their own sakes, from the exceeding comfort and satisfaction they afford him, and without reference to the answers which are promised to it, from a general sense of the blessedness of being under the shadow of God's throne.

What, then, is prayer? It is (if it may be said reverently) *conversing* with God. We converse with our fellow-men, and then we use familiar language, because they *are* our fellows. We converse with God, and then we use the lowliest, awfullest, calmest, concisest language we can, because He *is* God. Prayer, then, is *divine* converse, differing from human as God differs from man. Thus St. Paul says, "Our conversation is in heaven,"—not indeed thereby meaning converse of words only, but intercourse and manner of living generally; yet still in an especial way converse of words or prayer, because language is the special means of all intercourse. Our intercouse with our fellow-men goes on, not by sight, but by sound, not by eyes, but by ears. Hearing is the social sense, and language is the social bond. Prayers and praises are the mode by his intercourse with the next world, as the converse of business or recreation is the mode of which this world is carried on in all its separate courses. He who does not pray, does not claim his citizenship with heaven, but lives, though an heir of the kindom, as if he were a child of earth.

No, it is not surprising if that duty or privilege, which is the characteristic token of our heavenly inheritance, should also have an especial influence upon our fitness for claiming it, He who does not use a gift, loses it; the man who does not use his voice or limbs, loses power of them, and becomes disqualified for the state of life to which he is called. In like manner, he who neglects to pray, not only suspends the enjoyment but is in a way to lose the possession, of his divine citizenship. We are members of another world; we have been severed from the companionship of devils, and brought into that invisible kindom of Christ which faith alone discerns,—that mysterious Presence of God which encompasses us, which is in us, and around us, which is in our heart, which enfolds us as though with a robe of light, hiding our scarred and discolored souls from the sight of Divine Purity, and making them shining as the Angels; Faith, I say, alone apprehends all this; but yet there is something which is not left to faith,—our own tastes, likings, motives, and habits. Of these we are conscious in our degree, and we can make ourselves more and more conscious; and as consciousness tells us what they are, reason tells us whether they are such as become, as correspond with, that heavenly world into which we have been translated.

I say then, it is plain to common sense that the man who has not accustomed himself to the language of heaven will be no fit inhabitant of it when, in the Last Day, it is perceptibly revealed. The case is like that of a language, or style of speaking of this world; we know well a foreigner from a native. Again, we know those who have been used to educated society from others. By their voice, accent and language, and not only so, by their gestures and gait by their usages, by their mode of conducting themselves and their principles of conduct we know well what a vast difference there is between those who have lived in good society and those who have not. What indeed is called "*good* society" is often very worthless society. I am not speaking of it to praise it; I only mean, that, as the manners which men call refined are gained only by intercourse with polished circles, and as the influence of the words there used (that is, of the ideas which those words, striking again and again on the ear, convey to the mind), extends in a most subtle way over all that men do, over the turn of their sentences, and the tone of their questions and replies, and their general bearing, and the spontaneous flow of their thoughts, and their mode of viewing things and the general maxims or heads to which they refer them, and the motives which determine them, and their likings and dislikings, hopes and fears, and their relative estimate of persons, and the intensity of their perceptions towards particular objects; so a habit of prayer, the practice of turning to God and the unseen world, in every season, in every place, in every emergency (let alone its supernatural effect of prevailing with God,)—prayer, I say, has what may be called a *natural* effect, in spiritualizing and elevating the soul. A man is no longer what he was before; gradually, imperceptibly to himself, he has imbibed a new set of ideas, and become imbued with fresh principles. He is as one coming from kings' courts, with a grace, a delicacy, a dignity, a propriety, a justness of thought and taste, a clearness and firmness of principle, all his own. Such is the power of God's secret grace acting through those ordinances which he has enjoined us; such the evident fitness of those ordinances to produce the results which they set before us. As speech is the organ of human society, and the means of human civilization, so is prayer the instrument of divine training.

PERSONAL ITEMS.

Lord Dufferin's term as Governor-General of Canada expires June 1. He has held the office since 1872, and both he and the Countess are exceedingly popular.

The Illinois papers are again hinting at Hon. E B. Wasburne for next President. We suppose h will be put on the course for Congress and the Senate as a first step.

The Baroness Burdett-Coutts is the richest and most philanthropic woman in England. The bank of that name is hers. Hundreds have proposed to her, but she somehow thought, not being handsome, 'twas her money they wanted. She has been troubled all her life with a hereditary skin disease. She dresses always in black. Her Christian name is Angela.

Ex-Gov. Morgan, of this State, began business life in New York at the age of twenty-six as a jobbing grocer, on a capital of $5,000. He retired from trade after nine years with a fortune which he has subsequently increased, till he is now estimated to be worth ten millions. He has a son, Edwin D. jr., who is an able physician, and a grandson who is just becoming a society man.

THE Telegraph reported the other day that Jefferson Davis was received with special honors by President Diaz of Mexico. The person so entertained proves not to be the chief of the late confederacy, but Brigadier-General Jefferson C. Davis of the United States army, commanding on the Rio Grande frontier. What at first seemed to a studied affront to the United States, turns out to be a graceful compliment.

IT is not so very bad after all to be an ex-empress. The once gay and beautiful Eugenie has an income of $250,000 upon which she manages to pay her grocery bill and to live in what is called "dignified retirement" at Chiselhurst, England, where she daily takes long walks about the pretty lanes and wide commons. Sundays and fast days, and on the 9th of each month, she visits the Catholic Church where lie her husband's remains. She gives up her mornings to her correspondence and the newspapers, breakfasts at noon, and, as she has a royal memory and much vivacity, makes the meal a charming occasion; teas at five o'clock, usually receiving neighbors or visitors at that time, and dines at eight.

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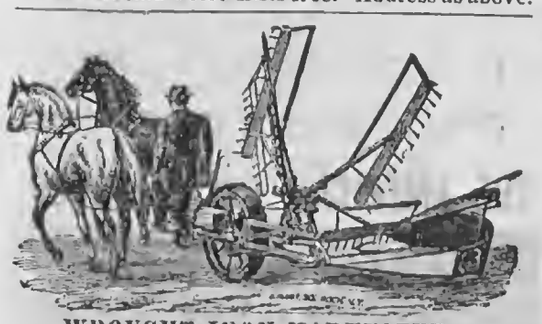

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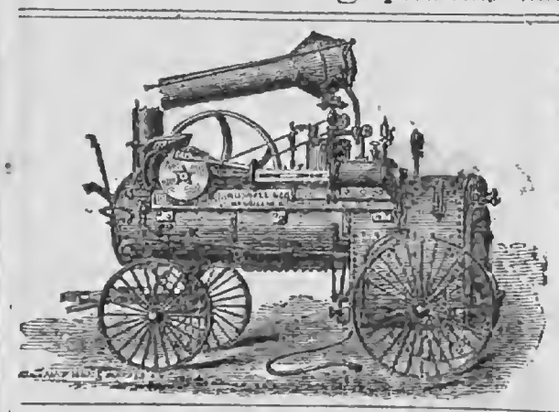

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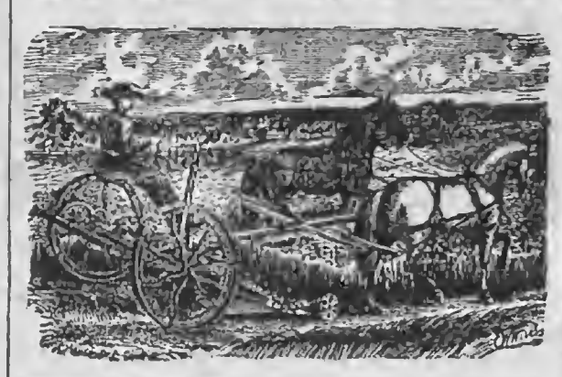

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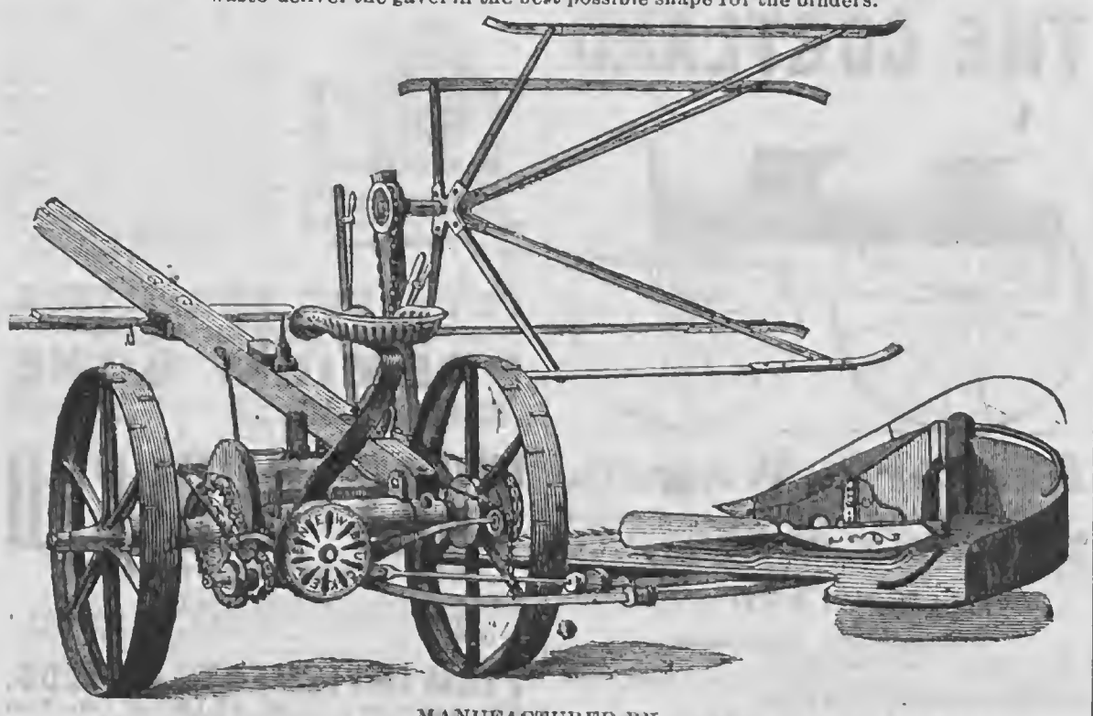

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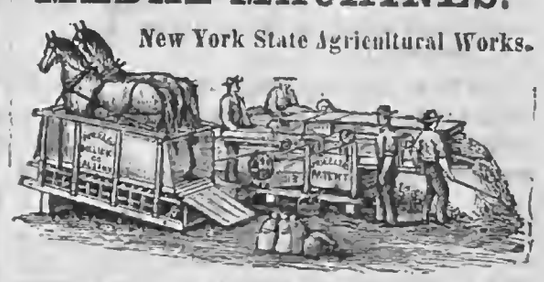

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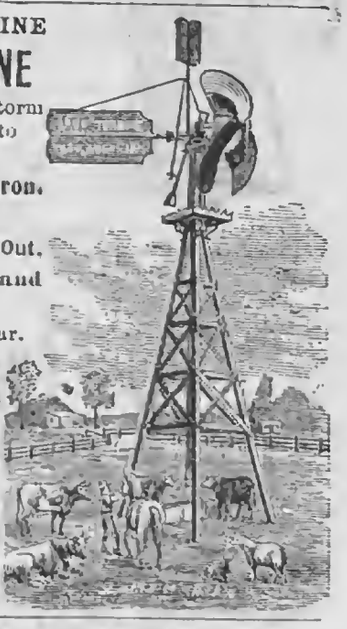

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EVEN a hair can cast a shadow over the happiness of a young married couple when found in the butter by him, or on his coat by her.

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THE manner in which some people suppose the students of the Michigan Agricultural College hoe corn.

The manner in which it is actually done.

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In order to make headway against the common enemy, Disease, it is necessary to oppose him with persistence. It very frequently happens that a remedy perfectly adequate to the necessities of the case, if *persisted in*, is condemned and thrown aside because a few doses of it do not cure a malady. How unreasonable and unjust would such a judgement be regarding Hostetter's Stomach Bitters, one of the most popular and highly sanctioned medicines of the day, a potent invigorant and an invariably successful remedy for constipation, dyspepsia, liver complaint, incipient rheumatism and gout, inactivity and weakness of the kidneys and bladder, and for the infirmities incident to the decline of life. No fact is better established than the above, yet in order to experience its truth those afflicted with obstinate forms of disease should give this benignant curative a patient trial. If they do, they may rely upon decisive curative results.

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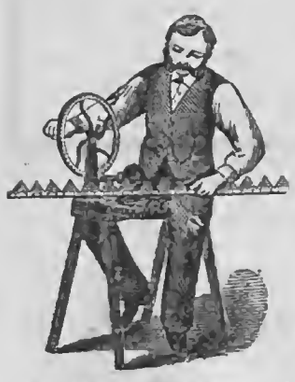

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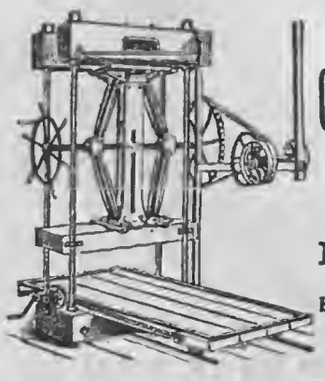

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Field Crops.

HOW TO USE CLOVER.

W. J. FOWLER.

FARMERS who grow clover largely are almost necessarily improving their land. It is true that some modes of disposing of the clover crop are more advantageous than others, but so long as clover is grown the soil must be benefited. The roots at least must remain, under the most exhaustive system of cropping and clover roots are no mean fertilizer. They take from the subsoil and probably also from the atmosphere most of the substances which the plant contains. It is hardly possible, except by the utilization of atmospheric nitrogen, to account for the beneficial effects of clover on the soil. I have often seen good crops grown on clover sod without manure and on land which before being clovered was reckoned rather poor. Of course, the effect is all the better if a crop of leaves and haulm is turned under with the roots.

The clover helps the soil in other ways. Its roots are the cheapest subsoiler and if the field is not very wet, will give the soil all the drainage needed for ordinary farm crops. I am satisfied that farmers who grow clover largely, can keep their fields dry with one-half the underdraining they would otherwise need. Walking this spring over the fields, I find clover sod dry and ready to plow, while in timothy or other grass adjoining, the water oozes out from the surface under the pressure of the foot. Even in wheat fields I find that where clover has been plowed under, or even on a clover sod, the soil is much dryer than on wheat after stubble. The decaying clover roots form channels through which the water passes away.

Plowing-under clover when in bloom is rightly regarded as a wasteful method of using it—far better, however, than not using it at all. The objections to naked summer fallows are, that they require two seasons to make a crop, and that while the sod is decaying under the blaze of a summer sun or the unprotected surface of the field, much of the valuable part of the clover is lost. If the soil is rich, as it should be, it will produce as much after barley or oats as after a naked fallow. I do not suppose that fallows average five bushels per acre more of wheat than land sown after stubble. This year the difference will be even less, and some of the best wheat I have seen was after a heavy crop of barley. Five bushels of wheat are too little to pay the loss of a grain crop and the extra expense in cultivating the fallow. There is a more important loss, as summer fallows are usually plowed the year after the clover is sown, the roots have not yet made their full growth, and do not until the second crop of clover in September when the seed is harvested. This is not too late to plow and sow to wheat. Good crops are thus grown; but the difficulty is in getting a "catch" of clover seed. My way is to harvest two crops of clover the second year, the last of which is for seed. Feed this out on the farm, sow the seed and make a big manure pile. The year after, manure this clover sod heavily, plant with corn or potatoes and then follow with barley or oats and wheat again. In this way there is no trouble about a good catch of clover every year, and besides the manure made from two crops of clover, the seed sold and used will pay the interest on the land.

Monroe Co., N. Y.

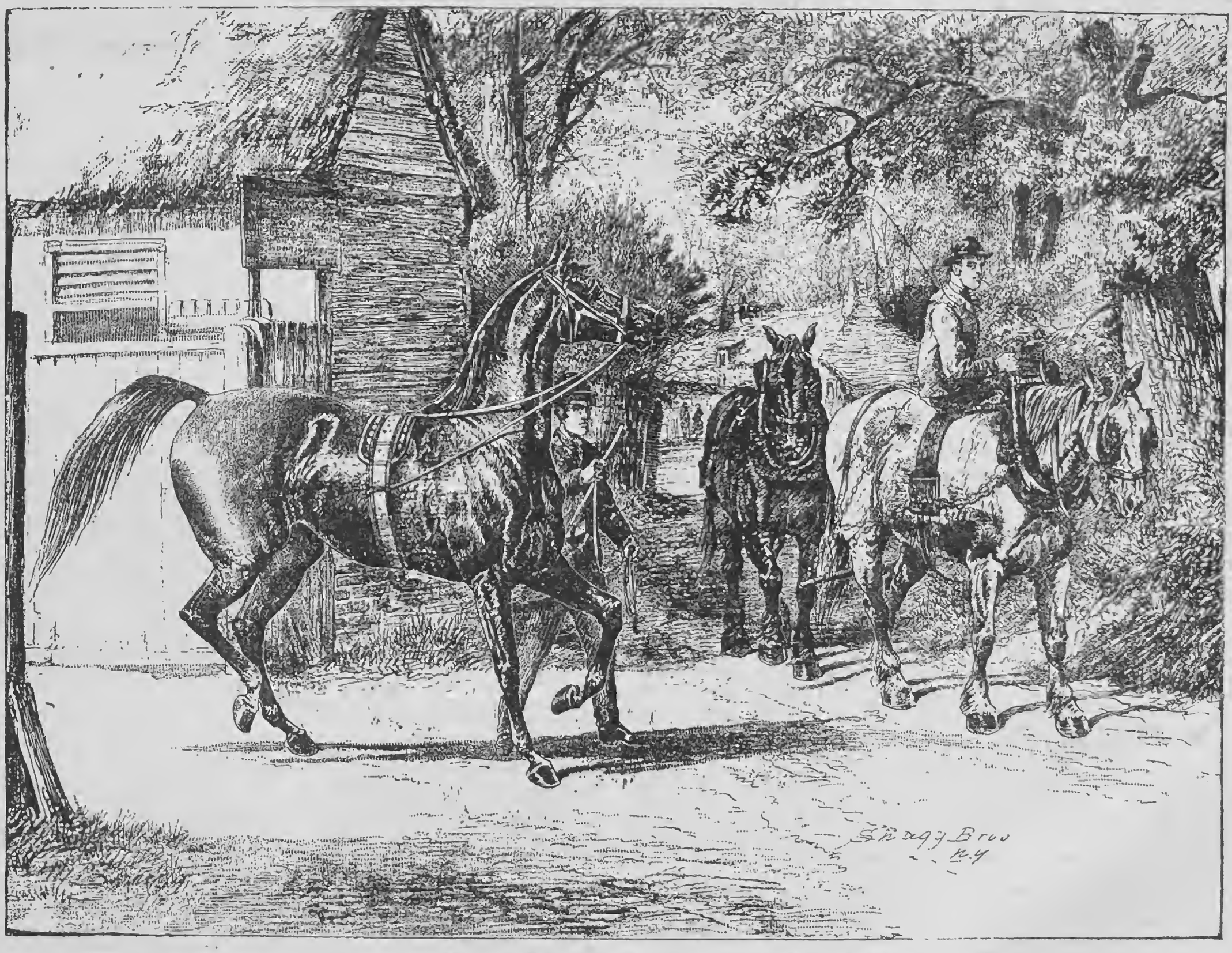
POTATO CULTURE.

PROFESSOR I. P. ROBERTS.

[THIS article is dedicated to the boys who, in addition to the usual amount of hoeing, will have to fight the potato beetles with pot and pan for the next two months. I have done much work in life, that was far from pleasant, but the most unpleasant, discouraging, back-breaking, side-aching work was hoeing and digging potatoes in a stiff, blue-grass potato field when a boy.]

AFTER numerous experiments and careful observation and study as to the best methods practiced, both East and West, in the cultivation and harvesting of the potato, I have concluded to give a brief description of the one which I have finally adopted and which I think I can safely recommend to others.

Select ground that has been tilled the previous year, plow and harrow as usual. In a week or ten days after, when many weeds have germinated and some have appeared above ground, secure a double mold-board plow, such as the Scotch and English use in ridge root culture; furrow with this four or five inches deep—the latter depth if manure is to be used in the drills—and three feet apart. The mold-board, though long, curves very rapidly at the upper rear end, grinding the small clods, compacting the soil slightly, and thus leaving a furrow clean and free from clods and stones in the bottom. In this furrow drop the seed—fair, smooth, medium-sized potatoes, cut into from two to four pieces each—from one foot to one foot and a-half apart. If farm manure is used, it should always be above the seed, not below it (Fig. 1—a). If no manure s used it will appear as in Fig. 1—b. With the same plow split the ridges,



THE ROMANCE AND REALITY OF FARM LIFE.

one horse walking in the furrow (a), the other in (b), and we have the appearance as shown in Fig. 2. They are now to remain from one to two weeks, by which time the soil will have be-

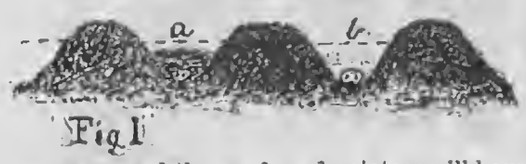


Fig 1

come warm and the weeds and potatoes will have started, the latter with sprouts from one to three inches long (as in Fig. 3). At this stage of growth, chain a 3x4-inch scantling, or rail, under the front of a heavy harrow and drive lengthwise till the surface of the ground is nearly level, as shown in Fig. 3. This destroys all weeds and rolls all sods, clods and stones be-

Fig 2

tween the rows and leaves the rich, mellow earth just where it is wanted. A second harrowing, without the scantling, after the potatoes are well through, will usually be very beneficial. The next implement is a two-horse wheel cultivator, such as is used in the West. This implement, in skillful hands, will work the ground so close to the row that weeds have but a very small

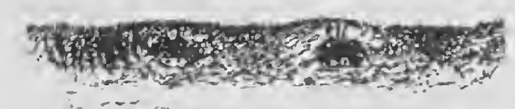


Fig 3

chance of escaping. Once cultivating each week till the potatoes are in blossom, and finally a run through the field to pull up, here and there, a weed that has escaped, and the work is completed.

To harvest them: procure a load or two of second-hand cement barrels, which can be purchased here in abundance at from five to eight cents apiece and, if cared for, will last five or six years; distribute them over the field; start the potato digger, and drive fast, as the potatoes are thrown out much better than when the team walks slowly. I also have eight pickers, provided with half-bushel baskets, picking the merchantable potatoes first and the smaller ones afterward. To complete the work, harrow thoroughly to expose any that have been partially covered or skipped.

We now have the large and small in separate barrels, not quite full two and a half bushels, so that they will not spill in loading. Two strong men will load ten barrels, or twenty-five bushels, in five minutes. As a rule, they should be sold before digging, so that they may go direct from the field to the purchaser, saving all extra handling and all extra time lost in hunting a purchaser after they have arrived in the market. On good land I have several times raised and marketed potatoes for ten cents and less—once for eight cents—per bushel as the cost of labor and seed. From a few experiments, I have come to the conclusion that thirty cents per bushel direct from the field are equal to forty in May, to say nothing of the risk of freezing and rotting. Mr. J. J. Thomas, at the Ithaca Farmers' Institute last winter, stated that from numerous experiments he had found that five inches is the best depth at which to plant, and that anything beyond very slight hilling was injurious. This so exactly coincides with my own experiments that I believe it to be the best practice for this locality.

Cornell University.

Farm Economy.

HIRING HELP AND OVERSEEING WORK.

PROFESSOR W. J. BEAL.

Most men have no tact in planning work or in directing others in their employ. Every day's work they hire often costs them more than the return in increased yield of produce. Such people are very likely to be always complaining about the poor quality of their hired help, when the fault is often largely due to their own lack of good management. Such men find it most profitable to tend a small place and perform all or nearly all of their own work.

In hiring a person, as in every other bargain, no matter how well you are acquainted or how intimate you may be, it is always the best way to have a definite understanding as to the duties to be performed and the wages to be paid, the time, manner of payment etc. Draw up a plain statement in writing of the agreement and let both parties sign it. Specify the rate of wages by the day, week or month, and if one week is worth more than another, specify the price for each. In making bargains other points will suggest themselves to thinking farmers. If all would pursue some such plan, many a quarrel and misunderstanding would be prevented.

Where the number of hands is large and the work of certain kinds, it is a good plan to arrange with hired help to furnish their own tools or a part of them, as spades, hoes, etc. In planning work for others, much of the success or profit depends on having everything go off well and without frequent changes or delays. Every man should work to advantage and should as far as practicable, be kept continually at certain kinds of work which he can perform rapidly and in the best manner.

Mr. PARRY of New Jersey, gives the following mode of managing a lot of pickers of berries. "As the berries are brought in for packing, they are carefully examined and at least one of each ten or a dozen emptied in presence of the pickers; if they turn out all right, they are paid in white tickets, but if small, green, or faulty berries are mixed among the prime ones, or they are not put up as directed, a blue ticket of less value is given, a practice which has a salutary effect, as it is mortifying for them to receive a blue ticket, which is the signal of bad work, in the presence of others. This system works beautifully; it is a constant stimulant for right-doing."

For picking strawberries one and a-half to two cents per quart have often been allowed; for raspberries and blackberries, a little less. At these rates, a smart lad or woman will sometimes earn a dollar and forty or fifty cents a day or even two dollars for picking one hundred quarts.

In drawing manure, turning and spreading and in many other operations, frequent occasion must be had to time hands at a particular part of the work, and to experiment in doing it in different ways to learn and then practice the best way.

To stimulate them and get the most work out of them, some find it necessary to "hoe a row" and lead all the rest through thick and thin, all day long for the whole season. Others succeed equally well with trained foremen and give most of their own time to plans for the rest, and now and then pick up the odds and ends and see that all things go off smoothly. By this kind of preparation and foresight the employer will prevent many delays and accidents and be the better prepared to meet them when they do occur. "Do not begin any operation that cannot be carried through in the best manner; keep all operations in a compact shape and everything up to time."

In every business it is very important that the proprietor understands all the details himself. He must know by personal experience and sound judgment just what is a good day's work. Men, if left to themselves, will very soon try the judgment of their employer and most likely impose upon him in all possible ways, unless he insist on a faithful performance of every duty. The director must have a quick eye to discover all slighted work and be able to show unskilled men how to perform correctly. He must insist on having the work done just as he wants it done. He should be concise in his directions, use but few words and not talk loud or too much. He will usually insist that no conversation be carried on while the hands are at work. He must have the tact of correcting, reproving, stimulating men to great exertions without incurring their displeasure.

An employer will be much more successful with his hands if he takes an interest in their personal wants and tries to treat them on all occasions with courtesy and respect. He must never lose his temper.

Agricultural College, Lansing, Mich.

SPREADING MANURE.

A GREAT amount of labor may be saved by spreading manure directly from the wagon or cart in which it is drawn into the field. This is not the only advantage, as in this way the manure may be scattered much more evenly over the ground. When it is thrown off into heaps, there always will be spots left without it and other places, where the heaps were, which will be too rich: the grain is apt to lodge on these places or to fall down, from too rank a growth, and on the spots between the heaps, it will be poor. When thrown from the load it can be carefully distributed and the places where it is most needed receive an extra sprinkle, so that the crop will grow evenly and, if seeded with grass seed, there will be a good catch all over the field, which cannot be the case when the manure is placed in heaps and spread from them. It is a good plan to get the manure on, and into the soil as rapidly as possible, and this can be done better by spreading directly from the load. Every rain washes it in then just where it is wanted, and when the plow or harrow comes along, it is covered up so that all of the plants can reach it. As manure is most valuable while decaying, it is best to bring it in contact with plants as soon as possible, hence it is best to clear the barn-yard in the spring and let the growing crops have the benefit of the decomposing process, rather than the barnyard where it is not needed, and the atmosphere which will carry its good effects to the neighbors' crops as well as to our own.

If any manure is left in the yard after spring, it should be heaped up and a sprinkle of plaster—gypsum—applied about once in a week to prevent the escape of the manurial gases. The plaster fixes or holds the ammonia so that it is not lost. The pile should be forked over occasionally, and wetted to prevent burning. When a manure heap is left to decompose and ferment without stirring or forking over, it is certain to burn and be materially damaged. It is well to mix plaster all through the heap. A ton of plaster used up in this manner will make a compost, or a manure heap the enhanced value of which will be worth far more than the cost of the plaster. Dirt, weeds, and almost any sort of refuse, may be added to the manure heap, and the heat of it will kill the seeds of weeds or cause them to grow so that by the time it may be wanted for use on the wheat ground, they will be harmless. Manure left scattered over the barn-yard during the summer is almost worthless, as it is leached of much of its value, and deprived of a good deal more by the constant evaporation going on all through the hot weather. Dry earth will answer very well in place of plaster to arrest evaporation, and by autumn it will have become, by being mixed with the manure, as valuable as it. Muck will not take the place of plaster or of dry earth for this purpose, but it is good—most excellent to absorb the juices contained in the manure or flowing from the stables. The muck, if made perfectly dry, would absorb ammonia, but not equal to plaster or dry earth. Sand is not good; it should be loam. Sandy loam would do very well, but clear loam is the best. The soil of road-sides may furnish a supply.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE have tried the "Cresylic sheep dip" (at our request.—ED.), manufactured by KIDDER, LAIRD & Co., New York, and found it to be effectual in killing the ticks on the sheep. As the sheep were in full fleece we made it strong, at the rate of one pound to five gallons of water. This solution gives no pain to the animal and is not at all dangerous to handle. After shearing, the ticks which are left on the bodies of the sheep, leave them and go on the lambs. If the lambs are dipped twice they will be rid of the ticks, as the second dipping will kill those not hatched at the first. There should be a week's difference between the dippings. We never had so many ticks on our sheep as this year, and it is not because they are so poor, but because the season has been so very favorable for the growth of the ticks. A fat sheep may be full of ticks, but they do not show so much as a sheep in good condition generally has a thicker fleece and more surface of body for them to be distributed over.

We had a small sheep which had twins, and as the lambs would make a heavy draught upon her, we commenced to feed her liberally with oats to make plenty of milk. Result, fever, and now her fleece is all dropping off and in a few days she will be completely denuded. Grain-feeding to sheep must be gradual, beginning with a mere handful, or even less.

The buckwheat straw we spread on the rye last fall did not smother out the grain, but served as a protection. Where it was packed down in bunches, it has been shaken up and spread around. This is a good way to get rid of buckwheat straw, to draw it directly into the field and scatter it on the rye; stirring it up in the spring is but litttle work.

Esquire Davidson had sixty-three chickens hatch last year and raised sixty-two. He attributes his great success to the introduction of new blood; or, in other words, using roosters not related to the other fowls. The chickens were strong and vigorous, and gave him no trouble, while the year before he had nearly a hundred hatch and lost almost the whole of them, as they were puny and weak.

Our little pigs are doing nicely. One of the pens is fixed so they can go in and eat all the oats they want. They seem to enjoy this side-feeding, and at all times of the day some of them may be found there. Before they were three weeks old they would eat some, and this extra feed keeps them from lugging the sows so much. Little pigs are very fond of oats, and they will not eat enough to hurt themselves.

We thought this morning that a worm was destroying the rhubarb, but as we could not find any on the leaves which were full of holes and ragged, we finally concluded it was the turkeys which were treating themselves. Our rhubarb is very fine this spring. It was nearly run out in the old bed, and last year it was taken up and changed and the roots divided. This seemed to give it new life. In a few years it will be best to move it again. The asparagus is coming up through the manure, and we have already had one mess. There are no weeds visible, and the prospect for lots of asparagus and few weeds is exceedingly flattering.

Peaches two years in succession are something new in this cold latitude, but such is the case. There used to be peaches every year, before we were born, but since then we do not remember peaches after peaches. Ours are nearly all self-planted and of course not very choice kinds, but they are good for canning, and some of them eat very well "out of hand." It is so little trouble to raise peaches that we now wonder why there are not more of them grown. The boys ought to plant pits this year and in three or four years they can have peaches.

A hen has been set to-day on Aylesbury ducks' eggs, and we must not forget to wet them two or three times with warm water before they hatch. This is necessary with the eggs of all aquatic fowls. The hen does not get her breast wet so as to furnish the necessary moisture, which is the case with water fowls, and there is danger that the skin which lines the inside of the egg will become so dry and tough that the little duckling cannot break through it. A few years ago two whole clutches of ducks died in the shell after they were pipped, because the eggs had not been wetted. We forgot it, being away from home, and some of the neighbors said it was thunder which killed them. This used to be an old notion.

Mr. Prince evidently appreciates the difference between a scrub pig and a well-bred one. Mr. Smith says he is right and so does Mr. Butler, who says he fatted a Victoria pig last year on 8½ bushels of corn and it dressed, when eight months and nine days old, 171 pounds. This pig had the milk of a three-year-old Jersey heifer besides the corn. He says he fed a scrub pig, a few years ago, plenty of milk and 28½ bushels of corn, and it weighed when dressed, at nine months of age, 125 pounds. The scrub had more milk than the other and ate more than three times as much corn.

Saratoga Co., N. Y.

Floricultural.

HANDSOME FLOWERING SHRUBS.

WILLIAM FALCONER.

No garden of any pretensions should lack a few shrubs, and as there is such a great variety to choose from, it is natural that we should want the prettiest and the hardiest, and a selection such as will afford us flowers throughout the whole summer. Of course, we cannot define the exact flowering period of any shrub, as that depends on the earliness or lateness of the season, the situation and other conditions of growth, and the part of the country wherein it is growing. In the following I have given the times of blooming from observations noted here during the past two years.

Among our earliest shrubs to blossom are Daphne Mezereum, a little European whose branches in March and April are clothed with purple blossoms to be succeeded, by midsummer, with brilliant berries. Then come the Cornelian Cherry—Cornus Mas—western Buffalo Berry, Leather-wood, and Spice-bush, in the order named; and all have small yellowish flowers that appear before the leaves. Though their blossoms are not very ornamental, they are interesting on account of their earliness. Contemporaneous with the above are the little shrubby Yellow Root of the Alleghanies, with its compound panicles of blackish-purple flowers; and the showy Forsythias, of which F. suspensa is the earliest, palest-flowered, and most useful for covering trellises or porches, or other vine-applicable purposes, and F. viridissima for hedges or single bushes. About a week later, Magnolia purpurea displays its many large, whitish-purple flowers before a leaf-bud bursts. Rhododendron Dahuricum, with rose-purple blossoms expands in early April to May, and is accompanied by Andromeda floribunda, an Alleghany evergreen shrub that sets a profusion of flower-buds in fall and opens them in spring; and Cassandra calyculata, the Leather-leaf of our Northern States. Spiræa Thunbergii dons its snowy cloak as April makes its exit, and at the same time the gaudy Japanese Quince, Cydonia Japonica, displays its wealth of scarlet-red.

Towards the end of April the yellow-flowering Currant has revealed its little clusters, and—where hardy—the crimson flowered one, quite an ornamental species—is of equal season. About the close of April and in early May the naked branchlets of the American Red-bud are covered with little peach-colored blossoms, as are likewise those of the more showy European species. Then appear the Lilacs, white and purple, Persian and common, and which are as much at home in the city as in the country gardens; and surely it is a very poor garden indeed that cannot boast of a Lilac bush. Then comes the grand rush; our gardens are a-blaze; the air is perfumed, and Flora's opulence is prodigal: Amelanchiers are profuse in blossoms; Double-flowering Almonds have their twiggy branches thickly studded with "daisies;" Exochorda grandiflora, one of the handsomest of the Spiræa family, is clothed in white; early flowering species varieties, and hybrids of the deciduous Azaleas are in blossom. English Hawthorns, single and double, white and red, diffuse their welcome fragance; the Chinese Wistarias drape our walls, arbors, or old tree stumps with drooping clusters of blue or white; and Dicrvillas unburden their

empurpled limbs, preparatory to being shortened back a little so that the next year's supply may exceed that of the present. Towards the end of May Deutzia gracilis becomes clothed with its snowy panicles, and on account of its neatness, dwarfness, profusion, and hardiness, surely it deserves a place in the smallest garden. About a fortnight later D. crenata, with single and double flowers, puts in an appearance and it too is one of our choicest shrubs.

Early in June the Fringe Trees, having remembered to leaf out, are a mist of sprayey whiteness, and about the same time the Yellow-wood trees, large and small, are drooping with heavy panicles of white pea-shaped flowers, humming with bees, and diffusing fragrance all around. From the end of May up into June the Tatarian Honeysuckle bushes are a-glow with white, pink, or rose-purple flowers, which are succeeded in a few weeks by bright orange berries. From the end of May till nigh the end of June the Large-leaved Mountain Laurel is doing its uttermost to reclaim the dreariness of the New Jersey woods or hold its own in our gardens, and that it does effectually, for surely no shrubs bloom more lavishly. And in May to July the crimson-purple corymbs of the Sheep Laurel are abundant in our woods and, if we choose, in our gardens. Potentilla fruticosa from early June blooms all summer long.—[Conclusion next week.

CARPET BEDDING.

CARPET bedding consists in the decoration of our flower-beds with neat dwarf-habited plants that are more conspicuous for their compacted nature and brilliant or dense leafage than for their flowers. Circular, square, oblong, oval, and other plain-patterned beds are the easiest and most prettily carpeted. The design may represent any conceivable idea, and should be executed so that at a distance or in proximity, the pattern may be as definitely plain—recognizable at a glance. These beds require thick planting so as to produce immediate effect, and afterwards, the greatest vigilance in sheering or pinching to prevent the lines running into one another, and thus obliterating the design. They not only require a deal of plants to begin with, but a great amount of patience and oft-repeated application in their summer care. Intricate tracery on a flat carpet bed is somewhat formal, no matter how minutely executed, hence the introduction of one or several isolated "relief" plants, as green-leaved Dracænas, variegated or plain-leaved Yuccas, Century Plants, and the like.

In England this kind of gardening is more practised than it is here, because there more kinds of plants are applicable for the purpose than is the case with us. They have an excellent blue in Lobelia and orange in Nertera depressa, both of which succumb to our summers. They have a fair yellow in the golden Stellaria which is unreliable here, and our Alternantheras—the back-bone of our coloring material—grow much the rankest in this country. Among the plants most commonly used for this purpose are: for white or silvery gray, Antennarias, Veronica incana, variegated Sweet Alyssum, variegated Stevia, variegated Solanum, Centaurea candidissima, Leucophyton Brownii, Guaphalium lanatum, Stachys Germanica, Sedum variegatum, and Artemesia frigida.

Golden Feather Feverfew is our best yellow and is supplemented by the variegated Abutilon vexillarium, pegged and pinched, and some of the best and most compact yellow variegated and golden-bronzed Pelargoniums. For blue Kleinia repens takes the lead, and then follow many kinds of Echeverias, Sedum glaucum, dasyphyllum and Hispanicum. But none of these is true blue; in fact, we are almost minus that color; for though dwarf Ageratums be used they are not persistently reliable enough. Good carpets of green are secured in various kinds of Sedums, as acre, sexangulare, and the like. Sempervivums or House-leeks are lavishly used in carpeting, and are quite effective, but medium sized plants are preferable to full-grown specimens, on account of the maturely developed ones blossoming, hence dying, thus leaving a gap. Therefore a few reserve plants should be kept in case of emergency. They are perfectly hardy and prettier and more satisfactory when exposed to the full winter's severity than when mulched or housed. Among the best are arachnoideum, tomentosum, piloselium, all cob-web kinds; montanum, calcareum (Californicum), Funckii, arenaria, Comollii, Powellii, stoloniferum, tectorum and some of its many varieties, etc. For fiery coloring, Alternantheras are alone, and that lately produced variety of amœna is the most brilliant of all.

The annexed illustration represents a carpet flower-bed at Clapham Park, London. It is a saucer-shaped bed 12 feet across with an elevated rim a foot wide, a 3 foot high mounded centre, adown which at regular intervals depend eight chained jeweled beds which consist of little succulent covered mounds, each surmounted by a plant of Chamæpuce diacantha. Beginning with the center the filling is composed of, 1st, a all specimen of Dracæna indivisa, 2nd, around the Dracæna, a 2½ foot wide mass of the variegated Mesembryanthemum cordifolium; 3rd, a 2 inch wide band of Sedum Lydium (green); 4th, a band of Echeveria secunda glauca; 5th, Alternanthera amœna, 6th, a belt of Sedum glaucum studded with little circles of Echeveria containing in their center a patch of Nertera depressa—a miniature plant covered with tiny orange fruits;—7th, Alternanthera amœna; 8th, Echeveria. From this 8th belt depend the chained jewels resting on a broad ground-work of green, formed by Sedum Lydium. The elevated rim is of rounded outline with inner and outer circles of Echeveria secunda glauca. Next to each of these circles is a belt of Alternanthera amœna, and in the middle a wider band of Sedum glaucum studded with Nertera depressa.

Arboricultural.

WHAT SHALL I PLANT?

SAMUEL PARSONS.

No. 3.

To answer such a question with any degree of completeness would require volumes, and it would be well if sufficient interest existed to make such volumes attractive to the world at large. A great part, indeed, of the charm of natural landscapes, in glades or forest, lies in the almost numberless varieties of plants that constitute them. Space, however, only permits me to mention a few prominent examples specially fitted to produce certain important effects.

The skeleton or framework of the place should be built up of Spruce and Pines. They grow large and make massive shelters against bleak northwesters. They should be planted on a somewhat irregular system by which the front tree fills up the gap presented by the two rear ones, while the whole shows a waving outline devoid of stiffness. The Norway Spruce performs this work most rapidly and completely, and may be well supported by the contrasting and beautiful hues of the larger Pines.

For symmetry and endurance, few surpass the well-named Black Austrian, although the erect elegance of the Swiss Stone Pine, Pinus Cembra, is both hardy and picturesque in the landscape. The Stone Pine, however, does not make a good wind-break, while the Scotch does, notwithstanding its irregular shape and meager look as it grows old. Moreover the Scotch Pine resists well the bleak winds and sea air. Other Pines and Spruces there are, but they are ill-adapted for the purpose of shelter. Like the White Pine, they are too open, or too slow of growth, and consequently have attained less popularity.

The framework established, next come the filling in of the shades and tints, the arranging of striking figures in the fore-ground, and the planning of all the vistas and graceful effects that go to make up the perfect landscape picture. If the place be large, I would use prominent specimens here and there on the outskirts, facing, like sentinels, the flanking shelter groups. Grandest of all evergreens for this purpose is the Picea Nordmanniana, shining and glossy-green of foliage, symmetrical, stately and tower-like in form. It is the king of evergreens, and attains its full majority only when the Norway Spruces are lapsing into thin and naked old age. Picea nobilis, steely blue, like tinted velvet, offers lovely forms for occupying prominent positions. Light-colored, long-leaved P. firma, most vigorous and hardy of conifers; P. cilicica, soft-leaved and of exquisite spring growth, P. Pichta from Siberia, richly hued and finely formed, all have notable qualities, well adapting them for lawn decorations. They all have the long-lived beauty which renders them well fitted to stand in groups bearing such a relation to masses of Spruces and Pines that, in the years to come, they may fill their places, when deformity requires their removal. All Piceas must be transplanted and pruned frequently, or they become worthless for lawn planting. Two or three Spruces—Abies orientalis, dark-green, shining and very massive, and Abies excelsa inverta pendula, remarkable and picturesque with drooping foliage hugging the stem—and at least two Retinosporas—obtusa and pisifera—are also well fitted for single, large specimens.

A very important element of fine lawn decoration will be found in groups of dwarf or lower-growing evergreens. They may be employed immediately about the house, or on the curves of paths near by. Planted three feet apart, it will be 10 or 15 years before any of them interferes with another. Large specimens are fine, if planted singly, but massed in groups, their varied colors and forms exhibit the most striking effects. Of course, all cannot be named here, but there are at least a dozen choice ones which should form part of every group of considerable size. Broad-leaved Hemlock, dark, hardy and of waxen luster; atrovirens, also extremely hardy, dwarf, dark and shining, constitute two members of a species, the crowning glory of which is the Weeping Hemlock of graceful sprays and fountain-like habit, a veritable queen of evergreens. Then come the Conical Spruce, most popular of dwarf evergreens, symmetrical and compact; Gregory's Spruce, massive, broad and dwarf, and neat little nigra pumila, with form of perfect finish, not forgetting Abies diffusa, richest and finest of dwarf Spruces in a way hardly describable—all form a most valuable group of dwarf ornamental trees.

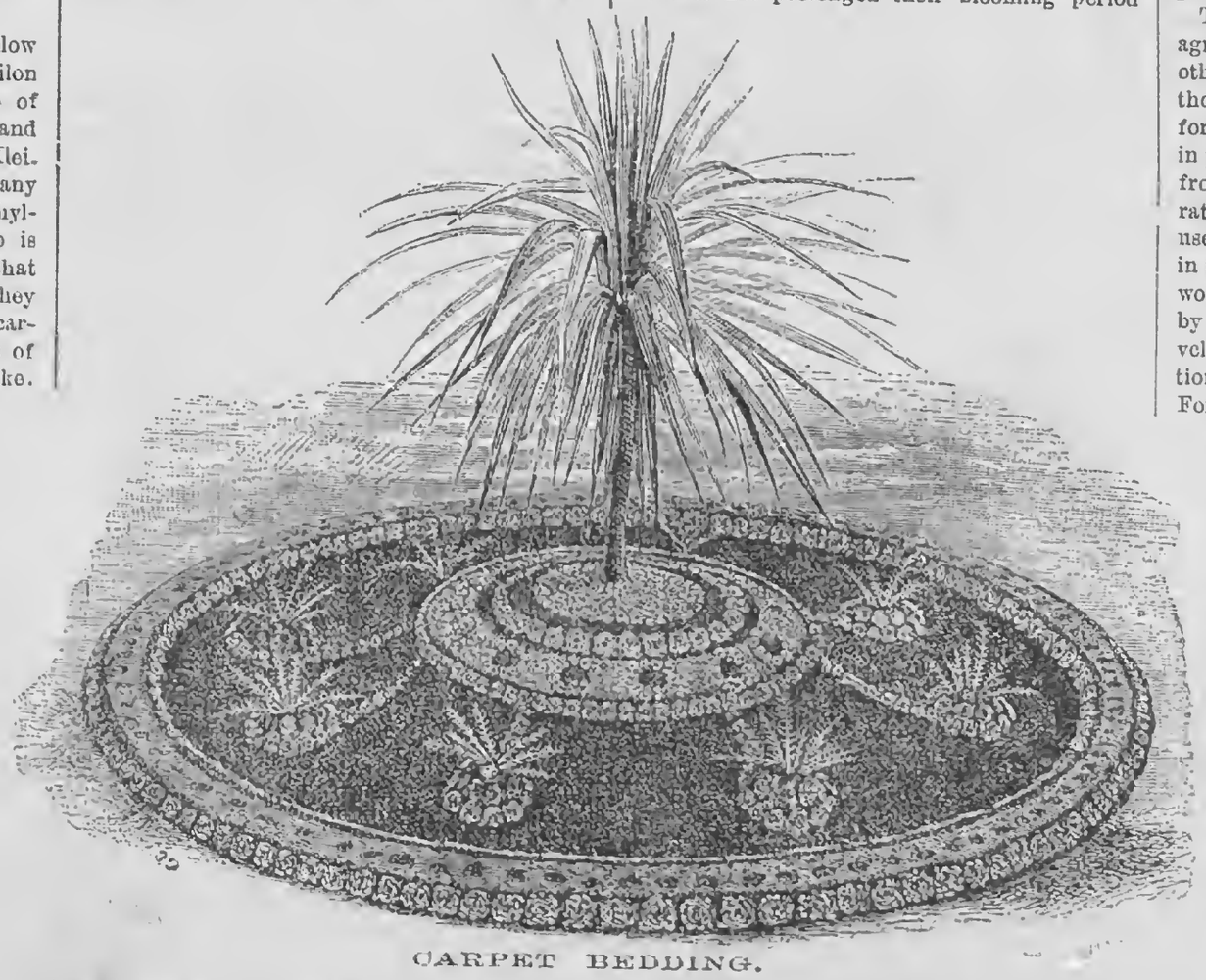
The Biotas, perhaps less popular because in some cases less hardy, furnish rich material in the golden elegantissima, the new Pyramidal and the hardy Nepalensis. Junipers are of taller growth except such as Swedish Dwarf, Juniperus tamariscifolia, prostrata, squamata, etc., which are very low and curious. Among Piceas we have the exquisite little Hudsonica, dark green and strangely dwarf, and compacta of hardy habit and elegant form. The soft, feathery needles of the Dwarf White Pine, and the darker, richer tints of the Dwarf Scotch and Mugho can be ill spared in any group of evergreens. Retinosporas have many dwarf and strangely diversified forms, such as filifera, leptoclado, lycopodioides, etc., but few surpass plumosa aurea for ready transplanting or lasting gold, which latter feature is so effective contrasted in masses with the Broad-leaved Hemlock macrophylla. Nor must I forget the Golden Yew, of unrivaled color in June, but later surpassed by the golden Retinospora in both beauty and hardiness. Did space permit, much might be said concerning these remarkable and comparatively unknown plants, each one of which is deserving of an article to itself.

SPRING'S PROGRESS.

RURAL GROUNDS: May 13.

THE late Tulips are nearly gone now at a time when in previous years they had scarcely begun to bloom. The season, owing to mild, cloudy weather has prolonged their blooming period and the flowers, it seem to us, have never been equaled in brilliancy.

Conifers have all of them started their spring growth and present that lovely contrast of light and dark-green which at this stage renders them more attractive than at any other time. Decidious trees of all kinds are in leaf except, it may be, the lazy Weeping Ash which, is only just beginning to open its big, black eyes.



CARPET BEDDING.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

"HAVING EYES, THEY SEE NOT."

CHAS. W. GARFIELD, SEC'Y OF THE MICHIGAN POMOLOGICAL SOCIETY.

I HAVE just attended a teachers' Institute, where learned men and women, who are called the educators of the children in this country, were gathered, and occupied a day in discussing the merits of this and that method of teaching. I listened to beautiful essays on "The Word Method," "Easy way of Computing Interest," "Order in the School-room," "Natural Instruction in Local Geography" and "Grammar by Short Steps and No Halting."

I confess that there was much of interest to me in the papers and discussions that followed, but I was somewhat surprised not to hear something upon the best plan of developing observing-powers in the pupils. I go out among the children and am astonished every time that they, as a mass, know so little about the commonest things about them. Boys that know the multiplication table by heart, do not know that an elm tree bears flowers, or that a butterfly comes from a caterpillar. Girls that can conjugate the verb "To love" with the most startling rapidity, open their eyes in ignorant wonder at the announcement that, a clothes-moth turns into a winged insect, or that the beautiful piece of stone they have called "petrified honey-comb" is a piece of coral, made by a little animal in the sea. A man who has taught school for years and has spent other years in giving the people the benefit of his thought upon questions of agriculture and horticulture, asked me the other day "Why do the Maples look so red this spring?" exhibiting the fact that he did not know that there was such a species as the Red Maple, and that its blossoms appeared before the leaves and gave it its common name; and when told of the fact, he said "Blossoms before leaves! how can that be? How can a plant flower before it is in leaf?" And when twenty illustrations of this kind were given, he expressed astonishment at his own ignorance.

Every day, wherever I go there is this same exhibition of ignorance of the most common things about us, and I am led to believe that the fault lies largely in our schools; there is too much teaching of Arithmetic, Grammar, and Geography, and too little developing of the observing powers. It is worth a great deal more to a child to know the difference between a bug and a beetle than to know the length of the Mississippi River or the hight Lake Michigan is above the ocean. The common school is to give the foundation for further knowledge; it is to sharpen the appetite for more learning, and I am in favor of making every step count by giving valuable information while working to discipline the mind of the pupil.

The great fault we find with men engaged in agricultural pursuits, who are willing to give others the benefit of what they know, is that they theorize too much—take too many things for granted—give us too much closet literature in place of farm experience. I think this comes from the early teaching which deals with books rather than with natural objects. Where one is used to turning over books for facts and is not in the habit of looking for himself but into the world for them, it is a great deal easier to sit by the desk in front of a library and develop ideas than to search for original observations on the farm, in the woods, or in the shop. For this reason we get a good deal of reading that is good, only it is warmed over. We would do well to heed the facts contained in it, but knowing they are dished up from the shelves, it is not appreciated.

The following would be considered a very queer question to put to a class of teachers on examination for certificates: "Where do our flies come from and what use do they subserve?" And still it is a far more sensible one than are one-half of those which, if correctly answered, win the certificate. "But this is a question in entomology and we are not required by law to answer questions in that?" is objected. I may not know what the law is or what the word entomology signifies, but I *do* know that it is a question that every observing child will ask sooner or later, and if the teacher can answer it himself, he will know the kind of information that is required in developing that child's tendency to observe. I wish more common sense could be put into our heads about the necessity of every teacher having a large fund of knowledge of common things that can be seen and heard. The teachers too often are of those that "having eyes, see not," and the difficulty is propagated in our system of education.

I know a professor that teaches botany by driving his classes into the fields and woods be

fore he gives them any books. He thinks every pupil should have first a few lessons in language before they study Botany directly—the language of nature. He first teaches them to be interpretors of this, to them, almost unknown tongue. It is quite astonishing how little the pupils, most of them, see the first time out. The true teacher under such circumstances does not tell directly what to see, but how to look. Very rapid progress is usually made under this plan, and I have in my own experience found that not the least valuable feature of this plan is, that the rapid acquirement of new facts stimulates to great effort to get more.

For a short article this is very rambling, but I intend it to be pointed toward what I am now about to say:

Everybody engaged in agriculture and horticulture nowadays is putting more or less confidence in experiments. Agricultural colleges are asked to perform thousands of experiments and in turn these colleges are asking the people to experiment. Agricultural papers are recording these experiments and they are all working at the right thing. But, I ask, how are we to expect one in a thousand of these experiments to be worth anything when the men who perform them know so little about accurate observation. The primary training is not in the direction of observations and how are these people, with no preparation for seeing, to see anything? This is why we get such a long record of experiments each year, with so little of real value. The experimenters have not been educated to see. I feel daily this defect on my own early training. I put in too many hours over Brown's Grammar, that I ought to have employed in learning how to see. Grammar has its place, but it should be a great deal nearer the college, and a great deal farther from the alphabet, than it is ordinarily placed. The development of the powers of observation can be pushed at a very early date, and I have often found the men best adapted to close experimental work who were kept at home on the farm when quite young, and from necessity were compelled to give up the privileges of school; but they learned many lessons that have proved of greater value than the majority of those conned at the student's desk.

My appeal, then, is to those who have the control of the common schools, to see that the kind of instruction and the methods pursued are calculated to prepare the boys and girls to become thirsty for new facts and more knowledge—diggers after information at the original mine. This is what is needful to make them valuable men and women, to aid in the development of the agriculture and horticulture of our country, and, in case they go into other callings, this foundation training could not be improved. Whatever a man's occupation may be, there is great gain in having learned to see quickly and accurately.

AMERICAN TEA.

DEPARTMENT OF AGRICULTURE,
WASHINGTON, D. C., May 3, 1878.

EDITOR RURAL NEW-YORKER—*Dear Sir:* As you have exhibited some faith in the success of the efforts of this Department to produce a good, merchantable tea in the United States, I take pleasure in sending you a drawing of tea made from American-grown leaves by an expert in the business, Mr. Gill, of the firm of Martin Gillet & Co. of Baltimore, who has spent six years in China and Japan, in buying and curing teas for his house, and a copy of whose letter to me, transmitting the tea, I send you for publication, if you so desire. Very respectfully,

WM. G. LEDUC, Commissioner.

BALTIMORE, May 2, 1878.

HON. WM. G. LEDUC, Commissioner of Agriculture, Washington, D. C.—*Sir:* With this we take pleasure in handing you sample of tea we have made from the leaves we received from South Carolina on Thursday of this week. In the preparation of this tea we have discarded all manipulation that could not have been better done by very simple machinery. Our apparatus was a wire sieve, a gas jet and a tin pan. We have produced a tea that we unhesitatingly pronounce as equal to any brought from China or Japan to this country, and which in point of flavor (due in a measure to its freshness) is greatly superior. The flavor is between that of a Japan tea and a fine Chinese green, and one that we think would be exceedingly popular. The most remarkable circumstance connected with this sample is that many of the leaves of which it is made would have been considered as unfit to produce a good tea in either China or Japan. With a more careful selection of leaves we believe a tea much finer than this would be produced.

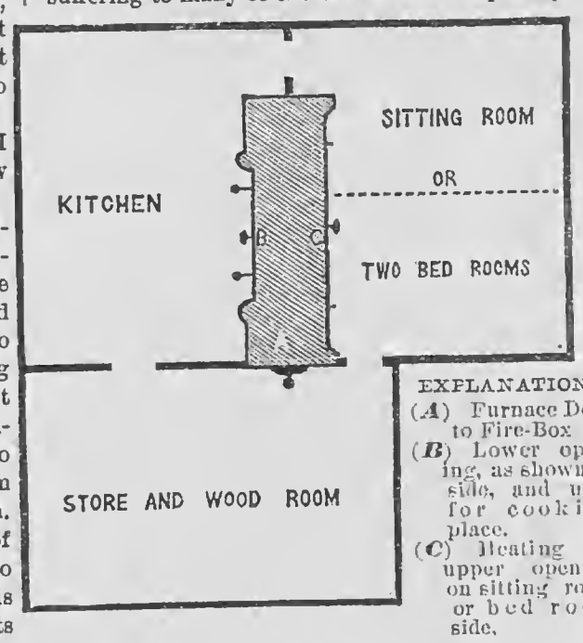
We desire to congratulate you upon the result of your efforts, and as "the proof of the pudding is in the eating," we respectfully suggest that you test our statements by an actual trial of the tea. We remain,

MARTIN GILLET & Co.

[Both these communications were received just too late for our last issue. The sample of tea was drawn and drank by six persons, all of whom pronounced it of superior flavor. The liquid tea was of a clear, amber color.—EDS.]

THE MENNONITE GRASS-BURNER.

A GREAT source of expense, inconvenience and suffering to many of the settlers in the sparsely-wooded prairies of the West, where transportation over bad roads is difficult, and coal mines are at a distance, is caused by the scarcity of fuel. Elsewhere throughout the country, also, are many places where a convenient supply of firing would add, not only to the comfort of many a farmer and farmer's family, but also considerably to the good man's bank account. Yet in many of these districts ample stores of excellent materials for fires suitable for all domestic purposes, are wasted in ignorance of the method by which they can be utilized in this way. The thought of burning grass or straw is generally confined to a bonfire or conflagration, and it is seldom the idea occurs that these substances might be profitably utilized for all culinary, heating and other domestic needs and conveniencies. Yet for years they have been so used by the Mennonites of Russia, and the colonists belonging to this sect, that have lately settled in Manitoba, Minnesota, Kansas, Dakota and Nebraska, have introduced the practice into this country.



GROUND PLAN.

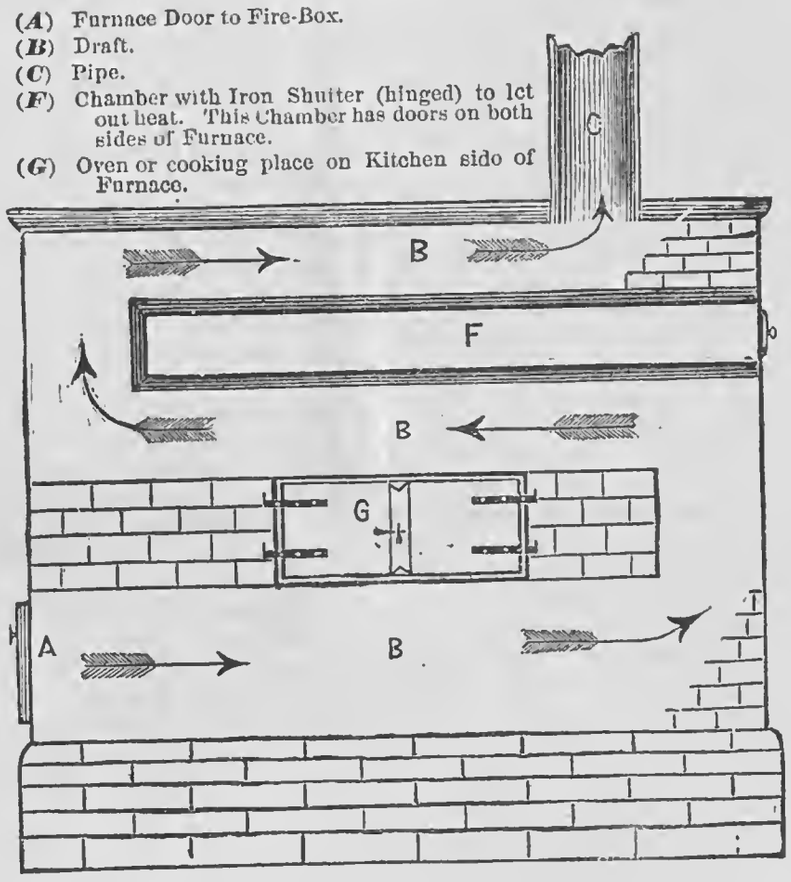
EXPLANATIONS:
(*A*) Furnace Door to Fire-Box
(*B*) Lower opening, as shown in side, and used for cooking place.
(*C*) Heating or upper opening on sitting room or bed room side.

The Mennonite Grass-burner is a simple, easily-constructed and inexpensive device, and there is little doubt that it, or improvements made upon it by American ingenuity, will ere long be extensively used in many parts of the United States. In constructing the furnace some employ brick, others stone, while others prefer a mixture of one part of sand with two of clay. Its position in the house is generally as central as conveniently possible, to promote an equal diffusion of heat on all sides. The furnaces vary in size with that of the house, but the principle of their construction is always the same, and is well examplified in the accompanying engravings. The length of the furnace here shown is five feet; its hight six; its width two-and-a-half; and there are 600 bricks in it. It may be said to have six stories: first, the ash-box; second, the fire-box; third, the oven; fourth, the smoke-passage; fifth, the hot-air chamber; sixth, the smoke passage either to a chimney or to a drum in an upper room.

The length of the fire-box is four feet, its width about a foot-and-a-half, and its hight the same. The Mennonites thrust the grass in with a fork as one would throw fodder into a rack. Both for cooking and comfort, two or three times in the twenty-four hours is found to be quite often enough to replenish the supply, if the receptacle is filled each time.

The accompanying illustrations will explain the design and construction of this useful contrivance more fully and and clearly than a page of writing—one among the many advantages of an illustrated paper.

EXPLANATIONS:
(*A*) Furnace Door to Fire-Box.
(*B*) Draft.
(*C*) Pipe.
(*F*) Chamber with Iron Shutter (hinged) to let out heat. This Chamber has doors on both sides of Furnace.
(*G*) Oven or cooking place on Kitchen side of Furnace.



SIDE VIEW.

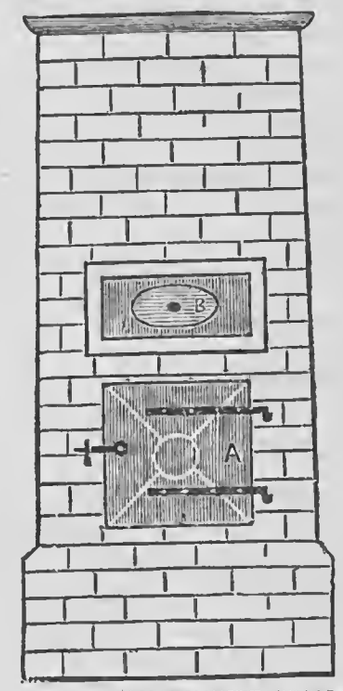
Your correspondent. A. E. BEADLE, says he has never seen mentioned in American catalogues the "English Vegetable Marrow." He certainly does not look very closely as the seed is offered in the catalogues of J. M. THORBURN & CO. of New York every year. He can see it in the catalogue for this year, and, Mr. Editor, I can show you a catalogue of theirs dated in 1828 which contains the article. X.

New York, May, 1878.

My Horse-radish took a great notion to seed this Spring. I notice over a dozen stalks; we have had it for eight or nine years but never had it seed before. I notice a variegated form of Lychnis in my perennial bed; every leaf is striped white, cream, and green, is it common? [We have never seen one.—EDS.]

I have a magnificent Pæony in bloom; flowers eight inches in diamater: very deep Crimson. I have eight others in bud; have a variety with foliage like Larkspur's. W. C. L. DREW.

El Dorado, Cal.



END VIEW OF THE "MENNONITE GRASS-BURNER."

(A) Furnace Door to Fire-Box. (B) Cooking place or Oven. This opening sometimes omitted.

NO TIME is so favorable to invest in real estate as when everything is depressed and money "tight." The farm announced for sale in another column is a bargain, and the gentlemen who have the matter in hand are trustworthy. They will supply particulars.

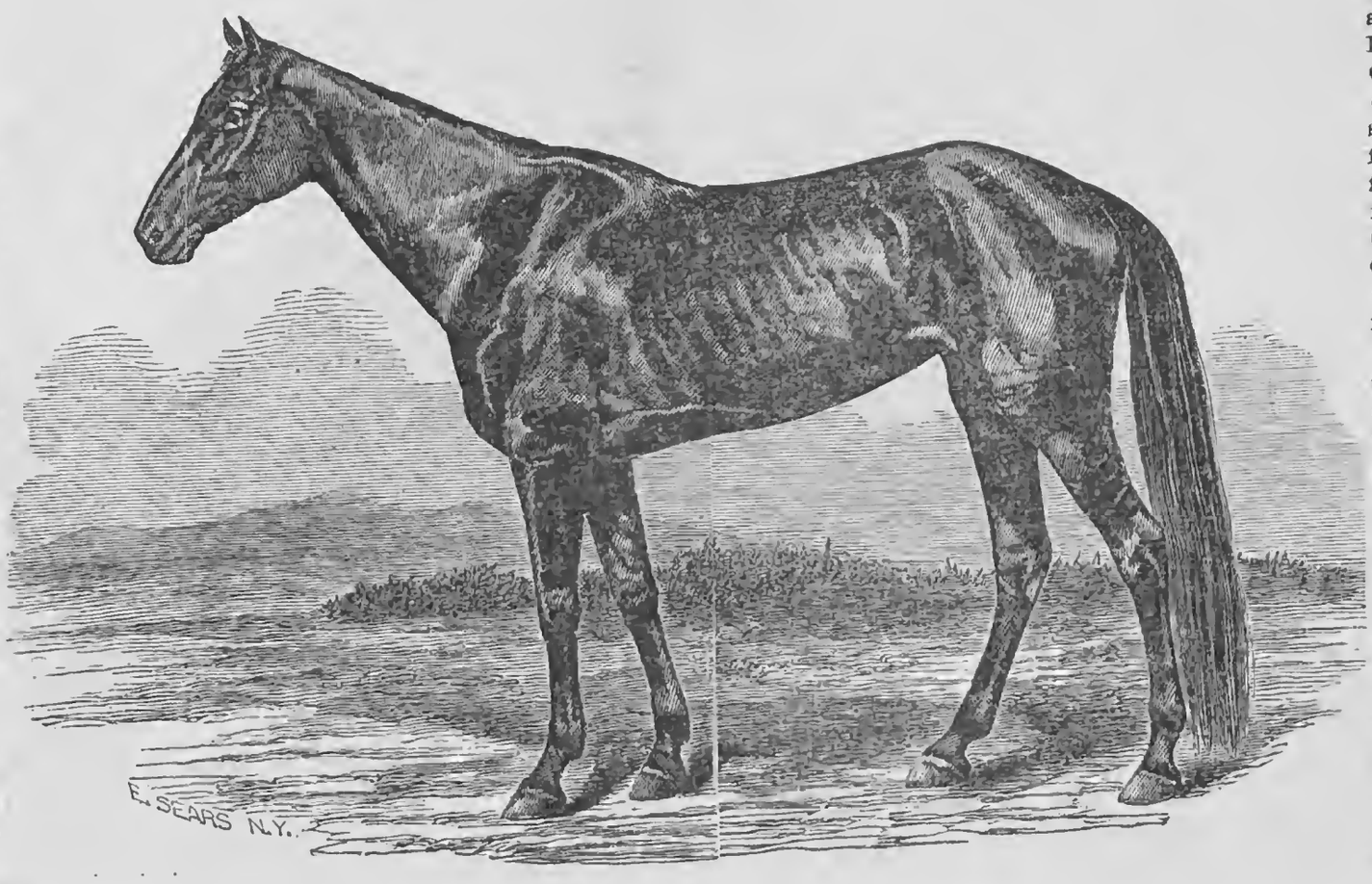
The Horseman.

NOTED TROTTERS.—No. 5.

GOLDSMITH MAID.

THE famous little mare that has made the name of Goldsmith Maid illustrious by winning, beyond all doubt, the highest honors of the trotting turf, was foaled in 1857, and bred by Jno. B. Decker, of Sussex County, New Jersey. Her sire was Edsall's Hambletonian, a horse afterwards purchased by Mr. R. A. Alexander, of Kentucky, who renamed him Abdallah, after his grandsire, who was the grandson of the renowned imported Messenger, already several times referred to in these sketches. Her dam was a nameless buckskin mare got by the elder Abdallah, so that she is very closely in-bred to the old grandson of Messenger, being by his grandson out of his daughter. Moreover, there was a great number of in-crosses to the Messenger blood in Abdallah's son, Rysdyk's Hambletonian, grandsire of the Maid. She is but little over fifteen hands high, but is long and low, with the general shape of a thoroughbred mare of good bone. In her youth she was remarkably independent and ungovernable; no fence could keep her in the pasture when she wished for freedom; she ran nearly wild until almost eight years old, and gave so little promise of her future excellence that at the age of eight she was sold by Mr. Decker to his nephew for $350. On his way home with his purchase, the latter met William Tompson, who straightway bought her for $460, in January 1865. In the following March, Thompson sold her for $650 and a buggy to Mr. Alden Goldsmith, of Walnut Grove Farm, Orange County, N. Y., and it is from this gentleman her name is derived.

Here, by the patient and skillful treatment of her trainer, she was cured of her wildness and timidity, while her strength and pace were greatly increased; and in August 1865 she trotted her first race at Goshen, N. Y., for a purse open to all ages, which she won in three heats, the fastest being 2.36. During the same fall she was beaten at Newton, N. J., and again at Goshen, after winning the two first heats. In the next couple of years she met with varying success, beating, generally, such flyers as Geo Palmer, Geo. Wilkes, Gen. Butler and American Girl, and being beaten occasionally by some one of these and, whenever they came in conflict, by Dexter and Lady Thorn.



GOLDSMITH MAID

After the purchase of Dexter by Mr. Bonner for $33 000 in 1868, and his withdrawal from the trotting track, the three great mares, Lady Thorn, American Girl and Goldsmith Maid, were considered nearly on an equality, and much curiosity existed as to which of this trio would permanently win the place of the abdicated monarch of the trotting track. The first of the three had the strongest claims to the foremost place, as, barring Dexter, she had repeatedly defeated the best flyers, but great hopes were entertained of the Maid, as she has been steadily improving from her first appearance on the turf. During this period of uncertainty she was sold to Doble and Jackman for $20.000, and though very unsuccessful during the early part of the first season with her new owners, later in the the season, at Buffalo, she won, in a race for $10.000, in three straight heats, 2 19¾, 2.19¼, 2.19¾. This was the first time that 2 20 had been beaten by one horse in three heats of a race. Shortly afterwards she was sold to one of the multitudinous Smiths of this city, whose property she still remains.

Since then, until her retirement from the turf for breeding purposes, at the close of the last season, her name has been constantly before the public in connection with the finest efforts of fleetness on the trotting track on every prominent course in the Northern States, from the Atlantic to the Pacific. A brief recapitulation of her best efforts is a record of the highest trotting excellence, not in this country only, or merely in these our days, but in the whole world and in all the time that has been.

1. She made, in harness, the fastest mile heat, at Mystic Park, Boston, Sept. 2, 1874, time 2.14.

2. The fastest second heat, at same place and time, 2 14.

3. Fastest sixth heat, Hartford, Sept. 1, 1876, time 2.19¾.

4. Fastest two consecutive heats—2d and 3rd—Buffalo, Aug. 3, 1876, time 2.15¼, 2.15.

5. Fastest three consecutive heats—1st 2d and 3rd—same time and place, 2.16, 2.15¼, 2 15.

6. Fastest six-heat race, at Hartford, Sept. 1, 1876, Smuggler winning first two, making a dead heat with Goldsmith Maid for third, and the Maid winning the next three; time 2.15¼, 2.17, 2.16¾, 2.17¼, 2 18, 2 19¾.

Industrial Implements.

AN EXCELLENT LAWN MOWER.

Awhile ago we received a Buckeye Lawn Mower for trial. This is placed before the public this season for the first. As requested we tried it thoroughly with results which justify us in highly recommending its use to our readers. The manufacturers, Mast, Foos & Co., Springfield, O., claim that it is light and easy to handle; that it requires very little power to drive it; that the ground wheels drive independently of each other, and that either wheel will drive

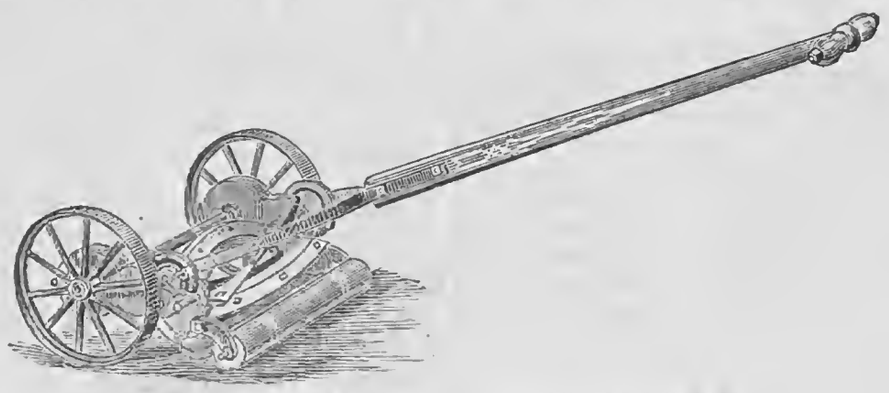
COOLER CAN.

the cutter; that it may be turned around in a very small space either to the right or left, and that it will continue to cut while turning; that this enables the operator to mow around shrubs, trees and small flower beds; that all the knives are tempered; that the machine is so constructed that one can mow borders to walks or flower beds; that all the working parts are encased, and it is not possible to clog the gearing or cutting with cut grass; that by a simple device the small roller in rear of cutter may be raised or lowered, thus regulating the hight the grass is to be cut. Three sizes for hand are made—12, 15 and 18 inch cut.

The manufacturers claim for this machine many other excellencies as to durability &c., the justice of which could only be tested by several seasons' trial. As it is, we are glad to be able fully to indorse the above claims and to assure our readers the Buckeye Lawn Mower will not disappoint them.

THE COOLY SYSTEM.

This system, devised by Mr. Cooley, is cheap and effective. It is the "deep-setting" plan so much talked about, and the principle is that milk enveloped in a low temperature will cause the cream to rise quickly and completely. Nature mingled the cream globules, the casein globules, sugar, etc,, with the water of the milk, each having about the same specific gravity. The cream globules are a little, but a very little, lighter than the water, and if left to Nature's laws will slowly rise to the surface, the heavier particles displacing them. The cream globules are poorer conductors of heat than the water and casein of the milk, hence they shrink more slowly upon the application of cold; if then,



THE BUCKEYE LAWN MOWER.

cold is applied to the milk, the cream globules being acted upon in a less degree than the water, are hastened to the surface; the watery portion being the most susceptible, chills first, shrinks, and forces the oily part to exchange places with it. The larger cream globules rise sooner than the smaller because each globule is covered with a coat of casein which is heavier than pure butter, and the smaller globules carry a proportionately greater quantity of casein, and hence rise more slowly. This being the theory, it only remained to test the practical effect, and to this end the Vermont Farm Machine Company have constructed an apparatus that combines both milk-vessels and milk-room, occupying for a dairy of twenty cows about the same space as a kitchen wood-box. The cans of milk (about 18 inches deep) are plunged beneath water of a temperature varying from 40 to 50° and the process may be said to be completed. The milk yields its cream quickly, and without the possibility of any deleterious effects from impure surroundings. The cans are not hermetically sealed, but the loosely-fitting cover of the submerged vessel admits of sufficient aeration and the purifying influence of the cold water acts favorably upon the milk. The slight difference between the temperature of the milk at the surface being about two degrees colder than at the bottom of the vessel, is found to hasten the process, sending the condensed watery portion near the top downward. The milk after parting with its cream by this process, is as sweet as when drawn from the cow, and is valuable for feeding, or for skim cheese. It is claimed that by this system the cream can be handled within twelve hours, or in other words, between milkings. The plan has great merit, and those interested may secure further information together with illustrations of the apparatus by addressing the inventor, or the Vermont Farm Machine Co., Bellows Falls, Vt., above mentioned.

THE "REINDEER" RAKE.

We are indebted for this improvement in rake and name to an enterprising manufacturer, Mr. Jno. Dodds, Dayton, Ohio, who places this implement before the agricultural public for the first time this season, after having submitted it to a thorough practical test the past year. We saw the rake for the first time at the N. Y. State Fair at Rochester, and a careful inspection seemed to substantiate the points made in its favor.

The "Reindeer" is a self-dump, made under a license of a combination of patents that cover about all the points of excellence found in the improved rake of to-day. Its construction is as good as improved machinery and the best material can make it. The axles are cold-rolled wrought iron, with solid hubs firmly fastened to the same. It is said to be the only self-dump rake without pawls or ratchets, and its steel pins are nearly or quite proof against wear and breakage. Cast steel teeth, twenty in number, tempered in oil, are hung in malleable thimbles in the rake head, constituting, as is said of the hornet's sting, the "business end" of the machine. The dumping gear is locked in, and there is no question about its ability to hold. The teeth will not drop back when not required to do so. The rake is firmly braced with wrought iron, and so strengthened that it cannot give down in the center. It is easily worked, and after discharging falls back into place with ease.

Mr. Dodds write us to the effect "that the 'Reindeer' was tested and exhibited at all the important fairs of the country last season, and was pronounced a vastly superior rake," and "that the heaviest implement dealers in the country are handling it this year" Also, that "the orders have been almost unprecedented, and will tax this extensive manufactory to its utmost to supply the demand." We think it will repay our readers to investigate its merits more fully than can be done in this notice.

TRE FOUNTAIN PUMP.

The subject of illustration, Whitman's Fountain Pump, is quite the most convenient little machine that has come under our notice. It is compact, emphatically portable, and adapted to so many and various uses as to make it a *multum*

in parvo. It is valuable to stock owners, is effective as an extingnisher of incipient fires, is an admirable sprinkler for trees, flowers, plants, vines, etc. It will clear drains, and in fact is a condensed fire engine, force pump and sprinkler. Its low price, simplicity and excellence of construction make it a most useful appendage to to the farm and country home. Mr. J. A. Whitman, Providence, Rhode Island, is the manufacturer.

COOLER CHEST.

WORCESTER'S KNIFE GRINDER.

The subject of this illustration is a little machine that should find a place on every farm of any consequence. Its low price puts it within the means of all, and the claim of the makers, Messrs. Livingston & Co., Pittsburgh Pa., that it will pay for itself in a season, seems a not unreasonable statement.

It is designed to sharpen the knives of mowers and reapers, and is, to that end, supplied with a solid emery wheel which is revolved against the knife at an exactly proper angle to get the required edge without waste of metal, or loss of time. The knife is held in a suitable vise that always adjusts it correctly. Water may be used on the wheel, but in either case it is so constructed that it is impossible to draw the temper from the steel. It is light and strong. A boy may carry it without inconvenience into the field. Its advantages are too apparent to be dwelt upon. The time and labor of one man are saved, the work is done more uniformly and quickly, and the knives may always be kept in prime

condition. The makers guarantee every grinder, and add that it may be returned at their expense and money refunded if it is not in all respects satisfactory.

The Swine-Herd.

THOROUGHBRED SWINE AND HERD BOOKS.

Since the National Swine Breeder's Convention was held at Indianapolis, Ind. in' 72, a commendable interest seems to have been developed all over the country in perfecting breeds of pigs, and in trying to maintain their purity by the organization of associations and the establishment of swine registries. Both of these ideas were recommended by the convention in the following report made by the committee on "What constitutes thoroughbred swine." "In the absence of any system of records by which pedigrees of swine are kept, your committee can only give an expression which, from the nature of the case, must be somewhat general. Only such breeds should rank as thoroughbred as are recognized in authentic history as of remote origin, and have steadily been bred in a line, resulting in the establishment of a fixed type, capable of transmitting itself with uniformity. Your committee would recommend that the leading breeders of pure bred swine from breeders' clubs, for the purpose of establishing herd registries, after the plan adopted by the breeders of thoroughbred cattle ,in order to secure greater uniformity, and to perfect, as soon as possible, the various breeds: J. P. Roberts, G. Sprague, Frank D. Curtis, Committee.

Mr. Roberts of Iowa, while signing the report, regarded it as somewhat ambiguous. What is a remote origin? Some had said twenty years; and if that was the understanding he was ready to vote for the report as it stood. Mr. Moore of Illinois, thought the report should be more definite. Some time should be given, and then the convention could understand what the report meant, and vote intelligently on its rejection or adoption. The public, two, could derive some definite idea from it.

Mr. Curtis explained that in the nature of things the language must be indefinite. Time alone did not form a thoroughbred race, but care and skill were necessary. A breed would make more progress towards becoming established in five years in the hands of some breeders, than in four or five times as long in the hands of other breeders. Mr. Rust suggested that the language be amended so as to read "Only such breeds should rank as thoroughbred as are recognized in authentic history as of sufficiently remote origin, that when bred in a line to result, etc. The suggestion was accepted by the committee, and the report adopted.

During the past winter, many of the breeders of Poland China hogs got together and organized an association, and made arrangements to have a herd registry, so as to keep the pedigrees correct and the breed pure. Col. R. M. Hoe, of Morrisania, N. Y., and Mr. Wm. F. Beach, of Jeffersonville, Ind., with others who are interested in the breeding of small Yorkshires, have begun a movement to secure an association and herd registry for this breed. Hon. Wm. M. Holmes, of Greenwich, N. Y., and Col. F. D. Curtis, of Charlton, N. Y., have begun the breeding of the Duroc pigs, and intend to keep a correct list of their breeding and pedigrees with a view of perfecting this class of hogs, and of making them thoroughbred as soon as possible. Some old families of pigs seem to have run out, doubtless for the want of a registry and careful breeding. We remember the Byfield and the Grazier as the old time families now not mentioned.

The Querist.

ANSWERS TO CORRESPONDENTS.

Manure for Root Crops.

E. E. Graves, Jefferson Co., N. Y., inquires whether sugar-beets, carrots, and turnips will be likely to do well on rich pasture land after corn without the application of any manure; whether guano, sown after the crop is up, is the best kind of manure for these roots; and if not, what is.

ANS.—A good fertilizer for root crops is the "blood guano" prepared by WING & EVANS. It is made from the blood and offal collected from the slaughter-houses and seems to be especially adapted to promote the growth of roots. It should be placed in the drill, or furrow, before the seed is sown and slightly covered with earth. The same plan must be adopted with all fertilizers which have strength enough to be of any benefit to the crop. This is particularly true of South American Guano. The earth absorbs the ammonia, which, if brought into direct contact with the seed or young plant, would burn it, or, at least, kill it. The surest method in applying fertilizers is to scatter them in the furrow and then either by hand, or with a rake or hoe, cover with earth or with a plow, and then put the seed on the top. To sow the guano or other fertilizers on the surface after the plants are up is not good economy or science, as there will be a great waste of the volatile properties, which are not lost when immediately covered in the furrow. Gypsum is the only fertilizer which should be sown over the young plant. When this is done, it has the effect to collect the ammonia from the soil and air, and retain it for plant-food. Well rotted barnyard manure is, after all, the best thing to depend on for a good root crop. The best of fertilizers will not altogether supply the lack of this.

To Prevent Cows from Sucking themselves.

J. C. Losel, Schenectady Co., N. Y. asks what will prevent a cow from sucking herself when a strap garnished with sharp nails, and placed round her nose, will not.

ANS.—If the strap, or muzzle around the nose is properly made, it is an effectual preventive for a cow sucking herself. The strap should be as wide as the space up to the eyes will admit and be garnished thickly with sharp spikes. The spikes or teeth in an old-fashioned wool hatchel are just the thing. Hampering from the head to each hind foot might stop a cow from this habit, unless she learned the trick of holding one foot forward. Covering the bag with a blanket of leather or thick cloth, would also keep a cow from getting at her teats. The blanket can be strapped over the back and held in position by strings tied around the legs. Smearing the under-side with aloes and pitch mixed together, will so disgust the animal that she will not attempt to meddle with the blanket. The blanket can be let down on one side to milk.

Something About Poughkeepsie.

H. C. Miller, Washington Co., Arkansas asks what is the population of Poughkeepsie N. Y.; the different kinds of manufacture carried on therein; its colleges and seminaries, the extent of its trade and the nature of its scenery.

ANS.—Poughkeepsie, the capital of Dutchess Co., 75 miles from New York City, had at the time of the last census, 1870, 20,080 inhabitants, of whom 4,425 were foreigners. There are in it three iron foundaries, two iron furnaces, a rolling mill, two ship-yards and dry-docks, several breweries, tanneries and manufacturies of agricultural implements, carpets, carriages, chairs, cooperage, cordage, dye-stuffs, files, edge tools, glazed paper, gloves, hardware, pins, shoes, soap and candles, spring beds, etc. The city has six National Banks, with an aggregate capital of $1,585,000, a savings bank and an insurance company, good graded public schools including a High-school department, Eastman business college, and about 15 private schools and academies, a free city library of upwards of 8,500 volumns, 20 churches. About two miles east of the city are the buildings and grounds—200 acres—of the Vassar College for young ladies, which in 1875-6 had 370 students. Its trade with the rural portion of Dutchess County is quite extensive, while its large manufactures bring it into commercial relations with nearly all parts of the country. The greater portion of the town is on a table land 150 to 200 feet above the adjacent Hudson River. It is regularly laid out, with pleasantly shaded streets and many elegant residences, and good public buildings. It is lighted, night times, by gas, and has a line of street railroad. The scenery along the Hudson, above and below the town, is very fine.

Chufas Again.

G. A. Blakely, Rock Co., Wis., asks for information about the value of Chufas as a root crop and how to cultivate them.

ANS.—In our issue of Dec. 15 will be found an engraving of the Chufa and interesting details of the plant. We may here briefly answer the above question as to culture: Plant the tubers in drills three feet apart, placing them a foot apart in the drill and covering them an inch or so deep. The present is early enough to plant them. As soon as the grass-like leaves appear, a cultivator may be run between the rows. It is best to cultivate them level. Afterwards it is only necessary to keep free from weeds. Half a bushel will seed an acre. Their value is chiefly as a food for hogs. There is no food they like better or will fatten upon quicker.

Hardening Butter.

Another Subscriber—who seems to live nowhere — asks for instructions for hardening butter.

ANS.—To keep butter firm and solid during the hot weather in summer, the following method is largely in use among good butter-makers in England. Pulverized carbonate of soda and pulverized alum, at the rate of a teaspoonful of each, are mingled together at the time of churning and put into the cream. The butter comes out firm and solid and with a clean, sweet flavor. The powdered carbonate of soda and alum do not enter the butter, but after acting upon the cream, pass off with the buttermilk. The ingredients should not be mingled together until they are wanted for use, just when the cream is in the churn ready for churning. Another—and perhaps the best method for hardening butter—is to keep it in a cool cellar, where the temperature is kept even by means of ice, or its construction, and then carrying the article to market in refrigerator pails or other receptacles.

Hen Manure for Tobacco.

Van, Conquest, N. Y., inquires the best way to handle hen manure to be used in the hill for tobacco. He has used it with good results on corn after having boxed it in order to heat it, then mixed it equal parts with plaster and leached ashes.

ANS.—Treated in a like way, it would have a good effect also on tobacco. A good way is, two or three weeks before it is wanted, to pile it up in a dry place, thoroughly broken up, and mixed with plaster, say at the rate of a barrel of plaster to one or two of manure. In a few days it will commence to heat, and the ammonia which is always given off by heating manure, will be arrested by the plaster. After standing a few days more, it should be worked over, and again left, when it will soon be thoroughly pulverized and fit for use. Three or four times its bulk of dry muck, or rich mold, should always be mixed with so powerful a fertilizer as hen manure before it is used, and care should be taken that the seed does not come in contact with it.

Plan of a $200 or $300 House.

Z., asks the RURAL to furnish a plan of a house that could be built, above the cellar and exclusive of painting and shutters, for from $200 to $300.

ANS.—A plan that would answer Z.'s purpose excellently, was published in the RURAL for Dec. 1st last year, to which we refer him. We trust that by the time Z. writes to us again, he will have completed his house, for in that case he will be able to comply with the requirement of all journals, that their correspondents, to merit attention, must send their names and addresses. The house built, he will have an address which he can mention. The sum mentioned above, however, is hardly enough to pay for a house of any architectural pretensions, yet many houses costing even less than this modest sum, have by the energy, judgment and industry of their owners, been soon metamorphosed into handsome mansions.

Beaucarnea Recurvata.

A. C. E., North Linndale, Ohio, asks where can Beaucarnea recurvata be purchased, whether it is sold by sprout or seed, and what is its price.

ANS.—So far as we knew the plants alone are for sale. Several of the catalogues which we have noticed of late offer them and give price.

They may be increased by cuttings when cuttings can be obtained, and by seeds which are imported from Mexico. We do not know of a plant that has bloomed in this country. Because of its flowing, graceful yet odd habit; because of the little care it requires to keep it in a perfectly healthy state, and because it is as desirable for an out-of-door as for a conservatory plant, it is strange that one meets with it so seldom.

Miscellaneous.

A Subscriber—who also lives nowhere—having read in an April RURAL of a large, flowering, double-fringed Petunia from Germany, and also of a work entitled "Simple Truths," by ROBT. COLYER, of Chicago, asks where each can be got, and the price.

ANS.—With regard to the Petunia, most of the catalogues noticed in our late issues advertise the one referred to. Price 50 cents per packet. The work, Simple Truths, is published by Lee and Shepherd, of Boston, Mass., who will furnish book as well as all information.

Miss V. S. C. asks for name and address of the principal of the Horticultural School, in Iowa.

ANS.—We do not know of a Horticultural School in that State. Dr. A. S. WELCH is president of the Agricultural College, Ames, Iowa.

H. P. Heil, Clyde, Wayne Co., N. Y. wants to learn where he can purchase a good self-binding reaper.

The following firms make good self-binders for sale: C. Aultman & Co., Canton Ohio; Aultman, Miller & Co., Akron, Ohio; W. A. Wood, M. & R., Mach. Co., Hoosick Falls, N. Y.

F. C. Denton, Daleville, Botetourt Co., Va., asks by whom is the Alden's Fruit-dryer manufactured.

ANS.—By Jno. Zimmerman, Mansfield, Ohio. Answers to other questions probably next week.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MAY 11TH.

F. McC.—L. M. B.—W. C. L. D.—"A Marksman"—Mrs. B. C. D.—G. A. B.—A. G. L.—M. L. D.—A. C. E.—L. A. R.—J. F., thanks—F. D. C.—I. P. R.—H. E. MC.—F. G.—"Dew Drop"—T. C. D.—A. L. G.—J. T. M.—F. D. C.—P. W. D.—W. F., thanks—T. B. P.—F. C.—A. C. M.—W. H. B.—T. T. L.—S. R. M.—A. R.—B. W.—A. L. J.—W. J. F.—"Alex."—J. M. P.—L. A. R.—E. R. N.—D. E. S.—M. P.—M. W.—R.—L. O. B.—C.

Everywhere.

GATHERING CATTLE ON THE PLAINS.

ELBERT CO., COL., April 22.

IT is difficult for any one that has never been here to understand, how the cattle trade is carried on in this country. People generally imagine that the stock-men see their cattle every day and milk their cows and feed their calves as they do in the Eastern States, and they will be surprised when I tell them that stock-men owning thousands of head, may not see twenty of them from November until the "round-ups" begin to come in, in the spring. Many readers of the RURAL will not know what I mean by the term "round-up." I will therefore tell them:

Every man knows his cattle by the brand; that is, a mark or letters made on the cattle with a hot iron and so that it can be easily seen. In the winter the cattle all scatter or drift with the storms for a hundred miles or more. About the first of May, or when the grass is well started, the stock-men send out their "outfits" each consisting of a wagon with provisions, bedding, etc., and a cook together with two or more herders or "cow-boys" as they are called here. There are three or four horses to every man, and these are sent by the stock-men into all the adjoining counties to collect the animals. The "outfits" from each neighborhood meet at an appointed place. These places of meeting present a lively appearance for a few days. There are perhaps one hundred wagons, one thousand horses, and from two to four hundred men. After making all arrangements these scatter, surround the county and drive all the cattle to one place. This is called the "round-up."

When they are all gathered there will be from eighteen to twenty thousand; then the men from one county or neighborhood proceed to separate the cattle belonging to their county or neighborhood from the main herd into a herd by themselves, holding them at a short distance from the main herd. This is called "cutting-out". While this is being done, other men are "cutting-out" their brand and so on, until the large herd is divided up into small herds. Then a part of the men start to attend other "round-ups" and a part start for home with the cattle already gathered, stopping at every ranch and "cutting-out" the cattle belonging to the place and then driving on to the next, and so on until the last man gets home with his cattle. These "round-ups" are coming in all summer and, as they come in, the cattle are held on the range by rounding them in every few days, to brand calves and ship beef. This is kept up until all the "round-ups" are in, all the calves branded, and all the beef shipped. Then the remaining cattle are all turned loose until the next Spring.

The men from this section start for the Bent County "round-up" to-morrow and expect to return and meet at the appointed place for this county "round-up" on the twentieth of May.

M. V. SNYDER.

FRUIT GLEANINGS.

EL DORADO CO., CAL., April 29, 1878.

THE season still bids fair to be a remarkably prosperous one. April 14th to 18th looked very threatening, and for several days it was doubtful, but finally it cleared off without any damage. Pears have set finely, the trees are fairly crowded with fruit; it will be necessary to remove at least two-thirds, if we would have fine specimen fruit. It is useless to let all the fruit that has set remain; and where fruits of the highest perfection are wanted they must receive a timely thinning. In our section there have been several trees killed by blight this spring. This is the first time that this disease has been noticed among our pear trees. That it is of fungoid origin there is no doubt; but as to a remedy, no certain specific has been discovered. I think Bartletts are less liable to it than others. Peach trees are badly injured by the curl-leaf. I am of the opinion that this is also due to a fungoid disease, young trees are not as badly affected as older ones. The crop had set finely and had not the curl-leaf appeared, we would have had a large harvest. As it is, it will perhaps not be over three-quarters of a crop. Apples will be in abundance. They will need thinning where fine fruit is wanted. The Woolly Aphis is the worst enemy we have for our apples and as it attacks the roots it will be a hard enemy to deal with; trees planted in hard ground are less liable to its attack. Plums are doing finely; the trees have just about a fair crop on; the common green louse or Aphis is the only insect I have ever seen on the plum here, and soap-suds settles it quickly.

Strawberries promise us a bountiful harvest. Plants set out as late as the middle of December are loaded with fruit. Currants and Gooseberries look healthy. Blackberries are just commencing to bud. W. C. L. DREW.

RURAL CRITICISMS.

SOME twenty years ago, or more, a village postmaster handed me a copy of "MOORE'S RURAL NEW-YORKER," which had been sent to him for distribution. Postmasters at that time were more attentive and accommodating than they are now, as they were then much more dependent for position upon the people than upon party politicians. I took it home for examination and was so much pleased with it, that I became a subscriber. Shortly afterwards the war broke out, and all communication between the North and South, except between fratricidal foes, was interdicted, and for five years I saw nothing more of the "RURAL." After the war, the first investment I made was for sperm candles and kerosene oil, as we were reduced to pine knots, having exhausted tallow candles and beeswax coils, and with a good light, good reading matter was suggested. I again became a subscriber of the "RURAL," but bad Government, hard times, and other casualties, caused a break in my subscription until this year. I think this explanation necessary, not only to show my appreciation, but my long acquaintance with the RURAL, and consequently my opportunity for judging of its merits and demerits. I say *opportunity* designedly for my ability is quite another matter, so I don't expect to arrogate too much, as I am by no means a Sir Oracle.

No one who has known the RURAL as long as I have, can fail to see the vast improvement which has been made in its appearance. From a single sheet it has grown to a weekly volume, and its mechanical execution, including the type and illustrations, is faultless. Of course, it contains five times as much matter as it did twenty years ago, and where there is so much it all cannot be above criticism. Were we asked what are the excellencies of a well-edited agricultural paper, we would say, facts! Theories and speculations are absolutely worthless. A farmer has too much work to do to waste his time upon anything else, and these facts and experiments must be as plain as day; so plain, that way-faring men, though fools, shall not err therein.

How often are accounts of most important and interesting experiments rendered absolutely worthless by the omission of some fact necessary to be stated, or by a statement of facts, that no one can understand. Nor has a farmer time to waste upon elegant phrases, well turned periods or "highfalutin." He wants the grain and not the chaff, and the cleaner the winnowing the better is he pleased.

I will try to illustrate my meaning by a running commentary upon some of the prominent articles in the number of Feb. 16th, which I have before me.

The first article is on "Agriculture and Education in the United States, No. 5," by Prof. I. P. Roberts. The Professor lays out a big clearing, and he takes up two or three columns to demonstrate that the Press is a great power, and has benefited agriculture; that agricultural clubs, County and State, are very useful; and that since his boyhood the country has improved, etc. He commences in the following manner: "I am not a prophet, nor a son of a prophet, but it is the part of wisdom to look back over the past that we may be able to learn something of the future. I may be of too sanguine a temperament to judge wisely, but when I compare the period of my early boyhood with the present as to education, methods and results; as to comforts, enjoyments and wealth, etc., I cannot but believe that the future has a greater prosperity, knowledge and happiness in store." Certainly, but the shuck is entirely too big for the nubbin.

The next two articles, by Col. Curtis, and by Prof. Shelton, are most admirable, and are as full of information and instruction as an egg is of meat. Every farmer should read these papers.

Then the next three pages are filled with many good things pleasantly told, and we come to the Domestic Economy column, where we have "Siftings from the Kitchen Fire" by Annie L. Jack. Whether she is single or married I do not know, but I do know if she is not married she ought to be. If she is as graceful in person as she is with her pen, and as profound in example as she is in precept, she is certainly a treasure!

The next article, which arrests my attention, is the one by Faith Ripley on "Decorating Pottery," and I commenced it with the hope of learning the *modus operandi* but was disappointed, and think this must be the last half of the subject. The author has kindly proffered to give any additional information on the sub-

-ject, and I hope she will yet give the reader of the RURAL more definite instructions upon a very beautiful art, which she seems to understand so well and thoroughly. J. WIST, SR.

Spartanburg Co., S. C.

RURAL SPECIAL REPORTS.

SHERMAN, Chaut. Co., N. Y., May 6, 1878.

EVERYTHING hereabouts is in a fine growing condition. Farmers have their grain nearly all sown. Quite a quantity of wheat has been sown here this Spring. The fruit prospect is good; also prospects are excellent for a good hay crop.

We are blessed with peace and plenty, and the Lord seems pleased to smile upon our pathway. Sherman boasts of supporting five church organizations, a fine Union school, a live local paper, the Chautauqua News, and as a community we are strictly temperate. No liquor saloons are allowed in our town. Fair Point, on Chautauqua Lake, is known as a popular summer resort.

The National Sunday School Assembly is held here each summer. Dr. J. H. VINCENT, of your city, is President. During the session all the eminent divines of the country and the leading Sunday School and Temperance workers of the day, are present, including Rev. JOSEPH COOK, Rev. Dr. DEEMS, FRANCIS MURPHY, JOHN B. GOUGH, etc.

President HAYES and party are expected this summer. Several farmers are going into cheese-making here this season. As an agricultural community we have great reason to be thankful for the many blessings it is our lot to enjoy.

May the God of all grace continue to remember us in much mercy! M. L. D.

WEST JERSEY, Stark Co., Ill., April 30.

WE have had splendid weather this month with the exception of the last week which has been quite cold and rainy. There were some fears of frost, but the weather is somewhat warmer though still wet. Most of the farmers are ready to plant corn as soon as it quits raining. Some few had corn planted two weeks ago. Prospects are fair for a good yield of fruit of all kinds. Quite a severe wind and hail storm passed through this State, on the 21st, some twenty miles north of this, doing a great deal of damage to the fruit trees; also washing out bridges and demolishing buildings at a fearful rate.

MRS. H. E. McC.

Dunnsville, Essex Co., Va., May 4, 1878.

We have had as usual all over the Continent a very mild winter. Vegetation full three weeks earlier than usual. Wheat a very fine growth, but wherever we hear from it is very seriously injured with rust. It is now in full bloom; grass is very fine; stock in good condition. Some families have sheared their sheep but ordinarily it is too early. Abundance of fruit except pears. Corn looks well for so early in the season; grain is low; stock also; money scarce; but the country has very much recuperated since the war. Good industrious mechanics are very much needed in tide-water Va; small farmers also. R. S.

Corning, Steuben Co., N. Y. May 9, 1878.

We have had rain nearly every day for three weeks making spring somewhat backward although most of the farmers have their grain sowed. Shall plant corn next week.

Every thing is nearly a month earlier than ever know in this locality before. There is every indication of an immense amount of fruit. Clover is splendid; will be fit to cut in two or three weeks. From experience I am convinced that the poorest soil can be brought up and made very fertile, by the use of clover alone.

CARLISLE, Schoharie Co., N. Y., May 6.

WE have been having plenty of rain of late. Yesterday it rained from the west all day; this morning the sky is clear and the air warm. Grass and winter grain are far ahead of any thing I ever saw in this section before. Spring grain is not half sowed yet; it will be late, for the ground is so wet that it will be a number of days before any sowing can be done, even if we have fair weather. Grain sowed looks nice and green; the rains have not hurt it yet. W. S. S.

MIDDLESEX Co., N. J., May 4.

WHAT extraordinary hot weather for the season!—88° in shade several hours yesterday, and 86 to-day. Things generally including weeds are growing freely. I have Strawberries in full flower, Peas 17 inches high, and Asparagus could be cut twice a day. J. T.

LITTLE FALLS, N. Y., May 11, 1878.

IT snowed in Utica this morning and we have been having cold showers all day. There was a light frost on the hills last night, with the prospect of a heavy one to-night in case it should clear up. Overcoats are in demand. W. H. K.

UTICA, N. Y., May 10, 1878.

IT is very cool here to-night, and we shall probably have a light frost. There is considerable apprehension that this unexpected cold spell will seriously injure the fruit crop which the earliness of the season has brought unusually forward. W. L. J.

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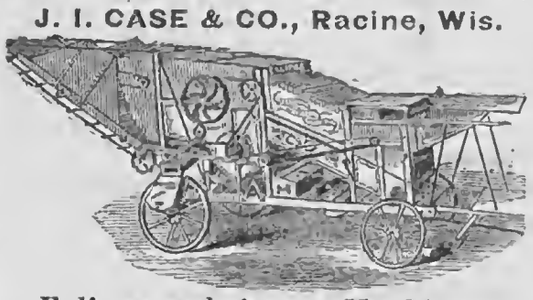

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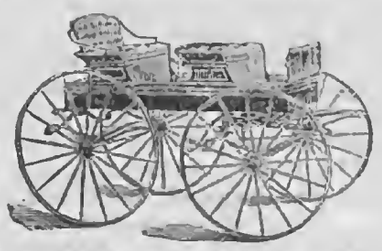

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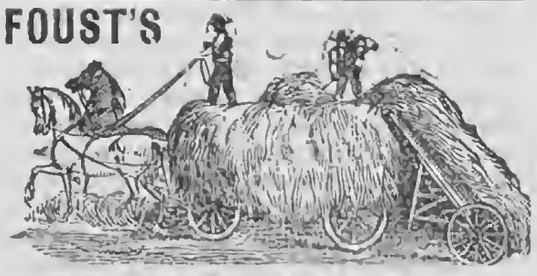

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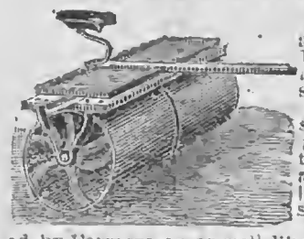

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Clover, How to Use—W. J. Fowler 309
Potato Culture—Prof I. P. Roberts (Illustrated). 309
Hiring Help and Overseeing Work—Prof. W. J. Beal 310
Manure, Spreading 310
Jottings at Ki by Homestead—Col. F. D. Curtis... 310
Flowering Shrubs, Handsome—William Falconer 310
Carpet Bedding (Illustrated) 311
What Shall I Plant: No. 3—William Parsons..... 311
"Having Eyes, they See not"—Chas. W. Garfield 311
Tea, American 312
Grass Burner, The Mennonite (Illustrated)..... 312
Noted Trotters—No 5 (Illustrated)..... 312
Lawn Mower, An Excellent (Illustrated)..... 313
Cooley System, The (Illustrated)..... 313
Rake, The "Reindeer"..... 313
Pump, The Fountain (Illustrated)..... 313
Knife Grinder, Worcester's (Illustrated)..... 313
Thoroughbred Swine and Herd Books..... 313

Answers to Correspondents:

Manure for Root Crops 314
Cows Sucking Themselves, To Prevent..... 314
Poughkeepsie, Something About..... 314
Chufas Again 314
Butter, Hardening..... 314
Hen Manure for Tobacco..... 314
House, Plan of a $2'0 or $50J 314
Beaucarnea recurvata..... 314
Miscellaneous Answers 314

Everywhere:

Gathering Cattle on the Plains..... 314
Fruit Gleanings..... 3 4
Rural Criticisms... 314
Sherman, N. Y..... 315
West Jersey, Ill..... 315
Dunnsville, Va..... 315
Corning, N. Y 315
Carlisle, N. Y..... 3 5
Middlesex Co., N. J..... 315
Little Falls, N. Y 315
Utica, N. Y 315

Domestic Economy:

Siftings from the Kitchen Fire..... 320
Preservation of Woolens and Furs..... 320
Domestic Recipes..... 320
Queries Answered..... 320
Markets..... 320

EDITORIAL PAGE:

Stock Husbandry..... 316
Bedding Plants, Putting out..... 316
Pleasing the Children..... 316
Japan Maples, The..... 316
Suggestive..... 316
Liquid Manure for Cabbages..... 316
Brevities..... 316

LITERARY:

Poetry 317, 319, 322
The Country Cousin 317
Cora..... 318
Recent Literature..... 318
Bric-a-brac..... 319
Influence of Women..... 319
News of the Week..... 320

Reading for the Young:

Pocket-Money for Young People: No. 2—S. Rufus Mason..... 322
Character and Conduct—Benjamin Clarke..... 322
A Visit to a Model School—S. B. P..... 322

Sabbath Reading:

A Word by the Way..... 322
Personals 323
Wit and Humor 324
Advertisements 315, 321, 323, 324

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, MAY 18, 1878.

STOCK HUSBANDRY.

AMERICAN agriculture will date a new era from the discovery of a cheap and safe method of shipping its meat, fresh in the quarters, for European consumption. It is not simply the new market opened for our meat that is so significant of future profit, but it is the stimulus that this will afford the American farmer to study the best system of stock-keeping, which must be the foundation of any permanent system of profitable agriculture. Any country that depends largely upon the sale of the raw material of its crops to be used in other countries to feed their population or stock, is on the sure road to deterioration and decay. Stock feeding must be the great reciprocating agency between production and compensation of the soil. It matters not how much production may be stimulated if its compensation be equally great. France and Germany have learned to produce their immense consumption of sugar from their own soil by the culture of the sugar beet, and yet both countries carry more stock than before. The refuse of the beet pulp, after the extraction of the sugar, contains all the valuable elements taken from the soil, and this, being fed to stock, returns them again to the soil. But suppose these beets had been sold and shipped out of the country, what would have been the result during the last half century?

This impetus given to cattle raising in this country will soon show our farmers the folly of shipping ten pounds of corn at the price of one pound of beef, and paying the immense difference in transportation out of their own pockets. The corn will be fed, the fertilizing elements going back to the soil, and the concentrated product exported at one-eighth the cost with a liberal profit. This market comes also on just the right terms to produce the best effect upon the character of our agriculture. This beef and mutton must be of the best quality, or it cannot be sold except at a loss. The farmer, therefore, who would feed stock for the foreign market must study how to produce the best animals; must study the whole subject of breeding and feeding. This will be a powerful incentive to education where most needed. Stock husbandry must hereafter become one of the largest specialties in our agriculture, and it will be our aim to keep the readers of the RURAL thoroughly informed of its progress.

PUTTING OUT BEDDING PLANTS.

IN our desire to fix up our gardens and to get rid of the care of house-plants that have become etiolated or diseased, we are tempted to put them out before danger of frost is over. The present early spring makes us more than usually perplexed. The ground, however, is becoming warm, and we do not think it unwise to accept the season as we find it, and to put out our bedding plants at least two weeks earlier than in past seasons. It is impossible to avoid some risks in this latitude, as, judging from our own section of country, frosts are not surprising visitors as late as the first of June. At any rate we need no longer fear frost from which a very slight covering will not prove an effectual protection. Turn out all plants which have been raised from last fall's cuttings with as little disturbance of roots as possible. When older plants are found to be root-bound, the compact mass should be broken so as to disengage the entangled roots and give them a new direction. The neglect of this often prevents a plant from flourishing—for the hard mass of roots will throw off any wet that falls upon it, and the plant will suffer in consequence. It is sometimes a good plan to place such masses of roots and earth in warmish water until every part has become saturated. Then the fibers may be disentangled without injury. In transplanting, press each plant firmly in the soil and give it a good drenching. It should, however, be borne in mind that weakly plants, if the ground is already moist, are not benefited by water. The roots, in fact, will extend themselves more rapidly in a dryish, warm soil than in one made cold and soggy by over-watering.

PLEASING THE CHILDREN.

SOME little girls, the youngest class of a private school in an adjoining city, following the custom of their elders, determined, a few days ago, to hold a fair for the benefit of some orphans. The matter had been fully and properly canvassed, price of admission (five cents) agreed upon, fancy-work commenced, contributions solicited, lotteries arranged, and all seemed to be working nicely after the manner of grown folks. The question *where* the fair was to be held was the only one unsettled, and this for a while bid fair to be an obstacle that would block the wheels of progress and turn into an utter failure an enterprise that had been commenced with such high hopes of abundant success. At whose house shall the fair be held? There was sickness at one, company at another; one's mother was too busy and another's thought it would be too much trouble. At last a little tot, the tiniest of the class, said, "I think you can have it at our house. My mother says nothing is too much trouble when it pleases her children. I know she will be glad to have you come."

Thus spoke the child of a wise woman. We want no further evidence of her wisdom than the testimony of her child, given in that simple, artless way. We wish we knew her, that we might do her reverence in person as we do now in spirit. Brighter than any jewels in Victoria's crown shines her motherhood. For her example in the treatment and home education of her children she deserves the thanks of the world. But do we not see, in the effect of the teaching of this mother in a more lowly station, the same wise treatment that produces the same effect on her children and all around her? Is there a mother of any one of those little school girls, who will not feel a reproof when she hears her child say—"MARIE's mother says nothing is too much trouble to do for her children." If there is, we are sorry for her, and for her children and her children's children.

Home influence is in this country too often unappreciated. Parents are too much occupied with the labor of accumulating worldly wealth to attend to the home instruction of their children. They are entirely willing to give all the money necessary to pay for instructions in school or college, but cannot spend the time to give them personal attention.

The education of children should begin with their earliest infancy. Lessons of obedience, respect, confidence and love should be taught long before school days commence, and be taught in a spirit of confidence and love. When your child believes in you and knows that you are willing to do every possible thing you consider for his good; when he trusts you because there has never been occasion for doubt, you have laid a foundation for an education that will be excellent even though that child never sees the inside of a school-house. What greater confidence can be expressed than that by the child who said, "It is true, for my mother says so, and when she says a thing is so, it *is* whether it is so or not." Not very correctly put, perhaps—but we all know what it means—that if mother says a thing is so, it will prove to be so, no matter how improbable it may look at present.

This topic furnishes a good opportunity to introduce an argument in favor of the education of women, but we will not improve it further than to say that in our opinion if liberal education can be given only to a part of the family, the girls should have it. The influence of an educated mother in a household can scarcely be overrated. She is with the children every hour of their infancy, just when the twig that shall grow to be the tree is susceptible of being bent. And words spoken in a proper spirit, at a proper time, are seeds sown that will bear rich fruit in after years.

There is a little book entitled Bits of Talk About Home Matters. We wish it could be read by every woman in the land. There is many a child that would be the gainer by it. And many a mother, we think, would gather wisdom from its pages.

THE JAPAN MAPLES.

OF the many beautiful hardy plants we have been among the first to commend to the public, there are few which promise to give a keener satisfaction than the Japanese Maples. Of these, it will be remembered, sketches of leaves were presented in our issue of June 1st, '76. There is hardly any doubt of the hardiness of these beauties for this climate, while for intricacy of leaf and delicacy and richness of coloring, we do not know of any other hardy trees that will at all compare with them. We do not understand why these Maples are so seldom referred to by English horticultural journals unless it is that the climate is less favorable to them than ours. Certain it is that all of our friends who have seen these exquisite plants, are quite charmed with their appearance, and we know of several gentlemen who at a considerable cost have purchased a specimen of each of the many varieties now offered for sale. In the matter of urging certain shrubs and trees upon the notice of our friends, we have endeavored to be both well-advised and conscientious, so that we could not be regarded by those influenced by our words as a cause of disappointment and so that we might both inspire and maintain their confidence. With such thoughts quite alive in our minds we are ready to repeat all we have said in praise of the Japanese Maples.

Suggestive.—Attend to Roses. Look to the buds inserted last summer and cut off those on the stocks that interfere with their growth. Give liberal dressings of manure if not already done. All sorts of bedding plants may be set beside spring bulbs, such as Tulips, Hyacinths, &c. Then when the foliage of the latter begins to wither, it may be cut off at the surface of the ground and the beds remain entire to the bedding plants. Keep down all blossom shoots of Rhubarb, which only exhaust plants. Weed all onion and carrot beds assiduously, and give the Asparagus plot careful attention. Nothing is gained by putting out Egg Plants, Peppers and Tomato plants before the ground is warm and the weather unmistakably settled. Sow radishes every week. Also broad Beans, Peas and Sweet Corn. Keep the mixture of sifted coal ashes, sulphur and hellebore, recommended in Brevities constantly on hand and ready to be used after every shower or oftener if needed. Look to the leaves of fruit trees and destroy every vestige of tent-caterpillars. The above mixture, if thrown up among the leaves of trees infested with slugs while the dew is upon the leaf, will dislodge them at once. Finally, consider how much more satisfactory a weel-kept garden is than one which is always half neglected and that if we are to derive a maximum benefit from our gardens, it pays to keep them in perfect order.

Liquid Manure for Cabbages.—What Cabbages, Brussels Sprouts and Cauliflowers need is a good start before dry weather. Of course it is well to have the ground made rich. Last summer, however, we tried the experiment of planting them in a rather clayey soil without any manure whatever, and feeding them with liquid manure which was kept in flour barrels near at hand. The variety was the Early Flat Dutch, and they proved the largest and heaviest we have ever raised. The manure was taken fresh from the stable and thrown in the barrels which were kept filled with water, or as nearly so as their tightness would allow.

BREVITIES.

"The buyer needs one hundred eyes, the seller only one."

WE were thinking what our agricultural and horticultural writers would do without the word *judicious*.

ACCORDING to latest reports, Oregon and California will have a larger crop of wheat than has ever before been known there.

FOR the purpose of making the off-year of fruit trees a bearing year—suppose we give the trees a heavy dressing of manure in the fall of the bearing year?

WE have found it necessary this month and last to go over our lawns with the lawn-mower every four days. The interval between cuttings has never been so short before.

FARMER SMITH does not oppose the use of commercial fertilizers, entertaining the belief that a good farm, like a good piece of meat, only requires basting with its own drippings.

PROF. COOK of the Mich. Ag. College advises wheat-growers where the Hessian Fly prevails, either to pasture or mow the infested fields after the eggs are deposited and before they hatch.

ACCORDING to horticultural writers of the present day, there are a great many Kings and Queens among trees, shrubs and plants generally. The fact is they constitute a royal family.

A MAN that will kick a good horse
"Is fit for treasons, stratagem and spoils;
The motions of his soul are dark as Erebus:
Let no such man be trusted."

A FEW evenings ago, we counted fifty men standing outside the gentlemen's cabin on the ferry-boat betwen New York and Jersey City, Twenty-five were smoking. There is a great fascination about smoking. Can any one describe it? Can any one tell just why he loves to smoke?

MR. MEEHAN exhibits at the Paris Exposition capsules, seed-vessels, seeds &c., representing the forestry and horticulture of America. The only other representation of American horticulture will be by the Iowa State Horticultural Society, which will exhibit the models of apples made by it for Col. BRACKETT.

THERE is no greater fallacy, says the Rev. J. FARMER of Nottingham, (Eng.) than that the whiter bread is, the better and more nourishing it is. For the more wheat is refined the more gluton is taken away, and finally scarcely anything but starch is left. It has been discovered that there is a ferment in the bran which aids digestion.

PRESIDENT BERCKMANS—of the Georgia Hort. Society—says that the Alexander Peach ripened with him at Augusta, upon young trees, as early as the 25th of May. Amsden ripens at about the same time and the Beatrice ten days after. He has sent the Alexander by mail to several persons North, and they arrived in fine condition, The Beatrice, though it carries well, is rather too small for shipping. Early Louise and Early Rivers are excellent for home use.

How sweet is learning! Listen to the Rev. Jos. COOK.—"Our conversation had turned upon the new Idealism and I had asked the Professor if he did not think that the plastic nature of the Kantian Antinomies might not be explained by particular reference to the 'Weltgemüthlichkeit' of Tauler, as explicated in his 'Geschichte Zua Elkenntniss des Menschlichseelenfinsterniss.' He did not speak for several hours." We should suppose it would have that effect.

A VALUABLE mixture to keep on hand at this season is one of coal ashes, sulphur and hellebore. The ashes should be very fine. It is best after passing them through the ordinary coal-ash sieve. To one pailful of ashes thus sifted, add a quart each of flour of sulphur and hellebore and mix together. For currant worms, plant lice, cabbage fleas, slugs on pear trees, melon bugs, we found this so effectual last season, that we confidently recommend it to our readers. It is always best to use it in the cool of the morning while the dew is upon the leaf.

MANY people are too apt to conceive that success, eminence in the various walks of life, may be gained at a jump; that it depends upon something else beside thought, study, endeavor. They start out with imperfect ideas of the obstacles before them, and fancy that a little of ingenuity, cleverness, of extra endeavor, will accomplish for them what it has quite failed to accomplish for thousands of others. This comes from the hopefulness, the buoyant aspiration of inexperienced youth. Later, the hard fact presses upon them that all of the real success they have met in life has been due to study, observation—to hard work.

Mr. KING, a Scotch agriculturist, says that the greatest mistake which he has ever seen committed in connection with the employment of lime, is that of mixing it with manure before application. In these days of enlightenment it is almost incredible that such an egregious error as this should be committed, and yet the perpetration of this species of absolutely inexcusable wastry is not so very rare. When farmyard manure, at least after it has been kept for some time, is so treated with lime it is almost entirely destroyed and the value of many other manures, by similar treatment, would be very much lessened. Lime should never be allowed to come in contact with the manure, at all; and if it could be arranged conveniently, those two substances should be applied to the land at different times.

Literary Miscellany.

THE COURTIER AND THE KING.

A COURTIER once made free to bring
A cup, and compliment to his king,
Said he, "Your majesty, behold!
Your nobles' love condensed in gold;
Each blazing jewel is a token,
Of praises they have never spoken,"
"God bless them all," replied the king,'
"And now my sparkling sherris bring;—
I drink" said he, "to the unknown
Who mined this metal for the throne:
The artisan who made it shine,
And graved thereon the royal sign;
The lapidary who could [illegible]
These gems in starry loveliness!
For kings and thrones till kingdoms end
On noble labor must depend."

[*Fletcher Bates in Transcprit.*

THE COUNTRY COUSIN.

"Mamma," said Sophy the next morning, "do let us give a party. We must have one before Maggie leaves; and we had much better have it early, so that she may come in for the return invitations."

"I don't think Maggie cares for parties," observed Mr. Harrison, looking kindly at her over his newspaper; "besides, it is full early yet for quadrille parties."

"Oh, but if we have it at once it will be done with," said Sophy; "and as for Maggie's not caring for parties, you are quite mistaken, for she is as fond of dancing as any of us."

"Yes, dancing, perhaps. Well, as you like," said Mr. Harrison. "But what does mamma say?"

"Oh, I've no objection in the world," replied Mrs. Harrison, who was as fond of gaiety as her daughters; "so get your desk, Sophy, and make out a list of names."

Sophy was soon hard at work, while Mr. Harrison, to escape the discussion as to who should and who should not be invited, took up his hat and walked off to his counting-house.

"Mamma," said Sophy, as she reached the end of a tolerably long list, "let us invite young Hamilton; I thought he seemed particularly anxious to improve our acquaintance yesterday."

"So I thought, Sophy," answered Mrs. Harrison, sagely nodding her head; "if we can only manage it; but your papa has such odd notions. However, we must see what can be done."

But there was no need for Mrs. Harrison's diplomacy, as Mr. Hamilton found an excuse for calling the next day, and made himself so agreeable to the master of the house that he readily acquiesced in the proposed invitation.

CHAPTER II.

DURING the time that intervened before the ball little else was talked about, and Maggie grew thoroughly tired of the subject; but she had yet to learn how much there is of practical discomfort in a large party at the house of pretentious people. The preceding day was a scene of the wildest confusion. Beds were taken down and carpets taken up, that supper might be laid in one room and quadrilles danced in another. The study was turned into a coffee-room, and the dining-room into a card-room; so that poor Harrison fairly took flight, and was seen no more till evening, while the boys revelled in the commotion, and took their meals how and when they could, securing divers forbidden dainties in the scuffle. Maggie sought refuge in her own chamber, but she soon found that that was required for a cloak-room; so she put on her hat and went for a long country walk, in which she contrived to lose herself, and only reached home in time for a cold, comfortless, late dinner.

In the morning matters grew worse, and the racket only subsided as the hour approached for the arrival of the visitors. By nine o'clock the rooms were full,—that is, about fifty people were crammed into a space scarcely large enough for half that number, so that flirting was carried on upon the stairs, and love-speeches whispered on the landing. However, the evening passed off well, and was, what Harriet called, "a decided success." But the aspect of the house the next morning was so utterly forlorn and desolate, such a chaos of rout seats and drooping garlands, such a litter of torn finery and champagne corks, such a medley of chicken bones and dirty platters, that Mr. Harrison, who was a sworn friend to order and regularity, might well be heard to exclaim that he was glad it was over.

"And you really like all this gaiety and dissipation, Miss Cameron?" said Claude Hamilton one evening.

"I liked it very much indeed at first," replied Maggie; "but I am beginning to get rather tired of it now, I must confess, and we live so very quietly at home."

"And pray how do you employ your time at home, Miss Cameron, if I may be allowed to ask the question?"

"Oh, I am never at a loss," she replied. "Mamma likes me to keep up my accomplishments; so I practise every day, and draw a good deal; then we have always plenty of books, and generally we play at chess in the winter evenings; so that, with plain sewing and fancy-work, the days often pass too quickly."

"In my day," said Mr. Harrison, "girls learnt housekeeping; and I have heard my mother say that she could make a pudding and knit a stocking before she was sixteen."

"And I can make a pudding, too, uncle," laughed Maggie, "and do, often, when Martha is busy."

"What's that about puddings?" asked Sophy, sailing into the room in full evening costume. "Oh, Mr. Hamilton, I did not know you were here. Are you going to the Stephens' to-night?"

"No, I really could not manage it," he replied. "Three invitations for one evening fairly scared me, so I declined them all, and just called in here on my way home." It was astonishing how often Mr. Hamilton had latterly called on his way home.

"Oh, how very shabby of you!" exclaimed Sophy, with her sweetest smile. "I shall tell Mrs. Stephens how very badly you behave." But the young lady's raillery only elicited an exaggerated expression of despair at his inability to join her party, and an offer to escort her to the cab, in which the others were already seated.

"Mamma," exclaimed Sophy, eagerly, as the cab drove off, "did you know Mr. Hamilton was in the drawing-room?"

"I did," said Fanny; "but as I knew he did not come to see me, I forgot all about it."

"It was very provoking, I must say, and you might have told me, Fanny," said Sophy, very much put out.

"I did not know he was there," said Mrs. Hamilton; "but, after all, it does not matter. Maggie is only a child, and you need not fear, Sophy, dear." But Sophy was not so easily consoled, and a cloud obscured her fair brow, which was only removed by two waltzes and a galliopade, aided by the fervent devotion of a gallant captain of Dragoons.

"And you really can make a pudding?" said Mr. Hamilton, as he drew his chair rather unnecessarily near the little table where Maggie was at work.

"I really can," answered Maggie. "But what is there so very surprising in that?"

"Nay, I think it is very surprising," he said; "and I question very much if you could find a dozen young ladies of a certain class in all this great town of Winterbury who could say as much. And there's another mystery to be solved. How is it you did not go to the Stephens' this evening?"

"Because she volunteered to stay at home and amuse her old uncle," said Mr. Harrison, laying his hand, caressingly, on her glossy hair.

"But it was no sacrifice, uncle," said Maggie, "for I did not want to go. I began quite to long for a quiet evening at home. You play chess, Mr. Hamilton? Ah, then you and uncle can have a grand battle, and I will sit by and watch the game." But Mr. Harrison declared he had not finished his paper, and told the young people to try their skill till he was ready.

The game, however, progressed but slowly, and the supper tray came in before it was half over; and after that there was another hour of pleasant animated chat; so that when Mr. Hamilton at last took his leave, he felt quite convinced he had passed a far pleasanter evening than if he had gone to a dozen balls,

"And what sort of an evening did you have?" asked Maggie, as the girls dawdled over a late breakfast next morning.

"Pretty well," said Sophy, languidly; "but I think I ought rather to ask you that. Pray, how long did he stay?"—the "he," of course, referring to Mr. Hamilton.

"Oh, he stayed to supper, and it was nearly eleven o'clock when he left," replied Maggie.

"How provoking!" exclaimed Sophy pettishly; "and what in the world could you find to talk about all the time?"

"Oh, plenty of things," replied Maggie. "I think he was rather curious to know how sober damsels like me pass their time in the country; so I gave him a slight sketch of my occupations,—very much to his amusement, no doubt."

"And did you tell him you made the beds and hemmed the table-cloths?" inquired Harriet, rather spitefully.

"No, though I might have done so," said Maggie, quietly; "for I do both sometimes. And as it was, I only owned to being vulgar enough to know how to make a pudding."

"Really, Maggie," retorted Fanny. "I begin to suspect you are a very deep little girl."

"A very silly one," interrupted Sophy, hastily. "What would he take you for? I consider pudding-making about on a par with dish-washing, and certainly no lady would wish to do either."

"Then I suppose I am no lady," said Maggie, "for I must say I see no reason why a lady should not do both, if necessity required it; and I know dear mamma thinks no girl's education is complete unless she understands housekeeping; and I am sure work is no disgrace to any one. But I beg pardon for speaking so warmly."

"Oh, there is no need," said Sophy, rather coldly; "it is not of the slightest consequence, I assure you."

While this little domestic scene was going on at the Harrisons', one somewhat similar took place between Mrs. Hamilton and her son. They had breakfasted early, as usual, and were seated on either side of a noble fire, burning in a grate of polished steel. She was a lady who might be between fifty and sixty, though her eyes were still bright, her cheek still smooth, and her figure queenly in its proportions and bearing.

"And who are these Harrisons?" she inquired, when her son had told her where he had spent the previous evening.

"He belongs to the firm of Greatwich, Harrison, & Pardoe," he replied,—"a respectable, well-to-do concern, and old Greatwich is as rich as a Jew; so is Pardoe; but they are bachelors, and the Harrisons are a large family,"

"Grown up?" inquired Mrs. Hamilton.

"Grown up," was the reply. "At least, the girls are; the boys are younger, mere schoolboys, in fact."

There was a pause, during which Mrs. Hamilton gazed thoughtfully into the fire. At last her son broke the silence; rather hesitatingly it seemed.

"There is a young girl, a cousin, I believe, staying with them at present."

"Yes?" said Mrs. Hamilton, inquiringly, as her son made another stop.

"She only came for the winter," continued Claude, in his turn gazing into the glowing embers; "and she will leave early in the spring, unless—unless I can persuade her to stay."

"Claude!" exclaimed his mother. It was only one word, but there was a world of significance in the tone, and he drew himself up rather proudly, and met her steady look with unflinching eyes.

"My dear mother," he exclaimed, "why do you look at me like that? Have you not, for the last three or four years at least, been telling me that I ought to marry, and now that I am really thinking about it you look as if I had broached some outrageous and unheard-of idea."

"Because you have taken me so completely by surprise," said his mother. "I have never seen—never heard of this young lady before; but if she is one really calculated to make you happy, depend upon it you shall meet with no obstacles from me."

"There's my own dear mother," exclaimed Claude, affectionately kissing her delicate hand; "and do not fear that I shall do anything rashly. I have not yet said a word either to Miss Cameron or her uncle. At present, all I want is that you should know her."

"I see but little chance of that, Claude," said his mother, gravely, "going out so little as I do; and it would not do for you to bring her here."

"No, I see that," said Claude; "and yet it must be managed. There is only one way—suppose you give a party."

"A party!" said Mrs. Hamilton.

"Yes, and invite the Harrisons," he replied. "Don't you think it would do, mother? They would be only too happy to come; and it would seem quite natural, as I have been there so often."

And so it was settled, and the Harrisons were in a high state of excitement and delight, and drove their dressmaker to the verge of desperation in their anxiety to have what Sophy called "killing costumes;" for Claude was an only son, and being distinctly related to a viscount, and on visiting terms with more than one of the "upper ten thousand," was considered by all the Winterbury girls as the grandest match in the neighborhood.

CHAPTER III.

An evening party at Deanley Manor was a different affair to a ball in St. John's Street, Winterbury. Here there was no crowding, no display, no striving after effect, but a certain quiet tone of refinement pervaded the establishment, and seemed to blend together every trifling detail into one harmonious whole. There was no regular ball, but the young people adjourned to the breakfast-room and got up a carpet dance, taking it by turns to play. Mrs. Hamilton was not so much engaged with her company that she could not find time to observe Maggie, and the result of her observation was so favorable that she determined to see more of her.

"My son tells me you are leaving Winterbury in a short time, Miss Cameron," said Mrs Hamilton, when she had by a few adroit questions obtained a considerable insight into Maggie's thoughts and fancies. "If it were not asking too much, I would invite you to spend a week with me before you leave; for I am so very fond of the society of young people, but we should be so very quiet."

"Oh, I do not mind that in the least," said Maggie, with childish eagerness. "I am so fond of the country, and if my aunt has no objection——"

"I will ask her myself," said Mrs. Hamilton, "and the carriage shall come for you on Monday morning."

A very few words sufficed to obtain Mrs. Harrison's consent; and Maggie, who was becoming very weary of morning promenades and evening parties, looked forward with delight to the idea of a short sojourn in the country, although Mrs. Hamilton laid great stress on the fact that she should be "quite alone," having made a special proviso that her son should go on a visit to some friends at a distance, and not return until she recalled him. The Harrison girls were quite taken "aback," as Fanny elegantly expressed it, by Maggie's unexpected good fortune.

"Though after all," said Sophy, "it will be nothing so very delightful if you are to be shut up with an old woman all day long, and her son away, too. Oh Maggie, she took care of that, depend upon it; and she only wants you to stop a gap; so it is not so very flattering."

"No, indeed," said Harriet, contemptuously; "but I hear she is a regular old-fashioned goody, who approves of young ladies making themselves scullions and kitchen maids; so I dare say you will get on very well together."

"Well, at any rate you need be under no trouble about dress," put in Fanny; "you can go as shabby as you please, now the young laird's away; though, to be sure, there may be a few callers after the party. However, I prophesy you will be glad enough to come back into the world again."

Maggie wisely held her peace, and gradually the scoffs and jeers died away; yet it was with unmixed feelings of pleasure that she saw the carriage drive up that was to convey her to Deanley. She found her hostess waiting to receive her with a truly warm and cordial greeting. Mrs. Hamilton was one of those rare beings who improve upon acquaintance. The slight reserve that characterized her manner with strangers wore off as she was better known, and she became warm, and even, affectionate, in her bearing towards those to whom she took a liking, as she soon did to her young visitor.

"Do you know," she said, one evening, as they sat by the library fire, "I think I took a sort of fancy to you because your name is Margaret."

"How did you know it was?" asked Maggie. "Oh, I suppose you heard my aunt call me so?"

"No, it was before then—it was before I had even seen you," replied Mrs. Hamilton. "Claude told me."

Mrs. Hamilton glanced at Maggie as she said this, but the quiet face was perfectly calm and unmoved. She had evidently never thought of Claude as a lover.

"Did he? I wonder he should think of it,' said Maggie. "Then you like the name of Margaret?"

"I love it as I love no other," replied Mrs. Hamilton; "it was the name of my dear sister."

"Then do call me so," said Maggie, eagerly. "It seems so formal to be called Miss Cameron."

"Perhaps I may, some day," said Mrs. Hamilton, with a smile.

That night a rather long letter was dispatched to Claude, and it contained these words:—"I am not disappointed in her; and that, you know, is much for me to say on so short an acquaintance. Give me a little more time, and I shall be able to speak more decisively."

The week for which Maggie had been invited passed away far too quickly, for the pleasant morning rambles when the weather permitted, and afternoon drives, with the cosy fireside evenings, were inexpressibly charming to a girl of Maggie's stamp. There was always some new book to discuss, or some village news to talk over, and occasionally more serious subjects would arise; and all tended to convince Mrs. Hamilton that Maggie was a girl of no common mind.

One afternoon, when the weather had changed and the thickly-falling snow made their usual drive impossible, Mrs. Hamilton had been showing Maggie some of the art treasures, of which she had a large collection.

"How nice it must be to be rich!" exclaimed Maggie, as the last antique gem was replaced in its richly carved Indian cabinet.

"Never covet riches," said Mrs. Hamilton, gravely; "my happiest days were spent in comparative poverty." Then after a pause she asked, "Would you like me to tell you something of my past life? It is just the evening for a story."

Maggie assented with delight, and seating herself on a low ottoman, drew a little nearer to her friend and prepared to listen.

"I will pass over my early days," said Mrs. Hamilton, "for there was nothing remarkable either in my education, position or prospects. My father was the younger son of a noble house it is true, but not a rich one, and moreover, he had irretrievably offended his friends by marrying a singularly beautiful and amiable girl of gentle descent but small fortune, in preference to one of immense wealth, plain person and unamiable disposition However, he never repented his choice. We were a large family, but all died young excepting my dear sister Margaret and myself. In her seventeenth year she too passed away, and I was left alone to comfort my almost inconsolable parents. Two years after her death I became acquainted with my late dear husband, and in another twelve months we were married.

"Now came my time of trial, for which, I am sorry to say, I was but ill-prepared. My life hitherto had been easy and pleasant, for my parents, though not rich, were comparatively affluent, and I had never known the virtue of self-denial. My husband was a barrister, well born and well connected, but of very small independant resources, and briefs did not come in so quickly as we had anticipated. The consequence was that our expenses soon exceed our means, and my husband told me this one day when I had been proposing to give a dinner-party

"'My dear Carolina,' said he, "I am afraid we are not justified in incurring any additional expenses. You know how small my income is, and my professional gains do not keep pace with our requirement. I am very much afraid we shall have to retrench."

"'Retrench!' I exclaimed, in absolute dismay for the word seemed significant of nothing short of ruin and disaster.

"'It will be nothing very dreadful darling,' he said, smiling at my tone of horror. 'I thought perhaps we might keep fewer servants, or, at least, put down the carriage."

"'Oh, no, not that!' I exclaimed. "Surely, Edward, it will not need that? We will give no more dinner-parties, and then we need not go to any. The children—for by this time we had three—will be a sufficient excuse for giving up visiting.'

"'I fear that will make but little difference, he replied; 'however, we can try,"

"We did try, and the experiment cost us dear, for in the end we were obliged to diminish our establishment far more than my husband had proposed, and in less than another year we were living in a small house with only two female servants and a gardener, who also waited at table.

"I may as well own at once that I had at that time a good deal of false pride, and at first I made myself thoroughly miserable, and every ring at the bell sent me into a tremor lest our maid-of-all-work should not be presentable, or the man be surprised in his working clothes; and when I went out I fancied my fashionable friends looked coldly on me because my dress was less costly or my bonnet less stylish than usual. Yes, you may well smile, child, and I hope you are untainted by any such absurdities. There was another thing, too that troubled me. My husband liked a good dinner, and I soon found that without some amount of personal superintendence that was absolutely unattainable. I was silly enough to think kitchen matters quite beneath the notice of any lady, and it cost my foolish pride many a bitter pang when I had not only to overlook but even prepare with my own hands the soup or the pudding that I knew my husband had particularly fancied. I am glad you can make a pudding, my dear."

Maggie looked up with a blush and a smile, and Mrs. Hamilton went on.

"Yet it was very sweet to be thanked and praised for my efforts,—so sweet, that in time I grew more than reconciled to my labor of love; and I learned to dread more than anything the luxurious self-indulgence which leads so many wives in the middle class to pass their days in utter idleness, lounging on a sofa and reading novels, while their children are left to menials, and their husbands to the uncheered monotony of a weary, wearing toil.

"Time passed on, and gradually our affairs im-

proved; so that, as is often the case, when once the turn came our tide of prosperity rose high and rapidly, and in a very few years' time our circumstances justified us in resuming and even exceeding our early style of living. Since then my life has been a prosperous and happy one, shadowed only by the one great sorrow of my life, which left me a widow, and, but for Claude, childless. But of this I cannot bear to speak."

The last sentence Mrs. Hamilton spoke so sadly that Maggie's eyes filled with tears, and for the first time Mrs. Hamilton drew her towards her and pressed a kiss upon her cheek.

"And now run away and dress," said Mrs. Hamilton, "for the second bell has rung, and we shall be late."

"I shall not be long," said Maggie; "and thank you, dear Mrs. Hamilton, so very, very much."

The next day was the last of Maggie's week, but, to her great delight, Mrs. Hamilton asked her to prolong her stay, saying, "I expect Claude home to-morrow."

"Oh do you?" exclaimed Maggie, but with a look and tone almost of disappointment.

"Why, my dear child," said Mrs. Hamilton, laughing, "how grave you look! Most girls would receive the announcement in a very different manner."

"Oh, I beg your pardon," stammered poor Maggie; "I did not mean—that is, I was only thinking that we shall have no more such nice quiet evenings."

But Maggie was mistaken, and soon learned to think the evenings quite as nice, or more so, than they were before Claude came; and her cheek began to flush, and her heart to beat at the sound of his voice or footstep. And one day when they returned from a long walk together there was something so new, so happy in her whole look and manner, that Mrs. Hamilton, taking both her hands in hers and looking earnestly in her blushing face, said softly, "I must call you Margaret now, I think."

Maggie's engagement was duly announced to the Harrisons, and received with very mixed feelings. Sophy was inclined to resent it; Harriet professed extreme disgust at what she called "Maggie's dreadful slyness;" and Fanny declared all that vexed her was that she had not entered the lists herself. Mrs. Harrison, however, was delighted at the prospect of being so nearly connected with "the Hamiltons of Deanley Manor," and immediately began to plan various schemes of aggrandizement for her daughters, none of which took effect; and long after Maggie had been a happy wife and mother, the Harrison girls, who had been engaged a dozen times, at least, were still unwooed, unwed,—a circumstance that did not improve either their looks or temper. Eventually, however, Sophy, growing in despair at her faded cheeks and scanty ringlets, which even bloom powder and hair-restorers failed to renovate, accepted an ancient lover, who made her an offer under the combined effects of unlimited flattery and an extra glass of brandy-and-water. Harriet took advantage of a weak moment to entrap an unsuspecting curate, and Fanny turned devotee, in the forlorn hope of ensnaring a popular preacher. Still, however, as Sophy sometimes owns, when in a desponding mood, it is a most aggravating thing to be outdone by a simple Country Cousin.

CORA.

CHAPTER XVI.

Three Years Later.

"Bend your head a little more forward, Cora, and draw the child more within your arm. Yes; that is better. I am afraid I tire you, dear wife."

"What nonsense, Alan; you know I delight in sitting for you."

And Cora glanced over at her husband's tall figure and bearded face, with a bright look of loving pride in her lustrous eyes.

They were in Sir Alan's studio, a large and lofty room in the handsome mansion to which they had removed from The Bungalow about a year after their marriage—Sir Alan finding it better for his interests that he should be in the metropolis itself, at any rate, during the greater part of the year. His name was not unknown in the art world now; his love for Cora, and his happy married life, had not damped his energies or his interest in the art he loved, and he had won fame, and was winning fortune, with his chisel, and with his strong, true right hand. The bust was at his foot now; he had modelled a bust of some great Court beauty which had created a sensation, and Sir Alan awoke one morning to find himself "famous." A royal foreigner, an enthusiast in sculpture, had had his statue chiselled by the young baronet; then a great national piece of work had been offered to him and accepted; so that Cora's husband was a great man now; and as his father had been famous in his career, so did the son promise to make his name glorious by his art.

Much as Cora had loved her husband before their marriage, greatly as his many noble qualities and high character had made her reverence and esteem him, she loved him doubly now, and no married life could have been happier, more full of domestic bliss, than Sir Alan and Lady Vincent's. They had been married nearly three years, and little Harold Sinclair Vincent was almost two years old, but Cora's beauty seemed only heightened by passing time. At twenty-four she was as lovely as at twenty; and people said that the quaint artistic dress, which Sir Alan liked her to wear, though it would have tried most women, was simply the most becoming costume in the world to her.

"Lady Vincent always looks as if she had stepped out of an old picture," people said: and while her own drawing-rooms were always well filled with great people and celebrities, Cora was a welcome and sought-after guest in the *salons* of the great upper ten; and "Who is that beautiful creature in that quaint Vandyke costume?" was a frequent question at fashionable *reunions*.

It seemed to Cora sometimes as if her life was too happy and too blest, as if some day it must be paid for by some great unhappiness; but Sir Alan laughed at the idea, and whenever she mentioned it, teased her out of the "morbid creed," as he called it.

His wife was Sir Alan's most frequent and favorite model, and more than once he had modelled her rare loveliness under various forms. When we find them again, on a fair spring morning, when even in "smoky London" one might obtain a glimpse of blue sky, Cora was sitting to him, with her boy, and Sir Alan was busily at work on a group representing Charity assisting little children; and the lovely face of his wife showed that, as she said, she "delighted to sit for him."

"That's a dutiful wife," said Sir Alan, smiling over at her. "Don't look so bewitching though, love, or I shall come and spoil the group by kissing my 'Charity.'"

"I wish you would," laughed Lady Vincent, "I shall begin to charge so many kisses an hour. I think," she added, laughingly; "but I must be paid in advance. I think some one knocked at the door, Alan."

"Come in," said the sculptor-baronet, turning a little impatiently.

The door without was opened, and the heavy curtain concealing the entrance into the studio drawn aside. A tall, strongly-built man, evidently an indoor servant out of livery, appeared, with a note lying on a silver salver.

"What is it Marks?" said Sir Alan.

"A note for my lady, Sir Alan. There is no answer."

"Very well," and Sir Alan took the note, and with a bow the servant disappeared.

"How I dislike that man," said Cora, a little impatiently.

"Why?" asked Sir Alan, as he brought the note to her.

"Read it, Alan, please. I might disturb the boy." For Cora held the child in her arms, and he was sleeping.

Sir Alan opened the note: it was elaborately scented, and bore a wonderful monogram on heavily cream-laid note-paper.

"DEAR LADY CORA,—

"Will you and Sir Alan think me very troublesome if I make a morning call in about an hour after you receive this? An old friend having returned from abroad, after a long absence, wishes to see Sir Alan's great work before it goes to St. Petersburg, and I want a glimpse of the bust of the Princesse de Pincetaille. We will try and not take up too much of Sir Alan's time; but, you know, he must suffer the penalty of fame.

"Sincerely yours,

HELEN ST. MAUR."

Sir Alan did not look enchanted at her ladyship's pretty billet, and made no comment upon it, except:

"Good-bye to our quiet morning, Cora," as he returned to his work.

"By-the-bye, my child," he said, in a few moments, "why don't you like Marks? He seems to me the perfection of a servant, and is evidently rather a superior person."

"I detest superior people," exclaimed Cora; "but I always have the feeling with him that we have met before. I don't think he is honest."

"Are you afraid he will steal the spoons, Lady Vincent?" asked Sir Alan, merrily.

"No, Alan, I don't doubt his honesty in that way. I mean, I don't think he is true."

"Foolish girl: he seems to me particularly plain and aboveboard."

"Well, dear, he is your especial property, you know," she answered; "but his eyes always seem to be following one about whenever he is in the room."

"Perhaps he is an admirer of the beautiful, wife."

"Don't be absurd, Alan," said his wife, petulantly, pouting her pretty lips.

"Am I absurd, sweetheart? Most men are where pretty women are concerned."

There was a long silence, broken only by Sir Alan's chisel, until Lady Vincent began, a little plaintively:

"We never have a quiet morning, Alan."

"The penalty of fame, my child."

"I shall begin to wish you were not so famous, Alan," she replied, looking over at him with a proud light in her eyes.

At this moment the drapery of the entrance was drawn quickly aside, and Marks announced:

"The Countess of St. Maur; Viscount Almane."

Sir Alan put down his chisel, and turned to receive his guests with the quiet high-bred ease and courtesy which distinguished him.

Cora sat still, almost unconsciously retaining the attitude in which she had been sitting for her husband; the color receded slowly from her beautiful face, even her lips paled in the surprise of the moment. Marks, as he dropped the curtain, noted the fair face, and he saw that there passed over it an expression of horror and fear.

"I must apologise, Sir Alan," began the Countess, as she came in her rich robes of velvet and fur, with her proud beauty and haughty bearing; "but, as I said, you must bear the penalty of fame. Allow me to present to you Lord Almane.'

Sir Alan bowed, as he relinquished the Countess's little gloved hand, and turned to the Viscount who uttered some facile compliment with his usual easy grace; and the sculptor's artist eye was struck at once by the rare beauty of his face, bronzed as it was by the hot sun of eastern lands, the haughty grace of the proudly-set head, the languid grace of movement and manner.

"Oh, Lady Cora," went on Lady Helen's gay voice, "are you doing 'model?' Nay, don't stir." Then, in a slightly lowered voice, she went on: "I have brought an old friend to see you."

Cora had risen, but her face was almost as colorless as the long, loose, white Grecian robe she wore.

"You find me in strange attire," she said, quietly. "Pray excuse it, Lady St. Maur."

"Nay, it is most becoming," laughed the Countess. "I wish the Earl had artistic tastes, and would allow me to dress in that fashion. But you look pale, Lady Cora. Are you not well?"

"I am a little tired," she answered, quietly, as she went forward, still holding the boy, and met Lord Almane.

"Lady Vincent and I are old acquaintances—I might almost say friends, Sir Alan," said the Viscount, as he took Cora's hand in his, and looked down at her with a melancholy sadness in his dark eyes.

Sir Alan expressed his surprise, and glanced rather inquiringly at Cora.

"We have not met for some years," went on Lord Almane in a sad, sweet voice which touched Cora like the echo of some old, well-remembered song; "but you are little changed. Is this your son?"

He stooped over the child for a moment, and Lady St. Maur claimed Sir Alan's attention. He went towards her, and Cora stood with Lord Almane bending over her son, trembling with some undefined fear.

"A beautiful child," went on the Viscount, quietly, as the boy awoke, and looked up at him with big, surprised gray eyes. "He has your eyes, Lady Cora."

He stooped over him again, touched his brow lightly with his lips, gave her a lingering glance of sadness and reproach, turning away with a long, low sigh.

A minute or two, during which Cora seemed occupied with the child, enabled her to regain her composure, and to overcome the emotion which the sudden meeting had excited; but the flood of recollections which Lord Almane's presence brought back to her had almost overcome her, and she still trembled.

"Will you excuse me for a few moments, Lady Helen?" she said. "I want to give Harold up to his nurse."

"Harold!" exclaimed Lord Almane, softly. "Your brother's name? How well I remember him," he added, with a sigh.

"Are you cold, Cora?" said Sir Alan, taking the boy from her into his strong arms. "Why, my dear, you are trembling; run away and get on some warmer garments. I ought not to have kept you so long."

And as the mother and child disappeared he turned to his guests, and during half an hour they were occupied with the studio and art talk.

Both the visitors made themselves most agreeable. Lady Helen, with her great beauty, set herself to charm Sir Alan, leaving Lord Almane free to devote himself to Cora, who soon came back, having changed her dress.

"It seems hardly possible that it is nearly five years since we met," said the Viscount, as they paused before the French princess' bust, and seemed to comment on its beauty. "I heard of your marriage when I was at Smyrna."

And again the low, regretful sigh.

"I lost sight of you completely," he went on, "after your visit to Mrs. Colsion. You remember it? I could bear my chains no longer then; but when I was free I found that you——pardon me, I know old associations are disagreeable, Lady Cora. May I tell you how much I rejoice in your happiness now, although——"

He hesitated; but Cora said nothing, and in a moment he went on:

"You believe me, do you not?" he said, in the musical voice of bygone days. "You know that your happiness, your welfare, must always be inexpressibly dear to me, for the sake of 'Auld lang syne.'"

"Luncheon is ready, my lady."

Whether it was that both Cora and her companion had been too absorbed to hear steps coming along the gallery, or that Marks had been even more noiseless than usual, certain it is that both started when the voice sounded close beside them; and Sir Alan, who was standing at the opposite side, listening to the Countess's gay chatter, noticed Cora's quick movement.

"Are you not well, my dearest?" he whispered, as she passed him on their way to the dining-room. "You look so pale."

"I am quite well, Alan."

But her husband noticed anxiously that she ate nothing at luncheon, and grew a little alarmed; although she was gay as usual and chatted with her guests. When they had gone he came back to the dining-room.

Cora was standing at the window, watching Lady Helen's barouche drive away. He went to her side, and put his arm round her. For once Cora did not move, and made no answering motion towards him.

"I am afraid I tired you this morning, love," he said, gently; "you have been looking so pale."

"I am not tired, Alan," she answered, quietly.

"I did not know you knew Lord Almane," he went on, after a momentary pause. Was it imagination, or did the little hand lying in his give a start, as if something hurt it?

"Harold knew him," she answered in a low tone.

"He is a handsome man," said Sir Alan, carelessly. "What are you going to do this afternoon Cora?"

"I don't know. Will you drive with me, Alan?"

"I would like it, dear; but I have an engagement."

"Then I will go and lie down. My head aches."

"And your hand is very hot, dear child. I thought you were not well."

"One may have a headache without being ill," she said, pettishly.

"You are certainly cross, pet, and you are not so when you are well," said her husband, smiling. "Go and have a nap, and be your own bright self by dinner-time."

She moved towards the door; then came back, and lifted her face to his with an expression of sweet contrition.

"Forgive me, Alan," she said, softly; "I was very cross."

He bent, and kissed her fondly. Cora went away, and, in the solitude of her own room, threw herself on a couch, and thought over the visit of the morning.

It was not that Lord Almane's sudden appearance had awakened any of the old feeling towards him; it was not that even a spark of that love lingered in her heart.

Cora was loyal to her heart's core to her husband; but the sight of the Viscount reminded her of a passage in her girlhood of which she felt Sir Alan ought to have been apprised, and of which she had, fearing to lose his love and knowing his jealous nature, purposely kept him in ignorance. If by any chance it should come to his knowledge now, he might imagine that there was more in it than there had been, and it might sow dissension in their happy home. Cora felt that she must avoid Lord Almane in every way—that, if possible, she must keep from any chance meeting with him; but how do so without arousing Sir Alan's suspicions? The Viscount's looks and words had been significant, and she trembled at the thought that her own emotion might have been noticed. Cora, with her keen impulses and sensitive nature, was quick to show what she felt, and had difficulty in suppressing outward signs of agitation; but she determined to school herself in order to meet Lord Almane as any chance acquaintance. But it gave her a pang of sharp pain when she recollected that she had a secret from her husband—from the honorable, noble-minded gentleman who had loved her so passionately, and who had filled her life so full of happiness and peace—the father of her child.

Some day, she told herself, she would find courage and tell him all—some day. But would he forgive her? Was it likely, for such a long deception?

Poor Cora bowed her head upon the cushions as she thought of his anger. Until now she had never felt her sin against him; he had trusted her so entirely she ought to have told him. And as she thought, her tears fell fast upon her clasped hands, and she mourned over the first shadow which had fallen upon her life since her marriage.

CHAPTER XVII.

A Constant Visitor.—A Gathering Tempest.

"And so, *M. le Vicomte*, you really think of forcing yourself into that domestic paradise, and spoiling the pretty *tableau* of such a devoted husband and wife?"

And Lady St. Maur lifted her dark eyes to Lord Almane's face with a curious expression—half-mocking, half-resentful.

They were sitting in her boudoir, an exquisite room, hung with pale blue satin and old lace, where the beautiful Countess received her intimate friends, and those favored individuals with whom she condescended to flirt.

"Why should I spoil such a pretty *tableau*, my dear Countess?" answered the Viscount, in low, languid tones, without lifting his eyes from a dainty Sevres vase he was examining. "It would be very awkward of me to do so. For example, my dear friend," he added, lightly, "I am a constant visitor here, and yet I have not, I hope, interfered in any way with the picture of domestic bliss which you and Lord St. Maur represent."

The Countess laughed, but colored. The Earl of St. Maur being as devoted a politician as his wife was an accomplished coquette, and neither caring sufficiently for the other to interfere with their vocations.

"But it seems that Sir Alan is as jealous as a tiger," she went on. "He looked furious last night at Lord Muncaster's because you took Lady Cora into dinner, and were so devoted."

"Did he?" said Lord Almane, a flash of triumph crossing his handsome face. "That would make it still more exciting. No woman is so easy to win as the wife of a jealous husband."

"And why, pray?" said the beauty, glancing at her little jeweled hands, and noticing the effect of her dainty lace cuffs.

"Because if he is idiotic enough to scold her or sulk, it will naturally make her more anxious for some one who will sympathise with her and not sulk."

So saying Lord Almane rose slowly from his cushioned *fauteuil*, and replaced the Sevres vase on a little buhl table beside him.

"That vase is an acquisition, Helen: I congratulate you. Shall I see you at the opera to-night?"

"Yes, I am going in for an hour before the Countess Steinmarek's ball. Come to my box, Stanley."—To be continued.

RECENT LITERATURE.

Memoir of Wm. Francis Bartlett—By FRANCIS WINTHROP PALFREY. Boston: Houghton, Osgood & Co. Price $1.25.

THE life of General Bartlett strikingly exemplifies that accident may develop elements of particular greatness in a man whose destiny otherwise would be comparative obscurity. Born and reared to the life and duties of a civilian, those latent qualities which achieved for him so exceptionally brilliant a career were called into action by the Civil War. At the age of twenty-two General Bartlett, having risen from the ranks, found himself in command of a regiment in active service, and that it was said to be the most thoroughly drilled and best disciplined of all the volunteer regiments in the service, was a marked tribute to the indomitable will, spirit and soldierly attributes which characterized the young commander. At the age of twenty-three he was promoted to the rank of Brigadier for "gallant and meritorious conduct," and at twenty-five a brevet Major Generalship was tendered him.

The book under notice is a compilation of letters to and from General Bartlett and extracts from his faithfully kept diary, descriptive of his career during and after the war up to the time of his death in December 1876. From long and intimate association with the subject, Col. Palfrey is well qualified as his biographer and to supply

whatever is wanting to make the record complete and full. There is always something fascinating in the perilous adventures of a brave man and most of General Bartlett's experiences, his many successive wounds—he never went into battle but once without being disabled—his tenacity and devotion in persistently returning to his command, his capture at Petersburg, his patient endurance in prison of the sufferings consequent on the criminal delay in effecting his exchange, are all described in his letters and his diary with the pathetic simplicity of an intrepid soldier conscious of doing no more than his plain duty as he sees it.

As in war he "imitated the actions of the tiger" so in peace was he characterized by that "modest stillness and humility" which so becomes the true soldier. When the war closed he was a scarred and crippled veteran of twenty-five, and his record had made him the most conspicuous soldier of his State. His position entailed upon him during the latter years of his life prominent duties in many of the military celebrations and it was then that he developed a talent for oratory never before suspected, and his eloquence will linger long in the hearts of those whose privilege it was to hear his words. "How many are truer and better men for your influence," said one among the last letters he received "you may never know. Your life is already in many another man."

With singularly clear judgment and absolute integrity and modesty he conducted his affairs at this period. Many civil positions of high honor and responsibility were proffered him but conceiving that each involved some sacrifice of principle or justice on his part he promptly declined them all. The devious and self-serving ways of the politician he could not understand. It is altogether in keeping with the character of the man, that he, among the first after the war, earnestly advocated the most liberal spirit of toleration on both sides as the surest and most consistent means of securing a just and lasting peace; and that when required by his business to reside in Richmond, the scene of his incarceration as prisoner of war, he speedily won by the virtues and graces of his private life the affection and respect of his late adversaries, to such a degree, that when the news came to them of his death, his late residence in Richmond was draped in mourning, and assembled citizens passed resolutions expressive of their sense of bereavement in the death of the venerated and esteemed hero.

Corporal Bruce of the Balaklava Six Hundred. By GEO. B. PERRY. Boston: Loring. Price 50 cts.

This is a thrilling story of the time of the Crimean War, Corporal Bruce being one of the heroes of the Light Brigade, whose charge at Balaklava poets have rendered immortal. It is not all of war, however; the touching friendship of the two old retired veterans,—fathers of the hero and heroine,—whose life-long dream has been the consummation of their mutual devotion in the union of their children, the faithful, tender and self-abnegating love of the heroine, the absorbing passion, ardor and courage of the hero as well as his faults and weaknesses and his pathetic sufferings in consequence of them, are all graphically depicted. Without being sensational the story is engrossing and fascinating. The plot is easily and naturally developed, and all the characters are finely delineated.

Canoeing in Kanuckia; or, Haps and Mishaps, Afloat and Ashore. of the Statesman, the Editor, the Artist and the Scribbler. Recorded by the Commodore and the Cook (C. L. NORTON and JNO. HABBERTON). New York: G. P. Putnam & Sons. Price $1.

THE name of Habberton on the title-page of a book is a sure indicator that the reader thereof will find in it no end of entertainment, and this latest addition to the author's family of brain children displays the same characteristics as its elder brothers. Beside heaps of fun and interesting incidents of travel, there is much really valuable information on the subject of canoes—the different models, their merits and demerits—and on the management of this now popular style of craft.

The World's Fair, Philadelphia, 1876. By FRANCIS A. WALKER, Chief of the Bureau of Awards. New York: A. S. Barnes & Co. Price 75 cts.

This is a series of articles originally published in the International Review. The author, as Chief of the Bureau of Awards, is qualified to speak with authority on every phase of the subject, and the book will be found a timely and satisfactory *resume* of the details of the American exhibition, by those who have in contemplation a visit to Paris during the exposition just opened there. To the general reader it will commend itself as an entertaining account of the administration of the Fair at Philadelphia, and of the display of the various exhibits.

Drew's Window Garden. Published by Geo. W. Park, Mt. Vernon, O. Price 25 cts.

W. C. L. DREW (floricultural correspondent of the RURAL NEW-YORKER) has written a comprehensive treatise on the culture of house-plants, complete in seventeen chapters. It is a plain, practical work, and those who are interested in window gardening will find it a useful little manual.

J. B. LIPPINCOTT & Co. of Philadelphia will shortly publish a new novel, by the author of "Odd Trump," entitled "The Clifton Picture." Also, the Life of Alex. H. Stephens, written with the approval of Mr. Stevens by Prof. R. M. Johnston and Wm. Hand Browne, which will be large, complete and carefully prepared.

The same house have just issued Petrarch, by Mrs. Oliphant; "A Sketch-Book of the American Episcopate," Rev. Dr. H. G. Batterson; "A Study of Milton's Paradise Lost," by Jno. A. Hume; and "Earthly Suffering and Heavenly Glory," by the Rev. Henry A. Boardman.

BRIC-A-BRAC.

He held her in his strong right arm,
Close to his throbbing side;
They heard the music of the sea,
The moaning of the tide

Long years have passed, and often now,
The neighbors, either side—
Hear, when the family jars break out,
The moaning of the tied. [*Hawkeye.*

GLASS slippers have been produced by the cunning artificers of Vienna. The slippers are actually woven in fine flexible threads of glass. The novelty is quite as much in the effect as in the material. Not only do lines of colored light, in different hues, and distinctly definable, traverse the body of the slipper, but, with the motion of the foot of the wearer, these hues so blend and intermingle as to produce a magical and beautiful effect, particularly when seen by gaslight.

HEAR the bell-punch with its bells,—
O, what a slew of revenue their melody foretells!
How they jingle, jingle, jingle, in the glaring air of noon,
While the breakers, twain and single,
By the ingle, mingle, mingle, as he stirs them with a spoon,
With a spoon, spoon, spoon, spoon,
Spoon spoon, spoon, spoon,
With the circumbobulation of the spoon
E. A. P. in the Graphic.

MATRIMONY AMONG ENGLISH PAUPERS.

How one's ideals of the clinging and enduring nature of the marriage compact are shattered by the following: It has been very properly insisted that to forcibly separate old married couples in the workhouse is cruel and unnecessary. But in St. Pancras workhouse, according to a writer in the Daily Telegraph, the old couples do not care to live together. In the course of a graphic account of a visit recently paid to the workhouse he says, in reference to the rooms set apart there for old couples:

In fact, the married rooms are an utter and complete failure. The old ladies, so long as they can see their good men occasionally, apparently do not care to be bored with their perpetual presence, and they infinitely prefer a gossiping life in a dormitory of women. The old men shake hands with their partners at this last stage of their career, and take their pipes and their snuff-boxes off to the rooms where they can chat with male companions. The good wife is, I am ashamed to say, regarded by the St. Pancras pauper as a useful and not an ornamental luxury. She was all very well when she was able to make a dumpling or boil a potato; but now that the boiling and baking, the cleaning and the bed-making, is done by ordinary workhouse routine, I grieve to say these selfish old gentlemen politely take off their hats and bid adieu to the "old woman" at the workhouse door. This is all terribly unsentimental, but is a fact.

A BIBLICAL ALPHABET.

A was a traitor hung by the hair—
II. Samuel, xviii., 9.
B was a folly built high in the air—
Genesis, xi,, 9.
C was a fountain o'er-looking the sea—
I Kings, xviii., 43–45.
D was a muse buried under a tree—
Genesis, xxv., 8.
E was a first-born bad from his youth—
Hebrew, xl., 16,
F was a ruler who trembled at truth—
Acts, xxiv., 25.
G was a messenger sent with good words—
Daniel, ix., 21.
H was a mother loaned to the Lord—
I. Samuel, i. 27—28,
I was a name received of the Lord—
Genesis, xxxii 31—28.
J was a shepherd in Arabian land—
Exodus, iii,, 1.
K was a place near the desert of sand—
Deuteronomy, i., 10
L was a pauper begging his bread—
Luke, xvi., 20—21,
M was an idol, an object of dread—
Leviticus xx.,2—3
N was an architect ages ago—
Genesis, vi., 13—23.
O was a rampart to keep out the foe—
II Chronicles, xvii 2—3.
P was an isle, whence a saint looked above—
Revelations, i., 4—9
Q was a Christian sainted in love—
Romans, xvi., 21.
R was obscure, yet a mother of Kings—
Matthew, i., 5.
S was a Danite, who did wonderful things—
Judges, xiv,, 5—6.
T was a city that had a stronghold—
II. Samuel, xxiv., 7.
U was a country productive of gold—
Jeremiah, x., 8.
V was a queen whom a King set aside—
Esther, i., 10—22.
Z was a place where a man wished to hide—
Genesis, xix., 1.
Read II. Timothy, iii., 15.
[*Buffalo Sunday News.*

THE king of Denmark is an amiable and judicious sovereign. A poor woman, the wife of a laborer, past fifty, observing a few months ago three children, who had fallen through the ice on a lake, rushed into the water, and at the imminent peril of her own life, rescued the children. His Majesty the king decided that this act of bravery should not pass unrowarded. The poor woman was sent up to town from the country; a room was prepared for her in the royal palace, where she stayed a couple of days to see the sights of Copenhagen, and she received from the hands of the king, in the presence of the royal family, the medal and ribbon for civil acts of bravery, being the first woman in Denmark who has received this honor. On one evening the king had secured places for her and her family in the Royal Theatre, where she was the observed of all observers.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

BEAUTIFUL THINGS.

BEAUTIFUL faces are those that wear—
It matters little if dark or fair—
Whole-souled honesty printed there.

Beautiful eyes are those that show,
Like crystal panes where hearth-fires glow,
Beautiful thoughts that burn below.

Beautiful lips are those whose words
Leap from the heart like songs of birds,
Yet whose utterance prudence girds.

Beautiful hands are those that do
Work that is earnest and brave and true,
Moment by moment the long day through.

Beautiful feet are those that go
On kindly ministries to and fro—
Down lowliest ways, if God wills it so.

Beautiful shoulders are those that bear
Ceaseless burdens of homely care
With patient grace and daily prayer

Beautiful lives are those that bless—
Silent rivers of happiness,
Whose hidden fountains but few may guess.
[*Littell's Living Age.*

INFLUENCE OF WOMEN.

IS MRS LUCY WEBB HAYES PRESIDENT OF THE UNITED STATES?—ABSURDITIES OF THE POSITION ILLUSTRATED.

THOSE who propose giving to women absolute civil and political freedom urge as an excuse for not so doing that they already have all the power they need. We are gravely told that "lovely woman" even now does more by her indirect influence than men accomplish directly. We are informed that "the hand that rocks the cradle rules the world," and men at public dinners are prone to grow maudlingly eloquent over "The Ladies, God bless 'em," and "Woman, God's last, best gift to man." By the way what a funny assumption of man's usual position there is even in this last intended compliment—"God's gift to man." Evidently the masculine mind cannot be disabused of the idea that everything, woman included, was made for him. One is also tempted to ask how many of the hands that rock the cradle can command a new dress when they need one?

MRS. DAHLGREN'S POSITION.

Even women are forced to reiterate all this nonsense. For instance in Washington there is a handful of ladies who oppose the woman suffrage movement. They are headed by Mrs. Dahlgren, herself an amusing specimen of the contradictoriness of woman's position, and the uselessness of her "indirect influence." This lady professes not to be "strongminded," yet she is known not after the meek, old-fashioned way as Mrs. Ulric Dahlgren," but her maiden name, "Madeline Vinton Dahlgren," whereas a truly humble wife should have utterly sunk her individuality in her husband's. Again, wishing to obtain money for the Dahlgren guns, the invention of the late Admiral, his widow has appeared before Congressional committees and urged her claims with much eloquence. Yet when women ask for suffrage Mrs. Dahlgren opposes their claim, and prettily prattles of that "moral influence over men" which is all potent "in business affairs." The lady's utterances are sufficiently answered by her own actions. She claims to speak for the masses of "silent women," yet herself loudly pleads for her moneyed interests. She tells other women to be contented with "indirect influence," but herself demands personal recognition.

NECESSITIES OF DIRECT POWER.

If it were not that centuries of subordination have made women blind to their own interests, they would unite in asking with one voice for direct power the necessity of which is constantly demonstrated. Take our school teachers for instance. Of what avail was their "moral influence" against an unjust reduction of their salaries? If those 27,000 women had been 27,000 voters, will not every one admit that their direct political influence would have been far more potent in receiving their protection? Again, look at the "praying bands" of the Western temperance excitement two years ago. They tried faithfully the womanly weapons of tears and prayers. Of what use was this "indirect influence" compared to man's power in legislation? All the persuasions of those women amounted to absolutely nothing, because they had not the direct control of the laws, which alone can strike a blow at the evil of which they complained.

It is so in all ways and in every direction. Womanly protests, womanly entreaties are of no avail to give to women protection in their dearest interests, and men smile sweetly under womanly influence in States where women have no right to their own property, their own earnings, or even their own children.

FEMALE LOBBYISTS.

But we do not pretend to deny that women have in all ages wielded a roundabout influence often pernicious in its effects because of its indirectness. There is no position more dangerous than that of "the power behind the throne," because it is power without responsibility. We have seen women who had been taught all their lives that the only way to rule men was by their charms; using those charms to gain unjust or wicked ends. It has been said that we needed no women in public life at Washington, because of the corrupting influence of women like Mrs. Stanton and Mrs. Livermore acting as Senators or Representatives, or the indirect influence of a painted and bedizened female member of "the third House?" And who is most likely to banish these unhappy specimens of their sex, dignified elderly ladies, or the silly elderly gentlemen who are now so easily befoibled?

A WIFE'S INDIRECT INFLUENCE.

Again, it is always a sad sight to see a woman of real ability and worth trying to accomplish by her "indirect influence" what the law and the usage prevent her from doing directly. In other words, to see the brilliant and talented wife of a mediocre man laboring desperately to help him to power and keep him in place. After all her efforts he must still at the critical moment do the work himself, and thus swift failure is sure to result. However carefully the wife may have coached him at home, it is the man himself who must make the speech or act in the committee, and then the inevitable blunder follows because the mouth-piece has not beside him, the ready-witted brain.

MADAME ROLAND.

To go back nearly a century, the story of Mme. Roland is a striking illustration of this. She it was who stimulated her husband to assume the position he took as a revolutionary leader; she prepared his speeches, but, alas! could not deliver them. History records no more striking picture than that of the brilliant and beautiful wife leaning eagerly forward from the gallery, her fine face a-glow with excitement, while her common-place husband tried to utter the eloquent words she had prepared for him. How much more fitting it would have been if that glorious woman could have stood in the tribune herself, and poured forth the appeals which her genius would have rendered all potent.

Talk of woman's "indirect influence!" What was the result in this case? That because the poor husband had not the grand wife with him he blundered and fell. The result is only the old sad sory! Women must be contented with an indirect place so long as there is power or glory to be won, but when the meed is hardship or suffering then they must bear their burden directly on their own shoulder. So this gifted being, who had never been allowed to utter one word in her own behalf, bore the penalty of an indirect influence by the loss of life itself, and another name was added to the long list of women martyrs to man's most unjust laws, when the fairest head in France fell on the block.

MRS. LOGAN AND MRS. WILLIAMS.

In our own country we have seen in many instances of a woman's laboring a lifetime to bring a husband into power only to have him fail at the critical moment because he stood in the place which she should have properly filled. It is notorious that ex-Senator Logan owed his position to the exertions of his brilliant wife, who succeeded in placing him in the Senate chamber, but who could not keep him there. The new Senator, Williams, of Kentucky, is said to owe his place to similar indirect feminine influence. It remains to be proved where the real strength lies.

MRS. PRESIDENT HAYES.

But a still more striking instance of indirect influence is to be seen in the White House to-day No one can look in the faces of our worthy President and his most excellant wife without seeing where the real strength lies. Evidently from the moment the young Rutherford had sense enough to fall in love with Lucy Webb she has been his guide and controller. To-day she is undoubtedly the real president of the United States, indirectly this has been acklowledged; on all public occasions Mrs. Hayes has been presented and cheered on, being recognized by great audiences as one of the most important members of the Presidential party. Her dictation on the subject of wine has been all powful at State dinners, and the other day, in Philadelphia the honest "sailor men" did not dare to imbibe their very mild form of "grog" until they had asked permission, not of Mr., but of Mrs. Hayes.

No doubt the men of the country have done well in so arrranging their last abortive attempt at an election that its result has been to make Mrs. Hayes President; but as she alas! cannot preside at Cabinet meetings, and as the Secretary of State has unfortunately no "indirect influence" to give him backbone, we have the singularly weak administration which is now afflicting the nation. Next time we suggest that the men elect Mrs. Hayes by direct vote, as she has not said she will not serve a second term.

LILLIE DEVEREUX BLAKE.

THE manager of the Chicago *Daily Evening Post* Oliver A. Willard, Esq., a very capable man, died a few weeks ago; and his place has been filled by his wife, who takes charge of the business department, and his sister, Miss Francis E. Willard, who will control the editorial department. Their card to the public shows that they have a good idea of what a newspaper ought to be and we wish them great success. Miss Willard has had much experience in public life and in helping on the causes which benefit public morality, and brings no unpracticed pen into her new editorial work. To an earlier generation the name of her mother, Mrs. Emma Willard, was very familiar as that of a writer and teacher.

THERE are now seventy-two postmistresses in the United States, one of whom, Miss Nina Hodges, in the Des Moines post-office, is said to have handled and paid out four million dollars.

FOR the first time in Holland, the degree of Doctor of Medicine has been conferred on a lady, Miss Aletta Jacobs, who has announced her intention to practice medicine at Amsterdam.

SEVERAL answers to correspondents asking information about fashions, books, and the complexion have to be omitted this week on acco of want of space.—FAITH RIPLEY.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

THE house-cleaning is over. The last carpet tacked down by busy willing hands, that do these needful tasks for "love of mother;" the curtains in place and our extra help has given her pleasant "*bon jour*," and sought "pastures new" for the exercise of her useful talent. Yet many things must be attended to before the house is really in summer array. Straw matting must be washed with salt-and-water to prevent turning yellow, and unused tins that are not regularly polished, come in for their cleaning now, with fine whitening. The boys take a rainy day to give the cow stable a coat of lime, and are quite pleased when "Old Stranger" returning to be milked at night, starts back in affright at the clean house and does not know her own stall. Ah! these rainy days in spring! the grass seems to grow under one's feet, and such a health-giving breath as one can feel in the soft air, so full of promise and beauty.

"Forever are they sweetly blent,
In the falling summer rain."

Mud, did you say ma'am? Yes, I know all about it, but if your men folks are at all considerate for the girls and their mother, you need not have so very much of that. Of course you do not scold. Just appeal to the feelings of any boy on the subject and see the result. In the latter case he will remember for a long time your words, and slip off his boots, or wipe them clean on the outside mat. For, of course, you keep a good strong mat where they can perform this necessary operation and a box of slippers invitingly placed inside the kitchen door, are a great comfort to tired feet and tired housekeepers too.

I have been cleaning black lace with rain-water, borax and a little alcohol, afterwards rinsing in hot water in which an old black kid glove has been boiled. The edges were pulled out, and after folding, it was placed carefully under a heavy weight, and came out as good as new.

"How do you cook sparrowgrass?" asks a neighbor over the fence, to whom we have given a bunch of this, the first delicious spring vegetable. She dined on nettles yesterday though owning a farm of 100 acres, and has not yet cultivated asparagus. So we told her to cut the stalks equal length, scraping the outside fiber from the white part, throw into cold water, and then gather it up in your hand with heads evenly together, and tie in small bunches, with strings or tape; boil about twenty minutes in salted water—a little longer if it is old. Toast three or four slices of bread, cut off the crust, and into any shape you choose. Dip in the asparagus water and place around the dish. Thicken the water the least trifle, melt in it a lump of butter and pour over the asparagus, and you have a dish fit for a queen or a farmer's wife. "Mighty lot of fuss!" she answered; "I couldn't take that trouble."

Besides being a pleasant vegetable so early in the season, there is nothing better for affections of the kidneys and liver, as I have known cures in the former disease, effected by its steady use, while in rheumatism many doctors recommend it as a diet, and I have heard those so afflicted assert that they found relief. But the vegetable must be used with perseverance during the season.

PRESERVATION OF WOOLENS AND FURS.

ALL clothing liable to be eaten by moths, should be put away as early in spring as convenient. It is at this time—May, that the moth deposits its eggs, and if clothing be neglected until attacked by the larvæ of the moth, no after care will undo the mischief which could have been prevented, had we early in the season displayed a little watchfulness and energy in rendering all moth-proof. Our furs and woolens are cared for as follows:—Beat and brush thoroughly, and hang in the sun for several hours. The furs are then carefully combed, and wrapped in *newspapers* perfectly tight—we do not use camphor because we think it turns them light—and then put them away in a tight chest. Once a month they are taken out, beaten, and left in the sun for a day.

Our woolens are likewise wrapped in *newspapers*, aired, and brushed once a month, and tied up again. I have used camphor before now for woolens, but I have learned that the printing ink on the papers is as distasteful to the moths as camphor. A. E. M.

DOMESTIC RECIPES.

Cookies.

Two cups of sugar, one cup of butter, four eggs, one teaspoonful of saleratus dissolved in a tablespoonful of hot water, two tablespoonfuls of cream-of-tartar; flavor with nutmeg; flour to mix. These cookies will keep a long time.

Ginger Cookies.

One cup of sugar, two cups of molasses, two cups of lard, one tablespoonful of ginger, one teaspoonful of salt, two heaping teaspoonfuls of saleratus dissolved in a teacupful of boiling water; pour the hot water and soda over the other ingredients, and mix a little stiffer than most cookies, or they will be too short; bake in a very hot oven until of a deep brown.

This recipe makes a large panful of cookies, which are nice for farmers' wives to keep on hand. A. L. G.

Green Peas.

Peas lose their delicious flavor in a short time after picking, hence the necessity of picking them just before wanted, and the reason why persons who depend upon the markets for their supply find them so tasteless and insipid. Always wash before shelling, but never after. Reserve some of the tenderest pods, and put into a saucepan with just water enough to cover, and boil gently fifteen minutes; then skim out the pods, put in the peas, and boil another fifteen minutes—this time sufficiently cooks young, tender peas; but for those old and hard, one must allow from twenty to thirty minutes, or even longer. When they are done, there should not be more than a small teacupful of water around them. Season with a few spoonfuls of cream, salt and a little butter.

A very nice pea soup without meat can be made as follows: Boil two lettuces, two cucumbers, three onions, all of which should be chopped fine, with three pints of peas, until tender; put through a sieve or colander, and add butter, salt and pepper; have toasted some pieces of bread, break into little bits, put into the tureen, and pour over the soup—this makes about two quarts.

Stewed Water-Cresses.

Place the cresses in strong salt and water to free from insects; pick over, drain, and put into a stewpan with a very little water, butter, pepper and salt; the cresses will cook tender in a short time. They may be served with vinegar, or add a few tablespoonsful of cream, and pour over slices of buttered toast. E. M. B.

Cream Beer.

Two ounces of tartaric acid, two pounds of white sugar, the juice of half a lemon; boil five minutes, and when nearly cold, add the whites of three eggs well beaten, one-half cup of flour, one-half ounce of wintergreen essence. Take a tablespoonful of this sirup to a tumblerful of water, then add one-half teaspoonful of saleratus and drink at once.

Black Ink.

Ten grains of bichromate of potash, one-half ounce extract of logwood, one quart of soft rain-water. Let stand open for a few days, when it will be fit for use. W. L. VANDERVEER.

For Catarrh.

One teaspoonful of mustard dissolved in a tumblerful of cold water; gargle night and morning, or oftener if convenient. Or, take equal quantities of pulverized alum and loaf sugar—use as a snuff. MRS. B. DRAKE.

May-Apple (Mandrake) Jelly.

Gather ripe fruit only; wash, slice, and boil until tender, strain without squeezing, measure the juice, and add two-thirds the amount of white sugar; boil until it will jelly. It will be of a beautiful clear straw color.

MRS. MCCLOUD.

QUERIES ANSWERED.

I am advised to take lime-water for indigestion. Can I make it myself? If so please give a recipe. DYSPEPTIC.

ANS.—Lime water purchased at the druggists' is made from distilled water. You can, however, filter it yourself, which answers very well and the following proportions will be found good. Slake two ounces of lime with a little water and gradually add enough water to make two quarts; stir together immediately, covering the vessel and let rest for four hours; then pour into glass-stoppered bottles with a portion of the undissolved lime in each; when wanted for use, pour off the clear liquid from the top.

News of the Week.

VARIOUS.

A professor of Bologna claims to have invented a chemically prepared bank-note paper which cannot possibly be counterfeited.

Ohio has voted by a large majority against taxing church property.

THERE is a fish pond mania in Kentucky, and many persons who own swamps traversed by small streams, are digging them out, damming them, artificial sheets of water which making they are stocking with fish, principally trout.

About fifteen years ago the "New Idea" variety show was a resort of miners in San Francisco. A feature of the nightly performance was a reel in which girls of 14 to 16 danced. There was much rivalry among them, and the audience was generally enthusiastic. Otto Burbank, a veteran minstrel, says that the now well-known Lotta was one of the favorites, and that she there learned the dancing and banjo playing with which she still pleases her audiences. Another was Maggie Moore, now Mrs. Williamson, the mainstay of the successful "Struck Oil." Sophie and Jennie Worrel, the burlesque actresses, were also of the company.

M Edward Andre has an article in the *Illustratio Horticole*, showing that the original home of our common potato is in South America, in the Andes, near the equator. He first found it growing wild on the Summit of Quindio, near the volcano of Tolima, at a hight of 11,400 feet in latitude 4° 34' north. He next found it at 6,200 feet high in the Cauca in latitude 1° 33' north, in May, 1866. It was growing as a handsome vine, supporting itself on the neighboring trees and bearing magnificent flowers of a deep purple. M. Andre also found it in North Lima in the Amancees mountains, where in the midst of a very scanty vegetation the potato is found growing in abundance. It is equally common in the island of San Lorenzo, near Callao. M. Andre is convinced that Humboldt is entirely mistaken in his opinion that the tuber did not exist either in Chili, New Granada, or Peru.

The daily production of crude petroleum in the northern oil fields of Pennsylvania is 30,600 barrels which at 1.50 per barrel, amounts to $59,400 daily; $1,782,000 monthly, and about $21,681,000 per year.

The Emperor of Austria is a notable sportsman and the following list points to the conclusion that his subjects are pretty active in the same line. There were killed in his dominions in the year ending 1876, 54 bears, 10 lynxes, 233 wolves, 23,606 foxes, 7,112 martens, 9,327 polecats, 5,380 wild cats and weasels, 2,426 badgers, 261 eagles, 916 owls, 66 925 kites, falcons, and sparrowhawks, and 12,411 crows.

Every male citizen of Atlanta, Ga., is taxed $5 per annum for the maintenance of the streets, but whenever it is muddy they have to stay indoors, or go out on stilts.

The terrible drought which has for some time afflicted almost the whole of Australia is at length breaking up. Sheep and cattle have suffered severely, and, in many instances, owners have lost one-half of their flocks and herds. The want of water is really the curse of Australia; and it seems doubtful whether this can be ever effectually remedied, although large expenditures has been incurred in arrangements for the storage of water in threatened localities. The small land owners—"free selectors" and "cockatoo farmers," as they are called—have a very hard time of it, unless they chance to be in a singularly favored district.

Some months ago a man named Packer organized a large colony of emigrants in Allegany county, Md., collected considerable money from them to pay for handsome homesteads in Nebraska, and conducting them as far as Omaha disappeared, leaving them penniless and friendless.

A well-known English naturalist says that it is one of the old vulgar errors to suppose that a skin taken from a live animal is more glossy than that taken from a dead one.

The birth rate in Georgia since 1865 has been a little more than thirty per cent. among the whites, and among the blacks a little more than fifty. How about the "niggers" dying out?"

The first bar of steel ever manufactured in the South was rolled last week at a mill in Chattanooga, Tenn.

In England the class among whom the rate of mortality is highest are the innkeepers. For this there can be but one cause, drink. The class highest in the scale of vitality are the barristers, who are, as a class, distinguished for habits of total abstinence. The death rate is higher among clergymen than among lawyers. It is a curious fact, too, that mortality is greater among solicitors, who lead a much less stirring and bustling life, than among barristers.

On December 1, 1877, the population of Berlin numbered 1,018,818. In 1860 it was only 500,000.

Connecticut cabbage growers are far from being disinterested spectators of the struggle in Congress over the proposition to reduce the tobacco tax.

India is becoming a very serious competitor with the United States in the wheat market. The value of wheat she exported in 1875 was £14,141; in 1877, £123,473, and for 1878, £500,733.

Samuel B. Hale went from Boston to the Argentine Republic twenty years ago, and has become a considerable farmer there. His farm contains 28,000 acres of rich prairie land, enclosed with a heavy wire fence. He keeps an average of 110,000 sheep from which the wool, tallow and skins is enormous. He also has 3,000 beeves, 500 horses, and 1,400 hogs.

If the tax of $100 be placed on every Chinaman landing in California, the imperial authorities at Pekin threaten to impose a similar tax on Americans landing in China.

The fall of nearly three inches of rain in the course of twenty-four hours, which was recorded during the recent storm in London, was regarded as an almost unprecedented event, but this heavy rainfall is frequently exceeded in the Antipodes. During a storm in Sidney, described in the last Australian newspapers, as much as 10.88 inches fell in forty-eight hours. After the terrible drought which has afflicted the country, the parched earth was not equal to carrying off such an enormous quantity of water suddenly poured upon it, and disastrous floods followed, causing great destruction of life and property.

William Harley, agent of the Merchants' Trading Company of Liverpool, has arrived at San Antonio for the purpose of completing arrangements to ship Texas cattle and sheep direct to England. The cattle will be sent by rail to Galveston, and thence by a special line of steamships, about being built, to Barrow.

St. Petersburg possesses 670,000 inhabited houses. The first brick dwelling was built in 1710, two years before the city was made the seat of Government. Excluding still-born children no fewer than 5,725 deaths occurred there between May and August last, or over 34 in every 1,000 of population.

France proposes spending $150,000,000 on her army, and $45,000,000 on her navy in 1879. The low pay of French soldiers is partly compensated by the fact that they can buy their tobacco from the Government on very low terms, and travel everywhere through the country at half price.

In the schools under the control of the London School Board, teachers, male and female, usually begin at $350 a year, and the greater number do not get beyond $450.

Russia preserves eight crowns of provinces conquered at various times and joined to the Empire—Siberia, the Crimea, Kiew, Astrakan, Kasan Finland, Poland, Krussinia.

There is a factory in Davenport, Iowa, for making sugar from Indian corn. The product somewhat resembles maple sugar, and sells readily in the neighborhood. The sirup is especially liked.

Among the meetings to be held in Paris this summer will be one of beemasters and insectologists, when insects noxious to vines and agriculture will be discussed, with a view to all sorts of lethal experiments. The Colorado potato beetle will meet with especial attention.

Before the Gregorian reformation of the calendar in 1582, such was the state of confusion into which things had fallen that from 1500 to 1582 no fewer than fifty-four Easters out of eighty-three had been wrongly celebrated, and if this had continued, after A. D. 2693 there would have been no legitimate Easter.

The gentlemen kerosene oilers of the Commune complain bitterly of the vast amount of freedom left to policemen in the larger American cities.

Manufacturers of Ladies' Suits, that use the Davis Vertical Feed Sewing Machine, are doing the sewing in the most elegant manner, and entirely without basting, or showing the stitches, by the use of very simple attachments. The invention and introduction of the Vertical Feed is an invaluable addition to Sewing Mechanism. The old under-feed machines will be rapidly superseded by this new and more perfect device for sewing, as it is adapted to every variety of work. The Davis Sewing Machine Company are building an addition to their large manufactory at Watertown, New York.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 11, 1878.

BEANS AND PEAS.—Very heavy receipts for the season continue to weaken the market, and it is not improbable that the rate for Medium will go lower. A better export trade in Marrows has set in, but with the free offering, sellers have to shade prices. The best quality of Pea seem to have been absorbed in the late demand; the remnant is dull, at quotations. White Kidney also quiet. Red Kidney more freely, with better prices noted for prime. Green Peas at the stations sell for $1.00; Choice Stored at $1.10. Southern S. G. Peas $2.85@3.00 nominally. Canadian Field in bulk and bond steady at 8@81c.; receipts being taken for export; shipped last week, 32,250 bush. Export of Beans 1,675 bbls. mostly for Cuba. Receipts of beans 8,550 bush. medium beans, choice, $1.60@$1.65; fair to good, $1.50@1.55; marrows, prime, $1.50@1.75; fair to good, $1.50@1.60; pea, $1.40@1.55. White kidney, $1.60@1.70; red, $2.25@2.42½; Black (Turtle Soup) $2.40.

BUTTER.—The market has not recovered from its recent decline. White or streaked lots of State have a very undecided position and must be named very low to induce sale; particularly as fine fresh yellow is quoted almost down to oleomargarine figures. The liberal supplies of butter this spring, thus far have been very sagaciously handled by New York merchants, and for once there is little fear of white blockading the position of grass. This is the case with State, and it is not likely that the West will risk shipment of fodder-fed stock that will be almost sure to sell at a loss. Another mark of this extraordinary season is a record of interior packing in State dairies in the month of May. The general demand is fair, and likely to improve at the prices. There has been considerable export, but sellers cannot depend upon a prolongation of foreign call, as Continental and British production at this season relieves consumers from a dependence on American. Receipts for the week 24,500 pkgs.; exports for past week 2,907 pkgs. We quote:

State creamery, choice 21@22c., a few at 23c.; fair to good 18@20c.; Half tubs and pails selected, 19@20c.; fair to good, 15@18c.; Welsh tubs, choice, 18@19c; other useful, 15@16c.; poor or stale State 12@13c.; Western, creamery range with State; Western dairy fine 16 17c.; other, 12@15c.; factory (tubed) 13@14c. do. (milled) 11@12c.; poor Western 7@10c.; do. and grease, 4@8c.

BEESWAX.—Is offered lower with freer supplies, quoted at 27@28c. for Western and Southern.

Exports past week 1,000 lbs.

BROOM CORN.—A small business is in progress. Quoted at 6@7½c for hurl and short brush; 5@6½c. for medium green, 4@5c. for red and red-tipped, ₱ lb.

COTTON has been very dull, but closed a trifle stronger on the improved English advices. Latest prices are 10.59c for May; 10.76c. for June; 11.08c. for July; 11.11@11.12c. for August; 10.81@10.82c. for September; 10.64@10.65 for October; 10.54@10.55c. for November; 10.55@10.56c. for December; 10.65c. for January; 10.74@10.76 for February; 10.83@10.86c. for March, and 10.92@10.95 for April.

Quotations for poor cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texa*
Ordinary	7¾	7¾	8	8
Strict ordinary	8⅛	8⅛	8⅛	8⅛
Good ordinary	9 1-16	9 1-16	9 3-16	9 3-16
Strict good do	9 9-16	9 9-16	9 11-16	9 11-16
Low middling	10 1-16	10 1-16	10 3-16	10 3-16
Strict low middling	10⅜	10⅜	10½	10½
Middling	10 11-16	10 11-16	10 13-16	10 13-16
Good middling	11 1-16	11 1-16	11 3-16	11 3-16
Strict good middling	11⅜	11⅜	11⅝	11⅝
Middling fair	11⅝	11⅝	12	12
Fair	12⅜	12⅜	12⅝	12⅝

Stained.

Good ordinary, 7 ⅞c. Strict ordinary, 8⅜c.; Low middling, 9⅛c.; Middling, 9⅝c.

CHEESE.—Prices have been steadily giving way all through the week, and closed fully one cent under last week's prices. This has been wholly due to the increasing receipts, and the fact that the English advices have not been at all encouraging, and business consequently obliged only as forced. About 3,200 bbls. have been taken for shipment this week, closing with free sellers at 11 for fancy factories, and now and then a parcel of extra quality reaching 11¼.

For factories, 11@11¼c. for best lots, 9¾@10 c. for good and prime; 5¼@7c. for half skimmed, and 3@4c. for skimmed. State, farm dairy at 9½@10¼c. for good to choice and 3@4c. for poor skimmed. West-

ern at 11@11¼c. for fine; 9½@10½c. for good to prime. western flat; prime, 10½c.; good at 9@10c. half skimmed, 5@6½c.; skimmed, 3@4.

Exports for the week, 32,052 boxes.
Receipts, 43,548 do.
Gold closes 100¼.
Liverpool cable, 64s. old cheese.]

DRIED FRUITS.—There has been an exceptionally dull market the past week, nothing doing outside of a jobbing way, and prices unsettled and easy.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia 10@11c.; good to prime Georgia; 8@10c.; un. peeled halves, 4½c.; quarters, 4c. Pitted cherries choice new, 27@28c.; Raspberries, 27@28c. New York State plums, 13@14c.; southern plums, 11@12½c. Blackberries, 10@ 0½c. Apples—State quarters, 4½@5½c.; do sliced, prime, 6@6½c.; good, 5c.; Western quarters, 4@4½c.; Southern at 6@7c. for prime sliced, 5@5½c. for fair to good; Southern quarters, 4½@4½c.; Tennessee quarters, in bags, at 2½@ ½c.; prime and fancy North Carolina sliced at 5@5½c.

Exports for the week, 210 bbls. dried apples.

EGGS.—Receipts for the week, 12,012 bbls.; do last week, 9,193 do. Quotations for Western have touched 13½c. during the week; but after the long reign of low figures, buyers limited purchases when prices hardened to that extent. It crops besides have loosened again and dealers all report a weak market at the close as follows:

Near points, 13@14c.; State and Penn., 12½@13c.; Western and Canadian, fresh, 12@12½c.; fair Southern 11 @11½c.; inferior or stored eggs, 11c.; Duck, 14 @15c.; Goose, 25@30c. Neither d. or g. wanted.

FRESH FRUITS. — Apples quoted as before with stock mostly gone. Selected $5@6 ₱ bbl others $3@ 4.50. Strawberries were in large supply yesterday, over 200,000 quarts offered mostly from Norfolk. Low prices gave them a wider distribution than they have yet had. Maryland and Delaware fair to prime, 12@18c: Norfolks 10@14c.; Charleston and North Carolina, fine, 15@20c., poor berries irrespective of shipping point, 5@10c.; Md. Gooseberries quoted 8c. ₱ quart. Choice blackberries, 12c. neither wanted though the latter were the first ever seen here in May Black Hamburg grapes (hot house), $1.75@2.00 ₱ lb. No more cranberries; the crop has paid fairly. Peanuts quiet, but holders have awaited the customary demand so long they think they can meet the warm weather, call at full late prices Va. handpicked, $1.35@1.40; prime to extra $1.20@1.30; common to fair 85c.@$1.00. Pecans 6@8c.

Receipts of peanuts, 1,640 bags.

FLOUR.—With lower prices for wheat and full supplies, prices have been steadily declining and closed weak.

Latest prices are $4.15@4.60 for very poor to choice superfine State (fancy lots up to $4.75, an extreme); $4.65@5.00 for poor to good extra do. odd lots and lines; $5.00@5.10 for good to fancy do.; $4.10@4.60 for very poor to choice superfine, Indiana, Iowa, Michigan, Ohio, &c., (fancy lots at 10@15c. higher figures, but these extreme); $4.60@5.00 for inferior to good shipping extra do., and $5@5.40 for good to fancy extra do.; common to choice white wheat extras, $5.15@6.25; choice to fancy do. at $6.25@7.25; red and amber winter wheat, inferior to choice trade and family, at $4.85@6.25; round hoop Ohio at $4.75@5.10 and trade and family brands of do. at $5.15@6.25, the latter rate for choice; (fancy lots quoted higher); St. Louis, $4.90@5.75 for very poor to good extra, and $5.75@6.50 for good to very choice, with a few brands of fancy quality quoted up to $7.00@7.25); Minnesota clear, very inferior to very choice at $4.60@6.00 (a few fancy brands quoted higher); Minnesota "straight," inferior to very fancy, at $5.50@6.75, and patent poor to fancy choice at $5.75 @8.00, outside stock at from $2.25@5.75; city mill extra at $5.80@6.10 for fair to very choice for West Indies; do. for England at $4.75@4.90; do. trade and family extras, $6.25@7.25; do. for South America, $5.20@7.00 for fair to fancy; No. 2 at $2.70@4.00 for very inferior to very fancy.

CORN MEAL.—Sales at $3.00@3.10, for Brandywine and $2.85@$2.95 for Western.

FEATHERS.—Duck, 20c.; extra white geese, 45c.; mixed, 40@42c.; scalded, 35c.

BFURS AND SKINS.—Advices from the auction sale at Leipsic show an advance in eastern and Halifax muk of 10 per cent., and a decline in coon. Red and Gray fox of 10 per cent. as compared with London March sale. Other grades of mink were only half sold. Beaver, muskrat and skunk and sold at the same rates as at London March sales.

FEED.—Sales of 40 lbs. at $15@16.; 60 lbs. at $15.50@ 16; 100 lbs. at $17@19. Rye feed, $17@18, and Sharps at $15@20.

GRAIN.—Prices throughout have ruled much lower, and closed with free sellers on the same advices from the other side, and large receipts. Latest sales of wheat are:

New York No. 2 red at $1 30@131; No. 1 red at $1.35; amber Michigan at $1.33½; No. 1 white at $1.38; white State at $1.40@1.41; No. 3 red at $1.25. red Canada in bond, $1.30; Canada spring, in bond, $1.17; No. 1 spring at $1.21@1.27; No 1 Milwaukee spring (to arrive) $1.25; New York No. 2 spring and No. 2 Chicago spring, at $1.20; No. 3 spring at $1,18 1New York No. 2 red, June options, at $1.21¼; New York No. 2 spring, May option, at $1.18½@1.19; do., June option, at $1.19¼@1.19¾; No. 2 Northwestern spring, May option, at $1.21¼@1.21½; do. June option, at $1.21. Rye at 71@72c for Western, and 73@75 for State. Corn, New York No. 3 at 51@51¼c.; New York No. 2 (old) in store, 55½c.; Kansas mixed, 41¼@42c.; New York No. 3, 46@48½c.; ungraded mixed 49@52½c.; yellow western, 51c.; white Southern, 55½@56c., and Jersey yellow, 53c.; New York No. 2, May delivery, 51@51¼c.; do. June, 51½c.; do. July, 51½c.; steamer mixed, May, 49@49½c., do. June, 49c. Oats, No. 2 Chicago at 35c.; New York extra white, 40c.; New York No. 2 white 35¼@35½c.; New York No. 1, 35c.; New York No. 2, 31c., New York rejected, 33c.; mixed Western, 31@31c.; white Western at 35¼@40c.; mixed State, 31½@35¼c.; white State, 35@38c.

HAY AND STRAW.—Supplies are not so large, and with demand freer prices are steadier.

Bale hay, 55@60c. for shipping, and 70@80c. for retail qualities; clover, 50@53c. for prime. Straw, 40@ 50c. for long rye; 35@40c. for short rye, and 40@45c. for oat.

Exports for past week 1,411 bales. Since Jan. 1st 25,000 do.; same time last year, 22,500 do.

HOPS.—Exports for the week have been 500 bales. Brewers have bought only a few small lots, and the general market is dull. The medium grades sell at irregular prices. The quotations are for:

New Yorks, good to prime, 7@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5 @8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

LEATHER.—Hemlock sole at 19½c. to 21c. for light, 19½ to 20½ for middle, 20 to 21 for heavy and 17½@19 for good damaged.

OIL-CAKE.—Western quoted at $30@30.50 per ton.

MAPLE SUGAR.—Supply small; season virtually over; cakes, 10@12c., sirup, 75c.@100 per gallon with can.

PROVISIONS.—Have been very dull and lower, closing weak.

Mess pork, $9.40@9.60 for spot lots; $9.20 for May and June and $9.30 for July. Bacon at 4¼c. for long clear and 5½c. for short clear. Lard—Western steam, 7.15@7.17½c. for spot, lots, 7.15@ 7.17½c. for May and June and 7.25c. for July. Stearine 7¾c. for Western. Tallow, 7¼@7 3-16c. for prime. Beef hams at $16@16.50. Beef—New extra mess, $12.@12.25; plain, $10@11.50; packet $13.50@14.50 bbls. family mess, $15@16; extra India mess $22@24 for city brands; do. Philadelphia, $20@21.

POULTRY AND GAME.—Live has ruled dull, and would have gone lower, but for a fortunate late order from Havana which cleared the coops of fowls. Turkeys no longer wanted alive. The steamer and hotel demand can be fully supplied from Pa. Spring chickens active at 50@$1.00 ₱ pair; Fowls, choice, 12@13c.; Western, and Southern 12@12½c.; Roosters, 6@7c.; Turkeys, 10@12c.; Ducks, choice, $1.12; poor to fair, 50@75c., the lowest for Southern; N. J. Geese, $1.25@1 50; other, 70c.@$1.

Dressed poultry in light supply from the country. Interior scalded lots not wanted, City dressed is far ahead of it in appearance. Capons not marketable. Turkeys, 12@13c.; Fowls, extra, 14@15c.; good to prime, 10@13c.; very common, 8@9c.

The few items of game are common and have lost their novelty. English snipe $2 ₱ doz.; Plover, $1.25; Sand Snipe, 45 50c.; wild pigeons, stall fed, $1.10@ 1.30; flight, 60@75c.; squab, 2@10.

SEED.—Grass are very dull: clover at 7¼@7½c. for Western and 7¾@7¾c. for State; Timothy at $1.30@1.40.

SUGAR.—Refined at 9¾ for cut loaf, 9¾ for crushed, and powdered, 9¼ for granulated, 8¾@9¼ for soft white and 7¼@8¼ for soft yellow.

TOBACCO.—Export demand is very fair, and there is confidence as to prices which, however, are not showing a quotable advance.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4¼
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¼	6¼@ 7
Good leaf	6¼@7½	— @—
Fine leaf	— @—	— @—
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Seconds and fillers, shipping	9 @11
Pennsylvania assorted lots	9 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—Old potatoes have to divide trade with good grades of new, and the extreme is only obtainable when stock is faultless. Choice Rose and Peach Blows, $1.37@1.50; other sorts $1.00 bulk, $1.25 in bbl; Bermuda, $5.50@6.00; Flor., $2@4; Charlestons are in fine order; when selected $3@5. Asparagus in fair demand, fine quality coming from N. J. as Oyster Bay. Choice $1.50@1.75; other 75c @$1.25 doz. Bld. green peas bbl. $2.50@3; Norfolk $2.00@2.50; N. C. $1.00@1.25; Char. and Sav. string beans $2.00@2.25 crate; Fla. $1.50@1.75 refugee; cucumbers crate Sav. and Char. $3@5; Fla. $1.@2. Rhubard $1.@1.50. Spinach bbl. 50c. Lettuce, N. J., bbl. $1.25@1.75. Cabbages, Norfolk, bbl. $1.@1.50; Char. $2. Fla. tomatoes crate $4; Ber. do. 5 quart box 50c.@60c. Bermuda onions sell readily, as domestic are out; crates $1.75 @2.; Ber. beets crate 50c.; Nor. do. 100 bunches $3. @4; do. turnips $1.@2.

WOOL.—There is a dull condition of trade, and sales possible only at easy prices.

Ohio, Pennsylvania and Virginia XXX and picklock, 43@46; XX, 38@41c; X, 38@40; No. 1, 39@41; No. 2, 34@37c.; common 32@34; combing, 40@45.

New York, Michigan, Indiana and Wisconsin, XX, 33 to 36c.; X, 33@36c; No. 1, 36@39c.; No. 2, 32@35c; common 30@32c.; combing 40@44.

Iowa, Vermont and Illinois X and XX, 33@35c.; No. 1, 34@37.; No. 2, 30@32.; combing, 38@42.

Missouri, Kentucky, and Tennessee—Washed fleece, 34@35c.; unwashed, 23@26c.; unwashed combing, 28@31c.

LIVE STOCK MARKETS.

NEW YORK, May 11, 1878.

BEEVES.—Receipts for the week, 8,995 head; do., last week, 10,277 do. The closing important day of the week, Friday, was attended by a very buoyant market. Prices showed an advance of ¼@½c. per pound compared with Wednesday. Shippers and home buyers paid 10¾c. for picks. Quality was exceptionally good and a better average price was obtained than has been noted for many months. Nothing decent sold yesterday under 9½c., and the range was 9¾@10¾c. for medium to best steers. Fat bulls, 3¾@4¼c.

COWS AND CALVES.—The demand would use a few extra milkers but New York prices offer no inducement for sending a quality that could not be readily replaced for the same money at home. Poor stock takes a chance sale. Really good fresh cows worth here $55@65.

VEAL CALVES.—The market has been weak, but with moderate arrivals closes a shade stronger. Prime New Jersey, 6c.; good, 5@5¾c.; State fair to good, 4@5 ¾c. Buttermilk extra 4½c.; other, 3@4c.

SHEEP AND LAMBS.—Receipts for the week, light. Sheep firm at 6c. for fair unshorn and 5@5¾c. for ordinary to choice clipped. Lambs dull at 7@ ½ for Kentucky and Virginia, and 9@10½c. for New Jersey.

SWINE.—Receipts for the week, 27,086 head; do. last week 30,390 do. Live quoted steady at 3¾@ 3¾c., the lower for Western.

SPECIAL NOTICES.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is:

Single Copy, per Year	$2 50
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Five Copies or more, per Year	2 00
" " " Six Months	1 00
Three Months' Trial	65

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Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

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Marsh's Cylinder Bed Foot Lathe.

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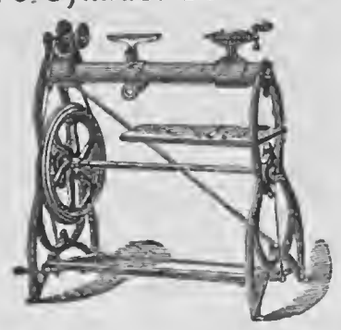

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The only Wind Mill awarded

TWO MEDALS

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Every machine warranted to be well made of good material; to do good work in any kind of wind; to be perfectly self regulating; to possess more power and to be more reliable than any other Wind Mill made.

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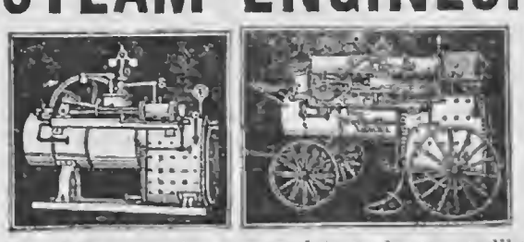

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The POTATO BUGS

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SURE DEATH to the Colorado Potato Bug is only to be had by the use of Paris Green. Prof Cook and others say that all other remedies have failed. ENDORSED BY A. S. FULLER, AGRICULTURAL EDITOR OF THE "SUN."

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Made by F. W. Devoe & Co., can be relied on for the extermination of the Potato Bug and Cotton Worm. Circular on the use of Paris Green distributed free on application.

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For the convenience and economy of consumers of PAINT the well-known house of F. W. DEVOE & CO. now prepare

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They are uniform in shade, and the colors can always be matched. Any one can paint with them. No need of a painter to mix it for you. No need of a dryer or other ingredients. The paint is ready for immediate application. Send for sample cards showing different shades. They have very superior covering properties and do not, like the so called patent paints, contain either water, benzine or alkali. These Paints are in Liquid Form, and are sold in Gallon Cans and Barrels. They are also put up in small cans of one to five pounds.

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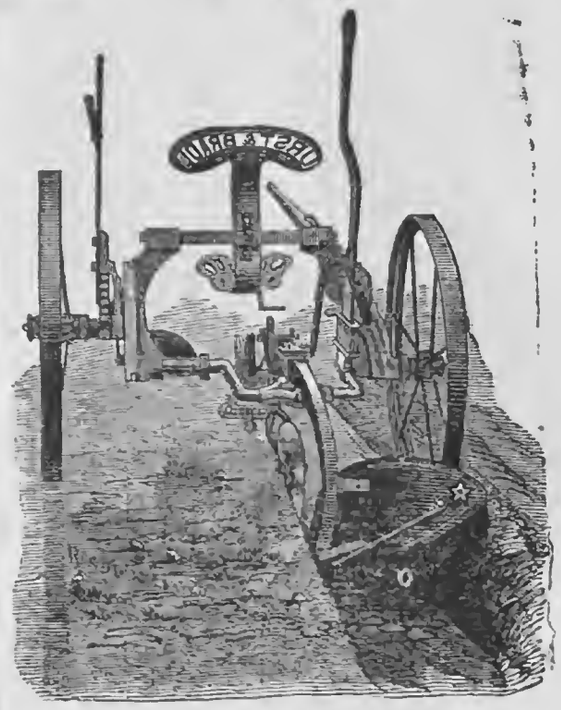

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TO PRESERVE THE HAIR,

Stimulate its Growth, and render it soft and glossy, use Dr. Jayne's Hair Tonic. This unequaled dressing for the hair, being free from all deleterious substances, exerts a beneficial influence on the scalp, removes dandruff, and in most cases causes new hair to grow.

Reading for the Young.

THE EXPLORER.

Out of the unknown into the known,
From the infinite sea to the sea of time
Cometh a voyager, sailing alone,
Steering with confidence all sublime
Straight to the land of joy and rest,
The tropic isle of his mother's breast.

Little he cares whether hall or cot
Shelter his shallop from wind and wet;
Cotton or velvet, he heedeth not—
Peasant or lord—they are nothing yet!
Crown for head and sceptre for hand
Are toys and play-things in baby-land.

Oh, but he finds out wonderful things!
The dome of his cradle high and wide;
The drowsy sense when the mother sings;
The swinging ebb of the outward tide,
Which somewhere underneath him seems
To drift him into the land of dreams!

Then wide awake, from the distance dim
In far, mysterious realms of space,
A soft, bright moon doth rise for him;
The tender rounds of his mother's face.
In this wide world finds he charm on charm.
As he rides round the room on his mother's arm.

Smiles and tears in your bonny eyes,
Shine and cloud on your coral lips,
Little explorer out of the skies,
Searching out truth with your finger tips!
You know not yet, as we old folks know;
There is nothing new in this world below!

Ah! what disdainful looks you cast—
Captain who sailed from the unknown shore
Rogue's eyes answer me; "Not so fast,
Filling my eyes with your well-worn lore;
Baby or fairy or sprite or elf,
You'll find I am something new myself!"

[Golden Rule

"POCKET MONEY FOR THE YOUNG PEOPLE."—No. 2.

S. RUFUS MASON.

How many ways there are for farmers' boys to gather up a little small change, that city boys cannot enjoy! How much pride—honest pride—a lad feels when he can say "I earned all that by using my wits and my hands instead of letting them lay idle!" The mere amount of money thus obtained, although to the boy it looks immense, is really the least of the advantages gained.

His mind is exercised in devising salable articles, in laying plans to produce them, in the best mode of supplying a market already existing, or in creating a new one; his spare time is occupied at home, and to the total exclusion of idle associates, who always abhor a workshop. He thus early in life learns to buy, to create, and to sell; to be economical, careful and pleasant-mannered, because all these faculties must be developed to insure success. Then when he has the shining fruits of his labor in hand, he lays it out in the purchase of some useful book, some tool, or material to enlarge his ability to carry on the business he has embarked in.

This is of itself an education, and with a little assistance in the way of facilities from his parents, will lay the foundation for a better man than is usually made out of the mischievous street Arabs of the towns and cities. This much to the boys. To the parents I appeal, and ask them to look into the matter closely: it will claim as much of their sympathy as they can possibly feel in the future of their sons, and will prove of so great benefit to them and the whole family as to make home more a true home than ever before. Let each father at once consider how he can best assist, in a moderate way at first, to foster industry and forethought, carefulness, neatness and business habits in his boys, by setting aside for them a piece of land, a few seeds, a little lumber, a few tools or any material upon which profitable labor can be expended. I know from my own early experience how valuable this may be made to every boy in the land.

Almost every lad has some predilection, some "turn of mind," which if carried out in practice, is sure to lead to good results. In selecting a line in which to exercise one's faculties for profit, this "bent" should be cultivated. It is up-hill work for a boy to labor against his peculiar fancies, and in deciding upon a line of business, let inclination guide if possible. An inquiry at the stores will assist in the choice of an article to raise, and the ease with which the facilities available can be used, will decide the point. A calf, pig, some poultry or a colt, will always pay; a crop of beans, tomatoes, potatoes, pop-corn, anything neglected by others, will find a ready market, and if well managed will give a surprising profit.

Do not be ashamed to ask advice. Form a plan of operations, write it down, and then carry it out. Get the soil in the best order, get the best possible seed, and give it the same constant care which you would to a prize essay, and you need not fear the season. Let every operation be thorough in season, neatly performed, and try no experiments.

When market day is at hand, go boldly forward, describe your goods exactly; let there be no concealment of bad points, state the truth, the whole truth, and nothing but the truth, and if your product does not give you quite so much money as was expected, you will have formed a character for honesty which will stand as a foundation for all your life.

To conclude this article then, do not let the desire for spending-money tarnish your good character in the smallest degree.

CHARACTER AND CONDUCT.

BY BENJAMIN CLARKE.

Can there be anything more important than conduct? Yes, *character* is more important than *conduct*. I have dwelt on one line of conduct, because that mainly relates to you as Sabbath scholars: but character is developed in every relationship; character is being always formed; character is, in fact, yourself.

A man is what his character is, not what his conduct is. A moment's reflection will convince you of this,—will show you that often the conduct may be all that could be desired, under given circumstances, when the character may be faulty.

Conduct is largely influenced by outward circumstances, character is formed within. Character controls conduct, and the controlling force must be the more important. Character is always being affected for good or evil; the lines of character must be much more subtle, therefore, than those of conduct. The character is continually either being strengthened by virtue or impaired by sin.

Let me give as an illustration, a story of a school-girl in America. It was the eve of the half-yearly examination; it was her last term at school, when she would be seeking some engagement; and she was most anxious to secure the best position in the school. She was doubtful, however, about the chemistry paper that would be set; in fact, it was the only subject of which she was afraid; but it was all-important to her, because she and another were so nearly equal in the class that a single paper done indifferently would decide the prize.

The mistress wanted some book from her desk, and sent Mary for it.

What was it that made Mary start?—that sent the color to her cheek?—that sent the finger to the lip? Why did she draw back her hand from the desk so hastily? Was there anything to bite?

Yes, there was temptation lurking there; for right before her lay the book containing the questions that would be set for the chemistry examination. A single peep, and she would have some idea of the questions to be set. Should she look? The temptation was strong: and was backed by some plausible reasons, but honor was stronger and taking up the book for which she was sent, Mary slammed down the desk as though she would at the same time crush the serpent that lay there.

Next day the examination was held, and, as Mary feared, she did not do well in chemistry, though satisfied with her other papers.

Anxiously the result was waited for, and when it was announced that Mary was second, her friends crowded round her to sympathize with her. Of course she was disappointed, but they were surprised to find her so little so, when she answered them with a quiet smile, "Never mind."

It was the last day of the term, and the prizes were to be publicly awarded. Visitors and friends of the pupils came, and the girls felt that the best part of the prizes was to have them awarded before so distinguished a company. When Mary's competitor went up certain eyes were turned in pity towards Mary, but no shade of vexation or disappointment clouded her face, but instead of a a smile of satisfaction played thereon.

Later in the day the mistress called Mary to her, and said, "My dear, Mr. —— has been asking me if I could recommend him a young lady as secretary and amenuensis. Her duties would not be heavy, and they would be liberally remunerated; but he insisted that she must be a girl of unimpeachable honor, for she would be intrusted with important and confidential papers. I have recommended you, Mary, because I have always trusted you, and because I have recently had a strong proof of your honor, when I know it must have been tried. Shortly after I sent you to my desk I had occasion to go there, when I at once saw the book containing the questions. How foolish! thought I. Nay, how wrong to expose her to the temptation! But I never doubted you, Mary; just then the sun shone into the desk, and revealed a tiny spider's web across the book, and I knew at once that you had resisted the temptation."

But before that something else had shone into that desk—Mary's character, stronger and brighter because of the temptation resisted. That was a fine line that revealed to Mary's teacher her trustworthiness and honor; but finer than any gossamer threads are the lines which daily indicate how character is formed. "Line upon line, line upon line; here a little and there a little."

A VISIT TO A MODEL SCHOOL.

S. B. P.

On our first entrance I was agreeably surprised at the large area of blackboard, so arranged as to be within easy reach of the tallest as well as the shortest pupil; and with the skillful arrangement of light and shade, so as to make the light agreeable in all parts of the rooms at all times during school hours. Not less was I pleased with the pictures on the walls, the mottoes on the blackboards, the outline maps and the wreaths of evergreens and flowers that met my eye. The seats and desks were carefully arranged so as to accommodate the natural positions of the bodies of the different grades of hight, and I detected no bodily weariness in the occupants.

Having been a schoolboy "once upon a time," I could not help going back in memory to that time when I sat for seven long, weary hours, each day, with a book before me, or with folded hands, upon a slab bench without back, and at first so low that my feet and lower limbs were an encumbrance, and afterwards, as I increased in literature and altitude, being promoted to a bench and desk so high that my limbs were entirely too short for me; for there were only two grades of seats to accommodate the whole school, composed, as was then the custom in country places, of pigmies, and all the way up to giants. The walls of my *alma mater* were *not* decorated with either maps, pictures, evergreens or flowers, but with daubs of ink, pencil marks and cuts of jack-knives, and all the blackboards with which the house was furnished were desks and seats blackened with ink, begrimed with dirt, and ornamented in intaglio with cuts of jack-knives in squares, triangles, parallelograms, circles, rhomboids and all other geometrical and fanciful figures. Such were my recollections and reflections, as I took my seat among this assemblage of smiling, happy juveniles.

Miss M., the teacher, has her own way in the manner of teaching either science, literature or morals; being encumbered by no statutes, no ordinances of municipalities or rules of school boards. All the laws by which she is governed are the laws of kindness, firmness and affection, and all her rules are, that all under her charge shall preserve and practice order, cleanliness, respect for their parents, seniors and each other.

Public schools are a necessity and a blessing, and the attention paid to them, and the care bestowed on them by the public and the legislators of the present era, is one of the most marked evidences of the progress of the age. But there must necessarily be for their management laws and rules for the government of the masses, which are not always the most proper for individual cases. These rules cannot fail to operate somewhat as a bar to any profit by the individual experience of the teacher and to any improvement in method which he might otherwise invent or suggest.

Miss M.'s school-room, though in a second story, which is not preferable, has easy and safe means of ingress and egress; has a convenient hall and recitation room, in which latter is taught the alphabet by two of the older girls, thus ingratiating the young ladies into the secrets of teaching, to which they aspire, and for which, judging by the eye and ear, they will soon be eminently qualified; and their places filled by the next in the scale of progress.

I have hinted that Miss M. adopted practices peculiarly her own: she has some certainly not sanctioned by the "authorities." Instance: a dog, from pure affection and by the means with which that friend of man is peculiarly endowed, scented his way into the school-room and to the side of a member of the family to which he belonged. Instead of being driven out with poker and broom, he was allowed to be caressed and quieted, and there followed, during the presence of his dogship, a lecture on zoology,—especially of the canine race. So also of a kitten, which some unfeeling person had thrown into the street, and which had wandered into the room; there followed a lecture on felines, from the lion down to pussy. And there was seen through the windows the blows, and heard the curses bestowed upon a poor, tired horse; all this was the occasion of a lecture on cruelty to animals, and on the services rendered to man by the horse and ass; all which were more interesting and better remembered for having the live subjects before them. These and many other episodes gave not only valuable information to the pupils, but a rest from brain labors, the value of which should never be overlooked.

Miss M. is not content with teaching merely that which is required for the public schools, but practices and believes, as believed a noted ancient philosopher, that children should be taught specially that which will be useful to them in after life. As to her manner of teaching, I noticed little that is new or peculiar, except in its thoroughness and its adaptation to the particular cases of each individual. The health of her pupils is not the least of her cares. They are provided with ample out-door play-ground and encouraged to use it when weather permits. She believes in the science of mnemonics, and endeavors to associate in the minds of her pupils the orthography, pronunciation and definition of each word that occurs in their lessons. She, believing and knowing also that isolated words are not only hard to remember, but that they are thus worthless; their value being only in forming a part of a sentence, therefore columns of words are never used, either in reading or spelling, and are never referred to except as illustrations of certain principles. The main effort in her teaching is to impart a knowledge and a correct use of language, believing that the sum and substance of that ignorance that stultifies is ignorance of language, and that wisdom is only taught through that language which is understood.

Whatever you do, have system about it. It is the greatest labor-saving machine in the world, and the cheapest, but it is not the easiest governed. It requires reason and management to control and exercise it. Yet, wherever it has been introduced, this great labor-saving machine has been a success, demonstrating to the world that it has saved its operator unnecessary manual labor, a multitude of perplexities, kept his workshop in order, and enabled him to perform correctly more by far than in its absence would have been possible. It has many a time kept its possessor from exasperating entanglements; it has saved him time and trouble; it has kept his business rectified while others have been confused. System! It has ever been a victor in war, it is the powerful sceptre that the true statesmen and the political economist sway in goverment and it has been and still is the commonest stepping stones to individual fortunes. Have system in your management, and you will find eventually it will outweigh the physical forces of energy without it.

Keep Busy.—The boy who has nothing to do is the most miserable of beings. If you have no regular work, do little jobs, as farmers do when it rains too hard to work in the field. In occupation we forget our troubles. The boy whose mind and hands are busy, finds no time to weep and wail. If work is slack, spend the time in reading. No one ever knew too much. The hardest students in the world are the old men who know the most.

Sabbath Reading.

LOST AND FOUND.

I lost the brook as it wound its way.
Like a thread of silver hue;
Through greenwood and valley, through meadows gay
'Twas hidden away from view:
But I found again a noble river,
Sparkling and broad and free,
Wider and fairer growing ever,
Till it reached the boundless sea.

I lost the tiny seed that I sowed
With many a sigh and tear,
And vainly waited through sunshine and cold
For the young green to appear;
But surely after many long days
The blossom and fruit will come,
And the reapers on high the sheaves will raise
For a joyful harvest-home.

I lost the life that grew by my own
For one short summer day;
And then it left me to wander alone,
And silently passed away:
But I know I shall find it further on,
Though not as it left me here;
For the shadows and mists will have passed and gone,
I shall see it fair and clear.

I lost the notes of the heavenly chime
That once came floating by;
I have listened and waited many a time
For the echo, though distantly:
But I know in the halls of glory it thrills,
Ever by day and by night;
I shall hear it complete when its harmony fills
My soul with great delight.

I lost the love that made my life,
A love that was all for me;
Oh! vainly I sought it amid the strife
Of the stormy, raging sea:
But deeper and purer I know it waits
Beyond my wistful eyes;
I shall find it again within the gates
Of the garden of paradise.

I shall lose this life! it will disappear,
With its wonderful mystery;
Some day it will move no longer here,
But will vanish silently:
But I know I shall find it again once more,
In a beauty no song hath told:
It will meet with me at the golden door,
And round me forever fold.

[M., in Golden Hours.

A WORD BY THE WAY.

Several years since two merchants had taken their seats in the morning train for a certain city. They were neighbors, dwelling in a contiguous suburb, and doing business in a large and populous town. Although their residences were near together, and they saw each other daily, they were not intimate. They had few sympathies in common. One had been for many years a professed disciple of Christ, loving God's house, and alive to all that pertained to the spread of the gospel. The other was a respectable and successful merchant, absorbed in business, and to all appearance indifferent to all beyond this life. On the morning in question these two neighbours happened to occupy the same seat in the railway carriage. They soon became earnestly engaged in conversation on business, its prospects, their own plans and successes.

The worldly merchant, the elder of the two, said they had been very successful for the year past, and could now say he had a competence. "I do not care," said he, "to be worth any more."

"Well," said his friend, "this life is all provided for. That is all right. But how about the life beyond?"

"Oh," was the reply. "I do not worry myself about that."

"But ought you not to trouble yourself about it?"

"No I think not. I have no doubt that it will be all right."

"But I would not thus trust without looking into the matter. The interests involved are momentous."

The train had reached the station, and the two merchants separated, each taking his way to his own place of business. A few months afterward the Christian merchant missed his neighbor from the morning train. On inquiry he learned that he was sick. Days and weeks passed, and he knew only that his neighbor was unable to be out. At length, as he was in his office in the city one day, he received a telegram that his neighbor was dying and was desirous to see him. He lost no time in hastening to his bedside. There, surprised and delighted, he heard from the lips of the dying man this announcement:—

"I could not die without thanking you, sir, for what you said to me some months since in the railway train. It made an impression on me at the time, and since I have been shut up here it has come up to me again. I am dying, but I trust all beyond. My hope is in Christ."

Was not that a rich reward for one act of Christian fidelity? What opportunities for thus speaking a "word by the way" are constantly occuring, and how glorious would be the results were they improved!

It is not always high water with the saints, sometimes they are reduced to a very low ebb. The best of saints are like the ark tossed up and down with waves, with fears, and doubts; and so it will be till they are quiet in the bosom of Christ.

Seneca well says, that "though death is before the old man's face, yet he may be as near the young man's back." Man's life is the shadow of smoke, the dream of a shadow. One doubts whether to call it a dying life, or a living death.

Man's holiness is now his greatest happiness, and in heaven, man's greatest happiness will be his perfect holiness.

PERSONAL ITEMS.

Dumas the younger honors the memory of his father, one of whose dramas he has reconstructed. He says: "To know the author of the piece is not easy. The public shall decide. If it succeeds, it is my father's; if it fails, it is mine."

Mark Hopkins, the treasurer and brains of the Central Pacific Railroad, who died childless, leaving $15,000,000, wore shabby clothes, dug his own garden, picked up bits of old iron when he saw them, worked until two o'clock in the morning, wrote more on a page than most business men put on sheets, and paid thirty-five dollars a month rent.

A very large land-holder was the Earl of Leitrim, who was shot a few days since by some of his exasperated tenants. He owned 56,184 acres in Donegal, 18,203 in Galway, 53 in Kildare, and 21,179 in Leitrim, making in all 95,619 acres. Of the two Irish dukes, Fitzgerald, Duke of Leinster, owns 70,262 acres in Kildare, and 1,119 in Meath, and Hamilton, Duke of Abercorn, 51,860 in Donegal and 15,919 in Tyrone.

A Washington correspondent who knows all about noses, writes this: "Senator Kernan is said to have a long, practical, sensible nose; Senator Conkling a handsome, lighting nose; Senator Lamar an artistic nose of great possibilities; Senator Howe a long, triangular nose, with a sharp point; Senator Bayard an inquisitive, yet a courteous nose; Senator Edmunds a firm nose, the nose of a gnarled and knotted character; and Senator Barnum a dashing and heedless nose.

The Rev. Jasper, L.L. the Richmond darkey, who preaches dat de sun do move an' de eart' stan' still, is a Baptist, is five feet ten, sinewy, square-shouldered, round-headed, with a retreating, thatchroof forehead, bright eyes, gold spectacles, oval face, big chin, shaggy beard and moustache, short, flat feet, gold shirt buttons, strong, musical voice, and a various amount of grammer. It needs neither much beauty nor much sense to gain notoriety—witness G. F. Train, Count Joannes, and Jasper, and many more nuisances and nincompoops, lay and reverend.

No street in the world represents so much wealth in the short space of two miles as Fifth Avenue in this city, between Washington Square and Central Park. Among the wealthy residents of this reach may be mentioned: Dr. Rhinelander. $3,000,000; M. O. Roberts, $5,000,000; Moses Taylor, $5,000,000; August Belmont, $5,000,000; Robert L. and A. Stuart, $5,000,000; Mrs. Paran Stevens, $2,000,000; Amos R. Eno, $4,000,000; John Jacob and Wm. B. Astor, $60,000,000; Mrs. A. T. Stewart, $50,000,000; Pierre Lorillard, $3,000,000, James Kernochan, $2,000,000; William H. Vanderbilt, $75,000,000; Mrs. Calvert Jones, $2,000,000; James Gordan Bennett, $4,000,000; Frederick Stevens, $10,000,000; Lewis Lorillard, $1,000,000. Total, $248,000,000. Here we have 18 families living near each other who derive fixed yearly incomes from a capital between $240,000,000 and $250,000,000.

Real Estate.

FOR SALE --- FINE DAIRY FARM.

A very fine Dairy Farm of **160** acres, two miles from the city limits of Toledo. In the finest farming section adjacent to the city. 100 acres in Grass, 27 acres of Corn and Oats, 15 acres fine Wheat, 18 acres good Timber. Convenient brick residence, with barn and stable for 40 cows. Abundant supply of pure water that never fails. Three apple orchards. A valuable "milk track," with cows to supply it, if desired. The Farm is on a good road, planked to within ¼ a mile, and is a valuable living for some one. The party now owning the farm has nearly made it *clear* in the past six years, from the proceeds of his dairy. For further particulars, address

GEO. E. POMEROY & SON,
Real Estate Agents, Toledo, Ohio.

Implements and Machinery.

WROUGHT IRON HARVESTER.

COMBINED REAPER AND MOWER.

WROUGHT IRON MOWER.

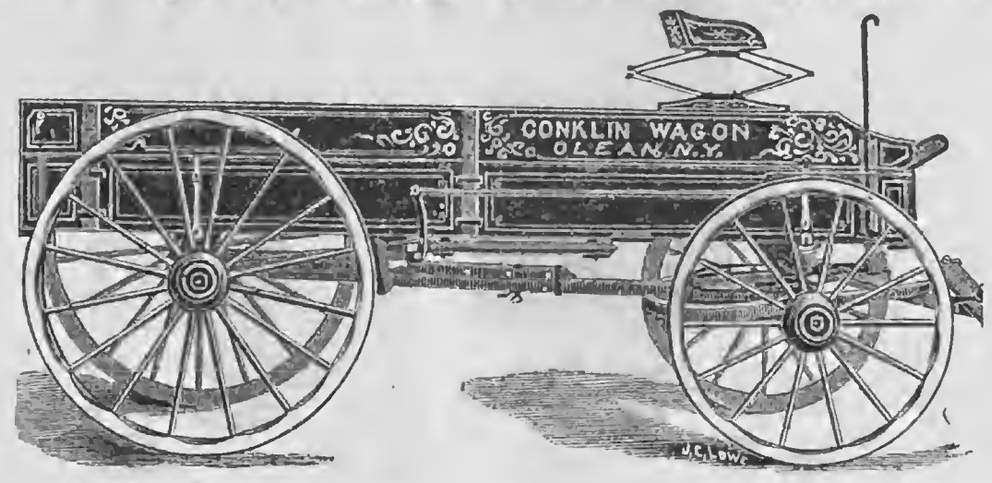
The Johnston Harvester Co.

BROCKPORT, N. Y.

Implements and Machinery.

FOR
THRESHING MACHINES
Farm Engines,
MOUNTED and DOWN HORSE POWERS,
Clover Threshers and Hullers,
THE BEST MANUFACTURED—WRITE TO
RUSSELL & CO., Massillon, Ohio.
Send for Illustrated Circular.

THE CONKLIN FARM WAGON.



This celebrated Wagon is manufactured under the personal supervision of the proprietors, and, considering material used, workmanship and finish, it is the

CHEAPEST and BEST FARM WAGON in the MARKET.

Every Farmer, Teamster and Lumberman should have one.

EVERY WAGON FULLY WARRANTED.

If there is no agent or dealer in town, send for Circulars and full particulars to

W. H. & D. C. CONKLIN, Olean, N. Y.

CREAMERY BUTTER.

The Cooley System of Butter-Making has been before the public but one year, yet over 1,300 Dairies have introduced it. Read for yourself what people say about it who are using it;

OGDEN FARM, NEWPORT, R. I., March 24, 1878.
VERMONT FARM MACHINE CO.:
Gentlemen:—We are more and more pleased with the Cooley Creamer as we continue to use it, and we feel confident that we shall produce a better quality of butter this summer by means of it than we ever had before. We are now getting $1 a pound for our butter. Very truly yours, MELVILLE BULL.

Send 3c. stamp for Circular to
VT. FARM MACHINE CO., Bellows Falls, Vt.

AHEAD OF ALL COMPETITION
1878.

SEVEN SIZES FOR HAND USE.
Weighing from 32 to 51 lbs.
THREE SIZES for HORSE POWER.
These Machines did an amount of work on the Centennial Grounds, equal to 10 years of ordinary use, without loss of time for sharpening or repairs—completely distancing all competitors in that celebrated trial of 6 months' duration.
GRAHAM, EMLEN & PASSMORE,
Patentees and Manuf'rs, 631 Market St., Phila., Pa.
Send for Descriptive Catalogue with prices.

CHAMPION
WINDMILL POWER,
(Underwood's Patent,)
Perfectly Self-Regulating,

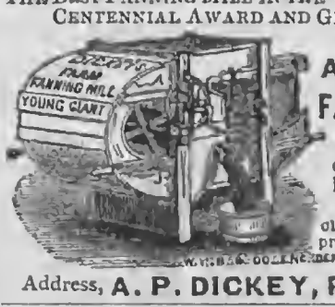
For Pumping and Turning Light Machinery. All our Windmills are warranted, when properly put up, to stay and to do what we claim for them; also, manufacturers of the

ORIGINAL AND ONLY GENUINE
STAR PUMP
Porcelain Lined Iron Cylinder Pumps, Farm Pumps, Wood Eave Troughs, Tubing, Etc.

Illustrat'd Catalogue and Price List sent free.

POWELL & DOUGLAS, Waukegan, Ill.

THE BEST FANNING MILL IN THE WORLD. OBTAINED CENTENNIAL AWARD AND GRAND MEDAL.



BUY THE
A. P. DICKEY
FANNING MILL

No good Farmer can afford to market dirty grain.

A medium quality well cleaned brings a better price than the nicest grade in dirty condition.

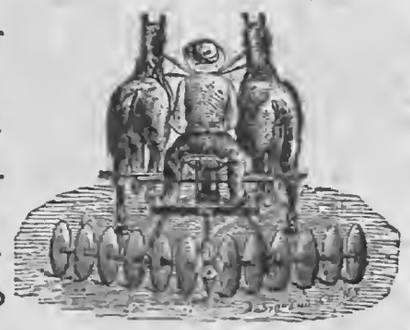
Address, **A. P. DICKEY, Racine, Wis.**

The **THOMAS RAKE** is made for farmers who want a first-class Rake at a comparatively low price. It costs less for repairs, does better work, and is more durable than any any other Rake. It is the standard everywhere. We also make a lower-priced Rake and the best Revolving Rake in the market. Send for Circular. Order from the Factory if your dealer does not keep them. Made by

J. H. THOMAS & SONS, Springfield, Ohio.

LA DOW'S JOINTED
Pulverizing and Smoothing HARROW.

Light, Simple, Cheap. Durable and Flexible.



Will pulverize and leave ground smoother and in better condition and cover seed better, by once going over, than twice with ordinary Harrow. Acknowledged the best in use. Being jointed in the center, it accommodates itself to uneven surfaces, such as dead furrows, ridges, &c. Made with both Chilled Metal and Cast-Steel Discs.

Responsible agents wanted where we have none. Manufactured by **WHEELER & MELICK CO.,** Albany, N. Y., for the United States, except New England States. EVERETT & SMALL, BOSTON, Mass., Manufacturers for the New England States.

THE OLD, RELIABLE

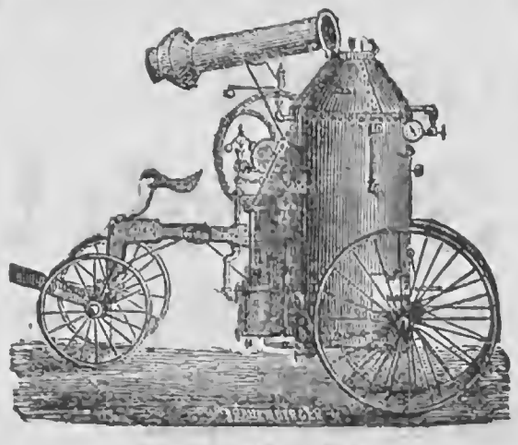
TAYLOR RAKES.

Five Different Styles, including 2-Foot, Hand and Self-Dump.

Taylor's Self-Dumping Rake (No 4) has been greatly improved for 1878. This Rake made a great success last season, and is now the best Self-Dump Rake in the market.

These are the only Rakes ever offered the farming community that have proved a Complete Success, in all kinds of Rakings, in the United States, Canadas, British America, and in Europe and Australia.

Illustrated and Descriptive Circulars free. Address **B. C. TAYLOR, Dayton, Ohio.**



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Batavia Monitor Agricultur'l Engine

Lightest of its capacity of any Engine built. Each Engine warranted in every respect.
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BATAVIA PORTABLE ENGINE CO.,
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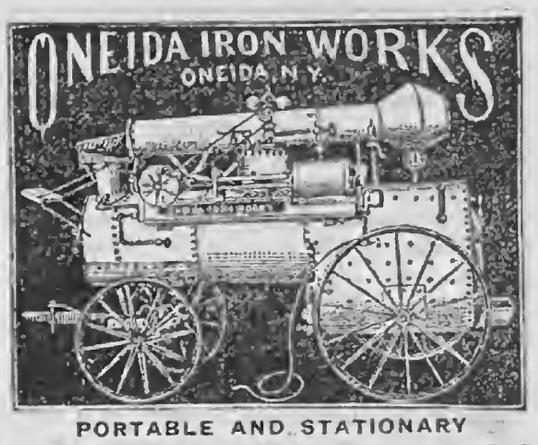
Implements and Machinery.



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STEAM ENGINES!
Of All Sizes and Adapted to All Purposes.
Simple in construction, first-class in material and workmanship.
SAFE! ECONOMICAL! STRONG! DURABLE!
Send for Price-List. Address
ONEIDA IRON WORKS, Oneida, N. Y.

If you want to buy a Sulky Rake this season, do not buy an old fashioned Hand-lever Rake; they have had their day and are behind the times. The self-operating rakes or "Horse Dumpers," as they are called, are now acknowledged to be a great improvement over the old method of compelling the man instead of the horse to do the hard work.

THE TIGER HAY RAKE
is admitted by all to be the Standard Self-operating Rake. It is no experiment but a PROVED SUCCESS, and has double the sale of any other Sulky Rake in the United States. Send for Circulars.
J. W. STODDARD & Co., Dayton, O.
Sole Manufacturers.

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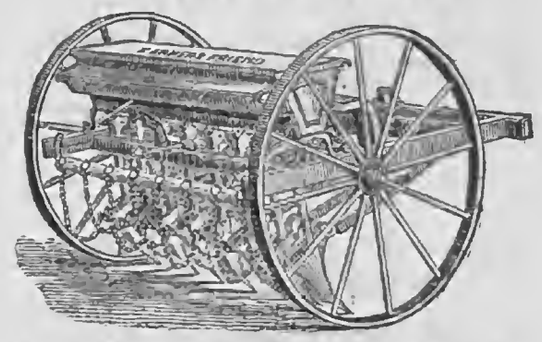

Grain & Fertilizer Drill.

The quantity is regulated with gear-wheels in a **CONE**, so there are no **loose wheels** or **movable feeders**, and it will sow any grain perfectly and accurately.

It has the best **Spring Hoe**, and every Drill has a **Force-Feed Grass-Seeder, Patent Shifter,** and **Surveyor** free.

Illustrated Catalogues, with description, prices, and a **Full Centennial Report**, sent on application. Agents wanted in unoccupied territory. Address, stating where you saw this notice,

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DOUBLE HARPOON
HORSE HAY-FORK.
BEST IN THE WORLD.
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12 Inch Cut	$18 00	18 Inch Cut	$25 00
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More than 300 Different Styles
LIFT and FORCE PUMPS,
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Send for Circulars and Prices.
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PENNOCK'S
Patent Road Machine
Keeps the road in **far better** condition, and at **half** the present cost. Circulars free.
SAMUEL PENNOCK, Ithaca, N. Y.

Wit and Humor.

SPARKS AND SPLINTERS.

TAKE China, said a homœopath to an ague shaken mortal. And the driviling idiot immediately repaired to his home and devoured a tete-a-tete set. He'll shake no more.

THE Rochester (N. Y.) Express says, "The story is told, and it is said to be entirely true, that at the recent dedication of a Baptist church in this county, the ceremony of immersion was performed for the first time in that church by a well-known Baptist minister of this city. When he had entered the water, and while waiting for the candidate, the minister suggested that somebody should sing an appropriate hymn. One of the deacons who stood near by, heard the suggestion, and, without thinking, struck up the familar hymn, 'Pull for the shore.' The hymn proved to be so suggestive that neither the minister nor congregation could restrain an audible smile for some time, and the cermony had to be postponed until the preacher could recover his gravity."

A Word to Tourists.

You cannot have a better companion on your journey than Hostetter's Stomach Bitters. That prime medicinal agent will enable you to drink brackish water without running the risk of disordered stomach and bowels, will neutralize the influence of foul or miasmatic air, and will prove a most agreeable and wholesome stimulant and means of counteracting the fatigues of traveling and seasickness. Change of climate, water or diet, is apt to induce harassing and often dangerous diseases. The three changes combined are fatal to thousands of emigrants and travelers every year. Is it not, then, of the last importance to know that Hostetter's Stomach Bitters are an absolute preventive of the horrful consequences arising from these causes? Travelers, voyagers and emigrants to new countries cannot be too often reminded of the fact that this agreeable vegetable tonic is the most reliable safeguard against disorders to which they are far more liable than the habitual denizens of healthy regions.

IMPARTIAL.

New Parson (who wishes to know all about his Parishoners.) "Then do I understand you that your Aunt is on your Father's side, or your Mother's?"

Country Lad. "Zometimes one an' zometimes the other, 'ceptin' when Feyther whacks 'em both, Sir!"

STOCKBRIDGE
MANURES

Originated by Prof. Stockbridge, Prof. of Agriculture in the Massachusetts Agricultural College.

Made for each crop, furnishing the plant food which each requires. They have been used for five years with such success that in 1877 they were applied on over 10,000 acres with excellent results. **Send for Pamphlet, Mailed Free.** Also for sale, Agricultural Chemicals.

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TRADE MARK.
'VIBRATOR'
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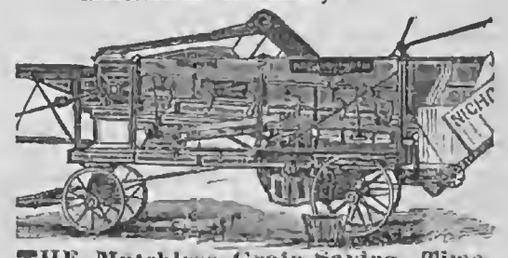
THE ORIGINAL & ONLY GENUINE
"Vibrator" Threshers,
WITH IMPROVED
MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
NICHOLS, SHEPARD & CO.,
BATTLE CREEK, MICH.



THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

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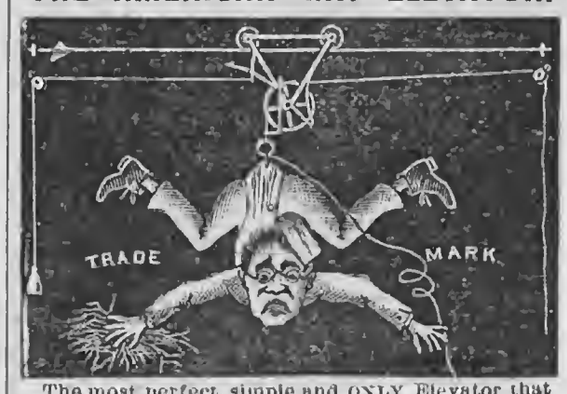

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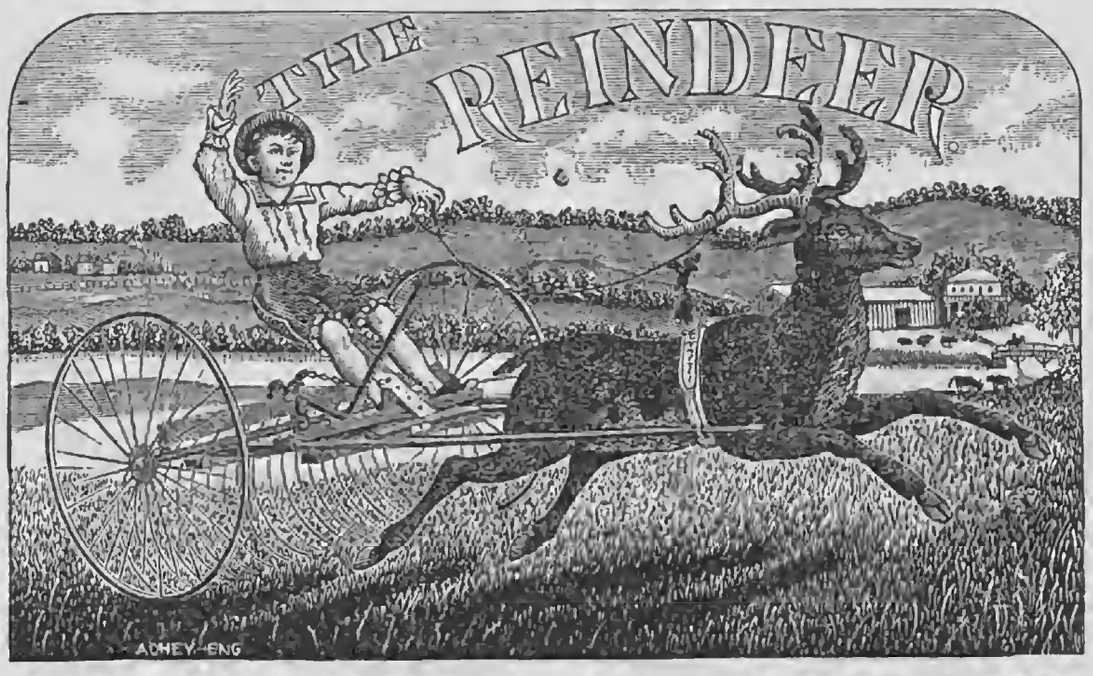

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The Naturalist.

THE TIGER.

WHILE the lion reigns supreme over the feline race in Africa, his claims to undivided sovereignty are disputed in Asia by the tiger, an animal which although less high on the legs and more slender than the African monarch, yet equals him in actual size and strength and excells him in elegance of form, beauty of fur, and grace as well as activity of movement.

In its stealthy carriage, lithe figure, small head, maneless neck, and indeed in its whole appearance, the tiger bears a much closer resemblance than the lion to the domestic cat which serves as a type for the whole genus of *filidæ*. Its handsome coat is of a tawny yellow above, irregularly striped with dark-brown transverse bands almost at right angles with the body and limbs, and fading into white on the under parts, as well as on the chest, throat, around the eyes, on the back of the ears, and on the tufts of long hairs on each side of its jaws. Its long tail, ringed with black, slightly tapering, and extremely pliant, adds not a little to its beauty.

It is exclusively an inhabitant of the continent of Asia and the adjacent islands. It is abundant in Java, Sumatra, and throughout the greater part of Hindostan. It is found also in Siam, China, Bokhara, Southern Siberia, as far north as the banks of the Obi, as well as in the numerous states stretching westward to Persia, and, in 1853, a savage specimen was found by Mr. NORDMANN, wandering as far to the west as Tiflis, in Georgia. In Bengal it attains its greatest development, and is honored with the title of royal.

The favorite site of its lair is on the border of a stream amid the jungles of a densely wooded district. To this den it retires to rest when gorged with abundant food, and from it, when urged by appetite, it steals forth, secretes itself in a wood or behind a clump of shrubbery on the border of a sequestered path, and there, concealed from every eye, awaits its victim. The moment it sees the object of its desire, its eyes flash, its supple tail curves with suppressed exultation, and its whole bearing manifests a savage joy. It allows the unsuspecting prey to advance, and when sufficiently close, with tremendous force and velocity bounds upon it. If it gets wind of its prey from a distance, it glides through the tall grass with the undulating movement of a serpent. Despite its brilliant hues, there is no animal that can hide itself more thoroughly. The markings harmonize so well with the dry, dusky, jungle grass, among which the creature loves to dwell, that the herbage and fur are so nearly undistinguishable that when it is crouching low down, even amid scanty vegetation, its destined victim may almost tread on it without detecting its dangerous presence. Usually it takes up its post opposite its lair, so that it need not turn with its prey but proceed straight to its den with its acquisition. It bounds on its victim from a distance of 15 or 20 feet. A blow from its sledge-like paw, with its sharp sickle-like talons which cut like knives, is enough to strike to the ground a sturdy ox. It first tears open the throat and greedily laps the hot blood, then drags the victim to a secluded spot, watches it until evening, if captured in day-time, and then beginning at the hind-quarters eats towards the head, crunching flesh, skin and bones alike, until gorged so that it cannot eat another mouthful. After having liberally slaked its thirst from a neighboring stream, it then retires to its lair where for three days it lies in a semi-torpid condition, enjoying a grand repast and a healthy digestion, and relieving its craving thirst with an occasional draught of nature's choicest beverage—water. It then returns to the remains of its prey, and without any fastidious scruples, begins another hearty meal, however tainted and malodorous the fare may have become in the interval. Acting on their knowledge of this habit, the natives, whose herds have probably furnished the banquet, frequently follow the track of the destroyer and his burthen, and in the interval between the first and second feast, either poison the carcass or construct, close to it, a scaffold from which a lurking marksman slays the beast on its return to the mess.

The reputation which has made the word tiger, a synonym for savage ferocity, is due in a great measure to the animal's incredible audacity when urged on by the gnawings of an empty stomach. Nor does it delay until the last extremity before displaying a reckless courage in seizing on its prey. Although its usual habit is to creep stealthily towards its victim and spring treacherously on it, yet there are hundreds of instances where the hungry monster has flung himself boldly on the first object that excited his desire, whether it happened to be one of a cavalcade of armed horsemen, a soldier in the midst of an encampment, a Brahma among an admiring crowd, or a peasant among the excitement and multitude of a fair or market. Every year thousands of human beings, men, women and children, fall victims to the cunning, audacity and ferocity of this terrible scourge, until whole districts in India and elsewhere have been depopulated or rendered uninhabitable by its ravages.

In one part of Java lately, 148 persons thus perished in a single year and 131 in the next. A tiger that has once tasted human flesh is said to relish the delicacy so highly that he ever afterwards makes it his special aim to secure it at all hazards, so that the "man-eater" becomes a terror in every neighborhood he infests. An outer change is said to be, ere long, wrought in his appearance, so that he can be distinguished by the darker tint of his coat and a redness in the cornea of the eye.

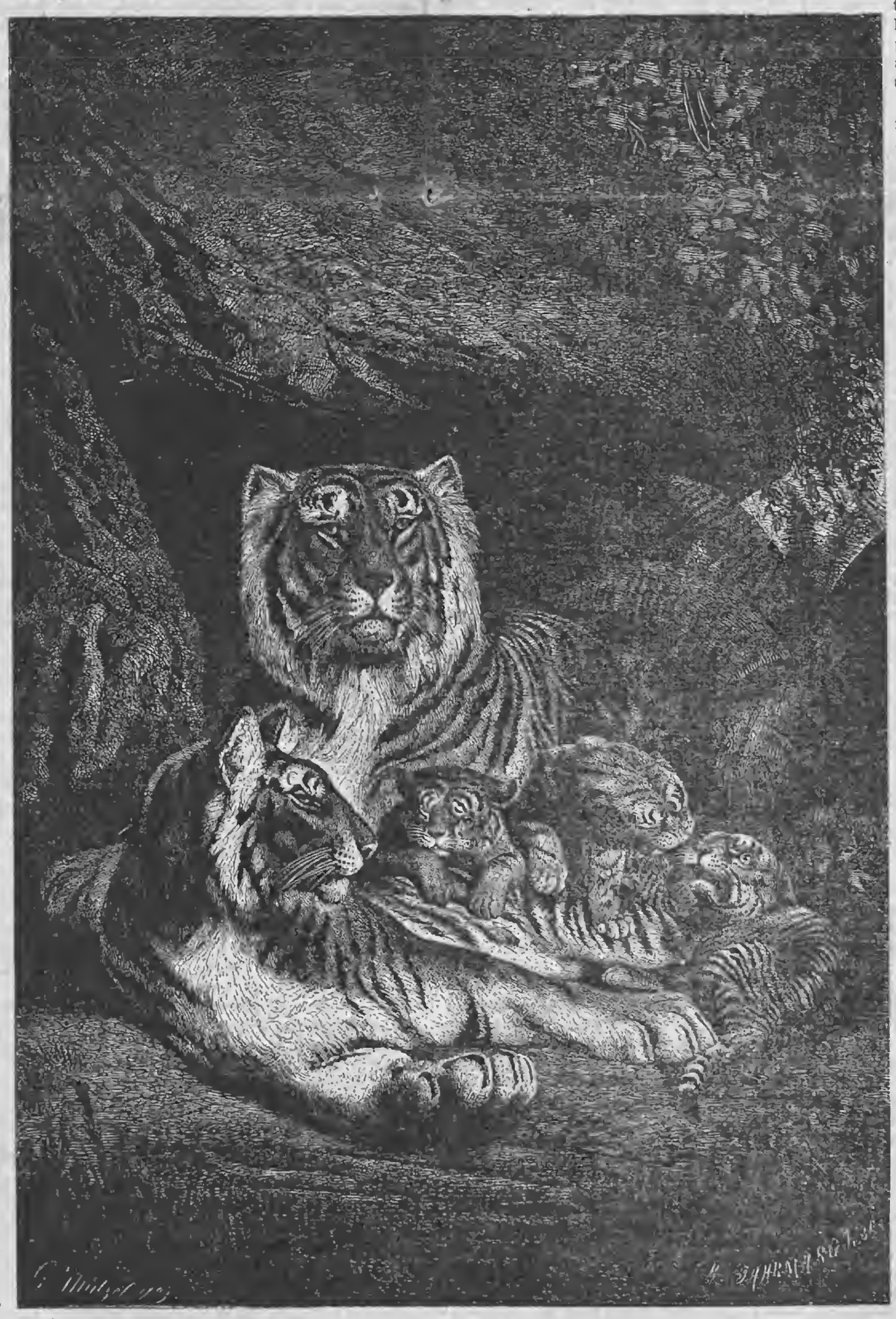
A litter of young tigers is generally composed of from three to five cubs. As the tiger has the habit of devouring all the newly born young of his own sex he can lay his paws on, the tigress, just before dropping her young, searches about for some secret, inaccessible spot where she may in safety give birth to her progeny. Moreover, she is extremely careful to make all her tracks in the neighborhood as intricate and confused as possible. She manifests an extraordinary degree of affection for her offsprings and will defend them from danger often at the peril of her own life. A litter of tiger cubs playing round their couchant dam is not at all unlike one of kittens gamboling about and over their prostrate mother.

The tiger is an excellent swimmer and readily takes to the water in pursuit or search of prey, but as he swims high, he affords a good mark to the hunter. While a slight wound from his claws, owing probably to the shock to the nervous system, is extremely dangerous as a cause of lock-jaw, the tiger himself frequently perishes from what on another animal would be a trifling injury. On him a small wound soon gets tainted, the flesh rapidly yields to putrefaction, and maggots and blow-flies torment him to death.

When captured young and submitted to skillful training the tiger is capable of a good deal of tameness and affection, as all have now-a-days frequent opportunities of witnessing; for the menagerie finds its way into every corner of the land, and at it every youngster can see tigers handled like poodles.

To the ancient inhabitants of Europe the lion was known long, long before the tiger had ever been seen. PLINY tells us that the first ever brought to Rome was in the reign of Augustus. Three-quarters of a century later, Nero's pet tiger was as great a terror to his courtiers as the tyrant himself was to subject humanity. After one of his wild orgies, it was a common practice of his to point out to his attendant brute some Patrician who had incurred his displeasure or at whose expense he wished to create at once amusement and excitement, and straightway the wretch's mangled corpse was laid at the feet of the human monster. About a century and a half later Heliogabalus entered Rome on a chariot drawn by four tigers and as many leopards all of which were afterwards allowed to roam at liberty around the palace of the cruel and voluptuous tyrant. In the East tigers have for ages been the emblems of power, as well as among the sources of its amusement and the objects of its display.

It has been a subject of frequent remark that it seems a trifle inconsistent with the beneficence of the Creator that so many animals have to support life by the destruction of others, all the more painful from the lacerations of their carnivorous destroyers. Some maintain, however, that there is a beneficent provision by which all sense of pain is expelled after the first shock on being seized by a carnivorous animal. Numerous instances to this effect have been cited, especially that of Dr. LIVINGSTONE. On one of his early visits to central Africa, he was flung to the ground by the sudden attack of a lion, and before



A ROYAL FAMILY.

his rescue, had been seized by the shoulder and shaken as a terrier would shake a rat. The shock produced a stupor and a dizziness in which, while conscious of all that was happening, there was neither sense of pain nor feeling of terror. Others, again, assert that Nature is obdurately indifferent to the pains and pleasures of her children, and that this little globe of ours whirls round every day and year, crushing bones as well as hearts with every revolution.

Farm Topics.

ROTATION OF CROPS—SOME BENEFITS OF.

W. H WHITE.

FARMERS occupying a vigin soil, find very little necessity for resorting to any particular mode of fertilizing it, in order to produce good crops; neither do they pay any regard to the laws of rotation, although these are essential, as is found in after experience. For experience teaches that if any one variety or family of crops or plants be constantly taken from the same soil, without making any adequate return, the land, sooner or later, fails to yield a return at all in proportion to the expense of production; whereas when a variation, or rotation, of different crops on this same soil, is practiced, a more satisfactory return is had. In all of our older farming districts the original system of culture is necessarily greatly changed. My memory extends not near as far back as that of many others who may read this, yet it reverts to a time when much of our land was devoted to grain crops of some kind. It was then found that much of the soil would grew fair crops only once in two, three, or more years, without manuring. Accordingly it became necessary that a rest of this duration should be given or at most, in our culture, tho land was only plowed etc., tho farmers adopting tho fallow system, exposing the soil to the influence of air, rain, etc., so that tho action of the elements might assist in pulverizing the soil, and in naturally decomposing the accumulated stores of fertilizers in it, in this way rendering them available as plant-food. Why this failure to produce a crop regularly? To answer this understandingly we need investigate the constitution and requirements of plants, their means of taking up pabulum, and the offices the soil performs in relation thereto.

Plants are composed of different elements, some of which come only from or through the soil. The functions of the soil are to hold or "fix" these elements, elaborate and yield them as food for plants. Some plants require a certain quantity of one element, others need an amount of some different element. These different elements are supposed to be held in the soil, mostly as compounds, and before becoming available to the plant, it becomes necessary that they should be digested, elaborated, in the soil. Now, if the soil becomes deficient in any one element essential to the particular plant grown on it, it is very evident that it cannot supply that element in sufficient quantity to the plant which demands it; neither can it if the plant-food in it be abundant but locked up in combination with other elements; so that that particular plant will fail to thrive on the land, not because the soil is "worn out", but merely because it is deficient in this element properly elaborated. If we take plants of a different class, demanding some other element which is in excess in the soil, we find that such plants will thrive and produce abundantly. The reason, then, why one class of plants fails in a soil in which they have been successively grown, is that such plants have drawn from the soil so much of the elaborated element needed by them as food that enough does not remain to support them in vigorous growth. Such elements may be restored by adding to their amount by the application of manure and fertilizers, but the quantity must be in proportion to the exhaustion. In practice we find that the supply may be economized by some system of variation, whether it be some regular course of different cropping or some less elaborate method. Whether we apply animal manure, plow under green crops, apply mineral or other fertilizers, or depend upon the fertility of the soil alone, we also find that by change we realize much better returns for the labor, time, fertility etc., expended.

Some crops rapidly exhaust fertility by appropriating large quantities of the elements essential to their growth; others either use less, or have the ability to collect their food more readily from a broader area. Some roots remove from the soil in any ordinary crop a comparatively small amount of certain elements which if abundant in an available form, would vastly promote their growth and increase their yield; while straw crops demand an available quantity of elements very different from those needed by grains crops. The growth of one variety of crop in a measure prepares or fits the soil for some other; the rejections or excreted matters thrown off by the first crop enter the soil and form new combinations, which in turn are decomposed, and their elements are frequently the most required for the nutrition of the next. Almost all plants have their enemies growing year after year in the same soil. They increase most abundantly where a single crop is grown, for on coming to the surface each season, they find their most desirable food at hand, and accordingly thrive and multiply rapidly. Frequently the same crops, successively grown in the same soil, will contract disease from some cause often not readily ascertainable. This liability is diminished, if not entirely got rid of, by a rotation.

To realize in crops, the greatest possible benefit from the application of manure, they should succeed each other in the order of their dissimilarity, and consist of as many classes or families of plants as possible, only repeating each class at the greatest convenient distance of time. A rotation something like the following: oil plants, roots, commercial plants grown for the plants themselves or their leaves, leguminous plants, grains and grasses, will illustrate my idea of different classes of plants. It also suggests the variation although this is not given with any particular order as regards the succession. This can best be arranged to conform to differences in soils, localities, markets, &c. The longer the interval between two crops of the same kind, the better the soil is prepared to supply the necessary elements which enter into their structure, it having replenished them from the atmosphere, digestion and matter added otherwise, or having had substances detrimental to the plant dissolved and washed away by the action of the elements. The English agriculturist, by close observation, long experimenting etc., has slowly worked out a system of rotation which is peculiarly adapted to his circumstances of soil, climate and necessities. Our country being so extended, and embracing such a great variety of soil, climate, &c. no single set of crops can be adopted as universally suitable for all places and even if such a course existed, our markets would not afford the requisite demand to absorb the large quantity of the few kinds of similar products and varieties that would be produced.

As a result of the great size of the country and the variety of its climate, soil and demands, the American farmer finds his occupation made more profitable in that he is able to produce a greater variety of crops, thus finding a ready market for all his productions. Another happy result, too, is that as a people we are less dependent upon the resources of other nations than if we had a less diversified soil and climate. There are several crops, however, of which, as a class, our American farmers grow too little, and which, as we advance in the art of agriculture, we shall find advantageous. I here refer more particularly to the leguminous plants, as peas, beans, clover, etc. These plants supply some of the richest and best food for stock, and from feeding it a more enriching quality of manure is made. If we devoted a larger area to the growth of these crops, and adopted a system of rotation of such crops as are particularly adapted to the soil, climate and market of each locality, our farms would improve; we should be able to keep more farm stock; and by feeding these crops to the stock on the farm, an immense amount of the very best quality of manure would be made, which, judiciously applied, would bring still better crops, while at the same time our farms would be increasing in value. Taking this view of the question, would it not seem economic to add to our possessions by improving our system of culture instead of adding more acres to our farms? The thought should be ever uppermost with all cultivators of the soil that the value of their possessions does not consist in the number of acres they own, but in the production economically derived therefrom.

Worcester Co., Mass.

NOTES FROM MAPLEWOOD FARM.

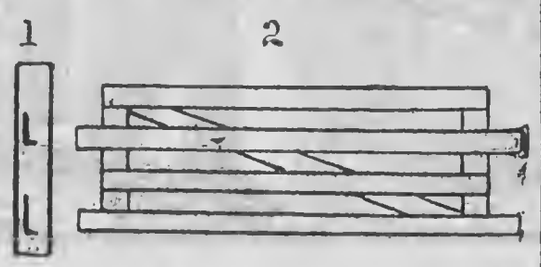
HECTOR BERTRAM.

FENCES AGAIN.

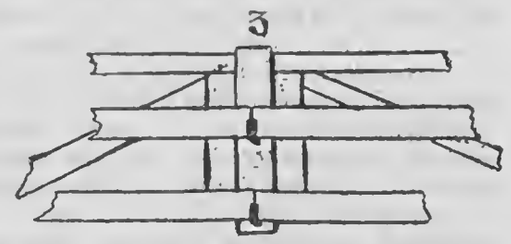
THE subject of fencing is at the present receiving a vast amount of attention from farmers generally. Considering the cost of material, building, and repairs, it is really one of the most important features of the farm account-book, and while I cannot accept the fact advanced by many, that fences on the farm are a nuisance, an unnecessary cause of expense, I am confident the enormous outlay for fencing now made every year, may be greatly diminished by a more judicious selection of material, a simpler style of building, and more care in their disposition on the farm. We must have fences on the farm. It is not sufficient that one or two fields are fenced for stock. Stock, especially sheep, require frequent changes of pasturage. We cannot use one or two fields for stock range for an indefinite period with good results. The second or third year after seeding, the land affords the most pasturage. After this the quantity and quality deteriorate. Therefore it is impossible to simply fence a small portion for this purpose. If we do, we must change the fences repeatedly, making fully as much expense as would arise from fencing the whole farm.

There is no improvement made which adds so much to the appearance of a farm as the fencing—good substantial fences kept in repair. A great amount of fencing is unwise. An indiscriminate mixture of stone, rail, stump and board is untidy. A farm well fenced in large fields with either stone or board and with a substantial fence along the highway flanked by a row of shade trees, is the one I should select in preference to the one that has been thrown open to the street for the free access of any cattle that may by chance break into the highway, or be driven past.

For the benefit of those who think with me that fences are not a nuisance, but one of the



chief requisites of the model farm, I present a plan of a cheap, durable, neat and handy fence. By reference to the cuts, it will be seen that any pannel of this fence can be taken out at any time to afford passage for a load of grain or hay, without being obliged to drive the whole length of the field to gain a gate or bar-way. Along roads where the snow drifts in winter, they are easily taken down and piled out of the way until spring. Fig. 1 represents the post with hooks



driven in; Fig. 2 a pannel of fence; and Fig. 3 a section set up.

As far as expense is concerned, the above fence can be built for about the same as the common style of board fence, and is, I think much handier and neater. The pannels should be about twelve feet long. It would perhaps be better to allow the first and third boards to project instead of the ones shown in the cut.

I have been making a garden or trying to rather; for there has been so much rain that the ground is like a mortar bed. Onions, peas, beans, potatoes, radishes and corn are up. Onion seed sown without sprouting, came up in less than two weeks. Onion beds should be covered with ashes. I have found these an excellent dressing. In fact, I know of no vegetable that ashes are not good for.

Some one asks for a preventive for the depredations of ants: A few stalks of tanzy, laid about the buttery shelves, will drive them away entirely.

Field Crops.

THE POTATO PROSPECT.

WM. J. FOWLER.

IT is a wonder to me, as it may well be to any one, that shrewd, intelligent farmers are preparing to plant largely of potatoes, while with every furrow they turn there are hundreds of lively potato beetles, to say nothing of myriads more already above ground and patiently waiting for potatoes to appear so that they can begin operations. Yet this is just what is daily done in this section. Some farmers of my acquaintance propose to plant ten or twenty acres. One large farmer intends to put in thirty-five acres. "Enough," as he says, "to give the beetles more than they can eat," and thus save his crop. Of course, this expectation is fallacious. The more potatoes planted and not strictly watched, the more beetles, and after the posts have destroyed the crop, they turn to neighboring fields to repeat their ravages. Last year the farmer above spoken of, grew several acres, which he never dug, and if he plants thirty-five acres this season, it means trouble for his neighbors as well as for himself.

My belief is that hundreds, and probably thousands of acres of potatoes will this year be abandoned and plowed up as fallow for wheat. In no previous season in Western New York have the potato beetles been so numerous thus early in the season. They were abundant last fall and few apparently have died. This fact is preventing judicious farmers from planting as largely as usual. On the whole, fewer potatoes will be planted in this section than in four or five years. A small planting, well cared for, will pretty surely pay. It is better to plant only on rich, moist soil so as to insure a large yield; and be careful to have enough help at the right time. No matter what mode of destruction is used, the enemy must be disposed of promptly or the crop is lost.

And yet there are localities where considerable planting of potatoes may be advisable. The potato beetle runs in neighborhoods, enough anywhere, but some farms are more infested than others. I propose to plant several acres, for the reason that I am in a neighborhood where few potatoes were grown last season. Potato beetles do not travel far. In the spring they fly till they find a potato plant, and in most sections they don't need to go far. My potatoes will be planted rather late, about the last days of May, so that the beetles that have wintered over will mostly have found homes. I expect a good many; but here the idea is true that on a large field they are at first less destructive than in a small patch. I think the beetles have some way of finding out where young potatoes are growing; but if so they are as likely to be attracted to a small field as to a large one. [Plant a single potato where you will—in the remotest, most hidden part of the field or garden—the beetles will find it without any trouble. In our own grounds they prefer the Matrimony Vines to those of the potato. Perhaps it would be well to plant a *quantum sufficit* of this rampageous vine (plant) around the potato patch.—EDS] The difference is that in a large field they seem less numerous, and are not destroyed so soon. Spend the same number of days' work per acre on a large field and it will be freest from the beetles and larvæ.

We are gradually learning how to deal with this enemy, and "knowledge is power!" To those who know how, the cost of fighting the potato beetle need not exceed $5 per acre. If the land is rich enough to yield 200 bushels per acre, the extra cost of potatoes because of the beetle will be only two and a-half cents per bushel. If you plant early varieties which yield lighter crops, the expense per acre will be somewhat less, but there will be an increased cost per bushel.

Monroe Co., N. Y.

Miscellaneous

EXHIBITING VEGETABLES AT FAIRS.

PROFESSOR W. J. BEAL.

IT is now none too soon to begin to prepare to make a good display at the various annual exhibitions which are to occur in autumn.

In the first place: the person ambitious for fame or prizes will strive to raise excellent samples of the vegetables which he intends to exhibit. He will take all precautions to have the soil well prepared and to select the proper soil for each vegetable, and then give extra care in cultivation, and thinning, and the supply of water. In some cases liquid manure will be employed once in a week or two. Enough of each sort will be raised from which to make good selections. As a general rule for vegetables, great size is not of most importance; samples will always look best if they are of uniform size, shape and color. It will often be best to reject one or two of the largest that the rest may look alike. If shown at all, the larger uneven samples may be put in a separate place. To be worthy of a prize, they should be tender, of good flavor and quality.

In sending to the fair, great care should be taken in preparing the samples to have them fresh, sound and clean. Some kinds are best placed on wet sphagnum or grown in neat uniform pots or boxes in which they may be shown in good condition.

With regard to the quality of roots for feeding stock, Mr. JOSEPH HARRIS makes the following comment in his address at the Centennial Exhibition. "The English seed-growers have for years bred turnips and mangels for size and shape, until they can grow 84 tons per acre, nearly 80 tons of which is water. Now in this country we do not wish to pull up, top, draw home, pit and slice up 80 tons of water to get 4 tons of food. We can pump water far more cheaply with a wind-mill. Turnips and mangels will never be generally grown in this country till we begin to breed for quality rather than for size. When we can get mangels that contain but little more water than fresh grass or fresh clover, we shall then be able to gather, store away, cut and feed out the crop at one-third the expense, and the roots would keep better. As long as we are caught by size and sound, we shall find little profit in root culture." In his opinion, even for feeding stock, the matter of quality is worth careful attention.

At our fairs, it is very important to have a good light on the samples exhibited. A skylight is the best; a light coming in over and back or beyond the collection, is the worst. No one enjoys facing a glaring light while viewing a collection. Rather low flat tables present the best surface upon which to exhibit. The good effect produced by vegetables may be much increased by arranging each variety in parallel rows, in squares, circles, ovals, or stars or in almost any compact, symmetrical figures. Much taste may be displayed in arranging these groups to show the contrast of shape and colors in the different vegetables or the surface on which they are placed. Enough of each sort, and no more, should be used to carry out the design. The collection of each person, town, or county in competition should be neatly, plainly and conspicuously labeled, by placing the name of the exhibitor over it. Each variety

should have a label attached to it or fastened where it may be seen. This should be placed on, or just back of or in front of, the specimens. These cards should be attached to the plates by some kind of clasp to prevent visitors or the wind from removing them.

Specimens are generally best shown on a flat surface and not piled on each other. The neat white plates adopted by the Massachusetts Horticultural Society are excellent for this purpose. They vary in size to suit the size of the samples. The plates are in the form of a parallelogram with a very slightly raised edge. Each plate is intended to hold twelve specimens of apples, potatoes, etc. Collections should be distinctly separated by neat boundaries of some kind, to make it easy for visitors and judges to distinguish them from each other without asking questions. This can be done by stems and leaves of asparagus, evergreens, or strips of red, blue, or white paper.

For convenience in judging vegetables, the lots in each class should be as near each other as possible. Competent judges will not trust to the eye alone in determining the merits of vegetables and fruits. They will not be misled by overgrowth, but will consider those best which a person of good taste would select for his own table. Very often something can be told of the quality by cutting and tasting in a raw state, but in case of potatoes, turnips, squashes etc. samples should be well cooked for comparison.

Agricultural College, Lansing, Mich.

THE WOOLEN INTERESTS.

It seems to be folly to sweep away the wholesome protection which the tariff now affords to the woolen interests for both the wool-grower and the manufacturer of woolen fabrics. As is well known to the readers of the RURAL the present tariff is the result of a patient and careful conference between those interested, and it has met with universal approbation, and under its fostering care the woolen interests of America have prospered. It is the specific duty on wool, of ten and twelve cents a pound, which really affords the protection to the wool-growers, and that duty the tariff bill now before Congress proposes to do away with and have only a nominal *ad valorem* duty, which would reduce the protection more than three-fourths. The sheep industry of this country cannot stand any such legislation and we trust Congress will kill this part of the bill, at least. Every citizen is interested in the maintenance of the present prosperity in the woolen interest. Other avenues of business are well crowded and would be damaged by the addition to their ranks of those engaged in the various avocations connected with wool in its different forms, its production and manufacture. The government is an interested party; for it has millions of acres of land to sell adapted for nothing else but sheep and cattle growing, and the more people who occupy these regions, the more there will be to help bear the burden of the national debt.

The manufacturers and wool-growers were in session during the latter part of winter in Washington and agreed to a new schedule of tariff rates, which would be satisfactory and which was all the reduction they thought they could stand and keep the flocks from being sacrificed and the mills from destruction. They, however, were clearly of the opinion that no change whatever ought to be made, but prepared a new basis for a change, if one *must* be made. The Committee of Ways and Means paid no attention whatever to these suggestions, but arbitrarily struck the life out of wool-growing, so far as their action was concerned.

We trust that Congress will not thus deal with this great interest, but heed the voice of warning and be guided by the suggestions of those who thoroughly understand the matter, and who have taken so much pains to harmonize all of the conflicting interests involved, by mutual concessions, and by making as many sacrifices as ought in reason to be demanded. We were never clothed so cheaply as now, which shows that the margins in the woolen trade are at the lowest point. Every citizen is interested more or less in this great underlying industry.

CATALOGUES, &c., RECEIVED.

CIRCULAR — Roebuck's Wire Screens for doors and windows, 164 Fulton St., N. Y.

REPORT of the Secretary of the Iowa State Agricultural Society for the year 1877. JOHN R. SHAFFER, Fairfield, Jefferson County, Secretary.

WESTERN NEW YORK HORTICULTURAL SOCIETY. Proceedings of the twenty-third annual meeting held at Rochester, Jan. 1878. The work is made up of a valuable collection of essays by distinguished men.

A TREATISE on Potato Culture, by WILLIAM HUNT. Published by the Quinnipiac Fertilizer Co., New Haven, Conn. This gives the results of an intelligent farmer's experience, and is of value to all who cultivate the potato.

ILLINOIS INDUSTRIAL UNIVERSITY, Urbana, Champaign Co., Ill. The total number of students for 1877–78 is 404. The aim of this University is to teach such branches of learning as are related to agriculture and the mechanic arts, without excluding other scientific and classical studies, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

Floricultural.

HANDSOME FLOWERING SHRUBS.

WILLIAM FALCONER.

(Concluded.)

Azalea viscosa comes into blossom about the middle of June and continues more or less in good condition till well into July. Rhododendron punctatum, a very pretty Southern species which sometimes gets considerably winter-killed so far north as this, bears its rose-colored blossoms very plentifully from about the middle to the end of June; but scarcely has its beauty faded when R. maximum, a larger and more showy native species, steps forward and remains with us throughout July. June is, too, the season of perfection of the Catawbiense and many lovely kinds of garden Rhododendrons, for which we are indebted to the horticultural art.

Kerrias, single and double, begin blossoming in May and continue throughout the summer more or less to display their yellow flowers; and from the end of May till the end of June is the heyday of the Mock-oranges or Syringas, as they are often called. From early June till the end of July the Common and Oriental Bladder Sennas, with yellow and saffron blossoms respectively, are in perfection and their profusion of pea-blossoms, lively foliage, inflated bladders, neat habit and hardiness, render them desirable shrubs. In June, too, every branchlet of Cytisus capitatus is terminated by a lot of downy-yellow pea-blossoms; and the Carolina Allspice is decorated with its fragrant dark purple flowers that continue to be produced throughout the summer. The Burning Bush, — Euonymus atropurpureus — bears myriads of tiny dark-purple blossoms in the latter half of June, and these are followed by a brilliant display of red fruit in the fall, which is shown off to excellent advantage in front of an evergreen back-ground, as for instance a belt or hedge of Norway Spruces. Itea Virginica, from the tiniest morsel of a plant to large shrubs, bears its pretty racemes of white flowers from about June 20th to the middle of July. Magnolia glauca, the Sweet Bay of our swamps, is a handsome shrub or small tree that produces fine, globular, creamy-white, fragrant blossoms from the middle of June till near the middle of July; and about the same in season are our Catalpa trees which, either as arboreal or minor specimens, display their beauty long and lavishly. The American species is much handsomer than the Japanese.

The misty panicles of the Smoke Tree are beautifully expanded about the 20th of June and remain in perfection throughout July, but after that I think the smoke is more a disadvantage than a gain. Rose Acacias are shrubs of June; still straggling clusters are occasionally borne throughout the summer.

Hydrangea arborescens and radiata have large flat cymose heads of greenish-white flowers in July, and the silvery lining of the radiata leaves makes them quite ornamental. In early July appear the erect, slender panicles of bluish flowers of Cladrastis Amurensis, and about the middle of the same month the long, erect, raceme-like panicles of white flowers of Æsculus parviflora are quite telling in large gardens, but, of course, it is not condensed enough for small plots. In July, too, the Trumpet Vine makes great show, and Yucca filamentosa—though not a shrub but an admirable substitute—sends forth its immense branched flower-stems. From July far into August the White Alder, Clethra alnifolia, is laden with racemes of small, fragrant, white flowers; and C. acuminata, of equal season, has larger but fewer racemes. Both are desirable garden plants. Of the same season as the Clethras is Oxydendrum arboreum, a Southern shrub or small tree that has numerous pretty white flowers arranged in one-sided racemes clustered in loose panicles, and its leaves too are among the most beautiful of autumn-tinted foliage.

From the middle of July all through August, we have likewise the Vitex incisa in bloom; its bluish flowers are most abundantly produced, and the cut pinnatifid leaves are no small ornament. Though annually winter-killed a little, it seems to enjoy the knife and every young shoot blossoms. From early August into September is the season of our shrubby Althæas—Hibiscus Syriacus—whose showy flowers, single and double, present almost every shade of white, purple, and rose. The roots but not the stems of the Lemon-scented Verbena are hardy here, but as summer approaches, new shoots are made and they bloom from August into September. The branchlets of Callicarpa gracilis reveal some modest little flowers about the 20th of July and keep increasing them more and more till fall, when blossoms bedeck the branchlet points and amethyst berries the lower portions; indeed they are only at their prettiest when November or December frosts nip their beauty.

Hydrangea paniculata, among shrubs, is the lion of autumn, and we find young plants produce larger flower-heads than do old ones, and the same superiority is visible in specimens that have been cut hard-back over those only shortened in a little. The greenish panicles appear early in August, become white from the middle to the 20th of the month, and attain their purplish hue as September advances.

Many miscellaneous blossoms are produced throughout the fall months, which added to the conspicuously decorative fruits of several bushes, as Crataeguses, Snowberries, Bitter-sweet, Winterberry, Burning Bush, Strawberry Bush, Rose hips, Sumachs, &c., and the brilliantly tinted leaves of many of our American and Eastern Asiatic shrubs and trees, give to the fall a mature richness entirely its own. And the last flower of the year is perhaps the yellow blossoms of the Witch-Hazel, that are unfolded in late fall when the leaves are turning and dropping.

But I have omitted a few very pretty little shrubby plants that are better suited for edging shrubbery borders than for mixing with stronger growers: Erica carnea, the European Heath, which from March till May is laden with rose-purple bells; E. vagans, the Cornish Heath, which is in blossom in July and August: Calluna vulgaris, the European Heather, in July; and Daphne Cneorum, a very pretty low-growing evergreen that bears a profusion of terminal clusters of rose-pink flowers in April and May, and again a light second crop in fall.

Now that I have finished I begin to realize the army of favorites I have overlooked, as the host of Spiræas that keep up a succession all summer long; the Snow-drop tree and Cornus florida that bloom in May; the many ornamental Primroses and Pyruses, Berberis, deciduous and evergreen; B. Thunbergii is a beautiful species, that leaves out and blossoms earlier than most kinds, has the most brilliantly colored fruits of any species with which I am acquainted, and moreover, the hues of gold and crimson that appear in its leaves in autumn give it a place in the front ranks of that class of ornamental shrubs, and it is perfectly hardy; Tamarix, whose wythe-like stems are clad with tiny purple racemes in early May; Viburnums, as the Guelder Rose, Rhodotypus, and several others.

Botanical Gardens, Cambridge, Mass.

FLOWERING PLANTS FOR ROOMS.

JAMES TAPLIN.

Many of my lady friends are very successful in growing and flowering plants in rooms, while others say they have no luck with their plants, the want of it being due either to lack of attention, or unsuitable position or atmosphere for growing the plants.

I have no doubt if it came to the growing and flowering of plants in rooms, many of the lady readers of the RURAL would do it far better than I should on the first trial, as the conditions are very different to greenhouse treatment, so I shall only call attention to a few useful plants suitable for the above purpose, with a few general hints as regards cultivation, while advising growers not to attempt growing too many sorts, but to confine themselves to a few well-grown plants which they have found to succeed best under their own particular circumstances. I may also mention that unless there is a special plant-stand furnished with a pan for catching water when plants are watered, it is necessary to place saucers under pots, not for holding water, but to prevent it running on the floor, for few plants will keep in good health if constantly standing in water.

ROSES are generally desired for flowering in rooms, and I have seen some growers very successful with these plants; but many fail from not commencing with good, established plants, or often from having nice plants in flower from a forcing-house. The so-called Monthly Roses, which include the China and Tea varieties, are the only varieties suitable for growing in rooms, and should be grown in pots at least a year before brought into the house.

The green fly is often troublesome on the young growth, but can be easily killed by dipping in tobacco or quassia water, and mildew must be destroyed by dusting with sulphur.

CALLA LILIES. I recollect these as window plants when I was a boy, and they are more popular now than at that time. This is one of the few plants which, when in full growth, can stand in a pan full of water. I have complaints from visitors that their Callas grow well, but do not flower. To these I would recommend standing the plants outside in the full sun, from May until September, and then shaking away all the soil and repotting in good, rich soil.

GERANIUMS. Under this head, I shall include both scarlet and the so-called Lady Washington varieties, although they require rather different treatment. The scarlet varieties are best grown from cuttings rooted in the spring and grown in pots outside during the summer, and will usually flower freely in a light, warm room during winter. Old plants are worth nothing for this purpose, although useful for planting outside in the summer. The Lady Washington class can be either grown as young plants or the old ones cut down after flowering. In dry, droughty rooms, the green fly is often troublesome on them, but can be destroyed by tobacco.

CARNATIONS.—These are best obtained from some florist early in the fall, before the plants have been grown in a warm house, and will, with fair treatment, generally flower all the winter.

BOUVARDIA.—The above remarks will apply to these, excepting that the flowering season does not usually extend much beyond Christmas.

MIGNONETTE.—A few pots of this sown outside in September, are very desirable to flower in-doors when the ground is covered with snow. The same remark applies to the old-fashioned Musk plant, which will grow freely if well supplied with water, and other charming plants of which the ladies never get tired, for example, the Forget-me-not. This can be planted outside in April, and will flower all the summer in a damp, shady place. I saw some charming beds of it in the neighborhood of New York recently.

VIOLETS can be successfully grown in pots, by taking up plants, when planted out in the spring, and bringing them in-doors before frost.

FUCHSIAS are useful plants for house decoration, as they do better in partial shade, and strike freely from cuttings, or if plants are required in flower at once, these are cheap to purchase. Bulbs, such as Hyacinths, Crocuses and Tulips, are best obtained fresh each year, or they can be planted out for one year and taken up for flowering the next. These are among the most useful plants for winter blooming, for if potted early, some can be had in flower by Christmas, and a succession of flowers may be kept up until May by bringing in a few plants at a time. I object to Narcissus flowers in a room, as they are, like Tuberoses and Lilies, of too powerful scent to be pleasant, but, of course, these flowers are nice out-of-doors.

I am often asked if various flowers will do well in a room; for this reason I often try plants not generally grown, among them the Anthurium Scherzerianum or Flamingo plant. One of these I placed in my room six weeks ago, and the plant looks about the same as at first; the flowers which were expanded, are still perfect and others have opened, and it looks likely to stay in flower for six weeks longer. I may say that we do not burn gas, do not keep rooms very hot, and ventilate at all times.

A Brooklyn lady informed me she had her window filled with Thomas Hogg Hydrangea at Easter, and how much it was admired! She had a greenhouse, however, and the plants were, no doubt, in flower before placed in the window, but these plants can be kept in the cellar and would then flower well later in the season.

I may add, it is well to bring plants into rooms before too far advanced in flower. They last much longer. It is also well not to bring them from a very close, moist, hot-house, for in the best regulated rooms there is always a dry air in winter.

South Amboy, N. J.

Arboricultural.

TWO NEW JAPAN QUINCES.

SAMUEL PARSONS.

This species of shrub possesses many qualities which well fit it for frequent use in lawn planting. We have known it so long and become so accustomed to its presence everywhere that we hardly realize the superior advantages it undoubtedly offers for every purpose required of a flowering shrub. Hardy, compact and vigorous of growth, its bright glossy leaves and numerous, richly-colored flowers, clinging closely to the stem, would certainly call forth rapturous expressions of delight were they presented as a new introduction from foreign countries. As it is, every one enjoys the early beauty of the glowing flowers formed before the leaves are developed, and no group of deciduous shrubs that pretends to offer a series of blooms extending throughout the spring and summer, can dispense with its rich colors.

The Japan Quince is a large-growing shrub, and hence should occupy positions in the center or rear of the mass, unless some prominent point of peculiar character requires a larger growth than is ordinarily used. It should be set out early, although on the whole it is quite easy to transplant. Years ago it was considered somewhat difficult to propagate, but now it is grown readily from root cuttings. As already intimated, the foliage constitutes one of its great charms, and a thorny habit has caused its successful employment for ornamental and impassable hedges. To sum up its advantages, it has nearly everything necessary to the character of a perfectly hardy, deciduous flowering shrub. Although the general appearance of the foliage of the Japan Quince in its many varieties, is much the same, the color, size and shape of its blossoms form a very distinctive peculiarity. Distinguished chiefly by the appearance of the flowers, there are at least a dozen varieties common in nurseries. Their colors range all the way from scarlet or crimson

to white, with some varieties striped in a very attractive manner. The red and white are, of course, most popular because most distinct. Almost the only accusation that can be justly made against the Japan Quince is that it grows too large for some positions. My object, however, in calling attention to the Japan Quince, is not only to offer a brief tribute to its many choice qualities, but to describe two distinct varieties that are really very fine and quite unknown to the lawns of America. They come from Mr. THOS. HOGG, as do so many other good things, and have now attained a size which very fairly indicates their nature at maturity.

The first is a strong-growing kind, with leaves of a more oval form than usual and very large flowers of white, touched on the upper edge with rose color. The flowers are well formed and clustered in the usual way about the stem. Their size is very striking, and the habit of the entire shrub decidedly attractive. It will undoubtedly be found a great improvement and addition to the present list of Japan Quince varieties.

The other—Cydonia or Pyrus Japonica, anglicized, Japan Quince—is still more remarkable than the last. I have already noticed that for some positions the heretofore known varieties of Japan Quince were too large. Nature has apparently become cognizant of the fact, and therefore has sent us from Japan this little gem of the species. Dwarf enough to occupy any position near the house where small plants would be used, it has, in addition, literally masses of pretty salmon-colored flowers and a most lovely variegation of the leaves in red, white, and green. The flowers rest like a rich crown on the compact little plant. It may be readily seen how charmingly adapted such a plant would be to a group of low choice shrubs near the house, a place from which the common Japan Quince is perforce excluded. The great value of the introduction of such new deciduous shrubs lies in the increased beauty and variety of foliage and flower afforded at a particular season by groups arranged for continuous blooming. It is not easy to speak too strongly of the importance of deciduous shrubs on a lawn, and it is to increase the list of materials to be combined by the landscape gardener that it affords a pleasure to present two new Japan Quinces for consideration.

Entomological.

THE CURRANT-WORM SAW-FLY.

WILL the RURAL please give the name, origin and habits of the insect, specimens of which are inclosed. LYDIA M. PRATT.

Marion Co. Indiana.

ANSWER BY B. PICKMAN MANN.

THE specimens, very nicely put up, arrived in excellent order, a condition rare enough in the experience of entomological writers, to call for notice and commendation.

The insects are four males and one female of the imported Currant-worm Saw-fly, Nematus ventricosus. They were introduced into the United States nearly twenty years ago, from Europe, appearing first in the neighborhood of Rochester, N. Y whither they came probably in cocoons attached to the roots of imported currant or gooseberry bushes. Had the importers been entomologists, or had they kept in their employ an entomologist, they would have taken into consideration what insects, in what condition, might be expected to occur on imported bushes, and would have searched, in turn, for each of these. They spread in all directions from Rochester, and reached Indianapolis about 1870 Perhaps they were independently introduced into some other places, for instance into Vermont.

The larvæ or "worms" eat only the leaves of the cultivated Currant and Gooseberry, preferably the former. Imagos come out of the ground soon after the leaves of bushes put forth in the spring, and the female soon after lays her eggs. These specimens from Indiana are nearly three weeks earlier than any of which I had record previously. I hope Miss PRATT will make a note of the dates at which the insects pass through their several stages, and send them to the RURAL NEW YORKER to be printed. In about two months after the first appearance a second brood makes its appearance.

The presence of the insects may be noticed in the first stage, after the imagos have been found, by turning up the leaves, or lying down and looking up under them, and seeing rows of white eggs upon the ribs of the leaves. In the next stage the eggs have hatched and the larvæ have gnawed little holes through the leaf, so that it looks as if riddled with shot. When the native leaf is all eaten the larvæ move to other leaves, scattering along the branch, and devouring these leaves from the edge inwards, not riddling them with holes. Soon the branches are stripped. The bushes should be examined frequently, and the larvæ destroyed.

The most certain, economical and safe way of destroying the larvæ is to pick them off, either separate from the leaf or with the leaf, and to destroy them by crushing. They are not poisonous, and are best crushed in the naked hand as they are picked. Some persons, who have a fancy for giving and taking medicine, dust the larvæ with powdered hellebore. This is effectual, if applied often enough and of good quality. Other persons use other powders, especially just as the larvæ have reached their full growth and are about to descend to the earth; as the larvæ disappear about at this time these persons write to their agricultural paper that they have discovered a remedy for the currant-worm.

The male and female imagos are described in detail and are figured in the American Entomologist, vol. 2, p. 16–17. The larva is green, and in its earlier stages has a black head and has many black dots on its body, but after its last change of larva skin, it is grass-green all over, except the large dark eye-spots on each side of the head, and except that the joint next to the head and the hindmost two joints remain of a yellow color. When full-grown it is about eighteen millimeters long. It may be distinguished from other larvæ found on these bushes by having twenty feet, as well as by its other characteristics. A detailed description is given in the Practical Entomologist, vol. 1. p. 120.

The cocoon is thin, oval, six to eight millimeters long, and made of brown silk. It is spun amongst the rubbish on, or slightly under, ground or spun between some leaves on the branches.

This insect is one of the worst enemies which the currant-bushes now have in the country, and should be vigorously opposed wherever it appears. The second generation in the year would be fifty fold more numerous than the first, were it not for enemies, diseases and other mishaps which occur. The increase at any rate is so great that it is well worth while to be thorough in early work.

Scientific and Useful.

MANUFACTURING POTATO STARCH.

P. M., North Jackson, Susq. Co., Pa., wishes to be told how potato starch is made on a large scale, as there are hundreds of bushels of potatoes going to waste in that county, and starch might be made from them and sold for something.

ANS.—A carefnl comparison of a dozen or more tables of analyses of potatoes shows large variations in the proportion of starch in different samples, and that these variations are chiefly caused by the variety cultivated, by the soil and locality in which the tubers are grown, and by the time during which they are kept. The highest proportion of starch in potatoes may be taken at 20 per cent., the lowest at 10 per cent., and the average at 15 per cent. in the natural, and 60 per cent. in the dry state. On keeping, the proportion of starch diminishes, shrinking in one variety analyzed every month, from 17.2 per cent. in October to 14.5 per cent. in the following April.

In manufacturing the article in large quantities, the potatoes are first washed in a cylindrical cage formed of wooden spars, made to revolve on a horizontal axis in a trough filled with water to the level of the axis They are then reduced to a pulp by a rasping machine composed of a wooden drum covered with sheet-iron, roughened outside with numerous prominences, made by punching out holes from the opposite side. It is turned by hand by means of a winch fixed upon each end of the shaft. The drum is inclosed in a square, wooden box, to prevent the potato-mash from being scattered about. A hopper, from which to feed the washed potatoes, is attached to the top of the box, and has its bottom concentric with the rasp-drnm and nearly in contact with it. A pulp chest, underneath the drum, is made to slide out, so as when full to be readily replaced by another. Two boards, slanting towards each other from the opposite sides of the box under the drum, conduct the pulp into it. A moderate stream of water should be made to play into the hopper upon the potatoes to prevent the snrface of the rasp from getting foul with fibrous matter. Two men, with one for a relay, will rasp, with such a machine, from two and a half to three tons of potatoes in twelve hours.

The potato pulp must be elutriated, or cleansed, upon a fine wire—say No. 120—or hair sieve, which is set upon a frame in the mouth of a large vat, while water is made to flow upon it from a spout with many jets. The pulp meanwhile must be stirred and kneaded by the hand or by a mechanical brush-agitator, till almost nothing but fibrous particles are left upon the sieve. These, however, retain about five per cent. of starch which cannot be separated in this way.

This parenchyma, or agglomerated, sticky mass, should therefore be snbjected to a separate rasping upon another roughened cylinder. The water, turbid with starch, is allowed to settle some time in a large tub or vat, called a bac; the clear liquid is then run off by a cock into a second bac, and after some time into a third, whereby the whole starch will be precipitated. The finest powder collects in the last vessel. The starch thus obtained, containing about 33 per cent. of water, may be used either in the moist state, under the name of *green fecula*. for various purposes, as for the preparation of dextrine and starch syrup; or it may be preserved under a thin layer of water, which must be renewed from time to time to prevent fermentation; or, lastly, it may be taken out and dried.

In the manufacture of starch, a considerable proportion of the product is lost despite every precaution, owing to the strong affinity which the starch has for the fiber of the potato, and it is generally considered that very little more than two-thirds of the quantity of starch in the different varieties of potatoes manipulated, is secured, while nearly one-third escapes. The "slump" or waste, is sometimes by chemical treatment converted, in great part, into sugar or into alcohol, but in European countries it is generally returned to the soil along with the vines as manure, and as it contains nearly all the fertilizing elements of the potato, bnt little exhaustion of the soil is produced by the growth of successive crops of potatoes on the same land, if enriched in this way.

There are several other processes and contrivances for manufacturing potato starch, most of them complicated by the nature of the machinery and the use of chemicals; but these, chiefly employed in huge factories, would be beyond the means of an ordinary farmer, and beyond the skill of one untrained in their use.

Veterinary

SHOEING HORSES.

EVERY veterinary surgeon knows the great errors that are committed by blacksmiths in the matter of shoeing the horse and the proper care of his feet. The chief cause of these is that, as a general rule, the horse owner patronizes the blacksmith that does the work cheapest and makes the shoes stay on the longest, whether the work be inferior or first-class. A great many men do not know the importance of good shoeing, and, of course, the smith wants to suit his customers, so he drives the nails home and clinches them down to stay six months. I saw an instance, this morning, of the evil effects of bad shoeing. A man from the rural district hereabouts came to me and wanted me to put a seton in the shoulder of his horse to cure a disease which never existed—sweeny. Now this man had this horse shod last January or early in February, according to his own account, and here it is the tenth of May and he has not had the shoes even set yet. The poor animal has done the spring's work, plowing, etc., with his winter shoes on!

I had a blacksmith take off the shoes, cut the toes down, pare them out level with the heel and then rasp the whole bottom of the foot to make the surface level and smooth for the application of the shoe. The shoes should be cold or blackhot instead of red-hot, and beveled on the inside, so that the outside will protect the outside crust. They should cover the crust or shell all around the foot, and the heels should not be so wide that the heft of the heel of the foot will crowd between the heels of the shoe and cause contraction of the foot by making a wedge of it. On the other hand, putting the heels in too far will cause corns and contraction. Let the shoe just rest all around the crust equally, the same as it rests on the ground. And do not allow the shoe to be drawn in, and then chop the toe off, for this weakens the shell of the foot and the horse is more liable to be pricked.

Now, when the nailing comes, never allow more than three nails on a side to be put in on the fore-foot and four on the outside and three on the inside of the hind-foot; for the heels of the hind foot are thicker than those of the fore. In road and speed horses, in dry weather, there should be only two nails on the inside, as close as possible. Shoes nailed this way will, as a a general thing, stay on longer than is good for the horse without clinching very close. A horse shod this way will never be flat-footed or have contracted feet, unless it be by standing on a hard plank floor without applying softening agencies to the foot. Youatt says that agricultural horses need no foot softening; nevertheless, in warm, dry weather, they need it every other night. No foot can be deformed without contraction.

It is almost impossible to drive four nails in a horse's foot without driving one opposite or back of the navicular joint, and all of the veterinary surgeons in the world, with the best foot stoppage, could not prevent the feet from contracting with nails back of this joint. I have seen blacksmiths try to point out the navicular or what they called coffin joint; and they would come from half an inch to an inch of it, but on taking a foot that was divided into sections, they would find this joint nearer the toe than they thought. There are a great many blacksmiths who deny this, but the one that does never ought to be permitted to shoe a horse.

A horse never ought to be allowed to stand on a hard plank floor; it onght to be the natural ground—good gravel floor. With this kind of floor and proper shoeing, a horse would never have contracted feet and, of course, that is the beginning of all foot diseases, such as corns, thrush, founder, quittor, toe-crack, and of all the navicular joint diseases. If a horse were shod properly, with only three nails on a side, as close to the toe as possible, on the fore feet, and if he always were allowed to stand on the ground as a floor, flat feet and foot diseases, as well as the so-called sweeny, would not exist. Lame horses would be out of fashion, and so many of our horses would not have to go to pasture with great setons in their shoulders from the effect of contracted feet. When the feet get softened by the moisture of the earth, and the horse gets well of the lameness, then comes around the practitioner who has put in the seton, saying, "Don't you see the seton is the best thing for lameness, and is what does the business?" never thinking it is the moisture of the feet that has produced the good results. One thing is certain, that lameness in a horse is due far more to the owner's and shoer's fault, than to any inherent defect in the animal.

EDWARD O. KINGMAN,
Veterinary Practitioner.

Cortland Co., N. Y.

Horticultural.

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

POPULAR FALLACIES.

T. T. LYON, PRESIDENT MICH. POM. SOC.

AMONG the great mass of people who have neglected to thoroughly acquaint themselves with the subject, it is a very common circumstance for a person, who shall chance to have his attention drawn to a fine-looking or well-flavored variety of fruit, just in condition to please his taste or to gratify his eye by its large size or beautiful color, to proceed, upon such slight knowledge of it, to introduce it into his grounds, without waiting to learn whether or not its observed success is exceptional—only to find by dearly-bought experience, that while, once perhaps in a decade or two, a season just adapted to its needs will develop the perfection which chanced to catch his attention; under all other circumstances, it remains a reproach and a failure.

Or, the variety may have attracted his attention when just in bearing upon young, vigorous trees, sufficing to develop beauties or high qualities which disappear as soon as the tree reaches full bearing, or maturity, either from the tendency to overbear, or from lack of constitutional, vigor, or, possibly, from want of proper adaptation to the climate or soils of his locality. Notable cases of this latter difficulty will be found in the old Herefordshire Pearmain, the Ortley and the American Summer Pearmain, to which we may add the Wagener, the American Golden Russet (Bullock's Pippin,) and to some extent Esopus Spitzenberg and many others, while White Doyenne pear, (in regions where it is liable to the cracking of the fruit,) and Hale's Early Peach, (where it proves liable to rotting of the fruit.) are characteristic cases of the former difficulty.

We know of no better rule to govern the selection of varieties to be planted, and to be rigorously applied in the introduction of varieties into existing plantations, than to select them, as a man should choose a wife—upon thorough acquaintance, and a careful study of their peculiarities.

These remarks must, however, be considered to apply only to general planters, and for permanent purposes. Unknown and promising sorts may, very properly, be put upon trial in small quantity, by any one; although, as a rule, this sort of experiment will be better conducted by the pains-taking and observing amateur; from whom the ordinary gardener or orchardist will be able to acquire a knowledge of carefully matured results; while he will avoid the ninety-nine failures, so sure to accompany every case of actual success.

The Swine-Herd.

HOG CHOLERA AND GOVERNMENT.

EDS. RURAL: We are making an effort to get the assistance of our Legislature to enable us to eradicate the *scourge* of our country—the so-called, Hog Cholera. What do you think of it? Is it practicable? If so what plan would you advise? The accompanying slip is from our local papor "The Trimble News," and is the first of a series of articles that will be published, at an early day. S. E. HAMPTON, M. D.

Milton, Ky., May 13, 1878.

"Every farmer is asking for a remedy for hog

cholera, yet where is the man that has ever taken the time and trouble to investigate the nature of the disease? We hear of men cutting hogs open and pretending to say thus and so, but who has ever made a post-mortem or a thorough analysis of the blood and secretions of hogs that have died with the so-called hog cholera? Some say it is a disease of the blood; others that it is caused by corn; others that lice are the sole cause. And so it goes, and of course there are as many remedies, almost, as hogs. One man has found a panacea in poke-root, another in soft soap, &c., &c., almost ad infinitum. It is all guess-work, and our country will continue to lose millions of dollars annually unless Congress or our State Legislatures take the matter in hand and apoint a committee of scientific men—men able and willing to make an investigation that would disclose the cause of the disease; and when this is accomplished it will then and only then be easy to find a remedy"

Industrial Implements.

HAYING APPARATUS.

Of all the operations involved in haying none is quite so laborious as the final disposition of the crop. At least this was the case until the introduction of labor-saving machinery. All appliances directed to lessening the labor have been very generally used, and in no branch of mechanics applied to agriculture has the inventive faculty been exercised to greater advantage.

Quite recently we have seen some haying machinery that happily combined strength, durability, convenience, novelty and cheapness. We refer to the Anti-friction Hay Carrier, and Noyes' Field Pitching Apparatus, made by the U. S. Wind Engine and Pump Co., Batavia, Ill. We give in this issue two illustrations of the Carrier, showing it: (1) just after the pulley to which the fork is attached has run up into the crooked

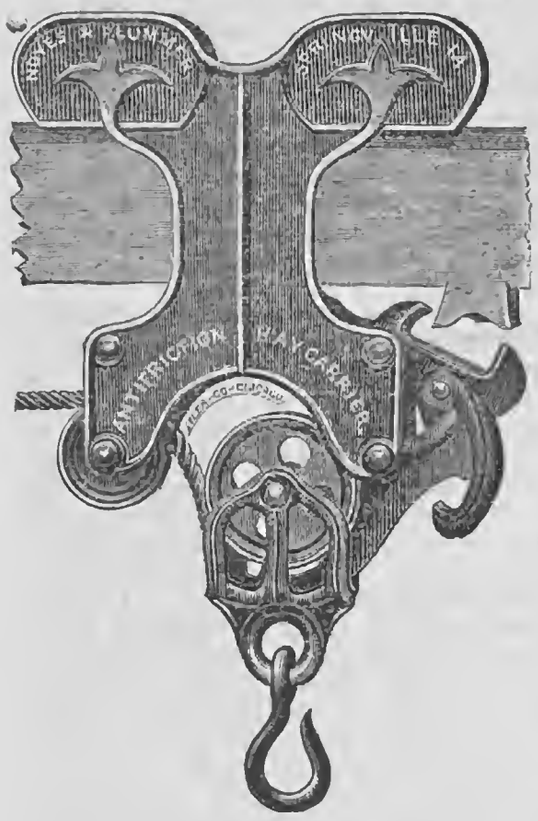


Fig. 1.

arm on which it rides. The carrier is now detached from the lug on the track and has commenced to move off. (2) Shows it in position over the load.

The main and peculiar feature of this carrier is the way in which it is moved along the track. Ten chilled-iron rollers revolve around an oblong bearing in the head. This arrangement gives a large bearing surface and comparatively slow revolutions, which decreases friction to a minimum, and makes it possible for the driver to take hold of the rope with his hands and move along the track with ease after the load is grappled, thus allowing the horses to turn around and return to their place as soon as the forkful has reached the carrier. Another great advantage is, that the carrier runs so easy that if the track has a slight incline, no weighted rope is needed to draw it. It will of its own weight back down the track to its proper position, and the fork will return to the operator on the load. We would call particular attention to the perfect, never-failing grappling apparatus which differs from many others in never clutching and destroying the rope. There is no trouble about getting over high beams, or to the top of high stacks. This carrier may be used for filling barns from within or without; it can be put on or taken off the track, or shifted to run in an opposite direction in two minutes. It never needs oiling, and it is not encumbered with delicate or troublesome rigging, as the rope passes through no loops or rings. The Noyes' Field Pitching Frame is a very ingenious adaptation of means to an end. The entire frame requires but 458 feet of lumber and is braced in a way to combine strength and lightness. It can be quickly shifted to any desired position and when at work in conjunction with the Anti-friction Carrier (for which it was designed,) it accomplishes satisfactory results quickly. It is said that there is practically no limit to the size of stack; that the hay is dropped in the middle at any chosen place along its length, therefore the sides do not become littered, and in settling, the center always being higher than the sides, the stack will not lean, and is sure to shed water. Five tons have been stacked and the frame moved, within the space of forty-five minutes.

Fig. 2.

We would recommend our readers to send for circular "3" issued by this company, as this circular contains a fund of practical information on the subject. Especially a full working diagram of the picture with estimates of the material. With these specifications any one with ordinary intelligence may construct the apparatus. This circular also contains designs for tracking barns.

THE PHŒNIX TILE MILL.

Every practical tile-maker has discovered by experience what a severe test there is upon the strength of the machinery used in the manufacture of drain tile, and how much importance there is in having all the parts sufficiently strong to withstand the very great pressure upon them; but this point may not be so thoroughly impressed on those who propose using a tile mill, but have not had their experience tempered by practice. We present an illustration of a tile mill, made by Chandler & Taylor, Indianapolis, Ind., which is very popular.

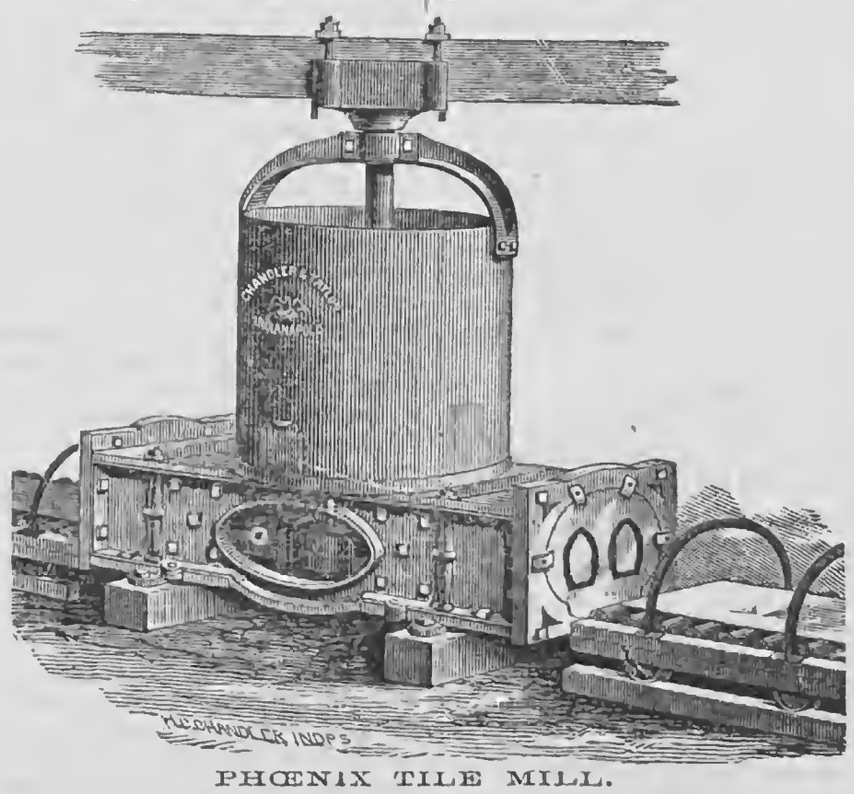
This machine consists of a tempering hopper, an upright shaft, with crank at its lower end, two pressure chambers (one at each end of the machine), and a double plunger, which forces the clay out of the pressure boxes through the dies.

The tempering hopper is made of boiler iron, and a band of wrought iron around the top end, to give it stiffness. At the bottom of the hopper are two openings leading into the pressure boxes. Through these openings the clay is forced at each revolution, by means of a feed wing fastened to the upright shaft.

The pressure box is also a very important part of the mill, as it has to withstand the compression of the mud, and it is also subjected to rapid wear, especially in sandy or gravelly clay. To guard against the first, the plates composing the chamber are made to lock themselves together in such a manner as to be a support to each other, rendering it almost impossible to burst them apart. To guard against wear, the plates composing the pressure chamber have recesses in them to receive false plates, or more properly, wear-plates. All parts of the mill are accessible for oiling, and all parts have a provision for wear.

The cut-off tables are formed with rollers set on iron pivots, which revolve underneath the tile, which comes from the machine in a continuous pipe. At intervals of thirteen and a-half inches there are steel wires set in the top frame, which pass between the rollers, for the purpose of cutting off the tile into convenient lengths for drying. To enable the operator to cut the tile so as to avoid defective places, the tables are mounted upon small car wheels, which move easily on a track, and by this means he can move the table so as to bring the wires to any point before cutting the tile. This feature is peculiar to this machine, and is of great advantage, as all the perfect tile can be saved and only the defective ones thrown back.

The mill illustrated is intended to be run by horse power. It is also geared to be run by steam power.



PHŒNIX TILE MILL.

THE PRINCE ORGAN.

The Messrs. Prince of Buffalo, New York, are among the foremost organ-builders in the country, and are well known to our readers. Many of our agents' homes are embellished with their organs which we offered as premiums for several years. We have ever received the warmest praise of the merits of these premiums. We take pleasure in again calling attention to this firm, and their recent new patterns which combine the excellencies of former styles with recent improvements that cannot fail to be appreciated. The prices are in accordance with the times. Illustrated catalogues are sent on application, and they repay perusal by those wishing to have one of the pleasantest and most refined accessories to the home—a parlor organ.

THE DIRECT DRAFT EUREKA.

The Eureka Mower differs entirely in the principle of its construction from that of any other machine. This difference was prominently brought before the agricultural public during the Centennial field trials. The report of the Judges of Group XXIII. is before us, and after giving a comparative table of the drafts of the various mowers, the chairman, Mr. Coleman, speaks as follows of the Eureka:

"It will be seen from the above that the draft per square foot of grass cut varied from .288, in the case of the Eureka machine (direct draft), to .564 in one of Osborne's machines, or nearly 100 per cent. In reality the difference was not quite so great, inasmuch as the Eureka cut a quarter of an inch higher; but allowing for this, we still have the fact that this machine was the lightest of all that were tried, and, as it is on a totally different principle from the original models, a short reference to its leading features may not be out of place.

"The Eureka is a direct-draft mower,—that is to say, the knife works in front of and between the wheels, and the horses are attached to the center of the machine, equidistant between the wheels, and are so placed, by means of a long neck-yoke, that while one walks on the uncut grass, clear of the knife, the other walks where the track-board has cleared the cut grass; thus the mowed grass is not interfered with, an important point as regards cutting. The wheels are much larger than in ordinary machines. The cutter-bar, which in the machine tested was six feet long, is placed in front of the wheels. The pitman works at right angles with the knife, the connection between the two being a bell-crank lever. It might be thought that the horses treading down the grass would prevent even cutting, but this is not so; did the machine follow the tracks instead of meeting them, we cannot say how it would be, but one great advantage of this form of machine is that it returns along the same line, and therefore meets the grass that has been trodden down.

"Every crop can be dealt with according to its particular form; thus, supposing the grass beaten down in any direction, the machine can be driven at right angles to the lay, and thus good cutting is secured. By a peculiar method of attaching the knife-bar to the frame flexibility is acquired, and we could not see that any machine cut the standing grass more evenly; at any rate, the cutting was sufficiently good. One great merit in this machine is that, owing to having a clearer track on both sides, the cut grass is laid up in a beautifully light, open swath, very favorable for curing. Indeed, in fair weather very little after-work is required. Two horses worked a six-foot cutter with ease. The gearing is simple, no bevel-wheels are used, and we do not see why such a machine should not wear well, and there can be no question that as a mower it is a highly valuable implement." The Eureka is made by the Towanda Eureka Mower Company, Towanda, Pennsylvania.

It is nice to be an Arab during the summer, and go about the country *al fresco*, but we have recently seen an improvement on this way of summering. It is the Hoffmire Portable House. It is constructed in sections; can be readily put together; is water-proof, and for camping-out summer houses, camp-meetings, boat houses, &c., it will more than repay its cost in a single season, in the additional comfort it secures. The houses contain two, three, or five rooms, and weigh from 750 to 1650 pounds complete. Jno. M. Hoffmire, 157 Broadway, New York, is the agent.

Messrs. Bradley & Co., Syracuse, N. Y. write us:—"Having purchased the patterns and materials of the Bradley Manufacturing Co., we shall continue the manufacture, at their old place of business, of all the implements heretofore made by them. We shall endeavor to maintain the high standard of excellence that has characterized their work for so many years."

Steam-Power applied to farm uses, is growing in favor, and as many are thinking of applying the same, it may not be unprofitable to attract the reader's attention to the admirable steam engine made by Messrs. Wood, Taber & Morse, Eaton, N. Y. Mr. Wood is a veteran in the business, and their model has been generally approved by competent judges.

WHAT THEY SAY OF IT.

Clock came to hand all right. Much pleased.
Brooklandville, Md., April 26, '78. S. B.

Received the "Cricket" Clock all right; it runs very well, and keeps first-class time.
Rhinebeck, N. Y., April 26, '78. R. L. S.

The "Cricket" came to hand all right. It is a beauty. It talks as well as it looks. Thanks.
Emporium, Pa., April 30, '78. J. D.

I've received and am well pleased with the "Cricket" clock you sent me. Mrs. T. J. B.
Okolona, Miss., May 11, 1878.

The "Cricket" arrived all right, and we are very much pleased with it. It has given perfect satisfaction so far. W. M. & Co.
Byron, Ill., April 30th, 1878.

Accept my thanks for the "Cricket" clock, which came in due time. It is real nice and keeps good time. Fannie J. A.
Burlington, West Va., April 29, '78.

The "Cricket" goes well. I could have sold it many times, but I shall keep it; but I want my neighbors to take the paper. C. M.
Colenville, P. Ont., Canada, May 11, '78.

We received the "Cricket" all right. It is just what we wanted, and is the delight of the whole household. It is a beautiful little time-keeper. Please accept our thanks. A. H.
Madison Co., N. Y., May 10, '78.

Received "Cricket" in good order; it fully came up to my expectations, and they were placed high. I would not part with it for five dollars. J. W. W.
Warsaw, Mo., May 11, 1878.

The clock sent upon my order to A. M. B—p reached him safely and gives satisfaction. It was exhibited at our Grange—No. 465—yesterday, and was pronounced "a perfect beauty" by all who saw it. Nellie B.
Oakland, Miss., May 7, 1878.

I received the "Cricket" clock by express. I have given it a good trial as a time-keeper, and am entirely pleased with it, and so are all others who see it. The Rural is quite full of useful reading matter and is well worth all it costs, without the "Cricket;" I accept the little "Cricket" as a gift. Mrs. C. E. T.
Emporium, Pa., May 7, 1878.

Of all the weekly agricultural papers of which we are in receipt, we must, in justice, in our judgment, award the premium to the Rural New-Yorker, 78 Duane street, New York city. We were induced to pay for it by the premium of a clock offered to yearly subscribers, for $3.50. our expectations in its manufacture, reliability, and appearance. Besides the paper is well The time-piece we have received, and it is beyond worth the subscription, without the premium. We do not believe we can give our numerous readers better advice that to subscribe for the Rural New-Yorker.—*Florida Dispatch.*

The Querist.

ANSWERS TO CORRESPONDENTS.

An Uniform Flow of Milk for Market.

Walter Severly, Venango Co., Pa., asks how he can best keep up from his cows a uniform flow of milk all the year round so as to satisfactorily supply his city customers; what feed and treatment of cows would best conduce to this end.

ANS.—A system to preserve a good, uniform flow of milk, depends upon circumstances. The easiest and best way during the summer months, if the owner has plenty of pasture, is to turn the cows to grass during the day, and at early evening, give them in the stable a liberal feed of finely ground bran or oats, and after eating this, put them back again into the pasture. If pasture is scarce, keep the cows in the stable during the day-time, and give them two feedings of bran or meal, morning and night, and all the forage they will consume, feeding them three times a day. Put them in the pasture at night. Under any condition let them have all the water they want, and at least twice a day. The quantity of meal should be regulated according to the size of the cow.

Green feed will make the most milk, over any other food, provided it is of such a kind that the cow will eat bountifully of it; but the milk will not be as rich as if the cow was fed some meal with it. For stable feeding in summer, there must be a variety of green forage, beginning with rye, the earliest, and oats, clover, corn and millet in their order. For winter feed, brewers' grains will make a free flow of milk. They can be fed in connection with hay or cornstalks. The largest flow of milk and the most uniform can be produced by cutting the forage, and steaming it, mixed with bran and roots. This form of food keeps the cow the nearest to a summer condition in her food, as it is succulent and laxative, and if fed a regular quantity, will produce a steady and uniform flow of milk. Being fed warm makes it all the more suited to promote immediate and generous secretion, as the system is not chilled, or the digestive functions in any way set back; but, on the contrary, the food is put in the condition to be rapidly and freely digested, and the rumen emptied ready for another supply. To have a uniform quantity of milk, the cows should be managed so that they will become new milkers at different times of the year. A good cow is an essential part of a dairy, and should be thought of first. A warm stable in winter is another important consideration. The stable should be so warm it will never freeze, and the cows should be kept in it all the time, except while they are getting a drink. The stable should be so constructed that the cows can lie down comfortably. When a cow is cold and weary and restless, she will not do well. Let them have room to move about a little, and lick themselves, and keep them warm, and give them all of the succulent food they will eat, and there will be a generous reward.

Seeding Potatoes.

W. H. Mower, Cheshire Co., N. H., asks about seeding potatoes so as to obtain the best results in quantity and size; 1. how many bushels should be used per acre; 2. should the tubers be planted whole or cut to single eyes.

ANS.—By all means cut the potatoes, even if so small that a whole potato is needed. Cut potatoes, especially if the cut surface is slightly dried and hardened, push the shoot much more rapidly than potatoes planted whole. With regard to amount of seed needed, it varies with different sorts, size of potatoes and distance of the hills from each other. With hills three feet apart each way, Early Rose and Early Vermont, from three to five bushels are enough; of Peerless and Late Rose five to eight bushels, per acre; Cut in pieces with two or three good eyes and plant one piece in a hill of the early sorts, and two pieces per hill of strong-growing varieties. On rich soil Peerless and Late Rose will often grow too large and misshapen, if only one piece per hill is planted. Planting two pieces per hill remedies this evil, making more potatoes and of good market size. It is much better to have two pieces with two or three eyes each than one piece with five or six eyes. Reject any small, and all unripe potatoes. Those about the size of hens' eggs of Early Rose make good seed, and can be cut in three to six pieces. It does not pay to cut to single eyes except with new and very scarce varieties. Good crops are thus grown, but it is too much labor. Drill culture is also expensive, and of no advantage to strong-growing sorts; but of Early Rose more potatoes can be grown per acre in drills three feet apart and potatoes 15 inches distant in the rows. But this rarely pays. Fully 150 to 175 bushels of Early Rose can be grown in hills 32 to 36 inches apart, with most of the work of cultivation done with the horse-hoe. Unless land is very scarce and labor very cheap, hills, with rows both ways, are much preferable to drills.

Remedies for Gapes in Chickens, Etc.

Frank Crane, Wayne Co., Ohio, asks, 1, for some means of preventing a cow losing her milk towards the end of the day; 2, a remedy for gapes in chickens.

ANS.—To prevent a cow losing her milk towards evening: milk her three times a day until the tendency to do so, is removed. See also answers to E. M. A. in this department. 2. Spring is peculiarly the season for gapes among chickens, and every year, as it comes round, inquiries are made and answered with regard to its treatment. As it is due to the presence of gape worms in the windpipe of the chick, these must be removed or killed before it can remedied. To effect this numerous means have been found more or less effectual, among the most strongly indorsed of which are the following: Strip off the vane of a small feather to within an inch of the end; dip this in spirits of turpentine and then thrust it down the windpipe; give it a turn or two and draw it out quickly, bringing out the worm or killing it. Another: blow tobacco smoke into the chick's mouth; a portion will pass down the windpipe as it breathes, thus reaching the worm and often killing it. A better way: twist a horse-hair, making a small loop at the end; insert this in the chick's windpipe, give two or three twists with the thumb and fore-finger, and a quick pull out will generally bring to light a couple of worms about half an inch or more in length and of a blood-red color. If unsuccessful at the first attempt, try again, and continue until all the pests—sometimes as many as a dozen or even more—are removed. Camphor, a very strong vermifuge, is also said to be an excellent remedy. It is usually given in small pills, about the size of a pea, especially in the early stages, and also diluted in the water the chicks drink. Gapes is nearly always the result of foul water, exposure to wet and want of proper nourishment, unless when it is communicated from infected fowls. These causes should be abated, of course, and the afflicted chicks strictly separated from the others.

How To Use Paris-green.

W. L. Gray, Somerset Co., Pa., asks, in view of the early appearance of the Colorado beetle, and in consideration of this being his first season on a farm, how Paris-green should be used.

ANS.—The easiest, quickest and safest way is to mix Paris-green with water in proportion of a tablespoonful of the former to a pailful of the latter. Use a brush or swab, made by tying a handful of fine corn-husks to the end of a stick two or three feet long. Take the pail in one hand and the brush in the other, give each plant a thorough sprinkling, stirring the water from the bottom of the pail occasionally as the Paris-green settles, and taking two rows at a time. The sprinkling should commence just as soon as the young beetles or larvæ make their appearance and, if a second swarm appears after the first has been laid to rest, the newcomers must be treated in the same prompt manner as their predecessors. A common watering pot with a rose may be used instead of the brush. The powder may also be mixed with flour or plaster and dusted in the cool of the morning according to directions frequently given in these columns.

To Prevent a Cow Leaking Her Milk.

E. M. A., Smithville, Ont., Canada, asks for some method practiced by farmers for preventing a cow from leaking her milk.

ANS.—Several ways of remedying this evil are in practice among farmers: First, after milking, place an India-rubber ring round the teat, to be kept there for two or three days at a time, during three or four weeks, until the udder expands sufficiently to hold the milk. Second, milk the cow three times instead of twice a day until the muscles of the teats gain sufficient strength to hold the milk from morning until evening. Third, immediately after milking, wipe the teat dry, and with a small brush apply to its end a small quantity of collodion that may be had at the druggist's. This at once forms a thin, tough membrane or skin which will prevent leakage, and is easily removed before milking. Fourth, take white-oak bark, put it into water, boil it down to a strong solution; then, after every milking, soak the ends of the leaky teat or teats in the solution for a few minutes, and prevention is said to be sure. These four remedies are given separately by practical farmers, each of whom says he has found his successful; if all prove useless, take the cow to the butcher, as he alone can remedy the evil.

Ayrshire Cattle.

A Subscriber, Oconomowoc, Wankesha Co., Wis., asks whether the Ayrshire cattle are a distinct breed or only the product of crossing other breeds.

ANS.—The present Ayrshire cattle are undoubtedly entitled to be considered a distinct breed, having the faculty which constitutes a breed—the power of certainly transmitting to their progeny their own distinctive charactoristics. After an examination of many authorities on the subject, Youatt concludes that the ancestors of the present breed were introduced into Ayrshire, Scotland, and the adjacent districts, by the Earl of Marchmont, between 1724 and 1740. It is conjectured that they were originally either of the Teeswater breed, or derived from it. It is by crosses from these original progenitors with the native cattle that the present improved breed of Ayrshires has been developed.

Miscellaneous.

A Rural Reader, Troupsburgh, Steuben Co., N. Y., asks whether the Cape Jessamine is a house plant by nature, and what treatment does it require in order to make it blossom.

ANS.—It is a hardy greenhouse plant; that is, it will endure some exposure. It may be used as a bedding plant during summer and removed to a frost-proof shelter during winter. It should be potted in a mixture of light loam with a small portion of white sand and well-decomposed manure. The proper name of the Cape Jasmine or Jessamine is Gardenia.

Treatment of Hoyas.

Mrs. P. D. W., Park Place, Arkansas, asks what is the matter with her Hoya. It looks fresh, after being in her possession two years, has plenty of vigorous-looking roots, but only a single leaf which appears to get thicker; otherwise there is no change in it.

ANS.—Hoyas like a stove heat and full exposure to the sun, and the soil should be fibrous with a little loam and sand, adding bits of charcoal to keep the soil open.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MAY, 18TH.

H. — M. B. C. — R. S., always acceptable — J. L. N.—F. D. C.—"Friend"—L. A. R.—W. C. L.—A. L. J.—H. J. D.— G. E. S.—P. S. W.—W .C. W.—W. T. M.—E. O. K. — W. H. W.—G. P.—J. L. D.—J. W. K., thanks—C. W. G.—N. W. B.— E. L. C.—R. A. D.—A. P.—E. B. C.—T. M., thanks—W. L.—C. D. H.—H. R.—B.

Everywhere.

NOTES FROM THE RURAL GROUNDS.

BERGEN COUNTY, N. J., May 15.

THE FROST.

WHEN in the care of fruits, vegetables, crops or plants of any kind, disasters come which by a little extra work or thoughtfulness might have been averted, we are full of self-reproach for the neglect. When, however, our best endeavors fail to avert disasters, there is much of consolation in the thought that the misfortune was not merited. So far as possible we had prepared for a sharp frost. The bedding plants were covered in so far as we could provide articles with which to cover them. Even the grape vines were covered with newspapers. Not less than thirty varieties of grapes showed buds, many of them for the first. Some of the stronger-growing had made shoots eighteen inches long. But the frost was too severe to render the paper-protection of any value. The shoots were withered and blackened to the buds from which they sprang. All of the bedding plants were injured or killed outright. The leaves of Magnolias and the flowers of those which were blooming were seared as if by a burning wind and these trees look, as we write, as if it were late fall instead of late spring.

The effects of this frost were very peculiar. It would seem that had it been a trifle less severe, it would have done comparatively little harm, and had it been a trifle more severe, it would have done incalculably more harm. For instance, the topmost leaves of one Tulip tree growing in a high, southern exposure, were withered. Upon another Tulip growing in a northern exposure upon the banks of the lake, not a leaf was touched

In one part of our grounds, the new shoots of the Norway Spruce wilted over so as to rest upon the stem. In another part they were not appreciably affected. In one part, the new shoots of Picea firma were killed; in another, but slightly injured. The leaves of one Wistaria were scorched; of another, not at all. Some of the green strawberries were blighted; others not harmed so far as can be judged at present. About this neighborhood, corn three or four inches high, was cut off in patches over the field, while the rest was unharmed. So of potatoes. While in other fields the corn was everywhere killed and the potatoes blackened to the ground. In some localities, not over half a mile distant, the frost was very light—in others persons did not know there had been any frost. One thing we observed that may be worthy of note, is that purple-leaved varieties did not suffer the same as green-leaved varieties or species. The leaves of such shrubs and trees as the purple-leaved Filbert, purple-loaved Berberry, Birch, Beech, Oak, &c., were not, so far as we could discover, curled or wilted in the least, while those of the hardy Yellow Wood, yellow-flowering Horse Chestnut and green-leaved Oak (Quercus fastigiata,) Hazel and Birch were.

One is very apt to exaggerate the damage done on such occasions in the first flush of disappointment. In reality it is not a very serious matter. Corn can be planted again—potatoes will keep on growing though the check may lessen the yield and make the crop a little later. We do not shed tears over the destruction of our tender bedding plants. We can replace or go without them. Besides, we knew there was still a likelihood of frost for three weeks when they were put out, We danced—and we propose to pay the fiddler cheerfully. But our grapes! Some of them were seedlings just coming into bearing. With a parent's fondness we would like much to have seen them fruit this season instead of waiting another interminable year. But we suppress the tear. The grapes might have proved sour, and disappointed our hopes. We will hope on another year. A sweet hope is better than a sour reality.

RURAL SPECIAL REPORTS.

NEW MARKET, Shenandoah Co., Va., May 13.

I LIVE in what is called the Shenandoah Valley, lying between the North Mountain and the Massanutten Mountain. The land lies generally rolling, interspersed with creek and river bottoms. The soil throughout the Valley is generally fertile; almost all kinds of cereals are grown here, but wheat and corn are the chief products. This country is well watered; a number of mills are in operation along the streams, and there's room for a good many more. Mills and factories of various kinds are needed. The climate here is healthy; epidemics and malarial diseases are not experienced here.

Any one of the RURAL readers wishing a good home, can find one here; people are social and hospitable. Virginia is justly famous for her valuable mineral springs. Among those that deserve honorable mention, is the popular and delightful summer resort, known as the Valley View Springs. Any one wishing to spend the summer in the country can do so to their heart's content at these springs. They are situated in the mountains of the valley of Virginia, two miles east of New Market, on the New Market and Sperryville Turnpike, and four miles from the New Market depot. This location is one of the highest and most easy of access in Virginia; the air is the purest and most bracing; the scenery grand and picturesque. The waters, white and yellow sulphur, are without their equals, and the iron or chalybeate water is equal to any in the State. These waters, as a tonic or alterative, cannot be excelled. We've been having cool, wet weather since the first of May with the exception of a day or so. The farmers have not finished planting corn yet owing to the wet weather. Some of the farmers have plowed their corn already, while others have not planted yet. Wheat looks well; a fine prospect for a good yield here; it is mostly in head at present. There are more acres sown in wheat here than usual; oats are up and look promising. Wheat is worth $1.10; corn, 60@75c.; oats, 35@40c. per bushel; butter, 15c. per pound; eggs, 10c. per dozen. P. S. W.

LINDEN, Union Co., N. J., May 14.

LAST evening the thermometer, at 7 o'clock, stood at about 50° on the north side of my house; and at 3 o'clock this morning it was down to 28°, and at 7 o'clock it was up again to 50°! Ice was formed on water in a pail at my pump, as thick as ordinary window glass, and the result of the frost is severe. Potatoes, early corn, beans, tomatoes &c., were cut down. I never plant corn, beans, and other tender vegetables till the 15th to 20th of May, so I escaped loss in these things; but the thousands of silly people who cannot witness mild weather in April, and in early May, without rushing in seeds of all kinds of vegetables, will learn a lesson by this frost, that they will remember one year at least. Grape vines in some places in this vicinity were badly injured. Mine were not much hurt, but how the young shoots and setting fruit could stand a degree of cold uninjured, four degrees below the freezing point, is a mystery to me. In an acre of vines only one year old, all leaved out, the frost took one here and there—one in ten perhaps—leaving the others untouched. I account for this by the fact that frost of a light degree goes in veins, or currents, cutting down plants as the stronger currents happen to strike them. T. B. MINER.

CORRY, Erie Co., Pa., May 13.

FOR the past three weeks there has been so much rain that it has made farmers somewhat backwards in doing their spring work. Things are from three to four weeks earlier than common. Wheat and all kinds of fruit promise a large yield if the cold spell that we are having at present does not destroy them. On the night of the 11th ice formed to the thickness of window glass, and last night, the 12th, it looked as though we were all going to be frozen up; but we were happily disappointed, when we got up in the morning, by finding the ground all covered with snow in place of a hard freeze. It is warming up so well now that we may escape disaster this time. Butter is worth 15@16c.; eggs, 10c.; potatoes, 25c.; oats, 32c.; and corn 50c. per bushel here. C. D. S.

HUNTER'S BOTTOM, Carroll Co., Ky., May 13.

WHEAT is rusting badly, and that which was the most flattering prospect for an abundant harvest ten days ago, is now the most discouraging; although our old farmers say that red rust does but little damage, while the black rust is fatal; and as it is, so far, only the red, we "hope against hope" that our fears are unfounded. Our wheat is in full bloom and the heads are exceptionally large.

S. E. HAMPTON.

WARSAW, Benton Co., Mo., May 12.

WHEAT in the prairie portions of this county (Benton) looks bad, while the timber portion

promises a fine yield; corn about all planted. Corn worth 25c.; wheat, 85c.; potatoes, 20c.; stock hogs, 2c. per pound; fat cattle, $3 25; cows and calves, $20@25; land from $1.25 per acre to $15; eggs, 5c.; butter, 10c. Season at least one month ahead of last season.

J. W. W.

RURAL FARM, Long Island, May 16.

FROST has destroyed all beans both bush and running. Tomatoes were much harmed. Corn is badly bitten but will probably recover. Potatoes were harmed. Perhaps one-fifth of the vines are blackened. Spring Wheat and Oats are very fine. Potato beetles in abundance and a larger deposit of eggs than we have ever before noticed.

COBLESKILL, N. Y., May 13.

IT is very cold here to night; heavy frosts in Utica, Little Falls, and St. Johnsville; ice in the hills at St. Johnsville. We had quite a heavy snow storm this morning. There is every prospect of ice making here to-night, as it is clear and cold. R. H. N.

FLUSHING N. Y., May 16.

THE frost made a clean sweep of our grapes destroying half an acre. The seemingly delicate foliage of the Japan Maples was not harmed in the least. S. P.

ALBANY, N. Y., May 14.

IT is a little warmer to-day. As far as I can hear the frost through Central New York has done but little if any damage. W. H. K.

Dairy Husbandry.

SHALL DAIRYMEN INVESTIGATE?

J. M. PETERS.

"I SUPPOSE, chemically speaking, there are differences between these brands of salt, but, practically, the only point I can see that should be watched by the butter dairymen is to see that the salt is white, dry and free from lumps and trash of every kind. The chemical distinctions are beyond our ken, and as long as we cannot see them, there is no need of looking for them."

THE above is the closing paragraph of an article, by Mr. L. S. Hardin, descriptive of a salt test, in which the writer, as the few lines quoted would indicate, failed to detect any difference in samples of butter from a single churning, salted, respectively, with Ashton's, Higgins' and a "mongrel" brand. I do not propose to enter into a controversy with Mr. Hardin upon the merits or superiority of any brand of salt, but I must mildly protest against his assertion that there is no need of looking for things which we have reason to believe exist but which, on a cursory examination, we cannot see. It would be unjust to Mr. Hardin for us to accept his own words as indicating a real indifference on his part to the hidden mysteries of his profession. He has been too keen and studious an investigator of all that relates to the practice and science of dairying, to merit the reputation which he would give himself, of being a man content with mere "surface indications," and before the ink was dry on the article from which I have quoted, I will venture to say he had conceived some more searching test by which he might determine the chemical differences which he feigns to ignore.

In any event, it is dangerous for the dairyman, or for the farmer in any other branch of his calling, to content himself with a superficial knowledge of his work or of the manifold methods and materials which enter into it. The chemical researches of Liebig, of Johnstone, of Sturtevant, of Arnold and of others who have labored in the field of agricultural chemistry, have helped to make the studious American farmer, and above all the American dairy farmer, the leader of his class throughout the world. It is not appointed unto every farmer to be a chemist, but agricultural chemistry, as it is given in the RURAL and in others of the journals which devote themselves to this great work, is brought within "the ken" of every man, and his practical knowledge should enable him to apply it profitably in the tilling of his land, the raising of his herds and the manufacture of his products.

I agree with Mr. Hardin that there are chemical differences in dairy salts, and while his tests have failed to develop them, equally simple tests that I have witnessed, have shown most plainly that these differences may be detected by very simple tests, involving no other chemical processes than are at the disposal of every dairyman. A glass of water and a few ounces of salt will afford means for a test which has convinced me of some differences in dairy salts. Moreover, I have seen differences in just such tests as Mr. Hardin made, result in clearer evidences of the chemical differences than he was able to obtain. I cannot, however, pretend to settle this point, but should prefer leaving it to every dairyman to make his own tests, cautioning him, meanwhile, that nothing that he may even suspect is so far "beyond his ken" as to warrant him in remaining ignorant of its actual existence and character.

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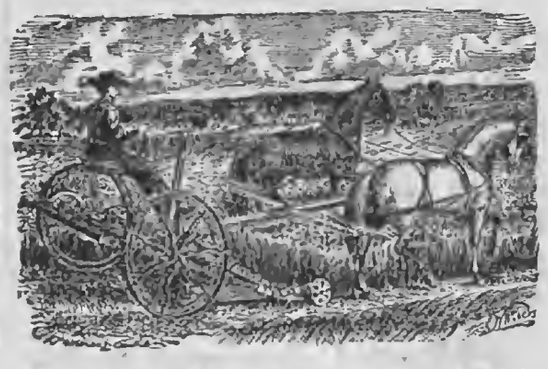

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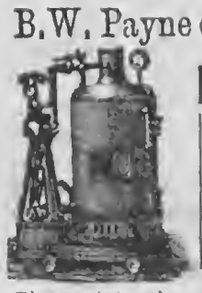

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Tiger, The (Illustrated)..... 325
Rotation of Crops; Some Benefits of—W. H. White..... 326
Notes from Maplewood Farm—Hector Bertram (Illustrated)..... 326
Potato Prospect, The—Wm. J. Fowler..... 326
Vegetables at Fairs, Exhibiting—Prof. W. J. Beal..... 326
Woolen Interests, The..... 327
Catalogues, Etc., Received..... 327
Flowering Shrubs, Handsome—William Falconer 327
Flowering Plants for Rooms—James Taplin..... 327
Quinces, Two New Japan—Samuel Parsons..... 327
Currant-Worm Saw-Fly, The—B. Pickman Mann 328
Starch, Manufacturing Potato..... 328
Shoeing Horses—Ewd. O. Kingman..... 328
Popular Fallacies—T. T. Lyon..... 328
Hog Cholera and Government..... 328
Haying Apparatus (Illustrated)..... 329
The Mill, The Phœnix (Illustrated)..... 329
Mower, The Direct Draft Eureka..... 329
Organ, The Prince..... 329
Portable House, The Holmire..... 329
Bradley & Co., Messrs..... 329
Steam Engine, Wood, Taber & Morse..... 329
What They Say of It..... 329

Answers to Correspondents:

Milk for Market, A Uniform Flow of..... 330
Potatoes, Seeding..... 330
Gapes in Chickens, Etc., Remedies for..... 330
Paris-green, How to Use..... 330
Cow Leaking her Milk, To Prevent..... 330
Cattle, Ayrshire..... 330
Hoyas, Treatment of..... 330
Miscellaneous Answers..... 330

Everywhere:

Rural Grounds, Notes from the..... 330
New Market, Va..... 330
Linden, N. J..... 330
Corry, Pa..... 330
Hunter's Bottom, Ky..... 330
Warsaw, Mo..... 330
Rural Farm, N. Y..... 331
Cobleskill, N. Y..... 331
Flushing, N. Y..... 331
Albany, N. Y..... 331
Shall Dairymen Investigate?—J. M. Peters..... 331

Domestic Economy:

The Washing of Muslins, Cambrics, Woolens, Etc..... 336
Cleaning Beds..... 336
Kerosene Lamps, The Care of..... 336
Domestic Recipes..... 336
Markets..... 337

EDITORIAL PAGE:

Paris Green and the Potato Beetle..... 332
Change in the American Agriculturist..... 332
The French Exhibition..... 332
How to Control the Bearing Year..... 332
Hills or Drills..... 332
Notes..... 332
Brevities..... 332

LITERARY:

Poetry..... 333, 336, 338
Cora..... 333
Recent Literature..... 334
Bric-a-brac..... 335
Extracts from "Wife Torture in England"—Frances Power Cobbe..... 335
Items for Correspondents..... 335
Napoleon and Mme. Recamier..... 335
News of the Week..... 336

Reading for the Young:

Pocket-Money for Young People: No. 3—M. B. Prince..... 338
Education..... 338
Letters from Boys and Girls..... 338
The Puzzler..... 338

Sabbath Reading:

Sinai..... 338

Personals..... 339
Wit and Humor..... 340
Advertisements..... 331, 337, 339, 340

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SATURDAY, MAY 25, 1878.

PARIS GREEN AND THE POTATO BEETLE.

FROM letters received we find that there are localities to which the Potato Beetle has been a stranger until now. We find also that there are many who now propose to use Paris-green who have opposed its use before, and finally that there are many who are not familiar with the best methods of mixing and using it. The topic is timely and we will therefore repeat in brief what we have said at length many times before. Some prefer to mix the Green with water—others with flour or plaster. Either is quite effectual. In the one case a watering-pot that will hold a pail of water—in the other a sieve of some kind is needed. Any tin vessel with holes punched in the bottom will serve. A flour-sieve with a covering of muslin or paper tied about it answers well enough.

To twenty parts of cheap flour or plaster, add one part of Green and mix thoroughly. Sift this upon the leaves before sunrise while they are filmed with dew. It is labor and material lost to wait until the dew has been in part or wholly evaporated, since there is nothing to hold the dry powder and the first breeze blows it away. We find even now that there is an impression that the contact of Paris-green with the beetle or its larva is necessary to kill it. Contact however does no harm. In eating the leaf a minute quantity of the poisonous powder is eaten and the bug is thus destroyed.

A heaping tablespoonful of Paris-green may be stirred into a pailful of water in quantity and applied as we have above indicated stirring it the while as the Green is not soluble in water.

The present beetles will effect comparatively little injury to the vines but each of the females will lay perhaps a thousand eggs. These may now be found in clusters upon the under part of the leaves. They will hatch out in a few days and then their work of destruction begins.

THE FRENCH EXHIBITION.

THE international Exhibition opened in Paris on the first of May, is at once a convincing proof of the marvelous recuperative power of the French nation, a powerful evidence of the pacific disposition of the most belligerent race in Europe, and a strong testimony to the stability of the newest republic in Christendom. 'Twas only yesterday that battered France lay prostrate at the feet of arrogant Germany, her government overthrown, her industry disorganized, the remnants of her once invincible armies prisoners in Germany, exiles in Belgium and Switzerland or demoralized bands struggling vainly though desperately against overwhelming odds on her own devastated soil—the proudest people in Europe so utterly crushed and humbled as to draw forth the warmest sympathy of friends and even the pity of national foes. She rose exhausted with her efforts, weighed heavily with a load of debt purposely placed upon her with the design of keeping her down for a generation at least; but resolute, self-reliant and still full of spirit. In a few short years she has cleared off her indebtedness, organized a free and stable government, so thoroughly restored her industry as to be able to challenge the world to compete with her, reformed her armies, so as to place her once more in the foremost ranks of European nations, and now while the whole neighboring continent is groaning under the burden of warlike preparations, France calmly invites her admiring friends and foes to her beautiful capital there to witness a grand display of the arts of peace.

CHANGE IN THE AMERICAN AGRICULTURIST.

DOUBTLESS it *is* "a matter of regret to the friends of The Country Home that its publication should be indefinitely postponed." We had proposed to give it an immense welcome. It was to have been a glorious journal—printed upon highly-calendered paper, beautifully illustrated and ably edited. It was to have been the RURAL NEW-YORKER inspissated, refined, perfected so far as we could judge from what we heard and read. The price was to have been $3.00 and the size that of the Christian Union. At the eleventh hour the managers discovered what seemed to them a better opportunity of "expending their energies," than that of a "new and untried enterprise notwithstanding their faith in its ultimate success." The managers trust that this "combination" (if the word can be used to express the adding of something which was to have existed to what does exist) will be as the "engrafting of fresh and vigorous cions upon a sturdy tree, still in full vitality and that the product will be acceptable to all who shall gather the fruit."

Mr. ORANGE JUDD remains as President of the Company but he will be relieved from the "brunt of the work." Dr. GEO. THURBER also, the new managers think, "has nobly earned the partial relief which comes to him at this time." We are right sorry that The Country Home was not born. But we are glad that the suppressed embryo is, as it were, dissolved and injected into the veins of the old Agriculturist. "Mr. E. LIBBY takes the position of managing editor of The American Agriculturist and Mr. BECKWITH that of Treasurer of the Company."

HOW TO CONTROL THE BEARING YEAR.

EVERY strong man is capable of doing a limited amount of hard work. Any work beyond his powers of endurance, however, exhausts him and a longer period of rest is required than usual to restore his wonted physical powers. The same as he is capable of a certain amount of work, he is benefited by a certain amount of food. If less than enough, his strength is impaired. If more, the functions of his system are harmed by surfeit Is the analogy good if applied to fruit trees? It appears that the tendency of fruit trees is to overtask themselves. They are taxed too heavily one season—they recuperate the next. How can we treat our apple trees so that their work shall be distributed evenly from year to year? If the soil affords an abundant supply of food we have only to regulate their work. We have to deprive them of the means of exhausting themselves so that they shall perform just the amount of work of which they are capable without exhaustion. If the soil does not naturally supply a sufficient quantity of food, we must enrich it so that it will.

If it is true that if the vitality of an apple tree is so impaired one year by bearing an excessive crop that it fails the next, it would seem to follow, supposing the tree derives from the soil in which it grows suitable and sufficient nourishment, that, if in the bearing year it were deprived of half of its fruit as soon as it had formed, it would be in a condition to mature a crop the next year also.

HILLS OR DRILLS.

ONE of many experiments tried at the Agricultural College farm of Kansas in 1876 sets forth the comparative merits as between the old method of planting corn in hills and that of planting in drills. Four plats were laid off across a portion of a field quite uniform as to the character of its soil. Each contained four rows of corn, the rows being three and a-half feet apart. In the first plat the corn was planted in drills; in the second in hills, after the usual way; again, the third was planted in drills, and the fourth in hills. When the corn was about six inches high the drilled plants were thinned out, leaving the stalks as nearly as possible ten inches apart in the rows; the plats in hills were likewise thinned out, leaving the same number of stalks in every plat throughout the experiment. In cultivating the plats care was taken to give each the same treatment, and beyond thinning, hoeing once and cultivating twice, no special treatment was given the plats. The corn was husked November 11th, and the weighings showed for the drilled plats a yield of 71 bushels per acre; for the plats in hills, 62½ bushels per acre—an advantage in favor of the method of planting in drills of 8½ bushels per acre.

Raising Corn.—Among the controversies of the Ohio Farmers' Club, it is stated that "it don't require any *scientific* attainments to raise good corn, if the land is good, but it does require some practical common sense and some industry." If science is anything it is knowledge—it is truth ascertained. If common sense means anything in particular, it means a certain amount of intelligence which enables one to perform certain simple acts as they should be performed. But how was that "certain amount of intelligence" obtained? Was it inherited? Did it come without investigation? The best methods of the present which may have been handed down from generation to generation are not the less due to science because they were discovered centuries ago. All who intelligently observe and investigate are scientists to that extent, and every discovery that flows therefrom is due to what is termed science, call it by whatever other name we will.

Hints about Insect Pests.—The white-ants, or termites, about which there has been a scare now and then, are justly feared. Remember that they are not ants at all, but get their name only from a very superficial resemblance to ants. The sexual individuals are already developed and will fly abroad in June. The colonies live in damp, dead wood, such as stumps and the boarding of cellars. They will suddenly spread through the timbers of the house and reduce them to shells, when—down comes the house, with the people in it. For Aphides, when leaves cannot be washed, encourage the Syrphus (Gay-fly), Coccinella (Lady-beetle), Chrysopa (Lace-winged fly), and discourage ants, which latter take care of the plant-lice and defend them from their enemies.

Alternation.—It is the undoubted fact that unmanured land upon which is grown the same kind of crop year after year, becomes "exhausted." Will this same land nourish other plants without manure? If it has become exhausted for wheat will it grow rye? How is it with the forests? Can they support, without any rest, the same trees for ages? Do the leaves which fall supply to the soil all that the roots have withdrawn? How can we explain then the fact that where once flourished Beeches, Birches and Oaks years and years ago, now we find Pines only, and, *vice versa*.

English Sparrows.—In connection with the English Sparrow, let us say: It was introduced to exterminate the inch-worm (popularly so-called) from the streets of some of the cities of this country. It did exterminate it. We knew when the experiment was tried the low estimate in which the Sparrow was held in England. Our cities were rid of the inch-worm,—the country is alive with the English Sparrow! The remedy for the cities is the disease for the country. The country people have now to set about exterminating this disease for the introduction of which we have to thank our city friends.

BREVITIES.

TORCHON lace is much used on lawns. Lawn mowers are not needed.

THE first ripe strawberries in the neighborhood of the Rural Hort. Grounds (Bergen Co., N. J.) were picked the 18th inst. They were Wilson.

The chief lesson which Mr. Mechi's (England) last balance sheet gives is the policy of striking out unusual lines of action for oneself upon the farm in bad times.

MR. BATEHAM says that 20,000 bushels of strawberries were grown about Cleveland in one season and consumed by that city. The port of Norfolk, Va., reported about 100,000 bushels of strawberries for 1877.

THE price of Asparagus has doubled owing to the frost which in many places killed the shoots to the ground. As we go to press (Monday) a warm steady rain is falling and everything injured by the frost fast recovering.

MICHIGAN State Pomological Society. The summer meeting is announced by Secretary GARFIELD to be held in the city of Jackson, Tuesday, Wednesday and Thursday, June 18, 19 and 20, commencing with an afternoon session at 2 o'clock on the 18th, and closing with a morning session on the 20th. The programme is as usual, attractive and practical.

MR. HENRY KING, writing of "Old-fashioned flowers" in The Western Homestead, says: Let us have them, then, in profusion. Land is plentiful, the seeds cost but a trifle and the air and sunshine will cheerfully do most of the gardening. The only thing in the way is snobbishness, for the old flowers are the ones God gave to the world when the world was a paradise; and what was good enough for Eden is good enough for Kansas.

THE second annual Bench Show, under the management of the Westminster Kennel Club, was opened in New York on the 15th and continued for three days. The large structure, Gilmore's Garden, was well filled with representatives of every valuable breed of dogs. Setters predominated. Toy dogs, such as Pugs, Terriers, Dandie Dinmonts, and Japanese specimens, attracted the curious, while *connoisseurs* gathered about the Beagles, Pointers, Setters, and other breeds valuable for their useful qualities. The representation was large, and the quality above the average.

THE Agricultural Gazette of England gives the following curious manifesto issued by some agriculturists of the county of Essex on the state of their affairs and the low price of labor: "*A Proclamation to our worthy laborers.*"—We, the neighboring farmers, deeply deplore our inability to continue the present rate of wages to our worthy laborers; the fact is, we cannot afford it. Free trade has brought us into close competition with foreigners, who pay so little money for labor, that dark-brown rye bread, skim-milk cheese, and a few onions, is (*sic*) all the men get. With these foreign serfs, who are bought and sold with the land, like cattle, are we now contending in our own markets. Much as we deplore it, we are obliged manfully to tell you, that if we are to give you constant employment, we cannot pay the present wages. Essex must come to what many other counties have already come—6*s* and 7*s* a week. We will give as much as we can, but it must be in proportion to the price of corn; the money lost by farmers this year is dreadful. Down with the malt tax! God save the Queen!—Billericay, March 14." [1851]

IN the proceedings of the Michigan Pomological Society, we commend the following remarks of Mr. THOMAS to some of our farmer-readers: "I am a very plain man, and perhaps most of you would not think from a gaze at my exterior that I am a passionate lover of flowers. But there is nothing in which I take greater delight, and from long experience in farm-life I can say that, although I have given a great many hours to the cultivation of flowers, the time thus spent has been by no means lost. I am no poorer for my flower garden. I am richer in all that makes my life worth living for. And when any man excuses himself from assisting his wife and children to arrange a flower garden because he has no time for such foolish things, I set him down as one who does not take any broad ground in matters of real economy. I look upon economy as something that applies to more than a man's pocket-book. It looks to the health and happiness of his family, and it is my conviction that there is nothing connected with farm life that has more elements of true economy in it than the plan of spending time and thought among the flowers."

MR. MECHI, a distinguished English farmer, to one who asks his advice, says:—"Without a thorough knowledge of farming and suitable conditions, it is a business to lose money by." In conclusion, he says:—"I know some sharp men of business, not bred farmers, who make farming pay." The inquirer replies to Mr. MECHI, from which we quote:—"I know nothing of farming except from book reading. Well, nor did I of vegetable gardening; and yet I have succeeded very well in that line, going chiefly by book instruction and using such common sense and observation as nature furnishes me with." The editor of the London Agricultural Gazette, in which the correspondence is published, strongly dissuades the inquirer from investing his capital in farming and suggests that he had better deny himself enough to pay the annual premium on a life insurance out of his £300 per year (his income) and leave the agricultural venture alone. But it is an unfortunate fact that the advice of the most experienced men as to whether others should engage in this or that occupation, is of little value. If the man who desires so to engage in any particular employment will take pains to ascertain what others *have* done, situated substantially as he himself is, he is himself the best judge whether to engage in it or to let it alone.

Literary Miscellany.

TO ALBERT PIKE.

Suggested by his Article in Rural, entitled "Every Year."

J. T. MORRISON.

To me each budding spring doth brighten
Every year,
And the fragrant blossoms whiten
Every year,
The April showers earlier quicken
The leafing trees—and verdure thicken
Every year.

Altho' I know I'm growing older
Every year,
The world to me does not grow colder
Every year,
Tho' sorrows with my loves are blended,
My joys of friendship are not ended
Every year.

Tho' my infirmities remind me
Every year,
That my youth I leave behind me
Every year,
Yet affection's ties shall bind me
To this life (till death shall find me)
Every year.

And as life's shadows lengthen
Every year,
Then my thoughts of love shall strengthen
Every year,
More firmly grow the recollection
Of earthly friendships and affection
Every year.

CORA.

STANLEY bent over the little jeweled hand, and touched it with his lips.

"Where are you going now?" asked, Helen, lifting her brilliant eyes to his face, inquiringly.

"To the club," he answered, "at once;" but when he entered his cab, which was waiting at the door, he desired the servant to drive to No. 17 Rivington Square, and then stopped at the house inhabited by Sir Alan Vincent. The door was opened by Marks, whose quiet face showed no sign of recognition of the visitor, except that an evil gleam shot for a moment into his blue eyes.

"Her ladyship is at home, my lord. Sir Alan is at Richmond."

And the Viscount followed a footman up the broad staircase into the drawing-room, where Cora was sitting alone. She started nervously when she saw who her visitor was, but greeted him with some self-possession.

"I am fortunate in finding you at home, Lady Cora," he said, as he seated himself opposite to her. "I have been unlucky several times."

Cora colored faintly, and murmured something in excuse.

"Nay, I know you have many calls upon your time," he said; then added, with a soft reproachful intonation, "or was it purposely to avoid me, Cora?"

She flushed hotly to the roots of her hair, and her lustrous eyes met his proudly.

"Lord Almane!" she said, haughtily.

"Oh, pardon me," he said, sadly, "I forgot that what gives me so much pain gives you none. What mockery it is," he added, passionately; "what madness to believe in a woman's constancy!—a woman's truth! No such thing exists."

Cora sat proud and silent, her eyes downcast, her mouth set, but he saw the little hands on her lap tremble.

"Forgive me," he continued penitently. "I forget—I forget. Cora, the sight of you brings back old days, and blots out the remembrance of the present; for a moment I am happy again, and then the bitter reality comes back."

"Let us talk of something else, Lord Almane," she said quietly. "The past does not interest me at all, and the recollection of it can give you no pleasure."

"Can it not?" he answered, mournfully. "It is a sad pleasure—but still a pleasure. They say, you know," and he turned to her with a wonderfully sweet, sad smile, "that the saddest words in our language are—'what might have been!' but if they are sad, they have still a little drop of sweetness when they remind us of the happiness which was once within our reach. But you—you are very happy, Lady Cora?"

"Very," she answered, gently, for the extreme sadness of his voice and mannner touched her against her better judgment. Then she added, rapidly; "Tell me something about your travels abroad, Lord Almane. That will be more interesting than my domestic bliss."

"Nothing that concerns you, in however small a degree, is uninteresting to me," he replied; "and yet I feel, Lady Cora, that my own conduct must require some explanation. Will you let me justify myself in your eyes?"

"There is no need," said Cora, haughtily.

"But there is," he returned. "You shall not think badly of me—you, the only woman I ever loved. Let me speak this once, Cora; I will not trouble you again."

"Be it so," she said, coldly; "let it be as brief as you can, my lord."

Shortly after you left England," he rejoined, "my engagement to Lady Lucie was broken off. I was hastening to you to offer you the love which had been yours for so long, when I heard of the terrible bereavement you had sustaind. At such a moment it seemed to me as if even my sympathy must seem an intrusion, and I hesitated. You returned to England, and I heard that you were engaged then to the man I had seen at Mrs. Colston's, your brother's friend and messenger, Sir Alan Vincent. Cora, I was in despair. I longed and yet dreaded to see you. Nay, one day calling at Lady Martyn's, I heard that you were there, and I fled the house rather than look upon your beauty, and know that you belonged to another. Ah, Cora, it was not quite—and yet I can blame you."

"Lord Almane," said Cora, eagerly, "will you believe me, when I tell you that it was quite two years after my return from Italy that I became engaged to Sir Alan; that at the time of which you speak I was quite free."

"Oh, Heaven! and I lost you thus." He buried his face in his hands with such an air of grief and suffering, that Cora's eyes filled, and then ensued a long silence.

She spoke at last, and her voice had a very gentle intonation:

"Lord Almane, of what avail is it to look back upon the past? We were both deceived it seems, and we have suffered; but all that is past now and you must see with me the folly of remembering what cannot be undone."

"It is well for you," he said, bitterly—"you, happy and loved; while I——"

"You will be happy, too," she said, gently. "Do not waste time in useless regrets. We can be friends if you will. Believe me——"

"Did you ring, my lady?"

"No," said Cora, quickly and sharply, turning round to meet the evil look of Marks' blue eyes, while Lord Almane rapidly raised his head.

As the servant disappeared, with a humble, "I beg your ladyship's pardon," Cora uttered an angry exclamation.

"If I had rung, it is not that man's place to answer the bell," she muttered, angrily.

But the man's entrance had effectually broken the thread of the conversation, and it was difficult to join it again.

"Do you remember long ago offering to be my friend?" said Lord Almane, softly, "and what I answered you then? Ah! we are older and wiser now, Cora; and if you will give me your friendship, I will prize it greatly. Is it mine?"

"It is yours," said Cora, frankly, putting out her hand. The Viscount took it, and was about to put it to his lips, when the door opened suddenly, and Alan entered.

"An unexpected pleasure, my lord," he said, bowing, but appearing not to notice the hand Lord Almane offered him. "Have you some tea for me, Cora?"

It was impossible to ascertain from his manner whether Sir Alan had noticed the quick start of his wife and her companion at his entrance, or the rapid unclasping of the two hands which had met so frankly. His manner was quiet and pleasant, and he spoke in his usual way.

"I thought you were at Richmond, Alan?" his wife said, as she gave him some tea.

"I did not go," he replied, shortly; "you see I am here."

Shortly after, Lord Almane took his leave, and Sir Alan and his wife were alone. Cora a little apprehensive, if the truth were known.

"Have you any objection to go Paris at this dull season, Cora?" said Sir Alan, suddenly. "They have a new statue at the Louvre I am most anxious to see. Are you afraid of the heat?"

"Not for myself a bit, Alan, but for Harold."

"Oh! we'll send Harold and the nurse down to The Bungalow."

"And this house?" said Cora, a little surprised.

"Leave the servants on board wages. You will take your maid of course? Marks shall be courier and general factotum, and we will have a second honeymoon, sweetheart. What say you?"

"That I shall be charmed," she said, gayly. "When do you mean to start, Alan?"

"As soon as you like, wife, and the sooner the better. You really like to come, Cora?"

And he put his hands upon her shoulders and looked searchingly into her face.

Cora felt that the blood rose in her cheeks, but she lifted her eyes to his unflinchingly.

"Anywhere with you, Alan," she said, sweetly; and her husband bent and pressed his lips almost roughly to hers.

He turned and left her, but, returning in a few moments, appeared to have already altered his mind concerning the journey to Paris.

"On second thoughts, Cora, I think we won't start quite yet," he said. "I have business which will keep me in town some time longer. You'll say I am very changeable, almost as changeable as a woman, Cora!"

And though Cora forced herself to return his smile, she felt her heart sink with a foreboding of evil.

July and August passed uneventfully for Cora. All the fashionables had deserted London for various summer resorts, but Sir Alan chose to remain in town, and Cora, as a dutiful wife, remained with him, although she had scarcely an acquaintance left in the metropolis, and she was consequently much alone. Harold had been sent down to The Bungalow, so that even the amusement and companionship of her boy were denied to her just now. At any other time she might not have felt this; but Sir Alan seemed much occupied, and there was a strange alteration in his manner towards his wife which puzzled her at times, and made her anxious and unhappy. It was not that his words were less affectionate, or his caresses less frequent; but they had now a certain coldness and restraint which struck upon the young wife's sensitive heart, and caused her own manner to be less frank and spontaneous. She knew that her husband was as kind and indulgent as ever, but she felt that some shadow had fallen upon the old, sweet companionship.

Lord Almane still lingered in London, and was a constant guest at Rivington Square. Cora received him with a cordial frankness betokening the friendship she had offered him, but which was anything but pleasing to the Viscount, although he seemed to accept his position frankly enough, and abstained from reminding Lady Vincent of the old intimacy. Sir Alan, whenever he appeared in the drawing-room during his lordship's visits, was courteous and pleasant, but their meetings were not frequent; and as the Viscount and Cora were generally alone, he was at liberty to entertain her with his regrets for a misspent past, his hopes and aspirations for the future; and he talked with that sad bitterness and mournful self-reproach which has a certain charm for a woman, especially one who was not quite happy.

On the whole, his visits were not displeasing to Cora, and she gave herself up freely to the pleasure she felt in their intercourse. She loved her husband too truly to dream of wrong to him; and it seemed as if Sir Alan had banished his besetting sin, for he showed no annoyance at the constant visits.

But it was not so, for the baronet was a prey to a passionate jealousy which he had tried vainly to combat. He told himself that Cora was true and noble, and that she loved him; but notwithstanding all his efforts, that demon, the "green-eyed monster," had obtained firm hold upon his heart, and although he appeared so outwardly calm and cool, he was suffering acutely.

Why, urged the tormentor, did Cora keep her acquaintance with Lord Almane a secret from him? Why had she turned pale, and seemed so much moved on that first day when they had met? Why had both started, and seemed embarrassed, on his sudden and unexpected appearance in the drawing-room? He would not doubt her, he said to himself, passionately; and yet he was doubting her with all his heart. It seemed to him that almost daily Marks' quiet face appeared at his studio door with, "Lord Almane is in the drawing-room, Sir Alan." Or when he returned from his club, in reply to his question, "Has any one called for me, Marks?"—"No, Sir Alan; no one has been here except Lord Almane."

Then, too, he noticed that Marianna had seemed annoyed and anxious at being sent with the child, whom she worshipped, and his nurse, to The Bungalow; and Cora had told him that the old Italian had wished her to accompany them thither.

Could it be that Marianna, who had lived at The Tryst, and been with Cora from her childhood, knew of that old friendship, and distrusted it? Sir Alan was a proud man; but his ruling passion was strong upon him now—so strong that he rode over to The Bungalow, and when he found himself alone with Marianna, he mentioned his lordship's name, and asked the old *cameriaria* concerning him.

"I know but little of Milord Almane," she replied, calmly. "He stayed at Richmond with my young master once, having met with an accident at our door. But, signor, I do not like him—I do not trust him. Do not do so either, signor," she added in a moment. "Ah! do not forget that the signora is very beautiful, and very innocent."

She concluded abruptly; but Sir Alan could not obtain any further information from her, and he returned to town with his belief strengthened—almost confirmed.

The next day Sir Alan told Cora that she must prepare for the intended visit to the French capital; and she gladly obeyed, hoping to win back the old love and trust when they were alone. And during the first few days it seemed as if she succeeded, for, freed from Lord Almane's presence, the baronet gave himself up frankly to his real love for Cora; and she hoped and believed that whatever the cloud had been it had passed away.

But it was not so. The cloud was but gathering, and, when it burst, the storm would be a terrible one, almost overwhelming her with its violence. [1]

CHAPTER XVIII.

The month of September is a lovely one in Paris, and residents and strangers look upon it as one of the most agreeable seasons in that favored city. The Parisian grandees come back then from their season at the *eaux* or their country houses, and the closed shutters are reopened, the boulevards resume their brilliant appearance, the

THE TRIAL TRIP.

Champs Elysees become thronged with gay promenaders and brilliant equipages, which contrast with the *fiacres* and tourists who have had it all their own way there during the hot months of July and August.

In a handsome sitting-room at one of the principal hotels in Paris, situated in the Boulevard des Capucines, lounges Lord Almane, carolessly glancing over the Times, impatiently turning now and then to look at the French time-piece, with which the mantel-piece is adorned, and betraying sundry signs of *ennui*. The remains of his late breakfast were upon the table, but he did not summon a servant, and seemed in expectation of a visitor, for when his valet appeared with the information that a person was inquiring for his lordship, he said, eagerly:

"Show him in at once."

Two minutes elapsed, when the door was again opened, and a tall man, with a pale face and deep-set blue eyes, was ushered in. He bowed respectfully to the Viscount, but did not speak, until the atter addressed him. Lord Almane nodded carelessly, and began:

"Well, Marks, what news this morning?"

"There is none of any importance, my lord," replied Sir Alan's servant, for it was he. "Sir Alan and my lady are gone to the Louvre."

"Does Sir Alan know that I have arrived?"

"I believe not, my lord," was the quiet reply. "But I told Lady Vincent's maid that your lordship was in Paris, and she repeated it to her ladyship."

"Who will, of course, tell her husband," said the Viscount, a little impatiently.

"I think not, my lord; although, since their rrival in Paris, Sir Alan has resumed his former devotion to my lady."

The man's voice was quiet, monotonous and indifferent; but the light blue eyes told a tale of eager, cruel resentment, and the Viscount's velvety dark orbs read it clearly enough.

A slight shadow passed over the handsome face of the young nobleman.

"But," went on Marks, "the seed sown in Sir Alan's heart will bear fruit, my lord. He distrusted his wife once, he will do it again; and Lady Cora is too proud to bear suspicion."

"You owe your master a grudge, methinks," said the Viscount, smiling. "Why is it, Marks?"

"That is my secret, my lord," the man answered, quietly, but not disrespectfully.

"Her ladyship is a devoted wife," remarked the nobleman, in a few moments.

"Very much so," was the reply; "but her ladyship is proud and passionate; Sir Alan is jealous and equally passionate. If two such natures clash, my lord, they are not easily reconciled, for Lady Cora will stoop to no explanations, and if she would Sir Alan would listen to none."

"You are a deep student of character, Marks," remarked Lord Almane, smiling. "Did you say that they were at the Louvre this morning? Tell my man, as you go down, to call a *fiacre*, will you?"

And the Viscount gave a cool nod of dismissal, which the other returned with a low bow, as he went away; and in a few moments Lord Almane was driving along the boulevard towards the Louvre.

Although it was yet early when he reached it, there were many strollers about the long picture-lined galleries, and a tolerable number of artists were engaged in copying noted works of art. The Louvre was a well "beaten track" to Lord Almane, and he passed on indifferently through the sculpture-rooms, up the broad stone-steps, over the smooth, shining floors, until, through one of the galleries, he caught sight of a tall form—the figure of a man of unusual hight and grand proportions, with a graceful female form standing at his side. One glance sufficed to show him that they were those whom he sought; he turned round and moved quietly away in another direction.

"Yes, it is most beautiful, Alan," said Cora, softly, as they stood before Greuze's celebrated picture of the "Cruche Cassee." "I like Greuze's heads, they are so lovely, are they not?"

"You are not singular in your liking" said a musical voice at her elbow, and Sir Alan felt the little hand resting upon his arm give a convulsive start; and his own lips drew closer together over his set teeth as he turned to greet Lord Almane.

"I did not anticipate such an agreeable surprise," continued the Viscount. "How long have you been in Paris, Lady Cora?"

"A fortnight," she replied, in a low tone.

"And your stay will be a long one?" he said.

"Our movements are uncertain," replied Sir Alan, coldly. "Look Cora, this is the Claude I wanted you to see. Look at the effect of that sunset on the hills. Is not that perfect?"

"Perfect, indeed," answered the Viscount, who saw that Cora could not speak, and hastened to reply for her. "Nothing beats the Claudes, to my mind, in the Louvre."

"Are you ill, Cora?" said her husband, suddenly, but without the slightest tenderness in his voice. "Would you like to return to the hotel?"

"Yes, if you will get me a *fiacre*, Alan," she said faintly. "Don't let me take you away."

"Will yot accept my escort, Lady Cora? I was just thinking of leaving the museum when I met you. These picture-galleries are very tiring, are they not?"

"Are you sure that it will not be taking you away, Lord Almane?" said Alan, coldly. "If not, I shall be glad if you can return to the hotel with Lady Vincent. I happen to have important business with one of the head officials here."

Lord Almane quietly expressed his willingness, and Sir Alan accompanied his wife down to the entrance, called a passing *fiacre*, and assisted her to enter. She was pale and trembling still, but as he was about to relinquish her hand she clasped his in both her own.

"Can you not come with me, Alan?"

"Certainly, if you wish it;" and with a hasty apology to the Viscount, they drove away together, while Lord Almane returned to his hotel not on the whole displeased at the result of the morning's work.

"Did you know Lord Almane was in Paris, Cora?" was all Sir Alan vouchsafed to say during the few minutes which elapsed as they drove from the Louvre to the hotel bearing the same name where they were staying.

"Yes," she answered, faintly, for she felt that her hope of peace was over now, and that it was the presence of the Viscount which had caused the change in Sir Alan's manner.

"You seem nervous," he said, quietly, as they reached the sitting-room. "Will you have any advice Cora?"

"Oh, no," and she tried to laugh. "I shall be all right in an hour or two. Don't let me detain you, Alan."

And as he went away Cora threw herself upon a sofa and burst into tears. Her position was a difficult one and she felt it to be so. Her husband had never even hinted at any jealously of Lord Almane, but there was no other reason for his coldness; and unless the Viscount could be got to discontinue his visits and intercourse, a breach would be made between them which could never be filled up. And yet, how could she tell Lord Almane that her husband had not perfect trust in her? How could she let him know the doubts by which Sir Alan degraded himself and her? She was powerless, and her only chance consisted in the utmost circumspection and careful avoidance of Lord Almane.
—[To be continued.

RECENT LITERATURE.

France and the United States; their present Commercial Relations considered with reference to a Treaty of Reciprocity. Comprising Papers by M. MENIER, LEON CHOTTEAU, PARKE GODWIN and J. S. MOORE. New York: G. P. Putnam's Sons. Price 25 cts.

THE energetic policy pursued by Secretary Evarts in the matter of collecting information respecting the exact state of our trade with foreign countries and the trouble he has been at to devise means for increasing the same; the visit to this country of the French Committee who have in view the establishing of a commercial reciprocity treaty between France and the United States, and the discussion of the "Wood Tariff Bill" have all combined to keep the question of our trade relations with foreign countries before the people for several months and to foster an interest in the subject—and a work having any bearing on the question is likely to have a large circle of readers.

The little manual noticed above is published under the auspices of the New York Free Trade Club and is full of suggestive facts and figures. We quote from M. Menier:

"In 1816, as in 1865, the Americans committed a great commercial mistake; they wished by raising their tariff rates to make foreign nations pay the debts of the United States. What was the result? That foreign commerce deserted them. Then a certain number of manufacturers said, 'So much the better! From foreign competition we can be independent; we shall produce all that we need; we shall no longer pay foreign tribute.'

"But the crises through which the United States are now passing, the strikes which have taken place, should prove to all the dangers of such a system. Products are exchanged for products. Such is the economic law. When a market is closed to foreign products, foreign commerce deserts it. The foreign nation in its turn retaliates by similar restrictions. Instead of a union of interests, there is a war of interests. Then home products finding no outlet, glut the market; the consequences are plethora and crises. This is what is taking place in the United States. Instead of applying themselves to the production of cotton, coffee, wheat, tobacco, meat and precious metals, they wished to compete with the whole manufacturing interests of Europe; hence the crises and the failures from which New York has perhaps suffered most.

"They wished to protect silk by a tariff of sixty per cent., aggravated by Custom House red tape. Has the silk industry prospered in the United States? Did not the great manufacturer of Newark threaten, a few months ago, to close his establishment, or to reduce the salaries of his workmen fifteen per cent.?

"In the United States, twenty miles from St. Louis, are mountains of iron ore; yet for the last three years the production of iron has steadily diminished:

1873	2,868,000	tons.
1774	2,689,000	"
1875	2,266 000	"
1876	2,050,000	"

"Why? Because cast iron costs about fifty-four francs more than in Europe; the raw products, the workmen, the freight charges, having all been benefited by the protective tariff. Then the demand stopped. The United States also wished to protect the merchant marine; and they, who have splendid harbors, superb rivers and an immense coast line, and cotton, wheat, woods and metals to export, built last year twenty-five steamers, of a capacity of 21,000 tons, while England built 719 sailing vessels and 348 steamers, of a capacity of 473,000 tons. Such facts are significant."

Leon Chotteau, in reviewing the history of the changes in our tariff, says:

"The eight years of war nearly ruined the United States, and Washington in 1790 thought best to ask from Congress a protective tariff. Until 1816 the duties were reasonable. In 1816 there was a sudden rise in the rate of custom duties; the war of 1812 with England exhausted the treasury, and foreign commerce was obliged to make up the deficit. In 1832 the national debt was very nearly wiped out. At the proposal of Henry Clay it was decided that every duty of more than 20 per cent. *ad valorem*, should be reduced from year to year, until this uniform rate was reached. Toward 1840, began the agitation which has been called the tariff war. Men like Mr. Carey of Philadelphia wrote books and pamphlets in favor of a vigorous system of protection. The high tariff of 1842 was the result of these efforts.

"In 1857 they went back to the tax of 20 per cent. But the South, four years afterward, rebelled against the North.

"When Lee surrendered to Grant at Appomattox Court House the Republican party by excessive custom duties tried to make manufacturing Europe pay the national debt. In serving the interests of the treasury it was the intention to show their strength to England who had armed the "Alabama," and to Bonaparte's government which had sympathized with the South. To be sure Thaddeus Stevens in the House of Representatives and Charles Sumner in the Senate Chamber were patriotically right in wishing reprisals. They made a mistake in thinking that by keeping away English and French commerce they would hurt England and France alone. When the duty rises from 4 or 5 per cent. to 50, 60 or 70 per cent., it is equivalent to prohibition and ceases to be levied because there are no goods to levy on. This is what has been lately shown in connection with the Lyons workmen. The Lyons exporters send very little silk to the United States; they suffer greatly and the American Custom House receives next to nothing from this quarter because it has been too greedy. Such is the situation.

"The English acted under a wiser inspiration. In 1826 they levied on silk a duty of only thirty per cent., and the innovation bore fruit so well that the manufacturers of Manchester complained in 1852 of being too much protected by this remnant of protection. They asked relief from the government 'by abolishing the duty on silk goods of foreign origin, not partially or gradually, but completely and immediately.'"

Mr. J. S. Moore shows that out of a total of $46,233,793 of exports to France during 1877 only 2,000,000 were manufactured goods, and it is to bring about a more satisfactory state of affairs for the exchange of manufactures that this Commission was organized.

The work concludes with an earnest appeal to the people of the United States to further the good work.

The Voyage of The Paper Canoe. By N. H. BISHOP. Boston: Lee & Shepard.

MR. BISHOP is a practised traveler, whose observations seem to have been in no way embarrassed by the difficulty of keeping above water in such a cranky affair as the paper canoe during a voyage from Quebec, along our rivers and coast, to the Gulf of Mexico.

Such a novel method of navigation made him the observed of observers of high and low degree, and his voyage was more or less triumphal from start to finish. Although escaping narrowly a number of times, he had but one ducking in the trip of 2,500 miles, but on that occasion, in Delaware Bay, crew, cargo and ship very nearly came to a period.

In South Carolina his journey was an ovation. Before leaving the state he spent a day with Gov. Aiken on his island home. We make room for a brief extract:

"As we sat together in that room, where in years gone by, Gov. Aiken had entertained his northern guests, my kind host freely told me the story of his busy life, which sounded like a tale of romance. He had tried to stay the wild storm of secession." * * For several years previous to the war his place yielded a net income of fifty thousand dollars. When the Union Army marched through another part of South Carolina, where the Governor had buried the old family heirlooms, and had added to the original plate $30,000 worth of his own purchasing, the soldiers dug up this treasure-trove. * * Thus was plundered an old and revered governor—one who was a kind neighbor, a true patriot, and Christian gentleman. His persecutions did not, however, end with the war. * * To-day, the governor's favorite sideboard stands in the house of a citizen of Boston, as a relic of the war. O, people of the North, hold no longer your relics of the war, stolen from the firesides of the South. Restore them to their owners, or else bury them out of the sight of your children, that they may not be led to believe that the war for the preservation of the Great Republic was a war for *plunder*;—else did brave men fight, and women pray in vain. Away with stolen pianos, 'captured' sideboards, and purloined silver. What but this petty plundering could be expected of men who robbed by wholesale the poor negro, to protect whose rights, they were sent South?"

Again: "A traveler should place facts before his readers, and leave to them the drawing of the moral. Northern men and women who go south and reside for even the short space of a year or two invariably change their life-long views and principles regarding the negro as a moral and social creature. When these people return to their homes in Maine and Massachusetts (as did the representatives of the Granges of the northern states after they had visited South Carolina in 1875), a new light, derived from contact with *facts*, dawns upon them, while their surprised and untravelled neighbors say: '*So you have become Southern in your views.* I never would have thought that of *you*.'"

Mr. Bishop is a native of Massachusetts.

The three hundred and fifty-one pages of the volume are replete with the results of careful observation and conclusions, while the easy and graceful manner of the narrative, added to the novelty of the manner of journeying, makes it impossible to find a dull page between the covers.

The Art of Sketching from Nature. New York: G. B. Putnam's.

THIS is the first of a series of art hand-books intended to aid and direct the artistic bent of those who, knowing nothing, are yet anxious to be taught. The conspicuous merit of the present treatise is its simplicity and clearness. There is a lack of confusing art jargon, and the author, Thos. Rowbotham, keeps ever before him the idea that if the untutored are to be taught the A B C of sketching from nature, it is essential not to take for granted that the learner is familiar with the letters; hence the explanations are lucid, and advance step by step, until the principles are distinctly set forth. Carefully mastered, the beginner cannot fail to secure a good foundation in the art, and his progress will thereafter depend on natural aptitude and practice. Sketching from nature affords the most lively enjoyment, and is the surest means of crystalizing the pleasantest reminiscences of travel. A sketch will more vividly bring to mind some bright episode of the past than a library of diaries.

The book is embellished with 27 illustrations explanatory of the text, and is in every sense complete. Miss Carter, Superintendent of the Cooper Union art schools is the American editor, and in her preface says: The books which make up this series are all by skillful painters, and the rules they lay down are safe and practical. The series will embrace in addition to the book under notice, Landscape Painting in Oil Color, Flower Painting, Figure Drawing, and an Artistic Treatise on The Human figure. The books thus far issued are sold at the uniform price of 50 cents, and are typographically charming.

The Phantom Wedding; or, the Fall of the House of Flint. By Mrs. E. D. E. N. SOUTHWORTH. [cloth: $1.75]; Philadelphia: T. B Peterson & Bros.

THIS is the title of a volume of 370 pages. One is attracted by its handsome binding and startling title—by the manifold names of the authoress and by its table of contents glistening with exclamation points and small-caps like the programme of the Old Bowery Theater, and braces his nerves to witness a dramatic performance of five thrilling sensational acts with accompanying tableaux, phantasmagoria and transformation scenes to slow music. It is a delusion and a snare!

The Phantom Wedding is after all but a short and very flimsy ghost story giving, like an attenuated godmother a name and a local habitation to some other short and flimsy stories which occupy 300 of those pages. The latter are from the pen of Mrs. Frances Henshaw Baden and bear a strong family likeness to their godmother. Some of these are: "Did He Win the Right One?" "Mary's Ghost"; "Was She True?"; "Almost a Crime," etc. The last not being, as one might hope, a remorseful exposition of the fraud which foists these waifs upon the cold world, but only a sentimental story of a young man—albeit of delicate sensibilities who was bribed by his mother—25c. being the amount used in this corrupt transaction—to drown a cat. Fortunately the vena youth, having secured the quarter in advance, was spared the commission of the "crime" simply from the fact that the feline having suffered the discomfort of losing one of its nine lives returned to relieve his conscience and suggest the possibility of another quarter in the near future. It seems difficult to believe that these trashy stories were written for grown people and yet they cannot but be considered most unwholesome reading for the young.

Suffrage in Cities. By SIMON STERNE, New York: G. P. Putnam's Sons. Price 25 cents.

MR. STERNE is well known as an able lecturer in the interest of reform and pure government. The above named discourse, delivered at Cooper Institute in December last, is devoted to an exposition of the evils consequent on universal suffrage as applied to cities. In all cities of this country the great bulk of taxes is paid by the property-holders who are in small proportion to the number of inhabitants. The large majority of the voting population consisting of persons holding little or no property, who for the most part are ignorant, thriftless, idle and unworthy, and can have but little interest in the administration of the municipal government. These masses are controlled by designing and unscrupulous adventurers to serve their ends. They manipulate the political machine for them and direct their votes as they wish. The intelligent middle classes cannot affect the result of a municipal election one iota—they are practically disfranchised, they have no representation. "All public robbers and tyrants extend the suffrage with a view of striking centers of ignorance and prejudice upon which they can base their power, so as to be independent of the intelligent middle class which has always been the conservator of liberty, and the safety of the State." Mr. STERNE earnestly advocates a property qualification or other just limitation of the suffrage, by legislation or, failing in this, a fair and equitable minority representation. No one in the field of lectures is more conversant with the subject or better qualified to instruct.

Two Ways to Matrimony; or, "Is this Love?" Philadelphia: T. B. Peterson & Bros. Paper 50cts.

HERE we have a moral pointed by an unknown author for "Young ladies and gentlemen, as well as for mothers, for fathers and for all those contemplating matrimony or in wedlock." The two ways are indicated, one by a worldly-minded and frivolous mother who educates her daughters according to her superficial notions of usefulness—the usefulness of girls qualified to marry an "establishment" and the other by the mother whose daughters are brought up with a view to self-helpfulness and the domestic virtues. The same financial crash impoverishes both families and while the members of the one—still wedded to their idols, endeavor in their country home to impress the simple country folks with their pretensions and display; those of the other utilize their solid accomplishments and live simply, comfortably and respected by all. There is the conventional Baron, who is only a gambler and adventurer, marries (under the impression that she is an heiress) a superficial daughter of the frivolous mother, who is dazzled by his title and supposed wealth, opens a gambling house, and finally commits suicide. A number of virtuous young men marry the daughters of the correct family and live happily ever after. It is the old story of the punishment of pride and the reward of virtue, and the plot is too thin and the incidents too vapid to invest it with any new interest.

BRIC-A-BRAC.

WANTED.

SPOKES for the ladder of fame.

TEETH for the mouth of a river.

GLOVES for the hands of a clock.

MOLD for growing flowers of speech.

ELECTRICITY for thunders of applause.

A HANDKERCHIEF for the weeping-willow.

THE OLDEN LOVE.

Now to thy waiting arms
I come, my olden love,
As oft and oft to prove
Once more thy soothing charms.

Against thy faithful breast
I press my aching brow;
A lethean solace now
Creeps o'er me, and I rest.

All shadowing of regret
For what has been, must be,
All pain, all care, in thee
I'll for a while forget.

No converse shall be ours,
But silence calm and deep,
Like that when white stars keep
Still watch through midnight hours.

So mutely, best, thou'lt share
My burdens, friend long proved,
Long cherished, and long loved—
My dear old easy chair.

[*Boston Transcript.*

NOT A MARRYING GIRL.

THEY were seated together, side by side, on the sofa, in the most approved lover fashion—his arm encircling her taper waist, etc.

"Lizzie," he said, "you must have read my heart ere this; you must know how dearly I love you."

"Yes, Fred; you have certainly been very attentive," said Lizzie.

"But, Lizzie, darling, do you love me? Will you be my wife?"

"Your wife, Fred! Of all things, no! No, indeed, nor any one else's."

"Lizzie, what do you mean?"

"Just what I say, Fred. I've two married sisters."

"Certainly! and Mrs. Hopkins and Mrs. Skinner have very good husbands, I believe."

"So people say; but I wouldn't like to stand in either May or Nell's shoes, that's all."

"Lizzie, you astonish me,"

"Look here, Fred; I have had over twenty-five sleigh rides this winter, thanks to you and my other gentleman friends."

Fred winced a little here, whether at the remembrance of that unpaid livery bill, or the idea of Lizzie's sleighing with her other gentlemen friends I cannot positively answer.

"How many do you think my sisters have had? Not the sign of one, either of them. Such pretty girls as Mary and Nellie were, too, and so much attention they used to have!"

"Now, Lizzie—"

"I am fond of going to the theatre occasionally as well as a lecture or concert sometimes, and I shouldn't like it if I proposed attending any such entertainment to be invariably told that times were hard and my husband couldn't afford it, and then to have him sneak off alone."

"Lizzie, Lizzie—"

"And then if once in a dog's age he did condescend to go with me anywhere in the evening, I shouldn't like to be left picking my way along the slippery places, at the risk of breaking my neck, he walking along unconsciously by my side. I am of a dependent, clinging nature, and I need the protection of a strong arm."

"Lizzie, this is all nonsense."

"I'm the youngest in our family, and perhaps I've been spoiled. At all events, I know it would break my heart to have my husband vent all the ill-temper which he conceals from the world on my defenceless head."

"But, Lizzie, I promise you that I—"

"Oh, yes, Fred; I know what you are going to say—that you will be different; but Mary and Nell have told me time and again that no better husbands than theirs ever lived; no, Fred, as a lover, you are just perfect, and I shall hate awfully to give you up. Still, if you are bent on marrying, there are plenty of girls who have not married sisters, or who are not wise enough to profit by their example, if they have. And don't fret about me, for I've no doubt I can find some one to fill your place—"

But before Lizzie had concluded, Fred made for the door, muttering something "unmentionable to ears polite."

"There!" exclaimed Lizzie, as the door closed with a bang. "I knew he was no better than the rest. That's the way John and Alcck swear and slam doors, when things don't go just right. He'd make a perfect bear of a husband, but I'm sorry he came to the point so soon, for he was just a splendid beau."

IN THE APPLE-TREE.

RIGHT into the heart of it,—why Robin!
Why, didn't you know that the apple-tree,
When she gets her wonderful, fragrant blows,
Is a real spring-angel in white and rose?—
(Now hear him singing to mock at me!)

Why your nest is in there, you darling Robin,
And your little brown lady is in there too,—
Faith! you've an exquisite bridal-room,
With a ceiling frescoed, in rosy bloom,
Upon a ground of celestial blue.

Here's to your health, you blessed Robin,
And the next best thing it must surely be
To being an angel in bliss above,
To live with your little ones and your love,
In the heart of a blossoming apple-tree.

[*Springfield Republican.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

BEAUTIES OF ENGLISH LITERATURE.

A PRETTY deer is dear to me,
A hare with downy hair,
A hart I love with all my heart,
But barely bear a bear.

'Tis plain that no one takes a plane,
To have a pair of pears,
Although a rake may take a rake
To tear away the tares.

Sol's rays raise thyme, time razes all,
And through the whole holes wears.
A scribe in writing right may write
To write and still be wrong;
For write and rite are neither right,
And don't to right belong.

Robertson is not Robert's son,
Nor did he rob Burt's son,
But Robert's sun is Robin's sun,
And everybody's sun.

Beer often brings a bier to man,
Coughing a coffin brings,
And too much ale will make us ail,
As well as other things.

The person lies who says he lies
When he is not reclining;
And when consumptive folks decline,
They all decline declining.

Quails do not quail before a storm,
A bough will bow before it;
We cannot rein the rain at all,
No earthly power reigns o'er it.

The dyer dyes awhile, then dies—
To dye he's always trying:
Until upon his dying bed
He thinks no more of dyeing.

A son of Mars mars many a son,
All Deys must have their days;
And every knight should pray each night
To Him who weighs his ways.

'Tis meet that man should mete out meat—
To feed one's fortunes sum;
The fair should fare on love alone,
Else one cannot be won.

Alas, a lass is sometimes false,
Of faults a maid is made;
Her waist is but a barren waste—
Though stayed she is not staid.

The springs shoot forth each spring and shoots
Shoot forward one and all;
Though summer kills the flowers, it leaves
The leaves to fall in fall.

I would a story here commence,
But you might think it stale;
So we'll suppose that we have reached
The tail end of our tale.

[*Louisville Railway Mail.*

EXTRACTS FROM "WIFE TORTURE IN ENGLAND."

BY FRANCES POWER COBBE.

WHAT reason can be alleged why the male of the human species should be the only animal in creation which maltreats its mate, or any female of its own kind?

With the exception, perhaps, of the seal, Mr. Darwin gives a sad picture of amphibious conjugal life: "As soon as a female reaches the shore ('comes out,' as we should say in 'society'), the nearest male goes down to meet her, making meanwhile a noise like the clucking of a hen to her chickens. He bows to her and coaxes her, until he gets between her and the water so that she cannot escape him. Then his manner changes, and with a harsh growl he drives her to a place in his harem" ("Descent of Man," vol ii., p. 269.) What an "o'er true tale" is this of many a human wooing and of what comes later; the "bowing and coaxing" first and the "harsh growl" afterward! I am surprised Mr. Darwin did not derive from it an argument for the descent of man from the seal.

It is very instructive to watch the behavior of a big male dog undergoing the experience which is understood to surpass the limits of a man's endurance; namely being "nagged" by a little vixen who stands opposite to him in an attitude exactly corresponding to the the "arms akimbo" of her human prototype, and pours out volleys of barking which would obviously, in the police courts be reported as "abusive language." The much-tried dog—let us say a retriever or Newfoundland—who could annihilate his little female assailant—a toy terrier or Pomeranian, perhaps—in two mouthfuls, and who *would* do so in the case of an enemy of his own sex—always on these occasions starts aside with well-feigned surprise, as if astonished at the reception of his advances; lifts his ears as a gentleman raises his hat, and presently bounds away lightly: "I beg your pardon, madam. I am the last dog in the world to offend a lady!" Be it noted that if that dog had retreated before the bullying of another male dog, he would have slunk off with his tail between his legs, ashamed of his own poltroonery. But from the female termagant he retires with all the honors of war, and with his tail held aloft like a standard; quite conscious that he is acting as becomes a dog and a gentleman.

* * * * * * *

Wife-beating exits in the upper and middle classes rather more, I fear, than is generally recognized; but it rarely extends to anything beyond an occasional blow or two of a not dangerous kind. In his apparently most ungovernable rage, the gentleman or tradesman somehow manages to bear in mind the disgrace he will incur if his outbreak be betrayed by his wife's black eye or broken arm, and he regulates his cuffs or kicks accordingly. The dangerous wife-beater belongs almost exclusively to the artisan and laboring classes.

* * * * * * *

I have no intention in this paper to discuss the vexed subject of women's political and civil rights, but I cannot pass to the consideration of the incidental and minor causes of the outrages upon them, without recording my conviction that the political disabilities under which the whole sex still labors, though apparently a light burden on the higher and happier ranks, presses down more and more heavily through the lower strata of society in growing deconsideration and contempt, unrelieved (as it is at higher levels) by other influences on opinion. Finally, at the lowest grade of all, it exposes women to an order of insults and wrongs which are never inflicted by equals upon an equal, and can only be paralleled by the oppressions of a dominant caste or race over their helots. Man alone claims to hold his mate in subjection, and to have the right while he lives, and even after he dies, to rob a mother of her child; and man, who has lost the spontaneous chivalry of the lion and the dog, needs to be provided with laws which may do whatever it lies with laws to effect, to form a substitute for such chivalry. Alas! instead of such, he has only made for himself laws which add legal to natural disabilities, and give artificial strength to ready-constituted prepotence.

* * * * * * *

When I read all the fine-sounding phrases perpetually repeated about the invaluable influence of a good mother over her son; how the worst criminals are admitted to be reclaimable if they ever enjoyed it; and how the virtues of the best and noblest men are attributed to it, as a commonplace of biography—I often ask myself: "Why, then, is not something done to lift and increase, instead of to depreciate and lower, that sacred influence? Why are not mothers allowed to respect themselves, that they may fitly claim the respect of their sons? How is a lad to learn to reverence a woman whom he sees daily scoffed at, beaten, and abused, and when he knows that the laws of his country forbid her, ever and under any circumstances, to exercise the rights of citizenship; nay, which deny to her the guardianship of *himself*—of the very child of her bosom—should her husband choose to hand him over to her rival out of the street?"

The general depreciation of women *as a sex* is bad enough, but, in the matter we are considering, the special depreciation of *wives* is more directly responsible for the outrages they endure. The notion that a man's wife is his PROPERTY, in the sense in which his horse is his property (descended to us rather through the Roman law than through the customs of our Teuton ancestors), is the fatal root of incalculable evil and misery. Every brutal-minded man, and many a man who in other relations of life is not brutal, entertains more or less vaguely the notion that his wife is his *thing*, and is ready to ask with indignation (as we read again and again in the police reports), of any one who interferes with his treatment of her, "May I not do what I will *with my own?*" It is even sometimes pleaded on behalf of poor men, that they possess *nothing else* but their wives, and that, consequently, it seems doubly hard to meddle with the exercise of their power in that narrow sphere!

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Stripped of the euphemisms of courtesy wherewith we generally wrap them up, it cannot be denied that the sentiments of a very large number of men toward women consist of a wretched alternation of exaggerated and silly homage, and of no less exaggerated and foolish contempt. One moment on a pedestal, the next in the mire; the woman is adored while she gives pleasure, despised the moment she ceases to do so. The proverbial difficulty of introducing a joke into the skull of a Scotchman is nothing to that of getting into the mind of such men that a woman is a *human being*—however humble—not a mere adjunct and appendage of humanity; and that she must have been created, and has a right to live, for ends of her own, not for the ends of another; that she was made, as the old "Westminster Catechism" says, "to glorify God and enjoy Him forever," not primarily or expressly to be John Smith's wife and James Smith's mother. We laugh at the great engineer who gave as his opinion before a royal commission that rivers were created to feed navigable canals; and a farmer would certainly be treated as betraying the "bucolic mind" who avowed that he thought his horse was made to carry him to market, and his cat to eat his mice and his cheese; yet where women are concerned—beings who are understood to be at least *quasi*-rational, and to whom their religion promises an immortal life hereafter of good and glory—the notion that the "final cause of woman is man," seems never to strike them as supremely ridiculous.

* * * * * * *

The Rev. F. W. Harper, writing to the Spectator of January 26th, says, "I make bold to believe that if ever I should turn into a wife I shall choose to be beaten by my husband to any extent (short of being slain outright), rather than it should be said that a stranger came between us." After thus bringing to our minds the beatings, and kickings, and blindings, and burnings, and "cloggings," which sicken us, he bids us remember that the true idea of marriage is "the relation of Christ to his Church!" It is not for me to speak on this subject, but I should have expected that a minister of the Christian religion would have shuddered at the possibility of suggesting such a connection of ideas as these notions involve. Heaven help the poor women of Durham and Lancashire if their clergy lead them to picture a Christ resembling their husbands!—*British Quarterly Review.*

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

MRS. G.—Your lawn will look pretty trimmed with torchon lace; or if you prefer a novelty, I would suggest colored embroidery. In blue you can get tasteful designs for 25 cents per yard.

MISS TEEJON, Otsego County, N. Y.—A tolerably good quality of kid glove can be purchased for 50 cents. Of course, these gloves are inferior in finish and in shape, but still they are serviceable for second best. The much advertised lisle-thread gloves with openworked wrists, are very pretty—in boxes at the store counter, but have a most slovenly effect on the hand. A lisle-thread glove to be at all presentable, should fit the hand as snugly as possible, and as the openwork does away with buttons, there is nothing to draw the gloves into shape and they hang loosely around the wrists reminding the beholder of the tidy effect produced by stockings down at the heel.

MRS. LESTER, Racine, Wis.—I would strongly recommend you to purchase a bourette grenadine. The prettiest styles come in grey, dashed with some bit of bright color. They retail at 30 cents per yard, and are unusually wide. The objection to cheap black grenadine is that they so soon become rusty-looking, and when once they've lost their pristine blackness they are the most dejected looking of fabrics, and give the wearer an air of shabbiness.

MISS LAURA STOCKTON, Shelter Island.—Passably good stockings are offered as low as 25 cents per pair, one firm selling one-half dozen pair regular made for $1.00; but of course this class of goods is not to be compared, in appearance with those which command higher prices. A beautiful quality of balbrigan stockings, extra long, with silk clocks, is sold at 43 cents per pair. Fancy colored stockings bring fancy prices. Some designs are very beautiful, whilst others are correspondingly ugly. Lisle thread come at $1.18 per pair. Dainty openworked stockings can be had at 80 cents per pair; but as durability is not one of their characteristics, they are a rather expensive investment for those who can't afford to indulge in "pedal" extravagances.

JENNIE LEE, Berkshire Hills, Mass.—All white hats are very much worn, but unless one has an exceptionally good complexion they are extremely unbecoming; and beside, they are so "dressy" as to require a handsome costume throughout. A cheap dress fabric, however tastefully made, is not a suitable "accompaniment" for a white hat, unless the hat is trimmed with Quaker-like simplicity.

HATS AND BONNETS.—So many inquiries about head-covering have been received that I've decided to give an illustrated article on fashionable millinery in our next issue, and answer all the fair querists at one time.

COMODONES OR BLACK WORMS.—The presence of these indicates a lack of activity in the skin. Turkish or sulphur baths are beneficial in removing all impurities of the skin, and where these are not obtainable, an ordinary sweat bath is a tolerably good substitute. Washing the parts affected with white castile soap, allowing the soap to dry on it is recommended, as is also a wash of 36 grains of sub-carbonate of soda in eight ounces of distilled water, perfumed with six drachms of essence of roses. Another remedy which must be used with great care, is to touch the head of each worm with a fine hair pencil dipped in acetic acid. Pimples, worms and all skin disfigurements are the result of ill health, improper diet or of impure air. The skin is very sensitive to such influences, and physical sickness or mental depression make sad havoc with the complexion.

NAPOLEON AND MME. RECAMIER.

How very small and very contemptible this great fighting man could be is exemplified in his conduct to Mme. Recamier, which even exceeded in baseness his persecutions of Mme. De Stael. The first time his eyes fell upon her she incurred his jealous anger. It was in the court of the Luxembourg, on the occasion of the great reception given him by the Directory to celebrate his Italian victories. While Barras was delivering a long oration, she rose from her seat to obtain a better view of the hero of the day. Clad in simple white, her invariable costume, her wonderful beauty immediately attracted all eyes, and a murmur of admiration ran through the assembly. Bonaparte glanced sharply round to ascertain the cause, and his eyes fell upon that lovely form. Indignant that even a woman should for an instant distract the admiring gaze from him, he cast upon her a glance so stern that she sank back into her seat overwhelmed with confusion. From that hour he became her enemy. Being present at the trial of General Moreau, he demanded so angrily "What was Mme. Recamier doing there?" that she was counseled by her friends, if she had any regard for her safety, not to attend a second day. Yet the jealous despot was no more insensible to her charms than were other men.

It was at a ball given by Lucien that she met him for the second and last time. She observed his eagle glance following her every movement, and presently Fouche came up to her and whispered in his bold, insolent way, "*Madame, le premier consul vous trouve charmante!*" After the supper Napoleon himself addressed her brusquely with, "Why did you not come and sit by me at supper? You should have done so; it was your place." The great mogul or the sultan of Turkey could scarcely have been more dictatorial to a female subject. Through his vile agent, Fouche, he made overtures to her to take the post of dame du Palais. "He has never yet," said Sir Pandarus, "met with a woman worthy of him, and no one knows what would be the love of Napoleon for a pure-minded woman; she would assuredly obtain an influence over him which would be most beneficent." But Juliette Recamier's virtue was proof even against the allurements of this modern Zenguis Khan, and she shrank from all his advances; thereby, of course, incurring his deadly hatred, which became more or less extended, even to those who frequented her salons. Hearing that three of his ministers had been seen there, he demanded angrily since when the council had been held at Mme. Recamier's, and forbade them thenceforth to appear there. He said openly that he regarded as a personal enemy every person, whether French or foreign, who visited her.—*Belgravia.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

THE WASHING OF MUSLINS, CAMBRICS, WOOLENS, ETC.

In washing delicate, colored muslins and linens, several essential points must be observed if we intend preserving their original freshness and beauty. First, they should never be soaped or soaked. If not too soiled, wash in almost cold water; make a lather of good bar soap—white is best—and in it dissolve a small piece of alum: Use this dissolved soap in the water, and rub the goods with the hands, as far as possible. Put through two waters, and rinse in two more. A handful of salt or a spoonful of vineger in the rinsing-water, helps to brighten and hold the colors. Wash only one article at a time, and that very quickly. I have found that the blue figuros of prints and calicoes were rendered permanent by soaking them for a short time in strong salt and water—a pint of salt to two quarts of water. A piece of spermaceti an inch square, and a teaspoonful of salt, added to starch for muslins and linens, give to them a fino, smooth, glossy appoarance, and prevent the iron from sticking.

As soon as starched, hang in a shaded place—never in the sun—and iron immediately they are dry enough. A moderately hot iron only must be used, as many delicate pinks, buffs and greens, will change color as soon as a *hot* iron is placed over them. Brown linen may be kept looking like now, though repeatedly washod, if always washed in starch-water and hay-tea. For one dress, put a milk-pan of timothy hay on the stove, pour ovor hot water, cover, and boil until of a deep green. Make two or three quarts of flour-starch the usual way, and into it strain the hay-tea. Take about one-half of this mixture and add water, only enough to wet the dress in every part. Let soak ten minutes; add a little moro warm water, and rub through without soap. Rinse through more water than used in rubbing, with the starch and tea strained in; squeeze, snap, and hang in the shade to dry as quickly as possiblo. Small flannel garments for children may be whitened by first dipping into suds, wringing out, and hanging upon cords across the top of a barrol, with two or throe tablespoonfuls of flour-of-sulphur burning underneath. It may be necessary to repeat the prccess if very yellow. Care must be taken that the sulphur does not blaze and burn the articles. Hang in the air for a day or two; then wash and rinse in bluing-water. Scarlet flannel may be washed in warm suds, to which is added a quart of moderately thick flour-starch, and then rinse in warm water. A good method for washing woolen shawls is, to dissolve a pound of white soap in a little water, and boil down until like jelly. When cool, add three tablespoonfuls of turpentino, and one tablespoonful of strong spirits of ammonia. Wash thoronghly with this lather in enough water to wet it, and rinse until all the soap is out. Then put through salt and water, and hang up where it will dry at onoe.

Steuben Co. MARY B.

CLEANSING BEDS.

We have been renovating our hair mattresses this spring and finished tho last one yesterday. They look as good as now and I am pleased to say cost us nothing except our time and labor. The mattresses were ripped on three edges, the hair taken out, put on the grass, well pulled apart and beaten with long whips. The ticks were washed and ironed and the hair put back evenly. Then, with a long upholsterer's needle and strong twine tho mattresses wore tacked down tightly in diamonds the same as before, with a rosette of blue or red worsted tied in with each tacking. I found it rather difficult in the first one to spread the hair evenly. The mattross, when tacked, was high in the center and with scarcely any hair in the corners so that I was obliged to undo part of the work. Profiting by this experience, I had no difficulty with the second. MRS. E. B.

Cayuga Co.

THE CARE OF KEROSENE LAMPS.

Few illuminating substances produce a light as steady and brilliant as kerosene oil, but owing to inattention to certain requisite points its full brilliancy is rarely attained. The wick, oil and all the appurtenances of the lamp must be kept scrupulously clean; the burner polished; the chimney not only clean but bright and clear; the wick cut square across with *sharp* scissors. Those lamps which are made with immovable cupolas require especial care in cleaning and trimming, The upper part of a lamp frequently gets oily after standing for a time. This may, in a measure, be prevented by cutting a hole in a piece of felt so as to fit exactly around the socket into which tho burner is screwed. Trim the felt so that it will be abont one-half inch in width and place the ring on the socket. Housekeepers disregarding the above have, as a result, a flame dull, yellow, smoky, and half-lighted apartments at the same cost as those well lighted.

DOMESTIC RECIPES.

Delicious Pie.

Beat to a cream three-fourths of a cup of butter and one cup of sugar; add the well-beaten yelks of five eggs; flavor with vanilla. Line two tins with puff paste; pour in the mixture and bake at once. Beat the five whites to a stiff froth; sweeten with powdered sugar; flavor with vanilla and spread over the pies when done. Brown delicately and cut the pies while hot to prevent the eggs from falling.

One, Two, Three, Four Cake.

One cup of butter; two cups of sugar; not quite three cups of prepared flour and four eggs. If not wanted quite so rich, substitute cream for the butter.

Jumbles.

One pound of sugar; one pound of butter; two pounds of flour; three beaten eggs; one nutmeg; one teaspoonful of saleratus dissolved in a few drops of vinegar.

Pound Cake.

One pound of butter; one pound of sugar; one pound of flour and ten beaten eggs. Take half prepared and half unprepared flour.

River Edge, N. J. MISS LIZZIE VORHEES.

Cream Cakes.

One-half pint of boiling water; three-fourths of a cup of butter; one and one-half cup of sifted flour. Put in a saucepan over the fire; beat until very smooth and thoroughly scalded; set aside and when sufficiently cool add five well-beaten eggs. Drop this mixture, the size of a silver dollar, on buttered pans leaving a space of three inches each way. Bake thirty minutes in a hot oven, keeping the oven door closed as much as possible. When nearly cold, cut a slit three-fourths around the top of the puffs and fill with cream made as follows: Boil one pint of milk; add one cup of sugar; one-half cup of flour and two beaten eggs worked smooth in a little milk; boil ten minutes, stirring constantly. Flavor when done.

Sally Lunn.

Seven cups of sifted flour; one-half teacup of butter warmed in one pint of milk; three eggs; a little salt and two tablespoonfuls of brower's yeast — if baker's or home-made, use twice as much. Let rise six or seven hours.

New York City. MISS SUE MCCHAIN.

CORRECTION.—Miss CRONK'S recipe for preserved strawberries in the RURAL of May 11th, should have read three-quarters of a pound of sugar to a pound of fruit, and a pint of water to seven pounds of sugar instead of "three-quarters of a pound of fruit and a pint of water to seven pounds of sugar."

QUERIES ANSWERED.

WHAT will removo tho disagreeable taste from wooden bowls and pails?

YOUNG HOUSEWIFE.

ANS.—Try first, scalding thoroughly with boiling water; then wash with a solution of pearlash and lime and scald again.

WILL you please give a recipe for "planked shad?" MRS. KATE BRADY.

ANS.—Split the shad throngh the back, dress, wash, wipe dry, salt and tack skin down to a clean oak board with small nails. The board should be about two inches thick and heated *very* hot before tacking on tho fish. Place near an open fire with tho head down; as the juices run down, turn head up. It is important to turn frequently so as to retain the juices. When done, butter and serve on the board.

News of the Week.

NEWS OF THE WEEK.

ON Monday the 13th inst: the long-threatened attack on the President's title was begun by the democratic party in the lower House of Congress. Mr. Potter of New York, introduced a resolution based on Montgomery Blair's Maryland memorial, McLin's Florida confession and the charge of fraud in counting the electoral vote in certain parishes in Louisiana, and providing for a select committee of eleven to investigate the alleged frauds in both these States with authority to send for persons and papers and report at any time. Debate with regard to its admission was prevented by Speaker Randall, who, by a preconcerted agreement with its managers, ruled that it was a question of "privilege" on the ground that it related to the Presidential election. Mr. Hale of Maine, on behalf of the republicans, endeavored to amend the resolution so as to include all cases of fraud in any of the States. Neither amendment nor debate, however, was allowed by the democratic majority, nor would Mr. Potter even allow the proposed amendment to be read. Thereupon the republicans, denouncing the movement as intended for partisan campaign purposes, refused to vote, thus leaving the House without a quorum. A quorum of the House consists of 147 members who declare their presence by voting. When the vote was counted on this occasion there were only 116 yeas, and 1 nay. A subsequent count of the House showed 228 members present, but as the policy of the republicans forbade them to vote and so form a quorum hostile to themselves, the proceedings for the day abruptly terminated. The struggle continued for five days, the democrats daily gaining accessions to their numbers by the arrival of absent members who had been telegraphed for, and the republicans steadily adhering to their silent tactics whenever it came to a vote on the obnoxious resolution. At length, on Saturday the 18th, the democrats got their quorum and the Potter resolution was adopted by 145 yeas and 2 nays. Contrary to expectation the republicans made no attempt to filibuster and declined to ask for an investigating committee of their own on the ground that the scheme would tend still more to paralize business, prevent the restoration of confidence and reconciliation and Mexicanize this republic by throwing doubt on the title of its Executive. If the object of the movement is to oust Mr. Hayes, it is likely to be disastrous to the country; if to provide a basis for legislation to prevent future frauds, the inquiry should be made more general and much less partisan; if to make party capital for use in the fall canvass, it will be weakened by its one-sided character, limited scope and the cumbersome form in which its results must be presented to the public. In any case, it is hardly likely to bring about the punishment of the wretches who confessed to have directly perpetrated the frauds, and who, according to their own shameless avowal, reveal their rascality now merely because the administration refused to be frightened into giving them the petty offices they demanded as rewards for their turpitude. The "smelling" commitee will consist of seven democrats and four republicans and it is expected the report will be made in about sixty days' time.

The President says his title can only be questioned before the Supreme Court of the United States, that that Court would probably deny a writ of *quo warranto*, as the matter is in its discretion, and anyhow that he is resolved to maintain law and order at all hazards. Ex-Governor Packard of Louisiana has been nominated Consul at Liverpool, England, a fat berth where he may find consolation for his New Orleans failures while learning the duties which the present incumbent of the office has for years been faithfully discharging with universal satisfaction—another specimen of our vaunted Civil Service Reform. The President has sent to the Senate a message concerning the late award of $5,000,000 made to the Canadian Government by the Fishery Commission. He advises the payment of the sum, while a review of the controversy by Secretary Evarts, which accompanies the message, shows that the award does not accord with the questions submitted for arbitration. More than half the sum is to be paid to prevent the possibility of a slur being cast on our national character for fair dealing.

In the Pennsylvania coal regions eleven Molly Maguire murderers have already been hanged within the last year; two more are about to suffer the same well-merited penalty, and others are being sternly hunted down; yet the Society seems still to have a good deal of dangerous and revengeful life in it. A new organization called the "Kights of Labor" has been formed in Pennsylvania, and is said to number 200,000 men in the entire State, most of them foreigners, and like nearly all secret societies, it is producing considerable uneasiness among the people generally. The laboring classes in England and Germany and here are getting very restless, conscious that matters are not altogether right, yet without any definite idea as to the proper way to improve them. In this condition they are apt to fall easily under the leadership of blatant agitators who can suggest no way of bettering the condition of the poor except the destruction or partition of all wealth. Leveling down, not uplifting is the essence of their inflammatory harangues.

The Communist movement seems to be gaining headway here and there in the large cities. In St. Louis 5,000 men paraded the streets on Sunday, the 19th. Contrary to expectation, the demonstration passed off peaceably. In expectation of disorder, the police had taken all needed precautions, and most of the militia were under arms at their armories. In Cleveland, Ohio, members of the order are buying arms and ammunition. In San Francisco it has attained a dangerous extent, chiefly under a turbulent demagogue called Kearney. A split, however, has taken place in the faction there, the less disorderly party being for the time triumphant. Real estate has very considerably depreciated in the city on account of the fierce and blood-thirsty threats of the agitators; upwards of $20,000,000 that would have been invested there within the last few months, in quiet times, has been sent out of the State; and there is serious talk of organizing a Vigilance Committee composed of the men of property and respectability, to take the ring-leaders of the factions in hand. In this city, the movement gains but few adherents, and these almost entirely low French and Italians. Everywhere the talk of the socialists is intensely rabid, and their avowed object to accomplish their revolutionary ends by lawless violence.

The Fenian agitation against Canada seems to be more a matter of talk than action; nevertheless the Canadians have been vigorously preparing to give any hot-headed filibusters a warm reception. Forts along the border have been armed, gunboats on the lakes and the St. Lawrence equipped, the militia abundantly furnished with arms, ball cartridges and other military supplies, and it is far more than probable that any Fenian bands that may venture across the frontier will be treated even more roughly than those under O'Neil a few years ago. In San Francisco harbor a party of Irish excursionists hoisted the Irish flag on their boat while passing a Russian war vessel; the latter dipped her colors in salute, fired a salvo of 21 guns, and many a Hibernian throat was taken home that night sore with cheering.

In addition to the 600 Russian officers and sailors on board the Cimbra, still on the Maine coast two other transports are on their way hither with a large number of men to form crews for steamers purchased in this country, in the event of war with England. Most, if not all of them will see service in the Pacific, and arrangements have been already made with the railroads for transportation across the Continent. It is said a fast new steamer has been already purchased in Philadelphia, another in San Francisco, and several in this city. However the sympathies of the people of this country may incline, the government is certain to follow the honorable example of all former administrations, and in case of war between nations with which we are at peace, cause a strict neutrality to be observed even by the most ardent adherent of the cause, and the most greedy speculator in the needs, of either belligerent. Professor Henry, Secretary of the Smithsonian Institution, Washington, and co-laborer with Maury, Agassiz and, other eminent scientists, died on the 15th. Lydia Sherman, the American Borgia, left the Connecticut State Prison, on the 15th to join the three husbands and four children whom she had poisoned—gone but not forgotton. Gen. Dakin, the celebrated rifleman, is dead—his skill with the rifle would probably have sent him to Congress had he lived longer, just as the same qualification has placed another of the successful team on the judge's bench in one of the courts of this city. Sitting Bull's forces are still encamped near Cypress Hills, Manitoba and are so well supplied with spoils from the plunder of Black Hills trains by some of his marauding bands, that lately a trader who visited the wily chief, could buy goods advantageously of him to be afterwards sold in Manitoba.

Every day for the last couple of months and more, the chief city papers have a couple of columns of telegraphic news from Europe relating to the Anglo-Russian-Austrio-Hungarian-Turkish complications. In these not only are the items of yesterday's news contradicted to-day, but the intelligence flashed as certain from St. Petersburgh, is often in the same column and issue, modified in Vienna, doubted in Berlin, scouted in London and directly the reverse stated from Constantinople, while other European capitals have each a different version of the matter. Sometimes a smart writer inserts an article in a certain paper for the express purpose of contradicting it in another, and showing how idiotically absurd it is in a third, and without much sketch of fancy, one might easily imagine such an erratic genius manipulating the news at the other end of the Atlantic cable. But, after all, the newspapers must say something to keep alive the public interest, and the telegraph companies must send so many words to earn so much money—behold the real cause of so many unreliable rumors.

So far as the issue of war or place can be inferred from these multitudinous reports, the matter is still in great doubt, but within the last few days, the prospects for peace are somewhat brighter. Count Schouvaloff, the Russian Ambassador to England, has been summoned to St. Petersburgh to hold a conference with the Czar and Prince Gartschakoff. Several interviews have taken place, the nature of which is still a secret, though, of course, a few omniscient newspaper correspondents have put their own conjectures with regard to the matter into the shape of positive information received, by special favor, from the highest authority. If their guess turns out true, they crow; if false, it's only another contradiction added to former hundreds. The Count is known, however, to be in favor of Russia making concessions with regard to the treaty of San Stefano; he is a strong advocate of peace, and thoroughly posted as to the temper of the English people. He started last Saturday on his way back to London, and the result of his mission will soon be apparent. It is said he bore to the Czar information of the changes in the terms of the treaty of San Stefano, on which England would insist at the cost of a war; and it is not unlikely that he bears back with him Russia's answer.

Meanwhile Gen. Todelben has moved his forces nearer Constantinople, and sent a peremptory message to the Porte insisting on the immediate evacuation of Shumla, Varna and Batoum, and the surrender to him of Buykudere, a port north of Constantinople, on the straight connecting the Sea of Marmora with the Black Sea. It is also rumored that he demands to be allowed to occupy both sides of the Bosphorus. In the treaty no time was named when Turkey was to surrender the fortresses, and accordingly she refuses to evacuate them until the Russian armies have withdrawn from the neighborhood of Constantinople. Osman Pasha has strengthened the defensive lines about the Turkish capital, and as he has 80,000 men under his command, it is not at all impossible that in the event of a Muscovite attack, they might find there another Plevna. Todelben is about to receive heavy reinforcements; the Sepoy troops ordered by Great Britain from India, have arrived in the Mediterranean. More are about to follow, and should the Government venture on the step, 1,000,000 soldiers could be readily raised from that source alone—but after fighting white men in Europe, would there not be danger of trouble and perhaps successful rebellion on their return triumphant to the East? Austria is greatly troubled by turbulent refugees from Bonia and will probably soon occupy that State; Roumania is still discontented, and her forces are so placed that rather than yield to Russia, they will retreat into Austria. The Ottoman rebellion in Bulgaria is spreading, and nearly all the mountain region is in the hands of the insurgents—a dangerous element on the Muscovite lines of communication. All parties while talking about peace, are vigorously preparing for war. Already the war has cost Russia $500,000,000, and she is nearly bankrupt, whereas England can well afford to spin out this expensive armed condition almost indefinitely.

On Monday last an attempt to assassinate the

aged Emperor of Germany was made by a socialist named Hodel, a native of Leipsic. While the Emperor was driving out in Under der Linden, the principal street in Berlin, the fellow fired a couple of shots at him, but fortunately without hitting him. The would-be assassin was at once arrested. At first he claimed that he merely wished to commit suicide in such a public manner as to attract attention to the wretched condition of the working classes to which he belonged. But it was proved conclusively that he aimed at the Emperor, and then he owned up to the fact. Socialism is becoming a terror to the upper and middle classes throughout Germany. The great strike of mill operatives in England still continues. Nearly 75,000 men are thus kept idle, and four times that number of women and children starving.

Manufacturers of Ladies' Suits, that use the Davis Vertical Feed Sewing Machine, are doing the sewing in the most elegant manner, and entirely without basting, or showing the stitches, by the use of very simple attachments. The invention and introduction of the Vertical Feed is an invaluable addition to Sewing Mechanism. The old under-feed machines will be rapidly superseded by this new and more perfect device for sewing, as it is adapted to every variety of work. The Davis Sewing Machine Company are building an addition to their large manufactory at Watertown, New York.

We call the attention of farmers and threshermen to the advertisement of the Fearless Horse-Power and Thresher and Cleaner, elsewhere in this number of our paper. This machine is the only one that received an Award on both Horse-Power and Thresher and Cleaner at the Centennial Exhibition, Philadelphia, and ranks among the best of its class. An Ex-President of the New York State Agricultural Society said of HARDER'S Machines, "they are the best ever made," and the same testimony has been borne by equally good authority time and again. For further information send to MINARD HARDER, Cobleskill, N. Y.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 18, 1878.

BEANS AND PEAS.—Strictly choice Mediums are the only ones of that grade selling, and prices are stronger with small sales. Marrow beans for Havana use are unsettled, owing to a late advance in freight; the cost is now 90c. per bbl; formerly 30c. This will prevent shippers from operating until the W. I. market becomes adjusted. Exports this week are large, as they contain about 1,000 bbls. for Brazil; a new outlet for wholesale parcels. Pea Beans firm for prime. White Kidney steady. Red are scarce, having been largely included in the late sales for Pernambuco. Black beans quiet. Receipts of beans for week, 7,492 bush. Canadian peas are easier for ordinary quality, bulk and bond, quoted 83c. Green Peas doing better, $1.05@1.10; Southern B. E. Peas nominal, at $2.85@3.00. Exports of peas, 17,400 bush. We quote medium beans, choice, $1.65@1.67½; fair to good, $1.55@1.60; marrow, prime, free to vessel, $1.70@1.75; fair to good, $1.50@1.60; Red beans, $1.40@1.55; white kidney, $1.60@1.70; red do., $2.25@2.50; black beans, $2.40.

BUTTER.—Moderate prices have ruled since our last, but the market has shown a steady animation that might have helped rates, were not supplies so liberal. Western butter forms a large share of the receipts, but with rich, yellow State at the present ranges, Western has not its old time dominion over close buyers. Exporters include some creamery in their purchases. Firkins are wanted for coastwise use, but have to be packed here. Welsh tubs also have been repacked to some extent. State farmers' butter flown; great care, however, should be used as the proceeding at this early period is more or less experimental. Milled Western factory is slow of sale, and even fine ladle-packed must have extra merit to reach the price-limit.

Receipts for the week 24,812 pkgs,; exports do. We quote:

State creamery, choice 21@22c., a few at 23c.; fair to good 18@20c.; Half tubs and pails selected, 19@20c.; fair to good, 17@18c.; Welsh tubs, choice, 18@19c; other useful, 15@16c.; poor or stale State 12@13c.; Western, creamery choice, 21c.; other, 17@19c.; Western dairy fine 16 18c.; other, 12@13c.; factory (ladled) 13@14c. do. (milled) 11@12c.; poor Western 7@10c.; do. and grease, 4@8c.

Exports, past week, 4,300 pkgs.

BEESWAX.—At reduced prices a small trade comes from exporters. Sales at 27@27½c for Southern, and Western at 26½c.

Exports past week 4,475 lbs. Extra N. C. Wax held above 27c.

BROOM CORN.—Is very slow but not changed in price. Quotations are 6@7½c for hurl and short brush; 5@6½c, for medium green, 4@5c. for red and red-tipped, ₱ lb.

COTTON has shown a freer export demand, and closed firm, Latest prices are 11.13c@11.14c. for May; 11.22c. for June; 11.32c. for July; 11.35@11.36c. for August; 10.96@10.97c. for September; 10.75@10.77c. for October; 10.66@10.67c. for November; 10.66@10.67c. for December; 10.75@10.77c. for January; 10.85@10.86c. for February; 10.93@10.95c. for March, and 11.09 for April.

Quotations are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8¼	8¼	8¾	8¾
Strict ordinary	9	9	9⅛	9⅜
Good ordinary	9⅛	9⅛	9⅜	9⅝
Strict good do	10	10	10⅛	10⅜
Low middling	10 7-16	10 7-16	10 9-16	10 9-16
Strict low middling	10 11-16	10 11-16	10 13-16	10 13-16
Middling	11	11	11⅛	11⅛
Good middling	11⅜	11⅜	11⅝	11⅝
Strict good middling	11 11-16	11 11-16	11 13-16	11 13-16
Middling fair	12 3-16	12 3-16	12 5-16	12 5-16
Fair	12 11-16	12 11-16	12 13-16	12 13-16

Stained.

Good ordinary, 8 5-16; Strict ordinary, 9 1-16c; Low middling, 9¾c.; Middling, 10⅛c.

CHEESE.—Early in the week shippers were very indifferent, and but very little business was accomplished notwithstanding a willingness to accept concessions. Prices finally settled sharply and export trade was invigorated. At the close the supplies for the week proved lighter than had been expected and a steadier market was the result. Quotations are:

For factories, 10@10¾c. for best lots, the latter for special lots; 8 @8¾c. for good and prime; 5@7c. for half skimmed, and 3@5c. for skimmed. State, farm dairy at 9@10c. for good to choice, 7@8c. for fair to good and 5@6c. for poor skimmed. Western at 10c. for fine; 8½@9½c. for good to prime; 9½@9¾c. for western flat; 8@9c. for good to prime; half skimmed, 6@6c.; skimmed, 3@4c.

Cold weather has taken off a good deal of "show" from even some of the best factories, and part of the undecided feeling of the early part of the week may be ascribed to that fact.

Exports for the week, 46,798 packages.

Receipts, 58,425 boxes.

Gold closes 100¾.

Liverpool quotation, 61@62s. new cheese.

DRIED FRUITS.—Some slight changes in prices of small fruits, and the general market is very dull.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia 10@11c.; good to prime Georgia; 8@10c.; un. peeled halves, 6½c.; quarters, 4c. Pitted cherries choice new, 21@22c.; Raspberries, 25@27c. New York State plums, 12½@13; Southern plums, 11@12c. Blackberries, 10@10½c. Apples—State quarters, 4½@5½c.; do sliced, prime, 6@6½c.; good, 5c.; Western quarters, 4@4¼c.; Southern at 6@7c. for prime sliced, 5@5¼c. for fair to good; Southern quarters, 4½@4¾c.; Tennessee quarters, in bags, at 2½@3½c.; prime and fancy North Carolina sliced at 8@12c.

Exports for the week, 697 bbls. dried apples.

EGGS.—Receipts for the week, 12,045 bbls.; do last week, 12,042 do. Supplies are very liberal and the demand has not kept pace with them. Western or Canadian stock is not running regularly fine, and buyers insist upon the count being made good. Duck eggs sell in with hens. Goose eggs dull at 24@25c.

Near points, 14@15c.; State and Penn., 13c.; Western and Canadian, fresh, 12@12¼c.; fair Southern, 11@11½c.; inferior or stored eggs, 11c.

FLOUR.—Has yielded in price 10@20c. per bbl. and closed weak and rather dull on the tame advices from the other side.

Latest prices are $4.10@4.60 for very poor to strictly choice superfine State (fancy lots a shade higher); $4.65@5.00 for very poor to good extra do. odd lots and lines; $5.00@5.40 for good to fancy do.; $4.10@4.60 for very poor to choice superfine, Indiana, Iowa, Michigan, Ohio, &c., (fancy lots at higher figures); $4.60@5.00 for inferior to good shipping extra do., and $5@5.40 for good to fancy extra do.; common to choice white wheat extras, $5.15@6.25; choice to fancy do at $6.25@7.25; red and amber winter wheat, inferior to choice trade and family, at $4.55@6.25; round hoop Ohio at $4.75@5.10 and trade and family brands of do. at $5.15@6.25, the latter rate for choice; (fancy lots quoted higher); St. Louis, $4.30@5.75 for very poor to good extra, and $5.75@6.50 for good to very choice, with a few brands of fancy quality quoted up to $7.00@7.25); Minnesota clear, very inferior to very choice at $4.60@5.00; Minnesota "straight," inferior to very fancy, at $5.60@6.75, and patent poor to fancy choice at $5.75@8.50, unsound stock at from $2.25@5.75; city mill extra at $5.80@6.00 for fair to very choice for West Indies; do. for England at $4.85; do. trade and family extras, $6.25@7.25; do. for South America, $5.00@7.00 for fair to fancy; No. 2 at $2.85@4.00 for inferior to very fancy.

CORN MEAL.—Sales at $3.00 for Brandywine and $2.25@2.65 for Western yellow.

FEED.—Sales of 40 lbs. at $15@15.; 60 lbs. at $15.@16; 80 lbs., at $15@16; 100 lbs. at $17@19. Rye feed, $17@18, and Sharps at $18@20.

FRESH FRUITS.—Russets are now the only commercial lots of apples. Extras bring $6, others, $3.50@5. Strawberries have been abundant but of poor quality, being green, rain soaked or sandy. Dealers have had to repack a great many and in that way have obtained the ex rame price. Some good Boydens begin to arrive. N. J. crates, 15@18c.; Maryland Delaware and North Carolina, in order, 12@15c.; poor, 8@10. Gooseberries per bush. $1.50@2; cherries Southern 5@7c. A severe frost occurred here last Monday night reports from near by vineyards show that grapes have suffered; some State strawberry patches also injured. Peanuts are unaccountably quiet; Va. handpicked, $1.35@1.40; prime to extra $1.20@1.30; common to fair 85c.@$1.10. Pecans 6@8c. Receipts of peanuts, 1,473 bags.

GRAIN.—All articles are lower and closed weak, with a pressure to sell, as the situation on the other side is looked upon as peaceful.

Latest sales of wheat are of No. 3 spring at $1.13; ungraded spring at $1.16@1.18½; No. 2 Northwest, May, at $1.23; do., June, at $1.21; New York No. 2 spring, spot, at $1.20½@1.21; do, May, at $1.20; do., June, at $1.18½@1.19¼; do., July, at $1.17½; No. 2 Milwaukee at $1.23¼; No. 2 Chicago spring at $1.21; No. 1 Milwaukee, deliverable first ten days in June, at $1.16; No. 1 spring, lots, on spot, at $1.26@1.27; No. 1 white at $1.37@1.38; No. 1 amber, long, at $1.36½; No. 1 red, choice, to a miller, at $1.36; No 2 red at $1.30; do., May, at $1.20; do., June, at $1.28¼; Canada spring in bond at $1.17. Rye at 71@72½c. for Western, and Canada in bond at 71½@75. Corn at for No. 2 for May delivery at 50¼@50¾c.; No. 2 for June at 50¼@50¾c.; No. 2 for July at 51¼@51½c.; steamer mixed for May at 49½c.; do. for June at 49c. The New York steamer mixed at 50c.; New York No. 2 at 50¼@51c.; New York No. 3 at 48¼@49c.; ungraded mixed 48¼@51c.; Kansas mixed, 50¼@51c.; Southern white from store at 50½c. and southern yellow at 50c; Oats at for New York No. 1 white at 38@38½c; New York No. 2 white at 34¼@34¾c.; do. for May delivery at 34½c.; New York No. 1 at 34c.; New York No. 2 at 33½c.; New York No. 2 at 33c.; No. 2 Chicago at 34@34½c.; do. for June delivery at 31c.; mixed Western, 33@34½.; white Western at 34½@38½c.; mixed State at 31@31½c.; white State, 34½@38c.

HAY AND STRAW.—Prime lots of hay are in sufficient demand to keep them steady, but shipping and lower qualities are plenty and weak.

Bale hay, 55@60c. for shipping, and 70@80c. for retail qualities; clover, 50@60c. for prime. Straw, 40@50c. for long rye; 35@40c. for short rye, and 40@45c. for oat.

Exports, past week, 1,350 bales. Since Jan. 1st 26,300 do.; same time last year, 23,375 do.

HOPS.—Exports for the week, 400 bales. Trade generally is very slow and prices easy. Reports of the growing vines are favorable with few exceptions.

New Yorks, good to prime, 7@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

MISCELLANEOUS.—Feathers have improved; best Western live, 45@50c; mixed, 40@42c. Domestic essential oils quoted, currency prices: Peppermint, in tin, $1 75@2; in glass, $2 50. Wintergreen, large pkgs, $1 90@2; small, $2 10@2 15. Sassafras, 42@45c. Ginseng, $1 12@1 25. Seneca root, 55@60c. Honey is offering, but entirely unsalable. Maple sugar nominal at 10@12c; sirup in cans, 70c@$1.

OIL-CAKE—Quoted at $30.50 per ton.

POULTRY AND GAME.—Receipts of live have not been so free as was expected and prices are fairly firm. A large offering is expected next week. Spring chickens now quoted, ₱ lb, 25@27c. Fowls, choice, 12@13c.; Western, and Southern 11@12½c.; Roosters, 6@7c.; Turkeys, 8@12c.; Ducks, choice, $1.12; poor to fair, 50@85c., the lowest for Southern; N. J. Geese, $1.25@1.50; other, 70c.@$1.

Country-dressed poultry scarce but not wanted, especially scalded; city-dressed turns out brighter for market use. Turkeys, 12@15c.; Fowls, extra, 14@15c.; good to prime, 10@13c.; very common, 8@9c. Phila spring chicks, 31@36c; do winter, 25@27c.

Game is in moderate supply, and good, cool holding weather has stiffened prices. English snipe $2 50 ₱ doz; Plover, $1 50@1 75; Sand snipe, 45@50c.; wild pigeons, stall fed, $1 40@1 50; flight, 75@85c; squab, 50@60.

SUGAR.—Refined at 9¾ for cut loaf, and powdered, 9¾ for crushed, 8¾@9¾ for soft white and 7¾@8¼ for soft yellow.

TOBACCO.—A good export trade has been in progress and there is a firm range of prices.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2⅜@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5½@ 6¼	6½@ 7
Good leaf	6½@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @7
Pennsylvania assorted lots	8 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

PROVISIONS.—Hog products are generally lower and depressed.

Mess pork, $9 for spot lots June and July and $9.10 for August. Bacon at 4½c. for long clear and 5 1-16c. for short clear. Lard—Western steam, 6.95@6.97½c. for spot, lots, 7.93½c. for May and June and 6.97½c. for July. Stearine 7¼c. for Western. Tallow, 7 1-16c. for prime. Beef hams at $17@17.50. Beef—New extra mess, $12.@12.25; plain, $10@11.50; packet $13.50@14.50 bbls. family mess, $15@16; extra India mess $20@23 for city brands; do. Philadelphia, $19@20.

VEGETABLES.—Old Peach Blows and Rose are firmer, $1.37@1.62 good to extra; common grades of potatoes dull, at $1.00@1.12 all with bbl.; Southern new arrive steadily, and there is a good offering of Bermuda, Fla., $2.50@3.50; Char. and Sav., $2.50@4; Ber. $5@5.50; Southern, $1.50@2. Some L. I. and N. J. potatoes were damaged by the frost of last Monday. Asparagus is higher since the cold snap. Green Peas higher. Some former receipts worthless, mostly pods. Asparagus, Oyster Bay, $3.50@3 doz. good to best N. J. $1.50@2.50. Md. green peas bbl. $3@4.10; Norfolk $3.50@4. String beans, ref., crate $2@2.25; flat, $1.75@2. Cucumbers Sav. and Char. $2.50@3.; Fla. 75c.@$1.50. Rhubarb per 100, $1.50@1.75. Spinach, 37c.@50c. bbl. Lettuce, $1.25@1.50. Norfolk Cabbage, bbl. $1.50@1.75; Char. and Sav. $1.75@2 25. Fla. tomatoes crate $3@4; Ber do. 5 quart box 40c.@60c. Bermuda onions sell readily, as domestic are out; crates $1.75@1 87.; Ber. beets crate 50c.; Nor. do. 100 bunches $2.@2.50; do. turnips $1.@2.

WOOL.—Not much trade the past week, and very little prospect of an improvement in this respect until the new clips are ready for market. Prices are weak, but essentially as quoted last week.

Ohio, Pennsylvania and Virginia XXX and picklock, 43@46; XX, 38@41c; X, 38@40; No. 1, 39@41; No. 2, 34@37c.; common 32@34; combing, 40@45.

New York, Michigan, Indiana and Wisconsin. XX, 33 to 36c.; X, 33@36c.; No. 1, 30@32c.; No. 2, 31@35c; common 30@31.; combing 40@44.

Iowa, Vermont and Illinois X and XX, 33@35c.; No. 1, 34@37.; No. 2, 30@32.; combing, 38@43.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@35c.; unwashed, 23@26c.; unwashed combing, 28@31c.

LIVE STOCK MARKETS.

NEW YORK, May 18, 1878.

BEEVES.—Receipts for the week, 11,802 head: do., last week, 8,994 do. Regardless of enlarged receipts the market is higher and strong. Nearly one-half of yesterday's 46 cars were taken for export. Light Texans sold at 9¾c. Most of the trade at 9¾@11c.; a few extra steers 11¼@11½c. Exporters paid as high as 11c.

COWS AND CALVES.—Market unchanged. Choice as valuable in the country and here.

VEAL CALVES.—Receipts for the week 4,827 head; do last week, 4,602 do. good to prime live calves 5¾@6¾c., the latter for N. J. Buttermilk extra 4@4¼c.

SHEEP AND LAMBS.—Receipts for the week, 27,466 head; do last week, 22,235 do. The market was dull and at the close prices favored buyers. Poor to good clipped sheep, 4¼@5¾c.; extra held, 5¾c. Southern and Western lambs, 7¼@8c.; New Jersey and State 9@10c.

SWINE.—Receipts for the week, 28,937 head; do. last week 27,686 do. Good light corn-fed Ohio worth $370@380 per 100

SPECIAL NOTICES.

Genuine *versus* Spurious Electric Belts. Particulars free. Address PULVERMACHER GALVANIC Co., Cincinnati, O.

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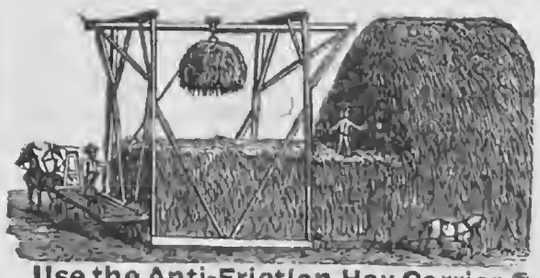
on both Horse Power and Thresher and Cleaner, at the Centennial Exhibition, as shown by Official Report, which says: "*For special features in the Power to secure light running and minimum friction. For the ingenious form of the Straw Shakers, which insure the proper agitation to separate the grain from the straw.*" For catalogue, address MINARD HARDER, Cobleskill, Schoharie County, N. Y.



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WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop's, Burlington, Vt.

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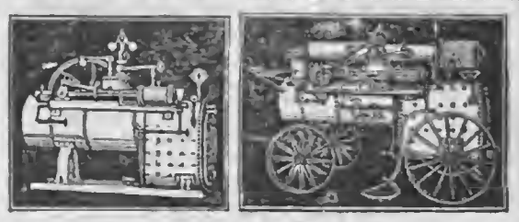

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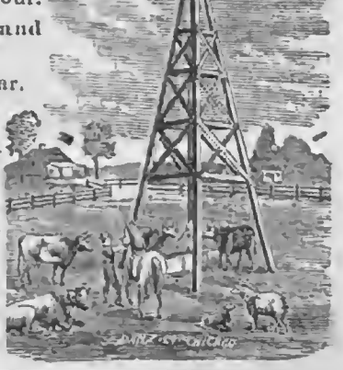

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Reading for the Young.

AN ANGRY BABY.

No human being who saw that sight
But felt a shudder of pale affright.
He sat in a window three stories high—
A little baby, with no one nigh.

A stranger saw him, and stopped to stare;
A crowd soon gathered to watch him there;
A gleam! a flutter!—in airy flight
Came past the window, a butterfly bright!

From fields of clover and perfumed air,
Wayfaring insect, what brought you there?
The baby saw it, and eagerly
Reached out to catch it with glowing glee—

With fat, pink fingers reached out—and fell!
The awful horror no tongue can tell!
Poor little baby, so sweet and bright!
Pale faces quivered, and lips grew white;

Weak women fainted; strong men grew weak;
Up rose one woman's heart-piercing shriek.
Hurrah for the awning! Upon the fly
It caught the youngster and tossed him high.

The bounce prodigious made baby scowl;
He caught his breath, sir, and sent up a howl.
All blessed the awning that had no flaw—
But a madder baby you never saw!

"POCKET MONEY FOR THE YOUNG PEOPLE."—No. 3.

M. B. PRINCE.

ONE of the prominent, if not the most prominent, causes of the desire to leave the farm so prevalent among farmers' sons is, no doubt, a lack of pecuniary remuneration for services rendered. Though this may be an old idea advanced by some one of the few who have attempted to give us light on the subject, we do not now remember to have seen any explanation as to the *how to do it;* that is, how to give the boy an opportunity, how he may improve it both mentally and pecuniarily; all of which I propose to show, in a practical way, I hope.

But first a word to parents. Do not work the boys too hard, making men of them before their time—a practice that will surely destroy all the beneficial influences of rural life, and bring about the same results finally that is seen in the hot-bed growth of our cities.

As the boy labors by your side in the field, the orchard or garden, explain to him as far as you are able, the mysteries of plant growth; the principles of deep or shallow tillage, drainage, the effect of weeds in the hill of corn; the results of good or bad management in the care of domestic animals, as well as the different points of excellence in the various breeds, and their adaptation to different purposes. Assist him in procuring tools with which to while away a leisure hour, or allot to him a patch of land whereon to grow some crop for his own; to be disposed of as he pleases, advising him, of course, as to a proper investment of the proceeds. The ways are so many by which the young people can secure pocket-money, and the circumstances of location so different that to go through the whole category would be an endless task. Near small towns and in thickly populated rural districts, the growing of vegetables, plants and perhaps flowers will be found to afford a profit as well as a prolific source of pleasure and education.

Commence in a small way, enlarging as the business demands it. Secure good seeds of the best varieties, not too many, say two kinds of tomatoes, three of cabbage, etc.; when the proper season arrives, make an ordinary hot-bed, instructions for which you will find in many of the catalogues of seedsmen that are sent free by most of the RURAL'S advertisers.

One sash, 3x6 feet, is large enough for the first; when your tomato, pepper and egg-plants are about two inches high, have another bed ready, in which transplant two or three inches apart, then as the weather becomes more mild, a cold-frame or bed may be used to advantage for a second transplanting, where more sun and air should be allowed, which will "harden off" the plants, as the gardeners say, rendering them more able to withstand the after open-ground culture.

A cheap cover for the two later beds can be made of cambric, stretched on a frame; it does admirably for mild weather. Cabbages, cauliflowers, celery, etc., are usually sown where they are to remain until planted in the open ground. In this, as well as in other plans which we may propose, make it a point to produce the best. Establish a reputation in your neighborhood; above all, study the wants of your plants; observe the effect of much or little water, different fertilizers, etc., thus storing the mind with useful knowledge,

EDUCATION.

THIS is what Mr. Fowle says about cleanliness in a teacher: "Perhaps in no particular can a teacher be more useful to his pupils than by inculcating a habit of neatness, and in no one thing, perhaps, will the importance of our example be so distinctly felt. The superiority of female teachers in this respect is, perhaps one of the strongest reasons for the growing preference which is given to them. At every institute I saw young gentlemen who, in manner and personal appearance, were all that could be wished; but I saw also many who in these respects were far better fitted to be warnings than models for the imitation of youth. I do not wish the young teacher to expend all he earns in dress, but I do wish to see every teacher careful in regard to external influence. His clothes may always be neat and whole, however coarse. His boots may always be cleaned. His hair may always be neatly combed, his teeth perfectly white, his finger nails cut, his hat and clothes brushed, and his hands, nose, ears and neck perfectly clean. Frequent ablutions of his whole person, as well as of his face and hands, are indispensable. He must have a care as to his breath, that it be not offensive to those whom he is obliged to face so often. I do not hesitate to say that if I were on a school committee no man who used tobacco and who spit on the floor, should ever have my vote, if he applied for a school and would teach for nothing."

Large committees of our ablest teachers after full examination have reported that the complete introduction of the metric weights and measures, now making so rapid progress in this country, would save a full year of the school-life of every child.

In spite of all the efforts that are made in the cause of popular education, illiteracy is increasing faster than our population. The year saved would be enough to turn the scale. In a country depending for the safety of its free institutions upon the education of the people, these facts are of the most serious importance.

Such being the case, every friend of education, economy, and progress, must have a strong interest in the efforts now meeting with so much success, to secure these advantages for our country.

The Printing Times says we must accept the following data on the authority of the compiler, who has evidently more time than business on his hands: "A rapid penman can write thirty words in a minute. To do this, he must draw his pen through the space of a rod, 16½ feet. In forty minutes his pen travels a furlong. We make on an average sixteen curves or turns of the pen in writing each word. Writing thirty words a minute, we must make 480 to each minute; in an hour, 28,000; in a day of only five hours, 144,000; and in a year of 300 days, 43,000,000. The man who made 1,000,000 strokes with his pen in a month, was not at all remarkable. Many men, newspaper writers, for instance, make 4,000,000. Here we have, in the aggregate, a mark of 300 miles long to be traced on paper by such a writer in a year. In making each letter of the ordinary alphabet we must make from three to seven turns of the pen, or an average of three and a half to four." Perhaps some equally ingenious person will next inform us how much ink a journalist can save by not dotting his "i's."

Many Iowa towns have elected women to the office of school director under the new State law allowing women to hold office. The experiment is reported to be a successful one.

Princeton will send a party to Denver, to witness the solar eclipse of July 28th. It will be occupied principally with spectroscopic work.

I will never purchase lottery tickets so long as I can hire a man to rob me at reasonable wages. —*Josh Billings.*

A CULTIATED EAR.—An ear of corn.

LETTERS FROM BOYS AND GIRLS.

Our Foreign Cousin Again.

DEAR UNCLE TRUE AND COUSINS:—With great pleasure I see that my last letter has found its way into the dear RURAL, and encouraged by your very kind remarks, I will try again to step before the cousins to-day.

In my letter I promised to write to you about rural life in Switzerland, and hoping that you will not find my letters too long and dry, I undertake to fulfill my promise by giving first, an introduction on the outlines of the history. In old times, the times of the Middle Ages, half of Europe was the exclusive property of the government, the church and the numberless counts and barons. They possessed and exercised a most despotic power over their subjects. The common people owned no land in their own name; they had to work it either on shares or to rent from the proprietors; but they had no chance to buy it or to free themselves from the rent.

The constant wars in which the smaller and greater sovereigns were involved, and for which their respective subjects had to pay dear enough with life and property, led to the entire ruin of the people. Only after the spirit of civilization commenced to reach the heart of the population the serfs shook off the yoke and taking possession of the property of their former oppressors, they became for the first time owners of real estate; but this freedom was bought with the lives of thousands of our ancestors who fought like heroes against the foes of liberty.

The old Swiss were the first that protested, and the deeds of William Tell and others are well known across the Atlantic to a good many of our cousins. After liberty carried the victory over slavery, a revolution took place in the socia life of the people; darkness, ignorance and religious persecutions had to make room for light, civilization and freedom of religion; new inventions and improvements were made from year to year in agriculture and other sciences, population and prosperity increased, and after America was discovered the old world had means enough to explore the new, to settle there, and to turn the vast wilderness into the most productive country on the globe.

But as population increased very large farms became smaller and smaller; every generation had to divide the farm in smaller lots in order to content their successors, until our land is now all divided into one-quarter to five acre lots; and it is not very seldom that a farmer owning 50 acres of land, has it, perhaps, in 50 different lots, situated four or five miles around the village he lives in; and working on such a farm is what I call "small farming."

As I am through now with the introduction, I fear that more of my bad writing, (which, by the way is caused by bad pen and hard labor for the past days), would annoy UNCLE TRUE. If it should please you I shall write in my next letter something about small farming. *Au revoir donc!*

Clinton Co., N. Y. JOHN SCHWYN.

Our Pert Cousin.

So Wildfire actually considered me talented? Really I didn't expect to receive such a compliment from him. We sigh for another poetical effusion. Wildfire, why didst thou cease thy efforts? Renew them, we beseech thee, and gladden our hearts.

Where is Solomon? I fear his residence was among the sugar maples, and he has been boiled down, and some one has gobbled him up. Oh, heart-rending thought!

Where is Young Naturalist? Echo answers, where! Has he disappeared from this mundane sphere, or has he succumbed to Dew-Drop's smiles and departed our circle to be forever at her side?

Do any of you know the whereabouts of Belle E. F.? I have not seen a letter from her for some time; hope she will write again soon, you know "the more the merrier."

Will some one please tell me how to skeletonize leaves? Yours, excruciatingly,

Norfolk Co., Va. Bertha, alias Gerfalcon.

The Puzzler.

HIDDEN STREAMS OF WATER.

1. DRIVE rather fast.
2. There's a flake of snow.
3. 'Tis Alla Baba, you know.
4. Let Ella go once.
5. Why, Bub, a yell is a scream.
6. Is this easy?
7. Doc., Eanice loves you.
8. I met Eric reeking with vile rum.
9. I live in Brooklyn, E. D.
10. Is Dover ill?
11. Will Rivu let egg-nog alone?
12. So, under the sod he sleeps.
13. Castra, it seems wrong.
14. Nic., Han., NeH and I.
15. I wonder if "Rith" is right?
16. In the march I (Pela) got out of step.
17. The Mogul fainted.
18. See the Hypoo laugh!
19. Upon Dave's word.
20. Can Allen go?
21. Lestu, a rye-field took fire.
22. He's a tar no more.
23. At last, Rea M. let me kiss her.
24. I am ill, Racero.
25. I live in Maine.

☞ Answer in two weeks. LITTLE ONE.

CROSS-WORD ENIGMA.

My first is in you but not in me,
My second is in neither, I think you'll agree;
My third is in cedar but not in pine,
My fourth is in liquor but not in wine;
My fifth is in stone but not in wall,
My sixth gets in trouble, I leave to you all;
My seventh is in riddle but not in sieve,
My eighth is in Utah, where "latter days" live;
My ninth comes in yearly, not monthly, I ween,
My whole I prize dearly, though never have seen.

☞ Answer in two weeks. MARY WALKY.

DOUBLE ACROSTIC.

1. A NATIVE of India and Hindostan. 2. Illegal. 3. A measure. 4. A complimentary title applied to married or elderly ladies. 5. Bustle. 6. In no degree. 7. Clean. 8. A girl's name. 9. A dance. 10. A peak of the Andes Mountains. 11. A lizard. 12. A place of toil and misery. Primals and finals form two of Sir Walter Scott's works.

☞ Answer in two weeks. A. O. L.

DIAMOND PUZZLE.

1. A CONSONANT. 2. A month. 3. A woman's name. 4. Weakness of resolution. 5. A modified disease. 6. New doctrines. 7. An earthen vessel. 8. Wickedness. 9. A consonant.

☞ Answer in two weeks. S. C.

TRIPLE ACROSTIC.

1. HAVING six sides. 2. A lady's name. 3. An ancient religion. 4. Exhumed. 5. A tyrant. 6. Part of a ship. 7. To dry in a kiln. Primals, centrals and finals form three fishes.

☞ Answer in two weeks. BALTO.

WORD-SQUARE ENIGMA.

1. A CITY of Russia. 2. One of the Caroline Islands. 3. The primitive form of a word. 4. A fable.

☞ Answer in two weeks. DR.

PYRAMID PUZZLE.

1. A CONSONANT. 2. A boy's nickname. 3. Foolish. 4. An idle prater. 5. A female writer. 6. Heedfully. Centrals form a county of Maryland.

☞ Answer in two weeks. FLORIDIAN.

PUZZLER ANSWERS.—May 11.

CURTAILMENTS.—1, Nith, nit; 2, Yew, ye; 3, Wet, we; 4, Coos, coo; 5, Deep, Dee; 6, Early, Earl; 7, Weed, wee; 8, Tooth, toot; 9, Kink, kin; 10, Wart, war; 11, Hope, hop; 12, Horn, Hor; 13, Rouen, roue; 14, Thine, thin; 15, Loo, lo; 16, Booty, boot; 17, Vesta, vest; 18, Stalk, staff; 19, Romeo, Rome; 20, Doth, dot; 21, Pear, pea; 22, Heron, hero; 23, Met, me; 24, Beet, bee; 25, Bet, be.

TRANSPOSITION.—

"Is it not sweet, beloved youth,
To rove through erudition's bowers,
And cull the golden fruits of truth,
And gather fancy's brilliant flowers?"

Sabbath Reading.

CHRIST AND THE LITTLE ONES.

MARK 10: 13. LUKE 18; 15.

"THE Master has come over Jordan,"
Said Hannah, the mother, one day;
"He is healing the people who throng Him
With a touch of His finger they say.

"And now I shall carry the children,
Little Rachel, and Samuel, and John;
I shall carry the baby Esther,
For the Lord to look upon.

The father looked at her kindly,
But he shook his head and smiled:
"Now who but a doting mother
Would think of a thing so wild?

"If the children were tortured by demons,
Or dying of fever, 'twere well;
Or had they a taint of the leper,
Like many in Israel."

"Nay, do not hinder me, Nathan,
I feel such a burden of care;
If I carry it to the Master,
Perhaps I shall leave it there.

"If He lay His hand on the children,
My heart will be lighter, I know;
For a blessing forever and ever
Will follow them as they go."

So over the hills of Judah,
Along the vine rows green,
With Esther asleep on her bosom,
And Rachel her brothers between,—

'Mong the people who hang on His teaching,
Or waiting His touch or His word,
Through the row of proud Pharisees listening,
She pressed to the feet of her Lord.

"Now, why should'st thou hinder the Master,"
Said Peter, "with children like these?
Seest not how from morning to evening
He teacheth and healeth disease?"

Then Christ said, "Forbid not the children!
Permit them to come unto Me!"
And He took in His arms little Esther,
And Rachel He sat on His knee.

And the heavy heart of the mother
Was lifted all earth care above,
As He laid His hands on the brothers,
And blest them with tenderest love,—

As He said of the babes in His bosom,
"Of such is the Kingdom of Heaven;"
And strength for all duty and trial
That hour to her spirit was given.

[*Julia Gill.*

SINAI.

IF the Wady Feiran, by its palm-grove and its brook, be marked out as the first long halting-place of Israel, the high valleys of Jebel Musa with their abundant springs no less mark out the second. The great thoroughfare of the desert, the longest and widest and most continuous of all the valleys, the Wady es-Sheykh, would lead the great bulk of the host, with the flocks and herds, by the more accessible though more circuitous route into the central upland; while the chiefs of the people would mount directly to the same point by the Nukb Hawy, and all would meet in the Wady er-Rahah, the "inclosed plain" in front of the magnificent cliffs of the Ras Sufsafeh . . . No one who has approached the Ras Sufsafeh through that noble plain, or who has looked down upon the plain from that majestic hight, will willingly part with the belief that these are the two essential features of the view of the Israelite camp. That such a plain should exist at all in front of such a cliff is so remarkable a coincidence with the sacred narrative as to furnish a strong internal argument, not merely of its identity with the scene, but of the scene itself having been described by an eye-witness. The awful and lengthened approach, as to some natural sanctuary, would have been the fittest preparation for the coming scene. The low line of alluvial mounds at the foot of the cliff exactly answers to the "bounds" which were to keep the people off from "touching the mount." The plain itself is not broken and uneven and narrowly shut in, like almost all others in the range, but presents a long retiring sweep, against which the people could "remove and stand afar off." The cliff, rising like a huge altar in front of the whole congregation, and visible against the sky in lonely grandeur from end to end of the whole plain, is the very image of the "mount that might be touched," and from which the "voice" of God might be heard far and wide over the stillness of the plain below, widened at that point to its utmost extent by the confluence of all the contiguous valleys.

REMEMBER that God is no curious or critical observer of the plain expressions that fall from his poor children when they are in their closet duties; 'tis not a flow of words, or studied notions, seraphical expressions, or elegant phrases in prayer, which take the ear, or delight the heart of God, or open the gate of glory, or bring down the best of blessings upon the soul; but uprightness, holiness, heavenliness, spirituality and brokenness of heart—these are the things that make a conquest upon God, and turn most to the soul's account.

THE Lord defines faith to be a coming to God in Christ; to be a resting, or staying, or rolling of the soul upon Christ. And it is always safest and sweetest to define as God defines, both vices and graces. This is the only way to settle the soul, and to secure it against all the wiles of men and devils, who labor by false definitions of grace to keep precious souls in a doubting, staggering and languishing condition; and to make their lives a burden and a misery unto them.

GOD hath bestowed himself as a portion upon as great sinners as any are that as yet have not God for their portion.

PERSONAL ITEMS.

The Russian painter Verestchaguine, who accompanied Gen. Skobeleff during the late war, is now in Paris, occupied in painting some of the most terrible incidents of the campaign in which he took part.

Sir Garnet Wolseley, the model English soldier, has taken to growing his hair long, after having been for some years trying to cultivate what is known as "a mixture of the beauty of a convict and cocoanut." The change becomes him, but he does not look half so fierce as he used to do.

Mrs. President Hayes explained at Philadelphia that while she does not use wine herself, nor is it used in her family, she has no objection to other people using it if they think proper to do so. In short, she enjoys herself in her own way and fully accords the same privilege to all other persons. Thanks Mrs. Hayes!

Thomas Carlyle, the mighty British thinker and uncouth writer, is as weary of hearing the Father of his Country spoken of as "first in war, first in peace, and first in the hearts of his countrymen" as the old Greeks were of hearing of "Aristides the Just." He thinks a biography ought to be written that would "take him down."

Senator Don Cameron has provided against any clashing of interests in his family by arranging that his eldest daughter shall have charge of her five brothers and sisters at Harrisburg, and his newly-wedded bride be given sole possession of the Senator's house in Washington. His wife and daughter are nearly of the same age and for years have been warm personal friends.

Mr. Frank H. Taylor, the "Graphic" artist and author of the poem "Her Letter," published in the issue of the RURAL for March 23d, is connected with the latest romance in real life. He was at the wreck of the Huron as a newspaper correspondent, and finding among the *debris* a woman's letter to a loved one, whose form might then be lying cold and stark somewhere along the beach, Mr. Taylor penned the lines describing the circumstance, and the verses were so widely copied as to lead to the identification of the fair writer. Fortunately the young man to whom the stray letter was addressed did not meet the fate of many of his companions, but was saved, and at Sandusky, O., a few weeks ago, was wedded to the author of the tender epistle. His name is R. Gracey Denig, of the U. S. Navy.

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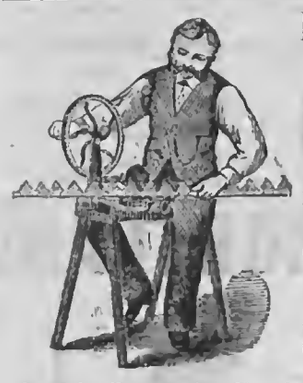

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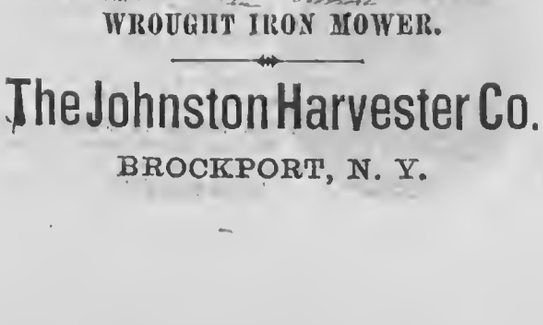

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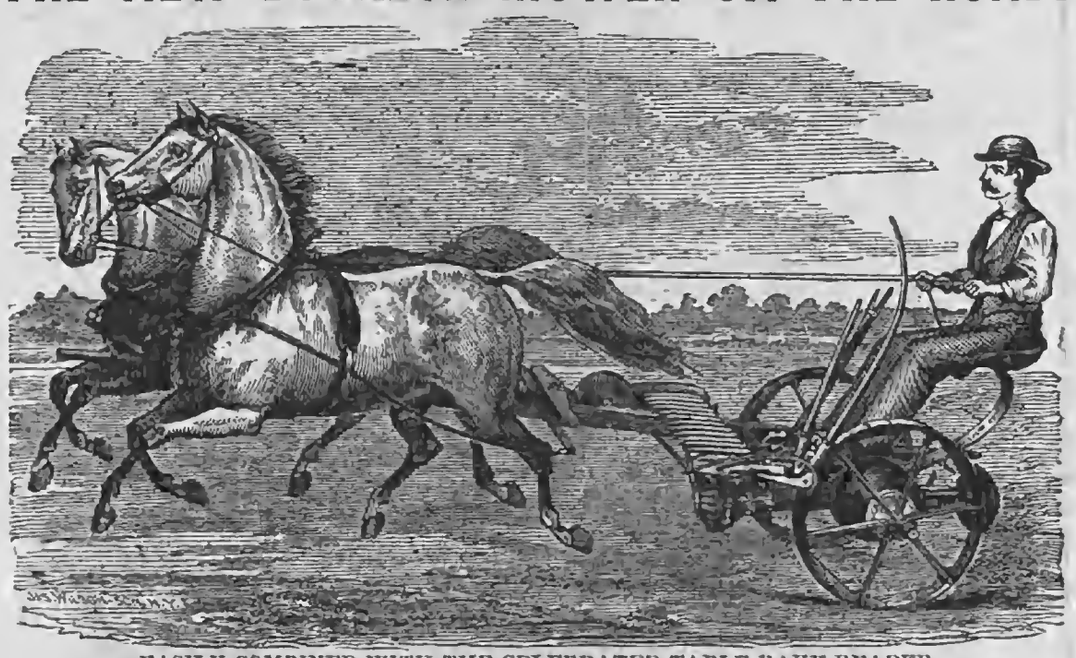

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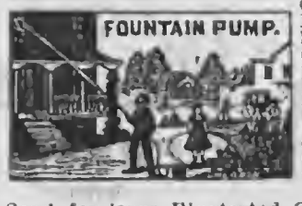

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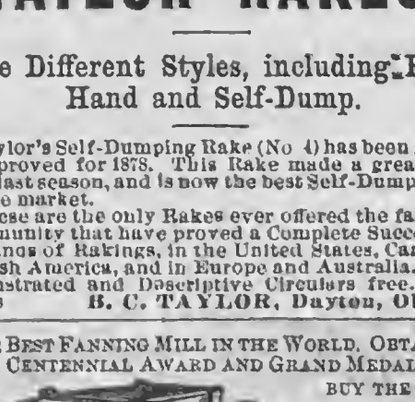

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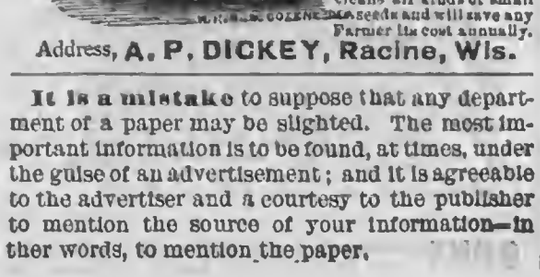

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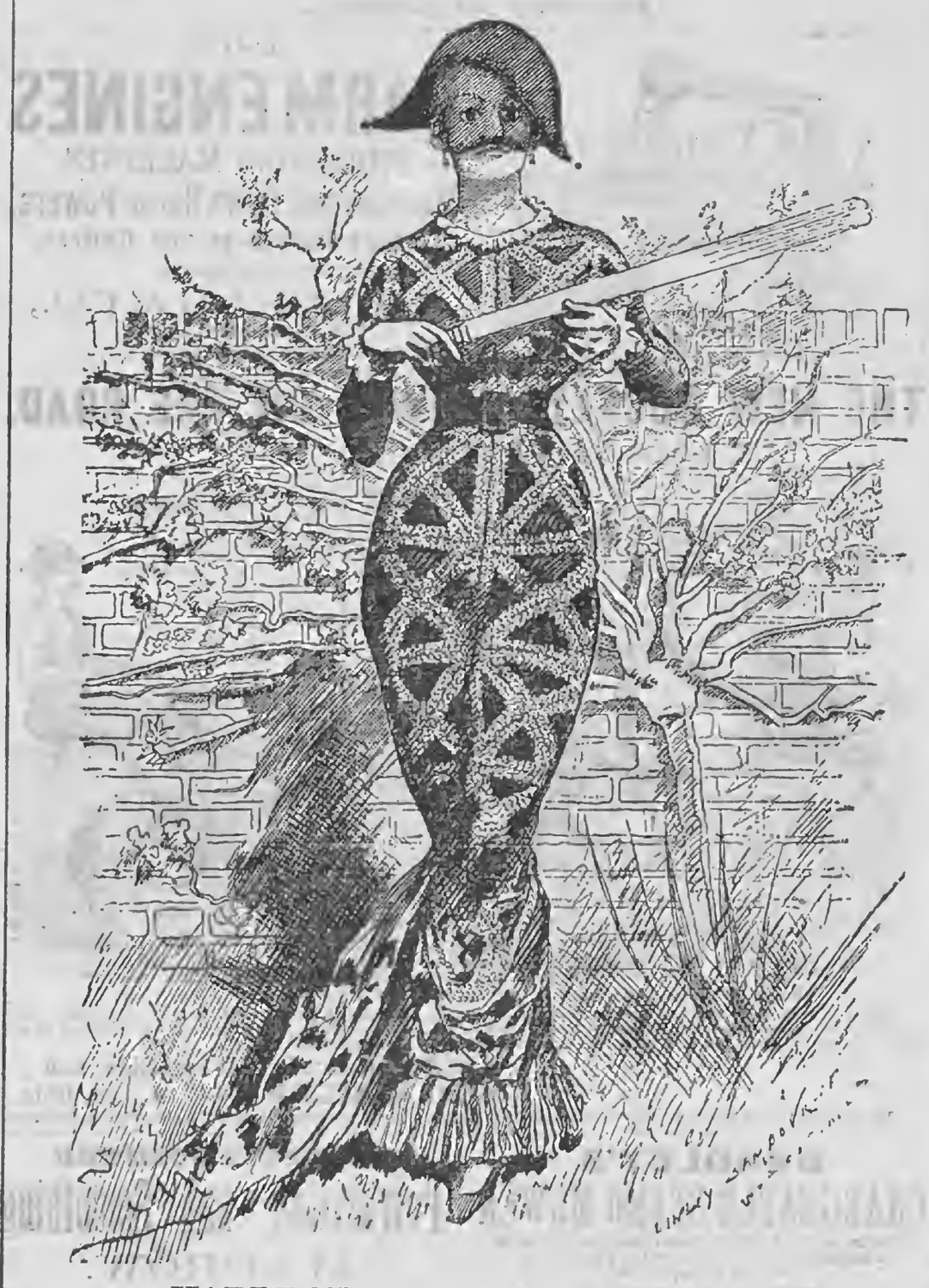
THE following translation was made by a Frenchman who professed to teach languages, and who thought he was telling a story in really beautiful English: "A lady which was to dine chid to her servant that she not had used butter enough. This girl, for to excuse himselve, was bring a little eat on the hand, and told that she came to take him in the crime finishing to eat the two pounds from butter who remain. The lady took immediately the cat whom was put in the balances, it just weighed that two pound. 'This is all the very much well for the butter,' the lady then she said, 'but where is the cat?'"

Out of Tune.

WHEN the tones of a musical instrument become harsh and discordant, we say that it is "out of tune." The same may be said of that far more wonderful and complicated piece of mechanism, the human structure, when it becomes disordered. Not only actual disease, but those far more common causes, overwork, mental anxiety and fast living, may impair its vigor and activity. The best remedy for a partial collapse of the vital energies, from these as from other causes, is Hostetter's Stomach Bitters, which is at the same time an agreeable and mind-cheering cordial, and the best possible invigorant in all cases of debility. It is an incomparable stomachic and antibilious medicine, eradicates fever and ague, and prevents subsequent attacks. It remedies with certainty and thoroughness bowel and kidney complaints, dyspepsia, nervousness, rheumatic troubles, and many other bodily ailments. It also counteracts influences which predispose to disease.



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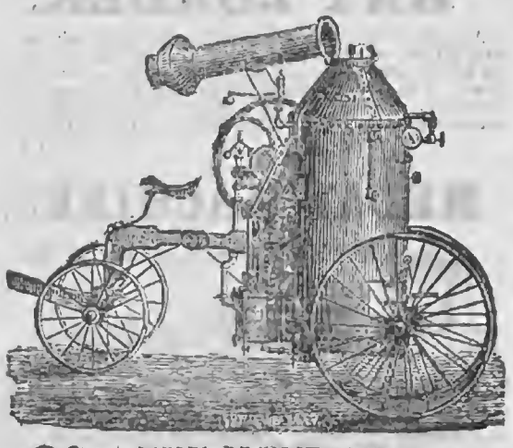

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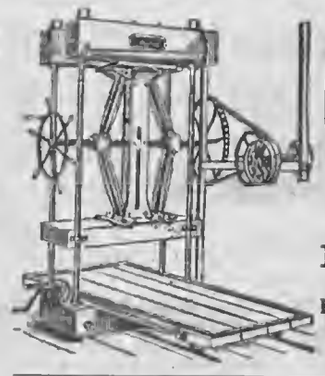

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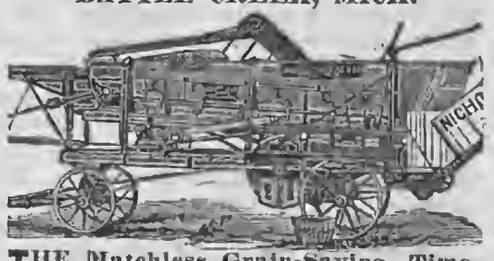

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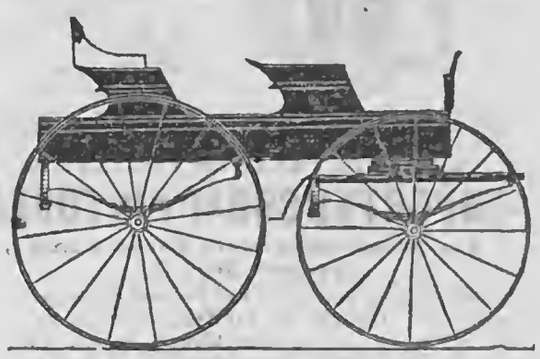

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 22.
WHOLE No. 1479.

NEW YORK CITY, JUNE 1, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

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Entomological.

THE ACTION OF UNITED FORCES.

In the Rural New Yorker for May 11, we figured some carrion beetles and flies at their useful work—removing dead bodies from the air.

To-day we present another figure, showing these and other insects at work upon a bird. In the figure the two beetles on the tail feathers and under the wing, are Necrophorus; the beetle on the base of the tail, and the two similar ones on the breast, are Silphas; while the one under the head, and the other in the left-hand corner, are Necrophilas—near relatives of the Necrophorus. Here we figure also some hornets, which, as we mentioned before, do not disdain to eat flesh, at any rate when it is fresh, though they seem to prefer to catch their own prey, namely insects, rather than to associate at a common table with their lowly, distant relations. The butterflies, though lovely to the sight, are not so dainty, are filthy indeed; while the caterpillars, which are sometimes regarded with disgust by shallow-pated sentimentalists, are more cleanly and devour only the leaves of the trees or lowlier plants.

The labors of all these insects, however, except the Necrophorus and the flies, would avail but little in removing the decaying mass from sight. Linnæus said that three flies would, through their progeny, devour the carcass of a horse as quickly as a lion would devour it, which, as lions do not eat stale meat, must be true; but we may believe it would be true under other circumstances. A carcass, which has grown ripe under a hot summer sun, often seems to be composed almost entirely of a mass of living maggots. The burying beetles are not so prolific, but by their habits they get the body out of sight as quickly and as effectually as do the flies. Attracted to the corpse by the sense of smell, they surround it and push their heads under it. They scratch away the dirt with their legs, so that a wall is raised around the carcass at the same time that a grave is dug, and the body sinks into the hollow by its own weight. From time to time one or another of the beetles comes to the surface and observes the progress of the work. If any part is less buried than the rest it is examined attentively by the beetle, who stands before it with head and antennæ stretched in thought, and then returns to work. Soon we see that the strength of all the beetles has been concentrated upon this part, and in an almost incredibly short time the corpse has disappeared beneath the ground; then the mound over it is leveled, and, finally, no trace of the burial remains. In very favorable ground the corpse is buried thirty centimetres deep. Sometimes, when the ground upon which the carcass lies is not easy to dig in, the beetles push the carcass along to a place suitable for burial.

Gleditsch often and long watched these beetles at work, and says, that in fifty days four of them buried two moles, four frogs, three small birds, two locusts, the entrails of a fish, and two pieces of neat's liver. This flesh is buried as a receptacle for the eggs of the beetles, the beetles themselves feeding upon the larger and unburied carcasses.

[It was not our intention to have given this week the accompanying entomological cut, which, owing to a disappointment in procuring a first-page sketch, illustrative of the opening of the Paris Exhibition, (which we shall present next week), we were obliged to use.—Eds.]

ACTION OF UNITED FORCES.

GETTING RID OF THE CUT-WORM.

The following method of getting rid of the Cut-worm is just about as sensible as many methods of destroying insects which are published in these enlightened days. It is taken from Jossyln's account of his voyage to New England, printed in London in 1674:—"There is also (in New England) a dark dunnish worm or bug of the bigness of an oaten-straw and an inch long, that in the spring lye (*sic*) at the root of corn and garden plants all day and in the night creeps out and devours them. These in some years destroy abundance of Indian corn and garden plants and they have but one way to be rid of them, which the English have learned of the Indians. And because it is somewhat strange, I shall tell you how it is. They go out into the field or garden with a birchen dish, and spudling the earth about the roots, for they lye not deep, they gather their dish full which may contain a quart or three pints, then they carrie the dish to the sea-side when it is ebbing water and set it a-swimming, the water carrieth the dish into the sea-side and within a day or two you go in your field, you may look your eyes out sooner than find any of them."

Arboricultural.

AZALEA AMŒNA.

Among the various plants that have grown into public estimation of late years, few are more deserving than this little shrub. Faring like many new and old plants, we find it for years consigned to the greenhouse and the companionship of the larger, if not more showy, Chinese Azaleas, where its charms seem quite dwarf and dulled by contrast. Even after accident taught many that it possessed a considerable degree of hardiness, it was classed with such kinds as A. Obtusa and Sinesis alba, which, in ordinary exposures, have been found by no means hardy Very many new and choice plants experience a like fate. If any extraordinary beauty or delicacy of color and form appears, immediately the prize is too precious to expose to the rude blasts of winter even for the sake of experiment and the enlightenment of mankind. Let some one else, they say, benefit the world by the sacrifice of so beautiful a plant, we will preserve its attractions in the greenhouse. Fortunately, however, some one is generally sure to risk the sacrifice by carelessness, and to the surprise of every one the plant proves hardy. Again the accident occurs with the same result. A few daring spirits now slowly and tentatively leave out in winter more and more of these plants, until in time their absolute hardiness is established.

It would be a surprising figure could we learn the period of time required to demonstrate the hardiness of many of our now commonest flowering shrubs. Few have been doubted in this respect longer and more persistently in the face of facts than Azaloa amœna. In reality it is nearly, if not quite, as hardy as Ghent Azaleas and Rhododendrons; and a perfectly charming little object it is in early spring. Freed from the dulling effect, in the house, of masses of larger and highly colored Chinese Azaleas, the somewhat purplish shades of its petals disappear almost entirely in the open air and amid the quieter tones of green foliage, only enough remaining to intensify its deep and glowing red or rose color. The general tints of early spring are fresh and striking, but none are more so than the rich masses of flowers which completely envelop the dwarf, bushy form of Azalea amœna. Along a border, or among other shrubbery the effect at a little distance is almost dazzling. The flowers come, as usual with such plants, before the young growth, which shoots directly upward, and gradually fills in form below, year after year, until it assumes in time a solid mass of glossy, dark-green foliage made up of little oval leaves, often arranged in layer-like masses, after the manner of other hardy Azaleas. It is, however, much more compact than any thing of the Azalea genus, and quite evergreen, except that it takes on a bronze-brown hue in winter. The roots are very fibrous and numerous, which enables it to endure transplanting with great ease and safety.

Its proper location on the lawn is in some border or near the house on the outskirts of groups of Azaleas, Rhododendrons, etc. As with all similar plants, the selection of a sheltered side of the house, east or south, favors the length and retention of its bloom in spring, and its absolute safety in winter. For similar reasons, some remote and quiet nook of the lawn affords a fitting situation where its beauty can appear suddenly and unexpectedly to the observer. The pruning knife need scarcely ever be used on its regular, compact growth, or the soil specially prepared, if already properly enriched. All summer, its glossy foliage is attractive, so we cannot complain—as we do sometimes rather unjustly, of the Hardy or Ghent Azaleas—that its wonderful flowers constitute its chief, if not its only, charm. These words of praise for this little plant seem very weak, as we look on its glowing colors. S. Parsons.

Industrial Topics.

THE PARIS EXHIBITION.

PLAN OF THE BUILDINGS.

PARIS, May 12th, 1878.

THE Atlantic cables have robbed the European correspondent of a good deal of the interest and still more of the importance that used to be attached to his communications in the days when they had the freshness and piquancy of absolute news. Now the most exciting and significant items of intelligence are flashed with lightning speed across the waters, and the best the correspondent's laggard letter can do is to give details of information which, in the rapid current of modern affairs, has already become always at least a trifle stale and generally at best somewhat insipid. Moreover, it is his rather discouraging lot that the scenes and incidents an account of which would afford the most attractive subjects to his descriptive pen, are precisely those which the cablegram has already detailed with an exasperating minuteness that leaves little that is fresh for him to relate.

It would be pleasant to be the first to set forth to RURAL readers the magnificent pageantry connected with the opening of this the third International Exhibition held in the brilliant capital of France; to describe the impressive spectacle presented by the entire garrison of Paris, eighty thousand strong, drawn up along the route traversed by the Marshal President on his way to the ceremony, or forming his imposing escort; to particularize and describe the notable personages, headed by the comely Prince of Wales and the stalwart Crown Prince of Denmark, that rode beside him; to set to words the musical crash with which the arrival of the august party was greeted by the twenty-six military bands of Paris which were stationed near the Exhibition; to depict, or try to, the splendid scene in the gorgeous rotunda of the Trocadero, where princes, nobles, senators, representatives, the grand officials of the State and its worthiest citizens, together with the representatives of all civilized nations and of all enterprising journals assembled to the number of seven thousand to see the soldier ruler of the most warlike race in Christendom throwing open the finest display of the arts of peace which the world has ever seen, at a time when surrounding Europe is trembling beneath the tread of marshaling armies and the air is thick with rumors of approaching conflict.

But this is a theme on which the telegram has long since anticipated in detail the efforts of the correspondent, and in casting around for an appropriate topic for this first letter, none seems more timely than a brief account of the general plan of the Exhibition, which will be all the more intelligible to readers of the RURAL on account of the illustrations of the buildings that enriched its pages before the writer had crossed the Atlantic.

No exhibition was ever designed on a grander scale, and none has ever more completely realized the conceptions of the artist who planned it. Only two years and one month before the opening of the institution, the Champs de Mars and the hights of the Trocadero were bleak and desolate-looking; now towering masses of architecture, innumerable works of art, painting, sculpture, decoration, fountains, flowers, and vast stores of industrial treasures all contribute to render these spots the most interesting and beautiful in the finest city on the globe.

The distinctive feature of the present exhibition is the marvelous palace on the Trocadero enthroned, in stone, on an eminence facing the Champs de Mars, overlooking Paris and commanding enchanting views of long reaches along the valley of the Seine. Its vast dome and glittering minarets, towering above all neighboring structures, make it conspicuous miles away; and it is satisfactory to know the Municipality of Paris has decided to buy it as a museum and art treasury after the close of the the Exhibition.

Its rotunda, which accommodates 7,000 persons, was the scene of the inaugural ceremony on the first of May, and here also the prizes will be distributed at the close of the Exhibition on the 31st of next October. One on each side of the huge dome, two towers rise aloft to the hight of 250 feet, and from the elevated position of their foundation, their summits are the highest points in Paris. Flanking the rear of the rotunda, and spreading in two elegant semi-circles to the right and left, are the wings, fully double the length of the facade of our Capitol at Washington. These are occupied by exhibits of glass, porcelain wares, statuary and fine arts generally. Terraces with colonnades front these wings and overlook the beautiful garden which slopes down to the quay by the river, and which is adorned with a fine cascade of thirty feet fall, and eight large fountains surrounded by many smaller ones, the lowest and broadest of all throwing up a jet to the hight of eighty-three feet. Here and there in the garden, from the midst of trim lawns and brilliant flower-beds, rise houses illustrative of Oriental architecture. There too are conservatories and hot-houses gay and odoriferous with all species of flowers that delight the eye or perfume the air in every part of the world, to say nothing here of a host of other charming novelties the mere mention of which would crowd this page.

Quitting this delightful art department and crossing the Seine by that memorial of Prussia's crushing defeat by the first NAPOLEON—the Bridge of Jena, which has lately been broadened and strengthened—beyond the lines of the street cars, rises, on the Champs de Mars, the vast façade of the Industrial Exhibition, 2,315 feet in length and 1,145 feet in breadth. Surrounding this also is a wide garden stocked with flowerbeds, hot-houses and ornamental lakes. To the right are models of handsome cottages, to the left models of foundries and manufactures, whose designer evidently believes that utility and beauty are by no means inseparable; while the lawns are skirted with innumerable kiosques for the sale of newspapers, refreshments, guide books and the thousand and one other needs or conveniences of pleasure-seeking excursionists.

Passing into the Exhibition through the main or central entrance, a magnificent scene is presented by the Street of Foreign Nations, a thoroughfare eight hundred yards long, bordered by houses of every order of ancient and modern architecture; while at intervals tower aloft gigantic statues symbolical of the various nations near whose exhibits they stand. The Prince of Wales' gorgeous Indian pavilion comes first, then a shapely model factory; then a row of pleasure villas. Next comes the modest and by no means handsome structure representing American architecture, and beyond that Sweden, Norway, and Italy are represented in brick, wood and marble. Then Japan, China, Spain, Austria-Hungary, and Russia are followed by Switzerland with novel cottages and dairies, and Belguim with curiously fretted town-halls. Then Greece, Denmark, South America, Morocco Luxumburg, Monaco and Portugal stand in the order named. These houses stand to the right of the Grand Street, and the architectural sample of each nation forms the façade, the frontispiece, to its industrial and art exhibits which lie behind. The whole of the left side of the street and the left wing of the Exhibition building in the rear, are occupied by French houses and by the French exhibits, so that France alone has chartered as large a space as all the other nations combined.

The main building is chiefly of iron and glass and internally is laid out in rectangular, checquer-like blocks, a plan which while very convenient for visitors and economical of space, detracts a great deal from the impression of vastness which so large a building is calculated to convey. Throughout the whole area, every available foot of space seems occupied, while a good deal of the machinery has been forced into annexes, forming not the least interesting part of the grand display. Although in this first screed, it would be an ungrateful deed to notice the blemishes and shortcomings in a scene which has given me so much pleasure, yet it must not be supposed that either the management, the buildings or the nature and style of the exhibits are wholly without faults, but of these as well as of the chief attractions more shall be told the readers of the RURAL in my future letters.

THREBER.

Horticultural.

EXTRACTS FROM THE PROCEEDINGS OF THE WESTERN NEW YORK HORT. SOCIETY.

SELECTION AND PACKING OF APPLES.

THE essays and proceedings of the Western New York Hort. Society seem to us to be of unusual general interest. We have read the report through and made the following extracts which, though several of them have been printed before, are worthy of the consideration of a second reading:

President BARRY said he thought the prospects of the orchardist in Western New York were never more encouraging than at the present time, and he would advise the planting of the apple extensively, under proper conditions, with as much confidence as he ever did. The great markets of the world, with the millions of consumers, are just opening to us. We are near the great markets of our own country, and near the places of shipment abroad. It is conceded that our apples keep better and transport more safely than those of more Western growth, and we may always expect the readiest sale and best prices in foreign markets. One or two conditions, however, are indispensable. *Careful selection of the fruits and thorough packing.* These are necessary for our own markets, but far more so for the foreign market, as the loss arising from badly assorted and packed fruits is so much greater. Complaints are numerous from England on this subject, and the sooner our shippers understand and act upon this matter the better.

His conclusion is that there is no danger of apple culture being overdone in Western New York, always provided it be well done.

NEW VARIETIES.

Mr. J. J. THOMAS, one of the editors of the good Country Gentleman, alluding to the display of southern fruit, especially of apples at the meeting of the Am. Pom. Society at Baltimore last September, mentions among the best the following:

The Beauty of the World, from Morganton, North Carolina, was very handsome, good size, and of very good quality, and he was informed from the neighborhood of its origin, that it is there highly prized for its quality, productiveness, and late keeping.

Another fine one is Hare's Red Winter, a new seedling from Suffolk, Virginia, not yet disseminated, of excellent quality, and he learns from where it is well known, that it is highly esteemed for its quality, late keeping, and good bearing qualities.

ORNITHOLOGICAL.

Mr. HIRAM J. JONES, of Rochester, in an ornithological paper, says that among those birds which have fallen in the estimation of many fruit lovers, may be named the Robin, whose breast, bright and red, and whose song so joyful, are well known to all. It is indeed sad that he who cheers us first in spring should ere the leaves are yellow, be driven from our midst. Exasperated beyond measure at his audacity, forgetting the multitudes of measuring worms, rose-slugs, cabbage butterflies (in their larval condition), house-flies, table-flies and mosquitoes, which *constitute his diet early in the season*, we give him not a moment's rest, unless beyond the reach of the shot from our gun.

The Hawk or Owl carries off an occasional chicken, and pays for it by the loss of his life. But the good done in destroying field mice *alone* would pay for several dinners of chickens. Man must be short-sighted or he could not so soon forget the deeds of his best friends.

GRASS OR CULTURE FOR ORCHARDS.

In the report of the committee assigned to report upon the merits or demerits of certain systems of fruit culture in Wayne County, orchards used as pastures for hogs and sheep seem to do well. The animals fertilize the ground with their excrements, eat the fallen apples, worms and all, and are true generals in the Codling Moth war. In addition to this, the constant rooting of the hogs keeps the ground partially cultivated, and if they do not cultivate sufficiently, a handful of corn planted here and there, will set the animal plow-share in motion and cultivation ensues. The orchards which are properly cared for in this manner are almost universally known as very productive, usually annual bearers. And in the war which seems to wax warm between the advocates of clean culture and grass in orchards, may not this be a kind of neutral ground where the white flag of truce may be unfurled and good crops of fruit grown; for in this system we have some grass, some culture, and good, sound apples or pears.

The system of keeping orchards in grass from year to year with annual supplies of mulch, muck or fertilizers, and only plowed at remote periods of time if at all, has raised the most opposition among fruit growers and its advocates have been unsparingly denounced. It was the plain matter-of-fact statement of this mode of culture by a member which raised such a commotion in this Society two or three years ago, that he was not able to make a fair exhibit of his course of non-culture.

Orchards in Wayne Co. which have been cared for by this system are fully as productive, if not more so than by any other, if we except, perhaps, one, the land of which is seeded to grass, timothy, red top or orchard grass, (not clover, the roots are too long), and then where an annual mulch is applied, or manure, or manure and muck, muck alone, or composted with lime or with gas lime. The length of the new growth of the branches of the trees is the tongue, which the tree doctor examines, and applies the remedies at the right time, of the proper material and in proper quantities. It is a dangerous fact to publish that an orchard can be kept in grass for a long series of years and yet be profitably productive. But it is nevertheless true.

A number of orchards was visited in Cayuga County. All good managers find it necessary for the success of young orchards to cultivate the trees for several years after setting out. When planted in grass, the growth is feeble, and they are long in reaching bearing size. As they become older, the roots run deeper and they are less retarded by grass growing near the surface. A curious example occurred in this connection when trees of large growth, when set out, or two inches in diameter, grew more vigorously than smaller trees, or such as were only an inch in diameter when removed. Both were set in grass; but in taking up the larger trees it was necessary to dig much deeper in order to secure the roots, than in digging the smaller ones. These deep roots when set, were down beyond the reach of the grass roots, and hence the reason that they made the best growth. But in a portion of the orchard well cultivated, both large and small greatly exceeded the others in vigor.

The effect of cultivation on young trees was distinctly exhibited in one instance, when a line of apple trees had been planted along the roadside, one portion of the adjacent field, about eight feet from the trees, being cultivated in corn, imparted twice the growth to the trees that they had where grass occupied the adjacent field.

When the soil of the county is a strong, rich loam, there is less difference between cultivation and grass in the growth of young established orchards than in lighter soils; and the difference is less in deep than on shallow soils. As a general rule, young trees when six or eight years old, make a growth in a clean mellow soil about twice or three times as great as in compact grass sod.

One of the finest full-bearing orchards in the county belongs to Giles Landon. It shows in a remarkable degree the benefit of manure, and good treatment generally. It has been set out twenty-three years, and the tree tops have become so broad that cultivation has been discontinued, although the trees were set thirty-six feet apart. It is top-dressed every two years, and lightly pruned annually.

ROADS.

Mr. J. J. Thomas, above quoted, makes some excellent remarks in an essay upon Public Roads.

"Good roads," he says, "facilitate the attendance of public worship, bring lectures and public meetings within easy access, favor frequent mails, and thus become virtually civilizers and educators."

He did not propose to furnish a treatise on road-making, but there are two ways in which they may be improved with so small an outlay, that those will bear repeating at least three hundred times in each year. One mode of improvement is the removal of stones from the track. A single loose stone, which might be thrown out in two seconds, is sometimes struck by wagon-wheels fifty times a day, or more than ten thousand times in a year. Ten thousand blows of a sledge-hammer as hard, on one wagon, would probably demolish it entirely, and the stone does no less harm because it divides its blows among a hundred vehicles. There is therefore probably no investment that would pay a higher rate of profit than a few dollars' worth of work in clearing public carriage tracks of loose and fixed stones. If a single stone, thumped against ten thousand times a year, costs the community fifty dollars (that is, half a cent damage for each time), and could be removed even with a half minute in labor, or one-thousandth part of a day, then the fifty dollars would be saved by the application of two mills in United States currency, leaving a very handsome margin of profit. If these figures are wrong in any respect, please correct them as far as you please, and still the showing will be a good one.

Another method of improving the public roads, is by tile-draining. In some places, from one to two months, or even more, in each year, witness the passage of wagons, carriages and buggies, plowing through mud and ruts six inches to a foot deep, which would become hard and dry in one-fifth of the time, if one or two good tile-drains extended lengthwise with the track, with an opening for the water at every depression. The ditch might be partly or wholly filled with gravel above the tile. We often see large quantities of gravel drawn and deposited at much expense in the road-bed, when no adequate drainage has been provided. The gravel is spread on the soft earth, which as soon as soaked with rain or melting snow, becomes mixed with the gravel by passing vehicles, and in a short time the whole is cut into deep ruts. A perfect drainage below would prevent such a waste of labor, and give a hard and dry foundation with a smooth surface above.

SMALL FRUITS.

Speaking of small fruits, the remark is made that it is possible for three hundred bushels of strawberries to be grown on one acre. Two hundred bushels is not an extraordinary yield, yet one hundred bushels per acre might be over the average, for there is much poor culture. One hundred bushels of raspberries is a satisfactory yield, but often above the average. Currants, gooseberries and grapes yield generously, with good culture and congenial soil, and are highly profitable, if the best varieties are selected. The blackberry is perhaps the most profitable of all, in sections of country where it does not winter-kill.

ASSORTING AND PACKING APPLES.

Professor LAZENBY, of Cornell University, in a paper upon gathering and marketing apples, says that far too little attention is paid to this matter of assorting apples. Take three barrels of what is termed good fruit, as they are ordinarily put up, and divide them into two barrels of first and one of second quality. The two barrels will sell for more money, and give a better return than the three unassorted. They had a good illustration of this in their own experience, at the University, the past season. One of the practical lessons given to the horticultural students, in connection with the instruction in the class-room, is picking and barreling apples ready for shipment. This work is supplementary to a course of lectures upon fruit culture, which is given during the fall term. An experiment was conducted, which, in its results, clearly indicates the importance of carefully sorting and grading fruit for market. The students picked enough of the Tompkins County King apple to fill six barrels. Two bar-

rels were filled with the apples just as they came from the tree, without sorting. The remaining apples were carefully sorted into two grades, three barrels being "No. 1," and one barrel "No. 2." This fruit was shipped to a well-known commission house in New York City. The returns were as follows:

Three barrels Tompkins Co. King Apples, No. 1, at $3.50	$10 50
One barrel Tompkins Co. King Apples, No. 2, at $3.00	3 00
Two barrels Tompking Co. King Apples, ungraded, at $3.00	6 00

We see from these figures that the ungraded apples, though three-fourths of them were of the same quality as those graded and marked "No. 1," sold for the same price as the poorest one-fourth, which were marked "No. 2," causing no inconsiderable loss.

After determining into what grades the apples shall be sorted, the next operation is packing. This should be done by a careful, experionced hand. Two courses should be placed in the bottom of the barrel with the stems down; then the apples can be put in more rapidly, yet they should not be thrown or carelessly dropped in; but the hands should reach well down, so that none of the fruit is injured. When the barrel is one third full, it should be shaken gently—again when two-thirds filled, and once more when the barrel is oven full. Make it a rule, inflexible and relentless, that there shall be no "topping off" with large apples, with those of poorer quality in the center. See to it also that your barrels are of the proper size and neatly made. When the barrels are headed up, they should be plainly marked or branded with the name of the variety, the grade, and either the name of the orchard or the grower.

Among the questions discussed which, we think, is worthy of continued experimental investigation, is this:

What is the best Fertilizer for Fruit Trees, taking into account economy, health, vigor and productiveness of the trees and quality of the fruit?

QUINCE CULTURE.

The best conditions under which the quince flourishes is discussed at length. It has seemed strange to us that so useful a fruit, one that is so easily grown, should be so seldom seen in farmers' grounds, and where seen, so utterly neglected. We make the following extracts:

The quince loves a moist but not wet soil. If it is a little clayey it is no disadvantage.

To salt at the rate of four quarts to the tree; spreading around the tree as far as the roots extend, or a little farther is very beneficial.

Mr. Fowler stated that the quinces do not do well on sandy ground, mainly because the borer works more on light than on moist, heavy soils.

Mr. Moody stated that the quince flourished in Niagara County particularly on strong, heavy soils. He instanced the orchard of Dr. Woodward, forty or forty-five years old, which produces splendid crops. A temperature ten degrees below zero does not injure the quince.

Mr. Gray, of Orleans, thinks the best quince orchard in the country is in cool, moist soil.

Dr. Sylvester said that the best manure for the quince is swamp muck.

He had seen them do well on the frozen Green Mountains of Vermont.

A friend had some quince trees which had grown year by year, but never borne; at length he told his boys to kill the trees. They accordingly poured the old brine from the pork barrels around them. The consequence was they bore so abundantly that the trees had to be propped up.

Mr. Geo. Ellwanger said he considered Rea's Mammoth the best quince in the market. It is the most delicate and always commands a good price in the market. The Angers' is a good quince in the south or France, where the summer climate mellows it somewhat, but here it does not perfect itself. He believed in cultivating the quince to a single standard.

INSECTS.

Speaking of Insect Enemies, Mr. Greenman remarked respecting the codling moth that, a fine soil and climate for fruit avails us nothing so long as we have this enemy among us to prey upon the fruit. He found that the larvæ of the codling moth liked cotton batting better than any other material for nesting. He found that they only moved at night. Removing all the worms from the bands at night, they were filled again in the morning. But if they were all cleared in the morning, they remain clear at night. The apple containing the worm falls to the ground, and if the insect is sufficiently matured it will crawl up the tree the first night. He placed paper bands around his trees, and when protected in that way, about one apple in four was infested with worms. On trees unprotected, but one apple in six escaped.

SOLUBLE FLOWER-POTS.

We have received from Mr. Tuisco Greiner of Naples, Ontario Co., N. Y. a package of soluble pots for flowers or vegetables. These pots are a compound "chiefly of rich garden soil and fresh cow-manure" and any unskilled person, by the use of Mr. Greiner's press can make from 1,200 to 1,500 pots in one day. Then they have to be dried 24 hours in the sun or a warm room and are ready for use. In place of garden soil and cow-manure, muck, yellow loam and any kind of dry commercial fertilizer may be added according to the requirements of the plants to be grown, though the admixture of fresh, clean cow-manure always improves their quality. For growing early plants, the pots should be filled with fine, rich, loose soil and the seeds planted. The pot when once soaked full of water acts, it is claimed, somewhat like a sponge, supplying the plant with moisture for a considerable time. When transplanting time comes, the pot, containing the plant is placed in the ground so that the roots are not disturbed. The moisture of the soil soon dissolves the pots, and the roots imbibe the nourishment contained in them. Thus the operation of transplanting "is always safe and sure" "Plants may therefore be started earlier and, as they are not put back by transplanting, gardeners are enabled, by the use of soluble pots, to have egg-plants, tomatoes and other vegetables come to maturity, or flowers to bloom, much earlier than if grown in the old way."

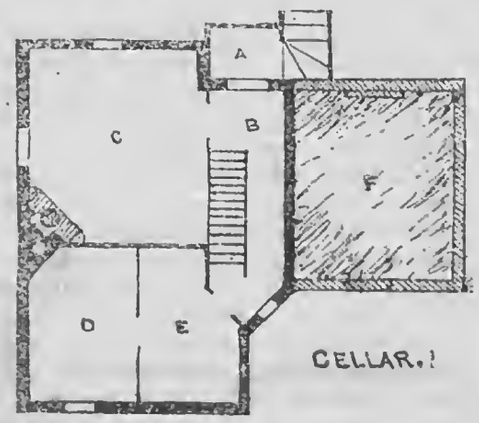
The above and much more are claimed by Mr. Greiner for the soluble pots. We shall try them and in due time give our own estimate of their value.

Rural Architecture.

COTTAGE.

L. F. GRAETHER, CIVIL ENGINEER.

The cuts represent a small, attractive cottage suited for a family of limited means. The plans are described as follows, viz.:



Cellar.—Seven feet in the clear; A, rear-entry; B, passage; C, wash-house, (12 by 14 ft.); D & E, cellars; F, unexcavated space under kitchen.

First Story.—nine feet eight inches in clear; A, piazza (6 by 24 ft.) with front steps; B, hall (6 by 18 ft.) with main stairs to second story; C, parlor (12 by 16 ft.); D, dining-room (13 by 15 ft.); E, kitchen (12 by 16 ft.) with sink etc., and pantry G, (4 by 6 ft.); F, rear piazza with steps leading to yard.

Second Story.—Nine feet in clear; E, hall; D, bed-room (13 by 15 ft.); A, bed-room, (8 by 12 ft.); B, bed-room (11 by 12 ft.); C, closets; E & F, roofs for piazzas and the kitchen, etc.

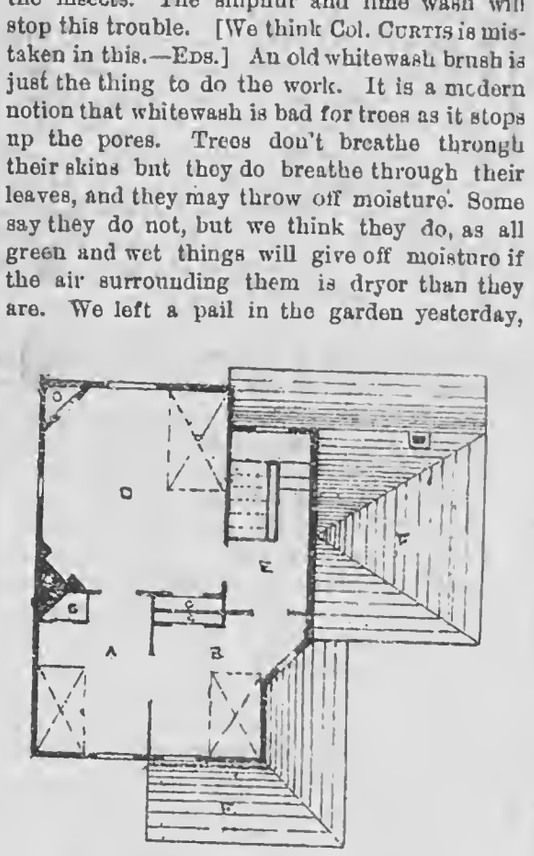
The expense of erection of such a building will (according to finish and locality) range from $1500 00 to $1700.00.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

The young pear trees are full of sprouts and suckers which must be cut off without delay, as they rob the tree of a great deal of sap.



1st Story.

will be more liable to blow off; so these limbs must be cut down at least half of their hight. Our grandmothers used to whitewash their trees as they thought it healthy for them. They were right. We are going to mix fine sulphur with the lime—a half pound of sulphur to two quarts of lime—and smear every tree with the mixture. It will kill or keep away (?) all of the insects and do so much to prevent blight. The leaves of some trees are now punctured and curling up on account of the depredations of the insects. The sulphur and lime wash will stop this trouble. [We think Col. Curtis is mistaken in this.—Eds.] An old whitewash brush is just the thing to do the work. It is a modern notion that whitewash is bad for trees as it stops up the pores. Trees don't breathe through their skins but they do breathe through their leaves, and they may throw off moisture. Some say they do not, but we think they do, as all green and wet things will give off moisture if the air surrounding them is dryer than they are. We left a pail in the garden yesterday,

2nd Story.

and to-day it has become so dry that it leaks. It has given out the moisture in the staves and shrunken up just so much. When the sun shines hot, moisture rises from a green tree, just as it did from the empty pail, and the paint did not prevent it, nor will whitewash keep a tree from emitting moisture. This is the reason why newly-set trees should be mulched to keep the ground damp at the roots so the supply of moisture will not fail. The root must feed the top.

We have been planting some of the dipper

COTTAGE—ELEVATION.

When trees are grafted above the ground, that is not in the root, they are more liable to throw out these suckers than when grafted below the surface of the earth. The sprouts come out from the old stock. Some of our trees have gourd seed. These gourds grow with a handle, and when ripe, they may be sawed in two and make handy dippers, or vessels to hold water for many uses. They become very hard and are tough and strong. In some of the old countries they are used almost altogether for drinking vessels, and in the kitchen. If we succeed, the Rural shall have all the surplus seed and a dipper too.

The sod was thick and tough in the baby's nut grove, so it has been planted with potatoes. The potatoes were dropped on the sod—right in the grass, and then oat straw was spread on top of them a foot thick. We are waiting now for the potatoes to come up, and congratulating ourselves that there will be no necessity for hoeing that crop, and that at the same time the grass will all be killed and the trees do much better. If a tuft of grass shows itself, a forkfull of straw is put on the top of it and trampled down.

Where hens or other poultry are confined in a small yard, it should be dug over frequently. The fresh earth is healthy and at the same time the surface of the ground which becomes putrid, by being turned under is thoroughly deodorized by the action of the earth. This reminds us how common it is to have water-closets in the country so constructed that they become pestilential. Usually, a pit is dug in the ground near the house, and this is left for years with its accumulation of filth and corruption, poisoning the air and the water veins, and often creating fevers and causing death. We know of a closet of this sort under a part of the dwelling, which we are sure killed two wives of the owner, and has made the third one a feeble woman, undermining her naturally good health. The husband who prides himself in having everything handy, would be dead too, but he is out-of-doors so much that the malarial poison is counteracted by the abundance of fresh air. Every privy in the country should be on the top of the ground, and the contents in warm weather be kept covered with earth or plaster. As soon as a wheelbarrow load accumulates, it should be taken away. The indifference of sensible people to this important thing is astonishing. Many an infant and child is laid away in the grave because of foul privies.

The gapes have begun with the oldest chickens. Every one has these spasms, and before we knew it one was dead. We are trying the experiment of making them inhale tobacco smoke. They are put into a basket and covered up, and the tobacco is set to burning in an old kettle underneath. The chickens are left in the basket and carefully watched until they appear dumb, when they are taken out. They soon revive and the spasms are lessened. We hope to cure them by a few trials.

Miscellaneous

VAN'S VIEWS.

SOWING GRAIN.

The sowing season is past, but there are some points which came up this spring which I would like to see discussed a little more. One was the amount of seed to be sown per acre. Most of the farmers hereabout sow one and three-quarter bushels of wheat or three bushels of oats per acre; and I used to think that it was better to use two bushels of wheat, but a near neighbor, one of our best farmers, I always noticed had "No. 1" wheat, while most of us had to sell ours as "No. 2." Last summer he and I were talking on the subject and he said that the reason his wheat ranked higher than ours lay in the fact that his was sown thinner, and as it stood thinner the grain filled out better; and as the difference between "1" and "2" wheat is that one must be plump while the other may be shrunken, his argument seems good. In 1875 he raised forty-two bushels per acre, sowing five pecks of seed, and his crops are always good.

In talking of this matter with a number of farmers, one day, the amount to be sown on rich and poor land was spoken of, and while two agreed with me that rich land needed less seed than poor, the other five thought that the reverse was true. Now, I claim that if your land is rich, your grain will stool out and you need less seed. I read not long since of a stool of rye containing 109 heads, the product of one kernel. It grew in a field of winter wheat where the wheat had killed out. Henry Coleman, of England, counted 95 heads from one kernel of wheat, and says: "I sent out my drill to an eight-acre field with seven bushels of wheat to be sown; by a mistake in setting the drill my man found, when he had sown half the field, that he had sowed but two pecks per acre; not wishing to bring back part of the seed and let me know of his mistake, he set the drill to sow five pecks of seed per acre and finished the piece. I did not know of the error but noticed that part looked very thin; but at harvest the thin part yielded best and the man confessed his mistake."

A well developed head contains, on the average, 40 grains; I have counted 68 in a head. If we sow one bushel per acre, and each grain produces one head—if it grows it can't do less—we shall have 40 bushels to the acre. The average in our State is about 13 bushels.

Prepare your land well, make it smooth so that when you sow, your grain will be covered evenly. Use less seed and there will be thousands of dollars annually saved. A heavy crop has been grown by "dibbing in" six quarts per acre. Ohio alone has in a single year sown two million acres of wheat. One-half bushel of seed per acre saved, would make a difference of one million bushels in a single State, which would send an agricultural paper to a good many homes which are now without one.

ROOT CROPS.

Our main dependendence is and must continue to be Yellow Globe Mangel-wurzel. I will sow mine this year by stopping up all but four of the holes in my drill—the Planet—which, by the way, can't be beat for garden seed, and is very useful in sowing field beets and fodder corn—so as to drop the seed in clumps ten inches apart, saving seed and thinning and much trouble in hoeing. We sow Beets, Mangels and Rutabagas from May 20 till June 15; later is not profitable, and earlier is not very desirable as it makes coarser roots and the cattle do not like them as well; and the rutabagas, if too old, will make the milk and butter taste.

POCKET MONEY.

I am glad to see these articles in the RURAL. I well remember, when a little lad, how proud I felt when I sold my first litter of chicks, which "Old Brownie" had hatched and raised. I kept on increasing my flock till I had over sixty nice large Light Brahmas, which alas! were one night "taken" by some prowlers. I felt my loss keenly, but was not so sad as I was when, a few years before, I awoke one morning to find that my first love—"Old Brownie"—had fallen victim to a skunk during the night. I was sure that there would never again be a hen in my possession that would be her equal—and there never has been. I have had fine fowls which have been admired by many, but I have never had another "Old Brownie."

But the worst thing possible is to give a boy or girl, say, a motherless lamb, and then after it has grown—and owing to its owner's care—attained an extra size, let some butcher have it and pocket the money. The boy will vow that "he will get away from the farm to where things are *his*." He can't see the logic of its being Johnny's lamb but father's sheep.

Brown Co., Wis.

A GRANGE AGENCY—IS IT EXCEPTIONAL?

THE Mississippi farmers who have attached themselves to that institution known as the "Patrons of Husbandry," have been taught to believe that the Grange Agency was a large and beneficent concern in Memphis, where a man "initiated in all the degrees," posted in the "secret work," might go and "get the worth of his money in bargains," wagons of better make, more durable material—and cheaper by ten dollars than those to be purchased anywhere else. There was the same cry about sewing-machines—"a first-class sewing-machine for ten dollars less than it could be bought of the manufacturers." Flour, sugar and coffee were sold by retail at very low rates, and in short the Agency proposed to be a nursing-mother to the poor husbandman.

A certain gentleman of my acquaintance, a farmer, having by dint of hard work and close saving accumulated a few hundreds, resolved to "try the Agency" in the purchasing of supplies—a sewing-machine for his wife and a wagon for himself. Arriving in the city, my friend sauntered along Front Street, reading the signs, and at length discovered "Grange Agency" on the door of a dingy building, and going up the greasy, narrow stairs, encountered an unprepossessing and shabby gentleman, who in response to the initiated Granger's signs, displayed none of the anticipated warmth and interest of mystic brotherhood, but summarily turned him over to a "clerk," who conducted him to the warehouse of a neighboring establishment, and from his underling he learned that the "Agency" was for the most part a nominal concern, whose principal gains were from "drumming." The name "Grange Agency" was the potent magnet that drew up those greasy stairs the "Patrons of Husbandry" whose trade by those astute drummers was deftly transferred to the wholesale merchant next door, who, of course, paid a certain percentage on the custom thus secured. After examining samples of flour, sugar, coffee and rice, my friend decided to "look around a little before closing the trade;" and so, going from one place to another, happened to meet with a friend, a clever fellow, residing in the city, who without more ado took him to a house where he "did business," and with a word to the merchant, and a hint to my friend, secured his supplies of meat, flour, sugar, coffee and rice at a cent and a half less than the rates he would have had to pay at the "Grange Agency"—this firm, a house which made no pretensions to favoring farmers as such!

Thus ends the talk about doing away with "middlemen," mere "bubbles" fit only to burst; for, looking at the matter from a plain, common-sense, practical stand-point, what could we do without middlemen and middlewomen? It is they who bring capital and labor together, and even co-operation fails without them—as a sandy field yields no returns if burnt by drought. Capital is a reservoir, labor the field, the middleman the aqueduct conveying the life-giving fluid to the thirsty land. The middleman or factor, living in the busy town, is *au fait* with city prices, city regulations, and city fashions; and as superior to a countryman in driving a bargain as the practiced swordsman in the use of his weapon excels a mere novice. Many a time have I proven the advantage of a middlewoman friend. When in want of a stylish, fashionable costume, I greatly prefer to depend on her *taste* and *economy* in laying out my funds. She will not forget in her shopping rounds the minutest appurtenance of the toilet—there will be gloves, necktie, parasol and fan to *match* the dress, and the trimmings will be *comme il faut;* whereas one of our good farmers' wives, branching out to do a "day's trading," as she calls it, gets her mind so perplexed with the multitude of little things she wants to get at once, that she comes home minus the most important. Her liege lord in the city loses his head at the "sights," and is no more fit to trade with the quick-witted salesman without a pilot middleman than he is to talk to a Turk without an interpreter.

PERLE PERDU.

FROM CUSTER COUNTY, COLORADO.

WET MOUNTAIN VALLEY, Ula, Custer Co., Col.

Doubtless the name Wet Mountain Valley, implies a place where water is at least abundant. It was as badly named as the ridiculously named neighboring mining region which an unsound mind, having no idea above cow-driving, christened the Hardscrabble Mining District. Such an idiotic naming of a mineral district has kept thousands of people away from its great riches, and thousands, too, eager to secure Government's fertile lands in between mountain ranges, have held aloof from coming to the beautiful valley here mentioned. There is in it just the water needed, no more, no less. There are no swamps, no mirey places, no water-covered tracts. Grape Creek, Texas Creek, Muddy River, whose water is as clear as crystals, and tributaries traverse the valley. These waters are cold, clear, rapid in their course from their mountain birth-places to the Arkansas River, and are full of the finest American fish—the wiley, yet luscious mountain trout.

In length from northwest to southeast the valley is fifty miles, with an average width of ten miles. It hugs closely the Grand Canon of the Arkansas at its northwest extremity, in Fremont County, and crossing Custer County, ends in Huerfano County. It is crossed by ranges 71, 72, 73 and 74, west of the 6th principal meridian, latitude 38° 15′ north. Its climate is faultless The atmosphere is clear, transparent, bracing; giving new life to worn and weary lungs, healing universally all catarrhal and bronchial affections, and insuring a new lease of life to all dyspeptics and debilitated people from the east and south. Cattle feed and keep in excellent condition all the year, not requiring any more care than to herd them once yearly when they are to be branded. These nutritious mountain-side and valley grasses prepare stock for the Kansas City market better than any cattle fed on the plains of Kansas and Nebraska. The large hay crop cut in the valley is pressed, baled, and goes to the markets of Colorado Springs, Pueblo and Canon City, where it brings very remunerative prices. No fencing is necessary, except for the small fields of 100 to 1,000 acres reserved for hay and grains.

The soil is a dark, rich, deep, very light loam, that does not pack down for years after being once cultivated. It is not encumbered by brush or trees, is easily broken, and enriches itself by the yearly decomposition forever going on upon the vast, wide-spread breasts of the grand mountains which upon the east and west slope towards the center of the valley. Fifty bushels of wheat—of a quality too to make the premium flour of the world—60 to 85 bushels of oats and barley; 325 to 450 bushels of potatoes, to the acre; 35 to 40 bushels of peas; three to five tons of hay—such are the products of mountain-fertilized soil. Forests of Pine, Spruce, Poplar and Balsam, furnish free wood for building and fuel. These forests are on the great mountain slopes on either side. The many mining camps of Silver Circle, Ula, Texas Creek and Hardscrabble mining districts, afford ready cash market for all the produce of the valley except hay, and these camps are rapidly swelling in numbers and in population. Potatoes are, on an average, the year round paid for at the rate of two cents per pound or $1.20 per bushel. Those who cultivate them plow, plant and dig without using hoe, cultivator or shovel-plow. Weeds are comparatively unknown. Crops grow rankly and quickly and mature in very much shorter time than similar crops do East. Rains fall during August and the latter part of July. Annoying, long, drenching rains are unknown. Storms here are all short for, just west and south of here are made up the storms which move eastward to the Atlantic, and, being made up for a long course, they cannot stop to give us much of their volume for fear, as it were, they might not have force enough to do their wonted work in the far-away east and south.

The Canon City Branch of the Denver & Rio Grande Railroad from Pueblo terminates thirty miles east of the valley. At Pueblo it connects with the Atchison, Topeka & Santa Fe road—for Kansas City, Chicago, and all eastern points. An extension of this road is surveyed into the valley, terminating at Ula—its central point; Rosita, 12 miles distant, is purely a mining camp, 9 800 feet above the sea level. It has no garden spots, is too high for permanent good health, consequently Ula, of the valley, 1,200 feet lower, is the central commercial point of Custer County.

On either side of Wet Mountain Valley, all along its line, are wide crevices of precious ores. There is ample working room in this dual mineral belt for a quarter of a million of sturdy miners. Their number doubles annually, thus increasing the need of having tens of thousands more people come and take up these valley lands which are open to all as pre-emptions and homesteads. Of the 500 square miles of agricultural and grazing lands comprised within Wet Mountain Valley, not one-twentieth of the land is, as yet, claimed. It is open to all. As agricultural land it is unexcelled; as grazing lands they have no known rival; as a climate it is the "perfect land" of *savants* and travelers; as an adjunct of mining vicinities it has advantages of transportation and proximity to central cities not possessed by any other metaliferous region of our own or any other country; as a land of wonders, such as Nature sometimes fashions, its scenery transcends all other views on earth.

Deer, elk, beaver, mountain sheep, wild turkey, grouse are the natives, for we are 175 miles east of even an Indian, stray or tramp. Occasionally, a solitary cabin in the center of a few hundred acres of fertile bottom-land is found. All such lands are being taken up rapidly.

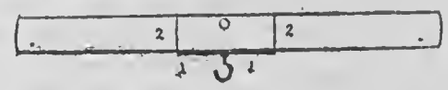
This valley was located first by a German colony; Englishmen of means, with a few Americans came next, and have enriched themselves by cattle-growing, horse-herding, and tending grass lands. No less than 30,000 bales of hay were cut here last season. The Beckwith Bros., of the valley, have 15,000 head of fine cattle. Messrs. Frink & Cole, retired eastern merchants, have 4,000 head and many horses. Messrs. Leonard and Frank Hunter, brothers and Englishmen, have large herds and many fine horses. "Trapper" Smith, a graduate of Cambridge, owns 250 heads of blooded horses. Mr. John Waits, County Commissioner, has a splendid place at the northern end of the valley, where he has a stately mansion, which usually is filled with the *elite* of Pueblo and Canon City during the summer season. Dr. Bell, of Manitou Springs, has a large ranch and a spacious cheese-factory in the valley. His cut of hay off from the cheese farm last season was 900 tons. The Rev. Major Goodwin, a pensioned relic of Lunday's Lane, has a fine place. Mr. Goodwin is mining, is 50 years old, sound, hale and sprightly. Mr. Wm. Scofield has a fine ranch and a goodly herd of American cattle. Joseph A. Davis, County Clerk, has a good farm, is among the foremost men of the valley, and is the people's choice for the legislature. Mr. Jacob Risser, Wm. Hall, Frank Hall, Wm. Tall, H. B. Harrison, are English gentlemen of means; Mr. Schwab, a great grower of potatoes, Chas. Sieber, a successful cattle man, Reginald S. Sweetland, J. H. Tebbs, a school-teacher, Messrs. Jarvis & Sons and Mr. Ed. Martin, have homes in the valley. Mr. A. B. Johnson, once a big corn importer across the plains, and familiarly called "Corn" Johnson, has a large farm, cattle, horses, and owns some fine mines of gold and silver. Herr Kantzantin & Sons have a good ranch and some rich mines also. Wm. Wood owns good property. Captain Horn, after whom Horn's Peak on the Range is named, is a retired merchant from Philadelphia. He has a splendid location on Grape Creek, just across the valley from Rosita, and grows, with little pains, astonishly large crops. Mr. J. T. McNeally, Chairman of the Republican Central Committee, is the legal-law depository of the valley. Messrs. Mix and Onderdonk, of Batavia, N. Y., have recently purchased the Hilburn Ranch, in the eastern end of valley. The Messrs. Snyder Bros., Germans, have erected a large still for the purpose of manufacturing whisky from potatoes. On the road from Rosita to Mocha Pass, "English Billy," familiarly named, has a fine ranch. His hospitable home is made a stopping-place for all who make the San Juan country *via* Mocha Pass. Here he entertains all alike, rich and poor, and his name has become a household word in Wet Mountain Valley. Samuel Shepard, Assessor Gove, Messrs. Hayden, Burrows, Lowther. Rieiters, Lawrence, Palmer, Meyers, Duckets (who also own valuable mines), Townsend, Lansendorfer, Gillaud (an excellent family), Wheeler, Gen. R. K. Swift (who was one of the stirring bankers of Chicago 20 years ago), Falkenburg (who is Postmaster), and many others have locations in the vast mountain valley. All are prosperous, and are ready to welcome thousands of new neighbors who come to settle.

Two prospectors, W. H. Holmes and Edward Egglistone, locate mines for farmers and others for an one-half interest doing all the work under their own experienced superintendence. Already they have such partners as Hon. Geo. M. Chilcott, Hon. Sheldon C. Hall, Justice Tucker, Attorney John W. Warner of Leon, Iowa, Col. W. M. Strait, H. K. Pinkney, Mrs. Judge Wilbur F. Stone, Banker, J. N. Pierce, Jr. and many others. I do not know of any other place on our continent, and I have been coursing over it for 17 years, where the industrious yeoman can so handily unite fortune-gaining as here; where he can be miner during winter and farmer during summer; and, in all cases, when a family has some dear one whose health is impaired, who is sickly East, or South, this land certainly, should be sought and once found will ever afterwards be prized.

H. H. HORTON.

TEAMSTER'S VADE-MECUM.

I AM using a device which I prize very highly, and since I do not design to obtain letters patent upon it, or allow others to do so, I offer it to the RURAL folks. It is an improvement upon the swivel clevis.



2, 2, are ⅜ bolts, passing through the evener and fastening on rear of the evener, the plate of iron 1, 1. 3, is a short hook playing freely in the plate 1, 1.

On the wagon, the hook is out of the way under the hammer-strap. Its uses: if on wish to "double up" a steep hill, hook on to the end of the wagon tongue and ascend. Are your horses' feet in ground so soft that they cannot pull the load after them? hook on to the end of the tongue again, and your horses with feet on hard ground, can now pull the load across the soft spot. Is the ice doubtful? put greator distance between your horses and the load.

Its numerous uses will readily suggest themselves to every teamster. Its chief recommendation is that you always have it with you when you need it. Any blacksmith can put one on at a few cents' cost. Try one and you would not trade it even for a "Cricket."

That last assertion is made without ever having seen a "Cricket," of course.

Harlan Co., Nebraska. R. H. CRANE.

DESTRUCTIVE FIRE.

ON the night of May 19th, the extensive factories of Russell & Co., makers of the widely known Massillon Thresher, at Massillon, Ohio, were partly destroyed by fire. They write us that—"Undismayed by the terrible fire of last night, by which our Iron Working, Belting and Wagon Making Departments were almost entirely destroyed, we have already arranged for machinery to replace that lost, and will resume work on Monday next with undimished zeal. But one day's delay has been caused by a fire involving a loss of a hundred thousand dollars. We are prepared to fill orders promptly, and hope that our misfortune will occasion our friends no inconvenience."

We sympathize with them in this misfortune, but admire their pluck. May the orders flow in steadily!

EXCERPTS FROM BINGHAMPTON FARMERS' CLUB.

"How shall we interest young men most in the pursuit of Agriculture?"

If we would interest young men in agriculture we must make home and the farm pleasant and agreeable. We must make society in the country attractive; must organize circles for social and intellectual improvement in their own neighborhood. Let them have something they can call their own; don't let the boy's colt be the father's horse. Teach them not only how to get money, but how to spend it. Enlist them in the art of doing business themselves. Gain their confidence; try to understand them. In a family of boys there may be as many different dispositions and abilities to fill different positions as there are boys; *provide good reading.* J. H.

MEETING OF MICHIGAN FRUIT GROWERS.

THE summer meeting of the Michigan State Pomological Society will occur in the city of Jackson, June 18, 19 and 20. There will be an exhibition of fruits ripe at that date and a general discussion upon topics of interest. Horticultural Societies in other States are cordially invited to send delegates. If the Secretary is notified of the attendance of horticulturists from abroad, provision will be made for their reception.

CHAS. W. GARFIELD, Sec.

Grand Rapids, Mich.

HORTICULTURAL MEETING.

THE third annual gathering of the nurserymen, florists, seedsmen and those of kindred interests will take place at Rochester, N. Y., commencing June 19, and continuing three days. Every person interested in horticultural pursuits is invited to be present, and will receive a cordial welcome. Specimens of cions, seeds, fruits flowers, implements etc., are requested. June 19, committees will be appointed and President's address delivered; 20th, the election of officers, reports and discussion; 21st, address, reports and discussions continued.

Pomological.

CAN WE HAVE BETTER FRUIT.—No. 2.

GEN. W. H. NOBLE, BRIDGEPORT, CT.

In my late partial answer to this question, I told of the only two ways yet revealed for bettering the kind of animals or plants, namely: breeding in-and-in and cross-breeding. VAN MONS' method with fruits, essentially breeding in-and-in, I gave in full detail. The overshadowing and more lasting results of cross-breeding, and the little known of his wondrous work, seemed to call for a rehearsal of its routine. I have strong hope that its study will disclose hidden ways and new helps to better fruits. About this I shall say something beyond.

The other way, that of cross-breeding, was the method of THOMAS ANDREW KNIGHT, President of England's Great Horticultural Society. He was a contemporary of VAN MONS and the peer of any to whom we owe fine fruits. Before his time the skilled breeders of England had stocked her pastures with the finest domestic animals in the world. Judicious mating and cross-breeding were the secrets of their success. That method's wondrous and unfailing work Mr. KNIGHT applied in plant life to the raising of fine fruits. The best varieties in each kind were crossed with their like, through the sexuality of their flowers, by ways familiar to all adepts. You cut off the stamens from that plant which you desire to have mother of your fine fruit; then at the first opening of its blossom, dust on its pistil the pollen of the paternal flower; and next, in some way, shut out all chance of mixture from the pollen of other blossoms. The fruit from such crops, ought in theory to yield you kinds bespoaking their parentage, and of improved quality. But somehow the results of such crossings do not tally very closely with our theory. Either in mating our kinds we are too careless about their purity and high score in qualities essential to a perfect fruit, or nature's ways, through which come our fine chance seedlings, are not "yet found out in our philosophy." We shall yet by study reach the mystery, which baffles our hopes and in some degree veils from us sure pathways to more perfect fruits. Yet, in face of all this uncertainty, the world has rightly settled down on cross-breeding as the only reliable method for continuous improvement in animals or fruit. Through it, Mr. KNIGHT and others since his time, have presented us many choice varieties. The theory of cross-breeding was not original with him, as was with VAN MONS the special method of his work; but Mr. KNIGHT so thoroughly tested cross-breeding, as a sure path to enduring and higher excellence in fruits, that since his time it has been the one hope of the garden or the orchard.

Yet I do not believe the best estate of animals or plants is to be gained by the exclusive use of either in-and-in or cross-breeding. The law that like produces like rules either plan.

To in-and-in breeding, rigorously following a single line of parentage with special purpose up to a certain point, we owe the first signal lift toward excellence. Up to that point for a time it helps with wondrous force and change. At any stage, in skillful hands, it's a sure method for any special betterment in the offspring. Yet as a system, it does not follow out its early promise. Beyond a certain point, it has always begotten feebleness, and ofttimes a drift backward, toward the rude types from which improvement sprang.

In animals especially, both flesh and spirit flag from too closely breeding in-and-in. Stamina and gains are only kept and pushed by crossing the fittest family strains, each in its kind. But I think the unlike sexual nature in plants and animals, somewhat relieves the former from strict compliance with rules essential to bring better specimens to the herd. The great law of like to like, while it concerns either, does not so strenuously demand diverse families of like in fruits whose impregnation follows very different conditions.

But neither in animals nor fruits has careful cross-breeding met like signal failure, or any stay or limit to improvement. This means, of course, judicious mating of the best blood and qualities. It demands in the orchard both upon tree and product, a close watch on the best estate and choice of parentage. The tree must be healthy, vigorous and resistant to all the ills that its kind is heir to. The fruits chosen as the parents and progenitors of a large planting should score up to the highest standard of merit, in size, season, keeping qualities and early ripening. Through careful crosses of such, thus forecasting a likely progeny, there seems hardly a limit to our advance. For example, why not have pears in every season, rivaling in size the Duchesse d' Angouleme, and vying in texture and aroma with the luscious Seckel; peaches, not only like so many of to-day, looking close back upon "winter lingering in the lap of spring," but greeting us with a Merry Christmas and a Happy New Year. I have had them without care, large, juicy and delicious, crowning the festive board at the November "Thanksgiving." I think they would have held good for weeks longer.

Now though cross-breeding is the one accepted way for better fruits, the possible conditions of impurity therein deserve our heed. It would be well to ask how true a cross that is, from whose seedlings we expect fine fruit. Whether some hindrances, or hidden taints, do not so mix things in our mating that we get but a lot of mongrel crudeness oftener than ancestral likeness or excellence. The secret of fruit-tree life and growth, so studied and disclosed by VAN MONS, deserves most careful note. The mighty part which the root plays in the life and quality of the tree and its product, should never be slighted as a motor toward either deterioration or betterment. There is, down in its laboratory, some secret alchemy, distilling excellence or crudeness, which borne up to the seed-germ on the vital current of the sap, gives to it a divine quickening, or a sorry taint. Though our seedling may rejoice us by its great advance, yet when in the progression of our crosses, we graft its cion on some crude though thrifty stock, how do we know that the base blood from the root has not left in its seed-germ a taint which that germ will reproduce? Thus, or in some other way, as in the young of animals, some slumbering race-taint, dating away back to a careless or stolen cross, may crop out, to disappoint and dishearten trial.

Though we know much about how better fruits have come and should be sought, we have not yet found out all the faculties and vital forces of the fruit tree. They await to be unmasked by some new VAN MONS or KNIGHT. Such may define unerring laws through which better kinds may progressively and surely follow crosses.

Now, VAN MONS never forgot how much the root had to do with the seed above it and its fruitage. No root-taint from a crude and puckery pear, was ever run by him into his trials. Through all his life-work, he never planted a seed which grew not on its own roots. To this, in part, we should ascribe the rapid improvement of his seedlings.

Your recent correspondent, Mr. D. S. MARVIN, in his able article on grape improvement, marks a new feature in this root power. His suggestive trials are worthy of all praise, and are full of hope. We rarely find a mind so instinctive as to method, and so patient in practice. He is in grape culture a new VAN MONS. I have seen nothing so original in American Horticulture. Yet it is a simple following of nature's ways and laws. Like all great truths, they are plain and easy, when once you have reached their measurement and work. In their present stage of his development, they deserve close scan, and brighter hopes in the vineyard. His sanguine expectations are warranted by all we know about how the root shapes the life and product of the plant. An intense interest awaits the results which Mr. Marvin seeks. We watch in faith and hope for better grapes. In even these early years of American horticultural life, the American grape has come close up to the excellence, for which the Old-World species, has had the work and chance of all man's life on earth.

Now for a marked example of the way that fruit crosses "gang awry." The CLAPP'S Favorite Pear claims parentage from the Bartlett and Flemish Beauty. But it is unlike, and I think inferior to either. Such fruits should have yielded us a child of higher excellence. But how true a cross of pure parental blood was the CLAPP? It may be that the flowers were skillfully mated, with due care that no other than the parental pollen should mix therein. But how about the root? Surely no Bartlett or Flemish Beauty roots were likely to have nourished the seed which grew up to be the CLAPP, or bore the pollen which impregnated its germ. If VAN MONS and MARVIN are right about what the root has to do with the seed and fruitage, what is the CLAPP'S Favorite but a chance seedling, though the flowers of each were carefully mated with the purpose of a cross? Did there no old taint or newer crudeness crop out in these seedlings? Now, is it not plain from all this, that the footsteps of your search for better fruits must follow the laws of plant-life and its schools of trial? Otherwise you are but groping in the dark after results, whose reality may mightily disappoint.

In this hope and search for better fruits, there is more bound up than the beauty or luxuriousness of their harvest. There is health and comfort and refinement in fruit trees loaded with their glowing and bounteous crops. There is joy in the home. There is pleasure at every meal and at every step. The sight and memories of heaped-up fruits in the orchard, and a winter's store in the cellar, dwell with us through life. The plentiful offering of luscious fruits at the social hours and on the family table, and their unstinted use all throughout every avenue of life bring joy and blessings to all the walks and markets and marts of men. Their full measures brim with comfort and content. They who gain for us better kinds; they who show how better to raise and keep them; they who study out, and defend against the ills and the insects that harm the fruit tree or its product; they who largely plant and make plentiful fine kinds; they who year by year study and tell us what and how to cultivate for a better fruitage, are great human benefactors.

Our people hunger for finer fruits. Every new one promising qualities desired, or so heralded, is eagerly bought. An endless opportunity stretches in the future beyond our comparatively brief trials. No people can boast such a sun, soil, climate and atmospheric conditions, unitedly auspicious of a glorious repast. Hardly a fruit grown on earth, but somewhere in our territory finds a congenial home. Over the great majority of our States, every product of the temperate latitudes rewards culture. Many share with the tropics their luscious fruits. The orange, banana, lemon, citron, guava, plum and peach, flourish side by side in Florida. The new fruits of Japan will doubtless find congenial homes far north of New Orleans, where the new persimmons have grown crops for years. The field is unlimited, the promise bright, the reward sure. All who would here push on the work of VAN MONS and KNIGHT to a more glorious fruitage, find everything apt, and a people eager to second their thorough exhaustion of the possible in pomology. Therein sleep secrets, wonders and glories towards whose revealing, those great pioneers were only LIVINGSTONES and STANLEYS, in the realm of fruits.

But the question is: how can the work and search best be done to hurry up surely and grandly the better fruits? Something more than individual enterprise is needed; some thing beyond the chance and stretch of individual life; something more continuous and concentrated than the grand work of our National Pomological Society. Time, place, and the men must be had to hold fast patient trials, and crown them with finer tested fruits. The need is of tireless skill, with well appointed help through years of trials and triumphs. This work must be so hedged about with an authority and trust, that it will command the faith of those seeking better fruits.

In the feverish hurry of our American life, infecting as well the nursery as other marts, there are neither means, time, space, nor patience, to face the needed trial and delay. The business of ready gain, is the great end there. Give them a better fruit, and in print and tinted picture, the world will soon know all its deserts, if not much more. It is discovery of fine fruits, not their sale, we seek. The work of VAN MONS and KNIGHT was not done at a commercial nursery, but under the ease and patience of delay, in well-endowed institutions. I know that many fine fruits have come from such as LEROY, and REEVES and POITEAU. But as a rule, you need not hope for a commercial nursery, right along, to plant the well-bred seed, and patiently wait its fruiting, under all the conditions essential to success.

I hope some fruit-loving capitalist will, by and-by, endow a fruit garden, devoted to raising and testing new kinds, and new ways of infusing into the germs a drift toward the better sorts at every new trial. I know already of one enthusiastic lover of fine late winter fruit, who proposes to devote in some way $10,000 to encourage the raising of pears, which will stretch with the apple almost and even quite round the year. It is a bright idea on the line of a needed advance. Suppose ten or more such men should each give therefor like sums, and somewhere, in Virginia say, organize a Horticultural Garden to originate and test new fruits, or, what seems to me better still, let the Government endow such an institution, accepting individual gifts and help, and admitting individual direction. What more paternal or divine governmental work could be devised? The Agricultural Bureau, which covets the dignity of a Department, might then be lifted from its desk-work and seed distribution, by some stout Horticultural help.

At any rate, our National Pomological Society should no longer delay the duty of harnessing into enduring and pensioned search for better fruits this divine climate of ours, and the manifest leaning of our seedlings to improvement. I commend this work and duty, to the venerable and very able President of that Society. It would grandly wind up his valued service as its head, and crown years full of honor and respect, to engineer the foundation of such a national institution. Let it be endowed by Government and by individuals as a branch of either the Agricultural Department, or of the Smithsonian Institute, admitting directors, trustees and management outside of politics.

Floricultural.

HUMEA ELEGANS PURPUREA.

W. C. L. DREW.

THIS graceful biennial may be used to great advantage to give hight and lightness to the centers of flower beds and garden vases, its showers of drooping, grass-like blossoms, making it charmingly adapted to such situations, serving the same purpose as do ornamental grasses in a bouquet. It can also be used most effectively as a back-ground to beds of standard Fuchsias and other tall flowers, where they skirt piazzas and the walls of the house.

It would be useless to plant the Humea for show purposes; for, though its minute blossoms are fascinatingly pretty when closely examined, they are not at all showy in form or color, and apart from its undeniable grace, the plant has few qualities to recommend it to favor. But, in connection with more highly-colored favorities, its mellow russet, wrought of tiny specks of brightest hues, gives the effect of Persian fabric toning and blending to a rich and pleasant harmony, the sometimes startling contrasts of the garden.

The Humea is propagated by seed. This should be sown in a moderate hot-bed in the spring; then pot off or plant in the border until cold weather, when the plant must be removed to the greenhouse, to await its final setting out in the garden bed during the spring of the second season, for as it is a biennial, it will not mature the first season. If the plant is grown in a pot the first season, it will be well to repot it several times, at each time using a pot a size larger. This will so greatly increase its strength and vigor as to amply repay the additional labor. To keep up a succession, it will be necessary to start a new supply from seed every spring.

The Humea is a native of New South Wales, Australia. In such situations as those mentioned no more desirable subject can be planted.

El Dorado, Cal.

Hygienic Information.

CHRONIC RHEUMATISM.

M. Veldhuis, Allegan Co., Mich., asks whether there is any specific cure for rheumatism. His father, who has been afflicted with the ailment for two or three years, has tried the nostrums of several doctors and quacks in vain, and he inquires whether the RURAL can give some good remedy.

ANSWER BY DR. GOODENOUGH.

There is no specific remedy for acute or chronic rheumatism, nor can there well be until something more definite is known about the cause and nature of the pains which are attributed to this disease. The term rheumatism has a very vague meaning, being applied to affections of the joints and muscles, with their tendons and fasceæ, or coverings, and which are due either to a chill or to causes which, with our present knowledge, cannot be ascertained, and which therefore are generally assumed to be atmospheric. In fact, all pains that do not admit of being defined, are called rheumatic. Formerly neuralgia, catarrh, gout and several other maladies, now considered distinct diseases, were included under the term rheumatism; but when, within the last century, the progress of medical science revealed the nature and specific treatment of these, they ceased at once to be included in the number of ailments which our present ignorance confound under this general designation; for there is little doubt but that the future will show that there are still included under this name various diseases profoundly unlike each other, and of radically different natures.

Various remedies have been tried with various degrees of success in the treatment of this malady. The prescription, however, which has proved highly beneficial or even curative in one case, has often been of little or no value in another. Many of these so-called remedies are empirical—merely experimental—in each individual case. They may succeed, or they may fail, but as they are harmless in any case, and as no certain remedy exists so far as we at present know, the chance of a cure should beget a willingness to give them a trial. A few of those which according to personal experience and the indorsement of the best medical authorities, are generally the most efficacious, are the following: Lemon juice taken liberally, which is generally of service in acute articular rheumatism, is also often beneficial in the chronic form of the disease.

Colchicum, iodide of potassium, bicarbonate, acetate, tartrate, and citrate of soda and several other alkalies as well as diuretics have also been found beneficial; but as the quantity of these to be administered and the length of time they should be given must depend in each case on special circumstances, it would be useless certainly, and might be hurtful to give a prescription here. Poor and hard-working people are the chief victims of chronic rheumatism, and nourishing, strengthening diet has proved highly beneficial in these cases. Cod-liver oil, as well as preparations of iron and quinine, would generally be found as curative as any form of medicine. For local applications:—Paint the affected joints with iodine; rub them with alcohol, ammoniacal or camphorated liniments, with opodeldoc or turpentine. Warm baths are excellent, general or local, especially the former. The water may be tinctured with mustard or other irritants in either case. Lately in Germany, very favorable results have been obtained by mixing muck or peat with the warm water; and this is very highly recommended.

Chronic rheumatism lasts often for months or years or a life-time and is always apt to return in an aggravated form. Even in the most satisfactory cases, it nearly invariably terminates in an imperfect recovery—imperfect either because it does not extend to all the affected joints, or because the process of repair is arrested at a particular point, and in all a certain amount of thickness and stiffness permanently remains.

The Querist.

ANSWERS TO CORRESPONDENTS.

Peppermint, Spearmint and Bergamot.

C. S., Swan, Noble Co., Ind., having a piece of black land is thinking of planting it in peppermint, spearmint and bergamot, and asks: 1, what would be the proper soil and culture. 2, the kind and probable cost of apparatus for distilling the oil. 3, the product per acre. 4, the names of any manufactories of the article in northern Indiana or southern Michigan. 5, do the United States export or import such oils. 6, are there any books published on the subject.

ANS.—The bergamot tree is a native of the south of Europe, and is particularly abundant near Nice and in the neighborhood of Reggio in Calabria, whence the entire supply of bergamot oil is drawn. The tree is small and produces a round fruit like a small orange, the rind of which yields the oil by distillation. It is not cultivated in this country and could not be grown in Indiana. Spearmint, the ordinary mint of our gardens, is generally grown only for culinary purposes, but when cultivated for the purpose of extracting the oil, the culture and distillation are the same as those for peppermint.

Peppermint is largely cultivated for the production of the oil of peppermint, a culture which was at one time confined exclusively, in this country, to Massachusetts, the western part of New York and some countries in Ohio, but was later taken up by the farmers in southwestern Michigan where for some years between 2000 and 3000 acres have been devoted to its culture. At present St. Joseph County, Michigan, and Wayne County, N. Y., have the reputation of cultivating it most extensively and profitably. Peppermint has a perrenial root and an annual herbaceous stem. It requires a good soil, deep and friable, such as a rich alluvial or good loamy soil, free from grubs and wire-worms. The land should be thoroughly pulverized by frequent plowings, harrowings, and rollings. According to the English method, the field should be laid out in lands or stretches about ten feet wide, upon which the young plants are to be set. The plant is propagated by means of offsets from old fields, and as soon as they appear strong above the ground, usually in May, they are taken from the old roots and set in the prepared soil at intervals of from four to eight inches. This is generally done by boys, some bringing the sets from the old plantation, others planting them with short wooden dibbles. In this country the land is usually laid off in furrows 15 to 24 inches apart, and sets or parts of old plants, are planted thickly in the rows.

To obtain a fine crop, it is necessary to keep the hoe constantly at work, as freedom from weeds is essential to a good crop, and since the land must be very rich, the abundant weeds, unless properly attended to, will seriously injure the young plants. The volatile oil is most abundant at the period of inflorescence and the crop should therefore be cut when in full flower, usually from August to October. For this purpose bright sunshiny weather, with little or no rain, should be selected. The operation is performed with a cradle having two fingers and the mint is raked into cocks where it remains 12 hours to wilt before it is distilled. The first year's crop is generally considered the best, not only because the plants are young and vigorous, but the mint is then free from a weed which is apt to spring up later. This weed is called mare's-tail fire-weed, and by several other names, resembles lettuce somewhat, and yields a volatile oil, bitter and pungent, which injures the product, if mixed with it. The second and third years the crop is much less; the fourth year the field is plowed and the crop springs up from the broken roots; the yield of the fifth year is about equal to that of the second, and after this the field is devoted to other uses. In England however it does not yield a full crop until the third year.

The still is a wooden vat of heavy staves hooped with iron, four and a half feet high, and six feet in diameter. The wilted mint is packed into it by treading it close with the feet until the vat is full when the lid is fastened down steam-tight. A pipe enters the lower part of the vat to convey steam from a boiler, and another from the top of the vat connects with a "worm" as in an ordinary still. On the admission of the steam the oil from the mint is volatilized, and its vapor, mixed with steam, is condensed in the worm. The mixed oil and water are collected in a receiver or separator. This is usually a deep and narrow vessel having a siphon-shaped spout joined to it near the bottom. In it the oil, owing to its lighter specific gravity, floats on the top and is from time to time removed, while the water runs out at the bent spout. The stalks, leaves, and refuse of the still, being useless as cattle food, should be converted into manure and returned to the land. The oil is packed in tin cans holding 20 pounds each and a large share of the product is exported. The cost of the apparatus for distilling will depend upon its size, finish etc., and can be ascertained from any manufacturer of distilling apparatus.

3. The quantity of oil obtained per acre is very variable, as a dry and hot summer is requisite in order to secure a full amount. Rain is very injurious when the plants are approaching maturity, making them too succulent, so that they occupy a much longer time in distillation and yield very little spirit. In common practice in England, the produce varies from ten to twenty pounds of oil to the acre, the plants yielding, in favorable seasons, from four to six ounces per cwt.

Good land, good hoeing and good manuring are necessary and then the plant may after all turn rusty. From the heavy expenses incurred in the labor requisite to render the plants strong and valuable, in the purchase and application of manures, and in fitting up the necessary apparatus and carrying on the operations of the distillery, as well as on account of the skill and attention which are continually required, the cultivation of peppermint can hardly be profitable, except as a specialty, and should never be undertaken without personal acquaintance with the methods and processes, for these can be only imperfectly learnt from books or papers.

4. We don't know the names of any in that part of the country. 5. The United States export peppermint oil and import bergamot, and probably spearmint. 6. We do not know of any books specially devoted to this subject, but it is incidentally referred to in several standard agricultural works.

Effect of Colored Light on Plants.

F. G. F., Roxborough, N. C., asks 1. for an explanation of the effects upon flowers, of light passing through glass of various colors: 2, how to start Dahlias so as to insure success.

ANS. — To assimilate materials of growth, plants are dependent upon the influence of light. When once assimilated they are not altogether so dependent. All the parts of green-leaved plants which are underground or otherwise excluded from light, are nourished *by the products of assimilation produced in the light; so also parasites destitute of chlorophyll live on the work performed by plants that contain chlorophyll, and are therefore dependent indirectly on light, even though the whole of their development may be completed in darkness, as in the truffle. In other cases they only emerge to unfold in the air the flowers already formed under ground and disseminate their seeds as in Monotropa (Indian Pipe.) Many plants which do contain chlorophyll and which live on inorganic food, complete their growth in entire darkness, putting forth their green leaves only at certain times for the purpose of again accumulating beneath the ground fresh formative material. Such is the case with the Autumn Crocus, Tulip, Crown Imperial, etc., and with such as form tubers and rhizomas. Now, ordinary light is made up of a number of different colors, which is shown by decomposing it through the medium of the spectrum and the rays of different refrangibility affect vegetation quite differently. Certain functions are induced only by the strongly refrangible, others only, or chiefly by those of less refrangibility.

The growth of plants depends upon their power of decomposing carbonic acid gas, i. e. their power of appropriating (assimilating) carbon. PFEFFER has deduced the following values for the decomposing power of the different regions of the spectrum, the action of white light being placed at 100.

For Red—orange	32.1
Yellow	46.1
Green	15.0
Blue—Violet	7.6

The effect, therefore, of "various colored glass upon different flowers" may be inferred by our friend. There is no light for plants like white light or God would have provided it.

2. Dahlias are propagated by seeds, roots and cuttings. The best way to "start" Dahlias is to place the tubers in gentle heat. Covering them with mellow soil in a warm place and covering at night will answer. In this way buds will soon start and the tubers may be planted when desired.

*Sachs' Text Book, p. 660.

Barreling Apples.

F. C. Denton, Botetourt Co., Va., asks what style of barrels is principally used by Western New Yorkers for shipping apples; is there a machine for cutting the staves or are they sawed; cannot they be put up at a cost of from 20 to 25 cents in a country where wood is plentiful; what is the best way to press apples in the barrel for shipping.

ANS.—Apples are mostly shipped in barrels made of staves which are cut with a knife. The blocks of elm or oak are steamed and a single stroke of a stout broad knife makes a stave. They are seasoned and then the edges trimmed by machinery. The heads are sawed. They can be made for about the price here suggested. For shipping, apples are heaped up about two or three inches above where the head goes in. Hardware dealers sell an iron screw-press for the purpose of forcing the head down to its place. A cheap lever can be made, but it is not so handy as the screw.

An Ailing Dog.

N. C. Williams, Madison Co., O., asks how he should treat his dog: it took a severe cold about two weeks ago; when out, it discharges any number of worms; the skin has turned very yellow and so have the eyes; the animal refuses to eat, but does not appear to be in misery.

ANS. — Make ten grains of santonin, eight grains of cowhage into four pills by adding a sufficient quantity of soap and syrup of buckthorn. Give one in the morning and one in the evening for two days. If it should prove beneficial, repeat ending with four tablespoonfuls of castor-oil. Give in the middle of the day twenty grains of root Turkey rhubarb. Let his food consist exclusively of rice, boiled in meat-broth of the consistency of thick soup. Feed of this always in small quantities while yet he is inclined to eat—if eat he will at all. Take him into a warm room and wash thoroughly with Castile soap and rub until dry. We think you will lose the dog.

Cow Yielding Thick Milk.

A. C. Mathews, Port Dover, Ont., has a cow that gives thick milk; commencing in one teat it continues there for one or two milkings, then shifts to the next and so on all round. Then there will be no cause of complaint for about a week; the more milk the animal yields, the worse the trouble is; and a remedy is sought.

ANSWER BY DOCTOR SALMON.

Changes of this nature in the milk may be caused by animals eating musty food or that covered with vegetable growths, or by drinking impure water containing cryptogams, by congestions of the udder and even by diseases of the digestive organs, according to Haubner. In this case it would seem to be due to congestion of a rheumatic nature. If the cow is stabled, see that the stable is dry and well ventilated, keep her from impure water or musty food. As medical treatment: give colchicum, one drachm, and chlorate of potassa two drachms, twice a day; if there is no improvement in ten days, bisulphite of soda in two drachm doses, night and morning, may prove beneficial.

Miscellaneous.

L. M. Brown, Onondago Co., N. Y., sends plant for name.

ANS.—It is Pulmonaria (Lungwort)—species probably officinalis. The specimen was much dried and broken.

S. S. Demarest, Bergen Co., N. J., asks whether there are any white wild swans in this country, and where white turkeys can be found in quantities.

ANS.—Large numbers of white swans frequent Currituck Sound, N. C. We do not know about white turkeys; can any RURAL reader answer?

N. W. Boddie, Nash Co., N. C., sends a twig and inquires the name of the tree to which it belonged.

ANS.—Cunninghamia Sinensis, the Chinese Cunninghamia—thus named after Mr. James Cunningham;—Pinus lanceolata (the Lance-leaved Pine) and Araucaria lanceolata, derived from Araucanos a people of Chili.

A Six-year Reader, Bellsville Md.—Having for some time been vainly seeking for some bronze turkeys with a view to purchasing them, asks why those having them for sale don't let the public know by advertising.

ANS.—This conundrum we pass. Let those having such birds for sale answer, preferably in our advertising columns.

L. S., Washington, D. C., wishes to know what the plant is of which he sends "root, leaf and stem" and "all about it."

ANS.—This is the False Soloman's Seal belonging to the Lily family—Smilacina racemosa. stem about two feet high, slender, curved as if from the weight of the ovate-acuminate, sub-sessile leaves which number about ten, three-quarters of an inch apart. The peduncle starts from the base of the topmost leaf, slender and ten inches long to the bottom of the slightly compound racemes of minute white flowers. The raceme is about one and a half inch long; the individual flowers not larger than the head of a big pin. Root, a rhizome, whitish-brown. Blooms here about June 10 usually.

C. N. Rich, Mooksville, N. C., says: please send price list of the best threshing machines in your State, with a six-horse power; also catalogues of the best agricultural warehouse in your city.

ANS.—Our advertising columns are well filled with the names of representative agricultural implement makers of the country: you should consult them. Write to JAS. BRAYLEY, Buffalo; M. WILLIAMS & Co., St. Johnsville; G. WESTINGHOUSE & Co., Schenectady; M. HARDER, Cobleskill; WHEELER & MELLICK Co., Albany, N. Y., & A. W. GRAY'S SONS, Middletown Springs, Vt., for threshers and horse-powers, as also to other firms in our advertising columns. Catalogues will be mailed you. R. H. ALLEN & Co., N. Y. city, is one of the largest and best general Agricultural Warehouses in the city.

St. Vrain, Longmont, Col., wishes to learn by whom the following books are published. 1. House and Home Papers. By Miss BEECHER and Mrs. STOWE. 2. The Schoolmaster's Trunk, by Mrs. ABBY MORTON DIAZ. 3. Gray's Botany.

ANS.—1. Roberts Bros., Boston; 2. Houghton, Osgood & Co., Boston; 3. Ivison, Blakeman, Taylor & Co., New York.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, MAY, 25TH.

S. E. H. — W. E. K. — J. B. M. — S. P. — C. S.—B. P. M.—M. B. P.—A. M. Van A.—C. H.—G. G. W.—J. W. I. — J. W. L.— A. C. M.—D. E. S.—St. V.—M. R. — M. E. S. — J. F. — T. H. H. — W. B. D. — J. N. H.—M. S.—R. H. C.—W. H. N.—J. A. Van A.—J. A. W.—F. D. C.—L. A. R.—"Eva Edgerton"—W. J. F.—"May Maple"—M. V. S.—W. F.—S. H. F.—M. S. F.—F. D. — S. M.—R. S.—H. K.—R. A. I.—C. W. G., thanks — J. H. — W. B. — G. M.—Dr. A. C. W. — C. R. — C. W. G. — J. M.—Dr. T. H. H.—A. L. J.—N. V.—F. H. J.—E. F. M.

Everywhere.

NOTES FROM EASTERN SHORE OF MARYLAND.

CAROLINE CO, Md., May 15, 1878.

OUT-DOOR operations being temperarily suspended by rain which has been steadily falling since yesterday noon, leisure is thereby afforded me to engage in a brief "pencil chat" with the RURAL. During the past winter months we had considerable spring weather; now, it seems as though we were behind someway in our weather accounts, and in order to fill out the time allotted to spring, are compelled to use some of the winter days, thrown aside too soon. Notwithstanding partially cloudy weather on the night of 13th inst., the following morning found considerable frost in places; not, however, sufficient to do much harm. Crops are not looking as well here this season as last; wheat on light soils is noticeably poor in comparison with last year; but then farmers agree that the wheat crop of 1877 was superior to that of any other within their recollection; hence there will be no just reason to despair if the present crop falls short of this exceptionally good one.

The decline in price of commercial manures within the last three or four years is telling with marked effect upon the agricultural interests of the "Eastern Shore;" and it is to the Order of Patrons of Husbandry that the farmers are mainly indebted for this revolution in their favor. Co-operation works wonders in agricultural as well as other pursuits. A couple of dozen farmers combining, in each district, purchasing materials at wholesale prices, and manufacturing their own fertilizers, have been the means of saving thousands of dollars to the horny-handed tillers of the soil. And really when present costs of commercial manures are compared with those of a few years ago, it is scarcely discernible how the average farmer made both ends meet, as but comparatively little stable manure is made here. In fact, a few of our most thrifty farmers say it is cheaper to use good phosphates at a fair price, than barn-yard manure gratis, reckoning cost of labor in handling, return in crops, etc. The reader is not to suppose, however, that this opinion extends to any great number of our farmers, for the prevailing belief as to permanent improvement of the farm, rests upon the immutable basis of barn-yard and stable manure. True, the amount of labor involved in preparing, hauling, spreading, etc., of barn-yard manure, on a well-stocked farm of 200 or 300 acres, is no trifling item in the expense account; and where there is a lack of brain capital to draw upon in the administration of this part of the farm government, it is possible that artificial manures would be the cheaper of the two, as there is no doubt but that a great deal of barn-yard manure is produced at too high a cost. It is the practice here to use all the stable manure on the corn crop, spreading it on the land during the winter and early spring; then for wheat there is nothing to depend on but artificial manures, from 200 to 300 lbs. of a good article being the usual quantity applied to the acre.

J. W. KERR.

RURAL SPECIAL REPORTS.

SWAN, Noble Co., Ind., May 16.

WE have had a beautiful spring fully four weeks earlier than common, but the weather has been so very wet that farmers are just planting the first installment of corn. Fruit trees bloomed very full, but wet weather blasted a great many of the blows; still we hope for a good crop of apples and peaches. Jack Frost or rather Jack Freeze—for the thermometer was two degrees below freezing point—visited us so severely on the mornings of eleventh, thirteenth, and fifteenth as to completely kill grapes. They are as brown as after a November frost. I don't think it damaged wheat, though many feared it. Times are very dull; Kansas fever is raging fearfully now, and good farms can be bought cheap here. No demand for laborers; farmers have tired of selling all they raise and some stock to pay off hands.

C. S.

HARLAN Co., Neb., May 20.

WEATHER.—It has been often claimed that Nebraska soil was like a sponge storing moisture and holding it for a time of need. It has been thoroughly tested in this locality this season. We had an unprecedentedly heavy rain last December, and since then we have had no rain until May 12th and 15th. The ground has been

in fine condition for working all winter and spring thus far—mud a thing unknown; no wasted rainy days. Crops have not materially suffered and just as faith in Nebraska weather begins to wane and farmers are reporting "Crops not injured yet but soon will be," the rain falls gently, soaking to the bottom of the furrows. Save a few counties in southwestern Nebraska and northwestern Kansas showers have been frequent. R. H. CRANE.

NEWPORT, Orleans Co., Vt., May 20, 1878.

THE frost has struck you harder than it has us on the line of 45° north. Corn 6 inches high in my garden, shows no sign of frost—indeed the only things I have seen to indicate temperature below 32° were some Trilliums in a deep narrow valley or ravine near my house. I am on the shore of Lake Memphremagog; up in the hills we hear of sharp freezes in some spots. Potatoes are up, and orchard-grass heading out. Prospects of a large apple crop for those who have orchards which are yet few, however, in this part of the State. But the researches of Pomologists are giving us fruits hardy enough to carry orcharding one or two hundred miles further into the northern cold than has before been thought possible. T. H. HOSKINS.

CARROL CO., Ky., May 17.

WHEAT, the all-absorbing theme of to-day, is holding its own against the rust; and is heading out finely, although in appearance at a few hundred yards distance it is quite ripe. What the effect will be the "oldest settlers" are unable to tell. Were it not for the rust we would set it down at 50 per cent. above an average at this date. Rains and fogs frequent, but the weather continues cool, so much so that corn is quite yellow and growing slowly, although we have an unusually good stand. Fine prospect for apples, cherries, strawberries, in short for all fruit except peaches. Pastures 50 per cent. above average; stock in splendid condition. S. E. H.

CARLTON, Kewaunee Co., Wis., May 17.

WE have had a very wet, cold spring. The grain looks poor, and in many places is drowned out. Last week we had three hard frosts which did considerable damage. There are now three cheese factories in operation in this county, and they are a benefit to the farmers. Cows are cheap. There is but little "blooded stock" in the county. Wages are low and laborers are plentiful. The following are the prices paid here: Wheat, $1.06; potatoes, 30c.; hay, $10; butter, 12c.; eggs, 7c.; cows, good common, $20; graded, $25@40. The factories pay 80 cents per hundred pounds for milk. J. A. WHITAKER.

WINDHAM, Portage Co., O., May 16.

WE have had rain here every day for 23 days, commencing Friday, April 19, ending Saturday May 11, and winding up with a slight fall of snow on the 10th, and three frosts on the nights of the 12th, 13th and 15th; that of last night being hard enough to form ice upon water. Early potatoes are killed. Some fear it has injured the fruit crop. No corn planted yet. Wheat is looking splendid. Good prospects for a heavy hay crop. Corn, 30c. per bushel; potatoes, no demand at 25c.; oats, 1c. per pound; butter, 12½@14c. per pound; eggs, 9c. per dozen. CLINTON HIGLEY.

OWENSBORO, Ky., May 14.

WE are having cool weather now—plenty of frost last night. The two weeks of May past have been cool and rainy. First planting of corn looks well; the crop about all planted. Tobacco plants scarce; wheat got the rust very badly on the blades, but the stalks, so far as I have observed, are healthy. A great deal of uneasiness is felt in regard to the crop. My short experience is that so long as the stalk is healthy the grain is not materially damaged by rust on the blades. In article on "Kitchen Garden," May 4, instead of "lay by" sweet potatoes etc. it should be Irish. J. W. S.

BROWN CO., Wis., May 15.

CROP PROSPECTS.—Wheat is generally looking well; some on high and dry locations remarkably so; some on low ground is beginning to look yellow; on the whole, it looks well and there is about double the usual acreage sown in the county. It has been pretty wet for oats, but they are not all done for and we shall probably have an average crop. Corn and potato planting has just begun. The winter was rather rough on winter rye, but where not winter-killed, it is doing well. VAN.

WHITNEY'S POINT, Broome Co., N. Y., May 20.

THE 11th and 12th cold and squally with now and then snow. Wind north-northwest; 13th, 14th and 15th, frost; fruit as yet uninjured; wind north-northwest. Thermometer averaging 80° at sunrise; raining to-day; wind south. Wheat very large; potatoes, 20c.; oats, 33c.; eggs, 9c. per dozen; butter, 15c. per pound. M. B. P.

REYNOLD'S, Rock Island Co., Ill., May 18.

ON the mornings of 13th and 14th every thing was white with frost. Nothing badly damaged however, except beans and tomatoes, as far as I have heard. C. H.

RURAL GROUNDS, May 25.

WEATHER cold at night—cloudy. Three-quarters of the Strawberry crop blighted by frost. Plenty of rain. Sunshine is needed and warmer nights to forward melons, etc.

WINNESHEIK, McPherson Co., Kans., May 14.

WE have corn, wheat, oats, pork and-so-forth, but can get no money for them; at least not more than enough to pay expenses and hardly that. E. A. E.

WHAT THEY SAY OF IT.

TWELFTH WEEK.

The Rural Cricket to be Withdrawn, positively, the 1st of July.

The most Liberal and Valuable Present ever offered by any Journal.

ALL ARE PLEASED AND THE RURAL IS HAPPY!

THE clock reached me this week; and I thought myself sadly sold when I could not set it going; but I soon found I had wound it too tight. It now works charmingly, and I cannot say enough in its favor. M. B. C.
Lisle, Broom Co., N. Y., May 3, 1878.

THE "Cricket" was received in good condition, but it gains time rapidly. I will take it to some reliable person and have no doubt but that the trouble can be remedied. My thanks for the clock. S. M. H.
Bath, Pa., April 26th, 1878.

THE "Cricket" came to hand just one week ago to-day. We are indeed much pleased with it. We find it all that you represented it to be, and think it by far the most useful premium ever offer by a paper. G. M. S.
Duluth, Minn., May 18, 1878.

THE clock came safely to hand yesterday morning, and it is a real beauty. I am much pleased with it. I have wound it up and it has been ticking away like a good fellow. I believe it will keep good time. Please accept thanks for it.
Shrewsbury, York Co., Pa., May 14, '78. J. M. L.

THE little "Cricket" reached me safely. I am more than pleased. I am just delighted with it. I thank you very much for this special favor. I shall not cease my friendly efforts in securing subscribers whenever an opportunity offers. MARIA H.
Grand Rapids, Mich., April 30th, '78.

AN apology is due for neglect in acknowledging the receipt of the RURAL "Cricket" sent to our address, April 1st. 'Twas an agreeable surprise and is thus far appreciated. We shall not be able very soon to supply its place with a more desirable gift, and for it please accept our thanks. MR. & MRS. E. G. S.
East Randolph, April 30th, 1878.

THE "Cricket" you sent me arrived on time, all safe. I wound it up and set it up by the side of our old "Seth Thomas" and it ran right away from the old fogy; gained an hour in 24. I have had quite a time in getting the lad "toned" down, but it is all right now, and runs exactly with old "Seth." The accompanying order for another is the result of the affair.
Lansing, Mich., May 1, '78. O. W. C. B.

THE "Cricket" was received in due time safe and sound, and I return you sincere thanks. I have received many valuable premiums from the RURAL, and each has been worth more than the "Cricket," yet I was never more pleased with any than I was to receive this, and, as all premiums have been just as represented, I have no doubts concerning the "Cricket." H. J. S.
Carlisle, N. Y., May 6, 1878.

THE RURAL "Cricket" arrived here safely the 30th ult., and I am very much pleased with it. It is just what it is represented to be—an accurate time-piece, and a very pretty ornament. It is the most noisy cricket I have ever heard, and in it our old family clock will have a very formidable rival. Many good wishes for the RURAL NEW-YORKER. E. L. C.
Skaneateles, N. Y., May 3, 1878.

THE "Cricket" came all safe. It exceeds our expectations. We purchased one last autumn for our daughter who needed a clock in her school-room, for three dollars. We were delighted with that, but we would not exchange the "Cricket" for it. We return many thanks for it; also for the package of flower seeds received from you last winter. I hope to be able to offer flower seeds to the readers of the RURAL another year. We have never taken a paper that gave us the pleasure we receive from the RURAL. We read it thoroughly and then mail it to our sons who are hoping soon to be able to subscribe for it. MRS. F. E. F.
Lawrence, Kansas, April 25, '78.

Implements and Machinery.

☞ Please mention Rural, when addressing Advertisers.

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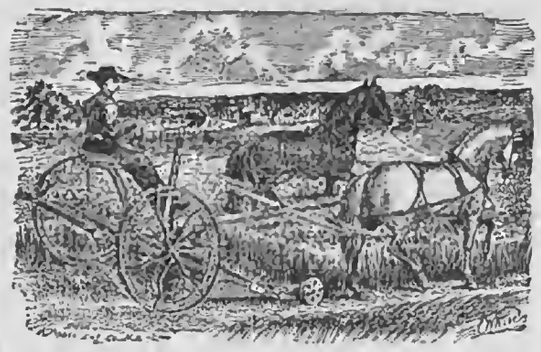
EUREKA MOWER



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Great Capacity for Rapid Work

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OATS AND BARLEY HARVESTED SUCCESSFULLY AND WITH GREAT SAVING IN TIME AND LABOR WHEN CUT WITH THE EUREKA.

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TOWANDA, BRADFORD CO., PA.

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—WOODEN PUMPS—
The Best is Always the Cheapest.
MADE FROM MICHIGAN WHITE PINE.
Wholesale and Retail.
—WOODEN WATER PIPE—
Always on hand and made to order.
Also, Chain Pump Tubing and the Rubber Bucket Pumps. Send for Circulars.
H. H. BABCOCK & SONS, Watertown, N. Y.

Horse-Powers,

For One, Two and Three Horses.
MACHINES FOR
Threshing and Cleaning Grain and Sawing Wood.
Patented, Manufactured and Sold by
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The machines with the improvements are the result of more than thirty years' careful study and experiment.
The proprietors are the inventors, ever have been and still are the sole manufacturers.
We have labored from the first to produce machines that will be durable, tasty, compact, portable, and that will run with the least possible friction.
We believe that we manufacture the best machine of the kind in the country.
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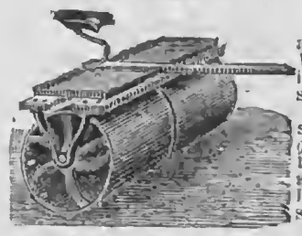

These implements are made of *Cast* and *Wrought Iron*, insuring the wearing of the same a life-time.
Efficient in preparing soil for proper and *sure germination of seeds* after sowing, by their action in pulverizing, leveling and rendering sufficiently firm.
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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

The Action of United Forces (Illustrated) 341
Getting Rid of the Cut-Worm 341
Azalea Amœna—Samuel Parsons 341
Paris Exhibition, The—Thrcber 342
Western N. Y. Hort. Society, Extracts from the Proceedings of 342
Flower Pots, Soluble 343
Cottage, A Small—L. F. Graether (Illustrated) ... 343
Jottings at Kirby Homestead—Col. F. D. Curtis ... 343
Van's Views 343
A Grange Agency. Is it Exceptional? 344
Custer Co., Col., From—H. H. Horton 344
Teamster's Vade-Mecum—R. H. Crane (Illustrated) 344
Binghamton Farmers' Club, Excerpts from 344
Michigan Fruit Growers, Meeting of 344
Russell & Co. 344
Western N. Y. Hort. Society 345
Can We Have Better Fruit?—Gen. W. H. Noble .. 345
Humea Elegans Purpurea—W. C. L. Drew 345
Rheumatism, Chronic—Dr. Goodenough 345

Answers to Correspondents:

Peppermint, Spearmint and Bergamot 346
Effect of Colored Light on Plants 346
Apples, Barreling 346
Dog, An Ailing 346
Cow Yielding Thick Milk 346
Miscellaneous Answers 346

Everywhere:

Eastern Shore of Maryland, Notes from 346
Swan, Ind. 346
Harlan Co., Neb. 346
Newport, Vt. 347
Carroll Co., Ky. 347
Carlton, Wis. 347
Windham, O. 347
Owensburg, Ky. 347
Brown Co., Wis. 347
Whitney's Point, N. Y. 347
Reynolds, Ill. 347
Winnesheik, Kas. 347
What They Say of It 347

Domestic Economy:

Piths 352
Cooking 352
Ornamentation Carried Too Far 352
Paste, An Excellent 352
Domestic Recipes 352
Markets 353

EDITORIAL PAGE:

Exportation, An Unwise 348
Iowa 348
Smoker's Car, The 348
The Frost 348
It is Different 348
Ice-Houses, Cheap 348
Brevities 348

LITERARY:

Poetry 349, 352, 354
"Bonnets and Hats" 349
Cora 350
Recent Literature 350
Magazine Notes 350
Bric-a-Brac 350
News of the Week 352

Reading for the Young:

Pocket-Money for Young People: No. 4—Prof. Wm. R. Brooks 354
School Children. A Plea for the—May Maple ... 354
The Man Everybody Likes—M. E. Stone 354
Russian Merchants 354

Sabbath Reading:

A Step Back out of Error 354

Personals 355
Wit and Humor 356
Advertisements 347, 353, 355, 356

THE

RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, JUNE 1, 1878.

AN UNWISE EXPORTATION.

We learn from our foreign exchanges that a new experiment is being tried in the importation of lean cattle from the United States to be fed on the rich pastures from Schleswig-Holstein. The steamer Schleswig is mentioned as having brought 322 cattle, 15 horses and 46 swine from New York. They are highly commended, as "well-grown, strongly built," and ready to make good progress on proper feeding. "The pigs were well and active, well-fed, etc." They are submitted to a rigorous quarantine of two weeks.

We chronicle this as news, but with the purpose of deprecating such enterprise on our part, as resulting in wasting our resources instead of making the most of them. The most expensive part of the production of beef is in raising these lean animals for the final feeding period. They can hardly be sold at a remunerative figure at that stage, and it cannot be wise for our stock farmers to sell such expensive unfinished animals when a few months would complete their fattening for a better market. The cost of transportation is even more per hundred weight than for well-fattened animals, because the lean ones occupy more space proportionally. It cannot be national thrift to send these unfinished animals from our country of cheap food to be fattened on much dearer food. The profit must be made on the finished animal. It is true that this may not be quite so bad as exporting our cattle foods to be used in growing foreign beeves, but it is the same policy as far as it goes. We can grow beef, pork, and mutton cheaper than any other country, save perhaps Australia, and it behooves us to study the transportation problem, and to export only the most concentrated product. The last 200 or 300 pounds put on a steer draws a much larger compensation than any other like amount. As a stocker of 1,100 or 1,200 pounds it is worth, say, in our present market, 3½ cents or $42, but as a well-fattened 1,500 pound bullock it is worth 5½ cents, or $82.50, so the last 300 lbs. nearly doubles the value of the animal.

This illustrates the importance of the finishing process, and shows the folly of exporting lean cattle to Europe to be fattened. The time has come when American agriculturists should study every branch of their business that they may reap their just reward. We are glad to find that every year sees less corn, proportionally to our production, exported and more meat, and trust that this will go on till we shall export little grain, except that used for human food.

IOWA.

According to the remarks of Mr. Shaffer, the Secretary of the Iowa State Agricultural Society, 1877 was a sad year for that State, although the Report does not very well sustain it. He says: "There never has been a time in the history of the State when there was so great a depression of business of all kinds" as at the date of the report (January last). This was owing, in part, to "incessant rains and impassable roads" which laid an embargo on all sorts of trade. The curious spectacle was presented of an inter-state railroad suspending its freight-trains because no products could be hauled to depots. Corn rotted by thousands of acres in the field and thousands of bushels in the crib. Wood, so largely used for fuel throughout the State, could not be taken from the forests where cut, so that prices were higher than for years before. Those who depended upon hogs and cattle and corn to meet obligations in bank, saw only failure staring them in the face. No new manufacturing enterprises were inaugurated, and those already in operation were curtailed as far as possible. The erection of new buildings and the progress of such improvements did not supply half of the skilled laborers with work, who sought it at nominal figures.

From this report the rapid progress of corn-growing is shown. In 1863 the area planted was 1,733,503 acres, yielding 63,883,911 bushels, an average of nearly thirty-seven bushels per acre. In 1875 there were 4,019,738 acres, yielding 146,993,570 bushels. Assuming the same ratio of increase as that in previous years, there must have been 5,063,685 acres in cultivation last year. The fact is pointed to that over 5,000,000 cans of corn were packed in the State of Maine, giving a revenue of about $1,000,000, and furnishing employment to nearly ten thousand persons during the packing season, and the suggestion is offered that an inviting field for the capitalists of Iowa might exist if this "tide of export" were checked and home manufacture established.

The report estimates that the State had a surplus of 30,040,000 bushels of wheat for shipment after allowing for increase of population, or ten bushels to each person. This would give a revenue of $26,285,000 at the average price of the crop in the State, eighty-seven and a-half cents per bushel. Such figures ought surely to be gratifying, as at least illustrating the capacity of the "virgin soil" of Iowa to produce this prime element in the food product of the world. The report here utters a word of caution. "How long can this wonderful production be continued?" "Must not there be fertilization?" Or in a few years "will not the wheat area be removed from Iowa as it has been from States farther east?"

Iowa ranks fifth in the number of milch cows. There were 665,300. The product in butter and milk, it was thought, would not fall short of $30,000,000, or nearly $20 to each inhabitant. The large infusion of good blood from the Jerseys and Short-Horns and the general improvement of cattle on the farm, have doubtless tended largely to an increase not only in the product but in the interest everywhere manifested in matters pertaining to the dairy.

The report deems that not enough regard is paid to the grass crops: "They are worth more than the corn and wheat and all the fruits put together; that is, they represent a greater money value, and there is no year when this has not been a fact, and such a year may never come. All waste places can be utilized and by judicious management can be made to yield a large return for every dollar expended in fencing, draining and planting trees for shade and protection."

While the present price of hogs is so low as to be discouraging, the report takes for granted that good hogs always bring a fair price—"while for breeds of indifferent blood there is no sale at all." Iowa, as a hog-producing State, exceeds any other in the Union by 513,200. The abatement of hog diseases, so prevalent in former years, is thought to be due to a more "thorough system of care and protection from the storms of winter and the heat of summer." After mentioning some startling figures, showing the annual loss by diseases of hogs, the report says: "The State of Iowa should expend some money in the investigation of the diseases of animals generally, and of swine especially. All that is published as to the cause, is a tissue of absurdities. All substances that are prescribed as remedies are empirical and often nonsensical. What Iowa wants is an appropriation sufficient to buy the intelligence and skill and worth of some man, or set of men, who will find out the fountain and origin of these diseases, and thus suggest a remedy, and save the State from losses that annually reach up into the millions of dollars."

The remarks respecting sheep are especially interesting and instructive.

The number of sheep in Iowa in 1867 was			1,593,226
"	"	1875 "	724,204
"	"	1877 "	318,439

This shows a loss of one million, two hundred and seventy-nine thousand, seven hundred and eighty-seven in ten years. The cause of this decrease is attributed first of all to dogs. In the matter of dogs legislation seems to have failed in Iowa as elsewhere. The sentiments, "Love me, love my dog," and "Every family should have a dog," have perpetuated and increased the number of dogs and steadily diminished the number of sheep. The remedy suggested in the Report is to "educate the public to believe that a sheep is better than a dog, and that it does not cost so much to keep the former as the latter. Some of the loss is attributed to wolves; and some to inexperience.

The quality of oats was better than for several years, and the crop larger. Two hundred thousand acres of barley were raised, with an average yield of twenty-six bushels. With such a commingling of success and failure, there was no "lack of food." There was no one hungry of necessity. "None suffered from lack of clothing and shelter except the negligent and the imprudent."

We trust that this season may fulfill the prediction of the Report that "From this dark (?) outlook all may confidently expect that light will break forth, and prosperity once more gladden all hearts."

THE SMOKER'S CAR.

Reader, have you ever, either by accident or design, been in the smoking-car of a railroad train well under way? If not, we beg of you to improve the first opportunity to do so. It will enable you to see life in a new phase, and you may possibly learn a lesson from it.

We think we are safe in saying there is no life, either animal or vegetable, less tenacious than that of man, which could continue long within its smoky precincts. Thirty, forty, and sometimes as many as fifty pipes and cigars of all kinds and conditions, in full blast, are giving off their clouds of poisonous smoke, which fills the entire capacity of the car.

Fumigation so thorough would soon clear an infested ship of rats and other vermin. Plants subjected to its influence would be poisoned to death in a short time. A child would be soon suffocated, and strong men, who have not been accustomed to such an atmosphere, would succumb to its poisonous influence.

The human physical organization is of wonderful endurance. We have only to notice the vast amount of poisons, administered by medical advisers in their daily practice, which the system rejects, always with more or less injury, to be convinced of that fact. Without going to extremes for illustrations, we see how tea, coffee, pepper, spices, and other things not natural to man's appetite, or beneficial to his system are, after constant and moderate use, not only received by the system without opposition, but finally a hunger is induced which they alone can satisfy, or which at least it is difficult to overcome. The same may be said of the use of spirituous liquors, arsenic, tobacco in its various forms, opium, and many other forms of poisons. Perhaps man was so constituted, expressly to enable him to withstand the poisonous atmosphere of the smoking-car.

The smoking-car may be taken as an illustration of man's moral as well as his physical nature and tendencies. If the doctrine of total depravity, as once taught, was true, we might suppose ourselves born in a spiritual smoking-car, whose cloudy contents were in exact consonance with our unholy condition, and amid which we should revel with the highest enjoyment.

But in these days of more liberal views, we are taught that men are only naturally inclined to evil ways, and readily believe that in our individual cases the inclination is so very little from the perpendicular that there is no danger of a fall. Our neighbor, who indulges in a whole pipefull of sin, may be in danger, but our little cigarette can work no harm. In fact, we see no reason why we should not be allowed to smoke it if we choose.

The little sins are but blossoms of which the larger ones are the fruit, and the season of growth is sometimes exceedingly short. One wrong thought or action is followed by another as readily and inevitably as is the cigarette by the cigar.

The confirmed sot had his first glass of wine, and he who stands lowest in the moral scale, his first departure from the paths of righteousness.

We are all journeying on Life's Railway, and on each train there is a smoking-car. Those who enter it do so from choice. They may be urged or influenced by others, but the decision, the *yes* or the *no*, is with them. More or less of the dust of the road will be found on each one of us. We shall not run into the terminal station with our apparel fresh and clean, let us do the best we may; but we can show that we have striven to avoid contamination, and that we have at least kept clear of the abominations of the smoking-car.

The Frost.—The frost, to which we referred last week, perpetrated more harm in the Rural Ground than we were aware of. The new shoots of many balsams and spruces were killed, the effect of which will be more apparent later in the season in the disfigurement of the trees. Many grape-vines were killed. We had supposed that only the new and tender shoots were harmed. But the early buds and growth seem to possess much of the vitality of the plant, so that when frozen, the entire plant receives a check—a shock from which it cannot recover. Had these same shoots been *rubbed* off, we doubt not, though weakened, the plants would have pushed other buds and survived. A greater proportion of seedlings than of others was killed—for the reason, we presume, that the new growth as compared with the old wood was greater than in older vines.

Comparing such vines as Rogers' No. 1 (Goethe) with the Concord, it was plain that the latter had sustained the greater injury, though the hardier variety of the two. But the Concord had made twice as much growth. The panicles of buds in the Concord were all killed. Half of those of the other escaped. For this locality—as for any other visited by severe frosts—there is a "marked difference" in the reward likely to be offered to the "Early Bird" and to the "Early Spring."

It is Different.—There is no accounting for tastes. Some people don't like the looks of trees that are whitewashed. Some people admire the contrast between the white stems of the Cut-leaved Weeping Birch or of our White Birch and its green leaves, or the deep purple leaves of the Blood Birch, a variety of the European White Birch. But if we should take our common Black or Sweet Birch and whitewash the stems occasionally, would not the contrast be as fine!

Cheap Ice-Houses.—Bore two or three holes in a hogshead and cover with a wire netting. Then place a layer of saw-dust. Fill in with ice and the spaces with saw-dust. One hundred pounds of ice may thus be made to keep for a week, and this is sufficient to supply a small family. Ice is at present delivered to country homes by butchers and others at forty cents per hundred. For those who have neither refrigerators nor ice-houses, what is the objection to this method?

BREVITIES.

To keep up a uniform flow of milk the year round, feed cows a couple of quarts each per day of meal, adding shorts in winter.

In sowing grass seed sow a variety and sow a plenty of it. As a rule we do not sow seed enough; and this year, when it is very cheap, it is a good time to sow more.

We do not believe the country—take it anywhere and everywhere ever looked finer or gave a better promise of splendid crops of all sorts than at the present time. "But there is many a slip," etc.

We caught a sparrow in the act of eating our first ripe strawberries. The sparrows are not to be blamed for liking strawberries better than caterpillars—only they ought to have some respect to the conditions of the hospitalities extended to them by this country.

C. L. Flint of Massachusetts says that every farmer knows that he is by no means sure of "getting a catch" when he sows his grass seed with oats, or even with wheat or barley; and there is pretty good evidence that, if we are going to raise wheat on a piece of land this year and grass next year, we shall do better by sowing the wheat alone, and after it is cut turning over the stubble and sowing our grass seed in the fall or early next spring. This plan may require a little work, but it will give more hay.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

LIFE'S REST.

J. L. L.

You lean from your casement small
And look with longing eyes
To the hills beyond, nor see
The beauty that nearer lies.

And you sigh in discontent
That your life is narrow and small;
Do you not know, little maid,
That your narrow life holds all

That can make it sweet and true—
That can make it fair and blest?
Of all the world's good gifts
You have the very best.

Out at work in the fields,
Husking the yellow corn,
Is a man whose honest heart
Beats for you night and morn.

Were you to search the world,
What would you hope to find
Better for heart or hand
Than this you would leave behind?

Ah! little girl, the hills
May glow with a splendid grace,
But the valley, after all,
Is a very pleasant place.

And nothing that life can give,
Be it ever so great and sweet,
Could be one-half so grand
As this love beneath your feet.

Though the hills seem glory-crowned,
Yet the hills are bleak and drear;
But the valley is sheltered warm—
Stay in the valley, dear.

"BONNETS AND HATS."

THE peculiarity of the millinery this season is the "barbaric splendor" of its ornamentation. Bonnets, feathers and flowers are lavishly enriched with sprays and fringes of pearl, gold or silver beads. The pearls are in different colors—gold, rose, white and water-green and are in all sizes. Gold and silver beads are all small. On bonnets the pearls are disposed in rows about the under or upper side of the front and generally the upper side of the circumference around the back. Metallic beads are sometimes interposed between pearl rows. A row of pea pearls and two of seed pearls beautifully begem the stems of long, wide ostrich feathers. Ostrich feathers tipped with marabou, showered with gold, silver and pearl, are elegant novelties. Plumes of marabou alone

FIG. 1.

are sprinkled with all three decorative additions.

The taste in flowers is for heather, small oats, heliotrope, unripened grass seeds, tamarack foliage, white lilacs, strawberry blossoms, golden-rod bloom, blossoming mosses, poppies streaked with pink and yellow, dusty foliage, sere leaves, dried natural grasses, queenly roses in deep, lovely watermelon-pink. Large wreaths are composed of a liberal amount of foliage, a cluster of three or four roses, and five or ten buds, natural size. Buckles and pins seeded with pearls and set about with glowing steel facets, are very rich.

Soft silks and tissues of Indian texture in loose meshes are used as trimming. Some silken fabrics are woven in a half-diaphanous net, and brocaded with flower sprays of velvet. Ribbons are watered on one side and plain on the other. The most fashionable bonnets are of chip and fine straw. Some of them are composed of alternate silver and gold braid. To any lady who may desire, I will supply information as to prices of bonnets, feathers, flowers, etc.

DESCRIPTION OF CUTS.

Figure 1 is known as the "flower bonnet" of which there are a number of styles. This one is composed of buttercups and foliage, with an intermingling of pearl-tipped grasses. It is made over a lace or silk frame, and has illusion ties.

Fig. 2 This has a low coronet faced with velvet and piped with silk, while just above the piping is a row of fine beads strung on wire. The bonnet itself is chip and is neatly trimmed with satin ribbon, together with a cluster of blossoms set in front near the crown, no face trimming is required, a cluster of blossoms is caught in the bow.

Fig. 3. The walking hat here represented is fashionable for street wear, and may be trimmed as illustrated, or with a band, a flat bow at one side, a wing and binding. In the present instance a wreath of blossoms, wound with ribbon, encircles the crown. At one side of the front two guilt heron feathers are caught, and back of them is a rosettee bow of ribbon. Another bow is caught under the brim at the opposite side, to complete the hat. Black, brown or white straw or chip hats of this shape are equally sty-

FIG. 2.

lish, and may bo trimmed with contrasting colors.

Fig. 4. Is of fine Tuscany straw and in shape is simply a high crown curved out at the back and brimless. It therefore fits the head closely and requires no face trimming. A demi-wreath and a band of ribbon trim the center portion—a large rose with foliage commencing the wreath a little to the right side and fine flowers terminating it at the left side. A large cluster of standing loops is at the right side of the back, their ends fastening under the blossoms. The ties may be of narrow ribbon or lace.

FIG. 3.

Fig. 5. Illustrates a hat the front of which is a double coronet covered with shirred satin and divided by a wreath of blossoms and foliage. Its lower edge is bound with satin and underlaid with a rushing of lisse which sets closely to the hair. The crown is of chip and to it is caught a mass of blossoms, from which falls a long plume of fine grass with the ends tipped with pearl beads.

Fig. 6. A handsome promenade hat is here illustrated in dark straw with trimmings of satin, three demi-plumes and a cluster of silk cord. The face trimming at the side is composed of loops of satin confined by a couple of gilt and pearl ornaments. One of the three plumes falls backward and another forward, while the third also inclines toward the front. At Fig. 7 is presented another Roseberry. The side under the raised brim is filled with flowers, and the crown is encircled by a twist of velvet terminating in a jaunty bow at the front. This bow also confines the stem of the sweeping plume that extends over the crown and falls at the back.

Fig. 8 represents a straw hat made of fine braid. The trimming is simple, consisting of a band of satin formed into a square bow, with a knot at

FIG. 4.

the left side. From the top of this knot rises a short ostrich plume which curls over the crown in a very graceful manner. As the brim slightly rolls at the sides it is faced underneath with satin so as to present a neat finish. Velvet or silk may be used in place of satin, and the outside trimming a scarf of gauze or tissue, with a wing at the side.

Fig. 9 is a white chip hat. Velvet folds encircle the crown and opening, and tips surmount the crown at the front, and give quite an airy effect in spite of the density of the trimming fabric. The face trimming consists of a shirred band of velvet, overhung by a fall of bead fringe which continues across the back, where it is entwined with the velvet in a very effective manner. The ties are of satin gros-grain ribbon, at the front or back.

F. R.

WOMAN AND ILL HEALTH.

MRS. POTIPHAR.

Is chronic invalidism the normal condition of women? MICHELET and a whole host of lesser lights in the literary firmament have answered this query in the affirmative. In fact, men generally seem to accept as true, the statement of one of their number that "woman is born to a heritage of pain and weakness"—a perfectly healthy woman is to them an anomaly.

FIG. 5.

This tendency, on the part of the sterner sex to regard woman as by nature lacking in vigor, breaks out quite virulently where it is proposed to extend the sphere of her activities. Is the question of sending her to college discussed, or is it hinted that there are latent possibilities which, developed, might make her eminent as an artist or scientist? then do the brothers of the human family grow eloquent over the physical limitations of our sex; then do they draw appalling pictures of the consequences to posterity if the girls of this generation are permitted to exhaust their little strength in gathering ideas.

They shed tears over the pallor of girlish students; they collect statistics of the number of headaches per annum with which the average-scholar is affected, and then call on the community at large to put an end to this wanton waste of health and strength.

FIG. 6.

The physical weakness of woman is dwelt on at such length and is so elaborated, that for the time being the periodicals and the press of the day are transformed into physiological text books. It is claimed that this feebleness is such as forever to debar her from exhaustive intellectual effort, except at the expense of her own health and that of her prospective children.

Ordinarily, the physical well or ill being of woman does not call out any special comment or demonstration from men. For ages, pale-faced women have slaved and toiled far beyond their strength, for husband and children, and yet these gentlemen who wax lachrymose about the vitality expended by girls in the pursuit of knowledge, have calmly contemplated the spectacle of whole generations of wives and mothers sacrificed on the home altars of housekeeping and baby tending without so much as even hinting that the tendency of matrimony is to produce ill health in women. They never admit that the lot of most married women is to be commiserated. The wife, albeit she is weakened by the care of house and children, is always represented as occupying an enviable position. What tears these gentlemen have to shed are reserved for the ambitious girl student and for those women who prefer to walk through life alone rather than with uncongenial companions. Men are so partial in display of their sympathy that one is led to doubt both their conclusions and the genuineness of their pity.

That women, as a rule, are more inclined to invalidism than men cannot be denied; but were they born so?

Is it reasonable to suppose that a benign God would deliberately doom a creature to a life of weakness, or give her functions and a work to do and not supply the requisite strength? Is not this lack of vigor, rather the result of artificial habits of civilization? A well-known woman physician lately attributed three-quarters of all woman's invalidism to the present style of dress! Another woman, eminent as a writer, has pointed out that the most potent reasons for the universal

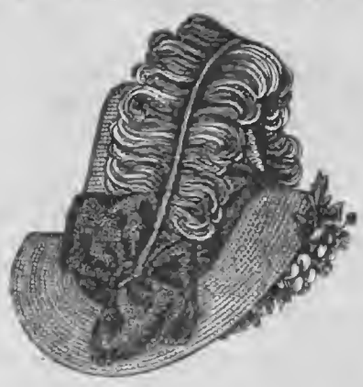

FIG. 7.

ill health among women are their lack of interest in intellectual pursuits, the over-stimulation of their emotional natures; their disinclination to out-door exercise and their slavish devotion to the needle and the sewing-machine.

It is a well authenticated fact that women who have not exceptional frames can, by training, equal and surpass men in the exploits of the gymnast and if in this most strength-taxing profession they can put themselves on an equality with man what is to prevent women lifting themselves out of their present pitiable feebleness by some system of judicious education, combining exercise and hygiene?

No one has sufficiently computed, it seems to me, the grand elasticity of womanhood. The good God has given her a brain as well as the sacred office of maternity. Not by spasmodic intellectual effort, with intervals of indolence and vague imaginings are the great mothers of the race to be reared and formed. The perfectly healthful woman whom the doctors never see will laugh, if you tell her she was created an intermittent invalid. She knows the sustaining force, the healthful reserve of power, which keeps the balance of her pulses under all the complex conditions of her life. Nature foreseeing the various demands upon her, has gifted her with powers of endurance, of rebound under care, of patient pulling and steering through shoals of harassing and complicated duties, be-

FIG. 8.

fore which the stoutest "stroke" of the university crew would break his oar in exasperation and lay himself down in despair.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

MRS. S. B.—I send samples of embroidery and lace by this mail.

MRS. MERTON, Venango Co., Pa.—Colored embroideries are used on underclothing, and the effect is quite pretty, although for myself I should prefer some of the laces now so much worn.

MISS LULU JOHNSON.—The Roseberry hat can be made "dressy" by tasteful trimming. A dark brown straw one, trimmed with seal-brown velvet, ecru mode silk and ostrich tips of same colors, is both stylish and pretty.

WANTED.—A recipe for staining wood.

L. M. BROWN, Onondaga Co., N. Y., asks some one to tell her how to make a pretty paper-receiver.

FIG. 9.

DAME DURDEN wants some "RURAL" mothers to tell her what indoor games she can amuse her little toddlers of three, five and seven years with.

MRS. HULBERT, CALIFORNIA.—Yard sample is seal brown and as good quality of silk can be purchased for $1.50 per yard. That is if you will be satisfied with American manufacure.

Literary Miscellany.

REPLY TO A CHILD'S LETTER.

Over the mountains far and blue
Bubble has sent me a tiny note,
The dearest, charmingest billet doux
That ever a little maiden wrote;
A scribble-scrabble of willful pen,
Like written cooing of a dove,
But in great letters round and plain
The dear words, "*Bubble sends her love!*"

The rest I could not understand,
'Twas baby Greek, for aught I know,
Or hieroglyphs from fairy land—
But nothing on the earth below,
And nothing the bright stars above,
Nor flower, nor gem, nor pearl in the sea
Is dearer than the gift of love
Little Bubble has sent to me,

Dear little maid with sunny hair,
Your random shaft has touched my heart
With happiness that, unaware,
Your grace and innocence impart.
God bless you! May your happy life,
Bright as the pet name they have given,
Float calmly free from care and strife,
Reflecting only hues of Heaven.

[*Phila. Evening Bulletin.*

CORA.

A few days passed miserably. From indifferent and cold, Sir Alan's manner became sharp and harsh; many were the sarcastic and bitter words which fell from his lips now—those lips which until then had never spoken to her save with loving tenderness. Cora resented it bitterly. If he had spoken frankly to her she would perhaps have found courage to tell him all; but he gave her no opportunity, and she was too proud to make one for herself. Marks had been wise in his dilineation of both characters; but proud and indifferent as Cora appeared, she suffered passionately, and alas! in her sorrow, Lord Almane's gentle words, his friendship, came like a solace and consolation. He was too wise to touch directly on her grief, or to let her see that he suspected the misunderstanding which existed between her and Sir Alan; but he showed a sympathy with, and sorrow for her, which touched the proud, passionate, bleeding heart.

But keen as her suffering was, it was as nothing to her husband's, who felt the bitterness of death itself in the thought that he could not trust his wife—the wife that he had idolized and worshipped. Jealousy is a terrible companion to carry about with one, and it haunted Sir Alan day and night. He was scarcely able to master himself sufficiently to meet Lord Almane with ordinary politeness, although not one word as to his secret pain passed his lips. That the Viscount was quite *au courant* with the state of things we, who are aware of his acquaintance with Mr. Marks, must know, and that he rejoiced at it is very certain.

"The jealous fool is playing into my own hands," he said to himself. "Cora will not stand such brusquerie, and if I give her a hint of the espionage to which she is subject, she will revolt, and the day will be mine. More especially if Marks is sharp, and awakens none of her suspicions."

"Do you know whether her ladyship has gone out, Marks?" said Sir Alan, entering the sitting-room one morning when Marks was clearing away the breakfast things.

"I think I heard Miss Spills say that her ladyship was going into the Palais Royal, Sir Alan," replied the servant, in his usual voice; "she has but just left the hotel, sir, and perhaps if you look out of the window you may ascertain."

Sir Alan strode across the room and looked out, drawing aside the lace curtains with an impatient hand. Their rooms looked out upon one of the entrances of the Palais Royal, and among the many figures hurrying to and fro Sir Alan distinguished Cora's graceful figure as she entered that "ladies' paradise". He stood for a moment, apparently hesitating whether to follow or not. As he did so a cab dashed up, and its occupant, a gentleman, alighted, and also entered the building.

Marks, who had followed his master to the window, saw his quick start, and heard the smothered exclamation with which he turned from the window, and a transient gleam of satisfaction crossed the servant's face.

The baronet threw himself into an arm-chair, and leaning his head upon his hand, appeared wrapped in deep thought. A long sigh from the man aroused him from his reverie, and looking up, he met the little deep-set eyes fixed upon him with an unmistakable air of compassion. He withdrew his gaze directly he felt himself observed: but an uncomfortable feeling lingered on Sir Alan's mind that the man, his servant, noticed that his wife was betraying him.

Rising and going to his writing-table, Sir Alan wrote a few lines, which he directed and sealed, then, seeing that the man had left the room, he rose and began pacing to and fro, evidently a prey to the greatest mental distress.

"Oh! Cora—Cora!" he said aloud, passionately: "that you whom I loved so madly, the mother of my child, should deceive me so cruelly. No—no; I will not doubt you. And yet, oh! Heaven, this is terrible!"

He bowed his head upon his hand in anguish; but after a few moments he raised it, proud and calm.

"I will trust her, I can do so," he said, decidedly; and crossing over to the bell, he rang it.

Very promptly was the summons answered—so promptly, that had Sir Alan been less preoccupied he might have suspected Marks' near proximity to the keyhole; as it was he noticed nothing but the pitying expression of his face,

"I am obliged to start to town at once, Marks," he said, not turning his face to the man, but keeping it bent over the *escritoire*. "When does the next train for Boulogne start?"

"At 11:45, Sir Alan," was the quiet reply.

"I can catch that if you hurry."

"But there is an express at 12:10, sir."

"That is better; put me up some things at once, and tell one of the waiters to call a cab."

"Yes, Sir Alan. Shall you require my attendance, sir?" he added, as he was about to leave the room, apparently struck by the thought.

"Certainly not," Sir Alan answered. "Lady Vincent could not remain here alone."

And without noticing the triumphant expression which shone on the man's face, Alan caught up the Times and turned away; but he had not read one word of it when Marks returned, although quite half an hour had elapsed.

"The cab is at the door, Sir Alan."

"Very well, Marks. Give this note to her ladyship when she returns. It contains an address I omitted to give her this morning, and," Sir Alan's voice was thick, and he stammered a little, "if you should want to write, Marks, address to the club."

"I understand, Sir Alan," replied the servant, quietly, as he followed his master down-stairs, obsequiously handing him his rugs and sticks, and giving the direction to the cabman with the utmost deliberation.

But very different was the swift step with which he returned to the *salon*, and taking up his master's note, opened and glanced it over. The few lines it contained gave him no clue to the hurried journey.

"Dear Cora," Sir Alan wrote: "I have received an immediate summons to town, and shall be absent a few days. Take care of yourself; and if you should want anything from home write to me at the club."

Having satisfied his curiosity, Marks coolly took another envelope from his master's table, re-addressed the note in a hand writing which was a perfect imitation of Sir Alan's, and sealed it with a seal which lay there.

As he replaced it on the table, he said, with a savage gleam of triumph in his glance:

"It was your turn once, Sir Alan Vincent; it is mine now. Your triumph was momentary, but my revenge will be lasting, and my tumble in the ditch will be amply expiated."

If Cora could have heard him, she would have known why his face seemed familiar to her.

Sir Alan's favorite servant was the man who had insulted her crossing the common, and whom the baronet had disposed of in such a summary manner.

CHAPTER XIX.

The Effect of a Letter.—The Night Mail.

Cora's surprise and agitation at her husband's sudden and inexplicable departure were very great, and the few cold lines he had left for her did not tend to reassure her. She summoned Marks, but he could give her no information; and then she was angry at herself for having allowed him to see what Sir Alan had not done, that until her return from the Palais Royal she was in ignorance as to his hurried journey. For some days she kept in her own room, restless and miserable; then pride came to her aid, and she tried to overcome her depression. She had denied herself to all visitors, and Lord Almane was beginning to get impatient, when one day he was admitted, and found Cora, beautifully dressed and apparently in high spirits, but without a shade of color in her fair face, and with hollow dark circles under her large eyes.

"Good Heavens! you are ill, Lady Cora," he exclaimed. "Have you had advice? Your hand is burning."

And he retained the little, trembling hand in his, and bent his velvety dark eyes upon her face with deep tenderness and commiseration.

"What is the matter, Cora?" he went on, softly. "Are you really ill? Will you not tell me? Can I not help you for the sake of old times?"

The tender tone went to Cora's heart, but she snatched away her hand petulantly, and laughed.

"What is the matter with me? Nothing but *ennui*, of course—if one can be *ennuye* in this gay city. I am glad to see you, Lord Almane; perhaps you will tell me something to make me laugh. Please don't look so melancholy yourself, you will only increase my blues until they reach the indigo shade."

"Then you are unhappy," he said, sadly and tenderly. "I cannot be mistaken in your tremors, Cora. It is not *ennui*, it is misery which looks at me through your sweet eyes. Oh! my child, how dare he marry you to make you wretched."

"You are mad!" cried Cora, trying to speak haughtily. "I am not unhappy. My husband is goodness itself. I will not hear you speak thus, Lord Almane."

"Goodness itself," he repeated, bitterly; "and yet he can leave you thus. Ah, Cora, had you trusted me I should have made your life as bright as sunshine; my love would have kept every trouble from you."

"How dare you?" flashed Cora, trembling and panting; struggling with her tears, as she leant back in her chair.

"How dare I? Because I love: because you are really mine—because you loved me once well, before you met him—before he stole you from me, Cora—Cora," he went on, passionately, "I would never have spoken thus had I seen you happy and honored. Had I known you to be a happy wife, I would have buried my love in my heart, and never by word or look would I have let you suspect that I love you still; but I find you lonely and neglected, deserted by the man to whom you have given the priceless treasure of your love, and I can keep silent no longer. I must tell you that I love you still. That I love you now as dearly—nay, ten times more so than I did in those happy, bygone days. Do you remember them, Cora?" he went on in a few moments, bending over her with inexpressible tenderness in tone and manner, "Nay, you cannot have quite forgotten them, I think. I would give the hopes and desires of years to win one of those days again—an hour, even time to hold you in my arms again, and to hear you whisper, as you did then, 'Stanley, I love you—I love you.' Nay, I can hold my peace no longer; Cora, you must—you shall hear me."

He caught the little trembling hands in his, and drew them passionately to his lips. Quivering in every limb, and almost powerless from emotion, she tried to withdraw them, but he held her fast.

"Do not struggle so, my love; do not turn from me. How can I see you ill and unhappy, and keep back the torrent of my love," he pleaded, passionately. "It is not sin, Cora, it is not wrong. He—that man whom you call husband—cares not for you. Has he not left you here to me?"

She wrenched her hands away from him, and covered her face; but he sank on his knees beside her, and as Cora felt his arms round her, her strength seemed deserting her, for she had not power to repulse him.

At this moment the door opened quietly, and Marks appeared. The Viscount sprang up and turned, frowning, to the door.

"I beg your pardon, my lady, I thought you were alone," said the man, quietly, retiring and closing the door after him.

"I am lost!" said Cora passionately. "Oh! Lord Almane, what have you done?"

"Be calm, dearest child," he murmured, tenderly.

"But that man? He will tell Alan! Ah, me, what have I done. In pity leave me, Lord Almane."

And Cora clasped her little hands beseechingly, and lifted her streaming eyes to his face.

"Leave you!" he repeated—"leave you to the mercy of a man who neglects you, and sets spies over you; I will not, Cora. I must rescue you from such degradation."

"Spies!" she repeated, vacantly—"spies!"

"Yes, that man is a spy—your husband's spy—left by him here to report on your conduct. To tell him how many times you go out and come in, and what you do and what you say. Ask him, Cora, if it be not so."

"A spy," repeated Cora, faintly. "To what intent? Why should he spy me?"

"Listen, my child," the Viscount said, gently forcing her to lean back in the *fauteuil*, and speaking with a grave, mournful tenderness. "I do not know whether you love Sir Alan, but I know this, that he is unworthy of your love, for he mistrusts you and believes you false to him! Nay, I know more than this; I know that he would willingly be freed from the ties which bind him to you. Your devotion, your love, have wearied him. He never really cared for you. He pitied your loneliness, he says, and so he married you."

"It is false," said Cora passionately. "It is false, quite false; he loved me—he loves me!"

"Loves!" repeated Lord Almane, scornfully. "*Now?*"

"Yes, now," she answered. "Why not?"

"Ask yourself, my poor child. Is his conduct towards you the conduct of a man who loves?"

"But he loved me once," moaned the poor young wife, recalling all the old happy days, and contrasting them with the loneliness and misery of the present. "He loved me once. He will love me again."

"He never loved you! I have proofs," he answered, quietly. "Cora, if I thought he loved you, if I thought your happiness safe with him, I would leave you now, and never willingly meet you again."

"Proofs! you say you have proofs! Give them to me," she said, with feverish eagerness, holding out her hand in entreaty.

"Not until you are calmer," he said quietly.

By a strong effort Cora choked back her sobs, and tried to assume some semblance of composure. The Viscount took a letter out of his pocket and slowly unfolded it.

"Did you ever hear of George Leeson!" he asked. "He was a friend of your brother's" he added, gently, "as well as of your husband's."

"Yes, I know" she answered.

"When he heard of your betrothal, he wrote to Sir Alan to congratulate him on the prize he had won. This letter is Sir Alan's answer. You recognize his writing I suppose, Cora?"

"Yes."

She snatched it from him eagerly. As she read it the color slowly forsook her cheeks, her lips paled, and her eyes closed. For a moment Lord Almane thought she would faint, and hastened to support her; but by a strong effort, she rallied, and withdrew herself from his arm.

For some minutes there was silence, broken only by the regular tick-tick of the clock on the mantel. Lord Almane had turned away; the heart-broken misery on Cora's face was not pleasant to look upon, and he stood at the window, looking out at the busy, animated scene beneath with a preoccupied gaze which saw none of it. Lady Vincent still held the letter open before her, and was gazing at it with dilated eyes, and a face whose pallor was almost livid.

"I cannot believe it!" she said, at last, with a wail of agony. "He could not have deceived me so! Alan, Alan! and I loved you as my life!"

She slid from her chair, and lay on the floor trembling and sobbing, but without tears. The Viscount lifted her in his arms and laid her upon a couch, trying by tender words to soothe her suffering; but she appeared unconscious of his efforts, and moaned feebly, holding the letter clutched tightly between her fingers.

"Alan! Alan!"

Half an hour elapsed, and then Cora sat up, and pushed her hair back from her burning brow.

"Will you leave me now?" she said, faintly. "I think you mean kindly, Lord Almane; I think" —with a caught breath—"I think you love me a little. I will write to you. I want to be alone. I think I am not very well. This has upset me,"

"My poor child!" and the Viscount pressed her hands in his, and left a long, tender kiss upon them. "I wish I could comfort you! I wish I could bear it for you! Cora, you believe me, do you not? I would give half my life to save you one sorrow."

She tried to smile, but the attempt was a failure; and as Lord Almane went away she sank back upon the cushions, and lay there, white and faint, although the blessing of insensibility was denied her.

When she was able to rise and make her way to the window, it was evening. The Palais Royal was lighted up; so were the busy street, and the gay shops; and carriages and cabs were hurrying to and fro, bearing happy people to places of amusement; and lady Cora stood and watched them with a feeling as if the brightness and gaiety mocked her own misery.

Glancing at her watch, she found that it was half-past seven, and that Marks would soon be up to prepare the table for dinner. That hateful man! she could not see him again; and she was about to ring the bell, when he opened the door, carrying a tray covered with silver and glasses.

"Send Spills to me," said Cora. "You need not lay the table; I do not want dinner this evening."

Marks bowed and retired. In a few minutes Cora's maid, a demure and starched English woman, entered.

"Spills, I want you to ascertain for me at what time the night-express leaves for Boulogne. I want to get to town immediately. Sir Alan wants me; and if I go by that train I shall catch the Folkstone night boat."

"But my lady," began Spills.

"Will you ascertain at once?" said her mistress, cutting short the remonstrance. "I need take no luggage, nor do I require your attendance. We shall return to Paris in a few days at the longest, or send for you and Marks."

Much mystified, but too much awed by her mistress' manner to make any remark, the maid went away to impart the news to Mr. Marks, who did not appear much astonished. Having given Spills the information she required, he went up to his room, and for half an hour was busily employed. Then he went down stairs, hailed a cab, and drove to the hotel on the Boulevard des Capucines, where Lord Almane was staying, and remained for a few moments in close conversation with the Viscount. At the close of the interview both seemed quite satisfied; and the handsome, aristocratic features, as well as the coarser, more plebeian ones, expressed unmixed triumph and pleasure. Then Mr. Marks re-entered his cab, returning to the "Grand Hotel du Louvre."

"The night train leaves at 9.40, my lady," said the maid, returning to the *salon*. "It only stops once, at Amiens, and will be quite in time for the Folkstone steamer."

"Very well; I will change my dress now, Spills. Give me a dark, warm one, and put my ulster and my traveling-bag ready. Then bring me a cup of strong coffee."

Cora was quite calm and self-possessed while the maid took off her dainty silk dress, and replaced it by a dark blue serge; but her heart was beating violently, and her pulses were throbbing quick and fast; and she had but one thought—to get to Alan, and tell him all, and implore him to give her back his love and to take her to his heart again. It was a wild, thoughtless plan, reckless, indefinite; but Cora's brain was in a whirl, and she did not pause to think. If Alan did not love her—had never done so—she would creep away somewhere and die, and trouble him no more; but at least she must know it from his own lips.

At nine o'clock Spills knocked at the door and announced that the cab was waiting, and on the landing without Marks waited to escort his mistress.

"I require no one with me," said Cora, sharply "Do you hear me, Marks?"

"May I not accompany you to the station, my lady?"

"No; I am going alone."

So Marks followed her quietly down the broad staircase, and some of the loungers in the hall turned to have a second glance at the *belle Anglaise* who had created no small sensation at the hotel, not merely on account of her own beauty, but for the prestige attached to her husband's name. She was looking pale and resolute, and the large hat she wore shaded her face, as she passed on calm and indifferent. Marks put in the traveling-bag, and assisted her to enter the cab, giving the man the same direction as he had given Sir Alan's coachman.

And as the man drove away the servant stood and watched it disappear, with an evil smile on his lips.

"That fellow reminds me of Mephistopheles," said a young Frenchman, as he passed by, to his companion. "I should call that a face of the police-court."

Cora was driven rapidly through the lighted streets She had thrown herself back in the cab and covered her face, as she began to feel the rashness of the step she had taken; but she would not return. She felt that she must escape from Lord Almane in the first place, and the longing to see her husband was strong upon her If she went to him, told him the past, and assured him that her heart was his and his only now, he would believe her, surely he would for their child's sake.

Lord Almane's words had sunk deep, still she did not believe them all. She knew her husband was too noble to wish her dishonor, but so many little things once unnoticed came back to her now. She recalled Marks' constant appearances, especially when Lord Almane was with her; she knew that the occurrence of the day had placed her in the man's power; but Alan should know all from her lips, not from the servant's; and if he believed him in preference to his wife, she must submit.

By the time they reached the Rue de Dunkerque she had checked her tears, and was able to dis-

miss the cabman, and obtain her ticket without attracting any attention, while a porter, a little struck with her appearance and manner, allowed her to go on the platform, and found her a seat in a carriage before the other travelers, who were few in number, were freed from their "durance vile" in the waiting-room.

Very impatiently Cora waited for the time to pass, and it was a real relief when she saw the waiting-room doors opened, and heard the guard summoning the travelers for "Amiens and Boulogne." She leant back in her carriage, hoping to be left alone, but as she did so she fancied she recognized a likeness to Marks in the appearance of a man upon the platform, but the idea only made her shrink further back.

The whistle sounded and they were off, when the door of the carriage she was in was rapidly opened, and, even as the train moved away, a traveler sprang in and took his seat, while the porter, whom Cora recognized as the one who had found her a seat, closed the door, and turned the handle securely.

CHAPTER XX.

A Terrible Journey.

For some minutes Cora did not even turn her head or glance at her fellow-traveler; but when she did so, she could distinguish nothing except that he was muffled up, and wore a slouched hat, which, if it were a precautionary measure, was a very effectual one. Occupied with her own sad thoughts, Lady Vincent soon forgot his presence, and thought no more of him. Now that she had leisure to reflect over her hasty action, she could realize how unwise she had been, how imprudent. She was in the power of an inferior, and she feared an unscrupulous man: and she felt very bitterly towards her husband when the thought obtruded itself that he had placed that man there to spy her. Lord Almane occupied her but little, all her thought was given to Sir Alan; and the one wish present with her, as they sped onwards, was to see him again, and justify herself, if she could, in his eyes. As they went on, as she felt herself every moment approaching him, and pictured the meeting, all the bitterness and pride faded, and sadder, softer thoughts came: thoughts of the wedded happiness and peace which had been hers so long—thoughts of her husband's tenderness and goodness, and of their child—their bright, beautiful boy—whom she would soon see again. Sir Alan's harshness, and the constraint of the past few weeks, were all forgotten; she remembered nothing but his love, his consideration. He must have loved her—he could not have feigned such devotion; and when this gulf which seemed to have opened beneath their feet had closed again, he would love her still. Cora's tears flowed fast as she bowed her head upon her hands, and her agitation shook her delicate frame with hysterical violence.

Suddenly she felt her hands removed from her face, and, looking up, she saw Lord Almane's handsome countenance, full of passion and eagerness, bending over her.

"My own darling, devoted love," he murmured, passionately. "How can I thank you? Cora, trust me, you shall never repent this step."

And he drew her to his breast, and tried to press his lips to the quivering lips and tear-stained cheeks; but with a fierce strength Cora threw him off, and recoiled indignantly.

"What!" he said, gently. "Still coy—still unkind! Nay, Cora, after such a proof of love as you have given me, you can no longer feign indifference. It were absurd to do so."

"This persistence is unmanly, Lord Almane," said Cora, through her sobs. "How dare you persecute me thus?"

But even as she spoke a sense of her own helplessness struck her with terror, and she tried vainly to suppress any signs of agitation.

The Viscount smiled.

"If you had not written to me, Cora," he said, quietly, "I should begin to imagine that my presence was distasteful to you; as it is, my darling, I can understand your agitation. It is but natural; but you must not carry it to such an excess, love, or you will be ill."

His quiet tone and manner transfixed his hearer with astonishment.

"Written to you," she repeated, haughtily. "You are under a strange delusion, Lord Almane."

"A warrantable one under the circumstances, my child. Is not this your writing?"

And he held up to her view a little note, folded and addressed to "Lord Almane."

"Yes," said Cora, at once.

"And this?"

As he spoke he unfolded the note. It was written on paper which bore her monogram, and at the first glance she thought the handwriting hers; the second undeceived her.

"I did not write that," she said, disdainfully.

"The writing is yours, Cora!"

"It is an excellent imitation. Your forgers are clever, Lord Almane."

"My forgers!" he said. "What folly is this? On my honor this note was brought to me by your servant. It is in your writing. In obedience to its request I am here—here at your feet—your willing slave, dearest! Do not trifle with me, Cora."

"Lord Almane," said Cora, suppressing her emotion by a strong effort, "you are the victim of some strange plot. On my honor—on my life—I never wrote that note!"

The Viscount hesitated unwillingly, and yet was forced to believe her. But he would not easily give up the prize he had been so sure of winning.

"If I am the victim of a plot, we suffer together," he said, quietly. "Do you remember what I told you this afternoon? that Sir Alan Vincent would gladly be free from the chains that bind him to you?"

"Yes," she answered, breathlessly, lifting her eyes to his in expectation, as he sat opposite to her.

And the train flew on rapidly through the still country.

"He is taking his measures accordingly," he went on. "Do you know that such a thing exists as a Divorce Court, Lady Cora, and that your husband has sufficient evidence against you to win his cause in one?"

"I do not understand you," she answered, faintly, as she sank back upon the cushions.

"It is not my forgers who are clever, Cora," rejoined the Viscount. "They are his—your husband's! I told you he had his spy. There is a diabolical plot against you my poor child; but if you will trust me, I will do my best to save you."

Cora was powerless to speak, as he rapidly told her that Sir Alan was getting up a chain of evidence against her, in order to obtain a divorce.

At first, this unhappy woman refused to credit him; but he brought proof upon proof in favor of his words, and, unable to cope with his practised eloquence and persuasion, poor Cora sank shivering and cowering into her corner, praying for death.

And then, when he had, as he hoped, destroyed all her confidence in, and love for Sir Alan, the Viscount pleaded his own cause with an impassioned eloquence worthy of better things. He dwelt upon his long existing love for her, the suffering he had endured, the protection his love would be to her in the future, when she would be deserted by all; but most of all he dwelt on the fact that Sir Alan had left her alone in Paris, knowing that he, Lord Almane, was there.

"He cannot but see how dearly I hold you," he concluded. "Do you not see that he is willing—that he wishes to be rid of you?"

Cora had let him plead without interruption. She knew that she was in his power for the present; but her whole soul revolted against the man who could take such a base advantage of her helplessness and trouble. She covered her face with her hands, with a swift prayer to Heaven for help and direction in her hour of need.

The Viscount thought that he had triumphed—that she was yielding; and he loved her well enough to rejoice, as well as to exult in his victory.

"Do you remember telling me once, long ago, that you wished my happiness above all earthly things, Cora? and you can make me so happy. You will come with me, love, will you not? And we shall be so happy, my beloved! My whole life shall be devoted to your happiness, and to the welfare of my honored wife!"

Cora moved her hands from her face, and lifted her eyes to his, and that one glance, so full of repugnance and horror, showed the Viscount that he was reckoning without his host.

He stooped over her, and tried to encircle her with his arms; but she recoiled.

"Wait one minute," she said, feebly—"one moment yet. You say that I will be your honored wife, Lord Almane; but that would be impossible. The step you urge would deprive me of all claims, not only to your respect, but to my own. Do you think I could be happy, even if I loved you, knowing that I was disgraced in the eyes of all mankind? but I do not love you. I loathe—I despise you as I would any man who would so basely betray a weak woman! If my husband believes in my guilt I must submit to bear the punishment; But at least,"—she rose up proudly, her slight form swaying to and fro, her eyes flashing—"I shall have the consolation of knowing my innocence!"

Again he drew near to her with tender words and gestures, but with a fierce strength she threw him off, by look and word expressing her detestation of his unscrupulous passion. It was an unequal struggle, for Cora was faint and exhausted, but he saw that she was in earnest, and he desisted.

"You will repent this," he said, fiercely; "you will repent having cast away the only love which is left you, and the day may come when you will crave for it and when it will be denied to you. Cling to the husband who scorns you, and my revenge will be ample, knowing that if you love him that love will be your greatest curse."

"Ah, Heaven, have pity, moaned Cora, as her fictitious strength deserted her, and once again she sank back upon the cushions and looked out on to the dark night with despairing anguish. Was there no help for her, no respite from the taunting words which were lacerating her tender heart?

Suddenly, surely she was not mistaken, the speed seemed to slacken; they were stopping. Her heart almost stood still as she rose in breathless expectation; lights appeared then; they were entering a station, and with a sob of relief and a passionate "Thank Heaven!" Cora realized that they had reached Amiens.

"Amiens, Amiens; twenty minutes stoppage," shouted the porters as they ran along the station and opened the carriage doors. "Twenty minutes here."

"Cora, what are you going to do?" said Lord Almane, as he saw her rise and prepare to alight, although she seemed hardly able to support herself, and was trembling from head to foot.

She did not heed the question, but passed him and got out. The Viscount followed her as she went on with faltering steps, and came to her side.

"Cora, let me help you; you are ill," he exclaimed, touched in spite of himself by the haggard misery and exhaustion visible on her face. But she pressed on unheeding.

Just as they drew near the waiting-room a gentleman appeared from within, and came slowly towards them, his face deadly white, and bearing an expression of anger terrible to read.

One glance told the Viscount who he was and he drew back momentarily with a smothered exclamation, at which Cora lifted her eyes. As she did so she uttered a cry, a wail of anguish, which rang through the station, thrilling all who heard it with its terrible woe, and fell forward insensible at her husband's feet.—[To be continued.

RECENT LITERATURE.

Science Primers. Edited by Professors Huxley, Roscoe and Balfour Stewart. 12mo.—Illustrated. New York: D. Appleton & Co. 50 cts. each.

It was a happy thought that led to the publication of these Science Primers. The series consists of an introductory volume followed by Chemistry, Physics, Physical Geography, Geology, Physiolgy, Astronomy, Botany, Logic, Piano Playing and Inventive Geometry. Each volume contains from 125 to 150 pages, and when necessary to the proper understanding of the text, is fully illustrated. The style is plain and concise, adapted to the understanding of youth, but none the less interesting and instructive to older people. The subjects are treated by different authors who aim in few words to set forth the principles thereof, and it is astonishing to see how much of the groundwork of each science is presented. One who reads these primers thoroughly, will obtain sufficient knowledge to enable him to understand the general principles, at least, of the subjects on which they treat. It is not to be expected all details can be comprised within the compass of volumes of the size of these; but the reader will gain from them sufficient instruction to enable him to read more intelligently all matters bearing on the subjects of which they treat. To those who have been familiar with the sciences in their school-days, these books will serve to refresh the memory and awaken interest. We have no doubt many, after giving them examination, will feel as we do, that we would not give them up were their cost much greater than it is. Each volume can be had separately.

MAGAZINE NOTES.

The leading contributors to the June number of Sunday Afternoon are E. E. Hale, S. G. W. Benjamin, C. F. Thwing, Josephine R. Baker, Rebecca H. Davis, Susan Coolidge and Rose Terry Cooke. The articles continue to be varied and attractive, and readers miss an intellectual treat of the best kind if they do not hasten to secure a snug nook in the place "where it is always afternoon."

Arthur G. Sedgwick contributes the most thoughtful and important paper to the June Atlantic. "Unforeseen Results of the Alabama Dispute" are results that it should have behooved our legislators to have foreseen. "Detmold" is concluded, and Warner continues to verify the Adirondacks. The Contributors' Club is vigorous in this number—a great many speaking at once.

Volume XLII commences with the July number—a good time to subscribe.

St. Nicholas is charming. Miss Alcott's story, "Under the Lilacs," the funny "Master Montezuma," "How to Make a Telephone," "Dab Kinzer," "Jack-in-the-Pulpit" and the "Riddle Box" will entertain every one until the July issue makes its bow.

The leading article in Scribner, June number, is an appreciative one by Russell Sturges on George Cruikshank, with good copies of his most spirited etchings. "Bird Architecture" is handsomely illustrated, and W. J. Linton takes up the cudgel in behalf of engraving as a fine art. The poetry is good. Dr. Holland certainly knows how to make a magazine, and is creating a standard that other illustrated magazines must conform to, or be left behind in the race.

The American Naturalist for June contains "A Lesson in Comparative Histology" (with plate 2), Chas. Sedgwick Minot; "Rambles Around San Francisco," W. N. Lockington; "Phosphorescent Insects, their Metamorphoses," Mrs. V. O. King; "On the Genealogy of Plants," Lester F. Ward, A. M.; "The Mode of Extraction of Silkworm Moths from their Cocoons," A. S. Packard, Jr.; and general notes on Botany, Zoology, Anthropology, Geology, Paleontology, Geography, Travels and Microscopy, beside scientific news and reviews of recent literature. A glance at such a table of contents must prove very tempting to any one who is interested in any branch of science.

Littell's Living Age, published by Littell & Gay, Boston, is a continuous feast of good things. A year's reading of the admirable selections which appear in it from week to week, is equivalent to a moderately liberal education. The last number (May 25) contains a review of Lecky's History of England in the 18th Century, an instalment of Macleod of Dare, From the Quirinal to the Vatican, The Comet, The Apollo Belvidere, Conossa, Retrospective Sympathy, and two poetical selections. Peculiar, indeed, must be literary taste which cannot find something to its liking among such a number of articles.

The Domestic Monthly.—Fashion has a thorough and reliable exponent in the popular Domestic Monthly. The June number devotes twenty of its large pages to the considerations of Fashion, which are divided up into a comprehensive review of fashion, giving full information concerning prevailing and forthcoming novelties in all its departments, and articles (nearly all illustrated) on Seasonable Fabrics, Trimmings, Summer Wraps, Children's Fashions, Novelties in Ladies' Under-clothing, Millinery, Coiffures, *Lingerie*, "Domestic Art"—fancy and needle work, decoration, etc.

The literary contents are: an instalment of Mary Cecil Hay's charming serial, "Her Three Lovers," poems by "Dorr," Fanny Clipsham and others, several very entertaining short stories, an interesting paper on "Lace," and No. 9 in Eben E. Rexford's instructive series of "Flower Talks." The Miscellany, Small Talk, Household Departments, Critiques of New Books, Mosaics, etc., offer a great deal of entertaining and instructive reading.

BRIC-A-BRAC.

Mr. Dusenberry's daughter
Plays "Baytoven's Moonlight Snorter,"
While the world sits all enraptured
And the noodleheads are captured
By the dignity and ease
With which she ballywhacks the keys;
And she wanders all the while,
Through andante cantabile,
Vivace and allegro,
Forte, pianissimo,
Staccato, fugue, roulade,
Scherzo, tempi, crescendo,
Diminuendo, faro, keno,
Sostenuto, claro, maduro,
Oscuro, Colorado, bureau,
Con moto, con expressione,
Con undrum, mezzo, adagio,
Con durango, con stipatione,
Con o'hardin and con maguire.
Gracious hevings! What's the wonder
We are startled by such thunder?
Foolish, silly maid, you oughter
Lay aside that "Moonlight Snorter"—
Let it climb the golden stair.
Give us rather "Maiden's Prayer."
"Swanny River," "Hazel Dell,"
Or the "Monastery Bell,"
Pull, fair idiot, down your vest—
Give the "Snorter" kind a rest.

[*N. Y. Post.*

One Hundred Years Ago.—One hundred years ago not a pound of coal, not a cubic foot of illuminating gas had been burned in this country. No iron stoves were used, and no contrivance economizing heat employed until Dr. Franklin invented the iron-framed fire-place, which still bears his name. All the cooking and warming in town and country were done by the aid of fire kindled in the brick oven or on the hearth. Pine knots or tallow candles furnished the light for the long winter nights, and sanded floors supplied the place of rugs and carpets. The water used for household purpose was drawn from deep wells by the creaking sweep. No form of pump was used in this country, so far as we can learn, until after the commencement of the present century. There were no friction matches in those early days, by the aid of which fire could be easily kindled; and if the fire went out upon the hearth over night, and the tinder was damp, so that sparks would not catch, the alternative was presented of wandering through the snow a mile or so to borrow of a neighbor. Only one room in any house was warm, unless some of the family were ill. In all the rest the temperature was at zero many nights in the winter.

ADOON THE LANE.

Upon ane stormy Sunday,
Coming adoon the lane,
Were a score of bonnie lasses—
And the sweetest I maintain,
Was Caddie.
That I took beneath my plaidie,
To shield her frae the rain.

She said the daisies blushed
For the kiss that I had ta'en;
I wadna hae thought the lassie
Wad sae of a kiss complain.
"Now, laddie!
I wadna stay under your plaidie,
If I gang hame in the rain!"

But on one after Sunday,
When cloud there was not ane,
This self-same winsome lassie—
We chanced to meet in the lane—
Said Caddie,
"Why dinna ye wear your plaidie?
Who kens but it may rain?"

NAUTICAL CATECHISM.

If a ship misses her stays, how do you find in what direction her course sets?

Will the ship heel over if you tow her out?

How many horses does the captain drive in his gig?

Did the man who took his trick at the wheel do it with the right bower?

Can you get a "night-cap" at the cap-stan bar?

When the boatswain pipes all hands who furnishes the tobacco?

How many knots are in the ship's log?

Is the ship's screw drawn by a screw-driver?

Is the keel son any relation to the cabin boy?

Did you ever spin the main top?

If the captain snores ought it to be set down as a head-wind?

When the ship's ropes are all taut is it any evidence that a schoolmaster is on board?

Does the captain get his wine out of the port holes?

Is there any way of making the cross-trees good-natured?

Is the yard *arm* over three *feet* in length?

Do you know how to wind up the larboard watch?

MR. WHITTIER AND THE JAR OF BUTTER.

Some years ago a lady residing at Pond Hills, a little hamlet near the home of the bachelor poet J. G. Whittier, presented him with a jar of butter, for which he returned the following characteristic expression of thanks:

"Words butter no parsnips," the old adage says,
And to fill up the trencher is better than praise.
So, trust me, dear friend, that, while eating thy butter,
The thanks that I feel are far more than I utter.

Kind Providence grant thee a life without ills,
May the cows never dry up that feed on Pond Hills,
May the cream never fail in thy cellar so cold,
Nor thy hand lose its cunning to change it to gold!

Thrice welcome to him who, unblest with a wife,
Sits and bungles alone at the ripped seams of life,
Is the womanly kindness which pities his fate,
And sews on his buttons or fills up his plate!

I wouldn't give ten cents a yard for all the pedigree in this world; if a man hez got a level head on his shoulders, and an honest hart in hiz body, he hez got all the pedigree I am in search ov.—*Josh Billings.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

PITHS.

LET the children have pets.

Good flour should be of a creamy white.

Ornament your dining table with flowers.

Keep brown flour on hand for thickening gravy.

Coffee which has not been roasted improves with age.

Stews if properly made are healthful and digestible.

Cooks make a mistake in thinking all soup should be thin.

Lemon juice is a strengthener of the nervous system.

Reheating coffee just before grinding brings out the flavor.

Make two large pockets in your kitchen apron and in one of them always keep a holder.

"In dressing salad mind this law:
With two hard yolks use one that's raw."

Suet chopped fine and mixed with flour and then tied down tightly in a jar will keep good from ten days to two weeks.

One drop of the attar of roses on a piece of white paper to a pound of tea imparts a very fine flavor—keep the canister closely covered.

The economy of the French is proverbial, and the following is only a fair sample: All pieces of dry and damaged bread are utilized. Some of it is dried in ovens and used in soup at low-class restaurants, some pounded into a white paste and used by meat-men to ornament cutlets, while the poorest crusts are reduced to charcoal and converted into a tooth paste.

COOKING.

MY plans for cooking do not consist so much in weighing, measuring or implicitly following directions, as in endeavoring to use judgment and tact, if it may be so called. For instance, before commencing to cook a meal, I set my wits to work to devise a plan for the meal. I consider first, how much time and expense I wish to expend, and what my seasonable resources are; and if some things which are generally required are not attainable, I must substitute others, or I must strive to arrive at the desired result—a wholesome meal well served—by some other route. My cooking, both from principle and necessity, is generally very plain. I am an advocate of a simple, plain and *very* neat system of cooking, having regard for both purse and digestive organs. A little experience and scrupulous care, combined with good taste in serving, will, providing the materials are fresh and well-kept, enable one to prepare a meal fit for a king, or what is much more desirable, fit for one's own family, with but little time and waste. I think as much care and skill are required to properly prepare bread, coffee, potatoes and common articles of food, as in the manufacturing of rich pastry, cakes and sauces; and young housekeepers, and old ones too, for that matter, should take more genuine pride in preparing each meal carefully and economically than in being able to get up rich, costly, and often unhealthy food for special occasions on company.

Negligent habits in throwing away, or what is not much better, placing on the table remnants of food, cold in the dishes in which they were formerly served, is almost sure to disgust or cause it to be again left. Whereas, if it were rewarmed in a skillful manner, or used to prepare something of an entirely different form, it would serve to make very palatable dishes.

I get some very useful hints from recipes, but I seldom use them without some change to accord with my own circumstances.

Iowa. MRS. MARY B. B.

ORNAMENTATION CARRIED TOO FAR.

WILL you allow me to ask if some one will not through the RURAL give young ladies some instructions how to make themselves useful? This ornamentation I think is being carried a little too far. Our daughters could surely be much more sensibly employed if they spent a little more time in the kitchen assisting their over-burdened mothers and less in pasting pagan pictures on jars etc., and then calling it ornamenting. It seems strange to me that an enlightened and civilized people should desire to have such reminders of Paganism in their homes. I do not wish it understood that I object to ornamenting our homes providing there is good taste shown and not so much time given to it as to exclude the useful. I, however, wish the two could be more equalized, hence the appeal. MRS. P. W. A.

AN EXCELLENT HOME PASTE.

ONE ounce of the best gum tragacanth; a teacupful and a-half of clear soft water and a bit of corrosive sublimate, not larger than a pea. Free the gum from all impurities and put it with the corrosive sublimate into an earthenware vessel having a close cover; add the water and let stand where it will be kept warm—not hot. Stir with a *stick* several times during the day. When properly dissolved the paste will be smooth throughout. This is a very convenient paste for housekeepers, and it will keep good for a year. AUNT KATY.

DOMESTIC RECIPES.

Indian Corn-Bread.

THREE cupfuls of corn-meal and one of Graham; one-half cupful of molasses in which dissolve a teaspoonful of soda; one pint of sweet milk and one teaspoonful of salt. Stir together with a spoon and steam three hours and then bake one-half hour.

Cream Pie.

The following recipe for cream pie we have never seen in print. It is fully equal to lemon pie and can be made when it is difficult to get lemons.

Make and bake two nice under-crusts. Take one pint of milk; four eggs, reserving the whites of three to put on top of the pies; one cup of sugar; one-half cup of flour; stir the sugar, eggs and flour to a paste; pour in the milk; place over the fire and stir constantly until it boils; let cool a little and flavor lightly with lemon extract. Pour into the crusts; beat the whites very light; add one-half cup of sugar and spread over the pies. Bake very slowly.

Pork Fruit Cake.

Chop one pound of salt pork very fine; pour one pint of boiling water over it; add one pint of molasses; two cups of sugar; one teaspoonful of soda; one pound of raisins; one pound of English currants and one-half pound of citron; spice to suit the taste. Mix in flour until quite stiff. This makes a nice light cake without eggs and one which will keep six months.

Toothsome Molasses Cake.

One cup of molasses: one cup of sugar; one cup of butter; one-half cup of sweet milk; two eggs; one teaspoonful of soda; one teaspoonful of ginger and two each of cinnamon and allspice; two and a half cups of flour.

Michigan MRS. MINNIE ELLIS.

Raspberry Short-Cake.

Stir into one quart of flour two teaspoonfuls of cream-of-tartar and a little salt; add two tablespoonfuls of thick cream or rub into the flour one large tablespoonful of butter or lard; dissolve one small teaspoonful of soda in a little milk; mix with milk; bake quickly and thoroughly; then cut open and lay in sweetened raspberries, in abundance, as prepared for the table; close again quickly while hot that the berries may cook somewhat. To be eaten with or without a sauce. RURAL READER.

Cherry Pudding.

One cup of sour milk; one beaten egg; two tablespoonfuls of butter; one-half teaspoonful of soda; flour to mix; roll out thin; spread the fruit over the paste and roll up; put into a floured bag and boil for one hour. May be served with a brandy sauce. MISS CRONK.

QUERIES ANSWERED.

CAN you give an effective remedy for the early destruction of flies which are now, with us, becoming annoying? Also a good method of preparing stoves before putting them away for the summer to prevent rust, which in our sea-air is very damaging? W.

ANS.—(1) In the Domestic Department of the RURAL of March 30th, the proportions of a very good home-made fly poison were given which, if prepared and placed in each room, will speedily lessen the number. You must, however, be provided with screens for both doors and windows, and then see that each member of your family keeps those net doors and windows closed. Never allow the garbage-pail or pans of sour milk, etc. to stand within or without your kitchen door. Nothing but care and watchfulness will keep your house free from flies.

(2) Asphaltum varnish thinned with a little turpentine and applied with a brush; or mix stove polish with kerosene until of the consistency of cream, and apply thickly with a rag; then wrap in papers.

News of the Week.

NEWS OF THE WEEK.

NEW YORK, Monday, May 27, 3:30 P. M.

FOREIGN NOTES.

The prevailing drift of opinion is peaceful. The Russian Count Schouvaloff has had an interview with Lord Salisbury, and the impression created is favorable. St. Petersburg journals hint that the Congress is again a possibility.

The news from Constantinople is less tranquil. A number of Turkish refugees and conspirators headed by Ali Suavi, have made a fruitless attempt to depose the Sultan in favor of the idiotic Murad. Ali Suavi was shot by the guard. Besides, the Russians advancing their lines nearer Constantinople, have been met by warlike preparations on the part of the Turks, and both are reinforcing and fortifying vigorously, while a commission composed of Russian and Turkish Generals has been formed to draw a distinct line of demarkation, on which it has come to no understanding as yet.

Russian emigrants are passing through Germany. It is believed they are sailors in disguise bound for America. Two unarmored Russian war ships have left Cronstadt, presumably for America. Russian agents are also busy inspecting the shipping in Sweden with a view to purchasing cruisers. Moscow merchants have contributed 400,000 roubles towards forming a volunteer fleet.

The weather continues unseasonably cold.

The Duchess of Argyll is dead.

Prince Gortschakoff has had a fresh attack of gout.

The Chinese Government has offered a new loan of 2,000,000 taels, with the customs revenue as security.

Japanese officials think they have discovered a conspiracy against the existing order of things and there are wholesale arrests accordingly.

The English and Russian Asiatic squadrons follow each other about closely from port to port, and trade in those seas is very dull in apprehension of a war.

Recent weather in England unfavorable to crops.

The Pope is seeking a place away from Rome to pass the summer. The Jesuits are endeavoring to keep him in the Holy City.

The Manchester Guardian concludes from the reports of the proceedings of the operatives at all points in the strike district that little disposition exists to accept the ten per cent reduction even temporarily. The spinners declare that they would accept five per cent reduction outright and nothing more. This attitude will prolong the strike indefinitely, but attempts to secure a compromise will be continued. There have been no further disturbances, nor is there likely to be, because of the military precautions. There is a scheme to put the reduction to a ballot. It has been done at five points with the results of only 323 for the proposal to 12,972 against it. The Trades Union Congress Committee have tendered their sympathy and support to the cotton strikers.

The Vatican is trying to come to an agreement with Germany, with faint hopes of success.

The German Parliament is debating the anti-socialist bill. The Government declared the bill urgently necessary for the welfare of the State, but the opposition is sufficiently strong to prevent its passage. In either event the Government will pursue the socialist organizations with vigor in consequence of the recent attempt on the Emperor's life.

The suspension of diplomatic relations between Germany and China is imminent. That means fight.

A great fire at Constantinople, within the precints of the Porte, destroyed a greater portion of the buildings including the ministries of Justice and Council of State.

The town of Reynoser, Mexico, has been captured by the Lerdo revolutionists, and a *prestamo* of $8,000 levied. The party has moved southward.

Reports from the districts of Venezuela recently devastated by the great earthquake, indicate a very widespread destruction of property and distressing loss of life. The town of Cua was completely destroyed by the heavy shocks of April 14, and all the surrounding plantations and settlements shared the same fate.

Before and during the progress of the convulsion the heat over the districts visited became intense. Even the rivers were rendered unbearable for the fish, which leaped out of the water.

The severity of the shocks was greater than has been before experienced by the present generation.

From Halifax, N. S., news comes of the explosion in the Old Sydney Mines, resulting in the death of six men.

The first persons to enter the mine after the explosion were three brothers named Sullivan, who succeeded in rescuing thirteen of the cutters who were overcome by the gas. They were unconscious for some time, but all are slowly recovering. Sixteen pairs of cutters were at work here.

The Belgian government is about to ask an explanation from the United States concerning our criticism of Mr. Delfosse.

POLITICAL NEWS.

The Senate has been discussing, in Committee of the Whole, the bill providing a permanent form of government for the District of Columbia.

There has been an election affray in Norfolk, Va.

The Senate in executive session rejected the nomination of John B. Frothingham to be Assistant Appraiser at the port of New York. Mr. Conkling made a speech against the confirmation.

The Senate Committee on Commerce has called upon the Secretary of War for information in relation to a number of the proposed river and harbor improvements provided for by the House Appropriation bill, and will not finally act upon the bill until the information is received.

The National Democratic Committee in caucus has adopted the following: "Resolved, That the action of the House of Representatives in appointing a committee fully empowered to investigate and report upon the frauds alleged to have been committed in the late Presidential election, to the end that the truth may be made known to the people and the repetition of such frauds be prevented in the future, meets the approval of this committee."

The Investigating Committee is not under way yet, but both Democrats and Republicans are busily preparing for the work of inquiry. It is understood that General Noyes has already asked for leave of absence, in order to come here and confront any one who may come forward to accuse him before the committee. Secretary Sherman has been in consultation with leading Republicans, and these say that they feel absolutely certain that no wrong or even impropriety can be brought home to the Secretary. Mr. William E. Chandler is understood to be engaged with the Republicans in looking into the Florida case. The Democrats keep their own counsel, but it is believed that they are looking over lists of witnesses which have been furnished them by Morton for the Florida case and by others for that of Louisiana, and preparing their plan of operations.

Representatives Herbert, House and Hunton, of the committee charged with the consideration of the method of electing President and Vice-President, dissent from the plan proposed by the majority. This plan proposes, in brief, to allow each State a number of electoral votes equal to the number of its Senators and Representatives in Congress, but to prorate these votes among candidates according to the popular vote. Each candidate for President and Vice-President is to have allotted to him his aliquot proportion of the electoral vote of every State in which he is voted for. These when counted and ascertained, must be forwarded to Washington, and the candidates having a plurality of the electoral votes shall be declared elected as President and Vice-President.

The Vermont republicans have nominated Col. Redfield Proctor for Governor, unanimously: Their platform says: That the motives and general course of the administration of President Hayes have our hearty approbation, and, though a difference as to policy may exist, we rejoice in the belief that both the Executive and republicans in Congress are disposed to suffer no divisions.

GENERAL NEWS.

Reduced freight rates between New York and St. Louis, per 100 lbs.: 87, 70, 58 and 46, for the four classes.

Coal mining in the Schuylkill is about to be suspended for two weeks.

Much cows are dying near Independence, Mo., apparently as a result of eating clover. New disease—consternation among cattle dealers.

Another new American steamship launched. The City of Para.

The female branch of the Executive is trout-fishing. Mrs. Hayes was in luck to the extent of 20 pounds of trout. Scene: Saranac Lake, N. Y.

Depot Hotel at Lemars, Iowa, burned; cause, kerosene.

The tonado in Wisconsin damaged the town of Perry, Waukesha, Mineral Point and adjacent territory. Thirty killed, about one hundred injured, and damages to the extent of $20,000. Desolation extreme.

The Bonanza Kings Flood and O'Brien are sued for ever $35,000,000 by J. H. Burke.

The North and South Presbyterians are in session at Pittsburgh.

Factories in Fall River, Mass., are suspending work temporarily.

The Russians have bought a new patent torpedo in New York.

Confederate graves were decorated in Baltimore, on the 23d inst.

Young Men's Catholic Union Convention convened in Buffalo, N. Y. Also the Buffalo Sportmen's Convention.

The rowing regatta on Seneca Lake promises well.

The Columbia Crew have sailed for England to row the University Crew.

The amount collected for tolls on N. Y. Canals from May 15th to 22d, was $1,341.37.

Russian agents are in San Francisco ready to issue letters of Marque to a privateer.

Indian raids are reported in the vicinity of Diamond City, M. T.

The revenue agents are on the whiskey war path. A prominent distiller has been arrested in Cincinnati.

A pleasure yacht went over a dam in Galt, Ont. Several were spilled out and drowned.

Disastrous floods reported in Colorado. Railroads damaged, and loss of life and property.

A destructive fire at Hartford, Conn. Two firemen killed, six injured. One of the finest buildings destroyed.

The Canadian Mounted Police are watching Sitting Bull. He is becoming restless. The troops on the Plains are being recruited.

The Cincinnati Music Festival, lasting a week, was a great success in all respects.

President Hayes and party attended the ceremonies at the Hampton Agricultural Institute, Fortress Monroe, Va.

The suit of the C. & A. Railroad *vs.* Tilden *et al*, is in on the U. S. Circuit Court for Illinois.

Peter Cooper, philanthropist and greenback candidate has been sued for a large amount in Brooklyn, N. Y., on account of libel. The jury disagreed, four insisting on six cents damages, eight for acquittal.

Another scandal in Plymouth Church. A Sunday School teacher charged with drugging and violating a lady.

The Social Science Convention held its annual meeting in Cincinnati. The papers read were important.

Grace Church, New York, has three organs that are played by one man. Electricity connects the keys and stops.

The South Boston Iron Co. are coquetting with the Russian Government for the casting of monster cannon, and the British Consuls are narrowly watching and reporting all transaction completed by the Russian agents.

PUBLIC OPINION.

Comments of the Independent and Partisan Press.

SPEAKING of the Fishery Award, the *N. Y. Times* (Rep.) concludes that:

The payment should be made subject to a protest that will clearly set forth the American feeling in regard both to the unreasonableness of the award and its admissability as a precedent. Taking the facts as proved, this is the state of the

case: This country pays for the privilege of access to the Canadian inshore fisheries, for twelve years, many times more than the value of all the fish caught; and at the same time concedes to the Canadians admission free for products which yielded a revenue of between $200,000 and $300,000 yearly. In addition to the $5,500,000, therefore, we shall indirectly give the Canadians about $300,000, during the period stated, in the shape of duties remitted. And all for a privilege which, on the basis of the past, will not, in the twelve years, yield a million and a half!

This is what the *N. Y. World* (Dem.) says apropos of the Resolutions:

But as the time rolled on it became daily more plain that within the bosom of the party of which Mr. Hayes had been the candidate, grave doubts existed as to his having been chosen by the people, and as to the character of the methods by which his inauguration had finally been secured. Was it to be expected that the Democrats who for nearly two years have been laboring under the stigma of idle vaporing about unproved frauds should neglect this opportunity at one and the same time of vindicating the complaints of their party, and the outraged institutions of their country? Certainly not by candid and reasonable men.

Criticising the recent Address of the Republican party, the *Louisville C.-Journal* (Dem.) speaks its mind as follows:

Here is a party which for seventeen years has had possession of the Government, having the effrontery to talk about "the paralyzation of industries," and "anarchy," and "peace." It is equally false and funny. But it is very characteristic of the hypocrites and bullies who have put it forth. Yet there is a potency in their scheme and outcry. This is the dilemma, however, presented to the Northern mind, which puts the South at a disadvantage. If we gush over the flag, and emit a glow of national feeling, natural, justified and inevitable under given circumstances, it is declared by the organs of perpetual hate to be "diplomacy," as though a whole people could diplomatize. If, driven back upon our natural lines of defense, we exercise the freeman's natural right to speak his mind out, and yield to the promptings of a manhood not wholly cowed and enslaved, we are "cracking the old slave whip over the shoulders of loyal men."

THE *Cincinnati Enquirer* (Dem. Greenback) commenting on Senator Matthew's speech on his resolution says:

We regard the plan as faulty in several particulars. We will name some: Its two main corner-stones are redemption in coin of the legal-tenders, and suspension of specie payment when the coin fund runs out. No paper circulation ever has been, or ever can be, staple on such a basis.

We want a National, inter-State currency upon which shall neither be written nor printed any such word as *fail*. We want a purely American currency for home use, that will never carry with it the idea of *suspension* under any circumstances, except the destruction of the Government itself. It is the quality of suspension, inherent in the nature of a paper currency that promises to pay coin on demand, that produces so much disaster in commercial crises and currency panics.

The *N. Y. Tribune* (Rep.) deduces the following conclusions from current events.

The events of the past week teach lessons of the gravest importance to the people, irrespective of party, to the President, and to the Republican leaders. There is every reason to believe that the mad partisanship of the Democratic party, its bad faith, its indecent unfairness, and its reckless disregard for public opinion or the public welfare, will keep these lessons fresh in mind until after the elections of this Fall. The same wanton folly which brought upon the country the struggle of last week will continue to threaten its peace and its free institutions until the people put it down by overwhelming majorities.

Manufacturers of Ladies' Suits, that use the Davis Vertical Feed Sewing Machine, are doing the sewing in the most elegant manner, and entirely without basting, or showing the stitches, by the use of very simple attachments. The invention and introduction of the Vertical Feed is an invaluable addition to Sewing Mechanism. The old under-feed machines will be rapidly superseded by this new and more perfect device for sewing, as it is adapted to every variety of work. The Davis Sewing Machine Company are building an addition to their large manufactory at Watertown, New York.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, May 25, 1878.

BEANS AND PEAS.—The local demand for beans is light but, directed to strictly choice quality especially in mediums. Marrows are in large supply and without much export support. Some further lots are being prepared for South America, but as the feature is new and the stock mixed, the outlet has no immediate effect upon the tone of trade. The late orders for S. A. have absorbed all of the red kidneys that were offering. Fine pea beans scarce. White Kidneys quiet. Canadian peas are easier, 80@82c. for fair to choice in bulk and bond. Green peas steady at the recent advance, $1 05@1 10. The remnant of Southern B. E. Peas very light and held at $3@3 25 per two bushel bag.
We quote medium beans, choice, $1.65@1.67½; fair to good, $1.55@1.60; marrow, prime, free to vessel, $1.70@— fair to good, $1.50@1.60; red beans, $1.40@1.65; white kidney, $1.50@1.70; red do., $2.50@2.60; black beans, $2.40.; Pea beans, $1 40@1 65.

Receipts of beans past week, 3,260 bush. Exports of beans, 277 bbls.

BEESWAX.—Sales of small lots run from 26½@28c.
Exports past week 2,760 lbs.

BROOM CORN.—Has but little inquiry.
Quotations are 6@7½c for hurl and short brush; 5@6½c. for medium green, 4@5c. for red and red-tipped, ₱ lb.

BUTTER.—State half tubs and pails have declined since Tuesday last. Dealers generally thought that the easy rates lately quoted would be sustained, especially with quality so much in buyers favor as it now runs. But the trade has been only steady and receipts have exceeded even a...active spring demand. Added to this Western butter is arriving very liberally and its quality too is remarkably good while the difference in prices for trade lots greatly assists sales. Receipts of State may moderate with the disclosed Weakness; shippers will moderate their collections and dairymen will have to pack. In the latter case we again urge utmost care in putting down this early make, so that the lines may turn out as uniform as possible. Exporters are using some Western butter, but most of them seem inclined to wait until Canada becomes an offset to our market before they purchase heavily Milled Western is entirely neglected. Dairy and ladle packed factory not brisk enough to harden prices. Creameries may be called steady at the prices. Firkins have a fair demand; thus opened at 22c. but have dropped in sympathy with other styles.

Receipts for the week 28,800 pkgs, ; exports 3,996 do.
State creamery, choice 21@22c., a few at 23c.; fair to good 18@20c.; Half tubs and pails selected, 19@—c.; fair to good, 14@17c.; Welsh tubs, choice, 17@18c; other useful, 15@16c.; poor or stale State 10@12c.; Western, creamery choice. 22c.; other, 17@19 c.; Western dairy fine 15@16c.; other, 11@14c.; factory (ladled) 12@13c. do. (milled) 10@11c.; poor Western 6@9c.; do. and grease, 4@6c.

CHEESE.—Receipts have been large, and it has been necessary to yield in prices steadily. The English markets have been drooping, but yet exporters influenced by the comparatively low prices here have bought to a fair extent, the exports for the week reaching 60,111 boxes. The market closed at 9c. for fancy factories.
For factories, fancy, 9c.; 7¾@8¼c. for good and prime; 6½@7¼c. for fair; 4½@6c. for half skimmed, and 3@4c. for skimmed. State, farm dairy at 8@8¾c. for good to choice, 6½@7¾c. for fair to good and 3@4c. for poor skimmed. Western factory fine, flat at 8¼c.; do. good to prime 7@8c.; do. fair, 6@6¼c.; do. half skimmed, 5@6c.; do. skimmed, 3@4½c. Wisconsin factory, fancy, 9c.; do. good and prime, 7½@8¼c.; do fair, 6@7c.
Exports for the week, 62,936 packages.
Receipts, 80,625 boxes.
Gold closes 100¾.
Liverpool quotation, 55s. for new cheese.

COTTON.—There is increased export demand and a strong market. Latest prices are 11.30c@11.32c. for May; for June, 11.32c.; for July, 11.45c.; for August, 11.69c.; for September, 10.80@10.88c.; for October, 10.76@10.77c.; for November, 10.76@10.77c.; for December, 10.85@10.88c.; for January, 10.92@10.95c.; for February, 11.@11.01c.; for March and April, 11.10@11.11c.
Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted.

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8¼	8¼	8¾	8¾
Strict ordinary	9¼	9¼	9¾	9¾
Good ordinary	9¾	9¾	9¾	9¾
Strict good do	10¼	10¼	10¾	10¾
Low middling	10¾	11⅜	10¾	10¾
Strict low middling	10¾	10¾	11	11
Middling	11⅜	11⅜	11¼	11¼
Good middling	11⅝	11⅝	11⅝	11⅝
Strict good middling	11 13-16	11 13-16	11 15-16	11 15-16
Middling fair	12 5-16	12 5-16	12 7-16	12 7-16
Fair	12 13-16	12 13-16	12 15-16	12 15-16

Stained.

Good ordinary, 8 9-16; Strict good ordinary, 9 11-16c; Low middling, 9 11-16c.; Middling, 10 5-16c.

DRIED FRUITS.—There is no trade outside of jobbing lots, and prices are unsettled and easy for other than small lots.
Peaches—Fancy North Carolina 12@13c.; Choice Georgia, 10@11c.; good to prime Georgia; 8@10c.; unpeeled halves, 4½c.; quarters, 4c. Pitted cherries, choice new, 21@22c.; Raspberries, 26@27c. New York State plums, 12½@13; Southern plums, 11@12c. Blackberries, 10@10½c. Apples—State quarters, 4¼@5½c.; do sliced, prime, 6@6½c.; good, 5c.; Western quarters, 4@4½c.; Southern at 6@7c. for prime sliced, 5@5½c. for fair to good; Southern quarters, 4½@4½c.; Tennessee quarters, in bags, at 2½@3½c.; prime and fancy North Carolina sliced at 8@12c.
Exports for the week, 772 bbls. dried apples.

EGGS.—Receipts for the week, 10,704 bbls.; do last week, 12,045 do. Western and Canadian begin to unpack irregular in quality, and losses are generally conceded. Extra fresh near points are firm. Receipts are in sellers' favor, but other produce is abundant and cheap, so dealers are forced to more or less humor buyers.
Near points, 15c.; State and Penn., 13@13½c.; Western and Canadian, fresh, 12½c.; inferior or stored eggs, 11@12c.

FLOUR.—Has been declining on large supplies and the lower range for Wheat. Latest prices are $3.90@4.45 for very poor to choice superfine State; $4.50@4.75 for poor to good extra do. odd lots and lines; $4.75@5.10 for good to fancy do.; $3.90@4.45 for very poor to choice superfine, Indiana, Iowa, Michigan, Ohio, &c., (fancy lots at higher figures); $4.50@4.75 for inferior to good shipping extra do., and $4.75@5.10 for good to fancy extra do. common to choice white wheat extras, $5.00@6.00; choice to very fancy do. at $6.00@7.00; red and amber winter wheat, inferior to very choice trade and family at $4.05@6.00; round hoop Ohio at $4.60@$4.90, and trade and family brands of do. at $5.00@$6.00, the latter rate for choice. (fancy lots quoted higher); St. Louis, $4.65@5.50 for very poor to good extra, and $5.50@6.50 for good to very choice, with a few brands of fancy quality quoted up to $7.00@7.25 Minnesota clear, very inferior to very fancy choice at $4.00@6.00.; Minnesota "straight," inferior to very fancy, at $5.50@6.50, and patent poor to fancy choice at $5.60@8.25; unsound stock at from $2.25@5.75; city mill extra at $5 50@5.80 for fair to very choice for West Indies; do. for England at $4.50@4.75; do. trade and family extras, $6.00@7.50; do. for South America, $6.00@6.75 for fair to very choice; No. 2 at $2.65@3.75 for very inferior to very choice.
CORN MEAL.—Sales are $2.90@3.00 for Brandywine, and $2.25@2.65 for yellow Western.

FRESH FRUITS.—A few lots of selected apples have sold at $8@9: ordinary stock is higher, ranging at $4.50@7.50. A crate of Georgia peaches has appeared. North Carolina brags of her crop. Fine cherries have been steadily arriving from that State; now quoted 15@16c.; Norfolk, 5@10c. Gooseberries, ₱ bu., $1 50@1 75; trade very slow and likely to be until Eastern buyers begin to use them. Strawberries have had a most depressing phase of trade; dealers report low prices and frequently a "stick" at that. New Jersey arrive in good order; quoted 7@11c. ₱ quart; Md., Del. and Norfolk, good, 6@8c.; inferior, 3@5c. Hot-house peaches, doz., $4@5; do. Black Hamburg grapes, ₱., $1 50@1 75. Peanuts are held in hope of old prices. Va. hand-picked, $1 35@1 40; good to prime, $1 15@1 25; common, 90c@$1. Pecans, 6@8c.

GRAIN.—Wheat has suffered a sharp decline, on large supplies and easy English advices.
Latest sales of No. 1 red at $1.25; ungraded white western at $1.28½; extra white at $1.31½; white State at $1.32; No. 2 red in lots at $1.27@1.28; No. 1 Milwaukee spring, strictly pure, at $1.21; No. 2 Milwaukee spring at $1.19; No. 2 Chicago spring at $1.17; New York No. 2 spring at $1.16; No. 3 Northwest spring at $1.13; No. 2 red, May, at $1.22½; do., June, at $1.22; do., July, at $1.19½; No. 2, Northwest spring, May, at option, at $1.18; do., June option, at $1.16½; New York No. 2 spring, May option, at $1.1.6; do., June option, at $1.14½@1.15. Rye at 71@73c. for Western, and 72@74c. for State. Corn has been active and higher; latest sales are of New York No. 2 at 50@51c.; New York No. 3 at 48@48½c. New York steamer mixed at 49½@50c.; low mixed at 50½c.; ungraded mixed at 48@51½c.; steamer yellow at 52c.; white western at 50c.; Kansas mixed at 51@51½c.; No. 2, May option, 50@50½c.; No. 2, June, 49½c.; No. 2, July, 50@50½c.; steamer mixed, May option, 49½@50c.; do., June, 48c.; do., July, 48c. Oats have declined and closed easy. Sales of No. 2 Chicago at 31½@31½c; mixed State at 31@32½c.; white State at 33@38c.; mixed western at 30½@32c.; white western at 32½@38c.; New York No. 1 at 31½@32c.; New York No. 1 white at 33c.; New York No. 2 at 30½@31c.; New York No. 2 white at 31@34½c.

HAY AND STRAW.—Supplies are liberal, and there are free sellers at easy prices. Bale hay, 55@60c. for shipping, and 70@80c. for retail qualities; clover, at 50@60c. for prime. Straw, quoted at 40@50c. for long rye; 35@40c. for short rye, and 40@45c. for oat.
Exports, past week, 950 bales; Since Jan. 1st 27,275 do.; same time last year, 21,430 do.

HOPS.—Exports for the week, 675 bales. The inquiry from brewers is small. Supplies of desirable lots are; very light, and really choice lstock brings ready prices. New Yorks, good to prime, 7@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do, 5@8c.; Yearlings, 2@3c.; Olds, all growths 1@2c.

OIL-CAKE—Western quoted at $30$30,50

POULTRY AND GAME.—Live has declined, heavy supplies of fowls giving killers an independent position. Turkeys hardly wanted at any price. Spring chickens abundant and lower.
Spring chickens now quoted, ₱ lb, 20@25c. Fowls, choice, 11@12c.; Western and Southern 10c.; Roosters, 5@6c.; Turkeys, 8@11c.; Ducks, choice, $1.12; poor to fair, 80@87c., the lowest for Southern; N. J. Geese, $1.25@1.50; other, 70c.@$1.
Country-dressed have merely a nominal place, but near points are in buyers' favor.
Turkeys, 13@14c.; Fowls, extra, 13@14c.; good to prime, 10@13c.; very common, 8@9c. Phila spring chicks, 28@30c; do Western, 20@25c.
Game is scarce, but as there is hardly any local demand there is enough to supply special hotel wants. Dunlich snipe quotable next week. English are out. Sand, 50c. Stall-fed wild pigeons, 90c@$1; flight, 75@80c; wild squab, 60@70c.

PROVISIONS—Have been weak and lower through large supplies of hogs.
Mess pork quoted $8 75@9 for spot lots; $8 60 for June; $8 75 for July; $8 85 for August. Bacon at 4¾c for long clear. Lard at 6.75 for spot, 6.72½ for June; 6.77½ for July, and 6.87½ for August. Beef hams at $19.50. Tallow at 7c. for prime. Stearine at 7¼c. for Western. Beef—For extra mess, $12.@12.25; plain mess, $10@11.50; packet, $13.50@14.50 for bbls.; family mess, $15@16; extra India mess, $20@23 for city brands; do. Philadelphia, $19@20.

TOBACCO.—A fairly active trade is in progress, and prices hold steady and are essentially as quoted latterly:

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¼	6¼@ 7
Good leaf	6¼@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common	10	@—12
fine, do	18	@22
medium	12½	@14
selections	25	@35
seconds	9	@12
Fillers	6	@ 7
Pennsylvania assorted lots	8	@17
wrappers	20	@50
New York assorted lots, common to medium	8	@ 9
Good	10	@12
Ohio assorted lots	7½	@10
Wisconsin assorted lots	7½	@ 9

VEGETABLES.—The supply of old potatoes is diminishing; new are arriving freely and fine. Old Peach Blows, choice, $1 75@2; R. Rose, $1.75@2, with some Eastern growth, $2 25; other, $1 25@1 50, with bbl.; Bermuda, $4 50@5; Charleston and Savannah, $2 50@3.50; culls, $1 25@1 50; New Jersey green peas now quotable at $2@3 ₱ bbl; Maryland, $2 00@2 50; Norfolk, $1 00@2 50. Asparagus is easier: Oyster Bay, $1 25@1 50 ₱ doz; other, 75c@$1 12. Southern cucumbers, crate, $1 50@2 00, in good order. String beans same. Rhubarb, 100 bunches, $1 50@1 75. Spinach, bbl., 37@50c. Kale, 20@30c. Lettuce, $1 25@1 50. Southern cabbages, $1 25@1 50; do. beets, 100 bunches, $2 00@2 50; do. turnips, $1@2; N. J. do., $3@4. Bermuda tomatoes, 40@60c., 5 quart box; do. onions, $1 75@1 80. Florida tomatoes, $3@4 crate.

WOOL.—The new clips from San Francisco and Texas are arriving in increasing quantities, and to sell them easy prices are made. By accepting low figures for general stock a fair amount of trade results. It is not likely that the market will show settled activity until the new Western clips come forward.
Ohio, Pennsylvania and Virginia XXX and picklock, 43@46; XX, 38@41c; X, 38@40; No. 1, 39@41; No. 2, 34@37c.; common 32@34; combing, 40@45.
New York, Michigan, Indiana and Wisconsin. XX, 33 to 36c.; X, 33@36c.; No. 1, 30@39c.; No. 2, 31@35c; common 30@32c.; combing 40@41.
Iowa, Vermont and Illinois X and XX, 33@35c.; No. 1, 34@37.; No. 2, 30@32.; combing, 38@42.
Missouri, Kentucky, and Tennessee—Washed fleece, 30@35c.; unwashed, 25@26c.; unwashed combing, 28@31c.

LIVE STOCK MARKETS.

NEW YORK, May 25, 1878.

BEEVES.—Receipts for the week, 11,454 head; do., last week, 11,820 do. Continued heavy arrivals have rather depressed the market, and prices are easier with some stock left over. Ordinary to prime steers to dress 5@57c.; lbs. sold at a range of 8¼@10½c. Extras brought 10¾c. Exporters paid 10@10¾c. Texas bulls, 3@3½c. live weight.

COWS AND CALVES.—There were not enough transactions to base city quotations upon.

VEAL CALVES.—The market has ruled weak even when supplies were favorably light. N. J. 5½@6.; State, 4½@5c.; Buttermilk calves, 3@3½c.

SHEEP AND LAMBS.—Receipts for the week, 24,986 head; do last week, 27,460 do. Trade has dragged to some extent; the asking rates exceeding the views of buyers in many instances. Clipped sheep sold at 4¾@5c.; New Jersey Lambs, 8½@9c.; Md. 8¾c.; Kentucky, 5@5¾c.; Virginia, 7¾c.

SWINE.—Receipts for the week, 35,115 head; do. last week 28,937 do. No late business; nominal price, $3.40@3.50 per 100; Chicago price, $3@3.10 do.

INDEX TO NEW ADVERTISEMENTS.

Allen & Co., S. L.—The Planet Jr. Horse-Hoe.
Batavia Portable Engine Co.—Monitor Agricultural Engine.
Boomer & Boschert Press Co.—Cider Presses and Graters.
Bradley & Co.—Bradley's Self-Dumping Sulky Hay Rake.
Bown & Son, J.—Seven-shot Revolver.
Chadborn & Coldwell Mf'g Co.—New Excelsior Lawn Mower.
Coquillard, A.—The Coquillard Wagon.
Devoe & Co., F. W.—Potato Bug Poison; Mixed Paints, ready for use.
Farmers' Friend Mf'g Co.—Farmers' Friend Grain and Fertilizer Drill.
Fitzhugh, J. R.—The American Hay Elevator.
Gifford, W. C.—Gifford's Swinging Stanchion.
Jayne & Son, Dr. D.—Dr. Jayne's Hair Tonic.
Kingsford & Son, T.—Kingsford's Oswego Starch.
Parsons & Sons Co.—Itare Evergreens.
Ralston, John—The Union Mills Bug Destroyer.
Russell & Co.—Threshing Machines, Farm Engines, Horse Powers, &c.
Taylor, Bros. & Co.—Rubber Printing Stamps.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.
Wells, Richardson & Co.—Leamon's Dyes.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

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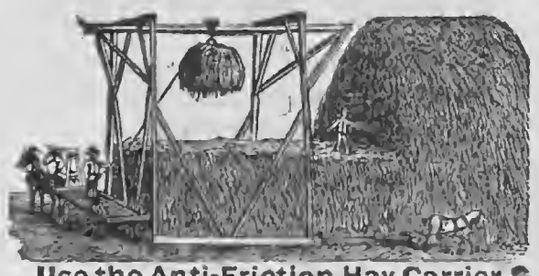
Sure Death to the Potato Beetle.

The Union Mills Bug Destroyer

Contains Paris Green and other poisonous ingredients, mixed ready for instant use, and is guaranteed to effect a speedy and sure deliverance from the ravages of the Potato Beetle.
Directions for using and a good hand sieve for applying the poison with each barrel.
Price $5 per bbl., delivered on cars. Satisfaction guaranteed or money refunded. Address
JOHN RALSTON, 170 Front St., New York.



Use the Anti-Friction Hay Carrier.
For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and to the end of long mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons Hass been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "3" to U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

KILL

The POTATO BUGS

AND SAVE THE POTATOES.

SURE DEATH to the Colorado Potato Bug is only to be had by the use of Paris Green. Prof. Cook and others say that all other remedies have failed. ENDORSED BY A. S. FULLER, AGRICULTURAL EDITOR OF THE "SUN."

PURE PARIS GREEN

Made by F. W. Devoe & Co., can be relied on for the extermination of the Potato Bug and Cotton Worm. Circular on the use of Paris Green distributed free on application.

F. W. DEVOE & CO'S

MIXED PAINTS.

For the convenience and economy of consumers of PAINT the well-known house of F. W. DEVOE & CO. now prepare

PAINTS READY FOR USE

FOR FARMERS and MANUFACTURERS.

They are uniform in shade, and the colors can always be matched. Any one can paint with them. No need of a painter to mix it for you. No need of a dryer or other ingredients. The paint is ready for immediate application. Send for sample cards showing different shades. They have very superior covering properties and do not, like the so called patent paints, contain either water, benzine or alkali. These Paints are in Liquid Form, and are sold in Gallon Cans and Barrels. They are also put up in small cans of one to five pounds.

F. W. DEVOE & CO.,

Manufacturers and Importers of Colors, White Leads, Zinc White, Varnishes and Artists' Materials, CORNER FULTON AND WILLIAM STS. (OLD DUTCH CHURCH CORNER), NEW YORK CITY.

LADIES IF YOU WISH TO COLOR— Use Leamon's Dyes.

Warranted the best and cest Dyes for all family fancy dyeing. Dresses, Cl Coats, Ribbons, Ties, Feat anything, can be colored shade. Anyone can use t The expense is trifling, especially recommend Black as much better than wood. Sold by druggist any color sent by Mail, size, 25c., small size 15c. for Dye Book and beau Samples, Free.

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Halladay Standard.

The only Wind Mill awarded
TWO MEDALS
and
TWO DIPLOMAS
by the
CENTENNIAL JUDGES.

Every machine warranted to be well made of good material; to do good work in any kind of wind; to be perfectly self-regulating; to possess more power and to be more reliable than any other Wind Mill made.
Each piece is fitted and numbered so that a stranger can put the Mill up, using our drawings and printed instructions for a guide.
Send for Catalogue "B" and Price List.
U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.
Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.
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Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 4.

PROFESSOR WILLIAM R. BROOKS.

THE possession a of little pocket-money, "all our own, to do just as we are a mind to with," is doubtless one of the great luxuries of life. If this is a luxury prized by the adult, how much more so by the young? I believe, too, that if the possession of money is a pleasure, the earning of it by one's own skill or industry is still more so. And then we are also better enabled to appreciate its value.

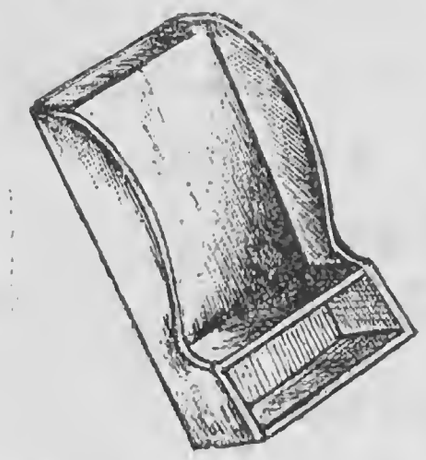
Now, it seems to me there is many a farmer's boy, who by a little industry has it in his power to command no inconsiderable amount of pocket-money; and that with his ordinary quickness and intelligence he will avail himself of this privilege when the way is pointed out.

I shall leave it to others for the present at least, to show, how by farming a small piece of land on his father's farm, the raising of garden stuff or poultry, a farmer's boy might get to himself a little ready cash.

I propose to show how the rural youth, possessing a little dexterity with mechanic's tools—and of such to my knowledge there are many—might manufacture little useful household articles which he can sell to his neighbors—the farmers' wives, and the village matrons; work which can be done on rainy days, and in spare hours. And this mechanical skill thus developed and perfected, will prove of the greatest service in after life in repairing the tools and implements about the farm.

The tools which will be required are not many or costly; almost every farmer has them, and certainly all should have. An important matter is to keep what you have in good order; it will add much to the pleasure of your work. A good, firm work-bench, with a strong screw vise is also quite a help.

One of the handiest little household articles, simple and easy to construct, is what I shall entitle the "Rural Scouring-board." It is for scouring knives and forks upon, and contains also a receptacle for holding the brick-dust, or other polishing powder. Here is a picture of it.



The bottom is made of a piece of three-quarter, or inch board seven inches wide, and twelve inches long. The sides and ends are of one-half inch stuff, and are three inches high—the sides being curved in the manner shown, to give it a little more fanciful appearance. Two inches and a-half from the end-piece is a cross-piece which is fastened by a few brads driven through the side-pieces, and this forms a box to hold the scouring material. The front is left open so that the knife may be laid flat upon the board while being scoured. All the parts should be neatly planed, and the sides and ends fastened together with brads. The boards may be painted any suitable color, but in my opinion a simple coat of varnish would be better.

The "Rural Scouring-board" will readily retail for twenty-five cents, affording, as my young readers may calculate for themselves, a good profit upon the cost of the material. I should like to hear through the RURAL of the first boy who has manufactured one and made a sale. If there are any questions you would like to ask about it, I will answer with pleasure. Let some of our young folks try their hand at this little article, and in a short time I will describe something different. Do not be discouraged at your first attempts, but persevere, remembering always that "practice makes perfect."

A PLEA FOR THE SCHOOL-CHILDREN.

MAY MAPLE.

FOR several years of my life I have been engaged in mind cultivation, that is "teaching the young idea how to shoot;" not an original remark, but one that marks out my work. I find some who are putting forth their efforts in the right direction in educating the younger generation. Their offsprings will be prepared to enter business life, even though they are left without $100 capital. These parents have no need of any suggestions from my pen. But there are many parents who seem to be laboring under a great mistake.

Some of these imagine their children are such wonderful helps that they cannot be spared from the farm even at the early ages of seven, ten and twelve years. I know from experience that children are often absent from class because they are required to stay at home to drop corn and potatoes in seeding time, and I remember one instance when a child of eight or nine years was kept at home two weeks to plant over a piece of ground that any wide-awake man could have planted in half a day or less.

Two youngsters of the same age and ability start for school the first Monday in May. They read passably well in the First Reader. One attends every day, rain or shine, during the term of four or five months, and is supplied with books according to his capabilities; the other comes one day and stays away two or three, and then possibly comes three or four more, coming and going like an intermittent fever. His excuses are often amusing when we take into consideration the age and size of the little man. He has "had to help plant," or "log off a piece for 'taters," or "help ma wash," or he "had to take care of the baby while ma went to the store," or "to see a neighbor," or "to pick berries for sass." His schooling averages about two days of the week. At the close of the term there is an examination. The first-mentioned lad reads well in the Third Reader; he has learned to add, subtract, multiply and divide numbers understandingly; his knowledge of Geography and History is good; he can write a readable page in his copy book, and can spell hundreds of words correctly. The foundation stone is laid for an intellegent, useful man.

How is it with his companion? His advancement is scarcely perceptible. Who is to blame? Not the boy, and certainly not the teacher (although thoughtless parents frequently criticise the ability of the instructor because their children do not learn). Has the little farmer earned enough to pay for his lack of school culture? Most emphatically I declare that he has not.

If parents would send their children to good schools from the time they were seven till they were fifteen years of age, for ten months of the year, and then claim their services till they were twenty-one, it would be money in the parent's purse and far less injustice to the offspring.

At fifteen the boy or girl is strong enough to be of use, while at the same time they will be capable of learning by practice and observation what they have before learned only in theory. And many a lad or lass would lay up a fund of useful knowledge during the evenings and odd days when otherwise unemployed, that would be a perpetual fountain of usefulness during all their lives.

Whereas the child who has an occasional day, or week, or month at school, even from the time he is five years old until he is twenty-one, will have a very limited amount of knowledge with which to begin a business life. And undoubtedly he will be obliged to knock about the world doing the drudgery for his former companions; looked upon as a sort of ignoramus incapable of using his best energies.

Look about us and behold the Jacks-at-all-trades who are good for nothing! They have large capabilities, and yet, for lack of knowledge rightly directed, their talents are rusting, their lives are miserable failures, and our nation and the world at large poorer in abilities and slower in its march of progress.

Some parents have a habit of sending their students to school without tools to work with, depending almost entirely upon the teacher or neighbors to supply the deficiency of books, slates, pens, paper and pencils. Others get their supplies from "Noah's ark," or from their great-grandmother's library. If they move from Maine to California they still expect to use the same series of books if they patronize the district school. Now, the fact is such students may just as well remain at home. Their time and energies are not only wasted, but they are a trial to any wide-awake teacher, and a detriment to any school.

Trying to educate the present generation from text-books that are out of date, and should long ago have been cast into oblivion, is not wise. Neither is it wise to use books that have been lately published, if they differ from the general series used in the district. Remember that the more classes the less time can a teacher have to devote to each one, and when only two or three minutes—as is often the case—can be spared for a recitation, but very little can be demonstrated.

Again, there is another set of injudicious parents who make a great mistake. These are anxious to have their children well educated, and they are pretty sure to send them to school regularly, and to supply them with all needful apparatus; and yet they fail in the true art of progression. They are anxious to accumulate a plenty of this world's goods for future years, when the threads of silver shall have found a place among their locks. Also, each dear child will need a few broad acres or golden eagles when he leaves the old home. And all this is laudable, provided it is not carried to such extremes as to deprive justice of its due in other matters.

But when children are called from their bed at four o'clock in the morning, and are kept busy at work "choring" here and there till it is almost or quite time for the school-bell to ring, and then bidden to make haste to school or they will be late, and to "hurry home as soon as school is over, as there are lots of chores to be done"; *this*, I say, *is injustice*.

The pupil comes into school thoroughly exhausted. How then can he undergo mental exercise with proper energy? He takes up a book and tries to read over his lesson; the letters all run into one continual jumble; he rubs his eyes and tries to brighten up his ideas but tired nature rebels; he soon loses consciousness and all idea of labor, either mental or physical is forgotten, while sweet sleep locks his thoughts in oblivion. Very soon he may be awakened by the ever vigilant but not otherwise clever teacher. But alas! for him, study now as hard as he may, he comes to his class with little if any knowledge of his lesson. Of course he receives a reprimand, and in not a few instances he is dubbed a "stupid, brainless blockhead."

Is the child to blame when he fails to pass a creditable examination, although he has not "missed a day" in the whole school year? Is the teacher to blame for not being able to instruct the intellect that is benumbed by physical labor? To cultivate the brain requires diligent forethought on the part of parents as well as instructors. There must be much self-denial and sacrifice to attain that degree of culture necessary to use one's ability to the best advantage. There are many talents buried in napkins for want of knowledge. There may not be many individuals who possess ten talents by which they might make successful competitors in all business transactions, but those who possess five possibilities of success in one or more branches, comparatively speaking, are quite numerous, yet for lack of knowledge, our parlors are often filled with simpering ignorant ladies, (!) more ornamental than useful; our country flooded with tramps, our almshouses filled with paupers; our prison cells lined with criminals, and our country taxed millions of dollars to supply the deficiency of wasted ability.

We glory in our country's government; for in most respects we believe it to be the best in the world, but its education laws might be greatly improved. For instance, we would have a certain series of graded books for every district school in the State, thus doing away with such a heterogeneous mass as now exists; and a certificate of qualification should be required for every occupation. Each individual should be able to bring all his gifts to the altar of usefulness; educate thoroughly in those branches for which the pupil has a natural inclination. There is no child with its five senses, but has at least one talent given him whereby he may be of use to himself, and a benefit to the world at large, if he has the proper culture.

THE MAN EVERYBODY LIKES.

HE is often very short, very lean and very homely, but this makes no difference; he is the man that everybody likes and looks up to. An Adonis might enter the town, but he could not usurp his place; no indeed, for he is too firmly rooted in the hearts of the people.

In the first place he is not a bigoted man. He believes in everybody having their rights:—yes, even in women receiving equal pay when they do the same amount of labor as a man. He also believes in giving the minister enough salary to live on, and doesn't sneer at all other denominations excepting "mine."

In the second place he doesn't know it *all*. He has enough humanity to conceive that there are things in this world beyond his knowledge. He is willing to be taught, but never tries to teach others.

In the third place he possesses a great heart, with "charity for all, and malice towards none." When you enter his presence it is just like the effect of a warm fire on a cold night. He always stands up for the weakest side,—is very forgiving; very apt to overlook your shortcomings and think you will do better next time. If any of the boys get into trouble they go to him. He has a faculty of smoothing it all out and starting them in the right path again. Older men go to him also. His clear, concise manner of stating a case is sure to brush the fog away when they are perplexed.

His wife (if he has one) is considered the luckiest woman in town. She does seem to enjoy herself, and is in most cases fat and rosy, with a hearty, infectious way that is suggestive of pleasant things at home.

When in society, his manner is perfect. He is very attentive, and listens to your hobby with the utmost patience. He knows just who is the most lonely and needs a little attention. If there is a girl or ancient maidon who is overlooked, Mr. N. will be sure to find her corner and have a pleasant chat, which brightens her up for the whole evening. In fact, he has a way—not by flattery, for he does not descend to that, but by the reflex of his own sunny disposition—of making everybody feel pleased with themselves.

Somehow, he gets to be *the man* of all the men in the town. If anything important comes up, it is, "consult Mr. N."; if any one falls into trouble, it is, "run for Mr. N."; and it is "Mr. N." all the time, because you see *everybody* likes and trusts him.

M. E. STONE.

RUSSIAN MERCHANTS.

THE two great blemishes on the character of the Russian merchants as a class are, according to general opinion, their ignorance and their dishonesty. As to the former of these there cannot possibly be any difference of opinion. The great majority of the merchants do not possess even the rudiments of education. Many of them can neither read nor write, and are forced to keep their accounts in their memory, or by means of ingenious hieroglyphics, intelligible only to the inventor. Others can decipher the calendar and the lives of the saints, can sign their names with tolerable facility, and can make the simpler arithmetical calculations with the help of a little calculating instrument called *stchety*, which resembles the *abaca* of the old Romans, and is universally used in Russia. It is only the minority who understand the mysteries of regular book-keeping, and of these very few can make any pretensions to being educated men. Already, however, symptoms of a change for the better in this respect are noticeable. Some of the rich merchants are now giving to their children the best education which can be procured, and already a few young merchants may be found who can speak one or two foreign languages and may fairly be called educated men.

ECONOMY.—Perhaps there is no word in the English language that has been so foolishly narrowed in its meaning as the word economy. Most people think of it as a saving of money, as though to be economical, was in a certain sense, to be stingy or mean. Now, economy in its true interpretation is the art of management—is the wise adaption by which we arrange time, health, and strength so as to produce the best results.

Sabbath Reading.

THE WISE MAN'S CHOICE.

MAN'S days are as grass: as the flower of the field so shall he flourish.—PS. Ch. II. 15.

SEE, in her thorny stalk reclining,
Yon withered rose, so sickly pining!
Yet late her crimson cheek was seen
In dewy lustre brightly shining.
Thus quickly fades our youthful bloom,
When age or sickness steals upon us;
And when we sink into the tomb,
Not long our nearest friends bemoan us,
Till beauty then the sage despises.
Him never her tempting lure entices;
Naught but fair virtue's doubtless charms,
That deck the soul, he fondly prizes.
Unmoved he smiles at fortune's frown,
Scorning all her fleeting favors;
His hope that rests on God alone,
And always Him to please endeavors,
Beneath His sacred wing protected,
Still towards Him it is directed,
He journeys on through life secure,
Till comes the happy term expected,
When ended all his care and toil,
He flies to meet his God's embraces;
Who welcomes him with gracious smile,
And 'mong his saints in glory places,

A STEP BACK OUT OF ERROR.

THE following bit of experience, says The Congregationalist, is recounted in a letter to his sister from the pen of an estimable Christian, who has conscientiously "sounded all the depths and shoals" of that plausible and fascinating error of which he speaks, and will be read with interest, and we trust with profit:

I have looked much into the "Higher Life" theory, so called; have attended "holiness" meetings, have been looked upon as a "higher-life man," have spoken again and again in meeting of the the fullness of the blessing," "entire sanctification," the "rest of faith," etc., and have, of course, been brought in contact with the brethern who profess it; and now, what is the result? I have entirely given up attendance on holiness meetings; I have seen so much to offend and disgust me, that I have been gradually led to the conclusion that my place was to work quietly in my own church, and not make a hobby of any particular doctrine. I have discarded all that literature, because I have found a want of harmony, also a conscious spirit, an "I am holier-than-thou" tone in some, and a mysticism in others; but I feel instead an increasing delight in the Word of God.

I have doubtless, my dear sister, encouraged you in this theory by my letters and influence; and now I write plainly to tell you, before God, that I am beginning to see my mistake and am anxious to influence all I can to come back to the simplicity of the Word of God. The Lord has, no doubt, richly blest you; let love take the place of theory, let your light shine in your own church; if it is cold, and the pastor, to your mind, formal, all the more need of your warm, Christian influence. Mind you, I don't say there is no such thing as a "blessing." I believe I have it. I believe you have it; the precious indwelling of the Holy Spirit, the abiding of Jesus in the soul, the hidden life, the cleansing; but I believe that *every* child of God has the same blessed spirit in him, though he may be weak and not know his wealth. The *tendency* of this theory is to lead to the formation of a set or party or clique, who perhaps not intentionally, are setting themselves up as more spiritual, as having made higher attainments than the mass of Christians. As they walk into church the feeling *will* come; "I am free; I am fully sanctified." I have had that feeling, and say it with shame and confusion, but confess it. Now all my higher life is concluded in this—assurance of God's love, peace of conscience, joy in the Holy Ghost increase of grace. Conscious of a poor, weak, sinful heart, but all the more clinging to my dear Saviour for the cleansing and forgiveness for which I am sure I receive.

I want for myself and for my dear sisters, a strong, healthy, rounded Christian life; full of Jesus and His word; free from theories and "isms." I hope and expect to be daily growing in grace, and not to be fully sanctified till I die, though righteous in God's sight now because of faith in His dear Son. While I reckon myself "dead to sin," I must watch the old man till I die.

THE more any man improves his graces, the clearer, the sweeter, fuller and richer is his enjoyment of God here. There is no man in all the world who has such enjoyment of God as that man has who most improves His graces. It is not he who knows most, nor he who hears most, nor yet he who talks most, but he who exercises grace most, that has most communion with God, that has the clearest visions of God, and that has the sweetest discoveries and manifestations of his Lord and Master.

MANY saints have had their hearts warmed and heated by sitting near other saints' fires, by eyeing and dwelling upon other saints' graces. When men's graces shine as Moses' face did—when their lives, as one speaks of Joseph's life, is a very heaven, sparkling with variety of virtues as with so many bright stars—ah! how are others stirred up to glorify God, and to cry out, "These are Christians indeed; these are an honor to their God, a crown to their Christ, and a credit to their gospel."

THE number of difficulties makes the Christian's conquest the more illustrious. A gracious man should be made up all of fire, overcoming and consuming all opposition, as fire does the stubble. All difficulties should be but whetstones to his fortitude.

PERSONAL ITEMS.

Dion Lewis is suffering from congestion of the brain and paralysis, at Oakland, Cal.

Colonel Robert Ingersoll denies that he is a Communist. He is making too much money as a lecturer to believe in dividing it.

If the National party should ever gain the ascendancy in this country, Benjamin F. Butler would be President of the United States.

"I mean business," said a burglar who entered Mr. Patterson's house, in Sterling, Ill. "So do I," said Mr. Patterson, and shot him through the head.

J. Milton Turner, our colored Minister to Liberia, wants to come home because he believes he has been in office long enough to deserve a good office somewhere else.

The late W. S. O'Brien, one of the California Bonanza Kings, a year before his death, settled $1,000,000 on a woman who now claims to have been his wife, and entitled therefore to a third of the $20,000,000 he left behind him.

Victoria C. Woodhull has met with considerable success in London, where she is living quietly and modestly, and will not return to America. The hard knocks she has sustained have driven a great many "isms" out of her head.

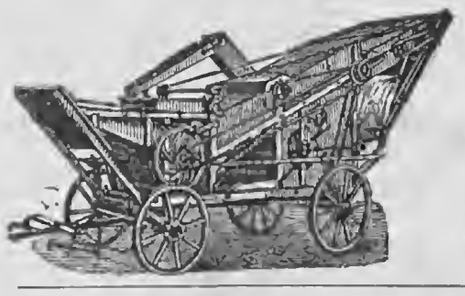
The Duke of Aosta, ex-King of Spain, will spend a month viewing the Paris Exhibition. There are at present in Paris alone, three ex-Queens of Spain: Isabella, Christina and the wife of Don Carlos. The ex-Kings and Queens seem to be on the best of terms, as the papers daily announce visits of one to the other.

Last summer, Master Jesse Grant was present, as he often was, at a great party in a great London house, and found it dull. Complaining to a friend that the entertainment did not meet his views, he was reminded that it was open to him to go away. "Yes," responded the young heir to the White House, "I know that, but you see I don't want to break up the party so early."

The Duke de Biron, when condemned to death during the French Reign of Terror in 1793, ordered, on returning to prison, oysters and chablis. The executioner entered as his Grace was enjoying the repast. "Just let me finish my oysters," said the Duke, "and meanwhile take a glass of wine with me, my friend; you'll need a a fillip for your work;" and then he filled a bumper for the turnkey and himself, and presently went off to be guillotined.

The most venerable couple in Texas, perhaps in the country, are Mr. and Mrs. Robinson of Mountain City. He is reputed to be 103 and she 102 years old, and they were married in Kentucky eighty-two years ago. Mr. Robinson says he never swore but one oath, has never borrowed but fifty cents, and never gave a note. He and his wife are like children in their devotion to each other, and after any separation shed tears on meeting. Recently they were presented with a comfortable house by a generous neighbor.

Implements and Machinery.



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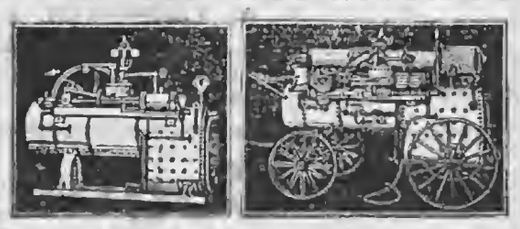

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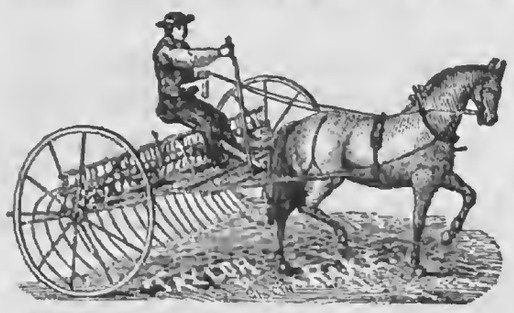

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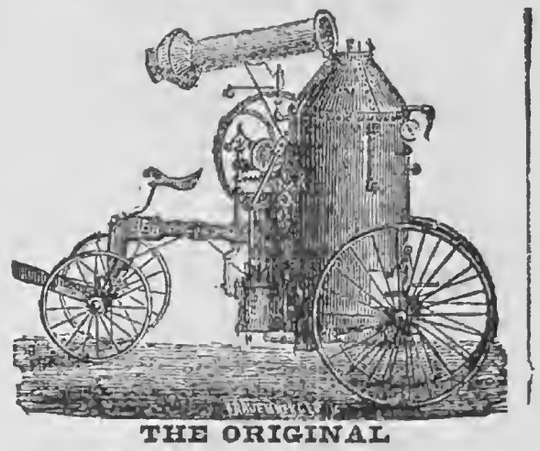

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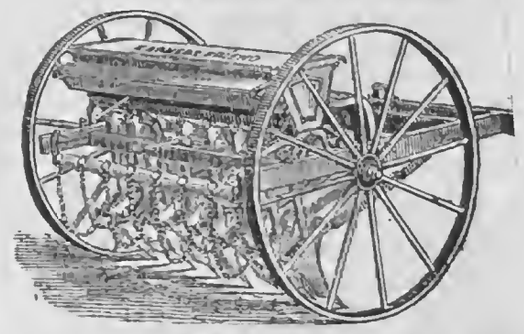

Grain & Fertilizer Drill.

The quantity is regulated with gear-wheels in a **CONE**, so there are no **loose wheels** or **movable feeders**, and it will sow any grain perfectly and accurately.

It has the best **Spring Hoe**, and every Drill has a **Force-Feed Grass-Seeder, Patent Shifter,** and **Surveyor** free.

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Dayton, Ohio.

FOUST'S

HAY LOADER.

A perfect machine for rapidly pitching hay, barley and all loose grain on the wagon in the field. Saves as much time and money as the mower and horse rake. Thousands in use by the best farmers in the country. Prices reduced. Send for Circulars to the manufacturers, STRATTON & CULLUM,
Meadville, Pa.

If you want to buy a Sulky Rake this season, do not buy an old-fashioned Hand-lever Rake; they have had their day and are behind the times. The self-operating rakes or "Horse Dumpers," as they are called, are now acknowledged to be a great improvement over the old method of compelling the man instead of the horse to do the hard work.

THE TIGER HAY RAKE

is admitted by all to be the Standard Self-operating Rake. It is no experiment but a PROVED SUCCESS, and has double the sale of any other Sulky Rake in the United States. Send for Circulars.

J. W. STODDARD & Co., Dayton, O.
Sole Manufacturers.

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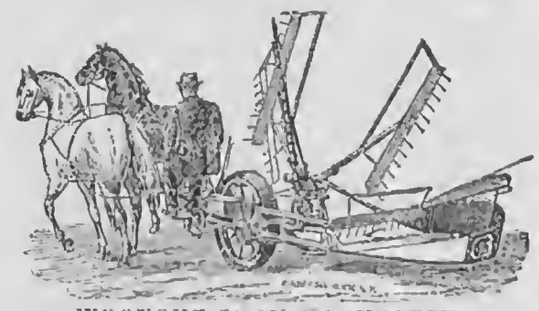
Patent Road Machine

Keeps the road in far better condition, and at half the present cost. Circulars free.
SAMUEL PENNOCK, Ithaca, N. Y.



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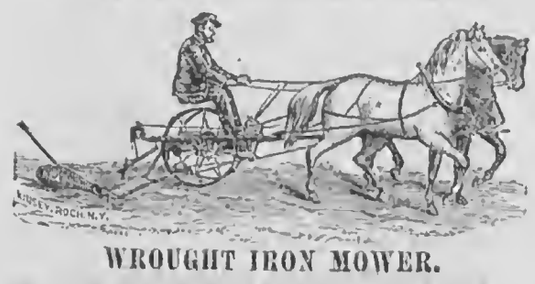

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SICKLE GRINDERS.
Price $10.
Every owner of a Mowing Machine should have one.
They pay for themselves in a single season.
N. B.—The first 500 machines will be sold at **$7.50 each.**
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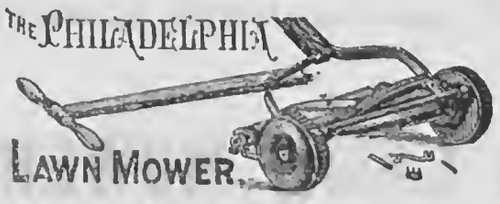
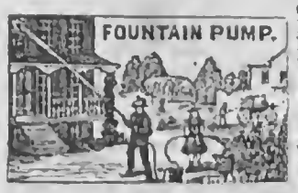
SULKY HAY RAKE

Will rake cornstalks or bunch up. Teeth can be raised for gleaning stubble fields.
Send for Pamphlet (sent free) giving full description of our Rakes, Plows, Sulky and Gang Plows, Wheel Cultivators, Harrows, &c.; also containing valuable Tables, Recipes, Postal Laws, Rates of Foreign Postage, Home Physician, &c.
FURST & BRADLEY MFG. CO.,
63 N. Desplaines St., Chicago.

AHEAD OF ALL COMPETITION
1878.



SEVEN SIZES FOR HAND USE.
Weighing from 32 to 51 lbs.
THREE SIZES for HORSE POWER.
These Machines did an amount of work on the Centennial Grounds, equal to 10 years of ordinary use, without loss of time for sharpening or repairs—completely distancing all competitors in that celebrated trial of 6 months' duration.
GRAHAM, EMLEN & PASSMORE,
Patentees and Manuf'rs, 631 Market St., Phila., Pa.
Send for Descriptive Catalogue with prices.



GARDEN ENGINE AND FIRE EXTINGUISHER. For Washing Windows, Carriages, etc. Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

If you want to buy a Sulky Rake this season, do not buy an old-fashioned Hand-lever Rake; they have had their day and are behind the times. The self-operating rakes or "Horse Dumpers," as they are called, are now acknowledged to be a great improvement over the old method of compelling the man instead of the horse to do the hard work.

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J. W. STODDARD & Co., Dayton, O.
Sole Manufacturers.

Wit and Humor.

SPARKS AND SPLINTERS.

THE cucumber graceth the festal board
Enshrouded in condiments rare,
And the epicure gleefully rubbeth his paunch
At the sight of the treasure there.
The doctor smileth a sad-like smile
And giveth a crocodile groan,
And the marble man goeth out the while
And polisheth up a stone.
The undertaker mournfully asks
"What will his measure be?"
And the sexton marketh a spot "reserved"
All under the willow tree.
'Tis hard the times and 'tis scarce the cash—
And so with a zestful joy
We welcome waft to the fitful fruit
That giveth the folk employ.

[*St Louis Journal*

AN Irishman being asked why he wore his stockings the wrong side outwards, replied it was because there was a hole on the other side.

WILSON, the celebrated vocalist, was upset one day in his carriage near Edinburgh. A Scotch paper, after recording the accident said: We are happy to state he was able to appear the following evening in three pieces.

"You are fond of tea," remarked a boarding-house mistress to a boarder who had passed over his cup to be filled the third time, "very fond of tea!" He replied, "I should think I was, or I wouldn't be willing to drink so much water to get so little of it!"

"Mamma," asked a resident youngster, "is our old hen going to be sent away for the summer!" "I guess not, my son," she replied; "but why do you ask such a question?" "Because I heard pa tell our hired girl that they would have such a sweet time when he sent his old hen away for the summer."

THE fashion reporter who wrote with reference to a belle: "Her feet were encased in shoes that might be taken for fairy boots" tied his wardrobe up in a handkerchief and left for parts unknown when it appeared the next morning: "Her feet were encased in shoes that might be taken for ferry-boats."

A COUPLE were married in Georgia by a justice of the peace. Unto the man he said, "Sir, will you have the beloved woman you hold by the right hand, in the name of the State of Georgia, Cobb county, and the new constitution, whether it be adopted or not, to be your lawful, wedded wife?" And to the woman he said: "Madam, will you take this man to be your lawful husband, under the Constitution of the United States and the constitutution of the State of Georgia, no matter who is President?"

AT a happy spot where a number of negroes reside, an old negro was heard calling out to his wife: "Manda! Is you got dem chickens shut up in de smoke-house, like I told yer?" "No; an' I like ter know what's de matter wid you, that yon's so mighty tickler 'bout dem chickens all at once?" she replied. "Neber you mind. I know what's de matter, and dat's nuff till dem chickens is housed. When I hears dat dem niggars over dar in de next yard gwine to hab a party tomorrow night, I wants to be shore dat my chickens does't 'tend it; you hear me?" The chickens were at once locked up.

A Manifest Absurdity.

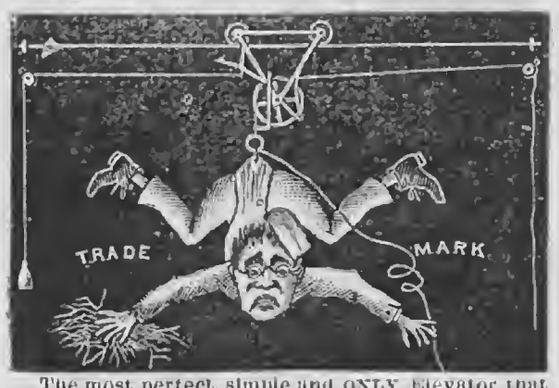
It is manifestly absurd to claim for a mere stimulant, tonic and alterative properties. Yet this is what is daily done by the vendors of cheap local bitters, colored to make them look attractive, and agreeably flavored, but the alcoholic basis of which is of the vilest and most hurtful description. The transcendent success of Hostetter's Stomach Bitters, the leading alterative tonic of the United States, has induced many of these compounders of drams in disguise, to attempt the counterfeiting of this standard medicine, but their efforts have never proved successful on a large scale, and they have themselves in many instances notoriously "come to grief," through the instrumentality of the law.

The genuine Bitters have, indeed, a spirituous basis, but they are emphatically a medicine, since their botanic ingredients are signally efficacious in overcoming and preventing chills and fever, dyspepsia, liver complaint, constipation and many other disorders.

GUNS and Revolvers. Illustrated Price List free. *Great Western Gun Works*, Pittsburg, Pa

CIDER PRESSES AND GRATERS. BOOMER & BOSCHERT PRESS CO., Syracuse, N.Y

THE AMERICAN HAY ELEVATOR.



The most perfect, simple and ONLY Elevator that raises the hay from wagon and carries it in barn any required distance. Economical, durable, labor-saving. Send for Illustrated Circulars and prices to
J. R. FITZHUGH,
1708 Barker St., Philadelphia, Pa.
Branch Office: 55 Beekman St., New York.

A LESSON IN SUBTRACTION.

Aunt Bella—"Now look here, Tommy. Suppose there were three Apples on the Table. Could I take away One and leave Three?" *Tommy.*—"Oh, No, Auntie! Certainly not!" *Aunt Bella.*—"And why, Tommy?" *Tommy.*—"Because it wouldn't be Polite!"

The Coquillard Wagon.

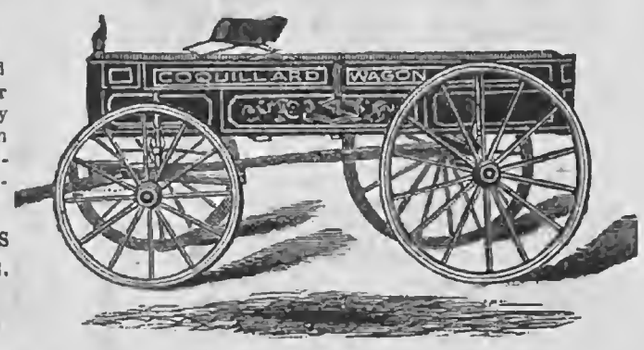
THE FARMER'S FAVORITE.

These Wagons are made of the best Wood and Iron to be procured, and put together by the most experienced workmen. Every one warranted to give satisfaction, both in regard to quality of material and workmanship. They are also noted for their lightness of draft and ease of running.

Carriages, Buggies and Sleighs

Of superior workmanship always on hand. Send for Circular and Price List.

A. COQUILLARD,
South Bend, Ind.



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For HARNESS, CARRIAGE TOPS

BOOTS, SHOES, HOSE, BELTS, ETC.

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Send for Circular, Etc.
Address NAIAD OIL AND BL'K'G CO.

The Best in the World.

Ready FOR Use.

FACTORIES:
CLEVELAND,
NEW YORK,
CHICAGO,
ST. LOUIS.

ANY SHADE DESIRED.

Rubber Paint Co.: DUNDEE, N. Y.
Gentlemen: All of our customers who have used your Paint, speak in the highest terms of its *covering capacity, cheapness and beautiful glossy finish.* We consider two coats of the Rubber Paint fully equal to three coats of White Lead and Oil.
Yours truly. M. E. BENNETT & CO.

SEND FOR CIRCULAR, ETC.

KINGSFORD'S
Oswego Starch!

Is the BEST and MOST ECONOMICAL in the World.

Is perfectly PURE—free from acids and other foreign substances that injure Linen.

Is STRONGER than any other—requiring much less quantity in using.

Is UNIFORM—stiffens and finishes work always the same.

NEW EXCELSIOR LAWN MOWER.

RECEIVED HIGHEST AWARD AT THE CENTENNIAL EXPOSITION.

Important Features for the Season of 1878.

REDUCTION IN PRICE!

LESS WEIGHT! LIGHTER DRAFT!

And Furnished with either Wheels or Roller.

It has been adopted, and can be seen in practical operation on the **Public Parks of New York, Brooklyn, Boston, New Haven, Cleveland, Chicago,** and on almost all the prominent City Parks in the **United States and Canada.**

The **EXCELSIOR** received the **FIRST PREMIUMS** at the **Great Lawn Mower Trials** held in New York City, Cleveland, O., Waverly, N. J.; also at the **Great International Lawn Mower Trial** held at CARLISLE, ENGLAND, in September last, and at many other trials and Agricultural Fairs held in in Europe and America.

Six sizes for hand power; four sizes for horse power.

Our New Horse Mower is conceded to be the LIGHTEST and BEST Horse Lawn Mower ever made.

N. B.—HORSE and HAND Lawn Mowers are alike guaranteed in every respect. Address

CHADBORN & COLDWELL M'F'G CO.
SEND FOR CIRCULAR. Newburgh, N. Y.

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OVER 58,000 NOW IN USE
Two New Styles Just Out.
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OUR TERMS ARE THE BEST.
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GIFFORD'S SWINGING STANCHION. Self-closing, self-fastening. First farm right in each town for 30 cts. in stamps. For Illustrated Circular, address W. C. GIFFORD, Jamestown, N. Y.

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This is a combination of capitalists to supply *consumers only* throughout the *United States* with **PURE TEAS** on the mutual principle, by getting up clubs. Send for New Price-List.

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HELP!

FOR THE WEAK, NERVOUS AND DEBILITATED!

The afflicted can now be restored to perfect health and bodily energy, at home, without the use of medicine of any kind.

PULVERMACHER'S

ELECTRIC BELTS

AND BANDS,

For self-application to any part of the body, meet every requirement.

The most learned physicians and scientific men of Europe and this country indorse them.

These noted Curative appliances have now stood the test for upward of thirty years, and are protected by Letters-Patent in all the principal countries of the world. They were decreed the only Award of Merit for Electric Appliances at the great World's Exhibitions—Paris, Philadelphia, and elsewhere—and have been found the most valuable, safe, simple, and efficient known treatment for the cure of disease.

READER, ARE YOU AFFLICTED?

and wish to recover the same degree of health, strength, and energy as experienced in former years? Do any of the following symptoms or class of symptoms meet your diseased condition? Are you suffering from ill-health in any of its many and multifarious forms, consequent upon a lingering, nervous, chronic or functional disease? Do you feel nervous, debilitated, fretful, timid, and lack the power of will and action? Are you subject to loss of memory, have spells of fainting, fullness of blood in the head, feel listless, moping, unfit for business or pleasure, and subject to fits of melancholy? Are your kidneys, stomach, or blood, in a disordered condition? Do you suffer from rheumatism, neuralgia or aches and pains? Have you been indiscreet in early years and find yourself harassed with a multitude of gloomy symptoms? Are you timid, nervous, and forgetful, and your mind continually dwelling on the subject? Have you lost confidence in yourself and energy for business pursuits? Are you subject to any of the following symptoms: Restless nights, broken sleep, nightmare, dreams, palpitation of the heart, bashfulness, confusion of ideas, aversion to society, dizziness in the head, dimness of sight, pimples and blotches on the face and back, and other despondent symptoms? Thousands of young men, the middle-aged, and even the old, suffer from nervous and physical debility. Thousands of females, too, are broken down in health and spirits from disorders peculiar to their sex, and who, from false modesty or neglect prolong their sufferings. Why, then, further neglect a subject so productive of health and happiness when there is at hand a means of restoration?

PULVERMACHER'S ELECTRIC BELTS AND BANDS

cure these various diseased conditions, after all other means fail, and we offer the most convincing testimony direct from the afflicted themselves, who have been restored to

HEALTH, STRENGTH, AND ENERGY,

after drugging in vain for months and years.

Send now for DESCRIPTIVE PAMPHLET and THE ELECTRIC QUARTERLY, a large Illustrated Journal, containing full particulars and INFORMATION WORTH THOUSANDS. Copies mailed free. Address,

PULVERMACHER GALVANIC CO.,
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Avoid bogus appliances claiming electric qualities. Our Pamphlet explains how to distinguish the genuine from the spurious.

EXCELSIOR

MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 23.
WHOLE No. 1480.

NEW YORK CITY, JUNE 8, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

Arboricultural.

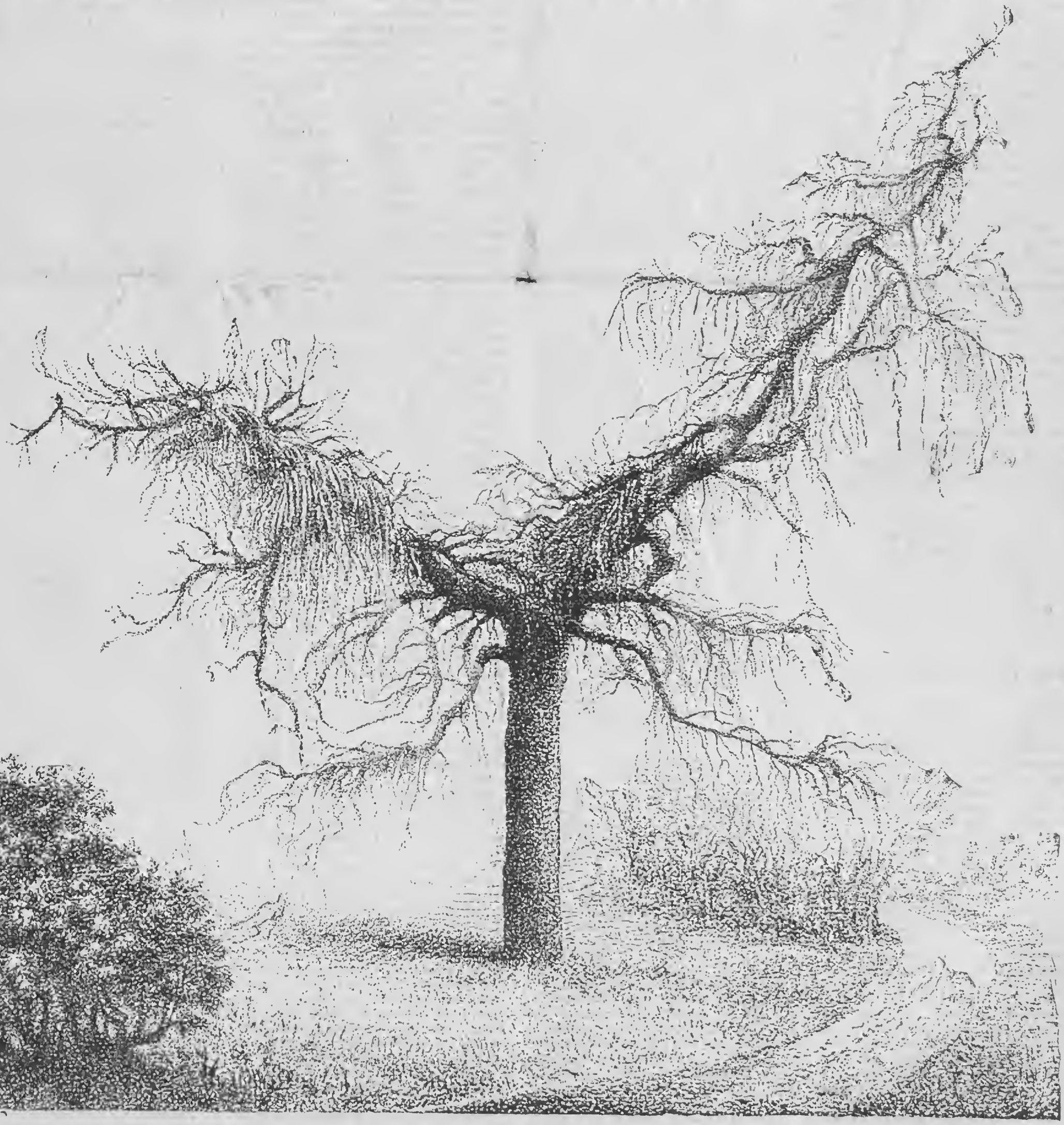
OUR TREE PORTRAITS.

LARCHES.

THE Larch, unlike most other coniferous trees, is not an evergreen. There are but few species, and these are all natives of mountainous regions in the northern parts of the Old and New worlds. The American Larch, known also by the names, Black Larch, Hackmatack and Tamarack, grows in primitive forests sometimes to the hight of from 80 to 100 feet, though generally it is considerably smaller. In the more northerly latitudes it is found in uplands, but within the limits of the United States it is almost invariably to be met with in moist or swampy soils. In cultivation it grows well on nearly any soil, but thrives best on deep moist ground. The wood is close-grained, heavy and remarkably strong. It is very durable in contact with the earth, and valuable for ship-building, rafters, and all kinds of timbers used in building.

The European Larch differs from the American species mainly in its pendulous branches and the shape and color of its cones, which are about half as large. Throughout Central Europe it is largely cultivated, both as an ornamental and timber tree; and it has the well-earned reputation of combining rapidity of growth, symmetry of form, durability of wood, and adaptability to a variety of uses in a greater degree than any other timber tree of northern latitudes. Of late years it has been pretty extensively introduced into the United Stated; and in many places is giving satisfactory returns.

There are many trees whose peculiarities of growth are better shown in winter than during that period when the branches are clothed in foliage. The specimen of Larch presented below is certainly one. It stands in the private grounds of Mr. S. B. PARSONS of Flushing, L. I., and was drawn by our artist during January last.—[To be continued.



WEEPING LARCH.—FROM LIFE.

Farm Topics.

WHAT SALARY DOES A FARMER RECEIVE?

PROFESSOR W. J. BEAL.

He receives the equivalent of a larger salary than ninety-nine out of a hundred of them are willing to admit. They underestimate their own profits, and overestimate the profits of men living on a salary.

There is a great difference among those who live by farming. A great many work the soil because they do not know what else to do, or because they cannot live by any thing else. Many of this class hardly deserve to be classed as farmers. They lower the standing of farming as a business. I believe there is no business by which a man can live so well with so much neglect, as in agriculture. Still nothing better repays good care and ability. It is rather slow to yield brilliant returns at the outset: so is any business. The farmer's profits are concealed in the rise of land—in improvements by ditching, clearing, new buildings, more land, more tools, or better stock. Most farmers have no idea how much it costs them to live. They forget to figure in the pork, poultry, mutton, butter, flour, vegetables, etc., etc. The salary-man lives entirely by his individual efforts. In estimating a salary, we must do so by looking at the privileges enjoyed, the hard work of brain and muscles, and the gain in property or improvements.

I am personally acquainted with two brothers in Michigan, who started out on an equality about twenty years ago. One of them, after a good education, went to farming, the other to teaching. They had only a few hundred dollars apiece to start with. The one who followed teaching for the last six years, has received annually from two thousand to two thousand seven hundred dollars. One-third of this amount would be called a large salary by nine-tenths of our farmers, who can save as much each year as does the teacher referred to. The farmer, of the two brothers under consideration, owns and works a small place of seventy or eighty acres, which he is steadily improving. He has good buildings. He owns a small cheese factory. He is out of debt. He has lately bought fifty acres more of land worth $2,000, and from previous experience, he is certain he can save five hundred dollars a year above all expenses, to apply as payment on his recent purchase. He is easily keeping up with the teacher in accumulating wealth. He works no harder. The natural tact of the two men for work and business was not much different, while they worked together on the old homestead. The farmer in question is not an old fogy in any sense of the word. He is all the time looking for new and better implements, but he is very cautious about buying any of them until he has seen them tried and knows that he can make good use of them. He does not make costly experiments, but he is every year trying some new vegetables or grains or grasses. He is improving his stock by some purchases, and by "natural selection." He wastes no money in rushing from one department of farming to another. He keeps cows, raises some hogs, a little wheat, some corn, hay and grass, some fruit and poultry. In no sense of the word can he be said to have made money by buying low and selling high. He is not a trader. He has no tact in making his money by good bargains. What he has earned has come by legitimate farming. Some would call him a little conservative. He is very cautious, saving, industrious, but he dresses well and lives well.

Agricultural College, Lansing, Mich.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

DEATH TO THE TENT-CATERPILLAR.

In looking over the orchard the other day, I found a great many webs of the Tent-caterpillar; more than at any one time during any preceding year. Further investigation proved that the plum, cherry and peach trees were in the same manner infested. This must be attended to immediately. A ball of cloth saturated in kerosene, and affixed to a long pole, makes an excellent torch for burning them up. I tried this two years ago, and never saw another caterpillar on the trees during the remainder of the season. The proper time for burning them is early morning, before they leave the webs for a foray upon the leaves of the tree. If care is exercised, the flame need come in contact with none of the branches, and the tree remains uninjured.

CLOVER HAY.

The clover field is heading out, and will be fit to cut soon. Clover makes excellent hay, if cut at the right time and properly cured; and although it does not contain quite as much nutriment as timothy, horses and cattle eat it more readily, and its value as a fertilizer makes it most profitable to grow. The crop must be cut when in full bloom, and put up in cocks as soon as wilted. After standing one day they must be handled over, reversed, the top placed at the bottom, and *vice versa*. This, repeated every day for three days, will give us, next winter, fresh, fragrant hay, which the cattle, sheep and calves will relish almost as much as grass. And I shall not hesitate to feed it to the horses and cattle, for it will not be dusty, as much clover hay is.

DUSTY HAY.

Speaking of dusty hay, calls to mind some I cut two years ago that had become too ripe. The hired man, although a good one, failed to remember that old Kit had rather weak lungs, and fed some of the dusty hay. The consequence was that in two days she coughed badly and showed strong indications of heaves. The hay was immediately removed, and clean, bright oat straw substituted, and the feed of grain well wet. In a few days the cough and stricture of the lungs entirely disappeared, and have not since returned.

FLOWERS IN THE DOOR-YARD.

As I write, facing the window, I can but pause to admire a Wiegela growing before it, its pink-and-white, bell-shaped blossoms forming a delightful contrast to the dark green of the lawn. It was only planted a year ago, yet I now count one hundred and eleven bunches of flowers, with from five to eight flowers in a cluster. I never saw a finer, more showy shrub for the lawn, and it has the good quality of being perfectly hardy, requiring no extra care or cultivation. By a judicious selection, shrubs of excellent qualities might be found growing in farmers' yards much more frequently than they now are. A well regulated, carefully tended yard or garden goes a great way toward "setting off" the farm.

APPLES FOR HOME USE.

Notwithstanding the severe frost, fruit promises to be abundant. Apple trees were never set more full of fruit, Northern Spys especially. These are the best of winter fruit for our cold climate. They start so much later than others in spring that they are not so apt to be injured by frost, and although rarely bearing while very young, when once started they invariably give a good crop annually of fine, marketable fruit. A tree at Maplewood Farm gave seven barrels the tenth year. Moreover, who ever saw an ill-shaped tree of this variety? Next to the Spy, I would plant the Wagener for home consumption. But, unlike the Northern Spy, trees of the Wagener variety, when young, will produce so much fruit that, if it is suffered to remain on the tree, the vitality of the latter will be destroyed.

MANAGEMENT OF DUCKLINGS.

A neighbor had a fine flock of young ducks, some thirty in number. For some cause unknown to him, they died off rapidly until but twelve remained. In distress he asked my opinion of the cause of his loss. My first question was in regard to their food, and when I learned that meal—corn meal—had been fed, I assured him that he could attribute his loss to that. Young ducks should have curd; not a particle of meal until six or eight weeks old. Mr. Berry has since substituted curd, and the ducklings are all healthy and growing finely. Chickens, too, are very fond of sour milk. I always keep a supply where they can have free access to it at all times.

CORN AND THE CROWS.

The corn is planted, and now the question arises: How shall we save it from the depredations of the crows? Last year I put white twine about the field, but the sly thieves viewed this with the utmost contempt, pulling the corn directly under it. This season, should their visits become too frequent, I shall follow the plan advocated by an experienced farmer—that of soaking eight or ten quarts of corn and scattering it about the field on the surface. That amount will keep the rascals employed until the corn has grown so that it is no more a temptation to them. I dislike to kill birds of any species, for I consider them always the farmer's firm allies.

ELECAMPANE FOR HORSES.

A piece of Elecampane root, cut up fine and mixed with the feed of horses every day in spring, is an excellent tonic and blood purifier. They may show some hesitation in eating it at first, but will soon learn to like and eat it readily; while the sleek, glossy appearance of their coats will give ocular proof of its beneficial effects. It is easily procurable in the pastures or road-sides of the Eastern and Middle States, and even as far west as Illinois. Its persistent use has been known to cure cases of the heaves, when not too firmly seated.

DOCKING LAMBS.

The sheep were neglected this spring, and turned to grass before tagging. This is an oversight that must not occur again. The long wool and longer tails become ready receptacles for the accumulation of filth. Notwithstanding the protestations of some of Bergh's disciples and my own dislike to inflicting unnecessary suffering on dumb animals, I believe it to be proper and right, both for the comfort of the animals and the feelings of their owners, that lambs be docked. Little or no pain attends the operation, if done quickly and at the right time, and the animals will be much more cleanly. Too much care cannot be exercised in handling sheep during washing and shearing. Mr. Packer, formerly one of our most successful sheep raisers, was very particular in his selection of men to do this work. The cruel practice of lifting them about by the wool, and taking off large pieces of skin with the shears, is too barbarous for any humane man's sanction, and any man in my employ guilty of such cruelty, might look for a speedy discharge.

PRECAUTIONS AGAINST THE CURCULIO.

Anticipating a visit from the curculio, the plum trees were subjected to a liberal sprinkling of soot and ashes each morning, while covered with dew, from the time the buds became white until fruit became well set, and as a consequence they give promise of an enormous crop.

Miscellaneous

THE TRUTH ABOUT IT.

[Under this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—Eds.]

THE POETRY OF THE FARM.

S. Q. LENT.

I do not mean that kind of a jingle which is put together by people who go from towns into the country, and after a short sojourn of a few days, enjoying the pure air and specially prepared palatal delicacies, go into rhapsodies over country life; who frame their nice compliments for the farmer in words like these: "How delicious is country life!" "The farmers must be the happiest people on the earth!" "I should be in elysium had I the ownership of a farm like this!" All this is stuff, and is easily conjured up for the occasion.

But there is real poetry connected with farm life that is endorsed with both rhyme and rhythm, and the production of it is not due to any chance sojourner who partakes of the bounties without the toil. This poetry is made by the farmer and his own household. There is less of it written than there might be, for there is a world of latent ability and the lines are not written upon chance slips of paper in stolen moments, but impressed upon human hearts, to be read there in all the years of a lifetime. Beautiful trees, ornamental flower borders, tasteful surroundings, all those beautiful things that give charm to a country home, are the inspiration to the poetry of the farm; and if I could impress upon my brethren of the country the fact that they have a great deal of talent lying dormant for making this poetry, I should be doing a better work than in writing columns of the best kind of dissertation upon the culture of roots, wheat, corn or oats.

"It is all very well for newspaper talk, and sounds very nicely on paper," says my farmer friend, "but when you come to scratch for a large family, and get wherewith to feed their hungry mouths and cover their bodies with passable clothing, there is little time to write your kind of poetry by fussing with flower beds, cutting off the door-yard grass every week, and all that sort of thing."

But I do not hesitate one moment in making a reply to this, that there is enough time, labor, and ingenuity wasted upon the farm to render it a model of grace and beauty. There is a principle implanted in our natures that craves food as instily as our stomachs, and as many people die from the want of it as from the need of food to build up the bodies. I refer to that love of beauty and beautiful things, which, if gratified, stimulates to right action, commendable exertion and loving thoughtfulness, without which we might as well be so many sticks and stones.

Men can live upon potatoes and salt, with but very little in addition, for a time; they can be satisfied, under necessity, to move about in uncomely fabrics; but contentment under such circumstances is out of the question for any length of time. As means are gathered, it is considered no matter of extravagance to have the best of food in variety, and to be clothed tastefully in fine apparel. Time and thought of the most earnest type are given to these. Much less, then, ought it to be counted idle expenditure to attempt to satisfy a higher desire of the human heart, to embellish a home with tasty surroundings that will hold its occupants under the most tender subjection to the true, the beautiful and the good. There is a molding power in each flower and shrub, which exhibits its effects in the government of the family, and in the mellowed nature which results from the position in which is placed in the heart the memories of these attributes of the childhood's home.

Who can cite a happy home, overflowing with general good nature and family affection, without the accompaniment of beautiful things in its outward adornment. The two go hand-in-hand. The outer circle is an index to the inner one. "We guess the pulp before we cut the peel." There is a warmth of soul engendered by the effort put forth on the embellishment of a home, which affects the conduct of each member of the family. In its power it is akin to religion.

There is one thought in connection with this adornment of the exterior home that to me is a grand one. We are not working for ourselves alone. The crops of grain, the vegetables and fruits of the orchard, which we develop, may be entirely to our own benefit; but the beauties we add to our premises are the property of the neighborhood, and even the stranger without the gates has an interest there safely invested. They not only bring comfort and happiness to others, but material possessions. Every dollar or day's work expended on trees, flowers, lawn or hedges, is invested for the benefit of the the whole country about. More than this, the value is not lost when we leave the treasures, but with all the added increments of the years, they are handed down a possession to futurity.

Whittier appropriately put the thought into rhyme:

"For he who blesses most is blessed,
And God and man shall own his worth,
Who toils to leave as his bequest,
An added beauty to the earth."

HAVING EYES, THEY SEE NOT.

M. OAKEY.

Under the above heading Mr. Chas. W. Garfield, on page 311; criticises the manner in which children are at present educated by our common schools. While there is truth in what he writes, yet, in the main, he is unjust to teachers, and does not get at the bottom of the matter. He holds that children should be taught to observe more the things around them by the study of natural history and objects, and pay less attention to the mere routine of Grammar, Arithmetic and Geography. Failing in this, their powers of observation are not developed as they ought to be.

Now for not pursuing such a course the teachers are not to be censured, because they are not competent to do so. Nor are they to be blamed for incompetency. The salaries paid to the common school teachers will not purchase so much value. Those who possess such abilities, find better fields and higher remuneration for their intellects. Mr. Garfield himself cites a notable incident of incompetence, which I am sure is not the only one. I remember, ten years ago, a class that went from school, but partially matured, and ill prepared for any brain work, most of whom applied for certificates to teach, and secured them from the County Commissioner. This was in New York State. I afterwards asked the Commissioner how it was he gave certificates to such, and he replied: "They are as good as the average," and certainly I have met since with many who were poorer, though that class did not comprehend, and could not master, a single branch they taught, not excepting reading. How could they develop the faculty of observation in others? They are not to be blamed for securing the places, but the system is faulty.

Ask the farmers and it will be found they prefer to have their boys taught the elementary branches and leave them to learn practically about "trees and crops and bugs." To touch the sciences in their course they regard as time thrown away in which they "better do something else." Nor is it any better with private schools. Pupils must be hurried off to college or rapidly prepared for business to begin the ladder while young. No time is allowed for any branches other than those which directly prepare for the end in view. The introduction of any such system as Mr. Garfield hints at, would be regarded as an innovation, and meet with opposition. I speak from experience. The school patrons should be censured.

As to Mr. Garfield's proposition to neglect, partially Arithmetic and kindred subjects, and substitute some undefined "dealing with natural objects," I stoutly protest against it. He leaves out of sight the fact that these branches are taught for two purposes; first, their practical value; second, the development of the reasoning faculty: and this last is by no means a small matter. The time allowed for this is between the ages of seven and seventeen years. Little more than a beginning is accomplished at the age of between twelve and fifteen years. Before this age the mind is too immature to open to the logic of natural life, or to observe it closely enough to feed and grow upon its study. But just as the pupil reaches this point in development, where he may pursue such a course successfully, the parent steps in and he must be hurried through his last two preparatory years. Indeed the farmer's boy is more frequently taken from school without these "extra years" as they sometimes term them. This is lamentable, it is true, but don't blame the teacher for it, and above all things don't ask him to neglect the rudiments for which his time is already too little.

Furthermore, it is better to leave the teacher, especially if incompetent, to pursue a well-de-

fined system, than to denounce or discourage him in it. Certainly till a better one is devised it is wisest not to take the present system from him, and hurl at him as a substitute high-sounding phrases which only confuse him.

Middlesex Co., N. J.

FALLACIES ABOUT FRUIT.

T. T. LYON.

A VERY common fallacy among the planters of fruit trees is the assumption that, because a fruit posesses qualities calculated to attract the attention of the mass of consumers in town and city markets, and has hence become popular with dealers, it is also to be accepted and planted by those whose purpose it is to produce fruits strictly for home use.

Such planters, including the mass of farmers, together with the owners and planters of village and city gardens, should ever keep in mind the fact that buyers in the markets, as a rule, select by the eye: and owing to this fact, many showy but austere, tough or indifferently flavored fruits, pass current at the fruit stalls, and, if the trees are vigorous, hardy and productive, they become popular with market orchardists; while other sorts, so nearly "Iron-Clad" as to succeed in unfavorable localities, from this cause, with only a secondary reference to their flavor or texture, acquire wide notoriety, as in the case of Ben Davis, Willow Twig, Wealthy, Edgar Red-streak, and several others.

Persons planting for the supply of a home should recollect that they, if any one, can afford to grow and consume the *best*;—that they need not consider for their purposes the ability of varieties to bear the rough treatment incident to the process of shipment, and that many of these "best varieties," from peculiarities of the tree, are not adapted to the market orchard; and that more of them hide their luscious qualities beneath an unattractive surface; while yet others are of such a delicate texture as to essentially unfit them to sustain the rough treatment of the marketing processes with impunity. The home planter, having properly digested these facts, may be impelled to ignore the lists of commercial planters, and to seek the information adapted to his needs from other sources; selecting sorts which, though less outwardly attractive or profitable, in a merely pecuniary sense, will yet, with lapse of years, grow in his esteem.

I think few observers will escape the conviction that some of our very finest fruits are falling into comparative oblivion, less because they are being crowded aside by newer or better competitors than for the reason that the *market idea* is being prominently put forward, not by commercial planters only, but by Horticultural Associations as well, that people are in danger of forgetting that there are really varieties better or more desirable for such purpose than the trash that, by commercial orchardists and dealers, is made to do duty as fruit to the motley crowd that haggle and jostle each other in the marts of our great cities.

MISTAKEN NOTIONS.

THERE is an idea prevalent among the great mass of cultivators of the soil, that whatever one of their number under his special conditions of soil, climate, etc, can successfully produce, another similarly circumstanced with regard to these conditions, should be able to produce likewise, without any reference to his particular fitness or circumstances. These forget that it has taken the successful man, perhaps, years to learn the right methods as well as to bring his soil to the proper condition, and to make needed improvements. Nor should it be forgotten that closeness of profitable markets and thrifty facilities for reaching them, are important conditions in this connection. Yet many imagine that by reading a faithful report of the *modus operandi* followed by the successful producer and adopting it, they would be able to secure a like success, forgetting that his experience has been accumulated by years of trial and from small beginnings. And if, under this impression, they rashly rush into new undertakings, what other result than disappointment or perhaps total failure, can be reasonably expected?

Who would expect that a machinist who had served an apprenticeship in learning to make a steam-engine would be able to compete successfully in watch-making with a watch-maker who had spent years in mastering his trade, and who, moreover, may have gained skill and knowledge by developing, in mature years, ideas conceived perhaps in his less experienced days? Yet it would be just as reasonable, and no more, to expect that any cultivator of the soil, without the advantage of previous apprenticeship, should be able to compete successfully with experienced producers in their specialties. I am willing to allow that there may be exceptions, but only enough to confirm the general rule. Natural tact and special circumstances may combine to render an attempt successful, but where one succeeds, ten fail; and it is, perhaps, more than doubtful whether the gains of the one compensate the community for the failure of the ten.

An apt illustration of this truth occurred a few years ago. Then every farmer, in some sections of the country had, according to his own notion, an opportunity of getting rich, of rapidly making any amount of money by planting and growing hops and tobacco. Many blindly rushed into these industries, reminding me of a little scene I have noticed more than once—where the leader of a flock of sheep feeding in a fair pasture, wandering along the fence or wall, espies an opportunity of breaking bounds and succeeds in doing so, when straightway the rest follow the leader with the exception, perhaps, of one or two that cannot get over. The result is uneasiness on both sides, perhaps greatest with the few left behind. But to the large majority of those who changed their ordinary occupations for the cultivation of hops and tobacco the result was so disastrous that history and tradition should hand it down as a guidance and warning to succeeding generations of agriculturists.

The successful production of any special crop, presupposes many favorable conditions, and especially versatility on the part of the producer. Aside from experience, perhaps more depends in such a matter on this versatility than on any other thing that could be mentioned. In undertaking a specialty, the cultivator should start from small beginnings, and necessary expenses should be provided for by adapting all conveniences especially to the end of securing success in the undertaking. As most farmers gain their money by a slow process, it would be to their interest to adopt new enterprises with much caution, feel their way carefully, and only when success is assured "rush in."

W. H. WHITE.

EDUCATIONAL FACTS FROM MISSISSIPPI.

NOTWITHSTANDING the large appropriations made for public schools in the State of Mississippi very few children get more than a bare smattering of education. The style of reading of the smartest scholar is simply execrable, and his ideas of Geography and Grammar little less vague than his notion of universal history. Five months out of the twelve is the time allowed for free schools, from the middle of January to the middle of March and from the first of July to the last of September. For services rendered in these free schools the teachers are allowed $30,00 for 20 days schooling of of 25 scholars and 6 cents for every additional scholar. If the average falls below 25, six cents a scholar only are allowed. Twenty-day reports are required, signed by the trustees and signed by the superintendent of education, in order to draw the money from the treasurer. There are many thinly-settled neighborhoods where the scarcity of children preclude free schools, and if teachers be obtained, they must rely on individual subscriptions, which are usually meager and difficult of collection. When, however, a teacher succeeds in getting such a number of names on his roll-call as will make the thing "pay," his soul, if it be a conscientious soul, will inevitably faint within him at the Herculean labor involved in drilling anything like accuracy of speech or information into the pupils' heads. They one and all have the lingo which free intercourse with ignorant white and colored people induces. Such expressions as. "T'aint no use; nobody don't do it;' 'I couldn't git to go;' 'I 'lowed to go,' I 'yeard him say so," are of continual recurrence. Send a scholar to the blackboard for exercises in Grammar and the intricacies of error into which he lapses are enough to discourage the most determined dominie. P. P.

HAY-CAPS.

As the time is not very far distant to haying, I wish to speak a word in favor of this useful article to the hay-maker. Until he has once used them, he does not know the value of them, and after once being used, I never knew a farmer to discard them. They will save their cost in a short time, by protecting the hay from dews and rains.

It is for the health of stock that they be provided with good hay and when one uses hay-caps he can add greatly to the value of his hay, after it is cut and cocked, by protecting it from ruin, as well as heavy dews. It often happens that a shower causes a great deal of extra labor, and this can be prevented, in a measure, by capping. Hay which is properly put up and capped, will pass through quite a long storm and come out in very good condition. Caps are also very useful to place over barley, or beans, while curing. They should be one yard square, with a pointed stick about 14 inches long, tied on at each corner. These are to tuck into the hay, to prevent the wind from blowing them off. A water-proof coating should also be applied to them. The following is a good and cheap dressing, and one it is said that will not crack: In one-half gallon of boiled linseed oil stir two ounces of soft-soap; apply with a brush to one side only, two or three coats. F. H. D.

May 24, 1878.

THE JERSEY CATTLE SALE.

THE sale of Mr. E. P. P. FOWLER'S last importation of Jersey cows was made at Messrs. A. M. HERKNESS & Co.'s Bazaar, in Philadelphia, May 21st. The following memoranda will show that prices were fair, and that the sale was not local:

Annie Laurie, J. B. Davis	$310
Annette, Jas. Young, Middletown	255
Antelope, S. C. Kent	285
Boulivot Lass, Jos. Lauer, Riverton, N. J.	245
Bluebelle, Johnson & Co.	280
Brunette, S. A. Brown, Lehigh Co	280
Bouley Bay Lass, J. B. Davis, Richmond, Va.	400
Christabel, M. Reeves, Richmond, Ind	300
Her b. c., H. Lippincott	40
Croppy, Caleb Wood, Columbus, N. J.	275
Diana, F. C. Biddle, Chadd's Ford	175
Fairy, S. C. Kent, West Grove	305
Grouville Lass, Mrs. M. N. Rogers	430
Jeanette, I. Morton, Mill Creek	215
Lucilla, S. C. Kent	230
Lucy, Elwood Evans, Marlton, N. J.	210
Maria, A. E. Kapp, Northumberland	300
Mignonne, James Young	250
Princess Mary, S. C. Kent	235
Priscilla, Mrs. M. N. Rogers, Wilmington, Del.	400
Rosanna, J. Macaulay, Philadelphia	150
Her b. c., same buyer	30
Rose, H. Lippincott, Philadelphia	290
Her b. c., same buyer	95
St. Catharine, W. Chapman, Bethlehem	190
Her c. c., 2 weeks old, John Patterson	160
Sylvia, Johnson & Co., New London, Ct.	400
The Countess, Elwood Evans	255
Venus, M. Reeves	240
Total for 25 two-year olds and 4 young calves...	$7,720

CATALOGUES, &c., RECEIVED.

THE WOOD SYSTEM of Harvesting Machines. To the Jurors in the class of Harvesting Machines at Paris Exhibition, 1878. A neat pamphlet in French and English, relating the success of the "Wood System" and a list of prizes taken all over the world by the Walter A. Wood Mowing and Reaping Machine Co.

THIRD ANNUAL REPORT of the American Veterinary Hospital, West 54th St., between Sixth and Seventh Avennes, N. Y., containing classification of 1478 cases treated at the hospital during the collegiate year ending March 1878, terms, etc., etc.

Pomological.

THE FRUIT-BELT OF MICHIGAN.

THIS name, given to the fruit producing region about St. Joseph in that State, has become pretty widely known over a large extent of country through agricultural papers and otherwise, in a general way, but its advantages have never been given in detail. St. Joseph, the center of the great fruit-growing operations, has always been placed in the foreground, and the high prices that land has obtained in that immediate vicinity, have been a bar to many men of small means going there, or seeking detailed information in regard to this fruit growing region, the best perhaps in the world.

It is now about twenty-five years since a few men in St. Joseph, favorably impressed with the locality as a peach-producing section, commenced putting out peach orchards of select fruit to supply the Chicago market, and they succeeded beyond their most sanguine expectations. The soil, generally, was a very light sand, worth nothing for farming purposes, but it seemed peculiarly adapted to peach-growing, the profits of which were so great that the land advanced from a mere nominal sum to two hundred dollars per acre for the wild, uncultivated tracts, while many orchards in bearing sold for as much as one thousand dollars per acre. The great success in peach-growing induced the planting out of other fruits, until apples, pears, plums, cherries and the small fruits, blackberries, raspberries and strawberries were in abundance, with nearly as much profit as the peaches.

As the "fruit-belt of Michigan" is formed by its proximity to the east shore of Lake Michigan, strangers would naturally inquire why lands should be so dear at St. Joseph, when there was so much land to be obtained up and down the shore from that point, at a much lower rate. St. Joseph being a lake port, with a good harbor for the accommodation of sailing vessels and steamers, was for years the only point of shipment for fruit from that region of country, and as the land carriage of fruit was expensive and injurious, lands only in the immediate vicinity of the town, were desirable for the purpose of raising fruit for shipment, and consequently advanced to extravagant figures.

The years 1870 and '71 saw the completion of the Chicago & Michigan Lake-Shore Railroad, from New Buffalo on the Michigan Central Railroad, to Muskegon, a lake port north of New Buffalo some one hundred and twenty-five miles, and the great manufacturing point of pine lumber for western Michigan. From New Buffalo to St. Joseph, a distance of twenty-seven miles, the railroad track is about one mile from the shore of Lake Michigan, opening up a region of country fully as good for fruit-growing as St. Joseph and vicinity, and it is of this point I propose to speak now, setting forth some of the advantages to be derived by settling there, even by men of moderate means.

Along the lake shore, between New Buffalo and St. Joseph, extending back from the lake some three miles, was a section of very heavy timber, that had been neglected for years by the pioneers of western Michigan. The soil of the land commencing at the lake, is a light sand, gradually becoming heavier until it merges into a loam, and usually at the distance of three miles becoming a mixture of clay and gravel. As fruit-raising had not become one of the leading industries in that part of Michigan in the early days of the pioneers, and as the lands a few miles from the lake were considered much better for producing grain, the region of country beyond this belt was early settled and improved, as much so as any part of Michigan, and farms are selling there at this time for from fifty to seventy-five dollars per acre, while on the lake shore they can be bought at from fifteen to twenty-five dollars. The cause of this state of things is this: For years before the building of the railroad along the shore of the lake, parties engaged in the hard-wood lumber trade located on that strip of heavy timber, manufacturing it into wood and lumber, and shipping it to Chicago, the present writer among the number. The transportation was conducted by building piers out into the lake, where vessels could come and load the products of the forest. With this branch of business came a class of people adapted to lumbering, but very poor farmers. Many of them bought land, and depended on selling their timber to meet their daily wants—a kind of hand-to-month way of living. On the opening of the railroad through that section, the timber had been exhausted, and the only alternative the settlers had, was to farm their land in their poor kind of way. To make up for deficiencies in receipts, many of them mortgaged their land, and allowed it to be sold under the mortgage foreclosure, and it is these lands to-day that are offered at such low prices; for most of them are held by Eastern capitalists who want to realize what money they can out of the land, but will sell it at very low figures rather than hold it.

On the opening of the railroad, the people of St. Joseph found there would ultimately be a "new deal" in regard to land, and that prices there must decline. Cheaper lands, as good for fruit-raising, or better than that which they held at two hundred dollars per acre, were brought into competition with it, while market facilities were nearly as good. The only lands that stood in the way were those between St. Joseph and New Buffalo, as the railroad in leaving St. Joseph for the north, ran farther from the lake, and in a few miles left the fruit-belt entirely. With the pecuniary interest St. Joseph has in her near-by land, she has managed thus far to keep this section of cheap lands in the background, so that but few know they can buy, within fifteen miles of St. Joseph for fifteen dollars per acre, land more productive and with as good market facilities as the districts where they used to ask two hundred dollars per acre, but are willing now to take something less.

In regard to the successful growth of trees in the section of country I have mentioned, I can speak from "the card," as I was in business there for twelve years. Apple trees of ten years' growth are as large as those of fifteen years in western New York, and I should be surprised if an orchard of six years' growth had not produced apples enough to pay for the land it occupied. I have in my mind now an apple orchard of twenty-five acres, set sixteen years ago, the trees of which are as large as many orchards in western New York which have been set twenty-five years, and the bark of those trees is as smooth as that on trees of five years' growth in the latter place. This orchard is on a farm of one hundred acres, with good buildings, the owner of which became involved, and it was closed out under a mortgage sale. Three years ago, it was bought by a party for thirty-five hundred dollars; last fall the apples were sold on the trees for nine hundred and fifty dollars, and one year ago last fall, for fifteen hundred dollars, with a prospect now of a yearly revenue from the orchard for years to come, of from fifteen to twenty-five hundred dollars—not a bad investment for these hard times.

Another farm of eighty acres, closed out under a mortgage sale, and lying across the road from this sixty acres, cleared, good barn, but no house, with ten acres of orchard, was offered by the mortgagee for two thousand dollars with no buyers. In the last two years the owner has received one thousand dollars for the apples on the trees, with no cost to him for picking or packing, and he has just found out that the lake shore is the place to raise fruit with profit; and now he declines to sell, but thinks of setting out the balance of the eighty acres to apple trees. He lives some twenty miles from there on a farm that cost him ninety dollars per acre, and I will venture to say he does not clear five per cent. on his home investment, while ten acres of the eighty on the lake shore, pay him twenty-five per cent. on the whole farm.

St. Joseph has nearly discontinued peach raising for the reason that the borer and curculio are such obstacles to success that the cost of producing is more than the fruit will bring; but apples, pears, plums, cherries, and all the small fruits are a success. If I were to engage in fruit-growing in that section, I should turn my attention chiefly to apples, pears and quinces, as they require the least care, and are much more profitable in view of the money and labor expended, where lands can be bought so cheap. The small fruits are never a failure with the exception of blackberries, and those have only failed once during my sojourn of fourteen years there. Strawberries produce from three to six thou-

sand quarts per acre, and the box manufacturers of St. Joseph will furnish you with sixteen-quart boxes and an outside case to pack them in for fourteen cents—less than one cent per quart. Peach baskets, also used for grapes, sell for from five to seven cents each.

As regards the country: it is all that can be required in the way of churches, schools, railroad facilities, etc. It is within four hours' ride, by rail, of Chicago, the metropolis of the west, whose daily morning papers reach there in the forenoon. The land in this locality is very good farming land. Parties living on it and cultivating it as it should be cultivated, will raise about as much as on the high-priced land of this State, so that men of small means who have money enough to make their first purchases and buy their trees, need not think they will have to wait for bearing orchards before receiving any income, for most of this land is in partial cultivation, and with industry they can more than make a living.

The lands held at twenty-five dollars per acre have usually comfortable buildings, and a good part of them are cleared, so there is no extraordinary outlay to get a place to live in after purchasing the land. Grain and stock are shipped to New York and Boston by rail about as cheaply as from western New York, and prices are about the same. LUMBERMAN.

Horticultural.

GARDEN TALKS AND WALKS.

THE BEECHES, May 25, 1878.

THE past winter was exceptionally mild, but a few cold snaps and the surface wetness of the ground were detrimental to some plants; in fact, altogether, hardy plants suffered more during last winter and early spring than they did the previous one. The spring opened unusually early, and excellent working weather has been the rule since early March. We have not had much hot weather so far; on the contrary it has been somewhat cold; nevertheless herbage and shrubbery are in growth considerably ahead of what they were this time last year, but forest trees are not much if any in advance.

A few cold mornings, a week ago, did considerable damage to strawberries and early vegetables in some neighboring localities, but right round here no perceptible damage has been done. There is every probability of an immense fruit crop, and vegetables look thrifty and flattering.

We have had a long period of labor in tarring our apple and elm trees to prevent the ascent of the canker-worm grub; we have been at it from last October till April. We tack a strip of tar-paper, about a foot wide, round the stem of the tree, and paint the paper every second or third day with a paint made of printers' ink and some cheap oil. This being wet and sticky, the grubs cannot pass it. Some people have zinc troughs fixed around the trunks of the trees and which are filled with crude oil. I prefer the tarring system though the troughs are certainly the least troublesome. The grubs were unprecedentedly numerous this spring. Gooseberry caterpillars are at work, but dry hellebore powder dusted on them, destroys them. Aphides, too, in many places are at work, but timely and frequent syringings of a weakly wash made from a solution of whale-oil soap and tobacco juice, applied to Roses and other subjective plants, have, thus far, kept the vermin outside our gates. The mildness of last winter is likely to be severely felt during the summer months in the multiplicity of the bug family, many plump and vigorous representatives of which have been exposed to light during the winter and spring, when we were digging, plowing, and turning over manure and compost heaps, and the potato gentlemen were the most numerous of all.

On account of the prevailing cold weather "bedding out" is not so forward as it was this time last year. Echeverias, Feverfew, and the hardier plants are being unreservedly planted, but we delay to plant out Alternantheras and the more tender things, for nothing is gained by committing tender plants to a cold soil. But we can help matters greatly by so hardening off our stock that neither sun nor exposure can hurt them after we do plant them.

About the first of June we usually turn our Palms, green-leaved Draceenas, Ficuses, etc., out of the glass-houses on to the terrace in front, and as we have no means of shading them from sun, the leaves generally got a little browned. By ventilating day and night for a month ahead, we greatly alleviate the evil that might be. Were the plants movably small, we would remove them from the green-houses to under the shade of trees for a little while before fully exposing them, and thus secure perfect immunity from scalding.

Notwithstanding the beauty of tender plants we have a passionate fondness for hardy ones, hence a varied and extensive collection of them. As I have encroached so much on your space already I will only mention a few of our choicest specimens now in perfection:

TREES.—Fraser's Magnolia, the Yellow Cucumber Tree, Judas Tree, Flowering Dogwood, American Black-thorn and English Hawthorn.

SHRUBS.—Rubus deliciosus, Exochorda grandiflora (magnificent), Lilacs, Tartarian Honeysuckle, Snowdrop Tree, Calycanthus, Kerrias, Spiræa obovata, prunifolia and hypericifolia, Azalea Pontica, mollis and undiflora, Pyrus arbutifolia, Daphne Cneorum, Rhodotypus Kerrioides, Nevinsia Alabamensis and some of the earlier-blooming Rhododendrons.

HERBACEOUS PLANTS. — Stellaria Holostea, several kinds of evergreen Candytuft, Columbines in great variety, European and Asiatic Globe-flowers, Anemone Pulsatilla, Bleeding-Heart, Pursh, Shooting-star, tree Pæonias, Polemonium reptans and carneum, 21 kinds of American Violets, Cypripedium parviflorum, pubescens, candidum, arietinum and acaule, Armeria vulgaris, Irises in variety, round-leaved Saxifrages, Golden Corydalis, Fire-pink, early Phloxes as subulata, reptans, amœna, and divaricata, Ten-o'clock, Soleman's Seal, Sedum ternatum, Saponaria ocymoides, Vesicaria utriculata, Doronicum Caucasicum, and many others. The first rose of the season is Rosa acicularis, a Siberian species.

Among vines, the Pipe Vine has been in bloom since some time, Wistarias and Akebias are at their best, and the Matrimony Vine is full of little blossoms. As a finely colored foliage shrub, Acer polymorphum dissectum has no seasonable equal; its leaves are deep crimson.

MASS.

PLANT STRAWBERRIES EARLY.

WE occasionally are advised to set Strawberries early, and thus procure a partial crop the first year.

The advice to set as early as the land is in good condition, is sound, but what fruit one gets the first year is at the expense of the future crop. Better cut off all the blossom buds, and thus throw all the strength of the roots into the growing plants. This "first" crop will at best be light and inferior. Have patience until the second year, and you shall have your reward.

NELSON RITTER.

[THE above with several other valuable timely articles was mislaid, for which we apologize to our valued contributor.—EDS.]

EXTRACTS FROM CORRESPONDENTS' LETTERS.

THE KITCHEN AND FLOWER GARDENS IN THE FAR SOUTH.

HARRIS CO., Texas, May 19.

WE are badly in need of rain here. We did not have any good soaking shower for three three months. While the field crops are not seriously hurt as yet, by this dry weather, its effects are felt in vegetable and flower gardens. The first green corn is sold in market. Of this, for the table, gardeners generally plant only the common field varieties. The taste of Texans is not, as yet, brought to such a fine point as to esteem and give due preference to the improved sugar varieties. It is quite different with tomatoes: when in their season, nothing short of a fine-grown Trophy is salable. But, unfortunately, this season is very short; even young plants refuse bearing during the hot days after June. A tomato that would keep bearing through the whole of summer would be a boon. Hitherto we have none that comes up to this requirement.

Of all the different varieties of melons that come to this market in their season, I consider the Peerless the best in many points. The so much lauded Gipsy is nothing but a coarse-meated, over-grown monster, handsome to look at, but insipid and stale to the taste.

The onion crop is made; and one that looks at some of these monster bulbs — sometimes measuring six inches through, would be at once convinced that as good and large an onion may be grown here, in one season from the seed, as in any of the New England States. Wild dewberries and blackberries have been peddled round in large quantities since the last week of April. It is the colored population that monopolizes this industry. There is no prospect for a small-fruit culturist here. These berries go directly from the picker to the consumer; they sell at five cents per quart and will, before the season is gone, come down to about half this price. Chickasaw plums are ripening; this is the only cultivated species of this fruit, that will bear here. Judging of the great variation in taste, size, color, form and adhesiveness of stone manifested in seedlings of this plum, it undoubtedly would by proper selection be susceptible of great improvement.

Gladioli are in full bloom; they are rather impaired by the unusually dry weather they had through the whole period of their growth. Cape Jessamines are loaded with flowers. This is the flowering bush, *par excellence*, of Texas. It takes about the same rank among shrubs here, as the Lilac does in the Northern States. It is, after the planting of a rose-bush or two, the first thing used to adorn the door-yard even of the humblest cottage. Sweet Myrtles are just through blooming. Magnolia grandiflora, the queen of broad-leaved flowering evergreen trees, is in its full glory, exhibiting its grand fragrant flowers in profusion. These trees continue to bloom from three to four months constantly; much to the delight of a horde of sable urchins, who created quite an industry by picking the magnolia buds, arranging about half a dozen to a bouquet and wrapping them up with a little gray moss; in which shape they are sold to railroad passengers coming from localities where the Magnolias do not exist. G. MARTI.

BLOOMINGTON, Ill., May 24, 1878.

How pitiful the ravages of tigers and serpents in Asia, and from wolves and bears in Europe! What sort of people can the inhabitants there be that give up to such pests—and why don't thousands of our American and English and German hunters emigrate there and *clean 'em out?* W. P.

Floricultural.

LOBELIA FROM SEED.

W. C. L. DREW.

A COMMON complaint among amateurs is the difficulty of germinating Lobelia seed. Many fail in raising these plants, who are successful with much more delicate subjects. The reason for this failure is not far to seek. Those having experience with fine seed, usually call into use the aid of a hot-bed or cold-frame. The results may readily be anticipated: Cinerarias, Calceolarias and such like, being subtropical plants, thrive; Lobelias fail. The fact is Lobelias are almost hardy plants. The seed will germinate fully in a temperature a few degrees above the freezing point. Consequently if sown in the close, moist air of a hot-bed or cold-frame, the seeds vegetate quickly, and also "damp off" almost as soon as up. Thick sowing also favors damping off. Thus between thick sowing and an excess of heat and moisture, Lobelia seeds too frequently fail to produce a crop.

The proper method is to sow the seed thinly in well-drained pots or pans and place on a shelf in a cool greenhouse, or in some cool, lightsome situation. The soil is of secondary importance, one composed of equal portions of leaf-mold, garden soil and sand suits admirably. The pot or pan need not be more than half filled with soil, drainage occupying the balance of space.

The seed is very fine, and should never be covered, but merely sown on the surface and pressed in with a smooth board. But little water should be given until they commence to grow freely. Lobelia seed can be sown at any time by placing in a cool place. Some prefer to sow in October; others in April; any time from October to April is to be preferred to later in the season. As soon as the seedlings can be handled, they should be pricked out into pans or pots, setting an inch apart. Early plants grow stronger and bloom sooner and more profusely than those raised later in the season—but do not hurry the Lobelia. Queen Victoria, Blue Stone, Emperor William, are popular varieties.

El Dorado, Cal.

Entomological.

HELLEBORE AND THE CURRANT-WORM.

T. H. HOSKINS, M. D.

I FEEL obliged to demur to Mr. Mann's statement that "the most certain, economical and safe" way of destroying currant worms is to pick them off. There are many plantations of currants and gooseberries, near our large towns and cities, of an acre and upwards in area. If we were compelled to depend upon hand-picking, the business would have to be abandoned on account of the cost, besides being so imperfectly done as to be very ineffective. Upon a few bushes, by a careful gardener, it is practicable; but even in such a case the proper use of hellebore is preferable.

But it seems very difficult to get into the public mind the proper use of this invaluable insecticide. It is an active drug, it is true, and a "poison" just as tobacco is a poison, and no more active upon the human system. There does not seem to me any probable, hardly any possible way, in which the use of it for destroying currant-worms can inflict serious harm upon any but the worms themselves. Used as by those who understand the quickest, simplest, cheapest and most effective way of applying it, there is no need of even causing a sneeze.

That way is simply thus:—Have a ten-quart sprinkler with a moderately fine rose; into this put as much of the pure powdered hellebore root as can be taken upon a large table-spoon. (In my currant plantation I carry the hellebore in a covered tin-pail, to prevent waste by the wind, and have with it a horse, a stone-boat, and a barrel of water). Add to the hellebore in the sprinkler a quart of water, and "slosh" it around until it is well mixed. Then fill up the sprinkler, and quickly and lightly, yet thoroughly, wet every leaf of your currant and gooseberry bushes. Sprinkle from the outside of the bushes, all around, turning the rose toward the center. In this way you wet without waste.

The time to do this is when the bushes are just beginning to go out of bloom. A dry day should be chosen, and if properly done, with good hellebore, only one general application is necessary. The first brood is so completely destroyed, before it has time to inflict injury, that it is hard to believe that there were any there, unless you have looked for and found the eggs, and the little holes made by the worms before they scatter. The hellebore left on each leaf by the drying of the water remains all summer in full efficacy, with slight exceptions here to be noted. Of course, the leaves that come afterwards do not have it; but any second or third brood does not spread far before reaching leaves that do have it. And under the drip of the trees it is washed off. It is only in this last case that I ever have to make a second application, and I do not propose to grow my currants and gooseberries under trees hereafter. It is possible that very heavy and long-continued rain may sometimes have a like effect, but I have had no such experience in 14 years. The powder sticks tightly, to the hairy currant leaf especially, when it has once dried there.

It is entirely unnecessary, as many direct, that the hellebore be applied to the under side of the leaf. The worm eats clean, takes the whole leaf, and will get his dose as well from one side as the other. Applied at the blossoming season, no hellebore adheres to the fruit, as there is no fruit to adhere to. I think there is no danger at other times, as I have never been able to make it adhere to the smooth skin of the berry. Even if it did, the portion that would reach the berries when applied as above directed would be so small that an eater would kill himself eating currants long before he got enough hellebore to hurt him.

Newport, Vt.,

Industrial Topics.

OPENING OF THE FRENCH EXHIBITION.

PARIS, May 20th, 1878.

ALTHOUGH the weather was bad, the work in the Exhibition incomplete, and the arrangements for the *fete* a trifle defective, still the opening ceremony on the 1st of May was certainly a success. The threatening clouds did not prevent the light-hearted inhabitants of the gay French capital from turning out in tens of thousands to take part in the festivities; and every approach to the Great Show was crowded with spectators on foot and in carriages, while the building itself and the surrounding grounds, were thronged with those fortunate enough to have obtained tickets of admission to witness the proceedings of the day. From early morning the whole city was dressed in holiday attire, banners and draperies were displayed in every direction, while the illuminations after nightfall were universal and, in many cases, extremely brilliant.

Shortly before two o'clock in the afternoon, Marshal MacMahon, the Prince of Wales—wearing a field-marshal's uniform—the Crown Prince of Denmark, Don Francisco D'Assisi of Spain, the Duke of Aosta, Prince Henry of Holland, and the Grand Duke of Lechtenberg, together with the foreign ambassadors, the high functionaries, and the senators and deputies, assembled in the Reception Hall of the Trocadero. When all had arrived, a move was made to the platform on the garden front of the building. Here the Marshal was greeted by M. Teisserene de Bort, Minister of Agriculture and Commerce, who read an address, at the close of which the Marshal stepped forward, and in a loud voice exclaimed: "*L'Exposition est ouverte!*"—the Exposition is open—and at the same moment the guns of the distant forts boomed a salute, the magnificent cascade and fountains poured forth a sparkling flood, the band of the Garde Republicaine struck up Gunod's "*Vive la France*," and a sharp shower, the third that morning, drenched the admiring crowd.

Then was formed the procession to visit the main building across the river on the Champs de Mars. First came the Prefect of the Seine and the Prefect of Police followed by hussiers; then came Marshal MeMahon, with the Prince of Wales on the one hand and Don Francisco d'Assisi on the other, and abreast of the Marshal, the presidents of the Senate and Assembly, jealous that the Executive should not on such occasion be more prominent than the legislative departments of the government. After them walked a score or so of Princes and Grand Dukes, followed by Mr. Krantz, under whose charge the Exhibition was erected, together with many Commissioners of foreign countries.

Descending the steps, the *cortege* passed across the Bridge of Jena to the Vestibule of the Street of Foreign Nations, where the Marshal and his guests halted, while, amid torrents of rain, the various Commissioners, in every variety of national costume, hurried forward to the ir respe

tive sections in order to be ready to receive the Marshal on his round of inspection. Presently MeMahon and his suite again moved forward along the Street of Foreign Nations, pausing at each section to congratulate the Commissioners, and, finally, after visiting several French industrial sections, he quitted the building amid loud cries of "*Vive la Republique.*" The foreign princes were escorted to their hotels by detachments of cavalry.

After the procession had passed through the Foreign Sections, the gates were thrown open to the public, and the "Opening of the French Exhibition" was a thing of the past. TREBER.

Dairy Husbandry.

CHAUTAUQUA COUNTY BUTTER DAIRYMEN.

CHATAUQUA CO., N. Y. May 26, 1878.

CHAUTAUQUA County, situated in the western part of the State of New York, is not so much of a grain-producing, perhaps, as a dairying section. In the way of manufacturing fine butter and cheese, we think it only excelled by Orange and Herkimer Counties, which are probably the largest in the State. Chautauqua dairymen are enterprising and each one tries to excel his neighbor in the art of *fine* butter making. Many farmers keep an extensive dairy of cows, their butter receipts alone amounting to quite a large sum during a season. Farmers are becoming awakened to the fact that a good cow can be kept as cheaply as a poor one, while the yield of milk and butter is much greater. Much fine stock is therefore being raised, and only calves from the best cows are kept, which is good economy.

On account of the low price of butter at present, however, several dairymen have abandoned the idea of butter making and have gone into the manufacture of cheese, and a number of new factories have been started. Others still continue butter making believing it will ere long be in good demand and bring a fair price. Chautauqua County butter is generally known as A. No. 1, and in most cases it is sold at good figures in market.

Were it not for the butter and cheese product some farmers would find it a difficult matter to obtain a livelihood from off their farms. Scarcely any grain is raised but what is consumed at home, while a large quantity is imported from the great grain producing sections of the West, and this is quite a heavy item of expense during the year. Improved thoroughbred stock is being constantly added to the dairy of cows, and many believe that it pays to keep only the best.

Within the past few years, fruit growing has become quite an important part of farm industry, the apple crop of Chautauqua County amounting to several thousand dollars, last season—a great help to farmers in these hard times. The low price of butter this spring, together with the prospect of a small crop of hay, has given many farmers the blues, although really they have little reason to complain.

It is generally believed that as good an article of butter and cheese can be produced in Chautauqua County as anywhere, and more and more is being produced each year, thus inaugurating an important branch of industry.

M. L. DORMAN.

Industrial Implements.

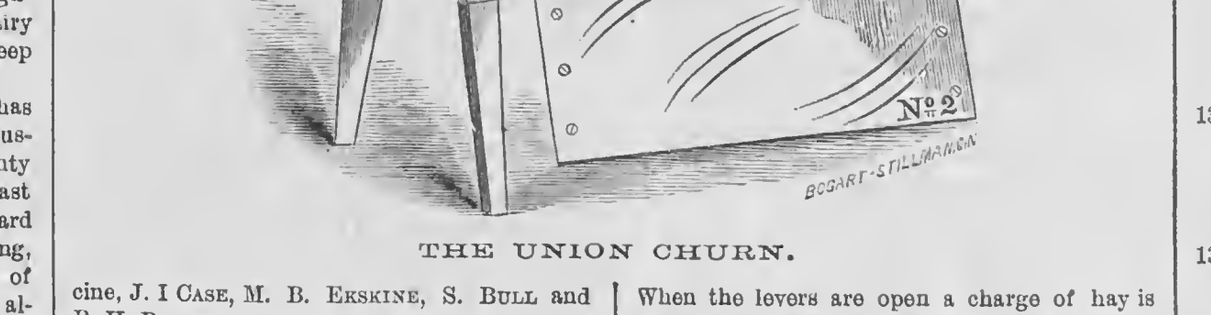
THE CASE WORKS.

THE magnitude of the interests involved in the manufacture of farm machinery is strikingly illustrated in a single instance,—the threshing machine works of Messrs. J. I. CASE & Co., at Racine Wis. The illustration shows the works as they are to-day—the chief feature of Racine's extended industries, and probably the largest threshing machine establishment in the world.

The products of the Case works sustain the highest reputation, and the demand ran up to eighteen hundred and forty-five threshers last season, not to mention horse-powers and one hundred and nineteen steam engines, which latter item will run over two hundred this season. Mr. CASE commenced business in 1842 in Racine and has continued steadily in the same occupation to date. As the transactions of the firm grew, partners were added, Mr. CASE always selecting gentlemen who had been in his employ, thus securing the kind of talent and energy that was best adapted to the business.

Details give, perhaps, the best idea of what a large establishment it requires to turn out eight complete threshers, and horse-powers per day; and annually two hundred threshing engines, one hundred and fifty thousand dollars' worth of repairs, besides over two hundred heading machines for the Pacific Coast—to which the State fair of California awarded the Gold Medal.

Upwards of 400 men, with a pay roll of $20,000 per month; with shops and warehouses covering 15 acres; involving a capital of over $2,000,000; consuming yearly 1,000, tons of iron 3,000,000 feet of lumber, $50,000 for belting, $25,000 for paint, $50,000 for freight, $20,000 for printing and advertising, $2,000 for postage stamps; with over 400 agencies, extending throughout the breadth and length of the land are the items that command the time and attention of the four representative men of Racine, J. I CASE, M. B. EKSKINE, S. BULL and R. H. BAKER.



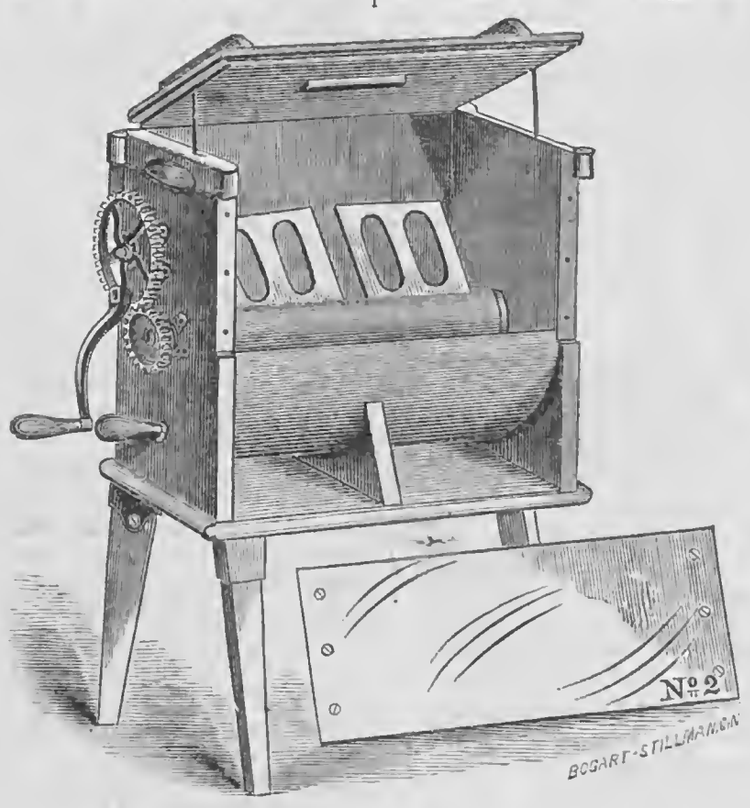
THE ERTEL PRESS.

THE ERTEL PRESS.

MR. GEO. ERTEL of Quincy, Ill., has invented a portable, economical press, adapted to pressing hay, straw, moss, etc. The aim of the manufacturer seems to have been to crowd into the smallest compass the most simple and effective machinery adapted to the work. The result is that the "Economy" press operated by a man, a boy and a horse, will perfect upwards of sixty bales of hay in ten hours—bales running from 175 to 220 pounds. The strong features of the press are its simplicity, portability, compactness, light weight (about 3,000 pounds) and low price.

Those having to do with the hay crop know that an attractive package has an additional value above the worth of the material; at least it is so in the New York markets. Consequently a press that meets its maker's claims to being always ready for work within itself; that can be moved from stack to stack quickly without waiting on steam or horse-power apparatus with which to operate it; that is worked without gearing calculated to multiply friction, and that permits of the operator attending to his duties without the aid of platforms and other cumbersome, stationary contrivances, is a desirable piece of agricultural machinery.

The illustration shows the construction, and position of the press when at work. The levers are drawn in with a chain that is fastened to the power, working direct without pulley or sheave. One horse is hitched to the end of the sweep, and when pulling to the right opens the press, and shuts it by reversing the draft to the left.



THE UNION CHURN.

When the levers are open a charge of hay is placed in the press, and a door shut which locks itself as it closes. This right and left motion of the horse is repeated until the bale is of the proper dimensions, when it is wired and thrown out and ready to be packed in a car. A box car will contain from 110 to 125 bales. The size of the bale in press is 19-23x36 inches—a convenient size.

The "Economy" commends itself for the features above enumerated, and the fact that it has successfully stood the test of practical hard work. Mr. ERTEL will send circulars and complete information to those who desire them.

THE UNION CHURN.

Of the making of churns, like the making of books, there is no end, and it is well that it should be so. The most hopeful sign of civilization is a man paying his debts, and buttering his bread. To have butter worth the name one must use a good churn. Such an one is the "Union" made by the Tiffin Union Churn Co., Tiffin, Ohio. The illustration we give needs no letter-press explanation. The "modus of the operandi" as has been said, is apparent.

A word concerning the company: SHAFFEL & BALDWIN in 1864 commenced making this churn in a small way, and had hard work introducing it to a prejudiced public. They kept right on, and in 1875 sold out their interest to the present company of which A. C. BALDWIN is president. The extent of the business has commanded new and spacious brick factories, and at the present time there are upwards of sixty thousand of these churns in use. These figures are more convincing than words. Circulars may be had by writing to the company.

RUSSELL AND CO.'S THRESHER.

THE Improved Thresher turned out by RUSSELL & Co., Massillon, Ohio, should command the attention of large farmers and threshermen. It is very simple in construction, has few parts subject to wear, does not require exceptionally skilled men to run it, and does satisfactory work in the large as well as the small grains.

Its capacity is about one hundred bushels of wheat and two hundred of oats per hour; and its claim to superiority the ease and small cost by which this gratifying result is obtained. As a thresher is not so easily procured as a mower, for instance, it needs no suggestion on our part to those intending to invest, that it is well to look before leaping; and the way to do it is to get all the circulars and information procurable before deciding.

Various.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

NEW HAVEN, June I, 1878.

Bulletin No. 14.—Fertilizer Analysis.

132. PINE ISLAND GUANO. Manufactured by Quinnipiac Fertilizer Co., New Haven. Claimed 4 per cent. Nitrogen, 3.5 per cent. soluble and reverted Phos. Acid, 2 per cent. Potash. Sampled May 13, by E. H. Jenkins, from lot in transit to purchasers.

137. STOCKBRIDGE FORMULA FOR CORN. Manufactured by W. H. Bowker & Co., Boston, Mass. Claimed 5.75 per cent. to 6.50 per cent. Nitrogen, 3 to 4 per cent. soluble Phos. Acid, 6 to 8 per cent. total Phos Acid, 7 to 8 per cent. Potash. Sampled May 22, by Andrew's Bros., Southington.

139. E. F. COE'S AMMONIATED SUPERPHOSATE, from J. B. Barstow & Co., Norwich. Claimed, available Phos. Acid. 9 to 11 per cent. Nitrogen, 2.1 to 2.9 per cent. Sampled May 24, by J. B. Barstow & Co.

134. MURIATE OF POTASH, from stock, of Geo. W. Miller, Middlefield. Sampled May 7 by R. S. Hubbard, Middletown.

138. MURIATE OF POTASH, from Mapes' Formula and Peruvian, Guano Co., New York. Claimed 5 per cent. Potash. Sampled May 22, by John S. Kirkham, Newington.

136. IVORY DUST. Sampled May 22, by L. J. Platt, Deep River.

140. PETER COOPER'S PURE BONE DUST, from G. H. Glover, Branford. Sent May 14, by Killingworth Farmers' Club.

	132	137	139	134	138	136	140
Nitrogen	4.35	5.89	2.35			1.37	1.41
Soluble Phos. Acid	1.28	2.01	8.60				
Reverted	1.65	3.35	0.76				
Insoluble	1.25	1.53	1.91			12.43	26.10
Potash	*3.29	*5.00		**43.08	**56.17		
Moisture						10.64	
Calculated value	$34 01	46 37	34 94	36 62	47 74	22 33	41 62
Cost	$42 50	50 00	38 00	45 00	+38 00	‡	30 00

* Potash is valued at 7¼ cts. per lb. and evidently too high.

** Potash is valued at 4¾ cts. per lb. In 138 potash costs 3 6-10 cts. per lb.

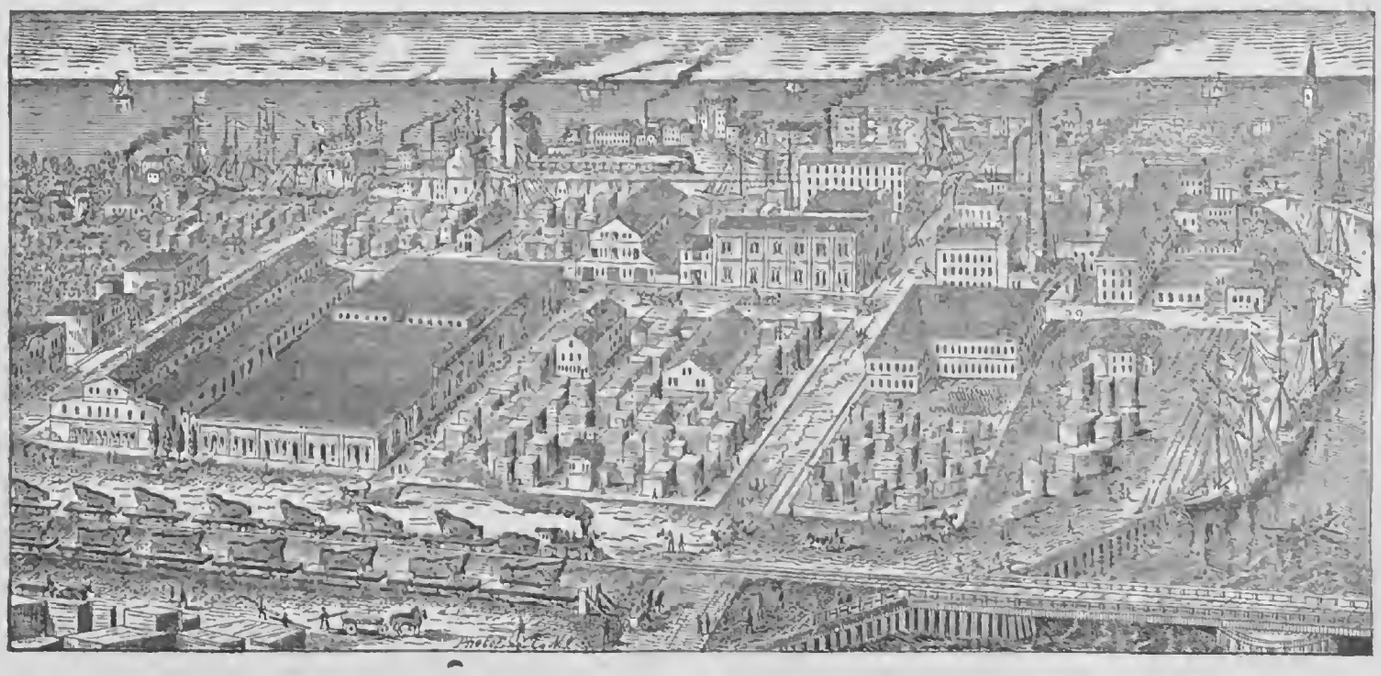
+ $38 00 in N. Y., $40 00 in Hartford.

‡ Is considered worth half as much as bone-dust.

S. W. JOHNSON.

FOR a farmer to get rid of all his money, we know of no way more certain than for him to buy a stock of dry goods and then attempt to sell them. This mode of procedure is both quick and sure. We have seen many instances of this kind and it has not generally taken over six years—sometimes less, rarely more. None but trained experts and those with a natural taste for the business can permanently succeed in selling dry goods. If this can be called experimental agriculture, we may add that there is no more need of repeating the experiment.

IN the use of bone manure it is well to bear in mind that the more finely it is pulverized, the more quickly it acts. The effect of finely ground bone may not be noticeable for more than two or three years, but a quick return for the capital invested is made. Coarser bone may be far less observable in its effects upon crops, but of course, those effects will continue much longer.



THE WORKS OF J. I. CASE & CO., RACINE, WIS.

The Querist.

QUERIES ON DISEASES OF CATTLE.

ANSWERED BY D. E. SALMON, D. V. M.

Stomach Ailments.

G. Penrose, Westchester Co., N. Y., says:—The past week one of my cows and a yearling heifer refused food. I called in a veterinary surgeon, who, discovering that there had not been for some time any action of the bowels, prescribed purgatives. These were given, but with no effect, the calf dying the following day in great agony. In order to ascertain if possible the cause of death, I had the calf cut open, but the surgeon evidently being out of his element, as he apparently knew no more of the matter than I did, could not determine the cause of death. The heart, liver, lungs, and small intestines seemed in a healthy condition—the first stomach was much distented with food, the others apparently healthy save the last—of this, the membrane dividing the interior of it, was parched up and broke readily at a slight pressure, as if rotten, while the contents were as dry as if the matter had been expelled for days. Pray inform me, through the columns of your paper, whether I have described the normal condition of this stomach, or if it became so from disease, and the name of the disease.

The cow died the following night. I had at first thought that these animals gained access to some paint that was in the barn, but no trace of this could be found in their bowels, nor did they seem to suffer from thirst; a symptom always accompanying, so I understand, poisoning.

ANS.—It is probable these animals were affected with impaction of the third stomach, sometimes called grass staggers. It is often caused by a sudden change from dry food to grass; it may also be caused by feeding on dry, indigestible food, by a deficiency of water, and by lead poisoning. The stomach spoken of as the last, was probably the third or manifolds, the contents of which are always found in a dry, hard, caked condition in this disease. The epithelial lining of the first three stomachs is readily removed in large pieces, in all cases where there is congestion of the mucous membrane of these organs; and even the membrane of the fourth stomach may be softened by congestion or inflammation. Purgatives (Glauber or Epsom salts with common salt), and stimulants (Ginger, Turpentine, Nux Vomica), accompanied with injections, with counter-irritants when there is much irritation of the stomach, should be used as treatment.

Glanders—Heaves.

Van, Brown Co., Wis., says that one of his neighbors lost a horse lately by a disease about which opinions in his neighborhood differ. She was sixteen years old and had had the heaves for a long time; she had refused oats or any feed but hay for about a week or ten days; had breathed with difficulty, a sort of pant, with now and then a long breath like a warm, tired dog; a thick, yellowish discharge ran from the nostrils all the time. 1. Was it glanders? 2. He has a horse eleven years old that has the heaves slightly, and he asks what can he do to cure him?

ANS.—1. This horse may have had glanders, or the discharge might have been caused by simple bronchitis; there is often a discharge from the nose in connection with the heaves. It is, therefore, impossible to decide as to the nature of this disease without knowing whether or not the peculiar symptoms of glanders were present. In all cases where glanders is suspected, it is the duty of the owner to have the animal examined by a competent practitioner; and in case the animal is thus affected, it should be destroyed at once. Glanders is one of those fatal, contagious diseases, which is not only communicable to other animals, but even to people; and it should be understood by the owners of glandered horses that, in keeping them, they are exposing themselves to the contagion of a disease which, if contracted, is no less fatal or horrible than hydrophobia itself. Glanders is diagnosed from the peculiar, sticky character of the discharge from the nose; from characteristic ulcerations of the mucous membrane of this part; and from the hard, nodular, enlarged condition of the lymphatic glands under the jaw. It is absolutely incurable, and its treatment should never, under any circumstances, be allowed.

2. Perhaps the best treatment for this trouble is a run on natural pastures. If the animal must be kept in the stable and worked, it should be fed on oats and roots, (particularly carrots), with a very little of the best hay and that given at night, and a limited supply of water. The greatest care should be taken to have the animal in the open air as much as possible, day and night, or at least to have the stable *thoroughly* ventilated.

Wintering Dahlia Bulbs.

J. W. G., asks how best to winter Dahlia bulbs. She had them in a cool place, but they would dry up and become hard, or else mold and rot. They were raised on very rich ground and grew large and thrifty.

ANS.—Take them up after light frosts, wash and dry. Place them in sand and keep in the cellar. We think there will be no further difficulty.

New York Steamship Companies.

Edwin Hope, Geauga Co., Ohio, asks for the names of the chief steamship lines sailing from this port.

ANS.—Foreign Lines: Cunard, White Star, Williams & Guion, National, Inman, State, Anchor, North German Lloyd, Hamburg, French, White Cross.

Coastwise Lines: Pacific Mail S. S. Co., C. H. Mallory & Co., Clyde, Morgan, Alexandre, Murray, Ferris & Co.

An Ice-House.

Jas. Kyger, Clinton Co., Indiana, says: I built me an ice-house and milk-house combined, last fall. It is built 10x15 feet, out of rock, with a board partition in the middle—the front for milk, and the rear for ice. The milk-house part is about eight feet deep inside; the ice-room six feet. I didn't get any ice to put up last winter to try it. Now, I want to ask if it would be best to plank the floor of the ice-room, or just put the sawdust on the ground sloping towards the milk-room. I have a good tile-drain from the bottom of the milk-room, and I put in gravel and laid the floor with brick. The entrance to the ice-room is at the north side, and to the milk-room 'tis at the east. The milk-room is about four feet below the ground and the ice-room two feet below.

ANS.—By all means, we should plank it. Sawdust, when packed too hard, loses much of its non-conducting power.

Beans.

E. L. C., Skaneateles, N. Y. asks, whether beans yield better sowed in drills or planted; 2, what is a good fertilizer for beans.

ANS.—Pole beans we think will yield as well if planted in hills; the dwarfs will yield more in drills. Potash (ashes) is the best special manure.

Bone Fertilizer.

Rural Reader, Blackstone, Ill., asks, 1. the difference between superphosphate made from raw and burnt bone; 2. how bone-black is made; 3. the difference in nitrogen between the shank and rib bone.

ANS.—There is no ammonia in burnt bone. Otherwise it is nearly the same. 2. Bone-black is obtained by grinding the product of bones burned in a close vessel at a red heat. 3. We do not know.

Miscellaneous.

Frank H. J., Warren Co., Va., asks the name of a reliable work on farming generally, including diseases of cattle, etc., for the purpose of canvassing the local agricultural community for it, in connection with other books and periodicals.

ANS.—We would refer him to The Orange Judd Co. of this city. They sell all such books; we sell none except the RURAL.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JUNE, 1ST.

S. B. P.— W. J. B. — L. A. R. — Wm. G. L. D. — T. H. H.—A. L. J.—J. W. G.—F. H. D.—E. W. S.—B. C. D. — R. T. —M. B. C.— F. D. C. — L. E. Y.—E. H. S.—W. L. D., many thanks—A. M. Van A.—M. O.—C. D.—M. W.—I. P. R.—T. T. L.—D. E. S.—M. L. D.—V. D. C.—F. W. B.—"Hector Bertram"—F. K. — E. F. M. — L. S. — "Rose Geranium" — W. H. W. — L. G. S.—L. G. C.—S. E. H., thanks—M. A. R.—E. S. M.—W. F. — A. L. W.—M. B. P.—C. A. G. —N. D.—E. A. D.—Threber.

Everywhere.

HERDMEN'S LIFE ON THE PLAINS.

ELBERT CO., Colorado.

THE traveler on his way across the plains by the way of the Kansas Pacific Railroad, suddenly opening his eyes in the morning, finds himself on the Great American Desert. He is amazed at the vast extent of country rolling on and on like a great ocean, with nothing to break the monotony. He cannot realize that there are people living here a life as full of interest to them as the life he lives in the East is to him. But were he to leave the train and take one of the horses he sees hitched to a post at the little way-side station, and canter across the prairie to a little ravine where there is water to be had, he would come upon a scene as full of life and interest as any he had left behind.

It is the midst of the "round-up" season and one has just come in. The visitor will not find a man that has time to speak to him, but he will probably hear one cow-boy call out to another. "There comes a tender-foot!" It is almost night and the boys are tired and hungry, but the cattle must be corraled before dark, and if the stranger does'nt keep a tight rein on his horse, it will join in the chase after that refractory steer that has broken loose from the herd, and with head down and tail erect gives promise of a fleet race, but he is soon headed by an expert rider and brought back.

The horses know their business so well that if a beast breaks away from the herd, almost before you are aware of it, your horse is after it. By keeping the herd closely surrounded and pushed forward, the head ones finally make a rush for the corral gate, when all the rest follow. Then the cow-boys start for the ranch and supper. But how rough and dirty they do look in their leather over-alls and their sombreros slouched over their sunburnt faces, and their spurs clanking at every step! Their first care is to loose their long lariats from their saddles and stake their horses where they can get good grass. Then they go for the pump and should there happen to be a lady at that ranch, there will be a lively time with wash-basin, towels, and combs, and a few minutes afterwards you would scarcely recognize them as the same men. They come in polite and affable, and if they see that the lady of the house is busy caring for their comfort, they go right in and help her to wait on table and wash dishes or cook; for it is a rare thing to find a cow-boy that cannot cook.

Early next morning the branding is to be done, and soon there is a big fire out at the corral, but you will not enjoy seeing the hot irons put on the poor struggling calves. The cattle are started to running around the corral; then the rope whirls through the air and settles on the neck of the victim, and often when the cow hears the cry of her calf, she makes a dive at the men. Then there is a scramble for the corral fence; and if you are where the "tender-foot" generally is—on the top of the fence out of danger—you will have a good laugh. Sometimes the cow becomes boss of the situation; then some of the boys mount their horses, go in, and driving her into one corner, hold her there until her calf is released. The cows will not attack a man on horseback.

As soon as the branding is done, the boys are off to another "round-up" and by that time, if business is not driving, you will not want to return and take the next train, but will join the boys; and if you do, make up your mind to take all kinds of weather, faro, and jokes in good humor, and do not put on any airs of superiority over the cow-boys; for you are no better out here than they are and if they think you are putting on airs, they will persuade you to mount on a bucking horse and you will get your white shirt soiled. N. V. SNYDER.

CROP PROSPECTS IN NORTH MISSISSIPPI.

DE SOTO, MISS., May 26, 1878.

CROP prospects in North Mississippi cannot, at this writing, be described by any one adjective, unless it be the word "various." Wheat, which is now nearly ready for the scythe, is seriously injured by rust—an appearance of disease produced by a minute insect, which absorbs the juices of the plant, causing it to dwindle, fall down, and fail to perfect its grains. Oats look promising, and clover patches are luxuriant. Farmers here plant such things as clover, chufa and buck-wheat only in patches. Cotton and corn are the main crops—the cereals are put in as more accessories, and always allotted to the poorest parts of the farm. Corn is now knee-high and doing well.

Cotton being the money crop of the country, a large area is planted; and it is now being chopped to a stand, not yet making much of a show. I know of no crop that pays so well for a small investment of labor and space as clover. In this country, if planted in early spring, the farmer may graze his cows, calves and other stock on it, turn them off in a thriving condition in May, leaving the clover eaten down to the ground. It will presently spring up, and be ready to cut by the last of June, continuing its yield, without being reset, for two years.

This is the season of the year when we have pic-nics. The woods are full of wild flowers; the spring waters are cool and sweet, and the temperate air yields just the right proportion of those vital gases necessary to make existence itself a joy. The lads and lasses dearly love to angle in company, and older folks do not disdain the sport so dear to gentle Isaac Walton. The streams hereabouts abound in trout, buffalo and perch. The water is muddy and mosquitoes ravenous; but still people go a-fishing. Give me a fresh RURAL NEW YORKER, and a shady nook at home, any day, in preference.

Gardens are well advanced—squashes, cucumbers and beets abundant. There are plenty of dewberries, blackberries and raspberries. The two former are spontaneous productions. Strawberry season is nearly over. We have had some uncommonly fine ones. My experience is that clean culture is the thing to produce profuse bearing and large fruit. Those vines that we let, by way of experiment, wander at their own sweet will, afford comparatively few.

PERLE PERDUE.

COLD-SNAP DISASTERS.

MUSKEGON, Muskegon Co., Mich., May 22.

UPON us, in this sandy-soil region, Nature smiled with an early and warm spring and a great profusion of blossoms, and barring the fact of excessive flowering—which always breeds suspicion—everything promised a great yield of grapes, tree and all small fruits, and we went to bed on the night of the 12th with but little fears of evil; but in the morning of the 13th Nature put on mourning. We did not, however, feel the full effects of the disaster till the morning of the 15th when the play was encored and strawberry blossoms that were opened, changed the hue of their stamens and pistils to a mourning color, the new growth of grapes hung their heads and the leaves of some varieties of forest trees withered. Still we had little fears of Apples especially the Crabs and other iron-clads, though we could plainly see that Peaches, Plums and Cherries had mostly gone up. But to-day there are strong indications that a good share of the Apples have followed suit, especially the early flowering varieties and those in excessive bloom. These remarks apply only to ordinary aspects, such as level or slightly rolling plains, but do not apply to abrupt elevations affording an unobstructed flow to the cold air as it approached the freezing point; for in all such places I find no damage done, thus offering to the novice a valuable lesson in local climate.

My observations do not extend eastward to the heavier soils where, as we had copious spring rains, I think spring work must be greatly retarded, and where I hear that winter grains are somewhat injured by frost, though promising before, there as here, a full crop. Whatever wind there was in the evening of the 12th, came from the northwest carrying a fog arising from the bayous putting into Lake Michigan from the east to the south side; but before the frost the wind shifted carrying the fog to the north side, protecting all vegetation for some distance in that direction.

Our fruit-growing country is rife with lamentations over this dispensation and threats of emigration are heard, but climatologists reply "You must go to the equator before you are entirely safe from occasional killing frosts." This is but the second time in 20 years that Grapes have been killed here in the spring after the clusters have appeared. S. B. PECK.

KENTUCKY NOTES.

POTATO BEETLE.—FAREWELL!!

WHEN our potatoes, hereabouts, were first coming up, countless numbers of the beetles made their appearance. In fact, it was generally conceded that they were more numerous here than ever before. I was about to purchase large quantities of Paris-green for my own and neighbors' use, when I noticed that the eggs were not hatching, and up to this date I believe that not one in ten thousand hatched.

I have carefully searched my fifteen acres and found less than a hundred young beetles. We all rejoice in the prospect of bidding, at an early day, the potato beetle a lasting farewell.

CORN

Is coming up exceptionally well. In fact we have heard of but one farmer in the "bottom" having to replant, and he left his seed-corn on a floor all winter instead of hanging it up, which may account for his failure. An unusually large acreage of corn is planted here this spring, and many meadows have been planted, in which the corn looks remarkably vigorous.

WHEAT.—RUST.

Notwithstanding the frequent showers and intervening hot sunshine, our wheat is heading finely. So far the rust is confined to the blades, and seems to have checked the growth of the stalk without affecting the development of the head, thus acting beneficially rather than injuriously.

We have heard it said that "the black rust never follows the red rust." Is this correct?

S. E. HAMPTON.

Carroll Co., Ky., May 26, 1878.

RURAL SPECIAL REPORTS.

DOUGLAS CO., Central Ills., May 23, 1878.

AFTER four years of spring rains and consequent failure in crops, we again realize that our hopes, encouraged by an early spring, are blasted, if any thing, worse than on either of the four previous seasons. It's the last week in May and not even much land is broken, to say nothing about planting. The Embarrass river is from bank to bank, and a few fields in its bottoms, which could be gotten in early, by reason of the sandy nature of the soil, are now ten feet under water. There was a large breadth of fall wheat and oats sown, both of which promised, a month ago, a larger yield than we have ever had here; but oats are damaging badly, and whole fields of wheat are "struck" with rust.

As to fruits, we thought, six months ago, apples would be abundant; but to-day, many of those having large orchards, tell me they will have less apples than they have ever had. Peaches are abundant, but the frost, on the night of the 12th inst., blackened a large amount on the upper sides, and these are now dropping off. This, however, will result in good by thinning the crop, which was already two or three times too large. A frost we had about the 1st inst. killed all cherries in bloom, and cherries, generally a large crop here, will be very light, except on a few trees in sheltered localities. Now, I don't think I lost a grape. I have

out twenty sorts; many of them early and tender varieties, but I held them back, as I anticipated late frosts. I have not heard from the extensive vineyards four miles north of me, but my impression is they are badly damaged, since no protection is given during winter and they probably bloom very early. Strawberries are a fine crop. Beans, early corn, tomatoes, squashes, melons, all tender garden truck, have been cut to the ground by the frost.

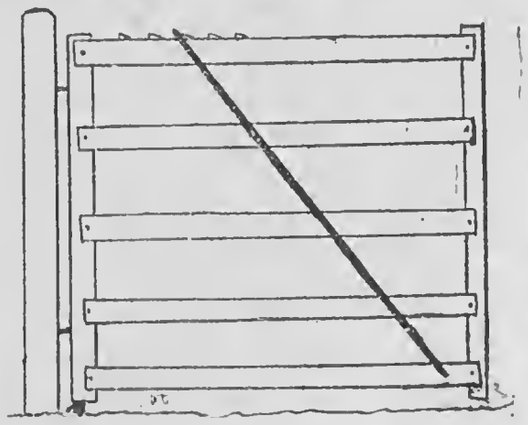
DR. A. C. WILLIAMS.

ROCKINGHAM Co., N. H., May 23, 1878.

THE season has been uncommonly early, and very favorable for doing farm work. During the latter part of April, and first of May, a large amount of rain fell, which gave grass and vegetation of all kinds a good start. Grass never looked better at this time of year. Should it be wet for the next few weeks, the hay crop must be heavy. There has been no rain for the past two weeks; the top of the ground is getting dry. More corn than usual has been planted. Our farmers realize that it is better to raise what they consume, than to depend on buying Western corn. It has been demonstrated to a certainty that corn can be raised at a profit in New Hampshire. Then there is the fodder which is considered worth as much as the average crop of hay cut on the same land. Not as many potatoes will be planted as last year. The low price of last year's crop, with the labor and cost of protecting them from the bugs, has led many to plant only enough for family use. The apple trees are in full bloom; with favorable weather for the next two or three weeks, there will be a large crop. Pears do not bloom much. Peaches did not winter well, and are blooming but little. Low prices for almost everything prevail, yet I do not know but a ton of hay, a pound of butter, or a can of milk will now purchase as much of what farmers have to buy as during the flush times succeeding the war. It is a fact that the farmers are better off than any other class of the community. The barrier between them and abject want is greater than that between it and those engaged in other kinds of business. Could our surplus population be placed on the land where they could obtain their own living, we should hear much less of hard times, strikes and labor unions. W. BROWN.

BERRIEN Co., Mich.

I WOULD like to tell the farmers who read the RURAL, of a cheap and, I think, a very convenient gate for the farm. I made mine 4½ feet high by 12 feet long. It can be made four or five boards high, as one may choose, using a double piece on each end, between which the boards are placed, and using bolts instead of



nails. Then take two pieces running diagonally across the gate, bolting one end to the bottom board; then put another bolt through the two pieces above the gate, cutting some notches, as shown in the cut, on the upper edge of the top board, so that when you raise the gate at the left hand end, these pieces will slide back and catch the bolt in any of those notches. Then you can swing the gate just as you would any other gate, over a snow drift or other obstacle. I use two bolts to each board and two for the pieces diagonally crossing the gate.

Mine works very nicely. I like it better than any farm gate I have ever seen. It is cheap and durable. J. B. RAY.

QUEBEC, May 26.

WHAT a cheerful picture is given us from the Rural Grounds after the frost! It gives me a feeling of wishing to tell of our losses and my own disappointment.

Well, in Canada the Apple trees were white, Currants and Grapes in flower, when one morning the children brought in cakes of ice, to show me. Alas! I could not take it philosophically to lose the best of our fruit, for there is no doubt such is the case. I had planned to be in New York next week, and to go from there to Boston to meet some scientific friends—and spend a week. But I could not speak of it, with the prospects of a poor crop on twenty-five acres devoted to fruit culture, and quietly gave it up. It has been a hope and thought all winter to see the Rural Grounds the last of May, but though "I do not think the grapes sour," I must be content to do without them. A.

PEQUONOCK BRIDGE, New London Co., Conn., May 25.

FOR the first two weeks of this month, March and May seemed almost to have changed places here. Several frosts occurred a few miles back of this place, but no serious mischief was done so far as I could learn. It is warmer to-day. Orchards look well and bid fair for a good crop of fruit this fall. Potato beetles come straggling along and judging from last year, the farmers hereabout will soon have lively times enough with brush and pail among the vines in order to be able to save the crop from complete destruction. Dogs are being registered by the score, and some of our shopmen no doubt make a good thing in selling collars—not rope; more's the pity!—to grace the necks of the worthless, sheep-stealing canines. M. W.

CORNING, Steuben Co., N. Y., May 24.

THERE has been a sudden change in the weather since the opening of May. On the night of the 11th we had a heavy frost which nipped potatoes that were up and also grape vines, which were pushing out rapidly, and all tender plants. Fears are also entertained in regard to the fruit crop being very much injured, which is doubtless the fact; and until within a few days but little corn has been planted on account of the cold, wet weather. Feed is remarkably good and stock has been turned to pasture early. Winter wheat is looking fine and a larger area was sown last fall than usual. Buckwheat sells for 50c.; oats, 30c.; potatoes, 25c.; butter, 16c. and eggs 10c. F. H. D.

SHERMAN, Chatauqua Co., N. Y., May 28, 1878.

AT the present writing the weather is warm and pleasant, and everything is growing finely. Corn is nearly all planted, and the spring's work nearly over. Fruit was badly damaged by the frost which passed over this entire section recently. Cherries and plums are thought to be all killed, while apples are nearly so in many places. Butter is low—the best bringing only from 15 to 17 cents per pound. Eggs, 9 to 10 cents per dozen; potatoes 25 cents per bushel. Potato bugs numerous. M. L. D.

DALLAS Co., Ala., May 24.

THE prospects hereabouts are good, so far for field crops and also for fruit. I have been picking strawberries since March and am doing so still with plenty of young fruit and plants in full bloom. JAMES MULLEN.

CAMBRIDGE, Mass., May 30th, 1878.

WARMER and drier. Rain wanted badly. Now, vegetation, beyond grass and a few other herbs, none ahead of this time last year. W. F.

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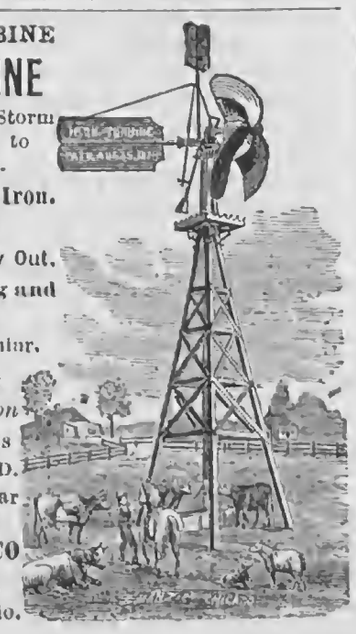

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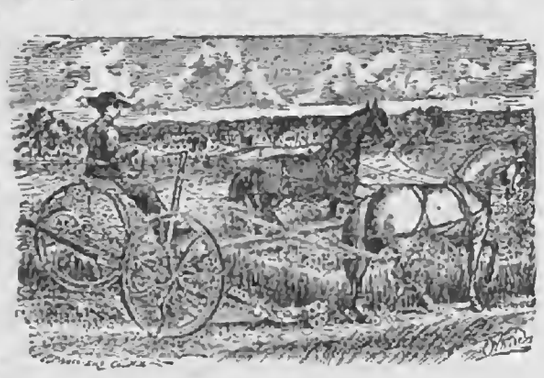

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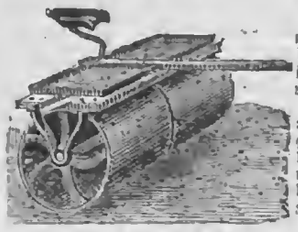

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Miscellaneous.

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Our Tree Portraits (Illustrated) ... 357
What Salary Does a Farmer Receive?—Prof. W. J. Beal ... 358
Notes from Maplewood Farm—Hector Bertram ... 358
The Poetry of the Farm—S. Q. Lent ... 358
Having Eyes, They See Not—M. Oakey ... 358
Fallacies about Fruit—T. T. Lyon ... 359
Mistaken Notions—W. H. White ... 359
Educational Facts from Mississipp—P. P. ... 359
Hay-Caps—F. H. D. ... 359
Jersey Cattle Sale, The ... 359
Catalogues, Etc., Received ... 359
Fruit-Belt of Michigan, The—Lumberman ... 359
Garden Talks and Walks—Mass ... 360
Plant Strawberries Early ... 360

Extracts from Correspondents' Letters:

Harris Co., Texas ... 360
Bloomington, Ill ... 360
Lobelia from Seed—W. C. L. Drew ... 360
Hellebore and the Currant-Worm—T. H. Hoskins, M. D ... 360
French Exhibition, Opening of the—Threber ... 360
Chautauqua County Butter Dairymen ... 361
The Case Threshing Machine Works (Illustrated) 361
The Ertel Hay Press (Illustrated) ... 361
The Union Churn (Illustrated) ... 361
Russell & Co.'s Thresher ... 361

Answers to Correspondents:

Diseases of Cattle; Stomach Ailments, Glanders, Heaves—D. E. Salmon, D. V. M ... 362
Wintering Dahlia Bulbs ... 362
New York Steamship Companies ... 362
Ice-House, An ... 362
Beans ... 362
Bone Fertilizer ... 362
Miscellaneous Answers ... 362

Everywhere:

Herdsmen's Life on the Plains—N. V. Snyder ... 362
Crop Prospects in North Mississippi—Perle Perdue ... 362
Cold-Snap Disasters—S. B. Peck ... 362
Kentucky Notes—S. E. Hampton ... 362
Douglas Co., Ill ... 362
Rockingham Co., N. H ... 363
Berrien Co., Mich ... 363
Quebec, Canada ... 363
New London Co., Ct ... 363
Steuben Co., N. Y ... 363
Chautauqua Co., N. Y ... 363
Dallas Co., Ala ... 363
Cambridge, Mass ... 363

Domestic Economy:

Siftings from the Kitchen Fire—Annie L. Jack 368
Domestic Recipes ... 368
Markets ... 369

EDITORIAL PAGE:

Fertilizer Experiments ... 364
Botanical Studies—Mr. Meehan's Excellent Work 364
Why Is It? ... 364
Brevities ... 364

LITERARY:

Poetry ... 365, 368, 370
Cora ... 365
Widow Saxe's Trip to the Centennial—L. A. Brocksbank ... 366
Transactions of the Cobblestone Farmers' Club ... 366
Our Dumb Friends ... 366
Bric-a-Brac ... 367
The New Hampshire Miranda ... 367
Mrs. Watson's Boys—Mrs. J. E. McConaughey ... 367
Letters from a Country Girl: No. 5—Margaret B. Harvey ... 367
Items for Correspondents ... 367
News of the Week ... 368

Reading for the Young:

Pocket-Money for Young People: No. 5—Annie L. Jack ... 370
The Art of Deception ... 370
She Likes to Work in a Garden ... 370
The Puzzler ... 370

Sabbath Reading:

Prayer ... 370
Personals ... 371
Wit and Humor ... 372
Advertisements ... 363, 369, 371, 372

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SATURDAY, JUNE 8, 1878

IS ANYTHING TO BE LEARNT FROM EXPERIMENTS WITH CHEMICAL FERTILIZERS THE FIRST SEASON?

CAN the farmer ascertain from the results of the first season's experiments, carefully conducted, whether for a given crop his land needs phosphoric acid, potash, nitrogen or any two or all as special fertilizers?

Professor CALDWELL says in the Tribune that the comparative worthlessness of the results of a single year's experiments is very plainly indicated, in most instances, when these experiments come to be repeated. This may be true, but the able article to which we are alluding does not help us to think so. Referring to a large number of experiments in progress for three years on the farm at Cornell University with commercial fertilizers, Professor CALDWELL says:

"If we had stopped with the first year we might have published a number of very interesting and apparently useful results; but when a second year's results came in, it was evident that we could not give both series to the world unless we should put them in the puzzle column for young folks. Now, after a third year, we begin to see some signs of agreement on certain points, but even yet nothing is safely established, and we must keep on experimenting. No chemist, working in his laboratory with the most approved processes of analyses, processes that are in many cases known to give accurate results, ever feels entire confidence in a determination of phosphoric acid in a fertilizer till he has repeated the determination and gets concordant results; how much less confidence should a farmer have in the results of a single year's trial of a superphosphate on wheat, when his experiment is liable to be affected by so many adverse or favorable influences which are entirely independent of the action of the manure; there are disturbing influences in his case a hundred times greater than in that of the analytical process in the laboratory."

What parallelism is there between determining phosphoric acid in a fertilizer in the laboratory and ascertaining the effect of superphosphate on wheat or any other crop in the field? Suppose we select a field the soil of which is as nearly uniform as may be and lay it off in small plots of equal areas for corn. Upon the first, second and third of these, we sow a quantity respectively of potash, nitrogen and phosphoric acid. Upon a fourth potash and nitrogen; upon a fifth, potash and phosphoric acid; upon a sixth, phosphoric acid and nitrogen; upon a seventh all combined, leaving one plot to be planted without manure.

Why cannot we obtain from this experiment valuable results? Why is not the plot which yields the best crop *proof* that the manurial ingredient or ingredients were those the soil most stands in need of? Professor CALDWELL says:

"Every farmer knows that favorable or unfavorable features in the weather, alone, even during a small part of the growing season, may make or unmake a crop; therefore, we do not know but that what appears to have been a failure of a manure may not have been due to bad weather, or that a remarkably good crop may not have been simply the result very largely of a very favorable season and a fair soil."

This is plain enough. But does not the weather affect these plots the same? If the weather were favorable and the natural soil exhausted, the differences would be more apparent than if unfavorable. If unfavorable, either because of wet or drought, would not even then the differences in the appearance of the plants of the different plots be a positive guide as to which plot furnished the food needed by the plants which the other plots did not?

We do not wish to invite any discussion at all with Professor CALDWELL. He has examined the subject studiously—we superficially at most. But there are hundreds of farmers experimenting with manure this season in the hopes of obtaining practical results at its close, and we hope that their hopes are not for the most part visionary, as Professor CALDWELL's statements would indicate.

BOTANICAL STUDIES—MR. MEEHAN'S EXCELLENT WORK.

BOTANY is now taught in many of our schools—in nearly all of our colleges. With many the study ends with their school days, and a bare remembrance of calyx, corolla, stamens and pistils is the most that remains through after-life. A real love of the study is rarely acquired in this way. In fact the constrained study of text-books is rather calculated to dry up the natural impulses than to warm them into the vehement thought and action that inspire all who derive much of either pleasure or benefit from original investigations. The field and woods; the streamlet and meadow should be the class-room of the young botanist. There the captivating parts of the study reveal themselves; the elementary principles are fixed without a conscious effort of the mind and the student naturally takes to books in order to gain as complete a knowledge as may be of what already some information has been acquired. If we wanted a child to grow up indifferent to play we think it might be effected by providing him with text-books on plays which should define in the usual explicit terms their technicalities, philosophy and methods. By the time all this had been committed to memory probably the child would have concluded that he preferred to amuse himself in ways less stupid and complicated. A child who listens to instrumental music well executed, if he has "an ear for music," may be inspired to efforts which shall enable him to produce such music for himself; while if without such inspiration he were obliged to study and to practice the dull rudiments of music for hours each day, he would become sickened of the weary practice. Thus it may be shown that, in all studies and pursuits, the interest should first be awakened. The study should be presented so as to induce voluntary research, which, being voluntary, is not distastefully laborious.

From our own observations we are impressed that a fondness for botanical studies is generally awakened by a person's being accidentally thrown among flowers. He admires them. The possession of a little plot of ground or a sunny window induces him to procure his first plants or to sow his first seeds. At once difficulties arise and inquiries begin. He learns the names of his plants and how to cultivate them. From a knowledge of one or two varieties of a species he is the more interested in other varieties of the same species. Difficulties and inquiries multiply. The interest thus awakened extends to all species and genera until a book on botany becomes indispensable. Then botany is appreciated because it gives the information one zealously seeks. We understand the importance of a study of the structure of plants—we understand the importance of a systematic arrangement, and of names so determined that plants may be designated by the same name as well in one country as another. As one progresses in botany he finds himself again attracted to the wild flowers of the fields and woods. Not, perhaps, that he values less the flowers that have been changed by cultivation—but he values the others more. He is delighted with the botanical learning which enables him to determine the name and entire history of a plant taken from the woods which he had never before seen, and he is as much pleased with a herbarium or with accurate drawings or paintings of plants as is any other specialist with specimens or designs illustrative of his specialty.

These thoughts were called forth by the first two numbers of a work by Mr. THOMAS MEEHAN entitled "The Native Flowers and Ferns of the United States," that more than any other similar work that we have ever seen, is calculated to subserve the object-teaching whereof we have been speaking. It will appear in series, each series complete in itself, and to consist of twenty-four parts. Each part will consist of four colored plates and sixteen pages of text. The size is large octavo, and the work will be sold by subscription only, and delivered to subscribers by agents, one part to be issued every two weeks, and to cost fifty cents! From Mess. L. PRANG & Co., of Boston, Mass., we have received parts first and second, the colored plates (chromo-lithographs) of which are worthy of all praise for their beauty and accuracy, and are really worth, it seems to us, so considerable a part of the subscription price, that an immense circulation alone can insure the publishers against loss. The plates of Part 1 are, first: Tradescantia Virginica; second, Geum triflorum; third, Gilsemium sempervirens, and, fourth, Polypodium incanum. Those of Part 2, are, first: Viola cucullata; second, Anemone nemorosa; third, Aquilegia chrysantha, and, fourth, Pachysandra procumbens. The work appeals "not to one class only, such as botanists, or gardeners, or those who take an interest simply in the poetry and beauty of the floral world, but to all combined." As regards the quality of the reading matter, the name of THOMAS MEEHAN, so well known as the editor of the Gardener's Monthly, and as that of an honest, earnest worker in the fields of botany and practical horticulture, is a sufficient guarantee.

NOTES.

Why Is It?—The value of labor-saving machinery and appliances depends very much upon how they are used and taken care of. Few things are more discouraging—more exasperating to the farmer than to see, day after day, that the members of his household or his hired hands are indifferent as to whether his new and improved implements are so handled that they may pay for themselves or whether they are broken to pieces in a season. More than once we have been prevented from buying such articles which were really needed, because we knew that through ill-usuage they would soon be knocked to pieces and thrown aside. It has often occurred to us that hired men do not measurably consider how much more valuable they might make themselves to their employers if they would act upon the principle that "what is worth buying is worth taking care of" and that "a stitch in time saves nine." It is to be presumed that self-interest would incite laborers to promote their employers' interest in every way, at least when it could be done without unusual work or sacrifice. But we have known workingmen, exemplary in almost everything else, to treat their tools and implements as if it were a part of their duties to render them useless in the smallest possible period. Why is this?

Binding Paint Brushes.—Those who do their own painting will find it economical to take good care of paint-brushes. If buying a good article ever has advantages over buying a cheap one, it is certainly the case respecting paint-brushes. Before use, they should be carefully bound at least one-half the length of the bristles. How best to effect this may not be known to all of our readers. We suggest the following: Wrap one thickness of muslin around the bristles, allowing a margin of six inches of muslin. Then bind a cord evenly and tightly about the brush as low as is desired, and tie in a hard knot. Then fold the muslin back towards the handle where it may be fastened by tacking around the original binding. This will retain the cord.

BREVITIES.

MR. CHARLES DOWNING, the venerable and respected pomologist, is in bad health.

ONE of the unkindest things the microphone does is to magnify a maiden's sigh so that it roars like the cataract of Niagara.

WE would thank our subscribers very cordially if they would have money orders made out to the RURAL Publishing Company instead of to individuals.

DR. HOSKINS, on another page, in the use of hellebore thinks it necessary to apply it to the under part of the leaf for killing currant worms. This greatly simplifies its use and, for aught we see, answers the purpose as well.

MANY of our contemporaries appropriate articles from the Domestic Economy department of the RURAL without any credit—as if there were no obligation to credit them. The truth is, they are just as original, and are written with just as much care as the articles of any other department.

THE Toronto Globe says that "the man who will pass by a potato-beetle at this time of the year without crushing it, is a public enemy." We should like to have the editor here on the Rural Farm and in haste to get to his office in New York. We are afraid he too would prove a public enemy.

HERR R. SCHATZMANN recommends the application of a decoction of ground pepper to cheeses as a sure protection against the attacks of their accustomed depredators. A couple of washings with such a preparation will free a cheese from any number of mites. So says the London Farmer.

A NEIGHBOR farmer, now sixty years old, tells us that if corn is planted three feet apart each way, he prefers to plant two and three kernels rather than three and four. If he could be assured every kernel would grow, he would prefer one to three. If the corn is planted three and a half feet apart each way, then he would prefer to plant three kernels. It is a mystery to him that any experienced farmer would manure in the hill.

THE Germantown Telegraph says: "The RURAL NEW YORKER is trying its hand at a curculio remedy. Somebody tells it that he has tried it and finds it answers first-rate. It is simply to scatter on the ground, under the trees, while the fruit is forming, salt or wood ashes. This is as easy as falling off of a log." That's a mistake—we never dreamed of it. Our comment upon the article evidently referred to, was that the salt and wood ashes might benefit the trees.

THE Prairie Farmer thinks it necessary to crush the shells of peanuts before planting them. We once tried the experiment of planting the seeds alone and the fruit (nuts) entire. The former, for the most part, rotted in the ground. This may have been exceptional. We do not know with what propriety it calls the elongated ovaries or styles "stolons." They are not stolons, if that is meant, any more than the petiole of a leaf is a stolon. Peanuts will thrive upon a harder, more clayey soil than is generally supposed in the north. The power of the pointed style to force itself into the earth is very remarkable.

THE municipal authorities of certain European towns pay children for collecting "May bugs" upon their first appearance. In a few hours the children of Mannheim collected and sold at a fixed rate over 3,000 litres (2,113 American pints.) Suppose our town authorities were to pay for the potatoe beetle upon its first appearance in spring—say ten cents per quart or a remunerative price, whatever that might be found to be. Might not this prove an effectual method of exterminating the pest? Surely every farmer would be willing to pay an extra tax in support of any exterminatory measure that would do away with Paris-green.

Mr. GLADSTONE of England, speaking of war, says:—I am very sorry to say that one of the calamities and misfortunes of war is that it is highly profitable to certain classes. I am a landlord. I am not a great landlord, but my interest in land is great relatively to my interest in other things, and I have not a doubt that to me as a landlord war would in the first instance be beneficial. War would at once add largely to the price of corn, because freights would rise greatly, and every shilling added to the freights of foreign corn would be equivalent to a shilling added to the price of British corn. The farmers have had very much to contend against of late years, and I wish them every possible advantage that the order of Providence and of nature, and invention and skill, industry and perseverance can give them: but I cannot wish that my own rents may be secured or their profits increased by burdens laid upon the nation."

"RURAL" WEATHER STATUS AND PREDICTION.—The highest pressure is now upon a small grove of Pines, on the top of Pike's Peak. The leaves and younger branches are much depressed thereby. It extends eastward for a distance, and then ascends too high for any practical observations. The low pressure is universal and steady, concentrating for the most part in cities, in consequence of which there is a general tendency to go up.

The probabilities are for the next week, that there will be some wind, some rain, and partially or wholly clear or cloudy weather. Storm centers, of more or less magnitude, may form during the week, and occasion the usual results of such meteorological phenomena.

Literary Miscellany.

THE DROVE.

Suggested by Eneking's Picture.

EARL MARBLE.

THE drove of cattle slowly wends
Its way the country road along,
Beneath a sky that o'er them bends,
Inspiring monodies of song,
In keeping with the sober guise
That nature in her woody deeps
Wears, losing all her gaudy dyes
As with the equinox she weeps.

What deep contentment in the group
That in the waters stand hoof-deep,
Unmindful of the lash or whoop!
What joy in this young creature's leap!
And yonder one, with head erect,
And ears set forward, fain would know
What from this stir she may expect;
And on, with sturdy move and slow,

Come others, while against the sky
A horseman rides in silhouette,
Whose fazy motions seem to vie
With cattle's moods, that naught may fret.
The footman, too, with measured stride
The mastiff, with himself content,
And with his charge quite satisfied—
All with the scene are merged and blent.

And so life opens to our view
A sylvan scene, not once, but oft,
Where everything a blending hue
Assumes beneath an air so soft
And bland that thoughts of strife and toil
And strong effects that passion gives,
And fierce theatrical turmoil,
Are lost in life that dreams, not lives.

For is the life that dreams less true
Than that which lives its lurid truths?
Are autumn's skies of ghostly hue
Less true than those of May's and youth's?
The strong effects of youthful days
Have not their lessons truly taught
If age loves not to rest its gaze
On scenes with peace and quiet fraught.

Transcript.

CORA.

CHAPTER XXI.

On the Sands.

CORA'S shrill cry of terror, ringing as it did through the railway station, struck upon her husband's ear and heart with a sudden and sharp pang. He had trusted her, notwithstanding the grave causes she had given him for doubt, and his trust had been betrayed—basely betrayed. Could it be really Cora whom he found alone, flying from Paris in the company of Lord Almane—renouncing her good name, her claim to the respect of her equals and inferiors, committing a grave and dreadful sin for the love which she ought to have striven to put away from her at whatever struggle, whatever cost?

It was solely by chance that he found himself at the station; he was traveling in the express from Boulogne back to Paris, having telegraphed to Cora, and the up train like the down, stopping at Amiens, had allowed him a few moments to obtain some refreshment, and—intercept the fugitives.

It was a terrible blow to him, the conviction thus forced upon him of his wife's unworthiness, and he staggered under the stroke like a drunken man; and the thought that death itself were preferable to such misery, beat itself into his brain.

Lord Almane stood still, and made no movement towards Sir Alan, neither did he bend over Cora, but his face was almost as lividly pale as Sir Alan's own, and his lips were compressed and firm.

Both stood thus motionless for a few seconds; Cora lying prostrate at their feet. Then some of the ladies who had alighted from the train, came rushing up with *flacons*, eau-de-Cologne, vinaigrettes, and offers of assistance, which roused Sir Alan from his momentary stupor.

Stooping over Cora, he lifted her in his arms as easily as if she had been a child; said a few cold words to the Viscount, who answered them with a slight bow, and strode away, with his wife's pale, beautiful face lying upon his breast.

"Take me to the nearest hotel or *auberge*," he said, quietly, to a porter, and the man led him out of the station into the road, and pointed him to a small white house by the roadside.

"Monsieur will have to hurry," he said. "He has about a quarter of an hour before the train starts. But a quarter of an hour."

Alan strode into the little inn, and demanded a bedroom; then he followed the hostess upstairs, still carrying his motionless burden, and when they reached the room, he laid his wife down upon the bed, standing for a moment looking down at her lovely face. It looked almost like the face of a dead person in its terrible pallor, and Sir Alan saw the alteration a few days had made. Her hat had fallen off, the masses of beautiful hair had become unloosened, and strayed over the pillow: and her little hands lay helplessly at her side. With an uncontrollable impulse, he bent over her, and touched the sweet, cold mouth with his bearded lips, in one sudden, passionate kiss; then he turned away, and, giving some rapid directions to the hostess, left the inn, and made his way back to the station, just in time to re-enter the train.

He saw that Lord Almane was already seated, and as he himself entered the adjoining compartment, he stooped mechanically, and picked up something white which lay upon the carpet at his feet, then he threw himself down in a seat heedless—perhaps unconscious—that he was alone, as the train started again, and sped away—away from Amiens—away from Cora—away from his erring, but still dearly-loved wife.

When the first bitterness was over, he began to consider what his movements would be on arriving at Boulogne. He remembered that when there during the day, he had met an old college friend on the quay, to whom he must apply at once on arrival to entreat him to stand his friend in the duel, which he had resolved should take place with Lord Almane. He knew Gilbert Arley sufficiently well to rely upon his friendship in the matter, and if Lord Almane had no friend or acquaintance in Boulogne from whom he could ask a similar favor, doubtless Arley could find him a second.

No doubt, also, that in the early dawn, along the coast, they could find a spot sufficiently retired for their purpose, and when it was over if unhurt, he would return at once to Amiens and arrange a private but complete separation from Cora. He would not see her after it; but if it were possible he would prevent any further possibility of ruin to her. But if he fell, what of her?—what of their child? Would she marry Lord Almane? and would Harold learn to think of him as his father—this man who had injured him so cruelly? No, no—a thousand times no; he should have no power over his son, even if Cora became his wife; and taking out his pocket-book, he wrote a few hasty lines, appointing his mother guardian absolutely to Harold.

"Cora will respect my wishes so far," he said to himself, with a faint, sad smile. "So far; and she may not care for him when I am gone."

The train stopped at Boulogne, and Sir Alan alighted, meeting Lord Almane face to face as he did so.

"I have a friend staying here," said the Viscount, haughtily. "It is late, or rather early, but not too late or too early to receive visitors! I will go to the "Hotel des Bains" and request Sir Harry Bartlet to meet your second here, Sir Alan. It will be more prudent than going to a hotel."

Sir Alan bowed slightly, and then both men drove off—the one to the "Hotel des Bains," the other to the "Hotel Royal," where Captain Arley was staying. Gilbert Arley's astonishment was profound when he saw his visitor. He was not yet undressed, having but just returned from a dinner-party, and, on hearing Sir Alan's mission, threw on an overcoat, and drove back with him.

"By the way, old fellow," he said, as they quitted the hotel, "who is your adversary? Almane! By Mars and Bellona!" and he showed some concern, "he is a formidable one. First-rate shot. Must you fight? Cannot it be arranged?"

"There is no alternative," answered Sir Alan, quietly. "It must be done, and, if possible, get it over at once. In case of my death, take this note to my mother. I cannot find words to thank you, Arley."

"I am glad of it," he answered, trying to smile. "But, Vincent, it is hardly fair of you to risk your life so foolishly."

"You would not speak thus if you knew all," said Sir Alan. "Here we are, Arley. "That is Lord Almane, and I suppose the other man is Sir Harry Bartlet."

Captain Arley and Sir Harry exchanged bows, and moving away together, paced up and down slowly before the station, while Sir Alan leaned moodily over the bridge and thought of Cora, and Lord Almane smoked two or three cigarettes, lighting them with impatient hand, half smoking, and then throwing them away, as if they were distasteful to him.

In about a quarter of an hour, Gilbert Arley returned to Sir Alan, and passing his arm through his, led him away towards the hotel.

"Come and take a couple of hours rest," he said. "We are to meet at Andresselles at dawn, so you will have time. It will do you good, old fellow. You have travelled all day and all night, remember."

More in order to please his friend, than for any rest, Sir Alan threw himself on a couch and tried to catch a little sleep. But he was far too excited and miserable to succeed in getting any repose, and it was a relief when Gilbert Arley came to tell him that the carriage was waiting, and it was time to start.

Very still and silent were the streets as they drove on, the cliffs rose in their quiet, grand solemnity beside them on the one hand; on the other stretched the sea, calm and still, dotted here and there by a passing sail. They drove past Andresselles, then leaving the carriage, and bidding the man wait, they strolled on to the sands, and found a sheltered hollow, admirably suited for their purpose.

A very few minutes elapsed before Lord Almane and Sir Harry arrived, and while the seconds were finishing the last preliminaries the Viscount approached his opponent.

"Sir Allan," he said, gravely, "it may seem absurd that I should try to justify Lady Vincent to you; but I assure you, on my honor as a gentleman, that it was almost entirely by chance that we were fellow-travelers last night."

"It is rather too late for any explanation," said the baronet, haughtily, raising his stately head and looking Lord Almane full in the face with his sad, proud gray eyes. "The score I wish to settle now is not merely an account of last night's business. No," he went on, raising his hand to enforce silence; "your lordship need not trouble yourself any further."

Lord Almane bit his lip as he turned away, and went forward to place himself where Sir Harry desired. In another minute all was ready, and these two men stood facing each other, under the cool, gray morning skies—deadly enemies, foes to the death.

Both were very pale, but while Sir Alan's face was sternly and proudly set, the Viscount's handsome features wore an expression of irresolution and hesitation which rather surprised Sir Harry Bartlet. Gilbert Arley's face was the saddest of the four; he had seen Cora Vincent several times, and in the happy time which followed her marriage; and remembering the deep love she had evinced for her husband, he thought of her grief, if anything turned out badly for Sir Alan.

Strangely enough, he did not connect her with the duel, for the Vincents' conjugal felicity was well known, and more than one gay young bachelor had envied Sir Alan his fair wife, while many a Benedict had wished for the perfect understanding which existed between him and Cora.

There was a momentary pause before the signal was given, and then, simultaneously breaking on the stillness around, rose two sharp reports, which disturbed the sea-gulls, who were lazily moving their wings over the surface of the water.

Both seconds ran forward, but neither Lord Almane nor Sir Alan staggered or seemed hurt. The latter had missed his aim, the former had fired into the air. Deeply as he hated his adversary, he felt that he had injured him enough; and though Sir Alan's eyes flashed at the thought of such a conclusion to the meeting, he was obliged to accept his friend's decision, and acknowledge himself satisfied.

While Captain Arley was assisting Sir Harry Bartlet to put the pistols into their case and exchanging a few congratulatory remarks as to the result of the hasty duel, Lord Almane approached his adversary.

"What I have told you is the truth, Sir Alan," his lordship said, quietly, but earnestly. "Our meeting last night—Lady Cora's and mine—was a chance; she will doubtless explain all to you. It would be useless to deny that I love her. I loved her before you met her, and my affection was returned; but—no, hear me out—I was deceived as to her feelings towards you, and I give you my word of honor that I will never willingly see her again."

He raised his hat with courtly and ceremonious politeness, and rejoined his friend, leaving Sir Alan with a dark frown upon his brow, and an angry sneer upon his lip, looking away over the water with fierce pain, and unsubdued sorrow in his gray eyes.

The drive back to the "Hotel Royal" was accomplished in almost unbroken silence. Avoid them as he would, Lord Almane's words rang in his ears. "A chance meeting!" Over and over again he repeated them to himself, trying to realise whether they could be true or not. He had telegraphed to his wife; but doubtless the telegram had reached the hotel after she had left it. No; it was impossible; she had intended to fly with the Viscount, otherwise why, when they met at Amiens, had she uttered that terrible heart-stricken cry and fallen at his feet as one dead? Was not the fear she showed a proof that she was guilty? If she were innocent, why was she terrified? "A chance meeting!"

It was impossible. Lord Almane fancied he could betray and befool him yet more. How he hated the man! How he writhed at the idea that he had refused to fire at him! If he had aimed at him, and shot him, it would have been the greatest kindness he could have done him.

Captain Arley did not disturb his reverie. Glancing now and then at the gloomy, mournful face beside him, he wondered; but said nothing until Sir Alan turned to him with a smile, so sad and mournful that the young officer felt a choking sensation at his throat.

"Are you wondering at all this?" said Sir Alan. "It is an old debt, Arley. Would that he had let me pay it. How can I thank you for your generous assistance and friendship?"

"No thanks are needed," was the answer. "I am heartily glad it is satisfactorily over. Think of Lady Cora's grief," he went on, "if anything had happened to you, Vincent."

A shudder passed through the stalwart frame of Alan; but he made no reply, and they again relapsed into silence.

After breakfast, having ascertained the hours of departure of Paris trains, and finding there was one in the afternoon which would take Sir Alan to Amiens about dusk, Captain Arley persuaded him to take a few hours' sleep; but any kind of inaction was impossible to Sir Alan, and he paced restlessly up and down the room until he was utterly weary.

Gilbert went with him to the station, and saw him off, watching the pale, stern face as the train started, with intense pity; and when Sir Alan could no longer see the bright, frank face of the young man who had stood his friend, he threw himself back in the carriage. He was not alone this time; two or three French ladies were in the compartment, and they glanced curiously at the handsome, mournful-looking Englishman, who had not a thought or a glance to give their pretty, perfectly-dressed selves.

After awhile, Sir Alan took out his pocket-book, in order to destroy the letter he had written to his mother. As he did so, a white paper fluttered out with it, and the baronet stooped carelessly to pick it up. One glance at it, however, changed his indifference into eager attention as he recognised the handwriting. It was a note to Lord Almane, and ran thus:

"I am tired of my misery and degradation. The love and shelter you offer I will accept. I will meet you to-night at the station, and we can leave Paris together."

A few lines truly; but how much they contained!

Sir Alan sat gazing on them thunderstruck. His last faint hope raised by Lord Almane's earnest and apparently truthful words was destroyed.

It was not a chance meeting. The Viscount was false to the core, and it was this man, deceitful, base, treacherous, whom Cora loved.

CHAPTER XXII.

A One-Sided Explanation.

When Cora's senses returned, the dawn was breaking in the eastern sky and a glimmer of sunlight was stealing into the room where she lay. Her eyes wandered over the apartment without seeing in it one familiar object. It was a bedroom hung with gaily-flowered chintz, and scrupulously clean; there were colored pictures on the walls, and from the window she could see the green foliage of lofty trees.

For a few moments she lay trying to recall where she was, and when recollection returned, a faint cry broke from her which brought to the bedside a woman who had been sitting at the window, busily knitting. She was a cleanly, middle-aged woman, with pleasant, homely features and quick, dark eyes, wearing a print dress, a white apron and a snowy cap.

"Madame feels herself better," she cried pleasantly, in French.

"Yes, yes, I am better. Who brought me here?" And Cora tried to sit up, but fell back on the pillows, giddy and exhausted,

"Madame fainted at the *gare*," said the woman, gently; "and monsieur, the tall gentleman, her husband, carried her here. But madame must not stir until the doctor comes, or she may make herself seriously ill."

Cora turned from her, and hid her face on her pillows to conceal the the tears which flowed unrestrainedly.

After a few minutes the woman approached her again.

"Would madame allow me to assist her to undress?" she said, in her gentle tones. "She will be more comfortable if she goes to bed."

Cora was too weak for any resistance. She let herself be undressed and put to bed, feeling like a weary child, and quite heedless of her surroundings.

"Will you ask my husband to come to me?" she said, at length, feebly.

"But monsieur is gone, madame," was the reply. "Both the gentlemen are gone. Their business was too important to delay, they said; so they brought madame here, and desired me to look after her, and continued their journey."

Cora had listened to her with dilated eyes, with a cold chill striking on her heart.

"Together?" she repeated—"are you sure they are gone together?"

"Oh! yes, madame. They went on in the mail train to Boulogne."

"Did they leave no message for me?" said Cora faintly.

"Monsieur said that madame would know the motive for their haste, and that she was to remain here until he returned."

The motive for their haste! Too well and too truly did Cora know it, and the knowledge brought her terrible pain. What had she done? Oh! heaven, what had she done? They had gone to fight—gone, perhaps, to meet death—one or both!

Oh! Heaven, save him," moaned Cora, as she turned from the light, and hid her face in hopeless despair—"save him from all harm, and let me only suffer, for the sin is mine!"

As she lay there she had leisure to think of it all; to picture the meeting, Alan's terrible anger and pain, and the hatred which must animate both men.

"And I am so powerless!" she sobbed, as she tossed about among the pillows, and tried to cool her burning brow. "Oh! Alan—oh! my husband."

In the morning the doctor came, a little surprised to find a patient so evidently of high position at a small *auberge* like the "Maison Blanche," as the little roadside inn was called. He gave her some soothing potion, forbade any excitement, and went away, promising to call again the following day. But the potion had no effect in calming Cora's excited nerves.

Hour after hour she lay there, sleepless and miserable. She could hear, as they passed, the shrill whistle and rumbling of the trains, and the gay chatter of the servants and customers of the "Maison Blanche" as they talked under her windows.

Now and again the kindly hostess came to her, to see if she could do anything for her; but Lady Vincent shook her head in silent misery, and Madame Dumoulin went away, feeling sorry for the poor young wife, who she began to suspect, was deserted by the big Englishman, who had called himself her husband.

Evening came, and Cora could bear her misery no longer. During those twelve short hours she had suffered a life-time of anguish, and the inaction was unbearable. She rose, and with slow, feeble movements, managed partially to dress herself, and then put on the dressing-gown which Spills had put in her traveling-bag, and whose dark shade of crimson made her pallor still more ghastly. Having proceeded so far, she was forced to sit down and rest, before continuing the process of hair-dressing, and she sank upon one of the old-fashioned chintz-covered arm-chairs by the window, with her hair falling around her, and shading the beautiful, mournful face.

As she sat there, a familiar step, sounding on the pavement without, attracted her attention, and the blood mounted in her cheek as she recognized her husband's voice. It was he!—surely it was he! and she rose, and leant out of the window. Yes, she was not mistaken; the tall form standing by Madame Dumoulin was the form of her husband. He had returned, and unhurt.

"Thank Heaven, thank Heaven!"

Throwing her hair back from her face, she tried to reach the door of her room, but her strength failed her, and she was obliged to support herself by the back of a chair. She heard steps on the stairs, coming along the landing, and pausing at her door. Then it was opened slowly, and Sir Alan Vincent appeared on the threshold. He came in quietly, closing and locking the door behind him.

A slight expression of surprise crossed his pale, haggard face when he perceived his wife; for Madame Dumoulin had led him to imagine that she was too ill to rise, and her appearance seemed to say that the landlady was right. He noticed the extreme pallor and exhaustion of every feature—the perfect helplessness and powerlessness of her attitude as she drooped over the high-backed chair, without which she could not have stood at all, and a sentiment of pity for her mingled

with the anger and wounded love which held dominion in his heart.

"I think you had better sit down," he said; "I have much to say to you."

His tone was very hard and cold. There was no relenting in his stern face as Cora raised her despairing eyes to his. She sank into a chair, leaning her hands upon its arm, and bowing her head upon them in an attitude of hopeless despair.

"I have much to say to you," he resumed, keeping his eyes from glancing at the bowed form of the woman he loved so passionately still, "and the interview can hardly be a pleasant one. Are you well enough to listen to me? You have been ill; perhaps a longer repose is necessary for you?"

"I am well," she said. "It is only the suspense which hurts me."

"You are sure?" he said, doubtfully. "You know my dislike to scenes. I would rather wait than risk one."

The cold, cutting tone stung her. She lifted her head with a momentary flash of pride.

"You need not fear," she answered.

"That is well."

There was a silence. Sir Alan seemed to have some difficulty in expressing what he was going say, for he hesitated.

Cora stole a long glance at him; she saw that looked worn, and ill, and aged, as if some eat trouble had passed over him; and all her art went out to him with a cry of love which ost rose to her lips.—To be continued.

WIDOW SAXE'S TRIP TO THE CENTENNIAL.

L. A. BROCKSBANK.

SHE was determined to go—cost what it might. Several of her neighbors had been *talking* of going, all summer, but it was likely to end in talk, as it was then the middle of September, and not one had gone except Doctor COBURG, and he, being a widower, had to go alone, poor man! So of course, the little village of Saxville would be none the wiser for what he might see at the Exposition.

"The fact is," she said, "a man may see wonders, but it takes a woman's tongue to describe them."

So widow SAXE, after due reflection, packed her large traveling trunk, reserving for a moderate-sized valise such articles as might be required for more immediate use, and filling a small lunch-basket with plump New England "doughnuts" and rich yellow cheese, she shook out her brown linen duster, placed beside it her ample umbrella, parasol, fan, gold-bowed spectacles, and bottle of smelling-salts, and lastly her *opera glasses*. She was going for sight-seeing, to be sure.

Here permit us to remark that the widow SAXE was considered rich in that modest little community, being the widow of the lamented Doctor JOHN SAXE, who had made pills and plasters, killed or cured in that same town for a quarter of a century, and, having been wise enough to abstain from his own medicine, had lived to a good old age, leaving behind him, at last, a buxom widow (some years younger than himself), a gentle young daughter and a moderate fortune.

Within two years after his death, three young doctors and one old one had settled in the village, to supply his place. Of course there was rivalry. With the young people the young doctors were the most popular. Among the older and wiser heads (Mrs. SAXE included) the more experienced Doctor COBURG was the favorite physician. Human nature is the same in town or village, and widow SAXE, with the rest of them, was more human than angelic. At least, her daughter's husband had more than once been tempted to —think so.

On this particular morning, as soon as the early breakfast was over, Mrs. SAXE informed ROBIN, her son-in-law, that she should take the train for Philadelphia (due in forty-five minutes), and *he* was to be her escort for the trip. The baggage was in readiness; he had only to send it on, and she would walk with him the short distance to the depot.

"What in thun—! Why, mother, it is quite impossible! Who is to attend to my business? —and such short notice too!"

"And mother,—that large trunk! Why, how long do you mean to stay? I thought you told Doctor COBURG that 'a *sensible* person would be apt to stay away from that heathenish Exhibition,'" chimed in the voice of little Mrs. ROBIN.

"Come, come! There is no time to discuss the matter. ROBIN, go attend to the luggage, and send JACK to me."

ROBIN looked at his wife, who stood staring into vacancy, gave one glance at his shirt-front, and darted from the room, pulling his mustache with one hand while the other was firmly clenched.

It is needless to say, perhaps, that when the "7:15 train" came puffing up to the depot, the Widow SAXE, ROBIN, bag and baggage, were on time, and among the first to step off the platform; while it was just possible that poor little Mrs. ROBIN was bathing her pretty eyes in cool water to remove the trace of unbidden tears.

Pleasanter expressions of countenance—however,—might have been seen on that same car, than ROBIN'S, as his august mother-in-law, waved him into the first vacant seat. Consigning to his care valise umbrella, parasol, and shawl-strap, retaining for herself the lunch-basket, while she secured a more desirable seat by the window.

Having settled herself comfortably, withdrawn the right hand glove, and removed her veil, she gave one calm, deliberate look at her fellow-passengers—strangers, all;—then settled back in her seat and drew one long, deep breath of mingled relief, and satisfaction.

She was on her way to the Centennial! and not a soul in Saxville had enjoyed the pleasure of making the matter a theme for gossip.

It is worthy of remark, that ROBIN'S visage cleared up, as the train swept on, which was quite natural under the circumstances. If the widow had seen little of the world, ROBIN had seen less, having never before passed the limits of his native State. His business might suffer, it was true, with no one but his younger brother, "JACK" to attend to it, during his absence, but after all, he was "in for a good time," while the entire expense, as well as responsibility would be sustained by his able, and strong-minded relative. The only regret, after all, was, that his wife was not by his side;—poor girl!—But there was no help for it.

In the meantime Madam SAXE was becoming awake to the facts of the case, cost and consequences. Looking more anxious and unsettled just in proportion as ROBIN'S uneasiness subsided. Glancing furtively back at him, she suddenly bethought herself of danger to her luggage, and as suddenly she sprang up, rescued it.—valise, umbrella shawl-strap &c.,—and returning to her seat, she carefully bestowed it in the vacant corner, which no one had yet presumed to claim.

As the hours elapsed, she became quite weary of gazing upon the flying landscape, picturesque, or otherwise, and for a change betook herself to her well supplied lunch-basket.

Here, ROBIN would have willingly joined her but the invitation was not forthcoming, so he kept his place, and fasted.

As the train aproached the great busy city of New York, Madam SAXE began to regret that she had not had the power to summon a more experienced, and reliable escort.—(such as Doctor COBURG might be,—for instance.) Possibly she might meet him at the Exposition, and how comfortable it would be for them all to return in company.

These pleasant fancies occupied her mind till they were whirled into the Central Depot, at New York. Here it became evident that a change was to be made,—but what she did not know. It had been her impression that she would be taken directly to Philadelphia,—a slight mistake—that was all. Indeed she had scarcely given the matter a thought, still less had she sought information. She expected to go, as others did, of course.

She had been looking for ROBIN, till half the people were off the car, and been unconsciously borne on by the living current, till she found herself near the platform, with the crowd pressing in the rear, and outstretched hands in front, eager to help her, with the rest, off the car.

Such commotion! Such a jam! What could she do? and where were her possessions? and where was ROBIN?

"Kerriage, Mem? kerriage, kerriage? Have a kerriage, Mem?"

"Good gracious!" she thought; "what will become of me, and what *has* become of ROBIN? I wish I had staid at home."

And there she stood, alone, a stranger in a strange place. What to do, or which way to turn she knew not. Hundreds of people were flying hither and thither, all alike unmindful of her. Among them all no ROBIN with tall beaver and "cut-away" coat. And her trunk, what would become of that?

"Mrs. SAXE! are you waiting for a friend. Can I assist you?"

What voice! It was not ROBIN'S; but it was recognized at once, and never did her own name (which she had always been proud of, because it reminded her of Prince ALBERT) sound so sweetly before, even from the lips of Dr. COBURG.

On his return from the Centennial, surely heaven had sent him to her relief. And without a moment's hesitation she decided to return home with him, leaving the grand Exposition to others, and even ROBIN to his fate. Minus everything but sane mind and sound limbs, she soon found herself homeward bound, on the wings of steam, a gladder and a wiser woman.

In the meantime where was ROBIN?

On finding himself in the crowd, separated from his companions, he was at a loss what to do. A restaurant, close at hand, suggested one way out of immediate difficulty, and he stepped in and ordered oysters and coffee for two; trusting to luck, and a usually good appetite, to lead her, as they had him, to this same place.

In this he was disappointed; forgetting, perhaps, the "lunch basket"—which had been *her* traveling companion.

So he managed to dispose of the second cup of coffee just in time to catch the *last* car of the homeward bound train—on a forward car of which, his worthy mother-in-law was seated by the side of old Doctor COBURG.

It may be as well to remark that he, not being the "purse-bearer" of the expedition was, of necessity, obliged to return; only too thankful for the means to do so.

A few hours later, on that same eventful day, ROBIN being more fleet of foot than the venerable old couple of the forward car, had arrived home first, and had had just time to send the color from the cheek of his astonished wife by informing her that he had "had the misfortune to lose his mother-in-law," when the door-bell announced another arrival.

ROBIN met the radiant pair on the threshold only to send the color from older faces, for all the way from the depot had Madam SAXE been trying to frame some sensible excuse for having lost her daughter's husband, and for finding old Doctor COBURG; and in the dim light of that waning day, ROBIN did, in fact, look like a ghost. Imagination can picture the rest.

If the widow SAXE could not—with the "million"—talk of what she had "seen at the Centennial," she soon furnished a different theme for gossip to the lively little village—her husband's namesake, by changing her own name from Saxe to Coburg—by doing which she claimed that she lost nothing, as this would still serve as a reminder of Prince ALBERT; in fact, the union of the two names, Saxe-Coburg was certainly something quite remarkable and high-sounding.

Even before the close of the great Exposition, which after all she did not go to see, the wide-awake and energetic widow had been persuaded (by those lips so incapable of telling what the eyes might have seen there,) to leave the "unreliable" ROBIN and his wife to their own guidance for the future, and to go and make old Doctor COBURG'S home happy.

ROBIN got his moustache pulled by his meek, little wife, on the wedding-day, too, for simply quoting a line of Shakespeare, viz.:

"All 's well, that ends well."

TRANSACTIONS OF THE COBLESTONE FARMERS' CLUB.

A record showing how useful City clubs are in forwarding the interests of agriculture.

REPORTED BY A SILENT MEMBER.

The minutes of the last meeting were counted, while the members tucked their trousers into the tops of their boots, put off their glossy silk hats, and drew forth from under their garments rusty slouch hats which took the formers' places, This gave the meeting an experienced, knowing air.

The walls were adorned with life-like pictures of the fruits of the field, with the names printed in very bold letters,—"This is a Pumpkin," "This is a Beet," etc. Such foresight was not without its value. A member could always know the kind of thing the speaker alluded to by means of these chromos.

The proceedings were opened by reading the journal—The N. Y. Bugle was most commonly selected—after which the president introduced Mr. NEMATUS VENTRICOSUS, an entomologist of distinction, who read a paper on a newly discovered insect. He said.:

"It is unnecessary to explain to you, farmers, that there is a difference between a bug and a beetle. One digests his food, the other swallows it whole. This fact explains why the grasshoppers have such appetites.

"The subject of my paper this evening is an insect which I believe I have had the honor of discovering. It is the Virginia Creeper—an insect capable of doing incalculable harm to our agricultural interests. It feeds on them until they are consumed. I have planted some of these interests in my garden, and shall watch the result carefully. I have no doubt that these interests will be exterminated in a short time, unless Congress grants me an appropriation to suppress the Creeper. HARRIS says, in his Instincts Injurious To Vegetation—"

A member.—"Insects."

Several members.—(Furtively reaching to an inner pocket and glancing hurriedly at a little book filled with names and definitions)—Yes, yes, insects. Things that go on four legs and a wing."

The Speaker—(with dignity).—"You are mistaken, gentlemen. I don't mean what you mean. This is HARRIS on Instincts, another HARRIS—friend of mine."

Members.—"Ah! that's another matter."

The President here rapped for order, but a member had sent him out on errand, and the errand had not yet returned.

The Speaker.—"HARRIS says that Columbus found in Virginia an insect somewhat similar to the one I am about to describe, growing in a wild state on the savages, but that they were exterminated by the use of civilization and carbolic acid soap.

"This thing attacks the earth, paralyzing the superphosphate of bone and other manurial ingredients present in the soil, which has a tendency to raise the price of fertilizers, and is subversive of liberty and our institutions. It is especially injurious to pumpkins."

At this the members glanced hurriedly about the walls of the room until they found the thing the speaker alluded to, when the speaker continued.

"I have carefully noted its ravages on this esculent. When the fruit is nearly ripe it stings it; the leaves wilt, and the pumpkin turns from a dull green to a golden yellow. It is then fit only to feed to stock and to be made into pies. The seed is sometimes saved and sold to the seedsmen for watermelon seeds. Hence responsible dealers cause a printed guarantee to be affixed to each packet sent out, to the effect that seeds are not what they seem—sometimes.

"This insect lays its eggs in the spring, but its young are not large enough for market when spring chickens fetch the highest prices."

The speaker was called upon, at this point, to show a specimen of the insect, and after fumbling about his person in a confused manner for a time, asked leave to be excused for a moment, that he might retire to make a more careful search.

It was growing late, so I unobtrusively slipped my trousers out of my boot-tops, hung up my slouch hat and went home.

At the next meeting a foreign gentleman is to read a paper on a new plant recently introduced into Europe. It will be very instructive. I shall be there.

OUR DUMB FRIENDS.

E. F. M.

As we study with greater patience and kindness the lives of the lower animals, we discover much that is beautiful and wonderful in their loves and friendships, not only for us, their masters and owners, who feed and caress them, but for each other. No one doubts the faithfulness, or watchful care of a dog for his master's interests, or his devotion even after a death, for the dog has been so closely associated with human sports and dangers and the household life, that he is better known than most animals, but it has long been the habit of many persons to regard cats, as incapable of strong feeling, and to jest at the many monkey tribes as if they were nothing but caricatures and burlesques.

Yet the following letter which appeared in a recent number of The Spectator, tells the story of a faithful attachment between a cat and a dog, creatures naturally of alien traits and natures. The writer says:

"Colonel C—s' little black-and-tan dog "Flo" died last Monday morning about three o'clock. He had had her many years, and she had long had an internal complaint. She was a dear, little affectionate creature, and had always been treated as kindly as a child. He buried her in his garden, and over her little grave his housekeepers' children shed many tears.

Yesterday I heard from him as follows: Another of my domestic pets was an old black cat, which came to me a kitten years ago, a few weeks before I brought "Flo" from Oxford. They grew up together, and were very fond of each other, eating from the same plate and drinking from the same glass. I have often seen them stand side by side before my fire, and occasionally put their mouths together as though they were absolutely kissing. Well, the poor old cat seemed very miserable all day yesterday (that is, Monday, the day on which "Flo" had died early in the morning), and we could not induce her to eat. She could not be found last night when the house was closed; but as this occasionally happened, not much was thought of it. This morning she was found stiff and cold, stretched out by the side of "Flo's" grave! I could not have believed it, if I had not seen it with my own eyes. Whether it is only a coincidence, I will not pretend to say, but I would rather believe that the poor animal died from grief at the loss of her old friend. But if so, how did she know that "Flo" was dead? Such a fact as this leads to strange thoughts, or what would be called strange by these who can see in these creatures "only a dog," or "only a cat."

Another instance of gratitude and affection shown by a cat to a *human* friend is mentioned in the same article; and not long ago an old lady pointed out to me an old cat—who seemed the favorite *protegee* of the house—as a pet of her grandson, which had evinced the most marked delight and affection at his recovery from a childish illness. On this occasion the cat, then a kitten, had been placed on a corner of the bed near its foot that it might not disturb its little invalid friend, and the cat had ever since chosen this especial place for its morning and evening naps.

As for monkeys, a thousand incidents are told by those who know them of their intelligence. A little chimpanzee in the Zoological Gardens of London once saw his keeper turn a key in a lock. He begged for it, and it was given to him, but his poor, imperfect little hands failed to turn the key. He worked at it hour after hour for one or two days, and at last died of chagrin and nervous excitement of the brain. I can scarcely imagine anything more pathetic than this wistful and absorbed search after knowledge in a little creature so weak and undeveloped.

A higher faculty—love, including self-sacrifice—was displayed in the little monkey, who had conceived a great terror of a large baboon in the same gardens with himself. The little creature chattered and cried with fear when he saw its great, hairy form, and could scarcely be persuaded to look at it. But one day, the monstrous animal sprang in a fit of rage at the friendly keeper, and was tearing his throat when the little monkey saw it, and all his fear vanished by the stronger power of his love; at the peril of immediate death he sprang in turn on his dreaded enemy, and bit and shrieked until help arrived for his friend.

After such an act as this I think we must, like CHARLES KINGSLEY, regard animal natures as capable of heroic deeds—certainly of warm and loving friendships—which may brighten both the higher and lower lives they bind together. If we are truly wise, we will

"Count nothing that we meet with base,
But live and love in every place."

WHAT becomes of all the pins? A sagacious question very often asked and very difficult to answer. Of the millions of pins that escape us in this metropolis alone, how few are ever picked up. Do the fairies take them? A pin, though small, is not a very perishable article, but it has a marvelous aptitude to make away with itself. But even larger pieces of metal in daily use manage to disappear. There must be tens of thousands of horse-shoes dropped in New York in the course of the year, yet how rarely they are seen. This is all the more remarkable, inasmuch as it is considered lucky to pick them up, therefore people are on the lookout for them. There is a great demand for the nails by which they are fastened, in the manufacturing world. The hanging the have got through constant wear makes them of more value than even new nails—for what, does our reader think? To make stubb twist barrels. It seems odd that the same malleability could not be given to the iron in some quicker and more simple manner than the traffic of horses' feet.

A *fete* was given at Wellesley College recently by the students Aid Society and several hundred friends of both sexes, including Gov. Rice and other prominent men from Boston and elsewhere attended. At a meeting in the afternoon the objects of the society were explained and the reception of three contributions of $5000 apiece, for the establishment of scholarships, was announced. The remainder of the day was spent in visiting the grounds and several races between student crews took place on the lake.

Queen Victoria was fifty-nine years old on the 24th ult., and the anniversary was made a holiday in Canada, while flags were displayed on the British Vessels in New York.

BRIC-A-BRAC.

ASHES OF ROSES.

SOFT on the sunset sky
Bright daylight closes.
Leaving, when light doth die,
Pale hues that mingling lie—
Ashes of roses.

When love's warm sun is set,
Love's brightness closes;
Eyes with hot tears are wet,
In hearts there linger yet
Ashes of roses. [*St. Nicholas.*

INSECTS AS TALKERS.

"Two ants," says Buchner, "when they are talking, stand with their heads opposite each other, working their sensitive feelers in the liveliest manner, and tapping each other's heads. Numerous examples prove that they are able in this way to make mutual communications, and even on definite subjects." "I have often," says the English naturalist, Jesse, "placed a small green caterpillar in the neighborhood of an ant's nest. It is immediately siezed by an ant, which calls in the assistance of a friend after ineffectual efforts to drag the caterpillar into the nest. It can be clearly seen that the little creatures hold a conversation by moans of their feelers, and this being ended, they repair together to the caterpillar in order to draw it into the nest by their united strength. Further, I have observed the meeting of ants on their way to and from their nests. They stop, touch each other with their feelers, and appear to hold a conversation, which I have a good reason to suppose refers to the best ground for obtaining food." Hague writes a letter to Darwin "that he one day killed with his finger a number of ants who came every day from a hole in the wall to some plants standing on the chimney-piece. He had tried the effect of brushing them away, but it was of no use, and the consequence of the slaughter was that the ants who were on their way immediately turned back and tried to persuade their companions, who were not yet aware of their danger, to turn back also. A short conversation ensued between the ants, which, however, did not result in an immediate return, for those who had just left the nest convinced themselves of the truth of the report."

TWO AND ONE.

THOU hast two ears, and but one mouth;
Remember it, I pray;
For much there is that thou must hear,
And little say.
Thou has two eyes, and but one mouth;
Ponder the reason well:
Full many things thou art to see,
And few things tell.
Thou hast two hands, and but one mouth;
Nature has rightly done,
For she has given two for work,
For eating, one.
[*From the German of Ruckert.*

POETRY, some practical people think, hath no value. Not so, even in this prosaic age. The price paid by the *Nineteenth Century* to Tennyson recently for his ballad of the Revenge was pretty high, yet it is not the highest paid in our time to a poet. The ballad contains 120 lines, and the author received for it 300 guineas, or $12 50 a line. Mr. Robert Bonner paid Longfellow for the "Hanging of the Crane" $4,000. That poem contains 200 lines, at which rate the poet received $20 a line. For "Tithonus," published in an early number of the *Cornhill Magazine*, Tennyson received 100 guineas, or $7 25 a line, and Tom Moore much exulted in receiving a guinea a line.

AN ABORIGINAL CHANT.

WHAT time the glittering rays of morn
O'er hill and valley steal,
Chief Joseph's squaw, with dog and horn,
Prepares the Indian meal.

And if, with wild, rebellious shout,
The pappoose shall appear,
The chieftain leads the bad child out
Clutched by the Injine ear.

The breakfast o'er, the daughter strolls
Down glen and shady dell;
While gay young braves, from wooded knolls,
"Look out for the Injine belle!"

Each stricken brave she turns and leaves
Her coyness to bewail;
Her dragging blanket stirs the leaves—
The well-known Indian trail.

A Black Hills miner, scalped and dead,
Upon the ground is found,
Grim speaks the chief, "There's been, I'm 'fraid,
An Indian summers round."

What time he rideth forth to shoot,
His favorite horse the dapple is;
And when he wants a little fruit
Goes where the Indianapolis.

When finished are his warlike tasks,
With brazen incongruity,
For overcoats and food he asks,
With charming Indianuity.

At night, before his bed he'll seek,
With countenance forlorn,
He takes his scalping-knife, and eke
He trims the Indian corn. [*Hawkeye.*

IF a cat doth meet a cat upon the garden wall, and if a cat doth greet a cat, O need they both to squall? Every Tommy has his Tabby waiting on the wall, and yet he welcomes her approach with a hideous yawl. And if a kitten wish to court upon a garden wall, why don't he sit and sweetly smile, and not stand up and bawl; lift his precious back up high, and show his teeth and moan, as if 'twere colic more than love that made that fellow groan?

"DE big sunflower may rise above
De modest 'tater vine,
An' brag about its Sunday clothes,
An' put on airs so fine;
But when the winter howls around,
And the snow lies at the doah,
De big sunflower, oh! where am he—
De 'tater hez de floah!"

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

SONG.

I WORE your roses yesterday
About this light robe's folds of white;
Wherein their gathered sweetness lay,
Still clings their perfume of delight.

And all in vain the warm wind sweeps
These airy folds, like vapor fine;
Among them still the odor sleeps,
And haunts me with a dream divine.

So to my heart your memory clings,
So sweet, so rich, so delicate,
Eternal summer-time it brings,
Defying all the storms of fate.

A power to turn the darkness bright,
Till life with added beauty glows,
Each moment touched with tender light,
And every thought of you a rose.
[*Celia Thaxter.*

THE NEW HAMPSHIRE MIRANDA.

CELIA THAXTER is well-known as a poet to the readers of the Atlantic. She is thoroughly a New Englander and revolves around Boston. Her life has been peculiar and romantic. Her father was a local politician at Portsmouth, N. H., and having failed to get an appointment which he had every reason to expect, he became disgusted with mankind in general and politicians in particular, and resolved, like a Yankee Timon, to renounce society. Consequently he bought one of the islands known as the Isles of the Shoals, and retired there with his family, determined never to return to the main-land. He adhered to his resolution; he built a rude dwelling and remained there until death, some 16 or 18 years. On the island (Appledore, formerly called Hog Island) Celia Leighton was born, and there she grew up, never visiting the shore, her father having forbidden her to do so on pain of his eternal displeasure. When about 16, a lovely and natural girl, a lawyer, much older than she, went to Appledore for his health, having heard much of the restorative influence of the open sea air upon the lungs, his own having troubled him greatly. Her father refused to have him under his roof; but finding the lawyer bent on remaining in any event, and that he had erected a cabin of his own, he finally agreed to accept him as a boarder.

The result may be anticipated. The New Hampshire Miranda could not be thrown day after day into the society of the invalid Ferdinand without inspiring and being inspired by the tender passion. She had never seen any man except her father and two brothers, and she would therefore have fallen in love with Thaxter had he been a humpback, his name Spriggins, and his trade undertaking. He would not have been quite human had he been able to pass days and evenings on the rocks girt by the ocean, under the sunshine, starlight, moonbeams, in the delightful companionship of that child of nature. What happened was inevitable. Father Leighton was amazed and enraged when the lover asked his consent, and vowed he should never, never, never have his daughter. Thaxter swore then by Blackstone, Coke and Littleton that he would have Celia without the paternal sanction, and was so sure to keep his oath that the recluse yielded reluctantly. The two were joined in wedlock, and as the lawyer had greatly improved in health, he took his bride to the main land, and they went to Boston on their nuptial tour. Since, she has divided her time between Portsmouth, Boston and the Shoals, spending the warm months on Appledore, where she has a cottage. Her brothers, Cedric and Oscar, have the inn on the island, and have made money by the annual influx of summer visitors. Celia Thaxter is the chief lion or lioness of the place, and entertains many of her admirers and friends. She is enamored of the Shoals, thinking them unsurpassed for pleasantness, picturesqueness and health. They constantly figure in her verse. She has written a little book in prose about them, and she never wearies of chanting their praises. Her husband is not seen very often, his wife appearing to enjoy herself despite his invisibility. She is buxom, of liberal avoirdupois, of excellent health and digestion, talks fluently and eloquently, and if she owns any secret sorrow she does not parade it for the gratification of the curious. She is no longer young in years—she must be 45—but she is as young in feeling as she was in early womanhood. She has a son grown to man's estate.

MRS. WATSON'S BOYS.

MRS. J. E. M'CONAUGLEY.

FOUR great boys in the house and only one little four-year-old girl. It did look at first sight as if it was a rather unequal division of the "help" between father and mother. But that impression came from a want of familiarity with the family habits.

It was EDWARD'S job to get up in the morning and make a fire for mother in the kitchen and dining-room, and he thought it no great hardship either. If EDWARD had been a girl, most likely mother would have built the fire herself. Mother and SILAS usually made their appearance down stairs about the same time, and she never had to say, as I have heard some mothers entreat their daughters: "Now *do* hurry and get that table as quick as you can."

As methodically as an old clock, SILAS wheeled out the table the first thing and laid the cloth and plates, as neatly as if he had been bred a hotel-waiter. Probably he dallied over a paper a few minutes afterwards until the cheery sound "your breakfast is ready SILAS," greeted him from the kitchen. For in the buckwheat season SILAS was the cake baker for all the family, so mother could preside at the table in the usual orderly way. The good mother knew it was not a very heartsome thing for a growing boy to bake cakes for all the family before he had broken his own fast over night. So she always had something hot and nice fixed for him at one end of her big kitchen table where he could eat and chat with mother, at his leisure, while the other boys did up the chores. That was a good stroke of policy with Mrs. WATSON, and SILAS would remember those morning breakfasts lovingly when he was an old man. Then he was fresh and cheery and ready to put on the full buckwheat capacity of the big stove for the benefit of the rest. They all knew how to take a turn in the kitchen and put a room to rights up stairs as orderly as a West Point cadet could fix up his quarters.

They were taught from babyhood the good, soldierly habit of waiting upon themselves, so that it was very easy to add on the lesson of waiting upon others when there was a need for it, and particularly upon their hard-working mother. A great many girls are not half so ready or helpful, the more the pity! The boys could wash and iron some, and make a short-cake and pot of coffee, or cook a steak as well as the best Bridget to be had for money. They were none of them of that class to which Horace Greeley referred, where he said they would "starve to death in the garden of Eden for the want of somebody to pick the fruit." None of Mrs. WATSON'S boys would be reduced to the straits a soldier boy of my acquaintance was, where rations of dry flour were served out to the men.

"How did you cook it?" I asked.

"I mixed it with water, and salt if I had it, and then set it on the coals until it was cooked or burnt, and then ate it."

One thing these handy WATSONS used to do for their mother, which anybody's children could do where a mother does her own housework. They always cleared the table and set away the food in its proper place in the pantry or cellar; thus saving her a great many miles of weary walking in the course of a week.

These boys were not a whit less manly than neighbors' sons who sat toasting their boots around the fire, while mother wearily walked around them, doing all her work and waiting upon them besides.

A family thus trained once lived in a beautiful homestead up the Hudson. A friend was there at a family gathering when the mother's hair was silvered, and "the boys" came home from distant abodes to this happy meeting. One left his editorial chair, one his large wholesale establishment on Broadway, and all came from posts of honor and usefulness. When the feast was over, a son led his mother back to her cozy arm-chair and her guests, while her sons went merrily to work and "cleared away the things and washed up the dishes" as in olden times.

A little housework in their boyhood will not spoil them in the least.

LETTERS FROM A COUNTRY GIRL.—No. 5.

MARGARET B. HARVEY.

IN the neighborhood in which we lived there was a society composed of young people, meeting sometimes at the houses of the various members, sometimes in the lecture-room of the church. I would suggest that the former place be used in the infancy of such an association; the latter when it has grown. Both have their advantages: the first brings members more closely together, the second gives better opportunity for a higher grade of entertainment and culture. Every community which has not such an organization needs one. And to the woman who liked my suggestions, in former letters, and followed them and profited by them, I would say: Go to work to start a society. Begin now, so that by autumn, when its work will be most needed, it will be well under way.

Interest the young people first, by inviting them to spend an evening at your house. If you can privately, beforehand, notify several of your young friends to be prepared to read or sing or play for you. If you can send for a friend at a distance, who has some special talent, all the better. If you can afford to offer a few simple refreshments, do so; if not, never mind, finish the evening by a few old-fashioned romps. Then, when you are sure they have all had a good time, say that you would like to form a society among yourselves, to meet at stated times; object, mutual entertainment and improvement. If they are in favor, capture the brightest, most energetic spirits for your right-hand men and women. If they think it would not work, try again until you *can* get support.

But it will scarcely fail if you feel your way carefully. Encourage your friends to prepare songs or recitations, or to volunteer to read or play, and ask them to bring friends and spread the interest. After a while, when the association has taken form, speak of contributions to a Library Fund. Meanwhile, use for common readings to form the subject of conversation, essays, debates, etc., the best books that you have or can borrow. Many interesting exercises can be invented by yourselves. I shall describe briefly, two, outside of the ordinary range of music and declamation.

One was this. A young gentlemen of our number, who had quite a fund of humor, as well as talent for sketching, would, prior to the time of meeting, draw something on a blackboard—a number of ridiculous faces, a fantastic landscape, a Mark Twain Map. Then he would stand before the association, and in deep, solemn tones, "deliver a lecture" on physiognomy, painting or geography.

Another, less amusing, but perhaps more profitable, was: The president would give out a number of slips of paper, each containing a question in history, philosophy, mythology, science, etc., to be answered the next meeting. These, supplied by members to be answered by other members, would compel a large majority quite often to read and consult authorities.

After the Library comes the Piano Fund. You might give a concert for one or both. The mere fact of the society's having in their possession a library and a piano, would stimulate the community generally to study. Out of the Library Fund a number of standard magazines should be taken, to be accessible to all. If it cannot be arranged to have the Library open at all times, it can be on the afternoon and evening of the regular meeting.

I began by describing a simple, home society, and ended with a large lyceum and its machinery. Well, so ought you; that is, you must aim for your organization's growth in numbers and in power.

After a time it will pay you to combine your resources, so that you can, now and then, have a noted reader or, musician to come and entertain you. This done, occasionally, will give the people a higher standard of culture, and they will learn to appreciate fine literature and music.

Shakespeare and Handel will then become more than mere names. I do not admire "spouters" and "squallers," but I think it just as likely to occur in one place as in another, that the young people will learn to converse intelligently of the early English poets and later novelists, and to sing beautiful selections from classic authors.

Once in a while, also, a scientist—he need not be very eminent, provided he is accurate in his facts—may lecture for you. As a matter of course, this will awaken some latent love of a particular branch of science in some of your youth. All the better if they follow this bent. Then for general information you will have a more or less complete flora and fauna of the district classified, the collection of flowers and insects and birds gradually accumulating in the cabinets which have become the property of the society.

Art can be studied by the members chiefly from books read by sections, and by purchasing photographs, heliotypes and plaster-casts, which latter being educational, will also form appropriate ornamentation for the society's room, or rooms—for by this time, you ought to have some kind of a regular headquarters. Ruskin's Modern Painters is a good work with which to start. Many of the most famous paintings have been copied so as to be within reach of all.

I do not know how much of this can be done in *your* section of the country—but I know that all has been done in several of which I know. But the simplest kind of a reading-circle is better than the utter monotony of too many places. And I believe it possible for every settlement to become the center of an intelligent, cultured community.

A PERFORMANCE was given in aid of the Shakspeare Memorial Theater, Library and Gallery, now approaching completion at Stratford-on-Avon, at the Gaiety Theater in London recently. The performance was arranged by Miss Kate Field, and embraced the following features:—Selections from "Romeo and Juliet," "As You Like it," "Merchant of Venice" and "Henry the Eighth," a short speech by Miss Field on the subject of the memorial, and an exhibition of the telephone harp, etc. Miss Field sang "Angels Ever Bright and Fair," and appeared in her comedietta, "Eyes Right." Shaskpearian airs were played on the telephone harp in Shakspeare's house at Stratford-on-Avon, and distinctly heard by the audience. There was a large attendance at the theater, and the financial success is described as splendid.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

L. M. BROWN.—As you do not wish to purchase any more silk, you had best take for the body of your underskirt some black cambric or any black skirt you may happen to have, and trim the bottom of it with a flounce (as deep as your goods will allow) and a heading of silk. Make a long overskirt of the underskirt, and as it is *full* you will probably have some to spare. This, with the overskirt you have now, will be ample for the underskirt flounce. Your basque ought to be lengthened about three inches. You can add a piece on it and cover the seam by a fold of silk, a band of velvet or a double row of lace. You need have no hesitancy about adopting the cambric underskirt, as the richest silk dresses (new material) are made with cambric or stuff goods underskirts, ornamented with a flounce and puffings or piping of the rich material.

MISS LINGOOD, Columbia Co., N. Y.—I would recommend Littell's Living Age. It will suit your purpose better than any other magazine published in this country.

LOTTIE MASTERS, Thousand Islands.—I do not care to discuss the merits of any political measure through the RURAL. If you want to read the arguments in favor of free trade you can address Putnam & Co. of New York, who have published several pamphlets advocating the advantages of lowering the tariff; but I must ask you to excuse me from expressing my opinion on matters political.

LILY BENTON, Essex Co., N. J.—Use your old black silk as an underskirt, and buy some one of the rich, fancy black grenadines for an overdress. The prices range from $1 up. A very elegant quality is purchasable at $1.50.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

THE fire burns low: chips take the place of hard wood, and the siftings are like the writer's household experiences—light and of little value. It is not how near to, but how far from the fire we can manage to do our needed duties that is now in question; for with the thermometer at 80°, cooking becomes a burden, and desire for carbonaceous food is sure to cease. Then we find fresh fruit a relief from puddings, and the children sup upon rice and milk, with good appetites. We must study more the foods suited for the season and adapt ourselves to it. The oil or blubber so necessary to the Russian or Esquimaux, is out of place in our hot, dry air; so is the pork and other strong foods we use in winter with impunity. The farmer who neglects to supply his family with a variety of the fruits, in their season, is wanting in needful prudence, as by such a precaution many a doctor's bill might be saved, and the general health of the family materially increased.

I said something like this as we came in from the garden yesterday with just time enough to cook our potatoes and asparagus for dinner before that hour arrived, and with keen appetites, good boiled ham, and a dessert of stewed rhubarb and cream with the last of our winter apples, we felt that more elaborate cooking was not needed, in the heat of the day. So we study when the breakfast is preparing to have some dish on hand for the dinner: it may be corn-starch, or tapioca, to be eaten cold for dessert, or perhaps a pie, if fruit is not in season. When that time comes, expect not oh, "Autocrats of the dinner-table," that anything more delicate than strawberries or raspberries or blackberries or rosy and white currants, will be set before you, as a substitute for pie; for with such it is our will that you be served, with a sprinkling of sugar and a richness of cream, the cook books never knew. Are there to be no more siftings? Ah! sign of golden summer days, — *the fire is out.*

CONVENIENCES.

I WISH that every household in this goodly land could have all the modern conveniences that the proverbial "Biddy" so persistently demands in every new place.

Indeed, we can hardly blame Biddy for wanting them as we regretfully look back to the time we reveled in their possession and found them very handy, But aside from sinks and tubs, are there not many conveniences to be had, with little or no expense but that of forethought?

I have seen a neighbor preparing a meal and during the time going back and forth a score of times to a distant closet for pots, pans, spoons, salt, pepper, and everything else that was needed, and all the time complaining of being so tired that she could hardly stand. A small closet near her cook stove, to hold the needed articles with a few dishes to serve up the meals, would have spared her many steps each day. And think of those saved in a week, a month a year! MAY DAY.

DOMESTIC RECIPES.

Raspberry Short-Cake.

Take a coffee-cup of sour cream; a teaspoonful of soda; flour and salt. Sift the flour and add a little salt; then stir the soda into the cream and before it stops foaming turn it into the flour; mix stiff enough to roll out—careful not to get it too stiff—into three or four circles the size of a small pie-tin; butter each and place one on top of the other; bake until well done in a quick oven; pull the layers apart and spread each one plentifully with ripe fruit previously sweetened with pulverized sugar; place layer upon layer and serve at once with sweetened cream.

Old Potatoes.

Peel and boil in salted water and take up as soon as done that they may remain whole; have ready some rolled crackers and a beaten egg; dip the potatoes into the egg and then into the crackers and fry in boiling lard.

MRS. KATE BRADY.

Raspberry Shrub.

Place red raspberries in an earthen dish; cover with good cider vinegar—not too strong and let stand twelve hours; strain and to each pint of juice add one pound of sugar; boil ten minutes and bottle hot.

Raspberry Vinegar.

The following makes a delicious summer drink by stirring two or three tablespoonfuls of it into a tumbler of iced water. Fill a stone jar with ripe berries and cover with pure, strong cider vinegar; let stand five days and then strain through a sieve, pressing out all the juice. Allow one and a-half pounds of white sugar to each pint of this juice and boil until the sugar is dissolved, removing any scum which may arise. Take from the fire, bottle and seal.

Iced Tea.

Let me give our way of preparing this cooling drink for lunch or tea on hot summer days. The tea should be made in the morning and of half green and half black; make stronger and sweeter than usual; pour into a jug and place in the ice-house or chest. Serve in goblets with small pieces of broken ice.

Lemon Tea.

Add a few slices of lemon and a little of the juice to tea made as above.

Livingston Co., N. Y. GRACE BENINGTON.

Black Currant Jelly.

To every five quarts of currants allow one and a half teacupful of water, and to every pint of juice, when strained, one pound of sugar.

Remove the currants from the stalks, and put into an earthen dish, with the proportion of water given; cover the dish over tightly, and place in the oven for one hour and a half; then squeeze out the juice through a coarse, cloth bag, and to every pint of juice add one pound of sugar. Boil from one-half to three-quarters of an hour—skimming well; pour into jelly-glasses and tie down.

Black Currant Jam.

Gather the currants when thoroughly ripe, and pick from the stalks; bruise slightly, and to each pound of fruit allow three-quarters of a pound of sugar; put sugar and fruit into a porcelain kettle, and boil nearly one hour over a slow fire, stirring constantly. COUNTRY GIRL.

Onion Toast.

Boil some small onions, changing the water twice, and salting it the last time. When done, take the onions up with a skimmer. Thicken the water, which should be boiled away to about a pint, with a very little corn-starch; add butter, pepper and salt to taste. Have toasted some thin slices of bread, lay them in a dish, put the onions on the slices, and pour the gravy over.

Dropped Eggs.

Have a saucepan of boiling water, and drop fresh eggs carefully into the water; let them stand where they will be hot, but not boil until the whites set. Toast some thin slices of bread nicely, lay them in a dish, and pour over a gill of rich, hot cream salted to taste; take up the eggs with a skimmer, and put an egg on each slice of toast; sprinkle a little salt and pepper over, and garnish with parsley if you please. E. M.

QUERIES ANSWERED.

WILL you define the terms *Souffles, Vol-au-vent* and *Baba?* I have seen those terms in cookery but did not know their meaning. C. O.

ANS.—(1) *Souffle* means something puffed up, and is generally applied to a light kind of a pudding made with any kind of farinaceous substance. (2) *Vol-au-vent* is a figurative expression applied to puff-paste of the lightest kind. (3) *Baba* is a kind of light plum cake.

WANTED.—A cement for sealing corks in bottles? E. L. L.

ANS.—Melt together one-fourth pound each of sealing wax and resin with two ounces of beeswax. When it froths, stir with a tallow candle.

How can oil marks, caused by people resting their heads against my parlor walls, be taken out? JANE B.

ANS.—Try pipe-clay mixed with water to the consistency of cream, laying it on the spot and letting it remain over night. Next day remove with a penknife.

News of the Week.

MONDAY, June 3d, 1878.

AT HOME the Potter committee of investigation into alleged republican electoral frauds in Florida and Louisiana is still the chief topic of interest, and will probably so continue for some weeks at least. Most of the recognized leaders of the democratic party seem not to have been consulted about the move, and some of them, such as Pendleton, and Alexander H. Stephens, are strongly opposed to it. In making it, many say Mr. Potter was merely Mr. Tilden's mouthpiece, or phonograph, repeating the lesson learnt at Gramercy Park. The Boards of Trade of several of the large commercial centers have protested against any action looking to the removal of Hayes from the Presidency as ruinous to business, and the same sentiment seems to be widespread through pretty nearly all classes in the country. Mr. Potter has written a long letter belittling but not denying the possibility of such a movement. In it he is discontented with the action of the Electoral Commission, saying, pretty truthfully, that the democrats held the winning cards but that the republicans bluffed them, and he maintains that the chief object of the present inquiry is to ascertain facts, so that if frauds be established, a repetition of such frauds may be prevented, and if not, to clear up the belief throughout the country that there were such frauds. To him Mr. Stephens has replied in a forcible letter protesting against the determination to make the inquiry one-sided and against the opposition to Mr. Hale's amendment making it to cover all electoral frauds, and finally denouncing the whole movement as likely to disturb the peace, quiet, and harmony of the country, and to end either in a contemptible farce or a horrible tragedy. Postmaster-General Key, the democratic representative of the South in the Cabinet, has also taken to letter-writing. He assumes it as proved that if the democrats have a majority in both Houses of the next Congress, they intend to oust Mr. Hayes and inaugurate Mr. Tilden; that they rely on the "solid South" to do this; that such action would be unwarrantable as the question was irrevocably settled by the last Congress; that any attempt of the kind would be certain to lead to another deplorable civil war, not between North and South, but between neighbor and neighbor throughout the land. He urges that as the Senate must certainly be democratic, it is essential for the purpose of preventing such a calamity that the people should vote in the fall elections for no man who does not distinctly pledge himself to oppose any such movement. Newspapers, here and there throughout the country, are ringing the same tocsin of alarm and prophesying terrible things; but it is very unlikely that the generation that has suffered the disasters, deaths and despair of the last internecine war, will ever tolerate any scheme at all likely to lead to a repetition of so bitter an experience.

Meanwhile, on Saturday June 1st, the committee began proceedings by the examination of James E. Anderson, supervisor of registration in the parish of East Feliciana, La., during the last Presidential election. This is the scamp whom Gen. Sheridan declared he wouldn't believe under oath, whose proferred testimony neither party would accept in the investigation held shortly after the election, and who ever since has been trying to blackmail the Administration or to make lucrative terms with any party willing to pay him his price for his evidence. He asserts that some time after the votes of the parish were handed in at New Orleans, he committed perjury by swearing that a fair election there had been rendered impossible by democratic bulldozing, and that he was impelled to this crime by the promptings and promises of Secretary Sherman and other "visiting statesmen," and he produced a number of copies of alleged letters to confirm the truth of his present statement. His evidence has produced some effect certainly, but there are always two sides to a question and only a self-confessed perjurer has hitherto been heard. At present the "visiting statesmen" are the objective point of attack, and Secretary Sherman just now seems slightly wounded. It is just possible that both Hayes and Tilden may both be smirched during the inquiry, and while there are not a few republicans, like Conkling and Blaine, who would bear with fortitude the sight of the former bespattered, there are thousands of good democrats, even outside of Tammany Hall, who would shed no tears at the spectacle presented by the latter bedaubed with Florida or Louisiana mud.

By a vote of forty-one to eighteen the Senate has passed the House bill, prohibiting the further withdrawal of greenbacks and directing their reissue by the Treasury. This is a compromise between the advocates of contraction and inflation, and will doubtless receive the President's sanction. It has the advantage of affording a larger volume of currency for transacting the enormous business of the country, and therefore tends towards making times a trifle easier; and the disadvantage of establishing a precedent for Congress to constantly meddle with the amount of the currency and therefore with its value, and consequently with the value of all existing contracts. Already it is found so difficult to put into circulation the $3,000,000 of silver coined every month in accordance with recent legislation, that by the 1st of May $17,000,000 of it had accumulated in the Treasury vaults—another proof, added to hundreds here and elsewhere, that in financial matters, legislative measures from which high hopes are entertained, are very likely to be attended with disappointment. The Syndicate has taken the $50,000,000 of 4½ per cent. bonds, for which it had agreed to pay in gold, and the Secretary of the Treasury says he will be ready to resume specie payments by next January, should Congress, meanwhile, refrain from repealing the law to that effect. The House has cut down the army from 25,000 to 20,000 men, but the measure may yet be defeated in the Senate. The present force has to defend 12,207 miles of frontier; to guard against 270,000 occasionally hostile Indians; to prevent Mexican depredations; to protect $204,601,681 worth of government property, without including the public buildings in Washington, besides aiding the revenue officials to break up illicit distilleries, and serving as a safeguard against riot and destruction, in case of such disorders as paralyzed traffic last summer. The Indian Bureau has been transferred from the Interior to the War Department by the same bill that has cut down the forces at the disposal of the latter. This is a sad blow to the swindling contractors and agents who have grown rich by speculations and cheating, and have been the principal source of our troubles with the aborigines.

It has lately been widely published that, during the war, Gen. Grant's march towards Richmond by way of the Wilderness instead of by the James River peninsula, was due to President Lincoln, who insisted that the army should be kept between Washington and the Confederates, although Grant was said to have stated that this line of advance would cost 100,000 men more than that adopted formerly by McClellan, and which he wished to follow. In a recent interview with a newspaper correspondent, Grant emphatically contradicts this statement, and says no such advice was ever given by Lincoln, and if any blunders were made in that campaign, the responsibility rests solely and absolutely upon himself. By the way, the General is looming up as a candidate for the next presidental election; and there is little doubt but that, in their present straits, he is head and shoulders or rather from the knees up, a bigger favorite with the republican party than any other man—but then such men have bitter enemies, and 'tisn't the strongest man that always secures the nomination. John Scott Harrison, son of President Harrison, ex-member of Congress from Ohio and father of Gen. Harrison, last Republican candidate for Governor of Indiana, died suddenly on May 25; and was buried on the 29th, at North Bend, Indiana. As there had been several cases of body-snatching lately, special precautions were taken against ghouls; but it was found on the 30th that the corpse was taken for the purpose of dissection to the Ohio Medical College at Cincinnati. There it was discovered by one of his sons; the janitor of the college has been arrested and intense excitement aroused. Science can surely find enough subjects in hospitals and elsewhere, without having recourse to such infamous outrages to secure material for the scalpel. The aged poet and journalist, William Cullen Bryant, had a severe fall in this city on the 29th ult. and is still suffering from concussion of the brain. There are, however, good hopes of his recovery, but at 82 it does not take much to snap the thin thread of life.

The Iowa Democratic State Convention met at Cedar Rapids on the 29th ult., and nominated a State ticket, headed by T. O. Walker for Secretary of State, there being no election for governor this year. Their platform advocates the customary doctrines, and says, apropos of the present Congressional inquiry, that a thorough investigation into election frauds should be made; frauds should be exposed, truth vindicated, and criminals punished in accordance with the law, when found. The Russians have bought another fast steamer in Philadelphia, and despite the pacific news from Europe, the Muscovite seamen in our waters and on shore are still briskly on the move, while all their doings are closely watched and reported by British spies. For the past week a *cause celebre* has been on trial across the Hudson in New Jersey. The Rev. Mr. Vosburgh has been accused by his brother-in-law of an attempt to poison the latter's sister—the pastor's wife. The trial has caused intense excitement; the clergyman, being supported by his congregation, and declared innocent by his supposed victim who is now in good health. Last Saturday evening the jury brought in a verdict of "not guilty." On Sunday morning, a second-rate paper of this city, contained five long columns on the Tilton-Beecher scandal. In it a Mr. Mix, a newspaper reporter who says he was a confidant of Tilton and Moulton, bitterly charges both these worthies with a a foul conspiracy to destroy the great Plymouth preacher. The effusion bristles with vituperation, innuendo, bald statements and personal animosity, but is a trifle weak in the matter of proofs. 'Tis doubtful if public interest can again be aroused in this nauseous scandal, even by an action for libel against Mix, or the paper that admits his diatribe. Great trouble is expected in Montreal on the 12th of July next. A number of Irish societies have been invited from the United States to a pic-nic there on the 11th. The great Orangemen's procession is to take place on the following day, and crowds of Orangemen are expected from all parts of Ontario. The Government has been requested to take precautions to preserve the peace, and all visitors will be rigorously searched for arms. Sitting Bull is once more reported to be getting ready to go on the war path in the United States as soon as the grass is thick; the troops along the frontier are prepared to give him a warm reception. Escobedo has succeeded in invading Mexico on behalf of Lerdo. He is said to have captured a few petty towns, levied some contributions, of course, and won some minor triumphs. The whole country from the Mississippi East, has been visited during the week by severe wind and rain storms, here and there assuming the form of destructive hurricanes or tornadoes; many lives have been lost, much property destroyed by land and water, and another unusual feature added to this year's weather record.

It was only on the 11th of last month that the fanatic socialist, Hoedel, attempted to assassinate the Emperor of Germany while driving along the Avenue, Unter den Linden, in Berlin, and at two o'clock yesterday afternoon a similar attempt was made in the same place by another of the same stripe, named Nobeling. As the imperial carriage was passing No. 18, two shots were fired from an upper window. Thirty shot and slugs have been extracted from the Emperor's body, mainly from the face, chest and arms, and further mischief might have been done, had not a chasseur, after the first shot, thrown himself over the Emperor in the carriage. The wounded man is doing pretty well, though one shot in the wrist is considered dangerous at his great age. The would-be assassin barricaded himself in the room, resisted capture and finally tried to kill himself. It was with great difficulty that the quickly-assembled mob were prevented, in their fierce indignation, from tearing the wretch to pieces. Nobeling is a doctor of philology, a native of Dresden, and for years a resident in Berlin where he has edited a socialistic paper. He has long contemplated the crime, and it is supposed others are also implicated. The Crown Prince and his wife — Queen Victoria's eldest daughter—who were in London, have hastened home. Despite the one thousand million dollars Germany wrung from France half a dozen years ago, distress among the lower orders is to-day much greater in Germany than in France. Success begot extravagance and speculation wilder than here at the close of our war; then came collapse, pinching and inconvenience for a few of the aristocracy of birth or commerce and grinding poverty and starvation for thousands of the laboring classes. Militarism grew more exacting, and accumulated hardships have driven the lower orders in crowds across the Atlantic, while those who remained behind, in their misery, have lent a

ready ear to the plausible sophistries of the Commune. So many are the socialists in Berlin that since the crime of Hoedel, three weeks ago, 20,000 of them publicly followed to the grave the corpse of Drentel, one of their leaders. Some days since the Government introduced a bill into the Reichstag enforcing severe measures against them, but the first clause was so badly defeated by a union of the Radicals, Liberals and Ultramontanes, that the Government withdrew the whole of it. If reintroduced after this second outrage, it will stand a better chance of passing.

"It is the unexpected that happens" is one of those French paradoxes that turn out true far more frequently than one expects, and this is very likely to be the case with regard to the peaceful issue of the European complications. Invitations to the long-deferred and often-despaired-of Congress have been issued by Bismarck and accepted by all the Powers interested, and the meeting will take place at Berlin on or about the 15th inst. Count Schouvaloff, the Russian ambassador to England, who will represent Russia, started yesterday for St. Petersburgh to receive final instructions. Lords Beaconsfield, Salisbury and Odo Russel will represent England, which may well be proud of the results of her energy and determined diplomacy. Nearly all the conditions to be affirmed at the Congress are already agreed upon, and it is expected to hold only a few sessions. Peace across the Atlantic will be rather a bad thing for many of our farmers, who have planted wheat extensively in the expectation of European warfare affording them a profitable market; but for the sake of Christianity and humanity all should rejoice at the prospect that Europe will escape the horrors of so bloody a war as that which has been threatening it, would certainly prove.

On Saturday forenoon three German iron-clad war-vessels, the Konig Wilhelm, the Prussen and the Grosser Kurfurst were steaming off Folkestone in the English Channel, when the last, changing her course to avoid a passing bark, was run into by the first and sank in a few minutes—cause of accident, the steering gear out of order. Of her crew about 300 were lost and 210 saved. The Konig Wilhelm put into Dover with her prow smashed in, and the forward bulkheads full of water. HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 1, 1878.

BEANS AND PEAS.—Recent free receipts of beans have not included a fair proportion of mediums, and that grade is firm with moderate sales. Marrows still lack steady Cuban business and our quotations are very full. Fine pea beans could be more largely used, but they are noticeably as scant as they have been for several seasons. White kidneys sympathise with the lull in marrows and prices are extreme. Red kidneys have run down to a few small lots in two or three hands, and prices are firm at the advance. Black beans quiet. Green peas steady for good quality at $1 05@1 10. Canadian field peas, in bulk and bond, easier; 79½@80c. Southern H. E. peas nominal at $3@3 25 ₱ two-bush. bag. We quote medium beans, prime, $1.65; fair to good, $1.40@1.50; marrows, prime, free on board ship, $1.75; fair to good, $1.50@1.70; Peas, $1 40@1 65; white kidney, $1.50@1.65; red do., $2.50@2.90; black, $2 35@2 40.

Receipts of beans past week, 5,796 bush. Exports of beans, 840 bbls.

BUTTER.—Regardless of the low prices given in our last another decline is to be noted. By Tuesday last dealers in State found they could not cope with sellers of Western, and at the close of a week which has had the drawback of a holiday and several rainy days, they seem to have resigned the contest. At least, we hear none of them advocating further free receipts of State after attempting to mark down rates to match figures for Western. The main cause of lower prices arises from the very liberal receipts of Western, and as the useful average quality of it diminishes the late precedence held by State in that respect. It is likely that Western will keep this load until hot weather again advances the merit of State. No line of dealers, however, can feel much encouragement in the style of trade now current. Notwithstanding the low rates of Western a good many of the off grades, such as common factory and milled stock, have to go into store. A surplus of this kind always gives wholesale or export buyers more or less independence.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 17c.; other, 13@16c.; Welsh tubs, best, 16@17c.; other, 13@15c.; poor State, 10@12c.; Western creamery, choice, 19@20c.; other, 16@18c.; Western dairy, best, 13c.; other, 9@12c.; factory (ladle packed), 10@11c.; other, 9@10c.; milled Western, 5@9c.; old and grease, 3½@5c.

Receipts for the week, 34,508 pkgs.; exports past week, 2,250 do.

BEESWAX.—A small business is being done with shippers. Sales at 26½@27½c. for Western and Southern.

Exports since Jan. 1st.. 85,300 lbs.

BROOM CORN.—A late revision of prices names the following rates:—Brush and hurl, 5,@7e.; medium green, 5@5c.; red or poor straight, 4@4½c.; crooked, 2½@3½c. The demand is hardly wholesale in its volume, as the supply of brooms is large enough to prevent rapid manufacture. A late feature in the trade is a move to establish a uniform rate for crooked by quoting half-price, with hurl for a standard.

COTTON.—The export and spinning demands have been liberal, and the market closed strong. Latest prices are for June, 11,53@11.54c.; July, 11.59c.; August, 11,53@11,54c.; September, 11.33@11.34c.; October, 11.06@11.07c.; November, 10 91@10.93c.; December, 10,93@10.95c.; January, 11@11.01c.; February, 11.07@11.09c.; March, 11,16@11,17c; April, 11.20@11.27c.

Quotations are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9	9	9⅛	9⅛
Strict ordinary	9⅜	9⅜	9⅜	9⅜
Good ordinary	10	10	10⅜	10⅜
Strict good do	10⅜	10⅜	10⅝	10⅝
Low middling	10¾	10¾	11	11
Strict low middling	11 1-16	11 1-16	11 3-16	11 3-16
Middling	11⅛	11⅛	11⅛	11⅛
Good middling	11⅜	11⅜	11⅜	11⅜
Strict good middling	11 15-16	11 15-16	12 1-16	12 1-16
Middling fair	12 7-16	12 7-16	12 9-16	12 9-16
Fair	12 15-16	12 15-16	13 1-16	13 1-16

Stained.

Good ordinary	9c.	Strict good ordinary	10c.
Low middling	9e.	Middling	10⅜e.

CHEESE.—With the receipts of the country advices early in the week, the market here was completely upset. Shippers were very indifferent, and the supplies were piling in beyond all precedent, for this season of the year. Prices looked sharply at one time; fancy factories were obtained as low as 7½c., and the other grades relatively lower and difficult to sell. Towards the close trade became better in the fancy lots, and 8 generally made, and for exceptional lots 8¼c. The shipments for the week are 51,466 boxes. Quotations are, for fancy, 8c.; 7@7½c. for good and prime; 6@6½c. for fair; 4@5½c. for half skimmed, and 2@3c. for skimmed. State, farm dairy at 6¾@7½c. for good to choice, 5½@6½c. for fair to good and 2@3c. for poor skimmed. Western factory fine, flat at 6½@7e.; do. good to prime, 5½@6½e.; do. fair, 4½@5½c.; do. half skimmed, 4@5c. do. skimmed, 2@3e. Wisconsin factory, fancy, 8e. do. good and prime, 7@7½e.; do fair, 5½@6c.

A severe hindrance to sales occurs through the weak quality of stock. A large proportion of the arrivals are of only fifteen days' curing, and sellers are forced to hasten sales—a fact which always gives independence to buyers.

Receipts for the week, 90,336 boxes.
Exports, past week 86,406 boxes.
Gold closes at 101.
Liverpool quotation, new 50s.

DRIED FRUITS.—Apples are offered easy in price and are dull. Peaches are neglected. Small fruits generally firm.

Peaches—Fancy North Carolina 12@13c.; Choice Georgia, 10@11c.; good to prime Georgia; 8@10c.; unpeeled halves, 4½c.; quarters, 4c. Pitted cherries, choice new, 21@22c.; Raspberries. 25@27c. New York State plums, 12½@13; Southern plums, 11@12c. Blackberries, 10@10½c. Apples—State quarters, 4¾@5½c.; do sliced, prime, 6@6½c.; good, 5c.; Western quarters, 4@4¾c.; Southern at 6@7c. for prime sliced, 5@5½e. for fair to good; Southern quarters, 4¼@4½e.; Tennessee quarters, in bags, at 2½@4½c.; prime and fancy North Carolina sliced at 8@;2c.

Exports for the week, 450 bbls. dried apples.

EGGS.—Receipts for the week, 10,175 bbls.; do last week, 10,700 do. There is a good, steady demand that has supported prices for the past week. Buyers, however, insist on choice quality when the extremes are paid for Western and Canadian stock is turning out unely; 13c. is a frequent quotation. Sales of all stock now quoted loss off.

Few near points arrive, a local demand begins to hold them back. New Jersey and L. I., 15c.; State and Penn., 13@13½c.; Choice Western and Canadian, 13c.; good, 12½e.; off quality, 11½@12c.

FRESH FRUITS.—Apples nominally quoted, $1@7 bbl., few here or to come. Strawberries have been scarce for a day or two owing to the rain, and prices are exceptionally high. Md. and Del. sold at 7@12c.; New Jersey, crates, 10@11c. To-day the range is 11@18c. for the scant supply of good. No more due from Norfolk. Southern cherries, prime, 13@15c. lb.; small to fair, 4@11c. Gooseberries, ₱ bushel 2s to quality. Georgia peaches more in poor order; there have been sales at $3 crate. Hot-house peaches, doz. $2@3; do. Black Hamburg Grapes, $1@1.25. Peanuts dull, it looks as if rates would have to decline. Hand-picked, Va., $1.35@1.40; fancy, $1 25@1.30; fair, $1.15@1.25; common, 5@9c.

FLOUR.—Prices have been steadily declining on large supplies, and the lower range for Wheat. Latest prices are $3.30@4.15 for very inferior to fancy superfine State; $4.25@4.50 for poor to good extra do. odd lots and lines; $4.50@4.15 for good to fancy do.; $3.25@4.15 for very poor to fancy superfine, Indiana, Iowa, Michigan, Ohio, &c., $4.25@4.30 for very inferior to good shipping extra do., and $4 50@5.65 for good to fancy extra do. common to about choice white wheat extras, $4.50@5.65; choice to very fancy do. at $5.65@6.75; red and amber winter wheat, inferior to very choice trade and family at $4.50@5.85; round hoop Ohio at $4.25@4.60, and trade and family brands of do. at $4.70@5.75, the latter rate for choice, (fancy lots quoted higher); St. Louis, $4.40@5.25 for very poor to good extra, and $5.25@6.50 for good to very choice, with a few brands of fancy quality quoted up to $7.00 Minnesota clear, very inferior to very fancy choice at $4.35@5.37; Minnesota "straight," inferior to very fancy, at $5.35@6.50, and patent poor to fancy choice at $5.40@8.25; unsound stock at from $2.00@5.00; city mill extra at $5.40@5.65 for fair to very choice for West Indies; do. for England at $4.25@4.40; do. trade and family extras, $6.00@7.25; do. for South America, $5.75@6.50 for fair to very choice; No. 2 at $2.15@3.20 for very inferior to strictly very choice.

FEED.—Is at a decided decline, 40 and 60 lbs. at $13@14, and 100 lbs. at $16@17.50.

GRAIN.—There has been a severe decline in all articles, through the large receipts and reports of liberal shipments forward from cable points.

Latest sales of No. 2. Northwest spring at $1.07@1.08; do., first 10 days in June at $1.08; do. June option, at $1 07¾@1 08; New York No. 2 spring, spot at $1 06@1 07; do. June option at $1 06@1 07; do., July option, at $1 05@1 06, closing at $1 05 old; No. 2 Milwaukee spring spot, at $1 18@1 19; No. 2 Chicago spring at $1 06½; No. 1 Milwaukee and Minnesota spring, part to arrive shortly, at $1.10@1 12; ungraded red Western at $1.12@1.16; No. 2 Toledo red, spot, at $1.07½@1 10; extra white at $1.22@123½; No. 1 white at $1.21@1 25; ungraded white Western at $1.23; amber Michigan at $1 17½; No. 1 red at $1.15@1 16; New York No. 2 red at $1 13@1 15, closing at $1.13@1 13½; and do June option, at $1.12. Rye at 65@68c. for State and 63@66c. for Western. Corn at for No. 2 July option, at 45¾@46¾c.; No. 2 June option at 44¾c.; do. at 45c.; steamer mixed, June option, at 43¾c.; do. July option, at 43¾c. Of the spot lots New York No. 2 at 44½@45¾c.; New York No. 3 at 42½@44c.; New York steamer mixed at 43½@44c.; Kansas mixed at 45@46c.; mainly at 45@45½c.; steamer yellow at 48@50c.; ungraded mixed at 42@46c.; and western yellow at 4.c. Oats at for No. 2 Milwaukee, 30½c.; No. 2 Chicago at 30½@30½c.; New York No. 1 white at 36¼c.; New York No. 1 at 29½@30½c.; do. July delivery, at 30¾c.; New York No. 2 white at 30@30c.; New York No. 2 at 27½@29c.; New York No. 3 white at 28c.; mixed western at 27¼@30c.; white western at 29@30c.

HIGHWINES are held at $1 08, and bids lower.

HAY AND STRAW.—Supplies are large, the reports from the river sections that the crop is much better advanced than usual at this period, cause free sellers at easy prices.

Hale hay, 50@55c. for shipping, and 65@75c. for retail qualities; clover, at 50@60c. for prime. Straw quoted at 40@50c. for long rye; 35@40e. for short rye, and 40c. for oat.

Exports, past week, 630 bales; Since Jan. 1st 27,909 do.; same time last year, 25,650 do.

HOPS.—The shipments are sufficient to draw upon the accumulations, exceeding the receipts, and for all desirable grades there is a steady temper to the market.

New Yorks, good to prime, 7@10c; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

MISCELLANEOUS.—American essential oils: Peppermint, in tin, $1 70@2; in glass, $2. Wintergreen, $1 90@2; Sassafras, 39@40c. currency; Seneca root, 53@55c. Ginseng, $1 10@1 20. Feathers, choice geese, 45c.; mixed, 40@42c.; scalded, 35c; duck, 20c.

OIL-CAKE—Western quoted at $30@30,50

PROVISIONS—Hog products have tended a little stronger, with a fair trade.

Mess pork quoted $9@9,25 for spot lots; $9 30 for June and July; $9 35 for August, and $9 40 for September, Bacon at 4¾c for long clear and 5c for short clear. Lard at 6.75 for spot, 6.72½ for June and 6.75 for July. Tallow at 7c. for prime. Stearine at 7¾c. for prime. Beef hams at $19.50@20. Beef—For extra mess, $11 75@12; plain mess, $10@11.50; packet, $13.00@13.50 for bbls.; extra India mess, $20@22 for city brands; do. Philadelphia, $19@20.

POULTRY AND GAME.—The market has been overstocked with live from day to day, and prices have ruled decidedly weak. Spring chickens have also declined. Turkeys are completely neglected; from this out it will be more profitable to rear instead of shipping.

Fowls.—Near points; 9@10c.; Southern and Western, 8@9c.; Spring Chickens, N. J., 20@22c.; Western, 18@19c.; Turkeys, 8@10c.; Choice, Ducks, pair, 75@87e.; Southern and Western, 50@62c.; N. J. Geese, $1.25@1.50; other, 87c.@$1.25.

Dressed poultry continues nominal. City-dressed can undersell country. Very little good country-dressed, however, now arrives.

Turkeys, 8@11c.; Phila. fowls, 12@13c.; N. J. 10@12c.; State and Western, 8@10c.; Spring chickens, Phila., 23@25. Southern and Western, 20@22c.

There is only a fair demand for game, and moderate receipts supply it. Doubtful snipe, $2@2.25 doz.; Sand, 50c. Stall-fed wild pigeons, $1@$1.12; flight do. 75@85c; Squab, 65@75c.

VEGETABLES.—Choice old potatoes are scarce and very firm: many buyers have an aversion to new, and will pay big prices while fine Peach Blows and E. Rose last, common grades are doing comparatively well. Southern potatoes are of good quality and have a ready sale; good to choice including Norfolk, $3@3.75; culls, $1.25@1.75; Old P. B. & E. R. $2.12@2.37; common sorts, $1.25@1.75; Bermuda potatoes, $4@4.50; do. onions, $1.25@1 37 crate; do. tomatoes, 40@50c. five quart box. Fla. tomatoes, fine crates, $3.50@4; ripe, $1.75@2. Asparagus steady, $1.50@2 per doz. for best including Oyster Bay; other, $1@1.37. N. J. Peas bbl., $3.50@4; Md. do., $3@3.50. Southern cucumbers, 50c.@$1 per crate. Nor. String beans, half bbl. crate, $2.50; Charleston and Savannah bush, crates, $1@1.25; N. J. Beets, 100 bunches, $3@5; Nor folk do., $2@2.50; Rhubarb do., $1.50@1.75. Spinach, bbl., 50@75e.; Southern cabbages, bbl., $1.25@1.75; N. J. Turnips, 100 bunches, $3@4.50; Nor. do., 75c.@ 11.25; Radishes, 100 bunches. 50c.@1; Lettuce, bbl., $1@1.50; Hot-house Cauliflower, bbl., $5@8.

TOBACCO.—Prices have not varied. Export demand is very good in Kentucky Leaf, and the home trade in Seed Leaf more active.

WOOL.—Is very dull, manufacturers holding off for the new Western clip, and prices are weak:

Ohio, Pennsylvania and Virginia quoted at 36@38c., for XX, 35@37 for X, 40@43 for XXX and picklock, 37@40 for No. 1, 31@36, for No. 2, 32@34 for common, and 40@43 for combing.

New York, Michigan, Indiana and Wisconsin. XX, 33@35c.; X, 33@35c.; No. 1, 35@38c.; No. 2, 32@35e; common 30@32c.; combing 38@43.

Iowa, Vermont and Illinois X and XX, 32@34c.; No. 1, 31@33.; No. 2, 30@32.; combing, 37@40.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@35e.; unwashed, 25@26e.; unwashed combing, 28@31c.

LIVE STOCK MARKETS.

NEW YORK, JUNE 1, 1878.

BEEVES.—Receipts for the week, 10,351 head: do., last week, 11,454 do. Thursday was almost a lost day to trade owing to the Floral Celebration and bad, rainy weather has checked business. The market was generally quoted weak at the close, at 8¾@10½e. for medium to extra steers; exporters paying 9½@10¾c. The droves included Colorado cattle at 9@9¾c.; Missouri and Kansas steers coarse, but fat, at 9¾@10c.

COWS AND CALVES.—The nominal range is $40@$70, with an extra milker at $85. Trade unimportant, and there is no call for enlarged receipts.

VEAL CALVES.—Receipts are not oppressive, and and prices are a shade firmer. Choice N. J. 6@6½c.; good, 5½@5¾c.; State range at 1½@5¾c., for poor to best. Buttermilk have varied rates, some down to 2½c. and others up to 3¾@4¼c.

SHEEP AND LAMBS.—Receipts for the week 19,753 head; receipts last week 24,986 head. Market quiet. Common to good clipped sheep 3½@4¾c. Ohio lambs have sold slowly, some Kentucky here missed sale since last Monday. Lambs quoted, N. J. choice 6@7c.; State, 5@5¾e.; Va. and Ky. 4¾@5½e.

SWINE.—Receips for the week 32,285 head; do. last week 35,115 do. No recent sales alive. Nominal rates same as last week's, $3.50@4.50 ₱ 100 lbs.

INDEX TO NEW ADVERTISEMENTS.

Allen & Co., R. H.—Farm Implements and Seeds.
Aultman & Co., C.—Canton Monitor Engine.
Brown, Dr. O. Phelps—Fits Cured.
Challenge Mill Co.—Double and Single Header Wind Engines.
Dickey, A. P.—Young Giant Fanning Mill.
Eckstein, Hills & Co.—Pure White Lead.
Ertel, Geo.—Economy Hay, Straw and Moss Press.
Field, Son & Co., J. A.—Big Giant Corn Mill.
Furst & Bradley—Sulky Hay Rake.
Furst & Bradley Mf'g Co.—Walking Cultivators.
Harder, Minard—The Fearless Threshing Machine.
Kingsford & Son—Oswego Corn Starch.
Mackie, H. S.—Pianos, Organs and Small Musical Instruments.
Mast, Foos & Co.—Iron Turbine Wind Engine.
McSherry & Co.—Force Feed Grain Drill.
Minkler & Co., J.—30 Mixed Cards.
Nichols, Shepard & Co.—"Vibrator" Threshers. Horse Powers, &e.
Payne & Sons, B. W.—Eureka Safety Power.
Russell & Co.—Farm Engines, Threshers, &c.
Silver & Deming Mf'g Co.—Endless Chain Horse Powers.
The Dingee & Conard Co.—Beautiful Ever-blooming Roses.
Tiffin Union Churn Co.—The Union Churn.
Towanda Eureka Mower Co.—Wilber's Direct-Draft Eureka Mower.
Wells, Richardson & Co.—Perfect Butter Color.
Westinghouse & Co., G.—Threshing Machines, Morse Powers and Engines.
Wheeler & Melick Co.—Spring Steel Tooth Horse Rakes.
Young, Oscar W.—Imported Scrap Pictures.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c.	per line.
" 13th page	50	"
Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

SPECIAL NOTICES.

For particulars regarding Electric Belts, &c., address PULVERMACHER GALVANIC CO., Cincinnati, O.

New Advertisements.

FARM IMPLEMENTS & SEEDS.
Call on or write to R. H. ALLEN & CO., New York, for whatever you want of the above.
Address 189 & 191 Water St.

DOWN WITH HIGH PRICES

Strictly Portable.

Power and Press in one.

The Ertel Economy *One Horse* Hay, Straw and Moss Press—the World's Favorite—is the most durable, the handsomest working, the easiest in draught, the lightest in weight, and lowest in price; 10 tons of its Hay will load in any railroad box car. These Presses are daily sold, REGARDLESS OF JEALOUSY shown by Eastern monopolies. The Title of this Press is guaranteed to all.
Above is warranted or no sale. Address
GEO. ERTEL,
Patentee and Manufacturer, QUINCY, ILLS.

USE THE PERFECT BUTTER COLOR!
WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop's, Burlington, Vt.

Sure Death to the Potato Beetle.
The Union Mills Bug Destroyer
Contains Paris Green and other poisonous ingredients, mixed ready for instant use, and is guaranteed to effect a speedy and sure deliverance from the ravages of the Potato Beetle.
Directions for using and a good hand sieve for applying the poison with each barrel.
Price $5 per bbl., delivered on cars. Satisfaction guaranteed or money refunded. Address
JOHN RALSTON, 170 Front St., New York.

The FEARLESS

Railway Threshing Machine proved itself the "Best at Centennial Trial," and was the only Machine awarded a
CENTENNIAL MEDAL
AND CERTIFICATE OF MERIT,
on both Horse Power and Thresher and Cleaner, at the Centennial Exhibition, as shown by Official Report, which says: "*For special features in the Power to secure light running and minimum friction. For the ingenious form of the Straw Shakers, which insure the proper agitation to separate the grain from the straw.*" For catalogue, address MINARD HARDER,
Cobleskill, Schoharie County, N. Y.

Use the Anti-Friction Hay Carrier.
For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and to the end of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "D" to U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

TRADE MARK.
'VIBRATOR'
Reg. March 31, 1874.

THE ORIGINAL & ONLY GENUINE
"Vibrator" Threshers,
WITH IMPROVED
MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
NICHOLS, SHEPARD & CO.,
BATTLE CREEK, MICH.

THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Rattles, and all such Time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse size, and two styles of Mounted Horse Powers to match.

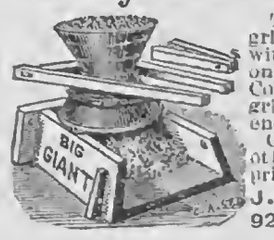
STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

IN Thorough Workmanship, Elegant Finish, Perfection of Parts, Completeness of Equipment, etc., our "Vibrator" Thresher Outfits are incomparable.

FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which we mail free.

BIG GIANT CORN MILL.
Every Man His Own Miller.



The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use.
Grinds twice as fast as any other Mill of same size and price. Manufactured by
J. A. FIELD, SON & CO.
922 N. 2d St., St. Louis.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.
Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.
For further particulars, send for Price Lists and Circulars to
KIDDER & LAIRD, 83 John St., New York.

Reading for the Young.

TWO LITTLE ROGUES.

Says Sammy to Dick,
" Come, hurry ; come, quick !
And we'll *do*, and we'll *do*, and we'll *do* !
Our mamma's away ;
She's gone for to stay ;
And we'll make a great hullabaloo !
Ri too, ri loo, loo, loo!
We'll make a great hullabaloo !"

Says Dicky to Sam,
" All weddy I am
To do, and to do, and to do.
But how doeth it go ?
I so little know ;
Thay, what be a hullabawoo ?
Ri too, ri loo, woo, woowoo !
Thay, what be a hullabawoo ?"

" Oh ! slammings and bangings,
And whingings and whangings,
And very bad mischief we'll do ;
We'll clatter and shout,
And pull things about ;
And that's what's a hullabaloo !
Ri too, ri loo, loo, loo, loo !
And that's what's a hullabaloo !

" Slide down the front stairs,
Tip over the chairs ;
Now into the pantry break through :
We'll take down some linware,
And other things in there—
All aboard for a hullabaloo !
Ri too, ri loo, loo, loo, loo!
All aboard for a hullabaloo !

" Now roll up the table,
Far up as you're able.
Chairs, sofa, big easy-chair too ;
Put the poker and vases
In funny odd places :
How's this for a hullabaloo ?
Ri too, ri loo, loo, loo, loo !
How's this for a hullabaloo ?

" Let the dishes and pans
Be the womans' and mans :
Everybody keep still in their pew !
Mammy's gown I'll get next,
And preach you a text.
Dicky, hush with your hullabaloo !
Ri too, ri loo, loo, loo, loo !
Dicky, hush with your hullabaloo !"

As the preacher in gown
Climbed up and looked down
His queer congregation to view.
Said Dicky to Sammy,
" Oh, *dere* comes our mammy !
Se'll *thcold* for dis hullabawoo,
Ri too, ri loo, woo, woo, woo !
Se'll *thcold* for dis hullabawoo !

" O mammy ! O mammy !"
Cried Dicky and Sammy,
" We'll never again certain true."
But with firm step she trod,
And looked hard at the rod :
Oh, then came a hullabaloo !
Boohoo, boohoo, woo, woo, woo !"
Oh, then came a hullabaloo !

[*Mrs. A. M. Diaz, in "Jimmyjohns," etc.*

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 5.

ANNIE L. JACK.

Strawberries—Currants.

There is no crop grown that has the same fascination to an enthusiast as the culture of fruit; and I think strawberries are the most charming and romantic of fruits. There are the color, the aroma, the luscious richness. It is the first fair fruit the summer gives; and no doubt boys and girls think it the fruit they would choose in their efforts towards a little pocket-money.

Well, if so determined, get the "Wilson" *to sell*, for, I am sorry to say, with all its acidity it is the only profitable berry for market purposes. The plants are sold here at one dollar per hundred, and do well in ground where potatoes or corn have been grown the previous season. Any nurseryman, in the fall will sell plants cheap, and after early potatoes are sold off, the land can be prepared in rows as if for corn—the plants set a foot apart and kept clean. A covering of leaves, swamp hay, or branches, is necessary to protect them when the climate is such that there is danger of frost. Many people cover with straw, but *any thing that does not contain weed seeds* is much better. The mulch is simply drawn aside in spring, and left between the rows to keep the fruit clean, retain moisture, and prevent weeds.

Of the profits I cannot say, as the price is so variable in different localities; and the neatness of sorting, and size and freshness, make quite a difference. The returns are quick, as the second year from planting the berries are extra fine, if not so plentiful as afterwards. But when you plant, remember, that in fruiting season the plants will require constant attention. You must pick, pick, through the heat of the July days, no matter what may lure you away. A day's delay, and your berries will lose their fresh look, and as they cannot be picked in early morning—for the dew—it is often a tiresome job in sun and heat. Then cases and boxes cost something; and a consignment from some land of plenty may flood the market and bring down prices.

But if you have customers who wish good, fresh berries, and know them when they see them, I should say "Grow strawberries." They are a delightful attraction to visitors and birds, and sweet and fragrant to taste and smell, always salable and eatable, and I remember one season when some boys and girls I know, picked ninety dollars' worth from not quite half an acre of land. After the berries are off, the cultivation must be *thorough*, runners cut, plants kept clean all through the summer; and it is wise to set out a new bed, to be coming into bearing before the old one is exhausted.

There is another fruit crop that repays all the trouble it requires, and any boys and girls who can get cuttings of currants, white, red or black, I should advise to set them out in straight rows, *wide* enough to be cultivated by horse power. There are plenty of customers to be found for these fruits, and people prefer to get them fresh picked from the garden to going to market for them.

All the suds and slops from the kitchen are useful to make them grow, and if the worm appears, hand-pick the leaves that are infested and water the bushes with white hellebore dissolved in soapsuds. It is surprising how soon a young currant bush will bear a gallon of berries; and they are generally large if well fed, while prices per gallon, in my experience, range from 40c. upwards, for fine, fresh fruit. They are easily handled, clean to pick, do not spoil if left a day on the bushes, and repay well extra care and culture.

THE ART OF DECEPTION.

One of the most singular inconsistencies to be observed in every-day life is found in the different manner in which the habit of deception is regarded according to the age and position of those who practise it. Children, as soon as they become capable of distinguishing right and wrong, are taught to look upon deceit as one of the worst sins that can be committed. Boys at school are not only taught the beauty of truth by their masters, but, in a certain rough fashion, reverence it among themselves. A boy, for instance, who parades ostentatiously to his master an assumed steadiness of principle and submissiveness of demeanor is very soon branded with the odious title of sneak. On the other hand, occasions arise in schoolboy life when by sticking to a deliberate falsehood, a boy may gain for himself the reputation of a hero among his fellows. This, however, is a detail of the curious system of schoolboy morality, the unwritten laws of which might afford an interesting matter for study.

Girls, it would seem, are by nature more inclined to untruthfulness than boys; but this inclination is really very often the result of moral cowardice, a defect which it may be said is as common to boys and men as to girls and women. But in the one case there are deterrent influences, absent in the other, which often lead to the attempt at overcoming, or at any rate concealing, this fault. A boy who has invented a story to save himself from a scrape, and is found out, is generally made to feel in some tangible way that he has been guilty of a gross blunder, if not of a crime. He becomes conscious that his conduct has gained him nothing but a punishment and the scorn of the community. With girls the matter is somewhat different; some form of punishment may be inflicted, but the sense of having done a shameful thing is less frequently and less strongly inculcated. A girl who has been detected in a falsehood may be teased on the subject by her companions, but she will not be shunned and despised. Thus she is very likely to learn early in life the great maxim that it is not crime but detection that one ought to avoid.

She Likes to Work in a Garden.

Dear Uncle True.—I want to tell you how dearly I like to work in a garden. I have raked all the leaves and picked up all the stray sticks and I am watching the flowers every day. Why can't we Rural Cousins gather flower seeds to exchange, or garden seeds. I help make the vegetable garden. I for one can save lots of seeds.

I am going to have a swing and a croquet ground, so I have a pleasant time with my company, and do not disturb the grown people. Some one give us directions for rustic summer-house of poles, and oblige NIAGARA MOLLIE.

The Puzzler.

ENIGMA.

In the middle of day I always appear,
Yet am ever in darkness, in sadness, and fear.
I am in anguish and pain, yet always in health;
In the midst, too, of happiness, pleasure and wealth.
I was formed since the flood, yet am part of the ark,
And seen in a cradle, a lamp, and a spark;
Though never out of England, I'm always in France,
Stay in Paris and Amiens, Bordeaux and Nantes.
I'm found in the foam and the waves of the ocean,
In steamboat and cars, yet am never in motion.
I'm always in land, yet ne'er out of water,
And without me you can't name a son or a daughter.
In short, I'm in all things; there's no lake, or sea,
Or island, or cape, but contains little me.

☞ Answer in two weeks. R. A. Dukate.

MISCELLANEOUS ENIGMA.

I am composed of 84 letters:
My 12, 26, 61, 51, 11, 5, 14, 6, 84, 18, 8 a sail of a ship.
My 41, 1, 42, 6, 35, 30, 57, 37, 43, 29, 22, 19 a circular edifice used for public amusements.
My 7, 27, 72, 31, 13, 36, 2, 4, 29, 34, 15 unhealthy.
My 64, 73, 74, 46, 61, 44, 79, 21, 33, 38 real merit.
My 25, 55, 83, 28, 22, 47, 50, 48 an act of charity.
My 49, 17, 67, 16, 52 an umpire.
My 77, 58, 24, 54, 59, 70 untwisted end of a rope.
My 80, 78, 71, 56 a point of compass.
My 68, 65, 76, 75 excellent.
My 82, 10, 53 to decline.
My 62, 63 a French conjunction.
My whole is good advice to young men.

☞ Answer in two weeks. Little One.

TRIPLE ACROSTIC.

1. Reckoned. 2. To mix with oxygen. 3. Slander. 4. Raw metal. 5. Uncooked. 6. A man's name. 7. A general name for a negro and a consonant. 8. To weigh down. Primals, centrals and finals form three States.

☞ Answer in two weeks. Balto.

PUZZLER ANSWERS.—May 25.

Hidden Streams of Water.—1 River; 2, Lake; 3, Bayou; 4, Lagoon; 5, Bay; 6, Sea; 7, Ocean; 8, Creek; 9, Brook; 10, Rill; 11, Rivulet; 12, Sound; 13, Strait; 14, Channel; 15, Frith; 16, Archipelago; 17, Gulf; 18, Pool; 19, Pond; 20, Canal; 21, Estuary; 22, Tarn; 23, Streamlet; 24, Mill-race; 25, Main.

Cross-word Enigma.—Uncle True.

Double Acrostic.—Primals, Guy Mannering; finals, Old Mortality.

Diamond Puzzle.—

```
    V
   MAY
  MARIA
 FRAILTY
VARIOLOID
 NEOLOGY
  CROCK
   SIN
    D
```

Triple Acrostic.—Primals, Haddock; centrals, Gudgeon; finals, Lamprey.

Word-square Enigma.—

```
PERM
EGOY
ROOT
MYTH
```

Pyramid Puzzle.—

```
    T
   SAM
  SILLY
 BABBLER
AUTHORESS
ATTENTIVELY
```

Sabbath Reading.

"COME UNTO ME."

ELEANOR KIRK.

A sweeter song than e'er was sung
By poet, priest or sages:
A song which thro' all Heaven has rung
And down thro' all the ages.
A precious strain of sweet accord,
A note of cheer from Christ our Lord;
List! as it vibrates full and free,
O grieving heart, " Come unto Me."

O wise provision, sweet command,
Vouchsafed the weak and weary;
A friend to find on either hand,
A light for prospect dreary.
A friend who knows our bitter need,
Of each endeavor taking heed;
Who calls to every soul oppress,
" Come unto Me; I'll give you rest."

" Come unto Me." The way's not long.
His hands are stretched to meet thee;
Now still thy throbbing, list the song
Which everywhere shall greet thee.
Here at his feet your burdon lay,
Why 'neath it bend another day,
Since One so loving calls to thee,
" Oh! heavy laden, come to Me?"

A sweeter song than e'er was sung
By poet, priest or sages;
A song which thro' all heaven has rung
And down thro' all the ages.
How can we turn from such a strain,
Or longer wait to ease our pain?
Oh! draw us closer, Lord, that we
May find our sweetest rest in Thee.

[*Congregationalist.*

PRAYER.

"He that cometh to God."—Gen. xl. 6.

There would be less of formality in prayer, and far more of strength and enjoyment in it, if men did but grasp the idea of what prayer is. But simple as the idea is, it requires an effort of mind to master it; and while we are willing enough to pay mechanically our daily tribute of homage at the Throne of Grace, natural slothfulness always recalcitrates against an effort of mind. Gradual ascent is as necessary to the mind, in order to its reaching a great idea, as it is to the body, in order to its reaching a great hight. We cannot ascend to a pinnacle of a cathedral, which towers aloft in air, without either steps or an inclined plane. Now the law of man's bodily progress is also the law of his mental progress. Both must be gradual. No grand idea can be realized except by successive steps and stages, which the mind must use as landing-places in its ascent. But what if the mind, after all its toil, should prove unable fully to master the idea, as must be the case where the idea to be mastered is connected with God and things divine? It does not at all follow that therefore our labor is lost. We have, at all events, risen to a higher level, where our view is more transparent, more elevating, more sublime, and where the play of the thoughts is invigorating to the inner man. And now let us apply these reflections to the subject in hand.

Prayer is nothing more or less than a "coming to God." Now the bare conception of this thing, "coming to God," is sublime and ennobling to the highest degree. But we are familiar with the idea, and our very familiarity with it—the currency of it among religious persons and in religious books—has worn off the sharp edges of it, until it has ceased to have any definite impress. Let us seek and pray that the idea may revive with some power in our minds. And this we will do by a series of hypotheses, which shall be as landing-places for the mind in its ascent.

1. Let us suppose as the first step that we enjoyed the privilege of opening our minds to, and consulting in our every difficulty and trial, the very wisest, and best, and most powerful man upon earth. Suppose that such a person resided in our immediate neighborhood, so as to be at all times easily accessible to us. Suppose that his doors stood open day and night, and that he had left instructions with his servant never to deny him to us. Suppose that, from his repeated invitations, coupled with the well-known sincerity of his character, we were perfectly assured that he would give his whole mind to any case which we might lay before him, and consult for us to the best of his ability, and with the keenest interest in our welfare. Can there be any doubt that the doors of this wisest, and best, and most powerful of all men would be besieged with applications for admission to his presence, and that even where persons in distress were not immediately extricated by his advice, it would be a great relief to their minds to hear him say, "This is an intricate case, and will require a great deal of management; but be assured I will bear it in mind, and take such measures in it as are most for your welfare?"

2. But the judgment of even the wisest and best men, while in the body, is liable to be disturbed by many influences, which death will set aside. Mixed up inevitably with earthly interests, and looking at things more or less through the medium of public opinion, they are not now as impartial judges of truth and right as they will be, when separated altogether from the world. Let us imagine then this great separation to have taken place,—the just man to have been "made perfect," and to be now lying in Abraham's bosom, his mind stocked not only with the experiences of life, but with the thousand additional lessons which death will convey. Imagine his spirit to be accessible after death to those in whom he felt, while living, the strongest interest. Let us suppose, to make the image more definite still, that he is a father, who has always had during life, a word of counsel and sympathy, and a hand of succor for his children; and that it has so come to pass that death has not cut them off from this resort. Doubtless, they would avail themselves of the privilege with great eagerness; the difference between the consultations with the living and the departed parent being chiefly this, that a certain awe would rest upon their minds in the latter case, from the reflection that they had to do with the inhabitant of another world, and that the advice given would be doubly valued, coming (as, on the hypothesis, it does) from a sphere where all errors of judgment are thought to be corrected.

3. And now for another step in our ascent. The Scriptures speak largely of angels, a class of beings whose faculties transcend ours in our present state; and certain words of our Blessed Lord are upon record, which, though they cannot be said to prove, yet, certainly, favor the popular idea of the Jews, that to each person is assigned a guardian-angel. Assuming, then, for the sake of argument, that such guardian-angels exist, let us suppose that each of them feels a special loving interest in the particular soul under his guardianship, trembles for it as in the mad frenzy of transgression it hangs upon the brink of eternal ruin, and rejoices for it, and with it, as it is plucked away from that brink by the arm of the good Shepherd, and brought back to the fold from which it had strayed. Suppose, again, in this case that we had each of us some power of access to this guardian-angel, that we could summon him to our aid,—lay our difficulties before him, unburden our minds to him, with the assurance of receiving from him both sympathy and succor. Can it be supposed that we should not avail ourselves of such a privilege, as opportunity offered? that we should never call him to our councils, or submit to him our cares?

4. But we have now climbed by gradual stages to the summit of the mountain, and are left to contemplate a privilege, which not only might be, but which is our own, and yet of which (partly from its very cheapness and commonness) we either do not avail ourselves at all, or avail ourselves in a formal and mechanical manner. "He that cometh to God." Inasmuch as God is the Infinite One, we can never by any reach of the mind grasp entirely the idea of coming to Him; but have we not desired some help, some clearness of view, some apprehension of the magnificence of prayer, from the train of thought which we have been pursuing? Created power, wisdom, love, all have their limits, beyond which they cannot help, counsel, or sympathize: our difficulties, our perplexities, our sins, might easily outrun them; and access to them might not be nearly of so much value as we are apt to imagine. But, "he that cometh to God"—what shall I say of this privilege? The tameness of human language is disappointing when we attempt to describe it. Throw into one great sum total all that you have ever experienced, or can conceive, of wisdom and power, the most far-sighted discernments of results, with the most absolute control over them,—the keenest intuition into character, with every conceivable influence for molding it,—and then invest Him in your conceptions with an intensity of love, which is not discouraged by the deepest moral degradation in its objects, and which clings to the person of the sinner with unchilled devotion even while it condemns his sin with an abhorrence no less than infinite,—imagine such a Being, and imagine Him accessible to man, and you imagine One, to whom in their hour of need all the world, unless indeed the spell of some deadly fascination were laid upon them, would be resorting continually for guidance, help, and comfort. But this is no imagination. It is a reality. God is such a Being as we have labored to describe. He not only permits, but invites; not only invites, but commands, the approach to Him of every comer. And if there be no promise that every prayer shall be heard according to the exact tenor of its prescription, yet assuredly there is a promise to all who ask,—most simple,—most express,—most universal,—of that nourishment of grace for the human spirit, which is the alone support of spiritual life: "If ye then, being evil, know how to give good gifts unto your children, how much more shall your Father which is in Heaven give the Holy Spirit to them that ask Him?"

E. M. G.

PERSONAL ITEMS.

Mr. Ralph Waldo Emerson reached the age of 76 years last Saturday.

Mrs. Nellie Grant Sartoris, the daughter of General Grant, is now visiting Paris, with her father and mother.

Ericsson, the inventor, is 75 years old and wonderfully strong and hearty. He never drinks anything but water.

Brother Jasper says he knows enough to keep out of jail, and that's where he's ahead of old Galileo, at any rate.

Thos. Carlyle says:—Make yourself an honest man, and then you may be sure there is one rascal less in the world.

Peter Cooper says his simple rules of business have been to avoid debt and idleness. And P. Cooper is worth ten millions.

Mrs Bright was one of the oldest and stanchest teetotalers in the United Kingdom, having tasted no spirits for forty years.

Barring himself and Mr. Blaine of Maine, there isn't much in this universe from the Creator down that is just as Col. Ingersoll would have made it.

Capt. Catesby Jones formerly Commander of the famous confederate ram Merrimac, was killed in Selma, Ala., last summer by J. A. Harral a neighbor.

The late Professor Henry made twenty-two inventions and discoveries, none of which he patented, preferring to leave the fruits of his science to all who would profit by it.

The "B's" are all big men in Massachusetts. They have had Butler, Banks, Boutwell, Burlingame, Bullock, Bird, Bowles and Beard, and the head of the new Prohibitionist party and its first candidate for Governor was named Baker.

Among the English aristocracy Earl Granville ranks as the best linguist; he is master of twenty languages. In appearance he looks like an oiled and curled Assyrian bull. The parting of his hair has never been known to change one hair's breadth.

The four most distinguished brothers in this country—Judge Stephen J. Field, of the United States Supreme Court; Mr. Cyrus W. Field, of Atlantic cable fame; Mr. David Dudley Field, the lawyer, and the Rev. Henry M. Field, of the New York Evangelist—met at Haddam, Conn., the other day to make arrangements for the purchase of a plot of ground for a public park to commemorate the work of their father, who for many years was the pastor of a church at Haddam.

Ex-Senator Simon Cameron had three sons and three daughters. Don is the oldest. His second son, Brewer, was made a paymaster in the army while his father was Secretary of War. The third has never been in public life. The daughters were Mrs. Burnside, Mrs. Halderman (whose husband was a Democratic member of Congress), and Mrs. Wayne M'Veagh. Don Cameron had six children by his first wife, who was a Miss M'Cormick, and who brought him a fortune of $750,000. General Simon Comeron is a man of large wealth.

Implements and Machinery.

WROUGHT IRON HARVESTER.

COMBINED REAPER AND MOWER.

WROUGHT IRON MOWER.

The Johnston Harvester Co.

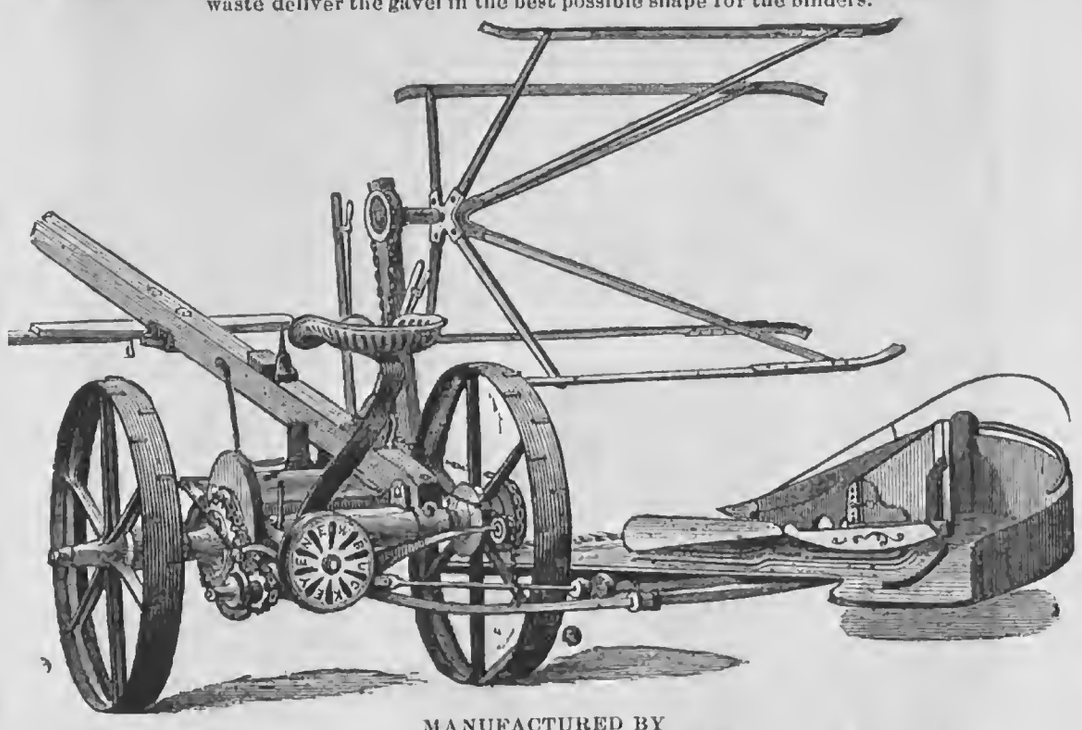
BROCKPORT, N. Y.

GARDEN ENGINE AND FIRE EXTINGUISHER. For Washing Windows, Carriages, etc. Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

Implements and Machinery.

New Buckeye Mower with Table Rake.

Will cut any kind of grain, and in any condition it may be found, doing thoroughly clean work, and without waste deliver the gavel in the best possible shape for the binders.



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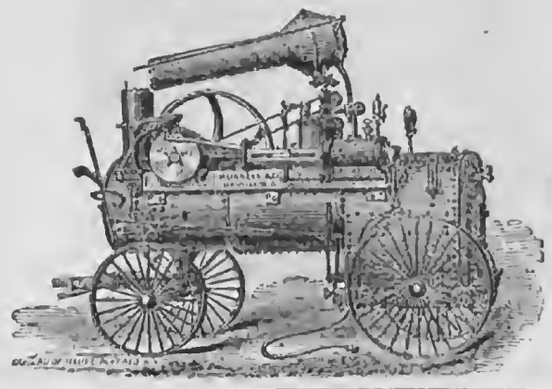

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Is the Machine upon which you can always depend. It is very easily regulated and managed, and possesses every requisite of a perfect Grain Drill. Years of successful use, without change of feed arrangement or any essential part, with its constantly increasing sale, prove in arguments stronger than words that it is the best and most satisfactory Drill to buy.

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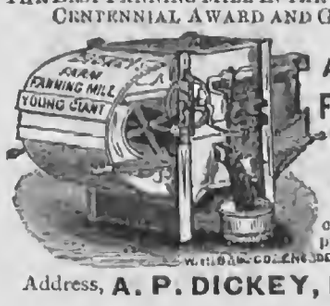

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A medium quality well cleaned brings a better price than the finest grade in dirty condition.

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SEVEN SIZES FOR HAND USE.

Weighing from 32 to 51 lbs.

THREE SIZES for HORSE POWER.

These Machines did an amount of work on the Centennial Grounds, equal to 10 years of ordinary use, without loss of time for sharpening or repairs—completely distancing all competitors in that celebrated trial of 6 months' duration.

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Patentees and Manuf'rs, 631 Market St., Phila., Pa.

Send for Descriptive Catalogue with prices.

BRADLEY'S CHANGEABLE SPEED MOWER

Has more good points, less complication, more adaptability and less parts than any other Mower in the world.

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The lightest, strongest and most durable single Reaper in the market.

For simplicity, durability and quality, these machines cannot be excelled. Every machine fully warranted to be as represented.

At the Great Mower and Reaper Trial, held at Watertown, N. Y., July 6-7 20th and Aug. 8th, these machines carried off the Highest Prizes, viz., Two Grand Silver Medals, over the Wood, Buckeye, Wood's Eagle, Meadow King, Warrior, Eureka, &c.

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TAYLOR RAKES.

Five Different Styles, including Foot, Hand and Self-Dump.

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Has *Twenty* tempered steel teeth—every tooth tested. The best-made Rake, with the simplest, most durable and easiest operated dumping device in the market. Circulars free.

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CREAMERY BUTTER.

The Cooley System of Butter-Making has been before the public but one year, yet over 1,300 Dairies have introduced it. Read for yourself what people say about it who are using it:

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Gentlemen:—We are more and more pleased with the Cooley Creamer as we continue to use it, and we feel confident that we shall produce a better quality of butter this summer by means of it than we ever had before. We are now getting $1 a pound for our butter. Very truly yours, MELVILLE BULL.

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The **THOMAS PORTABLE ENGINES** are made to meet a want long felt by Threshers, viz., Lightness of weight, with strength and durability. They are the lightest made, and are guaranteed to do the same amount of work as those 800 to 1,200 pounds heavier, and with much less fuel and water and less amount of steam pressure. Nothing equals them. Send for Circular. Made by

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HAY LOADER.

A perfect machine for rapidly pitching hay, barley and all loose grain on the wagon in the field. Saves us much time and money as the mower and horse rake. Thousands in use by the best farmers in the country. Prices reduced. Send for Circulars to the manufacturers, STRATTON & CULLUM,

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Keeps the road in far better condition, and at half the present cost. Circulars free.

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Important Improvements and Reduced Prices.

Threshers for all sizes of Horse-Powers and Steam. Lever Powers for 4 to 10 Horse, and Endless Chain Powers for 2 and 3 Horses, and Engines from 4 to 10 Horse-Power. Send for Circular.

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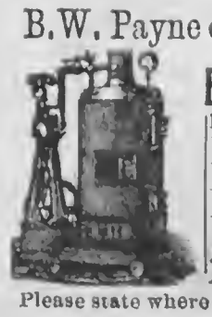

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SPARKS AND SPLINTERS.

THE bell-punch noteth oven the fall of a swallow.

A WELL-DRESSED dog wears a collar and pants in the summer.

A BAD marriage is like an electric machine—it makes you dance, but you can't let go.

LAY aside the graceful ulster,
Fold its arms with tender care;
Bring you out the linen duster
Much the better thing to wear.

A SLAWSON clergyman announces the marriage fee at $5; children, half price.

How can five persons divide five eggs so that each shall receive one, and still one remain in the dish? One takes the dish with the eggs.

"HAVE you ever read the 'Tale of a Bumble Bee?'" asked George of Sarah Jane. "No,' said she, as she turned the color of red paint; "but I've felt em."

PROFESSOR—"Miss Q., tell me what is that instrument called by which we ascertain musical pitch?" Miss Q. (hesitatingly)—"A pitch-fork." An audiblo giggling in the class.

LITTLE notes from creditors,
Little bills on slate,
Make the average bank cashier
Rehypothecate.—*St. Louis Post.*

BULL RUN has been made a post-office. There was considerablo of a stamp-ede there once, you remember.—Hartford Times. And a good deal of licking done on both sides.—Com'l Adv.

AT the door of the European Congress: Russian to Turk—"See here, now, you know! We are friends—treaty of alliance—complimentary telegrams exchanged, and all that sort of thing. Smile, d—n you; look cheerful or I'll lick you again."

"Before we were married," said he, "she used to say bye-bye so sweetly as I went down the steps!" "And what does she say now?" asked a friend. "Oh, just the same—buy, buy." "Oh! I see; she only exercises a different spell over you."

WHEN Jonah interviewed the whale
And haunted his intenals,
As erst it is recorded in
The truthfulest of journals,
What monarch did he symbolize?
(A far-fetched joke you'll style it.)
It seems to me he might have been
A sort of *paunch's pilot.*—*Yonkers Gazette.*

A DUTCHMAN, having lost his horses, started in search of them. Meeting a man in the road he inquired of him if he had seen them. Being a stranger in those parts, the man asked Hans to describe them. "Vell," said he, "dey was very mooch alike, 'specially the off one. Von looks so mooch like poth, I can't tell toder from which. Ven I vent after the one, I alvays caught de oder; an' I whipped de one most dead because de oder kicked me. Seen anything of dem, hey?"

THE Bishop of Exeter tells a good story of a speech which was once maue to him. He had gone to stay in a country parsonage of his diocese for a confirmation or some other clerical function, and the "house and parlor maid" had evidently been strictly enjoined on no account to omit to say "My Lord" when addressing the Bishop. In the morning, while going down to breakfast, he met the damsel on the stairs, and asked her whether she could tell him who had taken his letters to the post the night before. The answer, given smilingly, was, "The Lord, my boy!"

"You cannot, oh, day star of my life!" he pleaded, throwing himself at her feet; "you cannot refuse the rich, exhaustless mine of love I pour at you feet; you cannot turn from the rare treasures of my heart's devotion that I cast before you; you cannot turn away from all this lavish wealth of heart and hand that is yours to take, and say me nay!" She couldn't and she didn't; it sounded too wealthy. That was nearly four years ago. Day before yesterday he gave her $3.85. to run the house a week and when she said she would have to have a new pair of shoes, he raised the appropriation by an oven dollar, and grumbled about woman's extravagance till he was out of hearing. Oh, woman, woman, thou art of tender heart and trustful soul, if you don't scalp a man raw every time you get a chance, you are a little idot all the samo.

The Prevention of a Terrible Disaster.

No disorders, excepting the most deadly forms of lung disease, involve such a tremendous destruction of organic tissue as those which fasten upon the kidneys. Such maladies, when they become chronic—and none are so liable to assume that phase—completely wreck the system. To prevent this terrible disaster, recourse should be had, upon the first manifestation of trouble, to Hostetter's Bitters, which experience has proved to be highly effective as a means of imparting tone and regularity to the organs of urination, as well as to the liver, stomach and bowels. Another beneficial result of this medicine, naturally consequent upon its diuretic action, is the elimination from the blood of impurities which beget rheumatism, gout, dropsy, and other maladies. By increasing the activity of the kidneys, it augments the depurative efficiency of those organs, which are most important outlets for the escape of such impurities.

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BEST IN THE WORLD.

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as well as Complaints of the Throat, Dr. Jayne's Expectorant is certainly a palliative and often a curative, as the testimony of thousands and its world-wide reputation attests. For Coughs or Colds no surer or more effective remedy can be found.

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Introduced 13 years ago and 50,000 now in actual use. The UNION is the acknowledged standard Churn of the country. Every Churn is warranted to give satisfaction or returned at our cost. Easily operated, easily cleaned, and makes beautiful butter by the extra working of the dasher on the butter while churning. Five sizes, churning from 3 to 25 gallons.

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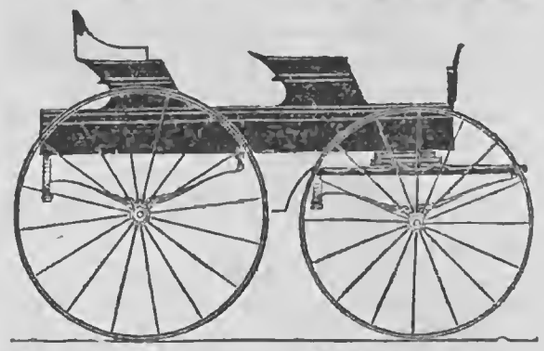

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CHEAPEST AND BEST

Platform Spring Wagon made.
Every Wagon fully warranted.
If there is no agent or dealer in your town, send for Circular and Price List to the
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STRONGEST WIND MILL MADE.
Tested 10 years. Thousands in use. A solid wheel without joints. Produces 15 per cent. more power, and will not blow away.
WE BUILD 13 SIZES MILLS
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Illustrated Circulars free.
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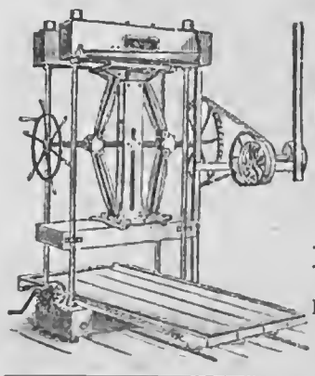
Simple, efficient and *always reliable.* No inside fixtures. Fifty per cent. in labor saved over *any other churn.* 5 sizes made. The Highest award given over all competitors at the late Dairy Fair in Chicago. An energetic man wanted in every town, to act as agent. One churn sent at wholesale where we have no agent. CORNISH & CURTIS,
Fort Atkinson, Wis.



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The most perfect, simple and ONLY Elevator that raises the hay from wagon and carries it in barn any required distance. Economical, durable, labor-saving. Send for Illustrated Circulars and prices to
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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 24.
WHOLE No. 1481.

NEW YORK CITY, JUNE 15, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

ANTHERICUMS.

A HANDSOME genus of plants for the border, which have been far too much neglected, are the different varieties of the Anthericum. All the varieties are perfectly hardy, requiring only to be planted in a tolerably rich, light, loamy soil to thrive and greet the happy owner, year after, with their stately spikes of bloom.

Of the Anthericum I am only acquainted with three varieties, differing materially in the size and form of the flowers, the color being the same in the several varieties, a pure clear white. Frequently, however, they have a rosy tinge, the result of planting them in a soil containing more or less charcoal.

The best known of the Antherieums is A. liliago popularly know as the St. Bernard Lily. It grows about sixteen inches high, the flowers which are rather small, are borne on spikes.

A. liliastrum, commonly called St. Bruno's Lily, bears a much larger flower than the first. It attains a hight usually of twenty or more inches; the flowers are lily-shaped and very elegant.

A. ramosum also has white flowers, small but more densely borne on the spike than in the other varieties. It grows from sixteen to eighteen inches high.

The Antherieums are highly prized, where crown, for bouquet and cut-flower decorations, for which purpose they are invaluable. For cemetery purposes they will also be found very satisfactory. They should never be used for lawn decorating, as cutting the leaves, which would be inevitable, injures the bulb.

BULBOCODIUM.

Very attractive is the pretty flower of the Bulbocodium vernum or spring Colchicum. It is one of the earliest to flower of the spring-blooming bulbs, coming in bloom from ten to fifteen days earlier than the favorite Crocus. The flowers are of a rich dark purple color, some specimens having black purple veins or markings.

Plant the bulb two inches deep, in a light, sandy soil; the bulb should be planted early in October; it will produce finer blooms if undisturbed for several years.

TRITONIA

The Tritonia, a variegated species of the Iridece or Cape Irids, has recently been introduced, hereabouts. It requires treatment similar to that needed by the Ixia, which was described in a late number of the RURAL NEW YORKER. The flowers, which are rich in color and of all the hues of the rainbow, are very beautiful. For window-garden and conservatory decoration, they are fine; or planted in pots, they may be used in many ways in the garden.

The Tritonia was introduced into general culture from South Africa, a number of years ago. Under the skillful manipulations of European cultivators, varieties have been produced which far surpass the old introductions, in variety and brilliancy of color. In fact, so wonderful has been the improvement in some varieties, that an unskilled amateur would take them for new species of plants. There are some thirty varieties in cultivation.

El Dorado, Cal.

Various.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

NEW HAVEN, June 8, 1878.

Bulletin No. 15.—Fertilizer Analyses.

141. PERUVIAN GUANO. Guaranteed 8.2 per cent. Nitrogen. Sold by Olds & Whipple, 164 State Street, Hartford. Sampled and sent May 24, by Andrew's Bros., Southington.

146. STOCKBRIDGE POTATO FERTILIZER. Claimed 4.5-5.25 per cent. Nitrogen, 7-8 per cent. Potash, 2-3 per cent. Soluble Phos. Acid, 4-5 per cent. insoluble Phos. Acid. Sold by Olds & Whipple, Hartford.

148. AMERICUS AMMONIATED SUPERPHOSPHATE. Claimed 9-11 per cent. Available Phos. Acid, 2.1-2.9 per cent. Nitrogen, 2-2.5 per cent. Potash. Manufactured by Rafferty & Williams, N. Y. Sold by Rodney Kellogg, Hartford.

142. CASTOR POMACE. Manufactured by H. J. Baker & Bro., N. Y. City.

143. BONE MANURE. Manufactured by G. W. Baker, Williamsburgh, N. Y.

145. ROTTED BONE MANURE. Manufactured by G. W. Baker, Williamsburgh, N. Y.

147. BONE MEAL—AMERICUS BRAND. Claimed "Bone Superphosphate of Lime 50-58 per cent.," 2.9-3.7 per cent. Nitrogen. Manufactured by Rafferty & Williams, N. Y. Sold by Rodney Kellogg, Hartford.

142, 143, 145, 146 were sampled and sent by S. M. Wells, Wethersfield, May 28. 147, 148 were sampled and sent by J. J. Webb, New Haven, May 2.

	141	146	148	142	143	145	147
Nitrogen	3.55	3.49	2.16	4.59	3.26	2.05	3.05
Soluble Phos. Acid	5.37	5.15	5.12				
Reverted " "	4.57	1.24	1.40				
Insoluble " "	3.40	0.18	3.49	1.50	11.85	2.43	22.65
Potash	3.14	10.22	2.01				
Cal. Value ₹ ton.	$63 29	44 65	31 87	21 06	28 33	10 78	42 69
Cost " "	$54 50	50 00	38 00	22 00	25 00*	10 00*	38 00

*Wholesale.—In 141 Potash is valued at 4¼ cents per lb.

In 146 and 148 potash is reckoned at 7¼ cents for comparison with similar articles previously reported, but 4¼ cents is high enough for the Conn. market at present.

S. W. JOHNSON

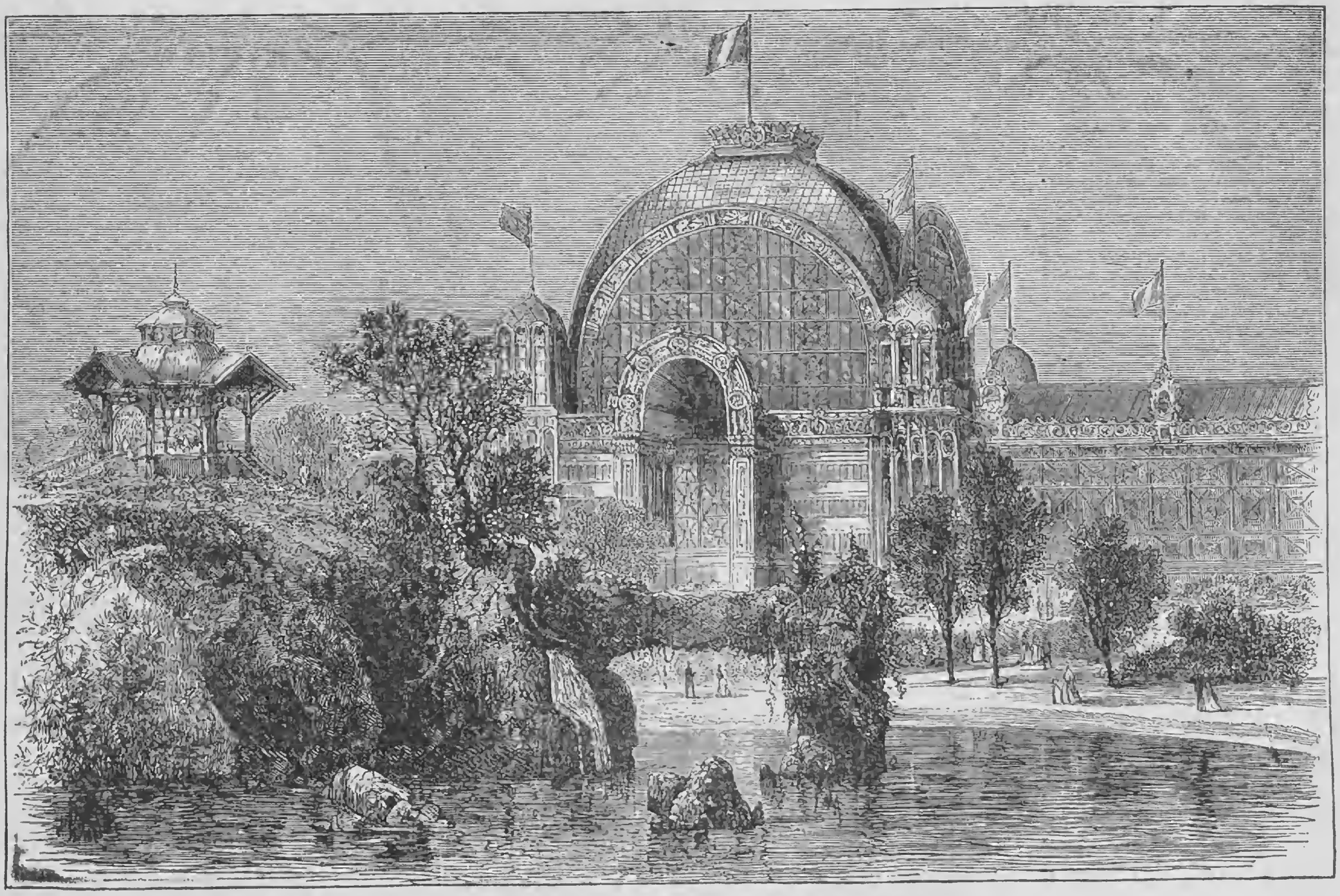
STRAWBERRY BLIGHT.

LAST week E. & J. C. WILLIAMS of Montclair, brought to this office several dozens of strawberry plants, many of the leaves of which were withered and dry. These were specimens merely of many plants in their vicinity affected in the same way. What was the cause? We said frosty and cold nights. They said disease. We have since received the following letter:

EDS. RURAL.—Further consideration of the strawberry blight only confirms our opinion that it is not caused by frost, as we remember having first noticed it several years ago on the Agriculturist variety which seemed peculiarly subject to this ailment, and we were compelled to discontinue the growing of this fruit on that account. We have seen the disease on Chas. Downing every year to a limited extent, but this year the destruction is complete. We think Boyden's No. 30 to be about the only sort in our place that is exempt this year.

E. & J. C. WILLIAMS.

Upon further inquiry, we have grave fears that these plants were affected with the same sort of rust or blight as those in several parts of the West, respecting which some account has been received this season.



A SKETCH IN THE PARK OF THE PARIS EXPOSITION.

Industrial Topics.

THE FRENCH EXPOSITION.

FINANCIAL CONSIDERATIONS.

PARIS, May 27th, 1878.

AT home, it is not an uncommon saying that in society the chief question with regard to a stranger is, in Boston, "What does he know?" in Philadelphia, "Who was his grandfather?" and in New York, "What is he worth?" a form of interrogation which plainly shows that while the Modern Athens and the Centennial City are merely provincial in their curiosity, the capital of the Empire State is the true representative of the nation in its inquisitiveness as well as in other respects; for to the average American the value and excellence of an object depend mainly on its money worth. Hence with regard to the French Exhibition "What did it cost?" is a very legitimate question in the minds or months of RURAL readers.

The first estimate of the cost of the palace on the Trocadero and the vast piles of buildings on the Champ de Mars was presented to the Corps Legislatif, on the 6th of June, 1876, and amounted to 35,313,000 francs. This was a trifle of about twelve million francs in excess of the cost of Louis Napoleon's Exhibition in 1867; but the republican show covers in the neighborhood of 125,000 yards more than the last international fair under the empire. During 1877 applications for space poured in very rapidly from at home and abroad, and before the close of the year it was found that the projected accommodations would be insufficient to satisfy all demands, and accordingly, 44,000 square yards, in addition to the original design, were covered with annexes intended chiefly for the display of machinery and other cumbersome exhibits. This necessitated a considerable increase on the original estimate, and the last statement of accounts which has come to my notice, shows that by the middle of May, 44,795,000 francs had already been disbursed; and as a considerable amount of labor even then still remained to be done before the completion of the works, the total expenditure for the buildings, their appurtenances and the embellishment of the grounds will certainly not be less than fifty million francs.

In addition to this first outlay, the expenses connected with the management of the institution, and the fetes projected during its continuance, will be very heavy. Among these incidental disbursements will be a sum of 1,500,000 francs appropriated for prizes; an allowance of 500,000 francs to President McMahon to defray the cost of balls, banquets, and other official festivities; 250,000 francs for the same purpose to Minister of Foreign Affairs; a like sum to the Minister of Agriculture and Commerce, and 100,000 francs to each of the other Ministers. In addition to this, there will be a bonus of ten per cent. on their salaries for six months to all the minor employes of the government, resident on Paris, while the cost of fireworks, illuminations, and other public displays, must aggregate an enormous sum.

Talk either of fighting or making any other great national effort merely for an idea or *pour la gloire*, has gone out of fashion here with the Empire which made insincere pretensions to this kind of Quixotism, and accordingly the means of recouping this large expenditure are freely discussed. During the first Exhibition, in 1855, the sale of tickets produced 3,200,000 francs; the same source during the second Exhibition, in 1867, yielded 10,765,000 francs, and this year it is expected that upwards of 4,000,000 francs will be in this way collected. Moreover, 1,235,000 francs, at least, will be gained from rents of different establishments, such as restaurants, drinking places, etc., not directly connected with the buildings; the materials of the latter when they shall be demolished, are put down as worth 4,000,000 francs; 6,000,000 francs are expected as an appropriation from the city of Paris, which contributed a like amount to the last great show; and the remaining 10,000,000, or more, are to be made up from special taxes on the receipts of railroads, passenger boats on the Seine, omnibus lines, hacks, and other public vehicles in the city, all of which reap a rich harvest from the pockets of the visitors attracted from every quarter of the globe to witness this grand display.

But away beyond the sordid consideration of immediate return of outlay, are the beneficial effects so vast an exhibit of the very best results of the world's invention, ingenuity, skill, and industry must have upon the arts, sciences and manufactures of the country. While to the general public the Exhibition is chiefly a source of amusement, and only indirectly an element of instruction, to the shrewd denizens of the workshops of France it is a glorious school in which they will learn many a lesson which will enable them to win a still higher reputation and gain a yet wider market for their productions. And while the country at large is in this way educated and benefited by this World's Fair, Paris must reap an especial harvest of pride, pleasure, instruction and shekels.

To secure the last object, the hotels and most of those who let furnished rooms have just about doubled their ordinary prices, nor will they lease their rooms for more than a month in advance. "We made nothing last year, we shall make the same next, therefore we must make all we can this season, and were we now to rent our rooms for a long time, we would be throwing away a chance of getting much more for them" is what is sometimes openly said, and often indirectly expressed by these makers of hay in the sunshine. Yet even a stranger in Paris, provided he possesses some natural shrewdness and *savoir faire*, can get along very comfortably for a moderate sum—say $150 a month; and pass the time very agreeably, seeing everything worth seeing, for considerably less. To accomplish this it would be necessary to hire a room either in a *maison meublee* or in a small hotel in one of the quiet streets that can readily be found not far from the gay boulevards. Such a room is generally cosier and better furnished than one costing two or three times the price in one of the huge caravansaries on the main thoroughfares. Meals should be taken at any of the excellent restaurants that abound throughout the city, especially around the Exhibiton buildings, many of which have made only a modest addition to the prices on their bills-of-fare. To the sight-seer wandering about at his own sweet will, such a practice is far more pleasant and convenient than the necessity of sitting down to the table at stated times. A clean, palatable dinner with quite enough courses to satisfy any guest, can be obtained at any of the sixteen *Etablissments Duval* in different parts of the city, for two and a half to three francs—about half a dollar—and at many other excellent dining-rooms easily hit upon by the wide-awake visitor, prices are equally reasonable.

Even to those whom circumstances prevent from making a pleasure trip to a scene of interest which attracts thousands of their countrymen, there is a certain satisfaction in learning the price the excursionists must pay for their gratification and the consequent saving made by the "stay-at-homes." To gratify this very natural sentiment, a fair estimate of the expenses of a trip to the Paris Exposition can be made from the following data: A first-class excursion ticket from New York to Liverpool and back, can be had for from $110 upwards, according to the line of steamers patronized and the situation of the state-room; the railroad fare from Liverpool to Paris, via London, Dieppe and Rouen, is $15.50 by first-class carriages and $11.50 by second-class; comfortable board and lodging in Paris, say $3.50 per day; incidentals measurable by one's inclination and the length of his purse. This would be the cheapest rate at which the trip could be made in a comfortable, gentlemanly fashion. No sooner, however, does the average American plant his foot on the soil of effete Europe than he patriotically feels himself the representative of the grandest country in the world, and is inclined straightway to squander his money with a liberality supposed to be in harmony with the proud character he has assumed.

THREBER.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE are trying an experiment which we think must be a success. Last year the mangels came up very uneven, and some did not come up at all. The carrots were a bad failure. At first we were inclined to lay all the blame to the seed, but after a while, when we saw that the seed came on nicely in bunches, and then made a skip for a number of feet without any signs of life, we concluded the fault was in the covering; either the drill, or the man who used it, did not work right. The carrot seed were sowed two weeks ago by hand, and covered by hand. They are now up and look fine; every seed was covered. It was slow work but it has insured success so far the carrots getting a good start. The mangel ground was ridged yesterday and rolled with a heavy roller, and to-day the seed is going in. A shallow furrow is made with a hoe, and in this, just a foot apart—a man's foot—three seeds are dropped. They are then covered with a hoe a half an inch deep, as nearly as possible, and the surface smoothed and patted with the hoe. The seed have been soaking in water for four days, and being rolled in white plaster they are readily dropped and easily seen in the furrow. It will not take more than half the seed to plant in this way the same amount of ground and the work of thinning out and weeding will be largely reduced. This is not all: the seed will come up sooner and evener and so get ahead of the weeds, and this will lessen the amount of labor in tending.

The worms have started to eat all of the leaves on the currant bushes. It is said strong soap-suds will drive them off. Our currants had been small and poor for several years, until the ground was thickly covered underneath them with manure, and the first season they were very large and much improved in quality. Fruit of under-size is always of inferior taste. Chip manure is excellent for putting around them.

A Chinese Yam was planted a dozen years ago, and although we have dug for it several times we never found it, but somehow or other it has made its appearance every season and the vine being ornamental, it has been allowed to grow. This year it has not come to hand and perhaps it has changed about and gone the other way to adorn some Celestial garden.

We spent five minutes in the Dorking hennery spading up the ground, and our little effort gave the fowls a cropful of worms and a spot of fresh earth in which to scratch and wallow. A few green sods were thrown in, and this addition to the dry grain is not only healthful but necessary if hens confined are expected to lay many eggs.

The butcher is now taking the lambs at $3.50 each. Last year we only got $3 25, and meat is lower this year, but the lambs came two weeks earlier and had better care and so they are larger and fatter. This price makes the sheep pay the best of any stock; for in addition to the $3.50 for a lamb, the sheep will average $1.50 each in wool. They ate the straw and made a grand lot of the best manure. Our sheep are of mixed blood with the largest share South-down. We want enough Merino to thicken the fleece and South-Down to make a meaty or plump lamb, and then a cross of Leicester or Cotswold to furnish a good udder and ability to give milk, and then we will have the best kind of sheep for practical utilty.

This is the time of the year for kicking cows. There are various ways to prevent the trouble, but the best one undoubtedly is to tie a small rope tightly around the body just in front of the bag. Some people buckle a strap around the two hind legs, and others tie one fore leg up, so the cow must stand on three legs. This way strains the animal, as she will struggle to free herself and fall down. A worse plan is to put a rope around the hind foot on the milking side and try to hold it back, as it sets the cow to jerking and pulling and is apt to injure her. A cow will not kick unless she is frightened, or her udder or teats are sore. To find out the cause of the trouble or rather to look out and prevent the irritation, is the first thing to do.

VAN'S VIEWS.

TOOLS.

IT is quite common to hear a man say that Eastern manufacturers don't know how to make a tool; not that they don't have well-shaped tools—for the Mohawk Valley Clipper is the most popular plow in our market—but they don't seem to have any steel in their shops, or at least, they are afraid of running out of that article. The machine of which I am now thinking, is True's potato-planter, a good machine saving many times its cost during its lifetime; but its plow and covers are great "gluts" of cast-iron, that wouldn't scour in emery-dust; and one must either have cast-iron morals, or else get steel plates made to take the place of these iron gluts. Now, I follow the latter course and get along well thereafter—the machine doing good work. But why couldn't this be done at the factory? A wheelwright, whom I wanted to put in bent felloes when he fixed a wagon-wheel for me, told me he had no bent felloes—they cost so much he didn't keep them. When further pressed, he acknowledged that if he used them he was afraid that he would ruin his custom, as he would have no wheels to repair. Now, poor as is the excuse, those manufacturers have not even this, as their cast-iron will wear as long as steel; and why will they persist in this course?

One of the handiest tools in a garden or on a farm, is a small double-mold-board plow; but they are all cast-iron, and a man whose farm is not located on a gravel-bed or sand-bank, is unable to use one. Inquiry has failed to find a steel plow, of this form, at our home dealers or in Milwaukee.

Another tool that we want, is a horse-cultivator that will work between the rows of fodder-corn. I use Pratt's Early Sweet Corn, and plant the rows two feet apart. My cultivator will work well down to two and a half feet; below that, the single-shovel plow is the only tool that I can use with a horse; and that does unsatisfactory work at the best. Now, I think, we might have an iron-frame cultivator, with long shanks, which would do the work. Does any one know of a tool which will answer my purpose?

There is a one hand-tool to which I can give unqualified praise, and that is the Warren hoe. It was some time before I could coax any of our hardware men to get them, but since they got the first ones they have kept increasing their orders, and the hoe is more and more popular as it becomes known. I have tried to get some of them to order some of Hexamer's prong hoe, but they seem afraid of it, and to order a single one would make it cost something for express charges.

ROOT CROPS.

At a late farmers' meeting, this subject was under discussion, and the president spoke in favor of parsnips and mangel-wurzels. Others favored other roots; some preferring the sugar-beet, the carrot, the ruta-baga, etc. For my part, I prefer the Long Orange carrot, Yellow Globe mangel-wurzel and American Yellow ruta-baga. An old Englishman, who is a better farmer than I claim to be, prefers the Long Red mangel-wurzel, and another good farmer near him, considers nothing equal to Lane's Imperial sugar-beet; while an old gentleman on the other side of the river, considers ruta-bagas away ahead of any other root. Now, here is a variety of opinions; all are conscientious in what they recommend, and the apparent contradiction comes from the difference in their soil. The president is on a sandy loam; I am on a heavy clay; our English friend is on a black, mucky soil; his near neighbor is on a clayey loam; and the gentleman across the river is on a gravelly clay.

FARM HORSES.

There is much discussion among our farmers about which breed of horses, or what sized horses are most suitable for farm work. I am inclined to horses from 1,000 to 1,200 pounds in weight, as being the best size; and I think that a blood stallion bred to a large roomy mare, will give us the most satisfactory stock. Many incline to the Norman horses, and if you want to sell the colts, you will find them as profitable as any; but I would prefer horses with less beef on their legs. I have seen two teams this spring, each having a beefy horse and a trim-built one, and in each case the beefy-legged horse had the scratches badly, while his mate was free from the ailment. That these beefy horses will keep in good order on less feed than a high-strung, active horse, I am quite willing to admit; that they are able to do as much work when well fed, I doubt: and I am certain that, in an emergency, one active horse is worth two of the others. There is almost no limit to what an active, ambitious team can pull for a short distance, and after a rest or "blow" they can do it again and again, while your big, beefy horse is discouraged and has to be urged to make him take the collar after a severe pull. And, anyway, with our farm work, pluck is more needed than weight. I have seen a big team tired out, plowing, when a small, active team had done more work and felt fresh at the end, in plowing a fallow where the ground was soft.

Brown Co., Wis.

HOW CULTIVATION WARMS THE SOIL.

S. RUFUS MASON.

WE are almost daily informed by the agricultural press that cultivation warms the soil. As no man should believe what is not made manifest to his perceptions, let us examine this question, and then form a positive opinion.

The rapidity with which heat or cold passes through a body, is called its conductive power. One end of a bar of iron, inserted in the fire, soon becomes too hot to hold at the other end; a bar of wood may, so treated, burn nearly up to the hand without causing discomfort; and our flesh may be brought quite close to a candle blaze and still be comparatively cool.

These three substances show very different degrees of conductive power, iron acting quickly, wood more slowly, and air (which was between the flesh and the blaze) scarcely acting at all. The conductive power of iron is 347, of wood 33, and of air only the one-half of one. Or, if air is called one, wood is called 66 times as great, and iron 694 times as great as air.

Of these three, iron is the most dense, and air the least; and in fact, the conductive power of most substances is nearly in proportion to their density. When we wish to employ this quality to the best advantage, we use thin clothing in summer and thick in winter. In each case we employ the fabrics as a covering demanded by modesty, and the non-conductive property of air to keep us cool in summer and warm in winter. It makes very little difference as to the material used—cotton, silk or wool—as their respective conductive properties do not vary one-quarter of one per cent. Their sole value, as protectors from heat or cold, lies in the amount of air held in a quiescent state within their texture. Cotton and silk being comparatively close woven, and wool more loose and open.

In regard to soils: a solid, compact, hard or densely packed one holds little or no air, hence is a powerful conductor of both heat and cold; while a light, loose, porous soil holds a large volume of air, and is a poor conductor, is not liable to extremes of heat or cold, retains moisture well, but not water, is warmer in cool seasons, cooler in hot ones, and thus is more congenial to plant growth at all times.

It is evident, then, that to render a cold soil warmer, we must cultivate deeply, to let in the balmy influence of the air; but if the soil is too hot and dry, we must add some heavier constituents, like clay or muck, to temper it to a proper consistency for crop purposes. Deep cultivation makes soil earlier in spring, cooler in summer heats, and warmer during winter's cold, only because it allows the non-conductive atmosphere free access.

Farm Economy.

FARM ACCOUNTS.

PROFESSOR LEVI STOCKBRIDGE.

THE question "Does Farming Pay?" is almost universally answered by farmers in the negative, though they can rarely, if ever, make a detailed exhibit of their debits and credits, which will *prove* either side of the question. Yet it is a self-evident fact that farming pays the nation. It is our great producing industry, the main-spring which keeps all the machinery of transportation, commerce and manufactures in motion, creating a value of untold millions out of materials which have no commercial worth until transformed by labor. If therefore on the one hand, farming does not pay the individuals who pursue it, there must be something wrong in the system by which the wealth created by its labor is divided; or if on the other, it does pay the individual, there must be something wrong in the system by which his business accounts are kept, or he could show by his balance-sheets, his exact business income and expenditure, the amount of his profit or loss. The latter is probably the general fact; or more properly, it is the fact that the farmer has no business system, and does not keep his accounts in such form and with such accuracy as to exhibit the true results of his business operations.

Business enterprises in their income and expenditure are one thing, and the support of a family with all its incidental costs, another and very different one. The farmer usually does not notice this, but assumes that the gross sum of his yearly expenses are farm expenses, though these may be but a moiety of the amount. In his calculations he is prone to error in stating the capital invested in his business, in both its real and personal branches, by treating the entire value of each as a business investment. Just here the farmer should act on the same principle that would be adopted by a manufacturer to determine the amount of his business capital. In it would be included all buildings used for manufacturing, and the land and privileges occupied by the same, the machinery, implements, vehicles and teams employed exclusively in the business, cash and both raw and manufactured stock on hand, and the credit balance between bills receivable and bills payable. But he would exclude from it his dwelling house and everything thereto belonging both real and personal, because they have nothing whatever to do with his business but are an outside expenditure distinctively differing from it.

The farmer should take an annual inventory and it should include all his *farming lands*, and if he owns it, enough wood-land to keep his farm fences and *exclusively farm buildings* in repair, all his buildings erected and used exclusively for the business of the farm, stock of all kinds kept, all teams kept for farm work, all cash crops and manures on hand, and the credit balance between farm bills payable and receivable. From this inventory he should exclude his dwelling-house and all attached buildings and grounds not used for farm purposes, and all implements, vehicles, teams and fixtures provided for the pleasure or comfort of his family, because, as in the case of the manufacturer, they are all an outside expenditure and not essentially connected with his strictly business operations. In the transaction of his affairs he should charge to the farm all labor, including board, whether it be on the farm or attending to its business abroad, or whether performed by persons hired, or by the farmer, his wife, sons, or daughters. But he should be very careful to charge only for service actually rendered.

It is quite common for the farmer to say that himself and family have labored the whole year, when the fact is, some or all the members have spent weeks and even months in other business, attending school, in travel, recreation or amusement; and it would be a manifest injustice to the farm to charge it for time thus occupied. He should charge all seeds, manures and fertilizers used, whether produced on the farm or purchased, all new implements purchased, and for all repairs of exclusively farm buildings, fixtures, tools and vehicles, and also for taxes and interest on all real and personal farm property. Contra: He should give the farm credit for every kind of crop or product sold from it, at the price received, and for all the grain, meat, vegetables, milk, butter, cheese, eggs and other products taken by his family, at their value on the farm, and whether wasted or consumed. This last item is of the utmost importance, and should be as rigidly adhered to by the farmer as by the country merchant who charges to his family all the dry goods, groceries and necessary supplies taken by them from his store. At the expiration of the year, a new inventory should be taken, embracing exactly the same items as the original, and the sum of this inventory and credits balanced with the sum of the debts, and the first inventory will show him his gains or losses for the year. To many, perhaps most, farmers, the keeping of books is irksome and perplexing, and therefore neglected; but it is absolutely necessary if farming is a business pursuit, and is to be conducted by those principles which prevail in other business enterprises.

No person, neither a farmer nor anybody else, can say that his business does or does not pay, unless the exhibit is made by a regular, correct account kept by the above or some similar method, and if thus kept he might, probably would, find that his business was a good one, the trouble with his final bank account being caused by a deficiency of labor debits and excess of family expenditures.

The person engaged in general farming, is really pursuing several distinct kinds of business, each of which requires special operations and has its own income and expenditure. He may be growing or fattening neat stock, raising horses or swine, growing the different kinds of grain, roots or vegetables, producing milk or butter as a market product. Some of these branches may be very profitable, others unprofitable. To ascertain this, separate debit and credit accounts should be kept with each department, so that he may know the source of his profit and losses, and know which department to abandon or improve, and which it may be for his interest to enlarge. It is wise, oftentimes, to keep accounts with the separate fields of the farm, and always an exact detailed record of the expenditures of the farmer's family, including in the latter all it receives from the farm. Complicated and laborious as *all* this may seem, it is no more so than the accounts of intelligent, accurate business men, whom it often saves from failure, and guides to success.

Farming, in every sense, should be managed on strictly business principles, and only when so managed have we any right to expect that it will pay.

Hampshire, Co., Mass.

ABOUT PASTURING LAND.

W. J. FOWLER.

"PASTURED land increases in fertility." The foregoing assertion has so long passed current that it may seem vain to controvert it. Undoubtedly, too, it has some degree of truth; is, in fact, as true a saying as most of the wholesale generalizations which are frequently heard about farming. Comparatively speaking, pasturing probably is more favorable to fertility than growing grain or other products, to be sold from the farm. It exausts the elements of fertility less rapidly. The droppings of animals fed on the land return to the soil something of what has first been taken from it. To this extent pasturing is not exhaustive. And this is all the truth there is in the old saying above quoted. To what extent this return of fertility is made to pastured land, depends entirely on the kind of stock kept, and what is done with them. Mature animals remove less from the soil than those which are growing, and fattening animals less than cows giving milk, or sheep on which wool is always growing. Fat is carbon, and carbon is not a very valuable or important plant-food in the soil. Hence fattening animals or selling butter does not take much of value from the farm in proportion to what is received from their sale.

But other questions are involved. The mechanical condition of the soil is a matter of great importance. Air, rains, dews and the warmth of sunshine, all impart fertility or make it more available. How does pastured land compare with other soil with regard to these agencies? Is it not everywhere true that it is less favorable to fertility? Air and rains will not penetrate the untilled soil. Even the dews, which fall on its herbage, do not touch a particle of soil but are evaporated in early morning. So then we have, as the result of pasturing, that the soil loses less of what is taken from it, and it also gains less from the agencies of nature by which the losses of fertility are restored. To those who know how important these are, the balance seems against rather than in favor of pasturing.

One other point is important. Exhausting the soil is not necessarily a bad result, provided the product will enable its owner to restore its fertility. It is the farmer's business to take from and add to the soil. If he is successful, he is so by selling fertility at a dear rate, and restoring it at a cheaper rate. No men exhaust the soil so rapidly as the market-gardeners of New York city; but every year they add 50 to 100 loads of manure per acre and keep the balance more than even. But let them intermit this manure a single year, and the failure of their crops will indicate the exhaustive system of their cropping. But practically, market-gardening does not injure land, because its profits enable the owners of such lands to manure so heavily. Is this the case with the owners of land in pasture? In grain growing regions there are large and increasing sales of commercial fertilizers. This may prove that those soils are becoming exhausted; but it also proves that their owners make money enough to help to retain the fertility of their lands. Who knows of places where owners of pastured lands are buying fertilizers with which to fertilize them?

In most dairy sections soils are becoming exhausted of their phosphates from sales of milk and cheese. The danger is seen and felt in a decreased production of grass, which only expensive phosphates can restore to its former productiveness. It is time that the old saying, "Pasturing increases fertility" was thoroughly examined, and the serious error which it contains, exposed.

Monroe Co., N. Y.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

THE IMAGINARY DISEASES OF ANIMALS. No. 1.

D. E. SALMON, D. V. M.

ALTHOUGH the United States is a country of schools and education, and its inhabitants are as intelligent and refined as those of any country, there are many beliefs and practices which have a foot-hold among us, handed down as they have been by tradition from the days of ignorance and cruelty, that are unworthy of our education, a blot upon our intelligence, and a shame to our refinement. And in no direction are these traditions so far from truth, so opposed to the interests of those who believe in them, so barbarous, and I may say, inhuman in their effects, as in the treatment of the diseases or supposed diseases of our animals. Occasionally, or semi-occasionally, a voice is raised in the interests of humanity and truth; but it is hardly heard before it is drowned by the cries of the multitude, who cling to their opinions with a pertinacity worthy of a better cause, and with whom antiquity of inheritance is the most plausible argument. And so, from one extremity of our broad land to the opposite, the first symptom of disease in an animal is a signal for torture of the worst description, to be continued till the disease has run its course, or the sufferer's powers of resistance are exhausted by the so-called remedies; the mouth is burnt to a crisp with red-hot irons, the teeth are knocked out by blows of a great hammer, the eyes are cut and mutilated, the stomach, and often the lungs are poured full of nauseous compounds, sometimes innocent, but oftener deadly in their effects; or, if it should be a cow, a gimlet is forced through the highly sensitive parts of the horns, and to add to the intense pain thus inflicted, salt, pepper, and other irritants are applied; and then the operator, in search of new opportunities to display his skill, seizes upon the tail, and either cuts it off entirely or slits it open for an indefinite length, never forgetting to apply the salt and pepper. All this time these people are as innocent of a knowledge of the real trouble and as unable to determine it, as is the poor animal which is obliged to suffer the consequences.

The great prevalence of these practices, their ridiculous character, their demoralizing influence, and last, though not least, their absolute cruelty lead me to take this opportunity to review them once more in the hope of doing something towards reducing their frequency.

LAMPAS.

This is a term applied to a swelling of the soft parts behind the upper front teeth; it is sometimes a real disease, though one of little consequence, but oftener exists only in the imagination. It is caused in young animals by teething—just as a similar congestion of the gums originates in children; in adult horses, it sometimes occurs with diseases of the stomach and bowels, from sympathy with these organs. It is, therefore, generally seen in such animals as have been poorly fed; in those that have been wintered on coarse, innutritious feed—in such animals the digestive organs are always more or less impaired, and intestinal parasites multiply to a surprising extent. We can therefore understand why frizzly hair, near the root of the tail, is considered a symptom of lampas, since parasites cause an irritation and itching of the rectum, which leads the animal to rub its tail against the sides of the stall or other objects, and this rubbing, in turn, causes a frizzly appearance of the hair. Very often such horses have a capricious appetite, and when put to hard work in spring lose it entirely at times; again, when the spring work comes on, their feed is increased, they eat more than their stomach is accustomed to, and more than it can properly digest, causing disease of this organ and consequent loss of appetite. In all these cases of diminished appetite, the mouth is examined for lampas, and it is not hard for the owner to convince himself of its existence; for, since he has heard of no other cause for the trouble, he decides this must be present. And, then, to cure a supposed tenderness and soreness of the part, he goes to a blacksmith and has a red-hot iron held against the roof of the poor animal's mouth till it is burnt in a terrible manner!

It is scarcely necessary for me to add that in real cases of lampas a slight scarification (not cuts a half inch deep) will prove a relief; but in adult animals, where the trouble arises from digestive disturbance, this must be treated according to its nature. Again, when horses lose their appetite from any serious disease, it is generally decided to be lampas, and so, whether there is inflammation of the lungs or liver, whether there is fever or a carious tooth, the first treatment is apt to be the hot iron.

WOLF TEETH.

These are small, supplemental teeth, called from their position pre-molars; they are very common, but in a majority of cases drop out when the first pair of milk molars are replaced by permanent teeth or soon after; they are, consequently, generally seen in young horses. As horses are quite subject to superficial inflammation of the eyes while teething, from the increased flow of blood to the head at this time, these teeth have become associated with such inflammation and are considered its cause; in the South and West where "big head" is prevalent, these teeth are also often charged with originating the bony enlargements which constitute this disease; as a consequence, horse-owners look upon wolf teeth as they would upon a rattlesnake—as something to be feared and destroyed as soon as possible.

The removal of these teeth causes little pain when properly done with forceps, but when they are punched out by placing a bar of iron against them and hitting this with a heavy hammer, as is usually the case, it not only causes severe and useless pain, but it so frightens the animal as to sometimes make it vicious for life. Wolf teeth have no effect on the eyes directly or indirectly, nor do they cause the enlargements of bones of the nose attributed to them. Dr. Horne, of Janesville, Wis., who formerly believed that these teeth caused blindness, was induced to examine the mouths of a large number of horses, to satisfy himself of their influence. The results of this examination, to say nothing of the almost unanimous opinion of the veterinary profession, founded on many years of experience, should convince any intelligent man. Of 1,073 animals examined, 216 had wolf teeth, and of this 216 all but one were perfectly free from any disease of the eyes or any other part; of the whole number of animals examined, 37 had affections of one or both eyes, but with the single exception mentioned, they did not have wolf teeth. Such an observation, made by one who believed the contrary, cannot be doubtful evidence, and as it confirms what veterinarians have always taught, it should prove conclusive.

HOOKS (HORSES AND CATTLE.)

The belief in "hooks" is not so widespread as that in lampas and wolf teeth, but what it lacks in prevalence it makes up in absurdity. Horses and cattle are, in some sections of the country, kept on such starvation diets during the winter that when spring comes, or before, they are mere walking skeletons; their digestive organs are deranged, their strength exhausted, they are scarcely able to drag themselves along, and this is done with swaying back and staggering gait. How this condition came to be charged to the *membrana nictitans* of the eye, it is impossible to say; but the belief exists that this is the cause, and that it must be cut out to effect a cure. And the belief has extended till now when a horse or ox sprains its back by hard work, a fall, or in any other way, the attention is at once directed to the eyes, and these are mutilated in a most barbarous manner. I have not space to dwell upon this false opinion, but "a word to the wise is sufficient," and a little reflection must convince any one of the ridiculousness of attempting to remedy a condition of starvation or a sprained back by any amount of ocular surgery. The diseases of animals are not so different from those of men, but that it is safe to ask one's-self what he would think if a physician proposed to institute such a treatment for a similar disease in people.

SELECTION OF VARIETIES OF FRUITS TO BE PLANTED.

T. T. LYON.

SOUTH HAVEN, MICH., May 22, 1873.

IT is by no means safe to conclude, because a variety of fruit is found successful and desirable in a given soil or locality, that it can therefore be relied on to succeed in other and untried situations.

The planters of fruits have shown themselves very slow to acquire, and slower still to act upon the knowledge of this fact. Many of my readers will, doubtless, be able to recall the fact that the earliest National assemblages of fruit-growers occurred in the autumn of the year 1848, and during the next few months thereafter; and that, at such conventions, committees were appointed, charged with the duty of framing lists of fruits to be recommended for general cultivation; but, to the great surprise of all, it was soon discovered that no varieties can be said to be more than locally successful; although an occasional one, such as the Bartlett and Seckel

among pears; the Concord among grapes; and the Wilson among strawberries, seems gifted with ability to attain success over a wider region than most others; while yet others, like Newtown Pippin, Swaar, and Esopus Spitzenberg, can hardly be said to prove fully successful away from their native localities.

There possibly is occasion to doubt as to the extent to which the fact of such failure is attributable to climate, and how far it may be due to aspect, soil or other contingency. Nevertheless, the fact remains; and it behooves the planter to consider it well, before proceeding to select his varieties. Indeed, the success or failure of varieties seems so little amenable to mere climate, and is apparently so far independent of the limitations of parallels of latitude, that in no case can it be considered safe to assume the success of a variety in an untried locality; nor yet to treat apparent success as certain and permanent, until the trial shall have extended over a series of years, and upon a variety of soils.

I am convinced that, to the careful observer, there can be little doubt that, if the selection of varieties for the present orchards and gardens of the country could have been wisely made, the mere fact of such wise selection, under all the existing drawbacks of neglect and bad management, or, in too many cases, no management at all, would have had the effect of doubling the money value of their products, taken as a whole.

BENEFITS OF THE GRANGE.

Allow me to thank you most sincerely for the good words and kindly regards for the Grange, expressed in your leader of Jan. 26. I had been thinking while perusing Prof. Roberts' articles in relation to Agricultural Colleges, that while the few are privileged to enjoy the advantages of scientific training, which are afforded by these institutions, the great mass of agriculturists remain unbenefited except it may be by reflex from those thus privileged. But the Grange as an educator reaches, or may reach, every farmer's home in the land. Its social, and educational influences are felt in the remotest hamlets and particularly in the "Great West."

"A word fitly spoken, is like apples of gold in pictures of silver," and the dictum which goes forth from such an influential, and widely circulated journal as the Rural, may decide hundreds, and perhaps thousands to take a step which I am certain they will never have cause to regret.

That the Grange is the greatest secular power for good, that has ever been brought to bear upon the agricultural population, no one who is acquainted with its workings will deny. Too many farmers and their wives live in selfish isolation, with their backs bent, and their heads down, always digging with the mud rake, like the man in Bunyan's Pilgrim's Progress, never taking time or caring to look up. Some there are who joined the Grange solely for financial benefit. In this they need not be disappointed, for by judicious massing of orders, and prompt payment of cash, many dollars may be saved. In the purchase of agricultural implements, musical instruments, sewing machines, fertilizers, grass seed, &c., many thousands of dollars are saved to the patrons every year. We have a little supply room in our Hall where most kinds of groceries are kept. They are purchased at wholesale, done up in convenient packages by the seller, the weight marked on each package, and the patron pays only the wholesale price, thus saving from 20 to 50 per cent. There are more kinds of groceries than the uninitiated are aware of, for which we would have to pay on the street twice the wholesale price for which we can get them through the Grange. But while the financial part contributes cohesive power, and is a necessary component of success, there is a leaven which is more subtle and sure, more necessary to the vitality and longevity of the order, and which leavens the whole lump. It is the educating power, socially and intellectually and this feature of it the members are learning to prize beyond all financial gain derivable from it.

To come to particularities—for I notice they often secure the attention better than generalities—the Grange of which I have the honor of being a charter member, has been in existence something over three years, and has a membership of over 100, composed mostly of farmers and their wives, all first-class people, for we have tried to be very careful not to admit any but worthy members, and to reject those whom we should be ashamed to call brother or sister. The Grange meets Monday afternoons, for Monday being butter day in town makes it more convenient for the men. At first the ladies demurred at this arrangement because it so materially interfered with the washing, but somehow they seem to have compromised the matter, for the potent power of the Grange has either prompted them to unusual activity in the early morning, or to defer the washing till another day. To woman particularly does this institution come as a benediction.

The greater part of the life of the average farmer's wife is toil, and drudgery, with little time for rest, or thought, mental improvement, or the refinements of social life. But the Grange gives her stated periods of rest and recreation, affords her something new, and pleasant to think about, and lifts half the burden. The pleasant friction of social contact with others, renders her cheerful, and enables her to look upon the pleasant side of life. In no other organized body is woman placed upon an entire equality with her husband, empowered to hold the same offices, and cast her vote with the same unrestrained freedom. This feature alone should recommend the Grange to every intelligent lady in the land.

The mental powers of the members are stimulated by discussion of agricultural topics and such other subjects as have been found of interest, and many an essay has been written and read by those who, when first called upon, thought it beyond their power to do such a thing, but who found, when it was tried in real earnest, that it was not so very hard after all. Some object to the Grange on account of its secret character. Do not all organized church societies, business firms, and even the family, have secrets which they do not care to have every one possess? The Grange is not an oath-bound society, its secrecy is enforced simply under an obligation which will not conflict in the least with one's moral or religious convictions, but which a man or woman of honor will consider as binding as an oath. It has secrets enough to hold it together, and to prevent any but the initiated from gaining entrance. The machinery works admirably and without friction—Subordinate, County, State and United States Grange, like wheels within a wheel, or links of one unbroken chain.

The different County Granges are doing an excellent work in the organization of Mutual Life Insurance Companies. It is to the shame of farmers that they have paid hundreds of thousands of dollars to Insurance Companies to support the officers in extravagance, build marble palaces, and buy whiskey and cigars for agents who ride about the country; without having realized in the aggregate the one-hundredth part of their investments. It is notorious that if he has the misfortune to have his buildings burned, the adjuster will throw out of account everything possible, and pay as little as he can of the loss incurred. This County has, within a short time, formed a Patrons' Fire Relief Association, starting out with $110,000 risks which I trust will soon be increased to five or ten times the amount. The rates, instead of being ¾ of 1 per cent for three years, as in the stock companies, is from 1-7 to 1-10 of 1 per cent for five years, according to proximity and character of buildings. Then we have the Patrons' Aid Society organized on the same basis as the Masonic Relief, which obligates the member to pay one dollar on the death of any other member. This—with the entrance fee which is small, and graded according to the age of the person—constitutes all the expense. There are no salaried officers to pay, except the actual expenses of the Secretary, and the beneficiaries get the whole sum paid by the members. Mrs. W. C. G.

Suffolk Co., N. Y.

PUBLICATIONS RECEIVED.

The American Antiquarian. This is the first number of a new quarterly periodical devoted to early American history, Ethnology and Archæology, edited by the Rev. Stephen D. Peet, and published at Ashtabula Ohio. It contains, exclusive of advertisements, sixty pages, nine of which are occupied by illustrations of Indian antiquities discovered in various parts of the country, and described in the text. It fills a desideratum in American literature, and while of special interest to archæologists, also affords entertainment and instruction to the general reader.

Arguments before the Committee on Patents of the House of Representative in February and March 1878, with reference to amending the laws relating to patents. This is a subject which affords a large scope for discussion, and the opinions of a dozen or so experts on the matter are condensed in the 375 pages of this work.

CATALOGUES, &c., RECEIVED.

Crop Prospects for the month of May, from special correspondents. L. L. Polk, Commissioner, Raleigh, N. C. 76 pages.

Nineteenth Annual Report of the Superintendent of the Insurance Department, State of New York. Part Second. John F. Smyth, Supt.

Hooker Nurseries, Rochester, N. Y. Specialties: the Brighton and Lady Grapes, Roses, Magnolias, Gooseberries, Currants, Peaches.

The number of students attending the Illinois Industrial University (Urbana, Champaign Co., Ills.,) in 1877-78 was 377.

Circular. American Association for the Advancement of Science. Twenty-seventh meeting to be held at St. Louis, Mo., August, 1878.

List of Premiums of the Iowa State Ag. Society for the Twenty-Fifth Annual Exhibition, to be held on Sept. 16-20, at Cedar Rapids. 75 pages.

Arboricultural.

LARCHES—CONCLUDED.

European Larches occupy a very important office in the plantations of Europe intended for either timber, for ornament or for shelter. Few trees grow more rapidly, or are finer during their early spring growth. Later in the summer, in America at least, a dimmer and more rusty hue is apt to pervade the foliage, which renders it less attractive. In Europe, however, their peculiar office seems to be that of shelter as well as timber. Massed together as wind-breaks on the outer boundaries of estates or smaller lawns, their rapid growth, thick foliage and cheapness well fit them to set off and protect the beauties of more tender and choice trees. Their employment for such purposes in America has not proved indeed equally successful. There is something about their nature that unfits them for thriving in our summer climate. The rusty hue indicates this and a sparse slender growth soon demonstrates it to a certainty. Then, again, they do not prove with us very easy to transplant, especially in the spring, when their habit of starting early causes many failures in cases where too much delay has occurred. The fall, in this latitude and further south, is undoubtedly the best season for moving all Larches, and were it always selected, far less complaint would be made concerning the difficulty of transplanting them. After acknowledging all the good qualities of the European Larch, we hardly think it will ever attain, much less hold, the important position among our trees intended for massing, that the Norway Spruce, White Spruce, and Austrian and Scotch Pines occupy.

We should like to say a word here concerning the importance of these masses planted especially for wind-breaks while at the same time they give a distinctive character to the place and afford a frame-work to its general arboreal surroundings in the shortest time and best manner possible. It should be the first duty of the landscape gardener to establish the protective adornments to which class undoubtedly the Larches belong and for which they possess a decided value.

The peculiar form of Larch represented so truthfully on the first page of the last number, is a variety of the European or rather of a particular form of that species, known as the Tyrolese Larch. It is said to have been picked out of a seed-bed in Mr. Godsall's nursery many years ago. The grotesque and remarkable form it assumes is very persistent. Indeed, the specimen in question bids fair to soon become a perfect monstrosity that must have, in order to prevent it from breaking down of its own weight, artificial supports under several prominent branches. The weight of snow in winter presents yet another danger for its abnormal formation. Unlike the stems of most high-grafted trees, the trunk of this form of Weeping Larch seldom incurs disease but it will be readily seen that the above noted monstrous shapes prove even in this case the fundamental weakness of the system of high grafting. Undoubtedly, however, the strong desire of most people for immediate effect will long secure the employment for high-grafted Weeping Larches, especially if by systematic pruning the weeping tendency be regularly trained to assume graceful shapes free from the distortion so sure to ensue if the tree is left to itself. The low-grafted form is therefore, in this case as well as others, much the best. It is a natural growth from the ground up, a weeping pyramid, and a proper feature of the landscape in its ordinary stages of development, and this the high-grafted is not. The specimen in question was imported from Europe years ago, and has apparently received no treatment with the knife during its occupation of the present position.

Larix glauca or alba is a variety of the Europæa Larch, that shows very light foliage on its young growth, otherwise it is not very distinct.

There are many Larches other than these two species: indeed their own varieties are numerous; but, practically, for ornamental effect, there are only two others that are worth dwelling upon. Larix Dahurica is a small tree of peculiar hardiness, "dwarfing down by climate to a stunted bush, with twisted, half-pendulous branches." It is found far north in Siberia, on the bleak mountains of Dahuria, in regions where appear only the last vestiges of arborescent vegetation. The distinct forms and rugged nature of this Larch give it a decided value; for it is well known that some species of Larch, such as Griffithii, etc., are not really hardy in this climate.

One of the most notable of all Larches is the leptolepsis, *par excellence* the Japan Larch. It is a more slender and delicately formed tree than Enropœa and belongs to a more refined type. "It is cultivated" says Gordon, "by the Japanese in pots which, in some instances, are priceless; hence, its Japanese name, Kin-t'siansoung, Money Pine." The high mountains of Japan dwarf it to a mere shrub of two feet.

Whatever may be said, in a general way, against the Larch as a specimen tree in America, nothing can surpass the soft, rich green of its foliage in spring: with regard to trees massed in groups for shelter and effect, most of these objections disappear.

THE GOLDEN RETINOSPORA AS A HARDY EVERGREEN

I should like to render my testimony in favor of this beautiful little golden evergreen on one special account, namely, that of hardiness. It is a well known fact among all who have attempted to grow evergreens on the bleaker points of the New England shores, such as the cliffs at Newport etc, that generally they are not capable of resisting the effect of severe ocean winds laden with salt spray. The Norway Spruce is soon rendered thin and meager and the Hemlock utterly destroyed. Arbor Vitæ, Junipers of certain varities, and Yews shrivel up and die, and even Scotch and Austrian Pines, in most cases perfectly rugged, will in peculiar localities lose the lower limbs, and become naked and bare. These last-named evergreens may, however, be termed fairly hardy, and classed in this respect with the White Spruce, Creeping Juniper etc. Indeed, so few evergreens thrive in full exposure to the vicissitudes of such situations, that the use of deciduous shrubbery and trees is to be specially commended for the main and most exposed plantations of these localities.

Strange to say, however, a conifer that has been occasionally, with seeming injustice, called tender, exhibits in the worst exposures, a vigor and endurance that are really astonishing. The Golden Retinospora, the conifer I mean, has something in its nature that adapts it to more situations, more pruning, more transplanting than almost any evergreen that can be named. I do not propose to dwell on the other notable virtues of this Retinospora, but simply to point out this particular quality, tested now for years, that must always entitle it to a high place on the list of the landscape gardener's material. Samuel Parsons.

Veterinary.

IS THIS A NEW HORSE DISEASE?

For about one year this section of the country has been afflicted by an unknown disease among horses, and many valuable animals have sickened and died from it, while of all that have been affected, I know of none that has recovered. The proprietor of a hotel in this town has just lost twelve horses, young and old, in this way, and others in the neighborhood have likewise been heavy sufferers. The most skillful local horse-doctors that have been called to treat this strange malady, have so far been unable to effect a single cure.

The symptoms and course of the disease, so far as I can learn, are as follows: At the outset the horse shows considerable weakness, accompanied with quick pulsations; the circulation then becomes sluggish, especially close to the surface, though it is believed to be more than normally rapid about the heart. Death, though certain, is not immediate. The horse will linger for weeks and months, from three to six months being, indeed, the time within which the animals are carried off after the attack commences. Meantime the appetite continues good up to the last, and feeding the animals well seems to have a better effect than turning them to grass; for with the latter treatment they die off rapidly. From the first, however, the horse loses flesh and runs down generally.

Should any reader of the Rural happen to know the cause, nature, course or cure of this malady he would confer a great benefit on hundreds hereabouts, and perhaps elsewhere, by telling what he knows with regard to it through the columns of the Rural. T.

La Rue, Marion Co., O.

Field Crops.

THE HESSIAN FLY'S FAVORITE WHEAT.

As was apprehended last fall, the *Cecidomyia destructor*, or Hessian Fly, is ravaging the wheat crop in this section to a fearful extent.

The Clawson and all white wheats are the varieties infested. Red wheats, and especially the Lancaster, seem to be proof against the larva of the fly. Either the fly never lays eggs on the blades of the Lancaster or else the larva after coming from the egg fails to wedge itself between the leaf and the culm, in the axil, which is claimed to grow closer and to be of harder texture. A number of pieces of wheat are now growing in this vicinity, which were sown in part to Clawson and in part to Lancaster, and at the very boundary between the two varieties of wheat, the Clawson is "crikling" down and some stems contain as many as twenty larvæ, some of which had changed to pupæ as early as May 10th. Of course all the larvæ came from eggs laid this spring. The Lancaster, only a drill-mark away, is vigorous and entirely free of the maggot.

A still more remarkable case of white and red wheat growing side by side, is a piece of wheat owned by Mr. A. Barton. When he began sowing a field to Lancaster, there was about a half-bushel of Clawson in the drill, which was not taken out, but the Lancaster was put in the drill on top of the Clawson. Now, at this time, the very place and distance to which the white wheat reached can be readily seen and marked, by the unhealthy condition due to the presence of the fly larvæ. These cannot be found elsewhere in the lot.

The cause of such a phenomenon is certainly worthy of the attention of entomologists. While the fly, in its younger stages, is found on barley and rye as well as on white wheat, red wheat is without a specimen of the larvæ. Notwithstanding the improbable difference between the white and red wheat plant, it seems very proper to call the insect the White Wheat Fly. Rank, rich pieces of wheat are looking well in spite of the

pest. Still pieces of wheat which, two or three weeks ago, gave promise of yielding 20 bushels per acre, are now, in consequence of cold weather, frosts and, above all, the insect, looking so bad that five bushels per acre would be a proper estimate. Arnold's Gold Medal wheat falls a prey to the fly, but the White Egyptian seems to be unattacked.

W. L. DEVEREAUX.

Wayne Co., N. Y., May 20.

RYE AND OATS FOR WINTER PASTURE.

THAT portion of the field sown, last fall, with rye for winter pasture, failed to realize my anticipations, owing to a combination of causes. Had it been sown in August instead of September, and had two bushels per acre instead of one been used, it would have furnished more than double the amount of feed. As it was, I turned off the stock on April first, and by May the first it was heading. Though very thin I hoped to save some seed, but it soon began to die, here and there a stalk, until nearly one half was dead. On May 29, when just ont of bloom, it was cut. I have some very nice straw for tying corn-fodder &c. That portion of the field sown with winter oats, though sowed some two weeks later, proved much more satisfactory, stooling out well, and giving more pasturage. The oats were ripe by May 28th, yielding a fair crop of good heavy grain. I shall try both the rye and oats again next fall. M. B. PRINCE.

Warren Co., N. C.

Industrial Implements.

THE IMPROVED "SWEEPSTAKES."

MOST of our readers are not unacquainted with the many points of excellence of the "Old Reliable Sweepstakes" thresher, made during the last twenty-six years by C. AULTMAN & Co., Canton, Ohio.

The illustration given of the thresher in this number does not show a recent improvement to which we wish to call attention. The motion of the riddle has been changed from "side-shake" to end-shake, and the twelve hundred machines being made for the season of '78, will be fitted with this improvement. Anyone conversant with threshing machines will understand the value of this improvement. The motion of the end-shake is in the direction of the line of the machine, which causes the thresher to run steadily without props or screwing up wheels. Giving an endwise rocking motion to the riddles, and grain, wet or dry, is bound to move forward and off, making "choking" out of the question.

This motion is not communicated from the shaft, but is secured by an ingenious device that relieves the shaft, and makes its motion easy and unstrained. The grain falls on the riddles in two places, securing an equal distribution, which greatly increases their cleaning capacity. The fan mill blast can be changed at will, owing to recent modifications, and the blast is evenly distributed, be the machine large or small. This point is best appreciated when working different kinds of grain and seed. It is said that in flax and timothy the "Sweepstakes" is especially efficient.

This thresher is too well known to need reference to the thorough manner of its workmanship and the excellence of material.

The popular CAREY power, made by this Co., has undergone a few minor alterations, that while not affecting the principle, are of great importance as conveniences. The bridge, for instance, is now made in three sections, connected by bolts operating in slotted holes. If damage occurs, this construction puts it in the power of the operator to readjust the machine easily and quickly. Instead of wedging the bearings against the shafts operating the bevel wheel and pinion, a set screw acting as a pivot, is forced against the boxes. As the boxes wear on the shaft they may be adjusted with the screw, and always have an even pressure and surface along their length. If well lubricated, then the friction will be slight, and the motion easy and uniform. Badly adjusted bearings are the cause of cutting out shafts, hot boxes, and immense friction. This device seems to us to be admirable.

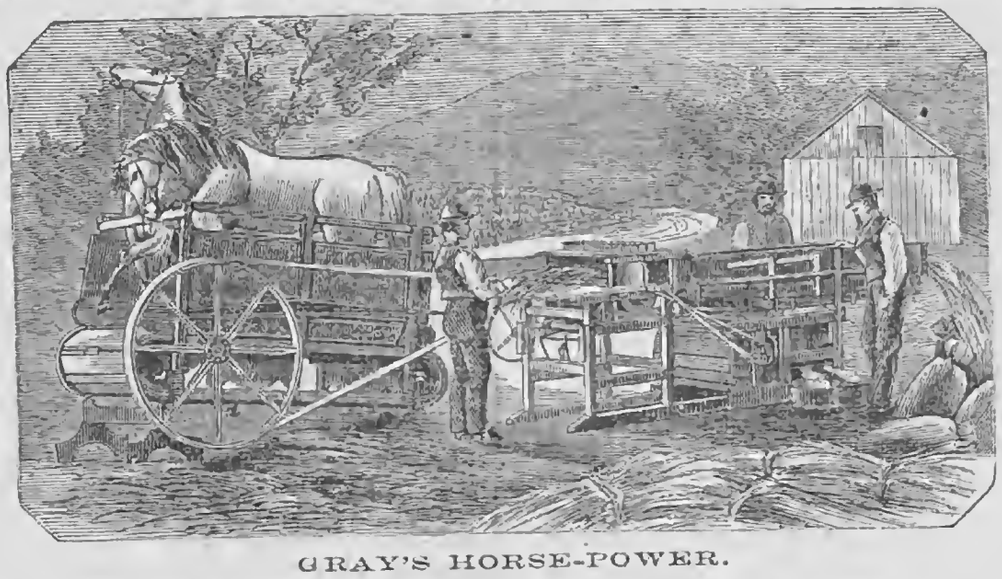
When steam is preferred for threshing, the firm has made an engine, the "Canton Monitor" as it is called, that answers well the purpose for which it is designed. It has a vertical boiler, hung low on wheels fitted with rubber springs. The precautions against explosion are ample, including a safety plug that melts out at a certain heat and lets the steam into the fire-box.

It is easily set for work, needing no leveling, and by turning the forward at right angles to the rear wheels, the engine is sufficiently braced. It is economical in the use of water, fuel and time, and is very durable. None but the best material is used throughout, and the aim to secure lightness, strength, full work and cheapness has, it would appear, been attained.

The explanatory circulars, furnished by Messrs. C. AULTMAN & Co., give information as to details, etc. They are supplied gratuitously.

GRAY'S HORSE-POWERS.

THE just appreciation in which horse-powers are held by the farming community is indicated



GRAY'S HORSE-POWER.

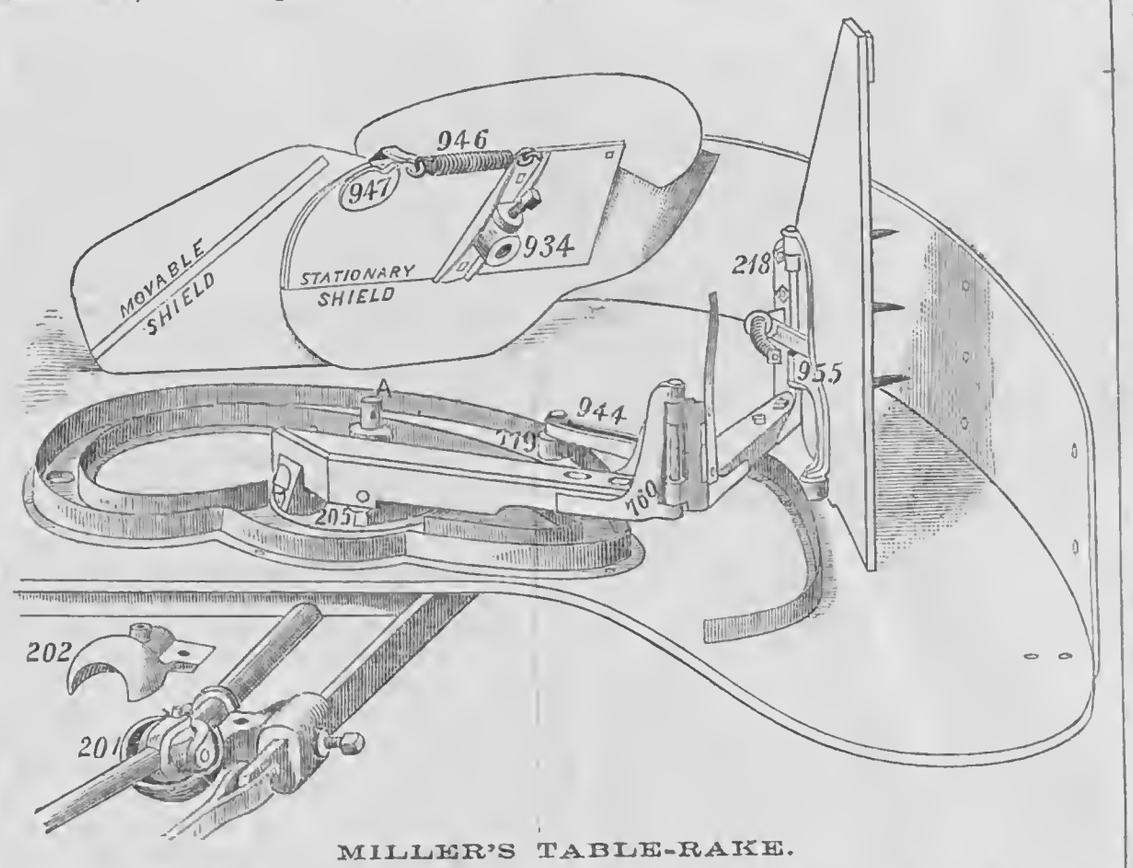
by the capital employed in their production, and a good test of success, which means, of course, thoroughly trustworthy and satisfactory machines, is the ability of a maker to hold and increase his business. The Messrs. A. W. GRAY'S SONS, of Middletown Springs, Vt., are a conspicuous example in this respect. The business begun by their father, years ago, has been steadily augmented, until to-day theirs is one of the representative firms in this branch of agricultural machinery.

Their powers are adapted to one, two and three horses, and the range of work conforms to this proportion. The horse walks on an endless platform, the pieces composing which are fastened on the under side by wrought-iron gear, connected by polished cast-steel rods of the most superior quality. These rods serve also as axles for the rollers, and move with the platform over a cast and wrought-iron track. The wrought gear meshes with pinions on the main shaft, to which is attached the band-wheel. The two and three horse-powers are modified by center tracks under the lags, on which run a set of middle rollers. These rollers hold up the lags and prevent springing, at the same time relieving the end rollers of a part of the weight. The light weight of these powers—being 850, 1,450 and 2,000 lbs., respectively, for the one, two and three horse—is an important feature, rendering them highly portable, and of necessity easily handled. Their construction reduces friction perceptibly, making less work for the horse to accomplish a unit of work.

In addition to general applicability to such work as running machinery for shops, grinding apples, churning, pumping water, cutting feed and working grist-mills, this firm apply them to their specialties, which may be said to have been invented because of the existence of the horse-power, as far as they are concerned.

Claiming attention at the head of the list stand the threshers and separaters, compact, durable and effective machines, that have recently been improved to a degree approaching perfection. They are well adapted to the wants of small farmers, and do most satisfactory work. One hundred bushels of well-cleaned oats per hour is not an extraordinary amount.

Drag saws and machinery for sawing logs, circular saws and minor manufactures, all of the best material and workmanship, added to as low prices as articles of the first quality can be sold, account for the extensive sales of this firm. Descriptive circulars, giving details of prices, and lucid descriptions of various machines and powers, may be had on application to the firm.



MILLER'S TABLE-RAKE.

MILLER'S TABLE-RAKE.

WE assume that the reel-rake is known to all men who have to do with harvesting machinery. The table-rake is designed to perform the same work as the reel-rake, but the methods employed are entirely dissimilar.

MILLER'S Table-Rake, of which we give an explanatory drawing, is the invention of Mr. MILLER, of the firm of AULTMAN, MILLER & Co., Akron, Ohio,—the gentleman who invented the widely-known Buckeye mower.

As its name indicates, the rake is attached to the platform or table of the new machine. It is driven by shaftings with universal joint and bevel gearing; its sweep or orbit is determined by a cam on the center of the platform. In operation a roller (779) following the contour of the cam, works the jointed arm (760-955) by extending or shortening it to suit the curves of the table. The fork, as seen at the end of the arm, starts into the grain close to the "shoe" and sweeps across the table in a line parallel to the sickle; on its journey it gathers and compresses the grain against the outside board of the platform, and delivers it in a neat, compact gavel, quite out of the way of the machine on its next round. This is the whole operation. To deliver the grain upon the table a light reel, adjustable to hight from the driver's seat without stopping the machine, is used. It is driven by chain-gear, connected with the main shaft of the machine, and is, of course, independent of the table-rake. The mechanism of the rake is covered by a shield, that is seen in the illustration resting against the circle-board. The movable shield makes way for the rake as it swings around to the front.

The advantages said to result from this application of the rake, are that the gavels are delivered in much better shape to the binders, and that no matter what the condition of the harvest, once the grain is put on the table the rake delivers it uniformly; the rake itself requiring no adjustment for different conditions of the crop. The reel-arms work parallel to the cutter-bar always, with a uniform motion throughout, just as when applied to a "dropper." The rake works automatically, delivering a bundle every thirteen feet, unless the driver objects, when by a foot lever he can control it completely, stopping it at any point in its course. This is a great convenience, as may be appreciated by those who have had experience in thin grain, and at the corners of fields, as the bundles may be carried as far as desired before dropping.

The other parts of the machine which contribute to the successful working of the rake are too well understood for comment. The platform is attached to the main frame, front and rear, evenly balancing the weight on the wheels.

Mr. JNO. COLEMAN, English Commissioner to the Centennial, speaking of the work done by this rake at the Centennial Field Trials, at Schenck's Station, says: "The men employed in binding the sheaves were unanimous in their opinion that the sheaves made by the table-rake were remarkably easy to bind," and he adds, "The draft appeared moderate, and the machine was very steady in work."

This agrees with our own observations made at the time, under the circumstances mentioned.

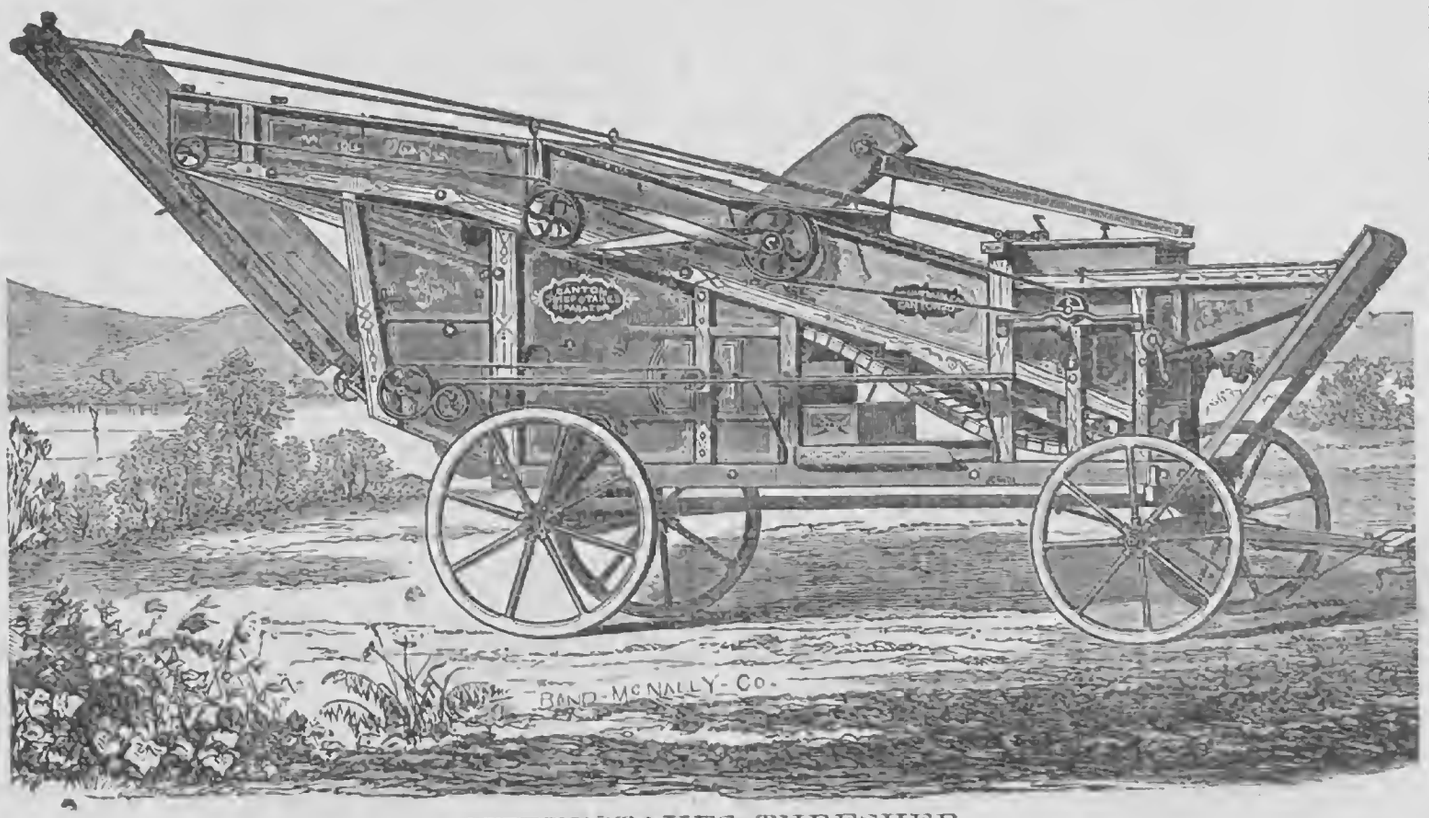
It would be impossible in the space of this brief notice to call attention to several improvements made by this firm this season, notably the "new" model Buckeye mower. The self-binding harvester is reported to be doing very satisfactory work. Circulars fully descriptive of these machines will be sent free on application.

THE LIVINGSTON KNIFE-GRINDER.

THE Knife Grinder, recently advertised in our columns, made by Messrs. LIVINGSTON & Co., Pittsburgh, Pa., has been in use during the past week on our Experimental Farm. It gives us pleasure to be able to corroborate, by actual test, the good points claimed for it by the makers. Its portability is one of its most convenient features. It works easily, sharpens rapidly, and the emery wheel does not draw the temper of the knives, as we feared it would. Its convenience and low price should commend it to every farmer. We cordially recommend it.

"PHILADELPHIA" LAWN MOWER.

MESSRS. GRAHAM EMLEN & PASSMORE the manufacturers of the widely known "Philadelphia" lawn mower have had an exceptionally prosperous season. At the present time the firm is four hundred machines behind its orders, a very flattering showing, and conclusive evidence that whatever other things people neglect, the lawn is being industriously mown.



SWEEPSTAKES THRESHER.

The Querist.

ANSWERS TO CORRESPONDENTS.

Experiments with Commercial Fertilizers, also with Seed Potatoes.

Having read accounts of the results of using ground bone and other fertilizers, given by farmers who had extensively employed them in different sections of the country and who recommended them as paying investments, and having been myself short of manure, I was induced last year to make a small investment in these much landed fertilizers. I purchased half a ton each of bone and phosphate from two extensive firms and in using them followed the directions laid down in the accompanying pamphlets, in every respect.

I tried my purchases on potatoes and, on measuring the crops, found there was no difference in the yield of land thus fertilized and of that on which neither ground bone nor phosphate had been applied. I tried them on meadow land, corn and oats without any benefit whatever. Indeed the oats were not so good as on unfertilized land. I used them in my garden and thoroughly mixed them with the soil, but found their effects injurious rather than beneficial. Before purchasing any fertilizer extensively, I would recommend farmers to experiment with it on a small scale. A number of years since, I had the same experience in using MAPES' improved superphosphate, which with me proved to be a complete failure.

There is another experiment of mine which I will state for the benefit of those who have not tried it. Some time since, in the Scientific Farmer of Boston, a man who had followed the practice every year, recommended that seed potatoes should be bought from Vermont or some other northern State, and according to him, it would greatly improve the crop and enlarge the yield. I had long been of the same opinion and concluded to try it. I purchased from Vermont potatoes enough to plant four acres; cut them into pieces of from two to three eyes each and planted them. As it was an experiment I wished to know precisely the relative results. Accordingly I took some of my own and cut them in the same way. Soon I could readily perceive the difference in appearance between the two kinds, and this was kept up until the crops were ripe. Then I dug and measured them, and having made a calculation, found that if I had used my own seed altogether, I should have had 100 bushels more of good, sorted potatoes.

Now, the subject that interests farmers most at the present day is how to best maintain or restore the fertility of the land. I am fully satisfied it will not pay to buy commercial fertilizers, but it will pay to economize farm-yard manure and to make all we can of it.

Can any of the RURAL readers give a statement of the effects of plowing under green crops, such as clover, corn, rye, millet, peas, etc.? Any information on this subject would oblige and benefit many others in this section as well as this special

READER OF THE RURAL.

Wayne Co., N. Y.

ANS.—Our friend's experiments did not go far enough. He purchased "bone and phosphate." Bone is phosphoric acid and lime. Dissolved in sulphuric acid, it is "superphosphate." If the article was of good quality and his land needed phosphoric acid, it would certainly have produced an increased yield. His advice to farmers to experiment on a small scale before purchasing largely of commercial fertilizers is excellent. That is what we have been advising again and again during the past six months. If upon separate plots he had tried dissolved bone-black, muriate of potash, nitrate of soda etc. and various combinations of them, he could have gained *some* indication of what manurial ingredient his land needs.

2. Thousands of such experiments are being tried every year. It is not an experiment, since the results are well known. Many are of the opinion that the fertility of a soil can be maintained by turning under clover alone.

Treatment of Palms—Growing them from Seed.

Amateur, New York City, asks which is the best way to keep Palms healthy and also how to grow them from seed.

ANS.—Use a compost of fibrous, lumpy loam mixed with clean, sharp sand and some leaf-mold, smallish pots, and good drainage. Never over-pot, and in shifting, don't remove much of the old soil; pack the fresh earth firmly. In the case of strong plants, add manure to the soil, but for small plants, the stimulants had better be in liquid form. Keep moist at all seasons, but most so in spring and summer. Syringe overhead on fine afternoons and sponge the leaves occasionally. Yellow and freckled leaves are the result of a sodden soil: then repot, removing some of the old soil and drain thoroughly. Before putting outside in summer, harden off well, else the leaves will get browned and destroyed. Palms love heat, moisture, a little shade, and while growing revel in bottom heat; but many grow well in cool greenhouses, in dwelling house windows, and some, as the Chinese Chamærops, may be wintered in the cellar and stood outside in the summer time.

Fresh seeds germinate very soon, old seed often take months. Grow in a temperature of 50° to 90°, according to kind. Plant the seeds in a shallow box filled with sandy earth or in small pots plunged in a box of sand; cover over with some sphagnum, cocoa-nut fiber or rough leaf-mold to prevent hasty evaporation. Keep the earth slightly moist; much wet will rot the seeds. Place the seed-box almost anywhere till germination appears, then bring it to the full light.

Cost of a Nice Green-House.

A Devoted Reader, Norristown, Pa., has been waiting a long time to see in the RURAL a nice plan of a small green-house, and inquires what would be the cost of one, for building which he has a space nine by eleven feet.

ANS.—"A nice plan of a small green-house" is too indefinite: "nine by eleven feet" doesn't give much information. If what is wanted is a detached building of that size, it will cost much more than if it adjoins a dwelling on one side, and that plan will again exceed in cost the construction of one in an angle of the house. The first involves four sides; the second, three sides, and the last but two. The floor and roof will be about the same in either case. The first will cost about $85, the second $65, and the third $50. The heating will depend on the exposure and which of the three forms of construction is followed. A small stove is probably, in this case, the best and cheapest. A description of the manner of making a cheap green-house was given by MRS. ANNIE L. JACK in the RURAL for May 11th.

Locusts and Barberries.

Mrs. M. A. Ross, Walla Walla Co., Washington Ter., asks, 1. whether she can subscribe now for next year's RURAL and have the subscription counted towards a cricket, her present subscription expiring next fall. She also says: "Last year I planted Box Elder trees as I would peas. They grew very fast and by fall were much larger than some locust trees which were planted at the same time. Locust seed should be soaked for a day or two in tepid water before planting." This spring she procured Honey-Locust and Barberry seeds for hedges, soaked the seeds in warm water and inquires, 2. how long it will be before the hedge will do for a fence. 3. Having heard that the fruit of the Barberry is nice for preserves and jelly, she wishes to learn when the bushes will bear fruit.

ANS.—1. Certainly. 2. That depends upon care, situation and manner of planting. We should say five years for the Locust—six years for the Barberry. 3. From seeds different plants will vary greatly in their time of fruiting. We should say they would average four years.

Saving Irish Potatoes.

F. M. Billing, Montgomery Co., Ala., asks to be told the best way of saving Irish potatoes.

ANS.—In the Northern States they are easily kept by burying them in the ground deep enough to keep out the frost, or they are kept in cellars. They should be dry when put up and never allowed to freeze. They must not be kept very warm; keep them dry and cool. For the section of country in the latitude of Alabama the following will probably be especially applicable. In spring, or on the approach of warm weather, potatoes in the north are taken from the ground or the cellar and spread in layers not over a foot deep, in a dry place—in a barn or under a shed. They wilt a little when so kept, but this is far better than to keep them in a damp or warm place as in a cellar where they will soon exhaust themselves by sprouting.

Grass Seeds for Name.

W. A. Whittemore, Chautauqua County, N. Y., says that, last September, a piece of land he had sown with winter wheat was seeded by him to Orchard grass as he supposed. Now, however, he sends samples of three different kinds of seeds gathered from the catch, and asks the botanical as well as the common name of each sort.

ANS.—No. 1. Dactylis glomerata—Orchard grass. No. 2. Holcus lanatus—Velvet-Grass or Meadow-Soft-Grass. No. 3. Lolium perenne—Darnel, Rye-Grass or Ray-Grass.

Black-Leg in Cattle.

O. E. French, Wright Co., Iowa, asks whether there is any cure for "Black-leg" in cattle.

ANS.—A pretty exhaustive article, from the pen of D. E. Salmon, D.V.M., on Malignant Anthrax, a disease of which black-leg is a common form, was published in the RURAL as lately as May 11th; and two weeks earlier, a shorter notice, by the same expert authority, was given of the disease as affecting sheep. As these articles are of such very recent date, we must refer our correspondent to them.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JUNE, 8TH.

G. H. W.—E. F. M.—S. W. J.—M. W. F., thanks—J. M. R.—H. G. T.—E. W. S.—S. R. M., ! !—L. A. R.—D. E. S.—R.—S. B. P.—S. P.—H. A. W.—"Subscriber"—W. S. McE.—A. J.—A. M. Van A.—"A Devoted Reader"—B. P. M.—W. H. O., thanks—J. B. T. W.—F. D. C.—M. B.—I. W.—C. D.—M. B. P., 1, 2—J. D.—W. H. K.—S. B. P. No. 2—D. W. P.—W. J. B.—B. K. G.—E. & J. C. W., thanks.

Everywhere.

NORTH CAROLINA NOTES.

TREATMENT OF CHICKENS AND CLOCKS.

THE turkey wanted to sit before she had a full nest of eggs, and when a week had passed, we added a few Houdan hens' eggs. No little turkeys made their appearance and it was hardly profitable for a turkey to spend her time in the care of only five Houdans. The weather being cold and wet, they were placed in a box by the kitchen stove. The cat and her two kittens chose the same lodgings and all slept together until the weather became dry and pleasant. Now, the chicks run at will out of doors during the day and are thriving better than others that have had the care of their feathered mothers. I expect them to be somewhat of a nuisance about the house before they are grown. We are feeding our chickens coarser meal—corn merely cracked—than ever before and are suffering less losses. Whole grain is undoubtedly the best feed when they are large enough to swallow it.

Some of our neighbors are losing their poultry by cholera; ours are healthy yet. We had our turn last year and hope to escape this summer. There seems to be no first cause for the malady, though it appears to be contagious; no preventive and no cure, though we are feeding a little sulphur, thinking it can do no harm and possibly may prove beneficial. Will Col. Curtis please report, through the RURAL, the result of the Guinea-fowl-potato-beetle experiment?

When the first cold weather came last winter, the old clock, that has done duty for many years, refused to run o' nights, and finally stopped entirely. I removed the face and found the cause to be dirt. It was several miles to a clock tinker, and then he would charge me at least a dollar for the job. I concluded to undertake the task; but not feeling competent to put it together properly again, if I cleaned each piece separately, I tried another plan. A kettle of boiling soap-suds was prepared on the stove, in which the works were boiled for a half-hour, then another half-hour in clean water; then thoroughly dried and a few drops of oil applied, after which the clock was replaced in the case and set going. Judging from results, the work was never better done. The old clock knocks off the hours and minutes with as great precision as when it received its yearly cleansing at the hands of a professional tinker at the cost of a dollar or two. Caution: Do not boil a wooden clock; the consequences might not be just desirable.

M. B. PRINCE.

NOTES FROM TEXAS.

HARRIS CO., Texas, June 1, 1878.

THE weather continues very dry and vegetation suffers. Gardeners about here feel discouraged, for this state of things prevents them from sowing or planting anything in the line of summer vegetables, to keep up a succession. This drought does not extend over the whole State, however. Further up the country crop reports are very favorable. The wheat crop, in the upper counties, is mostly laid by and is reported to have been an extra good one.

First peaches came to this market on the 20th of May. Early grapes will ripen through this month; I see some Delawares coloring. Tomatoes are plentiful. Irish potatoes are selling at 40 cents per bushel; onions at 60 cents.

Pearl Millet (Penicillaria spicata) of which the RURAL sent me a sample to try in Texas and report on, is seven feet high and is just developing its seed-spikes, which are from 12 to 15 inches in length. Every plant is a mass of luxuriant foliage. It was sowed the first week of April last, and we have never had a good rain since then. Despite the prevailing drought, however, the millet kept growing right along. The stool of the plant throws out new shoots constantly, which take the place of old ones when cut off. The leaves partake more of the succulent character of corn-fodder than of the rigid stiffness of some plants of the millet kind. I doubt not it will prove a very valuable forage plant, especially in a hot and dry country.

G. MARTI.

ROCKFORD, Ia., May 31.

WE are having a great deal of rain here, and the weather is cold and backward. It is a hard time on corn, and wheat begins to show the effects of the excessive wet. A larger area is sown to wheat than ever before and less to corn. A great many think, because the winter was so warm, the summer will be cold, and did not venture with corn. Many fields have had to be replanted. All farm products are low; hogs, $2.20; wheat, 80 cents; corn and oats, 25 cents; butter, 8 cents; eggs, 6 cents. Times are hard and our National Congress seems determined that they shall remain so. W. L. MC-E.

BARRINGTON, Yates Co., N. Y., June 3.

SPRING commenced about three weeks ahead of time after a very mild winter and considerable plowing was done and some grain sowed very early; but, with a few exceptions, the early-sowed grain is not looking well, for May was very cool. It appears therefore that spring crops are not so very much ahead after all, but winter grains and grass are well advanced and promise abundant crops. W. H. O.

ATLANTA, Ga., June 3.

WEATHER warm and dry, no rain to lay the dust since the first of May; crops suffering to some extent. Wheat now harvesting and looking promising. Fruit of all descriptions is very heavy. Cotton and corn looking well; sweet potato planting delayed in consequence of dry weather. Early Irish potatoes ready for digging, and early corn in "roasting ears." Farmers well up with their work. No prospect for rain yet. CHS. D.

BROOKSTON, Warren Co., N. C., June 1.

QUITE cool here. We expect to hear that you of the north have had another frost. M. B. P.

WARREN CO., N. C., May 27, 1878.

YESTERDAY was our first really hot day this spring. Vegetation is now growing rapidly; warm and frequent showers; wheat a little rusty. If the tales we hear of frozen fruit at the North be true, we are sorry for the growers, though perhaps we may reap a little benefit from their misfortune in the way of better prices for our own fruits. M. B. P.

SPRINGFIELD, Mass., June 4, 1878.

THERE is a great depression in business in this vicinity—worse than in any part of the country I have seen, and my business makes me see a great deal of it in many States. L. N. R.

ITHACA, N. Y., June 4.

FROST did but little damage here; the fruit prospect is fine. I. P. R.

WHAT THEY SAY OF IT.

THIRTEENTH WEEK.

The Rural Cricket to be Withdrawn, positively, the 1st of July.

The most Liberal and Valuable Present ever offered by any Journal.

"IT DRIVES AWAY THE BLUES!"

THE clock arrived safe. It far exceeds my expectations. Please accept my sincere thanks.

Spencertown, N. Y., June 3. M. W. A.

I RECEIVED the "Cricket" on April the 20th, and am well pleased with it. I send you my thanks even after so long a delay. S. H. F.

May 22.

THE clock received all right. We are very much pleased with it. Many thanks for the same. R. F.

Depewville, Jefferson Co., N. Y., May 27.

I RECEIVED the clock three days ago, all right. I am very much pleased with it. It fully satisfies my expectations. ADDA L. W.

River Falls, Wis., May 28.

THE "Cricket" was received the 1st of May. I wound it up and it has not varied two minutes since, without any regulating. We have concluded it to be the Boss time-piece for the money. H. F. H.

Mifflin, Ashland Co., Ohio, May 23.

THE Cricket "a thing of beauty" has come, gladdening the hearts of the office employes, and constantly reminding them of its presence with its tick, tack—tick, tack. J. H. H.

Racine, Wis., June 1.

I FEEL that I owe you a second acknowledgement of our thanks for the "Cricket." It keeps excellent time now, and has such a cheerful crickety sort of a tick that we are much attached to it. MRS. M. H.

Bath, Pa., May 18.

THE beautiful little "Cricket" arrived safely by express. We tried it for a week but it ran so rapidly, gaining two hours in a single night, that we were obliged to take it to a silver-smith to be regulated. It is now doing well. T. N. R.

Newport, Ky., May 25.

THE "Cricket" clock received all right. It is a perfect little beauty, looks so cute and cunning; and then it has such a clean, cheerful, pleasant face, and clear, distinct voice. It not only keeps correct time, but drives away the blues. I am more than satisfied with it. E. R. L.

Sedalia, Mo., May 18.

PLEASE pardon my delay in acknowledging receipt of the "Cricket," but I wanted to test it before doing so. I have found it every thing a clock need be. It keeps excellent time, is ornamental, and what more could be asked? I feel that I have made either a good paper or a good clock clear by subscribing for the RURAL.

Washington, D. C., June 3. C. S. T

THE "Cricket" came safely, and runs well so far. If it continues to work in the same manner, I shall think it worth much more than the cost. A. J. H.
Oaktown, Ind., May 22, 1878.

THE clock came quite safely and I like it very much. It is neat and substantial. After the test of a few days I find it keeps good time. Many thanks. AUGUSTA F.
Northfield, Mass., May 28, 1878.

WE received the clock May 25th, and are very much pleased with it. It fully equals our anticipations of its beauty and worth. All our friends admire it and "wish they had one just like it." Many thanks. A. G.
Cameron Mills, N. Y., May 28, 1878.

WE received the "Cricket" in good order, and hardly know how to express our many thanks. Think it a "gem," and would not part with it for double its cost. Every one that sees it admires it. May be able to send you another subscriber before the time for the premium expires, in consequence of the presence of the "little beauty." Mrs. G. S. W.
North Lansing, N. Y., May 27, 1878.

PLEASE find inclosed $5.00 for two new subscribers to the RURAL and one "Cricket" clock. This makes the fifth clock and seven copies of the RURAL that I have sent for this spring. All are well pleased with the paper and clock so far. J. B.
Miller's Station, Crawford Co., Pa., May 23, 1878.

I RECEIVED the "Cricket" safe and sound. It has gone splendidly ever since it arrived. We all like it, because it keeps such admirable time. It is invaluable. Please accept our thanks. W. L.
Hamilton, Ont., May 16th, 1878.

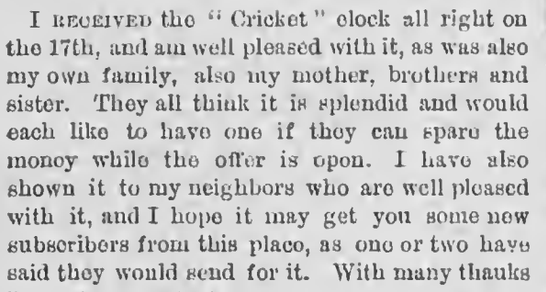
I HAVE received the "Cricket" in the best order, and set it going at once, and it has not varied a minute while I have had it—which is about ten days. Please accept my thanks for the beautiful present. L. B.
Columbia, Pa., May 20, 1878.

I RECEIVED the "Crickot" clock a few days ago, and have tried it for accuracy with my clock, and find it can keep right up with it. I must say it is much nicer than I expected it would be. I got it for my daughter for a school clock, and she is very well pleased with it, and thinks it just the cutest thing yet, in the clock line. J. K.
Mulberry, Ind., May 27, 1878.

I RECEIVED the "Cricket" clock all right on the 17th, and am well pleased with it, as was also my own family, also my mother, brothers and sister. They all think it is splendid and would each like to have one if they can spare the money while the offer is open. I have also shown it to my neighbors who are well pleased with it, and I hope it may get you some new subscribers from this place, as one or two have said they would send for it. With many thanks I remain yours truly. J. S.
Frankford, Pa., May 26, 1878.

I RECEIVED the "Cricket" clock you sent me as a premium, and hereby acknowledge my thanks for the same. This is the second clock you have sent me, which might look a little selfish, but I did not procure this last one for myself. My first one has proven to be a splendid time-keeper, and I have no fears but what the second one is just as good. The parties receiving the RURAL express great satisfaction and acknowledge it to be a valuable and useful household necessity. J. D. B.
Bettsville, Ohio, May 30, 1878.

Stock and Poultry.



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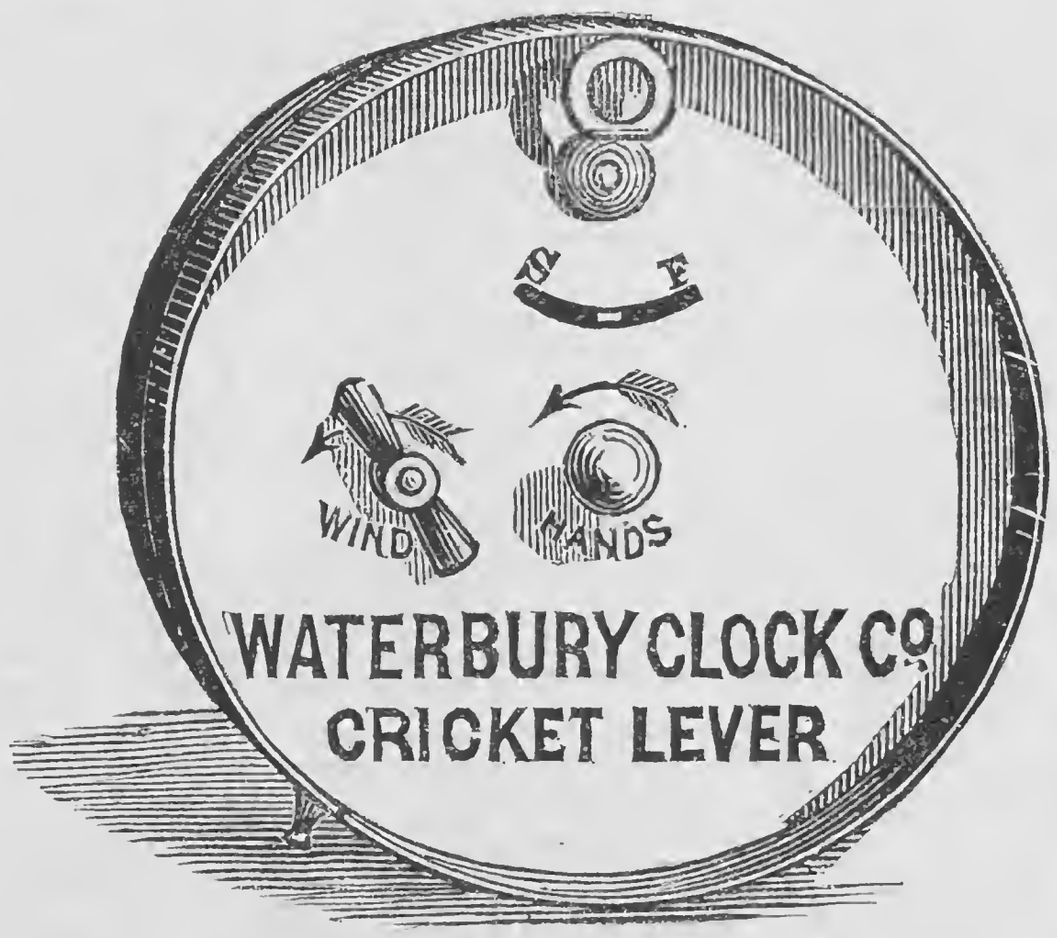

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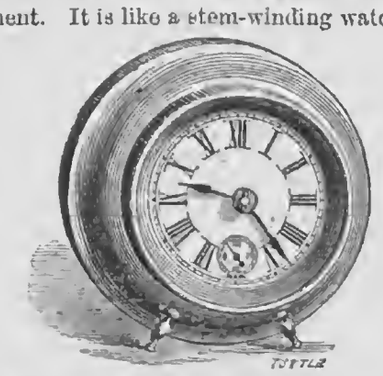

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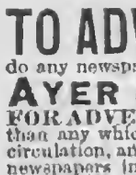

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Bulbs for the Flower Garden—W. L. C. Drew 373
Connecticut Agricultural Experiment Station—Prof. S. W. Johnson..... 373
Strawberry Blight..... 373
French Exposition: Financial Considerations—Throber..... 374
Jottings at Kirby Homestead—Col. F. D. Curtis... 374
Vaul's Views..... 374
How Cultivation Warms the Soil—S Rufus Mason..... 374
Farm Accounts—Prof. Levi Stockbridge 375
About Pasturing Land—W. J. Fowler..... 375
The Imaginary Diseases of Animals: No. I—D. E. Salmon, D. V. M..... 375
Selection of Varieties of Fruits to be Planted—T. T. Lyon..... 3 75
Publications Received..... 376
Catalogues, Etc., Received..... 376
Larches, Concluded..... 376
The Golden Retinospora as a Hardy Evergreen—Samuel Parsons..... 376
Is this a New Horse Disease?—T..... 376
The Hessian Fly's Favorite Wheat—W. L. Deveraux..... 376
Rye and Oats for Winter Pasture 377
Thresher, The Improved "Sweepstakes" (Illustrated)..... 377
Horse-Powers, Gray's (Illustrated)..... 377
Table-Rake, Miller's (Illustrated)..... 377
Knife Grinder, Livingston & Co.'s..... 377
Lawn Mower, "Philadelphia 377

Answers to Correspondents:

Experiments with Commercial Fertilizers and Seed Potatoes. 378
Treatment of Palms: Growing them from Seed 378
Cost of a Nice Green-House..... 378
Locusts and Barberries..... 378
Saving Irish Potatoes..... 378
Grass Seeds for Name..... 378
Black-Leg in Cattle..... 378

Everywhere:

North Carolina Notes—M. B. Prince 378
Notes from Texas—G. Marti..... 378
Rockford, Ia..... 378
Barrington, N. Y..... 378
Athania, Ga..... 378
Brookston, N. C..... 378
Warren Co., N. C..... 378
Springfield, Mass..... 378
Ithaca, N. Y..... 378
What They Say of It..... 378

Domestic Economy:

How to Laundry Blue Linen Suits: "Doing Up" Straw Hats—Mary Wager-Fisher 381
Preservation of Clothes Lines and Pins—A. E. M. C..... 384
Domestic Recipes..... 384
Queries Answered..... 384

Markets..... 385

EDITORIAL PAGE:

Work for Agricultural Colleges..... 380
Is a Turkey an Animal?..... 380
Thomas B. Miner..... 380
Why?.. 380
Brevities..... 380

LITERARY:

Poetry..... 381, 384, 386
Cora..... 381
Siena (Illustrated) 381
Picture of Constantinople..... 381
Recent Literature..... 382
Magazine Notes..... 382
Bric-a-Brac..... 383
Women in Council..... 383
Woman's Work—Grandmother..... 383
Items for Correspondents 383
News of the Week—Herman 384

Reading for the Young:

Pocket-Money for Young People: No. 6—Corn-planter..... 386
Self-Helping Boys—Mary Wager-Fisher 386
Scholastic Scraps—Alpha Beta Gamma..... 386
Letters from Boys and Girls 386

Sabbath Reading:

Short Biographies of Eminent Preachers..... 386
Personals..... 387
Wit and Humor..... 388
Advertisements..... ....379, 385, 387, 388

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, JUNE 15, 1878.

WORK FOR AGRICULTURAL COLLEGES.

AGRICULTURE, of all industrial pursuits, most needs the knowledge gained through accurate experiment. Farmers have been so long accustomed to follow mere traditional routine, with no accurate investigation of the basis on which it rests, that real progress has been slower than in any other department of human labor. The rearing and feeding of stock for all the various purposes relating to human welfare, form an interest so large and of such vital importance, not only to our home interests but to our foreign commerce and the balance of trade, that the most accurate scientific and practical experiments are required to determine the physiological and economic laws that govern animal nutrition.

The two great classes of animal products that swell our foreign commerce—cattle and swine—produced for the year ending June 30, 1877, an aggregate export of $129,382,202—that is cattle products, including the dairy, $47,029,980; and swine products, $82,352,222. This is nearly one-fourth of all our exports, aside from coin and bullion, and, under good management in the future these products are likely to reach much greater proportions. The cattle products especially, may be doubled in a few years. The value of these products, for export, depends so largely upon quality, that only the best beef pays any profit. The most economical method of growing and fattening these animals, of producing butter and cheese, is the important matter now to be discovered.

Farmers, as a class, do not investigate; they do not now even see the necessity for such investigation; but after experimenters have worked out a better way, they may be prevailed upon to adopt it. Agricultural colleges were endowed by the nation to extend just this aid to agriculture, to become the investigating, informing mind of the industry. The college farm is expressly for experiment, and is intended to be equipped with all the appliances necessary for illustrating the specialties in agriculture carried on in the region where it is located. Here are, or should be, all the facilities necessary in the dairy region, for determining, by accurate experiments, the comparative value of the different breeds of cows, noting the weight of the animal, the amount of food consumed, per-centum of weight, the milk yielded per day, and for a given quantity of food, the milk required from each breed for a pound of butter and cheese, the relative proportion of butter and casein in the milk of each breed, the effect of various foods upon each breed in the laying on of flesh and production of milk, the effect of different conditions of food, cooked or raw, succulent, partially or wholly cured into hay, as well as the economy of pasturing or soiling animals, considered with reference to the quantity of land, capital and labor required by each system. In short, here should be taken into consideration every fact which will test the productive value of each breed for the purposes of the dairy under precisely the same circumstances. This system, carried out at a dozen experimental farms for a few years, would effectually settle the comparative value of the different breeds for the dairy, and the most economical manner of breeding and feeding them. These experiments alone would be worth more to practical agriculture than the whole cost of the endowment of the colleges.

A like system of experiments should also be conducted in the breeding and feeding of animals for beef, pork and mutton—with accurate incidental experiments showing the physiology of animal digestion, and thence the true scientific method of feeding to produce the highest result with a given amount of food. When will our agricultural colleges begin these experiments which shall be a vindication of the wisdom of their endowment?

IS A TURKEY AN ANIMAL?

WE remember having been taught, years ago, that all created things were divided into three great classes or kingdoms—known and denominated as the animal, the vegetable and the mineral. Certain things, it is true, are so constituted as to render it difficult to decide to which of two kingdoms they belong, standing as it were so nearly on the dividing line as to raise doubts on which side is their proper place. Others possess all the attributes belonging to one kingdom, and none of those of the other two, rendering it easy to decide where is their place in nature. Thus, none would hesitate before declaring an iron bar to be mineral, a tree or shrub to be vegetable, and, up to a recent date, that a turkey belonged properly to the animal kingdom. But the law decides differently, and have we not always been taught that the very foundations of law are laid in common sense? That a turkey is not an animal has been declared by the Court of Hartford county, Connecticut, in a recent decision of one of its Judges.

It seems, from the record, that two neighbors, or perhaps we should say parties whose farms were adjoining, living in Bloomfield, in said county, became unneighborly. A sow, with her infant progeny, belonging to A, trespassed on the domain of B. Search being made the animals—no question about pigs being animals has been raised—were found and returned to their proper quarters, but on counting them it was found the number was one less than it should be. Search being made the future promise of bacon and sausages was found snugly stowed away in a box on B.'s premises. B. denied that the pig belonged to A., and there were no distinguishing marks upon it by which A. could identify it.

Soon after some of B.'s turkeys, leaving their native habitat, strolled through, over or across the fence, and were found regaling themselves on the fruits of A.'s labor. A. saw his opportunity. The law made and provided for protection against trespassers, gave him, as he supposed, permission and authority to impound the intruders, which he proceeded to do forthwith, sending notice to B. of what he had done, and adding that he could have his turkeys when the pig was returned, and one dollar paid for damages. B. was wroth, and refused to comply with the demand. Contrarywise he sued out a writ of replevin for the turkeys and brought the matter before the court. The facts in the case were not disputed, but long and able were the arguments of learned counsel. The words of the statute were discussed in their various bearings. Had the intruder been an ox or a horse, or even a goose, so the judge decided, the action of A. in impounding it, them or either of them, would have been legal, but nowhere and in no way in the law relating to the case, was turkey mentioned or even referred to. Consequently verdict was rendered for B. who was adjudged one dollar damages and costs of suit. We are anxious to know what became of the *pig*.

THOMAS B. MINER.

ON Wednesday, June 5th, at his beautiful home in Linden, N. J., THOS. B. MINER, Esq., one of the oldest agricultural and horticultural editors of this country, paid the debt of nature, after a brief illness. As Mr. MINER was to a large degree a public benefactor, it may not be out of place at this time to give a brief history of his career.

He was born at Colchester, Conn., in the year 1808. At the age of sixteen years he left home for New York City, where he engaged in commercial pursuits until 1849 when he removed with his family to Clinton, N. Y., and at once began to develop those agricultural and horticultural tastes which culminated in such a grand success in after life. Then, in 1852, he established a monthly paper called the Northern Farmer, which became so rapidly popular in the country districts, that it had a circulation of 30,000 in the second year of its publication. It was while publishing this journal that he wrote several works of much practical value on different branches of husbandry, the best known of which immediately became authority on bee-keeping and poultry-raising. Encouraged by his success with the Northern Farmer, Mr. MINER subsequently merged it into a semi-monthly paper called the Rural American, which proved financially a very profitable investment. Finding, however, that the severity of the climate, and the shortness of the season, greatly interfered with his successful propagation and distribution of small fruits, in 1867 he purchased a large farm within the city limits of New Brunswick, N. J., whither the following year he removed with his family and business. But whether it was owing to the change to a new place, or the fact that by this time nearly every paper, both religious and secular had adopted the plan of publishing an agricultural and horticultural department, the Rural American failed to prosper in its new home; and after a brief struggle with adverse circumstances, its publication was discontinued.

Always frail in health, Mr. MINER now began to feel the weight of advancing age, and though his capacity for mental labor still remained unimpaired, bodily infirmity forbade his well-digested plans with reference to the cultivation and propagation of small fruits, and an opportunity offering, he sold his New Brunswick farm, and in 1872 removed his family to Linden, N. J., where he continued to reside until the time of his death, which occurred as stated on Wednesday, June 5th. Few men of his generation accomplished so much of thorough, earnest, literary work. His mind was quick to conceive and quick to execute, and its versatility was truly marvelous. It mattered little to him whether the subject was religion, politics, letters, or his more chosen pursuits. His reading had been so extensive and his practical knowledge with reference to the great questions of the day, was so exhaustive, that whatever left his pen would generally challenge the severest criticism.

But his chosen field was rural writing, and here he had few equals. He wrote rapidly, seldom revised his work, and some of his best literary efforts were accomplished while he was carrying out the details of a vast and complicated out-door business. But it is not so much to his literary work that the public, and particularly the rural portion of it are indebted, as to what he was able to accomplish in the way of originating and disseminating valuable varieties of vines, fruits, potatoes, etc., and of improving on well-known and long-cultivated varieties. Here he was eminently at home, and no year was allowed to pass by without his developing in this direction some practical result of general value to the community. This was especially true of the last few years of his life; and up to the week prior to his death he was actively engaged in bringing about results from which the homes of our land will yet receive a substantial benefit.

Mr. MINER has contributed regularly to our columns during the past year and our readers will join with us in deeply regretting his loss.

Why?—A music teacher in a Pennsylvania Female College kissed one of his pupils. The young lady was taken home. The rest of the young ladies went in a body to the President and demanded the dismissal of the offending Professor. Were they indignant at having been slighted? This Professor could not have been well versed in the way of womenkind or he would have known enough to have served them all alike. He should have remembered—

"Hell hath no fury like a woman scorned."

BREVITIES.

YOUNG chickens like radish tops.

WE call attention to what G. Marti says of Pearl Millet in Texas.

HOUSTON (Texas), is going to have a horticultural exhibition during July or August.

AFTER the Scotch, Austrian and White Spruce, the Golden Retinospora is the hardiest of evergreens on the cliffs of Newport in the sea air.

MR. LEACH, a progressive farmer within ten miles of the RURAL GROUNDS, destroyed 504 nests of Tent-caterpillars three years ago. Two years ago he destroyed 122 nests, and this year, thus far, 54.

WE do not know of any plant whose leaves at this time are as golden-hued as those of Sambucus aurea. The leaves of the golden-leaved Ninebark are bright when they first unfold—but the color soon fades away.

RURAL GROUNDS June 10.—Cold nights continue. Strawberries rotting. Melons in *statu quo*. Many potatoes were too much injured by the late frost to make further growth. We have had very little sunshine since last week, and rather more rain than has been needed.

IT is becoming apparent that something has destroyed the eggs of the potato beetle in this section of country (Bergen Co., N. J.) Some attribute it to our sharp frost—others to wet, cloudy, cold weather. There are so few either of the larvæ or old beetles that the use of Paris-green is unnecessary.

TOUCHING upon the strawberry disease referred to elsewhere, we find the following in the semi-weekly *Tribune* of the 4th inst.: Would-be strawberry-raisers are sad in southern Illinois because their plants are visited by a deadly disease, which some call "rust" and others "blight," something similar to pear-blight or rot in grapes. The cause, it is popularly thought, may be "weather" or "insects."

EXPERIMENTS made upon the Colorado potato-beetle in its perfect state in summer and fall, analogous to those which should be made upon the wintered beetle in spring, show that it lives from a month and a half to two months in the beetle condition. Mr. Shimer, of Illinois, kept some seven months and a half, or six months after they had got through laying their eggs, and only lost them then by accident.

WE are convinced from experiments of our own and those of others that if Paris-green is thoroughly mixed with a divisor, let it be flour, plaster or any other, the proportion of Paris-green need not be nearly as great as that commonly deemed necessary. We know that one part of Paris-green to fifty parts of plaster will kill the beetles and a friend tells us that one pound to a *barrel* of plaster, if only it be thoroughly intermixed, has proven effectual with him.

A CORRESPONDENT of the Germantown Telegraph supposing that sorrel was induced by a sour soil, applied lime, ashes, soda and everything he could think of to neutralize the supposed acidity, without avail. As sweetening the soil availed nothing, he tried the effects of rendering it more sour by applying apple pomace from the cider mill. Then he harrowed it in and sowed to grass seed. The sorrel disappeared. Here is a clear case for the Homeopathic doctrine "similia similibus curantur."

NOW we should thin out our Apples and Pears if it has not already been done or if there is any intention of doing it. Few farmers are willing to take the pains to thin the fruit, though few there are who do not think that overbearing injures the trees. Mr. THOMAS says that the farmer who takes care not to have more than four stalks of corn in a hill and who would consider it folly to have twenty, never thins any of the twenty peaches on a small shoot. The gardener who would allow twenty cucumber vines in a hill, would be called an ignoramus by his neighbor, while at the same time he suffers a dwarf Pear to bear five times as many pears as it could profitably mature. If we would plant two Duchess dwarfs—side by side—thin out the fruit of one and leave the other to bear all that it would, we should, in a few seasons, be convinced for ever afterwards of the desirability of the practice.

DR. STURTEVANT speaks thus free-heartedly respecting the retirement of his late associate from the Scientific Farmer:—"Mr. E H. Libby, the founder, and until recently connected with the Scientific Farmer as editor, has severed his connection with us, and taken possession of a larger field, where his sterling qualities will tell on a larger constituency. He takes the position of managing editor of the American Agriculturist, a paper already widely known for its good work, and which under the new management cannot fail to continue its career of usefulness under the auspices of a young and vigorous mind, fully alive to the necessities and demands of the age. We regret his loss to us, as will our readers; but we cannot but rejoice in the opening to him of a career full of responsibilities and promise. He has our heartiest wishes for his success, and carries with him our belief and faith that in this new position he will meet the high expectation of his many and warm friends."

Literary Miscellany.

OUR TO-MORROWS.

FANNIE R. ROBINSON.

THE sky had been sunless and dun all day;
And dreamy and soft fell the faltering snow;
And the startled swallows had fluttered away
To the roses and summers that love them so;
And the story of Greece and her glorious dead
In the sweet long dreaming was all unheard;
And the grammar was tame, and I learned, instead,
The wonderful speech of a passing bird.

Till the darkness fell on an empty day,
And the winter sun grew cold and dim;
And the chattering sparrows would not stay
A moment longer to court my whim.
I remember the flush of gradual shame
At the vacant places beside my chair;
And just how the wasted moments came,
Like mocking spirits, to haunt me there.

But down the length of the homely room
I caught the fall of a patient tread;
And where, O childhood, were tears and gloom,
As a loved hand lifted a drooping head?
While even to childhood's untutored ear
There throbbed a hint of remembered pain
Through the comforting words, "Never mind it dear!
To-morrow we'll both begin over again."

I have learned "to be" and "to suffer" since then,
And I know the tale of the Golden Age;
And without the swallows have learned again
The weary lessons of life's hard page.
But oh, when the day and darkness meet
I hear, like the echo of some refrain,
Like the chant of a promise, low and sweet,
"To-morrow, my child, begin over again."

Oh! blessed pardon of empty days!
Oh! sign of a harvest still to reap!
Who talks of an end to our wearisome ways?
Who sighs for the coming of careless sleep?
Beyond the borders of our despair
God's fair Forever is just in sight:
And, all unsullied by earthly wear,
He keeps His To-morrows new and white.

[*Sunday Afternoon.*

CORA.

CHAPTER XXIII.

"OF course you must be aware of my business, here to-day, Cora," said Sir Alan, without looking at her, or changing his dejected attitude;" and even to you, it must be painful, and I will try to be as brief as I can. You know, or at least you can guess, why I left you so suddenly last night, and the object of my journey to Bologne?"

She inclined her head, but did not speak.

"Will you tell me what your wishes are?" he continued. "I want, if possible, to save you from further sin. Of course, after what has occurred, things can never be as they have been, but if I can save you from going headlong to destruction I will do so. Do you know to what you exposed yourself by you flight, to what depths of misery and crime you might have sunk? You have had time to think over it quietly to-day; do you not recoil with horror from such a prospect? No, there can be no explanations. Do not trouble yourself, for your actions, and their intent cannot be explained away; they are self-evident."

He paused a moment, but he did not speak or move.

"I loved you," he went on, with suppressed passion, now, in the tones which had been so clear and cold. "I loved you so dearly that the mere suspicion of your guilt was almost unendurable anguish. Cora, when I saw you last night coming toward me, I could have welcomed death; I could have prayed for it to save me from the knowledge of your dishonor. Nay, I know what you would say; I know what he tried to make me hear last night: 'That you were chance travelers!' Bah, what a madman you must think me! Ah, if I fought, it was not because I believed you innocent, but because I knew you guilty, and because I was mad, and could have killed him as he stood."

She shivered, and lifting her eyes to his, asked, mutely, a question she dared not ask with her lips.

"You are anxious for his welfare?" he said, with a bitter laugh. "He is unhurt, but you will not see him again. He had so much grace, that he swore never to seek you again; and so much shame, that he did not lift his hand against the man he had so bitterly injured. But of what avail is all this? What do you wish to do? Where do wish to live?"

An expression of wondering surprise crossed her face; but Sir Alan, studiously avoiding a glance at her, did not see it.

"You are my wife," he said, in a few moments; "and were you not so, you have a special and sacred claim on my protection. I loved your brother well, and the promise I gave him I will keep to the utmost of my power."

"Oh, Harold, Harold!" she cried passionately—"my brother—my brother, who never judged me cruelly, who bore with me so tenderly,—would to heaven you had taken me with you, away from such misery as this:

"Pshaw!" said the baronet, impatiently. "I told you I abhorred scenes; let us cut this short, and cease such heroics. Tell me what I can do to keep you from sin, and I will try to meet your wishes?"

Cora did not answer for some minutes, she was struggling to repress her tears, and it was only when Sir Alan said quietly:

"I am waiting," that she raised her head and spoke: "Do you mean that you are going to send me away?" she said. "Do you mean that I I am not to be with you any more?'

He bowed his head in acquiescence, but made no other reply. His wife rose from her seat and clasped her hands despairingly.

"Do you mean that you are going to deny me the shelter of your roof? That I am to seek another home? If it be so, then I am willing; do with me what you will, I care not—I care not."

"I wish to make every arrangement for your comfort and respectability," he answered, his voice a little unsteady now at the passionate despair in her tone and manner. "Even after all that has passed, I desire but one thing—your happiness."

She laughed a bitter, tuneless laugh, as she turned away from him.

"I am ready when you wish," she replied; "I will do what you order. Am I not submissive enough now? Let me take my child and go."

"I cannot let you take the child," he said, quickly. "Ask yourself whether you are a fit guardian for him?"

"But you cannot take him from me," she said, beginning to tremble violently. "He is my child; you would not be so cruel—you could not take him from me—Alan, you will not."

"Can I, loving my boy, trust him to you, Cora?"

The words were very sadly but firmly spoken.

"But I could not live without him," she said, nerving herself to speak calmly. "He will be my only comfort now that you, his father,"—oh, the inexpressible pathos of her voice—"condemn me so entirely. If you had him, he could not love me; you might teach him to despise me. Alan, you will not—you will let me have him—in pity."

She had crept to his side and laid her little trembling hands on his arm. The touch thrilled him, but he turned from her resolutely, and shook his head.

"I could not trust him to you," he replied, trying to repress all signs of emotion.

"Not trust him to his mother!" She turned from him with a choked, wailing cry; a film gathered over her eyes; her gait became unsteady, and she rocked and fell forward, fainting away.

To spring to her side, to raise her in his arms, and press burning kisses on the pallid face and closed eyelids, was the work of a moment. Then Sir Alan laid her upon the couch, and, turning from her, bowed his head upon his hands and waited.

Cora's swoon was not of long duration. A few minutes after she slowly unclosed her veined lids, and raised her hand to her brow with a troubled gesture. One look at the bowed figure of her husband recalled to her mind the painful discussion in which they had been engaged.

She slid from the couch on which she lay, and dragged herself slowly—she was too weak to walk—to his feet. Then she clasped her arms around his knees, and rested her head against them with a moan of anguish, which went to her husband's heart.

"Alan, for Harold's sake!—for our boy's sake—forgive!"

CHAPTER XXIV.

For Harold's Sake.

For some minutes there was perfect stillness in the room. Not a sound broke upon the silence within, although from without came the gay chatter of the passers-by, or the rumbling of a passing cart.

Suddenly, some one below began to play a concertina, and the tune played—the "Miserere" out of "Il Trovatore,"—sounded sadly in the quiet room. Long afterwards, Cora could not hear that tune without pain.

Still, Sir Alan did not move, or look up, and still Cora crouched at his feet, her slender hands clasping his knees, her head resting against him, the masses of shining hair falling over her. It was thus he saw her when he raised his head at last—in her attitude of humiliation and abasement, praying for forgiveness.

"For Harold's sake—for our boy's sake!"

At last he spoke, and his voice, though husky and unsteady, had lost the bitterness and harshness of its former tones.

"Rise," he said. "Cora, I cannot see you thus."

And he put his hand upon her head, and tried to raise her; but she caught his hand in both hers, and broke into sobs, which shook her slight form with alarming violence.

"I will not rise—I will not rise," she said, until you have forgiven me."

With that he bent over her, and said a few gentle words of pardon and peace, and made her rise, and placed her gently back in the arm-chair; and the tears came more quietly then. When he saw that she was calmer, he rose.

"I will leave you now," he said, quietly. "This agitation has been too much for you. I hope you will try and rest, and I will think what is best to be done for your welfare and happiness, as well as for Harold's. I will see you in the morning."

He went away, leaving her in darkness, and alone—leaving her to wear away the long night hours with tears and prayers—leaving her to realize that he was lost to her forever, because he believed her guilty, and because she could not justify herself.

The next morning a letter was given to her. She recognized her husband's handwriting, and trembled as she broke the seal, and read the few cold lines it contained.

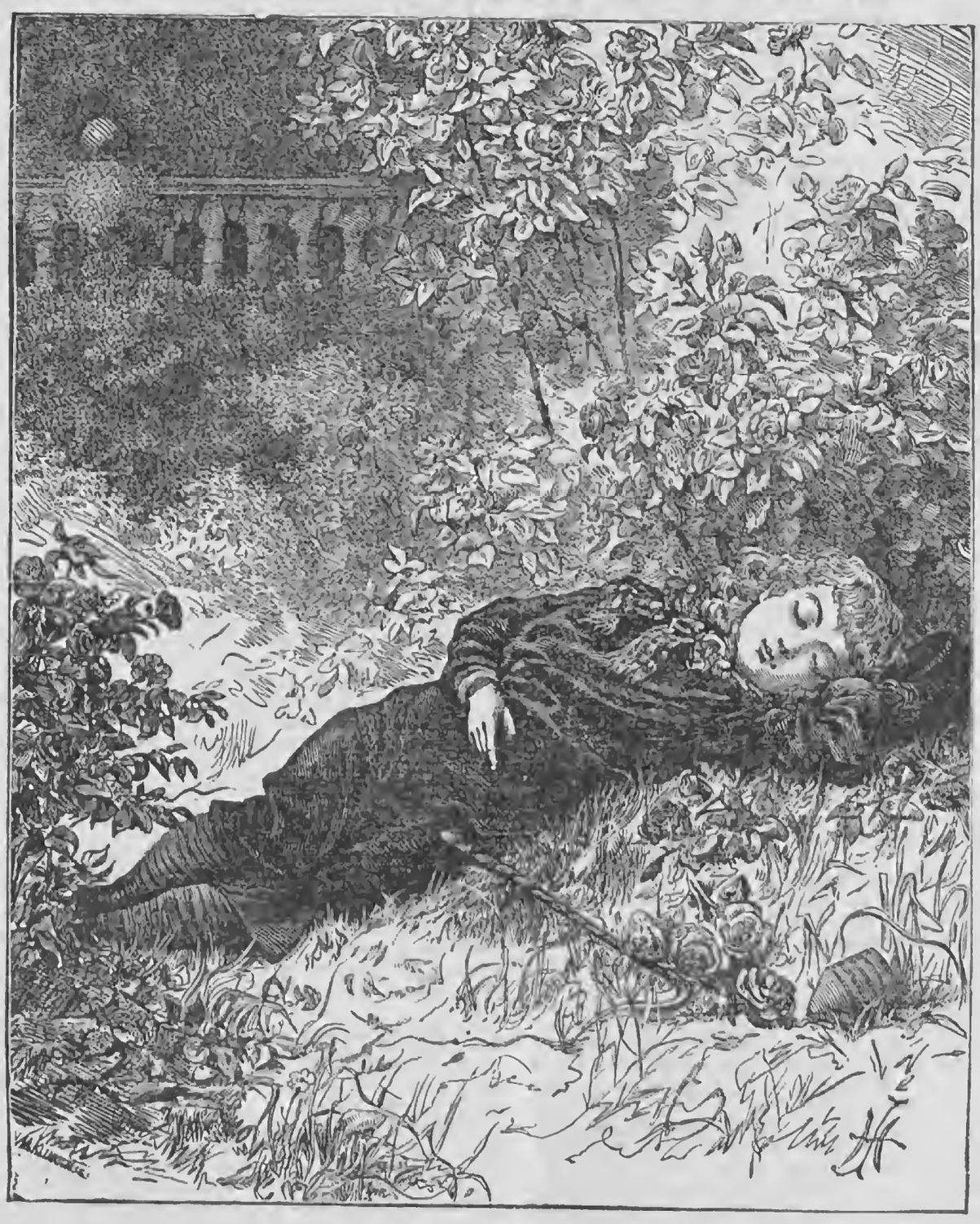
"The thought of being separated from Harold seemed to give you so much unhappiness that I have tried to avoid the necessity. Are you willing to return to London, and live in all *outward* respects as we have done since our marriage? We can meet as husband and wife in public, and before the world; alone, we can be strangers. I am the more anxious that you should accede to this proposal, because of the pain it would give my mother to know of the separation between us. It can be hid from her as from the world. If you will, I shall be anxious to know the decision. Will you tell your attendant one word for me: 'Yes,' or 'No?'"

"Tell monsieur 'Yes,'" said Cora, as she finished reading, and lay back with her cheek upon the letter, refusing the dainty breakfast Madame Dumoulin had prepared for her, but feeling happier at the thought of being with Sir Alan on any conditions, and, exhausted with sleepless nights and constant agitation, Cora fell into a heavy sleep, which lasted until the afternoon.

She awoke refreshed and better, and was able to meet Sir Alan at dinner with her usual self-possession, although the constraint between them was equally painful to both.

"Shall you be equal to a journey to Paris to-morrow?" he asked, as they separated at night "I do not want to delay, if possible, terminating my business there, and relieving Marks and your maid of their uncertainty."

"I will be ready." Cora said, quietly; although the start which the name of Marks produced did not escape Sir Alan, and the shade which seemed habitual on his face now deepened a little.—[To be continued.



SIESTA.

I, ZEPHYR, in the sultry noontide sighing,
Woo thee to slumber, ere I sink to sleep;
The nalads heavy-eyed are languid lying;
Through burning sands their lingering runnels creep.

Drowsed by the shrill cicala's weary crying,
The dryads dream, in hazel shadows deep.
Canst thou the sun-god's blighting beam withstand?
Sleep! the nymphs all are sleeping through the land.

PICTURE OF CONSTANTINOPLE.

What an Italian Prose Poet Saw There.

THE most remarkable work on the Turkish capital which has been born of the present interest in Eastern affairs is Edmondo de Amicis' "Constantinople." De Amicis is a poet, an artist, a wonder-worker with words, who so writes of what he has seen as to make his reader not only share the sight, but share also the mood in which it was seen, the emotions awakened and the impression left upon his own mind. The following is the author's description of the city and of the sights on the floating bridge across the Golden Horn:

"The vision of this morning has vanished. The Constantinople of light and beauty has given place to a monstrous city, scattered about over an infinity of hills and valleys; it is a labyrinth of human ant-hills, cemeteries, ruins and solitudes; a confusion of civilization and barbarism which presents an image of all the cities upon earth, and gathers to itself all the aspects of human life. It is really but the skeleton of a great city, of which the smaller part is walls and the rest an enormous agglomeration of barracks, an interminable Asiatic encampment; in which swarms a population that has never been counted of people of every race and every religion. It is a great city in process of transformation, composed of ancient cities that are in decay, new cities of yesterday, and other cities now being born; everything is in confusion; on every side are seen traces of gigantic works, mountains pierced, hills cut down, houses levelled to the ground, great streets designed; an immense mass of rubbish and remains of conflagrations upon ground forever tormented by the hand of man.

There is a disorder, a confusion, of the most incongruous objects, a succession of the strangest and most unexpected sights, that make one's head turn round; you go to the end of a fine street, it is closed by a ravine or precipice; you come out of the theater to find yourself in the midst of tombs; you climb to the top of a hill to find a forest under your feet and a city on the hill opposite to you; you turn suddenly to look at the quarter you have just traversed and you find it at the bottom of a deep gorge, half hidden in trees; you turn toward a house, it is a port; you go up a street, there is no more city; only a deserted defile from which nothing but the sky is visible; cities start forth, hide themselves, rise above your head, under your feet, behind your back, far and near, in the sun, in the shade, among groves, on the sea; take a step in advance, behold an immense panorama; take a step backward, there is nothing to be seen; lift your eyes, a thousand minarets; descend one step, they are all gone. The streets bent into infinite angles wind about among small hills, are raised on terraces, skirt ravines; pass under aqueducts, break into alleys, run down steps, through bushes, rocks, ruins, sand hills. * * *

"In the midst of Turkish houses rise European palaces; behind the minaret stands the bell-tower; above the terrace, the dome; beside the dome, the battlemented wall; the Chinese roofs of kiosks hang over the facades of theaters; the grated balconies of the harem confront the plate-glass window; Moorish lattices look upon railed terraces; niches with the Madonna within are set beneath Arabian arches; sepulchres are in the court-yards, and towers among the laborers' cabins; mosques, synagogues, Greek churches Catholic churches, Armenian churches, rise one above the other, amid a confusion of vanes, cypresses, umbrella pines, fig and plane trees, that stretch their branches over the roofs—an indescribable architecture, apparently of expediency, lends itself to the caprices of the ground, with a crowd of houses cut into points, in the form of triangular towers, of erect and overturned pyramids, surrounded with bridges, ditches, props, gathered together like the broken fragments of a mountain.

"In one quarter of an hour you must change your manner of proceeding ten times. You go down, you climb up, you jump down a declivity, ascend a stone staircase, sink in the mud and clamber over a hundred obstacles, make your way now

through the crowd, now through the bushes, now through a forest of rags hung out, now you hold your nose, and anon breathe waves of perfumed air. From the glowing light of an elevated open space whence can be seen the Bosphorus, Asia, and the infinite sky, you drop by a few steps into the gloom and obscurity of a net-work of alleys, flanked by houses falling to ruin, and strewn with stones like the bed of a rivulet. From the fresh and perfumed shade of trees into suffocating dust and overpowering sun; from places full of noise and color into sepulchral recesses, where a human voice is never heard; from the divine Orient of our dreams into another Orient, gloomy, dirty, decrepit, that gradually takes possession of the imagination. After a few hours spent in this way, should any one suddenly ask, "What is Constantinople like?" you could only strike your hand upon your forehead, and try to still the tempest of thoughts. Constantinople is a Babylon, a world, a chaos. Beautiful? wonderfully beautiful. Ugly?—It is horrible!—Did you like it? Madly. Would you live in it? How can I tell!—who could say that he would willingly live in another planet? You go back to your inn full of enthusiam and disgust; bewildered, delighted, and with your head whirling, as if cerebral congestion had begun, and your agitation gradually quiets down into a profound prostration and mortal tedium. You have lived through several years in a few hours, and feel old and exausted.

"To see the population of Constantinople it is well to go upon the floating bridge, about one-quarter of a mile in length, which extends from the most advanced point of Galata to the opposite shore of the Golden Horn, facing the great mosque of the Sultana Valide. Both shores are European territory; but the bridge may be said to connect Asia to Europe because in Stamboul there is nothing European save the ground, and even the Christian suburbs that crown it are of Asiatic character and color. The Golden Horn, which has the look of a river, separates two worlds, like the ocean.

"The news of events in Europe which circulates in Galata and Pera clearly and minutely, and much discussed, arrives on the other shore confused and garbled, like a distant echo; the fame of great men and great things in the West is stopped by that narrow water as by an insuperable barrier; and over that bridge, where every day a hundred thousand people pass, not one idea passes in ten years.

"Standing there one can see all Constantinople go by in an hour. * * * Whatever can be imagined that is most extravagant in type, costume and social class may there be seen within the space of twenty paces and ten minutes of time. Behind a throng of Turkish porters who pass running, and bending under enormous burdens, advances a sedan-chair, inlaid with ivory and mother-of-pearl, and bearing an Armenian lady: and at either side of it a Bedouin wrapped in a white mantle and a Turk in muslin turban and sky-blue caftan: beside whom canters a young Greek gentleman followed by his dragoman in embroidered vest, and a Dervise with his tall conical hat and tunic of camel's hair, who makes way for the carriage of a European ambassador, preceded by his running footman in gorgeous livery. All this is only seen in a glimpse, and the next moment you find yourself in the midst of a crowd of Persians, in pyramidal bonnets of Astrakan fur, who are followed by a Hebrew in a long yellow coat, open at the sides; a frowzy-headed Gypsy woman with her child in a bag at her back; a Catholic priest with breviary and staff; while in the midst of a confused throng of Greeks, Turks and Armenians comes a big eunuch on horseback, crying out, *Larya!* (make way!) and preceding a Turkish carriage, painted with flowers and birds, and filled with the ladies of a harem, dressed in green and violet, and wrapped in large white veils; behind a Sister of Charity from the hospital at Pera, an African slave carrying a monkey, and a professional story-teller in a necromancer's habit, and what is quite natural, but appears strange to the new-comer, all these diverse people pass each other without a look, like a crowd in London; and not one single countenance wears a smile. The Albanian in his white petticoat and with pistols in his sash, beside the Tartar dressed in sheepskins; the Turk, astride of his caparisoned ass, threads pompously two long strings of camels; behind the adjutant of an imperial prince, mounted upon his Arab steed, clatters a cart filled with all the odd domestic rubbish of a Turkish household; the Mohammedan woman a-foot, the veiled slave woman, the Greek with her red cap and her hair on her shoulders, the Maltese hooded in her black *faldetta*, the Hebrew woman dressed in the antique costume of India, the negro wrapped in a many-colored shawl from Cairo, the Armenian from Trebizond, all veiled in black like a funeral apparition, are seen in single file, as if placed there on purpose to be contrasted with each other.

"It is a changing mosaic of races and religions that is composed and scattered continually with a rapidity that the eye can scarcely follow. It is amusing to look only at the passing feet and see all the foot-coverings in the world go by, from that of Adam up to the last fashion in Parisian boots—yellow Turkish babouches, red Armenian, blue Greek and black Jewish shoes; sandals, great boots from Turkestan, Albanian gaiters, low cut slippers, leg-pieces of many colors, belonging to horsemen from Asia Minor, gold embroidered shoes, Spanish *alpargatos*, shoes of satin, of twine, of rags, of wood, so many that while you look at one you catch a glimpse of a hundred more. One must be on the alert not to be jostled and overthrown at every step. Now it is a water-carrier with a colored jar upon his back; now a Russian lady on horseback, now a squad of imperial soldiers in zouave dress, and stepping as if to an assault; now a crew of Armenian porters, two and two, carrying on their shoulders immense bars, from which are suspended great bales of merchandise; and now a throng of Turks who dart from left to right of the bridge to embark in the steamers that lie there. There is a tread of many feet, a murmuring, a sound of voices, guttural notes, aspirations interjectional, incomprehensible and strange, among which the few French or Italian words that reach the ear seem like luminous points upon a black darkness. The figures that most attract the eye in all this crowd are the Circassians, who go in groups of three and five together, with slow steps, big-bearded men of a terrible countenance, wearing bearskin caps like the old Napoleonic Guard, long black caftans, daggers at their girdles and silver cartridge-boxes on their breasts; real figures of banditti, who look as if they had come to Constantinople to sell a daughter or a sister—with their hands imbued with Russian blood. Then the Syrians, with robes in the form of Byzantine dalmatic, and their heads enveloped in gold-striped handkerchiefs; Bulgarians, dressed in coarse serge, and caps encircled with fur; Georgians in hats of varnished leather, their tunics bound round the waist with metal girdles; Greeks from the Archipelago, covered from head to foot with embroidery, tassels and shining buttons.

"From time to time the crowd slackens a little; but instantly other groups advance, waving with red caps and white turbans, amid which the cylindrical hats, umbrellas and pyramidal head-dresses of Europeans, male and female, seem to float borne onward by that Mussulman torrent. It is amazing even to note the variety of religions.

"The shining bald head of the Capuchin friar, the towering janissary turban of an Ulema, alternate with the black veil of an Armenian priest, Imaums with white tunics, veiled nuns, chaplains of the Turkish army, dressed in green, with sabers at their sides. Dominican friars, pilgrims returned from Mecca with a talisman hanging at their necks, Jesuits, Dervises, and this is very strange, Dervises that tear their own flesh in expiation of their sins, and cross the bridge under a sun-umbrella, all pass by. If you are attentive, you may notice in the throng a thousand amusing incidents. Here is a eunuch, showing the white of his eye at a Christian exquisite, who has glanced too curiously into the carriage of his mistress; there is a French *cocotte*, dressed after the last fashion plate, leading by the hand the begloved and bejeweled son of a pasha; or a lady of Stamboul, feigning to adjust her veil that she may peer more easily at the train of a lady of Pera; or a sergeant of cavalry in full uniform stopping in the middle of the bridge to blow his nose with his fingers in a way to give one a cold chill; or a quack, taking his last sous from some poor devil, and making a cabalistic gesture over his face to cure him of sore eyes. * * * *

"Seekers after the beautiful or the horrible will find their most audacious desires fulfilled; Raphael would be in ecstacies, and Rembrandt would tear his hair. The purest types of Greek and Caucasian beauty are mingled with flat noses and woolly heads; queens and fairies pass beside you; lovely faces and faces deformed by disease and wounds; monstrous feet, and tiny Circassian feet no longer than your hand, gigantic porters, enormously corpulent Turks and black sticks of skeleton shadows of men that fill you with pity and disgust; every strangest aspect in which can be presented the Ascetic life, the abuse of pleasure, extreme fatigue, the excess of opulence and the misery that kills. Who loves colors may here have his fill. No two figures are dressed alike. Here are shawls twisted around the head savage fillets, coronets of rags, skirts and under-vests in stripes and squares like harlequins, girdles stuck full of knives that reach to the armpits, Mamelukes' trousers, short drawers, skirts, togas, trailing sheets, coats trimmed with ermine, vests like golden cuirasses, sleeves puffed and slashed, habits monkish and habits covered with gold lace, men dressed like women, and women that look like men; beggars with the port of princes, a ragged elegance, a profusion of colors, tags, and fluttering ends of childish and theatrical decorations, that remind one of a masquerade in a mad-house, for which all the old clothes dealers in the universe have emptied their stores. * * *

"The first amazement over, the festive colors fade; it is no longer a grand carnival procession that is passing; it is humanity itself filing by with all its miseries and follies, with all the infinite discord of its beliefs and its laws; it is a pilgrimage of a debased people and a fallen race; an immensity of suffering to be helped, of shame to be washed out, of chains to be broken; an accumulation of tremendous problems written in characters of blood, which can only be solved by torrents of blood; and it is all horribly sad."

RECENT LITERATURE.

Adventures of an American Consul Abroad. By SAMUEL SAMPLETON, late United States Consul at Verdecuerno. Boston: Lee & Shepard.

THOSE gentlemen (their name is Legion) who are so solicitous of representing their country abroad, and whose ideas of the duties of representation are "a good salary and no work," will have the keen edge of their desire somewhat blunted if they read the truthful narrative of Mr. SAMPLETON. To start with his salary was munificent—$1,500 per annum! Out of that he was expected to pay house and office rent, servant and clerk hire, beside all other expenses incident to his position—cab hire, uniform for official calls and receptions. As may be expected, it required not a little very exact calculation to keep his expenses within limits of his income. Some of the make-shifts he had to resort to were extremely amusing, but for the most part the narrative is one to make an American feel humiliated that a representative of our country at a port whose trade is valued at $3 000,000 per annum, should be forced to present such a pitiable figure before the ambassadors of European governments.

So much for the salary: now for the duties. "When I was left alone, I began overhauling all the books, registers and papers of the consulate, and I was astonished at the amount of work, both in reports, statistics, shipping returns, correspondence with the Department of State, local authorities and four consular agencies there was to perform. The record of correspondence with the different authorities of the place and subordinate agencies was a perfect polyglot book. All the correspondence with the native officials was in the language of the country; that with the foreign consuls in French. I began afterwards to look over the register of correspondence received. It was still worse; for beside the above enumerated languages, there was also correspondence in German and several documents in Dutch that came from the Dutch consulate. I could not help thinking that Uncle ZACK's statement about their being nothing to do and plenty of money in such offices was all moonshine, as I found out to my cost. A great number of American ships came into port to load for the United States, and the masters thereof would be at my office half of their time to transact their business. There was hardly one who didn't have some trouble or other; and they brought them to me, expecting that I should settle them. I was constantly called upon to quell disturbances among the crews, settle wages and disputes, arrest men, send sick men to the hospital, discharge some, ship others, beside the endless variety of papers and documents of a legal form, each of which would take me three or four days' work to prepare them, as they were totally new to me, who had never studied law, and then I had to make several surveys of ships, surveys of cargo, depositions in cases of crimes committed on board, and correspondence with the police for disturbances committed on shore by members of the crews of our ships. At times I had to study day and night to prepare a single document or give a decision on any case and consult those dusty old books, the United States Statutes, and it often took me long hours to get at a single law passed by Congress."

Mr. SAMPLETON concludes his interesting narrative by pointing out the necessity for reform in our civil service. "There! how strange it is! Our Government sends men abroad, who, after hard labor and long experience, learn a complicated, delicate and responsible business, and no sooner have they learned it and are able to perform, creditably to themselves and to the Government they represent, all its intricate duties, than they are recalled and replaced by inexperienced men, who have to go through the same ordeal and never stay long enough to be of any real value to their country."

Studies in Luke. The Gospel according to St. Luke, containing the Original Greek Text, with an Interlined Word-for-Word English Translation, and a New Version based on the renderings of Eminent Critics, with Illustrative Explanatory Foot Notes and References. Also, an Alphabetical Appendix of Names, Weights, Coins, Words and Phrases used in the New Testament. By BENJAMIN WILSON. 12mo, 168pp., fine paper, wide margins, extra cloth. Price 60 cents. New York: S. R. Wells & Co., Publishers, 737 Broadway.

The almost universal use of the International Sunday-school Lessons has led to the publication, in a separate volume, of the Gospel according to St. Luke, the arrangement of which furnishes to the S. S. Teacher and Superintendent, and to the Bible Students generally, textual and other information of the most reliable kind. The entire plan of this work is both original and unique. There is a Greek text which is acknowledged to be one of the best extant, and a word-for-word interlined English Translation, the corresponding English term being placed directly under each Greek word. This, of course, gives to those who have an imperfect or no knowledge of Greek an unsurpassed opportunity to become acquainted with the language in which the Gospel was originally written, and will contribute to a critical understanding of any given part or subject. In a column on each page there is a New Version for general reading. This is based on the translation, and on the labors of many eminent critics and translators of the Scriptures, as well as on the readings of some of the oldest manuscripts now known. In this New Version emphatic signs are introduced, showing which of the Greek words were emphatic in the original, thus giving a *certainty* and *intensity*, a *vivacity* and *earnestness*, which are not found in the ordinary version. In connection with the above, the foot notes and references, and the various readings of ancient manuscripts, are very full, and placed at the bottom of the page. An Appendix arranged alphabetically, embracing the geographical and proper names, weights, measures, coins, precious stones, apostolic words and phrases, etc., contained in the New Testament, is added.

As most of the Christian sects—if not all—owe their existence to difference of interpretation, certainly every one is entitled to study the Scriptures for himself and to exercise his own intelligent judgment, and in this work the *literal translation* of the Greek being given, each student is enabled to make his own version. The work has received the approval of many eminent critics, and it is believed will be accepted as a great help by those for whom it has been prepared. S. S. Teachers who would furnish themselves with the best Lesson Helps should procure this. When the cost is considered, the price, 60 cents, is very low, and places this valuable work within the reach of all, and it is likely to have a very wide circulation.

The Rival Belles, or Life in Washington. By J. B. JONES. [Cloth; $1]. Philadelphia: T. B. Peterson & Bros.

MR. J. B. JONES is the well known author of The Wild Western Scenes and other stirring narratives of adventures in which class of fiction he excels. In the Rival Belles we have a story of society life as well as of adventure, the easy and natural development of the plot not being embarrassed by the number and variety of the incidents depicted, and the reader's interest is enchained from the beginning to the end. This is one of "PETERSON'S Dollar Series," which has become so deservedly popular both on account of the select volumes it embraces, and their cheapness and handsome binding. Others of this series are: The Matchmaker, a charming story of English life, by BEATRICK REYNOLDS. Aunt Patty's Scrap-Bag, by MRS. CAROLINE LEE HENTZ, and Miss Crispigny, by MRS. BURNETT. The last, though not comparing favorably in some respects with That Lass O' Lowrie's, is quite up to the standard of that book and will be eagerly welcomed by its admirers.

A Year Worth Living. By WILLIAM M. BAKER. Cloth; $1.50. Boston: Lee & Shepard.

A YEAR WORTH LIVING is a unique and rather quaint story. It is written in a concise, though easy and natural style which commends it to the reader at the outset. A striking feature is the number of "peculiar," not to say eccentric, people introduced, but their individualism is finely portrayed and preserved. Their whimsicalities are mirth-provoking at times and never wearisome or offensive. They teach in their peculiar ways lessons of unselfishness, benevolence and devotion as the hero and heroine teach them in theirs. A healthful moral tone pervades the book, imbuing the reader with a grateful consciousness of immunity from the harrowing details of intrigues, immoralities and the various other villainies so commonly deemed essential to the construction of an attractive novel.

Keramos and Other Poems. By HENRY W. LONGFELLOW. Boston: Houghton, Osgood & Co.

THE admirers of LONGFELLOW will be indebted to the publishers for collecting these poems—most if not all of them have appeared in the Magazines during the last few months—and giving them a permanent form. It would be like "gilding refined gold" to say anything in praise of this popular author. The simple announcement that a volume of his poems has been issued is enough to insure for him a wide circle of appreciative readers.

U. S. Commission of Fish and Fisheries. Commissioners Report 1875-76.

THE report of SPENCER T. BAIRD, U. S. Commissioner of Fish and Fisheries, embraces an inquiry into the decrease of food fishes on the Sea Coast and lakes of the United States, and a history of the propagation of shad, salmon and other species of food fishes. This will be found a volume replete with comprehensive information to those interested in the subject; the most valuable information because thoroughly reliable and instructive.

MAGAZINES.

THE ECLECTIC MAGAZINE for June, contains much exceptionally interesting matter. The article on "The Americans in Turkey," is replete with authentic information of the work accomplished by American men of letters, physicians and missionaries, and it well repays a careful reading. In the paper on "Impressions of America," by Rev. R. W. Dale, is presented an intelligent and just criticism of our national and social traits; a fair estimate of America by an English tourist is so rare as to warrant one's reading Mr. Dale if only for the variety of the experience. Goldwin Smith's paper on "The First Ten Years of the Canadian Dominion," we would commend to the careful attention of our readers, more especially those who are disposed to regard the U. S. as possessed of a monopoly of political sin. Articles on "Cruikshank," "Future Punishment," "Round the World in a Yacht," "Ancient Men and Ancient Times," and "The Farmer's Daughter," to "Ethel" and "Pope Leo 13th," complete this very fine number.

DEMOREST'S MONTHLY for June, maintains its usual standard of excellence. The literary matter, comprising stories, sketches, answers to correspondents, is alone worth more than the price asked for the Magazine (25 cents), and when to this is added the latest and most reliable information regarding fashions, it is evident that the purchaser gets a generous return for so small an expenditure.

AS USUAL, APPLETON'S JOURNAL for June, presents many and varied attractions—not the least of which are the exceedingly clever illustrations. "The American at Work," the opening paper, gives the Genesis and History of a Silver Dollar. The American antiquarian will find "South Carolina Relics" an interesting contribution. In this number By Celia's Arbor is ended, and an installment of "Jet"—Her Face or Her Fortune is added. Among the other prose contributions are: "Mrs. Gainesborough's Diamonds," "Otsego Leaves" by Susan Fenimore Cooper, "French Writers and Artists" by Wm. Winturn, and an amusing sketch, entitled: "Socrates a Reminiscence," etc. Poems are contributed by Earle Marble, Edgar Fawcett, Marie Le Baron, and others. The "Editors' Table" is crowded with discussions of timely topics, and Books of the Day receive their merited attention.

THE opening paper of THE POPULAR SCIENCE MONTHLY, is "The Age of Gymnastics" by F. L. Oswald, M.D., which, with the Essay by T. Clifford Allbutt, M.A. M.D., on "Brain Forcing," will repay careful perusal by those to whom has been entrusted the delicate task of educating the physical and mental resources of the young. "Water Waves and Sound Waves" (illustrated), is a timely dissertation by J. Norman Lockyer, F.R.S. The "Cardiff Grant and other Frauds," are thoroughly ventilated by G. A. Stockwell. "Illustrations of the Logic of Science," "The Scientific Study of Human Testimony," and other scientific papers make up this peculiarly edifying number. All the principal questions of the day in the scientific world are discussed in the Editorial Departments. There is probably no periodical of its class published which will afford greater satisfaction to the subscriber than this popular magazine.

BRIC-A-BRAC.

A MODERN SERENADE.

WAKE, dearest, wake and light thy gas,
Thou shalt not be alone,
For still for thee, my lovely lass,
I touch my telephone.
Though absent far from thee I am,
Yet softly on thy diaphragm
I give my sweetest tone.
And though away ten thousand miles,
I cannot see thy angel smiles,
Yet I can hear thy laugh.
And oh, unless fond hope beguiles,
Deceived with mechanic wiles,
I'll trust thy phonograph.
And as I grind thy accents out,
Then fading each fond jealous doubt,
I call thee all my own.
And absent yet, on thee I'll bet,
Bone of one bone, by telephone,
My better half, my phonograph,
My own, my own!

[*Musical Monthly.*

A BOYS COMPOSITION ON EDWARD VI.

HENRY VIII died one day with great success. He left threo children who did not care to go with him. Their names were Mary, Elizabeth and Edward. The last was the 'Ed of the family. He was a boy. His sisters were not. Their father also left a Will. His will was stronger than all his children. By will Earl Hertford was to boss the state while Edward was young. He was only ten years young. Hertford loved the glass so much he became a tumbler and was called the Duke of Summerset. He wanted the King to take the Queen—of Scotland—but the trick was lost because the Scotch refused to assist. The Duke was called the Protector because he protected his own family and put everybody else away in the Tower. The border men of England and Scotland were those who boarded on the frontier and bored each other almost to death; so they had a fight about Edward marrying their Queen. The English attacked them by water, which they couldn't stand. History says that the Scotch loss was ten thousand and the English two hundred. History lies, probably. The Government told the people what to believe. If they did as they were told they must pay taxes to support their belief. If they didn't do so they were roasted. Things were red hot. Somebody told stories about the Protector and so he was taken to the Tower and had his head chopped off. It was not much of a head, but he hated to part with it. Then there was a rising of the common people, but they did not know what for. Most of them got raised on to trees with ropes around their necks. Some very fat men were burned thus making light of their complaints. Now I guess it is time for the little King to die. He was only sixteen when he gave up the crown and the ghost. Finis.

TRAINING FOR THE REGATTA.

SOON as the faithful mantel clock
The hour of six A. M. shall chime,
He roseth from his downy couch,
And says, "'Tis training time."

Cold bathed and dressed he standeth up,
And fills the tumbler one-third full;
And as he drains the potent cup,
He takes his morning "pull."

And when he spendeth through the day,
Much more than he can earn,
To make the balance up at eve
He seeks his father stern.

But when, enrobed in party dress,
He gazeth upon beauty's brow;
With genuflexions graceful, then
He standeth at the bow.

Oft as glad pay-day bringeth round
It's glittering piles of silver store;
With joy unto his work he bounds,
And gladly grasps his ore.

And if the tiger tempteth him
To buck against the fierce Ke-*no*,
He seeketh that his checks may lie
Upon the upper row.

When'er the banquet board invites
He handleth knives and forks true,
And the glorious deeds of his crew recites—
The trusty, faithful corks crew.

[*Appleton's.*

THE Emperor of Austria's first meeting with his future Empress was romantic. One of her sisters had been destined for the imperial throne, and when Francis Joseph in his hunting dress arrived one evening at his father-in-law's residence on the Traunsee, he was received by four young ladies of the family, who have all since then made excellent marriages. As he was chatting with the group he saw an apparition of beauty, with magnificent hair floating over the shoulders, illuminated in the full glow of the sunset, approaching them from a neighboring wood. It was the Princess Elizabeth, the fifth of the sisters, and the Emperor from that moment became her slave.

"JUST A FEW WORDS."

JUST a few words, but they blinded
The brightness all out of a day,
Just a few words, but they lifted
The shadows and cast them away.

Only a frown, but it dampened
The cheer of a dear little heart;
Only a smile, but its sweetness
Check'd tears that were ready to start.

Oh! that the rules of our living
More like to the golden would be!
Much more, so much more, of sunshine,
Would go out from you and from me.

WHEN Freedom from her mountain hight unfurled her standard to the air, she little thought that naughty men would advertise hop bitters there.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

FIAT JUSTITIA.

LOUISE CHANDLER MOULTON.

YES, all is ended now, for I have weighed thee—
Weighed the light love that has been held so dear—
Weighed word, and look, and smile that have betrayed thee,
The careless grace that was not worth a tear.

Holding these scales, I marvel at the anguish
For thing so slight that long my heart has torn—
For God's great sun the prisoner's eyes might languish,
Not for a torch by some chance passer borne.

I do not blame thee for thy heedless playing
On the strong chords whose answer was so full—
Do children care, through daisied meadows straying,
What hap befalls the blossoms that they pull?

Go on, gay trifler! Take thy childish pleasure—
On thee, for thee, may summer always shine—
Too stern were Justice should she seek to measure
Thy fitful love by the strong pain of mine.

WOMEN IN COUNCIL.

Judge Hilton Branded as the most Conspicuous Fraud in the History of American Charities.

As most of our readers are doubtless aware the much advertised Women's Hotel has ceased to exist. Judge HILTON assigned as a reason for its collapse his inability to make the enterprise a success, resulting as he maintains from women obstinately refusing to avail themselves of his charity (?) because men were banished from the hotel. He was at great pains to make various other uncomplimentary comments on women. His statements were so manifestly untrue and wore beside so insulting that it was to be expected that the women of New York would resent his unmanly insinuations.

Accordingly a mass meeting was called for Tuesday evening, June 4, to express sympathy for the cheated, defrauded and insulted working girls of New York and to publicly denounce HILTON as the betrayer of trust and maligner of women. The meeting was successful beyond the most sanguine expectation of the ladies having it in charge. The large hall of Cooper Union capable of accommodating 2,500 was filled, the aisles and halls even being crowded, while hundreds lined the street unable to get into the building.

Sensible, womanly speeches were made by MATILDA FLETCHER, LILLY DEVEREAUX BLAKE, Mrs. SLOCUM and Mrs. Dr GILL. It is a noticeable fact that the only reference made to Judge HILTON'S coarse remark "that all women expected and hoped to marry and they wouldn't therefore shut themselves up in the Womans' Hotel, away from all chances of realizing their hopes," was by Mrs. BLAKE, who dismissed it in two sentences in which, to the amusement of the audience, she admitted that women wanted to marry, and added "and so do the men." This latter brought down the house. And yet a certain class of journals have spoken of this demonstration as the result solely of an eager desire on the part of women to stamp with execration Judge HILTON'S unhallowed suggestion that his "hotel was left empty because it wasn't a good place to find a husband."

It is to be regretted that we have not space to give a full report of the speeches. They were exceptionally good.

Those who are familiar with the onerous rules enforced while the hotel was used for women exclusively, will appreciate the following

FEW KIND SUGGESTIONS.

Before taking her seat Mrs. Fletcher said she would read a set of rules for the government of the hotel under the new dispensation, which had been presented by some wealthy ladies who did not care to have their names mentioned. The suggestions were made in good faith, and all kindness, for it was feared that, as it had taken Judge Hilton nine years to frame the rules under which the hotel was run for women, he would be a little confused and embarrassed in framing a constitution for the new concern. She then read the following set of rules, which were applauded to the echo, each and every one of them:

THE RULES.

1. Breakfast from six to eight; luncheon, twelve to one; dinner six to eight P. M. Charges fifty per cent. more or less than in other expensive places.

2. Gentlemen on returning from labor are requested to divest themselves of overalls, aprons, boots, &c., in the east dressing room, set apart for that purpose.

3. Women having failed to avail themselves of the privileges of the hotel are rigidly excluded from the walls, the management thereby hoping to insure "peace, prosperity and happiness" to the inmates.

4. The application of gentlemen engaged to be married, or otherwise matrimonially inclined, will be positively rejected.

5. Applicants for admission must be made by letter and be indorsed by twelve prominent women of New York.

6. The service of the hotel will be exclusively performed by men; no women need apply.

7. Smoking, chewing, spitting, swearing, singing, talking above a whisper in the dining-rooms, parlors or bedrooms expressly forbidden.

8. Gentlemen are requested not to shave or shampoo themselves in their bedrooms, but to repair to the tonsorial department of the hotel when they will, as in all other departments of the same, be shaved to their satisfaction.

9. Gentlemen are requested not to black their boots in their bedrooms, but to proceed to the S. E. cellar especially devoted to that purpose.

10. Dumb-bells, Indian clubs, swords, sabers, pistols, bows, arrows, boxing gloves, fishing rods, fowling pieces, bats, balls, hammers, saws, chisels and all other tools or implements not allowed inside the building.

11. Lounging on sofas, chairs, chair tilting, placing feet on mantels or furniture of rooms especially forbidden.

12. Dominos, cards, checquers and dice prohibited in bedrooms.

13. Tobacco, jars, jugs, bottles and demijohns not allowed in bedrooms, all intoxicating beverages being furnished at the bar.

14. The use of the windows for astronomical purposes is forbidden; gentlemen desiring to gaze at the moon or the primary planets will repair to the Hilton observatory on the northeast corner of the roof; admission, ten cents.

15. Gentlemen using hair restorers, dyes or pomatum, are requested to wear nightcaps for the preservation of hotel linen.

16. No visiting from room to room allowed without special permission from the Board of Managers.

17. Dogs of every description expressly forbidden in parlors, dining rooms and bedrooms; horses also excluded.

18. Phonographs, telephones, accordeons, violins, flutes, bones and "jews" harps forbidden in the bedrooms. Gentlemen desiring to perform on the bones will proceed to the room devoted to their use. Cornets and bassoons also prohibited.

19. Gentlemen are requested to provide themselves with a regulation full dress before coming to the Hilton Hotel. Persons connected with the militia organizations will please appear in uniform.

20. Gentlemen are requested to wear dressing gowns and slippers in their bedrooms.

21. The management reserve the right to discharge the boarders at their option, with or without cause, should they deem it expedient at any future time to open the hotel as an orphan asylum, zoological garden or museum.

22. Privilege of bath, twenty cents; of the billiard table, two cents a game; other games in proportion.

23. A cheerful compliance with the above rules is requested. The boarders are also expected to pledge themselves to respect any additional rules the management or any employe may lay down for their benefit and that of the proprietor.

24. Boarders must bring at least one large trunk with them, which will be immediately inspected by the Board of Examiners (Christian gentlemen all), who will attend afterward to its proper storage in the hotel storeroom.

25. Gas will be turned off at ten o'clock; all boarders will then retire or be locked out.

The exclusion of women and the residence of Judge Hilton in the hotel, for the benefit of his sex, will, it is hoped, make a happy home for gentlemen, more especially bachelors.

A gentleman will be in attendance to sew on buttons and make repairs.

At the close of a speech by Mrs. SLOCUM, the following pledge was read by MATILDA FLETCHER, amid loud applause:

WOMAN'S PLEDGE.

"The ladies are so much trouble."—Judge Hilton.

Until five years after date we shall not buy anything at Stewart's store, in consequence of the unmanly insinuations regarding the management and failure of the Woman's Hotel, hoping that in that time the managers thereof may better learn the characteristics of American women.

JUNE 3, 1878.

The speaker further announced that a committee had been appointed to distribute the same among the audience. She hoped that the signatures would be counted by the thousands. The next lady introduced was Mrs. DIEHL who read the following resolutions. The reading elicited frequent bursts of applause, the audience in some instances calling for repetitions of particularly pleasing portions.

Resolved, That while we hail with profound gratitude any philanthropy which seeks to better the condition of women, and would gladly offer the meed of praise to that benefactor who truly makes the working women of our land the objects of his benevolence, we have nothing but severe condemnation for those who arouse hope only to cruelly disappoint it, and scorn for him who would add to such an injury a covert sneer and insult calculated to degrade women in the public estimation and demoralize the rising generation.

Resolved, From the array of facts before us and from the oft reiterated assertions of A. T. Stewart to stand a friend of working women, we are firmly convinced that the benevolent intentions of one who, as he himself confessed, owed what he possessed mainly to the patronage of women, have been shamefully thwarted.

Resolved, That we entreat that those whom Providence has blessed with continued life, wealth and a large soul see that their benevolent plans be established beyond the reach of confiscation or the danger of perversion arising from the rapacity of unprincipled persons.

Resolved That in view of the failure of this noble purpose, we entreat Mrs. A. T. Stewart to see that what was intended for working women shall not be taken from them, and that an equivalent charity under better advisers be provided for them as she may in her woman's heart elect.

Resolved, That we exonerate Mrs. Stewart from blame in the administration of this trust, and cannot believe that any generous-hearted woman would have willingly countenanced regulations and restrictions alike insulting to her sex and our civilization, of which one of its chief glories should be the elevation, enfranchisement and protection of women.

Resolved, That the direct personal education of our youth in business probity and practical morals should be one of the chief objects, if not the chief object, of public school instruction, so that instead of producing, as too often is the case, grasping merchants, dishonest lawyers weak-minded legislators and the like, they shall graduate men proud in the consciousness of their rectitude and scorning to do a mean thing.

Resolved, That until the evil genius of sordid gain that presides over Stewart's vast commercial enterprise shows signs of true reform, every self-respecting woman should withdraw her patronage therefrom, and that that which was built up chiefly by women be taken away by women.

Resolved, That equal privileges, equal chances and emoluments in the walks and employments of life for men and women, equal justice in social estimate and administration of law, is what the world demands and values more than the patronizing generosity.

Resolved, That the spirit of avarice and tyranny which denies to a working woman a flower-pot, bird, sewing machine or permission to see father, brother, sister or mother, on the pretense of exact order, but can in a moment throw open smoking and billiard rooms and saloon bars, to pander to the worst vices of men for gain, is only on a par with that bigotry and intolerance which, because of some personal pique, casts odium and insult upon an unoffending, respectable and respected portion of our citizens whose name and history are proudly interwoven with the march of science, government and civilization the world over.

Resolved, That in putting on trial for only two months, under fatal restrictions, what was nine years building, and trumpeted to the world as a magnificent charity; that in obtaining through its brilliant opening, to which women chiefly contributed by their presence and applause, a vast amount of free advertising; that in coolly insulting women and betraying as it by premeditation woman's interest therein, the procurer of this result stands confessed as the most astute business trickster of the day and the most conspicuous fraud in the history of American charities.

Resolved, That however foreign it may seem to this issue and unwarranted in this connection we are still of the sad conviction that that public estimate and legal enactment which class women of the present day among minors, idiots, criminals and Indians not taxed, will not cease to engender a quality of person who, from false elevation to sudden wealth or other base cause, will be likely to subject women to similar taunts unless properly rebuked.

Resolved, That if meetings of the like may seem of no avail in obtaining practical redress, they at least educate a higher moral sentiment, and it is hoped will secure immunity from repetition of a like offence.

WOMAN'S WORK.

GRANDMOTHER.

THE inquiry is frequently heard: What can girls do? One would almost believe that there was a surplus number of girls in the world, and that there was not work enough to employ so many pairs of hands. This is far from being the truth. Though there are many departments that are crowded with applicants, there is in others a great scarcity of help. There is not a town or village but needs nurses for the sick; yet where is there a young lady who is willing to prepare herself for that vocation? Who will devote her energies to fitting herself for such a profession?

It is lucrative and the business is not half so wearing as the shop or sewing machine, and yet the need of good nurses is a serious one. Sick people often really suffer for want of a quiet, kind nurse. Now and then, some old lady is found who will go for a few days to take care of an invalid; but they are not the right kind of people for the business.

The qualifications of a nurse are good health, steady nerves, cheerful disposition, gentle hands, pleasant voice, and courage. These qualifications can be cultivated, and are within the power of all. Then add to these ample observation and practice, and the sum total represents the requisites for a good nurse.

But it is not the work that girls fancy; they are too secluded from society in this occupation. They want to do some great thing—make a stir in life—not stopping to consider how much good they might accomplish, how much suffering they could alleviate in this profession.

Physicians complain bitterly of the lack of competent nurses to take care of their patients. Relatives and friends are too anxious and nervous to make desirable nurses. They are apt by their very solicitude to make matters worse; they cannot control their feelings, and consequently cannot judge as correctly of the condition of the suffering one as a comparative stranger. Besides, the very sympathy they feel and express has an unfavorable influence with the patient.

Care of the sick is pre-eminently woman's work, and many a pair of idle hands might be usefully employed in the sick room, if their owners were disposed to avail themselves of the needs of the suffering; and instead of being useless parlor ornaments, they could become angels of mercy to the afflicted. What can girls do? There is work enough all around them, if they choose to do it; there is no need of their standing all the day idle.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

JOSIE LAUGHTON, Steuben Co., N. Y. I can purchase a tolerably fine straw hat for you as low as 75 cents. A feather with a marabou tip, ornamented with pearl beads, will cost $4. Flowers come at all prices; small one—violets, etc.—can be purchased at 4 cents per dozen; sprays vary according to quality and quantity of flowers used. If you will give me an idea of what you want I will give you prices.

MRS. MADELINE HOUGHTON, Haverstraw, N. Y. You can get fine photographs of fancy subjects—many of them are copies of celebrated paintings—cabinet size, for 25 or 30 cents, and put them in velvet frames, which range in price from 50 cents, and you have a pretty ornament for a bracket or mantel, infinitly preferable to the atrocious daubs so extensively sold through the country.

JOHNNY B—. If you took better care of your feet they would not occasion you any mortification. The feet should be washed every day. The popular notion that frequent washing will make them tender, is a popular fallacy, as any one can very readily ascertain for himself. Wash your feet with warm water and a liberal supply of soap. Allow them to soak a few minutes, then rinse them off with water into which a little aromatic ammonia has been put. The whole operation will not consume ten minutes. Surely seventy minutes a week is a small price to pay to save one's-self from being offensive. Stockings should be changed daily, and the shoes frequently aired.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

HOW TO LAUNDRY BLUE LINEN SUITS. "DOING UP" STRAW HATS.

MARY WAGER-FISHER.

My laundress, last summer, used gum-arabic entirely in starching colored linen suits, making blue linen, which, when starched in the usual manner looks "horrid," have the appearance of being quite fresh and new. And this is the way she did it: Put a tablespoon even full of gum-arabic in a saucer or bowl; pour on warm water, adding more water as the gum dissolves. With her fingers or with a cloth, she dampened the fabric in places not over half a yard square at a time, as she proceeded with the ironing, as the gum starch quickly dries; iron on either side of the goods as is found to be most convenient. A little practice will teach one more "how to do it" than a yard of directions. Of course, the quantity of the gum-arabic required depends upon the amount of surface to be starched. A tablespoonful will stiffen a very great deal.

I also use gum-arabic for stiffening straw hats, which only need to be "pressed over" and not re-shaped. It is economical so to do, and oftentimes a decided convenience. As often as otherwise I use my mucilage-bottle for this purpose, pouring in hot water to thin the mucilage to the required consistency (a few grains of gum added afterwards will make it all right again for other purposes); and with the brush I give the hat a coat of mucilage on the outside. I then lay a pasteboard along the edge of a table, and iron the brim of the hat on the wrong side, the right side being on the pasteboard. Of course, the hat must be turned around as the ironing proceeds. To press the crown I devise various expedients; but as I usually do things in a "jiffy," as the boys say, and without much circumlocution, I often make a large towel or piece of cloth into a bunch, and holding it in the crown with my hand, press it over that. The hat, when done, looks fully as well as if it had been sent to the milliner's; while the cost is about two cents worth of gum-arabic and fifteen minutes of time. This, for black straws; I never tried "my hand" on a white one.

PRESERVATION OF CLOTHES-LINES AND PINS.

We have found that our clothes-pins were rendered more flexible and durable by boiling in clean water from five to ten minutes every two weeks. They should be dried quickly, and kept in strong bags, free from dust. The lines are likewise boiled every month.

When the clothes are dry, the lines are *at once* taken down, tied up and placed in the pantry. By this treatment the clothes are never soiled or stained by the pins, and the lines are less liable to snap asunder, letting the clothes down upon the grass or earth, necessitating re-rinsing and starching.

New Jersey, A. E. M. C.

DOMESTIC RECIPES.

Strawberry Sherbet.

Crush one pound of ripe strawberries, add one pint of cold water, the juice of one lemon, and a tablespoonful of orange-flower water if you have it. Let this mixture stand four hours; then strain through a cloth, pressing out all the juice, and add about one-half pound of powdered sugar; pour into small tumblers, and set into the ice-box for an hour or so before serving.

Currant Jelly.

The currants should be picked before dead-ripe. If they hang long upon the bushes, they lose most of their jelly-making property. Pick from the stems, wash, and place in a porcelain kettle on the back of the stove; stir often, and let remain until thoroughly scalded; strain through a jelly-bag, and make not more than three pints at one time. Allow equal quantities of sugar and juice—a pint for a pint. Boil the juice ten minutes, add the sugar and boil ten minutes longer, skimming as necessary. Put into glasses and set in the sun for a few hours.

Mrs. L. M. W.

Iced Currants.

Take large bunches of currants, wash and drain dry; beat the whites of one or two eggs to a froth; dip in the bunches of currants and place them upon an inverted sieve, so that they do not touch each other; sift powdered sugar thickly over them and place where it is warm until dry.

Graham Gems.

Three teacupfuls of sour milk with a little cream; one and a-half teaspoonful—scant—of soda; one well-beaten egg and a teaspoonful of salt; a tablespoonful of molasses or sugar; a tablespoonful of melted butter and Graham flour to mix. To the egg add the milk, then the sugar and salt, then the flour with the soda mixed in, the butter last; beat the mixture well; have the gem-pans very hot, grease, fill with the batter, which should be stiff enough to drop, not pour from the spoon, and bake from fifteen to twenty minutes in a hot oven.

Mrs. E. L. L.

Buns.

One cup of sweet milk; one beaten egg: one-half cup of butter; one cup of sugar; one-half cup of yeast; a little salt and flour enough to make a soft dough. Let rise until very light and mold into long biscuit with a few currants; let rise again in the pan; then bake and when almost done glaze with a little molasses and milk.

Mrs. Mary Willson.

Cuba.

QUERIES ANSWERED.

Please tell me the easiest method of cleaning and polishing brass stair rods?

Mrs. W. B. P.

Ans.—Take equal parts of soft soap and rotten-stone; beat to a paste and apply with a woolen cloth; or use rotten-stone made into a paste with sweet oil; polishing in either case with whitening and soft leather.

Acids are sometimes employed the use of which however, causes the brass to soon tarnish, and consequently the rods require more frequent cleaning.

Wanted.—Something to remove stains from mourning dresses and crape?

Mrs. P. Baker.

Ans.—We have been advised to boil a handful of fig leaves in three pints of water until reduced to one pint; squeeze out the leaves strain the water, bottle and keep for use; apply with a sponge.

G. H.—Ink stains may be removed from marble by washing first with clear water and then with a weak solution of oxalic acid.

News of the Week.

May 10th, 1878.

POLITICAL.

The Congressional investigation into alleged electoral frauds in Louisana still remains the chief political subject of interest. Anderson's testimony is for the present concluded, though he will be recalled to the witness' stand later on and examined by Gen. Butler. His story, in brief, is substantially that the election in East Feliciana was fair; that no Democratic intimidation was practiced there, despite the fact that not a single vote was cast for any Republican candidate in a parish which had given a Republican majority of 1,020 in the Presidential election of 1872, and one of 841 in the State election of 1874, and which had on its books 2,127 registered Republican votes in 1876. For this strange fact he accounts by saying that the Republicans had formed a conspiracy to prevent the casting of any Republican votes as a basis for the rejection of the entire vote of the parish by the State Returning Board. On his visit to New Orleans after the election he was urged by the Republican leaders, as the supervisor of registration in the parish, to enter a protest against the returns. This he did, leaving here and there blanks, which were afterwards filled up by others with such figures as were thought necessary to insure the rejection of the vote of the parish. After this had been done, he had an interview with Messrs. John Sherman and Stanley Matthews, who urged him to stick to the fraud, promised that he and a fellow conspirator named Weber, supervisor of registration in West Feliciana, who has since been murdered there, would be well provided for by Hayes after the 4th of March. In order to get a hold on Sherman, he adroitly drew from him a short letter telling him to stand firm in the position he had taken, and that neither Mr. Hayes nor himself would ever forget the obligations under which he had placed them.

A copy of the letter was produced, and Sherman, having been summoned, said that he believed he never wrote such a letter; that he had no recollection of having done so, yet that it contained some things which he would have written on his understanding of the case at the time. This qualified denial has injured Sherman considerably, owing to his previous bold assertion that no such letter was ever written, although the Republicans say that the document, if genuine, would not be criminating, as Sherman was at the time under the impression that Anderson's protest of democratic violence was well founded, that his life would be endangered by his courageous conduct in making it, and that it would be only just therefore that he should be well treated by the party in whose behalf he had risked so much. Anderson says that afterwards Sherman never tried in any way to conciliate him, and peremptorily refused to push his claim for office in any department of the Government. Sherman has written a letter to Potter saying that he is able to show that Republican voters *were* intimidated in East Feliciana, and demanding that subpœnas should be sent to from 50 to 100 specified witnesses who can prove his assertion.

In order, as he confesses, to get Nash, Congressman for his district and candidate for re-election, so implicated that he could not "go back" on him, Anderson, before entering his protest, induced the guileless legislator to sign an agreement that he would secure the trickster the position of naval officer at New Orleans, in consideration of a promise that the latter would suppress evidence showing that East Feliciana was fairly carried by the democratic party. Original letters and copies of others put in evidence show that Senator Stanley Mathews has been persistently working hard to get Anderson a governmental appointment acceptable to him, yet a note of his tells the importunate and often impudent office-seeker that he can tell Nash that he, the Senator, is in possession of this disgraceful agreement. The general opinion seems to be that the correspondence has ruined Mathews. He has earnestly protested his innocence, however, in the Senate, and at his request, a committee of that body has been appointed to investigate his connection with the Louisiana complication. He has declined to appear to testify before the House committee, on the ground that the Senate had taken the matter in hand; but on the motion of Gen. Butler a subpœna has been issued to compel him to do so. Anderson freely owns that, though under oath, he deliberately deceived the Senate committee sent to New Orleans for investigating purposes shortly after the election; that he was in treaty with Burke and other Louisiana democrats, with a view to favor their party for money; that he has been persistently trying to blackmail the administration; that Hayes bruskly declined to hear his complaints, and that his present evidence is the result of his failure to receive a sufficiently satisfactory reward for his acknowledged rascality.

The next witness examined was Judge Levissee of New Orleans, Republican Elector during the Presidential contest. He created a sensation by testifying that his signature had been forged to one set of Louisiana electoral certificates. On the receipt in Washington of the electoral returns from that State, the package did not have on the outside the signatures of the electors, a formality considered constitutionally necessary. To remedy this defect, the envelope was sent back to New Orleans by the hands of the authorized messenger who had brought it—"Returning Board" Anderson. On its arrival there Levissee was absent from the city. The package, however, was opened, a new set of certificates made out, to which the other Electors put their names, while that of the absent member of the Electoral College was forged by somebody. On the original certificate the votes for President and Vice-President appeared together by mistake, contrary to the constitutional requirement. In the new returns the error was corrected, necessitating the signature of each Elector in nine places, and Levissee's name was forged in each place; yet it was on this certificate that Hayes was declared elected. Errors more or less similar were made with regard to the returns from several other States; but in making the necessary corrections, the only forgery committed was in Louisiana. There is no doubt but that the Republican Electors cast the vote of the State for Hayes and Wheeler; the fault in this case was the forgery of the name of a man who would have signed the documents readily had he been present, but who could not be reached in time enough so that the papers, properly authenticated, would arrive in Washington by the date required by the law. Lovisee also testified that he had been offered a bribe of $40,000 to cast his vote for Tilden by a man whom he afterwards discovered to be the agent of some gamblers who had heavy bets on the election. Isn't it about time that some law should be passed changing the present Presidential electoral system, so as to avoid the possibility of rascals in office defeating the will of the people by dishonest manipulation of the votes, or of rascals out of office tempting frail officials to effect the same object by betraying the trust confided to their honor?

On Friday Senator Spencer of Alabama introduced a resolution for the appointment of a committee of eight Senators to inquire into all matters connected with the Presidential election of 1876 in the States of Louisiana, Florida, South Carolina, Alabama, Mississippi, Oregon and any other State it may deem proper; also to inquire into any bargain which may have led to the overthrow of the Packard and Chamberlain governments in Louisiana and South Carolina, respectively. Spencer and Conkling are fast friends, and this move is said to be a joint affair that may hurt administrationists and democrats, while the latter claim that it is made to divert attention from the action of the House investigating committee. The Senate has refused to cut down the army to 20,000, as proposed in the House bill; but it has agreed that soldiers shall not be used as a *posse comitatus* for the purpose of executing the laws, except in such cases as the employment of the force may be authorized by the Constitution or by act of Congress. This will prevent the use or the army in election troubles, as formerly in Louisiana and other Southern States. As anticipated here last week, the President has signed the bill prohibiting the further retirement of greenbacks, and directing the reissue of redeemed notes by the Treasury. There is some talk East here of testing the legality of this measure before the Supreme Court.

The House investigating sub-committee are taking evidence at Jacksonville, Fla., with regard to alleged electoral frauds in that State. Baker County is said to have been thrown out to secure a Republican majority. Democrats say the revelations are highly important; an assertion Republicans stoutly deny.

The Senate has refused to agree with the House in its desire to transfer the Indian Bureau from the Interior to the War Department. Ex-Governor Noyes of Ohio is on his way home to testify as a "visiting statesman." Oregon is said to have elected a democratic Legislature which will, in turn, elect a democrat to the Senate. Hamlin of Maine tried to re-establish the franking privilege by a bill introduced in the Senate—vote even, measure therefore lost. In an interview with a newspaper correspondent on the field of Gettysburg, on Decoration Day, President Hayes declared that he considered any attempt to remove him from the Presidency revolutionary and would feel in duty bound to resist it. The general opinion of the country, however, seems to be that his title to the Presidency must not be called in question whatever may be the result of this investigation, and in this opinion even Mr. Hendricks, while favoring the investigation, concurs.

MISCELLANEOUS.

Gen. Spinner, he of the eccentric signature, is in Florida, raising all kinds of vegetables, fruits and trees that will thrive there, and is especially jubilant at the prospect of being able to drink and perhaps sell tea of his own cultivation. Those unpleasant stories about the costly jetties just built by Eads at the mouth of the Mississippi, are, it is to be hoped, unfounded. James Gordon Bennett, lately of Bennett-May duel celebrity, who has been in Europe since the occurrence, writes that he will come home to take the legal consequences, by the middle of July. The latest invention of Edison, the marvelous inventive genius of the nineteenth century and Menlo Park, N. J., is the Megaphone, a sort of sound opera-glass or telephone, which indefinitely increases the volume of sound and is therefore a handy boon to folks partially deaf, as well as to eavesdroppers. By it the footfall of a fly, it is said, can be heard as plainly as the gallop of a horse on a hard road. The emigration of freedmen from the Carolinas to Liberia is still gaining headway, chiefly under the direction of a philanthropico- speculative colonization company with headquarters in Philadelphia.

There is a strong probability of another Indian war this summer: the Bannock Indians are out in the Lava Beds rendered notorious by Capt. Jack and his Modocs, some years ago, Spotted Tail's 5,000 followers are also discontented at broken government promises, and the "braves" threaten to go on the war-path. Sitting Bull is urging the Sioux and kindred tribes to arms, and breathing vengeance against his present hosts in Canada; our troops are concentrating on the strongest points, and on those from which offensive movements would be most effective; border farmers and settlers are growing uneasy; and border speculators and desperadoes becoming jubilant. These Indian troubles have grown slightly chronic, and apprehensions of them severely so. The Silver Mountain Mining Company is the latest extensive fraud for swindling the unwary. The affair levies assessments on shares which are reported to be on the books credited to the proposed victim, promises enormous profits, and when the payment of assessments is refused, no more is heard of the Company. Miners in West Virginia are becoming riotous rather early this year. On Tuesday a party of them captured a steamboat near Charleston, went on it to Blacksburg, where they forcibly stopped the miners, then captured a railroad train, on which they returned home, forcing it to stop wherever they wished, and scouting the notion of paying fare.

Mr. Tilden's income tax suit has been deferred until another term of the Court. On motion of Senator Thurman, an auditor has been appointed to look after the accounts of the Pacific railroads. As the Government has millions invested in these roads, it's only right that it should know just how they stand. The filibustering Lerdist movement in Mexico is reported to have proved a failure; the invaders have taken to the mountains; and are hotly pursued. Great alterations are being made at Camp's great ship-building yard, at Chester, near Philadelphia, in three fast steamers purchased for war purposes by Russia. There are labor strikes and violence in Quebec, and Orange riots in Montreal. Crops in various parts of Massachusetts and New Hampshire were damaged by heavy frosts on Friday night. The Board of Alderman of this city has been indicted for misdemeanor in granting permits to hucksters allowing them to erect stalls on the side-walks. So has the Board of Health for not abating the nuisances created by fat-rendering factories and similar malodorous establishments. Both trials come off this week. Gen. Fremont has been nominated by the President, for governor of Arizona to take the place of Jno. P. Hyot, who has been transferred to the governorship of Idaho, on the removal of Mason Brayman, who is bitterly charged by the settlers with having given, to the Indians now on the war-path, permits to purchase the arms and ammunition with which they are said to be liberally supplied. Several other very respectable men, in different parts of the country, some curled and perfumed young pets of society, and others gray-haired specimens of venerated sanctimony, have yielded to satanic influence and been by discovery transformed into hypocritical scoundrels who have embezzled funds confided to their charge.

FOREIGN.

The Emperor of Germany is reported to be out of danger from the effects of the late attempt to assassinate him. So precarious was his condition towards the middle of the week, that after some hesitation it was deemed best that the Crown Prince should be appointed regent to discharge the duties of the head of the State, and by Bismarck's advice the appointment has been made. It is not improbable that the Emperor will either resign or refrain in future from taking any personal part in the Government. Nobeling, the would-be assassin, is still in a dangerous condition from his self-inflicted injuries, despite the best efforts of the doctors to save him for the hangman. It seems that in the socialistic conspiracy he was selected by lot to do the murder; and it is said that the Crown Prince and Bismarck were also in danger.

As predicted here last week, the liberal party in the Reichstag has already declared they will no longer oppose the enactment of prompt measures for suppressing socialism. The Pope also has written to Teutonic Roman Catholics urging a vigorous opposition to these revolutionists. A number of them who expressed joy at the dastardly outrage on the Emperor have been arrested and promptly condemned to imprisonment for from one to five years. The Nihilists in Russia are also again becoming trou-

biesome, having assassinated several prominent officials and wounded others. Altogether this communistic movement in various forms is causing extreme disquietude to monarchical Europe and making all parties the readier to accept moderate terms of peace at the approaching Congress. This will begin at Berlin on the 13th and the various diplomats who will take part in it are already on their way to that point. There are a host of newspaper conjectures with regard to the terms to be demanded by each party, but very little reliable news on the matter, and it is safe, therefore to stifle any curiosity in this connection until next week, by which time authentic details will probably be accessible. The earliest notice of these shall be given here. HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 8, 1878.

BEANS AND PEAS.—The scarcity of and advance in old potatoes adds something to the local demand for medium beans and prices for choice are strong, in fact higher than for marrows, which usually lead quotations for standard beans. Export sales of marrows add up to some extent, but the demand is not of a solid character and holders seem disposed to favor buyers. Pea beans quoted full for the quality here. White kidneys quiet and unchanged. Red kidneys not a wholesale stock. Black beans held with some confidence. Canadian field peas quiet and quoted easy; 78@80c. Green peas steady without large business; $1 05@1 10. B. E. peas scarce at $3 00@3 25.

We quote medium beans, prime, $1 60@1 62; fair to good, $1 40@1 60; marrows, prime, free on board ship, $1 60; fair to good, $1 45@1 60; Pea, $1 40@1 65; white kidney, $1 50@1 65; red do., $2 50@2 90; black, $2 35@2 40.

Receipts of beans past week, 4,600 bush. Exports of beans, 750 bbls.

BUTTER.—It is impossible for New York to use up the steady large supplies that arrive, and were not prices so favorable for consumers, dealers would be sadly puzzled as to the disposal of the heavy bulk. As at our last, grades at all off in table merit are pushed aside or sent to cold store rooms. This mainly occurs with western low grade factory or milled stock. It is difficult to predict what will be the future of poor grades; exporters are usually a last resource; but at present that class of buyers have access to lines of stock usually far above their price limit, and in many instances are sending butter abroad quite equal to that offering for home use. This introduction may eventually make an outlet for America's large and growing yield and farmers who are caught in the low-priced current of the present must content themselves with the possibility of drifting into a profitable commercial hereafter. This may not be a very cheering suggestion when this hard-earned dairy product is quoted 20c. per pound and under; but it is better than most of the blue stories that dealers greet us with. It is certainly a perplexing situation when merchants don't like to encourage shipments and dare not advise owners to hold back supplies. Near-by pails are improving in quality and begin to recall more of their customary summer city trade. Creamery is plenty, demand well divided between Western and State. Western dairy butter when in good retailing order sells readily, but rather than risk the chance of a false purchase in factory or milled, a good many grocers prefer to pay the slight difference for sound sweet State when reliable Western dairy is not to be had.

Receipts for the week, 36,700 pkgs.; exports past week, 11,811 do.

State creamery, choice, 18@19c.; other, 16@17c.; half tubs and pails, choice, 17c.; other, 12@15c.; Welsh tubs, best, 15@16c.; other, 13@14c.; poor State, 8@10c.; State firkins, 15@17c.; Western creamery, choice, 18@19c.; other, 16@18c.; Western dairy, best, 12@14c.; other, 9@10c.; factory (ladle packed), 10@10¼c.; other, 9@10c.; milled Western, 6@8½c.; old and grease, 3¼@5c.

Comparative receipts and exports from June 1st.

	Receipts, pkgs.	Exports, firks.
June 1, '77, to June 1, '78...	1,293,065	186,208
June 1, '76, to June 1, '77...	1,272,202	155,531
June 1, '75, to June 1, '76...	1,187,827	35,130
June 1, '74, to June 1, '75...	1,018,432	53,366
June 1, '73, to June 1, '74...	996,201	33,586
June 1, '72, to June 1, '73...	741,813	49,113

BROOM CORN.—Slight changes are made in prices to conform to the moderate business.

Quoted 6@7c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped, per lb.

BEESWAX.—Is offered easy, with a better supply. Sales at 26¼@27¼c. for Western and Southern.

Exports, past week, 1,396.

CHEESE.—The shipments for the week have been fully 98,800 boxes. With the demoralization of last week factorymen were more cautious shippers, and the receipts here have shown a decided falling off. A good many lots also showed inferior quality, and this was the case as well with a number of usual standard factories, on account of the rainy weather of the previous week, leaving but comparatively moderate offerings of really fancy prices. Shippers have wanted these choice lots, and the price has been carried up a trifle daily, closing with 8½ easily made, or a gain of one-half for the week. Towards the close of the week the good grades had increased attention.

Quotations are, for fancy, 8c.; 7@8c. for good and prime; 6@6½c. for fair; 4@6c. for half skimmed, and 2@3c. for skimmed. State, farm dairy at 6¼@7½c. for good to choice, 5@6c. for fair to good and 2@3c. for poor skimmed. Western factury fine, flat at 7½c.; do. good to prime, 5½@6½c.; do. fair, 4@5c. Wisconsin factory, fancy, 8@8½c; do. good and prime, 6¾@7¾c.; do. fair, 5¼@6c.

Receipts for the week, 98,773 boxes.

Exports, past week 79,650 boxes.

Gold closes at 101.

Liverpool cable quotation, 47.

COMPARATIVE RECEIPTS AND EXPORTS FROM JUNE 1ST.

	Receipts, pkgs.	Exports, lbs.
June 1, '77 to June 1, '78.....	2,675,032	117,452,460
June 1, '76 to June 1, '77.....	2,119,830	91,345,320
June 1, '75 to June 1, '76.....	2,447,849	99,259,799
June 1, '74 to June 1, '75.....	2,044,579	100,026,701
June 1, '73 to June 1, '74.....	1,962,901	90,053,247
June 1, '72 to June 1, '73.....	1,761,221	79,139,980

COTTON.—A considerable business has been done in spot lots, and the general market is stronger. Latest prices are for June, 11.58@11.59c.; July, 11.61@11.62c.; August, 11.65c.; September, 11.38@11.39c.; October, 11.18@11.19c.; November, 10.05@10.07.; December, 11.06@11.08c.; January, 11.03@11.11.; February, 11.16@11.20c.; March, 11.27@11.29c; April, 11.37@11.39c.; and May, 11.44@11.47c.

Quotations for export cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary.....	9¾	9¾	9¾	9¾
Strict ordinary.....	9¾	9¾	9¾	9¾
Good ordinary.....	10¾	10¾	10¾	10¾
Strict good do.....	10¾	10¾	10¾	10¾
Low middling.....	11	11	11¼	11¼
Strict low middling...	11 3-16	11 3-16	11 5-16	11 5-16
Middling.....	11¾	11¾	11¾	11¾
Good middling.....	11¾	11¾	11¾	11¾
Strict good middling..	12 1-16	12 1-16	12 3-16	12 3-16
Middling fair.....	12 9-16	12 9-16	12 11-16	12 11-16
Fair.....	13 1-16	12 1-16	13 3-16	13 4-16

Stained.

Good ordinary,...9¾c.; Strict good ordinary.....9¾c.
Low middling.....10¾c.; Middling .....10¾c.

DRIED FRUITS.—Apples are hard to sell, although they are offered lower. Peaches move off slowly, and small fruits generally steady and quiet.

Peaches—Fancy North Carolina 11@12c.; Choice Georgia, 10@11c.; good to prime Georgia; 8@10c.; evaporated, 25@28c.; unpeeled halves, 3¾@4½c.; quarters, 3¾@4c.; unpeeled evaporated, 7½@8c. Pitted cherries, choice new, 19@20c.; Raspberries, 27c. New York State plums, 11@12; Southern plums, 8@10c. Blackberries at 10½c. Apples—State quarters, 4½@4¾c.; do sliced, prime, 6c.; good, 4@4½c.; Western quarters, 2½@3c.; Southern at 5c. for prime sliced; 3½@4½c. for fair to good; Southern quarters, 3@4c.; Tennessee quarters, in bags, at 2½@3.

Exports for the week, 1,088 bbls. dried apples.

EGGS.—Receipts for the week, 6,720 bbls.; do last week, 10,174 do. The market is in good working condition, prices are better, but the advance is a wholesome one, and closing rates are not exhorbitant for the season. We quote lots Western N. J. extra, 16@17c.; State and Penn., 15@15½c.; Western and Canadian, fresh, 14@15½c.; poor stock, 14@14½c.

FRESH FRUITS.—Apples now omitted from the list. New Jersey and Hudson River gardens furnish the principal supply of strawberries. The growth in N. J. is thinner than for many former seasons. Several lots of mammoth seedlings have been in during the week, among which are to be noted: well-ripened Monarch of the West, Duncans, Downings, Jocundas, Great American and Glossy Cones. Some were fancy enough to bring 25c. 30c. 50c. and even 60c. per quart by the crate—very complimentary rates for growers, especially considering the state of times. Up River 3ds 3½@4½c. fair to good N. J. crates, 6@10c.; remnant of Southern, 4@5c. Cherries, fine, 10@12c.; good, 6@8c.; small, 4@5c.; sour cherries, 7@9c. Blackberries dull at N. C. and Md., 10@15c. quart. Peaches are coming from South Carolina and rather check the sales of Georgia, being better sized. Quality of either not much to speak of. Char., $2@2.50 bush.; Georgia, $2.50@4. Peanuts have had a southern advance, and sellers here have marked up rates; business continues light. Virginia handpicked, $1.40@1.50; fancy, $1.30@1.35; common to good, 90c.@1.25. Hot-house peaches, doz. $2@3. Black Hamburg Grapes, ℔ $1@1.25.

FLOUR.—The receipts have fallen off and in sympathy with wheat prices are rather stronger. Latest sales are at $3.30@4.15 for very inferior to fancy superfine State; $4.20@4.45 for poor to good extra do. odd lots and lines; $4.45@4.65 for good to fancy do.; $3.25@4.15 for very poor to fancy superfine, Indiana, Iowa, Michigan, Ohio, &c., $4.20@4.45 for very inferior to good shipping extra do., and $4.45@5.65 for good to fancy extra do.; common to about choice white wheat extras, $4.50@5.65; choice to very fancy do. at $5.65@6.75; red and amber winter wheat, inferior to very choice trade and family at $4.50@5.85; round hoop Ohio at $4.25@$4.60, and trade and family brands of do. at $4.70@5.75, the latter rate for choice, (fancy lots quoted higher); St. Louis, $4.40@5.25 for very poor to good extra, and $5.25@6.50 for good to very choice, with a few brands of fancy quality quoted up to $7.00; Minnesota clear, very inferior to very fancy choice at $4.35@5.75; Minnesota "straight," inferior to fancy, at $5.35@6.50, and patent poor to fancy at $5.40@8.00; unsound stock at from $2.00@5.00; city mill extra at $5.40@5.65 for fair to fancy for West Indies; do. for England, $4.25@4.35; do. trade and family extras, $6.00@7.25; do. for South America, $5.75@6.50 for fair to choice; No. 2 at $3.25@3.25 for inferior to very fancy.

GRAIN.—The receipts have been light, the movement at the lake ports of a more limited character, and resumption of important export demand has caused an advance in wheat and corn.

Latest sales of No. 1 red at $1.15; No. 2 white, $1 19; No. 1 white at $1.24; white State at $1.29; further bid; 17,500 bushels No. 2 red at $1 15@1 17; red southern at $1 14; ungraded red at $1.15@1.15½; ungraded Canada, in bond, at 1 10; No. 2. Northwest and Milwaukee spring at $1.11½@1 12; No. 2 Chicago spring at $1 11½; New York No. 2 spring, at $1 11; do. June option at $1 11½; do., last ten days in June, at $1 11½; do., July option, at $1 10½; No. 2 northwest spring, June option, at $1 12; do., special deliveries in June, at $1 12½; do July at $1.10¾; No. 2 red June option at $1 16. Rye at 64@65c. for State and 64c. for Western; Kansas mixed at 46¾@46½c.; New York No. 2 at 45¾@46¼c.; New York No. 3 at 41¾@43c.; ungraded mixed at 41½@45½c. New York No. 2 white at 53@53c.; New York steamer mixed at 42¾@43½c, and ungraded steamer sold up to 44¾c.; Southern yellow, at 47c.; No. 2 June option at 45¾@46c.; No. 2 July option, at 47¾@48¾c.; No 2 August at 48½c.; steamer mixed, June option, at 42½@43c.; do. July option, at 44¾c.; August at 46c. Oats at for New York No. 1 white at 35½c.; New York No. 2 white at 30@31½c.; New York No. 1 at 31c.; do. last half June and first half July at 31@31½c.; do., July delivery, at 31c.; New York No. 2 at 29½c.; white western at 29½@33c.; mixed western at 27@31½c.; No. 2 Chicago at 30½@31c; No. 2 Milwaukee, at 31c.; white State at 30@33c.; mixed State at 27½@30c.; New York extra white quoted at 33c.; New York No. 3 white at 29@29½c.; New York extra at 32c.; New York No. 3 at 28½@29c.

HAY AND STRAW.—The receipts are fair, demand only moderate and prices easy. The indifference of buyers is caused by the feeling that there are pretty full supplies of the old crop back in the interior and the reports that the new crop is two to three weeks ahead in the more important sections.

Bale hay, 50@55c. for shipping, and 65@75c. for retail qualities; clover, at 45@55c. for prime. Straw quoted at 40@45c. for long rye; 35@40c. for short rye, and 40c. for oat.

Exports, past week, 1,700 bales; since Jan. 1st 29,600 do.; same time last year, 26,060 do.

HOPS.—Exports for the week, 360 bales. With less favorable crop reports the market is somewhat stronger. The business, however, has fallen off this week, and the receipts have increased.

New Yorks, good to prime, 7@10c.; do., low and fair, 5@7c.; Eastern, new, 5@8c.; Wisconsin, do. 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.

LEATHER.—Quotations are 19@20c. for light; 19½@21c. for middle; 20@21c. for heavy, and 17½@19c. for good damaged.

MISCELLANEOUS.—American essential oils; Peppermint, in tin, $1 70@2; in glass, $2. Wintergreen, $1 90@2; Sassafras, 39@40c. currency; Seneca root, 53@55c. Ginseng, $1 10@1 20. Feathers, choice geese, 45c.; mixed, 40@42c.; scalded, 35c; duck, 20c.

OIL-CAKE.—Western is quoted at $30 00@30 50 per ton.

PROVISIONS—Are generally higher on an active trade.

Mess pork quoted $10@10 25 for spot lots; $10 05 for July; $10 20 for August, and $10 35 for September. Bacon at 5c for long clear and 5½c. for short clear. Lard—Western steam at 7 05 for spot lots, 7 for June, 7 02½@7 05 for July, and 7 10 for August. Stearine at 7¾c. for Western. Tallow at 7 1-16c. Neat hams at $20@21. Beef—For extra mess, $11 75@12; plain mess, $10@11.50; packet, $13.00@13.50 for bbls.; extra India mess, $20@22 for city brands; do. Philadelphia, $19@20.

POULTRY AND GAME.—German and Jewish holidays gave some life to the live poultry market, and for the moment prices are better for fowls and chickens. Turkeys scarcely inquired for.

Fowls.—Near points; 10@11c.; Southern and Western, 9@10c.; Spring Chickens, N. J., 20@22c.; Western, 18@19c.; Turkeys, 8@10c.; Choice, Ducks, pair, 62@75c.; Southern and Western, 40@60c.; N. J. Geese, $1.25@1.50; other, $1.00c.@$1.12.

Dressed poultry low even for warm weather. Turkeys, good to prime N. J. and Penn., 11@13c.; other, 9@10c.; Spring chickens, pair 24@27c.; Western, 18@20c.; N. J., 20@22c.; Phila. fowls, 12@13c.; State and N. J. 10@11c.

The game market is reduced to pigeons; Stall-fed per dozen, $1@$1.25; flight do, 65@70c; wild Squab, 50@60c.; tame, $2.

SALT.—Quoted at $2 50 for Ashton's; $1 10@1 25 for other brands except Folks and Buckley's, which are quoted $1 00@1 10.

SUGAR.—Refined at 9¾ for cut loaf, 9¾ for crushed, and powdered, 9¾ for granulated, 8¼@9¼ for soft white and 7¾@8¼ for soft yellow.

VEGETABLES.—Old potatoes do not hold their late advance, new having arrived heavily and dropped to very popular prices. Best old, $2@2.25; under grades, $1.25@1.50; Bermuda, $3.50@4; Fla., Nor. and Char., $1.75@2.25; Nor. and Md., $1.50@2; culls, $1. Ber. Onions crate, 75c.@$1; do. tomatoes, 40@50c.; Fla. do. crate, $1.50@2; Char. do., $1@2; L. I. Green Peas 2 bush. bag, $1.25@1.50; N. J. Marrowfat bbl., $2.50@3; Md. do., $2.50@2.75; do. small, $1.50@2; Nor. $1.50. String beans, half bbl., $1.75@2; crate, 75c.@$1.25. Cucumbers, 50c.@1; do. squash, half bbl., $1@1.25. Asparagus, Oyster Bay, $1.75@2; N. J., 75c.@1.25. Radishes, 100 bunches, 50c.@1; Rhubarb do., $1.50@2; N. J. Beets, do., $2@3; Nor. do., $2; Spinach, bbl., 50c.; Lettuce, 25@75c.; Cabbages, Nor., bbl., $1@1.50; Turnips, N. J., 100 bunches, $3@5; Carrots, bbl., $1@5; Hot-house Cauliflower, $1.50@3; Mushrooms, lb., 30@50.

TOBACCO.—The new crop is arriving freely, but demand continues good, and prices are strong and unchanged.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs.....	2½@ 3¼	3 @ 3½
Good lugs.....	3½@ 4¼	3¾@ 4½
Low leaf.....	4½@ 5	5 @ 6
Medium leaf.....	5¼@ 6¼	6¼@ 7
Good leaf.....	6¾@ 8	8 @ 9
Fine leaf.....	8½@10	10 @12
Selections.....	— @—	— @—

SEEDLEAF—CROP OF 1876.

New England wrappers, common.....	10 @—12
fine, do.....	18 @22
medium.....	12½@14
selections.....	25 @35
seconds.....	9 @12
Fillers.....	6 @ 7
Pennsylvania assorted lots.....	8 @17
wrappers.....	20 @50
New York assorted lots, common to medium	8 @ 9
Good.....	10 @12
Ohio assorted lots.....	7¾@10
Wisconsin assorted lots.....	7¾@ 9

WOOL.—Dealings are limited to small lots, and no possibility of much life until the Western clips are ready for the market. Prices are easy and unsettled.

Ohio, Pennsylvania and Virginia quoted at 36@38c., for XX, 35@37 for X, 40@43 for XXX and picklock, 37@40 for No. 1, 34@35, for No. 2, 32@34 for common, and 40@45 for combing.

New York, Michigan, Indiana and Wisconsin. XX, 33@35c.; X, 33@35c.; No. 1, 35@38c.; No. 2, 32@35c; common 30@32.; combing 38@43.

Iowa, Vermont and Illinois X and XX, 32@34c.; No. 1, 34@37.; No. 2, 30@32.; combing, 37@40.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@35c.; unwashed, 23@26c.; unwashed combing, 28@31c.

LIVE STOCK MARKETS.

NEW YORK, JUNE 8, 1878.

BEEVES.—Receipts for the week, 11,780 head; do. last week, 10,337 do. The offering for the closing day was large and buyers hung back in expectation of concessions. Sellers finally submitted, but the yards were cleared late. Quality did not run as fine as in the recent past, and selections brought ½c. more than similar grades on Wednesday. Texas, Cherokee and Colorado cattle part still-fed, sold at 7¾@9¾c. to dress 56 lbs. Ordinary to best native ranged from 8¾ to 10¾c., very small bunches at the latter price. Export trade was good with favorable reports from England on American beef and cattle.

COWS AND CALVES.—Receipts are unimportant, but there is no market to warrant steady supplies. Prices range as before, but even best cows have to risk a chance sale. Nominal rates $40@60 and $65.

VEAL CALVES.—The market has advanced for all grades during the past three days. Good, useful buttermilk calves sold at Sixtieth-st. 4@4½c.; near by buttermilk, such as go to West Washington market, 3@3½c.; full milk calves 5¾@7c. for ordinary to prime N. J.

SHEEP AND LAMBS.—Receipts for the week 25,590 head; receipts last week 19,753 head. Sheep are dull and low; very common to best 3¾@4¾c. Since lambs have declined the market has become very active. Va. and Ky. 5¾@7c. Ohio, Delaware and N. J. 7@8c.

SWINE.—Receipts for the week 26,806 head; do. last week 32,285 do. Market dull but with free supplies for summer. Killers will not bid above $5.50@5.65 for fair to good corn-fed.

INDEX TO NEW ADVERTISEMENTS.

Allen & Co., S. L.—The Planet Jr. Horse-Hoe.
Boomer & Boschert Press Co.—Cider Presses and Graters.
Boyer & Bro., Wm. L.—The Union Railway Horse Power.
Cloudburn & Coldwell Mf'g Co.—New Excelsior Lawn Mower.
Coulter & Co., A.—Agents Wanted.
Devoe & Co., F. W.—Potato Bug Poison; Mixed Paints, ready for use.
Ester & Laurlat—Dosia, and other New Books.
Eureka Trick and Novelty Co.—New and Wonderful Articles.
Farmers Friend Mf'g Co.—Farmers Friend Grain and Fertilizer Drill.
Fitzhugh, J. L.—The American Hay Elevator.
Furst & Bradley—Sulky Hay Rake.
Furst & Bradley Mf'g Co.—Walking Cultivators.
Gifford, W. C.—Gifford's Swinging Stanchion.
Grant, S. A.—Agents Wanted.
Jayne & Son, Dr. D.—Dr. Jayne's Hair Tonic.
King, Geo. E.—Self-acting Cow Milker.
Kingsford & Son, T.—Kingsford's Oswego Starch.
Parsons & Sons Co.—Rare Evergreens.
Parsons, J. C.—Tree-Box Hoops.
Pennock Mf'g Co.—Double Harpoon Horse Hay Fork.
Ralston, John—The Union Mills Bug Destroyer.
Russell & Co.—Threshing Machines, Farm Engines, Horse Powers, &c.
Silver, L. B.—Ohio Improved Chester Pigs.
Taylor, Bros. & Co.—Rubber Printing Stamps.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.
Wells, Richardson & Co.—Leamon's Dyes.
Worth & Co., J.—Agents Wanted.
Ziegler & Co., P. W.—How to Be Your Own Lawyer.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is:

Single Copy, per Year.....	$2 50
" " Six Months.....	1 25
Five Copies or more, per Year.....	2 00
" " " Six Months.....	1 00
Three Months' Trial.....	65

Any one sending a club of ten is entitled to one copy, one year, free.

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Special Notices, leaded, by count.....	70 "
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Reading "	1.00 "

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

SPECIAL NOTICES.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

New Advertisements.

Sure Death to the Potato Beetle.

The Union Mills Bug Destroyer

Contains Paris Green and other poisonous ingredients, mixed ready for instant use, and is guaranteed to effect a speedy and sure deliverance from the ravages of the Potato Beetle,

Directions for using and a good hand sieve for applying the poison with each barrel.

Price $5 per bbl., delivered on cars. Satisfaction guaranteed or money refunded. Address

JOHN RALSTON, 170 Front St., New York.

Use the Anti-Friction Hay Carrier.

For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and to the end of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "5" to U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.

Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.

For further particulars, send for Price Lists and Circulars to

KIDDER & LAIRD, 83 John St., New York.

KILL

The POTATO BUGS

AND SAVE THE POTATOES.

SURE DEATH to the Colorado Potato Bug is only to be had by the use of Paris Green. Prof. Cook and others say that all other remedies have failed. ENDORSED BY A. S. FULLER, AGRICULTURAL EDITOR OF THE "SUN."

PURE PARIS GREEN

Made by F. W. Devoe & Co., can be relied on for the extermination of the Potato Bug and Cotton Worm. Circular on the use of Paris Green distributed free on application.

F. W. DEVOE & CO'S

MIXED PAINTS.

For the convenience and economy of consumers of PAINT the well-known house of F. W. DEVOE & CO. now prepare

PAINTS READY FOR USE

FOR FARMERS and MANUFACTURERS.

They are uniform in shade, and the colors can always be matched. Any one can paint with them. No need of a painter to mix it for you. No need of a dryer or other ingredients. The paint is ready for immediate application. Send for sample cards showing different shades. They have very superior covering properties and do not, like the so called patent paints, contain either water, benzine or alkali. These Paints are in Liquid Form, and are sold in Gallon Cans and Barrels. They are also put up in small cans of one to five pounds.

F. W. DEVOE & CO.,

Manufacturers and Importers of Colors, White Leads, Zinc White, Varnishes and Artists' Materials, CORNER FULTON AND WILLIAM STS. (OLD DUTCH CHURCH CORNER), NEW YORK CITY.

HOW TO BE YOUR OWN LAWYER

AGENTS WANTED. $50 TO $175 A MONTH. Send for Circular & Terms. P. W. ZIEGLER & CO. Philadelphia, Pa.

$1 FOR 25 CTS.

Seven new and wonderful articles at one-fourth the retail price. Examine the list.

No. 1. Musical Pipe.—Made of metal, with bowl resembling a human face. By filling with water, will imitate perfectly the notes of any bird.

No. 2. Miniature Charm.—Suitable for necklace or watch chain. Size of gold dollar, yet has all of Lord's Prayer clearly engraved on it. New and beautiful.

No. 3. Eureka Whistle. Loudest and clearest whistle made. Very useful for sportsmen to exchange signals.

No. 4. Japanese Parasol. Just imported, Prettiest Infant novelty in the market. Splendid gift to a lady.

No. 5. Magic Spider. Funniest thing out. A horrible looking fellow, sure to make people jump out of their boots. Always creates an excitement.

No. 6. Musical Wonder. A new reed instrument, on which any tune may be played, or sound imitated, from the waul of a cat to a Punch and Judy show.

No. 7. Golden Water-Pen. Produces clear, golden letters, by simply dipping in water. Lasts for months.

The above seven articles are shown in cuts, and will be sent in neat cabinet, post paid, for 25 cts. At retail they would cost $1. We make this reduction to obtain new names for our Fall Catalogues. Postage stamps taken same as cash. Address,

Eureka Trick & Novelty Co.,
P. O. Box 4614. 39 Ann St., N. Y.

LADIES IF YOU WISH TO COLOR—

Use Leamon's Dyes.

Warranted the best and cheapest Dyes for all family and fancy dyeing. Dresses, Cloaks, Coats, Ribbons, Ties, Feathers, anything, can be colored any shade. Anyone can use them. The expense is trifling. We especially recommend the Black as much better than logwood. Sold by druggists, or any color sent by Mail, large size, 25c., small size 15c. Send for Dye Book and beautiful Samples, Free.

WELLS, RICHARDSON & CO., Prop's, Burlington, Vt.

Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 6.

CORNPLANTER.

The production for market of the more common vegetables is in many localities quite profitable. Where facilities for marketing are convenient, Lettuce, Radishes, Peas, Snap-Beans and Early Beets for greens are grown with but little labor. I have found the Early Egg-lettuce for early, and Malta Drumhead and Hanson for late, the best. Sow in drills, thinning four to six inches, utilizing the thinnings for market, tied up in bunches, or for transplanting: Radishes, French Breakfast for early, and Long Scarlet for summer; sown in drills, unless very close. They will not require thinning until some are large enough for use, when they should be drawn, and those remaining will grow rapidly, thus gaining a succession from one sowing.

Radishes delight in a sandy soil. A little rotted manure or other fertilizer will cause a quick growth, thus securing a mild, crisp and tender bulb. Where land is not so valuable as to require very close planting, run furrows two and one-half feet apart for your Peas, dropping the seed in hills eight to twelve inches, according to the variety, dwarf needing less room than taller-growing sorts, eight to ten seeds in each hill; or, if it is only proposed to give horse cultivation, plant in a continuous drill, using a little more seed. Cover with the plow. Go through the rows with the cultivator as soon as they can be seen. Turn a furrow to them on each side when five or six inches high; thus you see Peas are a crop requiring but little labor comparatively, though picking is a slow and tiresome operation. Varieties: Little Gem, or some of the other *littles*, will do for very early, but for the main crop, I have never found anything better than the old Dan O'Rourke for market purposes. Later kinds generally find prices so low that they do not pay cost.

We often hear the slang expression, "He don't know beans" (Uncle TRUE will please grant pardon for using it here), which one would think could be applicable only in the lowest ranks of ignorance, but, my young friends, there are many of our older Ruralists that have yet to learn that a Black Wax is far superior to a Marrow as a snap bean. Plant as above directed for peas, though not so deep; two inches is enough. Do not work them when the dew is on and the ground dry, the dust will be likely to cause rust; if the earth is moist so that no dust will rise, harm will not result.

For early beets, I have found the Red Egyptian and Yellow Turnip the best. Red beets usually sell most readily. Throw up high ridges, plant two or three seeds about six inches apart, and do not thin until large enough for greens, drawing about one-half the young plants, and again, a week or ten days after, go over them, leaving only one plant in a hill. Tie up in bunches both the thinnings and the larger beets. The Swiss Chard is excellent for greens.

Lettuce, radishes and beets should be washed clean, which is rapidly done after bunching by rinsing in clean water. This must be carefully done, so that the leaves are not bruised.

Different markets call for different methods of preparing vegetables for sale; but let us all call on Uncle TRUE to give us an idea as to the most attractive forms which come under his observation, as to the size of bunches most desirable, and also if they are such as are quoted in the RURAL Market Reports.

SELF-HELPING BOYS.

MARY WAGER-FISHER.

"WILL you tie my necktie, please, Cousin MARY," asked Hubert coming toward me a morning or two ago, with a cravat hanging about his neck.

"*Avec plaisir*," I responded, "but how proud I should be to have a boy, sixteen years old, going to some woman to tie his necktie for him! Half the boys in the world I suppose do it, and a great many men. Indeed I have heard of men who led great armies to splendid victories, and of statesmen of immortal fame, who for their very lives could not arrange their neckties satisfactorily. Why, any girl of ten years of age, who owns ribbons, knows how to tie bows and knots beautifully! You don't catch the girls going to papa or uncle with "tie my necktie, please," you see girls are not such ninnies, Ah, Hubert!

"Well, I *can* tie mine, for that matter," says the lad deprecatingly. "Well, why do you not do it then? You boys now-a-days are not good for much. The smallest services for yourselves you can't do—such as to thread a needle, sew on a button, or sew up a rip in in your clothing. Why, when ANAXIMANDER was at college, if he wanted a button on his shirt, he would run a short stick through the cloth, and poke his knife through anywhere for a button hole. Such looking clothes as *he* had when he came home, mother says!—But it was all her fault. Mothers nowadays are not half Spartan enough. The boys must be coddled like babies; sleep in soft beds, and be tucked in like fruit in a pie-crust, waited on by mamma and sisters, and when once out from the house-roof, are perfectly helpless in regard to a score of things they ought perfectly well to know how to do."

"Oh fie, you can't expect a fellow to learn everything, Cousin MARY!"

"No; but I would teach him to be *independent*. I would have him able to sew on a button nicely, as well as to ride on horseback, as Julius Cæsar did. It is not half so ridiculous for a man to know how to sew, as to see him standing forlorn before his dressing-bureau, with his last clean shirt in his hands, and finding it buttonless. Moreover, it is highly essential, if a boy is to become a scientific man, for him to become accustomed early to using his fingers deftly. One reason why women sometimes become so superior in surgery and as dentists, is largely because they know how to use their fingers skillfully. If you were the son of an English nobleman, you would probably have to dispense with some of your sortships and endure hardships. Your lordly papa would stick you in an unearpeted room, with a hard mattress on the floor to sleep on, make you wait upon yourself in every particular, and keep you a stranger to cakes and preserves, for he knows, as well as every body ought to know, that unless a boy gets a certain amount of what he calls being "knocked about," he is not likely to ever amount to much. And I think boys ought to know how to cook certain dishes, too!"

"Oh my goodness!" roars HUBERT with laughter, "you would have a fellow jack-at-all-trades and good at none—a regular 'sissy—'"

"Oh, that is what you always fall back upon when anybody wants you to be something else than a blundering, awkward, dependent creature, that thinks he knows quite enough if he can harness a horse and eat his breakfast after it is cooked and spread for him. Why girls know how to do five times as many things as boys do! They know how to do nearly every thing that you do, and ever so many more! But I *do* think it is a ridiculous way to bring up boys to be so helpless, I would have them know enough of cookery to be able to cook at least a rude meal for themselves, if necessary. And in conclusion, I'd have them all able to tie their own neckties properly, or go without!"

"Amen! that's what I call a regular old preach, Cousin MARY; I expect to profit by it, and one day may be seen sitting in my modest doorway, patching my old clothes, as the great Mohammed used to do. Amen, I say!"

SCOLASTIC SCRAPS.

ALPHA BETA GAMMA.

NOT a few weeks ago, the editor of this department of the RURAL intimated that a contribution pertaining to school incidents, or similar happenings, would be likely to be acceptable to the readers of these columns. So I thought that I would be among those to accede to the invitation.

Truth is stranger than fiction. If it was not for this maxim I am sure some of you would think that some of the following incidents are fictitious or overdrawn. But no; they are taken from real life in a schoolroom.

A few days since, I dropped into the High School and Academy of B—, a thriving institution of learning, where there are in attendance about one hundred and fifty masculine book-fighters, or, in more refined language, male students. Although there are three divisions, or grades in the school, I visited only one room, so captivated did I become by their queer methods of precedure.

It was Friday when I called; a beautiful April morning. Saluting the teacher, Professor THOMAS, I took a seat. And not only was it Friday, but 'twas April fools' day. There were no unusual exercises to be held, nor anything else in particular expected to happen by the Professor.

The first lesson recited was Latin—"Cæsar." Master JOHN BINGHAM was called upon to commence the exercises. The paragraph that he read began, "Super postridie ejus diei superarver unt Gallian." This passage was actually rendered by the thoughtless boy thus: "They conquered Gaul on the next day *after supper!*"

The effect of this ridiculous translation upon the class is hard to describe. Suffice it to say, that neither merriment nor laughter would begin to express the universal ridicule of the poor fellow's rendering. It was sometime before the mistaken boy, thinking his translation was correct, was prevailed upon to take his seat. Probably the next time he tackles that word *super*, he will remember that it takes two p's to spell supper, and that the Latin super means "moreover."

The next study was Rhetoric. The lesson happened to be about the derivation of words, a very interesting exercise by the way. One of the boys was asked to give the meaning and derivation of the word "editorial." He said it meant information coming from the head. "It is a word coming from the mother country," said he, "Where it is pronounced "headitorial." "When an editor copies articles from other papers, they (the articles) are called clippings; but when the editor writes them himself, they are called 'headitorials,' 'cause they come from the head."

List, ye editors, spread your ears, for this is an explanation of the word which is the synonym for your labors. Verily, education is the cradle of genius!

Another sharp-witted youngster was requested to name the marks of accent. Thus did he reply: "The breve,—and the acute—and the macron,—and the—the—'fessor, I know it!—oh, yes, *and the omicron!*" It is needless to say that he had his Greek learning slightly mixed with his knowledge of the marks of accent.

By this time, I thought I had better leave. Their sharpness was piercing. It seemed as if they *originated* an answer to questions, when they did not know the true reply. They seemed to have an easy time. Hard study did not appear to be making inroads upon their flesh. As I surveyed the juvenile throng as it passed out of the room to take recess, these poetical four lines occurred to me as describing these boys:

> "'Tis as natural for them to speak Greek,
> As it is for a pig to squeak;
> And Latin is no more *difficile*,
> Than 'tis for a blackbird to whistle."

Recess being over, the afternoon exercises began. I had intended not to remain, but was induced to stay by the professor, who seemed somewhat vexed at the boys' actions that morning; but then I knew the reason for all that, it was April fool. Boys will be boys, you know.

About an hour was consumed in recitations in Arithmetic and Greek, at the conclusion of which, one of the pupils called his teacher's attention to the time of day.

"Why," said the Professor, "It *is* time to dismiss school. I was not aware that the time was flying so fast. Here it is 2 o'clock already." And with an astonished look he proceeded to his chair on the platform.

"Why, why, what's the matter!" he exclaimed, as he beheld his chair upside down. "Why, who 's been meddling with my bell?" said he, as he found it dumb, the clapper being tied with a string.

"April Fool! April Fool!" quickly came from all parts of the house.

"Ah! yes," replied the teacher, "You may go, boys; you are dismissed." It was some time afterward before Prof. THOMAS learned how badly he had been fooled—swindled out of an hour's time—by the hand of the clock being put forward one hour by those mischievous boys, when the teacher was working an example on the blackboard.

"I am sorry that the boys behaved so badly, to-day," apologized the Professor to me, as I took my leave.

"I understand it all," said I, "But there 's something to be thankful for. April Fool's day comes only once a year."

LETTERS FROM BOYS AND GIRLS.

Our Cushing Cousin.

DEAR RURAL COUSINS:—I come from a land of perpetual beauty. Lovely flowers bloom around my pathway, rivers murmur softly as they flow, winding between green banks. I walk in the woods, and hear the low sighing of the wind in the pine trees. The Cardinal bird flits across my path, and I stay my footsteps to listen to its voice. The beautiful yellow jessamine tempts me to pluck its fragrant blossoms, and twine them in my hair. Thus I wander on, the soft air of spring fanning my cheek, the warm sun shining from a cloudless sky, glinting through the trees and filling the dear old woods with a hazy, dreamy light. Hark! what sound is that I hear? 'Tis but the frogs in the stagnant pool singing "Home Sweet Home." Fair daughters of the North, it is from the "Sweet Sunny South" I come—Ah! this is exhausting, I will desist. Doubtless you know who I am by this time. Indeed, nothing was further from my intentions, than to drive Slayerofconceit from the field: I only indulged in a few quiet remarks; but, as a Cousin, I would advise him not to let his little temper rise.

He Would Like to be a Cousin.

UNCLE TRUE:—I should like to be one of the Cousins, I have read your papers for one or two years, and have always taken a great interest in the letters. I live on a farm, in Vermont. I think that Slayerofconceit ought to stand up for his rights as well as other folks, but I don't approve of his slurs on the girls, for I like the girls. As to what the girls can do out of doors; I think the best place for them is in the flower garden. I can sew with a thimble, or I can do house-work of most any kind as well as Rocky Mountain Joe. I think that Nellie S. is rather inquisitive, but that is no matter; I also think that Yankee Bill must be something pretty nice, there is so much said about him. The fear of that waste-basket has kept me from writing for a long time, but if this letter is published I shall try again.

North Thetford, Vt. BOX BOY.

What She Saw There.

DEAR COUSINS what has become of you all, have you been frightened away? Nell S. wished me to tell about my trip East. If I could tell of all I saw, it would fill one RURAL. Was in Boston at the dedication of the Soldiers' Monument on the Common. Visited the Museum, Natural History rooms, and Art Gallery, also Memorial Hall and Agassiz Museum in Cambridge. The fossils there were splendid. Never saw any before; did not think there were so many kinds of animals, birds, and fishes in Cambridge. Passed under the tree where Washington took command of the American army, July 3d, 1775. There is an iron fence built round it for protection. Visited the Atlantic coast and saw the ocean for the first time; should not like to go out far on it; hope to see more letters from the Cousins.

HARRIE B. HENDLEY.

A Little Girl who Improves her Time.

UNCLE TRUE:—I feel quite anxious to write to you again though it is but a short time since I last wrote. I take great pleasure in reading the Letter column, and was delighted with the last letter from Honolulu. I think that that young lady must have a pleasant home. I am reading Longfellow's poems and "The Arabian Nights." One of my favorite books is "Little Men," by Miss Alcott. Mamma thinks I am too small to read Dickens' works, but I have read "Oliver Twist" and like it. We are having beautiful weather now. Mamma, my brother and I are going to-morrow to gather flowers. We have nice house plants, but I like the wild ones best.

Best regards, L. E.

Otisville, N. Y.

Wake Up, Boys!

UNCLE TRUE AND RURAL COUSINS:—I thought I would write and see if you would admit me as a Cousin. I don't think that this Department is as lively as it ought to be with so many would-be smart girls in its columns. I don't think there are as many letters as there were last summer, and the only way that I can account for it is that the boys do not write as often as they did. Now then, boys, wake up! and I will let you know that you have a friend even in this land of cobble-stone and gravel. GREEN JOHN.

Sabbath Reading.

PATIENCE.

WERE there no night we could not read the stars,
The heavens would turn into a blinding glare;
Freedom is best seen through the prison bars,
And rough seas make the haven passing fair.

We cannot measure joys but by their loss;
When blessings fade away, we see them then;
Our richest clusters grow around the cross,
And in the night-time angels sing to men.

The seed must first lie buried deep in earth,
Before the lily opens to the sky;
So "light is sown," and gladness has its birth
In the dark deeps where we can only cry.

"Life out of death" is heaven's unwritten law;
Nay, it is written in a myriad forms;
The victor's palm grows on the fields of war,
And strength and beauty are the fruit of storms.

Come then, my soul, be brave to do and bear:
Thy life is bruised that it may be more sweet;
The cross will soon be left, the crown we'll wear—
Nay, we will cast it at our Saviour's feet.

And up among the glories never told,
Sweeter than music of the marriage bell,
Our hands will strike the vibrant harp of gold
To the glad song, "He doeth all things well."

[Sunday Magazine.

SHORT BIOGRAPHIES OF EMINENT PREACHERS.

THOMAS ARNOLD.

THOMAS ARNOLD, D. D., the noble schoolmaster of Rugby for fourteen years, was born at Cowes, June 13th, 1795. He was educated at Oxford, ordained in the Church of England in 1828, and died June 12th 1842. His character was marked by rare manliness, Christian sympathy, and profound scholarship. How he taught his pupils to love him, is well told in "Tom Brown's School-Days at Rugby." Besides his classical works, he left five volumes of Sermons. His thoughts are pure, vigorous, and independent.

ALBERT BARNES.

ALBERT BARNES was born near Rome, New York, December 1st 1798, and died in West Philadelphia, December 24th 1870. He was a graduate of Hamilton College and Princeton Theological Seminary. After a pastoral charge of five years in Morristown, New Jersey, he was installed in the First Presbyterian Church, Philadelphia, in 1830. Here he actively ministered thirty-seven years, when failing eye-sight compelled him to become Emeritus Pastor. For conscience's sake, Rev. Mr. Barnes repeatedly declined the well-earned title of Doctor of Divinity. By dint of utilizing the spare hours before 9 A. M., he composed twenty thoughtful volumes on religious and theological subjects. Chief among these were his Notes, on the New Testament, Isaiah, Daniel, and Psalms, whose circulation before his death reached a million volumes. His writings are clear, incisive and plain, richer in matter and method than style.

JOHN BUNYAN.

JOHN BUNYAN, the "Shakspeare of Divines," was born the son of a traveling tinker, at Elstow, Bedfordshire, in 1628. He was ignorant and dissipated till after his marriage, at the age of nineteen. In 1655 he became a Baptist preacher, and his zealous labors led, five years later, to his imprisonment in Bedford jail with other dissenters. "Here," states Dr. Barlow, "with only two books—the Bible and Fox's Book of Martyrs—he employed his time for twelve years and a half, in preaching to, and praying with, his fellow-prisoners, in writing several of his works ('Pilgrim's Progress,' etc.,) 'and in making tagged lace for the support of himself and family." After his release in 1662, he evangelized his brethren throughout England till his death at Snowhill, August 31st 1688. His imagination was strong and creative, his spirit earnest and profoundly religious; hence his masterpieces are his spiritual allegories.

CHARLES PETTIT M'ILVANE.

RT. REV. CHARLES PETTIT McILVANE, D. D., D. C. L., president of the American Tract Society, was born at Burlington, New Jersey, January 18th 1799. In his seventeenth year, he graduated at Nassau Hall, Princeton. From 1825 to 1827, he was chaplain and professor of ethics at West Point. While rector of St. Ann's Church, Brooklyn, in 1831, he delivered in the University of New York a series of admirable lectures on the historical "Evidences of Christianity." In published form, these have had a deserved popularity at home and abroad. He was consecrated Bishop of the Protestant Episcopal Church in the Diocese of Ohio the following year. By speech and pen, he has ever allied himself with the whole Church of Christ, well saying: "We drop our denomination uniform when we undress at the grave." Although now past threescore and ten, Bishop McIlvaine lately crossed the Atlantic to intercede with the Czar of Russia for the religious rights of his Protestant subjects. He died at Florence, Italy, March 13th.

Cæsar in warlike matters, minded more what was to conquer than what was conquered; what was to gain, than what was gained; so does a humble soul mind more what he should be, than what he is; what is to be done, than what is already accomplished.

LUTHER professeth, "That he profited more in the knowledge of the Scripture by private prayer in a short time, than he did by study in a longer space."

THE more our gifts and graces are exercised, the more they are strengthened and increased. *All acts strengthen habits.*

PERSONAL ITEMS.

The Lorillards pay the government $4,000,000 annually as a tax upon tobacco.

Jennie June says the Woman's Hotel was a failure because it was a man's idea.

William Cullen Bryant was a precocious youth and at ten years of age translated Latin poems.

Blanqui, the Communist, although 73 years old, is said to be plotting another revolution in France.

Only one man in Chicago pays more taxes than Long John Wentworth, and he has just presented that city with six acres of valuable land, to be devoted to park purposes.

The Dean of Chichester was select preacher at Oxford the other day. "Ye men of science," said he, "ye men of science, leave me my ancestors in Paradise, and I do not grudge you yours in the Zoological Gardens."

Cardinal Franchi was somewhat scandalized to learn that Leo XIII. required a billiard table to be installed at the Vatican; but when his holiness insisted that to play an hour at least daily was necessary for his health, the secretary yielded gracefully.

Mr. Peter Cooper has given up the scheme of founding a college for women in South Carolina. It is said that the representations made to him concerning the disposition of the people of the State to forward the scheme, were not strictly founded on facts.

Earl Beaconsfield is in his seventy-fourth year, Mr. Gladstone is seventy, John Bright is sixty-seven, Earl Granville sixty-three, Bismarck is sixty-three, Gortschakoff eighty, Von Moltke seventy-eight, MacMahon seventy-two and Dufaure seventy-six.

Mr. Froude, the historian, recently addressed to Dr. Newman a letter in which he says that "the principle of gravitation is only looked upon now as a hypothesis by all careful minds," and, further, that it would be far better if all mankind could agree "to hold their opinions as mere hypotheses."

Mrs. Lieutenant Hoxie, nee Ream, is described as a slight, fairy-like, or rather elf-like, little creature, with great, soft dark eyes that have an appealing, childish expression in them that is irresistible. She is quick of movement, and when dressed in her working-blouse, with her tangle of curls bound back with a blue gauze veil, she is the quaintest thing in her atelier.

Implements and Machinery.

WROUGHT IRON HARVESTER.

COMBINED REAPER AND MOWER.

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The Johnston Harvester Co.

BROCKPORT, N. Y.

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HORSE-HOE.

This tool combines in itself the qualities of

the PLOW, CULTIVATOR, and WHEEL-HOE. It is invaluable to Broom-Corn-Growers, in Small Fruit Culture, and in the Potato and Corn Fields. DESCRIPTIVE CIRCULARS FREE.

S. L. ALLEN & CO., Patentees,
229 MARKET STREET, Philadelphia, Pa.

GARDEN ENGINE AND FIRE EXTINGUISHER. For Washing Windows, Carriages, etc., Protects Buildings from Fire, and Trees, Vines, etc., from Insects. Throws water 50 feet. Easily carried. No Dwelling, Country Home or Factory should be without the Fountain Pump. Send for large Illustrated Circular. J. A. WHITMAN, Sole Proprietor and Manuf'r, Providence, R. I.

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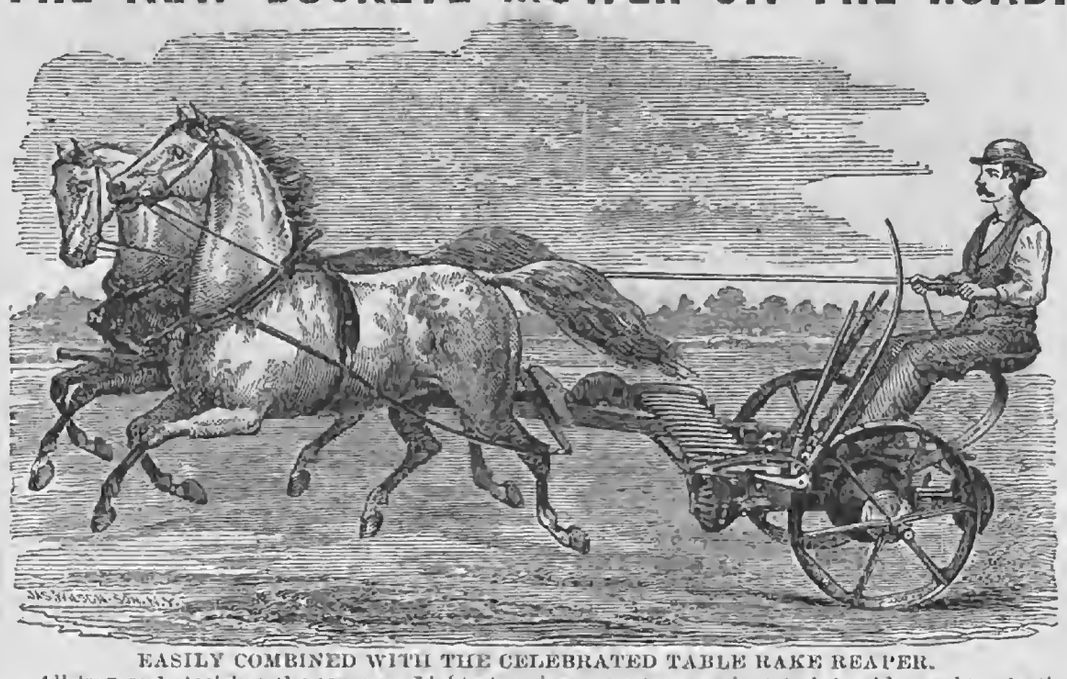

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All iron and steel but the tongue. Lightest running, most convenient and durable machine in the market. Absolute safety for the driver, and no weight or side draft on the horse's neck. Always in the lead and justly called the Invincible Machine of the Age. Manufactured by

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Clover Threshers and Hullers,
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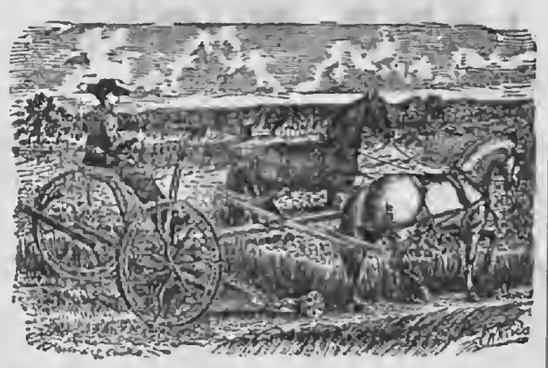

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Grass Cut by the Eureka Cures one-third Quicker and more Evenly than after any other Mower.

OATS AND BARLEY HARVESTED SUCCESSFULLY AND WITH GREAT SAVING IN TIME AND LABOR WHEN CUT WITH THE EUREKA.

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For One, Two and Three Horses.

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Has more good points, less complication, more adaptability and less parts than any other Mower in the world.

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The lightest, strongest and most durable single Reaper in the market.

For simplicity, durability and quality, these machines cannot be excelled. Every machine fully warranted to be as represented.

At the Great Mower and Reaper Trial, held at Watertown, N. Y., July 6-7-20th and Aug. 8th, these machines carried off the Highest Prizes, viz., Two Grand Silver Medals, over the Wood, Buckeye, Wood's Eagle, Meadow King, Warrior, Eureka, &c.

Circulars, descriptive of these machines, sent free by addressing BRADLEY & CO.,
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HORSE HAY-FORK.
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TAYLOR RAKES.

Five Different Styles, including Foot, Hand and Self-Dump.

Taylor's Self-Dumping Rake (No 4) has been greatly improved for 1878. This Rake made a great success last season, and is now the best Self-Dump Rake in the market.

These are the only Rakes ever offered the farming community that have proved a Complete Success, in all kinds of Rakings, in the United States, Canadas, British America, and in Europe and Australia.

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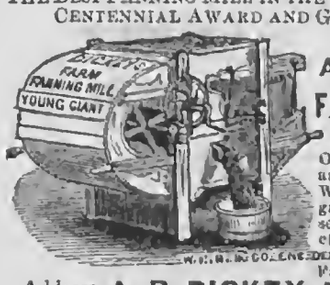

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It cleans perfectly OATS, CHESS, COCKLE, and all foul matter from Wheat and Barley. It grades, and separates for seeding and market, cleans all kinds of small seeds and will save any Farmer its cost annually.

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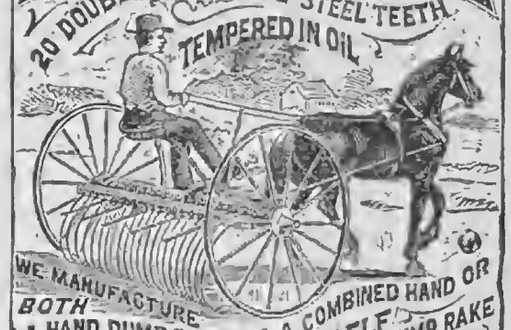

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Will rake cornstalks or bunch up. Teeth can be raised for gleaning stubble fields.

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CREAMERY BUTTER.

The Cooley System of Butter-Making has been before the public but one year, yet over 1,400 Dairies have introduced it. Read for yourself what people say about it who are using it:

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VERMONT FARM MACHINE CO:

Gentlemen:—We are more and more pleased with the Cooley Creamer as we continue to use it, and we feel confident that we shall produce a better quality of butter this summer by means of it than we ever had before. We are now getting $1 a pound for our butter. Very truly yours, MELVILLE BULL.

Send 3c. stamp for Circular to
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FOUST'S

HAY LOADER.

A perfect machine for rapidly pitching hay, barley and all loose grain on the wagon in the field. Saves as much time and money as the mower and horse rake. Thousands in use by the best farmers in the country. Prices reduced. Send for Circulars to the manufacturers. STRATTON & CULLUM,
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Wrought Iron Frame, Wrought Couplings, Wrought Steel Shovel Blocks, and ALL the late Improvements.

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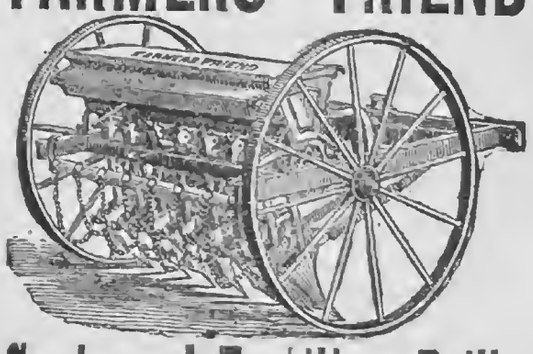

Grain and Fertilizer Drill.

The quantity is regulated with gear-wheels in a CONE, so there are no loose wheels or movable feeders, and it will sow any grain perfectly and accurately.

It has the best Spring Hoe, and every Drill has a Force-Feed Grass-Seeder, Patent Shifter and Surveyor free.

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Wit and Humor.

SPARKS AND SPLINTERS.

MERE 'airy nothings—bald heads.

THE Texas Legislature proposes to exempt the dogs of widows and orphans from taxation. The Barkises are willing.—Com'l Adv.

"Is Satan married?" asks the Chicago Times. No, he is a stingy, immoral old bachelor, and writes lying paragraphs about mothers-in-law, in order to scare young men away from matrimony.—Appleton's Journal.

AN optical delusion—Traveller: "Hi! guard! Have you seen a man walking about with one eye, of the name of Walker?" Guard (musingly): "N-no, sir, I dun-no as I 'av. What was the name of the other eye, sir?"

A FOP took a seat in a railroad car beside a young lady, but on perceiving she had a dog he moved off with an air of trepidation. "Don't be afraid," she said with a reassuring tone; "Jip won't bite you, he doesn't like veal!"

"Who was the doubting disciple?" asked the Sunday-school teacher. "Peter," promptly replied the small bad boy. "No, Thomas," said the teacher. "Then what do people always say 'Petered out' for?" asked the smart bad boy.

BEFORE beginning the second psalm for the day, a Glasgow minister reached down into his pocket and took a pinch of snuff. Even yet he cannot understand what there was in the first verse of the psalm to make the congregation laugh when he read: "My soul cleaveth to the dust."

A JOHN BULL, conversing with a Canadian Indian, asked him if he knew that the sun never sets on the Queen's dominions. "No," said the the Indian. "Do you know the reason why?" asked John. "Because Heaven is afraid to trust an Englishman in the dark." was the savage's reply.

A CLERK in a Philadelphia book-store, thinking to annoy a Quaker customer who looked as though he was fresh from the country, handed him a volume, saying: "Here is an excellent essay on the rearing of calves." "Thee had better present that to thy mother, young man," was the spontaneous reply of the Quaker.

A CITIZEN was arrested yesterday on a charge of shooting a neighbor's dog. His defence was that the animal was a nuisance, continually barking and biting, as is its nature to. "Oh," said the Justice: "then you shot the dog in self-defence?" "No!" was the rejoinder. "I shoots him in de head un'er de fence." He was acquitted.

AN obliging gentleman, who thinks that personal favors do not cost much, while they make friends, was applied to by a negro for a certificate of character, by which he might get a situation. The testimonial proving to be more complimentary than Scipio himself expected, that worthy, on recovering from his astonishment, exclaimed: "Say, Mr. ——, won't you gib me something to do yourself on dat recommendation?"

THERE was a little fellow who knew Mother Goose better than he know his Bible. One Sunday he was asked in his class, "Who were thrown into the fiery furnace?" That was too much for him. The question was passed; the answer came promptly, "Shradrach, Meshach and Abednego." This was a mortification to the little fellow, and when the next question came, "Who put them in?" he answered with, a jump "Little Johnny Green!"

Commercial Bulletin Spice—Money doesn't make the man, but twenty shillings make the sovereign.——When married men complain of being in hot water at home, it turns out half the time that it's scold.——A correspondent who says he has frequently heard of "Tara's halls," desires to know if old Tara was a bank president or a Fall River mill manager.——"England, sir! England rules the seas; Britannia rules the waves," pompously remarked an Englishman to an American. "That's nothing," was the reply, "every Yankee has a notion of his own."—— A young lady correspondent (poetic) desires to know if we have seen anything sweeter than "A Chaplet Alone." Certainly, we have seen a chap let a girl kiss him, which was ever so much sweeter.

There is Trouble in Store

For those who neglect to rectify irregularities of the stomach, liver and bowels, which they foolishly imagine will "come right of themselves." Of this silly error such persons are usually disabused by the development of some serious chronic malady, traceable to what they were pleased to consider a trifling disorder of the above-named associate organs. Such a culmination is easily avoided. A course of Hostetter's Stomach Bitters invariably has the effect of renewing the secretive action of a torpid liver, restoring healthy digestion and assimilation, and rendering the habit of body perfectly regular. The activity of these all-important functions being restored, and the entire system toned and regulated by this incomparable corrective and invigorant, no danger to the general health is to be apprehended from causes which, if not eradicated in time, will assuredly undermine it.

UNEXPECTED.

LADY (returning from a ride): "You know, Jane, I do not allow you to have your company in the kitchen."

JANE: "Then am I to take him into the parlor, ma'am!"

KINGSFORD'S
Oswego Starch!

Is the BEST and MOST ECONOMICAL in the World.

Is perfectly PURE—free from acids and other foreign substances that injure Linen.

Is STRONGER than any other—requiring much less quantity in using.

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The **EXCELSIOR** received the **FIRST PREMIUMS** at the **Great Lawn Mower Trials** held in New York City, Cleveland, O., Waverly, N. J.; also at the **Great International Lawn Mower Trial** held at CARLISLE, ENGLAND, in September last, and at many other trials and Agricultural Fairs held in in Europe and America.

Six sizes for hand power; four sizes for horse power.

Our New Horse Mower is conceded to be the LIGHTEST and BEST Horse Lawn Mower ever made.

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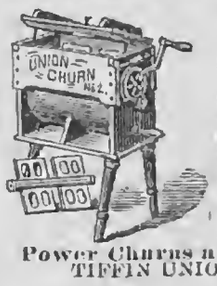

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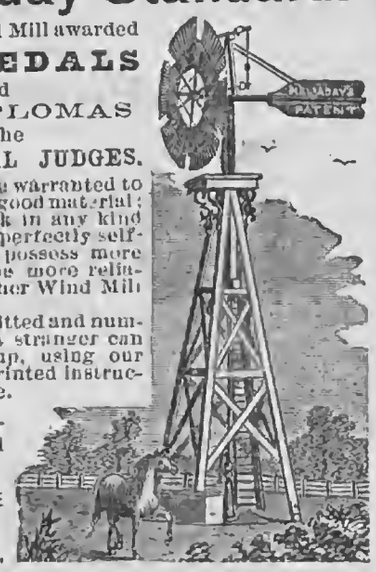

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Each piece is fitted and numbered so that a stranger can put the Mill up, using our drawings and printed instructions for a guide.

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HORSE POWER
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This Power produces much more power than other railway powers, with *much less elevation.*
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'VIBRATOR'
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MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
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THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Raddles, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

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MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

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STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

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Hickory; 6 ft. lengths; car loads or smaller quantities. Address J. C. PARSONS,
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EXCELSIOR

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Arboricultural.

RUSSIAN FORESTS.

Of the 8,351,004 square miles composing the Russian Empire, it is estimated by the best authorities that fully forty per cent. is covered with forests. These are very unequally distributed throughout the land, for while it is held that from 90 to 95 per cent. of the northern regions of the country is clothed with timber, not much over two per cent. of the southern portion is wooded. The vast steppes, or elevated plains, which form the greater part of the latter territory are, as a rule, nearly destitute of trees, while some of them are in great part mere barren tracts of sandy desert. Nor is all the north well furnished with timber, for the broad toondras, which, towards the Arctic Ocean, are the counterparts of the steppes of the more southerly regions, are, like some of these, bleak, treeless wastes. In the vicinity of towns, also, and along the course of navigable rivers, timber is fast becoming scarce owing to the reckless and improvident manner in which it has of late years been cut down to supply the demands of local manufacture as well as those of distant sections; for the timber trade of Russia is the most important branch of her internal commerce, and by means of vast rafts floated on the bosoms of her numerous rivers, the superabundance of one region is made to supply the insufficiency of another.

But despite the existence, here and there, of these bare oases, Russia can still boast of possessing within her broad boundaries, embracing one-sixth of the territorial globe and one twenty-sixth of its entire surface, some of the most extensive forests of the world. So vast are these in the Government of Novogorod and Twer, between St. Petersburg and Moscow, that it has been said that a squirrel of a roving turn of mind, could travel across the 390 miles between the two cities over the earth without ever touching it. The forest of Wolonski, at the sources of the Volga, is the most extensive in Europe; in the province of Perm, containing on both sides of the Ural Mountains, 18,000,000 deciatines, 17,000,000 deciatines are covered with pine forests; and of 1,085,671,000 acres in European Russia, 421,200,000 acres are wooded. In this mighty area are included the Black Forest, which covers a surface of about 4,000 versts or 2,653 square miles; the noble forests of Archangel, Wiatki, Olonetz, Minsk, Wilna, Jitomar and the magnificent lime forest of Kostroma. The Russian lime trees frequently display tops but slightly developed, and possess only insignificant branches; in this differing widely in appearance from the close ramifications which characterize trees of the same species in other parts of the world. The Oaks, too, are there adorned with fewer branches and thinner foliage than elsewhere, probably in consequence of the scarcity of atmospheric humidity. Indeed the Russian forests are often etiolated by droughts which, while injurious to trees of all kinds, are especially destructive to the Ash, Hazel and Elm.

In the Crimea, also, grand old woodlands abound, stretching over the two slopes of the central range ridging the peninsula. The hights which line the coast about battle-renowned Balaklava, are likewise clad with dense forests spreading thickly between Babougine-Yaila and Schahr-Dagh. The pine forests of Taurida, and the huge beech woods of Laspi are also worthy of mention. In Ukraine, too, where the black earth, mellifluously called stepnoiezernozem, is found, Oaks, Limes and Elms display a wondrous vigor of growth, and are associated with an immense number of magnificent pear trees. The vast frontier between Russia and Poland, in Lithuania, has a world-wide celebrity for its gigantic forest, extending over the entire district of Bialistock. A genuine "forest primeval" is this, in which the last descendants of the fierce urus, reputed to be the wild ancestor of our present races of domesticated cattle, still roam fearlessly in savage freedom with the buffalo and elk. Amid these lonely wilds and gloomy depths, the Ruskis form a distinct population, living a savage life in rude harmony with that of the wild animals around them.

In Asiatic Russia the forests spread still more broadly, and are arrested only by the intense Arctic cold which checks luxuriant vegetation. In the government of Kasan oak forests abound; on the north the coniferæ predominate, and on the south the Lime, Ash and Maple. Huge forests of Fir cover the banks of the Irtysch, the Barnaol and the Alei. The slopes of Atbachi are grandly robed in Pines and Larches, and its valleys clad with Rhododendrons, wild Currants and dwarf Birches. Forests of Black Poplar skirt the hills between Ouspenka and Thorne, and in many regions between the Alei and Irtysch there are vast tracts of jungle and forest in which the foot of man has never trod; while the mountain chains of Tazkel and Sayansk are roofed with sombre masses of umbrageous Birches.

In Russia each kind of forest has a special name descriptive of its nature. The fir forest is called picktovnikk, the birch, bereznikk while forests of Oak, Lime, Maple, Ash, Larch, and numerous other trees, as well as those on marshy ground, in hollows, on sandy plains, or of specially lofty growth, have each a descriptive name equally brief and sonorous.

But even the mighty forests of Holy Russia are rapidly disappearing beneath the advancing tread of civilization and its attendant—industry; and the axe of the lately liberated Muscovite serf is busily doing the work of destruction. Within the past twenty years rich meadows and outspreading pastures furnish abundant feed to countless herds where formerly the cavernous gloom of intertwining boughs and the rank luxuriance of tangled undergrowth afforded a refuge only to wild beasts, while impenetrable

A RUSSIAN FOREST.

to man. Broad fields, smiling with abundant grain crops, now occupy the sites of dense jungles, while on lands cleared but not cultivated, small thickets of Birch are rapidly springing up and these are soon followed by an array of Pines—a phenomenon of alternation in forest, growth not unknown on this side of the Atlantic.

From these forests the Russian peasant sup-

plies nearly all his wants except those of the inner and the outer man. He builds his cottage with the timber; heats his rooms with it; makes his household utensils and agricultural implements of the same material, while his shoes and mats for bed-clothes and floor covering are made from the inner bark of the lime tree, and many other trees serve for him a multitude of different purposes.

It must be ages, however, before the increase of population throughout the country will make any serious inroads on the vast area of forest lands, thousands of miles of which have never been seen by human eye. Despite the fact that Russia numbers a population of about 85,685,000, the ratio of inhabitants to the square mile is only 50 in European and one in Asiatic Russia, while in recent years the average increase has been at the rate of 1⅛ per cent. per annum. Yet it may be that the destruction the necessities of so vast a multitude would not effect for centuries, the improvident wastefulness of a part of it may accomplish in as many decades.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

If the buyers of wool were not so arbitrary and unreasonable in the rule to shrink one-third for unwashed wool, sheep would not be subjected to the fright and injury caused by washing. As the custom now is, all unwashed wools are shrunk one-third in the weight. Buyers in this section of the country—and they have the same rule in New York—pay as much per pound for the unwashed as for the washed wool, but in the weight they reduce the former one-third. This is without any reference to the amount of dirt or the kind of wool. So long as this rule is enforced, farmers will wash their sheep, but if the wool should be graded according to its actual condition of more or less of dirt, and the price be made accordingly, but few farmers would wash their sheep, as it is a dirty job and risky, too, for the health of the washers; for they are apt to catch cold from the exposure. Sheep often get smothered when huddled together and crowded in the pen by the water. We have known two dead ones to be taken out at a time, trampled upon and smothered. It used to make but little difference how much or little wool was washed. If it had only been dipped in the water, it went all the same. This was when wool was high, but now when wool is low, buyers are more particular and disposed to push rules to the utmost and make old customs into arbitrary requirements. As long as this is so, we must wash the sheep, however disagreeable it may be or we shall lose too much.

The washing should be done with care and with as little pulling and hauling of the sheep as possible. A careful man should hand the sheep to the washer who, being stationed in the water, can float the animal easily, and by holding the head against his breast, can use both hands to squeeze the wool and loosen the dirt. A current of water is the best, as it helps the washer to get the dirt out. The best place we ever knew of was behind a water-wheel where the swift currents sent from the wheel did the work effectually. It is hurtful to sheep to hold them under a column of falling water, as it chills them. The least danger to the sheep is to float them in a running stream, as the water will not be so cold and the animal cannot struggle to harm itself. If sheep are driven to the stream during the heat of the day, they should be allowed to cool off before being taken into the water. Tub washing is good, if a stream, can be kept running in and out all of the time, otherwise the water will become so foul that the wool will not be cleansed. Sheep will always struggle more in a tub than in a stream, and they always handle best when their feet cannot touch anything.

To catch a sheep by the wool and throw it into the water is an outrage, as the skin is made sore by pulling the roots of the wool, and then the animal is nearly suffocated by the unnatural filling of the nostrils and windpipe with water. A sheep should be caught by the hind legs or around the neck, and then no pain is caused or harm done. The water ought to be squeezed out of the wool at the edge of the washing place to reduce weight, so that the sheep can walk home easier and dry out sooner. After washing, sheep should run from ten days to two weeks to give time to get thoroughly dry and for the oil to start out, which improves the handling and condition of the fleece.

Eight cents per head was the price we paid last year for shearing. This year we expect it to be at least two cents less. In old times, four cents was the price, but sheep and shearers were more plentiful then and there was more competition.

In some ground it is better to roll the grain after it is up, especially if the dry time comes on. It is always best if the ground happens to be wet or very moist when the grain is sown. Rolling after the grain is up, will crack the crust and mellow the surface and will not injure the crop. Esquire DAVIDSON says he has greatly benefited his oats by rolling them, although they might be quite large, several inches high. He thinks they will stool out more and the crop will be heavier. Regular rules will not always do for farmers; they cannot always do just as their fathers did, or if they do, they will make mistakes, as for instance, on the rolling question. A man may say "My father always rolled his oat-ground, and he had good oats." Yet he might have had better oats sometimes if he had not rolled them. This is our case this year. We have made a blunder in rolling at the time of sowing; better have waited until the ground was drier, or not have rolled at all. We must be governed more by circumstances than by rules.

The tobacco smoke has saved all of the chickens sick with gapes so far—the one almost dead when the remedy was first applied seems cured. They have been smoked six times. A few live coals are put in an old iron pot, and a pinch of tobacco placed on them. As soon as the smoke begins to rise, the chickens which have previously been placed in a basket, are put over the vessel and covered with a cloth. They, or any one thus affected, are made to inhale the smoke until they tumble over partially insensible, when they are removed from the basket. They soon revive and the spasms have lessened.

VAN'S VIEWS.

GETTING OFF THE TRACK.

WERE you ever on a train to which some accident happened so that it lost the right of way? And do you call to mind how, before the accident, you were humming along, the freight trains, the way trains and specials standing respectfully to one side while you went bounding by? And how, after your break-down, you had first to yield the track to an emigrant train, then to a dirty cattle train, next to a smutty coal or ore train, and afterwards to a heavy lumber or wheat train. How the countenances of the passengers change! How the very engine seems to feel ashamed, and neither the bell nor the whistle sounds as it did before! Well, some of us, this spring, got in the same fix as that train. We had most of our grain sowed and some of it ditched and ready for business, but most of it was left just as it was when we got through sowing and it began to rain; and it rained one day, and then it rained the next day, and then began the next morning and rained all day; then it kept raining steadily for two or three days right along; then it stopped, but by that time our grain had all the water it could ask for, and we might as well have had a little less.

We were out in the rain, and all through the intermittent spells with our spades and hoes, but it was tedious and unsatisfactory work. Many fields were caught unsown, and some are just, May 28th, getting in the last of their oats. This doesn't look well, but I don't know how we can better ourselves, for we got "out" and lost the "right of way," and here we are.

One thing that would help us is a large double-mold-board plow to clean out our dead furrows with, so as to let off the water "when it showers;" for "it never rains but it pours," and we need a chance for the water to run off rapidly. With a few under-drains, and the dead furrows well opened, our heavy clays will yield us a fair return for our labor, and not be the curse which many consider them. If the plow spoken of by Prof. I. P. ROBERTS in the RURAL for May 18th, is made with steel mold-boards, and is for sale in this country, I think it might help us.

Speaking of under-draining reminds me that a neighbor on a clay loam with a heavy clay subsoil, finds that drains laid through the low places, and above 100 feet apart, dry his land well. The plan generally followed around here, is to take a three and a four-inch strip of inch-thick lumber and nail them in a ∧ shape. This we use for all laterals less than one thousand feet; main ditches must be larger. For each 16-feet section, lay about four bits of board crosswise on the bottom of the ditch; on those place your trough, put a bit of sod over the joint, and pitch in your dirt again. If able, I am going to lay some of these drains this season, and hope, by using my common and subsoil plows, to be able to reduce the cost of doing such work to a figure at which a man may feel able to go on with the work until the ponds are removed from his meadows and wheat fields.

We can all raise good crops in good years. In 1875 there were such yields as 80 bushels of oats, 42 of wheat, and 69 of barley per acre, and we have had 65 bushels of shelled corn per acre. But on the off year we raise twenty or thirty bushels of oats and ten or twenty of wheat. Now, we are told that under-draining will help us on these poor years, and bring up our average to where the good years would leave us; if this be so, under-draining would be a good investment.

Talking with a neighbor, the other day, about this, and looking at two pieces of land lying side by side, one drained and the other not, he said: "If draining will do the same for all our land that it does on this piece, and I see no reason why it should not, what fools we are to work away on undrained land!" What we lack is faith; we have not faith in our business; we are afraid to run in debt to try what we consider an experiment. Another thing is the high rate of interest which we are compelled to pay. Ten per cent. is the going rate in this region. If money could be had at six or seven per cent. we might have courage to borrow enough to enable us to go to work.

There have been many circulars of a kind of plow called a mole-plow, sent into this neighborhood and one of my neighbors has one, but he has not used it for some time, so I suppose it is not a success though I have heard good reports from it in other places; but candor compels me to say these were a long distance from here.

Brown Co., Wis.

Scientific and Useful.

EXPERIMENTS WITH COMMERCIAL FERTILIZERS.

PROFESSOR O. C. CALDWELL.

IN an article on agricultural experimentation, in a recent number of the Tribune, to some parts of which you have taken exception, in a kindly way, in the RURAL of June 8th, the farmer was supposed to have in view two main objects in experimenting with chemical fertilizers: 1. To ascertain for his own benefit whether he can use any of them with profit on his own farm; 2. To aid his brother farmers, making similar inquiries, by giving to them the results of his experience. The experiments are not made solely, or even chiefly, for the purpose of ascertaining which constituent of the fertilizers his soil stands most in need of, but of learning whether as a financial operation, it will pay to buy one or another of these substances, at the ordinary market prices, to apply to his land; whether in the usual run of seasons he will get his money back and a little more for profit.

It is my assertion that such experiments should be repeated in order that a farmer may safely proceed, on the basis of their results, to invest a portion of his limited means in commercial fertilizers, or may consider his results a real addition to the common stock of knowledge in regard to the relations between these fertilizers and our soils and crops, to which you take more particular exception; and you ask in reference to one of my illustrations of this point, drawn from the chemical laboratory, "What parallelism is there between determining phosphoric acid in a fertilizer in the laboratory and ascertaining the effect of superphosphate on wheat or any other crop in the field?" "Just this," I answer, "that each operation is performed for the purpose of getting a certain definite piece of information, that may be used as the basis for a financial operation; the information must therefore be reliable or it is worse than useless; for the chemical part of the comparison I might just as well have taken the determination of iron, or of gold or silver in an ore. If a hasty and ill-founded conclusion in the laboratory may work great mischief, which no one will deny, a similiar conclusion in the field may be attended with similar results.

It appears to you that in the case of several plots side by side treated with different manures, all will be affected alike by the weather, no matter whether it be favorable, unfavorable or indifferent. It appears to me otherwise, and that favorable or unfavorable seasons may or may not affect the several plots alike. The chemical fertilizers ordinarily used contain as their only valuable ingredients, phosphoric acid, nitrogen and potash, one or two or all of them, in forms that differ much in respect to solubility in water; every one of these ingredients must be brought into solution before it can enter the plant; and by the greater or less diffusion of the solution in the soil, so that the rootlets can find this added food wherever they go, the effect of the fertilizer can be increased to a greater or less extent. If the season is unpropitious on account of a deficiency of rain, that ingredient of the several fertilizers experimented with which is most soluble, and which with this small amount of rain may be most freely distributed in the soil, may produce the largest effect on the crop, and, as compared with the unmanured crop, may appear to be the best investment.

Another season's trial, with a fair amount of rain distributing all the fertilizers more evenly, may tell another story; and still a third, with a superabundance of rain, may give nearly as good a crop on the unmanured plot as on any of the others. If the season be an average one, not only as to the amount but also as to the distribution of the rain through the growing season, and all the plots should be treated alike except as to manure, planted together on the same day, cultivated on the same days, and in the same manner, and any one plot should yield a crop largely exceeding the others, the fertilizer which that plot received might well be added on a larger scale to that field the next year; but I should still watch it as a continuation of my experiment. Such a clear and decisive answer does not, however, come to every experimenter who puts this important question to his soils the first time, as I think, many a witness will testify who has tried it.

If the position I have taken, in regard to the necessity of the repetition of experiments, is an untenable one, my error can be exposed by showing that when an experiment is repeated, it always gives the same answer every time; evidently the first result is just as good as a dozen, then. But the records of repeated experiments do not exhibit such perfect agreement; on the contrary, they show in many cases a second year's results quite different from the first, and there may be, sometimes, no satisfactory way of accounting for the difference. But whether we can explain it or not, which result shall be taken for our guide in the selection of manures for the second year? One of the results must surely mislead us; if the second one was right, then we should have made a serious mistake if we had tried the experiment but one year and followed the lead indicated by that. The farmer who bases extensive operations in commercial fertilizers on the results of a single year's experiments on a small scale, cannot, it appears to me, be quite sure he is right, and he may run risks he cannot well afford.

"Nothing ventured, nothing gained," is an excellent maxim in any business; but the safer the venture the surer the gain. No one can read over the widely different reports, coming from different parties, of their experience with phosphates and other commercial fertilizers, or reports of repeated experiments, without feeling that any use of such manures is, to a greater or less extent, a venture which, like the cargo sent out by a merchant to a distant port, may possibly not yield a profitable return; and the wise farmer should, like the wise merchant, while still ready to run the risk as a legitimate part of his business, spare no trouble that he can take to inform himself as to the best consignment to be made, and the best manner of making it.

I would not, by any means, discourage experiments with chemical fertilizers, for I consider such work as a very important means of agricultural progress, especially in the older States; but I should have the farmer value, at their just rate, all the agencies which take part in making up his crops, and assure himself that he does not attribute a given effect to one agency, that belongs to another, and that he gives the manure credit for no more than its due. No one will rejoice more than I if the experience of "the hundreds of farmers experimenting with manures this season in the hopes of obtaining practical results at its close," shall show that, in general, a single year's experiments are sufficient for the accomplishment of the two objects for which, as I take it, this experimentation is carried on. But in order that this may be shown, we must have, besides a careful record of this year's results, a no less careful record of the results of the application next year of the fertilizers whose use is indicated as profitable. The question at issue can be settled only in such a way as this. We may theorize about it, you, Mr. Editor, on one side, and I on the other, but that will not be enough. I hope that the farmers themselves will step in and help us as well as themselves, and send in from all sides to your columns and those of other agricultural papers, the facts and figures for two or three consecutive years, that we need to test our theories.

Cornell University.

Farm Economy.

DELAYS ARE DANGEROUS.

THERE is no class of people to whom this old adage applies with more propriety than to farmers. There is a whole page of sayings of similar import. "A stitch in time saves nine," "Once done never forgotten." "Never put off until to-morrow what can be done to-day" etc, all of which are intended to impress the idea of punctuality.

If one arises in the morning, confronted by the fact that there are half a dozen things awaiting his attention, that must be done before the work laid out for the day can be commenced, it is at once an annoyance, and a delay results probably in carrying over to the next day a portion of the task assigned for this and making everything go the harder for the friction.

The best time to do anything is at the first convenient opportunity that offers after the doing becomes a necessity. We would not have a man leave a hay field, and go a mile or two for tools and appliances to replace a broken tooth in a rake—but we would have him replace it before the rake was again taken into the field. A strap or a string may serve to repair a broken harness for the time, but the farmer should no more think of continuing its use in an unsafe condition than the sailor should think of putting to sea for a new voyage with the jury masts he had rigged with which to make port after his spars had been carried away by a gale.

Neither should he neglect to keep close attention to everything about the premises. That gate post is an inch from the perpendicular to-day—not sufficient to attract general

notice. It will requre but a little labor now to put it in place. Don't wait till it leans six inches and the gate touches the ground, requiring much effort to swing it. A loose nut may be discovered by an examination, which, if left to itself, will result in a break-down at a very inconvenient time and place. The horse's shoe may be tightened now, if the necessity be observed, with little trouble; delay may cause serious injury.

To do things promptly and at the earliest moment, will make just the difference of allowing you to drive your work ahead in accordance with your proposed plans—or to be driven to do your work at a disadvantage. If you can choose your time and plow a field when it is just in the right condition, you gain—if you are compelled to plow when either too wet or too dry, because other work is driving and you have no choice, you will lose—and so with every department of farm work. If you will keep ahead, well—if not your work will keep ahead of you and when the season is over, you will have labored more and accomplished less than your neighbor who has learned that delays are dangerous, and does everything in season.

DEPTH FOR COVERING SEEDS.

W. J. FOWLER.

THREE times the diameter of the seed to be planted is the rule among market gardeners. And this rule in my experience holds good for most farm crops with the exception that most farm fields are not got in so fine tilth as market gardens, and therefore seeds need to be planted somewhat deeper than they otherwise should. In other words, we have to cover twice or three times the depth we ought, because the soil is stony or cloddy. Through this extra amount of lumpy earth the tender shoot has to push its way to light and air. This is the first move the young plant makes and the check from too much or unsuitable covering retards its vigor through all after growth. With fine, moist and rich earth as a covering, plants get a vigorous start from the first, and are soon beyond danger from the ailments which pertain to stunted growth. Seeds planted at the right depth, which is shallow, start their first roots in the proper place and do not need to put forth a second series. No matter how shallow seed is planted, provided the soil is in right condition, the plant roots will be deep enough. I have often known wheat, barley and oats sown broad-cast on newly plowed ground and never covered except as rains washed the grain into the loose soil. Such pieces never failed to make a vigorous early growth, and if the soil was rich enough, a good crop. This fact has often been noted by farmers, and yet nine out of ten think it a point gained if they put the seed, and especially winter grain, deep in the ground. They have some pet theory that deep drilling or deep covering of wheat will enable it to resist frost better, and though a thousand facts contravene this theory, the facts are forgotten and the notion is retained. Frost penetrates from six inches to three feet deep here in Western New York, so that no depth of covering will save wheat from winter-killing. In point of fact, light frosts reaching only two or three inches in depth are much more damaging to wheat than the steady cold weather of winter, when the ground is frozen deeply all the time.

For spring grain, and especially for barley, shallow covering is important. There is no frost to injure it, but the season for spring grain is so short that a little more or less in depth of sowing makes several days' difference in time of ripening. In nearly half the barley and oats grown we find part that is green from unripeness, giving the grain a stained and rusty appearance. These stained grains are the product of seed that has been delayed in ripening, and in almost every case by being covered too deeply. With oats this does not make so much difference; but malsters complain of barley that is uneven in ripening, and in seasons when barley is cheap, will not buy it. Thousands of dollars are yearly lost by farmers from this cause, rendering barley, in such seasons as the past, unfit for anything but feeding purposes. Of all crops barley should be sown at a uniform depth. For this purpose a drill set as shallow as possible, is the best implement. If the soil is lumpy, do not set the drill deeper, but drag across the drill marks, finishing with the Thomas Smoothing harrow and the roller, to mellow the surface and break down lumps.

Some drills have what is called a zigzag attachment throwing every other tooth forward of the one beside it. It is very handy in lumpy, stony or soddy ground, but it is a very poor thing for the crop. I never liked this way of putting in grain, and the more I see of it and think about it the more dissatisfied I become with it. On no account would I have grain of any kind put in by it. On cloddy ground it seems very nice to see the lumps slipping by the drill tubes instead of being dragged before them, but it is better to have a man follow the drill all day watching the tubes than to set them so that every alternate tube throws a ridge of these hard clods over the next row of plants. What if the drill "won't half cover" the seed without being set on this fashion? What you call "not half covering the seed" is, in all probability about the depth it should be put in. Follow the drill with the drag and roller, and the crop will be as good as the soil is capable of producing. What is quite as important, the seed will be covered a nearly uniform depth, and the crop will all be ripe together. There is altogether more fear than need be that farm seeds will not be covered deeply enough, and this zigzag attachment to drills is only a device to enable shiftless farmers who do not get their soil in proper condition before seeding, to leave the field after drilling looking nearly as well as if it had been properly prepared. What we want is not only to have the field appear in good condition but to produce a good crop of evenly ripened grain.

Monroe Co., N. Y.

Horticultural.

GARDEN TALKS AND WALKS.

THE BEECHES, MASS., June 8, 1878.

FROM the 20th of May till the 1st of June was the season of Mr. SARGENT'S Azalea Show at Brookline. I went to see them on the 29th, and a splendid show they made. They are the greenhouse kinds, grown in pots, and wintered in a cold-pit, and otherwise retarded as late as practicable, to bring them into bloom after other folks' are mostly past, and have as companions hardy Rhododendrons, Azaleas and other spring flowers. Conspicuous among them were decora, a red-blooming kind, and a massive specimen some 4 feet high above the pot and 6½ feet through at the base; Iveriana, Bride of Abydos, Beauty of Europe, Beauty of America, King of Holland, Daphne, Marquis of Lorne, Exquisite, Crispiflora, Variegata, Criterion, and Flower-of the-Day.

But outside of the exhibition tent is an enjoyable treat. The garden and pleasure grounds compriso some 130 acres, and are wooded, undulated, and planted in tasteful fashion. Where the natural rolls interfered with distant views, they have been toned down, divided or removed, and graded off so naturally as to conceal artificial work, and thus a finished and pleasing effect, is secured; and, turn where you will, a bird's-eye view of some distant locality issure to present itself. The garden is sheltered by belts of heavy timber, bnt the interior is planted in groups or with isolated specimens. Some of our Colorado and Western Conifers are handsome specimens, and beds and banks are formed of Japanese Retinosporas and other hardy evergreens. English Yews and LAWSON'S Cypress, and some others, though hardy along the Hudson, are tender here; but Mr. SARGENT winters them in pits and cellars, and transfers them to their summer quarters about the end of April; and really they look as fresh as if growing permanently where they stand. Mr. S., for tree planting, advocates big holes, say 10 feet wide by 3 feet deep, filled up with the best of the old soil mixed with old muck, peat, or other fresh earth, and afterwards annually cultivated in the summer time till the trees are several years old. For little trees such mighty digging may be laughable to some people, but I side with Mr. S. in this case; the trees speak the result. Among common trees and shrubs none was prettier or more floriferous than Cornus florida of our woods; and in the shrubbery belts, the crimson-leaved Japanese Maples were as telling as Copper-beeches are among trees.

But one of the most interesting features of this place was the Wild Garden, that is, a wooded dell all growing over with vines, shrubs, ferns, and the like, made the most enjoyable part of the garden in spring. In this place are naturalized hosts of Crocuses, Daffodils, Jonquils, Squills, Tulips, Irises, English Primroses, Phloxes, and many other spring flowers that come up and blossom in perfection in spring, while their location is open and sunny by leafless trees. During the summer-time they are sheltered, shaded and undisturbed, just as they prefer to be. It is not the winter's severity so much as the summer's sun that, in this country, proves fatal to so many European woodland plants. For instance, English Primroses growing in a shady rockery here, live over through the winter and blossom splendidly in spring; but in the open garden-border they invariably die.

Another noteworthy feature of this garden is the clumps of beautiful Rhododendrons that surround the lake and the masses of hardy Azaleas in a sheltered nook in the garden. These Azaleas are planted in a large bed and interplanted with Lilies of all kinds, and all are allowed to grow up unmolested together. The Lilies love this treatment and year after year strengthen and multiply; besides, they prolong the blooming period of the bed from May till September.

I have also been to see the garden of FRANCIS PARKMAN, Esq., at Jamaica Plains, and an interesting spot it is. Mr. P. is an enthusiastic amateur gardener, and has done considerable work in hybridization and propagation, particularly as regards hardy herbaceous plants and shrubs. He showed me some lily plants—the second generation of hybrids, using as the female parent Lilium longiflorum var Takesima, a beautiful white flowering Japanese Lily, and as male, Lilium lancifolium. And still no deviation whatever from the female parent is traceable in the offspring, beyond some abortive stamens and a less tendency to produce seeds, and some of the anthers changing to a trifle darker color. A third generation is expected to bloom this year. Mr. P. also showed me a rose-bush, a cross between our Prairie Rose and a Moss-rose. It is now four years old from seed, has the habit of the Prairie Rose, and is mossy. It is full of flower-buds just now, but none has yet opened; it did not bloom before. Clematis Miss Bateman is one of the finest and showiest of garden varieties with pale blue flowers, and blooms towards the end of May. Mr. P. sowed seeds of Miss Bateman and raised a numerous progeny. They are now in blossom, and present all colors from the deepest violet purple to almost white, but not one is precisely like the parent in color, nor so good in form or substance.

Here I also saw Forsythia Fortunei trained as a standard, just as if it were a Weeping Willow or Bird Cherry, or one of the old standard rose bushes of our boyhood. It is not "worked" on another stock, but to begin with, a stout, clean wythe is staked erect, pinched at the required hight, say five feet, and top-shoots allowed to form and depend, but side-shoots rubbed off as they apear. After two or three years the stems become self-supporting, and stakes are dispensed with. In this state they bloom, first-rate too, as the the old plant can amply testify.

A little breeze has sprung up in American and English horticultural circles, incited by a misinterpreted statement of Mr. THOMAS MEEHAN regarding the fruiting of the Wistaria. Mr. P. showed me an old Wistaria hugging the stem and inter-twining among the branches of an old Hemlock Spruce, and which, last year, bore an immense quantity of fruits, as many of the pods still hanging can show. But I note that Wistarias around Boston have bloomed rather sparsely this spring. In a nook in a shady border I saw Primula Japonica and some Aurienlas in bloom. Mr. P. tells me, however, that though they stood out there last winter and look pretty well, they are not reliably hardy.

A friend, writing to me from Dallas, Texas, says: "It is a very rare occurrence to get land within two miles of Dallas for less than 100 dollars an acre; but sandy loam, some ten or twelve miles from Dallas and on the Dallas and Wichita R. R., can be bought for about 35 dollars an acre. The same kind of land some four and a half, or five miles from Weatherford (which is not near the railroad,) for five or six dollars an acre. Neither Pears nor Apples do well around here, though Pears certainly do the best of the two. Wild-Goose Plums are great favorites, and Grapes do pretty well. Most kinds of Peaches do first-rate, and the following kinds are most planted: Early Beatrice, Amsden, Alexander, Foster, Hale's Early, Crawford's Early, Old Mixon, Chinese Cling, Stump-the-world, Crawford's Late, Heath Cling, and Ward's Late."

S. Q. LENT, at p. 358, just speaks my mind in advocating the ornamental garden as a farm requisite, and a family-refining and cementing influence. And, in reference to this question, permit me to repeat here what I once wrote in a frontier paper; and I assure you I spoke from experience;—No home of any pretentions should lack a few shrubs or flowers; their very presence is the sign-board of civilization and their absence the same of backwardness and aboriginality. Some farmers prefer hogs, dogs, chickens and cats, romping around their doors, breeding stench and insects, to the healthful fragrance and cleanliness of flowers and shrubs. The industrious, intelligent and educated farmer has a place for everything, a flower garden, a vegetable plot, an orchard, good crops and good stock; whereas, the indifferent has none of the first, and but sorry proportions of any of the rest. The exterior of a home bespeaks the interior. Calves, hogs, dogs, big weeds and scrub-wood in the yard bid far from inviting in the house, whereas a few shade trees, a few shrubs and common flowers with neatness and cleanliness outside the house, bespeak health and concord, plenty and prosperity, education and intelligence within it.

RENOCLAF.

HORTICULTURAL PROCEEDINGS IN MICH. AGRICULTURAL COLLEGE.

WE have received a copy of the "Report of the Professor of Botany and Horticulture of Michigan State Agricultural College." Our readers have already been favored with parts of this plain, practical document. We select a few others which we do not remember to have seen in print.

TREE EXPERIMENTS.

Three years ago last spring a few Silver-leaved Maples were taken from the river bottoms. They were small, and about three to six inches in hight. In three years they have become thirteen feet high and two and a half inches in diameter. Some of the limbs, last year and this, have grown, in one year, four to five feet. From the seed these have been twice transplanted. They have grown one year on the flats and three years in the forestry. A few Catalpas, four years grown, are nearly as tall and nearly as large as the Silver-leaved Maples, although they have been moved once, and have been killed back to some extent during two winters. Experiments are being made with European Larch, White Pine, Blue Ash, American Elm, Rock Elm, Red Elm, White Oak, Norway Spruce, and small quantities of numerous other sorts. They are still carrying on interesting experiments in the different modes of cultivating apple trees by mulch, manure, ashes, the plow, etc. They have tried these long enough in their orchard to become convinced that these trees left in grass with no manure, will not be profitable.

Last April Prof. BEAL began, on two trees, to take off a limb on the 25th of each month of the year. The intention was to watch these to see which would do the best after a test of several years. Several unsuccessful attempts were made to put in cions (and have them live) in which the buds were split. Cions of different varieties were carefully split through the middle of a bud, and a half cion of one variety was tied to half a cion of the other, and the whole used in a cleft graft. He intends to repeat this another year.

ONIONS.

One of the best points, it seems to him, to make improvements in our onions, is to improve their qualities for late keeping in spring. This can be done, to some extent, by continually selecting in spring the best keepers only for seed. He has sent a small quantity of the seed to several men in the State, who will go on with the experiment in the same way as they are doing at the college.

Our own experiments with tomatoes, together with the college experiments with the same varieties, are given at length.

CORN.

Prof. B. crossed some White Dent from one locality with pollen from White Dent obtained in a remote locality. This may add vigor to the race, though it will probably not otherwise change it. The plan was conceived by him about a year ago, and several months afterwards experiments of the same kind were reported on many species of plants by Mr. CHARLES DARWIN, of England. The favorable results of many experiments there given are quite remarkable. In a lecture at a Farmers' Institute last winter he spoke of a new way of raising seed corn; *i. e.*, in a patch by itself, where good cultivation should be given and all the poor stalks should either be removed or have their tops cut off before shedding any pollen. This he did the past year, and was gratified to know that at least one other man thinks the experiment sensible. His name is Dr. E. L. STURTEVANT of Massachusetts, the editor of the Scientific Farmer. He now advertises to sell seed corn raised by this improved method. In his experiments, though half the tops of the corn were cut off, there seemed to be enough pollen left to insure full ears on the stalks.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

SCIENCE AND PRACTICE.

PROFESSOR W. J. BEAL.

IN these times we hear a great deal said about "practical" men, especially by those who lay no claim to a good education. In the minds of certain persons, a thing is not practical, if they cannot understand it or put it in practice, or if they cannot see just how it will directly and immediately drop dollars into their pockets. A person may start out with a deficient education, work hard, and learn every thing by the severest effort, yet he may not be a very practical man after all. He will likely have some vague theories in regard to many things which he does not understand. These theories will more or less influence his modes of action. He will have many incorrect notions of the development and habits of insects and other animals. He will not understand some of the merest rudiments of plant physiology. On the other hand, there are some persons who possess much knowledge learned from books. If these are not careful, and have not tested their knowledge and have not learned much by experience, they may commit as great errors as the man ignorant of books.

I give briefly some examples which have come under my observation. The number might be much extended.

In case of plants, many errors are made and much bad advice given by those who are confused on the common names of plants. Any one can pick up or coin a common name, but un-

fortunately the same name is not applied to the same thing in all sections of our country. One tree is called Whitewood or Tulip-tree in Michigan and Poplar in the South, while there is another tree called Poplar in Michigan. Poa pratensis is often called Juno-grass in the North, while the same grass is called Blue-grass in Kentucky. Phleum pratense is called Herd's-grass in New York, while Agrostis vulgaris is called Herd's-grass in some parts of Pennsylvania. Some person inquires through the "Husbandman" about the hardiness of Buckthorn in the Northern States. He undoubtedly meant Rhamnus catharticus. A farmer in Michigan replies: "Oh yes, it is perfectly hardy and stands well along our roads and open places." The practical farmer probably meant Hawthorn, some species of Crataegus.

I knew a man who included himself among the practical men. He made an effort—a vain one, of course—to cause grafts of Chestnut to set on stumps or stocks of Horse-chestnut. A very slight knowledge of botany would have saved him all that trouble. A writer in a recent number of one of our first agricultural papers, complains that the roots of clover stop his tile drains. The drains he says, are 2½ feet deep, that the fibrous roots entered the drains, spread out into a fine, fibrous mass, and choked the drains, so that he had to take them up entirely, clean them out, and relay them. A correspondent replies and thinks number one must be mistaken, for clover roots run down not more than 12 or 18 inches, certainly not 30. And then he goes on to say that he has just dug some clover roots in deep mellow soil and finds none longer than 15 inches. The writer of this article has several times seen them six feet—72 inches—or over, straight down into compact red clay with a little sand here and there in streaks near the surface. He saw a student digging for the end of a clover root one day. He was then down six feet and had not found the end. Some writer in the United States Agricultural Report, said Buffalo-grass sent roots down but a few inches, while an experienced botanist found them down seven feet. A "practical" man was trying a remedy for a pear tree which had been struck with the blight. He bored into the tree to insert the remedy. He was careful not to bore into the heart of the tree, implying that he believed that part of the tree was very sensitive to injury. The fact is, that the heart of trees possesses very little, if any life, while the *liveliest* part of the trunk is the outside. A prominent nurseryman and author on Horticulture was applied to for some pollen of apple blossoms to be sent by mail for use in making a cross. He did not send any because he did not know how to collect it. The bees got the start of him. He had only to pluck the plump anthers from young flowers or buds just about to open, and send them in an envelope.

A "practical" man, so self-styled, recommended a liberal use of slaked lime in a hennery among the droppings of fowls. The objections are two-fold: the lime will liberate the ammonia which is a valuable fertilizer, and the ammonia is injurious to fowls.

Another man who boasted of his practical tact, did not need any surveying for him to lay a tile in a certain spot. He could lay it by the eye. The tile was laid and in one place did not work. It was afterwards surveyed when it was found that the tile ran in a way to make it necessary for water to run up hill over a foot above its level. The tile was taken up, relaid in a scientific manner and has since worked well. At a farmer's Institute, last winter, Dr. KEDZIE had just finished his lecture on some valuable chemical analyses of wheat and flour, showing their relative value. The man who succeeded him was to talk about exporting cattle to Europe. He began by saying that we would leave the theoretical and have something practical. He went on with his lecture, which, to say the least, contained some visionary ideas. We know two prominent men called scientific, who stated in papers that the mole could not eat vegetable matter. An account of some experiments, given in the RURAL not long ago, proved that at least one mole could and did eat cherries, soft corn, and potatoes. Additional proof could now be given of another mole—or two perhaps—which has twice "cleaned out" a nice lot of peas planted in a garden.

A beginner tried some experiments in the use of superphosphate on potatoes. He dropped a little in each hill. The plants which were not so treated yielded more than those where superphosphate was employed, probably because the fertilizer was not sufficiently spread or diluted. More than one practical farmer has fooled away his time in putting bands of cotton about his plum trees, or bottles of sweetened water in the limbs, all to attract, repel, hinder, or destroy the curculio. It is very common to hear wholesale approval of birds as friends to the farmer and fruit-grower, not even excepting the cedar-bird, and one of the sap-suckers, and the English sparrow. These, to say the least, must yet be shown to be a greater boon than a curse, if, indeed, it can ever be shown that they do more good than harm. The learned and unlearned may make some queer mistakes. Science with practice gives the best results.

Agricultural College, Lansing, Mich.

ROBERT BAKEWELL AND HIS WORK.

PROFESSOR I. P. ROBERTS.

IN 1726, ROBERT BAKEWELL of Dishley, England, was born. His early life was about equally divided between the farm and the school-room. At manhood he became possessed of several domestic animals, none of which approached in excellency his youthful ideal. Had he lived in our day, he might have gone to libraries and newspapers and have learned much of the successes and failures of his predecessors; but the past had nothing to give him. He was like a mariner seeking a new continent without the aid of the compass. True, he might have studied the most ancient book of the Bible and have learned that JOB, 2000 years before the Christian Era, had a thousand yoke of oxen, but of their quality or characteristics he would have learned nothing. Had he studied Homer, he might have learned in detail, how to fasten golden knobs on the horns of bullocks, but the art of producing a prime beefsteak at lowest cost Homer had not revealed.

Had he read Virgil's description of the cattle of the Romans, it would no doubt have increased his love for beautiful animals in the abstract, but he would have been as ignorant as before as to the methods by which the ungainly and angular animals about him were to be transformed into ones of beauty and value. Had he turned in other directions, the field was equally barren. Neither the Egyptian hieroglyphics nor ox-eyed Juno shed any light on the hard and unsolved problem. One other field is left from which to glean. Surely the artist whose highest aspiration it is to reproduce nature on canvas with the minutest exactness, will give some valuable hints as to the cattle of other lands and other times. But no; he is met at the very threshold with sadest disappointment; for he finds that nearly all the old landscape painters have introduced cattle scenes as accessories, and, with a view to lighten the beauty of the landscape by comparison, have grossly distorted and exaggerated the animals, thereby sacrificing truth for supposed artistic effect. BAKEWELL learned little of his matchless methods of improvement by beholding impossible, unshod, left-handed milkmaids, of twice the altitude of the cow, balancing on their heads two-quart pails while the poor cows' udders appear distended to a capacity that would satisfy the most grasping milkman even during a drought.

Thanks to LANDSEER and HERRING of England and PAGE and others of America, we now have the aristocratic Short-Horn and the fawn-like Jersey portrayed with admirable truth and fairness. Thanks to modern civilization which has wrought such changes that the honorable, the cultured and the wealthy vie with each other in the cultivation of these, save man, the highest types of animated nature.

Without guide or pattern BAKEWELL commenced his life of original work. His ideal must have been nearly perfect, judging by what he accomplished. He selects the best of his own herd and purchases from his neighbors the best of theirs. A portion of the offsprings he slaughters and dissects. The amount and texture of bone are carefully noted. The muscle is minutely scrutinized, not only as to its composition but as to its location; for it was well understood, even in that early day, that loin muscle was three times as valuable in the market as neck muscle. Next, the adipose matter was inspected to see if it was mixed with the lean meat, marbleizing the whole, making it juicy and palatable, or whether it formed layers on the surfaces, leaving the lean meat dry, tough and undesirable. How much information he gained by these tedious and continued experiments we are not informed; but certain it is, he soon learned one thing which appears hard for most of us to learn: that the half of the sum of two numbers is equal to the sum of their halves. To illustrate; supposing five to be the standard of perfection and we mark one parent four on this scale, the other three. Then the offspring—other things being alike—cannot exceed three and one-half. True, it is an improvement on one parent but the loss on the other equals it; there is no gain; we have simply equalized. And if parents are taken from this offspring, both being of a standard of three and one-half, their offspring cannot, of themselves, exceed this three and one-half standard.

There is much misconception as to selection or survival of the fittest. There could be no best or poorest, if the circumstances and surroundings were always the same. The offspring, however numerous, of two animals unaffected by the law of atavism, and always under the same conditions, would always be the same, as certainly as that a given weight will fall through a given space in a given time. BAKEWELL and his immediate successors learned the lesson well that like begets like under like circumstances; that Nature makes no mistakes and never sports but is ever true to the law of cause and effect. He discovered another law which has been formulated and called Prepotency. When this valuable quality had developed in any animal, he seized upon it as the means of *actual* improvement. Not believing it to have been produced without a cause, but only to have eluded his researches. In the illustration already given, if the parent marked four was prepotent, then the offspring might possibly reach a standard of three and three-fourths or even four; here is an actual gain of the average qualities of both parents, but if we follow this reasoning on and put it into practice, we find it a slow road to improvement, for this valuable quality can only be ascertained by results; the most discriminating judge being unable to detect it by outward form. Better food, care, and surroundings he soon found to be his main reliance.

But just as he appears to have learned the sure road to speedy success, he discovers another law, which asserts itself and frustrates his wisest plans—atavism, or ancestral influence, appears in many of the progeny. He finds that ancestors increase in each preceding generation in a geometrical ratio, and that the progeny is often not a type of its immediate parents, but has a portion, at least, of the possibilities of an innumerable ancestry; or possibly it may largely represent some inferior ancestor far down the line. Now, selection comes in play and separates those that have inherited the fewest objectionable qualities of their ancestors. But at first the number is very limited that escape this reversion to the inferior type. Had some of his neighbors improved their cattle to his standard, he might have gone on selecting and improving surroundings till he had finally eliminated the tendency to atavism. But this he could not do since all others were inferior to his own. Then how is he to reach his object? How arrest this constant tendency to revert to original types? The inferior blood that comes down with all the gathered strength of a hundred generations may appear he knows not when or where. He selects, with the utmost care, a few of his herd that appear to have inherited acquired tendencies, and to have escaped remote ancestral ones. This blood he concentrates by close breeding. Success crowns his efforts. The valuable acquired qualities are transmitted to the offspring, and the undesirable ones of remote ancestors are drowned out. He has established a breed excelling all others. So far excelling that lords and nobles flock to his unpretentious home to do him honor and learn the secret of his successes. Even the king makes him a visit to express his appreciation of his valuable labors and researches.

Though the rearing of cattle has been one of the chief occupations of mankind since the earliest periods, yet BAKEWELL was the first, so far as we know, to make use of any really scientific principles in their improvement. He learned that within certain limits he could produce any type or form of animal desired. Not by selection *per se*, but by taking advantage of variations caused by changed conditions. He who expects improvement from selection alone, will only meet with disappointment. Nay, more than this: the chances are about two to one that there will be deterioration caused by atavism or errors in judgment, in management, and in selection.

There has been a careful selection for the last hundred years of the cattle of the United States. The best animals are invariably saved and the poorest slaughtered; yet there has been no improvement except where improved blood has been introduced or the conditions have been bettered; and there never can be, for the stream cannot rise higher than its source. This one false idea entertained by the masses, has arrested improvement in domestic animals more than all others combined. Selection simply steps in and makes use of an accomplished result produced by a previous cause.

BAKEWELL died in 1795, and although he left nothing on record, yet his success was so great and attracted so much attention that his methods were well understood by many and put immediately into practice. CHARLES and ROBERT COLLING, THOMAS BATES and THOMAS BOOTH followed in his footsteps with the most happy results. In fact, they established another breed—the Short-Horns—that has attracted more attention than all others combined. Great credit is due to these last-named men for their skill and energy, though greater to BAKEWELL. But all of them will be remembered and honored as long as civilization endures, and long after the "Reform Politician" has been forgotten, the methods of these plain men will be studied with increasing interest.

Cornell University, Ithaca N. Y.

A FEW WORDS ABOUT SORREL.

T. H. HOSKINS, M. D.

THE writer lives in a sorrel country; his farm, when he bought it, produced more sorrel than anything else, and consequently he has had plenty of opportunity to study this interesting plant and learn its peculiarities.

An acute observer has said that "the obvious is rarely the true," yet among the things that nearest approach the impossible, without quite reaching it, the removal of a plausible error from the popular mind must be ranked high. As an example of this fact, I refer to the notion, contradicted by all experience and the observation of every farmer who does observe, that the growth of sorrel indicates "sour" land.. The warmest and sweetest soils are where the sorrel most luxuriates. Sorrel will retain its grasp of such soils even after their fertility has so declined by cropping without manure that few other plants will grow upon them. The sorrel will not luxuriate there, in such circumstances, but it will grow and overspread the ground, so that its red inflorescence can be distinguished at a long distance. These light sorrel lands are almost at once restored to fertility by the application of green sand, marl, or wood ashes, thus indicating that their special need is potash. But will the marls or ashes exterminate the sorrel? Very far from it. Unless the land is seeded with some crop able to overgrow and kill the sorrel, that plant, when dressed with ashes, will assume a most astonishing growth and luxuriance. A very slight experiment will satisfy any one that ashes, instead of being hurtful to sorrel, may be regarded as a special fertilizer for it. The two statements made above—first, that sorrel will take possession of and overgrow land exhausted of potash; and, second, that potash is a special fertilizer for sorrel, may be regarded as laughable inconsistencies; and certainly their mutual truth and inter-dependence do not rest upon their obviousness, to secure belief. Yet I will give an explanation regarding it which will satisfy any one somewhat acquainted with the principles of agricultural chemistry.

What is the substance that gives it's acid quality to the sorrel plant? Oxalate of potash. And what is oxalate of potash? It is a combination of oxalic acid with potash. The oxalic acid is native to and formed within the plant, by the union of its elements in the sap. But how does it get its potash? In a fertile soil, soluble salts of potash exist in sufficient quantity to supply the needs of all plants. In unfertile soils, rendered so by the exhaustion of the available potash, potash may nevertheless exist in large quantity in a form insoluble, or very slowly soluble, in the soil-water. From such a soil the oxalic acid of the sorrel enables it to extract potash by direct solution. Lime is also extracted in the same way. (See Johnson's "How Crops Feed," pp. 140-142.) The potash so taken up by the sorrel is sufficient for a moderate growth and the perfection of its seed, but not for luxuriant growth and leafage. But take a little patch of sorrel on such poor land, remove all other plants and keep them out—*i. e.*, weed your sorrel patch—and then apply a moderate dressing of unleached ashes, and see the demonstration of my statement that potash is a special fertilizer for sorrel.

How, then, does a free dressing of some potash fertilizer exterminate sorrel? Simply by promoting the growth of stronger plants, clovers and grasses, which are as weeds to the sorrel, and which when encouraged to grow freely by appropriate fertilization, smother it out. Applepomace, as narrated by the correspondent of the Germantown Telegraph, is a good application, because it contains a large amount of the organic salts of potash.

Orleans, Vt.

BOOKS RECEIVED.

RURAL AFFAIRS.—Luther Tucker & Son, Albany, N. Y. This book is well named. It *is* an Illustrated Register of Rural Affairs. Just those topics are touched upon which concern country people in their every-day life, and each topic is treated so as to convey in the plainest manner the most solid and valuable information. Thus, such subjects as "Country Dwellings, Improving and Planting Grounds, Fruits and Flowers, Domestic Animals, and all Farm and Garden Processes," are selected, and treated according to the best-known method, to the exclusion of the more theoretical views that may be considered as varying in accordance with individual tastes. It consists of 440 good engravings, illustrative of every subject in the text, and 350 pages. Mr. J. J. Thomas, the associate editor of that excellent farm journal, the Country Gentleman, is the author. The price is $1.50 by mail, postage prepaid, either for this volume or any of its predecessors, or $12 for the eight volumes, complete. We do not know of any similar work that, to the general reader who is interested in everything appertaining to the country home, is of more real value.

MANUAL OF THE APIARY, by A. J. COOK, Professor of Entomology in the Michigan State Agricultural College. Second edition, revised, enlarged, mostly re-written, and copiously illustrated. Published by THOS. G. NEWMAN & SON, Chicago, Ill. Among the numerous works on apiculture, we know of none so valuable to every practical apiarist as this handsome volume of 286 pages. Every point connected with the subject on which it treats, is handled in a clear, exhaustive, yet pithy and entirely practical manner. As we consider the work well worthy of a more extended notice in a later issue, we shall merely remark here that it should be in the hands of every apiarist who is seeking success by availing himself of the latest and best information on his business.

CATALOGUE OF THE UNIVERSITY OF NORTH CAROLINA.—This neat pamphlet of 64 pages gives full particulars concerning the institution to which it refers, including the names of the

Board of Trustees, the Faculty, and 160 students, and its praiseworthy benefactors. The nature of the studies pursued therein is also described, special attention being devoted to the department in charge of agricultural experiments, which has done so much for the advancement of the farming interests of the State. Of the extent of these services our readers have, from time to time, been indirectly informed by the incidental remarks of our valued correspondent, Professor Adolphus W. MANGUM, A. M., a member of the Faculty.

CATALOGUES, &c., RECEIVED.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

NEW HAVEN, June 15, 1878.

Bulletin No. 16.—Fertilizer Analyses.

155. MANHATTAN BLOOD GUANO. Claimed 2 per cent. Nitrogen, 7 per cent. soluble Phosphoric Acid, 3 per cent. insoluble Phosphoric Acid, 5 per cent. "Alkaline Salts." Manufactured by Manhattan Fertilizer Co., 38 Platt St., N. Y. From stock of L. C. Sternberg, Hartford.

156. WARRANTED No. 1 PERUVIAN GUANO. Claimed 3.2 per cent. Nitrogen. Hobson, Hurtado & Co., N. Y. From stock of R. B. Bradley & Co., New Haven.

158. UPTON'S SUPERPHOSPHATE. Claimed 2.4-3.2 per cent. Nitrogen, 10-12 per cent. soluble Phosphoric Acid, 3-5 per cent. insoluble Phosphoric Acid. Manufactured by George Upton, 18 Broad St., Boston. From stock of E. Stiles & Son, Willimantic. Sent in June 7, by E. Stiles & Son.

154. GLUE SETTLINGS. From Works of Peter Cooper. Sent in June 4, by Geo. H. Glover, North Branford.

155 was sampled and sent May 2. 156 was sampled and sent April 8, by J. J. Webb, New Haven.

	155	156	158	154
Nitrogen	2.58	8.02	2.01	0.67
Soluble Phos. Acid	7.79	5.82	1.49	
Reverted " "	1.40	4.03	7.34	
Insoluble " "	2.83	3.77	1.05	0.21
Potash	0.62	3.40		
Cal. Value ₹ ton.	$37 22	61 47	26 45	2 82
Cost " "	$47 50	60 00	38 00	

S. W. JOHNSON, Director.

QUARTERLY REPORT of the Chief of the Bureau of Statistics, showing imports and exports of the U. S., and other statistics relative to the trade and industry of the country, for the three months ended Dec. 31, 1877. Also for the corresponding quarter of the year immediately preceding.

EIGHTEENTH Annual Exhibition. List of premiums for the Oregon State Fair, at fair grounds, near Salem, commencing Thursday, October 10, 1878, continuing until Oct. 18; and the programme, rules and regulations of the same—reports of Committees and of the Secretary and Treasurer for 1877.

THE Annual Meeting of the American Association of Nurserymen, Seedsmen and Florists, will be held at Rochester, N. Y., June 19th to 21st. Headquarters at Osburn House. For particulars in regard to special rates, etc., address the Secretary, D. W. SCOTT, Galona, Ill., or T. S. HUBBARD, Fredonia, N. Y., Chairman Executive Committee.

THE HESSIAN FLY. A very interesting lecture by Prof. A. J. COOK of the Mich. Ag'l. College. Delivered at Farmers' Institute, at Paw Paw and Climax, Mich. It is sent pre-paid by mail for 10 cents, the cost of publishing and mailing.

CATALOGUE N. Y. State Agricultural Society. List of premiums and regulations for the Thirty-eighth Annual Fair to be held at Elmira Sept. 9—13. Entries close August 10.

SHEEP HUSBANDRY IN THE SOUTH. Prepared at the request of the Hon. Alexander H. Stephens, of Georgia, and others. By John L. Hayes.

LIST of Wild Plants of New England furnished by mail, post-paid, by ERASTUS S. WHEELER, Berlin, Mass.

PROCEEDINGS, Essays and Discussions before the Kentucky Hort. Soc., for the years 1877-'8.

TRANSACTIONS of the N. Y. State Agricultural Society 1872 to 1876; 532 pages.

AMERICAN VETERINARY COLLEGE. Fourth Annual Announcement.

TO MAKE APPLE TREES BEAR.

WE frequently see statements in the papers of inquiries if there is any way of making apple trees bear fruit on alternate years or every year.

Many years ago, a friend of mine had a dozen apple trees that were bearing heavy crops every other year. He wished to have fruit every year, so he took a very long pole—the trees were large—and gave them a heavy beating on one side, or half of the tree, just as the fruit was about the size of hickory nuts, knocking off every fruit on the south side of his trees. The result was, as I saw for a number of years, that these trees bore heavy crops on one side one year, and the next year a heavy crop on the other side, so that for many years he had plenty of apples for home use every year. His trees stood in a rich soil that was annually cultivated—no grass-sod to cover the roots. It is now about time to try the experiment. D. B. G.

TRADE continues good among the implement manufacturers. Aultman, Miller & Co., of Akron, Ohio, write us to the effect that their accumulated stock of New Buckeye Table Rakes was exhausted about the middle of May, since which time, although working a full force, full time, they are behind orders. This is as it should be. We hope they will have to work night as well as day.

THE self-acting cow milker, advertised by Stent & Co., in another column, is a useful invention. The simplicity which characterizes the machines themselves, and the thorough efficiency with which it is claimed the work is done, recommend them to dairymen and farmers.

THE LAST ACKNOWLEDGMENTS.

RURAL "Cricket" arrived save a week since. Goes well, gives entire satisfaction. Many thanks. O. B. B.

Lawrence, Kansas, June 8th, 1878.

THE RURAL is itself a gem, and the "Cricket" is just such a thing as we might expect from its liberal-minded management. R. S.

Ashland, Ohio.

"CRICKET" clock received all right. It runs nicely and keeps good time. It is very handsome. Many thanks for it. Hardly anyone here takes an agricultural paper. A. W. H.

Greenfield, Mass., June 10, 1878.

WILL not you receive subscriptions after July 1st for the RURAL, giving the "Cricket" premium? There are several who have promised me to subscribe for the last half of the year?

Paterson, N. J. C. S. S.

[Not after July 1st. This is positive.—EDS.]

WE received the clock you sent yesterday, and return you our thanks for so nice a present. We would not sell it for the price of the RURAL and "Cricket" if we could not get another. We set it going, and find it keeps exact time with our other clock, which is one of the best. H. J. W.

Camden, N. Y., June 12.

I HAVE only to repeat what so many have already said, that the "Cricket" is the most valuable present ever sent out for so small a sum, and, in connection with what we judge, the best family paper in the world. The RURAL grows better every week. O. A. B.

Cincinnati, Ohio.

"CRICKET" to hand far exceeds our expectations. It has had some pretty rough usuage at the hands of the children, but neither the fall JOHNNY gave it nor the soaking baby treated it to, seems to have in any way impaired its usefulness. It's the most accurate time-piece I ever owned.

Blue Grass Co., Ky. M. J.

I NOW return you my thanks for the "lively Cricket." Wishing to test its quality as a reliable time-keeper, I have delayed acknowledging its receipt. I will now say that the clock came to hand all right, that with a slight touch of the regulator it now keeps good time, and moves lively and true. I thank you for this valuable present. J. B. G.

Columbia, Pa., May 30th, 1878.

As I see the "Cricket" clock premium is to be withdrawn July 1st, I hasten to send for one more. As I understand it, the enclosed two names for six months each with the accompanying $3.50, entitle me to the clock. If I am mistaken, please correct me. The first clock I got was for two new subscribers and $5. That one has been very much admired, and as soon as I receive the second, I shall accept an offer I have had to sell it for $3.50. J. M. L.

Screven Co., Ga.

A WEEK'S trial has removed all doubt in the mind of the most dubious Thomas in this family about the punctual qualities of the "Cricket." It's always on time, not to the hour,—nor even to the minute—well, say to the half minute. I shall send for one more certainly, probably for two, and possibly for more before the end of the month. By the way, if my order is mailed here before July 1st, but reaches the RURAL office after that date, shall I fail of getting the Cricket as a premium? [No.—EDS.] W. L. M.

Milton, Florida, June 3d.

AFTER a journey of about 2,000 miles, the RURAL "Cricket" came to its new home here, nine days ago. Its long jaunt had slightly demoralized it on its arrival, but a little petting soon set it to rights, and now it correctly counts each passing second in a loud though cheerful tone. It looks so bright and handsome that one might readily imagine it has but little appreciation of the gravity of the lesson it is teaching with regard to the transitory nature of time and all things temporal. Many thanks, however, for the little preacher which is much more useful than many folks hereabouts think preachers can be. F. M. C.

Victoria, Texas, June 5th, 1878.

THE "Cricket" clock reached me safely considerably sooner than I expected to see it. It is a satisfaction to me to let you know that I am thoroughly pleased with it, though there is, I suppose, nothing new to be said in its praise. A prettier ornament or better time-piece I never saw, and the only effort it cost me was mentioning to two of my friends a few of the advantages to be derived from being a subscriber to the RURAL, and expressing my willingness to forward their subscriptions to you.

Accept my thanks for your generous premium.

Gage Co., Nevada. T. E. B.

WE are all exceedingly pleased with the "Cricket," and wonder how you can afford to be so liberal. After this month has passed, there will be many regrets from those who have not obtained one. Mr. Holdredge, Watch and Clock-maker of Newburgh, came over here and he was saying he had seen several of those pretty clocks and they were all good ones. I imagine you will need several car loads for the next two weeks. G. G.

Mountainville, N. Y., June 14th, 1878.

THE "Cricket" has created quite a furore in this quarter of the globe. Since its arrival (a week ago) the people (principally housewives), for miles around, have made pilgrimages to our house to impeach the much-talked of clock. One and all express themselves pleased with the beauty of the clock, and as I can and do vouch for its utility, there is a good prospect that you'll reap an abundant "Cricket" harvest in Venango Co., Pa. J. L.

The Swine-Herd.

MANAGEMENT OF PIGS IN SUMMER.

E. W. STEWART.

THE mass of farmers require some very strong preaching upon this subject. They seem to think the favorable summer season just the time to keep pigs cheaply, without any expenditure for food except the slops from the kitchen and a poor pasture. Their idea seems to be to increase the age without any regard to increasing the weight. They seem only desirous of pig frames to build on in the fall. This custom, almost universal until lately, of doing all the fattening in fall and winter, can only be accounted for by the fact that corn and the grain crops are ripened and ready for use in the fall, hence fall feeding was adopted for convenience or supposed necessity, without considering the strong objections to the system.

The cost of keeping up animal heat depends upon the temperature. During the six months from May to October, both inclusive, the average temperature ranges from 58 to 76°, and for the other six months from 29 to 58°, leaving a difference of temperature between the two seasons of about 30 degrees and the animal heat remains throughout the year the same, or 100 degrees. The animal must thus eat extra food sufficient in the cold season to overcome this large difference in temperature before any gain can be produced. Now, it will be seen that the difference between the average temperature of the air and blood-heat is twice as great in the cold as in the warm half of the year, and it will therefore require twice the food of respiration or heat production in the cold as in the warm season.

Experiments have shown that in very cold weather hogs would gain nothing upon the best feeding, if exposed to the open air. And this extra food required to keep up animal heat is all thrown away as compared with feeding in the warm season. It is quite below the fact to say that it takes 25 per cent. more food as a general rule, to produce 100 pounds gain in winter than in summer, unless the winter-feedings done in warm, well ventilated pens. It is most important that farmers should make the most of all their resources, and now, more especially, when farm products are so low. A farmer of the better class, who can make ten pounds of pork from a bushel of corn when the temperature averages 60 to 70 degrees, will find it more difficult to make 7½ pounds when the temperature is at an average of 40 degrees. From these facts it must be evident that the principal feeding should be done in the warm season. I would not advise feeding wholly upon grain, for the hog is a grass-eating animal, and it is doing violence to its nature to keep it wholly upon concentrated food. Many of the ills that swine "flesh is heir to" I think are caused by neglecting to feed sufficient fibrous food. Pigs should either have a good pasture or be fed clover and other green food in the pen.

When a pasture is not convenient, pigs may be soiled very profitably. An excellent way of feeding them in summer is to run green clover through a straw-cutter and mix an equal bulk of clover and corn meal together and allow it lie for 12 to 24 hours. The meal will absorb the moisture of the clover, swell and become softened, while both will so adhere as to be eaten together. From considerable experience in feeding after this method, I find the pigs uniformly healthy and more thrifty than when fed on grain alone. Good clover will do with half this quantity of meal, and sometimes produce equally good results. I have found even forty per cent. difference in favor of the clover and meal over the meal alone; and this, when dividing a litter of pigs and feeding one-half on corn-meal soaked in water, and the other half on clover and meal, giving each lot all they would eat. The pigs fed on corn meal alone were often feverish and mincing in appetite, while those on clover and meal were always lively and ready for a feed.

If pigs are on pasture then they should get also a constant small ration of grain. Grain will here produce much greater result than when fed alone. Pigs should be pushed through the summer with the most liberal feeding so that they may make a constant and rapid growth and reach a marketable weight of 250 pounds, or upwards, before December. A little grain used with pasture will always pay a liberal profit. There can never be a stand-still in growth without serious loss. Full feeding is the only consistent system.

Floricultural.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

ERANTHIS.

IN quick succession after the Snowdrop, the earliest of vernal flowering bulbs, we find the Eranthis hyemalis in full bloom, with its wealth of golden blossoms. This is one of the prettiest as well as the hardiest of the dwarf spring-bloomers, thriving in any and all situations. It is one of the most valuable plants we have. In many situations the Snowdrop and Crocus will fail entirely, while in all such places the Eranthis can be planted with the certainty of a liberal reward of flowers. It is of a very dwarf habit; but for massing, or bordering beds it is splendid. A small bed planted very thickly—and whenever it is used it should be planted closely—will be one of the most attractive plots in a garden. The flowers are a very bright yellow and can be seen from quite a distance. The Eranthis is known as the Winter Aconite.

IXIAS.

The Ixia, belonging to the large family of the Irideæ or Cape Irids, is one of the most showy and brilliant of bulbous flowers in cultivation. In the Northern States they have to be grown in the house or conservatory; in the Southern States and in California, they grow in the open border with as little care as the Gladiolii.

In planting, in the two latter climates, having selected a situation with a southern aspect, where the land is a light sandy loam, make the soil rich by the addition of well-decayed stable manure, well incorporated; plant the bulbs in rows, having the rows ten inches apart. The bulbs should be set four inches apart in the rows; they may be set closer but they will not develop as well. Plant them two and a-half inches deep, making the soil firm around them. Water must be given freely when the flower buds appear; and, until after the buds and flowers are fully developed, the soil must not be suffered to get dry. If these directions are followed the Ixia will give to the planter more satisfaction than a Lily.

POT CULTURE.

In potting the Ixia, the same general treatment will be found satisfactory in all climates.

Six-inch pots, containing five bulbs, will give the best satisfaction. The bulbs should be planted during October and November, that a succession may be maintained for many weeks. Fill the pots as follows: Place in the bottom for drainage, a piece of potsherd laying over it an inch of coarse charcoal, then an inch of common sandy soil, over which an inch of well-decayed stable manure should be placed; then fill up the pot with equal portions of sand and leaf-mold or very light, rich loam. Plant the bulbs an inch deep in the pots, the soil being well pressed around them. Water freely and set the pots in a dark but warm situation.

After the plants appear above the soil, remove to the window or conservatory. They should be watered freely when coming into bloom and a few days before the blossoms open water with weak liquid manure. The flowers of the Ixia are very pretty and curious, nearly all the varieties having two or more colors represented in each flower.

During the last few years, the Ixia has undergone such wonderful changes in the hands of European cultivators that its old character has been entirely changed. The new hybrids are characterized by very large, numerous and highly-colored flowers, which have only to be seen to be fully appreciated.

El Dorado, Cal.

FICUS ELASTICA.—There are very few plants, cultivated for foliage alone, that answer so well for tropical beds out-of-doors during the warm season, and for sitting rooms during the season of frost, as Ficus elastica. A tree six feet high, may be kept in a pot ten inches in diameter.

The Querist.

ANSWERS TO CORRESPONDENTS.

Preparing Caterpillars by Inflation—A Natural History Cabinet—Pita-Wood, Etc.

A Reader, asks 1. how caterpillars are prepared by inflation. 2. a design for a Natural History cabinet. 3. what is Pita-wood and what is it used for. 4. where can a book, treating of the preparation of Natural History specimens, be bought.

ANS.—1. To prepare caterpillars by inflation the specimens must be dead, and they may well be two or three days old in death. Pushing the end of a knitting-needle into the hole at the hind end of the body, taking pains not to break the skin, the viscera may be stirred up. Then lay the caterpillar on a piece of paper or cloth which will soak up much liquid, and with a stick, round like a lead-pencil, rolled along the body toward the vent, press out the viscera. Begin not far from the vent, and press with caution, loosening the viscera more if they resist much. Then press from a little farther from the vent, and so on until the skin is emptied, and no specks are seen in it when it is held against the light. Then insert a straw, bringing the mouth of the hole close around it, by tying it with a thread if necessary, and inflate the skin. The skin must be thoroughly dried while inflated. For this purpose it is well to make an oven, as follows: Hang a long, tin box, such as a mustard-box, on its side, either without its cover or with a hole in the cover, cut large enough to admit the caterpillar freely. Place a lamp under the box, to heat it. While the skin of the caterpillar is kept inflated by blowing into it as strongly as is safe to prevent bursting or stretching, hold it on the straw in the box. When your breath gives out, remove the caterpillar from the box, so that it shall only dry while distended.

Being dry, it may be mounted by twisting a fine wire on a pin and pushing the two free ends into the hole, putting liquid shellac or glue on the wire to hold the skin firmly to it; or a pin may be thrust directly through the skin and through the straw inside of it. In the former case, the straw should have been inserted as little as possible and afterwards removed; in the latter case, it should have been thrust to the head and left in; in the latter case, be careful not to tear the skin, and it is well to thrust the pin through a very small piece of cardboard which is to be glued to the under surface of the skin. Mr. S. H. SCUDDER, to whom we owe the introduction of this method into general use among us, fastens his wire in the body, as above mentioned, but thrusts the outer end of the wire into a cork and keeps every specimen protected in a bottle. Hairy caterpillars must be soaked in alcohol at least half an hour and lie on drying-paper or cloth for two days, and must not be rubbed. Keep the skin clean.

2. Tightness is the first essential and darkness is the next, for a cabinet. Let the joint between the lid and tray of the box always be a flange if not a tongue-and-groove, The boxes should not be much longer than broad, and may be smaller for beetles than for butterflies. It is well for any one collector to have all the boxes of the same size: 48x40x7 cm. outside, is the approved size for museums, and about 35x25x6 or 7 or 10 for private collections, according as the boxes are to hold specimens in the tray only, or in both tray and lid. Glass-lidded boxes may be kept in a cabinet with closed doors.

3. Pita-wood is the flower-stalk of the "American Aloe" (Agave Americana). It has been used with great success as a substitute for cork, to make the lining of boxes for specimens of Natural History, where a wood easily penetrable by pins is wanted. It has been found to preserve the specimens in the box from mold when the specimens in cork-lined boxes were ruined under circumstances the same in every other particular. It has the additional advantages of being lighter and cheaper than cork. It is also used to make strong, coarse cordage, and in Mexico for the manufacture of paper.

4. A book of directions for collecting insects is sent by the Smithsonian Institution of Washington, for twenty-five cents. The Naturalists' Agency, of Salem, Mass., sells Maynard's Naturalists' Guide for two dollars. This latter book treats especially of the preparation of birds' skins.

Remedies for Roup in Poultry.

Silas Wright, Montcalm County, Mich., having within the last four years lost by roup fully 50 hens, but not a single cock, and having in vain tried several reputed cures for the disease, asks the RURAL to suggest some that may be more successful.

ANS. — Roup is frequently caused by wet weather, or cold winds, but it may also result if the fowls are long kept without food and water and then have an unlimited quantity of drink. Confinement, however, is the chief cause of the malady, especially if the birds are shut up in tainted coops. Here, as in other diseases incident to man and animals, prevention is better than cure, and precautions should, therefore, be taken against the first attack. When the fowls have become affected, however, the earlier they are treated the better, for it is generally a difficult task to effect a cure if the ailment has been permitted to secure a firm hold on its victim. If the eyelids be swollen, the nostrils closed, the breathing difficult, the discharge from the beak and eyes fœtid and continual, the cure is sure to be slow at best, and perhaps the best thing to do would be to kill the bird, if not a very valuable one.

In the early stages of the disease, however, a cure is generally easy. Keep the fowl in a warm place; feed it with soft food only, such as meal, mixed with hot ale and chopped vegetables, such as cabbage leaf. Wash the head, eyes, and inside of mouth night and morning, with dilute vinegar, or a solution of five grains of sulphate of zinc. In aggravated cases the following is highly recommended: Powdered sulphate of iron, half a drachm, capsicum powder, one drachm; extract of liquorice, half an ounce; make into thirty pills; give one at a time, three times a day for three days. TEGETMEIR, the great authority on poultry matters, advises the following treatment: Feed on oat-meal mixed with ale and green food unlimited, washing the head with tepid water, and giving daily one grain of sulphate of copper.

In all cases the affected bird should be promptly separated from the others, as the disease is very readily communicable, probably by droppings from the beak infecting the drinking water or food.

Flavoring Butter

J. D., Pittsburgh, Pa., asks whether there is any "Butter-Flavor," safe and good, for the purpose of improving butter.

ANS.—We know of no artificial "flavor" for butter. In a late issue we mentioned what is said to be the practice of a German farmer to produce this effect. It is said he hangs a bunch of sweet-smelling herbs in the churn just before churning, and their flavor is imparted to the agitated cream. Having never tried this, we mentioned it merely as a bit of news that might be of interest to some of our readers.

Make the butter clean from all foreign and noxious matter; work it as free as possible from buttermilk; salt it with salt liberated from chlorides of calcium and magnesium, such as any of the standard dairy salts, and you have the best recipe for flavoring butter.

Butter from New Milch and Farrow Cows.

Jacob Fisher, Steuben Co., N. Y., asks whether he will get as much butter by churning together the cream from new milch and farrow cows as by churning the cream from each kind separately.

ANS.—The cream from new milch cows often helps that from farrow cows to come to butter and to gather. We have known cases where a farrow cow's milk would not make butter alone, but mixed with that of a new milch cow, butter could be made from it. The globules are so small, or fine, that by themselves they will not unite readily, but will become attached to larger ones and so swell the mass of butter. It would be an easy matter for our correspondent to try the experiment of keeping a churning separate of the farrow cow's milk, and see what the result would be, but, generally, it is best mixed with other milk for the above reasons.

A Wet Cellar.

An old Rural Friend asks for the best and cheapest way to fix a wet cellar, which during some parts of the year, has a good deal of water in it; and he also inquires whether such a state of things is unhealthy.

ANS.—There is nothing to prevent water accumulating in such cellars as have loose walls, during long periods of rain, except a good coating of cement upon the outside *and floor* of the foundation. If the cellar is too low—too deep—then the floor must be covered with small, broken stones and puddled with cement (one part cement, two parts sand) to an even surface. If water still accumulates, drains must be laid to carry it off. Earthen pipes, four inches in diameter, are as permanent and cheap as any other effectual drain.

There can be no doubt that water in cellars is unhealthy. Of course it becomes stagnant very soon, and becomes favorable to the existence of many forms of low vegetable life and poisonous exhalations, known to cause various diseases.

Wants Silver-Spangled Bantam Eggs, Etc.

A Constant Reader, Nunda, N. Y., asks 1. where can he get eggs of the Silver-spangled Bantam; 2. the name of a cheap work on Taxidermy, and where obtainable.

ANS.—1. Write to Henry Hales, Ridgewood, N. J. 2. Taxidermist's Manual, by Capt. THOMAS BROWN. Also "Taxidermy," a volume of LARDNER'S "Cabinet Cyclopædia;" both of which works any local bookseller will purchase for a customer, just as cheaply and with less trouble than they can be got direct from the publishers.

Plants for Name.

L. R. Oneida Co., N. Y., No. 1. Kerria Japonica fl. pl. The variegated Kerria J. is desirable. The margins of the leaves are lined with white. No. 2. Silene pendula, a native of Sicily. No. 3. Geranium Robertianum (Herb Robert.) This is common north.

Miscellaneous.

A Subscriber, Bolington, Va., sends specimens of insects for name, and asks whether they will injure the wheat crop, and if so, how. (2) He, or she, also inquires why grain does not form on the lower part of a head of wheat which is forwarded.

ANS. —There were three crushed specimens of the tree-hopper (family Membracidae). We suppose, therefore, they must have been the insects inquired about. The habit of the family is to puncture twigs and stems and drink the sap; but we have never known any marked harm to be done by them.

(2) The cause of the seed not forming in the lower part of the spike, is owing to the lack of some manurial ingredient in the soil—probably phosphoric acid. Try manuring with superphosphate of lime.

Col. Curtis, writes us that he has white Turkeys This in answer to a question by a correspondent whose name we have lost.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JUNE, 15TH.

L. S. — B. P. M.—S. W. J.—E. W. S.— E. B. W.—W. J. B.—R. W. F.—F. M. B.—A. C. W.—A. C. F.—E. B. W.—W. F.— W. L. C. D.—I. P. R.—W. W. —M. F. McC.—I. N. W.—S. S. S. — V. D. C. —G. C. C. —I. H. —F. D. C.—D. S. M., thanks — F. D. C., No. 2—E. B. S.—R. S.—E. L.—M. O.—L. A. R.—S. E. H.—A. M. Van A.—W. H. W.—A. W. C. — S. M. —P.—W. J. F.—B. C. — H. J. W. — M. W. — T. H. H. — J. E. McC.—M. G. R.—J. W. A.

Everywhere.

NORTH CAROLINA NOTES.

WHEN I made my new plantation of small fruits last autumn, I plowed in a liberal application of manure from the horse stable, and soon learned that a mistake was made, as the ground was soon occupied with oats and weeds. I hoed this spring before the flowers appeared, yet there was enough seed left in the ground to produce another luxuriant crop. Either I had better have used rotted manure, or else applied it earlier in the summer, giving the oats etc. time to grow and be destroyed by frequent cultivation before planting time. However, I now have them pretty well subdued; all the fruit, but especially the strawberries, look fine.

Currants are cultivated to a very limited extent here, and as far as I can learn with poor success. This being my first experience with this fruit in North Carolina, I am unable to give any reason why it should not thrive where all other fruits flourish so finely. My plants are somewhat injured by borers, though not to any serious extent; but of the Currant-worm I see no indications, neither did I ever on my own bushes even when my neighbors' crops were wholly destroyed. This exemption can be attributed to nothing except that mine were always kept cultivated and weeded clean, while others allowed theirs to stand in sod with the additional protection, toward the latter part of summer, of a rank growth of weeds. Will some one versed in entomology tell us if thorough cultivation is known to be any protection? M. B. PRINCE.

RURAL SPECIAL REPORTS.

NEOSHO VALLEY, COFFEY CO., KAN., June 3d, 1878.

THIS is a very busy time for the farmers. Everybody seems to be rushing the work instead of letting the work rush him. We are having splendid corn weather at present, making it fairly jump, and promising a larger crop than in '77.

Wheat is ripe, harvesting commenced last week, and the promise of an extraordinary crop was never so encouraging. The fruit crop will also be very large.

New potatoes and peas in market on the 20th of last month—something unusual for this part of the country. Immigrants coming into the State run over each other in their hurry to secure a home in the "Eden of America."

Prof. Tice is our prophet, and we rely on him as implicitly as the good old farmers of New England on "Thomas' Almanac."

E. C. FIELD.

BROOKSTON, N. C., June 10, 1878.

WHEAT harvest has commenced, and a good average crop will be made. This part of the State will have wheat enough for home consumption the present year, and we hope to be able to make our own bacon next year, if not this. One cheering indication is that merchants are selling much less meat than last year. We have no more excuse for buying our bread, meat, butter and cheese, than we have for tolerating our numerous grog shops. Prices are for corn, 60c.; oats in the sheaf, 75c. per cwt.; eggs, 10c.; butter, 25c. for prime, and "as you can light o' chaps" for grease; tobacco, $1.50 for some small selections of flue-cured, down to one-half a cent for dark lugs. M. B. P.

DUNNSVILLE, Essex Co., Va., June 4, 1878,

HARVESTING wheat has fully commenced in the Rappahanock Valley. The growth of wheat is generally good, as is also the head, but the grain is very short and inferior and the product as far as heard from, can't be half a crop of poor quality. Corn is not looking well; we have through April and to date, had cold snaps and cloudy and rainy for very unseasonable weather. Hay very good. The fruit crop is good now, but it is falling off. R. S.

RURAL GROUNDS, June 15.

THE gray skies, rainy weather and cool nights following the frosts recorded have much interfered with many of our experiments, notably those with strawberries which, so far as flavor is concerned, it is hard to distinguish one variety from another. Crops of all kinds, however, are looking well though little in advance of previous seasons. The rye fields were never looking better. The grass is as green as grass can be, and the country altogether looks—to use a word which somehow we think ought to be monopolized by the gentler sex—charming!

BROWN CO., WIS., June 11.

WE are having good growing weather just now, and the small grains are beginning to revive and get over the cold and wet weather of early spring. Early planted corn is up and looks poor and yellow. Potatoes are looking well. We are putting in root crops and will next week sow millet. Sowing season with us lasts as long as there is growing weather, almost. Rye is in blossom in many fields, and where not winter-killed looks well. VAN.

CORRY, Erie Co., Pa., June 8, 1878.

THERE was quite a freeze on the night of the fifth, which cut things pretty badly on the low grounds. Potatoes and gardens had to suffer heavily, on the hills it hardly injured things at all. We are having a nice rain this morning, which makes things look splendid C. D. S.

BENNINGTON, Morrow Co., Ohio, June 11.

OUR fine crop of wheat is nearly covered with red rust. It is just in bloom. Other crops are looking well. Nights are cold with some frost occasionally. J. W.

The Herdsman.

STERILITY IN MALES.

IN most cases of impotence male animals on the farm are born all right, and only lose their power of procreation in consequence of living too high and not having sufficient exercise. Sometimes too, when very much inclined to lay on flesh, the animal becomes barren from want of exercise in the natural way, and accumulates fat so as to destroy all sexual inclination. I had two bulls which would never get stock when fat. One of them was from Sir CHARLES KNIGHTLEY'S herd, and yet afterward, when in store condition, he sired upwards of 200 calves per year and would have sired many more if deemed advisable, for as we always led him to the cows and only once, he did not do as much as one having his freedom and lying with 20 cows only, would do.

The other bull I did not possess at the same time, but he was at all times so injured by good feed that he lived entirely on the rough odds and ends of hay and oat straw and then he was literally like a "straw-yard" bull, which is an English saying due to the fact that a bull lying out loose in a straw yard is always more anxious than others to mate with cows.

The best stallion my father possessed got so lazy with mares, when he was nine years old, that he was worked daily at plowing and the work was beneficial, as he not only was always ready when wanted but there were fewer barren mares than when he was extra fat.

Having had a great deal of experience in breeding every variety of agricultural live stock, I have proved, over and over again, that all males are more vigorous for being freely employed, the only care required being prevention of repeated and useless jumping, and any farmer permitting a male to lie unrestrained with the herd or flock when a great many females have to be served, is devoid of proper judgment, and any one with clear common sense can see that these statements are true.

A bull can serve five cows to every single mare served by a stallion, and the number of ewes for which a ram is good, is double the number of cows which a bull can properly serve and ten times the number of mares a stallion should be allowed to cover; that is, if the ram is restrained like the horse. As all beyond one intercourse is useless, when a male is desired to sire a great number of animals he ought to be prevented from tiring himself to no purpose.

ONE WHO KNOWS.

WEANING CALVES.

HAVING weaned many hundreds of calves, and having 50 years ago fed them morning and night myself, I can say with entire confidence that after the first week, skim milk warmed a little more than new milk is when drawn from the cow, will keep them in good growing condition. There is no *if* or *doubt* about this fact, for many thousands are raised in this way every year, and have been for years out of mind, before my day in the county I was born in, and also, in the States for the last twenty years; while in Canada, they are treated just the same by hundreds of people.

About four quarts of sweet skim milk for the first few times is enough, as giving more will relax them too much sometimes; six quarts afterwards and, if it can be spared, more as the calf grows larger. In winter or early in spring the calves require feeding with hay, a very little at first, and, of course, it should be nice soft green hay and a little bran and oats or bran and meal—two-thirds bran will make them all thrive very fast. AN OLD FARMER.

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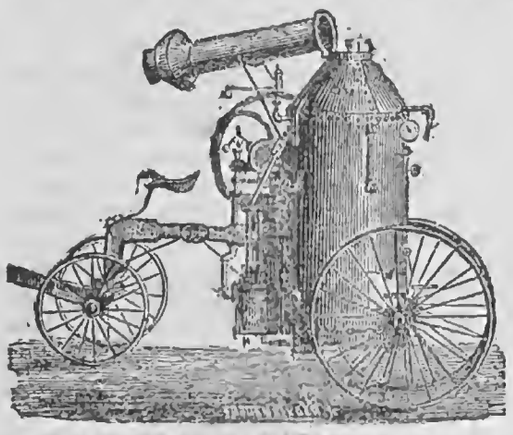

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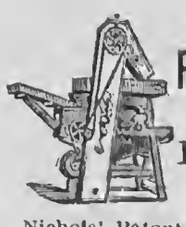

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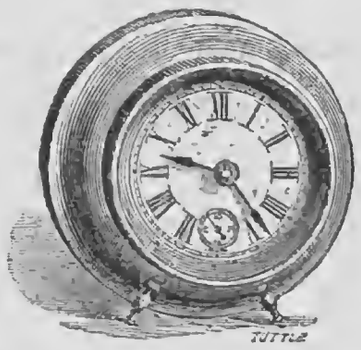

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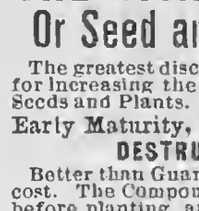

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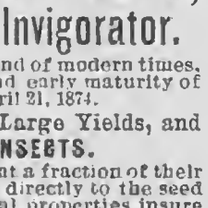

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Russian Forests (Illustrated)..... 388
Jottings at Kirby Homestead—Col. F. D. Curtis... 390
Van's Views..... 390
Experiments with Commercial Fertilizers—Prof. G. C. Caldwell..... 390
Delays are Dangerous..... 391
Depth for Covering Seeds—W. J. Fowler..... 391
Garden Talks and Walks—Renoclaf..... 391
Horticultural Proceedings in Mich. Agricultural College..... 391
Science and Practice—Prof. J. W. Beal..... 391
Robert Bakewell and his Works—Prof. I. P. Roberts..... 392
A Few Words About Sorrel—T. H. Hoskins, M. D. 392
Books Received..... 392
Catalogues Received..... 393
The Last Acknowledgmen s..... 393
Fertilizer Analyses—S. W. Johnson..... 393
To Make Apple Trees Bear..... 393
Management of Pigs in Summer—E. W. Stewart.. 393
Bulbs for the Flower Garden—W. L. C. Drew.... 393
Sterili y in Animals—One Who Knows..... 394
Weaning Calves—An Old Farmer..... 394

Answers to Correspondents:

Preparing Caterpillars for Inflation—Natural History Cabinet, Pila-Wood, etc..... 394
Remedies for Roup in Poultry..... 394
Flavoring Butter..... 394
Butter from New Milch and Farrow Cows..... 394
A Wet Cellar..... 394
Silver Spangled Bantam Eggs..... 394
Plants for Name..... 394
Miscellaneous..... 394
Communications Received..... 394

Everywhere:

North Carolina Notes—M. B. Prince..... 394
Neosho Valley, Kansas..... 394
Brookston, N. C..... 394
Dunnsville, Va..... 394
Rural Grounds..... 394
Brown Co., Wis..... 394
Corry, Pa..... 394
Last days of the "Cricket"..... 395

Domestic Economy:

Home Decoration..... 400
Domestic Recipes..... 400
Graham Bread..... 400
Corn Starch Cake..... 400
Crumb Pudding..... 400
To Prevent Stained Hands..... 400
Baked Fish..... 400
Markets..... 401

EDITORIAL PAGE:

Exportation of Live Cattle..... 396
Medical Education..... 396
What Kind of Help do You Hire?..... 396
Teaching Children to Pick Things Up..... 396
Brevities..... 396

LITERARY:

Poetry.....397, 399, 402
Cora..... 397
Leaves from the Birches..... 398
Conjugal Discords..... 398
The Good Man's Departure..... 398
Bric-a-Brac..... 399
The Housekeeper's Pruning Shears—J. E. McConaughley..... 399
Talk About my Jewels—Marguerite..... 399
Sermon to Girls on Cooking..... 399
Wedded Love—Stir Morris..... 399
Ferns and Flowers—S. H. R..... 399
Too Late..... 399
Items for Correspondents..... 399
News of the Week—Herman..... 400

Reading for the Young:

Pocket-Money for Young People: No. 7—S. Rufus Mason..... 402
Letters from Boys and Girls..... 402
Wild Cherries in June..... 402
Jim Crow..... 402
A Nice Little Girl..... 402
How to Make a Squaker..... 402
Long Wished to Join Us..... 402
From Ohio..... 402
The First Attempt..... 402
Puzzler..... 402

Sabbath Reading:

Cross of Jesus Christ..... 402
Personals..... 403
Wit and Humor..... 404
Advertisements.....395, 401, 403, 404

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

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RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, JUNE 22, 1878.

EXPORTATION OF LIVE CATTLE.

JUST as we begin to realize the possibilities of the live cattle trade with Great Britain, a bill is brought before Parliament to cause all these animals to be slaughtered at the wharf where they are landed. And, although the measure has, for the present, been defeated, it is by no means improbable that jealousy of foreign competition will hereafter prompt the agricultural interest of Great Britain to advocate legislation of a similar nature. There can be no doubt that the English people fear the effect of our competition much more than they fear the importation of contagious diseases; still they have a very convenient excuse for adopting a measure that will virtually stop our exports of live cattle. If our Government were only alive to its responsibilities, if contagious diseases here were made the subject of proper sanitary regulations, if affected animals were isolated and destroyed, and proper disinfection practiced, this excuse would no longer exist, and we could make such representations abroad as would give our cattle the freest entry in any port in the world. The representatives of Canada, it appears, have been able to show that their stock is free from disease, and, as a consequence, their cattle have been allowed to go to any part of the kingdom. On our part, there seems to have been nothing done to preserve our privileges in this respect; indeed, it is difficult to see how a case could be made out in our favor while the present know-nothing, do-nothing policy of our Government is continued.

We have long been apprehensive that our exportation of live cattle would be stopped, sooner or later, in some such way. We have had contagious pleuro-pneumonia domesticated among us for more than thirty years, and during this time it has been spreading in every direction until now no one is able to say where it exists and where it does not. Our government has made no effort to check its extension, nor even to collect information of its progress; and as no one in our own country can make any pretense to knowing what danger there is of its exportation, we can scarcely expect the English to know more. England has already lost over $500,000,000 from the ravages of this disease; her experience was dearly bought, and she cannot be blamed for providing against its future introduction by any reasonable measure.

Both our people and government appear to be totally oblivious of their duties in regard to such plagues, and apparently nothing will be done to check them till severe and repeated losses demonstrate the necessity of such measures. Pleuro-pneumonia is the most dangerous of all this class of diseases, as three or four months may elapse between exposure to the contagion and the appearance of the first symptoms, and as the disease may be communicated during a considerable part of this period, we can see how readily an animal might be taken to England and driven over many miles of that country, spreading the germs of this disease wherever it went, and finally be butchered before any symptoms of pleuro-pneumonia were apparent. Again, some animals may have the disease in a latent form, never showing any symptoms whatever, but still are as dangerous as the plainest cases.

These facts show that the fears of the English people are not entirely groundless. We have pleuro-pneumonia among us—it may not yet have reached the herds, or even the sections of country from which animals are drawn for exportation; but who knows how soon it may appear there? Or who can positively assert that all of such herds are even now free from it? It is said that a recent outbreak at Clinton, N. J., was caused by a cow brought from Ohio; did our government, or any individual outside of the infected district, suspect that pleuro-pneumonia existed in Ohio before this fact became known?

We do not wish to excite needless alarm, or to overestimate the danger from this disease; but we have a duty to perform in regard to it, and we cannot see that anything is to be gained by trying to convince ourselves, or the English people, that no danger is to be apprehended from any disease existing in our country. We cannot, therefore, agree with those journals which think our government should make such representations abroad as would give our cattle free entrance into the British ports; it is the plain duty of our government to make sure that such danger does not exist before asserting that this is true. If the destruction of our live cattle trade proves sufficient to awaken our people to the necessity of stamping out contagious diseases on their first appearance, and of making such regulations as shall prevent their spread, the loss will be more than counterbalanced by the gain.

MEDICAL EDUCATION.

WE printed in the RURAL last year an article "How Doctors are Made," in which we endeavored to show that even under the most favorable circumstances, and with the closest attention on the part of both student and instructor, it would be next to impossible for a majority even of a class in a medical colleges to obtain in the three years' study the law requires, sufficient knowledge of the many difficult branches of medical science to entitle them to a graduation and legal permission to practice the healing art. We believe there is a tendency in the right direction, but its effect is not yet very apparent. One college in New York at its last commencement, of a class of more than a hundred, graduated all but six—and this college ranks with the first in the country.

Our thought was turned to this matter by a recent statement in one of our daily papers that of twelve students of law who applied to the board of examination, for certificates of approval, only seven passed a satisfactory examination. Are we to infer that these applicants were less intellectual or less studious than medical students in general, or that the examiners in the law are more strict than those of the medical schools? One who has had experience or opportunity for observation, would decide that question readily. It is time the public took the matter of educating physicians into consideration. We entrust the lives of ourselves and of our families in their hands, with no other guaranty of their ability, than their diplomas, and we should see these diplomas are not granted to those who are not entitled to them. It would be supposed that a more thorough examination should be made of the qualifications of him to whom we entrust our lives, than of him who takes care and guardianship of our property. Let us see how it is: The law requires that a medical student shall have been under the instruction of a respectable medical practitioner three years, and that he shall have attended two courses of lectures in some medical college, established and conducted in conformity with the laws of the State, and shall pass a satisfactory examination by the faculty of the college he last attended.

It will be noticed that no examination for qualifications is made on entering medical colleges—and the time spent with the instructor may or may not have been well employed. At the end of the lecture term the examination is held. The inducements to pass the students are these: The faculty, being as a rule permanently connected with the college, divide the profits thereof, consequently it is for their interest to have large classes. They are not anxious to drive scholars to other institutions through fear of severe examinations. Beside, there is a fee paid by each student graduated, in addition to his other college expenses.

Let us look for a moment at the requirements of the law student in this State. A board of examiners is appointed each year by the Supreme Court for each district, to whom applicants present a certificate of some practicing attorney to the effect that the bearer has been studying in his office, under his direction, at least three years. If successful in passing the examination of the examiners, the applicant is admitted to practice law as an attorney. In this capacity he gives advice, and prepares cases, but is not entitled to present them to the courts. After two years of this practice an attorney can present himself for another examination which, if successful, entitles him to practice in the courts as counsellor. It takes a man five years to become qualified to manage a law case in which your property is involved. Three years is considered sufficient for him who has your life in his hands. If the lawyer makes a mistake in his management it is easily seen and his reputation suffers in consequence. For the physician—dead men tell no tales—and his errors are too often charged over to the inscrutable ways of Providence. Every man in the State should make this matter of medical education a personal one. Once set the question prominently before the public and it will not rest until the standard of qualification for medical practitioners is raised. No physician should be allowed to practice who has not had at least two years experience in hospital, or under direction of a practicing physician.

Worse things could be done with public money than to establish a free medical college in each State, from which none but thorough and well qualified students should be graduated.

NOTES.

Teaching children to pick things up.—We know a man who is quite particular about keeping every thing in its proper place. We heard him say, that he acquired this habit through the training of his mother. When a boy even as far back as he could remember, his mother always made him pick up and put away his playthings after he had got through with them. He was often allowed to get out all the materials he wanted for a good time. In bad weather the kitchen was often at the disposal of himself and brother, but they always understood that every thing was to be cleared up at the close of the play. No doubt there is a difference in children, for we have known boys of the same family, of nearly the same age, brought up in all respects as nearly alike as possible, yet one of them was always careless, and became a careless easy man, while the other was extremely particular in all the details of his dress, sports, and work. Still, granting this difference which many would call a natural difference, we believe a persistent training in early childhood would make an orderly man out of the most careless child.

What kind of Help do you hire?—Generally, one of the first requisites is faithfulness in performing work. This is well enough as far as it goes. A clear bargain is made as to the rate of wages, duties to be performed, and the length of time. We wish to call the attention of farmers to another point in this matter, which is too often neglected. What are the habits of the man employed? Is he temperate? Does he use tobacco? Is his language free from profanity and every thing which is vile or indelicate? If you have any young boys or older boys, they will very likely associate much with the hired men. The men are older and stouter and can do many things which the boys are unable to perform. The boys will imitate the vices of men as well as their good qualities. If you have daughters, it is scarcely of less importance that the hired help possess the good qualities above mentioned. Good habits and good morals are of great value. A young man who possesses them is of priceless value when compared with one who does not.

BREVITIES.

OUR readers are promised a series of horticultural articles by RENOCLAF, to extend, it may be, through the rest of the year. We leave these articles to speak for themselves.

AWHILE ago we complained that sparrows eat our strawberries. We find that robins eat them too. But we had rather that the robin should eat half-a-dozen than that the sparrow should eat one. The robin earns its living—if not by devouring insects, by its pleasing notes—its decorous behavior and comely looks. We had as lief part with strawberries as with robins. But the sparrow is among birds what tramps are among men.

WE respectfully announce that the Rural Cricket Clock will be withdrawn as a premium on and after the first day of July. It is now apparent, if it has not been from the beginning, that this clock is all that it was represented to be. The compensation that we have is that all who have received it have been well pleased. As a method of obtaining new subscribers it has been an actual loss to us. Our free seed distribution for the present year will be announced as soon as we can estimate the probable crop of seeds.

THE Scientific American publishes the following on neutralizing poison:—"A poison of any conceivable description and degree of potency, which has been intentionally or accidentally swallowed, may, it is said, be rendered almost instantly harmless by simply swallowing two gills of sweet oil. A person with a very strong constitution should take nearly twice the quantity. This oil, it is alleged, will most positively neutralize every form of vegetable, animal, or mineral poison with which physicians and chemists are acquainted." This is of inestimable value if true. *Who* says it, and how does he know?

THIS is just the season of the year when city people begin to think about how much they esteem their country friends and relations. It's a peculiar kind of esteem—an ardent affection, in fact, that burning intensely through the summer season, burns itself out by fall. But a smoldering spark is always left that, by nursing through the next nine months, is ready again in June to burn up as brightly as before. Conversely, however, country people love their city relations and friends best in winter, and, spite of all the ironical things said about it, the interchange of courteous hospitality is quite natural and sensible.

SOME years ago a son of the late Baron LIEBIG asked Mr. J. B. LAWES of Rothamsted to furnish him with samples of the soil of a certain wheat field, and the result of his analysis established the fact that manures, such as phosphoric acid and potash, remain in combination with the soil, very close to the surface. As all manures are applied either to the surface of the soil, or a few inches below it, we may consider that if they contain potash, phosphoric acid and nitrogen, as is the case with farmyard manure, the two former will remain close to the place where they are deposited, while the nitrogen, as it becomes converted into nitric acid, will diffuse through the soil, where part will be arrested by vegetation, and part will escape into the subsoil and drains.

THE "RURAL NEW YORKER."—We notice with pleasure the recent enlargement of the RURAL NEW YORKER as an indication of present prosperity and a progressive spirit. This paper has seen troublous times, and we are glad it has reached calmer waters. Its present editor has our admiration for the reviving work he has accomplished.—*Pacific Rural Press.*

[Liberal-minded journals like the above seem disposed to give the present editors of the RURAL NEW YORKER more credit than is really their due. The truth is, as we have before stated, the RURAL has never seen such "troublous" times but what, had it been conducted with any sort of management, it would have paid a handsome yearly income beyond its expenses. Its present success is due, therefore, just as much to a reduction of needless expenses, as to any improvement in the paper, increase of circulation, or advertising patronage.—EDS.]

Professor BEAL gives the following reasons in brief for cutting grass early. Stock of all kinds prefer young grass to that which is in the flower, and that which is in flower to that which is older or has gone to seed. He believes the same holds true of hay or grass deprived of most of its moisture. We should make hay early: 1st. Because all kinds of stock like it best. 2d. Cut it just before the flowers appear (or before full-blooming in clover), because the chemist finds at that time the grass contains a greater proportion of nutritious or digestible materials than when cut later. 3d. This plan leaves a longer time for the next growth, which may be used for pasture or for mowing again. 4th. It exhausts the roots of the plants less than when cut later. The English found, long ago, that one great cause of the deterioration of meadows was that of allowing grass to get too old before cutting. 5th The crop may often be cut at this time and secured in good order, while if the owner waits for the coming of the flowers, bad weather may interfere. 6th. If only a part is cut early, some portions will likely get into flower or even go to seed before it is secured.

Literary Miscellany.

THE COMING OF THE GRASS.

WHENCE cometh the grass—
The sudden secret grass?
From what deep world invisible,
What subterranean citadel,
What army of elfin-land,
Comes forth that swiftly-marshalled band,
That vision of unwarlike spears,
Innumerable as the heavenly years?

How cometh the grass—
The irresistible grass?
We know not how, we cannot tell
The moment of that miracle;
We know not when, we know not how;
We know the earth was bare, and now
That pleasantly our footsteps pass
Above the yielding emerald of the grass.

Where cometh the grass—
The all-abounding grass?
Along the hills, the meadow sweet
The river side, the village street;
In forest nooks its tassels wave;
Its patient green enfolds the grave;
Beside the cottage home doth press
The tender, faithful grass with mute caress.

Why cometh the grass—
The bright, untiring grass.
That down the ages doth repeat
With every year its idyl sweet?
To teach the truth declared for thee
By gracious lips in Galilee:
"He careth." Then when doubts harrass,
Heed thou the wise, soft whispers of the grass.

[Illustrated Christian Weekly.

CORA.

CHAPTER XXIV.

(Continued from page 381.)

THE next day they returned to Paris, and were greeted at the entrance of the hotel by the obsequious Mr. Marks, who a few days later gave his master formal notice to leave. His savings and a small legacy lately received enabled him to leave service, he said; and Sir Alan's mind was too much occupied with other things to take much notice of his profound regret at leaving such a master, nor had he the faintest idea that the legacy of which he spoke was a cheque received from Lord Almane, in return for services rendered by the faithful and attached domestic.

Thus it happened, that when Sir Alan and Lady Vincent returned to England, Spills was the only attendant they had with them, although Cora saw at the station the cold blue eyes and evil face of her husband's late servant, and even that transient glance made her shiver and draw nearer to Sir Alan.

"That man is my evil genius," she said, pettishly; and Sir Alan glanced at her in some surprise.

"I beg your pardon," he said, coldly. "To whom are you alluding?"

"To Marks," she replied, timidly, coloring at her momentary agitation. "I have had nothing but misery since I saw him."

"You are fanciful," was the quiet reply, as Sir Alan opened his newspaper and settled himself in his corner, nor did he speak again during the journey, except to ask whether she were cold, or when they stopped, to inquire if she would take any refreshment.

Lady Vincent and Marianna were at Rivington Square to welcome the travelers, and a very few minutes sufficed to show the elder lady that something was wrong between her son and daughter-in-law, and that something had destroyed the perfect confidence which had once existed between them. She saw that her son looked ill and haggard, that Cora, notwithstanding a forced gaiety, was the ghost of her former self, and evidently unhappy; but as days passed on neither volunteered any explanation, and she returned to the Bungalow much disturbed, and anxious in the highest degree; but hoping almost against hope, that the old love would reassert itself again.

At Christmas she paid her usual visit, and found that things had by no means improved. Sir Alan's manner, so haughty, imperious, and cold, pained her terribly; while Cora seemed so reckless and defiant that she could hardly recognise her as the same person. One thing about her seemed unchanged, and that was her devotion to the child, whom she seemed to idolize. He was a bright, handsome little fellow, with shining dark-gray eyes, shaded by long dark lashes, the counterpart of his mother's; while in shape and stature he seemed to have inherited the stately proportions of his father. But strangely enough, the child was more attached to Sir Alan than to his mother, whose passionate caresses and fierce love seemed to frighten him; and the tears came often into Lady Vincent's blue eyes when she saw Cora turn away from her husband and her boy with a yearning misery in her eyes, which told of sorrow unutterable. When he was playing with his son, the sorrow would be lifted from Sir Alan's brow, the gay smile appear upon his lips; and when Harold, wearied with a long game of romps, would fall asleep with his long curly head nestling against his sculptor-father's silken beard, Sir Alan's face would become beautiful with the expression of protecting tenderness which illumined it. And Cora, looking on, felt like Eve banished from Eden, and turned away, clenching her little hands to stifle the cry of agony which rose to her lips.

Deprived now of all domestic happiness, it was but natural that Sir Alan should devote all his time and energy to his profession. He passed long hours in his studio, and if he missed his wife's presence, he never, by word or look, betrayed that he did so.

Cora walked, rode, and drove as usual, appeared in society with a smiling face and gay demeanor, and Mrs. Grundy, acute as she is in general, failed to detect any skeleton in the sculptor's cupboard, although a more miserable woman rarely hid her wretchedness under a smiling mask than Cora Vincent.

Sir Alan's house was a favorite resort of talented and rising men of every profession, while the "upper ten" delighted to go where the lions of the day could be freely discussed and "interviewed." On two evenings in the week Lady Cora was "at home," and on these evenings the drawing-rooms were filled with aristocratic and distinguished visitors, who in their turn courted and "feted" the sculptor's beautiful wife. On these occasions, Sir Alan's courteous and chivalrous deference to his wife never altered; he introduced his new friends to her; was cordial to her; and the guests said that they were a "model couple," and wondered a little that their Bohemian tastes, which were sufficiently *prononces*, allowed them to give such an example of conjugal felicity.

Among these guests was one, however, who saw things more clearly, and who partly guessed how matters were. This was George Leeson, who, as a friend of Harold Sinclair's, had retained a warm interest in his sister. He was too indolent himself ever to reach the top of the tree in his profession, and had never married, entertaining, so rumor said, a hopeless passion for Lady Lucie Belmont, who, though she had returned to England and mixed in society, was still Lady Lucie Belmont, and retained undivided control over her broad acres and golden guineas. She and Cora met sometimes, but the old friendship of other days had not been renewed. She, as well as George Leeson, thought Cora had married Sir Alan out of pique at Lord Almane's neglect, for the Viscount's love for Miss Sinclair had not remained a secret to the heiress, who had set him free on learning, by that chance conversation overheard at Mrs. Colston's, that Cora was preferred to herself.

One evening, after an unusually brilliant assembly at Lady Cora's, when but a few intimate friends remained, Mr. Leeson approached, and sat down in a low chair by Cora, who was sitting a little apart, and at a sufficient distance to prevent any conversation being overheard.

"You are tired, Lady Cora," he said, gently.

"No," was the listless answer.

"Then will you come and show me that new orchid Lord Travers has been raving about? I want to speak to you," he added, as she hesitated, and something in his manner constrained Cora to rise and take his proffered arm.

They passed down the room into the conservatory beyond, and George Leeson made Cora sit down, and took a seat beside her.

"I am the bearer of a message and letter to you," he said, quietly. "I do not think I am wrong in delivering it. It was given me last night by Stanley St. Roger, and this morning I heard—my news will shock you, Lady Cora—so be prepared."

"You heard what?" she asked, quickly.

"That he left England last night, and that he did not go alone. That Lady Helen St. Maur accompanied him."

"Her husband, her poor children!" said Cora, looking very pale and shocked. "Oh! how dreadful!"

"It is very sad," said Mr. Leeson, quietly. "I am an old friend, Lady Cora, may I take an old friend's privilege? Had Lord Almane anything to do with the present uncomfortable feeling between your husband and yourself?"

"He may have had. Yes, in a great measure, perhaps; but you, who know that Alan never loved me, must have known that his feigned devotion could not last," she replied.

"I who know that he never loved you?" said Mr. Leeson, in surprise. "What do you mean, Lady Cora?"

"I saw my husband's letter to you," she went on, in a dreary monotonous voice, "the letter in which he said that 'out of pity for my lonely position and evident *penchant* for himself he was going to marry me.'"

"You are dreaming, Cora," said her companion. "Do you not know Alan Vincent better than to imagine him capable of such a thing? He never wrote those words in his life to me. Why, I have his letter still, the one he wrote in reply to my congratulations; and short as it is, it is easy to see that he loved you dearly when he thanked Heaven for giving you to him. Who showed you the letter, Lady Cora?"

"Lord Almane," she said, tremulously; and then, unable to repress her desire for a friend, she told him all that had happened in Paris, without any reservation or concealment whatsoever.

He listened with deep attention, and heard her in silence to the end.

"There is some conspiracy here," he said then. "There is some underhand business which we must discover, Lady Cora. You were all duped—you, your husband, Lord Almane himself. Depend upon it," he added, impetuously, "whoever forged the note from you to Stanley was the writer of the letter porporting to come from Sir Alan. Take courage, my poor child, all will come right yet."

She shook her head sorrowfully.

"I have given up all hope," she said, in her sad, sweet tones. "He will never believe in or love me again. Circumstances were against me, I grant; but it was easy to make him doubt. No; he never really loved me!"

"His was jealousy in love, Cora," said George Leeson, cheerily. "Trust me, all shall be well yet; and when you have him at your feet again you will forget all your trouble in the joy of that 'reconciliation which is the feast of love.' But I must go," he concluded; "and I am forgetting my commission."

He took from his coat pocket a sealed letter, which he handed to her. As he did so, Marianna appeared at the entrance to the conservatory, and, as Cora concealed the letter in the little embroidered pocket suspended at her waist, she came eagerly forward, her old, wrinkled face showing signs of terrible perplexity and distress.

At the sound of her footstep Cora turned, and seeing the troubled face, rose from her seat. The old servant seemed in the utmost excitement, and began a hasty explanation in her own language, which she always used when distressed. George Leeson was but an indifferent Italian scholar, and he had distinguished but one word, *bambino*, when Lady Cora uttered a faint cry, and rushed away, followed with almost equal rapidity by the old nurse.

CHAPTER XXV.

"Oh! doctor, save him, save him to me; he is all I have in the world."

"Dear Lady Cora, how gladly would I do so, but your dear child is beyond all human skill."

And the kindly, gray-haired physician, who had a young married daughter and a little grandson of his own at home, felt his eyes fill with water at the passionate sorrow in Cora's tone as she implored him to save her child.

Some three or four hours had elapsed since Marianna had summoned Cora from her interview with George Leeson, and they had been passed in terrible anxiety and suspense; but it was over now. There was no need now for anxiety—no need for suspense; as the gray dawn had broken over the eastern sky, Harold Vincent's fair soul had fled, and the form which lay clasped to Cora's breast was no longer living or breathing, but a form of lifeless clay.

All the efforts of the physicians who had been summoned in all haste, had proved unavailing. The child had been attacked by the most terrible species of croup, and after a few hours struggle with death, had passed away with a smile on his face, and a sweet upward glance of the gray eyes at his father's mournful face as he bent over him in speechless grief.

"Hush!" said Cora, hastily. "He is better; look, he is going to sleep. He is not suffering now."

No, he was not suffering; he would never suffer again. The sleep of which the poor young mother spoke was the sleep of death, and one glance at the grave faces of the medical men showed Sir Alan that it was so.

But Cora did not know it; to her the stillness of the little limbs, the sudden peace which had fallen over the little face, were not signs of death, but of sleep and freedom from pain; and she looked up at the physician with a faint little smile and a prayer in her eyes that he should confirm her hope.

It was a strange, mournful sight, that silent, solemn group gathered round the fair young mother and the dead child. Cora still wore her evening dress of gold-colored silk and lace, which looked strange and out of place at such a scene, and by the morning light; diamonds were gleaming on the rounded throat, in the little ears, and on the slender arms which clasped her child; the flowers in her hair had faded, and her graceful head was bowed over the little lifeless form. Sir Alan stood beside them, his face bearing an expression of anguish, and the two medical men stood apart, talking in under-tones; while Marianna was kneeling by her mistress, tears falling over her wrinkled face.

"Why do you cry, Marianna?" said Lady Cora, softly. "He is better now; but he is cold," and she gathered the child closer to her breast. "Give me a shawl to cover him. Why do you look so grave, Dr. Grayling? Harold is better."

"Yes, he is better," said the physician, gently. "He is quite well, Lady Cora. My child, he is freed from all pain and suffering now, and you, who loved him so dearly, would not wish him back."

Cora lifted her eyes to the grave, gentle face which bent over her, with a vacant gaze of terror.

"What do you mean?" she said, piteously. "Harold is better, is he not? See, he is so quiet. He could not lie so still if he were suffering."

"Neither does he suffer, my poor child; he will never suffer again. Let me take him from you."

But she drew him closer to her and clasped the white jeweled arms more tightly around him. Then she rose and stood upright with a faltering, uncertain movement, which made Sir Alan put his arm around her to support her.

"You do not mean that he is dead?" she wailed forth. "Oh, Doctor Grayling, he is all I have in the world. Save him to me—save him to me!"

"He is past all human skill now, Lady Cora. Your little son is dead."

As the words came slowly and unwillingly from the doctor's lips, Cora uttered a cry of anguish; then, stooping, she pressed her lips again and again passionately to the cold brow and closed eyes, and, parting the curls from the child's forehead, she cried out:

"It cannot be! Heaven would not be so cruel. I will not—I will not let him die!"

"Hush, Cora!" said Sir Alan, gently removing the boy from her arms and laying him on the little white cot. "Our little one is happy now; I loved him too, you know, and yet I am willing to give him up when it is for his good."

She looked up at him vacantly, but said nothing; Sir Alan encircled her with his arms, and held her tenderly within his embrace. It was long now since his lips had touched hers, and even in his anguish and bereavement a thrill passed through him as he bowed his head over her, and touched her brow with his bearded lips, murmuring some tender, pitying words. Cora stood still and motionless for a moment, watching Marianna, who, with tender hands, had laid the child on the bed, straightened the little limbs, and folded the little lifeless hands upon the breast.

When all was over, Cora disengaged herself quietly from her husband's arms, and moved with an unsteady, faltering step towards the bed.

Then she stooped over the child, pressed a long, long, lingering kiss on the baby mouth, and left the room with the same mechanical movement, the same stony glare in her dark, lustrous eyes.

"I need not say how deeply I sympathize with you, Sir Alan," said Dr. Grayling, as he prepared to take leave. "Poor Lady Cora!—it is a terrible trial for you both. I will call in the course of the morning to see how she is."

"Thank you," said Sir Alan, quietly, as he went down-stairs with the physicians, returning almost immediately to the room they had left.

It was empty. The little form was lying still and motionless on the white bed; but Marianna had left the room to go to her mistress.

CHAPTER XXVI.

SIR ALAN knelt down by the bed and contemplated the marble features, shaded by the clustering fair curls, until his eyes grew misty with unshed tears. Why had this terrible trial fallen upon him? Why had this child, in whom he had so greatly delighted, been taken from him? What had he done to merit, to require such severe chastisement?

Swift as thought the answer came to him. Had his harshness to his wife not fully deserved some punishment? Might she not have been less guilty than he imagined? Did not his pride, his jealous intolerance, his refusal to hear any explanation, merit some little correction? Was it for this end that the boy was taken? Many a softening thought came into Alan Vincent's heart as he knelt by his dead child, and thought of the child's mother, his wife, to whom he had meted such a harsh measure, whom he had judged with such a harsh judgment.

He thought of Cora again as he had met her first in her sweet girlhood, with her bright beauty untouched with care; Cora lying motionless in his arms, as he carried her out of the room where her dead brother lay; Cora, with her sweet, grateful face raised to his as they stood together by Harold Sinclair's grave; Cora, trembling and tearful, accepting the love he offered her at last. And then, as his wife, beautiful, and to all appearance happy, holding her child in her arms, gay, laughing, triumphant; queening it in society, *feted* and courted by all; in Paris restless and uneasy; at Amiens cowering at his feet in her humiliation and abasement; and now white, haggard, despairing, with her baby lying dead upon her breast.

"Oh! Cora—Cora!" broke from his lips, as he bowed his head in his hands, and his frame shook with the tearless sobs of a strong man's agony.

At last he had given way, the strong wall of coldness and reserve he had erected between himself and Cora had broken down. If there could not be perfect love and confidence between them, could there not be peace? Could not this dreadful reign of outward defiance on her side and indifference on his be over? At least they could be friends. He would go to Cora, now that she was softened by trouble, and ask her to forgive his harshness, his cruel judgment of her, and he could help her to bear their joint affliction.

He rose slowly from his knees and stooped over the lifeless form, pressing a long tender kiss on the little lips where Cora's had rested but a short time before, and quietly opening the door, went out and closed it after him.

As he went down stairs a housemaid, with swollen eyes and tear-stained face, was sorrowfully performing her morning work. She looked at Sir Alan mournfully and pitifully as he passed her, looking worn and haggard, still wearing his evening dress, and the ready, easy tears came to her eyes again.

He went down into the dining-room, hesitating whether to seek his wife now or wait a little until Dr. Grayling came, and, in this state of indecision threw himself into a deep leathern arm-chair, and bent his face upon his hand.

A light tap at the door aroused him, and at the mechanical "Come in," which he uttered, the servant he had passed on the stairs entered, holding a letter in her hand.

"I beg your pardon, sir," she said, huskily, "but I found this on the stairs. It is directed to my lady, I think, but she will not let anyone in. Will you keep it, sir, please?"

Sir Alan stretched out his hand and took the letter. The next moment he had dropped it upon the table as if it had stung him; and the pallor of his face grew yet more intense.

"Oh! sir, you are ill. Let me get you something," said the maid, startled and alarmed.

"There is no necessity," said Sir Alan, with an effort repressing all emotion. "Thank you, Peters; I will give Lady Vincent her letter."

The girl curtseyed and disappeared, leaving Sir Alan gazing at the letter which lay upon the table with fierce, agonized eyes, and a face from which all softness had departed.

"Even now," he said, bitterly, to himself—"even now—ah, Heaven! when I was trying to forget the past—when I had begun to hope——"

He rose from his seat, and walked up and down the room with hasty but uncertain steps, pausing now and then to look with fascinated eyes on the fatal missive, as it lay on the table before him.

"Shall I open it?" he soliloquised. "I have a right; and yet——no, I will not open it. It is hers, and she loves him."

Again the restless pacing to and fro; again the mental struggle whether he should open the letter Lord Almane had addressed to his wife Again he decided that he would not.

"How did it reach her?" he said to himself, as he contemplated it. "It has not been through the post. Are any of the servants in his pay? Has she seen him again? Does she meet him? Is she false as himself?—false, while I—Heaven help me!—I love her still."

And hiding his face in his hands, Alan Vincent, the eminent sculptor, the successful man *par excellence* of the day, broke into tears at the shattering of his hopes, and cried like a child over the wreck of his happiness. Ah! me—

"They who have loved the fondest, the purest,
Too often have wept o'er the dream they believed."

CHAPTER XXVII.

"LADY LUCIE BELMONT, my lady," announced Spills at the door of Lady Cora's boudoir, and her mistress rose up with a languid movement, strangely unlike her usual vivacity, to meet her visitor, who came forward with outstretched hands and her eyes full of tears.

"Cora, I could not help coming, I am so sorry for you, dear."

Cora answered mechanically, and Lady Lucie sat down beside her, her tears falling fast upon her companion's heavy mourning dress, while Cora's own eyes were dry and tearless, and glittering with an incipient light of fever.

"They told me you received no one," went on Lady Lucie, tenderly clasping her hand in both hers; "but I hoped you would see me. How can I comfort you? How can I help you to bear it better, dear? For the sake of old times I should like to do something for you."

"No one can do anything," said the dreary voice, in slow tuneless accents. "He was all I had in the world to love, and he is taken."

"Do not speak so mournfully, Cora. Remember your husband—you must be brave for his sake."

A faint, bitter smile rose on Cora's lips, so inexpressibly sad and hopeless, that for a moment her visitor could not speak.

"It is very—very sad for you, dear Cora," she said in a moment; "but you must not be so hopeless and despairing. Think how happy your little one is now."

"He was very happy here," said the bereaved young mother. "Why was he taken from me, Lady Lucie?" she added, passionately. "Other mothers have husbands who love them, besides their children, and when the little ones are taken they have still some hope in life. I have—none—none—none!"

Her voice rose in anguish; but before Lucie could interpose she went on again:

"I cannot be resigned, I cannot be happy. He was the one person on earth who cared whether I lived or died. Now he is gone, I am alone. My husband—he cares not for me. Better for him—much better that I were dead and he were free!"

She turned from her visitor, and throwing up her arms above her head, flung herself on the cushions in passionate despair.

Lady Lucie waited, soothing her with gentle words and caresses until she grew calmer, then she rose to go, weeping, although the childless mother did not shed a tear, and submitted to her caresses with a passive endurance.

As Lady Lucie went across the landing Sir Alan came out of his studio, and advanced towards her. She had not seen him since the death of his son, about a month before, and started at the change she perceived in him.

"Have you seen Cora?" he said, eagerly. "How is she bearing it? Lady Lucie, she will not see me, and yet, poor child——"

He broke off abruptly with a heavy sigh, and Lady Lucie told him of her deep sympathy with his trouble.

"Sir Alan," she went on, timidly, clasping her little hands as she lifted her blue eyes to his face, "you will not think me presumptuous, or that I am taking an unpardonable liberty. I, too, have known suffering."

He led her gently into the studio, and made her sit down on a pile of cushions, arranged in Eastern fashion upon the floor.

"What is it, Lady Lucie?" he said, gently. "You could not take a liberty with me. Tell me frankly what you wish to say."

"You will not be angry?" she queried, doubtfully, then she went on quickly: "Sir Alan, I cannot help seeing that something is wrong between you and Cora. Could I do anything? I fear very much that it may be caused by the same person through whom I myself suffered. I believe now that it was partly through want of perfect frankness—— Please let me speak," she continued, eagerly, as he was about to interrupt. "I know somewhat of the cause of your trouble. George Leeson"—the fair face flushed slightly here—"told me a little. Are you sure you are not misjudging your wife? She suffers so much from your coldness."

Sir Alan sighed heavily.

"Lady Lucy," he said, gently, "I know how sincere your friendship is, and how kind your intention; but it is not from my coldness that Cora suffers. I think she is unhappy: but a marriage contracted, not only without love, but when the love was given, cannot be a happy one. Her affection, poor girl, was given long before I met her; it is too late now to alter. We must both bear our cross, you know. Believe me, I feel, and deeply, that you wish to see us happier. Perhaps in later years, when we forget—until then——"

Lady Lucie rose sorrowfully; she saw from Sir Alan's resolute tone that there was no present hope, and she took her leave sadly.

When she entered the carriage, the powdered footman glanced surprisedly at the remains of tears upon her face; but the surprise deepened when she gave him the address; instead of the "Home" he had expected, she said, quietly:

"Drive to Mr. Leeson's studio in Elm Tree Walk."

While Lady Lucie Belmont was driving rapidly towards the old street overlooking the river where Mr. Leeson lived, Alan Vincent had returned to his studio, thinking of what she had said; and calmly as he had received her words, they had not been without effect. Perhaps after all, he told himself, he had not been quite fair to Cora; but then, the proofs were overwhelming. Had he not met her with Lord Almane and accidentally intercepted their flight?

True, the Viscount had, on that gray October morning, when they had met, in the early dawn, on the sands at Audresselles, proclaimed Cora's innocence; but he laughed at an assurance belied by proofs. Had not Marks, after he left his service, written him a letter, telling him that he had, many a time and oft, been the unseen spectator of passionate love-scenes between Lady Cora Vincent and Lord Almane? and the man could have had no motive for such an assertion.

Besides, had not he himself found in the railway carriage—had he not still in his possession—the little note in Cora's handwriting, agreeing to the flight with Lord Almane—the flight he had intercepted? Of what avail would explanations have been? What could she have said, with truth, to justify herself? Nothing! Nay, did he not hold still—unread, it is true—the letter addressed to her by Lord Almane, which had been brought to him on the morning their boy had been taken? Ah! she was guilty—she was unworthy.

No; if Cora suffered, she brought the suffering on herself, and the burden she had laid upon herself she must bear; but when he thought of her sitting alone in her terrible grief and bereavement, he felt, by the intense yearning to comfort her and lessen her grief, that his love for her was as strong as ever. He remembered her agony on the night when summoned by Marianna, she found her little son attacked with croup; again he heard her wild, imploring cry to the sympathizing physician.

"Oh! save him—save him for me! He is all I have in the world!"

And his heart softened strangely towards the woman whom he loved—loved still, believing her to be unworthy.

The studio seemed awfully still and quiet that evening as dusk gathered around. Sir Alan felt the loneliness dreadfully oppressive; and, leaving the room, he ordered his horse, and rode away to The Bungalow, resolved to tell his mother all, and entreat her advice, and clear, impartial judgment.

Cora, in her silent room heard him go, and went to the window to see him ride away, standing there motionless until he was out of sight.

A few moments after, her maid came in with a message to say that Sir Alan had ridden over to Lady Vincent's, and would not return until the morning.

"Very well," Cora replied, in the dreary tuneless voice habitual to her now. "I shall not require you again this evening, Spills."

"Very well, my lady. Can I bring you anything?"

"No, thank you; I shall want nothing more."

And Cora glanced up, and gave the woman a very faint, sad smile. Then she put out her hand.

"You have always been kind and attentive to me," she said, gently. "I am not unmindful of it."

"No, dear my lady, I would do anything. I wish I could do something," faltered the maid, as she went away, wiping off her tears, which had not ceased to flow when she reached the servants' hall, where they were noticed, and commented upon.

"My lady looked, and spoke so gentle," said Spills, sobbing. "She seemed as if she was bidding me good-by!"

When the maid had disappeared, Cora rose, locked her door, and began pacing up and down the room with bent head and clasped hands. A crowd of memories, bitter and sweet came surging up in her mind. Even her childhood's days—the merry, happy life before her father's death—came back to her; her early girlhood, her happy home at The Tryst, her brother, Lord Almane, that dreadful time at Rome, when Harold had been taken from her, and when her husband had proved himself so tender and faithful. These were followed by later memories: the long, happy, dream-like time which had followed her marriage, the birth of her child, and Sir Alan's joy, their pride and delight in him. Then came the dark shadow which had fallen upon them in Paris, the subsequent misery, and, finally, the visit of that

"Reaper, whose name is Death,
Who, with his sickle keen,
Reaps the bearded grain at a breath,
And the flowers that grow between."

And here Cora's head sank lower, and her frame quivered with anguish.

When she raised her head, her pale face had an expression of resolution stamped upon it.

She crossed over to her davenport, unlocked it, and looked out some letters—a few of Sir Alan's, written at various times of their engagement and some of her brother's, which she fastened together, and hid in her breast. Then she went slowly into the rooms which had been little Harold's, and lingered there awhile, touching with tender fingers the little garments which had been folded away, taking up with reverent hands the toys he had used, and replacing them in their places without a tear or sigh. Then she came round to the little cot, and sank on her knees beside it, resting her head on the snowy pillow, where the child's had so often laid, and caressing it as if it were something living, and able to understand her woe. She knelt there some time; so long that, when she rose, her limbs were cramped and stiff, and, for a moment, she had to steady herself against the bed. When she returned to the room she had left, the fire was dying out, and the household had retired to rest, for all seemed quiet.

Throwing herself upon a couch, she waited, watching the dying embers on the hearth, listening intently to hear if all was still, with a strange, stony glare in her large eyes, and a set look upon her fair face.

Now and then a few words escaped her pale lips.

"It cannot be sin when one is so miserable; at least, one will suffer no longer. He will not care—perhaps no one will ever know."

Then, when all was still in the house, when hardly a sound disturbed the echoes of the silent square, she rose and made her way out of the room, across the gallery and the studio into a room beyond—a little room overlooking the square, half library, half study, which Sir Alan had named his "den," and where he kept his chemicals of various kinds and drugs.

Putting her light upon the table, with a firm step Lady Cora approached a tall, ebony cabinet at one end of the room, but when she attempted to open it, she found that it was locked. Hastily she looked over the room, hoping to find the key, but her search was vain. Then she remembered that Sir Alan kept his keys in his dressing-room, and she went there with the same firm tread and fixed expression on her pallid countenance.

Having found them she returned, and having tried several, fitted one into the lock and opened it; sundry small bottles stood upon the dark shelves, and Cora took up first one and then the other irresolutely.

At last she found the one she sought, a small glass phial, labelled "Laudanum—Poison." Hurriedly relocking the cabinet, she turned from it, and taking out the stopper from the bottle, she raised it to her lips.

One moment more and Cora Vincent's short life would have been ended; but even as she raised her hand, her arm was caught from behind, the phial snatched from her hand and thrown violently upon the ground, breaking into pieces as it fell, and a faint heavy odor arose from the liquid it had contained.

Cora uttered a faint cry of terror, and sank upon her knees by the table, hiding her face in both her hands.

CHAPTER XXVIII.

"We fell out my wife and I,
And kissed again with tears."

For some minutes Cora did not venture to raise her head, even to ascertain who it was who, by sudden intervention, had thus defeated her purpose; but when she uncovered her face she saw that it was her husband who had seized the phial and destroyed it, and the same glance showed her that he was terribly agitated. He stood leaning against the wall with his head bowed upon his breast, and the strong, white hands shaking like an aspen from the sudden terror. Of the two Cora was the more self-possessed, her hand was steady enough as she rose from her kneeling position and faced him almost defiantly; but she did not speak, and it was some minutes before Sir Alan could master his emotion sufficiently to do so.

"Cora," he said, in a low, horror-stricken voice, "what were you about to do?"

"Simply this," she said, calmly, "to rid myself of a burden which is getting unbearable to me, and to rid you of my presence. Why did you come so inopportunely? Had you been half an hour later all would have been over satisfactorily to us both!"

"How can you—how dare you speak thus, Cora?" he said. "I thank Heaven that I arrived in time. Oh, think what you were going to do, and——"

"Do you suppose I have not thought?" she said, bitterly. "It is because I have done so—because I feel that my misery will end in driving me mad—that I wish to end my wretched, my most miserable life. While my boy lived I was not quite hopeless, now——"

She turned away with a hopeless, despairing gesture.—[To be continued.

LEAVES FROM THE BIRCHES.

EVA.

CHIRRUP, chirrup, r-r chee, and looking out into the fragrant shadow of an old, gnarled apple tree, I see a great, red-breasted robin, sitting in the warm June sunshine. What a rollicking fellow he is, to be sure! see how he swings on tiny twig with never a wink of the bright red eyes: now he hops higher where the shade is thicker and the sunlight checks his crimson breast, and the lovely blossoms puff their sweet breath at him; round and round he hops, tipping back and forth, pouring out his rich, liquid notes in mad, boisterous glee. Now he darts off, and only the gentle swaying of that branch convinces us we have not been half asleep and dreaming, wooed by the sweet scents and sounds of this pleasant afternoon.

I see many things from this window of mine. There are sprays of melting pink in the shape of hearts, with a speck in the center, peeping everywhere, long, old sprays, faded and gray, and baby sprays just learning how to hang daintily and sway gracefully in the fickle breeze. The language of this flower is woe, and is that why they are in the shape of hearts, and do human hearts blossom into as rare beauty when all cause for sorrow is left behind? Close by it is a slender plum tree, not quite so romantic perhaps, but more satisfying to the physical needs, as is the wine plant, spreading its tent over by the grape trellis. Chirrup chee chee chee, you conceited fellow, did you think I could not get along without your company? There is a hive of bees near that apple tree, and one benevolent branch reaches down its wealth of blossoms for their benefit, and they tumble on and over it without a word of thanks, and fly home heavily laden. Here a bed of pansies turn their faces toward me, all smiling, but with different shades of expression. Some blue and melancholy, some nearly black and very energetic looking, and some with golden hearts like a few people I love. There is a bunch of grass pinks, which whisper to me of sister bunches dwelling over a tiny grave miles and miles away. A "General Washington" droops and pines for its old quarters in the sitting-room window, for though its (his) predecessor delighted in situations that favored progression, this one finds itself indignant at the sun's hot rays, and bows its head in dejection.

A broken flower-rack lies in the path. What can I say of that? Oh! yes, the little fingers that fashioned it—fingers that belonged to a rude, noisy boy; but—what should we do without them? Then a rug made by some dear old work-worn hands, "such beautiful, beautiful hands," that lies on the springing grass, and the grass that looks like tufts and waves of emerald velvet—chirr chirr-rr-r chee. And upon the hill yonder is a house, a white house I should say, half hidden by trees. Who can tell of the hopes and disappointments, joys and sorrows, that have blossomed and died beneath that old roof tree? I can see in imagination the prattling child, the coy maiden, and the shy, sweet bride that stepped into matronhood there, with the crystal cup of hope pressed to her loving lips; the aged father and mother who sit alone and wait for the summons to a brighter, pleasanter home.

Up against an old building is a bunch of "burdock." Its broad leaves carry me back to childhood, when a loved companion would use the "burs" for purposes of adornment. He would string them up the creased pant leg, run them in single file over his shoulders and coat sleeves, and my imagination would clothe him in soldier uniform, and these were the "stripes of honor," and no conquering hero ever felt prouder than I did of that boyish, handsome face and figure. The only things left within my range of vision are (must I mention those prosaic things) the door-step, a pile of brush, and a clothes-line. But the shadow of the house roof has some way got into the middle of the flower bed, which reminds me it is tea time.

CONJUGAL DISCORDS.

M. H.

THE weaknesses and follies of women are a theme on which men, from the sage to the clown, have at all times been eloquent. Her natural coquetry in dress, her maternal vanity, her devotion to the little elegancies of the home, to clean windows and fresh curtains, are inexhaustible sources of masculine merriment or abuse. What housekeeper ever complained of an aching back or of nervous irritation without being scolded by her "lord" for some extra work she had done in beautifying the home? Men never seem to learn that women, as a rule, cannot find life endurable in the atmosphere of dust and disorder which characterizes bachelor housekeeping, and which seldom disturbs the equanimity of the masculine mind in the least. Men and women are so different in their tastes and ways that there must always be discord and unhappiness in the household until the sexes give over trying to change or remodel those tastes and ways, and learn to respect them. Men must accept as inevitable the fact that women to be happy must have artistic, or at least dainty and cozy, environments; and women must learn to preserve their souls in quiet when men spill their tobacco and ashes over the carpets and tables, for probably no man ever lived who could fill a pipe, even from a wash-tub, without scattering the tobacco over the premises.

That the sexes will give over trying to reform each other does not seem likely to happen very soon. Indeed, one might be pardoned for believing that matrimony is specially adapted to develop all the imperfections and meannesses of human character, and that even of those matches that are made in heaven, the devil arranges all the subsequent conditions. There is hardly a pure and innocent delight that unmarried women enjoy which they can carry into that blissful world bounded by the marriage-ring. One of those delights is that of squandering a little money, which is merely the equivalent of man spending it as he likes, without accounting to any one. Few wives can do this and not be subjected to the humiliation of hearing the husband say, "My dear, are you not a little extravagant? Is all that money gone that I gave you last week?"

Men and women seem incapacitated, in the very nature of things, from understanding each other. While mutually enamored they meet as upon a bridge—a Bridge of Sighs perhaps: break this, and they are for ever separated as by an impassable gulf. Leaving aside entirely the enamored state, do men as a rule seek the society of women and prefer it to that of men? The thriving clubs, the billiard and drinking saloons, and the other resorts of men common all over the civilized world, seem very like a negative answer to the question. In savage life we know that the sexes do not hunt or fish or do any work together. In our modern drawing-rooms most men confess themselves "bored." They long to get away to their clubs or some other resort of their fellows. When husbands spend their evenings at home, if no one happens to call, it is not common for them to enter into long and exhilerating conversations with their wives. To be sure, wives are too often ignorant of the subjects that interest intelligent men; still, not more ignorant than before marriage, when the one bridge upon which they could meet was unbroken. *Then* conversation never flagged; it was ever new and entrancing. Both talked pure nonsense, while having the art of "kissing full sense into empty words." On the other hand, it is, I think, quite a defensible proposition, despite the inferences to the contrary drawn from the failure of the Women's Hotel, that women enjoy conversation with women more than with men when there is no possible question of gallantry or flirtation; and, finally, that the recognition of the fact that men and women are not by nature in sympathetic accord, but only attracted through the law of compensation or opposites, will do more than all other things combined to make them study each other's nature and to respect sexual biases and characteristics, the motive for that study being, of course, the consummation of the ideal marriage, where man and woman set themselves together "like perfect music unto noble words."—*Lippincott's for July.*

THE GOOD MAN'S DEPARTURE.

Why weep ye, then, for him, who, having won
The bound of man's appointed years, at last,
Life's blessings all enjoyed, life's labors done,
Serenely to his final rest has passed;
While the soft memory of his virtues yet
Lingers like twilight hues when the bright sun is set.
(*B. yant.*

BRIC-A-BRAC.

A PICTURE IN SIX MINUTES.

A PRIVATE letter received from an American gentleman in Paris gives an amusing account of a picture painted in six minutes. Says the letter:

"We were at the Cafe Chantant the other night. It is a building somewhat larger than the Corcoran Gallery of Art. It is a great place for music, songs and dances. There was one very amusing feature. During one of the *entre'actes* they brought on an artist who was billed to paint a marine view in six minutes all finished for hanging (the picture, not the artist).

"The canvas was brought on.

"Out came the artist, a quiet, nervous-looking young man of about thirty years of age.

"His colors were all upon the pallette, and his brushes were all in his hands.

"'Attention!' sang out the director.

"The artist seized a large brush.

"At a signal the orchestral band struck up a clashing, maddening, nervous waltz.

"As the first note was struck the artist dashed a mass of yellow upon the upper part of the canvas. Then a bit of blue, then white, a dash of purple shadow, and then, with a quick twirl of a clean brush, a dark blue sea is dashed in against the horizon.

"Two minutes gone.

"The waltz goes on faster and faster. The brush keeps time. A huge rock is sketched in with burnt sienna and black. A lighthouse with a vermillion raoge light is dropped upon the top of the rock.

"Clash, crash, one, two, three, a boat under full sail is thrown into the dim distance. Clash, crash, one, two, three, and another boat is dashed in. Light upon the water is thrown in with a free, steady hand. A huge brush then carefully blends the edges of the masses, and, with a profound bow, the artist turns to a cheering audience, gratified, that he is through on time.

"And the wonder is that the picture is startlingly good in its broad effect. It is strong and clear. The colors are good, and not muddily mixed. It was as good a novelty as I ever saw at any show, and it beats all how it amuses the French people."

ANTONY'S ORATION OVER CÆSAR.

[The Text from which Shakspeare wrote his Version.]

FRIENDS, Romans, countrymen! Lend me your ears;
I will return them next Saturday. I come
To bury Cæsar, because the times are hard
And his folks can't afford to hire an undertaker.
The evil that men do lives after them,
In the shape of progeny that reap the
Benefit of their life insurance.
So let it be so with the deceased.
Brutus hath told you Cæsar was ambitious;
What does Brutus know about it?
It is none of his funeral. Would that it were!
Here, under leave of you, I come to
Make a speech at Cæsar's funeral.
He was my friend, faithful and just to me:
He loaned me five dollars once when I was in a pinch,
And signed my petition for a post-office.
But Brutus should wipe off his chin.
Cæsar hath brought many captives home to Rome
Who broke rocks on the streets until their ransoms
Did the general coffers fill.
When that the poor hath cried, Cæsar hath wept,
Because it did'nt cost anything, and
Made him solid with the masses. [Cheers.]
Ambition should be made of sterner stuff,
Yet Brutus says he was ambitious.
Butue is a liar and I can prove it.
You all did see that on the Lupercal
I thrice presented him a Kingly crown
Which thrice he did refuse, because it did not fit him quite.
Was this ambitious! Yet Brutus says he was ambitious,
Brutus is not only the biggest liar in the country,
But a horse thief of the deepest dye. [Applause.]
If you have tears, prepare to shed them now. [Laughter.]
You all do know this ulster.
I remember the first time ever Cæsar put it on,
It was on a summer's evening in his tent,
With the thermometer registering ninety degrees in the shade.
But it was an ulster to be proud of,
And cost him seven dollars at Marcus Swartzmeyer's,
Corner of Fulton and Ferry streets, sign of the red flag.
Old Swartz wanted forty dollars for it,
But finally came down to seven dollars because it was Cæsar!
Was this ambitious? If Brutus says it was
He is a even a greater liar than Mrs Tilton!
Look! in this place ran Cassius' dagger through!
Through this the sun of a gun of Brutus stabbed.
And, when he plucked his cursed steel away,
Mark Antony how the blood of Cæsar followed it!
[Cheers and cries of "Give us something on the Silver bill!" "Hit him again!" etc.]
I come not, friends, to steal away your hearts,
I am no thief, as Brutus is,
Brutus is a monopoly in all that business,
And if he had his deserts, he would be
In the Penitentiary, and don't you forget it!
Kind friends, sweet friends, I do not wish to stir you up
To such a sudden flood of mutiny,
And as it looks like rain
The pall-bearere will proceed to place the coffin in the hearse,
And we will proceed to bury Cæsar,
Not to praise him. *[Oil City Derrick.*

THE portrait of Mrs. Siddons is said to be the only one on which Sir Joshua inscribed his name, as if content to risk his claims to the admiration of future ages on this single example of his matchless skill. It was written on the part of the drapery, and on looking at the picture in its finished state, Mrs. Siddons stooped down to examine what she supposed to be a piece of classic embroidery, but which she found to be Sir Joshua's signature. She turned to the artist, on remarking the circumstance, and Reynolds immediately observed: "I could not lose the honor which this opportunity offered me of transmitting my name to posterity on the hem of your garment."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE LETTER.

BREAK into beautiful blossoms,
O buds of the sunny May,
And sing my robin and bluebird,
Your sweetest carol to-day—
For my love has written a letter,
And the world is all in tune—
He is coming along with the roses
In the fairest days of June.

I am counting the days between us—
I am counting the moments and hours,
Telling my beads, like a solemn nun,
On a rosary of flowers;
For he said, when the buds of the roses
Are flushing in royal red,
He is coming to claim a promise,
(I wonder what I have said?)

Break into songs and blossoms,
O birds and buds of spring:
Lillies, scatter your fragrance,
And sweeter, song-birds, sing;
And skies, drop golden sunshine
On the beautiful days of June,
For my love is coming to see me,
And the world is all in tune.

[Rosemary Leaves.

THE HOUSEKEEPER'S PRUNING SHEARS.

J. E. M'CONAUGHLEY

"SARAH JANE" said Aunt MARGARET solemnly "I am surprised to see you iron a sheet in that manner, after your bringing up!"

"It is as fresh and as sweet as a rose, auntie" said SARAH, folding it up with an air of satisfaction. "If I did iron it only on one side, is not that white enough to suit you."

"I do not find any fault with your washing, but I think your ironing might be improved. I was taught to iron a sheet as nicely as I would a hem-stitched handkerchief."

"You did your duty by me, Aunt MARGARET, I will always bear witness to that. But I think I have improved on your system. I have learneda judicious system of slighting things that may very well be slighted"

"What a word for a housekeeper! Why it is the rankest heresy I ever heard in that line of business. To slight anything was never so much as named by capable women in my day."

"It is a good system for all that," said SARAH placidly. Perhaps it was well for her that she was not Aunt MARGARET'S little girl any more. She smiled as she dimly recalled sundry boxed ears in olden times, as the reward for "slighting" according to the standard of that thoroughgoing women.

"I think it a very great art to learn what may be slighted to advantage. It gives you more time and strength to lay out on things that you wish to do the very best you can. For instance, I make everything as clean as the best soap, water, machine and sunshine can do it. Then I iron as well as I can all the starched clothes and the table linen, and pass over more lightly and swiftly all the coarser things. Plenty of pieces I only iron on one side. The stockings I do not iron, but smooth them out and roll them together in pairs. It is a poor foot that cannot iron its own stocking. Now, really, Aunt MARGARET, is not this better than wasting precious hours in such works of supererogation as ironing tea towels as carefully as the baby's bibs. When there are so many good books and papers in the world to read, so many kind friends to run in and visit for a half hour, and so many sick neighbors, at times, who need a bowl of delicious broth, or a saucer of jelly. How could I waste my time so, when all these duties are so pressing nearly every day.

I flatter myself that I am a very thorough housekeeper in my way, and I hold myself in readiness for improvement all the time. But I desire never to advance backwards. You may inspect my house from garret to cellar and I shall not blush; but you may not agree with me on all my points. Still I can give you a good reason for them, Auntie. I have good health and strength, and it is not half so hard now I have learned judiciously to lop off work when it can very properly be done. Indeed I think if every weak and weary woman would go through her affairs (metaphorically) with a pair of pruning shears, and snip off the useless things here and there that so waste her life powers, she would wake up to find herself a new woman in a few weeks. Look at one little item, ruffles or no ruffles for baby: what a difference that makes with the ironing table in the course of a twelvemonth! I make pretty, flat trimmings of cambric, stitched at the edges, and her little aprons take no longer to iron than a pocket handkerchief. I consider my laundry work in all my gettings and makings, and that is one place where I save by my pruning shears." Of course Auntie only saw in this talk another illustration of the degeneracy of the times, but just now the baby woke up and that

"Quite ended the conversation."

TALK ABOUT MY JEWELS.—No. 3.

BY MARGUERITE.

A VERY proud and thankful mother was I when I was able to hold a little daughter of my own in my arms. How tenderly my heart went out to the little spark of life; what good, noble and pure things I desired for her.

Cousin LILY came in one day to see her and rejoice with us over our jewel; and, while looking down upon her fondly, she exclaimed: "Isn't it a pity she had to be born a sinner?" I think it was the first time that I had ever thought that my child would sin. Of course I was aware that *other people's* did. Since then, my heart has re-echoed her words a thousand times, for the months were few before we discovered that baby was self-willed. I well remember one evening, she commenced a battle with the "Sandman," and would not yield to his mystic influence. I became tired of holding her, so I fixed her little bed as comfortably and invitingly as I could, and told her she must lie still and go to sleep. She would not. I punished her. She cried and yelled and kicked, and writhed as if in great agony and pain. I was puzzled and called Papa from the store. The moment he came in, he said: "Why, my little girl is very sick! We must have some warm water immediately." Very soon the little feet were placed in the bath-tub where she executed an impromptu dance for a few seconds and then was quiet. Papa gave her a dose of peppermint, and wrapped her in a blanket. After this, she was kissed and petted until she was asleep: For days after Papa would remark "How very sick my little girl was the other night!"

I do not remember her having a similar attack for some time. It occurred when I was visiting at father's. It was her bed time, but she did not believe it. I carried her to my room by main force, and put on her night dress. Again she rolled and writhed as if the little body was suffering extreme pain. Auntie declared "she must be sick," and Mamma surely thought she acted like it, so a dose of paregoric was hastily given her, which quieted her in an instant.

The next morning I asked my mother if she thought Gertie was sick the night before, or was it only an exhibition of naughtiness. A smile played around the corners of her mouth as she answered, "I think it was the latter." How my heart cried out for wisdom then as it has often since.

If our lives are pure, if our faith is strong, and if we hold up the Cross to our children, and by prayer and teaching, show them the infinite loveliness of our Saviour's character, we may find some tribulation in this world, but there will be more of joy; and we will at last awake where the light from the Sun of Righteousness will rest upon us eternally.

A SERMON TO GIRLS ON COOKING.

COOKING-CLASSES have been popular among fashionable young ladies of late years; but there is no cooking-class which quite equals in its opportunity for excellent information that which you may find at home. Presuming that I am talking to a girl who has just left school, I advise you to make use of your leisure in taking lessons from your mother. There is an absolutely splendid feeling of independence in knowing how to make perfectly light, sweet, substantial bread. Then try your hand at biscuits, muffins, corn bread, toast, and all the different forms into which bread-stuffs may be blended. Toast seems a simple thing enough, but is frequently so ill made that it does not deserve the name. Gruel, a necessity of the sick-room, is often a hopeless mystery to women who have no idea of how it is evolved from the raw material. After you have mastered the bread question, try meats and vegetables.

Any bright girl who can comprehend an equation, or formulate a syllogism, can overcome the difficulties which beset her when learning to cook. Lucent syrups, golden cakes, delicately-browned bread, quivering jellies, melting creams, and the whole set of material things glorified, because made for love's sake, and for the good of one's dear ones, are fit expressions for any woman. The charm of this accomplishment lies in the fact that it imparts to its owner a gratifying sense of power; it bestows on her, too, the power of blessing and resting those she loves best. Wherever the cook goes she takes her welcome along. One may tire of the sweetest singing, of the loveliest poetry, of the finest painting, and of the most witty conversation, but of cooking never. Yet I would be sorry to have you contented to be only a cook, only a domestic machine. That is not my meaning or intention. Be artist, poet, inventor, and well-bred woman; be the most and the best that you can and add, as a matter of couse, ability to keep house well and to do all that good housekeeping includes.—*S. S. Times.*

WOMEN'S INFLUENCE.

B. C. D.

A WRITER in the Women's column of May 18th, refers to the highest officer in our land, as having always been "guided and controlled" by his wife, as if that were a merit in them both. On general principles is this so? Our impressions of GEORGE WASHINGTON are, that he was a man of patriotism and integrity, that although his wife was a wise counsellor and companion, yet the qualities which make his name now revered were his own, and not merely the result of his wife's influence.

Besides is not a person who is so very susceptible to good influences as liable to come under the power of evil associations? How can men of fixed principles be so unstable. Men who can stand alone and do battle firmly for the right are the men that I believe in. As to the other women referred to in the same article, who have labored a life-time to bring their inferior husbands into power, they might have employed their time to better advantage. World'y honor won in that way is truly "empty." If mothers would so train their children as to develop an intelligent conscience and a firm determination to adhere to the right at all hazards, when they became men they could play a manly part in the world without depending on the influence of their wives to uphold them. The influence of a good wife to restrain her husband from evil, or to confirm the well-disposed in the right path, is not to be despised. Let us hear more about noble rock-rooted qualities inhereot to the heart of man: where these are wanting, "influence" only makes a man's weakness more conspicuous.

WEDDED LOVE.

A TRUE INCIDENT.

STARR MORRIS.

"MAKE the bed easy, Mr. B." said old Uncle ABE, to the undertaker who was preparing the coffin for his aged wife. "Make the bed soft and easy, for her old bones are tender and soft, and a hard bed will hurt them."

He forgot for a moment—that old, gray-haired man, that she was dead; that the old bones had done aching forever.

Sixty-four years had she walked by his side, a true and loving wife. Sixty-four years! just think of it, in this age of divorce!

Sixty-four years had they dwelt under the same roof-tree; together shared the same joys and the same sorrows of life; together mourned over the coffin of their first-born; together rejoiced in the prosperity of their sons and daughters, and now she had left him alone. No wonder he forgot. Her loving hands had so long cared for him, for he had been the feebler of the two.

"Until death do us part," said the marriage service that had united them, so many years ago. Death had parted them, but the love still survived. Tenderly had he cared for her all these years, and now tenderly did he watch the making of the last bed of this still loved wife.

He had ravely breasted the storm of life with her by his side, but now that she was gone he could not live, and in a few days they laid him by her side.

FERNS AND FLOWERS.

S. H. R.

THE month of June is the best time to gather ferns for winter trimmings or decorations. They are now perfect in form, and far prettier than when large and rank; the color is brighter, and insects have not made flaws in the leaves; another thing, they are smoother and dry quicker.

If those who make a habit of gathering them would only try to secure them early, they would never delay until fall again.

Mosses, too, gathered now, will take a brighter color than if left till the pests come. It is a pleasant recreation to gather them, and they make the walls of a room pleasant and bright during the bleak winter.

Some green leaves, too, ought to be saved as they look pretty mixed in with the gay autumn colors, and make a cheerful contrast in the trimming of rooms.

Flowers for Herbariums are beautiful now, and one can secure a greater variety than if they commence gathering them later in the season. They are not as liable to mold, or become dull, as when pressed when the weather is warmer. Just try it one year, and mark the difference.

"TOO LATE."

MOST of us have learned by bitter experience how much of pain and sorrow those two little words can express, and it is because I would spare some of the RURAL ladies the pain of disappointment that I venture to remind them that the time is drawing near for the close of the "Cricket" offer. Those who want to possess themselves of this popular little clock have no time to lose. It is superfluous for me to draw attention to the excellencies of this time-piece, the favorable opinion with which the publisher has regarded it from the first, has been enthusiastically endorsed by all who have received one, as can be very readily ascertained by reference to the letters published under "What they say of it." All that remains for me to do is to urge my friends of the RURAL to so time their order as to escape being "too late."

ITEMS FOR CORRESPONDENTS.

Miss LILY GORDON, Keokuk, Iowa.—Take your dark purple silk for an underskirt, and for an overdress buy purple embossed grenadine. It comes at six dollars per yard; ten yards will be sufficient. For trimming use pipings or cordings of light blue silk. I send you by mail cut of a suitable polonaise, pattern of it costs 30 cents.

MAMIE BROWN, Alleghany Co., N. Y.—Ladies use small gilt pins to fasten the outside cuffs. They can be purchased at 50 or 60 cents per pair, either plain or enamelled.

Mrs. L. BATES, Platt Co., Ill.—A pair of French gilt earrings—an arrow with a pearl in crown-setting, a pretty and unique design—I can buy for 50 cents. They are chaste-looking, and better for your purpose than a more expensive pair.

Mrs. SARAH LIPPINCOTT, Venango Co., Pa.—Excellent quality of French lace, a finger wide, can be bought for 35 cents per yard. At least ten yards will be required to trim your basque and overskirt.

DEAR FRIENDS:—As there was a wood stain called for, I send the following which I have used many times and know to be good.

CHEAP WOOD STAIN IN IMITATION OF BLACK-WALNUT.—Mix burnt umber, with the best of cider vinegar, to the consistency of thin paint, apply with a paint brush to the wood; when perfectly dry, go over with a coat of common furniture varnish, when that is dry, another is needed to make nice, durable work.

CHOKED CATTLE.—Take of fine-cut tobacco enough to make a ball as large as a hen's egg. Dampen with molasses till it adheres closely. Elevate the animal's head, pull out the tongue, and crowd the ball as far down the throat as possible. In fifteen minutes it will cause vomiting, and the apple or potato will come up. BEEBE.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

HOME DECORATION.

JENNIE JOY.

To make home beautiful is the desire of every true householder. To make the surplus earnings go as far as possible to the accomplishment of this end, is the aim of every cultivated person of humble fortune who has a home to beautify; yet how few there are who know how to make the most of what they really do possess. To be able at all times to put the best side out; to utilize the odds and ends; to make the rag-bag, waste-paper basket, wood-yard, field, and forest yield their treasures for the decoration of home, requires a tact, which unhappily, but few possess. It is an art, in fact, which to acquire, richly repays hours of careful study.

Capital can purchase luxuries, but a thorough knowledge of the harmony of form, proportion and color, is requisite to render even these luxuries pleasing to the eye. A few dollars in the hands of the poor man can buy the long-coveted parlor carpet, but unless he has acquired the art of discrimination, the hard-earned parlor carpet may, after all, prove but an eye-sore to the buyer, from its lack of harmony with the other appointments of the home: and, instead of almost furnishing a room of itself, as many a well chosen carpet has done, it will, by its incongruity of tint, figure or texture, present the disagreeable appearance of a gayly colored patch on a faded, thread-bare garment. It is not always the fault of the laborer and his patient, toiling wife, that their cottage walls are bare, or, what to a finely cultivated taste is far more painful to the eye, covered with coarse, cheap chromos: or that the contents of the rag-bag, representing in the rough, abundant material for many a charming chair-tidy, lambrequin, warmly tinted rug or door-mat, are weighed out to the obliging one-horse country peddler in exchange for a tin dipper, or a glass milk-cup, forsooth, which is to be wedded to the white-ware sugar bowl; or that the accumulation of the waste-paper basket shares a like fate, at a sacrifice of many choice gems of literature, pure pearls of thought and lovely *bijoux* of art, which, carefully culled from the rubbish and neatly arranged in a book, would be the source of untold delights, and contribute towards cultivating a taste for the beautiful.

Their eyes are dazzled by the magnificence of their wealthy neighbor's gaudy trappings; and, unconscious of the handsome adornments within easy reach, they begin to rear for themselves an airy castle in the clouds, dome over dome, and to count the time when they, too, shall be rich. Instead of enlarging, by the simple means always at hand, a taste for the loving harmony of all the notes of beauty, they toil on in their plain, dull rooms, with nothing to elevate thought or incite the play of fancy, until taste is hopelessly perverted; and the poor laborer and his patient work-weary wife, lose, beyond hope of recovery, the capacity for the higher delights of the soul which were theirs by divine right. A prominent feature in the appointments of the home is cheerfulness; and no room, however tastefully and richly furnished can present a truly cheerful aspect, unless it is well lighted. How strange, that light, the symbol of all good, without which nothing could exist, should be so often excluded from our dwellings! That the glorious sunlight, giving strength and beauty, brightness and bloom to our garden parterres; should be treated as an enemy to the well-being of the "olive plants round our tables."

Earth's dumb creatures realize perfectly, the sanative benefit to be derived from the sun's rays; hence we observe the mastiff, worn out in his master's service, slowly issuing from his dark kennel, to stretch himself at full length on the sunniest piece of turf within reach, to bask in this elixir of life.

But even the health-giving sunlight will fail to render our rooms cheerful if it falls on leaden-lined walls, and dull, somber-colored carpets and upholstery, which reflect not back the golden beams. Let the walls be embellished with hangings of a soft creamy tint; the pictures upon them be suggestive of happy, active life; let the carpets glow with warm, rich hues so softly and artistically blended that no harsh lines shall detract from the harmony of the whole; place bronzes and other ornaments where they will be ready to fling back with coquettish art, the first ardent glance of the day god as he ascends through the red gates of morning; through parted window-draperies of lace or sheeny muslin, let the red waves of solar light roll in upon us in floods; that they may warm our rooms and the hearts within them; that home may be the brightest, cheeriest spot in all the wide, wide world.

Xenophon says, "A man's home and fireside are the sweetest of all human possessions." Possessing them in all their beauty of perfect harmony, we are richer than kings. Evelyn writes, "'Tis from the want of symmetry in our buildings, decorum in our houses, that the irregularity of our humors and affections may be shrewdly guessed." To correct this outgrowth of a straggling, deviating tendency of the affections, the only proper way is to begin at once the delightful occupation of "brightening up the place." While we are studying the art of rendering our homes and firesides the beautiful temples over which Love may sweetly preside; we are fostering a thousand delicate heart blossoms whose clinging tendrils will keep the affections fresh and full of aroma, even to a ripe old age. Thus every day is a festival, and that which makes it the more splendid is gladness.

Beneath many a rough exterior there awaits our bidding the Sweet Spirit of Beauty; and ever near us lingers her twin sister, Harmony. Our hands may wield the sculptor's chisel which shall unchain the embodied thought hidden within the rough-quarried block or marble; our eyes may discover the flashing jewel within the unpolished stone; our souls strike the key-note which shall waken to life a thousand sweet and holy symphonies in the divine atmosphere of Home. From many a concealed covert and by-place we may woo the very soul of loveliness to come and dwell with us—an abiding guest. Thus shall all the chords of beauty within our habitations sweetly accord with the grander harmonies of the eternal Home. Thus shall we pass from these our earthly Paradises, not as strangers to such delights as the angels know. Thus shall we enter, with soul's attuned, to the celestial melodies. — Our Father's House — by-and-by.

DOMESTIC RECIPES.

Graham Bread.

Set sponge with wheat flour as for white bread; when light stir with a spoon into a pan of Graham flour adding salt and half a cup of molasses to seven pounds of flour, or a large tablespoonful to a medium-sized loaf. Mix and let rise as for white bread, leaving the dough very soft if kneaded, or if mixed with a spoon, as stiff as can be stirred. A hotter oven, also a little longer time in baking is necessary than for white bread. MRS. RANDALL.

Paterson N. J.

Corn Starch Cake.

One cup of sugar; one-half cup of butter; whites of three eggs; one-half cup of sweet milk; one cup of flour; one-half cup of corn-starch; one teaspoonful of cream-of-tartar and one-half of soda. Dissolve the soda in the milk; mix the cream-of-tartar thoroughly with the flour and add the whites beaten to a froth the last thing, flavor to taste. MRS. S. V. W. CARRIS.

Crumb Pudding.

ODD bits of stale cake can be made into a most appetizing dish in the following way: Over a quart of crumbs turn a pint of scalding milk and let them soak. Then add three eggs, well beaten, and a half-pint of milk; half-teacup of desicated cocoanut. Bake twenty minutes. Flavoring may be added, to suit the taste, and raisins or currants, if desired.

To Prevent Stained Hands.

WHEN there is danger of staining the hands from preparing fruit or vegetables, rub them with fresh lard. ROSE GERANIUM.

Baked Fish.

Many cooks find it a difficult thing to remove a baked fish from the pan to the platter, and, in answer to a question as to "how it is done," we give the following method, hoping it will be of service to those who have never tried it: Dress and stuff the fish in the usual way and bind very smoothly with tape or strips of cotton cloth from one end to the other; put several muffin-rings in the baking-pan, rubbing each with a little lard, and on these place the fish; pour a little water in the pan and bake slowly, basting frequently with butter and water. When nicely browned, and cooked sufficiently, remove from the rings with two broad knives—one under the shoulder, the other under the lower part—to the platter. With a sharp knife cut the tape the length of the fish, carefully pulling each piece out. Should the fish then be not quite brown enough, return to the oven-grate for a short time. Have prepared a cup of sweet cream with butter, salt, pepper and chopped parsley, and bring to the boiling point; add any gravy which may be in the baking pan and pour hot over the fish. The scales may be loosened by immersing the fish for a few minutes in hot water, and the earthy taste, so disagreeable in fresh-water fish, may in a measure be overcome by sprinkling plentifully with salt and letting stand over night; in the morning rinse and wipe dry with a napkin. E. M.

News of the Week.

POLITICAL.

Monday, June 17th, 1878.

THE sub-committee of investigation sent to Florida has returned and made a voluminous report. The three principal witnesses examined were McLin, the State canvasser; Diggers, County Judge of Baker County; and Edmonds, Clerk of Leon County during the canvass. Besides the recently published confession of the first, he told but little that is new. Diggers testified that although he was one of the local canvassers for his county, the clerk and a petty justice of the peace canvassed the votes without his knowledge, and returned a democratic majority of ninety-five; whereupon he created a private Board of his own by appointing a temporary justice of the peace, and, securing the sheriff's co-operation, secretly canvassed the votes, and returned a republican majority of forty, by throwing out the votes of two Tilden precincts. One of these was thrown out on the ground of intimidation, because a man told Diggers that his vote had been refused, and promised an affidavit to that effect; the other, on the ground of illegal voting, because there were half a dozen names of non-residents on the list. This return alone was presented by McLin to the State Canvassing Board, because, according to his testimony, it appeared to be properly attested, and most favorable to the republican party. A large number of "jolly jokers," or fraudulent republican voting papers, seem to have been scattered throughout some parts of the State, and Edmonds swore that Joseph Bowes, then Inspector of the Election, and since rewarded with a clerkship in Washington, told him that he had stuffed the ballot-box of Precinct 13, in Leon County, with seventy-three of these "jolly jokers," and so saved the State for Hayes. Offers were made to prove democratic frauds, also, in different parts of the State, but a majority of the sub-committee, which consisted of two democrats and one republican, declined to investigate this branch of the subject.

With regard to the forged signatures to the duplicate certificate of election from Louisiana, ex-Governor Kellogg's clerk, now holding a Government appointment in Washington, testified that Kellogg, having signed the document, handed it to him to have it attended to; that he left it for signature in a room to which any one had access; that no one was placed in charge of it; that after some time he found the names of the electors affixed to it, sealed it up and sent it on to Washington; but that he could not say who signed the names, except those of Kellogg and of a few others whose signatures he was able to identify. There is little doubt but that most of the signatures of electors on it are forgeries, like that of Judge Levissee. A duplicate of the original incorrect certificate, having the genuine signatures of the Louisiana Electors, was submitted to the Electoral Commission along with the forged production, and the republicans therefore claim the members of the Commission had ample data to come to a proper decision, and, consequently, that there is nothing in the case to invalidate any of the proceedings with regard to the Louisiana election before the Electoral Commission, or in the actual count before the two Houses of Congress. On the other hand, the democrats insist that the original document was invalid, because not drawn up in accordance with the Constitutional requirement, and that the Commission were ignorant of the forgeries affixed to the other.

The chief witness before the committee during the week was ex-congressman Darrall of Louisana. He testified that Anderson told him frequently that the name of "visiting statesman" Stoughton, now Minister to Russia, was also attached to the Sherman letter; whereas, Anderson swore before the committee that it bore Sherman's name alone. He also swore that Anderson told him that his protest with regard to intimidation in East Feliciana was true; and in several other points also he flatly contradicted Anderson, though he owned that he had used the latter's influence to secure for himself the collectorship of New Orleans. The rest of the week's evidence was of comparatively small importance, beyond demonstrating the rank corruption of politicians in the Pelican State.

On Friday the House decided, by two separate votes, that the Presidential title cannot be attacked, on the ground that the action of the last Congress was final in this matter; that no subsequent Congress has any constitutional power to revise that action, and that any attempt to do so would be revolutionary. On the first vote there were 215 yeas and 21 nays; and on the second vote, 234 yeas and only 14 nays. This kills Tilden's chance of being installed in the White House at any rate before next election; and secures undisturbed possession of that comfortable mansion to Hayes during his full term of four years.

Senator Matthews has returned no answer to the subpœna to appear before the House Investigating Committee; it is said he fears Butlers' examination; his course is considered highly injurious to his reputation. The chief objection to Hayes' conduct, in connection with politics in Louisiana and Florida, is his appointment to office of nearly all the worthies incriminated or besmirched by the recent revelations. Wood's tariff bill has been defeated in the House by a vote of 134 to 120, only six Republicans voting for it, while a considerable number of Democrats who favor a high tariff, voted against it. Both Houses have agreed to keep the army up to the number of 25,000 men. About eight millions have been appropriated by both Houses for the improvement of rivers and harbors. This is a considerably larger sum than that which Gen. Grant refused to spend in this way, despite the vote of Congress.

Oregon has elected a republican governor and State ticket; but a democratic congressman and legislature, so that Sargent, its present republican Senator, will be succeeded by a democrat. The committee appointed by the Senate to investigate the charges of bribery against Grover, its other democratic Senator, has reported that there is no evidence sufficient to support such charges. The Senate Committee to investigate the claims of Corbin and Butler, of South Carolina, to a seat, decide against the latter who at present holds the position, and was known during the election excitement as "Butcher Butler." Ex-Gov. Noyes arrived in this city early yesterday morning on his way from Paris to testify before the investigating Committee at Washington. He emphatically denies McLin's charge that he promised him a good position provided the vote of Florida was cast for Hayes, and says he will give some business to the committee in investigating democratic frauds.

MISCELLANEOUS.

A meeting of the Keeley Motor Company has just been held in this city to raise more funds; but the opinion is pretty general that the thing is a fraud, and the stock-holders are loath to throw good money after bad. About 10 o'clock on Monday four men armed with revolvers jumped on a crowded street car in this city, robbed an employe of the Company of about $150, beat him shockingly and the conductor severly, sprang into a wagon of theirs which had been following the car, and escaped; nor has the "finest police in the world" hitherto obtained any trace of of them. New York can beat the rest of country even in desperadoes.

The Western Union Telegraph Company has a new president—Norman Green—instead of the late Orton. At Fort Smith Arkansas died Gen. B. L. E. Bonneville, aged eighty-five—the oldest officer in the U. S. Army, and of the leader of the expedition described in Washington Irving's, "Adventures of Captain Bonneville in the Rocky Mountains and the Far West" A Professor Richtel, has been experimenting at Hartford Conn., with a flying machine which he caused to rise and sink in the air at his pleasure and to advance against the breeze.

On Wednesday the 12th, William Cullen Bryant, the Nestor of American journalism and among the first of American poets, died in this city at the age of 84, having been born on the 3rd of Nov. 1794. He never completely recovered from the semi-conscious lethargy produced by the concussion of the brain due to the fall mentioned here a fortnight ago. June snow storms during the week in Canada and even in Mass. The Indians are once more murdering—this time hitherto chiefly the Bannocks of Oregon. During the week the telegrams make a total of 34 men chiefly herders and mail carrier's slaughtered by them. The settlers are raising and equipping volunteer companies and the military are pushing cautiously into the hostile territory. Grave fears are still entertained of a general Indian war.

Violent tornadoes in portions of Ga., S. C. and Va., much property detroyed; several persons killed. Thos Winans, the Baltimore millionaire died on the 10th. The communists and "striking" laborers of Quebec, to the number of about 3,000 began a riot on the 11th; sacked a number of stores and warehouses and threatened general pillage and incindiarism. The troops were called out, and after submitting to a severe stoning by the mob, fired among them, wounding a large number, killing one of the ring-leaders, and putting the rabble to flight. For several days the disorderly element threatened mischief, but the presence of more troops from Montreal overawed them, many of the ring-leaders have been arrested, and for the present all is peaceable. A vast railroad strike is said to be imminent so soon as Congress adjurns to-morrow; but it is probably only a rumor. The defeated adherents of Lerdo are returning from Mexico into Texas; Gen McKinzie with 500 United States troops has crossed into Mexico in pursuit of Escobedo who unlawfully made this country the base of his late movement against Diaz. Towards the close of the session of Congress an effort has been made by a few senators to have cheese made a part of the rations issued to the army. Nothing has been done in the matter yet, and farmers should see to it that their representatives in the next Congress should know the wishes of their agricultural constituencies in this matter. Such a measure would afford to the soldier a healthy, palatable, nutritious and convenient addition to his fare, while to the farmer it would open another market to his product, besides having a tendency to popularize its use.

FOREIGN.

On Thursday last the first session of the Congress assembled to settle the vexed Eastern Question was held at the Badziwill Palace, Berlin. Germany, Austria, France, Great Britain, Italy, Russia and Turkey are the Powers represented. By mutual agreement the deliberations in each session are to be kept strictly secret, until everything has been arranged, and accordingly news with regard to the points discussed or decided must be largely tinctured with conjecture. It seems pretty certain, however, that Great Britain and Russia have agreed on the main points which have hitherto caused disagreement. Despite the protest of her late ally, Russia is resolved at all hazards to re-annex Bessarabia, which was taken from her and assigned to Roumania at the close of the Crimean war. This understood, she is willing that the entire treaty of San Stefano should be acted upon and modified by the Congress. With regard to the issue of the meeting, it is impossible as yet, to predict anything with certainty; but it is well nigh certain that peace must come of it, whatever may be the changes effected by it in the map of Eastern Europe and Western Asia. The final terms are as yet in a great measure guesswork, and for details of that kind of work there is no room in the small space accordable to news in an agricultural paper.

Massacres still continue in Bulgaria, as the Bulgarians seem determined to avenge ages of oppression by slaughtering all their Mahommedan neighbors. Vast numbers of the latter have flocked to mountain fastnesses where they defy the attacks of their enemies and even of Russian detachments, while they make frequent raids on the lower country and terribly avenge the deaths of their co-religionists. There are about 100,000 of such refugees in the Rhodope Mountains alone.

The Emperor of Germany is nearly well; and Nobeling also is much better. The Reichstag, or

Imperial Legislature has been dissolved, and an election of members takes place on July 30th. Bismarck is resolved to take advantage of the feelings of horror and loyalty aroused throughout the country by the two attempts to assassinate the Emperor, and to secure a more complaisant legislature than the present one. The other day, it refused to agree to the resolution he introduced giving the Government discretionary power for three years over publications, meetings, or societies having socialistic tendencies, and making the police the sole judges of the fact. This would virtually place the entire press—newspaper, periodical and book—wholly at his mercy. It had previously declined to pass other laws he demanded, and he now expects to secure the election of a less independent assembly. He is reported to have said that peace is just now essential to all Europe, in order that each nation should attend to the suppression of anarchical factions at home.

The synod of "Old Catholics," now in session at Bonn, has, by a vote of 75 to 22, adopted a resolution in favor of the marriage of the clergy. The strikers in Lancashire, England, are going to work at the 10 per cent. reduction in wages against which they struck. The war in Cuba is finally over, all the insurgents having, at last, surrendered. The Shah of Persia, after visiting St. Petersburgh, has arrived in Paris. The Empress of Russia has been dangerously sick, but is recovering.

At Paris, on the 12th, died George V. ex-King of Hanover. During the war between Austria and Prussia, in 1866, he sided with the former, which was at the time head of the German Confederation. After the triumph of Prussia at the battle of Sadowa, the expulsion of Austria from the Teutonic Confederac , and the installation of Prussia in her stead, the latter by a mere decree annexed to her dominions the petty kingdom of Hanover, confiscating all the private property that could be reached belonging to the king, because he foolishly objected to the little transaction. Knowing something of Bismarck's dislike of "nonsense" in treating with the shoal of German, kinglings, princelings, and dukelings, the old man in advance had prudently sent most of his "movables" to London, so that he has hitherto managed to get along pretty comfortably. Now that he is out of the way, his heir, it is said, will gladly agree to the absorption by Prussia of his royal inheritance provided the private one is restored. The young are wiser than the old in their greater readiness to yield gracefully to the inevitable. HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 15, 1878.

BEANS AND PEAS.—The beanmarket is without a new feature; mediums have a show of firmness owing to the moderate supply, but there is not trade enough at this season to encourage the desire to advance them. Still they are high compared with marrows. There is a fair export movement in the latter, but the stock is so large that buyers can obtain a shading from our extreme when they apply for round parcels with any regularity. White kidneys are easy in sympathy with marrows. The few Red do. that remain have been run up too high for steady business. Pea beans are firm for choice, but there is a light offering of that grade. Limas are doing well. Black, steady, with prospect of improved call. Green peas steady at $1.05@1.10; Southern B. E. peas, $1@3.25 per two bush. bag. Canadian in bulk and bond, 78c.

We quote medium beans, prime, $1 60@1 62; fair to good, $1 35@1 50; marrows, prime, free on board ship, $1 57½; fair to good, $1 40@1 50; Peas, $1 40@1 65; white kidney, $1 40@1 60; red do., $2 50@2 90; black, $2 35@2 40; Lima, $4.15@4.25.

Receipts of beans past week, 3,675 bush. Exports of beans, 1,780 bbls. Exports of peas, 12,700 bush.

BUTTER.—Dealers speak of the market as better, but there is more resignation than cheerfulness in the tone of their reports. This is not surprising when the scale of prices that has ruled so long is considered. In response to the question as to how country owners are satisfied with present low rates, an old dealer says:—"There is a growl from many dairymen who, having enjoyed the taste of war-prices, find the settling action of quotations very unpalatable. Others promptly and tranquilly accept the situation by not placing a limit upon the discretion of their consignees, but rather urge them to keep stock moving." This is certainly the correct policy, as it is better to have this heavy early surplus handled here now, than for the market to go through the season chilled with that depressing specter known as "a large interior reserve." Exporters are helping the market to a noticeable extent, but they want the goods and some humoring in prices. In the way of exportation the presence of Canadian shippers is an encouraging feature Some moderation in general receipts has helped to make the market run higher, especially as the export sales have again been liberal. On Western butter, after noting steadiness for fine creamery, it must be remarked that all stock under the dairy and selected ladle packed factory, have an indefinate range of quotations,

Receipts for the week, 29,895 pkgs, ; exports past week, 8,802 do.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 17@19c.; other, 12@15c.; Welsh tubs, best, 16@17c.; other, 12@15c.; poor State, 6@8c.; State firkins, 15@17c.; Western creamery, choice, 19@20c.; other, 15@18c.; Western dairy, best, 12@14c.; other, 9 10c.; factory (ladle packed), 10@11c.; other, 9@10c.; milled Western, 5@9c.; old and grease, 3½@5c.

BEESWAX.—A small business has been in progress at 26½@27½c. for Western and Southern.

Exports, past week, 14,900 lbs.; since Jan. 1st, 101,603 do.; do in 1877, 59,700 do.

BROOM CORN.—Small sales are taking place at 6@7c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped, per lb.

COTTON.—The spot demand has been active, and the market is stronger. Latest prices are: 11.56@11.57c., for June; 11.62@11.63c., for July; 11.17@11.68c., for August; 11.43@11.44c., for September; 11.21@11.25c., for October; 11.10@11.11c., for November; 11.09@11.10c. for December; 11.15@11.16c. for January; 11.21@11.23c. for February; 11.31@11.33c. for March; 11.41@11.43c. for April; and 11.52@11.54c. for May.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9¾	9¾
Strict ordinary	10	10	10¼	10¼
Good ordinary	10⅜	10⅜	10⅜	10⅜
Strict good do	10⅜	10⅜	11	11
Low middling	11⅛	11⅛	11¼	11¼
Strict low middling	11 5-16	11 5-16	11 7-16	11 7-16
Middling	11½	11⅝	11¾	11¾
Good middling	11 15-16	11 15-16	12 1-16	12 1-16
Strict good middling	12⅛	12⅛	12⅜	12⅜
Middling fair	12⅝	12⅝	12⅝	12⅝
Fair	13⅛	13⅛	13⅜	13⅜

Stained.

Good ordinary....9¼c.; Strict good ordinary..... 10c.
Low middling.....10¼c.; Middling .....11¾c.

CHEESE—There is a considerable quantity carried over this week, receipts having been large. On other than special grades the feeling has been weak. Fancy white has suffered most in price, and after stumbling at 8¾ early in the week is now offered at 8¼ and the lower grades are a little easier. A good portion of demand has been for fancy colored lots, and they have been taken close to arrival, and at 8¾ all through the week.

Quotations are, for fancy, 8¼@8¾c.; 7½@8¼c. for good and prime; 6½@7c. for fair; 4½@6½c. for half skimmed; 2@3½c. for skimmed. State, farm dairy at 6¼@7c. for good to choice, 5@6½c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 8@8¼c.; do. good to prime, 7@8c.; do. fair, to good, 5¾@6¾c.; Western factory, fine, full cream, cheddar, 7¾@8c.; do. fine, full cream, flat, 7@7¾c; do. slightly skimmed, flat, 5¾@6¾c.; do. half skimmed, 4@5½c.; do. full skimmed, 2@3½c.

Receipts for the week, 90,513 boxes.
Exports, past week 80,322 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 46.

DRIED FRUITS.—The general manner is still very slack, nothing being done outside of job lots, and an unsettled, easy, range of prices.

Peaches—Fancy North Carolina 11@12c.; Choice Georgia, 10@11c.; good to prime Georgia; 8@10c.; evaporated, 2@2½c.; unpeeled halves 3½@4½c.; quarters, 3¾@4c.; unpeeled evaporated, 7½@8c. Pitted cherries, choice new, 19@20c.; Raspberries, 27c. New York State plums, 11@12; Southern plums, 8@10c. Blackberries at 10½c. Apples—State quarters, 4@4¾c., do sliced, prime, 4½@4¾c.; good, 4@4½c.; Western quarters, 3@3¾c.; Southern at 4½@5c. for prime sliced; 3½@4¼c. for fair to good; Southern quarters, 3@3¾c.; Tennessee quarters, in bags, at 2½@3.

Exports for the week, 117 bbls. dried apples; since January 1st, 3,343; do, in 1877, 21,952.

EGGS.—Receipts for the week, 8,346 bbls.; do last week, 6,730 do. The market shows a fair summer style of business, though sales would be heavier if the weather were warmer, so as to bring out buyers for ice cream and pastry purposes. Prices have slightly but steadily advanced.

Near points, 17c.; State and Penn., 16@16½c.; choice Western and Canadian, 15½@16c.; a few off quality lots, 15c. Sales all loss off.

FLOUR.—The market has been steadily declining on full supplies, and the lower tendency for wheat. Latest prices are $3.25@4.00 for very inferior to very choice superfine State; $4.10@4.40 for very poor to very good extra do. odd lots and lines; $4.40@4.75 for good to fancy do.; $4.25@4.40 for very poor to very choice superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.40 for inferior to very good shipping extra do. and $4.40@5.65 for very good to very choice extra do.; common to about choice white wheat extras, $4.45@5.50; choice to very fancy do. at $5.00@6.75; red and amber winter wheat, inferior to very choice trade and family at $4.40@6.00; round hoop Ohio at $4.25@4.55, and trade and family brands of do. at $4.65@5.85, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.40@5.15 for very poor to good extra, and $5.15@6.50 for good to very choice, with a few brands of fancy quality quoted up to $6.75@7.00; Minnesota clear, very inferior to very choice at $4.40@5.85; Minnesota "straight," inferior to fancy, at $5.30@6.50, and patent poor to fancy at $5.50@8.00; unsound stock at from $2.00@5.00; city mill extra at $5 40@5.60 for fair to fancy for West Indies; do. for England, $4.15@4.25; do. trade and family extras, $6.00@7.25; do. for South America, $5.75@6.50 for fair to choice; No. 2 $2.25@3.25 for inferior to very fancy.

CORN MEAL.—Is selling at $2.80 for Brandywine, and $2.15@2.35 for yellow Western.

FRESH FRUITS.—The past week has given an elaborate display of fancy strawberries, and in some instances high prices were realized. As a rule, though buyers have aimed more for quantity than quality, and good table-sized stock has taken precedence in the sales. Most of the large berries have the drawback of tender quality, and if do not sell at holders' views the first day irregular prices are quoted next, as they are not tough enough to ship. This will be the case until we get a big variety to stand up like the hardy "Wilson." During the week we have had the novelty of "Seth Boyden's" Monarch of the West, Great America; Chas. Downing and Jocunda offering in wholesale lots. The New Jersey crop of market berries begins to run light. State berries piece out the supply, many coming from as far as Oswego and Oneida. Fancy berries sold on Tuesday 25@50c.; Up River, third, quarts, 3@4c.; N. J., quarts, fair, 4@6c.; prime, 7@9c.; Oneida, 9@12c.; Oswego, 11@13c.; whortleberries, quart, 12@15c.; Black Caps, 9@12c.; currants, red, 8c.; gooseberries are better quality, $1.50@2 bush.; cherries, fancy, 10@12c.; sour, prime, 6@9c.; good table, 7@10c.; common, 4@6c. The picking from adjacent points will be light, fruit having been severely damaged by rain and fog. Blackberries, 8@11c. Peaches are quite a feature and sell well. Ga. fine, bush. crates, $4@5; good to fair, $2@2.50; S. C., $1.75@2.50; N. C., $2@3. Hothouse grapes lower, Black Hamburg, ₱ 75c.@1.00. Peanuts held higher but dull; fancy Va. handpicked, $1.50@1.83; choice, $1.35@1.40; common to good, 90c.@1.25. Light receipts help the market. N. C. and Tennesee range at 90c.@1.25. A few Southern Red Astrachan apples sold at $3 per bush.; green, $1.50. Watermelons from Fla., $30@45 per 100, but hard to sell.

GRAIN.—A dull export trade, and the good weather for the crops, and the harvesting of the winter wheat taking place, with prospect of early increased supplies throw the market in the buyer's favor, and concessions in prices through the week have been quite liberal.

Latest sales of wheat are No. 1 white at $1.22@1.23½; white State at $1.23; New York No. 2 red at $1 10; No. 1 red at $1 14@$1 15; No. 3 red at $1; ungraded red at $1.03@1 08; No. 2 Milwaukee spring at $1.18; No. 1 Milwaukee and Minnesota spring, chiefly Minnesota at $1.10; No. 2 spring at $1.06@1.07; ungraded spring at 95c.; No. 2 Chicago spring, last half July, at $1,06¼; No. 2 red June opt'n, at $1.12; No. 2 Northwest spring, June option, at $1.07@1,08; do., July option, at $1 05; No. 2 spring, June option, at $1.07¾; do., July option, at $1.04½@1.05¼. Rye at 63@64c. for Western and 65 to 68 for State. Corn sales are of No. 2, June option, at 43¾@44c.; do. July option, at 45½c.; do., August option, at 46½@46¾c.; steamer mixed, June option, at 41½c.; do. July option, at 42½c; do., August option, at 45c.; spot lots New York No. 2 brought 43@43½c.; New steamer mixed at 41@42½c., the outside for a choice lot by rail; New York No. 3 at 40½@41½c.. Kansas mixed at 43¾@44c.; ungraded mixed at 38@46½c., and round yellow at 49c. Oats—New York No. 1 white at 35@35½c.; New York No. 2 white at 31c.; No. 3 white at 29½@30c.; New York extra at 31c; New York No. 1 at 30½c.; do., July option, 30½c.; New York No. 2 at 29½c.; white western at 30@30½c.; mixed western at 28@30½c.; No. 2 Chicago at 31c; No. 2 Milwaukee at 30c.; white State at 31@34½c.; mixed State at 28¾@30c.; New York extra white quoted at 35½@37c.; New York No. 1 white at 35@35½c.; New York No. 3 quoted 29c.

HAY AND STRAW.—The supplies continue liberal and prices are easy, especially for the lower grades.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 35@40c. for short rye; and 30@35c. for oat.

Exports, past week, 1114 bales; since Jan. 1st 30,700 do.; in 1877, 26,600 do.

HOPS.—Exports for the week, 1,245 bales. The temper of the market is stronger, and the better grades are in instances withheld. Fly has made its appearance in the English plantations, causing increased firmness in the London market. Reports from Germany are favorable for a large crop. Included in this week's exports are 500 bales of 1876s. Crop reports from the interior this week are less favorable. The cool weather hangs on, and the vine is making little or no progress. Quotations are for New Yorks, good to prime, 8@10c.; do., low to fair, 5@7c.; Eastern, 5@8c.; Wisconsin, 5@8c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—Hemlock sole at 19@20c. for light; 19½@21c. for middle; 20@21c. for heavy, and 17½@19c. for good damaged.

POULTRY AND GAME.—Added to the local demand for fowls there have been good wholesale sales for Havana, and prices have ruled quite buoyant for several days. Turkeys quiet; Spring chickens abundant and lower, quoted 18@20c. Western and Near Points.

Fowls.—New Jersey or Chulee, 12@12c; Southern and Western, 11@12c.; Roosters, 6@7c.; Turkeys, 9@10c.; Ducks, Choice, 12@7.c. pair, other, 40@55c.; Geese, N. J., $1.25@1 50; other, $1.00@$1.12.

Dressed poultry, quoted nominally for country packed as follows: Dry picked Phila., 13@14c.; other fair to prime, including N. J., 10@13c.; Spring Chickens, Phila., 26@28c.; Western, 18@20c.; N. J., 22@23c.; Phila, fowls, 13@14c.; other 10@12c.

Game has little variation from pigeons. These quoted, stall-fed, $1.25 doz.; flight, 80@85c. doz.; Squab, 65@70c.; small or nestlings, 40@50c. Tame squab abundant and unusually low, $1.75@2.00.

SUGAR.—Refined at 9¾, 9⅝ for cut loaf and crushed, 9¾ for powdered, 9⅝ for granulated, 7½@8 for soft yellow and 8½@9 for soft white.

SALT.—Sales at $2 50 for Ashton's; $1 05@1 25 for other brands of sack.

SEED.—Only the jobbing business usual at this late period. Clover quoted at 7¼@7½c. for Western and 7¼@8c. for State; Timothy at $1.30@1.40.

PROVISIONS—Export demand is better and the market closed up strong. Mess pork quoted $10@10 25 for spot lots; $10 for July and August, and $10 15 for September. Bacon at 5½c. for long clear and 5 7-16c. for short clear. Lard—Western steam at 7 07½c. for spot, June and July, 7 15; for August, and September at 7.25. Tallow at 7 1-16 for prime. Stearine at 7¾@7¼ for Western. Cured hams at $21@22. Beef—For extra mess, $11 75@12; plainmess, $10@11.50; packet, $12@13 for bbls.; extra India mess, $19@21 for city brands; do Philadelphia, $19.

VEGETABLES.—New potatoes have arrived so freely and sold so cheap that old have lost their late improvement. Common old, $1.00; Peach Blows and Early Rose, $1.25@1.37; with bbl. Bermudas also lower, $3.50 bbl.; new good to best, $2@3.50; Culls, $1.00. Very many Norfolks have turned out no better than culls, and by avericious shipment growers have lost money. Green peas were of poor quality until within a day or two, arriving puffed and poorly filled owing to cold and rain: L. I. ½ bush. bag, 50c.@$1.; N. J. bbl., $1 25@1.50; Md. bbl. $1.00@1,25; String beans, Nor. bbl., $2@3. Southern Cucumbers, crate, 75c.@$1,25; Squash, half bbl., $1@1.25. Cabbage, bbl., $1.00. Northern, per 100, $4@5; Asparagus, doz., Oyster Bay, $1.50@2; lower N. J., 75c.@1.25. Radishes, per 100 bunches, 40@50c.; Beets, do., $1.50@2; Rhubarb, do., $1.75@2; Lettuce, bbl., 25@50c.; Turnips, 100 bunches, $2@4; do., bbl., $1.50@2; Carrots, 100 bun. $1 50. New Orleans Onions, $2@2,25 per bbl. There has been a severe glut of Bermuda Onions and the market had to be relieved by sending them to Havana. Exports past week, 2,500 bbls. Bor. Tomatoes. 30@40c.; do., Onions crate, 50@65c.

WOOL.—Trade is yet quiet, and the advices from the West respecting the new clip indicate but little stir there. Only a moderate number of parcels changing hands, attended with but little excitement. The prices paid in the West for lines as they run of X and XX Ohio, have averaged about 30c.

LIVE STOCK MARKETS.

NEW YORK, JUNE 15, 1878.

BEEVES.—Receipts for the week, 11,044 head; do., last week, 11,780 do. Prices have kept pretty steady compared with our last. Common Texas sold at 6¾c.; good do., 7¾@8¾c. Native still fed, 9@9¾c.; useful to prime steers, 9¾@10¾c.; extras and top of droves, 10¼@10¾c. Export sales steady; 250 live cattle go abroad to-day and two cargoes of dressed. Several car-loads of bulls sold at 5¾@4½c. live weight. Texas has 30,000 head of stock for Kansas and Colorado this season.

COWS AND CALVES.—There is no market here; stock has been sent back to country owners,

VEAL CALVES.—Live have ruled high most of the week, and, though lower at the close, bring very satisfactory prices. Milk fed State and N. J., 5¾@7¼@c.; buttermilk, 4@4½c.

SHEEP AND LAMBS.—Receipts for the week 24,522 head; receipts last week 25,530 head. Market quiet for sheep, prices easy. The late range, 3¼@4¾c. Lambs sell fairly at 5¾@7¼c., the extreme for N. J.

SWINE.—Receips for the week 27,584 head; do. last week 26,806 do. Supplies mostly go to slaughterers; nominal yard rate. 3⅞@4c.; City dressed, 4¾@5½c. with light pigs, 5½c.

INDEX TO NEW ADVERTISEMENTS.

Alden Preserving Co.,—Alden's Improved Fruit Evaporator.
Allen & Co., R. H.—Farm Implements and Seeds.
Aultman & Co., C.—Canton Monitor Engine.
Bragdon, C. C.—Lasell Seminary for Young Women.
Clark, Jno.—Hog Cholera Remedy.
Cornell, O. H. P.—Cornell's A B C Thresher and Cleaner.
Culver & Wright—Caution.
Ely, Wm. F.—Automatic Cow-Milker.
Ertel, Geo.—Economy Hay, Straw and Moss Press.
Eureka Trick & Novelty Co.—Magic Trick Fan.
Great American Tea Co.—Another Great Reduction.
Hale, F. W.—Catarrh Cure Free.
Higganum Mf'g Corporation—The Farmers' Favorite Cider Mill.
Lewis, P. C.—Improved Potato Bug Exterminator.
Mast, Foos & Co.—Iron Turbine Wind Engine.
McSherry & Co.—Force Feed Grain Drill.
Payne & Sons, B. W.—Eureka Safety Power.
Ruhlmann, E.—Sure Death Moth Trap.
Rumsey & Co.—Hydraulic Rams, Lift and Force Pumps.
Russell & Co.—Farm Engines, Threshers, &c.
Stent & Co.—The Self-Acting Cow-Milker.
The Dingee & Conard Co.—Beautiful Ever-blooming Roses.
Wauguman & Co.—The Vitative Compound.
Westinghouse & Co., G.—Threshing Machines, Horse Powers and Engines.
Wheeler & Melick Co.—Spring Steel Tooth Horse Rakes.
Young, Oscar W.—Imported Scrap Pictures.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

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" " " Six Months	1 00
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$3 GOLD PLATED WATCHES. Cheapest in the known world. *Sample Watch Free to Agents.* Address, A. COULTER & Co., Chicago.

$1200 Salary. Salesmen wanted to sell our Staple Goods to dealers. No peddling. Expenses paid. Permanent employment. Address S. A. GRANT & CO., 2, 4, 6 & 8 Home St., Cincinnati, O.

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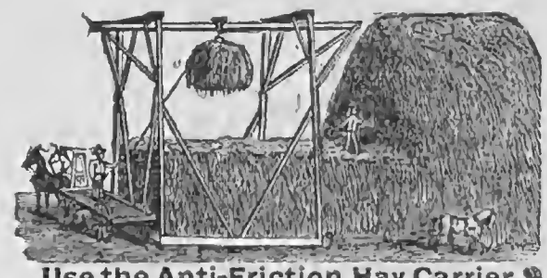

Use the Anti-Friction Hay Carrier.
For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and in the use of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and be framed moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR "..." to U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.
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The Ertel Economy *One Horse* Hay, Straw and Moss Press—the World's Favorite—is the most durable, the handsomest working, the easiest in draught, the lightest in weight, and lowest in price; 10 tons of its Hay will load in any railroad box car. These Presses are daily sold, REGARDLESS OF JEALOUSY shown by Eastern monopolies. The Title of this Press is guaranteed to all.
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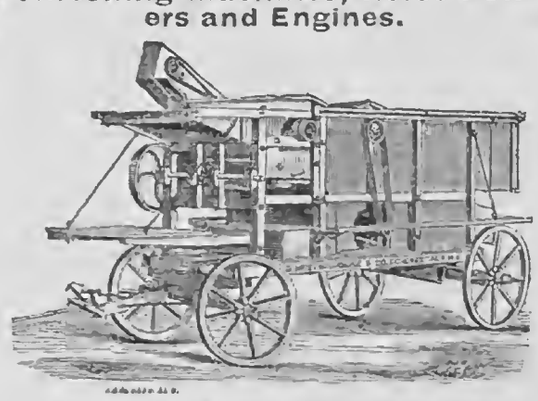

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Threshers for all sizes of Horse-Powers and Steam, Lever Powers for 4 to 10 Horse, and Endless Chain Powers for 2 and 3 Horses, and Engines from 4 to 10 Horse-Power. Send for Circular.
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Established in 1840.

Eureka Safety Power

h.p.	cyl.	ht.	space,	wt.	price.
2	3½	4	48in	40x25	900 $150
4	4x6	56		46x30	1600 250
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Also, SPARK ARRESTING PORTABLES, *and* Stationary Engines *for Plantations*. Send for Circulars
Please state where you saw this.

Automatic Cow-Milker.
I have the best and simplest milker in the world, made all of pure silver. It is easily kept clean, and has no flexible or rubber tubes to sour and spoil the milk in warm weather.
It is easily applied, and can be seen while milking that every teat is flowing.
Will milk sore or short teats, or kicker.
Fractious cows become very gentle by the use of my milker.
It is the cheapest, best and only perfect milker.
It never gets out of order—never wears out.
It will milk any cow very quick.
Price $3 per set; two sets, $5. Single Tubes, 75 cts.
Full directions. Agents wanted for every County in each State. WM. F. ELY, P. O. Box 226, Madison Morris Co., N. J.

***WEAK LUNGS** are cruelly racked, and the general strength gradually wasted by a persistent Cough, which Dr. Jayne's Expectorant may be relied on to cure. It will certainly benefit you also, if troubled with either Asthma or Bronchitis.*

Reading for the Young.

BABY'S TOES.

O, THE tiny, curled up treasures,
Just as cute as cute can be!
Come and help me count them, Madgie,
While the baby bends to see;

Peeps demurely over dainty
Skirts drawn up to dimpled knees,
Hey, my lady Lily! whose two
Roly-poly feet are these?

See the darling's round-eyed wonder—
Does she really know they're hers?
Now she reaches down to feel them,
While new triumph in her stirs.

Crow your fill, my little lady!
Those are your own cunning toes,
Round, and soft, and fat, and funny,
And—how many? Madgie knows!

Call them lily-buds to please her?
Madgie says they are too pink,
Say ten roses in two posies!
Rather rose-buds, don't you think?

Come, wee toes, lie still; be covered;
You've cut capers quite enough;
If you don't, we'll kiss and put you
Each one in a paper ruff. [*Companion.*

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 7.

S. RUFUS MASON.

MANY country boys have a turn for mechanical pursuits, and there is no more extensive field than the country for its employment. One advantage this possesses is that winters can be very profitably employed in making the little niceties and conveniences so "nice to have" about the house.

Let a boy get a few boards, a few tools, and at his mother's suggestions, stock the house with stools, benches, towel-racks, towel-rollers, salt and knife boxes, clothes-line boxes, cozy corner-shelves, brackets, door-stoops, hat and clothes-pins, clothes horses, and a hundred other things which only a mother or aunty can think of, and when neighbors drop in, a home market is at once made.

There is a demand always existing for anything nice which we see at a neighbor's house. To be able to set a price promptly upon an article, count up the cost of the lumber and material used, and if articles are well made, the labor should be as much more. That is, if an article costs twenty-five cents for lumber, and twenty-five cents for hardware, nails, glue, etc., a fair price for a well-made article would be one dollar.

Here, as in farming or gardening, care must be used to make a good, strong job; then make it as neat or ornamental as the purpose it is for, demands.

In a neighborhood where flowers are raised in pots, in the house or garden, plant-sticks, trellises, and plant boxes for windows are in great demand. Here paint can be used and taste exercised.

In every locality certain things are constantly wanted, and in some, an artificial want may be created by some especial pursuit peculiar to that place. In such cases, ingenuity will suggest something new and appropriate, and a demand grows up at once.

There is no reason why a boy may not employ the summer in growing something for market, and the winter in exercising the mechanical proclivities; both are improving to the bodily, mental and fiscal condition of youth.

But I hear some one whisper, "Is there no way by which country *girls* can make spending money?" Doubtless, but I am not competent to advise, one of the fair sex will rise to the emergency, I feel sure, and thus the girls will not be dependent upon their brothers for pocket-pieces.

LETTERS FROM BOYS AND GIRLS.

Wild Cherries in June.

GOOD day, little Cousins; it was so pleasant I could not help coming to see you. Ah! here is "Slayerofconceit." Well, Master Slayer, you wish us to listen to reason, do you? If you have anything to say, say it, and, if it is reasonable, I am sure we would all be willing to listen; but it is getting almost too warm for bedquilts, and as for pie crust, something a little *shorter*, please. That will do for the present. I have a Grandma, who has passed her ninety-fifth birthday. She is as straight as an arrow, and as spry as a cricket. Her chief delight is in washing dishes. I wonder if UNCLE TRUE is as old as that. I guess not; and it is not likely he knows anything about dish-washing, unless he is some old Maid. I see there has been a deal of discussion on that subject. Now, I rather like old maids. Those I know are very fine women. Of course, there are some exceptions; but I think, as a rule, the most noble women are those who remain unmarried. Probably because they meet with no one worthy of them; for I do not believe the woman was yet born who could not have married had she chosen. Some of the Cousins may think I am an old maid, I am perfectly willing. Perhaps, though, I may as well tell my age. I am sixteen years old. Uncle TRUE says the controversy had best end. So it had, if the Cousins are going to a wordy war. I don't think they are, Uncle TRUE. It is good to write something that will advance each other in knowledge. But, for amusement, a good joke, now and then given in fun, and taken in the same way, can do no harm. Of course, we must say nothing that would injure one another's feelings; and now we have commenced the thing, we ought to carry it out in good style, and get angry at no one. Young "Teetotaler" seems to think I am proud. No; I am not. Perhaps he is, though. I hope he never forgets to put baking powder in his cake, for that would be a terrible mistake. I should not wonder if he intends to be a Bach, and keep bachelor's hall. I wish to ask a question: Can anyone tell me how often the word girl occurs in the Bible, and where found? Good bye, Uncle and Cousins; I will call again some day. WILD CHERRY.

Jim Crow.

DEAR COUSINS:—I see you are just as full of fight as ever and I do not prefer any treaty of peace. I want to fight some, for you know if there is a skirmish going on "everybody wants his fingers in the pie." UNCLE TRUE very kindly printed my other letter and that encouraged me. I am much obliged to BROWN BADGER for inquiring about me. The work and study has not made me quite sick yet. You all seem down on "*Slayer-ofconceit*." He has one ally, however, and I hope that ALICE V. will prove a most powerful one. Young Teetotaler was speaking of the length of time her father has taken the RURAL. I think I can beat her there, for my father has taken the paper ever since it first started. I will say that I am also a teetotaler, and if we were together I think we should shake hands on it and be friends.

Perhaps some of the cousins would like to hear about the State Normal School here, and those living where there are others will perhaps tell me if it is like theirs. There are three departments in it, viz: Normal, Intermediate and Primary. In all there are about five hundred scholars. The majority of the scholars are representatives of the female sex. There are five professors and seven lady teachers. Each of the lower departments has a Principal and Critic, and there is a General Superintendent of both. Nearly every thing is taught in this school from the A B C's to Hebrew, if any one wishes to learn it. The School Grounds occupy about three or four acres in the center of our village, and were first fitted up to have scholars from abroad board in the building; but that plan was soon given up. Well! I think I have said enough about our school, and I also think that some of my friends may recognize the place and writer. I hope "Hawaii Nei," "Madcap Mollie" and "Slayerof-conceit," will write again. JIM CROW.

A Nice Little Girl.

UNCLE TRUE:—My father has often told me, when I entered a strange place, to address the gentlemen of the house first, and afterwards the children. I will do so now, and tell you who I am and what I came for. I am a little girl that has been much interested in reading your paper, going round with you every week to see how you cared for your flowers and shrubs, and doing everything in such a nice way it made me want to be practical too. I commenced at 5 years old to follow your directions about the transplanting, and can now do it without fear of failure. and I have come in as a Rural Cousin to thank you for telling us so plainly the best way of doing everything. Please accept my thanks for the little "Cricket." It arrived in due time, in good order, alive and chirping, and as I sit here writing my acknowledgement, it occupies a place on my table, and seems to be a vigorous little worker. We are very much pleased with it, and it is admired by all who see it. Dear Rural Cousins if your ring is not already full please accept me as one of your number, for I am much interested in your columns, and will help you work for the good old RURAL and the little Cricket. MARY E. WRIGHT.

Tuscola Co., Mich.

How to Make a "Squaker."

DEAR UNCLE TRUE:—I have been reading LILLIE LEE'S interesting letter, and I thank her for the information she has given. As I look over the letters, I wonder what has become of the boys. Perhaps I can tell. Down by the river among the willows making whistles, or on the bank, rod in hand, with an anxious look on the face as the first faint nibble is felt, which suddenly changes to joy as you land a shining—shinner. Aye, to boyish minds the rod is mightier than the pen. Or, perhaps, in the swamp among the alders hunting the cat-bird's nest; or in the field, driving the hay-rake; or, worse than all, in the meadow picking up stones. Now that I have found you, I will tell you how to make a "squaker." Two pine sticks of equal length, about two inches long by one-quarter wide, and the same in thickness. Hollow out one side of each stick so that when put together your knife-blade will pass between them. Take a blade of grass and put between the sticks, stretched across the opening between them. Place the sticks between your teeth and blow!

MENZER.

Long Wished To Join Us.

DEAR COUSINS:—I have long wished to join you I hope UNCLE TRUE will not criticise me too severely. I am very glad a few have come to their senses, and will say one good word of Slayerof-conceit. Perhaps he does not ask for pity, but I think he needs it. I hope he is not frightened from the field. The letters from HONOLULU are very interesting. Will our Cousin tell us something of the government of that country? May I ask some questions? Hoping that you all say yes, I will begin. 1. Where does Dr. J. G. Holland live? 2. What form of government has France at the present time? 3. Is it profitable to read any style of novels?

We have taken the RURAL for a number of years. We intend to send for it and the "Cricket" this year.

Espyville, Pa. KIT.

[1. Dr. Holland lives in New York City. 2. Republican, Marshal MacMahon is President. 3. There will be a series of articles presently on this subject.] U. T.

From Ohio.

DEAR RURAL COUSINS: I stand at the door waiting for admittance: will no one bid me enter? Thanks for at last admitting me, I have long wanted to be one of your number, but feared to try lest I should not be received into your circle. My father has taken the RURAL ever since I can remember, and I think it is the best of all papers. I live on a farm and have a delightful time. I hope to hear from our Swiss cousin often, and think he ought to write and tell us all about his country, I have often read of the beautiful lake and mountain scenery and would like very much to see some. I want to give the RURAL Cousins a word of advice: write often. DEW-DROP.

The First

PLEASE UNCLE TRUE and Cousins, may I come in? I have been much interested in reading the letters, and have been longing to knock and ask admittance. I don't think I am any smarter than many boys and girls who do write, but I think I am smart enough to try, and if this finds a place in the paper, I may write again. I am a country girl, and am glad of it. I live on a farm and have plenty of work to keep me out of mischief. I am fourteen years old, and go to school. We have a new school-house, a mile distant, and I have'nt missed a day, this winter.

APPLE BLOSSOM.

The Puzzler.

HIDDEN APPAREL.

1. THE cigar terrified me.
2. He was shut up in a forecastle.
3. She was a wine bibber.
4. I saw the ruins of Babel tower.
5. His ash tree gave good shade.
6. A truffle is a species of mushroom.
7. Sand always tickles my throat.
8. In Japan Nic Raymond died.
9. They had a scuffle.
10. Make no idol, man, for 'tis a sin.
11. Why not shir this trimming?
12. He broke his hoe.
13. I can't say boo to a goose.
14. His lip performed its duty.
15. I dislike this mockery.
16. Push, if the crowd presses.
17. Your lunch, Em., is elaborate.
18. Buy me a bassock, Samuel.
19. His pence-robber is under arrest.
20. I have a sick stomach, Ervine.
21. Draw Ersie's sled up the hill.
22. Can you usurp license?
23. I must suspend, Ersena.
24. Stop, Olan, also your gizzard.
25. The gold was a red ingot, Eva.

☞ Answer in two weeks. FLORIDIAN.

CROSS-WORD ENIGMA.

My first is in heat but not in cold,
My second is in new but not in old;
My third is in wrong but not in right,
My fourth is in red but not in white;
My fifth is in yes but not in no,
My sixth is in wrath and also in woe;
My seventh is in light but not in dark,
My eighth is in oriole but not in lark;
My ninth is in neck but not in ear,
My tenth is in good but not in dear;
My eleventh is in fat but not in lean,
My twelfth is not in dirty but in clean;
My thirteenth is in low but not in high,
My fourteenth is in leg but not in thigh;
My fifteenth is in out but not in in,
My sixteenth is in wish but not in sin;
My whole is the name of a popular man,
So, boys and girls, please guess if you can.

☞ Answer in two weeks. SATIE S. STORY.

HIDDEN NAMES.

1. NERO saw a rat.
2. Ma, belts are not worn this summer.
3. The evenings are getting shorter.
4. I cannot work to-day.
5. Shall I renew our subscription?
6. I can hem ma's ruffles.
7. The duck ate the apple.
8. Bert has the book.
9. The eel lay hidden in the mud.
10. I carried the basket to the gate.

☞ Answer in two weeks. R. A. DUKATE.

CLASSICAL DOUBLE ACROSTIC.

1. A son of Priam. 2. Wife of Orpheus. 3. The town of Etruria where Sejanus was born. 4. A daughter of Iphicles. 5. A king of the Cyclades. 6. A town on the Danube founded by Trajan. 7. One of the Titans. Initials and finals form gods of mythology.

☞ Answer in two weeks. DR.

TRANSPOSITION.

HET mawr mesrum nari
Somec glintkrie wodn teh nidwow nepa,
Stringub eht sndb fo eth gilbmlen sere:
Meleeow, reinsmu anir.

☞ Answer in two weeks. MARY WALEY.

PUZZLER ANSWERS.—June 8.

ENIGMA.—The letter A.

MISCELLANEOUS ENIGMA.—Men should be more guarded against the smiles of a painted Jezabel than the two-edged sword of an enemy.

TRIPLE ACROSTIC.—Primals, Colorado; centrals, Nebraska; finals, Delaware.

Sabbath Reading.

PARADISI GLORIA.

"O frate mio! ciascumana e cittadina
D'una vera citta——." [*Dante.*

THERE is a city, builded by no hand,
And unapproachable by sea or shore,
And unassailable by any band
Of storming soldiery for evermore.

In that pure city of the living Lamb
No ray shall fall from satellite or sun,
Or any star; but He who said "I Am"
Shall be the Light. He and His Holy One,

Nor shall we longer spend our gift of time
In time's poor pleasures—doing petty things
Of work or warfare, merchandise or rhyme,
But we shall sit beside the silver springs.

That flow from God's own footstool, and behold
The saints and martyrs, and those blessed few
Who loved us once and were beloved of old,
To dwell with them and walk with them anew.

In alternations of sublime repose—
Musical motion—the perpetual play
Of every faculty that heaven bestows
Through the bright, eternal day.

THE CROSS OF JESUS CHRIST.

D'AUBIGNE.

[JEAN HENRI MERLE D'AUBIGNE, D. D., came from a French Huguenot stock, that accounted life well spent in upholding evangelical religion. His great-grandfather had to fly to Geneva at the revocation of the Edict of Nantes; and his grandfather was exiled to the same city in old age. Here Jean was born, August 16th 1794. His theological studies, commenced at Geneva, were completed at Berlin, under the celebrated Neander. After a pastorate in Hamburg, and later in Brussels as chaplain to King William, he returned to Geneva in 1830. At once he was appointed president of its new theological seminary, and vice-president of the Evangelical Society. His great work is, "History of the Reformation of the Sixteenth Century, in the times of Luther and Calvin," of which nearly a half million copies have been sold. It is an eloquent, pious, and important portraiture of those thrilling times. His appearance was noble and commanding; his vivacity keen, and energy exhaustless. He died in Geneva, October 21st 1872.]

"*But God forbid that I should glory, save in the cross of our Lord Jesus Christ.*"—Gal. vi. 14.

MY brethren, God has not intended that men should be deprived of all boasting. A disposition to boast is one of the propensities most peculiar to our nature, and which we find in all classes of society and among all varieties of the human race. From him who stands on the highest elevation in the world down to the most unknown; from the inhabitants of our cities, whose spirit towers on high, down to the very savage, whose reason is scarcely observable; all find something of which they believe that they may boast. And what is it then? A ridiculous plaything, of which they should blush, instead of making it the object of their pride. Oh! sad spectacle of our vanity, which proves with the greatest precision that the human race has lost that in which it could glory, that it has come short of the glory of God (Rom. iii. 23); and that in this great need it stretches out its hand to the first plaything that it finds to put it in the place of the reality which it wants. Thus the inhabitant of a city in the utmost state of famine seizes with desire the most loathsome food, from the very sight of which at any other time all his senses would have revolted.

God would give men an object in which they could better glory. He has given them the cross of Jesus Christ.

"God forbid that I should glory," says St. Paul in our text, "save in the cross of our Lord Jesus Christ." And through these words he pronounces the sentence of condemnation against all deceitful things, which are in general our idols; he commands all men to cease from their vain endeavors, and he exalts the cause of Jesus Christ, as the only object worth glorying in for all intelligent beings till the end of time. But when the apostle says *in the cross of Christ*, think not that he understands thereby the wood, the outward sign, the figure which one meets so frequently in many regions of Christendom, and which has been so often abused by superstition. He intends to denote thereby the death of the Son of God, which took place when the fulness of the time was come for the remission of our sins. But he uses the expression *the cross* only to remind us that this kind of death was held as accursed among all people, that the death in which we ought to glory was full of humiliation, shame and ignominy, and even accursed of God.

THE more any man improves his graces, the clearer, the sweeter, fuller and richer is his enjoyment of God here. There is no man in all the world who has such enjoyment of God as the man has who most improves his graces. It is not he who knows most, nor he who hears most, nor yet he who talks most, but he who exercises grace most, that has most communion with God, that has the clearest visions of God, and that has the sweetest discoveries and manifestations of his Lord and Master.

MANY are miserable by loving hurtful things; but they are more miserable by having them. It is not what men enjoy, but the principal from whence it comes, that make men happy.

WHERE grace is improved to a considerable hight, it will work a soul to sit down satisfied with the naked enjoyment of God without other things.

PERSONAL ITEMS.

The wife of Senator-elect George H. Pendleton, of Ohio, is a daughter of Francis Scott Key, author of the "Star Spangled Banner."

During Mr. W. H. Vanderbilt's recent stay of a fortnight in Paris, he purchased pictures of celebrated artists to the amount, it is said, of $200,000.

Senator Oglesby, of Illinois, is a muscular man, who is brusque, heavy, practical and sensible. He and Senator Booth are great friends. He was at one time a miner in California.

Congressman McMahon of the Investigating Committee appears resolute. Behind his professional austerity he seems to have genial qualities. Men with big ears are usually generous.

Jeff. Davis has just been made rich by a decision of the Mississippi Court of Appeals awarding him a large plantation for which he once paid his brother, but did not secure a legal transfer, and which his brother (now deceased) afterwards sold to a negro for $300,000, though he left evidence that Jeff. had paid for the estate.

"Miss Grundy" has the grace to say of Mrs. Fremont, daughter of the late Senator Benton that she has had what rarely falls to the lot of any—a beautiful youth, followed by no less a middle age. Her hair is now as white as snow and very abundant, and her fresh complexion and animated play of features combine to make her one of the most distinguished-looking women ever seen.

Pope Leo XIII. is thin even to meagerness, and tall. His fingers are almost fleshless, and his whole figure and the outlines of his face ascetic to a degree. His hands are tremulous with nervousness. His voice is clear and ringing; his sentences are long, but admirably arranged. He has a noble head, crowned with snow-white hair; a high, wide forehead, not smooth and shining, but rough with bumps which would delight the heart of a phrenologist; eyebrows bushy and overhanging; deep-set, kindly, and intelligent eyes; a large—very large—nose, thin and fine; a wide mouth, which leads itself most readily to a very attractive smile, deep straight lines bounding it; and good, clear, pointed chin, with well-defined, firm jaw. He is remarkable for his kindly and courteous manners, his gracious speech, and the affectionate interest he takes in those with whom he comes in contact.

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We believe that we manufacture the best machine of the kind in the country.
Our machines have never failed to receive the highest award at all competitive exhibitions.
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(Signed) JOSEPH B. COLEMAN, Veterinary Surgeon,
Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

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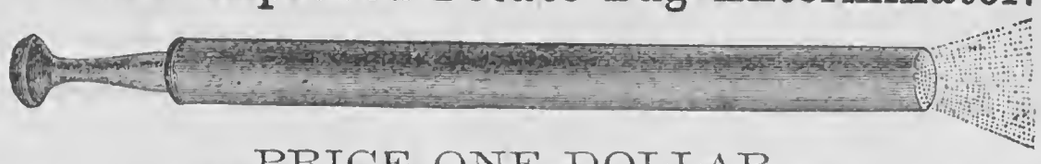

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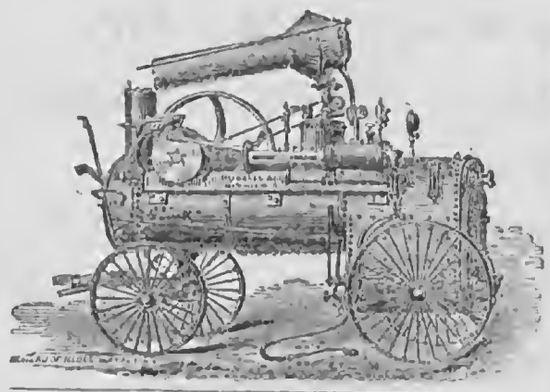

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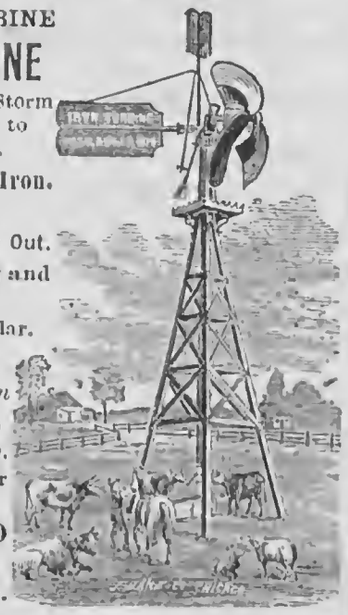

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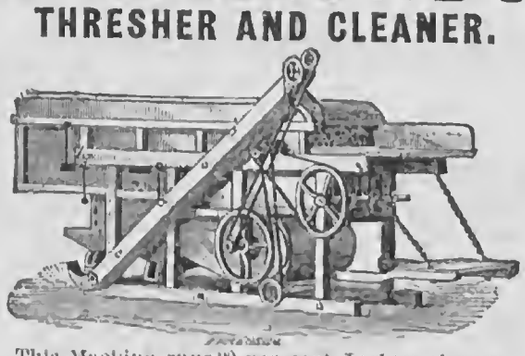

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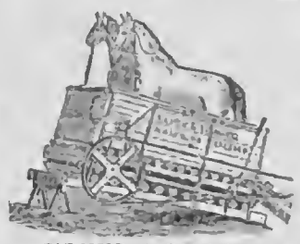

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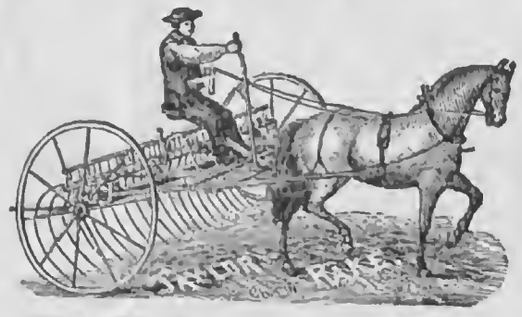

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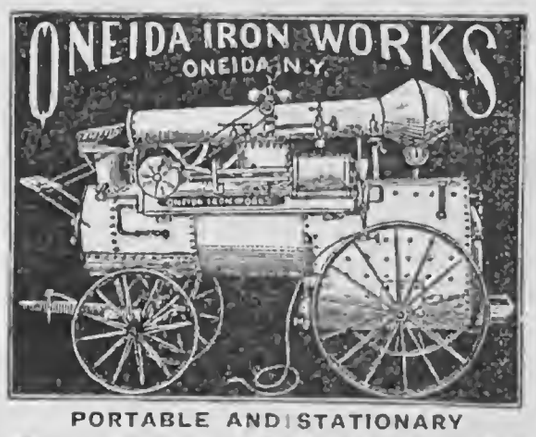
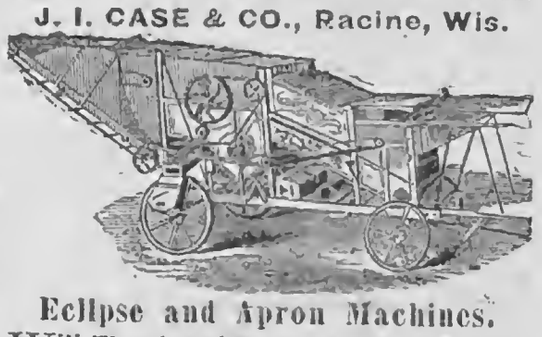
VERMONT FARM MACHINE CO:
Gentlemen:—We are more and more pleased with the Cooley Creamer as we continue to use it, and we feel confident that we shall produce a better quality of butter this summer by means of it than we ever had before. We are now getting $1 a pound for our butter. Very truly yours, MELVILLE BULL.
Send 3c. stamp for Circular to
VT. FARM MACHINE CO., Bellows Falls, Vt.



PORTABLE AND STATIONARY
STEAM ENGINES!
Of All Sizes and Adapted to All Purposes.
Simple in construction, first-class in material and workmanship.
SAFE! ECONOMICAL! STRONG! DURABLE!
☞ Send for Price-List. Address
ONEIDA IRON WORKS, Oneida, N. Y.

UNRIVALED POPULARITY.
Largest Manufactory in the World
—OF—
THRESHING MACHINES,
THRESHER ENGINES,
Mounted, Down & Tread Horse Powers.
J. I. CASE & CO., Racine, Wis.



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Will Thresh and Save, per day, 1,000 bu. Wheat, 1,500 bu. Oats, 400 Flax, 300 Timothy Seed.
Durability unparalleled. "19 successive Falls and frame staunch yet." "18 seasons' work with same Separator and Power." "Every Fall since 1859, and good now."
Most Complete Assortment of Threshing Machinery made. Eight sizes of the Apron Separator and three of the Eclipse.

Finest Threshing Engines—8, 10, 15 Horse Power. Combine Safety, Economy, Power, Strength, Finish.
Splendid List of Horse Powers: Mounted Pitts, 4-wheel Woodbury, 2-wheel Woodbury, Down Pitts, Down Climax, 1 and 2-Horse Sweep, Tread Power.
Catalogues, with Full Particulars of Improvements, etc., sent free on application.

MEDAL MACHINES.
New York State Agricultural Works.

1st Premiums at all Competitive Trials.
Railway, Chain and Lever Horse Powers, Threshers and Cleaners, Threshers and Shakers, Clover Hullers, Feed Cutters, Wheel Horse Rakes, Horse Pitchforks, Shingle Machines, Straw Preserving Rye Threshers, Portable Steam-Engines, Cider and Wine Mills and Presses, Dog and Pony Powers, Etc., Etc.
WHEELER & MELICK CO.,
ALBANY, N. Y.
Send stamp for Circular and report of Centennial trial.

The Best Paper, and the Best Premiums to Agents, is our motto. We ignore Chromos and all other cheap colored pictures, preferring to put our money *in the paper*, and in Premiums to Agents

Wit and Humor.

FISHING, IN FIVE STANZAS.

Now digs the boy the garden plot,
With energy intense,
Until he bags a tribe of worms,
And then he skips the fence.
[*Yonkers Gazette.*

Then off he skoots to where the stream
Doth ever gently swish;
And with much patience, and his hooks,
Entiecth sundry fish.
[*Hackensack Republican*

And then with slow and wary steps,
Homeward doth he wend—
When he is led to a back shed,
And frightful cries ascend.
[*Norristown Herald.*

But when at last the job is done,
With all his father's might,
The boy with pain and sorrow cries,
"I did'nt get a bite."
[*Grand Rapids Democrat.*

"The boys all laughed at me and said,
"My *bait* was cut for perch,
But now I wish that I was dead,
"For I've been *bate* with birch."

THE greenback party—Live lobsters.

THE jail bird—the robin. [*Utica Observer.*

WHEN a dog is muzzlod his bark is on the tied.

PEOPLE with colds in their heads belong to a generation of wipers.

A VOLUME that will always bring tears to your eyes—A volume of smoke.

A MULE'S hind leg has only one season. It is always a beautiful spring.

FATHERS with marriageable danghters, look into this matter. Does investigation invest a gate?

MRS. PARTINGTON says that her minister proached about tho "parody of the probable son."

SENTIMENTAL young grammarians are very apt to parso "love" as a "fine-night verb."—*Courier-Journal.*

LITTLE boy at the opening of a proposed spelling match: "Let's start fair, grandmother. You take Nebuchadnezzar, and I'll take cat."

MRS. PARTINGTON says she was much elucidated last Sunday on hearing a fine discourso on the parody of the prodigious son.

A FRENCH paper points out how the passion for gambling is showing in England, so that even in wedding notices it is necessary to state that there aro "no cards."

UNDUE indulgence in strawberries gives people tho hydrophobia. (This appalling lie is promulgated with a view to bringing strawberries down to four cents a quart.)—*Hawkeye.*

THAT was an unfortunate, fatal song, thoy started some yoars ago. "Tramp, tramp, tramp, the boys are marching," they sang, and there has been no end of tramps ever since.

"DAD, have you evor beon to the museum?" said a ten-year-old. "No, my son." "Well, go and mention my namo to the keeper, and he'll take you round and show you everything."

WHEN a woman makes up her mind that a hen shall not sit, and the hen makes up her mind that she will, the irresistible meets the immovable, and every law of nature is broken or perverted.

Eating is a Torture,

And sleep often a mere travesty of repose, to the dyspeptic. Appetite is correspondingly impaired by this most prevalent of maladies, and headaches, biliousness, constipation, poverty of the blood, loss of flesh and of vitality, and a thousand annoying and indescribable sensations, are its concomitants. It is, moreover, the progenitor of numerous and formidable bodily disorders. Obstinate as it is, however, its complete eradication may be effected by tho persistent use of Hostetter's Stomach Bitters, a medicine which communicates both vigor and regularity to the organs of digestion and secretion, relaxes the bowels gently but thoroughly, enriches and purifies the blood, promotes appetite, and gives tranquility to the nervous system. Persons of weakly constitution and feeble physique who use this superb tonic infallibly derive from it the stamina of which they stand so much in need, and it is invariably successful in remedying and preventing malarial diseases.

CAUTION.

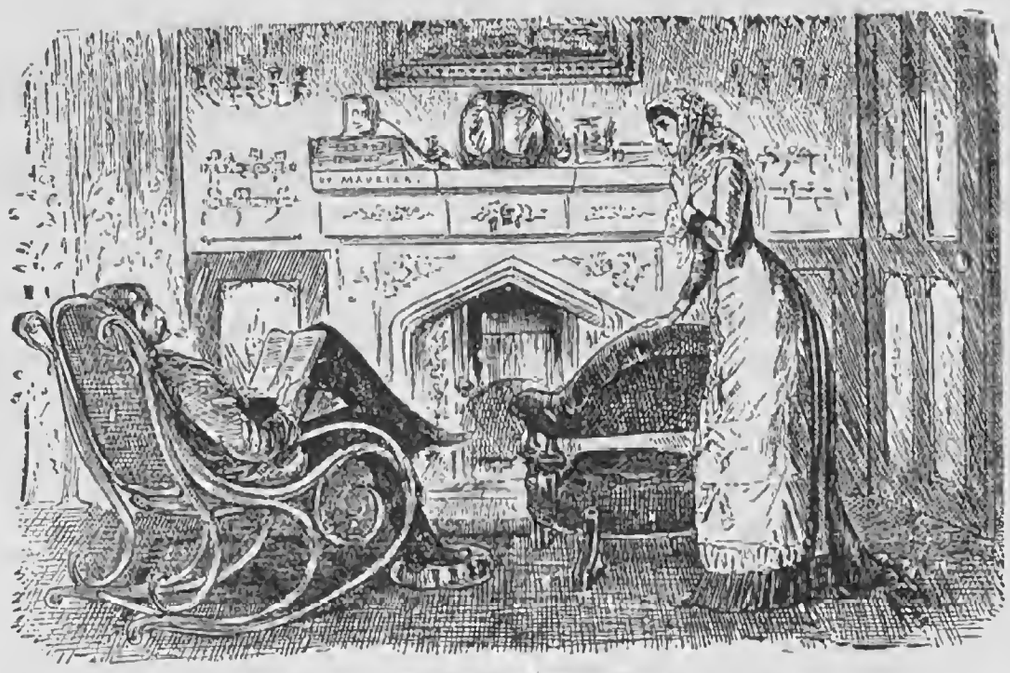
SPECIAL NOTICE is hereby given to all parties infringing on the inventions of Charles Alden, for preparing fruit, embodied in apparatus and machinery known as the Alden Evaporator, and which were secured to him by United States patents, bearing dates respectively as follows:—March 15th, 1870, April 5th, 1870, June 17th, 1870, March 7th, 1871, October 17th, 1871, and November 11th, 1873, that they will be prosecuted in accordance with the laws in such cases provided.

NOTICE is hereby given to all parties using the word "*Evaporated*" for designating or distinguishing fruits or food, by printing the same on labels or boxes without a special permit from Charles Alden or his legal representatives, that they will be prosecuted at law for infringing on his legal rights to the same as a commercial trade mark.

NOTICE is also given to all parties illegitimately using the name "Alden" on labels and packages containing prepared food, will be prosecuted for misrepresentation, and action for damages instituted in the courts against them. CULVER & WRIGHT, Attorneys for Charles Alden,
May 15th, 1878. 132 Nassau St., New York.

ALDEN'S IMPROVED EVAPORATOR and Fruit Preserving Processes. Address ALDEN PRES'G CO., 123 Chambers St., N. Y.

GUNS and Revolvers. Illustrated Price List free *Great Western Gun Works*, Pittsburg, Pa



AN ALTERNATIVE.

"CHARLES, Lovo, Madame Ledbury is at Home to-night, and Mrs. Gelasma has a Concert, and there's Mrs. Caruncle's Danco. Now, are we going to these Places or not? For if we are, it is Time for me to go and dress; and if we aro not it is timo for me to put a Mustard-Plaster on my Chest, some Flannel round my throat, and go straight off to Bod!"

KINGSFORD'S
OSWEGO CORN STARCH,

For Puddings, Blanc Mange, Cake, Etc.

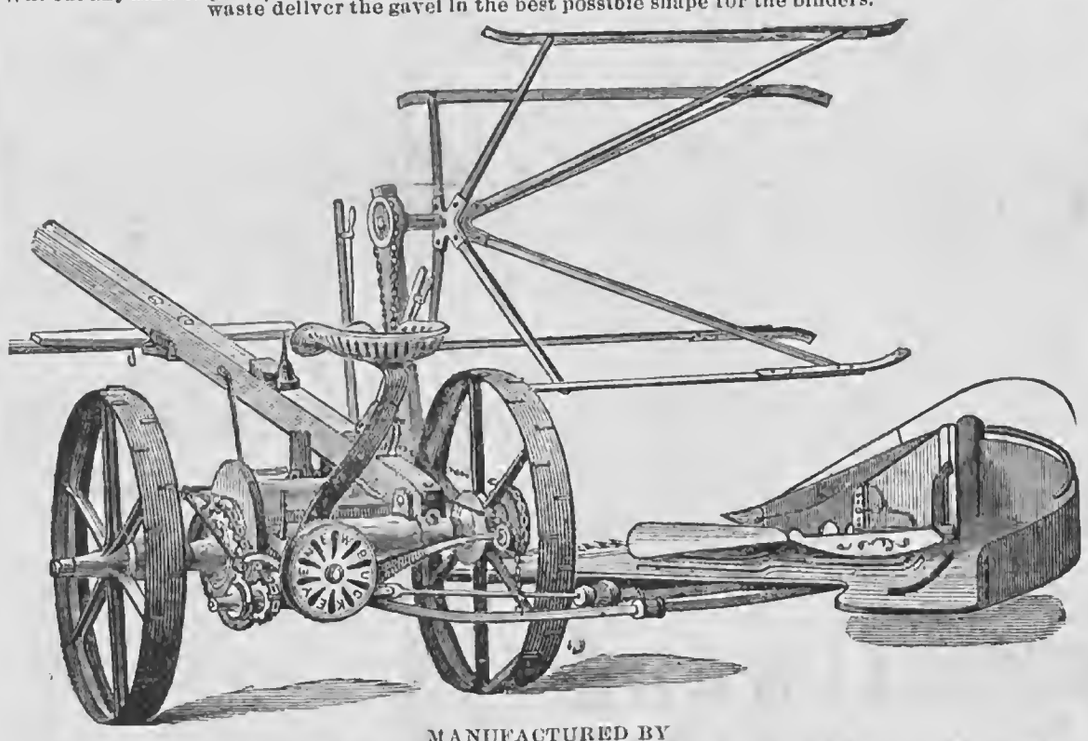
PURE AND DELICATE—PREFERABLE to BERMUDA ARROW ROOT.

☞ Inferior and spurious articles are often sold as **Kingsford's.** ☜

To avoid GROSS IMPOSITION see that **T. KINGSFORD & SON** is on each **Box** and on each **Package.**

New Buckeye Mower with Table Rake.

Will cut any kind of grain, and in any condition it may be found, doing thoroughly clean work, and without waste deliver the gavel in the best possible shape for the binders.



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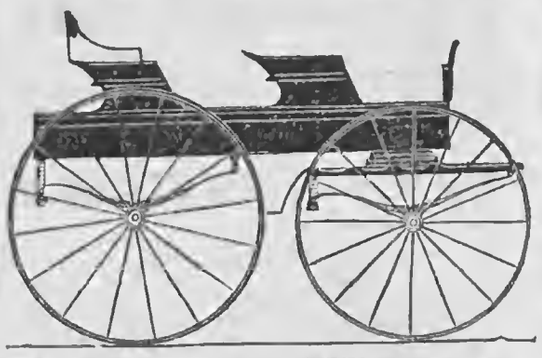
C. AULTMAN & CO., Canton, Ohio, and **AULTMAN, MILLER & CO.**, Akron, Ohio.
We also build the **Buckeye Harvester and Self-Binder.** Send to either house for descriptive circulars

THE CORTLAND



Platform Wagon.

To the Farmer and Dairyman, to whom a light-draft, easy-riding Wagon, capable of carrying from ten to fifteen hundred pounds, is a necessity, this is the

CHEAPEST AND BEST

Platform Spring Wagon made.
Every Wagon fully warranted.
If there is no agent or dealer in your town, send for Circular and Price List to the

CORTLAND WAGON MF'G CO.,
Agents wanted. Cortland, N. Y.

SEND TEN CENTS for SAMPLES of

IMPORTED SCRAP PICTURES

For Ornamenting Scrap Books, Pottery, Japanese Jars, &c.

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CORN SHELLERS, SMUTTERS, GEARING, SHAFTING, PULLEYS, &c.
MILL MACHINERY FOR WHEAT, CORN OR FEED
PORTABLE MILLS,
BOLTING CLOTH.
MILLERS SUPPLIES

See illustrated article in RURAL, May 11.

The Rectangular Churn

Simple, efficient and *always reliable.* No inside fixtures. Fifty per cent. in labor saved over *any other churn.* 5 sizes made. The Highest award given over all competitors at the late Dairy Fair in Chicago. An energetic man wanted in every town, to act as agent. One churn sent at wholesale where we have no agent. **CORNISH & CURTIS,** Fort Atkinson, Wis.

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This is a combination of capitalists to supply *consumers only* throughout the *United States* with **PURE TEAS** on the mutual principle, by getting up clubs. Send for New Price-List.

CONSUMERS' IMPORTING TEA CO.,
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TRADE MARK. 'VIBRATOR' Reg. March 31, 1874.

THE ORIGINAL & ONLY GENUINE
"Vibrator" Threshers,
WITH IMPROVED
MOUNTED HORSE POWERS,
And Steam Thresher Engines,
Made only by
NICHOLS, SHEPARD & CO.,
BATTLE CREEK, MICH.

THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the differences.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator, Entirely free from Beaters, Pickers, Tumblers, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse size, and two styles of Mounted Horse Powers to match.

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OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

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FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which we mail free.

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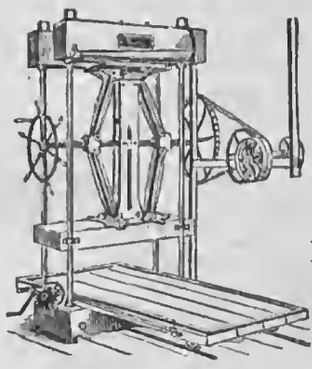
AT REDUCED PRICES.

Introduced 13 years ago and 50,000 now in actual use. The UNION is the acknowledged standard Churn of the country. Every Churn is warranted to give satisfaction or returned at our cost. Easily operated, easily cleaned, and makes beautiful butter by the extra working of the dasher on the butter while churning. Five sizes, churning from 3 to 25 gallons. Power Churns a Specialty. Address
TIFFIN UNION CHURN CO., Tiffin, Ohio.

HOG CHOLERA.
For Fifty Cents I will send a receipt to prevent or cure. JNO. CLARK, 214 W. 4th St., Cincinnati, O.



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WITH
Double Platform
BOOMER & BOSCHERT PRESS CO., Syracuse, N. Y.

THE AMERICAN HAY ELEVATOR.

The most perfect, simple and ONLY Elevator that raises the hay from a wagon and carries it in barn any required distance. Economical, durable, labor-saving. Send for Illustrated Circulars and prices to
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Branch Office: 55 Beekman St., New York.

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(See Centennial Judges' Report.)
STRONGEST WIND MILL MADE.

Tested 10 years. Thousands in use. A solid wheel without joints Produces 15 per cent. more power, and will not blow away.

WE BUILD 13 SIZES MILLS for pumping and power purposes. Illustrated Circulars free.
Eclipse Wind Mill Co., Beloit, Wis.

Another Great Reduction

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

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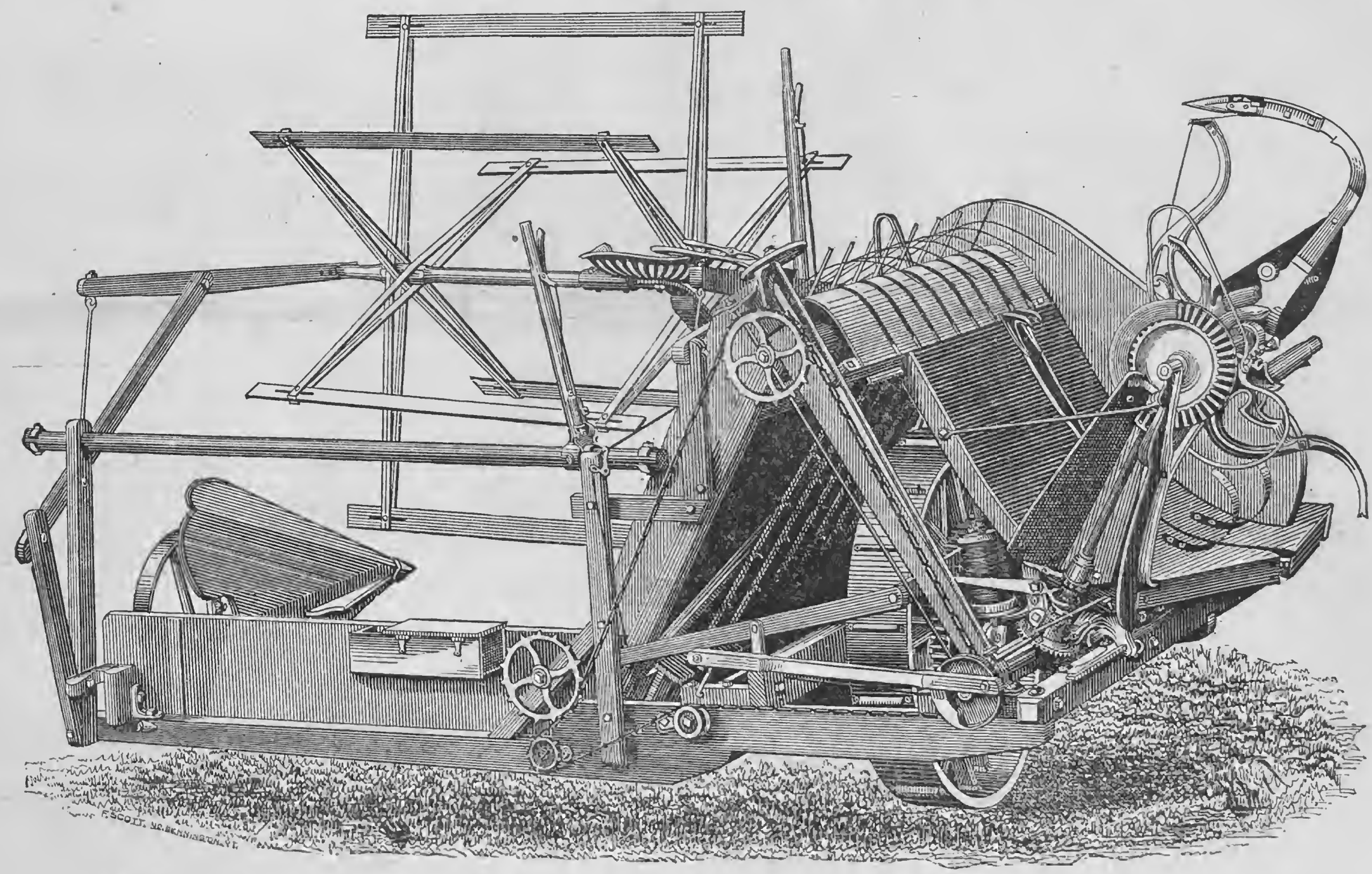

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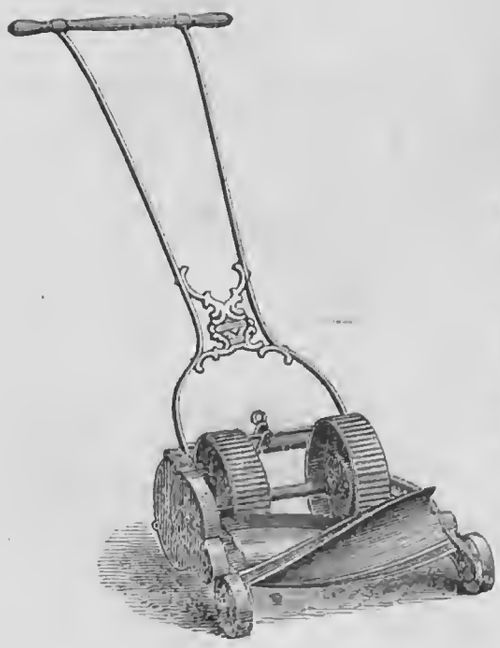

THE NEW

"CHARTER OAK" LAWN MOWER

The most beautiful and perfect Lawn Mower in the world. It stands to-day at the head of the list of Lawn Mowers in the United States and Europe.

The machine is mounted on two large driving wheels or pulleys and instead of being on the outside of the frames, to run in the uncut grass, like all other wheel-mowers, they are placed *inside the frames*, back of the cutting-blades, running on a shaft, each independent of the other, allowing the machine to be turned either to the right or the left without injury to the sod, and to be turned around in a circle no greater than its own length, and cutting at the same time.

One very important feature is its three-bladed solid revolving cutter, working in patent boxes, so constructed that grass cannot wind around the shaft of the cutter, which overcomes a serious objection in most all other Lawn Mowers.

It is a model of beauty, very compact, beautifully finished and thoroughly made; it is durable, easy to adjust, operate and keep in order, and the driving wheels being inside the frames, enables the operator to cut the grass clean around walks, drives, flower beds, trees and shrubbery. BE SURE AND SEE IT BEFORE YOU BUY.

Manufactured in five sizes for hand, viz., 8 in., 10 in., 13 in., 15 in (Standard), and 18 in.; and two sizes for horse-power, viz., 28 and 30 inch.

For Circulars, Price Lists, &c., address

HILL'S ARCHIMEDEAN LAWN MOWER CO.,

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1832. MERIDEN CUTLERY CO. 1878.

The Oldest Manufacturers of Table Cutlery in the United States, and

EXCLUSIVE MANUFACTURERS OF THE PATENT

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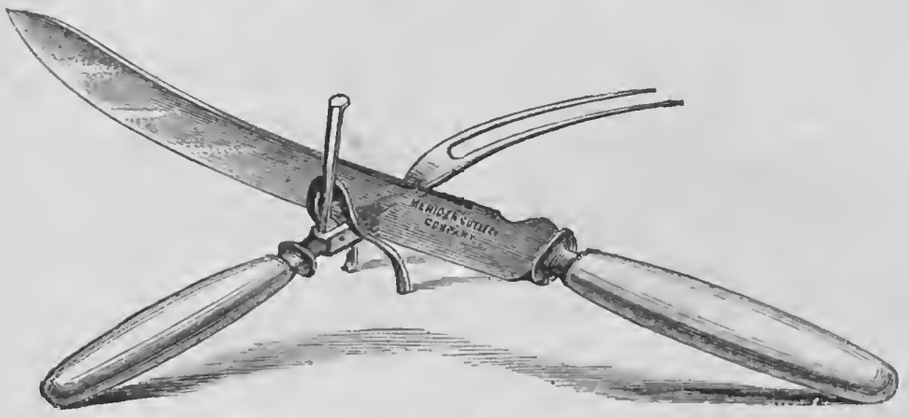
Handle, a perfect substitute for Ivory, equaling it in beauty when new, and far surpassing it in durability and appearance in use.



OUR NEW PATENT

GUARD AND REST

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All goods bearing our NAME can be recommended with the fullest confidence.

A full line of ROSEWOOD, EBONY, BONE, RUBBER (of which we were the original makers), IVORY, **CELLULOID**, PEARL and SILVER PLATED KNIVES always on hand and for sale.

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EVERY MACHINE **Fully Warranted.**

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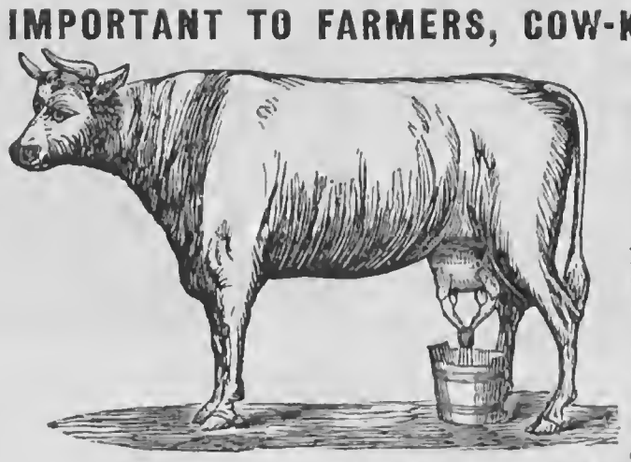
Circulars and full

IMPORTANT TO FARMERS, COW-KEEPERS AND DAIRYMEN.



THE WONDERFUL

Self-Acting Cow-Milker,

PATENTED MAY 28, 1878,

THE MOST USEFUL INVENTION OF THE AGE.

Tested and approved by many of the *leading Agriculturists, Dairymen and Farmers* throughout the *United States*, and highly recommended by all who have used it.

WILL MILK A COW IN FROM THREE TO FOUR MINUTES and can be adjusted and used by A CHILD. Usefulness, simplicity, cleanliness, durability and cheapness combined. **PRICE TWO DOLLARS.**

Apparatus with full instructions and pamphlet containing description of the milker and sectional views and treatise of the cow's teats and bag, *sent prepaid to any address on receipt of price* ($2).

READ THE FOLLOWING TESTIMONIAL:

25 LEXINGTON AVENUE, NEW YORK, 5th June, 1878.

I hereby certify that, in company with the *Superintendent* of the *American Society for the Prevention of Cruelty to Animals*, and other officers of that Society, I have witnessed the operation of the *Self-Acting Cow Milker*, and that it fulfills all that is claimed for it.

(Signed) JOSEPH B. COLEMAN, Veterinary Surgeon,
Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

STENT & CO., M'F'R'S AGENTS, P. O. BOX 2997. 132 NASSAU ST., N. Y.

THE

RURAL NEW-YORKER,

DEDICATED TO THE

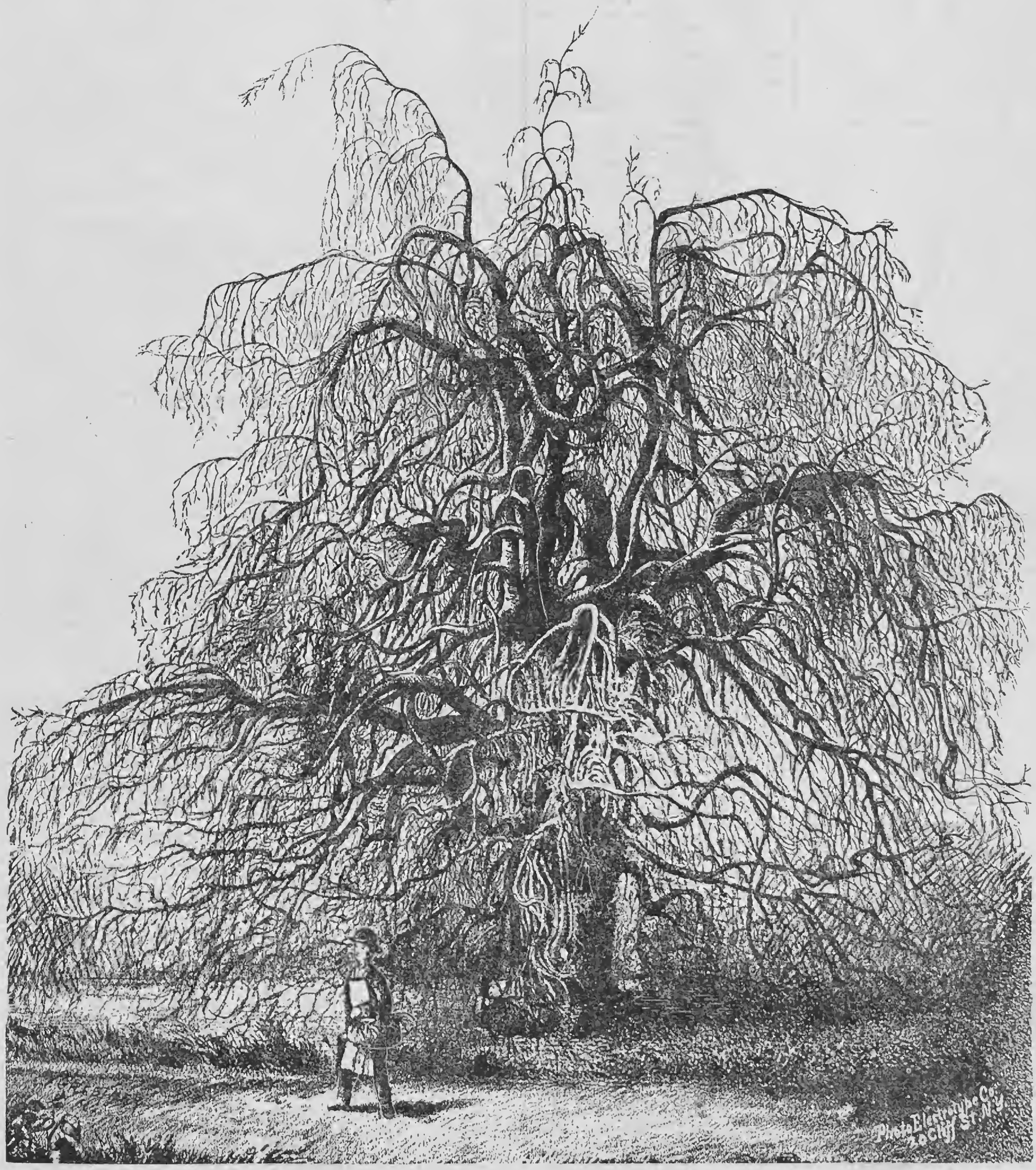
Needs of the Country and Suburban Home.

VOL. XXXVII. No. 26.
WHOLE No. 1483.

NEW YORK CITY, JUNE 29, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]



Winter Sketch — WEEPING BEECH. — By L. F. Graether.

Arboricultural.

THE WEEPING BEECH.

(Fagus Sylvatica Pendula.)

The remarkable tree, of which we give an illustration from life upon our first page, is one of world-wide celebrity; and justly so, for it combines as many of the qualities for which ornamental trees are admired as any other specimen of which we have any knowledge. Engravings of this tree have been published before, not only in this country but in Europe. But all represent it in full foliage. The outline is then so peculiar—the covering of leaves so dense, that one, as he approaches it for the first time, is ready to ask, "What is it?" A great mound of dark-green, glossy leaves; a gigantic bower of vines will, perhaps, suggest themselves in answer. Few branches are seen through the foliage, which sweeps the ground about its entire circumference, and he gazes in actual wonderment and admiration as the fact reveals itself that it is the undirected, unaided growth of a single tree. Pushing away the branches and leaves so as to effect an entrance, he finds himself beneath a darkened canopy, through which only the softened light transmitted through several layers of foliage can enter. Then above and about he sees something of the framework which by our engraving, drawn in mid-winter, we have attempted to portray. The following letter from the owner of the grounds in which this tree grows, explains itself:

Flushing, N. Y.

Eds. Rural New Yorker:—The artist has certainly given a very faithful portraiture of the Weeping Beech, and must have bestowed upon it much labor. You are certainly doing a good work in giving to the reading public the portraits of so many of the finer trees and plants; and I am very glad to have presented in the pages of The Rural New Yorker this faithful representation of one which I so much admire.

It was planted where it now grows, on the old grounds of the late firm of Parsons & Co., at Flushing, in the year 1843, and is now at least forty feet in hight. It differs from many of the plants of this variety, which are grown in Europe, in being worked near the ground, and thus having a different character from those grafted high, which possess the umbrella-form of the ordinary Weeping Ash and Willows. Though not of slow growth, yet it, of course, does not reach up as rapidly as when younger. Yet year by year we see an advance in its size and beauty; and among the many fine specimens here, there is not one which so quickly attracts the gaze and admiration of visitors.

Robert B. Parsons.

Mr. Frank J. Scott, in his fine work, "Suburban Home Grounds," presents one of the best portraits of this tree in foliage we have ever seen, and speaks of it as follows:

"We consider this (Fagus sylvatica pendula) the most curious tree of our zone, and one that will commend itself more and more as it becomes known. The original tree stands in the park of Baron de Man, at Beersel, Belgium*. The trunk is three and a-half to four feet in diameter, and grows in a twisted form to a hight of twelve to fifteen feet, with an appearance as if an immense weight were pressing it down. The branches cover an area nearly a hundred feet in diameter. Its history is curious. Some sixty years ago the baron's gardener was planting an avenue of beech trees, and the baron, observing a very crooked specimen, directed to have it thrown out; but the gardener planted it in a corner of the grounds little visited, where it grew to be one of the most beautiful and singular freaks of sylvan nature." Mr. Scott then refers to his engraving of Mr. Parson's tree as the finest in this country. It is impossible for any engraving to do justice to its eccentric luxuriance. It is the very embodiment of all the odd freaks of growth that make trees picturesque, and the vigorous healthfulness of foliage that makes them beautiful.

Mr. Meehan, to whom we sent a hand proof of our engraving, replies as follows:

Germantown Nurseries,
Germantown, near Philadelphia.

Eds. Rural:—I am glad to see your beautiful drawing of Parson's Beech. I have always had a great admiration for this tree, but your drawing hightens it.

I believe when it was first found among a lot of seedling Beeches in some nursery in Europe, the attendant threw the scrubby thing away; and it was only some ignorant person, to whom a tree was a tree and nothing more, who snatched the brand from the burning. If that attendant is still living, I hope he will not see the Rural New Yorker, for if he is a true lover of trees, it is enough to drive him to suicide to note how nearly we were deprived of a good thing by his stupidity. Very truly,

Thomas Meehan.

We have only to add that this beautiful variety of Beech, which we hope our readers by this article may be induced to plant in the choicest situations about their homes, is of slow growth during several years after transplantation. Our best specimen was planted five years ago, and is now nine feet high. It is not until it is about ten years transplanted that it fairly begins to show its beautiful eccentricities.

* P. J. Berckman, in Gardener's Monthly.]

The Vineyard.

PROBABILITIES OF AMERICAN GRAPES.

D. S. Marvin.

The history of our native Grapes would be a theme full of general interest, but I cannot here take it up for want of time and space, further than to say that it would throw light upon what I have to say of their future, and give a better understanding of the subject, and that the persistent attempts to utilize Vitis vinifera, the European grape, for out-door cultivation upon our Atlantic seaboard, has been a long history of disaster, for the class is not adapted to our climate. To obviate these difficulties, some twenty-five years since, horticulturists conceived the idea of hybridizing the European sorts with our wild and then despised natives. Much labor has been expended in this direction, and time enough has elapsed to enable us to see that this method is more or less a failure. These hybrids are only healthier than vinifera vines, inasmuch as they are dominated by the higher vigor of our native classes. We can hardly say they are a success, or that they have met the hopes of their originators. The elements of weakness still exist, only in a less degree.

It is therefore becoming generally recognized that we can rely alone upon our natives, and bring them up by the ameliorating circumstances of improvement by cultivation, and the arts, appliances, and skill of the horticulturist, to the standards of European Grapes, and doubtless, in time, beyond those, in some respects. We have not far to travel even now. In the matter of health, we are ahead; for wine and table purposes, nearly equal; but behind for raisins: ours may never be well adapted to this purpose from lack of pulpiness. When we reflect that the European has received careful attention and cultivation from the earliest records of profane and sacred history, and our own but for a single generation, and when we further contemplate how much can be accomplished in this direction, how pliable nature is in the hands of the skilled horticulturist, we are not without hope that our healthier classes and varieties may yet come to the rescue, and reclothe the sunny hills of Europe, devastated by Phylloxera vastatrix, Oidium Tuckeri, etc.

The writer hereof, having made this subject of amelioration, in its several departments, as thorough a study as was in his power, has determined to publish the story of his processes and their hopeful results, and to suggest such further processes as seem promising. To save repetition, he would respectfully refer the reader to a partial record, in an article published in the Rural New Yorker for April 13th, last. This is done because he considers the improvements already accomplished important, and the processes, some of them, new and original, and pointing the way to more hopeful results hereafter. He is already past the meridian and on the downward slope of life, and although he is sanguine and more hopeful than ever in going on with the good work, still he recognizes that human life is a thing of a day; that the processes devised may be an aid and encouragement to others in their efforts and achievements in the same direction; that there should be a brotherhood, an unselfish spirit herein manifested; that no one man knows it all, or should selfishly think he can monopolize, or make worldly gain to the exclusion of others; there are, too, so much valuable time and labor lost in repeating old and unhopeful experiments over and over again, and this would not be done if there were to be found an accessible public record of what had already been done by others.

There has been great loss of effort for want of proper attention to the great, I might say, profound and dominant, influence of the stock upon the germ or seed from which the new seedlings are to be grown. We know that normal seedlings will repeat themselves over and over again, true to the original; that the only gain we may ever expect is from rare occasional tendencies to sport, through changed circumstances of soil and climate. Our whole effort must, then, be concentrated upon this one point—*increasing the chances of sporting under propitious circumstances.* This is the alphabet, the beginning, and must be more profoundly studied. Cultivation, grafting, hybridizing, are but the accessories. Too much study cannot be concentrated here; every means within Nature's resources, and the skill of man, will be needed.

Europeans have not recognized the promise of our Grapes—old prejudices and prepossessions are slow to give way. So far they are only using the roots of our vines, upon which to graft their own; they have not sufficiently tested the fruit of our finest varieties; there is little wonder that the coarser Labrusca and cordifolia varieties disgust them; they should test some of the more promising æstivalis and vulpina sorts. Let the ingenious countrymen of Lafayette, who have the reputation of being skilled horticulturists, look into this matter, and recognize the possibilities and capabilities of our best classes and their varieties. Herein is a wide and profitable field for exploiting, and we want their help.

Our native resources are far greater than those of Europe. They have but one botanical class under cultivation; we have four or more already cultivated and adapted to widely differing climatic conditions. Advantage should be taken of the choicest varieties of these several classes; their individualities more clearly studied; their best features selected and concentrated.

Grafting to vary the result, has not, to the writer's knowledge, heretofore been used in these operations. In his hands it has yielded the most surprising and gratifying results. Every skilled horticulturist has observed the difference between a seedling from an ungrafted apple and a grafted one. Here is the most potent means to be used to effect the desired result. I am amazed that so simple yet important a factor has been so long unthought of. It only shows how crude we still are in this interest. By this means, as well as by hybridizing and marching, we are enabled to blend the sap of all the known different botanical classes in the production of a single seed, and the chances of forcing sports are greatly multiplied.

Horticulturists have heretofore taught that hybridizing was the great potent means to be used to bring about the highest results. I have not found it so in my limited experience. In skilled hands, its use is great; the seedlings are generally of the mixed nature of their parentage; but they are seldom an improvement over both, and their seedlings rarely yield seedlings of a mixed nature to carry on the improvements, but go back to the strongest parent. The power that grafting yields by blending the sap, is wanting. It is root power, not sexual force, that seems to give us high-bred seedlings, just as the good blood of the noted breeds of horses perpetuates their qualities. The hybrid between the horse and the jack is the well-known impotent mule, totally unable to perpetuate its species—a useful animal, but noted for its stupidity and intellectual inferiority to either of its parents.

Success will depend very greatly upon the judgment, experience and skill of the operator, in selecting the best classes and the best representatives of each class. I have long desired to go into our southern maratime districts, where alone the Scuppernong flourishes, to avail myself of the great advantages of our Vitis-vulpina class, which is reported to be exempt from phylloxera, and, by mixing, yields the genuine sparkling Catawba wine. This great field is almost unexplored; splendid results doubtless lie at the very threshold of experimentation there; but it requires a trained mind to see its advantages, and where to operate. One human life is not long enough to do all that should be done.

There are few men so situated that they can learn processes that require so many years' experience, because the business of most persons so interested, must be made to maintain them while doing it. Some well-endowed agricultural institution, or the general Government, should take the matter in hand. The Grape is but one among the many of our fruits, vegetables, and cereals, requiring further development. There is hardly any limit to the power of man over these ameliorating, developing, I might almost say, creating processes. Agriculture, which embraces, of course, horticulture, instead of being a series of hap-hazard processes, must become an applied science, with trained minds, instead of boors, to do its work of developing our fruits and seeds until they are greatly improved in quality and increased in productiveness.

Industrial Topics.

THE EXPORTATION OF FARM PRODUCTS TO EUROPE.

Professor Levi Stockbridge.

From an early day in American history, farm products in the form of food supplies, or textile and other raw material for manufacture, have been to a considerable extent shipped abroad. But the volume of the outgoing goods has rapidly increased in quite recent times, especially in food products, and is now of gigantic proportions. Not only from all our leading Atlantic seaports, but also from our Pacific coast, many huge steamers and sailers are weekly, if not daily, leaving for European marts with packed cargoes. They carry out cotton, corn, wheat, flour, barreled beef and pork, hams, bacon, lard, butter, cheese, apples, canned fruits, meat and vegetables, and live and dressed beef and mutton. In the aggregate, the value of these must amount to many hundreds of millions of dollars, and be more than double that of all our other exports.

This branch of our foreign trade has increased so rapidly of late as to awaken and fix the attention of all classes of commercial and financial men and associations, who unanimously predict that if it continues, it will lift the nation in all its interests from their present embarrassed condition, give employment to all desiring or willing to labor, and general thrift and prosperity.

What, then, is the prospect for the future? Will the foreign demand for commercial food continue, or is it only temporary in its character, and soon to cease in consequence of home supply? In answering this question, we may throw out of the account the demands from South America, from China and other countries of the East, which are quite large and will probably continue; and direct our attention only to Europe.

The war between Russia and Turkey has, undoubtedly, decreased the grain product of those countries and made some disturbance in the general market of Western Europe. But peace there is not likely to stay, or cause the ebb of, the present great grain tide in that direction. With our vast expanse of cheap land which is or can be made fertile to the point of profitable grain production, with all our superior labor-saving machinery for tilling and harvesting farm crops, with such unparalleled facilities for quick and cheap inland and foreign transportation, just brought to systematic perfection, we have nothing to fear from Russia, Hungary, or Austria in our present *grain* markets, and for the market in certain other great lines of our export, they cannot compete at all. But, again, the demand in our present market, it is almost certain, cannot be met by their home supply. Notwithstanding their intensive culture, large yields, and large carrying capacity per acre, the lands of the British Islands, as now distributed and occupied, cannot supply their population with healthful food in sufficient abundance and variety, and they must, from necessity and self-interest, continue large purchasers from us.

On the Continent, France, Germany and adjacent countries, whose agriculture, in many respects, is altogether superior to ours, especially that of France, which country may be said to be a nation of land-owners, of thrifty small farmers, the people have discovered that there is a large class of American exports, particularly of cattle and their products, which, owing to the value of their land and the size of their farms, can be more cheaply obtained here than by home culture. They will, therefore, buy such supplies of us, and turn their own farming largely into other channels.

Here, then, on the right hand and on the left, in the East and the West, are, and are to be, the demands—our markets. Can we produce enough to feed ourselves, and a surplus to meet the demands? Yes; we undoubtedly *can*, if we will. It is true that the general soils of the old States of the Union, for hundreds of miles inland, have been robbed of their original store of plant-food by the most improvident and thriftless methods of culture, and do not yield one-half as much per acre of many products as the lands of some countries to which we export. But the soil is here full of the *elements* of fertility ready for development into plant-food by judicious tillage, the *acres* are numberless and comparatively cheap, and we have the vast and almost untouched West with its accumulated store ready for immediate change into the form of crops, and the hands and machinery needed to accomplish it. Yes, we *can*, but will we?

Out of the very lowest depths of financial disaster and ruin, agriculture all unaided and unrecognized, with hundreds of thousands of able-bodied idlers in all parts of the land, who are useless as a laboring force, is even now lifting us to prosperity and giving hope and cheer to the despondING. The wild and reckless adventures, the fool-hardy schemes for acquiring sudden wealth outside of legitimate labor and business, induced by the monetary disturbance caused by the late war, had a most demoralizing influence upon all our producing industries. But the bubble has burst; fortunes real and imaginary have disappeared; and now our people are ready to engage in legitimate industry, not for the purpose of acquiring wealth to be expended in ostentatious and extravagant display, but for a rational livelihood. In this emergency, to the land where there is room enough, and labor enough, and food enough, and a sure competence for all who seek it, their attention is turned. If wisdom now is our guide, this tendency will be reinforced and strengthened by wise and judicious legislation of the States and nation, and by all the force of public opinion until the desire becomes fact.

If agriculture with the depressing, discouraging influences which have been bearing upon it, is even now the main cause of our returning prosperity, what may we not hope for and accomplish, if it receive the labor and encouragement its importance demands? The changes taking place at the present time point in this direction, and indicate that in the future we shall find this industry our great producer, its surplus above consumption the source of our increasing wealth, which surplus will seek its market on the other side of the Atlantic. Assuming this to be the fact, the influence it may have on our soils and their future producing capacity, becomes a matter of serious importance.

To export from a county grain, meat and other agricultural products, is simply to send away, to banish forever, those elements on which good farming has ever relied to maintain the soil's capacity of production. And unless the same elements in kind, availability, and about the same proportion, are substituted in other forms, the final result must be disastrous. With a knowledge and full appreciation of this fact, however, such consequences may be avoided. For we have in every part of the country, as natural or accumulated deposits, vast quantities of material, both mineral and organic, rich in fertilizing elements, now going to waste or little used, which by care and intelligence can be utilized for the purposes of plant-food. Chemistry, too, is just opening to us a measureless mine by the manufacture of the salts of the elements of nutrition, which are as effective and permanent in the production of farm crops, as the refuse of the crops would be if consumed at home.

The conclusion, therefore, appears to be just, that whatever may be the foreign demand for food-products, we have the soil, the labor, the machinery, the means of transportation to supply it. And by the practice of an intelligent course of husbandry, by the use of our natural and artificial advantages, the present producing power of our soils may be retained, and even increased and unequaled permanent national prosperity be the result.

Horticultural.

THE BANANA.

WILLIAM FALCONER.

BANANA plants are indigenous to the tropical world where they are widely distributed and have been cultivated for their fruit by savage as well as civilized peoples, from time immemorial. The amount of fruit they bear, in proportion to the ground they occupy and the care they receive, is enormous; and they are almost the sole sustenance of millions of human beings. In Florida, and some other parts along the coast of the Gulf of Mexico, banana-raising is quite an important industry. A gentleman of Tallahassee, Florida, writing to me a year or two ago, said: "Banana plants are worth 25 to 30 cents each. They come from suckers from around the old plant. Each plant will give from eight to ten yearly. We plant 435 bearing plants to the acre, and they bear fruit from fifteen to eighteen months after being set out."

Musa sapientum is the banana of commerce, and M. paradisiaca the plantain. Both of these species are so nearly allied, that some of their varieties defy botanical distinction. The banana plant has purple spots on its stem, and its fruits are shorter and rounder than those of the plantain. But in cultivation there are varieties of both species that are greatly superior to the originals. There are many species of Musa, however, and all useful in their way. Besides those mentioned, the Chinese banana, M. Sinensis [see cut], is a dwarf, quick-growing and heavily-fruiting species that, in some of the British colonies and Pacific islands, is being successfully cultivated. This is the kind most generally met with in greenhouses. All the Musas contain a deal of fibrous tissue in their leaf-stalks; the most noticeable in this case being M. textilis, which is largely planted in the East and West Indies, Malayan and Philippine Islands. The fiber is known as Manilla hemp. The finer material is used in the manufacture of shawls and other fabrics, and the rougher for ship-cordage; it is also used in paper-making. Banana plants are likewise used for other domestic purposes: the young leaves as culinary vegetables, the mature ones for thatching huts, and mats are made of leaf-strips.

MUSA ENSETE.] Flower.

The common banana grows from 10 to 20 feet high, the Chinese from 5 to 7 feet, but the Abyssinian, M. ensete [see cut of fruit, flower and seed], attains a hight of 30 or more feet. This latter is a noble-looking plant, with very stout "stem," and vast obliquely-erect leaves that have a deep red mid-rib. In fact, this Abyssinian banana produces the largest entire leaf of any known plant whatever. A few years ago an extremely fine specimen grew in the palm-house at Kew; I measured the blade of one of its leaves and found it to contain 89 square feet. This species is often met with in greenhouses. Its fruit is useless as food, but the base of the flower-stalk is cooked and used as a vegetable. This species never produces suckers, and must, therefore, be raised from seed. The Kew specimen referred to, kept on blooming for fifteen months. Banana plants are much cultivated for ornament in greenhouses. Though the commoner kinds are frequently met with, we have sorts particularly adapted for this purpose. They include: M. S. vittata, a variety whose leaves are variegated with large white blotches and streaks; M. zebrina, whose leaves are deep green spotted with crimson above, and crimson shaded underneath; the Chinese banana, whose leaves are in a rosette-like tuft at the top of its short "stem;" M. superba, in appearance just intermediate between the Chinese and Abyssinian bananas; the Abyssinian banana so long as it can be kept in a small state, and this is done by root confinement. Moreover, we winter this species successfully in the cellar. And there are a few kinds highly ornamental on account of their brilliant red flowers (bracts), notably M. coccinia, which does best planted out in a conservatory. It only grows some 6 to 8 feet high.

In some European gardens the Chinese banana is grown in glass-houses, for its fruit alone, and that most successfully, too; bunches weighing from 40 to 70 pounds being produced. A soil of turfy loam and old manure is used, a high temperature is employed, and lots of moisture at the root, overhead and in the atmosphere given. This species often fruits in the greenhouses without any special care, but then we cannot expect such excellent results as we would did we treat for fruit only. A nice bunch ripened here last fall.

Banana plants may be introduced to the summer flower-garden with excellent effect, grouped with other sub-tropical plants in beds or borders, or, better still, isolated in sheltered nooks. They may be planted out, or if preferred, kept in pots and the pots plunged out of sight. But in all cases they want sheltered positions, otherwise their leaves will be torn to shreds by the winds. They should never suffer for the want of water, and liquid manure is highly appreciated.

Cambridge Bot. Garden.

[In addition to the above we need add, at this time, only a few remarks. The cuts are after

MUSA ENSETE. Transverse section of seed.

MUSA ENSETE. Seed seen from below.

Le Maout, Decaisne and Hooker, and represent parts of the Musa Sinensis and Musa ensete. Respecting the cultivation of the banana, as adapted to our Southern States, we hope to furnish notes at a future day. Under favorable conditions a banana plant (varieties of Musa sapientum) will produce, on an average, in one year, three bunches of fruit, each weighing 44 pounds; these would yield for every three acres, in hot climates, 404,800 pounds of bananas, and in countries on the limits of its culture, 140,800 pounds.

As an ornamental plant we wish the banana was better known. All of the varieties are desirable for the conservatory, but M. ensete is in every way desirable as an out-door plant as well. In the house, besides presenting one of the noblest types of vegetation, it stands the dust and heat just as well as scores of quite inferior plants which are prized only for their large leaves. Out of doors, we have found that the leaves of this species are less torn than those of the others, and a single specimen placed last summer in a position exposed to the north and west winds, was the admiration of those who saw it.—EDS.]

BANANA—MUSA SINENSIS.

Industrial Implements.

A SELF-BINDING HARVESTER.

WE refer to WALTER A. WOOD'S Self-Binding Harvester. The central-western part of the United States is noted for the immense area in grain. Farms embracing thousands of acres are sown to wheat, rye, barley, etc., and in the harvesting season it becomes a serious problem to gather the product without loss of time, tantamount to loss of grain. Farm labor is often difficult to get, and untrustworthy when secured.

This fact has spurred invention to create the self-binder — for years the dream of practical men. The firm owning the patents covering the binder in question, had expended, it is said, upwards of one hundred thousand dollars in experimenting before one was produced that was considered as fully up to the standard required by the exacting ideal of the inventor.

Such an expenditure on a problem whose successful solution was by no means a foregone conclusion, was extraordinary.

Although the binder had been in use to a limited extent previously to the Centennial, it was not until the Field Trials, held under the auspices of the Commission, that it came prominently into notice. Mr. JOHN COLEMAN, English Commissioner, in his report to the Royal Agricultural Society, says:

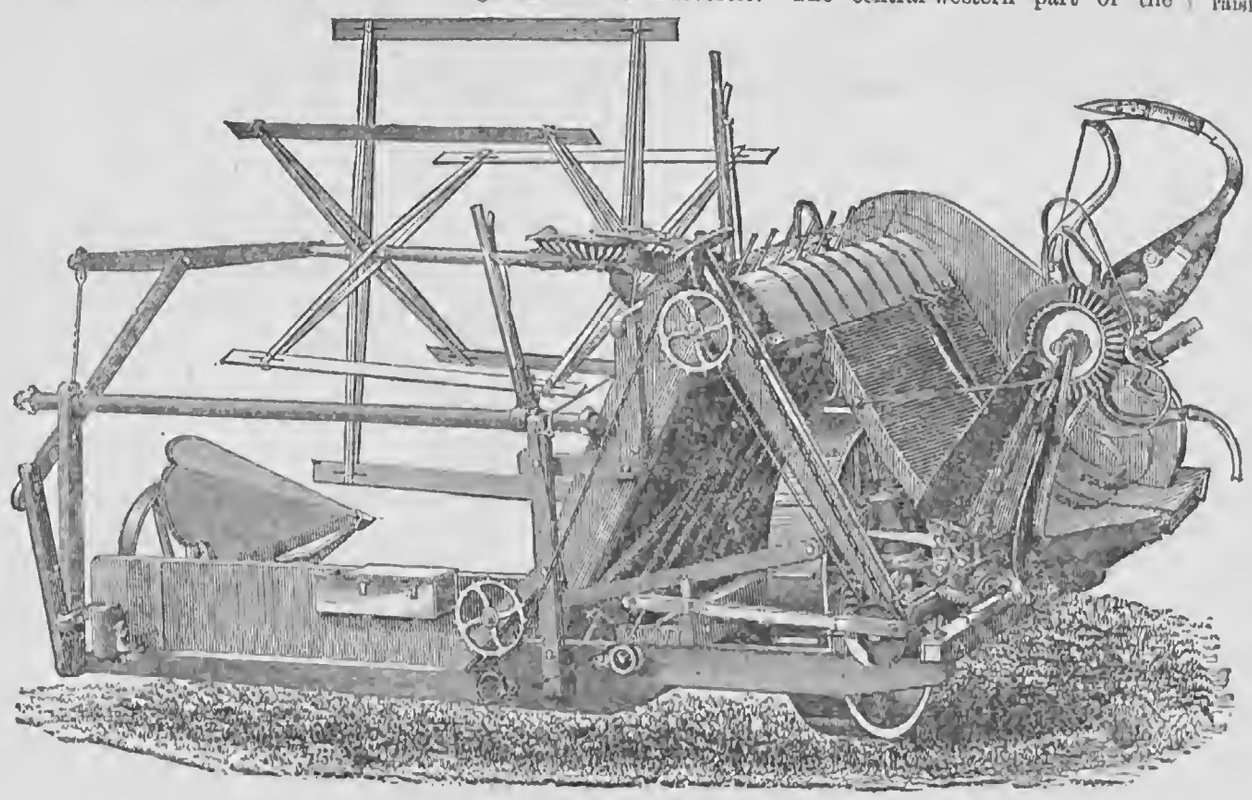
"The great feature of this department, and in fact of the whole Agricultural Exhibition, was the automatic binder, the realization of a long-cherished notion on which mechanics have been engaged for years."

It was the good fortune of American inventive genius to have its triumph accentuated at our Centenary, creating a new era in mechanics applied to agriculture, as did the American reaper at the London Exhibition in 1851.

It is seldom that a new thing so rapidly overcomes conservative prejudice as has the WALTER A. WOOD Binder. Mr. OLIVER DALRYMPLE, a gentleman who in 1877 had 7,500 acres in grain, and who this season increasing his acreage, will use seventy-six self-binding harvesters, writes to Mr. W. A. Wood, under date August 20, 1877, as follows:

"Justice requires that the wheat-growers of the West should express to you the gratitude I have no doubt they share with me, for the enterprise and perseverance you have manifested in bringing out a Self-Binding Harvesting Machine that may be depended on. I used ten of your Binders last season, harvesting 1,280 acres with them, and this year I bought thirty-one more, and have with the forty-one Binders, harvested about 7,500 acres of good heavy grain, and have done it in good season, so that none has been over-ripe or wasted. I have never seen so excellent binding or so clean work as these Binders do; there is literally nothing lost. The grain saved over hand-binding more than pays the cost of wire.

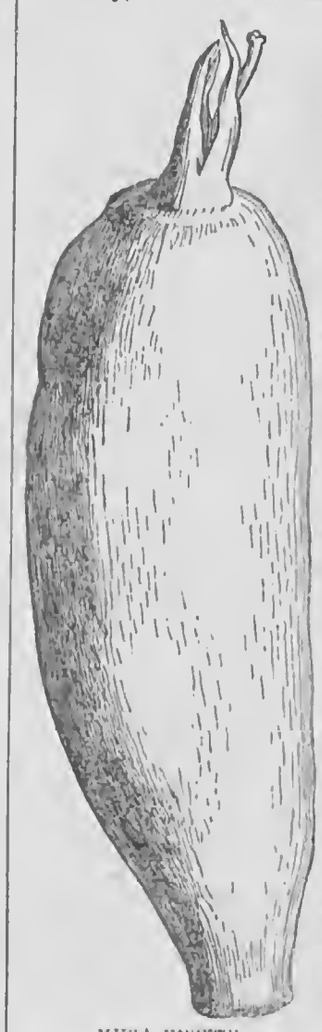
"You have taken a great burden from our shoulders, as the expense and vexations attending a large harvest were so great that many were deterred from grain-raising."



THE WALTER A. WOOD SELF-BINDING HARVESTER.

This is not only highly complimentary to the binder, but also a notable instance of the grand scale on which individual farming enterprise is conducted. The illustration in this issue is as good a representation of the Binder as can be shown when attached to the Harvester. Although its mechanism is very simple, it is somewhat difficult to describe. The grain follows the usual course over the Harvester, and is delivered in a continuous stream on the concave shown at the right. The revolving binder-arm, separates from the stream of grain passing into the concave an amount sufficient for a gavel, and by the aid of the compressing and reciprocating arms compresses the gavel in a compact form and while it is so compressed, passes the wire around it, binds it, and with only one movement, makes the twist and severs the wire from the band, leaving the ends protected so that they may not cause inconvenience to those who handle the bundle. The sheaf is then thrown from the platform automatically by means of the compressing arm, while a new bundle is in course of binding. The operation of the machinery is slow, and uniform, with a minimum of friction.

The whole machine is at all times under the control of the driver, who by convenient levers may enlarge, or reduce size of bundle, stop the Binder in its work, or move it laterally, to conform to the length of straw. Left to itself the Binder works automatically, making a bundle every ten feet.



MUSA ENSETE. Fruit.

The Walter A. Wood Harvester to which the Binder is attached, is too well known to require any but the briefest mention. The Binder is in no small degree indebted to the Harvester for its efficient results in lodged and tangled grain, owing to the Harvester being adjusted to adapt its cut according to the condition of the crop.

In theory the use of wire has met with opposition, but practice proves its value. Again quoting Mr. COLEMAN, he says: "I am aware that a strong prejudice exists against it, which I admit to have shared in previous to personal experience; but which is now entirely removed from my mind. The objections are that however carefully handled, portions will pass through the thresher cutting up like chaff. The wire can be prevented from entering the thresher at all by the use of a pair of forceps, which, while they cut the wire, retain it in their clasp. The man who attends to the feeder has this work to do. The wire cannot be used again, but its sale would pay for a good deal of the cost."

We have noted the performances of this Binder as closely as opportunity permitted from the date of its appearance at the Field Trials, feeling the importance of the interests involved in the successful working of such mechanism.

A word in regard to the remarkable factory where they are made will not be without interest, as its extent and the magnitude of its operations are quite as conspicuous in their way as is the Binder itself.

The Walter A. Wood Mowing and Reaping Machine Co. has established at Hoosick Falls, N. Y., U. S. A., probably the most extensive works in the world for the manufacture of agricultural machinery, having made and sold up to the beginning of this year, 277,027 machines. They employ two gangs of 1,000 men who work night and day alternately, the product of whose work is some twenty-five thousand machines yearly, distributed about as follows: Ten thousand mowers, nine thousand reapers, and six thousand self-binders. This immense product is for the domestic and foreign trade; about one-third going abroad. This year a new sweep-rake reaper and an improved light mower are the novelties. But to a visitor everything is novel. Where one hundred and twenty-five finished machines are made, daily it seems, on walking through the shops, that they positively grow before the visitor's eyes. Mr. WOOD, the president of the

company, has been the recipient of orders of distinction by the Emperor of Austria; and the Wood Machines have received so many medals from all countries as to have earned a cosmopolitan reputation which their merit retains for them.

DIAGRAM OF THE BUFFALO PITTS THRESHER.

THE accompanying diagram of the Buffalo Pitts Thresher, made by Pitts Agl. Works at Buffalo, N. Y., will give a clear idea of the mechanism of this well-known machine, and its mode of operation.

A is the feed-board on which the grain is spread and passed to the cylinder, *B*. *B* is the threshing cylinder with iron spikes or teeth *a*, fixed at certain distances from each other throughout its length and circumference. *C* is the concave, also having iron spikes or teeth *a* set in it.

The concave is fixed; the cylinder revolves rapidly on its shaft. As the grain is fed into the cylinder, the cylinder teeth catch it and drag it at great speed between the rows of concave teeth,—literally combing the grain out of the straw.

D is the grain belt,—an endless belt of stout duck on which are nailed wooden buckets or cells *b*. This grain belt runs on the rolls, *c*, and over the pulleys, *d d*, and receives from the cylinder the straw and threshed grain and carries it away,—the straw riding on top and the grain dropping into the cells.

The rolls, *c* are hexagonal (not circular as erroneously shown in drawing) and thus constantly agitate the belt and promote the separation of grain from the straw.

E is the beater—four wings, with iron fingers *e*, revolving on a shaft. These wings constantly beat the straw as it passes under them and thus further assist to dislodge any loose grain from the straw. *F* is the picker.

G is the straw belt — an endless belt — made of slats of wood nailed, at short distances from each other, to two leather belts, forming an endless ladder. This belt runs over the pulleys *f f*.

H is the agitator—a bar rocking on its center—so that the ends *h h* alternately strike the belt and shake the straw *I* is a tight floor. *K* is a wire riddle (or sieve) in the shoe. *N* size of mesh varies according to the kind of grain to be threshed. *M* is an opening for discharge of straw.

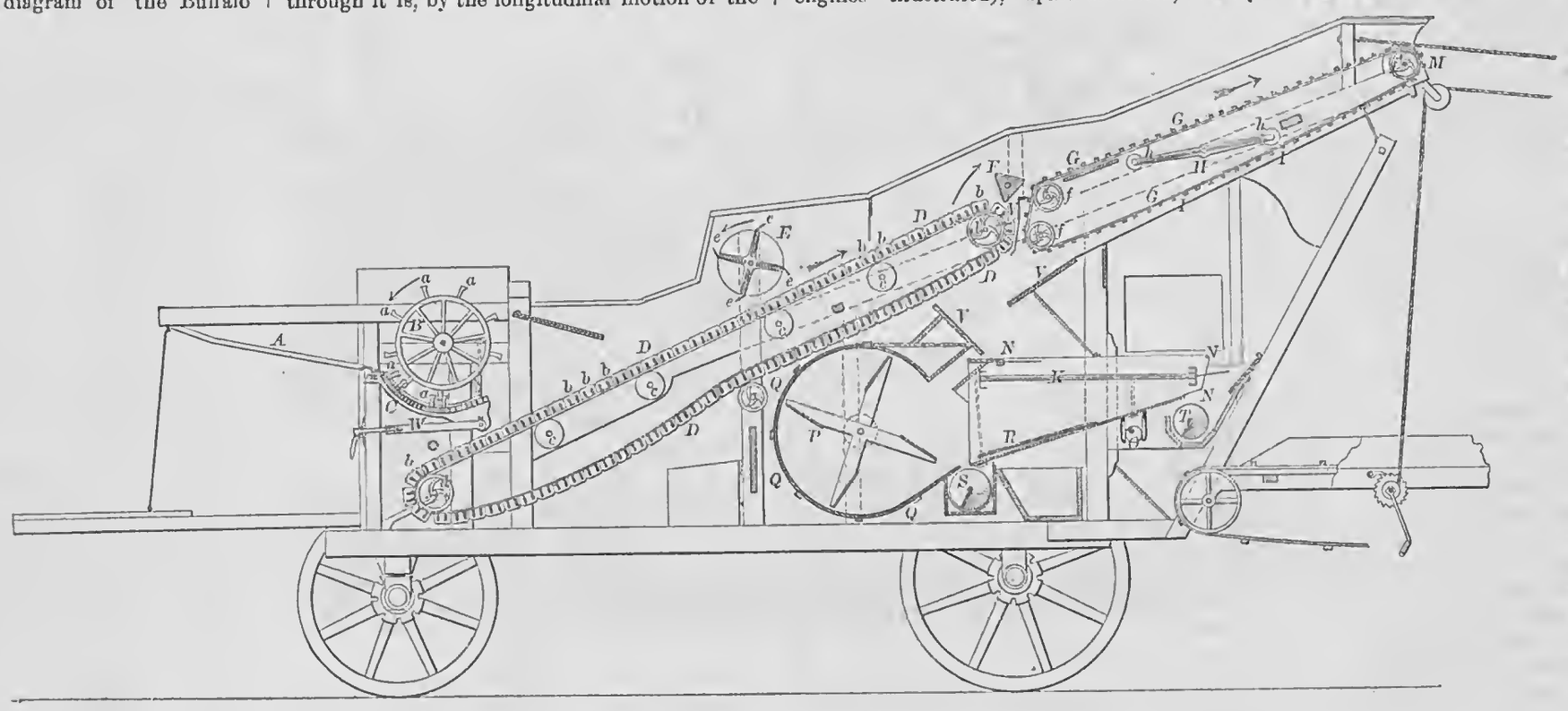
As the grain belt *D* turns over the pulley *d*, the threshed grain drops out of the cells *b* on to the riddle *K*. At the same time the picker *F* tosses the straw over to the straw belt *G*, and by this the straw is carried to the aperture *M*, and discharged.

The ends *h* of the agitator *H* striking the straw belt cause any grain still lodged in the straw to drop between the slats on the floor *I*, and by the returning (under) side of the belt this grain is swept on to the riddle *K*

N is the shoe, having longitudinal motion. *O* is an eccentric, giving motion to the shoe. *P* is the fan. *Q* is the drum enclosing it. *R* is a fine sieve forming part of the bottom of the shoe. *S* is the grain conveyor—a screw working in a trough. *T* is the tailings conveyor—similar to grain conveyor. *V* boards guiding the grain in its fall on to the sieve *K*. *W*, concave raiser to regulate distance between cylinder and concave. As the grain falls from the grain belt cells *b*, and from the floors *I*, toward the sieve, *K*, the blast from the fan, *P*, blows the chaff over the end of the shoe, *N*. The grain is sifted through the riddle *K* on to the shoe floor (which is sharply inclined) and rolls into the conveyer *S* by which it is delivered to the receptacle at side of machine—perfectly clean.

Any fine seeds which pass through the riddle *K* with the grain, fall through the fine screen *R* into the box beneath.

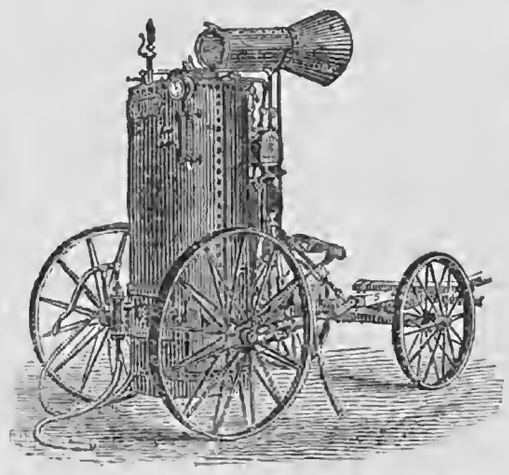
Whatever falls on the riddle and does not sift through it is, by the longitudinal motion of the shoe, assisted by the blast, carried into the tailings conveyer *T*, and thence is carried to the cylinder to be re-threshed.



BUFFALO PITTS THRESHER—DIAGRAM.

AMERICAN FARM ENGINES.

THE use of steam engines for farm purposes is of quite recent date in the United States, but



THE "BOSS CLIPPER" VERTICAL ENGINE

so rapidly are they growing in favor that a number of large manufacturing concerns find this special industry a lucrative business. The competition has led to ceaseless efforts in the production of an engine that shall be best adapted to farmers' use, and, in pursuance of our custom, we give illustrations in this issue of two classes of engines, the horizontal and vertical, that are made by the Taylor Manufacturing Co., of Westminster, Md., that possess admirable features. The facilities of this Company for producing high-class work are ample, and embrace not only the farm engines under notice, but stationary and portable engines of most of the approved designs, including the Corliss model. In the material used throughout the work considerations of price are subordinated to quality. The castings are made of charcoal iron, and the minor parts, such as pumps, governors and safety-valves (of which there are two on each of the engines illustrated), spark-arresters, safety-plugs, etc., are finished thoroughly, and combine some of the latest improvements.

The novel features of the horizontal engine are, the manner of staying the crown sheet, and the device for supplying dry steam to the cylinder. Trusses of wrought angle iron extending the whole width of the crown sheet, with the ends turned down and resting on the edges of the side sheets of the fire box, and placed four inches apart the whole length, are additionally strengthened by two braces fastened from the outside shell of the boiler to each truss. The "throat," or connecting sheet of the boiler, is also fastened by a double row of rivets. The stay bolts in the sides of the fire box are close together, and washers placed between the trusses and the crown sheet, leave space for the circulation of the water and prevent sediment collecting.

The cylinder is worked inside the cast iron steam dome, and is constantly surrounded with steam of the same temperature as that generated in the boiler. This arrangement obviates condensation, and secures a strong, elastic force. This feature constitutes the dry steam patent.

In the vertical engine, the flues of the boiler are always below the water line, and by the shape of the dome and fire box, which are narrow at the top and wide at the base, a direct heating surface is attained. It is claimed that this arrangement prevents the flues from being injured by fire; that the cast iron of which the dome and smoke box are made receives a direct heat from the fire box, the steam is super-heated, thus decreasing the expenditure of fuel; that the engines can be put to hard labor without lifting, or causing the water to foam; that steam is generated more rapidly, and that the flues can be quickly repaired at will without damage to fire box or boiler.

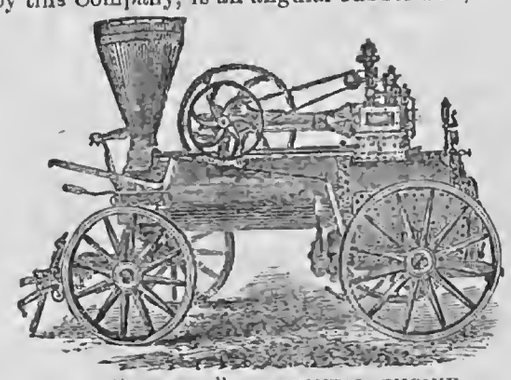
The engine works in a solid cast frame of the Corliss pattern, and the manner of mounting combines rigidity and simplicity, as will be seen by a reference to the cut.

In the horizontal, the engine is so placed as to avoid strain, and the cylinder being inside the dome, the pressure on the piston, it is said, is uniform with that shown on the steam-gauge.

Economy in water and fuel, good wearing qualities, and careful workmanship, commend these engines for all purposes for which they are adapted.

The handsome catalogue of the Company, giving illustrated descriptions, prices of repairs and the most minute particulars, may be obtained free, by addressing the Company, or through their representative at Paris, where the Company has a full exhibit in the Agricultural Department, G—1. U. S. Section, comprising one 10-h. power Dry Steam Engine on Wheels, one 10-h. p. "Clipper" Vertical, and one 20-h. p. "Utica" Portable Engine, which drives the shafting in the Agricultural Department of our section.

A new feature in belting, controlled exclusively by this Company, is an angular rubber belt, run-



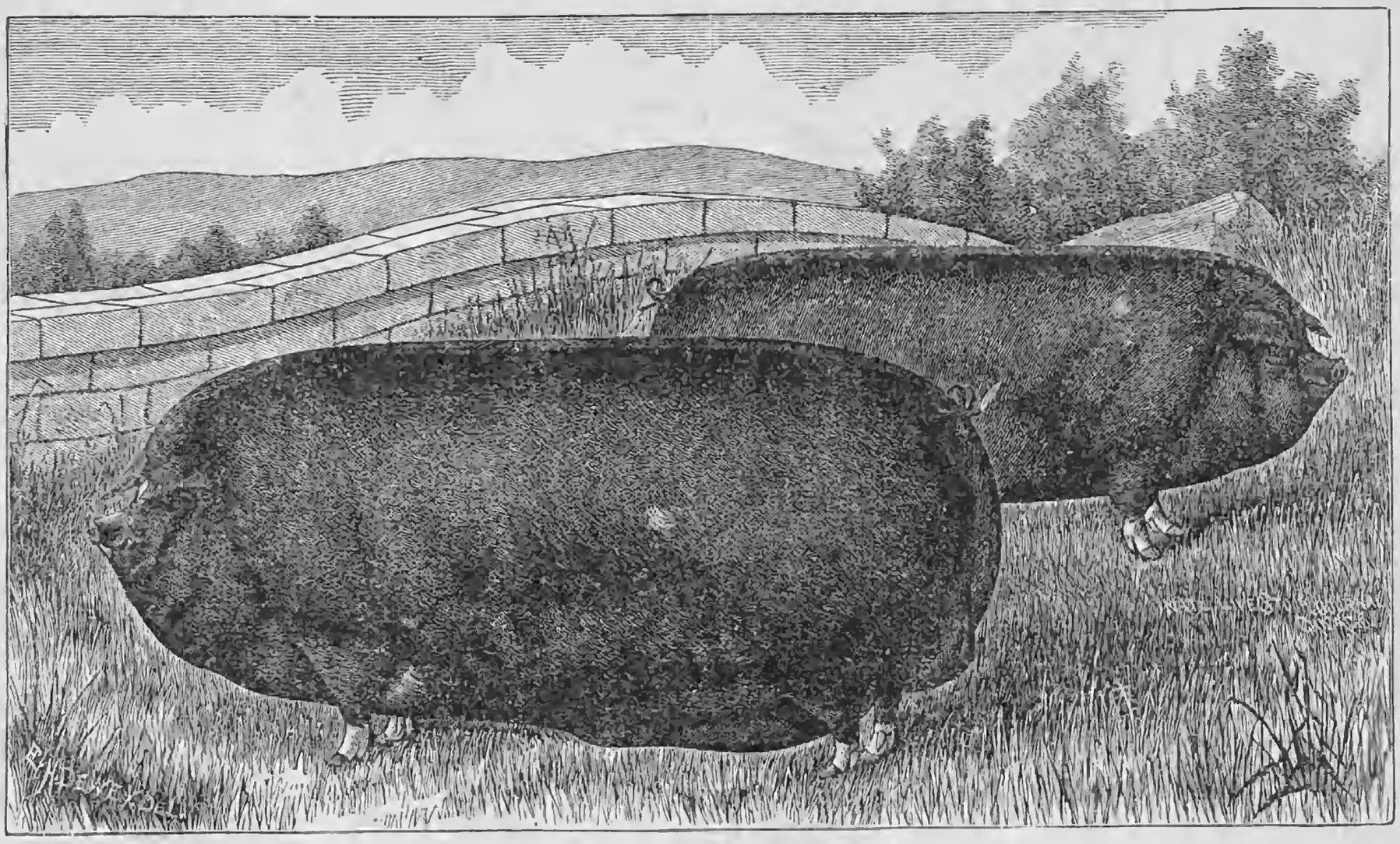
THE "CLIMAX" HORIZONTAL ENGINE.

ning in grooved wheels, which obviates all leveling and preparatory work commonly so troublesome in setting engines for service.

The Swine-Herd.

POLAND CHINAS.

THIS breed of swine variously known as Magie, Poland-China and Butler Co., was originated by Mr. D. M. MAGIE, the present manager of the D. M. MAGIE Co., Oxford, Ohio, and is the outcome of four distinct breeds, the Poland Big China, Irish Grazier and Byfield. Their chief excellencies consist in their susceptibility of being well fattened at any age; large growth when desirable, and the great amount of flesh laid on in proportion to the food consumed. They sometimes dress 350 pounds when no older than ten or twelve months. The illustration conveys a just idea of these swine. They have long bodies, short legs, broad, straight backs, and deep sides with square heavy hams and shoulders. They are large, dark in color, and the ears project over the eyes.



MAGIE OR POLAND CHINA HOGS.

Mr. MAGIE commenced his experiments in 1837, and for thirty-five years the Poland-Chinas have been a distinct breed, and one of the most popular in the States devoted to pork producing as a leading industry.

These animals have of late attracted the attention of foreign breeders, and Mr. J. MUSSON

of "Holt House," Whiston near Proscott, England, writes that the three head sent him by the MAGIE Co. give "unqualified satisfaction, and I must express my thanks to yon for sending mo such fine stock. I think no ono has any better Berkshires, Large Yorkshires and Middle Windsor breeds, than I have, but my honest opinion is that the three head you have sent me are the three best pigs in England at this moment, and if they come up to what I expect, I shall not feel inclined to breed anything else." This must be very gratifying to the Company, and is certainly flattering to Americans.

IN the United States, the Buffalo Starch Works have a brilliant reputation for the excellence of their product. What is known as the "patent gloss" starch is pure, strong and durable. The corn starch, made from maize, is used exclusively for culinary purposes, and is wholesome in a marked degree, as well as being pleasing to the palate. In the United States "corn" starch is a successful rival of arrowroot, and it is only a question of trial before attaining the same result in other parts of the world.

Dairy Husbandry.

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

DAIRYING FALLACIES.

T. H. HOSKINS, M. D.

THERE have been great advances in the study of the scientifics of dairying, during the last ten years. Large credit is due to a number of enterprising men, who have devoted both money and time to the investigation of milk and its products, and also to improving the methods of breeding, feeding, and handling dairy stock. If I were disposed to criticise anything these investigators have done, it would be the haste some of them have shown to become instructors before acquiring a mastery of their subject. To this we owe much building with "untempered mortar" that has not endured; and, worse than that, the diffusion of erroneous notions among the people, harder to be overcome than a simple, teachable ignorance.

Anxious to avoid the fault myself, and yet desirous to point out what I am thoroughly convinced are serious errors, I shall touch briefly in this article upon some important practical points which have been mis-stated and misunderstood, and about which the popular mind is yet adrift. I do this with some reserve, and only after more than fifteen years of practical study, joined to careful closet investigation of both the chemical and physical sides of the question. The public are often at a loss to decide, where "doctors" and "professors" disagree; yet I believe that I shall make the points I touch upon sufficiently plain, and shall support my statements with such good reasons, that most intelligent and well-experienced practical dairymen will agree with my conclusions.

AIR IN CREAM.

For some time it was thought (and churns to carry out the principle were introduced) that the passage of air into the cream during the process of churning, promoted the separation of the butter. This idea is now exploded, and the churns are found only in garrets. I allude to it merely to show, in the light of what will be hereafter stated, how far away from any true conception of the facts the minds of many must have been when such a theory could have had currency.

WITCHES IN THE CREAM.

Not unfrequently the correspondence columns of agricultural journals contain queries headed, "Why Don't the Butter Come?" or something equivalent, in which the writer details the painful efforts of hours, and even days, over a refractory churnful of cream. Most inexperienced persons meet with this trouble; and not a few, also, who have made a good deal of butter, and made it well, when all natural conditions were favorable. The idea expressed by some that the cream was "bewitched," is the last resort, the world over, for the explanation of uncomprehended natural phenomena. It is only in the clear white light of science (knowledge) that the witch becomes totally invisible. She and the ghost are always best seen in the dark.

TEMPERATURE IN SETTING.

As lately as seven or eight years ago, it was the universal teaching that the proper temperature for setting milk was in the vicinity of 60°. The best authorities agreed that at a higher temperature the milk would become sour before all the cream would come to the surface, while at a lower temperature it would never rise at all. When the Swedish method of setting in ice-water was first reported in America, it could hardly obtain serious notice, so contrary was it to received notions. Now, it has been abundantly demonstrated that cream swims to the surface soonest in milk cooled nearly to its point of greatest density, or about 40°. This is, in itself, a great advance,—probably the greatest single step that has been made in butter-dairying. Yet it was not made by a Professor, but was blundered upon in practice.

THE "CURRENT" THEORY.

Some minds have a great fondness for mystifying plain matters. If one should see a quantity of apples going over a waterfall, it would never occur to him that when these apples reached the still water below it would be necessary to "create currents" in the pool before the fruit would float to the surface. The fact that apples are lighter than water would be considered a sufficient reason why they should float upon it; and as it is a rule alike of philosophy and common sense that when we have a perfectly satisfactory reason for any occurrence, it is folly to seek for any other, we should never think of a "current" theory. Having ocular evidence that a current submerged the apples, and that they came to the surface where the current abated, we should be satisfied. Now, the butter globule, though it is too small to be seen by the naked eye, is to the milk in which it swims what the apples in the case supposed were to the water. If we keep the milk in a state of agitation they do not rise: if the milk is at rest, and just in proportion as that rest is perfect, they swim to the top. The most rapid separation of cream takes place in that apparatus where the milk is quickest reduced to the proper temperature and most rigidly held there. Whenever you hear one of these "current" theorists holding forth, you will always find that he has a "new patent setting-can" in the ante-room, which he would like to show you. Remember the air-churns, and eschew him.

THE ANIMAL ODOR.

That the best butter is now made from cream raised in closed, and even in submerged cans, is what the boys call "a sticker" to those gentlemen who have long and learnedly held forth upon the pernicious "animal odor" in milk, which required the most careful ventilation to be rid of, and which absolutely ruined the flavor and keeping quality of the butter when retained. Various ingenious ways of getting around the stubborn fact are resorted to. It is hard indeed, after having explained how this "odor" originates, what its chemical formula probably is, and how it looks or would look when isolated, to find it disappear, all at once, like a will-o'-the-wisp. No doubt there are "stinks" in milk, but no doubt, also, they are got there from filthy bags and teats, filthy hands, foul air, and the like. Pure healthy milk has nothing in it that needs to be removed by ventilation. Ventilate your cow stables, keep your cows clean, give them good food and pure water, keep yourself and your surroundings clean while handling the product, from the udder to the butter-tub, and you will never be troubled with the "animal odor." Another ghost has been laid, another "witch" has disappeared.

WASHING BUTTER.

Abundant experiment has shown that the natural flavor of butter cannot be removed by washing it with pure water. Careful manipulation, with the cream and everything else just right, will make good butter without washing. But the extra trouble is wasted.

THE "GRAIN" OF BUTTER.

When the butter has "come," and appears in little irregular masses, from a pin's head to a large pea in size, is the time to draw off the buttermilk and wash the butter in the churn. This removes most of the buttermilk. After being then gathered and removed from the churn, worked, washed and salted on the butter-worker at the proper temperature, we find upon breaking it, that it has a granular look. The mass seems to be made of little particles with a slightly glistening appearance. This is called the "grain." These small particles are partially kept apart by films of water, (after salting, this water becomes brine), and the peculiar texture thus imparted to the butter is a test of proper manufacture. Over-churn or over-work it, churn or work it at the wrong temperature, and the grain is gone, never to be restored; and with it is gone a large percentage of the selling value of the butter. Enough water (brine) must be retained to produce this appearance, which distinguishes "butter" from "grease." Consequently the most perfect grain is obtained by washing in the churn before the butter is "gathered."

THE BUTTER GLOBULE.

To those who know nothing of the microscope and its revelations, a world remains hidden of which they can have little comprehension. To the naked eye milk appears a smooth, uniform fluid. To the eye aided by the combination of magnifying glasses, called a "microscope," (seer of little things), it is a translucent fluid, in which floats a multitude of shining globes, and these globes are butter in its primitive state. We do not *make* butter when we churn, although we say so. When the process of churning has been continued until we can see little particles of butter in the cream, we say "the butter has come," and the next proceeding (after washing) is to "gather it." But, in reality, churning is a single process. There is no difference between the "coming" and the "gathering," except that the latter is visible, while the former is invisible to the unaided sight. All that we do when we agitate cream in a churn is to throw the butter globules strongly against each other. If the cream is too cold, we may do this forever and produce no butter, for the same reason that we cannot work butter into rolls, or prints, when it is too cold. The globules are too hard to stick together. They merely rattle against one another in the churn, like peas in a bag. If the cream is too warm, we can churn them together and then churn them apart again, because they are in too fluid a state to hold together against the action of the churn. So no butter comes in either case—there are "witches in the cream." The true exorcist, in such trouble, is a thermometer.

MORE MYSTIFICATION.

The mystifiers have held high carnival over the butter globule. Nearly all of them (I do not know an exception among dairy "professors") declare that it has a shell, or envelope of membrane. Having created this shell, (as the German philosopher created an elephant, "out of the depths of his moral consciousness"), they have as much trouble with it as they had with the "animal odor." Some tell us that the cream must be kept until acidity is developed, in order to weaken the shell. One has said that the churn must be so constructed as to have a grinding action upon the cream, for the same purpose. A good many have seen the shell, not only upon the globule, but after it has been ruptured and the butter has escaped. They describe it as accurately as they described the "animal odor" when concentrated into a "yellow oil," or as the old lady described the egg which the doctor made her throw up with a dose of lobelia. She said it "looked for all the world like the yelk of an egg."

And yet we know that we can make butter as easily from sweet cream as from sour. We know that we can make butter as quickly by shaking cream in a plain pine box as when agitated with the most scientific dasher ever invented. We know that at the right temperature we cannot carry a bottle of cream a few miles in a wagon-box without finding butter there at the end of our journey. So far, we have common sense *versus* inaccurate science.

If we go further, we shall find that while 20 years ago all physiologists thought they could see a membrane on the little globule (and nothing is more easy than to deceive one's self on this point in using an imperfect instrument, or a good one unskillfully,)—now, more than half of those who have studied the question with ability, declare it to be naked. It is really a difficult question to decide. Both optically, with the microscope, and by the use of chemical tests, the highest manual skill and the best mental ability are requisite in the determination of this apparently simple problem. But the writer hopes he may say, without undue egotism, that though "only an ordinary M. D. and farmer," he fifteen years ago, and several times since, has repeated, with many variations, a great variety of tests, both on the optical and chemical side of this "membrane" question, and concluded each time with a firmer conviction that the butter globules swim "bare naked" in the serum of the milk, requiring forcible contact only, at the right temperature, to cause them to adhere to each other and form butter. When he began this study, he was not aware that a single prominent sciontist held any other view than that the butter globule had an envelope. Now, he is happy in finding the majority upon his side; and he looks, in a few years, to see the point demonstrated, by some ingenious experiment, so that there can be no longer any dispute. Practically, it is already proved, since the practice of the dairy would not be at all modified by the demonstration referred to. Its operations are conducted exactly as though no envelope exists, and with perfect results.

Orleans Co., Vt.

Entomological.

REMEDIES FOR THE CODLING-MOTH.

PROFESSOR W. J. BEAL.

NOTWITHSTANDING large numbers of good observers have devoted much time in trying to discover some excellent remedy for this insect, it still remains the leading pest of the orchard. In case of other insects, parasites have come sooner or later, and have aided in keeping them within reasonable bounds. The codling-moth still thrives with remarkable vigor.

It ought to be generally understood by this time, that there are two broods of the codling-moth each year, one living over winter to work on the early apples, the other brood coming from the first brood during summer, to lay the eggs for destroying our late and winter fruit. In winter the moths are in the worm-state, under rough bark of the tree, about old stumps and rails and logs, and between boards and fence posts. Some winter about sheds where fruit was stored in autumn; others are in cellars, about beams and barrels; many are shipped to market with the fruit. The windows of cellars should be covered by screens on the approach of mild weather, to prevent the escape of the winged insect to the orchard.

All remedies may be divided into two classes. First, those which kill the insects in some form or other; second, those which drive or keep the moths from the fruit.

The use of swine in the orchard is one of the oldest and easiest to apply. It is of more or less value, and often attended with some inconvenience. Hogs sometimes strip the bark from the trees, and usually pull down and destroy the lower limbs. Unless they have rings in their noses, more or less rooting is done at irregular intervals. Swine are only a partial remedy at best, as the writer first showed in 1874. He has several times since made similar experiments at Lansing, Michigan, with similar results. Late in July, 250 apparently wormy apples were picked from the ground and cut open. *Not one* contained a worm. From some experiments, I think a worm will not remain in an apple one night after it falls. Swine must be smart and ever ready for each apple when it falls. Of 250 apparently wormy apples taken from trees at the same time, about 25 per cent. only contained larvæ; the larvæ had crawled out of 75 per cent. of the apples. Even the smartest of swine would not catch three-fourths, unless the swine were unusually enterprising and climbed the trees for the fruit

On July 7th, 101 apparently wormy apples were taken from one Wagener tree. Fifty contained the worm, fifty-one had lost them. On July 26th, 200 Red Astrachans were apparently wormy, and picked and cut open. Ninety-nine were found to contain worms; 101 no worms. How many of these would lose its worm before falling to the ground is uncertain. Most likely, some of them. It is barely possible that the odor of swine or sheep is offensive to the moths.

Writers in several of our leading agricultural papers have this spring stated that swine would exterminate the moths, or keep them from doing much harm, if people would only make a liberal use of them. Sheep are equally recommended by some writers.

Numerous kinds of bands have been used about the trunks of trees. Under the bands the the worms secrete themselves. By numerous experiments made by many persons, it has been shown that the worms crawl up as well as down the tree to find a good place for concealment. The bands need to be applied as soon as the earliest worms become nearly full grown in the earliest apples. The bands should be changed every nine days especially in warm weather, until the 25th of August. This is not very laborious or troublesome, although some writers have tried to carry that idea. I have found on an orchard of 250 trees that this care and expense of material for the whole season need not cost over four cents to each tree. As I once said, the man who has not enterprise enough about him to take this trouble to save his fruit, deserves to eat wormy apples, and sell them at second or third-class prices.

Various materials have been used for the bands about the trees, such as straw, thin strips of wood, old rags, paper, &c. If more than one thickness of paper is used, care must be taken to kill the moths between the folds, where a part of them hide. Mr. Greenman, of Niagara County, N. Y., has lately got a patent out on a paper band, lined with cotton flannel. I have purchased a few of them, and intend to test them carefully with bands of fuzzy, coarse cloth. I shall place two bands on several trees, in some cases placing Greenman's bands above, and in other cases placing them below the cloth bands. There is no patent on the linty cloth which I anticipate will do quite as well and cost less than the patent article.

Some are claiming to catch the moths in the winged state with vinegar and water in open dishes, or by a light over a tub of water in the night, or by molasses on boards or paper. Let everyone experiment on every thing he can think of; but he should be sure that he is not mistaken in the game he catches. If an attempt is made to kill the insect, it should be a united attempt—whole neighborhoods, especially those separated from others by strips of wood or large open spaces without apple trees. We know of several communities who are working together this summer.

It is generally advised to employ a remedy that shall kill the moths; but if one is inclined to be selfish, or wants to get the rewards of his own labor regardless of others, he will be likely to try a remedy which drives the winged insect from his trees.

The late Dr. Hull, of Illinois, several years ago, found that slacked lime thrown all over the tree when wet, would prevent the apples from injury. Others have since tried the remedy with success. Another man, after trying it, believes that gypsum, or land plaster, answers the same purpose. Another has tried two ounces of aqua ammonia to a pail of water, which he throws with a pump all over the tree just at evening, once a week after the middle of June. He thinks that he knows that it saved most of his apples where it was tried last year. I am trying most of these remedies this year, and some besides. I am using carbolic acid in water, which is thrown over the trees; also gas lime placed in open dishes, or on boards on the tree.

Agricultural College, Lansing, Mich.

Everywhere.

NOTES FROM THE RURAL GROUNDS.

DWARF PEARS.

Much difference of opinion exists as to the relative length of life as between Standard and Dwarf Pears. Some think, if well attended to, dwarfs will live as long as standards—others, that they are too short-lived to be worth cultivation at all. We began pear culture with a leaning towards the latter belief, but experience has taught us that the truth lies between the two. If now we were obliged to give up the one or the other for home culture, it would be the standard, for this reason if for no other: One must wait, under the most favorable circumstances, at least six years for it to fruit. If then or before, the trees are destroyed by the diseases which every year seem more numerous and destructive, one is tempted to relinquish pear culture, or, at least, not to replace the destroyed trees rather than again wait so long a time for fruit. The dwarf (many varieties at least,) will bear as much fruit the second year as the average of standards will bear the sixth year. They are no more liable to diseases, and, if well cared for, washed periodically with potash, lime, etc., and not permitted to ruin themselves by overbearing, will live and thrive for ten years at least. To replace a dwarf pear seems, and is, a smaller matter than to replace a standard. The roots of quince do not spread so far—the tree itself never occupies half the space. We may throw out an old dwarf and put in its place a young one, and scarcely know of the change, while the replacement of a standard is felt for several years.

That a Dwarf Pear should be shorter-lived than a Standard is quite in accord with nature. It is the price we pay for obtaining fruit earlier than we would otherwise, and for obtaining a larger quantity in a given space. Do these benefits pay us for the sacrifice? A tree, like an animal, grows on through youth until it reaches puberty—maturity. The vigor which induced the growth of youth ceases not with fruitfulness. With fruitfulness the vigor of the tree finds another way of expending itself. Whereas previously it was all concentrated upon the production of new leaves and shoots, and the enlargement of the older stems, it now finds there is something else to support. The same energy exists, but from now on it must be distributed. Fruit-bearing is the new function of the tree that is passing from youth to age. Its life of indolence and unproductiveness is at an end. It has henceforth to work for its living. As it sprang from good seed—as it was well reared, so it will be vigorous in health and prove fruitful of its kind until the end of its natural existence. Can we preserve these good qualities, and yet, by the skill of man, effect an earlier maturity? Ah, no! What we gain in a forced maturity we lose in an earlier decay. It is adding a slice on here that is cut off there. The most that we can do with Nature is to twist her so that she shall be more responsive to our immediate wants.

Nature has a lenient way of letting wise Man do this—though she warns him of the heaps of trouble he is piling up for himself in the future, or for future generations. When those evils come in the shape of blighted trees, she leaves him to find a remedy. Perhaps what is understood by "a refined civilization" might thence learn the lesson that it is not half what it sets itself up to be, and that it is largely made up of cutting off slices here to add them on there, and by twisting nature to its present needs, regardless of what it all may lead to in distant years to come. Among the necessities of a "refined civilization," we regard the Dwarf Pear as one.

TIME TO TRANSPLANT EVERGREENS.

"We forgot this spring that evergreens must never be transplanted until after the sap is started and is in full flow, if you want them to do well. So, early in the spring before the frost was fairly out of the ground, we transplanted a native Spruce, and now it is dead. It had plenty of roots and they were not frozen, and it was well set."—F. D. Curtis in Agricultural Tribune.

We remember once to have transplanted twelve Hemlocks so early in the spring that all the roots below eighteen inches, were cut off and left in the frozen ground. They were not less than five feet high, and were taken from nursery rows. On another occasion we transplanted Hemlocks during a mild spell in February. Not one of them was injured in the least. On the first occasion we also transplanted Spruce, Balsam, Austrian and Scotch Pine, without injury. Some of the Pines were from seven to eight feet high. We have repeatedly transplanted specimen lots of hardy evergreens, a dozen to fifty of various varieties of the above, and our success has been so unexceptional that we would prefer early spring to any other season. We remember on one occasion that, though the frost was out of the ground, the earth was so saturated that water stood in the holes, and the trees, though small, had to be propped up to prevent them from falling over in the puddle of mud. We have known arbor-vitæ hedge plants, and many other evergreens in large quantities, transplanted in August and all live. In other years we have known nearly all to die. We supposed in the former instance they owed their preservation to a showery August, and in the latter their death to a dry August. If such plants are taken up in summer without balls of earth, and shipped to any distance, the chances are all against success. In early spring, it seems to us there are no chances whatever of failure, if only the roots be kept moist and protected from drying or frosty winds, to which the roots of evergreens, and Hemlocks especially, are very sensitive.

OUR PREPARATION FOR INSECTS.

We have referred more than once, though somewhat indefinitely, to a mixture of coal ashes, &c., which we have been using during this season as a protection against many of our plant pests. Its use has been so effectual with us—it has saved us so much vexation and trouble as compared with other mixtures or measures which we have used or adopted in past seasons, that we urge our readers and friends to give it a trial. First, sift ashes enough through an ordinary ash-sifter to make a bushel of sifted ashes. Next, pass these through a flour-sieve, and *thoroughly* mix therewith one pound of pulverized aloes, one pound of hellebore, and one pound of flour of sulphur. Put the mixture into an open box and place it beside the range until every particle of moisture is dried out of the entire mass. It is now ready to be used; and early in the morning, while the dew is fresh upon the leaves, and there is no air stirring, is the best time to do so. The mixture will now be found so fine, so light and fluffy, that a thimbleful thrown up among the leaves will surprise one with its buoyancy, and the space through which it may be seen to float, and the number of leaves upon which it finally settles. It envelopes every part of the leaf, petiole, twigs and branches like a vapor, and at length, impinges, as it were, upon them as vapor would upon an ice-cold plate of glass. We have tried it upon grape-vines, rose-bushes, various shrubs, vines and fruit trees infested with aphides and slugs. We have dusted it over peas, corn, tomatoes, melons, etc., and the plants so dusted were seldom cut off by the cut-worm. We have dusted it upon two plum trees, as needed, and the plums, save one, are at this time fair and sound. A pint will amply suffice for a tree ten feet in hight, and the topmost leaves may be reached by tossing it up from the hand, or any little handled cup or spoon. A bushel of the mixture will suffice, we think, for our grounds this entire season, though insect pests were never so numerous. Does it kill them? We do not know, and do not much care. We have little faith in the ability of man to exterminate any race of such minute insects, thousands of which are born while he is killing one. To exterminate those upon his own grounds one season is little less than a measure of prevention—they will be just as numerous the next.

It may be said there is nothing new in the above; but we think there is. The novelty consists in the fineness of the preparation, and its being perfectly dry, which render its application far more easy and thorough. Soot, ashes of tobacco, and a dozen other nauseous powders may be added as one may choose, no doubt with good effect. We shall know more about it from further experiment. We have learnt a little of value, and hasten to place that little before our readers.

NOTES.

Among the many new things which we try from season to season, it is seldom we have to report upon one that is really a decided improvement upon old varieties.

In the way of peas, American Wonder is an improvement, in its way, upon anything we have previously tried. The vines grow about fourteen inches high, and are vigorous, strong and prolific. The pods are about the size of Philadelphia, well filled, averaging five seeds, which are very tender and sweet. It ripens with Early Dan O'Rourke, Carter's First Crop, Laxton's Alpha, &c. Until a little later in the season, we come to McLean's Little Gem; we prefer this variety to anything we have yet tested. B. K. Bliss & Sons are the first to send out this pea.

We shall have a few grapes in spite of the frost already often alluded to. It was taken for granted that the fruit buds which were destroyed would not be followed this season by other fruit shoots. Of course, buds which push from the new growth which was only harmed (not killed) by the frost, bear no fruit buds, but those which have since pushed from last year's canes do—and it is from these last we shall have a bunch here and there.

The standard gooseberries (worked on Missouri currant stock) so much talked of for the past two years, are crowded with fruit, and the fruit are crowded with mildew.

ROSES.

Among a lot of beautiful new French Roses, with which we were presented by the firm whose name one of the varieties bears, is "Dingee Conard," thus named by Eugene Verdier of Paris, in honor of the well-known Rose-growers of West Grove, Pa.

The flower is of goodly size, the petals are large and unfold with that sort of airy beauty that gives to a full rose-bud its indescribable charm. The color is a deep scarlet, suffused with a changeable violet-blush, and we could wish, as a result of reading this note, that "Dingee Conard" might find a welcome home in the gardens of our readers.

Bergen Co., N. J.

NOTES FROM THE RURAL FARM.

Queens Co., L. I., June 19.

Beans, melons, etc., were frozen entirely, and the second sowing is just making an appearance.

There are six acres of Clawson Wheat. Heads will average three and a half inches—the straw, five feet. Manured with barn-yard manure only. Last year 400 pounds of bone-dust were drilled in with oats. The year before the field was in corn, manured with barn-yard manure only. There are six acres of corn manured with 1,400 pounds of Mapes' Corn Manure, the plants, four feet apart each way, and four plants to a hill.

Six plots of corn are sown with different manures.

No. 1.—Stable and barn-yard manure in the hill only. The plants average 14 inches in hight at this time.

No. 2.—Mapes' Grass and Grain Spring Top-Dressing. Plants not so tall—leaves not so broad or deeply-green as No. 1.

No. 3.—Bone flour. This plot is doing well, but inferior to No. 1.

No. 4.—Mapes' Complete Manure. This is not so tall or vigorous as either No. 1, 2, or 3.

No. 5.—No manure. This is the poorest.

No. 6.—This looks the best, with the exception of plot No. 1. Mapes' Complete Manure.

All of the above sown May 8.

SPRING WHEAT.

The manure used on all of the following plots was the grain Spring top-dressing above referred to:

Plot No. 1.—Spring Mediterranean. First to head. Heads average four inches.

No. 2.—White Spring Russian, (beardless). Heads average four inches.

No. 3.—China Spring Wheat (bearded). Averages four and a half inches. Resembles Mediterranean in all respects, except it is longer bearded.

No. 4.—Pringle's New Hybrid Spring Wheat Defiance. (B. K. Bliss). This is a curiosity. The stems are the largest we have ever seen—the leaves very broad. It is not so tall as any of the others, except Champlain. Heads will, at this time, average four and a half inches. It would seem impossible for this grain to lodge. Not bearded. Highly vigorous and promising.

No. 5.—Pringle's New Hybrid Spring Wheat Champlain. Leaf not so broad. Straw not so heavy. Not so far advanced as Defiance.

VARIOUS.

We have five acres of timothy and clover which will cut three tons to the acre. Stable and barn-yard manure only. This crop is everywhere heavy in this section of country.

Harlequin potatoes (Bliss) most injured by frost. Vines are now six inches high, and the leaves are prettily variegated with yellowish white.

Further notes crowded out of this issue.

NOTES FROM OUTAGAMIE CO., WIS.

Winter wheat, which is sown extensively in the timbered portions of the State, promises now to be the best crop we have had for years. It stands thick and strong and is heading out finely. More wheat was sown this spring than usual. The ground was in good order and it was sown early; the prospect now is for a big crop. Oats and barley were damaged more or less by the heavy rains which came directly after seeding. Still we hope to harvest an average crop. Corn has come up well, and is ready for a start as soon as the weather gets a little warmer. These cool days and nights are splendid for the wheat, so we do not complain.

The potato beetle is here in force as usual, so those who raise good potatoes will have to fight for them.

The rainy, cool weather which we have been having lately, has given pastures and meadows such a start that we may reasonably expect hay and feed in abundance. The May frosts have thinned the fruit blossoms quite freely, still we have a fair prospect of an abundance of apples and small fruits. Among the latter the wild blackberry which grows freely in this part of the State, fills quite an important place in the list. Its bushes are literally white with blossoms now. Butter and cheese make up quite an item in our farm productions, as do also beef, pork, mutton and wool. Prices of most kinds of farm products are low, but our farmers hope that we have about "touched bottom," and we still live.

June 10. John Rusticus.

RURAL SPECIAL REPORTS.

Oneida Reservation, Wis.

The Oneida Indians were removed to this Reservation from Oneida, N. Y., by the U. S. Government, some 35 or more years ago. The Reservation lies a little back from Fox River, in Outagamie and Brown Co's. The Indians number from twelve to fifteen hundred, all told. The Reservation contains some three or four townships of excellent land, a part of which is divided up into small farms, the unoccupied part being timbered, is held in common. Whites are not allowed to buy these lands, but the aborigines sell and trade among themselves just as other folks do. They have many good farms and farm buildings, comparing favorably with those of their white neighbors.

They have their Chiefs and their Councils, make and enforce their own laws. They have two mission churches and schools, the Methodist and Episcopal Church each having a missionary stationed among them. Many of the men go into the pineries in the winter, and some work among the neighboring farmers during the summer, chopping, clearing land, splitting rails, &c. The women are experts at making baskets which they sell in the towns around. In their season they pick and sell large quantities of wild blackberries which grow in abundance on the lands on which the timber has been cut, and which have afterwards been burned over. They never beg: a majority of them are honest, sober and industrious. They have lately petitioned the Government to admit them to full citizenship. E. N.

Randolph, Vt., June 14, 1878.

We have just had a most refreshing rain, which was precisely what was needed; for the winds and drought of the past three weeks, had left the earth in a very dry and parched condition. Grass is quite light in some localities having no thickness at the bottom. The potato bug made its advent in countless numbers, the last week; and a summer crusade is in prospect for farmers. Grain is looking well, but corn and beans took a severe chill on the night of the 6th inst., that left them rather pale. On the streams, and in the valleys, it froze everything, but the hills were not much affected, although it was very cold, but the winds kept the frost away. Prices for produce are still low. Potatoes, 25 cents per bushel; corn, 56 cents per bushel; oats, 30 cents; butter as low as 12 or 14 cents per pound. The large dairies send their butter direct to market, and receive from 15 to 18 cents, according to quality. The last four weeks have been very cool, with the exception of an occasional warm day. S. H. R.

El Dorado Co., Cal., June 10.

We are having a spell of very peculiar weather; one day will be very warm, above 100°; the next day will be cool and cloudy; the morning will open bright and clear and continue so until perhaps two or three P. M., when clouds will suddenly gather fierce and black. It is just such weather as portends an earthquake. I would not be a particle surprised if there were a disturbance of some kind soon. It is very trying on plants. They have been burned badly already by the sun, an occurrence which, in spite of the dry year, did not occur last season, but altogether we are having a magnificent spring and summer, and were it not for the peculiar changes in the weather everything is fine.

The fruit crop will be up to all expectations: the trees are bending low already under their loads. I do not remember a season when cherries were so plentiful—25 cents a gallon and less, are all they fetch the grower, but then the trees are so thickly covered, it pays. I wish you had a basketful of our Black Tartarian cherries; they are magnificent. Wm. C. L. Drew.

Douglas Co., Ill., June 16, 1878.

When I began to take the Rural, I soon saw I must do better work, have better tools, raise better sorts of vegetables, in short, there must be an improvement all around, if the paper was to be any help to me. Accordingly, I began the improvements. I soon saw two fine ears of corn growing where before one "nubbin" grew. A ten-dollar rooster's oriental notes now peal forth where the cholera-stricken "dung-hill" moped about. Hens that once were laying eggs only at this season of the year, when eggs are worth merely four to seven cents per dozen, are now replaced by hens whose eye to profit prompts them to "hold on" till next winter, when eggs will be twenty-five cents per dozen.

Now, if this is boasting, it is only boasting of what the Rural can do for a negligent, lazy man. A. C. W.

Whitney's Point, N, Y., June 18., 1878.

This month has been wet and cold. The prospects are that the hay crop will be light. Wheat looks well; corn is small for the time of year and the length of time planted; potatoes look fine; bugs plentiful; pastures are good; dairymen are making more butter than usual for the time of year. Butter, 15 cents; eggs, 10 cents; hay, $6 00@6.50 per ton; oats, 35 cents; potatoes, 35@40 cents; bugs at a discount.

M. B. D.

Chautauqua Co., N. Y., June 17, 1878.

The weather for the past few weeks has been cold and backward, and marked with severe frosts. It is warmer to-day, however, than for some time, and we had a nice, warm rain yesterday. Potatoes in many places were badly injured by frost, and it being so cold, corn, garden vegetables, etc., present a sickly appearance. Should it continue warm, things will take a new start. M. L. Dornan.

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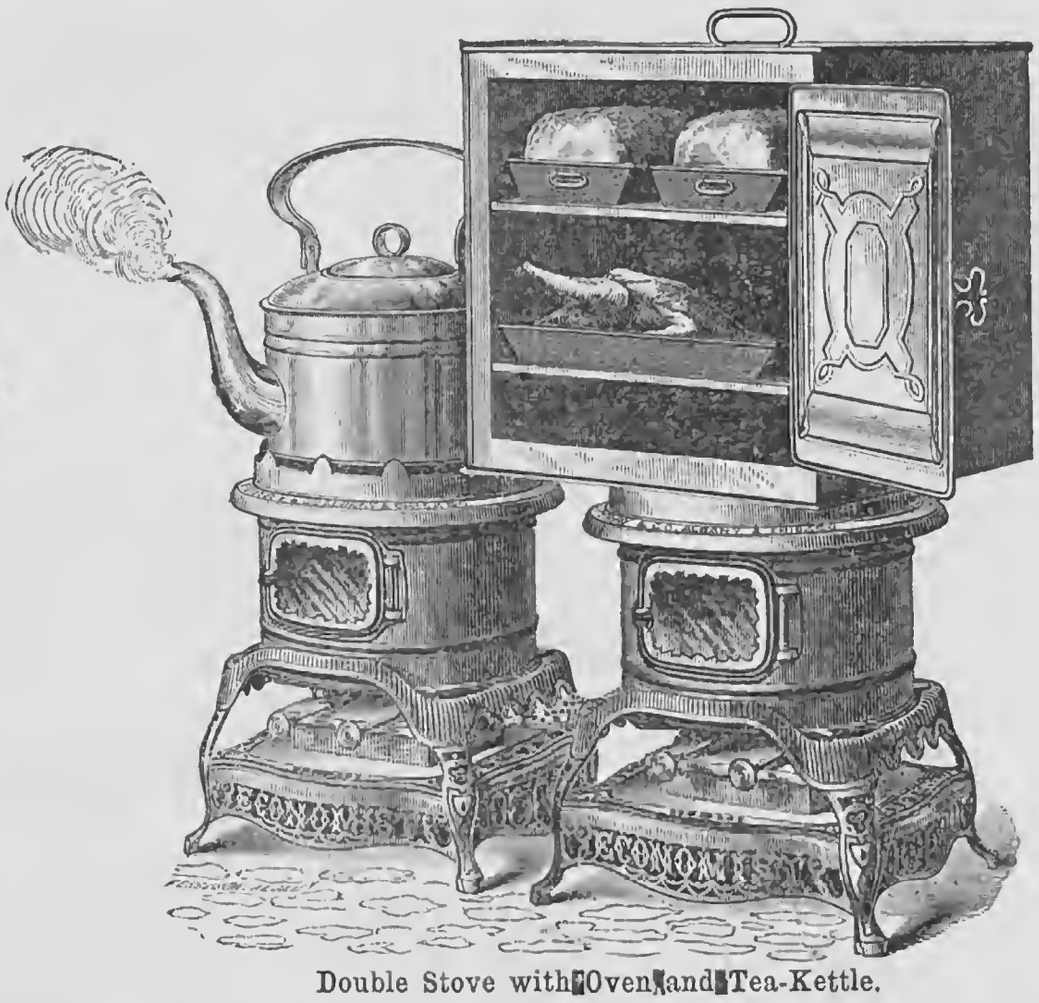

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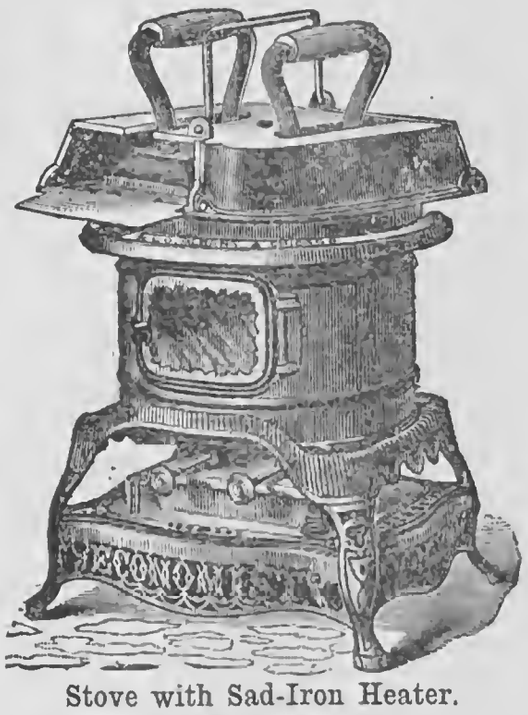

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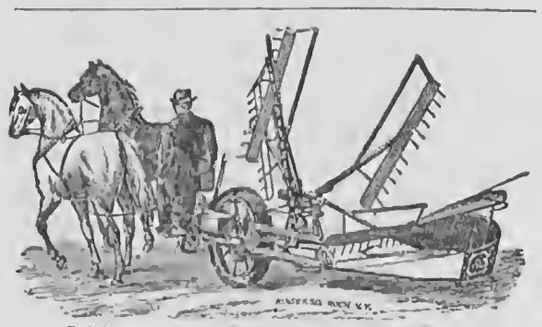

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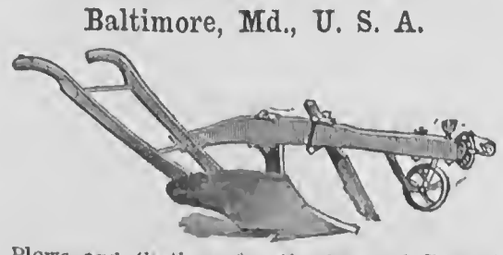

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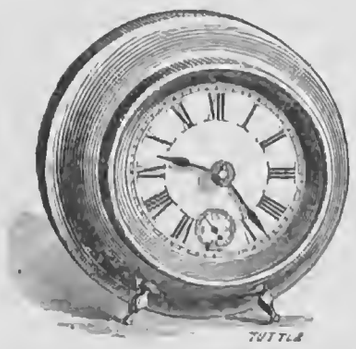

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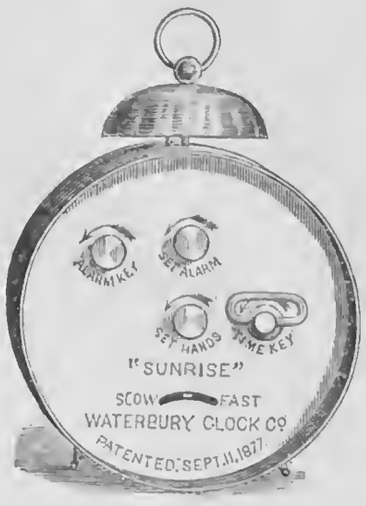

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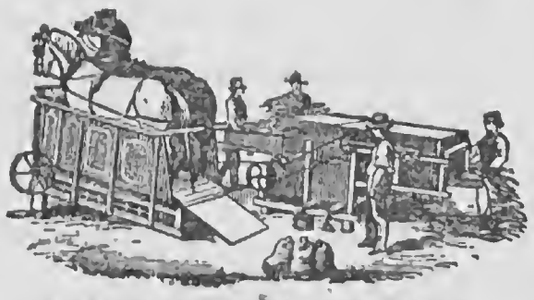

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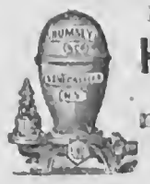

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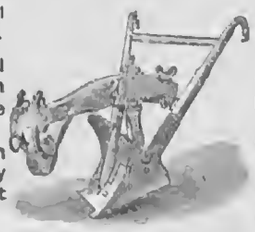

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Weeping Beech (Illustrated)..... 405
Weeping Beech..... 406
Probabilities of American Grapes—D. S. Marvin. 406
The Exportation of Farm Products to Europe—Prof. Levi Stockbridge..... 406
The Banana—William Falconer..... 407
Self-Binding Harvester..... 407
Diagram of the Buffalo Pitts Thresher (Illus.).... 408
American Farm Engines (Illustrated)..... 408
Poland Chinas (Illustrated)..... 408
Buffalo Starch Works..... 409
Dairying Fallacies—T. H. Hoskins, M. D..... 409
Remedies for the Codling Moth—Prof. W. J. Beal..... 409

Everywhere:

Notes from the Rural Grounds..... 410
Notes from the Rural Farm..... 410
Notes from Outagamie Co., Wis..... 410
Rural Special Reports..... 410
Oneida Reservation, Wis..... 410
Randolph, Vt..... 410
El Doraldo Co., Cal..... 410
Douglas Co., Ill..... 410
Whitney's Point, N. Y..... 410
Chautauqua Co., N. Y..... 410

Domestic Economy:

Female Borrowers—Mrs. A. E. Story..... 416
To Mend Broken Crockery..... 416

EDITORIAL PAGE:

July Fourth, 1878..... 412
When to Ventilate Cellars..... 412
The Farmer's Front Yard..... 412
Brevities..... 412
Communications Received..... 412

LITERARY:

Poetry..... 413, 414, 415
Corn..... 413
Gerald Southwick, Tea-Trader, China—H. H..... 414
Culture..... 414
The Mazarin Bible..... 414
How to Construct a Telephone..... 414
Bric-a-Brac..... 414
Women Philanthropists..... 415
Slurs on Women..... 415
Utilizing Useless Women..... 415
What a Queen Costs..... 415
Woman's Sphere..... 415

News of the Week—Herman..... 416
Markets..... 416

Reading for the Young:

Pocket-Money for Young People: No. 8—M. B. Prince..... 418
Concerning Spiders—J. H. Emerton..... 418

Personals..... 419
Wit and Humor..... 420
Advertisements..... 411, 415, 417, 418, 419, 420

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RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

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RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY, JUNE 29, 1878

JULY FOURTH, 1878.

It is well to observe the anniversary of our country's independence as a holiday and to celebrate it with bonfires and illuminations, with rejoicings and with thanksgivings. It is also well to give serious thought to matters connected with the existence of our country as a Government, and to ask if the results in the past have fulfilled the anticipations of its founders, and if its present condition gives warrant of future permanence and prosperity, considering meanwhile what are its demands on us, and what are our duties as good citizens. It would be interesting as well as instructive to trace back to their foundations all systems and forms of Government. This would doubtless lead us to the conclusion that in primitive times, the father was supreme head of the family, the law-maker, and law enforcer; the ownership of all property of the whole family vested in him. His dominion extended not only to the property, but to the lives of those under his control; at his death the property was divided among his sons (the eldest sometimes taking a double share as a birth-right), and each son, as the head of his own family, became its ruler.

The first cohesion took place, when at the death of the father his oldest male descendant governed in his stead. This was an aggregation of families and formed the *gens* or house. Afterward the consolidation of houses made the tribe, and of tribes the nation. In all these, although the ruling power may have been changed from patriarchal to chiefship, and given in view of muscular ability or success in war or in the chase, kinship was still the rule. The word nation signifies a number or community of people who have a common ancestry, and the history of Government commences with the assumption that kinship in blood is the sole bond of, and the only possible reason for, political community. Nation made war upon nation, power usurped dominion and made people subject to the rule of strangers.

We have not space to follow the growth of the various forms of Governments that have existed, most of which have been founded on the principle that might makes right; and we will pass on to consider for a moment the constitutional monarchy of Great Britain, a government of two branches—one of which is the King and the other the Parliament—which Parliament is again divided into two branches; one of the representatives of the people (or of such portion of them as are allowed to vote,) and the other of the aristocracy, the members of the House of Lords being born into their position. This branch, however, may properly be considered as an adjunct of the crown, as it may be increased whenever the king sees it best for his own purposes to do so.

This form of government, however, is a vast improvement upon absolute monarchy and good and honest politicians bring strong arguments to show it is the best the world has yet known. The instances where governments by the people have been made in olden times, have been failures. This may have arisen, as many believe, from the fact that intelligence and education were not generally diffused, or it may be that individual opinions were too various and too antagonistic to coalesce. Man, as a rule, is desirous of having his own way, and perhaps power to compel all to submit to certain rules is necessary. Plato, Aristotle, Xenophon, all agree that man is the "hardest of all animals to govern," and more recent authorities concur in their decision.

The form of Government now existing in the United States is really more the result of conflicting circumstances than of deliberate judgment. When the people of the colonies objected to taxation without representation, they had no idea of denying their allegiance to the king. The war of the Revolution had not its origin in the love of liberty. The quarrel was solely one about the rights of a Parliament, which the colonists ignored. The king supported his Parliament, and a withdrawal of allegiance to him was the consequence. The 4th of July 1776, witnessed a confederation of independent States. Notwithstanding the desire of many of the leading men to establish a Government of the same general form as that of Great Britain, obstacles at once presented themselves. States' Rights were immediately asserted. With a monarchy, Delaware and Rhode Island would be little more than pocket boroughs; a Republic was determined upon, because nothing else was feasible. After much difficulty a Constitution was adopted which was really satisfactory to only a small majority, and which was fitly termed "a bundle of compromises," but which was accepted as the best that could be had under the circumstances.

Under the Constitution with its various amendments the country has existed as a Republic for nearly a century. Unsatisfactory as it was in the beginning, it is little less so now. JEFFERSON said it was impossible to frame a Constitution that would out-last more than one generation. By patching, this has lasted three. The growth and prosperity of the country have been unprecedented and unexpected. The machinery of Government has become unwieldy and difficult to manage; but after all, where is there or where has there ever been a better Government; one by which the interests and welfare of the whole people have been better subserved?

We do not lose sight of the fact that it is not perfect, and that in many particulars it is susceptible of improvement, but with all its faults in full view, we are ready to join with the readers of the RURAL on this anniversary of our Country's Independence in giving

THREE CHEERS FOR THE UNION AS IT IS.

But because we can join in rejoicing that our Government is so good as it is, we are not blind to the fact that it could be immensely improved, and would be if citizens did their duty. We will append a few questions which seem to us to be worthy of careful consideration by every one. For instance:

Should not the Presidential term be lengthened, and the President rendered ineligible for re-election, having a seat in the Senate for life?

Should not suffrage be in some way made dependent on the possession of intelligence?

Should not some means be adopted by which the expenses of government should be paid more directly by the people?

Should not the Civil Service be improved to the extent that no officer or clerk of the Government should be discharged without good cause, and after a hearing?

Should not the number of Representatives in Congress be reduced?

Should not every citizen be as particular in selecting men to manage the affairs of the nation as he would be in choosing an agent to manage his own private affairs?

Does our Congress, judging from its actions during its last session, seem to be composed of men who are fit representatives of the average intelligence and moral culture of their constituents? If not where is the fault?

These are by no means all that occur to us, but if the voters who read these will give them thoughtful consideration, and act and talk and vote in accordance with their honest conclusions, it will be a step, and a long one, toward Reform.

WHEN TO VENTILATE CELLARS.

SOME of our contemporaries advocate airing cellars during the night and closing them during the day, to prevent dampness. The theory is that the hot air during sunshine holds moisture that is condensed in the cool cellar, while at night, the temperature outside and in the cellar being more nearly alike, there is less dampness. This strikes us as bad advice, though true enough, so far as we know, as a fact. A damp cellar is not necessarily unhealthy if it is kept clean and pure. When cellar windows are opened the colder air passes out producing a partial vacuum. This induces the air which has been warmed by the sun's rays to enter, when, by cooling, it is deprived of a part of its moisture and as before passes out and thus a constant change of air is maintained. But the warm, moisture-laden air is free from the poison of those malarial diseases with which night air in valleys or low tracts is infected. Carbonic acid also, the result in part of slow decomposition of vegetable substances, is dissipated by sunshine, while at night it accumulates in all low places, its specific gravity being about 1. 5. while that of air is 1. 0.

For the same reason, therefore, that people in what may be called miasmatic districts should confine themselves to the house from two hours or more before sunset until two hours or more after sunrise, they should close their cellars during the same time. And the cellars should be opened and ventilated, no matter how damp they may become in consequence, during those hours when the sun shines brightest.

The Farmer's Front Yard.—Most farmers, even the poorest of them, have a desire for trees, plants and flowers. They enjoy a well-kept place. It is a very rare thing to find a front yard without some attempt at ornamentation. The shrubs and flower-beds and the grass are often neglected and allowed to struggle with each other in their own way. Some work is occasionally done at odd intervals. A small spot is dug in the grass for a single rose-bush, another for a small Spiræa, one for a Lilac, another for a Pæony, and perhaps several others, two or three feet across, for small beds of flowers. In this manner the grass plot is broken up and frittered away by numerous single plants or small beds scattered all over the yard. Except, perhaps for a few vines, we should set plants a little away from the house. Besides this, for unpretending yards by farm houses, we suggest a plan which, at a less cost, we think, will make the yards look better than they now look.

The ground for the lawn should be nicely graded and enriched, taking care in most cases to preserve the natural gentle undulations. In several places here and there, depending on the size of the grounds, set shrubbery or flowers in masses of not less than ten feet in diameter. Plants in small beds cut out of turf seldom thrive well, because the grass roots run down beneath the plants, often for three or four feet, robbing them of moisture and nourishment. In the plan leave clean open spaces free from everything but grass. This can then be easily mowed several times a year.

If the land is rich and well graded, the grass can be easily mowed and it will furnish a crop which will be handy to feed the horses or some other stock. Locate the tress and shrubs somewhat with reference to making it easy to mow the lawn. The patches or groups of shrubbery should be often cultivated, at least till they become well established. A nice lawn is the most beautiful part of a well-kept front yard.

BREVITIES.

ON appelle l'attention do nos lecteurs français sur l'article de M. Marvin sur la vigne. Ils y trouveront des idees nonvelles sur ce sujet important.

IT is time to pinch off the shoots of Raspberries and Blackberries.

WE picked our first ripe red raspborries from Highland Hardy the 22d inst.

OUR contributor, W. C. L. Drew, predicts an earthquake for California soon.

SEVERAL cases of persons being poisoned by the careless use of Paris-green have been recorded during the past two weeks.

WE heard a lady say admiringly of a large rose: "It looks just like a pæony!" Was this a compliment for the rose or the pæony?

THOSE who fear mildew upon grape vines will do well to dust the leaves with sulphur now, repeating every week or so until the grapes begin to color.

MR. MARTI tells us, writing from Southern Texas, that it is only in very favorable seasons, standing in some protected nooks between buildings or high places, that bananas ever "ripen their" fruit thereabout.

Mr. J. J. THOMAS says—and many others have said the same—"Buy your trees of a nurseryman who has established his reputation." If everybody follows this advice, what we want to know is: How is a nurseryman to establish his reputation?

NEW raspberry plantations may now be formed as well as at any other season of the year and better, we think, if the ground is moist. Secure all the fibers that can be secured, and plant deep. Shoots from a few inches to two feet may be selected.

IT is a good idea to plant late peas now upon ground intended to be used later for new strawberry plantations. When the peas are picked, the haulm may be removed, the ground well enriched, and the strawberry plants set so that they may get well established before frosts.

WE respectfully announce that all renewals of subscriptions, or new subscriptions, not received at this office before July 4th, will not be entitled to the cricket. To avoid misunderstanding and disappointment, we are obliged to make this rule, which, unlike other rules, will have *no* exceptions.

THE United States have now sufficient monied men to invest in land, and avoid the deplorable despoiling of the rich soil nature has produced. Companies can be formed for any business transaction, and thousands up to millions employed, but agricultural, and especially stock-raising enterprises, would pay far better if properly conducted.

CAPITAL FOR FARMING.—Any man entering upon agricultural pursuits without money, has to commence on a system of robbery and continued taking out of the land the fertility till he has sold enough to buy stock, when if he breeds from his animals and keeps a good deal of the progeny, he may in time repay his exhausted soil; but it is a great advantage to have money and farm without any debts at starting.

FARM GATES.—Depend upon this assertion: A good well-hung gate will save its cost the first year in the time saved by stopping to put up bars whenever anyone passes. Farm gates are pleasant for master and men, and in England there are good, substantial ones into every field on the farm, and all have good, safe latches made to open easily with a riding stick or whip, so that a farmer can go all over his farm without dismounting. There are no wagon-ways of any kind without gates for the convenience of equestrians.

SOROSIS, ATTENTION?—If the ladies of this society, for whom we have the highest respect, are really in earnest in their professed efforts to ameliorate the condition of their sex, they should at once introduce a rule existing, as reported, in a Women's Club in Warsaw, which provides that no member shall wear a morning dress costing more than $25, no evening dress more than $50, and no bonnet more than $7.50. And further, that at each quarterly meeting each lady must declare that she is not indebted to either milliner or dress-maker. Such an example as this would do more to encourage others than a host of appeals, addresses, and circulars, and the money that could be saved by such economy could be well and profitably spent; or, perhaps enough could be accumulated after a little while, to establish a Women's Hotel on a plan that would prove successful.

J. J. MECHI says, in the London Times, that the inferior condition of crops on undrained lands, as compared with those on land drained artificially or naturally, is something astounding, and indicates that, in such a season, much of the prime cost of draining is repaid in a single crop. In the stagnant water the plant-fibers, rot; not so in the water moving and passing down to the drains. If he were a landowner he would not permit his tenants to farm his land undrained, because it would often diminish their rent-paying power. He knows many cases where the borrowed capital has been repaid by an annual charge, which the increased crops more than repaid. Where a doubt exists, a part of a field only should be drained, and the contrast would convert the unbeliever. If he proposed to a farmer to put a cork in the hole of each flower-pot, the farmer would call him, or consider him, foolish and unreasonable; but how seldom he removes the cork from the great outside plant-pot!

THE N. Y. Hort. Soc'S. Exposition opened at Gilmore's Garden on the evening of the 19th, closing on that of the 21st. We had prepared a short report of the beautiful and varied display of plants there to be seen which an unusual pressure upon our columns excludes. All people who love plants should attend these exhibitions even though a window-garden is all they can cultivate at home. Everything is plainly labeled and there are those in attendance who can give almost any desired information whether for hot-house, green-house, room or out-door cultivation. The following are among those who took the best prizes: MRS. W. J. DAVIDSON, wife of the Secretary, for dinner-table floral decorations; E. P. ROE for Strawberries; Dr. F. M. HEXAMER, for Strawberries: PARSONS' SONS & Co., for hardy evergreens and Japan Maples; GEO. SUCH, collection of rare hot-house plants. The Great American Strawberry exhibited by a number, disappointed all. Many other varieties were of larger size, and size is its only claim to greatness. The present is not a fair season to judge of the merits of any Strawberry, though as unfavorable to one variety as to another. In our own grounds the Great American has grown no larger than Borden 30, while it is as nearly tasteless as a Strawberry well can be.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JUNE, 22D.

E. & J. C. W.—P. T. H., thanks—J. W. W.—D. E. S.—J. G. R., thanks, next week—S. H. R.—F. G. F.—A. E. S.—R. E. L.—L. A. R.—C. E. P.—R. H. S.—M. B. P.—W. C. L. D.—B. P. M.—E. J. P.—C. L. T.—"Rural Reader"—J. E. F.—E. B. W.—J. S. —E. P. L.—B. P. M.—"Brighie"—J. D. F. W.—W. S. C.—F. H. D.—J. E. McC.—E. B. R.—W. F.—H. H., thanks—"Constant Reader," no address. We cannot answer such inquiries—S. W. J., too late for this issue—"An interested party"—S. B. P.—S. C.—E. R.—J. M.

Literary Miscellany.

THE PORCELAIN CUP.

Who watched the artist paint a porcelain cup,
Did wonder when he gathered brushes up
And said, "My task is done,"
That on the toy's fine rim,
A border black and grim
Contrasted hatefully with gentle tint
Of pink and azure, blonde and beryl hint,
And mocked those threads of sun
That made the cup a prize
To ravish royal eyes.

'Why leave this scowl of black?" one dared inquire,
The artist answered, "Clay must taste the fire,
And by that test he tried,"
Snatched from its furnace heat,
Transfigured and complete,
The dazzling gift comes crowned with aureole gleam
Its black all changed to gold! So—like a dream
Heart said to heart that sighed—
Grief may be joy at last,
When life's fierce feast is past. [*Observer.*

CORA.

(Continued from page 393.)

"Has it, indeed, been so bad, poor child?" he said, wearily. "Cora, I did not know, I did not imagine. You know I told you that I would do anything to make you happy; but I am powerless," he added, sadly. "Tell me what I can do for you. You must know that even if I did not care, it is my duty to do what I can to contribute——" His voice faltered, and he hesitated.

"I can hardly believe you care," she said, without bitterness now, but with an intense sadness. "You have judged me severely, and you have given me no chance of justifying myself. Had you loved me——"

"Ah, hush!" he interrupted, mournfully, beginning to pace up and down the little room. "You cannot keep up that farce, Cora. You know that I loved you. You know that, Heaven help us both, I love you still."

"You love me!" she answered; "you love me and believe me infamous?"

As she spoke she turned to him, lifting her wondrous eyes, full of sorrow, and reproach, and love, to his, and putting one little hand gently upon his arm. For a moment, one moment only, he hesitated, then he caught her in his arms, and pressed his lips passionately and repeatedly to hers.

"No," he said, tenderly, "I will believe only you, Cora. Will you try to forget the past, dearest wife, and let us begin anew? Oh, my darling, my darling, whatever your faults, I have been terribly harsh, and you have much to forgive; but if the tenderness of a lifetime can obliterate my cruelty, I will atone for it."

In his arms, held close to his beating heart, Cora stood trembling and quivering, hardly daring to believe that the lost happiness was hers again.

"Will you forgive me, Cora? will you pardon the madness which forced me to behave so cruelly? Ah, my darling, if you could know what I felt just now when I saw to what an extremity my conduct, my abominable harshness, had driven you?"

"Not your harshness, Alan," she whispered, with her face bowed upon his breast and her little hands clinging to him with eager tenderness, "my own pride. Ah, if I had prayed you to hear me, instead of being too proud to give you the explanation which was yours by every right, we might have been saved much suffering. Alan," and she raised her eyes wistfully to his, "you will not refuse to hear me now?"

"I do not want any explanation, darling wife," he said, tenderly, between the kisses which poured thick and fast upon her throat, and face, and hands. "I will trust you all in all, beloved, and nothing shall ever part us again. That you were not happy I knew, but the real extent of your misery I never fathomed until to-night. How can I excuse myself, sweetheart?" he went on. "My own excuse is this."

He took from his pocket the little note he had found in the railway. Cora recognized it at once, shuddering and drawing nearer to him as she recalled that terrible journey.

"I never wrote it, Alan," she said, earnestly; "it is like my writing, I acknowledge; but I never saw the note until Lord Almane showed it to me in the train as the reason for his presence there. Alan, you believe me, do you not?"

"Fully, darling; but there is some underhand conspiracy against us, I feel sure. Did he—Lord Almane—think that you had written that note. Cora?"

"Yes, I am sure so. Alan, let me tell you all; do not refuse to hear all, I pray you; you will not, dearest?"

"Not if you care to tell me, dear wife; but I want no explanations. You forgive me—that is all I want now."

"Nay, but I must tell you," she said softly; "I cannot be happy without. I must tell you; but not here—not here."

She shuddered faintly as she glanced at the fragments of the broken phial and the small, dark stain upon the carpet. Sir Alan put his arm round her, and led her gently into the studio. It was unlighted, save by the silver stream of moonlight which stole in through the windows; but, dimly as this light showed the surrounding objects, it was sufficient for Cora's purpose, and, with her eyes hidden and her hand clasping one of her husband's, she told him all—from the first meeting with Viscount Almane in the crowd, to her last at the railway station at Amiens.

"You believe me, do you not, Alan?" she said, in conclusion. "I never loved him, even when I loved him best, as I love you; his treachery never made me suffer as one unkind word from you. No, no; I don't mean any reproach. I never blamed you really, even when my heart was sore; I loved you too much ever to be angry, Ah! do not, dear Alan, I am so happy; and there are tears in your eyes—I felt one upon my hand, and it hurt me, ah! so much!"

"My poor little wronged wife!" murmured Sir Alan; and for some minutes he held her to him in a long, close embrace, which seemed to blot out the remembrance of the past.

CHAPTER XXIX.

When both were calmer, Cora disengaged herself, and got a light.

"I am tired of darkness," she said playfully. "Come into my room, Alan, and I will make you some coffee. You must want something, dear, after such a long, cold ride."

He submitted, smiling, watching her as she moved about, full of gentle, womanly attentions to his comfort, with a softened tenderness on her pale face which had long been a stranger there. Once or twice her lip quivered, and he guessed rightly that she was thinking of her dead child; but when she came to his side and met the sad look with which he regarded her she bent over him with a little smile, infinitely sweet, infinitely tender.

"Are you not better to me than ten sons?" she whispered softly; and Sir Alan could only press her to his heart, and kiss away the tears which had gathered in her soft, sweet eyes.

"I have a restitution to make to you, wife," he said, after a time; "and when I have received absolution for my theft, I will entreat you to go and take some rest. Cora" he continued, "on the night our little one was taken, this was brought to me, and I have had no opportunity of returning it to you."

Cora took the letter and recognized it immedirtely as the one which George Leeson had brought her from Lord Almane, and which she had entirely forgotten in the distress of mind she had endured since that period. Her color rose a little, but she put the letter back into his hand saying, quietly:

"Shall we read it together, Alan?"

"Darling, I trust you fully," he said, tenderly.

"It will please me, Alan. It may throw some light upon those things we cannot explain."

"Then read it to me, wife."

Cora broke the seal and began to read, but in a few moments her voice failed her, and she broke down.

With his arm round her and her head resting against him, Sir Alan took the letter, and in his soft, grave tones read as follows:

"If I swore never willingly to see you, I did not swear not to write to you, Lady Cora; and although you may think it unpardonable presumption, it is but fair to you and myself to have some little light thrown upon what may seem to you inexplicable. Ever since the first moment I saw you I loved you; it was neither infatuated admiration nor friendly regard; it was love; and as it seems my province to bring suffering on those I love, so I fear have I brought suffering on you. Yes, I loved you, but at that time I was bound to another; and although I would willingly have kept you in ignorance of my engagement to Lucie Belmont, you learned it by chance and rejected my proffered love—rejected it with pain, Cora, for you loved me. I did not care for Lucie; beside beauty such as yours, the few charms she possessed were pale and dim. But, alas! she was rich; and my past life, even when I met you, demanded that I should retrieve my impaired fortune. By some chance she learned my affection for you, and broke off the engagement to leave me free, she said. But I could not afford a penniless wife, and, though I was free, I did not seek you, Cora. I went abroad; when I returned to England I found you the wife of a man who loved you, and I myself, if not quite forgotten, was regarded with indifference. My passion for you was as strong as ever, and when I saw you so beautiful, I vowed that you should be mine by fair means or foul. I knew you had loved me once; you should do so again. Accident favored me; your husband is jealous, and though, Heaven knows, he has no cause, still it was easy to make him mistrust you. Your agitation when we first met was a favorable sign for me. He noticed it and wondered. Soon I received an unexpected ally, one who hated Sir Alan Vincent as much as any cold-blooded cur could hate. I mean the servant, Marks. He had but one stronger motive—his love of money—and this I willingly gratified. He kept me *au courant* with your husband's actions and your own. By his connivance I was enabled to meet you unexpectedly, and to follow you to Paris; while by every means in his power, he instilled the poison into Sir Alan's mind. Soon it began to work, and then his coldness and harshness unconsciously assisted my designs. You were unhappy, my sympathy was not displeasing to you, and I began to hope at last. Now for the most humiliating part of my confession, Cora. The man Marks has one accomplishment: he is an accomplished expert, not in detecting, but in doing. He can imitate any handwriting with perfect ease, and we called this accomplishment into play—I once, he twice. This will explain the letter to George Leeson, which you thought Sir Alan had written, and which, by the agony it caused you to think yourself unloved, almost won my cause. It explains also the note he brought me from you, by which I was duped and deceived. He is a clever conspirator, and although your husband's appearance at the station at Amiens was owing to chance, it disappointed him by preventing our flight. Still he succeeded to a great measure, he obtained large sums of money from me and satisfied whatever may be his dislike to your husband. I have told you all now, Cora. When you get this letter I shall have passed out of your life for ever. If I loved you selfishly I loved you well, and for the sake of that love forgive me if you can. Had I loved you less I might have given you up more easily; but I know now, that not only do you not love me, but your whole heart is given to your husband. Be it so, he is worthy of it; his only fault speaks of his love for you, and you must be unlike most women if you do not feel flattered by his jealousy. Be happy, and tell him—the man you love—the husband you esteem and reverence so highly—that even were he poor, wretched, disabled, he is still to be envied, possessed of such a treasure as your love."

"That is all," said Sir Alan, softly, closing the letter and placing it on the table beside him. "We can afford to pity him, Cora."

"Yes," was the quiet answer, although her tears were falling fast—falling at the thought of that misspent, ruined life, which might have been noble; at the blurred and blotted history which might have been fair and stainless. Suddenly she lifted her head.

"What happy chance brought you home to-night, Alan?" she said. "I did not think you would return until to-morrow morning."

"It was hardly a chance, my child," he said, gravely. Then he added, in a lighter tone: "I hardly know why I came. I rode down to The Bungalow and told my mother all our trouble, Cora, and she scolded me so heartily for distrusting my sweet wife that she made me quite ashamed and confounded. So I rode back to implore your forgiveness. Thank Heaven," and he clasped her closely, "that I returned."

"What can have caused Marks to dislike you, Alan?" she said again, after a pause. "I did not think you had an enemy in the world but one."

"I really don't know," said Sir Alan, musingly. "I think Lord Almane must be mistaken in imagining such a thing; it was the love of greed I suppose, and a natural inclination to evil. It was strange how you always mistrusted him, Cora. Perhaps some day we shall know more about it, love; but if we do not, we are content to let it rest, are we not?"

"I am quite content, Alan," she answered, softly. "Content to leave all in your hands, only, dear husband, if at any time you think you have reason to doubt me, you will come to me straight, will you not? and scold me as I deserve."

"I will never doubt you again, Cora," he said, tenderly. "You have forgiven me, but I cannot forgive myself. I think the lesson I have received will be a lasting one, my darling, and my insensate jealousy will be expelled for ever and aye."

CHAPTER XXX.

Mr. Marks on the Tapis Again.

"Can you spare me half an hour this morning, Vincent?" said George Leeson, appearing at the door of the dining-room, where Sir Alan and Lady Vincent were sitting at breakfast. "Excuse such an early intrusion, Lady Cora, but I have business of importance."

"Sit down, and have some breakfast," said the baronet, as they shook hands; and Mr. Leeson went across to Cora, who sat before the urn, looking very pretty and fair in the soft black dress, relieved at the throat and wrists by delicate white frills. She gave him her hand with the old gracious sweetness, so different from the proud, cold manner she had worn for so long.

"Thanks; I have breakfasted already; but I will take a cup of coffee, Lady Cora, if you will kindly give me one. You are rather late people!"

"Not generally," said Cora, smiling. "To-day is an exception. Where do you think we have been since last week, Mr. Leeson?"

"I heard you were away; I concluded you were staying with Lady Vincent at The Bungalow."

"No," said the sculptor; "we have been as far as the Eternal City and back. Spent two days there, just to renew old association, and came back."

"Rapid traveling," said Mr. Leeson, smiling. "Why did you not take a Cook's tourist ticket?"

"How do you know what we did?" said Sir Alan, smiling; "also, we're not *millionaires*, Mr. Leeson, whatever you may be."

"Oh! Alan," said his wife, laughingly, "how can you be so absurd? I wanted so much to go," she added, turning to Mr. Leeson, with a little sadness stealing over her face, "and Alan indulged me, but he could not spare any longer time."

"I met an old acquaintance of yours, Vincent," said the painter, as he stirred his coffee. "Quite by chance, the other day, I found that he lodges in the same house as myself in Elm Tree Walk."

"Indeed! Who is that?" said Sir Alan, looking up, with some curiosity in his face.

"Your ex-footman, Mr. Marks," was the quiet reply.

Sir Alan started.

"I am very glad to hear it," he said, heartily. "Now we will come to the root of the tree, I hope. You did not make yourself known to him, Leeson?"

"Oh, no, of course not; but we had a few minutes' conversation. He is secretary now to some new assurance company, having purchased his secretaryship with some of his ill-gotten gains, I suppose. Take my word for it, Vincent, that the man will receive his deserts yet—murder will out, you know. He is as mild and gentle as milk-and-water, and looks quite benign and trustworthy in a suit of superfine black; but the cloven foot peeps out, in spite of all."

"I'm afraid one may soil one's hands by contact with such a scoundrel," said Alan, savagely; but meeting an alarmed glance from his wife's sweet eyes he subsided and gave her a reassuring smile. "I should like to know if he had any other motive but cupidity for his treachery."

"So should I," said the other; "and for that purpose I have invited him to luncheon at my rooms at one. Will you come? I won't ask you to sit down with the fellow, but you can have an explanation instead of a luncheon."

"Of course I will come. You need not be afraid, little wife; I won't strangle him. I won't even touch him."

"I have a message for you from Lady Lucie Belmont," said Mr. Leeson, coloring a little. "She wants to know, Lady Cora, if you will go out with her this morning. I believe the object is one especially delightful to the fair sex—shopping. I know Marshal and Snelgrove's names were mentioned. She will call for you at twelve."

"It is almost that now, Cora, so if you are going, go and get ready. Will you have a cigar, Leeson, while we are waiting?"

Cora went away: and returning just as Lady Lucie's carriage arrived, the ladies drove off together.

Half an hour afterwards Sir Alan Vincent and Mr. Leeson got into a hansom, and drove to Elm Tree Walk. It was one of the quaint old streets down by the water, overlooking the broad river as it flowed calmly on, and inhabited principally by artists of all kinds and students, who lived a merry *sans façon*, Bohemian life, which George Leeson liked, notwithstanding his veneration for "Burke's Peerage" and "Baronetage," and which was not without a certain charm for Sir Alan himself.

It was strange that Mr. Marks should have chosen such a locality, unless his choice could be accounted for by the hope of meeting no one among the Bohemians who would recognize him in his former career. Perhaps he had a lingering fancy for Bohemianism himself, notwithstanding his snug, respectable exterior. Anyhow, there he was, lodging in the same house as Mr. Leeson, and behaving with exemplary politeness and amenity to all.

George Leeson's studio possessed an unmistakable air of bachelorhood. The floor was strewn with rugs and mats; the furniture consisted of sundry large and comfortable arm-chairs; there was no small display of bric-a-brac, principally china, of wondrous shapes and sizes; while an odor of tobacco pervaded the apartment.

Throwing themselves into two of the above-mentioned arm-chairs, Sir Alan and his friend waited for the advent of Mr. Marks.

Punctually at one o'clock Mr. Leeson's servant threw open the door and announced:

"Mr. Marks."

The host went forward, with careless ease, and gave him a courteous welcome; but Mr. Marks had caught sight of a tall figure standing by the window, and recognized at once the stern, handsome face of his former master.

"Allow me to introduce you to my friend, Sir Alan Vincent," went on George Leeson, without appearing to notice the sudden pallor which overspread his visitor's face, "he is anxious to make your acquaintance."

"You do not seem equally anxious to make mine," said the baronet, advancing; "how is that, Mr. Marks?"

For a moment the man seemed non-plussed, but he soon recovered his self-possession, and murmured some few words about "natural surprise and pleasure," which Sir Alan returned with a careless nod.

"I hope Lady Cora is well," went on Mr. Marks, with a hypocritical smile; "and her ladyship, your mother."

"Very well, I thank you," said Sir Alan, haughtily, with difficulty restraining himself.

"But you must be aware that I did not come here to exchange greetings with a rogue—I speak the word advisedly. I came here to obtain a little information on a subject which I need not define further."

"I do not undertand you Sir Alan," replied Marks, shifting his blue eyes uneasily from the mat at his feet to Sir Alan's face, and Sir Alan's face to the mat again.

"Are you sure? have you forgotten? The occurrence is not so very distant. However, I will refresh your memory. May I ask you why you committed daring forgeries in my name and my wife's You had, it is supposed, some other motive save the money you received from the person who employed you at the time you were in my service. You may spare yourself further falsehood; he himself is my informant."

The man hesitated, but he saw that he was detected; and was acute enough to know that such a thing would never be publicly brought against him.

"Yes, I had another motive," he said, with apparent frankness; "I entered your service in order to gratify my dislike to you, Sir Alan."

"I am highly honored!" said the baronet, coolly. "What have I done to incur such an unfortunate feeling?"

"Both dislike and revenge," was the reply "I have owed you a grudge for a long time, Sir Alan. I have had a most ample, if not complete, revenge. Do you remember," he went on, coming a little nearer, and speaking with the evil gleam lighting up his face, "one evening, a cold winter's evening, about three years ago or more, when Miss Sinclair was crossing the common at Pierpont with a maid, she was addressed by a passer-by, who offered to escort her home, and only asked a kiss in payment? He would have got it, too, had you not approached."

The man's face darkened as he proceeded. Sir Alan went white with anger, but did not interrupt. George Leeson, beside him, clenched his hands, and was heartily glad that he had promised no one not to administer chastisement to Mr. Marks.

"You took the man by the collar and threw him into the ditch, with as little ceremony as if he had been a dog, and left him lying there, on a bitter winter night, without giving him another thought, I daresay. If you recollect the occurrence, I daresay you have not forgotten what the man called after you as you went away. You heard him and laughed. You did not always laugh, Sir Alen; I have seen you look very miserable, and I remembered then that I owed you a grudge, and that I had sworn to 'pay you out.' Your turn came at last. I lost sight of you for a time, but when I found you again was even with you, I think. I had not a very pleasant half hour in the ditch, but you have had many a sleep-

less night since, Sir Alan Vincent, and I helped to make them so."

He ended with an air of bravado and defiance, which exasperated Sir Alan to the highest degree, and it was only with the utmost difficulty that he restrained himself, remembering his promise to Cora.

"You pitiful scoundrel," he said, scornfully, "to cherish animosity for a justly-deserved punishment. You had better not presume upon my patience too far, or you may find that it has its limits."

"I know what keeps you from kicking this fellow down stairs, Vincent," said George Leeson, unable to keep down his irritation; "but I am bound by no such promises. I should advise you to keep at some distance from me in the future, and to relieve us of your presence as speedily as possible."

Marks took the hint and disappeared, and the next day, when George Leeson's landlady lamented the departure of her second-floor lodger, "such a quiet, well-spoken gentleman, no trouble to nobody," the artist knew that as well as the hint he had taken the advice.—[To be continued in our next.

GERALD SORTHWICK, TEA-TRADER, CHINA.

H. H.

A long stretch of velvet lawn, bathed in delicious golden sunshine. Four people finishing a game of lawn-tennis, and as many looking on with a kind of lazy interest. On either hand shady shrubberies, bordered with brilliant flowerbeds; at the end of the lawn a little brook; in the distance the long sweep of the Cotswolds.

"Fifteen," counts Captain Hall, triumphantly, as a vicious stroke of Gerald Sorthwick's racket drives the ball beyond bounds. Gerald has played badly throughout, almost in silence, with a grave face and compressed lips. It does not matter, for his partner, Maud Conway, has exchanged with Captain Hall enough merry badinage for a dozen people. The young lady is nettled now at an ignominious defeat.

"I could wish you victor in a better contested fight, Captain Hall."

"It is my highest ambition, Miss Conway." There was nothing in the words, but the meaning, tone, and a low bow gave them point. Maud bit her lips, and Gerald threw down the racket, his face a little sterner than before. She turned to him, an angry glitter in the violet eyes:

"Your play has been wretched, Mr. Sorthwick; it was never worse. For the future we dissolve partnership."

"Can we? *Can* we, Maud?" *He* speaks meaningly now, and it seems strange her name can come with such tender inflection from so hard and firm a mouth.

"'Maud' to my friends, sir; 'Miss Conway' to you."

He leaves her, and saunters into the shrubbery, following a little winding path until it reaches the brook. Then he throws himself at full length upon the soft moss, and thinks bitter things of the girl who has befooled him. Half an hour later there is a rustle among the boughs, and he sees her in the act of retreating.

"I am sorry I disturbed your slumbers, Mr. Sorthwick. I thought you were gone."

"You disturb my *life*, Maud, waking and sleeping. Come here."

He spoke with such command, she instinctively obeyed, but her whole soul rose in rebellion. It was a novel experience to the spoiled and petted beauty.

He pointed to a low, rustic seat, and she took it. As though to measure strength, they look into each other's faces—his pale, determined; hers passionate, resentful. Then Gerald turns his head away, lest resolution should fail. His tone is low, but full of fierce, suppressed energy:

"You have not played with my love for months, Maud, without learning what it is. It comes between me and all other chance of happiness."

He pauses a few seconds, wherein she plucks a wild-flower, and picks it to pieces. Sweet and pensive she looks now, and unwontedly thoughtful; but his eyes are on the distant hills.

"From time to time, when I would have spoken, you silenced me, and I thought it girlish coyness. You made me believe you cared, Maud."

If only he would look now, and see how the girl's mobile features answer the sorrowful wail in his voice! But he does not.

"I saw you flirting continually, but it was your nature, and I did not mind, for I thought you gave me more. So you fooled me as you fooled others."

"Fortune-hunters, all of them," she broke in.

"Possibly," and his proud head was thrown back a little. "I am free from that imputation. Rich as you are, Miss Conway, the Sorthwicks of Sorthwick are richer."

It was true, as she knew well. General Sorthwick, the elder, had the reputation of being the wealthiest landowner in the country, and he was the only son.

"It is time the farce were ended," he continued. "I have been too long the willing slave of your caprice. It is not fitting the woman I honor above all the world should be on terms of free and easy intimacy with such a man as Captain Hall."

A contemptuous curl of the lip emphasized the words.

Maud started as though they had stung her; her hasty temper in arms immediately.

"By what right do you venture to criticise my friendship, sir?"

"You shall give me the right," he rejoined, hotly, "or from this day I will never willingly touch your hand nor see your face. Friendship! what is that beside such love as mine? Choose between them, Maud: his friendship or my love. I will never ask you again."

This desperate earnestness almost frightened her; nevertheless she made a mocking curtsey.

"Love may desolate and grieve you,
Love may stay awhile and leave you,
Friendship's truth will ne'er deceive you,"

she quoted. Then he fairly turned his back for some seconds, that she might not see the pained working of his features.

He was pale to the very lips when at length he did look, in silence offering his hand. Silently she laid her own in it. The agony in his eyes subdued her; what was a woman's weak petulance in comparison with this?

"For the last time," said Gerald Sorthwick. He bowed low over the white fingers, and kissed them; then walked away. She heard a horse's hoofs presently, at a furious gallop.

The lodge-keeper touched his hat as Gerald rode up, and he saw with surprise there were great tears on the old man's rugged cheeks.

"What is the matter, Williams?"

"Have you not heard, sir? I thought you knew from the rate you came, and the look of your face."

"No—no—what is it?"

Williams whispered a few words. Gerald swayed to and fro in the saddle, and would have fallen, but that the old man supported him.

"Strange news!" said Captain Hall to a friend that night. "Old Sorthwick is ruined and has shot himself."

"Nonsense, man; he is as rich as Cræsus.

"Yes; fabulously so, that is, he mortgaged every acre years ago, and bought Turkish bonds; that accounts for his large income. They have just stopped payment, you know, and other speculations have turned out much worse. The young cock will crow less loudly now, will he not? And an evil light gleamed in the speaker's blue eyes.

* * * * *

Silvery moonlight flooding a farm-house, and an unusually large garden appertaining thereto. Up and down the gravelled walk paces Gerald Sorthwick, moodily smoking a fragrant cigar. On the air is borne a sound as of an irregular bass solo, varied by the occasional squeak of shriller stringed instruments.

It denotes that half a mile off, in the little town of Sorthwick, an archery ball is now being held. The committee, in view of his father's recent death and his own social ruin, had decided not to send the customary reminder; but Gerald, with a poor man's morbid sensitiveness, misinterprets the kindness. With an impatient movement, expressive of disgust, he tosses away the half-smoked cigar. It alights on the soft turf of a small croquet-ground, and lies smoking. Then, with a curious smile, he crosses and picks it up carefully.

"I had forgotten myself," he mutters: "the last of the box, and a brand I am not likely to taste yet awhile.'

So, with the cigar between his teeth, he passes through the gate, and across green meadowland towards the town.

The music grows distinct as he approaches.

"I think I am wise," he reflects, bitterly. "To-morrow by this time I shall have left the old life quite behind me. Gerald Sorthwick, tea-trader, China. Vague, that, and it is about all I know: but I shall be better out there. The old position, habits, instincts, reminiscences, would be so many dead weights in England."

A wealthy tradesman passes him, and touches his hat. Gerald acknowledges the courtesy with that marked politeness which has ever won him popularity with his social inferiors, but the incident re-awakens latent cynicism.

"How long would that last?" he wonders "Formerly it meant your are my patron, ten times richer than I. Now it should be for me to doff the hat in greeting."

The cigar burns close to his lips; he spits it out and hesitates.

"I must see her face once," he groans, "my vow notwithstanding;" and as the church clock strikes ten he stands in the black shadow of some trees, looking across a bowling-green at the great doors of the Assembly Rooms, to which heated couples come from time to time to inhale the soft, pure air, and perhaps draw inspiration from the moonlight. At length he sees her, leaning on Captain Hall's arm, and laughing gaily.

A bitter imprecation rises to his lips, but he suppresses it. "Are you content now, stupid?" he asks himself.

A bird twitters on a bough near him, and by force of subtle association, in strange mockery, the recollection comes how he had once startled Maud by a perfect imitation of her dove's cooing; it was when they were most friendly, before Captain Hall's advent.

"It shall be your signal when you want me, and I am talking to disagreeable people," she had said. He wondered whether she would remember the incident, and a wish grew upon him to try the experiment.

They had ceased talking, Maud and her partner, and were gazing straight towards him; but there was safety in the shadow, he knew.

"Coo-o-o!" A soft note, thrice repeated.

He saw Maud start violently, and tremble. Captain Hall thought it was with cold.

"The night air is too chill," he said; "let us return."

"No, I cannot leave the moonlight; but you may fetch my wrapper, if you will be so good."

The watcher beneath the trees saw him vanish; saw Maud's gloved hand pressed to her heart, as though to still its beating. Then he marveled for a moment whether sight were playing him false, for a white figure glided towards him through the moonlight, heedless of the dew that soaked flowing robes and satin slippers.

"Gerald!" it cried.

He drew her into the shadow.

"Say good-by to me, Maud." There was a queer tremor in the voice.

"Good-by?" she asked, wonderingly.

"I leave England to-morrow. Will you not bid me good-by, my lost darling?"

Captain Hall appeared in the doorway at that instant, searching in great astonishment for his partner; but they were happily unconscious of the fact, for two bare arms were around Gerald's neck, and a sweet voice was whispering:

"Love—love—will you not stay, for my sake?"

So it came to pass, that "Gerald Sorthwich, tea-trader, China," remained a myth only.

CULTURE.

There are two theories of self-training, in which people expect to reach that which is fairest and best. One of these is the Christian theory of service for others by faithful labor and self-denial in their behalf; the other is the pagan theory of self-development and careful personal training. The result of the one is a soldierly Christian character; the fruit of the other is "culture."

Far be it from us to say one word against culture as a means to a higher end or as an incident in reaching that end. Culture is one of the finest fruits of mental training. It is that polishing of the mind's machinery which makes it not only run smoothly, but also shine. It is that large acquirement of information, that extended familiarity with the words and ways of men, and that breadth of sympathy with the thoughts and feelings of men, which smooth off the roughness in one's character, which make one tolerant of the notions and peculiarities of other people, and which give a man intelligent and easy companionship with other men.

There is something very attractive about culture, and we hear its praises sounded so much that there is in this stage of our civilization great and increasing danger of its being made an end of pursuit. It sounds well to speak of developing one's powers, enlarging one's sphere of knowledge, acquiring polish, by study, by literary pursuits, by making one's-self a delightful associate. Culture, culture—it is a little god with thousands of young people, who fail to see its essential selfishness.

There is a word, *dilletante*, which has come to us from the Italian, which expresses just a little of the weakness of culture when pursued as an end. It suggests that purposelessness of culture which distinguishes it from the intensity of a manly character that works for an end. A manly man cannot help feeling a healthy contempt for any life which ends only in its own amusement and pleasure, no matter how refined that amusement may be. Cultivation for the sake of culture, sunlight for the sake of sunshine, polishing for the sake of polish—there is something empty and contemptible in the very thought of such a life.

Culture is good, is beautiful; but culture for culture's sake, we say, is contemptible—contemptible because it is utterly selfish, and therefore unworthy. The grand men in the world have been the men of force; the men who have taken hold of other men and lifted them, instead of lifting at their own boot-straps. No man's name goes down to the ages as a name of enthusiasm and power, who has not in him a tremendous will to accomplish something great and good outside of himself. This is the very essence of Christianity, which is godliness. "My Father worketh hitherto, and I work." There is the example of God and Christ, and the grand bidding to the disciple is, "Work while the day lasts." "He went about doing good" is the record of the Master, and "Go work to-day in my vineyard," is His command.—*Interior.*

THE MAZARIN BIBLE.

In answer to many inquiries concerning this famous Bible, we publish the following particulars:

There is a copy in the Lennox Library in this city, which bears this inscription: "The Mazarin Bible, supposed to have been printed by Gutenberg, assisted by Fust, at Mentz (Mayence), 1450-1455. The first printed book known."

Eadies' English Bible, page 105, has the following to say of the Bible under notice: "Gutenberg, or Gousflush, had made some experiments in printing with moveable types prior to 1439. After some delay and loss of money, Fust, a goldsmith, was taken into his confidence, and by his own genius and his partner's financial help, the Latin Bible was printed, toward the close of 1455, in 2 folios of 1,282 pages."

It is known as the Mazarin Bible because the copy of it which first attracted attention in modern times was discovered in the library of Cardinal Mazarin by Dr. Burr.

A copy was sold in 1827 for £504: another at the sale of the Perkins Library; in 1874, brought £3,400.

HOW TO CONSTRUCT A TELEPHONE.

Procure two pieces of tin spouting, about nine inches long. Over one end of each glue parchment, or two thicknesses of very heavy writing-paper pasted together, and dry them near the fire or in the sun; pierce the center of each parchment, when dry, with a pin; then through the hole made, run a piece of fine copper wire, and secure it by means of a cross-piece of heavier wire. Fasten the two pieces of spouting to the wall, or table, or wherever desired, one at either end of the circuit of communication, making them stationary, and leaving the open ends exposed so as to speak into them. Conduct the wire from tin to tin, looping it up at intervals with a twine string, so as to keep it from touching wood or anything that may be a conductor. Draw as tight as possible, and fasten securely at either end.

This, though a home-made telephone, has proved so successful that I can be called from my study, situated in the third story, by any one on the first floor. Through it even a whisper can be heard. The cost is but a trifle.

BRIC-A-BRAC.

HUMAN BUILDERS.

"All are architects of fate
Working in these walls of time,
Some with massive deeds and great,
Some with ornaments of rhyme.

"Nothing useless is and low,
Each thing in its place is best,
And what seems but idle show
Strengthens and supports the rest.

"For the structure that we raise
Time is with materials filled,
Our to-days and yesterdays
Are the blocks with which we build."

[*Longfellow.*

TURKEY AND TRIMMINGS.

A correspondent supplies a curious record of events, which has special interest at the present time. He says:

A century is not much in the life of a nation, and the following dates may be of interest to your readers. From this it appears England has been alternately friends and foes of most of the European powers on the Eastern question:

1740. Austria and Russia agreed to divide Turkey. Great sea fight at Scio.
1770. England and Russia fight Turkey.
1790. Austria and Russia fight against Turkey, and Turkey loses 200,000 men.
1798. England joins Turkey against France, and drives the French out of Egypt.
1807. Russia joins Turkey against England, and almost destroys the English fleet in the Dardanelles, under Sir John Duckworth.
1827. English and Russian fleets destroy the Turkish fleet at Navarino.
1828 Russia fights Turkey, and the "sacred standard" is unfurled.
1833. Russia enters Constantinople, and makes an offensive and defensive alliance with Turkey.
1854. England, France and Turkey subdue Russia in the Crimea.
1877. Russia defeats Turkey, and this time England looks on.

THE REAL AND THE IDEAL.

Not nobler are the hearts that work than hearts that only dream;
For real as the things that are, are all the things tha seem.

The waters gleam among the hills, the mirage on the sands.
And yet alike both image forth the self-same Maker's hands.

We sail along a rocky shore—the cliffs are gray and green.
While in the sunlit depths below as lofty cliffs are seen.

We float upon the waves of Life, with Death at either hand,
And what is false, and what is true, we may not understand;

We see the shadowy rocks beneath, we see the crags above—
How happy are the hearts that know the name of both is Love!

CURIOSITIES OF ENGLISH.

The following are a few amusing examples of the "curiosities of English," as respects the change of sound produced by different consonants.

B makes the road broad, turns the ear to bear, and Tom into tomb.

C makes limb climb, hanged changed, a lever clever, and transports a lover to clover.

D turns a bear to beard, a crow to crowd, and makes anger danger.

F turns lower regions to flower regions.

G changes a son to a song and makes one gone.

H changes eight in height.

K makes now know and eyed keyed.

L transforms a pear into a pearl.

N turns a line into linen, a crow to a crown, and makes one none.

P metamorphoses lumber into plumbor.

S turns even to seven, makes have shave, and word a sword, a pear a spear, makes slaughter of laughter, and curiously changes "having a hoe" to "shaving a shoe."

T makes a bough bought, turns here there, alters one to tone, changes ether to tether, and transforms the phrase, "allow his own" to "tallow this town."

W does well; e. g., hose are whose, are becomes ware, on won, omen women, so sow, vie view; it makes an arm warm, and turns a hat into—what?

Y turns fur to fury, a man to many, to to toy, rub to ruby, ours to yours, a lad to a lady.

Here nestles little Jim,
A measle wrestled him
And mortified his tiny little system;
Then other measles followed,
Much medicine he swallowed,
And that is how it happened that we missed 'im.

[*Philadelphia Ledger.*

In Paris society was much exercised in its mind as to the etiquette which would decide the choice of a partner for the Prince of Wales in the cotillion at Lord Lyon's ball—whether the lady of the highest rank (of course it could be no other) would be selected from English or French claimants to that dignity. His royal highness, however, settled the question, by leading out an American young lady (Miss Yznaga), and society has not yet recovered the shock.

What a beautiful example of simplicity in dress is shown some of the followers of fashion by that domestic animal, the cat, which rises in the morning, washes its face with its right hand, gives its tail three jerks, and is ready dressed for the day!

Politeness is like an air cushion. There may be nothing solid in it, but it eases jolts wonderfully.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

CHOOSING THE RING.

I looked at an amethyst first, dear—
'T was so like your violet eyes,
Dreamy and soft, yet deep and clear,
The very hue of the skies
When dark clouds part, and the steadfast blue
Looks down on the storms below;
For a faith that is tender and tried and true
The tints of the amethyst show.

And then the sunlight suddenly streamed
On a mammoth topaz there;
Liquid gold, it glistened and gleamed
Like the amber glint of your hair.
And Hope, glad hope, was the word I read,
As in whirl of a sunny curl,
But the ring was far too large, and I said,
Not this for my little girl.

'T was a ruby stone that I looked at next,
It glowed like my own heart, dear;
And I poised it a moment, half perplexed,
For I felt your read lips near!
Love, love, I read in its burning rim,
And yet—can you tell me why?—
The color grew suddenly cold and dim,
And I passed the ruby by.

It was only the *diamond's* flash revealed
Blue, gold and crimson in one!
Ay! *faith, hope, love*—all lie concealed
In this magical matchless stone,
Where amethyst, topaz and ruby fling
Into one the glory of three.
And so it was that I chose the ring
My darling must wear for me. [*Transcript.*

WOMEN PHILANTHROPISTS.

Who has not heard of worthy Mrs. Fry, the Quakeress, who led the van in the noble work of reforming both prisoners and prisons?—a work so ably carried on by Mary Carpenter, who extended her philanthropic efforts to India, in the interests of education and prison discipline. Elizabeth Fry, surnamed "the Female Howard," was a daughter of John Gurney, of Earlham, and sister to Joseph John Gurney and Lady Buxton. She began to preach in 1810, and three years later commenced her work as a prison reformer. She effected much improvement in Newgate, and in parts of the United Kindom, and then she proceeded on a mission to the Continent, which occupied her during several years. She died at Ramsgate in 1855, having been the mother of a large family. Mary Carpenter comes next on our list—the friend of the miserable and out-cast—who labored not only for their reform in England, but, as we have remarked, in India likewise. Three times she visited that country, and on her return from her first visit, in 1866, she published two volumes on the subject. She took part in the conferences at Birmingham in 1851-52-53, and was called upon to give evidence to the committee of the House of Commons which in 1852-53, inquired into the condition of criminal and destitute children. Miss Carpenter was born in 1807, at Exeter, the daughter of a Unatarian minister, and died on the 16th of June last year. Her decease took place in the "Red Lodge Reformatory," which she had herself instituted, and where she had labored many years. The third great female philanthropist was Caroline Chisholm, the daughter of a well-to-do yeoman in Northamtonshire, a good and actively benevolent man. Her mother, early a widow, gave her an exceptionally thorough education, turned well to account, in after life. Having married Christian Chisholm of her Majesty's Indian Army, she went out to Madras, where she founded the "School of Industry" for the daughters of soldiers; in which rudimentary instruction of many kinds is still being given, including those of the various duties connected with the household. She was little more than twenty when she opened the school, and in 1839 she and her husband removed to Australia and settled at Sydney. There she established a home for the protection of young girls, whose peril was great on landing in a new and very rough country—as it was some thirty or forty years ago. Expeditions into the country were then undertaken by this brave and generous woman, for the purpose of escorting sometimes as many as eighty young women, to be left here and there in the scattered farm-houses, paying all expenses herself. On one occasion she took in charge the whole emigrant importation from one ship, consisting of sixty-four girls, possessing but fourteen shillings between them. Paying for all, she took them up the country, and in two years they were nearly all married, and, thanks to her selection of homes, all had preserved good characters. But her work did not end here; she opened a money-market for immigration at Sydney, and advanced no less than £10,000 of which she lost but £10 in return for her generous confidence. At last after much up-hill labor, the colonists began to subscribe to her work. Through the Colonial Secretary, she induced the English Government to send out the wives and families of "ticket-of-leave," convicts. One shipful, collected from most of the unions in the country, she brought out in person. She also effected important reforms in the regulation of emigrant ships. On one occasion of her leaving, the colonists presented their benefactor with a purse of money and an address; and her invaluable work was publicly acknowledged both by Lord Derby and Mr. Lowe, both ministers of the Crown. The valuable life of this exemplary woman terminated March 25, 1877.

SLURS ON WOMEN.

Of all evils prevalent among young men, we know of none more blighting in its moral effects than to speak lightly of the virtues of women. Nor is there anything in which young men are so thoroughly mistaken as the low estimate they form as to the integrity of women. Not of their own mothers and sisters, but of others, who, they forget, are somebody else's mothers and sisters. As a rule, no person who surrenders to this debasing habit is to be trusted with an enterprise requiring integrity of character. Plain words should be spoken on this point, for the evil is a general one, and deep-rooted. If young men are sometimes thrown into the society of thoughtless or depraved women, they have no more right to measure all other women by what they see of these, than they have to estimate the character of honest and respectable citizens by the developments of crime in our police courts. Let our young men remember that their chief happiness in life depends upon their utter faith in women. No worldly wisdom, no misanthropic philosophy, no generalization, can cover or weaken truth. It stands like the record of itself—for it is nothing less than this—and should put an everlasting seal upon lips that are wont to speak slightingly of women.

UTILIZING USELESS WOMEN.

A NEWSPAPER so seldom speaks in a sensible way of women, that the following article is worth noticing, from the Ogdensburg (N. Y.) Daily Journal:

In 1866, a cargo of women, numbering 150, left New York for Oregon, arrived there safely, and a letter recently received, says they all found homes and husbands, and have passed happy lives. It is said there are 100,000 bachelors now on the Pacific coast wanting wives, and a similar enterprise might prove equally successful.—Exchange.

Very likely; but the average of women are no longer willing to be shipped as "cargoes" to search for husbands upon the Pacific coast. They would gather their robes closely about their fair proportions and trip indignantly away at such a suggestion. Women, like men, have their representatives. Years ago they sought service with the foreign missionary societies, and were content to go out and spread the gospel net, to catch the shirtless and unsuspecting heathen. Now, one representative woman is an applicant for a first-class foreign mission under the general government, and she would like to know "how long, O Lord, how long," it will be before she can have a white man's chance to live in a palace in a foreign capital under the Old Flag, as a representative of her darling native land.

The aspiration is a natural one. We do not know why the chin of a woman might not wag as successfully in diplomacy as that of an antediluvian scare-crow like Caleb Cushing. But the tracery of green and the bursting buds upon the trees are likely to mark the advent of many a spring-time, we fear, before the hope will be realized. This perverse world moves but slowly, and with many a groan, perplexing hitch, and endless creaking, as it makes progress. The Methodists decided in their conference lately held in New York City, that women could not preach the Gospel. We are in favor of enlarging the suffrage, admitting women to the pulpit, sending them abroad as diplomats, and terminating the pitiful littleness of a policy that would restrain a woman from being a policeman or a statesman.

WHAT A QUEEN COSTS.

The Amount Englishmen are Taxed to suppor the Royal Establishment.

When Queen Victoria came to the throne in 1837, the usual steps were taken to provide for the support of her Majesty and the royal household. A select committee of twenty-one members was appointed by the House of Commons to prepare estimates for such support. For her Majesty's privy purse they set apart $300,000 yearly; for household salaries, $656,500; for ordinary household expenses, $362,500; for royal bounty, etc., $66,000; and for various other small items, $40,200. The total is about $1,925,000. The estimate was agreed to by the House of Commons, and so the account stands to-day. Some of the offices for which provision was made in that list have since become obsolete, and the incumbents have absolutely no duties to perform. Yet the offices are still filled and the salaries are still paid as before.

These items by no means constitute the whole expense of the Queen's household, and that lump sum of $1,925,000 is by no means her whole income from the National Treasury. She also receives the revenues of the Duchy of Lancaster which amount to $215,000 net. The amount from this source is not uniform, but that was the sum received for the last year reported—1876-77. This swells her Majesty's privy purse to $515,000 per annum out of the funds of the nation. On this sum she has absolutely no demands for her actual ordinary expenses. It is clear pocket money. She is under no necessity of laying out a single penny of it, for every possible expense seems to be provided for in other allowances. If she travels by water, a yacht is placed at her disposal at government expense. If she travels by rail, the country, likewise, foots the bill by an additional allowance. Even for charity she need not draw upon her own purse, for a liberal grant is made for this express purpose. Not only does she travel by water in royal yachts but a small fleet of these yachts is built and kept in repair for her particular use. This, of itself, is an enormous extra bill, but I have no means of finding the amount of it. The maintenance of royal palaces takes an additional $157,900 a year, and the maintenance of royal parks and pleasure gardens takes another $529,655 per annum.

Adding the annual allowance to her Majesty, the net revenues of the Duchy of Lancaster and the maintenance of royal palaces, parks and pleasure gardens, we have a total of $2,827,555 a year. This does not include the traveling expenses of the Queen, the maintenance of the royal yachts, or any of the half a dozen other important items which are strictly a part of the expenses of royalty in England. Allowances to other members of the royal family are also additional items. "In fact," as an English authority says, "if all the expenses incidental to 'the honor and dignity of the Crown' could be ascertained, it would be found that the $1,925,000 annually settled by Parliament upon her Majesty, constitutes but a very small portion of the actual cost of royalty.

It would be wrong to blame the Queen individually with any great part of the responsibility of her absurd and expensive household. It is a creature of the British aristocracy as a whole, and the Queen is only a kind of central figure of the system which the country has built. I may add that the Queen also has a large private fortune, from which it is estimated she realizes an income of no less that $1,000,000 a year, in addition to the amount paid her by the nation.

The allowances to the Royal Family, not including the Queen, amount to $785,000 yearly. The revenue of the Prince of Wales from the Duchy of Cornwall—about $350,000 annually—is not included in this sum. Summing up the leading items of the cost of royalty in England, we have a total of $3,964,430. If all the items could be ascertained, I do not doubt that the total given would be found to be not more than one-half the direct annual cost of royalty in England.

The London Times takes as manly and wise a view of woman's education as does the Examiner. "However opposed," it says, "men's views may be on the advantage to the world of the free competition of the women in the labor market, few would question the advantage of improving the quality of women's education. Nothing less well adapted than the kind of training hitherto provided for girls to fit them, keeping strictly within their own limits, to be useful companions of men, can well be conceived. Women will not have done much toward 'intellectual freedom' if they merely superimpose a boy's Latin and Greek on a girl's pianoforte and embroidery. What is required to give women 'intellectual freedom' is, not to increase the range of study, but to deepen it. Music, Italian, drawing and the use of the globes may be taught in such a way as to cultivate the whole intellect: and Latin, Greek and the higher mathematics may be learned with the result merely of creating female pedants. The 'higher education of women,' when it is fully developed, will, if it be really worth the name, make women not less, but more womanly. Even so there may be plenty of scope for a certain admixture of women in the liberal professions without changing the relations of society and setting sex against sex. * * * * It is not so much a higher education as a deeper and more thorough education that is needed. Let women be thoroughly taught whatever they have to learn, whether it be much or little, and they will thereby be fitted, as occasion calls, to take up any occupation that may be open to them with application, thoroughness and efficiency."

WOMAN'S SPHERE.

Why does it follow that women are fitted for nothing but the cares of domestic life? for bearing children and cooking the food of a family? devoting all their time to the domestic circle—to promoting the immediate personal comforts of their husbands, brothers and sons? I admit that it is their duty to do these things. But I say that the correct principle is that women are not only justified, but exhibit the most exalted virtue when they depart from the domestic circle and enter on the concerns of their country, of humanity, of their God. The mere departure of women from the duties of the domestic circle, far from being a reproach to them, is a virtue of the highest order when it is done from purity of motive, by apropriate means and toward a virtuous purpose. And I say that woman, by the discharge of such duties, has manifested a virtue which is even above the virtues of mankind and approaches to a superior nature. That is the principle I maintain; and I hold it to be proof of pure patriotism, of sincere piety and of every virtue that can adorn the female character.—*John Quincy Adams.*

FEMALE EDUCATION.—In the days of Queen Anne the education of woman, as we understand the term, was very much neglected. The daughter of a country gentleman was taught the duties of a cook; sometimes, also, if the parents were ambitious that she should shine in after-life as an accomplished hostess, she received lessons from a carving-master. The cardinal duty of hospitality, as she heard it inculcated at home, was for the lady to press the guests to repletion; while it was the province of the master of the house to make them drink to excess. This, perhaps, was a fitting education for a young woman who was to become the helpmate of a rude landlord, who regarded a wife as an upper servant, and who thought the company of a woman an irksome restraint upon the freedom of social intercourse. To a woman of any education and refinement, an English manor-house, during at least the earlier days of the Hanoverian succession, must have been an intolerable home.

THE ROSE OF JERICHO.—The so-called Rose of Sharon is one of the most exquisite flowers in shape and hue. Its blossoms are bell-shaped, and of many mingled hues and dyes. But its history is legendary and romantic in the highest degree. In the East, throughout Syria, Judea, and Arabia, it is regarded with the profoundest reverence. The leaves that encircle the round blossoms, dry and close together when the seasons of blossoms are over, and the stalk withers completely away at last from the bush on which it grew, having dried in the shape of a ball, which is carried by the breeze to great distances. In this way it is borne over the waste and sandy deserts, until at last, touching some moist place, it clings to the soil, where it immediately takes fresh root and springs to life and beauty again. For this reason the Orientals have adopted it as the emblem of the Resurrection.

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Halladay Standard.

The only Wind Mill awarded
TWO MEDALS
and
TWO DIPLOMAS
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CENTENNIAL JUDGES.

Every machine warranted to be well made of good material; to do good work in any kind of wind; to be perfectly self-regulating; to possess more power and to be more reliable than any other Wind Mill made.

Each piece is fitted and numbered so that a stranger can put the Mill up, using our drawings and printed instructions for a guide.

Send for Catalogue "B" and Price List.

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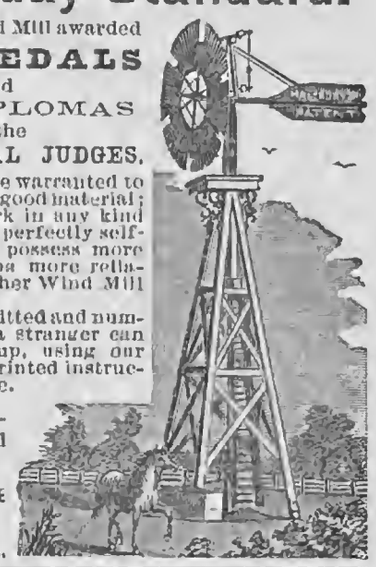

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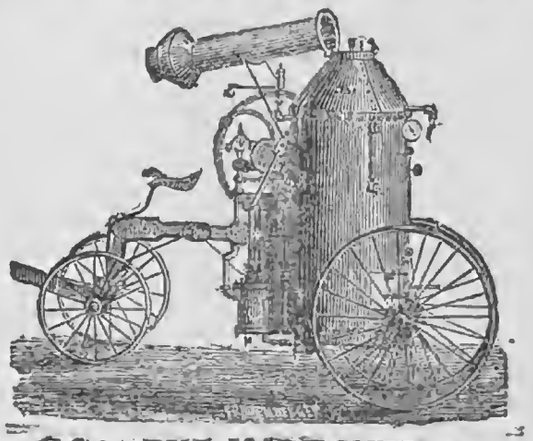

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Send to the Company for Descriptive Circular.

THE SILVER & DEMING
Endless Chain Horse Powers

For 1, 2 and 3 horses, are the best made.

They have steel track rods, wrought-iron links, and for strength and durability are unsurpassed.

Our Improved Governor regulates the speed perfectly.

We also manufacture Drag and Circular Sawing Machines. Send for Circular.

SILVER & DEMING MF'G CO., Salem, Ohio.

THE SILVER & DEMING FEED CUTTER
HAS NO SUPERIOR IN THE MARKET.

Celebrated for its great capacity, ease of running, and its adaptability to all kinds of work. Our Power Cutters are fitted with an **Improved Safety Fly Wheel**, and in the event of iron or other hard substances getting into the feed, the Fly Wheel revolves, but the knives stop, thereby securing safety to the machine and to the operator. Send for Circular giving Prices and full Particulars.

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BIG GIANT CORN MILL.
Every Man His Own Miller.

The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use.

Grinds twice as fast as any other Mill of same size and price. Manufactured by

J. A. FIELD, SON & CO.
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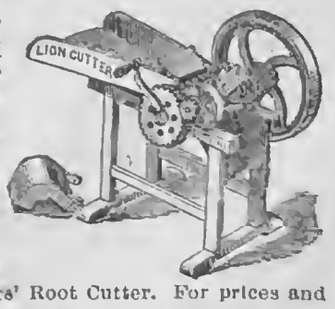
The Lion Feed Cutter



This is one of the most popular Feed Cutters in the market. We also make Gale's Junior and the old Self-Sharpening Feed Cutters—two well-known and highly approved Cylinder Cutters. Also Gale's Lever Cutter, the leading Lever Cutter now made. We also manufacture Gale's Vegetable or Root Cutter, besides Farmers' Root Cutter. For prices and terms, address

THE BELCHER & TAYLOR AG'L TOOL CO.,
Chicopee Falls, Mass., U. S. A.

Matthews' Garden Seed Drill,
Matthews' Hand Cultivator,

Matthews' Drill & Cultivator combined, surpass all others. Send for Circular before you buy.

Manufactured only by
EVERETT & SMALL,
Boston, Mass.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

FEMALE BORROWERS.

MRS. A. E. STORY.

"Neither a borrower nor a lender be."

DOES it ever enter into the mind of the woman who complains of the borrowing propensities of her neighbors that the lenders are themselves in a great measure responsible for the borrowing? Certain it is that borrowers would soon "cease from the land" if there were no one found to encourage the thriftless habit. The habit of borrowing grows upon one as habits generally do, whether good or bad, and the woman who begins by borrowing an occasional drawing of tea, or a bank of thread, will soon ask you for your latest magazine, and that before the leaves are hardly cut, or your best tablecloth when she has "company," as cooly as though she thought you must feel it a privilege to lend them. *Her* tablecloths are always "in the wash" at such times. She is always forgetting to send to the store for tea, sugar, starch, and a dozen other such things, and the reason she forgets is, she knows you have them and will lend them to her.

If her aunt's cousin is going to be married and she is going to the wedding, she is sure not to have time to get ready for so grand and particular an occasion, and so you are asked to ransack your boxes and drawers for something that will set off her old dress and make her a fitting wedding guest. She will remind you while you are doing this, that her complexion and style of features are peculiar, and that only certain things—which she mentions, and which she knows you possess—will become her.

You have been years, it may be, getting the conveniences of housekeeping about you, and your neighbor who has been too slack or thriftless to do the same for herself, uses them. She lets her tub fall to pieces in the sun and then does her washing in yours. She runs her candles in your molds, twists her stocking yarn on the wheel your grandmother left you, sifts her pumpkins through your colander, and grinds her spices in your mill, and you may count yourself fortunate if, when these things are wanted by yourself, you do not have to go after them.

"Please, ma'am will you lend ma a little salve? Tommy has cut his thumb."

"Mother would like to borrow a little kerosene, if you have it to spare."

"Pa has lamed his back so he can't work, and ma wants him to read to her; could you lend him a paper?"

"We want to go visiting this afternoon, and would you please let us take the baby's carriage?"

This is the way you are pestered, almost daily, if you belong to the great army of lenders and are so unfortunate as to live next neighbor to a chronic borrower. You bear it with a meek submissiveness that has become habitual with you, until Mrs. Slack comes in some day and requests the loan of your switch, as she is going West on a visit to her dear mother, and her hair—which is getting thin—"couldn't have been nearer the color of yours if it had all grown on one head," and "while she is there and thinks of it, she will take a fine-tooth comb, if you have one handy."

An ominous flush leaps into your face at this, and your neighbor goes home empty-handed, doubtless to call you the meanest woman alive, but she comes back next morning for your traveling bag and you lend it, thankful that the woman has a mother out West, and hoping that her visit will be a long one.

Now some of these troublesome people will read this article. They will borrow the paper to read it, and so sponge both on the publisher and the subscriber who has paid for it, and unless the heading should provoke their ire, as suggesting something "personal," they will want to see whether some woman *they* know of "catches it."

My dear friend, if *you* are a *habitual* borrower, this is for you. Don't you know that the tea you get of your neighbor is better than what you send back? Don't you know that you don't always return *quite* as much as you get? And don't you know, too, that it is possible for the neighbor to get out of tea while she is waiting for you to pay what you owe her? And don't you sometimes forget to pay it at all? Don't you know that you burn her brass kettle every time you have it to "make up your preserves?" and that you dull the knives of the sausage-grinder and then fail to sharpen them? Have you never thought what trouble you cause your neighbor when you oblige her to send to your house for the flat-irons every time she wants to use them? And has it never occurred to you that you are doing her an injury, not only in the wearing out of the various conveniences which her forethought has provided, but in appropriating to your own service time which belongs to her and to her family, and to which you have no manner of right?

TO MEND BROKEN CROCKERY.

WE have used lime and the white of an egg for mending earthenware, and find it most satisfactory. It is a strong cement, easily applied, and generally at hand. Mix only enough to mend one article at a time, as it soon hardens when it cannot be used. Powder a small quantity of the lime, and mix to a paste with the white. Apply quickly to the edges, and place firmly together. It will soon become set and strong, seldom breaking in the same place again.

Iowa. E. A.

News of the Week.

Monday, June 24, 1878.

SHORTLY after 7 o'clock on Thurday morning Congress adjourned, after having twice deferred the day for doing so, on account of the impossibility of passing the numerous necessary bills—chiefly financial—which had been put off to the last moment. This press of business towards the end of each session is invariable, and although it notoriously affords a flagrant opportunity for the undetected passage of private bills of a jobbing character, the lessons of the past are never enough to teach our legislators the advisability of avoiding the necessity for this final rush, by passing the needed bills at an earlier date in the session. The bill for paying to Canada the Fisheries Award of five and a half million dollars was passed by both Houses; that for paying the expenses of the second batch of "visiting statesmen" sent by Hayes to Louisiana, though amounting to only $6,000 was defeated in the Senate, Conkling and Blaine bitterly denouncing the "statesmen" for having brought about the defeat of Packard, whose title to the governorship of that State they claimed to be as valid as that of Hayes to the presidency. Hayes says he will foot the bill, if his hopes that next Congress will pay it, are disappointed. The democratic majority of the House Committee on Naval Affairs claim to have discovered such culpable extravagance in the purchases and sales made by ex-Secretary Robeson, that they recommend the criminal prosecution of that ex-official and of other accused parties. A bill has been passed authorizing the sale of 4 per cent. bonds for legal tender notes, and making the latter receivable for import duties after October the first. Gold has hitherto been required for both these purposes, and the effect of the bill will be to relieve the pressure on the gold market, caused by the large demand for gold for the above purposes, and also to force the United States to purchase about $100,000,000 of gold each year to pay the specie interest on its indebtedness.

After the adjournment of Congress the Louisiana Investigating Committee resumed its sessions, temporarily interrupted by the necessity for the presence of its members at the regular sessions of the House. The Senate Committee to investigate Senator Mathews' connection with the Louisiana frauds, has temporarily collapsed on account of Anderson's refusal to testify unless represented by counsel. As the Senate had adjourned, the committee had no power to punish his refusal, and accordingly adjourned indefinitely. Mathews has, at last, offered to appear before the House Committee. A Captain Jenks—famous, not for ballad notoriety, but as being the husband of Mrs. Jenks—was the first witness examined. He contradicted Anderson's evidence in several particulars, but refused obstinately to remember anything in connection with the celebrated Sherman letter, or the motives of his wife's travels or conduct. The impression conveyed by a perusal of his lengthy evidence, is by no means calculated to beget faith in his veracity. On the following day, Saturday, Mrs. Jenks enlivened the witness-stand, and for five hours both amused and startled her audience. At the end of that time, though fresh and sprightly herself, she had wearied her examiners—Ben. Butler and McMahon—showed Anderson to have all along been her dupe, and exhonorated Secretary Sherman from having had any connection with the famous document known as his letter. That production, she said in substance, was her own, though to avoid the accusation of forgery, she gave it to be understood that she merely dictated it; and palmed it off on Weber and Anderson as the inculpating production of Sherman.

She was commissioned by Weber to take to Sherman the joint note of Anderson and himself asking a written guarantee that both should be taken care of. Not finding that visiting statesman and having opened the letter of the tricksters, she concocted the famous missive, and handed it to Weber as coming from Sherman. Several letters of hers contradicting other parts of her evidence were read without at all disconcerting her, yet these contradictions weaken not a little her entire testimony. A sub-committee of two democrats and one republican, is about to visit Louisiana to take further evidence on the spot, and the main committee will have their hands full at Washington for some time yet.

Elections have just been held in California for members of a convention to frame a new constitution for that State. The workingmen's party, called Kearneyites, after their leader, Kearney, a San Francisco demagogue, has secured a majority in the Assembly, mainly through divisions among their opponents. The regular republicans and democrats put their respective tickets in the field, and a third ticket gotten up mainly by capitalists and called the "No-partisan ticket," drew away a large number of votes from the regular nominees, so that owing to this rivalry, the Kearneyites proved triumphant. War will probably now be made on Chinese immigration. Heavy rains, floods, and great destruction of crops in southern Kansas. Reports of Indian hostilities growing thicker; rumors, probably false, of threatened outbreaks on the western borders of Minnesota and Wisconsin. Col. McKenzie's force has returned to Texas from Mexico, without having met an enemy, but after having greatly exasperated the natives. Tramps are perpetrating outrages and murders in different parts of the country.

HERMAN.

New Advertisements.

Railway Threshing Machine proved itself the "Best at Centennial Trial," and was the only Machine awarded a

CENTENNIAL MEDAL

AND CERTIFICATE OF MERIT,

On both Horse Power and Thresher and Cleaner, at the Centennial Exhibition, as shown by Official Report, which says: "*For special features in the Power to secure light running and minimum friction. For the ingenious form of the Straw Shakers, which insure the proper agitation to separate the grain from the straw.*" For catalogue, address MINARD HARDER, Cobleskill, Schoharie County, N. Y.

TRADE MARK. 'VIBRATOR' Reg. March 31, 1874.

THE ORIGINAL & ONLY GENUINE

"Vibrator" Threshers,

WITH IMPROVED

MOUNTED HORSE POWERS,

And Steam Thresher Engines,

Made only by

NICHOLS, SHEPARD & CO.,

BATTLE CREEK, MICH.

THE Matchless Grain-Saving, Time-Saving, and Money-Saving Threshers of this day and generation. Beyond all Rivalry for Rapid Work, Perfect Cleaning, and for Saving Grain from Wastage.

GRAIN Raisers will not Submit to the enormous wastage of Grain & the inferior work done by the other machines, when once posted on the difference.

THE ENTIRE Threshing Expenses (and often 3 to 5 Times that amount) can be made by the Extra Grain SAVED by these Improved Machines.

NO Revolving Shafts Inside the Separator. Entirely free from Beaters, Pickers, Raddles, and all such time-wasting and grain-wasting complications. Perfectly adapted to all Kinds and Conditions of Grain, Wet or Dry, Long or Short, Headed or Bound.

NOT only Vastly Superior for Wheat, Oats, Barley, Rye, and like Grains, but the ONLY Successful Thresher in Flax, Timothy, Millet, Clover, and like Seeds. Requires no "attachments" or "rebuilding" to change from Grain to Seeds.

MARVELOUS for Simplicity of Parts, using less than one-half the usual Belts and Gears. Makes no Litterings or Scatterings.

FOUR Sizes of Separators Made, ranging from Six to Twelve Horse size, and two styles of Mounted Horse Powers to match.

STEAM Power Threshers a Specialty. A special size Separator made expressly for Steam Power.

OUR Unrivaled Steam Thresher Engines, with Valuable Improvements and Distinctive Features, far beyond any other make or kind.

IN Thorough Workmanship, Elegant Finish, Perfection of Parts, Completeness of Equipment, etc., our "VIBRATOR" Thresher Outfits are Incomparable.

FOR Particulars, call on our Dealers or write to us for Illustrated Circular, which we mail free.

The Rectangular Churn

Simple, efficient and *always reliable*. No inside fixtures. Fifty per cent. in labor saved over *any other churn*. Five sizes made. Twenty Thousand in actual use, and indorsed by leading Dairymen in every State. *Cheap*, and warranted to be exactly as represented.

CORNISH & CURTIS, Fort Atkinson, Wisconsin, U. S. A.

RALPH'S ONEIDA CHEESE VAT.

For Single Dairies and Small Factories. Send for Circular and full description to

JONES, FAULKNER & CO., Sole Manufacturers, Utica, N. Y.,

Dealers in Dairy Supplies and Furnishing Goods. Also, Manufacturers of Steam Boilers and Engines and STEAM DAIRY APPARATUS, for Cheese Factories and Creameries.

HIGH-CLASS POULTRY.

Send for New Practical, Valuable Circular.

GEO. S. JOSSELYN, Fredonia, N. Y.

HOG CHOLERA.

For Fifty Cents I will send a receipt to prevent or cure. JNO. CLARK, 214 W. 4th St., Cincinnati, O.

I WILL SELL TO SUBSCRIBERS OF the RURAL, Victoria pigs for $5, pairs $9, boxed and delivered at Schenectady, N. Y. The Victorias are a new white breed and not excelled.

F. D. CURTIS.

Kirby Homestead, Charlton, Saratoga Co., N. Y.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 22, 1878.

BEANS AND PEAS.—In beans there is neither local nor export demand of moment. Abundant summer produce diminishes the former trade, and there is nothing to stimulate wholesale transactions in the latter. The totals noted for export during the past fortnight do not include much new business. Quotations for all standard sorts are extreme, and during the week buyers have been favored in quality when paying even the under rates. Canadian field peas in bulk and bond quiet at 78½c. Green peas have a fair call for warm weather at $1.05@1.10. Southern B.E. per 2 bush. bag, $3@3.25.

We quote medium beans, prime, $1 87½@1 90; fair to good, $1 35@1 50; marrows, prime, free on board ship, $1 57½; fair to good, $1 40@1 50; Pea, $1 40@1 65; white kidney, $1 40@1 60; red do., $2 50@2 90; black, $2 35@2 40; Lima, $3.75@4.25.

Receipts of beans past week, 6,428 bush. Exports of beans, 107 bbls. Exports of peas, 1,700 bush.

BEESWAX.—There is only a trading in small lots, at from 26½@27½c. for Western and Southern.

BROOM CORN.—The dealings are limited to small lots. Quoted at 6@7c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red-tipped, per lb.

BUTTER.—There are no new features; sellers sole aim has been to keep down the supplies, they have allowed prices to take care of themselves. This system, of course, has not tended to improve quotations. Still, stock has been kept moving, and dealers are gratified with gaining such a point against the very free deliveries of this prolific season. We are glad to see Orange Co. pails and fine river do. rallying to something of their old-time firmness, as it reminds one of the prosperous days when boatmen *would* have their say. Creameries have been for a long time formidably antagonistic to the fine, rich churn product of Orange Co., Sussex Co. and other dairy points near this city. But now, since State and Western creamery are down to prices that let exporters in, barge captains begin to see the faces of old local customers more frequently. Western cheap table grades have not had a steady movement. Fine dairy packages have led the market demand. Milled stock and some factory have frequently turned out so poor of late, that much of the offering is condemned. Some of these lots are needlessly pushed aside, but, as we have before intimated, with a high standard of State, and the low scale of prices, it is difficult to entice buyers to other parcels that require much investigation, or whose cheapness seems to imply risk of quality.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 17@19c.; other, 12@15c.; Welsh tubs, best, 16@17c.; other, 12@16c.; poor State, 6@8c.; State firkins, 15@17c.; Western creamery, choice, 19@20c.; other, 16@18c.; Western dairy, best, 12@14c.; other, 9@10c.; factory (ladle packed), 10@11c.; other, 9@10c.; milled Western, 5@9c.; old and grease, 3½@5c.

Receipts for the week, 30,652 pkgs.; exports past week, 8,274 do.

CHEESE—The choice colored factories have held well up this week. Sales not deviating from the basis of 8¾ established early in the week, but there has been an excess of white stock, which, after opening fairly steady, was salable only at yielding figures. The latest prices for these are 8 for fancy, and 7¾@7¾ for very good and prime lots. The arrivals have been very large, and with the warm weather the position has been thrown in the buyers favor. Shippers have taken liberal quantities, and the assortments of the upper grades are pretty well cleared out.

Latest prices for factories are: Fancy, 8@8¾c.; 7½@8c. for good and prime; 6½@7c. for fair; 4½@6¼c. for half skimmed; 2@3½c. for skimmed. State, farm dairy at 6¾@7¾c. for good to choice, 5@6½c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¾@8¼c.; do. good to prime, 7@7¾c.; do. fair, to good, 6¾@6¾c.; Western factory, fine, full cream, cheddar, 7¾@7¾c.; do. fine, full cream, flat, 7@7¾c; do. slightly skimmed, flat, 5½@6¾c.; do. half skimmed, 4@5¾c.; do. full skimmed, 2¼@3¼c.

Receipts for the week, 120,300 boxes.
Exports, past week 121,907 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 45s. 6d.

COTTON.—There has been a good, strong market most of the week. Latest prices are: 11.50@11.51c., for June; 11 51@11.52c., for July; 11.53@11.54c., for August; 11.21c. for September.; 11.02@11.03c., for October; 10.89@10 90c., for November; 10 89@10.90c. for December; 10.93@10.95c. for January; 11 01@11.03c. for February; 11.00@11.13c. for March; 11.20@11.22c. for April; and 11.23@11.30c. for May.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala. Orleans*	*Texas.*
Ordinary	9 9-16	9 9-16	9 11-16
Strict ordinary	9 13-16	9 15-16	10 1-16
Good ordinary	10 7-16	10 7-16	10 9-16
Strict good do	10 13-16	10 13-16	10 15-16
Low middling	11 1-16	11 1-16	11 3-16
Strict low middling	11¼	11¼	11¾
Middling	11 7-16	11 7-16	11 9-16
Good middling	11⅝	11⅝	12
Strict good middling	12 3-16	12 3-16	12 5-16
Middling fair	12 11-16	12 11-16	12 13-16
Fair	13 7-16	13 7-16	13 9-16

Stained.

Good ordinary..9 7-16c.; Strict good ordinary.10 7-16c.
Low middling..9 15-16c.; Middling .....11 5-16c.

DRIED FRUITS.—Nothing new transpires in this connection. The lull in trade is incident to this season of the year when fresh fruits are plenty. Low prices do not help matters at all; apples especially depressed.

Peaches—Fancy North Carolina 10@11c.; Choice Georgia, 10c.; good to prime Georgia; 8@9c.; evaporated, 25@28c.; unpeeled halves, 3¾@4½c.; quarters, 3¾@4c.; unpeeled evaporated, 7½@8c. Pitted cherries, choice new, 19@20c.; Raspberries, 26c. New York State plums, 11c.; Southern plums, 9@10c. Blackberries at 10½c. Apples—State quarters, 4@4¾c.; do sliced, prime, 4½@5c.; good, 4@4½c.; Western quarters, 3@3¾c.; Southern at 4½@5c. for prime sliced; 3¾@4½c. for fair to good; Southern quarters, 3@3¾c.; Tennessee quarters, in bags, at 2½@3.

EGGS.—Receipts for the week, 10,156 bbls.; do last week, 8,310 do. The market has lost some of its hardiness in prices, but sellers do not apprehend a severe decline, as the weather has turned favorable for increased sales. Few near points arrive.

Near points, 16@17c.; State and Penn., 15@16½c.; choice Western and Canadian, 14@16c.; a few off quality lots, 13@13½c. Sales all loss off.

FRESH FRUITS.—We seldom report so extended a list at this date of June. Strawberries have a fair sale, but they lose some trade through the mixed purchasers of the period. New Jerseys are out, but the river counties and convenient interior railroad points furnish an ample supply. Up River 3d, quarts, 3@4c.; Oswego and Oneida, 8@11c. Southern peaches are in good supply. Some crates are extra in quality, and another long season of choice fruit is promised by the enterprise of Southern growers. Choice Geo., bush., $4@5; other, 2@2.50; S. C., $1.75@2.50, Choice N. C., $3@4; other, $1.50@2. State cherries are abundant, and the short neighboring crop is not felt commercially. Fancy, 10@11c.; fair 10 prime, 5@9c.; sour, 8@10c. Watermelons are in large supply, but very much in advance of the demand. $20@30 per 100.

FLOUR.—There have been pretty full supplies and not much activity, with prices easier and closing weak.

Latest prices are $3.15@3.90 for very inferior to very choice superfine State; $4.00@4.30 for very poor to very good extra do. odd lots and lines; $4.30@4.65 for good to fancy do.; $3.25@3.85 for very poor to very choice superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.35 for inferior to very good shipping extra do. and $4 30@4.65 for very good to very choice extra do.; common to about choice white wheat extras, $4.40@5.50; choice to very fancy do. at $5.60@6.75; red and amber winter wheat, inferior to very choice trade and family at $4.35@5.85; round hoop Ohio at $4.10@4.10, and trade and family brands of do. at $4.50@$5.85, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.35@5.15 for very poor to good extra, and $5.15@6.50 for good to very choice, with a few brands of fancy quality quoted up to $6.75@7.00; Minnesota clear, very in-

ferior to very choice at $4.25@5.75; Minnesota "straight," inferior to fancy, at $5.25@6.50, and patent poor to fancy at $5.50@8.00; unsound stock at from $2.00@5.00; city mill extra at $5 20@5.45 for fair to fancy for West Indies; do. for England, $4.10@4.25; do. trade and family extras, $6.00@7.25; do. for South America, $5.60@6.25 for fair to choice; No. 2 $2.15@3.00 for inferior to very fancy.

CORN MEAL.—Is selling at $2.30 for Brandywine, and $2 15@2.35 for Western yellow.

GRAIN.—The receipts here have been very small and the movement at the lake ports light, but from most sections comes good reports in regard to the crops, and prices have been in consequence declining.

Latest sales of wheat are of ungraded white western at $1.18; white State at $1.21½; extra white, at $1.24; No. 2 red at $1.14; ungraded red at $1.11 to $1.14; rejected red a. 9ic.; No. 1 Minnesota spring at $1.11; No. 2 spring at $1.06@1.07½; No. 2 red, June option, at $1.14¼; New York No. 2 spring, June option, at $1.07; do., July option, at $1.01½, and No. 2 northwest spring, June option, at $1.07½. Rye at 63½@64½c. for western. Corn at for No. 2, June option, at 44¾@45c.; do. July option, at 45¾c.; do., August option, at 47¾@47½c.; steamer mixed, June option, at 42½@42½c.; do., July option, at 43¾@43½c.; do., August option, at 45½c.; spot lots were New York No. 2 at 44¾@45½c.; mainly at 45c.; New York No. 3 at 41@41½c.; New York steamer mixed at 42@43c., the latter for choice New York No. 3 white at 5?c.; ungraded mixed western at 41@45½c.; round yellow at 52c.; Kansas mixed at 45@45½c., and yellow western at 45½c. Oats at for New York No. 1 white at 37c.; New York No. 2 white at 33½@33½c.; New York No. 3 white at 33½c.; New York No. 1 at 30½c.; do., August delivery, at 32c.; New York No. 2 at 31@31½c.; white western at 33@33½c.; No. 2 Chicago at 31½c.; white State at 32½@33c.; mixed State at 31@32c.; New York extra white quoted at 38c.; New York extra at 32½c.; New York No. 3 at 30@30½c.; No. 2 Milwaukee at 31½c.

HAY AND STRAW.—There are abundant supplies, and although low prices prevail for the lower grades especially, it is difficult to move them to any extent. Baled hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 35@40c. for short rye; and 30@35c. for oat.

HOPS.—Crop reports have been a little more favorable the last day or two with the warm weather. The damage that has resulted by the unfavorable weather this spring is, from all late reports, even more serious than was thought possible. An advance has been made this week and the market closed strong. Shipments for the week have been only 208 bales. Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—Hemlock sole at 19@20c. for light; 19@21c. for middle; 20@21c. for heavy, and 17½@19c. for good damaged.

OIL-CAKE.—Western is offered lower, quoted at $29 00@30 00 per ton.

POULTRY AND GAME.—Live fowl and chickens lower.

Fowls.—New Jersey or Choice, 10@11c; Southern and Western, 9c.; Roosters, 5c.; Turkeys, 8@10c; Ducks, Choice, 62@75c. pair, other, 40@55c.; Geese, N. J., $1.25@1.50; other, $1.00@$1.12.

Dressed poultry, quoted nominally for country packed as follows: Dry picked Phila., 12@14c.; other fair to prime, including N. J., 10@13c.; Spring Chickens, Phila., 20@24c.; Western, 16@18c.; N. J., 18@20c.; Phila. fowls, 13@14c.; other 10@12c.

Game has no rates except for p'geons; quoted, stall-fed, $1.25@1.50 doz.; flight, 93c.@1.00 doz.; Western Squab, 70@75c. Tame do., $1.75@2.

PROVISIONS have tended higher with a liberal demand. Mess pork quoted $10 25@10 50 for spot; $10 25 for July and August, and $10 40 for September. Bacon at 5¾c. for long clear and 6 and 6¼c. for short clear. Lard—Western steam at 7 25 for spot, June and July, 7 32½; for August, and September at 7 40. Steurine at 7¾ for prime Western. Tallow at 7 for prime. Beef hams at $21@22 50 for old and new. Beef—For extra mess, $11 75@12; plain mess, $10@11 50; punket, $12@13 for bbls.; extra India mess, $19@21 for city brands; do. Philadelphia, $18.50@$19.

RICE.—Sales at 6 ¾@6¾c., for Carolina fair up to 7¾c. for choice.

SUGAR.—Refined at 9¼c. for cut loaf; 9¾c. for crushed; 9¾@9¾c. for powdered; 8½@9c. for soft white; 7¾@8c. for soft yellow, and 9¾@9¾c. for granulated.

SALT.—Ashton's at $2 50; and $1 05@1 25 for other brands, with Liverpool ground at 60@65c.

VEGETABLES.—Old potatoes have no market and sellers are offering low. New are of good grade, cheap and abundant. Old range 75c.@$1.12 for best, 50@75c. for common. Bermudas also lower, $2.50@3 bbl.; new good to best, $1.50@2 the extreme for L. I. Green peas, marrow, L. I. 2 bush. bag, 80c@$1; small, 60@75c. N. J. bbl., $1.50. String beans, $2.50@3.50. Southern Cucumbers, crate, $1.50@2 50. Squash, half bbl., $1@1.25; Cabbage, per hundred, $4@6. Cauliflower, bbl., $2@$4; Asparagus, doz., Oyster Bay, $1.50@1.75; lower N. J., 75c.@1.00. Radishes, per 100 bunches, 40@50c.; Beets, do., $1.50@2; Rhubarb, do., $3@1; Lettuce, bbl., 25@50c.; Turnips, 100 bunches, $2@4; do., bbl., $1.50@2; Carrots, 100 bun. $1.50. New Orleans Onions, $2@2.25 per bbl. Bermuda Onions, crate, 60@70c.

WOOL.—New fleeces are now coming in from all parts, but as yet demand is not vigorous; XX Ohio fleeces new, it is supposed, will open at about 35c.

Ohio, Pennsylvania and Virginia quoted at 35@37c., for XX, 34@37 for X; XXX and picklock, nominal; 36@38 for No. 1, 33@35, for No. 2, 30@32 for common, and 38@42 for combing.

New York, Michigan, Indiana and Wisconsin. XX, 30@34c.; X, 32@35c.; No. 1, 34@37c.; No. 2, 30@33c; common 27@30.; combing 36@40.

Iowa, Vermont and Illinois X and XX, 30@33c.; No. 1, 32@35.; No. 2, 28@30.; combing, 35@38.

Missouri, Kentucky, and Tennessee—Washed fleece, 33@35c.; unwashed, 20@26c.: unwashed combing, 28@32c.

Tub-Washed.—Choice, 33@38; fair, 28@34; inferior and burry, 23@28.

Pulled Wool.—New York City extra pulled, 30@33; New York City super pulled, 32@36; New York City lambs pulled, 30@35; Western super and extra, 27@34; country extra pulled, 30@34; country super pulled, 33@37; country lambs pulled, 28@34.

LIVE STOCK MARKETS.

Saturday, June 22d, 1878.

BEEVES.—Receipts for the week, 11,945 head: do., last week, 11,041 do. It has been a blue week for sellers and owners. Cattle have been high-bought in the west in the basis of our recent buoyant markets; but there has been no day this week that has offered the later first costs. Since Wednesday evening the comparatively high decline has prevented many dealers from coming out whole and others report a loss of more than freight expenses. The cause of the weakness here is through a lull in the export demand, while warmer weather has decreased butchers' wants for consumption. The extreme price at the close was 10@10¾ for really extra stock, and those rates were only paid by exporters. The range for steers was 7¾@9¾c., including Cherokee and Texas at 7¾@8¾c. Still-fed stags and bulls, live weight, 2¾@3½c.

COWS AND CALVES.—Poor stock that struggles in takes a chance sale, and in the present silent condition of the market it would be risky to send fine milkers.

SHEEP AND LAMBS.—Receipts for the week 22,406 head; receipts last week 24,522 head. There is a fair demand for sheep. Lambs are native and higher. Sheep, poor to best, 3@4¾c.; including a carload of Texas, 3¾c. West and Southern lambs, 5¼@6¾c.; Near points, 7¾@7¾c.

VEAL CALVES.—Receipts for the week 4,420 head; do., last week, 4,093 do. Choice milk calves have had a steady good demand. N. J., 6@6½c.; State, 5½@6c. Buttermilk has been abundant and hard to dispose of at 2¾@4¾c.; fair qualities of fed calves 4@5¼.

SWINE.—Receips for the week 27,033 head; do. last week 27,581 do. A closing sale of Ohio was made at $4.15 per 100. Market steady.

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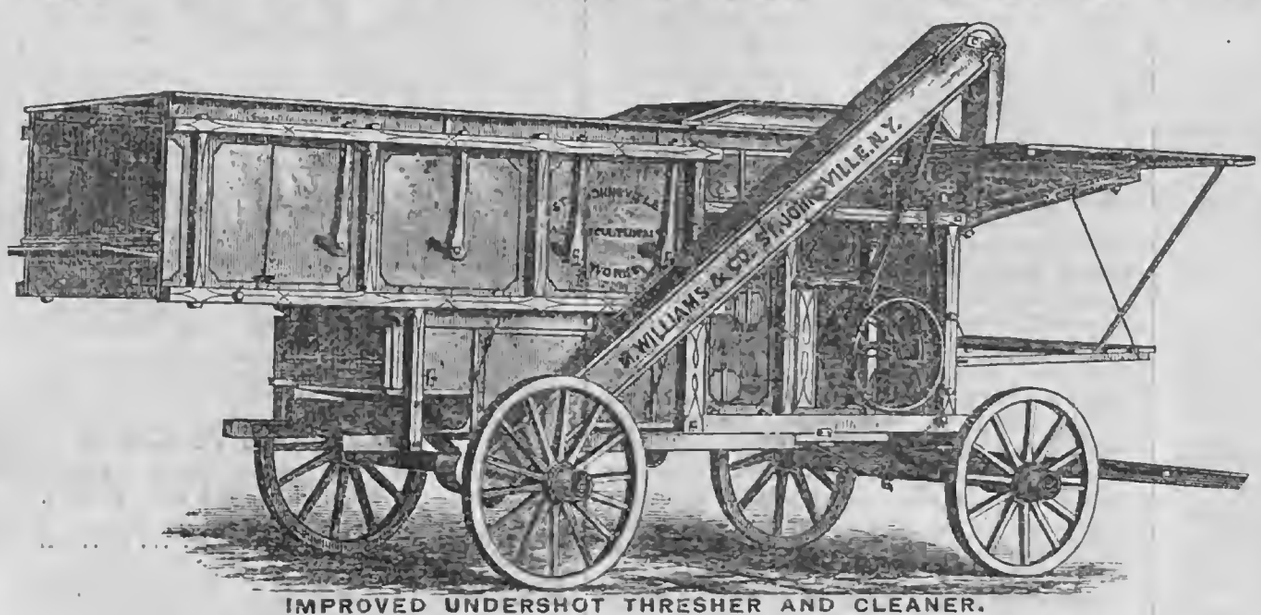

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Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 8.

M. B. PRINCE.

In devising ways for the boys and girls to earn a supply of pocket-money, the parents should encourage each in that direction to which his or her natural tastes and inclinations seem to lead. In a family of ten there may be no two who take a particular interest in any one branch of farm operations: one will prefer the care of the poultry, another of bees, and so on with all the different kinds of stock, garden crops, &c. Whatever it is, so that it be proper and properly attended to, let each one follow his bent, and let none be left out,—even the little toddler should have a pair of Bantams to call his own.

It were well if the poultry could be entirely given up to the ownership of the youngsters, allowing them to pay for the feed required, in meat and eggs for family use.

Bees, as requiring but little capital, afford a source of profit, and, if closely observed, an endless amount of information and recreation. Where they can be had to work on shares, a few hives and honey-boxes will be all that will be required for a start. The usual terms are to return to the owner at the year's end the old stock, and one-half the increase.

Grafting and budding can soon be learned by any bright boy; and more or less employment may be had in any neighborhood. There is one thing often forgotten, that is, if the raw material is not salable on account of an over supply or other cause, it can be manufactured on the farm, and the girls may very properly assist in or even do all the subsequent business, after the boys grow the crop. The writer once knew a brother and sister who made a snug little sum from the manufacture of tomato catsup late in the season, when the price for fresh fruit was too low to pay. As a rule, farmers can hardly afford to manufacture for their own use, much less for sale, in competition with the great manufacturers. Nevertheless, there are many things that will go to waste unless utilized in that way; and the young people are just the ones to take hold and secure the benefits, not only as a pecuniary matter, but as a lesson in economy; also, when anything of the kind is attempted, all the information to be had to the point will be searched out, and thus useful knowledge will be stored up for future use.

CONCERNING SPIDERS.

BY J. H. EMERTON.

Every young reader of the Rural has noticed the round, regularly-formed spider-webs which often adorn the corners of fences, and the windows of neglected dwellings; but few, perhaps, have had time or patience to watch the skillful manner in which they are constructed, or to examine the apparatus by which the spider spins the thread out of her own body.

To illustrate the habits and structure of these spiders, we will select one common species as a representative of the whole group, and confine our observations to it. This species, the *Epeira vulgaris*, seems to be common all over the United States. It is seldom found in the woods and fields, but lives in great numbers on garden fences and trellises, in barns, and on the framework of bridges, the structure of which affords numerous crevices for concealment. When fully grown it is half an inch in length, and its feet, when extended, will cover a circle an inch and a half in diameter.

In sheltered places they spend most of the time in their webs waiting for prey, while in situations exposed to the sun they watch only in the night. During the day, and in stormy weather, they remain concealed in some crack or corner, near which, for convenience, the web is always placed. In such retreats they also pass the winter without food, and only covered by a thin web of their own spinning. Like other spiders, they are furnished with poisonous jaws, which they attempt to use when disturbed, but as they can only bite what comes directly between their jaws, they may be handled without fear. There are but few cases on record of a spider biting the human skin. Their timid nature leads them to avoid danger rather than resist it, and the common suspicion with which they are regarded has no foundation, except a want of acquaintance with their habits.

If we take a spider of the kind just described and turn it under-side up, we shall at once notice that the body consists of two nearly equal parts, connected by a slender waist. The front part gives origin to the organs of sense and motion, while the hinder part contains the principal internal organs. The most conspicuous appendages of the body are the four pairs of legs. Immediately in front of these is another smaller pair, the first joints of which are flattened, so that they may be used as jaws, or lips, for squeezing the food. Next in front is a pair of stout jaws, each of which is furnished with a sharp claw at the end. This claw is hollow, and is pierced with a minute hole near the point. When the spider bites, a drop of poison is discharged through this orifice from a gland in the head. This quickly kills insects, and causes inflammation of the bitten part in larger animals. On the front of the head are the eight eyes, four near together in the center, and a pair on each side.

The feet of the spiders are wonderfully adapted for walking on the web. Each foot is furnished with three claws, the middle one of which is bent over at the end, forming a long finger for clinging to the web, or for guiding the thread in spinning.

The outer claws are curved and toothed like a comb. Opposite the claws are several stiff hairs which are toothed like claws, and serve as a thumb for the latter to shut against.

The spinning organs are three pairs of fleshy appendages situated at the posterior end of the body. When not in use they are folded in towards each other, the third pair covering the second. The end of each of these spinners is covered with minute-jointed tubes. Inside the spider, and connected with the spinners are several bunches of glands, which secrete a liquid like the white of an egg. To form the thread this liquid is drawn through the tubes, which divide it into such small fibers that it dries almost immediately on coming in contact with the air. The spider has the power of uniting these fibers into one or several threads, according to the purpose for which they are to be used. The thread commonly used for the web is composed of hundreds of simple fibers, each spun through a separate tube. As the thread runs from the body, it is guided by the hind feet, which hold it off from contact with surrounding objects, until the desired point is reached, when a touch of the spinners fastens it securely.

When a spider wishes to build a web she usually selects a corner, so that the structure may be attached on several sides. She then runs a few threads along the objects to which the web is to be fastened, to facilitate her passage from point to point. The web is commenced by a line or two across the point where the center is to be, which is not usually the geometric center, but nearer the top than the bottom. Radiating lines are then spun from the center in all directions.

Having finished the framework, the spider begins near the center and spins a thread spirally, around the web to the circumference, fastening it to each radius as it crosses. The distance between the spirals varies with the size of the spiders, being about as far as they can reach. This spiral thread serves to keep the parts of the web in place during the rest of the process, and is removed as fast as the web is finished. It also furnishes a ready means of crossing from one radius to another where they are farthest apart. All the thread spun up to this stage of the process is smooth when dry, and will not adhere if touched with a smooth object.

The spider having thus formed the web, begins to put in the final circles at the outside, walking around on the scaffolding previously prepared, which she gradually destroys as she proceeds: until in the finished web only a few turns in the center are left. The thread of the circles last spun is covered with viscid globules, strung upon it like beads at short distances. If an insect comes in contact with the thread, it immediately adheres, and its struggles only bring a larger part of its body into contact with the web. Dust and seeds also stick to the web, so that in a single day it is often so clogged as to be of no farther use. The web also becomes torn by the struggles of the prey, and by wind and rain, so that it requires repair or renewal every night. In mending the web the spider usually removes all except the outside threads, biting them off and rolling them into a hard ball between her jaws, so that when released it will drop quickly to the ground. This probably gave rise to the opinion, sometimes advanced, that the old web is eaten by the spider.

When the web is finished she stations herself in the center, where a small circle is left free of the adhesive threads. Her usual position is head downward, with each foot on one of the radii of the web, and the spinners ready to fasten themselves by a thread at the least alarm. She often remains in her hole with one foot out, and resting on a tight thread connected with the center of the web, so that any vibration is quickly detected. If the web be gently touched the spider will rush into the center, and face towards the disturbed part. She will then jerk smartly several of the radii leading in that direction, to see if the intruder is a living animal. If this test is followed by the expected struggle she runs out towards the victim, stepping as little as possible on the adhesive threads, seizes it in her jaws, and as soon as it begins to feel the effects of the bite, envelopes it into a silken covering, and hangs it up to suck at her leisure. In spinning this envelope the insect is held and turned around mainly by the short third pair of feet, while a flat band of threads is drawn from the spinners by the hind pair working alternately like the hands in pulling a rope, and wound over it in every direction, so that in a few seconds it is so covered as to be unable to move a limb. When a web is shaken by the wind, the spider will sometimes draw in all her feet toward her body, thereby tightening the web in every direction so that the vibration is prevented.

The contruction of nets for catching food is not the only use of the thread made by these spiders. They seldom move from place to place without spinning a line after them as they go. They are able by its use to drop safely from any hight, and when suspended by it are carried by the wind across wide spaces without any exertion on their part, except to let out the thread. The crevices in which they pass the winter, and the leisure hours of summer, are partly lined and enclosed by a coating of silk resembling that used for confining captured insects. The eggs are enclosed in a cocoon of the same material, and there the young remain until they are strong enough to shift for themselves, growing to nearly double their size without apparent nourishment.

Several hundred young are produced by a single female, but probably it is seldom that one-tenth of this number ever reach adult size. Nearly all the spiders which we see in webs are females, or young. They spend most of their time in the vicinity of their webs, and many, doubtless, pass their lives within a few yards of the places of their birth. The adult males are seldom seen building or occupying webs: they remain concealed during the day, and at night wander about from web to web.

When the time for the final molt arrives, both sexes retire to their holes and cast off the skins of their entire bodies, even to the claws. This process obliges them to remain concealed until the new skin has acquired sufficient strength and firmness, when they again return to their webs. The females of some species of spiders are said to devour the males whenever opportunity offers, but I have never noticed that habit in this species, though I have often seen a female charge upon an intruding male, and chase him from her web.

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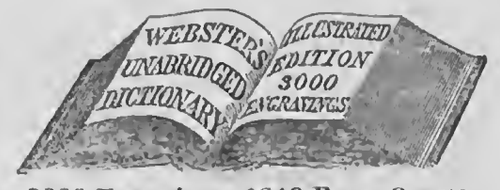

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Thomas Winans, the Baltimore millionaire, who died near Newport last week, was a railroad contractor for the Russian Government from which he has received heavy royalties. He was also the inventor of the Winans cigar-shaped boat, and is said to have been worth $25,000,000.

As no concealment is made or attempted as to the pay of British Embassadors, we can give some of the amounts. In Paris, Lord Lyons receives $50,000 per annum; in Constantinople, Mr. Layard receives $40,000 a year; Lord Augustus Loftus, at St. Petersburg, receives $30,000; at Vienna, Sir Henry Elliot has $40,000: at Berlin, Lord Odo Russell has $35,000, in Brussels, Mr. Lumley has $19,400; at Rio de Janeiro, Buckley Mathews receives $20,000; in Pekin, Sir Thomas Wade has $30,000; in Copenhagen, Sir Charles Wyke has $18,000; in Rome, Sir A. B. Paget has $35,000; in Japan, Sir Harry Parkes has $20,000; in Holland, W. Stuart has $18,000; in Persia, W. T. Thompson has $25,000; in Portugal, Mr. Morier has $30,000; in Washington, Sir Edward Thornton has $30,000. In each instance the above are annual payments, and where the embassy has not a mansion of its own in the capital where it is located, a liberal allowance is made for rent.

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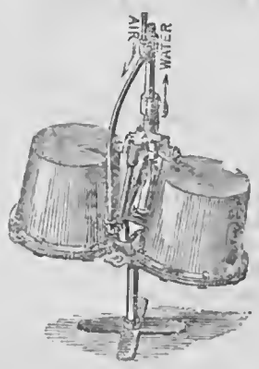

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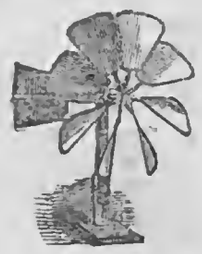

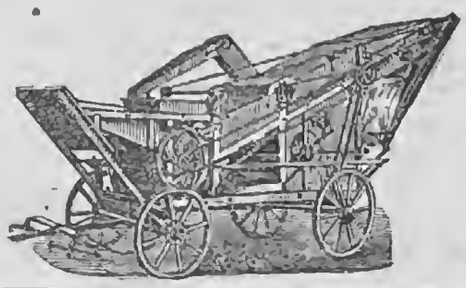

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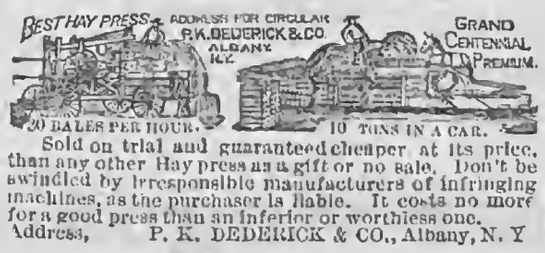

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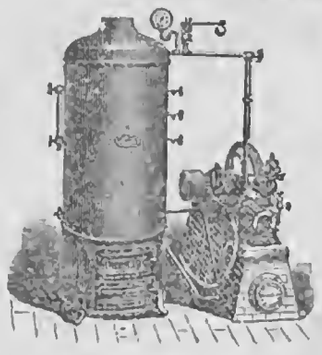

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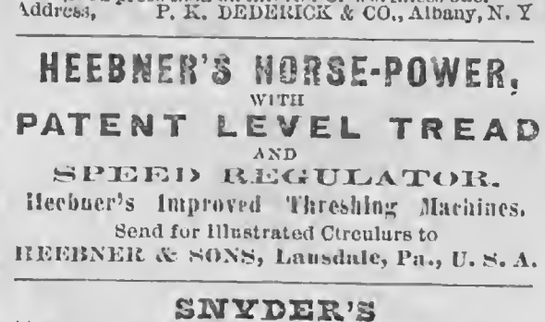

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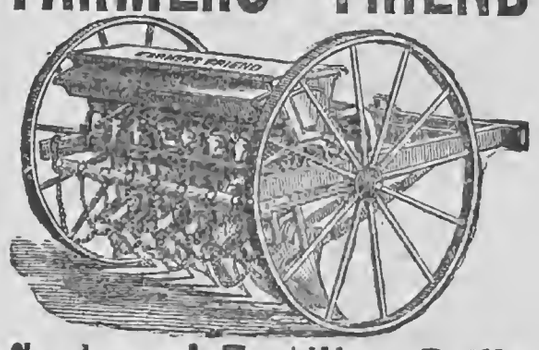

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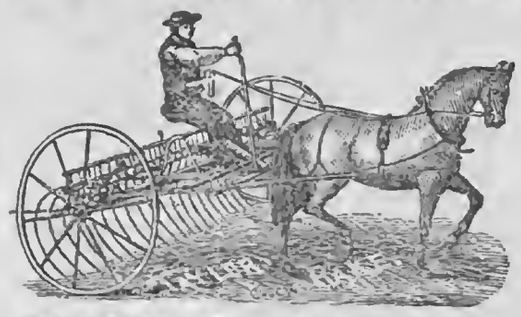

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Export orders solicited.

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Can never, never knit their browse.
[*New Jersey Republican.*

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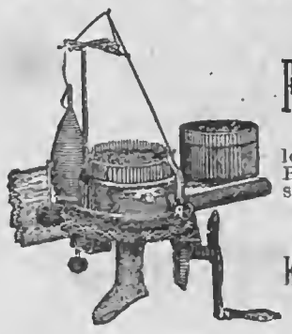

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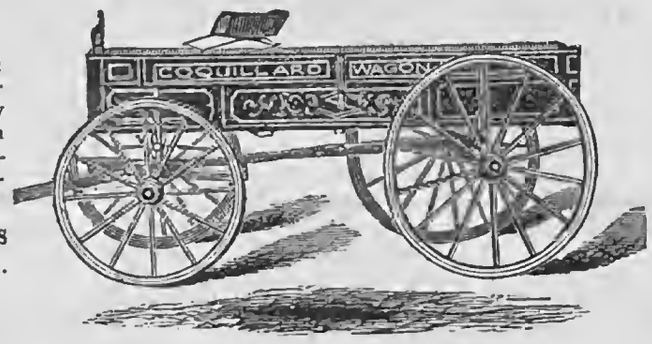

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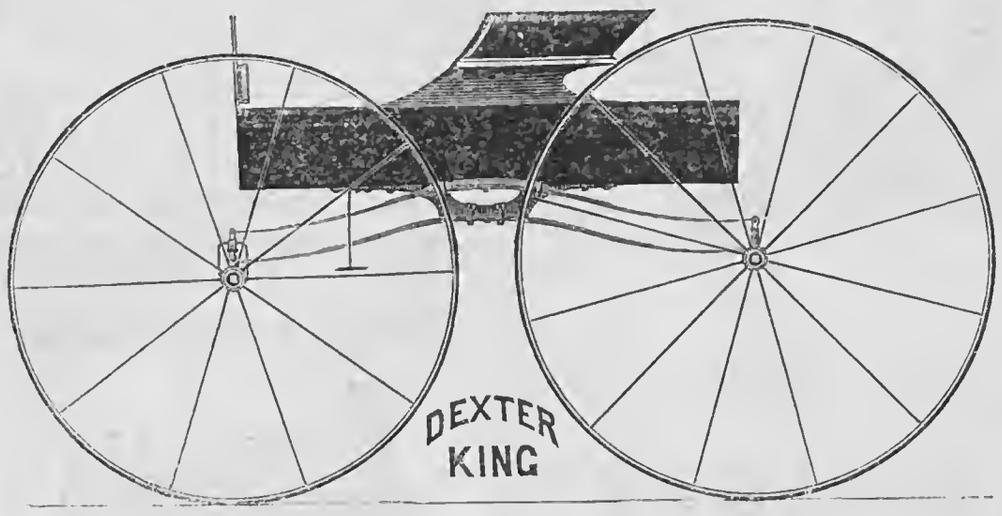

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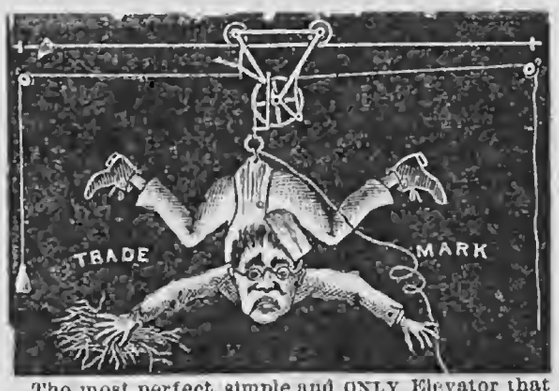

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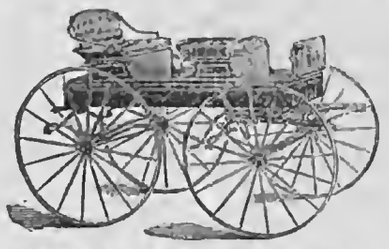

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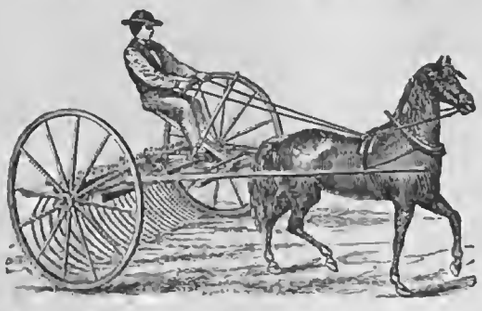

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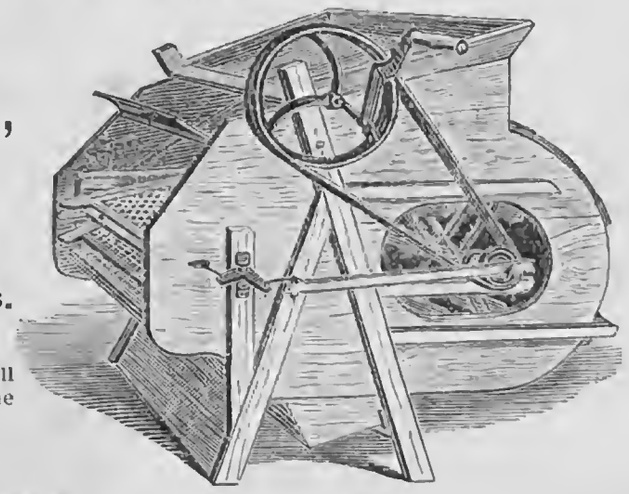

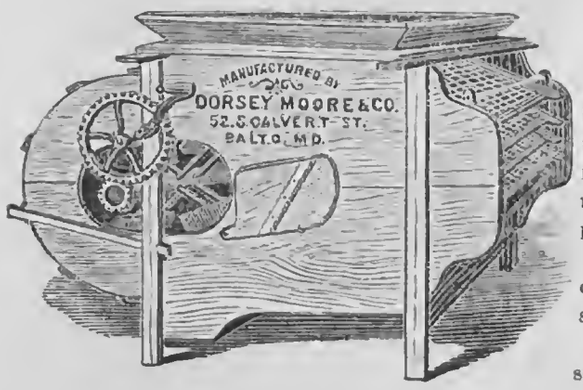

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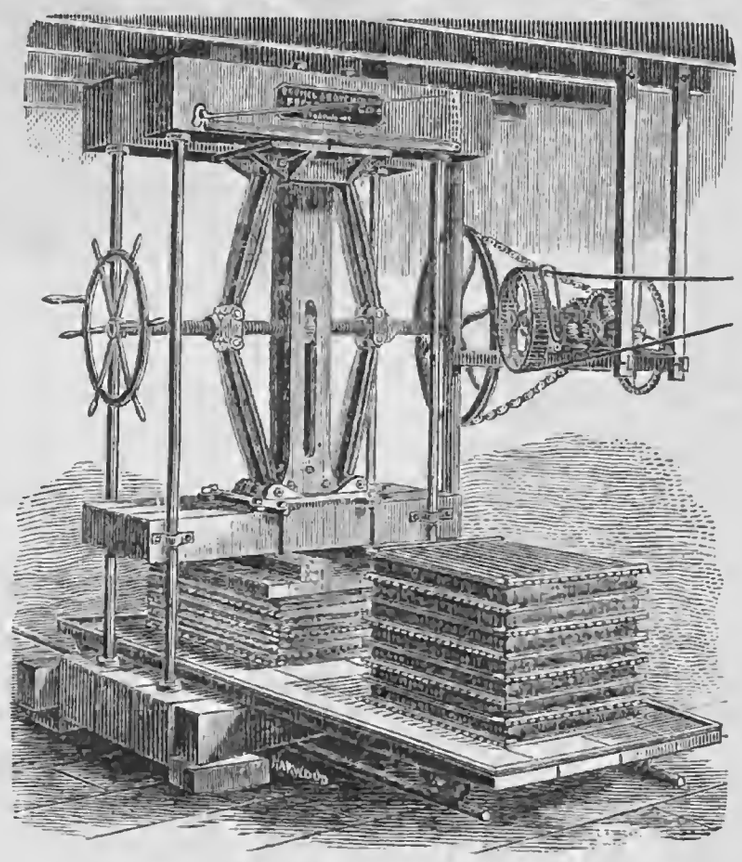

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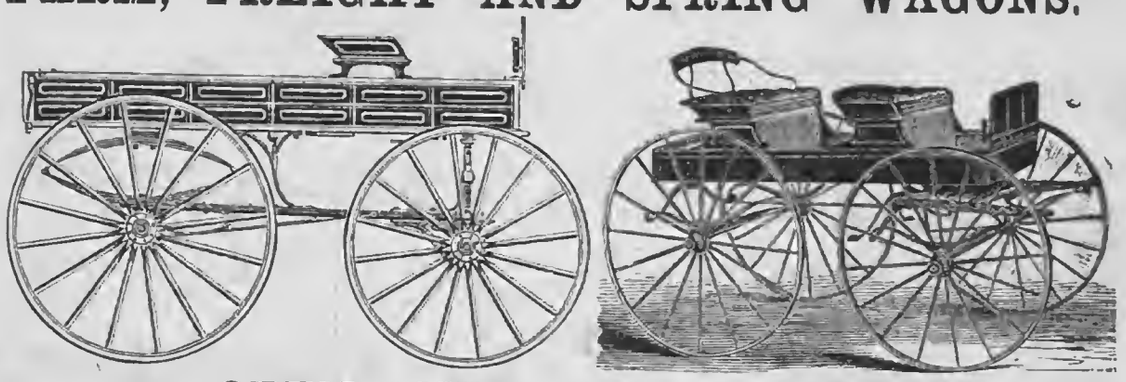

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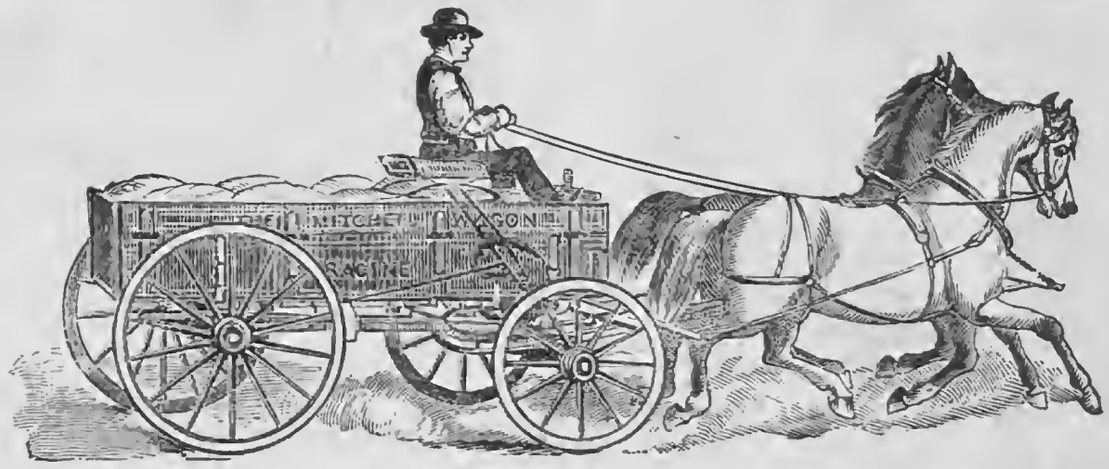

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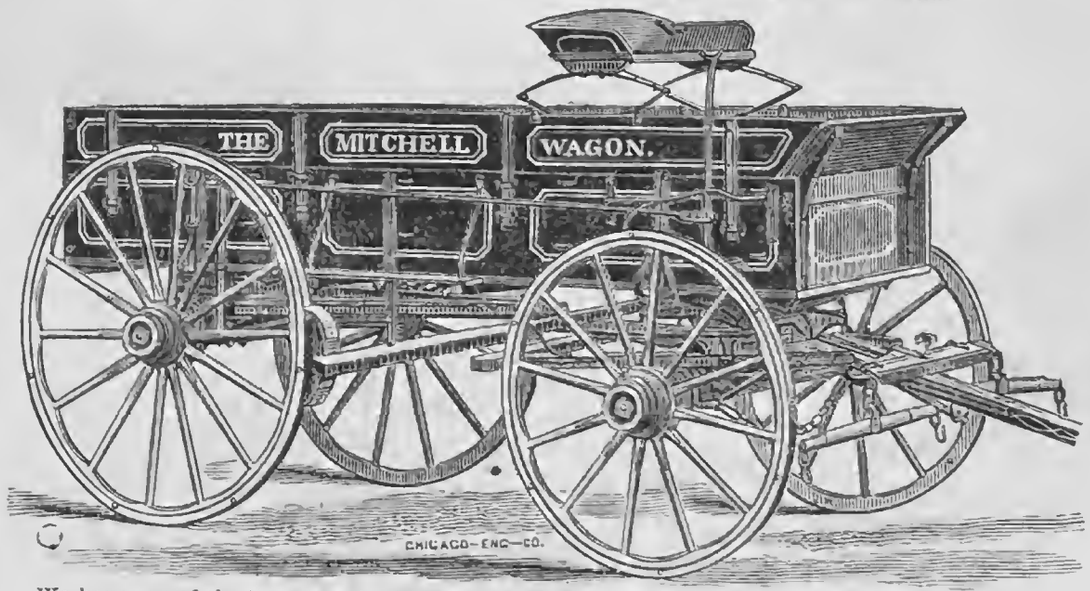

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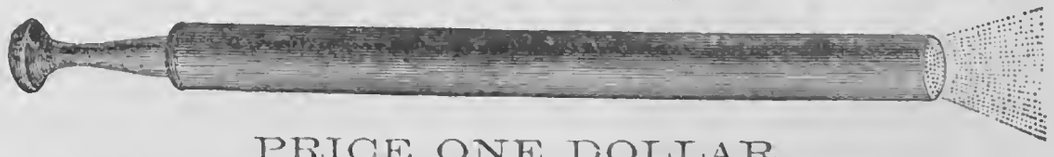

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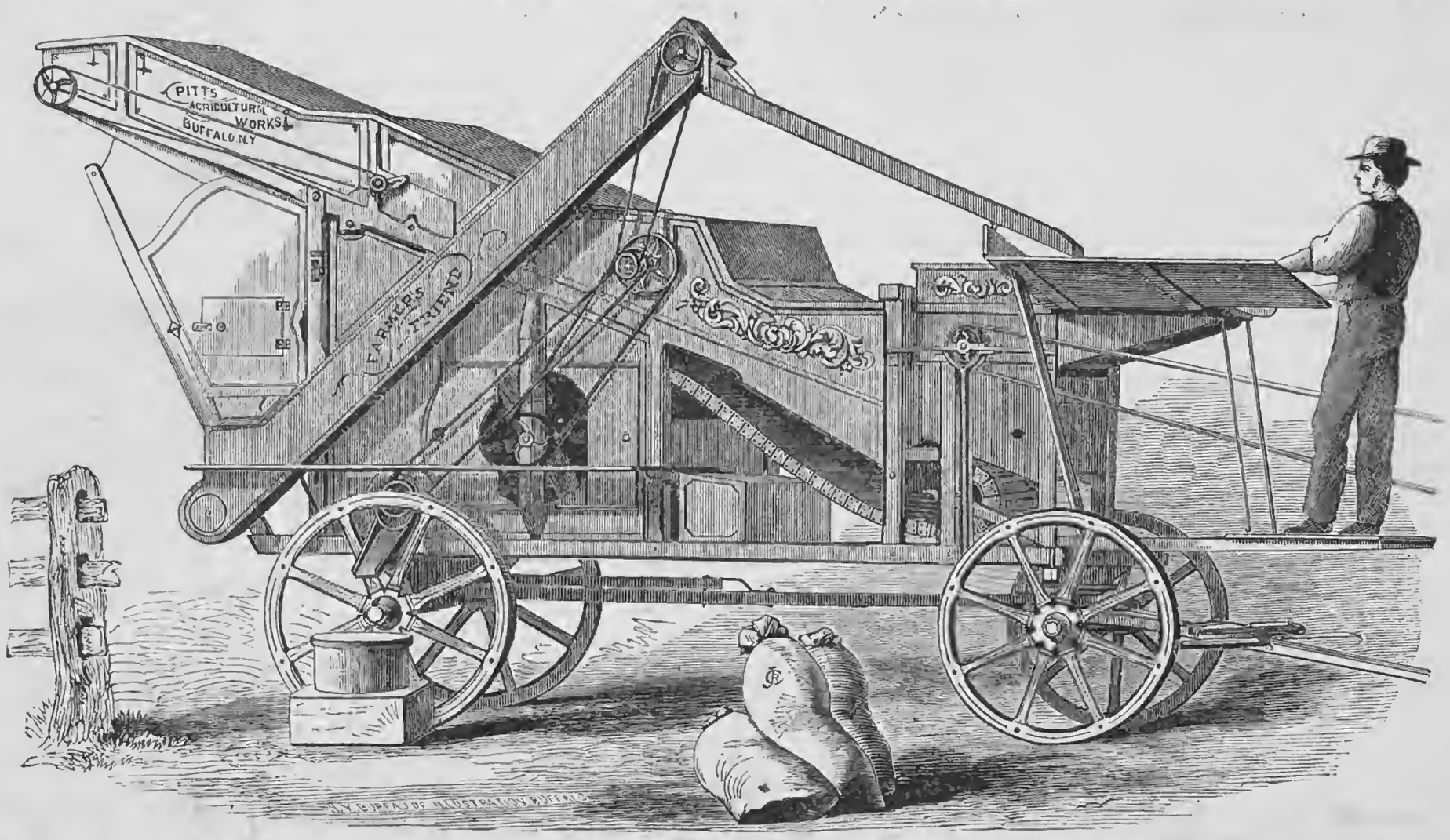

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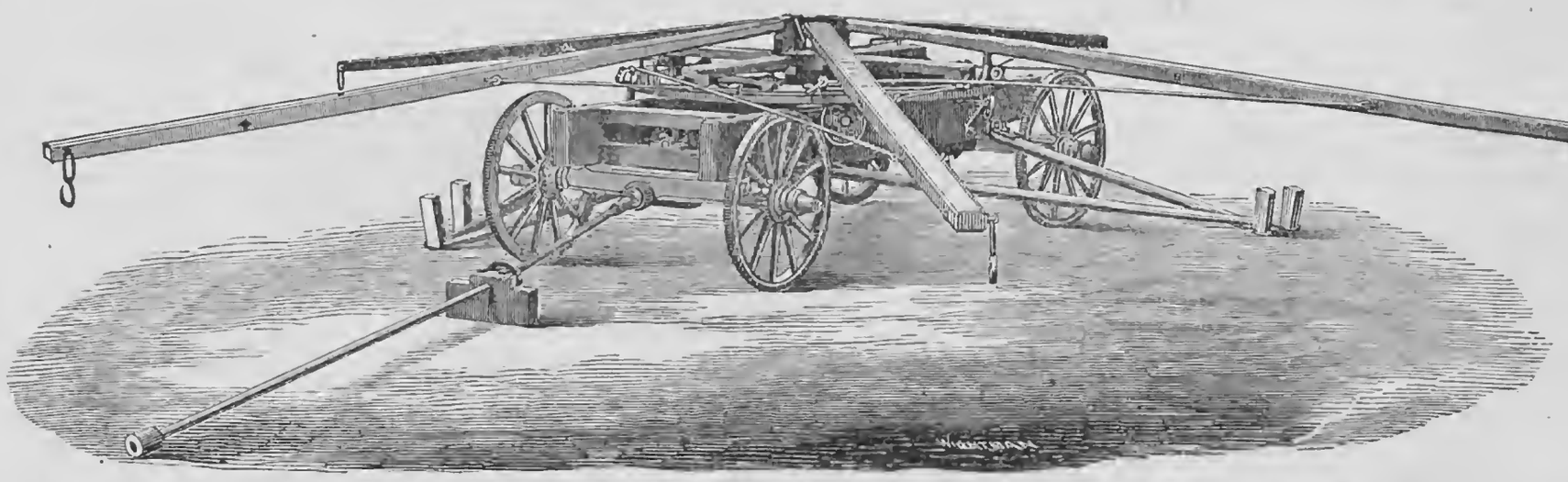

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VOL. XXXVII. No. 27.
WHOLE No. 1484.

NEW YORK CITY, JULY 6, 1878.

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PARISIAN CORRESPONDENCE.

PARIS, June 16th, 1878.

THE fourteen million francs which the projectors of this Exhibition expected to receive from the entrance fees, hardly seems too high an estimate in view of the great number of daily visitors down to the present time. During the past week the average attendance has been in the neighborhood of 115,000 each day, while on Monday last, nearly 200,000 persons entered the buildings either on the Trocadero or the Champs de Mars, and owing to the exhaustion of the indisponsable printed tickets, many thousands more were forced to remain unwillingly outside.

The Trocadero itself and still more its lavishly ornamented grounds, are favorite lounging places for the pleasure-loving Parisians and their pleasure-seeking guests. Here one of the prettiest and most frequented spots is the Japanese farm, inclosed by a bamboo palisade, The farm-house is characteristically Japanese, of the better class, and stands in the midst of a handsome garden. Instead of windows and doors, the house is furnished with shelter mats, which in fine weather are rolled up in order the better to exhibit the interior which is furnished in genuine Japanese fashion—a fashion which would be considered rude and insufficient in many of your back-woods settlements, but which answers admirably the simple customs and wants of the semi-civilized natives.

In the garden is a poultry inclosure constructed of the ubiquitous bamboo, and tenanted by a swarm of Japanese cocks and hens whose appearance, to the uncritical eye, differs little from that of the denizens of American farmyards, although either of your contributors, Messrs. HALES, MINER or WALLACE, could doubtless point out a multitude of distinctions. Close to these, a bevy of ducks of far Eastern breeds, enjoy a large sunken tub as mightily as they would the ponds or puddles of their distant native land. Scattered about are large china pots containing Japanese plants whose beauty or grotesqueness would add to the charms even of the Rural Experimental Grounds, and there be fortunate in finding an eloquent pen to describe their attractions.

The chief merit in the whole of this display, and also in the neighboring Chinese buildings, lies in the fact that they convey to the stranger a fair idea of the better class of architecture in the land which they represent, and this is a merit wholly lacking in the structure erected by the United States in the Avenue of Foreign Nations, across the river, on the Champs de Mars. In the long row of representative buildings that line the right side of this magnificent street, that which has been constructed under American auspices is certainly the least nationally characteristic, and probably the least expensive. It is a frame building, oblong in shape, surmounted with a smaller fac-simile, which is crowned with a pepper-box look-out, the whole bedecked with a considerable quantity of scroll-work ornamentation. Of the appropriation of $150,000 made by Congress for the purpose of insuring a fair exhibition here of American products, only a very small percentage could have been appropriated to the construction of this edifice. In a land whose vast extent bespeaks great differences in the climate and appropriate dwellings of its inhabitants, the styles of architecture must necessarily greatly vary, but in no part of the country has a great deal of travel ever brought to my notice a building architecturally designed like that which is here erected as a model of American architecture. If there really is such a thing as a distinctively American style of architecture, this certainly does not represent it; and if it is an embodiment of the ideal transatlantic architecture of the future, the American ideal, in this connection, can hardly be said, even by a partial friend, to be of a very high order.

SOME of our captious Parisian critics are by no means complimentary in their remarks upon the homely style and material of this building, and the entire absence in its design of those national architectural characteristics of which the structures in this avenue were designed to be specimens. But apart from this last shortcoming, it is perhaps best, after all, that only a minimum percentage of the miserly appropriation doled out by Congress should have been expended on the merely temporary receptacle of our industrial exhibits. These are displayed in a line extending away back from this building which acts as a frontispiece on the Avenue of Foreign Nations; and in view of their conceded excellence even the most susceptible patriot can endure with equanimity the sneers of unfriendly French writers, especially when he remembers the miserable display made by their compatriots at our Centennial Exhibition in Philadelphia.

THREBER.

Farm Economy.

DRAINAGE.

PROF. R. C. CARPENTER.

DRAINAGE is the art of carrying off the water from the soil and subsoil of land by means of open ditches or closed drains or trenches. By means of drainage, wet land naturally unfit for cultivation has been made arable, land which produced only rushes and frogs has been converted into the best of meadows. Drains even affect the sanitary condition of the country, for it has been shown by statistics which cannot be doubted, that on a subsoil constantly wet and retentive of water, diseases are much more prevalent and vicious than in a region with a dry subsoil. This last consideration alone, should be sufficient to induce a thorough system of drainage, for no compensation can cover the loss of health, or replace the value of human life. But the stubborn fact that drainage costs money, appears to many an almost insuperable obstacle, and hundreds, yea, even thousands of people in Michigan, are breathing the pestilence from malarious marshes, and slowly but surely infusing into their system a poison which must bring them to an early grave, without exerting a muscle to remove from existence the cause of all this evil. In many districts, where malarial diseases are prevalent, one-half the amount spent for doctors' bills, would effectively remove the stag-

AMERICAN BUILDING ON THE AVENUE OF FOREIGN NATIONS.

nant water, which to a great extent causes the diseases. But when sanitary considerations are alone involved, money considerations are with the parties interested, of more importance.

But fortunately in this case, financial as well as sanitary measures are united, and the overpowering logic of increased financial returns, induces action when all other measures fail. It needs little argument at this late day to convince persons that it will pay to drain wet lands; everybody admits that, in most cases. It is, however, extremely difficult to state just when it will pay to drain upland and when it will not pay. Each case will have to be considered from its own standpoint; you will have to take into consideration the value of your land, the total cost of underdraining and the probable increase in value of your crops. If the increase in value of your crops will not pay a good interest on the cost of underdraining, it will not pay to put in drains. But I doubt if there is any heavy clay land, except it may be above a porous subsoil, but what will return to its owner good interest from a liberal investment in under-drains. As the value of the crop is increased, this percentage of increase from drainage becomes of more and more importance, until in some cases the increase in crops alone for a single year, will more than pay the expense of drainage, or, in other words, your investment will repay you more than 100 per cent.

METHODS OF DRAINING.

Draining may be performed by open or by closed ditches, or under-drains. The method of constructing open ditches usually employed is shown in Fig. 1.

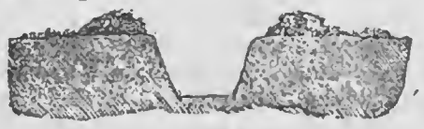

FIG. 1.

Such ditches are neither efficient nor permanent. The proper shape that an open ditch should have in cross section, is shown in Fig 2. This form can usually be made with a land or road scraper, otherwise it will be too costly for general adoption. The open ditch is at best an unsightly ravine, and it is always more or less in

FIG. 2.

the way. These objections are of so much importance that it can hardly be considered of any practical value to agriculturists, except to serve a temporary purpose, or in some exceptional cases, where a large area is to be drained, to take the place of a natural water-course.

UNDER-DRAINS.

I shall further consider only the construction of under-drains, which I shall denote by the single term "drain" now usually employed for that purpose. As drainage is to a great extent an empirical art, I cannot better illustrate the various processes employed than by giving a history of some of them.

Drainage by open ditches was no doubt the first mode of freeing land from superfluous water. The Roman agricultural writers mention the good results arising from covered drains, which were formed of wood and other substances, which served, so far, to render the land dry. More than a century ago, a large extent of clay land was drained at narrow intervals in Norfolk and Essex, England, by putting in brush, wood and even straw in the bottom of the drains. The progress of draining, which is now regardad on many soils as essential to economic culture, was slow and partial, until Mr. SMITH of Deanstone, about the middle of the nineteenth century, reduced the practice to a system, and showed the principles upon which its efficiency depended. Through the exertions of this advocate, thorough drainage came to be looked upon, in England, as a necessity on a clay soil or indeed on any soil in a moist climate. Before the general use of drain tile, stones were the common materials with which drains were formed. They were thrown into the ditch promiscuously from nine inches to a foot in depth, and covered with earth, thus forming a body that water readily passed through. Mr. SMITH recommended that no stones be used for this purpose that would not pass through a ring of 2½ inches in diameter; or when flat stones in sufficient number could be found, the stone drains were so laid as to make a box or trough through which the water flowed. This was found to produce an efficient drain, but in neighborhoods where stones were scarce the drain was very costly.

When tiles or pipes were first used, it was thought necessary to have some small gravel or stones about them, in order that the water might soon find its way into them, but it was found out that the drains were as efficient without the gravel, and moreover not as likely to be filled with sediment, as the natural soil allowed the water to percolate through it slowly, thus filtering out all impurities. Many kinds of pipes or tiles have been used. The first form tried was the horse-shoe tile without a bottom. This, when laid on the natural ground, soon became filled with earth by the rising up of the bottom, caused by the great pressure on the sides of the tiles from above. The next improvement in the tiles was the addition of a bottom. These were objectionable because they left a wide space on the bottom and did not confine the stream flowing through them sufficiently to clean out the dirt or silt which accumulated in them. The next improvement was the sole tile, which afforded a good passage for the water, but was objectionable because of the mechanical difficulties of construction, it being hardly possible to make them perfect. The sole tile affords a cylindrical passage for the water, but has a shoe or flat rest on one side, to lay next the bottom of the ditch. The latest improvement in the shape of tiles is to make them simple, circular cylinders about one foot in length, and with walls about one-half inch thick. These tiles offer a good water-way, and, having a circular section, they can be laid any side up; consequently a good joint can be secured, even if the tiles are slightly warped, as is usually the case. Again they are, next to the horse-shoe tiles without bottom, the easiest tiles to construct, and consequently the cheapest. These tiles present another advantage—they can be laid in collars, which are rings about three inches long, which pass over the contiguous ends of the tiles and form a close joint.

SIZE OF TILES.

When tiles were first used, it was thought that an internal diameter of one inch was sufficiently large for ordinary cases, but the smallest tile in ordinary use at the present time has an internal diameter of one and one-half inch, while the largest is not less than eight inches. The size of the tiles to be used should be such that all water falling on a piece of land will be conveyed away before it has time to injure any crops that may be growing on the land. The exact time that crops will stand inundating without injury, depends so much upon the variety of the crop that no definite time can be stated. Probably if the water is removed within 24 hours of the time of falling, no injury will be done to most farm crops, as in this case, water will not remain on the surface of the ground to exceed six hours, except in extreme showers. On this basis, we can calculate quite accurately the size of the tile needed, since we can find, by consulting tables of meteorological observations, the greatest rainfall that may be expected in 24 hours, and if we so proportion our tile as to convey this water off within the same time, no injury can be experienced by the crops.

In order to find the number of acres that can be drained by tile of a given size descending at a given rate, we must know three conditions: first, the amount of water that may reasonably be expected to fall on each acre during any day (24 hours) in the growing reason; second, the discharge of the drain as compared with the rain-fall; third, the capacity of drains running full at various inclinations and of various sizes.—[To be continued.

Agricultural College, Lansing Mich.

Farm Topics.

STUDY ON THE FARM.

M. OAKEY.

To every farmer I say: "Be a student." "What a farmer and a student?" Yes, certainly, both, and the better the student the better the farmer.

I like that word student. In its original meaning it signified "to desire strongly," "to be eager for," and implied the putting in operation, and diligently using every means to secure the end desired. How applicable this is to the farm in all its departments! It must not be supposed that study applies only to books. It is true there are many works treating on his profession, that the farmer cannot neglect or pass over without loss, and the same is true of the current agricultural periodicals; they should not be slighted. But it is not intended that the farmer should turn aside from the field and shut himself up in a study, and turn bookworm. It is the farm above all things else that he should strive to gain complete knowledge of, and that practically. To be wide-awake and progressive, however, farmers should obtain all information possible from every source, and digesting and modifying it, use it as a means of enlarging their experience which is too often confined to only that descending from the father.

But this is only a means to an end. The farmer must learn thoroughly his farm. He must know its soil; its needs and its adaptability. He should be eager to find out in what department, or branch of farming, he is likely to obtain the best results. He is to study its improvement, both in increasing its production, and in its appearance. A good farmer will take pride not only in obtaining the greatest product per acre, but in having the finest-looking farm in the neighborhood. In improving its appearance as a farm, he certainly will increase its yield. Study the farm.

Then study the crops. Learn their needs, their best mode of cultivation, and the most approved implements for their cultivation. All these the farmer should be eager to know. He should apply to every experience, to experiment, and even to much-abused theory, not his own alone but all to which he has access. Because a man has raised certain crops all his life-time does not prove he knows all about them, or even that he knows the best methods of treating them. He should desire and strive for the best, cleanest, and most remunerative fields and crops in his community, and no one should be able to excel him. This study makes more difference with farmers than is generally supposed. It has more to do with the success of one and the failure of another, than any difference in soil or opportunity. A successful farmer must study his stock. Sometimes I think a farmer can be better judged by his stock than in any other way. A good farmer seldom has poor stock, and, pretty generally, a poor farmer seldom owns good stock. The effect that a man's animals have upon him can not be over-estimated. A thrifty farmer will not only have good cattle, but he will study to know them, their temperament, their habits, their needed care, and their income. He will learn the safest and surest way of obtaining that income from them, and in satisfying their wants he will take new interest and pride in them because of their grateful and improved condition, as a matter of safety and economy. He should study his stock too. I knew a farmer of thirty years' experience who, raising a very fine heifer from which he expected something better than usual, lost her after her first calf because he did not know, as he said, "cows' bags ever got lumpy, and I did'nt know that any thing was the matter until too late, and did'nt know what to do anyhow."

Nor should farm machinery be slighted or neglected. The farmer should not only know how to handle his plow, but he should learn the principles involved in its construction. He should comprehend too the superiority of one implement over another. It will not do to trust to salesmen or their glib tongues, or yet to rely entirely on the experience of others, for what one will handle intelligently, and successfully, will prove a failure in the unthinking hands of another. In the Franco-Prussian war it was admitted that the chief superiority of the Prussians was in their more intelligent use of the weapons in their hands. Yet both armies were equipped with like implements.

Nor must farm economy be overlooked. Here is a vast field for diligent study and ingenuity too. "To know just where a dollar may be saved and where invested to produce its proper income, is study indeed. The fact is that many farmers instead of learning this, choose to hoard what few dollars they may grasp instead of adding them to their capital to increase their revenue. This works badly on the farm, for narrow-minded and greedy parsimony is sure to follow. And all the comfort and enjoyment that a farmer's life should possess is crushed out by the great weight of niggardliness. To save a few dollars on the preparation for a crop, or in its cultivation and fertilizing, is not always true economy. Often the few extra dollars thus spent render the whole crop profitable. The whole question of thus spending here and withholding there is of vital importance to the farmer and should receive his best thought and care. Is it not clear that a farmer should be a student?

POETRY ON THE FARM, ETC.

NORTON HILL, GREENE CO., N. Y.

THIS spring there were some failures among the farmers in this vicinity, and many good people lost by them. One of my neighbors remarked that they were men that worked too much and thought too little, a saying which I came to believe was about so, when I thought the matter over. They and their families and their hired help had worked night and day, and their hands had become calloused with labor in carrying on a large business. They had very little time to read and observe, or to keep books, so that they could know whether their business paid or not. It was with pain we saw these brother farmers of ours go under, hard-working as they had been and well as they had struggled to build themselves up. There was one case among them where our feelings of pity were not so great. The man had a good farm given him and got a good property by his wife; but he had spent the golden hours of youth and manhood in trying to accomplish nothing, and had succeeded; still we mourned his fate somewhat, but as not without hope, as he has, since his failure, gone to work. Most of the farmers hereabouts are making slow but sure progress. Year by year a gradual improvement is coming over their homes, thanks to their own energy and the agricultural press, which most of them patronize and enjoy.

In a late RURAL I saw a piece entitled "The Poetry of the Farm."

"Yes," said I, as I reviewed in my mind's eye some of the pictures which I had seen in the good RURAL time and again, such as the old fogy farmer's bull in the spring, the farmer who did not know whether it would be best to move his barn or the manure pile, and the one where the farmer stands in the cottage door at midnight, in clothing unmentionable, listening to the silver tones of the screech-owl, perched on the chimney, "Poetry," says I, "yes, I have heard it sometimes." Said I to myself, "Come to think, I heard it when one of my best hogs died this spring; when one of my best calves feeling so good while frisking joyously about, collided with his mate and broke his neck; when coming to plow my corn this spring, I found that the crows had dug and pulled out by the roots about one-tenth of one piece; and—another stanza—when one of my Jersey heifers became a confirmed kicker: yes, there is poetry in farming, come to think about it."

So I mused, and just then up ran two rosy-cheeked girls, such as can be seen only on the farm. "There is another couplet," thought I, and looking out of the window my glance fell on long lines of apple trees in full blossom, which father and I planted when I was only a little boy; then going out on the veranda to take the fresh, pure air of spring, and hearing the songs of the many welcomed feathered visitors that come to us year by year, thinks I, "there is another verse or two." Looking to the right I see my cattle in the spring grass, happy and contented on the hill-side, and the sight was by no means unpoetic.

Putting on my hat and lighting my pipe, "I guess I'll feed my pigs," thought I, and going to the pen, each of twelve upturned noses says "give me some good sour milk." By the way, a man told me last fall that the best breed of hogs he ever had, was a well-filled swill pail of nutritious food,—but in those twelve pigs were poetry and music. Visions of broiled ham, of roast spare-rib, of ham and eggs, and of sausage, danced before my eyes, and pleasing thoughts came of stomachs, owned by family, friends and help, well-filled from those plump fellows. And to fill up the measure, twelve tails all curled up in cues, or like old-fashioned musical notes, on their twelve backs. "Poetry!" said I, "yes, even in hogs."

Knocking the ashes out of my pipe, and going to the barn, I find friends there. There is Old Bill, the bay that used to carry my father so safely about the country. The hands that used to guide him are now quiet, as are those also of the driver's companion, my mother, and Old Bill, looking out of those large, honest eyes, seems to feel that he, too, is getting old and needs my sympathy and regard, as he gently whinnies and says, "good morning." There, too, in a line stand the wagons that have become so familiar to us, and in which we have all enjoyed ourselves often. "Poetry," says I, "yes, lines of gold endeared by thoughts of the past, when father and mother, as well as the boys and girls, were all at home on the farm."

Going through the barn to my poultry house, I see ducks, geese, hens, especially Guineas, and peacocks. But there! Hear them all sing together, and cackle, and gobble, and quack, and screech; and if any man with poetry in his soul doesn't feel the inspiring effects of that concert, his poetical ideas are of a very dull order.

Stepping over to my cow-barn, there are the open stalls of the cattle that fed here last winter, but which are now filling out their sleek hides and enlivening a fine landscape view, visible from my door-way. If there is anything that can find its way into a good farmer's heart, it is a good herd of cows, with well-filled bags, pasturing in good clover. For me there has always been in cows poetry of a high order.

Going from the stables into the orchard, "Popy, is there a-going to be fruit this fall?" ask my little girls who are with me now. The trees give cheerful promise that we shall have good times next winter in passing around golden Pippins and winter pears. Glad am I to see nowadays that almost every farmer has a pan of apples on his center-table, so that anybody that wants them may have almost any kind that he may desire from fall until spring.

Then, there is the dear wife, who still continues to bear the burden and heat of the day, but whose life is now cheered by the help of her boys and girls, who begin to feel and know what mother has done for them. Her step may not be as light as it was fifteen years ago, but the cheerfulness of the home which she has helped to build up and embellish, sends a ruddy, satisfied glow over her cheeks, and warms the whole household with sunshine and gladness. Poetry! yes, I have heard it; and it is in thousands of farm homes in this land. Despite all the sin and evil in the world, in the majority of farm homes poetry, love, virtue, benevolence, hospitality and charity gladden and cheer all those who come in contact with them, and make gleesome poetry on the farm. W. H. I.

Field Crops.

BARLEY ON CLOVER SOD.

WM. J. FOWLER.

THIS year I am trying an experiment in growing barley on a newly-turned clover sod. It is apparently working so well that I am much encouraged to repeat it as often as I have occasion. I had about twenty acres of clover last year cut for hay in June, and for seed in

September. Not wishing to plow and plant so much, I was at a loss what to do with it. The clover I was satisfied would not amount to much this year, as it rarely does the second season. Some advised summer fallowing and sowing with wheat in the fall; but the field was clean from weeds and it seemed a pity to lose the use of it for the year. The early days of April were bright and warm, so, putting in a three-horse team in a twelve-acre field, I had it nicely turned under in a week's time. I used the jointer plow, leaving a good mellow seed-bed on top. This was well harrowed, taking about half as much time as the plowing, and I drilled in 2½ bushels of barley on the 19th and 20th of April together with about 100 lbs. of phosphate and 100 lbs. of gypsum mixed, per acre. The field was in good heart, and the growth of barley is all that could be desired. The seeding was thick and the plants have tillered until the stalks stand about as close as they well can. No one who sees it can doubt that the barley roots are now feeding on the clover-sod whose decay is hastened by the concentrated fertilizer as also by the dense mass of barley leaves on the surface. The manure has also given the barley a good send-off, and enabled it to sooner reach the sod. I doubt not that the barley crop will be doubled by the fertilizer applied. Good judges estimate it at fifty bushels per acre.

Undoubtedly much of this favorable result is due to the moist season we have had; but in any weather, I believe that clover sod, well plowed, will insure a good barley crop, if a little fertilizer is applied with the seed. The clover decaying in the soil, keeps it moist, and this year also keeps it warm as well. After a week of dry weather we are having a fine rain which insures sufficient moisture till it is ready to cut. The joints are formed and, in a few days, heads will be pushed up, and the ground will keep moist from this rain until they are filled. It is of the six-rowed variety, which in a good season and on rich soil will yield more than the two-rowed, though the latter is safer if soil and season are unfavorable.

This fall I shall re-turn this sod, and sow with wheat, with phosphate and gypsum as before. The clover sod will be decayed enough to furnish just the pabulum which wheat roots delight in, and next spring I can re-seed with clover. I shall have an advantage in this, as a good many clover seeds were dropped last fall and turned to the bottom of the furrow. When the barley stubble is turned under, these will be brought up and will grow next fall or next spring. I have known good clover on fields from the seed scattered after a second crop of clover. Unless left very near the surface, clover seed will remain in the soil for years.

This plan of sowing barley on clover sod avoids the labor and expense of so many hoed crops, but it is only adapted to soils free from weeds. It has a very important advantage over the old-fashioned rotation of wheat and summer fallow after clover each alternate year. It gives one more year for clover roots to grow; and only takes one wheat crop in three years, instead of one every other year. In an average of seasons, I think too that the spring grain will be worth as much as the wheat, so that this rotation nearly doubles the profit in a course of three years.

Monroe Co., N. Y.

Pomological.

RUSSIAN APPLES IN AMERICA.

T. H. HOSKINS, M. D.

Few, perhaps, think or remember, when reading of the "Colossus of the North," in these days of Eastern warfare, that nearly the whole of the great Russian territory, both in Europe and Asia, lies north of the parallel of 45°, the northern boundary of New York and Vermont. Yet this is the fact, as a reference to the map will show. Moscow, the central city of the Empire, lies just below latitude 56°.

Europe is not as cold, on the same parallels, as our Atlantic States; but the most thickly settled and richest parts of Russia have a winter temperature quite as severe as any part of New England or Canada. Yet orchards are abundant there, and the apple-trees most healthy and productive; while in Northern Vermont, New Hampshire, Maine, New York and Lower Canada, with slight local exceptions, the apple production is quite insufficient for home consumption, and the business of fruit-growing is considered precarious and unprofitable.

Some thirty or forty years ago, trees or cions of some Russian Apples were brought to this country, and their beauty and productiveness have rendered them popular in many localities. One, the Red Astrachan, is largely planted from Louisiana to Canada. The Duchess of Oldenburg is the "stand-by" for hardiness and productiveness in Minnesota, Wisconsin and Northern Maine. The Emperor Alexander is marked as a profitable Apple to grow for market in Lower Canada. The Tetofsky is regarded as the hardiest of all Apples in Minnesota, the coldest State of the Union. Beauty, productiveness and hardiness are the marked characteristics of these Russian Apples. In quality they, none of them, rank with the best, and not one of them is a keeping apple. The latest, the Alexander, keeps only until November.

The necessity for a strain of apples, the trees producing which should have a greater resisting power against severe winter cold than the popular sorts of the Middle States and Southern New England, led to the introduction of the Russian varieties into all the coldest parts of the country. The demand for winter apples not being met by them, our Department of Agriculture, in 1870, imported from St. Petersburg a quantity of cions, nominally embracing 251 distinct varieties. These cions were distributed about among fruit-growers, mostly in the colder sections. A considerable number were sent to Vermont. Many of these cions, being grafted into large trees, have already borne fruit, which has been tested and exchanged among the growers with a lively interest. The greater number of these are plainly summer and fall fruit; and a great deal of disappointment has been experienced on that account by growers, who forget that many remain yet unfruited, and that usually the early Apples are the first to produce fruit, and that later kinds will probably be more numerous among those which will bear their first apples in 1878 and successive seasons.

The list sent out by the Department along with the cions, was but a bare schedule of names, without a particle of description, or the conveyance of any idea in regard to the season or quality of the fruit, save what the name itself might convey. So far as the writer knows, no account of this important importation, — whence or by whom it was gathered, what were the characteristics of the fruit of each, as grown in their native localities, their seasons, qualities, or relative esteem and market value where known,—has ever been made public by the Department. If there are any data from which such an account, however brief or imperfect, could be drawn up, now is the time for it to be put forth, that growers and experimenters may compare its statements with their experience with the new fruits as they are developed.

The writer has seen and tested the fruit of some thirty varieties of these new Russian Apples,—a few from his own trees, and the remainder sent to him, as a connoisseur, from different parts of Vermont and the North-west. It is not my intention to go into an extended description of any of these now. I reserve the subject for another time, when the added experience of one or two more seasons will give both fuller material and an opportunity for a revision of judgments based only on single tests. I will simply indicate a tentative opinion that among early summer Apples of this class, No. 334—Yellow Transparent—and 344—Sultan Apple—deserve to be tested alongside of Tetofsky. Among those a little later, No. 342—Charlottenhaler—is very large, and of quality comparable with Colo's Quince. No. 336—White Transparent—resembles the Early Harvest in fineness of texture and freedom from the "sour-water" quality of juice, that seems characteristic of too many of the early Apples of this class. It has substance and richness, united to a mellow quality. No. 317—White Pigeon Apple—is down in my notes as of medium size, yellow, with delicate carmine streaks; flavor neutral, almost sweet, with an indescribable spicy mingling of apple, pear and banana flavor. No. 368—Sugar Barbel—is a good early sweet. The only winter variety that appears valuable, so far, is No. 402—Borsdorf. This seems to be a long-keeping winter apple of finest quality; size rather large, oblate, obscurely ribbed; skin smooth and glossy, green with brownish-red cheek; flavor much like Peck's Pleasant.

Orleans Co., Vt., May 24.

Landscape Gardening.

FRUIT TREES FOR ORNAMENT.

SAMUEL B. PARSONS.

For lawns and landscape effect the only essential things are variety in form and color and taste in grouping. There is generally an impression that these can be obtained only by means of what are termed ornamental trees and shrubs; hence fruit trees are planted in straight rows for bearing, rarely in groups for landscape effect.

While the best results are produced by the finest ornamental trees and shrubs, it is a mistake to suppose that no landscape effects can be obtained with fruit trees and shrubs alone. Those who are familiar with the country in May and June, know the great beauty of the orchards when Apples, Pears, Cherries, Plums and Peaches are a sheet of bloom of various shades of color. There is also great variety in form; the round-headed Apples which generally prevail, are occasionally varied by a pyramidal form like the Lady Apple or the more dwarf habit of the Siberian Crab. In Pears the Buffum is almost as pyramidal as a Lombardy Poplar, while other varieties are graded from the roundest head of the largest trees to the more dwarf Seckel or Manning's Elizabeth. In Cherries and Plums there is the same difference in form, and one familiar with them soon learns to note it.

So it is in color; the shades are varied, and an ordinary workman will soon recognize each sort by its tint.

Thus it is possible to obtain with fruit trees alone those contrasts which aid to make a picturesque lawn. The Purple Peach is almost as dark as the Purple Beech, and occasionally dotted among other varieties, gives a good picture effect. Then the blossoms of Peaches are of all shades, from snow-white to carmine. Nothing can be more ornamental than the American Chestnut, with its tall, pyramidal form, and its abundant racemes of flowers, while the round head of the Spanish Chestnut is very different. The darker Hickory is stately and sturdy, and always valuable for its Shellbark varieties. The very dark purple-leaved Hazel contrasts strongly with the common sorts, while the different shades of Currants, Raspberries, and small fruits can form the shrubbery.

Were I making a country home, I would appropriate five acres of land, or ten acres if my ambition were larger, in the middle of which I

JAPANESE FARM ON THE TROCADERO.

would place the dwelling or other buildings. I would then surround it with a strong, pale-fence six feet high. On the inside of this fence, which faced the north, I would plant Blackberries and Raspberries; on that which faced the south, east or west, I would plant hardy grape vines. Next the fence on the inside there should be a space of five feet, then a drive of twelve feet, then a space of five feet, thus leaving an open space of twenty-two feet before planting anything which could shade the Grapes, Blackberries or Raspberries. Until the trees planted inside of this twenty-two feet become large enough to make shade, the five feet each side of the drive could be filled up with Strawberries or other fruits, or the more ornamental vegetables. Then at this distance of twenty-two feet from the fence I would plant apple and pear trees, choosing the sorts for their contrasting forms and colors.

To avoid the stiffness which a square gives, the drive should be the gently-curving segment of a circle, and the plantations should conform to it without falling into any regularity. The effort should be to make the space around the house an amphitheater, with turf in front and trees for the boundaries.

The larger trees—Apples, Pears, Cherries, Chestnuts and Hickories should be planted on the outside of this amphitheater. Then in front of these should come the lower-growing Pears and more dwarf Cherries, like Early Richmond, with Plums, Peaches, Nectarines, Apricots, Mulberries, Crab Apples and English Walnuts. Then should come Quinces, Raspberries, Currants and Gooseberries, while Strawberries could finish the embroidered belt, like a rug upon the turf carpet.

Some will prefer a broad, open lawn in front of these trees, but for many the effect would be improved by extending out occasionally a spur or peninsula of plantation, forming between them coves or small lawns visible to each other, by small vistas through the spurs. The broad spaces of lawn would still remain, and the outlook from the house would be full upon it as upon a Roman arena, with the graded hights of trees on the outside for the galleries of spectators. No trees should be near the house, and nothing be permitted upon the turf excepting bedding-plants or low growing shrubs for color, and even this effect could be obtained by fruit-bearing shrubs alone. Purple Hazel, Purple Berberry and other fruit-bearing plants could be planted in masses and kept low with great effect.

I have clearly in mind the charming results which might be obtained in a lawn planted exclusively with fruit trees and fruit shrubs. I here only sketch an outline; should any one wish to form such a place, I will take pleasure in furnishing a more carefully elaborated plan.

Arboricultural.

THE CONIFERÆ OF CALIFORNIA.

WM. C. L. DREW.

THE native evergreens of California are not surpassed by those of any other part of the world, and for gracefulness, majesty and rapidity of growth, they have few, if any, equals. It is for the purpose of drawing the attention of intending planters to the peculiar merits of the most beautiful of our Coniferæ, that I submit the following brief description of those I believe will give the best satisfaction as ornamentals or for useful purposes.

PINUS LAMBERTIANA.

Lambert's Pine, was discovered and named by Douglas. This magnificent tree is usually known as the Sugar Pine; when the trunk is burnt or wounded a sweet substance exudes, and from this circumstance arises its familiar appellation. It is excelled by no other in California for timber—making clear and handsome lumber.

The trunk of this Pine grows from 125 to 275 feet high. It is characterized by an unusually straight growth, and is destitute of branches for from one-half to two-thirds of its hight. The foliage is similar to that of the Pinus strobus—White Pine; it is rigid and of a bright-green color. The cones are from one foot to twenty inches long, and ten to twelve inches in circumference in the thickest part; they are pendulous from the ends of the branches; like the foliage, they also in form resemble P. strobus. The seeds are large, sweet and palatable. They are gathered in immense quantities, slightly roasted, and used as food by the native Indians; the shell is thin and easily broken.

It is a stately and magnificent tree, and next to the Sequoia, it is the giant of the forest. It occurs in groves with P. ponderosa, in the higher and moister sections of California; in the Sierra Nevada it is very abundant in the higher altitudes. As it grows where snow lies on the ground for four or five months, it should be hardy in the East. [It is.—EDS.]

P. PONDEROSA.

This variety was also discovered and named by Douglas, and was sent by him to England as early as 1825. The timber is solid and heavy; indeed, so great is its weight and solidity, that it will scarcely float in the water. It grows from 85 to 125 feet high, with a handsome straight trunk, for 30 to 50 feet of which are free from branches. It is remarkable for its strength and luxuriance. Its branches are very regular, become pendulous with age, but are horizontal while young. It is familiarly known as Yellow Pine.

[Pinus mitis, the short-leaved, and P. Australis, the long-leaved Yellow Pines. We do not know how many other *Yellow* Pines there are.—EDS.]

Its foliage, which is flexible, is long, broad and sharp-pointed and very thickly set on the branches. While young it is straight, but becomes twisted with age. Its cones are small, ovate and straight, and are borne erect; seed small.

This for an ornamental tree, is the handsomest Pine known. The head is very close and full, and of the greatest symmetry conceivable. The foliage is a very rich dark-green. It is widely distributed over California, but grows to the greatest perfection in the Sierra Nevada.

P. CONTORTA.

Like the preceding, this was also discovered and named by Douglas. This is the most dwarf of all our Pines, attaining to a hight of only eight to twenty-five feet. It is popularly known as the Twisted-Branch Pine from its peculiar habit.

Foliage somewhat succulent, flexible, a dark, rich green in color; cones small, ovate in form while young, but becoming nearly round with maturity. Its twisted branches are borne at almost right angles with the main trunk, and produced in whorls. Its native haunts are moist, swampy situations, and in such positions it is very striking. Useless except for fuel.

P. MURICATA.

The true name of this species is not as yet satisfactorily settled; besides the above, it is also known as P. Edgariana and Obispo; its familiar name is Bishop's Pine.

It grows from thirty-five to sixty feet high, but is useless except for fuel. It has an extensive range, but is always found in moist situations, near the sea-shore or in very high altitudes. The foliage is flexible, silvery on the under-side, a pretty green above. Its small, ovate cones are very persistent, clinging to the tree many years after the seed have perfected and been distributed. It is a ponderous and noble-looking tree, remarkable for its freedom of growth and hardiness. Likely to do well in the East.

P. INSIGNIS.

This tree, one of our handsome and stately forest kings, was the discovery of that indefatigable worker, Douglas, who also named it. It grows from 50 to 125 feet. It is principally found in the section of country around Monterey, from which the familiar name of Montery Pine is derived. It abounds in that region in immense forests of many acres.

The foliage is of a very dark green hue, very thickly set on the branches, and twisted in every direction: indeed, for irregularity of length, diversity of habit, and the way in which the foliage is twisted, it would be hard to find a counterpart to it in any other Pine. The outline of the tree, like the leaves, is very irregular, consisting of only a few irregularly spreading branches. Cones, small and persistent. The whole appearance of the tree is remarkable and so distinct from any other species, that it cannot but be desirable.

P. SABINIANA

Is another discovery of Douglas, it being also designated by him. While young it is halfway pretty, but when matured it is positively ugly. It has several local appellations, as Nut Pine, and Bull Pine, Digger Pine, and White Pine. The foliage is thin, long and straggling and of a light-green color. The cone is very large and heavy, ovate or conical in shape; the scales are terminated in upturned hooked spurs. The nut is large and much prized by children, who gather immense quantities of them. The shell is hard and thick, requiring a pretty heavy blow to break it.

The tree is flexible and of very crooked growth. This Pine has always appeared to me to be diseased, it having large, ugly swellings on all the branches. I have never seen one but what was thus affected. The wood is useless, except for fuel and miserable for this purpose, on account of its crooked growth

[There are many who speak of Pinus Sabiniana as one of great beauty. Mr. HOOPES says that the beautiful, regular form presented by a perfect specimen of this tree is all that he could wish for in that respect: and when to this is added a compact mass of deep-green verdure, gracefully extending to the ground, he does not know of anything more desirable. EDS.]

P. HEISTATA.

A fine species and sure to meet with favor. It attains a hight of from 40 to 75 feet. The foliage is of a rich green color, well set on the branches. Cones of small size, conical in shape; branches somewhat crooked, but of pleasing outline in general. Like P. Sabiniana, this has several local names, as Bent Pine, Soft Pine and Scar Pine. Seems to prefer a moist situation.

P. TUBERCULATA.

A handsome Pine is this, attaining to a hight of 75 feet. It is a very slow grower. The trunk is usually of small diameter, neat habit and straight. Foliage of a bright green hue, set moderately thick on the branches; cones are borne in clusters, usually of three each, oblong in shape, four to five inches long. They are usually persistent, having been found on the tree at least ten years old. Prefers a moist situation.

P. FLEXILIS

A peculiar and handsome Pine, growing from 30 to 75 feet high. Foliage rich green color, well set on the branches. Branches somewhat irregular and flexible. Cones of medium size, persistent, conical in form; outline neat but sometimes very irregular. Found in high altitudes and moist situations. Growth rather slow, but will be found of peculiar merit on small places. Only useful at fuel.

LIBOCEDRUS DECURRENS.

This is one of the handsomest of California's coniferæ; discovered and named by Torrey; familiarly known as California Arbor-Vitæ, and Cal. White Cedar. It attains to a hight of from 30 to 75 feet, and a diameter of 2 to 4 feet. Foliage a beautiful dark-green hue, well set on the branches; forms a handsome and moderately dense head of beautiful form.

CUPRESSUS MACROCARPA.

This species was discovered and named by Hartweg. The tree is the most magnificent Cypress in cultivation, attaining a hight of from 30 to 60 feet. Foliage a brilliant dark-green color, very finely cut, and densely set on the branches. Cones large, conical in form. Familiarly known aa Monterey Cypress. A tree of such remarkable growth and beauty cannot be but desirable in any collection. The tree is very hardy and will grow in any soil. [Not hardy here.—EDS.]

TORREYA CALIFORNICA.

Discovered and named by Torrey. Familiar name, California Nutmeg. The rich dark-green of the foliage makes this at once a bold and beautiful tree. Foliage resembles that of the Spruce, but rather light and thin. Tree attains to a hight of 50 to 60 feet. Branches of a slender, drooping habit. The Torreya belongs to a group of cone-bearing trees peculiar for the excellence of their wood; but the cones are entirely distinct from those of any other of our native trees, resembling the nutmeg of commerce. It will be found very desirable in all collections; and, as it is found in high latitudes, I think it will prove hardy in the Eastern States.

ABIES DOUGLASII

One of the handsomest Spruces known, attaining a hight of from 50 to 175 feet. The foliage is a rich green color, well set on the branches. The trunk of the tree is destitute of branches for over one-half of its hight. The tree is of very erect growth and very symmetrical. The wood is of fair quality and makes fine lumber. This Spruce cannot but prove desirable.

SEQUOIA SEMPERVIRENS,

or, as it is commonly known, Redwood, is a grand and stately tree with no rival except Sequoia gigantea. The timber of this tree is fast superseding all others in California for house building and other purposes. The grand and beautiful green foliage of the tree makes it one of the finest of our native evergreens for ornament. That it will prove valuable either as an ornament or for profit there can be no doubt.

SEQUOIA GIGANTEA,

also known as Sequoia Wellingtonia, the well-known "Big Tree" of California, requires only a passing word. The beautiful cypress foliage renders it a fine ornamental tree. The cone is small—about two inches long by one and a quarter in diameter—conical in shape, somewhat persistent. The bark is very thick, in some places 12 to 16 inches through. The wood is of fair quality and makes good lumber. In the East, where it will grow, it will be a valuable tree.

JUNIPERUS CALIFORNICA,

or, Cal. Cedar, a magnificent evergreen; Cupressus Mac-Nabiana, or Golden Cypress; Abies Mertensiana, or Cal. Spruce; Pinus Coulteri, all fine Coniferæ, must be passed for want of space and time.

El Dorado Co., Cal.

Horticultural.

GARDEN TALKS AND WALKS.

THE BEECHES, Mass., June 20, 1878.

A GENTLEMAN came to me the other day for information regarding planting some shade trees. He stated his case in substance as follows: "I am building a house on Belmont Hights, where the situation is high and exposed on every side, and I want to plant a number of large shade trees around the house, so as to give us some shade right-away. I can get any number of fine large trees such as I want in the wood near by our place, but how to move them is the question. I have read a good deal about very large trees being successfully transplanted that were lifted with large balls of frozen earth about the roots. Now, what do you think of the applicability of the plan to my purpose?"

I explained that forest-trees are mostly "natural" seedlings, that, never having been transplanted or otherwise artificially cared for, have formed a vital tap roots, and their surface-feeders are so far-stretching and sparingly fibered that it is almost impracticable to lift and transplant a ten to twenty-year-old tree from the forest or wood with safety as regards its life. Digging a trench around the trees before removal, in order to secure the frozen ball, in the case of trees in the woods, would, too, be almost useless, because it is not the ball of earth that is to save the tree's life, but the number of fibrous roots that are therewith secured unhurt; and as the roots of such "natural" trees, never having been checked, stretch out so far, it is very improbable that enough of them could be secured to save the tree. And the tap-root, which in the case of one or two-year-old trees is severed or checked in transplanting with benefit to the plant, is, in the case of wildlings, allowed to develop unhurt, till after a few years it is of such vital importance to the tree that to dissever it would be to almost, if not quite kill the plant. Besides, I am no advocate at all of the frozen-ball system. It certainly has been used very satisfactorily, and its advocates have as much right to their good opinions regarding it as I have to mine in favor of fibrous roots, and lots of them, without frozen earth. But in your case, I should adopt certainty, by going or sending to some reliable nurseryman for such trees as you want. They keep big trees in stock for just such purposes, and as these trees have been transplanted in their infancy, and again, maybe once, twice, or thrice since, they will have secured such a large mass of fibrous roots, and that so close to the stem that they can not only be lifted easily, but packed for shipment to any distance with facility, and they are almost certain to grow away briskly. And even if the nursery trees be considerably smaller than the trees you refer to in the woods, in a few years you have living and thrifty trees, and not stumps as dead as a fence-post. I am a strong advocate of fall planting, but in the case of such a bleak exposure as yours, I would prefer planting in early spring. Dig big holes, deep and wide, and fill up again with the best of the old soil and some good fresh soil, peat or old muck. Spread out the roots and introduce fine soil among the rootlets; never dump a tree up and down in a hole to settle the earth about the roots. Pack the soil firmly about the roots. If necessary, stake each tree securely. For a year or two after planting, a heavy mulching of old manure, pine "needles," or any other like open material will be of great benefit.

I walked through the garden of John C. Gray, Esq., at Mount Auburn, the other day. Mr. Welch, the gardener, has quite a reputation for growing peaches under glass, and he has a very nice crop, indeed, coming on. Those in pots are ripe and ripening, and are stood outside since a few weeks to give the fruit its proper flavor. Mr. W. complains severely about the borers. They usually enter the tree a little below the surface of the soil, and then their first presence is often unnoticed; but in order to stop this practice he has little zinc collars some four to six inches in diameter, and three or four inches deep round the base of each tree, so that they are imbedded a little more than half their depth in the soil, and then between the zinc and the tree is firmly packed with clay. Mr. W. claims that this prevents the borer entering beneath the earth surface, but instead, it enters above the clay, where its presence is immediately observable, and itself killed by the punch of a wire. RENOCLAF.

STRAWBERRIES.

H. HENDRICKS.

Now that we are in the midst of the season for this luscious and wholesome table fruit, is it not well for cultivators to compare notes as to varieties, soil, and the general management of bearing plants? Many, yes most of us, have grown Strawberries for years, either in private gardens, or in larger areas for market. Some, if not indeed the majority, have been content to grow only one or two common varieties, as the Wilson for example; being satisfied with an abundant supply of fruit, with no special regard for fine flavor. Others with more sensitive palates and greater facilities for their gratification, have planted sorts of more recent introduction, and found places in their gardens for many of the new, fine-flavored varieties as they came from our enterprising hybridizers and propagators. A few of this latter class have grown an extensive variety under varying circumstances, carefully noting the habits, peculiarities and merits belonging to each; and the results obtained, and opinions formed by these persons must, of necessity therefore, comprise the most reliable data we have on the subject.

To the non-producing consumer we must, however, accord a share of judgment in the general estimate, so far as relates to flavor. For some of these fully appreciate fine fruit and are willing to pay for it with nice discrimination; others claim to be connoisseurs in fruits and flavors, and will not desecrate their delicate palates with common varieties. Now, among so large a circle of readers as that possessed by the RURAL NEW-YORKER; it is surely fair to assume that all these various classes are fully represented. As one belonging somewhere in this list, I

will say that my own experience extends through many years and during that period I have grown and tested most of the new kinds that gave any promise of value, and also that it would be entirely proper to place myself and family in the category of consumers; for surely none have a better right to eat than those who produce; and the singular notion has prevailed in my mind that the berries which grew on my grounds and with my care and attendance tasted better than any others; which impression, if erroneous, is still most agreeable, and I would therefore advise every family in possession of a garden to raise strawberries at least for their own use. And yet in passing through the country I am sadly reminded of very many strawberry beds, that, from lack of care in culture or poor management, have become disgraceful failures, a tangled mass of weeds and grass. To all owners of such, I would counsel either more careful management, or that they devote the ground to some crop requiring less trouble and attention. For weeds grow spontaneously everywhere, and nowhere more luxuriantly and defiantly than under the fostering care and peculiar protection of a neglected strawberry bed where the runners are allowed to grow and take root. Thus it is that lazy people should never attempt the growth of Strawberries, unless they have the ability and willingness to pay for their proper culture.

The cultivation of the Strawberry in private gardens is of comparatively recent date. We find no record of its cultivation prior to the fifteenth century, and all varieties now known to us have originated during the present century. Previous to this all were wild varieties, there being only four or five. European cultivators were the first to raise successful seedlings; and it was from crosses on our American species found growing wild. The origin of the name, Strawberry, still remains unknown or obscure, I believe, the accounts of old authors being varied and conflicting. I can readily recall to mind the first introduction of this fruit into our family garden when a boy, and I was then old enough to be impressed with the fact that our strawberry bed was looked upon by friends and neighbors from far and near as a very doubtful and unpromising experiment. The variety then planted was the old Hovey seedling, the Pioneer Strawberry in this country, which I believe is still cultivated to some extent in certain localities. It being a pistillate, it proved unproductive grown by itself, and we therefore obtained plants of the Brooklyn Scarlet which were alternated with the Hovey; and thus the bed yielded some fine fruit the following season.

Since that time we have added new varieties as they were introduced and proved of sufficient value, discarding a very large number and retaining those only that most nearly answered all the conditions and requisites of a good, reliable family strawberry. Of late years the business of raising new varieties has grown to an enormous extent, and now the simple enumeration of them would require a volume, one cultivator alone having over three thousand promising sorts now growing. It is, of course, obvious that the difference between many of these is often so light as to be scarcely discernible to the unskilled. The Strawberry is more easily crossed than any other fruit; and although the business is not usually attended with any very alluring results of a pecuniary nature, the pleasure in sending out for the first time these little gems of their care and skill, together with a sort of fascination for the pleasant pursuit, seems a sufficient compensation to these enterprising originators and they keep at it from year to year; and we, more than they, are the gainers. Out of the many thousand seedlings thus obtained only a few are found worthy of propagation; and then again this list must be very materially reduced before going to the public; and then thirdly, it has to undergo another very severe reduction and elimination at the hands of cultivators in varied soils and climates. We have indeed, become very particular in this matter. A few years since the people were glad to get anything in the shape of strawberries with very little regard to flavor or variety; they were a luxury that required neither name nor special quality. But now we have passed that point, and the Strawberry of the present day must have a certified pedigree, with reliable references as to good behavior under any and all circumstances in which it may be placed.

From much careful observation and considerable reading I am led to conclude that the variety most generally needed throughout the entire country and by all classes, is one having the best possible flavor invariably, and which will grow in any kind of soil or climate and produce abundantly without any care, or at least with the most careless and slip-shod management that can be devised; and he who shall meet these requirements will be a benefactor indeed. If erroneous in this belief, I shall be most happy to receive correction. In view of this desideratum, then, it is obvious that the industrious hybridizer who seeks to meet the public demand, has a difficult task in hand. That he may fully accomplish this object is quite impossible; but that he can more nearly approach it than has yet been attained, there can be little question. In order to see how nearly this desirable result has been reached, let us look briefly at the leading varieties now in cultivation.

Some years since I obtained all the most prominent Strawberries then known, and not already in any collection, from Messrs. ELLWANGER of Rochester, N. Y. My collection then comprised the Jucunda, Triomphe de Gand, Lennig's White, Agriculturist, Napoleon III., La Constante, Nicanor, Colfax, Peak's Emperor, Romeyn's Seedling and many other varieties that I do not remember, both of home and foreign origin. I gave them every advantage of soil and culture in my power and brought most of them through three years of doubt and uncertainty with varying results. Of that entire list, however, but one has retained a place in my garden, and that is Lennig's White. And I consider this in many respects a most excellent family berry; a very healthy, vigorous grower, and its flavor is so fine and delicate, with that exquisite aroma that leaves nothing to be desired in that way. A dish of these pale pink beauties, on the table, is to me a very tempting desert. It is true, however, that they are somewhat less productive than some others, also the last portion of the crop is apt to run small in size. But for these reasons it is perhaps the best family berry we have. The Jucunda, grew and bore fairly, but the berry was not solid, and lacked flavor. Triomphe de Gaud tasted better but was less productive and lacking in vigor. Agriculturist was fair in flavor but somewhat defective in habit. Napoleon and La Constante, though both fine-flavored, large berries were weak and tender in growth and unsuited to the climate. Nicanor proved of no value on my grounds, surprising as this may seem to its worthy originators. It was small, sour, a poor grower and poor bearer. But for the fact that my plants were obtained from headquarters, I should, in view of all the praise that has been so generally bestowed on it, have doubted the identity of my plants. The Colfax proved a most wonderful bearer; and my plants were so fine that I was induced to exhibit a few in full fruit at the summer meeting of our Horticultural Society here, where they received a special premium. But the berries were small, rather sour and very soft; and though the most prolific variety I ever saw, I discarded it for these reasons. Romeyn's Seedling is a good berry, a rather vigorous grower and in most respects so similar to the Triomphe as to lead many to regard it as identical therewith. Burn's New Pine is an old variety, but in my estimation the finest-flavored strawberry yet produced. It is however a pistillate variety and not very productive; and still those who have room for variety should not fail to have this fine-flavored sort among them. Another very fine berry is the Charles Downing, and I regard it as a most desirable family variety every way, it is also quite productive. I am glad to see that it is now becoming more generally appreciated throughout the country as it well deserves. President Wilder has too good a name, for though pleasant-flavored, it is soft, unproductive, and most unreliable. Russel's Seedling is large and handsome, but of little value from its strong tendency to rot even before it ripens.

I might name others, all of which have proved defective and unsatisfactory here. I am now testing a few varieties of more recent introduction, among which Boyden's No. 30 is now very promising. It is the finest grower I ever saw, winters well, forms strong plants early, and bears abundantly: berries very large and fine-flavored, and very firm and solid in texture. I am much pleased with it thus far. Concerning Monarch of the West, Springdale, Star of the West and Cumberland Triumph, I am not yet prepared to speak with certainty. They are all doing nicely at present, and I trust they will bear out the glowing promises of their enthusiastic disseminators. During the past year or two a whole list of new seedlings have been let loose over the land with much *eclat*; but it is, of course, quite impossible to judge of their value at present. Among them may be mentioned Great American, and several others of Durand's seedlings; also Sterling, Crescent, Miner's Prolific, Duncan, Black Defiance, Duchess, Barnes' Mammoth, and hundreds of others. Col. Cheney has been highly commended by many, but my own experience with it has been somewhat unfavorable. It fails to ripen evenly to the end, is not productive, and lacks in vigor.

For years past the universal opinion of the people, all things considered, has been largely in favor of Wilson's Albany Strawberry, especially as a general market sort, and, on the whole, I think it has been accorded more good points than are found in any other variety; and yet I am inclined to the belief that now this great popular notion is undergoing considerable modification, and that ere long it will be largely discarded. It is very sour, variable in size and quality, and a very poor berry under the best conditions of growth. And still its great productiveness must be admitted; and it will, perhaps, bear abuse with better grace than any variety we have. It certainly has been the most successful variety of strawberry ever introduced into this country. When we read that the annual sales of this fruit in the four cities of New York, Boston, Philadelphia and Cincinnati, amount to the enormous sum of 1,500,000 bushels, it would seem that this strawberry interest is one of considerable magnitude, and well worth talking about.

ULSTER CO. N. Y.

Miscellaneous

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE are satisfied seed is not generally planted deep enough. Covering grain with a cultivator is better than with a harrow. Hereafter we shall use a harrow to mellow and pulverize the ground, and then take the cultivator to cover the seed. After the ground is made ready by the harrow, sow in the seed, and then with a two-horse cultivator go over the field, lapping enough so as to be sure not to leave any spots uncovered. This is for broadcast sowing. When grain is put in with a drill, the use of the cultivator is not required, as the drill does the work.

Clover seed will catch a great deal better sowed after cultivating than after harrowing. Clover seed is usually rolled in after the harrow. We are convinced this is a mistake; the practice of rolling in clover or other grain seed after a cultivator is a better plan, and when this is not done, clover and timothy seed should be harrowed in. When grain is drilled in, the grass seed may be covered by a roller and do well. Unless the season is very favorable, a great deal of grass seed rolled in after a harrow, will dry up, resulting in disappointment and loss. We have ten acres which is almost a total failure. This was rolled in. If the seed had been covered with a harrow it would not have dried up during the drought of last summer. A neighbor sowed his clover seed after the first harrowing and before the second, and his clover stood through the summer and resisted the frosts of winter, and now promises a splendid crop.

The above belief is proven by our barley this spring. It was covered by a cultivator with sharp steel teeth, each one rolling up a nice furrow and burying all the seed. High winds prevailed immediately afterwards, drying every bit of moisture out of the surface of the ground; but the barley came up promptly, and grew right on notwithstanding this check, which would have prevented the crop from growing if it had been covered as slightly as the harrow does its work. The cultivator will cut up weeds and tear in pieces clods the harrow slips over, and will leave the ground in better order for the crop. We are so convinced of these facts that we urge them upon the attention of farmers.

Every chicken which had the gapes has been entirely cured by being made to inhale tobacco smoke. The treatment has done them no harm, and the trouble of smoking is but little, if it is done when the chicks are in the coop. It takes but a moment to put them into a basket, and five minutes is as long as they should be subjected to the inhalation of the smoke, and not so long, if it is strong enough to produce stupor. As soon as a chick is stupefied, it should be taken from the basket and laid on the ground, when it will soon revive. Our chickens were nearly dead with the gapes when first treated, but got better with each treatment, and were cured after the seventh.

Sixty years ago a Mr. Hewitt bred a half-Jersey heifer, and as she proved an excellent cow, her progeny were all saved, and this family of cows are still owned and bred by Mr. Hewitt's son. They all have marks of the Jersey blood, and now and then a calf quite closely resembles the pure-bred type in color. They have always been noted for the richness of their milk, and butter made from them has always sold at the highest price, showing that "blood will tell."

When lambs are taken away from their dams at this time of the year, if the ewes have large udders, they should be milked several times, or else inflammation will follow in the glands of the bag and teats, and next year the udder may be spoiled. The lamb of a large ewe last year nearly starved before we found out what was the matter. We thought, at first, the lamb was sick, as the ewe had a full bag; but upon close examination we discovered that the milk could not be drawn through the teats. Neglect the year before had caused the stoppage. This year the ewes are milked. If they are shut up and fed dry food for a week, it will hasten the drying up of the milk, and save the trouble of going to the field for them.

In olden times the stripping-pail was thought to be a necessary part of the dairy furniture. The "strippings," the last milk drawn from the udder, is richer in butter than the rest of the milk, and this portion was carefully saved by itself, and put directly into the cream-pot. The "stripping-pail" naturally begot "stripping," and so the milker pulled away at a cow's teats as long as a drop of milk could be had. When dairies became enlarged, and cows were counted by scores, there was no time for "stripping" People who have large experience with cows think it entirely unnecessary, as the cream is not lost, and the practice tends to dry up cows, as milking is generally done at a time of day when cows feed best, but the time spent is a decided disadvantage.

The most economical way to milk a cow, all things considered, is to milk the two fore teats clean, leaving off with a pretty full stream, and then milk the hind ones down to a short stream, and, returning to the fore ones, milk them to the same condition, not touching the hind ones again. This will leave the teats empty, and the bag too. It is a false notion that tugging away at the teats stimulates a cow to give more milk; but, on the contrary, emptying the bag as soon as possible yields more; then the cow can have the extra time to eat, which is a better stimulus than either. A slow milker is never tolerated in the dairy districts, and a "stripper" is an injury anywhere. The sooner a cow is milked, and all of the organs connected with feeding, digestion, and secretion, are left in their natural condition, the better it is for the cow. For these reasons cows should always be treated gently, and never worried, as all of these excitements and disturbances have the effect to arrest the normal action of the functions, and consequent loss in the gain of flesh or the flow of milk.

Mr. SAUNDERS, the accomplished superintendent of the agricultural grounds of the Agricultural Department, Washington, D. C., sent us this spring cions of two of the varieties of Russian Apples imported from Russia a number of years ago. He has two hundred and fifty varieties now growing in the grounds connected with the Agricultural Department. They are all very hardy and useful kinds. One sent us is a very late keeper, and has been named by Mr. SAUNDERS the Saun-Ker-Matty, embracing his own name in part, and those of two of his associates. The other is the Yellow Transparent, or in the language of Russia, "Skwosnoi-Schotoi."

Mr. SAUNDERS informs us that he sent out, this spring, principally to the northwest, 17,400 grafts of these Apples. Among them were several kinds well known, as they have been so long grown in this country, such as the Astrachans, and some of the larger Crabs. The Apples are suited to our colder latitudes, where many of our native varieties kill out, and on this account are a valuable acquisition. And no doubt, too, on account of their individual merits, they will be welcome in other parts of our country.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

NEW HAVEN, June 22, 1878.

Bulletin No. 17.—Fertilizer Analyses.

144 MAPES' GRASS AND GRAIN TOP DRESSING. Claimed 4.1-5 8 per cent. Nitrogen, 6 8 per cent. Phosphoric Acid, 3-5 per cent. Potash. Manufactured by Mapes' Formula and Peruvian Guano Co., N. Y. Sent May 28th, by S. M Wells, Wethersfield.

159. UPTON'S SUPERPHOSPHATE OF LIME. Claimed 2.4-3 3 per cent. Nitrogen, 10 12 per cent. soluble Phosphoric Acid. Manufactured by Geo. Upton, Boston, Mass. Sent June 6, by E. Stiles & Son, Willimantic.

163. BRADLEY'S SUPERPHOSPHATE OF LIME. Claimed, Sulphate of Ammonia 10 per cent., soluble Phosphoric Acid 7.5 per cent., insoluble Phosphoric Acid 7 per cent. Manufactured by Bradley Fertilizer Co., Boston, Mass. Sent June 2, by M. S. Baldwin, Secretary Nanqatuck Farmers' Club.*

165. SOLUBLE PACIFIC GUANO. Manufactured by Soluble Pacific Guano Co., Boston, Mass From stock of Rodney Kellogg, Hartford. Sampled and sent May 2, by J. J. Webb, New Haven.

	144	159	163	165
Nitrogen in Am. Salts	3.24		0.59*	
" Nitrates	1.17			
" Org. Matters.	87	2.81	1.92	2.39
Soluble Phos. Acid	1.81	1.05	6.68	5.67
Reverted " "	4.18	6.70	0.54	1.84
Insoluble " "	1.32	1.42	3.43	3.77
Potash	3 65			11.05
Cal Value ₰ ton	$36.85	27.92	32.98	38.41
" Cost " "	?	38.00	45.00	45.00

* Potash in 165 is valued at 7½cts. per pound to make the analyses comparable with others previously published, but is obviously too high. Potash in 159 is valued at 4½cts per pound.

* This is represented to contain 10 per cent. Sulphate Ammonia, which is equal to 2.1 per cent. Nitrogen as Ammonia Salts. It really contains not more than 2.3 per cent. Sulphate Ammonia, equivalent to 0.59 per cent. Nitrogen. Nitrogen in Nitrates and Ammonia Salts is valued at 24cts., Nitrogen in Organic Matters at 20cts. per pound

S. W. JOHNSON, Director.

ANNUAL FAIR LIST.

THE following list of dates and places appointed for State fairs will be supplemented by full lists of local and county meetings as fast as they are received. We should be grateful for dates and particulars concerning these latter from any trustworthy source:

American Institute, New York	Sept. 11, Nov. 23
California, Sacramento	Sept. 16, 21
Colorado, Denver	Sept. 24, 28
Connecticut, Hartford	Sept. 10, 13
Dakota, ——	Sept. 10, 13
Georgia, Macon	Oct. 28, Nov. 2
Illinois, Freeport	Sept. 16, 21
Indiana, Indianapolis	Sept. 30, Oct. 5
Iowa, Cedar Rapids	Sept. 16, 20
Maine, Portland	Sept. 17, 20
Michigan, Detroit	Sept. 16, 20
Maryland, Pimlico	Sept. 24, 27
Minnesota, Minneapolis	Sept. 2, 7
Minnesota, St. Paul	Sept. 2, 7
Missouri, Madison	Sept. 9, 13
Nebraska, Lincoln	Sept. 23, 27
New England, Worcester, Mass	Sept. 3, 6
New Jersey, Waverley	Sept. 16, 20
New York, Elmira	Sept. 9, 13
Ohio, Columbus	Sept. 9, 13
Oregon, Salem	Oct. 10, 18
Pennsylvania, Erie	Sept. 23, 27
St. Louis Association, St. Louis, Mo	Oct. 7, 12
Texas, Austin	Oct. 29, Nov. 2
Texas, Houston	Oct. 22, 28
Vermont, St. Albans	Sept. 10, 12
Virginia, Richmond	Oct. 29, Nov 1
Wisconsin, Madison	Sept. 9, 13

The Querist.

ANSWERS TO CORRESPONDENTS.

Cranberry Culture.

P. G. Tracy, Hennepin Co., Minn., having a marsh of 25 or 30 acres, which, unimproved, bears a good stand of wild cranberry vines, wishes to learn the best method of improving, draining, flooding, and managing it as a cultivated cranberry plantation.

ANS. The most profitable sites for cranberry culture are heath ponds or low basins, places naturally flooded with water in winter; swamp lands in which deep deposits of muck are found; savannas or grounds lying between swamps and uplands; mill ponds whose water has been drawn off. Although cranberries are not infrequently cultivated successfully on alluvial uplands, still such locations are generally less desirable than the low, damp sites just mentioned. The best soil is a mixture of coarse sand and muck, made by covering a deposit of muck with a layer of sand. Both soon became thoroughly incorporated, forming a soil not unlike black sand. An abundant supply of water is necessary to profitable cranberry growing, but as stagnant water is injurious to the plant, the site of the plantation should be such as to permit of its drainage at least one foot below the surface. Another important material used in the preparation of cranberry beds is sand, which is spread over the surface of the ground to the depth of from two to eight inches, the amount being regulated by the compact or loose nature of the soil. This sand should be as pure as conveniently possible, free from any admixture of clay or loam.

In draining a swampy patch for cranberry culture, usually the first step is to dig a broad, deep ditch around it, for the purpose of drawing off the surface water, so that the ground may be cleared. The excavated soil, if sufficiently compact, may be used for embankments; otherwise, a firmer soil must be added or substituted. One or two main ditches should then be cut through it, and a number of side drains dug running into these, sufficient to drain all parts of the meadow at least twelve inches, or better still, eighteen inches below the surface.

The usual time for planting cranberries is in the spring from the first of April to the first of June, although the vine is sufficiently hardy to bear transplanting considerably later in the summer. Too much care cannot be taken in securing the plants from fruitful beds, as well as those that produce the largest and best fruit. They should be set in rows from eighteen inches to four feet apart according to the kind of plants obtained; the object being to mat the ground with their growth as soon as possible. There are several methods of planting, such as sod planting, hill planting, drill planting, planting by pressure, and sowing cuttings, for details of which space here is too limited.

In cultivating a cranberry plantation the main object is too keep down weeds and grasses and thoroughly drain the meadow.

To flood a meadow successfully; it is necessary to construct across the lower end of it a substantial dam the hight and strength of which must depend on the inclination of the meadow and the amount of water required to flood it. The time for letting in the water will vary in different locations, but it is a safe rule to apply it as soon as cold stops vegetation, and the vines commence to have a dull-red appearance. It should be kept on all winter, and until about, say, the first of May. Sometimes it is advisable to flood in summer, but then it is only necessary to apply water enough to give the soil a good soaking during a drought.

As a cranberry plantation is a permanent investment yielding returns for a life-time and needing a considerable preliminary outlay in its preparation, it is important that every precaution should be taken at the outset to render it a success. Sometimes the crop brings upwards of $1000 per acre and is nearly always remunerative. It would be well therefore, for a man intending to embark in this branch of industry to thoroughly post himself on all its requirements, by visiting some successful plantation, and also by purchasing some one or more of the works in which the subject is discussed by adepts. A lengthy article on Cranberry Culture appeared in the RURAL for December the 22nd last.

Chufas.

J. M. Butler, Jeffersonville, Arkansas, says: "Our lands off from the river bottoms are what are here termed piney-wood land. The growth of timber is principally Yellow Pine and Black Oak. There are also some Shellbark, White Hickory, and Dog-wood. The soil is light and sandy, and without manure, will produce, on an average for five years, twelve bushels of corn, 250 pounds of lint cotton, or 125 bushels of sweet potatoes per acre." He has never seen the Chufa there, but having noticed several references to it in the RURAL, he inquiries if it would thrive in that latitude.

ANS.—Chufas would certainly do excellently in the above latitude; in fact, hitherto they have been cultivated more successfully about that latitude or a little farther south than elsewhere. It is too late, however, to plant them this year, as the usual season for planting them so far south, is in March or April. On poor piney-wood land the crop is reported to be about 150 bushels per acre, increasing all the way up to 500 bushels, as the land is naturally or artificially richer.

Gilliflowers.

F. G. F., Roxboruogh, N. C., asks whether there is any way to extract the pollen from the double Gilliflower and put it on the single flower, so that the seed from the same might produce a greater amount of the double. He finds that by planting the double and single varieties close together, the cross-fertilization is not very thorough.

ANS.—By removing the stamens of the single flowers, fertilization (if it occur at all) by the pollen from the double flowers will be insured. "Double" flowers are those in which the anthers are changed into petals. If, therefore, the flower is fully double, there is no pollen. If semi-double, pollen can be collected on a camel-hair brush and applied to the stigmas of the pistils of the single flowers. In this case the stamens of the latter should be removed to avoid self-fertilization.

The Harlequin Potato.

Mrs. M. F. McCloud, Beaver Co., Pa., asks whether the Harlequin potato has variegated folisge. She sent for a specimen for her flower-garden to D. M. Forry & Co. of Detroit, but the top is green, just like that of the ordinary sorts; and in answer to a note from her to the above firm, they write back that they sold her the genuine Harlequin variety and made no mistake. She wishes to know whether her opinion, that it should have variegated foliage, is correct; and where she can get a specimen of that kind.

ANS.—We have this variety nine inches high. Every leaf is variegated with creamy-white. Our seed-potatoes were sent to our experimental farm by Messrs. B. K. BLISS & SON of this city, among other things, to be tested. We should suppose that D. M. FERRY & Co. are not a concern liable to send plants or seeds not true to name.

Drying Cows of their Milk.

J. B. T. Wheeler, Kane Co., Ill., having a lot of cows coming in, in early fall, is anxious to dry them off, and asks if there is any preparation which, if applied internally or externally, would do so without injuring the animals.

ANS.—We know of no preparation of the kind. In drying off a cow, it is best to put the animal where pasture is scanty, so that she will have to work hard to pick up a livelihood, and if there is no short pasture on the farm, then the cow should be kept in the yard and fed only on straw for a few days. The animal should be milked every third day to clear out the bag so as to prevent the milk from caking, which might cause injury to, or even the loss of, a teat next year. Many people draw a little milk daily from a cow, to relieve her; but this causes more to be secreted, and prolongs the drying off. For a week before the actual drying off begins, it is well not to milk oftener than once a day. Physicking and bleeding cannot be recommended. Should a cow show any signs of inflamation in the udder, it might be fomented with warm water as hot as the hand can bear it, and give a pint of salts; but the milking out of the liquid will generally be sufficient. The evil following the drying of cows is usually caused by feeding them too well. It is well to notice the udders and teats for a week or two after the milk has ceased to flow, as sometimes one or two of the teats will require stripping. Wild animals often lose their young, yet they come round all right, and with cows the best way is not to fuss too much.

Aphides on Grapes.

J. R. Roselle, asks whether the little brown aphides that are gradually covering the bunches of young grapes, will do any harm and how to get rid of them. He has used tobacco water and soft-soap with good effect on cherry trees and English beans, but is afraid it is too strong for the grapes.

ANS.—These aphides are injurious to the fruit but far more so to the young shoots and tender leaves on which they feed so liberally as to cause the parts they infest soon to wither and die. With regard to the best means of getting rid of them, we have asked ourselves the question every day for the past week. All that we have done is to pinch off the ends of the shoots infested, collecting them in a basket and throwing them into the fire.

Miscellaneous.

J. Halcomb, Hartford Co., Conn., asks for the name of the best work on botany and speaks of the artificial system of Linnæus.

ANS.—The artificial system of Linnæus is not used now. The elementary botany (How Plants Grow), by Professor ASA GRAY, will serve his purpose as well as any.

J. N. Whelmore, Rutland Co., Vt., wants to learn how to prevent mice from eating his harness.

ANS.—Nothing occurs to us that has not probably been thought of by our correspondent. We should naturally reply: hang the harness up out of reach of the mice, or, if kept in a harness-room by the use of sheets of tin, it may be made mice or rat-proof. When our rats get over-troublesome, we use rat-poison.

N. Y. Z., Nineveh, N. Y., having a cow troubled with "snuffles," asks for a remedy.

ANS.—This inquiry is too indefinite to enable us to give a correct answer. When advice is sought, with regard to the maladies of cattle, it is necessary to give a description of the disease inquired about, for not only do names for diseases vary in different parts of the country, but, to prescribe appropriately, it is also necessary to know the condition of the afflicted animal, as well as the disease.

C. E. P., Bay Ridge, L. I., N. Y., sends us a defunct insect for a name, and 1. asks how best to get rid of it. Its living kindred are ruining his verbena beds and destroying his Roses. Though he has scattered sulphur liberally on the plants, it seems to injure the flowers more than the bugs. 2. Lately he found a light-grayish toad, with a streak of gold down his hind legs, and around the eyes, and around the body a few black streaks like those found on marble, and he wishes to know whether it is a specimen of a distinct species or merely a "sport."

ANS.—1. The insect is a Rose-bug, best got rid of by picking them off. Will somebody pested in toads please answer question No. 2.

J. E. F., New York City, asks whether the Leghorns are the best fowls for laying and what breed is the most profitable for marketable young chickens.

ANS.—The White Leghorn is generally considered second to no breed as layers, though Brahmas and Cochins are not without admirers who prefer them. These are also held by most poultry keepers to be as profitable as any for marketing young chickens. A cross between a Brahma cock and a Dorking hen also produces an excellent fowl for market.

C. L. Toppert, Jefferson Co., Ky., asks for an article each on the culture of Peanuts and sweet potatoes.

ANS.—A lengthy illustrated article on the peanut and its culture appeared in the RURAL for Oct. 13, last year. Another on the culture of sweet potatoes will be published soon.

Mrs. M. A. Poppino, Muskingham Co., Ohio, sends flower for name.

ANS.—It is Lilium superbum.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JUNE, 22D.

S. H.—B. B. — W. C. L. D.—Clyde — W. H. I. — J. R. — Nellie S. — F. D. C. — W. H. N. — S. P. — S. V. W. C.—G. E. M. —M. O.—R. R. B.—J. A. S.—R. M. M.—E. B.—F. G. T.—I. N.—M. H.—S. R. M.—L. H.—A. W. M.

Veterinary

MALADIES OF STOCK.

INQUIRIES ANSWERED BY D. E. SALMON, D.V.M.

Sprain of Horse's Hip.

Alex. Moore, Chickasaw Co., Miss., has a fine mare lame in her left hind leg for twelve months. After working she walks on the tip of the hoof; is more lame going up hill than on level ground. The hip has recently shrunk; the muscles seem drawn up from the stifle to the upper joint; using her makes her much lamer and seems to cause the flesh to quiver between the stifle joint and the point of the hip. He wishes, from this diagnosis, to learn the mare's ailment and its treatment.

ANS.—The symptoms enumerated indicate sprain of the tendon of the glutens maximus muscle at or near its insertion on the trochanter major of the femur. The quivering of the muscles above the stifle is caused by the effort to keep the limb raised and thus throw the injured muscle out of use. In most cases of this kind there is more or less swelling at the point of the hip joint, *i. e.*, over the trochanter major; there should also be tenderness and flinching from pressure at this point. What is known as a high-heeled shoe, should be put on the foot of the affected limb to relieve the strain on the muscles; the joint should then be bathed with hot water (as hot as the hand can bear) several times a day for a week (the oftener the bathing is repeated, and the longer it is continued at each time, the better); the affected part should then be repeatedly blistered with cantharides (cantharides 1 part, lard 4 parts), and if not cured in this way, may be fired. Would advise Mr. MOORE to get Law's Veterinary Adviser, and read up on blistering and general principles of treating lameness unless he has had experience.

Paralysis in Swine.

J. Winans, Crawford Co., Pa., has a barrow hog about fourteen months old, which he intended to kill last Christmas. The animal, however, saved his life by suddenly losing the use of his hind legs just a week before his intended introduction to the butcher. Although he came to the trough dragging his hind quarters after him, his appetite continued first-rate, and at first it was thought that he had merely strained his back and would soon be all right again. As this didn't happen, a neighbor thought it was "kidney-worms" that ailed him, and prescribed a pint of soft-soap in his food once a day for five days. That hog, however, couldn't be soft-soaped into good health. Another neighbor then prescribed a pound of pulverized indigo; but the blue draught didn't make a shade of difference in his condition. Every neighbor all around had a different remedy for the case, but not one of them cured the animal, and, stranger still, all combined failed to kill him. So soon as folks ceased doctoring him the hog began to get better of his own accord, and soon became able to walk about in the pen. When the weather began to get warm, he was let out into a pasture lot, under the impression that the soft sod would be better for him than the hard floor. But here again the treatment failed of its anticipated effects, for in a couple of weeks the animal grew lame again, and is now as bad as when the subject of experimental doctoring. A name and a remedy are sought for the ailment.

ANS.—This trouble may arise from different causes, and it is not always an easy matter to decide in regard to its exact nature; although it is generally ascribed by farmers to kidney worms, this is, perhaps, the least frequent cause. It may be brought on by disordered states of the digestive organs, liver or kidneys, and also by congestion of the spinal cord. It is best to clean out the bowels with three to five ounces Glauber salts, according to the size of the animal; to apply irritants along the back (mustard, oil of turpentine, ammonia); to give soft, easily-digested food, and to keep the bowels in a laxative condition, by giving one to two ounces of salts daily. If not successful in ten days, this may be followed by nux vomica, in five to ten-grain doses, twice a day. Do not allow access to stagnant or muddy water, or musty food of any kind.

Parturition Fever.

W. H. Keplinger, Tuscarawas Co., Ohio, says: "Within the last few weeks, among our farmers and especially our dairymen, quite a number of cows in good condition, and aparently in good health, have died soon after dropping their calves. Nearly all seem to clean or pass the after-birth all right. In from ten to twenty-four hours after calving, the horns are found to be cold and hollow. The cow is unable to remain on her feet and becomes very weak and tender in the small of the back or across the kidneys. The spine, in the region of the kidneys, is quite hot, and the points of the hip are cold in some cases. The cow at once becomes helpless and lies down all the time, showing by her repeated turnings of the head toward the sides and hip, and her constant moaning, that she is suffering great pain. The nose at times becomes very dry, and at others breaks out in a cold, clammy sweat. The animal generally lives from one to three days after getting down—only a few recover. I would like to know what is the cause and the remedy, and if there is a way to treat the cow before calving to prevent the attack of this fatal disease?"

ANS.—This disease is known as milk fever, parturient apoplexy, parturition fever, etc., and is quite frequent in cows which have been fed too well before calving. The condition of the horns has nothing to do with the causation of the disease; it would seem that after boring the horns of cattle in all manner of diseases for over a century, our farmers would finally find out that the horns of all the cattle are naturally hollow after they reach maturity. Cold horns, hips and limbs are merely symptoms of serious internal disease. The trouble may be prevented by keeping the cows on *very spare diet* for ten or twelve days before calving, and for a week after. Treatment has never proved very satisfactory even in the hands of veterinarians. If the disease is recognized while the cow is still on her feet, and while the pulse is full and hard, she may be bled to the amount of four or five quarts; after this period bleeding is injurious. Give as medicine two pounds of Epsom or Glauber salts dissolved in warm water; just before administering, add to this half an ounce of carbonate of ammonia and half a drachm of nux-vomica (powdered), and repeat the ammonia and nux-vomica three times a day. A weak solution of carbolic acid injected into the uterus, two or three times a day, is of considerable assistance. Keep the milk drawn from the udder and apply bags of pounded ice to the head.

Red Water.

M. B., Andover had a cow taken sick. Her water and milk were part blood; she soon lost her appetite, milk and strength, and died three days after the beginning of the attack. He asks the name of the disease, its cause, and best treatment.

ANS.—This affection, which is known in Europe as *wood disease*, only occurs where cattle pasture on unimproved lands, *i. e.*, in woods and uncultivated meadows. It is said by some to be caused by various irritant plants (Ranunculus, Colchicum and Asclepias). It is also said to be caused by eating the branches of resinous

trees, while still others claim that even roots, grass, etc., grown on certain undrained soils, will produce it. As prevention, keep the animals from unimproved pastures till the grass is well started, and feed on sound, bright grain and fodder, free from acrid weeds. As medical treatment, give a purgative (Glauber salts, 2 lbs; ginger, 2 ounces); or, if there is colic and other signs of an irritated condition of the bowels, the treatment must be restricted to a laxative, such as olive or linseed oil. If signs of weakness and sinking are shown, give diffusible stimulants (sweet spirits of niter) and tonics (tincture of iron); food should consist of gruels and other easily digested substances.

Fistula in Horses.

W. Wright, Benton Co., Mo., having already lost a couple of horses by fistula, is naturally anxious with regard to another now afflicted with the same disease, and asks for a remedy.

ANS.—The great point in treating fistula is to make an opening from the lowest part downwards to the outside to allow the pus to escape; in such cases a surgeon is almost indispensable. A probe must be introduced into the tubes or sinuses, which are often three to six inches deep; the probe must then be cut down upon at its lowest point, and a seton inserted to keep an opening below till healed above. The wound should then be dressed once a day, and an astringent solution applied; this may consist of acetate of lead ½ drachm, water ½ pint, or acetate of lead and sulphate of zinc, of each ½ drachm, and water ½ pint.

Scientific and Useful.

COMPOSITION AND DECOMPOSITION.

S. RUFUS MASON.

THE title of this article indicates the two powers or forces which are the primary causes of life and death. All creation is governed by them; they are the beginning and ending of all things. I propose to consider their influence and action in the vegetable kingdom, in the interests of the cultivator, and to show that unless it is well understood and taken advantage of, no crops can be grown successfully, except by accident or by fortuitous seasons.

Composition is that property by which every living thing grows up to its maturity; and decomposition is the process commencing at maturity, which finally reduces it to its first principles. As animal life is forced into activity and motion by a chemical combination, and then begins to form or compose itself with the aid of food, warmth and moisture, so the vegetable embryo, its energies awakened by the chemical action of heat, light and moisture, at once begins to compose or form itself into the adult plant, producing, in time, the seed or future embryo. This is the first phenomenon of life.

Decomposition, or death, is the destruction, by a natural process, of the adult plant, the final end of that particular embryo, as far as its increasing period of life extends, and this is the last phenomenon of life.

Composition is the result of a close affinity between the embryo and the surrounding influences necessary to it, and decomposition is the result of a gradual decline of this affinity, produced by the natural changes of the season—heat changing to cold, light decreasing in intensity, and moisture giving way to autumnal drought. These are the principal agents, and the active principles of life and death, and it is evident that to insure a perfect life, all the attending circumstances must be not only in harmony with each other, but particularly so with the embryo to be acted upon.

In reality, there is no such thing as death, but in place of it, only a cessation of growth or increase, passing to a decrease of bulk and into another form of life called destructive fermentation, ending in the living body taking the form of food suitable for a new living body, and this is Nature's mode of maintaining the fertility of the earth.

We see, then, that without life there can be nothing to die, and without death, no food for the living. These processes are simple, regular in their action, necessary to development, and form the fundamental principles of the laws of nature. They cannot be evaded without certain punishment, but they can be improved by the farmer, always to his profit. As all plant life in nature is governed by these laws, it is evident that modes and times of tillage must conform to them, and that if decomposition is also conducted in accordance with the same laws, the produce of the land can only suffer from violent or untimely changes of the atmospheric influences. Chemical action begins only when all the agents act in unison, and natural growth is always due to the uninterrupted influence of all the agents. Any irregularity of either one not only deprives the plant of that special influence, but checks the effect of the others.

Here we notice the secondary laws; and these again are governed by all the different qualities, conditions and fitnesses of the soils, as well as by the conditions of the atmosphere. No two crops demand exactly the same amount of the essential elements, and thus we see the necessity of a perfect knowledge of each one's habits. The seed, the average amount of heat, light and moisture, and the length of the season, are fixed; the farmer has no control over either; but the soil, its fitness, its preparation and its condition during the season, are entirely under his control. As to the soil, its good qualities must be utilized, its bad ones corrected by cultivation and enrichment, while even the amount of light, heat and moisture may, to a certain appreciable extent, be increased or decreased by close or distant planting, or by deep or shallow cultivation. Here is the measure of the farmer's brain capacity and skill.

From the germination to formation of seed comprises the first stage of composition, and if carried through successfully, has allowed no signs of decomposition or death, such as dead leaves. After gathering the crop, the next duty of the farmer is to prepare for a regular and thorough decomposition in time for the next crop. This final act of the season takes place under precisely the same influences as composition, but in a vastly diminished degree of intensity of each. It is the most important work of the season—the preparation of food for the land which has become weakened by its efforts in growing food for the farmer.

Again the laws of nature assert themselves, as food is only beneficial when properly prepared and timely administered. These agents of plant growth never cease their action upon vegetable matter, and as we have no other tools to work with, it is of the last importance to know how to handle them. As composition and decomposition are active alternately—one in the growing, and one in the season of comparative rest—they never interfere, thus giving the farmer ample opportunity to assist both.

A study of the subject will prove that nothing dies; that what is called death is merely a a change from the composition of fruit and seed to the composition of manure, and that these processes are absolutely necessary to accomplish two purposes: one, that of preventing the earth from being encumbered with dead herbage; and the other of changing it to plant-food. Thus nature, always in a state of preparation, admonishes the cultivator of the soil to "go and do likewise."

Entomological.

GETTING RID OF THE CUT-WORM, &C.

B. PICKMAN MANN.

ON page 341 of the RURAL NEW-YORKER, Joslyn's method of getting rid of the cut-worm is said to be "just about as sensible as many methods of destroying insects which are published in these enlightened days," which kind of comment has the appearance of indicating a contempt for the method, but on page 266, in an answer to a correspondent, essentially the same remedy is recommended as the only one known.

In an answer to a correspondent on page 266 of the RURAL NEW-YORKER, the respondent says, referring to *the* cut-worm. "We presume our inquirer refers to *the* greasy, ash-gray caterpillars that cut off young plants during June and July." (The emphasis is my own.) May I ask which is *the* cut worm? Is it what Mr. RILEY calls the "Variegated cut-worm? (Agrotis inermis), or is it the "W-marked cut-worm" (Noctua claudestina), or the "Greasy cut-worm" (Agrotis telifera), or the "Western striped cut-worm" (Agrotis herilis), or the "Dingy cut-worm" (Agrotis subgothica?) all of which are distinct kinds of "greasy, ash-gray caterpillars that cut off tender young plants during June and July." Will farmers and gardeners soon learn that it is no more sensible for them to ask what to do with *the* cut-worm or *the* current-worm or *the* wire-worm or *the* potato-beetle or *the* weevil than to ask their physician what do for *the* fever or *the* headache or *the* indisposition? In Mr. GROTE'S last list of the moths known to entomologists as Noctuidæ, over two hundred and fifty different kinds of what may generally be called cut-worms are named.

I think it is a pity, considering the dense ignorance of entomology which still exists in many minds, to rely upon the power of irony alone to combat such absurd recommendations as those given for "Death to the curculio" on page 268 of the RURAL NEW-YORKER. There can hardly be any doubt that very many of the readers will recognize as readily as the editor does, this absurdity, yet it is made plain by a sad experience that recommendations no more sensible find acceptance in many minds, if they are not plainly discredited at every turn. See rather the remarks upon the curculio on page 248.

On page 162 I referred, in a partial answer to J. J. D., to some valuable observations made by Mr. WALTER FAXON upon the injury caused to hides by certain mites. I have just received from Mr. FAXON a copy of his article, which is published as No. 2 of vol. 5 of the Bulletin of the Museum of Comparative Zoology, at Harvard College, Cambridge, Mass. This comprises six pages, beside a plate and a page of explanations, and is entitled: "On the presence of Demodex folliculorum in the skin of the ox." "In the parts about the neck and shoulders, especially, the skins presented numerous slight swellings, which under pressure emitted a quantity of soft, whitish matter. After being tanned and split, the leather appeared disfigured with pits which in many cases penetrated nearly through the thickness of the leather." These cavities were found to be immensely enlarged, and they were filled with a fatty substance containing multitudes of the same mites which live in the little black-headed, worm-like masses that may be squeezed out of the face of a man, woman or child. The same mite is found in the skin of the cat, dog, fox, bat, ox, horse and sheep, and perhaps occurs in animals generally. In dogs it causes the mange. It is not known whether it makes hair fall from the skin of the ox or not. Fresh specimens of skin, preserved in rum, alcohol or whiskey, are needed to determine this question. The method of treatment is described.

Everywhere.

RURAL SPECIAL REPORTS.

HARRIS CO., Texas, June 16th, 1878.

THE severe drought we have had here ever since early spring, has been terminated by plenty of very heavy rains. Sweet-potato planting, which had to be delayed on account of the dry weather, is being pushed rapidly. There is a general want of plants and slips this year, which will, to a certain degree, limit the area of this crop, usually so sure and remunerative. Tomatoes and water-melons are plentiful; the drought caused the latter to be smaller than usual. Peaches are mostly curculio-stung and rotting on the trees. This fruit does not succeed as well as in former years, down here in lower Texas. Grapes are ripening. The mocking birds and other members of the feathered tribes are in for their lion's share.

In flower-gardens Crape-myrtles are in full bloom; so are the Althæas and Hibiscus mutabilis. I never have seen these two last-mentioned plants bloom so soon in the season, as they are properly fall-flowering. The Mignonette tree is loaded with flowers which shed their powerful perfume profusely. It is a pity that this shrub is not entirely hardy here. Perennial Phloxes exhibit their flower-trusses; they are not so plentiful in flower-gardens about here as they deserve to be, being comparatively little known and owned only by a few. Dahlias, too, make a fine show, after those few rainy days. They are apt to deteriorate in this climate, especially in a strong and heavily-manured ground. It is preferable to raise new tubers by cuttings every year, than to save the old ones; which latter get, on account of the long season, overgrown, carious and inclined to rot, producing flowers inferior both in color and fullness.

G. MARTI.

RURAL FARM, June 29.

THE hottest day of the season. Men have been obliged to quit the fields and to keep quiet under the shade of trees. During such "heated terms" it is wise to do all the work that can be done before the sun has full power in the morning, or to wait until the cooler part of the afternoon. To work through the heat of such days is the poorest kind of economy and results too often in sickness and death.

CEDAR MILLS, Meeker Co., Minn. June 14 1878.

CROPS of all kinds are looking very well, indeed, especially the small grain which never looked better. Some fields are heading out already, and an early harvest is expected.

We have been having an abundance of rain for the last four weeks. Immigration is pouring into the State at a rate never before equaled, and still there is room for more. Everybody seems prosperous and happy, and times are better than for several years.

M. E. B.

WARREN CO., N. C., June 10.

THE oldest inhabitant says, "We never had so cool a May and so far in June." We can rake and bind our fifty dozen of wheat, with "nary" a perspiration. Wheat is fine, the rust caused but little loss. Cotton is doing nothing. A good stand, July and August, may make a crop. Severe storms of wind, rain and hail have done considerable damage to fruit and other crops in some localities, some fields of wheat being literally threshed in the field. M. B. PRINCE.

POUGHTOWN, Chester Co., Pa., June 27, 1878.

WE are busy making hay which is a large crop. Wheat will be cut this coming week; it looks well and so do oats. Fruit will be a short crop. Hay sells at $6 per ton; wheat, $1.15; corn, 60c. per bushel; butter, 18c. per pound.

DR. HAINS.

DE RUYTER, Madison Co., N. Y.

I HAVE a hive of bees from which have issued four swarms within the thirteen days past.

M. H.

Educational.

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Parisian Correspondence—Threber (Illustrated).. 421
Drainage—Prof. R. C. Carpenter (Illustrated)..... 421
Study on the Farm—M. Oakey 422
Poetry on the Farm, Etc.—W. H. I..... 422
Barley on Clover Sod—W. J. Fowler..... 422
Russian Apples in America—T. H. Hoskins, M. D. 423
Fruit Trees for Ornament—Samuel B. Parsons... 423
The Coniferæ of California—Wm. C. L. Drew.... 424
Garden Talks and Walks—Renoclaf..... 424
Strawberries—H. Hendricks..... 424
Jottings at Kirby Homestead—Col. F. D. Curtis... 425
Connecticut Agricultural Experiment Station—S. W. Johnson 425
Annual Fair List..... 425

Answers to Correspondents:

Cranberry Culture..... 426
Chufas..... 426
Gilliflowers..... 426
The Harlequin Potato..... 426
Drying Cows of their Milk 426
Aphides on Grapes..... 426
Miscellaneous..... 426

Veterinary:

Inquiries answered by D. E. Salmon, D. V. M.

Sprain of Horse's Hip..... 426
Parturition Fever..... 426
Paralysis in Swine..... 426
Red Water..... 426
Fistula in Horses..... 427
Composition and Decomposition—S. Rufus Mason 427
Getting Rid of the Cut-Worm, Etc.—B. Pickman Mann..... 427

Everywhere:

Harris Co., Texas..... 427
Cedar Mills, Minn..... 427
Warren Co., N. C..... 427
Rural Farm..... 427
Ponchtown, Pa..... 427
De Ruyter, N. Y..... 427

Domestic Economy:

The Kitchen Club among the Roses—Annie L. Jack..... 432
Butter Making..... 432
Milk Paint..... 432
Domestic Recipes..... 432
Queries Answered..... 432
Markets..... 433

EDITORIAL PAGE:

Individuality and Selection..... 428
Crop Prospects..... 428
Brevities..... 428

LITERARY:

Poetry..... 429, 432, 434
Corn..... 429
Recent Literature..... 430
A Parisian Beauty's Revenge..... 431
The Man in Scarlet—F. R..... 431
A Rolling Stone Gathers no Moss—J. L..... 431
Women Help in Montana..... 431
Good News for Housekeepers..... 431
Pretty Hanging Baskets—Julia M. W..... 431
Kisses..... 431

Reading for the Young:

Coats-of-Arms..... 434
Kidnapping a Sloth..... 434
A Japanese Newspaper..... 434
The Puzzler..... 434

Sabbath Reading:

"Rock of Ages"..... 434
Personals..... 435
News of the Week—Herman..... 432
Wit and Humor..... 436
Advertisements..... 427, 433, 435, 436

THE

RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY JULY 6, 1878.

MANY of our old subscribers have written to us requesting that we would sell them the Cricket Clock. Others have complained that the offer (now withdrawn) was of advantage only to new subscribers. In order to satisfy all so far as we are able to do so, we have now the consent of the manufacturers of the clock to offer it to our subscribers—*and to them only*—until the 20th inst. at $1.75 each, delivered to the express office.

INDIVIDUALITY AND SELECTION.

NONE of our readers needs to be told that there are no two animals, even of the same breed, exactly alike—the fact is so apparent that it fails to excite either the interest or study which its importance would seem to warrant, for if we are not mistaken, these individual differences may and should, be made the basis for a great and rapid improvement of our live stock. It is not to external characters alone that we refer, but rather to internal functions, the activity of which decide the profit which an animal is to bring to its owner. With the same food, the same ration, the same surroundings, one of several animals will digest a large per cent., another will make more live weight from a given amount digested, and still another will furnish a greater proportion of dressed carcass. Of a given number of cows under the same conditions, one will be conspicuous for her large yield of milk, another for the quantity of butter which she produces, and still another for the amount of casein. Consequently, among a given lot of animals we find some that are very profitable, others that scarcely pay for their keeping, and still others that are a source of certain and continual loss.

If a merchant finds that he is paying more for a certain line of goods at one house than they can be bought for at another, he would be considered an incompetent business man if he continued to buy at the former establishment; it is a part of his business to get his goods at the lowest market price, and inattention in this respect often makes the difference between success and failure. And is it any less the business of a farmer to see that he gets his butter and cheese, his wool, beef, mutton and pork from such animals as furnish it at the lowest cost? It is self-evident that the greatest profit from animals can only be made by those who know at what price each one furnishes its products, who are particular to keep only the most profitable individuals, and who understand and practice the most certain methods of obtaining such animals.

It is not necessary to keep an intricate system of accounts to discover the profits yielded by individual animals, nor does it involve serious labor. In almost every farmer's family there is some young person who would be interested in keeping a record of such experiments, and to whom the experience thus obtained would be of immense value in after years. If the relative profit of the cows in a butter dairy is to be determined, the food of each should be carefully weighed and measured, and their milk, for a certain number of days, churned separately. It is then an easy matter to compute the butter yielded per day, the cost of food per day, and the cost of the butter per pound. Of course, the time since calving should be taken into account, and the mistake should not be made of limiting all the animals to a determined quantity of food, for butter is not manufactured from air, and it is those animals which have the capacity to eat, digest and transform the *greatest quantity* of food, which are the most profitable.

Our breeding stock, above all, should be selected according to such principles. If breeding mutton-sheep or hogs, lambs and pigs should be regularly weighed once a month, and their weights recorded; if it is a ram or boar that is to be selected, we should, when they are from one-half to two-thirds grown, in addition to the above weighing, select three or four of the most promising, weigh their food, and determine the actual gain for a given quantity of food. We may rest assured that by following this plan we will soon have a uniform flock or herd, and one that is capable of making the most of the conditions to which we subject them; and no one can doubt that the profit from animals bred in this manner would be far in advance of what it would have been had no such care been practiced.

This is practical selection. No farmer can afford to neglect it; and its general adoption would make an incalculable addition to the value of our animals, and to the profits of our agriculture—an addition that would make all the difference between an unremunerative business on the one hand, and a highly profitable one on the other.

CROP PROSPECTS.

"WHAT will the harvest be?" is at all times an interesting question to the farmer; but especially so at this season when the attention paid to the gathering of the crops in each section, naturally begets a desire to know their condition elsewhere. Agricultural statistics collected from every part of the country give ample data for an approximate estimate of the yield of the various crops during the present year.

Of the 120 million acres under the plow in the United States, 30 million acres were sown to wheat this year, an increase over the area sown to wheat last year, of fifteen per cent. for winter and eighteen per cent, for spring wheat. Of the entire yield from this area, about four-fifths are produced by twelve states, namely, Minnesota, Iowa, California, Missouri, Kansas, Wisconsin, Ohio, Illinois, Indiana, Pennsylvania, Michigan, and Tennessee. A medium crop from 30 million acres would be 360 million bushels; but the present will be more than a medium crop. At thirteen bushels per acre the yield would be 390 million bushels, and probably it will not fall short of this amount. But placing it at the low figure of 350 million bushels, 45 millions will be needed for seed, and 235 millions for home consumption, leaving a surplus of at least 70 millions for exportation.

Of corn, the great cereal crop of the country, there are under cultivation nearly 50 million acres, or about four-tenths of all the arable land in the nation. Of this area Illinois alone has nine million acres and Wisconsin five millions. It is too soon yet to predict the yield of the present crop, but out West much of that planted early, rotted in the ground, or if up before the advent of storms and frost, a great deal of it has suffered severely, particularly on heavy soils, on which much of it is stunted and yellow. On the better drained lands, however, and on those well cultivated, the growth is vigorous and the outlook highly promising. In the South, also, a larger area than usual has been sown to corn, and there an early and very favorable stand has been obtained. While the average relation of the yield to the exportation of wheat is about twenty per cent., only from three to five per cent. of the corn produced here is exported, and the price of the latter, therefore, depends much more directly than that of the former on the ratio between domestic demand and supply.

The impetus given to cattle feeding, by the exportation of meat and live stock, will do far more towards keeping up the price of corn than any increase in the exportation of maize or corn-meal, although this too has been slowly augmenting. This increase, however, is scarcely desirable, as it can never amount to any considerable part of the crop, and there is greater profit, and much greater farm economy in the shipment of meat, lard, cheese, butter, wool, and other concentrated products of maize, than in the exportation of the grain itself. Since 1860, the area under corn has increased twenty million acres, and this year the prospect is for a fair rather than for an unusually good crop.

The area under oats is greater than that under wheat, and stands next in extent to that under corn, while the annual value of the crop amounts to 100 million dollars. Its cultivation is constantly increasing, and about ten per cent. more land has been planted to it this year than last, mostly in the West and South. Farmers, in many places, have been cautious about cultivating this cereal on account of its liability to rust, but of late years, by obtaining the principal growth in winter, harvesting it early, and especially by carefully selecting acclimated, hardy, rust-proof varieties, this liability has been to a great extent avoided. The crop this year has, on the whole, been free from serious injury from rust or insects, and will be above the average.

Of barley, California produces nearly one-third of the crop; New York comes next, and in this State as well as in Illinois and Iowa, the prospects for a large yield are not favorable, while in Minnesota, Kansas and California the yield will be above the average.

The prospects for an average crop of rye are fair—but little importance is attached to this product.

The great yield of tobacco last year depressed prices so much that a smaller area has been this year planted to it, especially in the Ohio valley. The weather has not been generally favorable to transplanting the "weed," as heavy rains have interfered with the work. Still, the prospects for a remunerative crop are fair, as the decreased crop will tend to increase prices.

The area planted to cotton is about three per cent. greater than in 1877. The crop was put in early; came up well; was promptly brought to a stand; is, on the whole, cleanly cultivated, vigorous, and in better condition than at this time last year. In North Carolina and Tennessee, however, the weather has been too cold, too much rain has fallen, and the crop is, therefore, somewhat backward, but is rapidly improving.

The late frosts in May seriously injured the fruit crops in many places, so that, on the whole, the prospect in this direction is somewhat unfavorable; still late advices indicate that the damage done is less than at first anticipated.

AN OVERSIGHT.

OUR excellent contemporary, the Maine Farmer, speaks of "An English Recognition of American Agriculture," and refers to what Mr. J. B. LAWES, the great experimental farmer of Rothamsted, England, says of our wonderful changes in agriculture. But it gives the London Farmer credit for the long article from which the editor of the Maine Farmer takes his notes. The article in question was copied from the RURAL NEW-YORKER and duly credited by the London Farmer. See RURAL, April 6. We are surprised, first, that our contemporary did not read the article in this journal, and, second, that it did not observe the credit which the London Farmer gave to us.

BREVITIES.

THE best vegetables for undrained lands—Leeks.

"THE true investigation of Nature leads to God."

How would it answer to call the report of the Potter Committee "The Book of Revelations?"

RURAL GROUNDS, June 30.—The ground is moist — the weather hot. Melons grow like weeds and corn's in clover.

THUS far we have to report that Pearl Millet promises to be a failure with us, but the promise may be broken later in the season.

THE last roes of Summer, is the appropriate melody for the June shad as she penetrates into shallow places to perpetuate the species.

AND now by the aid of the microphone the pleasing hum of the mosquito will sound like the roar of a buzz-saw. The advantage of it is to stop emigration to New Jersey.

IN setting out late cabbage plants, it is better to twist off the outside leaves, leaving only the central ones. They cause needless evaporation, and delay the plant's growth.

MR. A. B. CRANDELL answers a friend who inquires whether wheat will turn into chess, in the affirmative, and even gives the time when the change takes place, viz.: when two Sundays come together.

SEEDS of Rutabagas or Swedes may still be sown. A pound of seed is enough for an acre. Sow in drills two feet or more apart, according to the richness of the soil, and thin out to ten inches in the drill.

WE hope, after all that has been said upon the subject, that farmers will take pains to select the best corn for seed. The suggestion to plant a plot by itself for seed, removing all weakly plants or cutting off the tassels before the pollen ripens, seems worthy of general trial.

LAST week it was stated in the Notes from the Rural Grounds that the plums (save one) of two plum trees were not attacked by the Curculio upon which our insect preparation had been used. We have now to state that many of the plums have been attacked. We merely stated what seemed a fact at that time, which has since proved otherwise. The Curculio *is* a little rogue! But we still contend that the mixture, prepared and applied as directed, is excellent for the other insects.

IT is usual to plant three or four times as many melon seeds in a hill as would be needed if all were to grow, so as to provide against the destruction of the cut-worm. As soon as they are out of such danger, it is better, as we have stated, to cut off at the surface of the ground with a pair of scissors, the plants not needed, than to pull them up as is the common practice. It does not disturb the roots of those which remain. On the contrary, the decaying roots afford, no doubt, an appreciable amount of food.

Now is a good time to begin the propagation of hardy shrubs by layering. Select the lowest branches, strip off all but the terminal leaves and ascertain by bending the stem where it will bury in the ground. In that place scoop out the soil as if to insert an earthen bowl—bend the branch into it and while holding it down, cover it with enough earth to keep it in place. Remove the other hand and fill in compactly. No forks or anything of the kind will be needed. Next spring the layer will be found well-rooted and may be transplanted where it is to remain.

FOR Tomato-stakes we use stems of young trees varying from one to two inches in diameter the larger end wedge-shape so as to enter the ground more readily. These we provide from the woods during the winter. Three, set triangularly and diverging upwards, suffice for each plant. Cheap, coarse cord is then tied about these stakes horizontally as the growth of the plants renders it necessary. Some support of this sort is indispensable in a well-kept garden, and we have found the above as simple and effectual as any other.

PROBABLY the Green Prolific Cucumber is the best variety to plant now for winter pickles. Beans, if picked when one-third grown, make excellent pickles and may be preserved in brine, the same as cucumbers to be pickled in vinegar, at any time during the winter. For this purpose the Golden Dwarf varieties are among the most tender. Asparagus, the tender shoots of Brussels-sprouts, Broccoli, young beets, and even those of the Chinese Yam, are all available for pickles. Young tomatoes, an inch in diameter, and Strawberry Tomatoes, make fine pickles, and may be placed in jars the same as canned fruits.

IN the garden, old pea, or worn-out strawberry beds may be manured and prepared for celery, a vegetable that farmers would do well to cultivate a hundred times more than they do. Trench-planting is not so much in favor as in years past, many preferring to use dwarf varieties, setting them on the surface and earthing up later. In Washington Market, New York, the dwarf varieties are sold almost entirely. The leaves and outside green stalks are cut off, leaving only the white, tender parts of each root. Retail purchasers prefer them thus prepared. They are more easily carried and are, after washing, ready for the table.

WE would impress it upon our readers that if poultry-runs and houses ever require care, they require it during the hot season. Our largest poultry-house has a cement floor. As often as twice a week the droppings are hoed into a heap, thrown into barrels and covered with a little earth. These are removed when filled. As often as every two weeks kerosene is poured through a fine nozzle along the perches and into all crevices where vermin accumulate. A small quantity of sulphur is sometimes mixed with fine coal-ash siftings for dusting baths. It is a good deal of trouble to give poultry the steady attention which they need at this season. But if it pays to keep poultry at all, we are confident it pays to give them this unremitting care.

IT is folly longer to talk of the "dreaded potato beetle." The notes we have published from time to time, for the most part in jest, partly in earnest, that it was really the poor man's friend and had done more than anything else for potato culture, are not without a smattering of truth. The potato beetle is an indolent and a stupid enemy, and by a united action on the part of those who raise potatoes, could be substantially wiped out in a single season. Speaking for ourselves, plant-lice (Aphides) have pestered us more than any other insects, and more the present season than ever before. Every growing shoot of every Cherry tree is alive with them. The leaves become blackened, curled and dried up. It is so with Plums and Apples and many ornamental trees and shrubs.

Literary Miscellany.

WHEN YOU WERE SEVENTEEN.

JOEL BURNS.

When the hay was mown, Maggie,
In the years long ago,
And while the western sky was rich
With sunset's rosy glow,
Then hand in hand close-linked we passed
The dewy ricks between,
And I was one-and-twenty, Mag,
And you were seventeen,

Your voice was low and sweet, Maggie,
Your wavy hair was brown;
Your cheek was like the wild red rose
That showered its petals down,
Your eyes were like the blue speedwell,
With dewy moisture's sheen,
When I was one-and-twenty, Mag,
And you were seventeen.

The spring was in our hearts, Maggie,
And all its hopes were ours;
And we were children in the fields,
Among the opening flowers.
Aye; life was like a summer day
Amid the woodlands green,
For I was one-and-twenty, Mag,
And you were seventeen.

The years have come and gone, Maggie,
With sunshine and with shade;
And silvered is the silken hair
That o'er your shoulders strayed
In many a soft and wayward tress—
The fairest ever seen—
When I was one-and-twenty, Mag,
And you were seventeen.

Though gentle changing Time, Maggie,
Has touched you in his flight;
Your voice has still the old sweet tone,
Your eye the old love-light,
And years can never, never change
The heart you gave, I ween,
When I was one-and-twenty, Mag,
And you were seventeen.

CORA.

CHAPTER XXX.

(Continued from page 414.)

MEANWHILE, Cora and Lady Lucie Belmont had driven rapidly from one fashionable shop to another in search of wedding finery and presents, for Mrs. Colston's favorite niece was about to be married, and the heiress was pleasing herself in making the young people happy by loading them with all kinds of ornamental and useful gifts.

"I have so much money, Cora," she said, half-sadly, half-jestingly as they drove away, from one great *magasin*. "If I do not use some of it, and make other people happy, of what good is it? You were a happy girl not to be an heiress, Cora; it must be so pleasant to be loved for one's-self alone."

"But is there any reason that you should not be loved for yourself, Lucie?" said Cora, smiling. "And it would be so pleasant to make anyone you cared for rich. I should not have imagined that Alan had married me for money if I had been ever so rich."

"A burnt child dreads the fire, Cora," said the heiress, still a little sorrowfully. "I am inclined to put faith in the old saw: 'Men are deceivers ever.'"

"Not all, dear Lucie."

"Of course not all, Lady Vincent," laughed Lucie, patting her companion's hand lightly with her own. "There are bright exceptions; my friend, Sir Alan Vincent, for instance."

"And my friend, Mr. George Leeson," said Cora, smiling; and, giving Lady Lucie a sly glance, she saw the color deepen on her cheek.

"He too," said her ladyship, quietly, "I believe him to be loyal and true. Here we are at Marshal's, Cora; come and tell me whether you think *ecru* or moonlight-blue will look best for my dress; that is a more interesting subject than mankind for you and me!"

When Cora returned home she found that Sir Alan was there before her, and he came out to assist her to alight. Lady Lucy would not get out, as she was anxious to dispose of the numerous parcels with which the back seat of the carriage was covered, so that if Mr. Leeson expected to see anyone but his hostess when he came in to afternoon tea he was disappointed; and it was, I suppose, the disappointment which made him quiet and absent while Cora and her husband discussed Mr. Marks.

"I always thought we had met before," said Lady Vincent. "You remember, Alan, I told you I was sure there was something familiar about him; that momentary anger of yours almost cost you dear, Alan."

"It cost me very dear, my child," he said. "It seems very awful that a man should cherish revenge so long and bide his time. In my opinion it was not so much his revenge as his advantage that he sought."

"I suppose he quieted his conscience with the idea that he owed you some retaliation," said George Leeson, as he rose to take leave. "But directly Lady Cora told me her story, I felt sure that Marks had something to do with it, and Lady Lucie and myself have long been on the lookout for him."

"How can I thank you for your friendship?" said Cora, in a low tone, as he bent over her to say good-bye. "Can I do anything for you, Mr. Leeson?"

"Yes," he said eagerly. "Say a good word for me——" Then he broke off, sighing heavily. "No, it is better not. It would be impossible."

And with these disjointed words he departed, mentally anathematizing the cruel fate which had made Lucie Belmont an heiress and himself a painter with a small income.

CHAPTER XXXI. AND LAST.

The marriage of Miss Andrews, Mrs. Colston's niece and adopted daughter, was celebrated at the Brixton mansion, with all due *eclat*. The crimson drawing-rooms were decorated with flowers; the breakfast offered to the wedding guests was of the most expensive and *recherche* description, taxing Mr. Gunther's resources to the utmost. Mrs. Colston herself was conspicuous in ruby velvet and cameo ornaments, and the little fair lady in *ecru* satin and lace, whom many of the guests hardly noticed at all, turned out to be Lady Lucie Belmont, the great heiress, whose name headed the list of names in the newspaper report the following day.

When the bride and bridegroom had driven away and the guests had departed, Mrs. Colston and Lady Lucie returned to the drawing-room, and sat down to talk over the happy event, while they waited for the return of Lady Lucie's carriage, which had taken the newly-married couple to the station, where, it is to be hoped, the officials were duly impressed by the powdered servants and dashing grays.

"I think all went off very well, my dear, don't you?" said Mrs. Colston, as she gave a satisfied glance at her handsome, portly person as it was reflected in the numerous mirrors hung round the room. "Emily behaved beautifully, did she not?"

"All was very nice, Emma," answered Lady Lucie's gentle voice. "I hope they will be happy."

"I wish you would stay and dine with me, dear Lady Lucie," pleaded Mrs. Colston. "I shall feel so lonely to-night. Emily was so bright and cheerful."

"I would with pleasure, Emma," replied Lady Lucie, "but I promised Lady Cora Vincent that I would spend the evening with her."

"Ah! poor Lady Cora! How is she now? Is she bearing her trial more resignedly?"

"She is bearing it well," said Lady Lucie, a little coldly; "but it was a bitter one. Her husband's love is a great consolation to her."

"I suppose so. Do you know, my dear, I always fancied, I may have been wrong, that she did not care much for Sir Alan."

"Why did she marry him, then?"

"Oh, she was flattered by his preference, and pleased that such a distinguished man should——"

"You are quite mistaken, Emma. I know that Lady Cora has been, and is, most sincerely attached to her husband."

"Well, perhaps so. At any rate, my dear, he was not her first love."

"Few of us marry our first love," said Lucie, smiling. "I agree with the poet, who says 'that the last love's the best.'"

"Still I don't think she behaved well during her stay here," persisted Mrs. Colston.

"I am glad you have mentioned that," said Lucie, quietly, "as it gives me an opportunity of setting you right on that point. Before Lord Almane left London he wrote me a letter, telling me of Cora's complete innocence with regard to him. It is true that he loved her, and unaware of his engagement, she returned his love; but directly his relations with me became known to her, she refused to listen to any more protestations, as dishonoring to herself as well as to him. I am glad to be able to tell you this, Emma, because I think you were a little unjust to Cora."

"Will you tell her that I am sorry that I misjudged her?" said Mrs. Colston, readily. "It was for your sake that I was annoyed, Lucie."

"I know that, dear Emma," and Lady Lucie rose and put out her hands in farewell. "I will tell Cora, and now I must say good-bye. There is the carriage, and it is late already."

It was a very quiet party of four at Sir Alan's that evening, but none the less a happy one. Cora was at the piano, trying over some new songs and singing some old favorites, while Sir Alan leant over her with lover-like tenderness, and mingled his rich deep notes with her sweet contralto.

Lady Lucie, in her dainty dress of *ecru* satin, her ornaments of pearl and diamonds, looked very fair and sweet; and George Leeson, from his seat at her side, watched her with very tender eyes, and wished that the satin and lace were cotton and braid, and that the pearls and diamonds were not in existence. In his eyes she was no longer what he had called her to Harold Sinclair—"a pretty creature, but rather insipid;" but the one woman in the world—"a daughter of the gods most divinely fair," his ideal of all that was sweet and true, and womanly. What had wrought this change, when to all other eyes Lady Lucie had not improved? She was thinner and paler, and the sweet rose-bloom had fled. Simply that George Leeson loved her—loved her with all his heart; yet loving her, would not speak, would not tell her so, because she possessed these broad acres and that long rent-roll which had tempted Stanley St. Roger in the past, and had made poor Lucie doubtful and mistrustful in the future.

And she! did she guess the love she had inspired? I think she did, I think she must. No woman can wilfully remain in ignorance even if the man who loves her keeps silence. Now, as she sat there in Cora's pretty drawing-room, she felt the earnest gaze of his eyes fixed upon her, and she knew that the color would rise in her cheeks and would not be prevented, and that her voice when she spoke would have a little nervous tremor, so she kept silence and held her peace; and George, thinking he had offended her, kept silence too; so that they sat apparently calm and appreciative listeners to the music, but in reality restless and ill at ease.

"You are silent, Lady Lucie," he said, at length.

"I was about to make the same remark," she replied. "Is anything wrong with you, Mr. Leeson?" she added quickly, as he sighed.

"Wrong? No; unless it be wrong to long for things out of one's reach," he said, with a bitter sadness.

"Have you tried to reach them," she said, in a low tone. "Most things are attainable if one tries long enough. Don't you remember the Italian proverb, which says that 'he who would be Pope must make up his mind strongly to be Pope, and he will attain the triple tiara at last.'"

"Would that wishing could do it!" said the artist, a little less mournfully.

"Nay, there must be action as well," she answered, gaily, but in a troubled, uncertain voice.

Softly rose Cora's rich tones, filling the room with melody; and the words she sang, set to a quaint old melody, were these:

"I knew that this was life—the track
Whereon with equal feet we fared;
And then as now the day prepared
The daily burden for the back.

"But this it was that made me move
As light as carrier-birds in air.
I loved the weight I had to bear
Because it needed help of Love.

"Nor could I weary heart or limb,
When mighty Love would cleave in twain
The lading of a single pain,
And part it, giving half to him."

As the rich tones died away, Cora lifted her eyes to Sir Alan's, and he bent over her with a tender gesture and loving words, whose import might be guessed if they themselves were unheard. With a stifled exclamation, George Leeson rose and walked away into the conservatory, a spasm of pain passing over his face. Lady Lucie sat still for a few moments, then Cora rose and came over to her, smiling.

"Has my song driven Mr. Leeson away, Lucie?" she whispered. "Will you not call him back? Dear, I think you care for him; he is too proud to tell you how deeply he loves you."

"Do you want me to take the initiative, Cora?" was the half-laughing, half-tearful answer, as Lucie hid her burning cheeks on Cora's shoulder.

"No, dearest, of course not; I only want you to give him enough encouragement to prevent him giving way to despair."

And Cora flitted back to the piano, where Alan had replaced her, and stood watching him as he played. A few minutes elapsed, and Lady Lucie arose, and soon the pretty, creamy satin draperies disappeared in the same direction as George Leeson had taken. Lady Vincent smiled to herself, and Alan, meeting her glance, looked up laughingly into her happy eyes.

"I hope he will win her, Cora," he said, softly. "He is worthy of her."

"She is won," said his wife, triumphantly. "She loves him already. If he will but speak, she is his. Oh, that tiresome money, Alan! It is always in the way, somehow. There is either too much of it or too little. Sing something, Alan."

"What do you want me to sing, Cora?" he said, merrily. "Something appropriate? '*Si tu savais*,' for instance?"

"Don't be absurd!" she replied, petulantly, atoning for the petulance the next moment with a kiss.

Sir Alan hesitated a moment, then he played a soft, dreamy prelude, and his deep, rich voice rose softly on the stillness, reaching the conservatory, where George Leeson and the heiress stood together. And the words he sang were these:

"Ask me no more. The moon may draw the sea;
The cloud may stoop from Heaven and take the shape,
With fold to fold, of mountain or of cape.
But, oh! too fond, when have I answered thee?
Ask me no more.

Ask me no more. Thy fate and mine are sealed,
I strove against the stream, and all in vain,
Let the great river take me to the main.
No more, dear love, for at a touch I yield,
Ask me no more."

George Leeson, standing with Lucy Belmont in the shaded conservatory, in a perfect grove of ferns and flowers, heard the words, and glanced down at Lucie's face, as she played with some starry blossoms of stephanotis which she had gathered. A pretty rose-color had risen in her fair cheek, and the white flowers trembled in her little fingers, as Sir Alan's words reached her:

"'Let the great river take me to the main
No more, dear love, for at a touch I yield.'"

"They are very happy," said George Leeson, at last, to break the silence. "Do you not think so, Lady Lucie?"

"I am glad," she answered, softly. "I rejoice that it is so. They have passed through the thick of life's battle and have not escaped quite unscarred; now, as long as they have each other they will be happy."

"Having each other," said Leeson, meaningly; "yes, they can be happy."

"Happiness is not always out of our reach, Mr. Leeson," she said, very hurriedly, the rose-color deepening into crimson as she spoke; her eyes persistently dropping upon her hands. "Some people do not care to reach it."

"Do not care?" he repeated eagerly—"do not care? Some people dare not; happiness is too high for them—too far above their heads."

"Too high? If so, it is because they do not try to reach it," she said, softly.

"Do not try," he rejoined, quickly, catching her hand in his, and looking eagerly into her downcast, blushing face. "Lady Lucie, do you know what you are letting me believe? Do you know that you are letting me think that the mad, presumptuous feelings I have dared to cherish towards you are not displeasing to you? Ah! Lucie, forgive me! I love you so dearly. I have loved you for so long and so hopelessly, I can hold my peace no longer. Send me from you if you will—hate, despise me for my presumption—but the secret is out now—I love you!"

He had dropped her hand at the first movement she made to disengage it from his clasp; and now, as she did not answer, he turned away from her, covering his face with his hands. She stood by him silently for a moment—not doubting his love, the ring of passion in his voice was too genuine for that—but almost fearing he would deem her unfeminine if she told him too readily that his love was returned.

"Perhaps I wish you to believe it, Mr. Leeson," she said, at last very softly. "Perhaps that which you call mad presumption is very precious to me. Perhaps"—as he turned and caught her hands, full of flowers as they were, in his, pressing them, stephanotis and all, to his lips.—"perhaps, I, too, have a secret I wish to let you share. Perhaps—no, not perhaps—I love you, even as you love me."

With that Lady Lucie's fair head sank on the artist's shoulder, and the kisses he had been pressing on her hands were transferred to her face. I will not even say that she did not return one of them.

So the "lady of high degree" was happy in the honest, steadfast love she had won. "At a touch she had yielded," and she was his own for ever.

* * * * *

A few months after a paragraph appeared in the first sheet of the "Times"—that portion of the newspaper so dear to feminine readers, which caused no small excitement among the "upper ten."

"At St. George's, Hanover Square, George Alfred Leeson, Esquire,, to Lady Lucie Matilda Belmont, only child of the late Earl and Countess of Fernhill."

Cora Vincent and her husband were among the guests at that wedding, which, indeed, had been delayed a little to allow her to be present, for little Harold had a tiny successor in the nursery now, and the rooms he had filled with childish mirth and the patter of little feet are no longer silent, although he is not forgotten.

"So you have got your wish, wife mine," said Sir Alan, when they had returned from the wedding, and Cora glided to his side in her soft robes of shimmering moonlight blue—she had put off her mourning for the occasion. "Are you satisfied with your manœuvres, little match-maker?"

"Quite," she answered earnestly, leaning her fair cheek, a little pale still, on his breast as he drew her within his arms. "Lucie is very happy. She has the best husband in the world but one, (an adoring upward glance here into Alan's face), "and their future may be briefly summed up like ours, dear Alan, in the words with which we used to finish our fairy tales, "They lived happy ever after."

* * * * *

And the same newspaper which chronicled George Leeson's marriage, told all who cared to know it that the Earl of St. Maur had succeeded in obtaining freedom from the ties which bound him to the worthless, beautiful woman who had been his wife, and Lady Helen St. Maur was free to wed with the man for whom she had given up all.

Can it be said of them, I wonder, that they "lived happy ever after?" I think not—I fear not. They that sow the wind must reap the whirlwind, and such seeds that they had sown could bring forth no sweet or pleasant fruit. As soon as it was practical after the divorce, they were married, and as Viscountess Almane, Lady Helen found many a foreign *salon* open to her, many a titled and distinguished foreigner, ignorant of her story, and ready to receive, with open arms, the beautiful and charming "Vicomtesse," with her *ravissante* toilet, her high-bred manner, her queenly grace. It was but a few, and they were very close observers, who detected the false ring of her laugh, the real bitterness underlying her light and careless manner, and none knew why, when she bent over a child, her lips trembled and her eyes softened.

"Perhaps miladi has lost a child?" said a great French lady, gently, one day.

"I have lost four," said Lady Helen, passionately, thinking of the four little children who had once been her pride and delight, whose very memories gave her a shooting pang now; of her son who would be heir to a fine title and noble estate, and who would never know his mother, and if he knew of her could but despise her sin and her shame.

But when such thoughts as these came to the unhappy woman, breaking in unwelcomed on the few quiet moments her gay life allowed her to take, did they humble her and make her penitent? did they make her strive to do her duty to her husband and to the little child which came to her after a time? No; whenever the unpleasant intruders came, she dismissed them promptly, redoubled her smiles, flirted, danced and laughed, and was the queen of every *fete*, the belle of every ball.

And he, the man for whom she had renounced her husband, her children, her position, and for whom she had sinned so deeply—what of him? Would he pass his life in foreign cities, a passive spectator of his beautiful wife's triumphs, haunted continually by the recollection of a pale, pleading face, lighted by lustrous eyes, which was still so dangerously dear to him, whose misery he had once attempted?

Lord Almane became a sadder and wiser man! He still thought of Cora Vincent often, and heard of her sometimes, when a chance meeting with an old home acquaintance allowed him to hear of Sir Alan's artistic triumphs and of his domestic happiness. His feeling then was not envy but regret—regret that he, who had once such happiness within his reach, should have passed it by—that he who had once possessed Cora Sinclair's love should have sold it for the chance of wealth. But a gentler influence has taken possession of the Viscount now, and his life may be purified and ennobled yet by his love for his little child. She is a pale, delicate, puny little girl, but for her sake he may find courage to lead a better life and to retrieve the past as far as it may be retrieved, the baby-fingers may lead him to a higher path, and the clear trust and innocence shining in her sweet eyes make him wish that the page of his existence was not so sullied and blotted. Let us hope it may be so.

Of one more personage in our story we must make passing mention—I mean Mr. Marks. George Leeson was right in predicting that that

worthy individual would meet with his deserts at last. It was so; success in imitating the handwriting of his employers and their friends rendered him yet more daring, and the forgery of cheques for large amounts at length led to his discovery and ultimate punishment—a punishment which was richly merited and thoroughly deserved.

Sir Alan Vincent was never again troubled by any visits from his *folle du logis*, "the green-eyed monster;" never again did a doubt arise in his mind as to the sweetness and truth of his wife; and Cora looks up to her husband with almost adoring reverence and love, and her past experience has only made her more humble and gentle.

Marianna still flourishes; there is a charming little Lucie, as well as a bold, gallant, high-spirited Alan, to pay a yearly visit to grandmother Vincent, at the Bungalow; and though no one is exempt from trouble, Cora was not far wrong when she said of George and Lucie Leeson, as well as of herself and Sir Alan, that "They lived happy ever after."

RECENT LITERATURE.

Free Ships. The Restoration of the American Carrying Trade. By JNO. CODMAN. New York: G. P. Putnams' Sons. Price 25 cents.

IT is to be regretted that people do not study for themselves the relative merits of "free trade" and "protection" instead of relying, as many men do, on demagogues and partisan newspapers for information on questions of such vital import. Our prosperity, as a nation depends on intelligent tariff legislation, but so long as the matter is left, as at present, to professional politicians, what better can be expected than that these honorable (?) gentlemen should, to further their own personal ends, continue to tinker at the tariff, changing and modifying it, thereby causing such a fluctuation in values, as to seriously derange commercial affairs?

To those who deplore the loss of our carrying trade, the monograph under notice cannot fail to be of interest, and we commend it to the careful attention of all who desire an intelligent exposition of "free trade" as applied to ships. The author says, very truly: "Whatever may be the arguments in favor of, or opposed to, the protection of industries under the control of our own Government, none of them can apply to those pursued upon an area which is the common property of the world. It is a proposition so evident that no words need be wasted in its demonstration, that, other things being equal, the cheapest and best ships, most adapted for the purpose, by whomsoever owned, will have preference in the carrying trade over the ocean. You may pile the duty, for instance, on iron, and grant bounties on the production of the American article if you please, to any extent; you may, if you choose, prohibit the importation of plows, and then assess farmers ten times the cost of their plows for the benefit of the home manufacturer. You would undoubtedly succeed in compelling them to purchase American plows. They must have them or starve, and we should all starve likewise if they did not use those protected plows to cultivate the soil! Indeed, in a less exaggerated way we are doing something very like this continually under the guise of 'protecting home industry.'

"It is a legitimate business for the advocates of that doctrine. If they believe in it they are quite right in 'trying it on,' and in making the people at large pay as much as can possibly be got out of them for the benefit of a few.

"But fortunately they cannot build a Chinese wall around the country. We are necessitated to have intercourse with other nations. We have a surplus of agricultural products to dispose of to them, which they cannot pay for unless to a certain extent we take the merchandise they offer in exchange. The carrying trade is the means whereby commerce is conducted, and this carrying trade, an industry once of vastly greater importance to our people than all ship-building has been, is now, or ever can be, is a business that Congress has deliberately thrown into the hands of Europeans, and sacrificed American *shipowners* at the instigation of American *shipbuilders*.

"In face of the prosperity achieved in consequence of the abandonment of a ruinous system by other nations, in face of the lamentable decadence its maintenance has brought upon ourselves, we still persist in packing this Sindbad of prohibition, the worst offspring of protection, upon our back, and then we wonder that we alone make no progress!"

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"The flags of all nations are at their peaks—the British, German, Dutch, Danish, Belgian, French—but among the three hundred and more there are only four that carry the stars and stripes, and these were put afloat mainly at the cost of the Pennsylvania Railroad Company. Three hundred steamships, employing fifty thousand men earning a million and a half dollars monthly; these men supporting and educating families, and themselves becoming reserves for their respective countries to call upon for naval service in time of war! Look at the ports from which these vessels wherever built, now hail, and which they enrich by the capital they distribute. Behold the warehouses, repairing shops, foundries, and other various industries connected with these enterprises, and the ship-owners engaged in promoting them pursuing a legitimate business.

"Then look at home. First calculate the sum of one hundred and thirty millions of dollars that has been annually paid by us to those foreigners for transporting ourselves and our merchandise. Then go back in memory to the time when in the days of sailing ships, our packets almost monopolized the ocean on account of the skill of our officers and seamen.

"Reflect that if a policy of ordinary foresight had prevailed in our national councils when these sailing ships were killed off by the competition of the newly-invented iron screw, their old commanders and their noble crews would have kept their employment, and as they died would have been succeeded by men as worthy as themselves, adding to our revenue in time of peace, and, when needed, supplying a navy now maintained at an immense expense—God save the mark!—for the protection of an extinct merchant service!"

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"Old things did not pass away and all things did not fairly become new until the discovery of gold in California and Australia revolutionized values, created universal national intercourse, and by thus giving a sudden impetus to commerce, made the carrying trade an industry of far greater importance than it had ever been before.

"At that epoch, our restrictive laws were productive of no harm to us, because it so happened that most of the business of the seas was done in wooden sailing ships, and it also happened, fortunately for us, that we had the faculty and the means of constructing them better and cheaper than they could be produced elsewhere. Accordingly our ship-yards became wonderfully active in supplying the demands of our ship-owners, and the *personnel* as well as the material of our merchant fleet being of the highest character, it was consequently in active employment. In the ratio of the increasing value of our carrying trade there was a corresponding decrease in that of Great Britain, simply because her restrictive laws, which were the same then as ours are now, prevented her people from owning such magnificent clippers as we were able to build, on equal terms with us.

"But British statesmen were not inattentive to the situation. They wasted no time in appointing committees to investigate the cause of the difficulty.

"Parliament deputed no half dozen of its members to spend six months in running around among ship-builders, asking them what bounty they required to build clippers like the Americans, and how long it would take them to equal American ship-builders in skill, material and cost.

"But, realizing that the interests of commerce and ship owning were of infinitely greater value than that of mere ship-building, they did not propose to lose them, while the latter industry should endeavor to gain new life. Regardless of any such consideration as that which solely actuated our investigators, Parliament at once *abolished* the *prohibition* to purchase *foreign-built ships*. The *greatest good of* the *greatest* number was the *motive of this wise decision*.

As soon as they were thus allowed to do so, English ship-owners ordered clippers from our ship-yards, and putting them into profitable employment under their own flag, kept on with their business, sharing with us the supremacy of the seas, which, but for the timely action of their government, they would inevitably have lost. In this way they maintained it until there came a new era in ship-building, when circumstances becoming reversed, their mechanics were enabled to accomplish what ours could not, in the construction of iron screw steamships. Had Congress then been as wise as Parliament was in 1849, our ship-owners would, in their turn, have maintained their prestige by supplying themselves from abroad with new vehicles of commerce they could not procure at home, and we should never have heard of 'decadence.' Instead of such obviously judicious action, it has done nothing but condemn us year after year to enforced idleness in the name of 'protection.' So we have endeavored to compete with these new motors on the sea by means of wooden sailing ships and paddle steamers, until they are of service only in our coastwise monopoly or rotting at the docks, if not broken up. We have gone on steadily protecting ourselves to death, and protecting England and Germany, the chief of our rivals, to life at our own expense of vitality. England's justice to her ship-owners, which at first seemed harshness to her ship-builders, was eventually the means of their prosperity. It set them to 'finding out knowledge of witty inventions,' and now they have one hundredfold the capital invested and labor employed in iron steamship building, more than ever found occupation in their old ship-yards."

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"Almost immediately after the repeal of the British Navigation Laws the revolution in shipbuilding to which I referred had its commencement, and we have seen how British ship-owners avail themselves of it. Nor were they alone in adopting the change from sail to steam and from wood to iron. We can remember what a large trade we had with Germany twenty-five years ago, although it was small compared with that of the present. At that time it was chiefly conducted in American vessels. But when iron steamships came into vogue, wooden vessels, both American and German, were abandoned. If we had been permitted to do so, we should have still kept the greater part of that important carrying trade in our hands. But we were shackled by our navigation laws, while the Germans were unconstrained by any such impediment.

"The *personnel* of our mercantile marine was, in every respect, superior to theirs, but it was consigned to annihilation by our protective government; while Hamburg and Bremen took their galliot skippers in hand and educated them to the responsible places they now fill in command of the splendid lines of iron steamships, making their semi-weekly trips across the Atlantic, having absolutely monopolized the whole American trade!

"Thus our government protected the Germans as well as the English. By citing other examples, we might show how the 'fostering' hand of protection has been extended by our government to every nation choosing to trade upon the necessities of prohibited Americans."

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"The iron screw steamship is now the great and profitable carrier upon the ocean, and all we care to ask is the privilege to avail ourselves of this 'survival of the fittest.' Whence then comes the opposition to what should be the inalienable right of an American citizen to own the best ship that he can buy with his own money? Naturally, from the few iron shipbuilders in this country."

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Mr. CODMAN concludes his essay with the following parable: "There are two large towns on the opposite banks of a wide river. There is a constantly increasing passenger and business employment, supporting several ferries, between them. In former days the principal ferry-masters were an American, an Englishman, and a German. They all employed boats propelled by sails, and especially the first did a very profitable business. Indeed, the American was the most successful, as he and his boys had a way of handling their craft much superior to either of the others. Each had a large family of relatives, and, naturally, as these relatives of theirs were willing to work for the same wages as other people, they built new boats for their kindred whenever they were required.

"It so happened, however, that the American's family built much better than the Englishman's. When the latter noticed that the superior craft of the former were better patronized by the public than his own, he asked the Yankee boys if they wouldn't build some boats in their style for him? 'Sartain,' they said, 'if you'll pay us what Uncle Sammy pays for his'n?' 'Aye, of course I will,' said Mr. Bull, 'for boats like yon I must have, or Sam will run away with all my business, and my family will starve.' So Uncle Sam's boys built the boats for Mr. Bull, and the two old gentlemen got on amicably, for there was business enough for them both, and the Dutchman did not interfere with them a great deal. The few carpenters among Mr. Bull's relations did not like this very well, but the old man said to them squarely, 'Look you here, now, d'ye think I'm going to let fifty of my relatives stand still because two or three of you, who can't build boats as well as Sam's people, are growling about it? That's not my way; I work for the good of my family at large. Go to work now, and see if you can invent a better boat than they build; if you can, I will employ you, and so will Sam.' They took the old man's advice, for they saw the sense of it, and in a short time they studied out a craft superior in every respect to anything they had before, or that Sam had now. 'That's right, boys!' exclaimed old Bull, rubbing his hands with glee, 'now build some of them, and I'll buy them of you, and so will Sam if he isn't a fool.' They did build some excellent boats, to which the public took at once; and everybody who wanted to cross the river; or to send any goods over immediately, gave Mr. Bull their custom. He grew rich suddenly, not so much from *building* boats as from *using* them. Nobody patronized Sam's now old-fashioned craft. Uncle Sam, generally supposed to be a 'smart old fellow,' couldn't understand it at all. 'It's one of those things that no fellow can find out,' he said, 'but next time we have a family meeting we'll appoint a committee to get at what this here 'decadence' comes from.' So he appointed a committee, and they ran around six months among the carpenters of the family, and came back with a report that 'Whereas, a few years ago, during a family row, a lot of old ferry-boats had been stolen by or sold to Mr. Bull, this had killed boat-building ever since; and it always would be dead until every one of the family put their hands in their pockets and supported the carpenters till they had learned to build just such boats as Bull was using.' In the meantime it may be remarked that the Dutchman had got Bull's boys to build some new boats for him, and he was now doing a better business than he had ever done before. Uncle Sam looked on and observed, 'By jingo, this here's a fix; I've asked my family to hand over the cash to support these carpenters of mine, and they preemptorily refuse to do so. Well, never mind what, and now that whole raft of boys, who were earning money for me on the ferry, are digging clams or gone to farming, and when I want to go across the river I have to go with Bull or the Dutchman, and pay them for it, instead of getting money for doing what they do, myself.' His boys, who were thrown out of employment on the ferry, thereupon approached the old gentleman and said, 'Uncle Samuel, don't you remember how, a while ago, when those carpenters of ours built better boats than Mr. Bull's could build, the old fellow came to you, and asked you to let them build some for him? If he hadn't got them from us his fellows would shortly have been high and dry, as we are now; but we sold them to him, and so he kept up his business on the ferry. Now, why don't you do what he did, and give us something to do, instead of spending your money going across in his boats and the Dutchman's?' Uncle Sam reared right up at this mild remonstrance. 'Git out,' he exclaimed, 'you ain't no account, the ferry's no account, there ain't nothing of no account in this here family but just a half-a-dozen boat-builders. Say, Jonathan, what are you doin' with that ar' jack-knife? Did you make it?' 'No, sir; I bought it of one Bull's boys.' 'Well, then, lay it right down; *I ain't a-goin' to have you whittle till you can make one for yourself.*' And then the old man went off—mad! And in another sense of the word, he is still mad."

We have quoted thus generously from this monograph, not for the purpose of getting converts to the doctrine of free trade, but to induce you, read—if possible, to interest yourself in the question of tariff or no tariff. Investigate the workings of the opposing systems both in this country and abroad. Have an intelligent reason for your opinions for or against free trade, and do not accept unchallenged the conclusions of political leaders who never see beyond party lines, and to whom the success of their candidate is of infinitely more moment than the welfare of the country at large.

Between the Gates. By BENJAMIN F. TAYLOR. Chicago: S. C. Griggs & Co.

THIS is the brightest and most fascinating of books. Mr. TAYLOR not only interests the reader in his narrative, he does more; by his incomparable word-painting he makes his scenes and his adventures so realistic that the reader veritably sees the mountains, woods, cities, peoples and situations so graphically described, and shares the emotions of the author. We subjoin a few extracts which illustrate Mr. TAYLOR'S claim to the title bestowed on him by an enthusiastic admirer, the "Raphael of writers."

FROM WINTER TO SUMMER.

"A California train is a human museum. Here now, upon ours, are the stray Governor of Virginia, an army captain going to his company in Arizona, a trader from the Sandwich Islands, a woman from New Zealand, a clergyman in search of a pastorate, an invalid looking for health, a pair of snobs, Mongolians with tails depending from between their ears, the proprietor of an Oregon salmon-fishery, a gold-digger, a man whose children were born in Canton while his wife lived in San Francisco, some Shoshones and dogs in the baggage car, and a family who ate by the day, breakfasted, dined, supped, lunched, picked and nibbled without benefit of clergy. It would take a chaplain in full work just to 'say grace' for that party. Victuals and death were alike to them. Both had 'all seasons for their own.' They ate straight across the continent. If they continue to make grist-mills of themselves, crape for that family will be in order at an early day.

"At some station in the Desert where we halted for water, there sat, huddled upon the platform, some Shoshone Indians, about as gaudy and filthy as dirt and red blankets could make them, and papooses near enough like little images of Hindoo gods to be cousins to the whole mythology. One of the squaws, with an ashen-gray face and white hair, a forehead like a hawk's, an eye like a lizard's, an arm like a ganglion of fiddle-strings, and a claw of a hand, looked to be a hundred years old, and her voice was as hollow as if she had an inverted kettle for the roof of her mouth, and talked under it. Near by, on the same platform, an Englishman was passing to and fro, putting down his well-shod feet as if he had taken the country in the name of the queen of 'ome and the Empress of H'India. A Frenchman, in a round cap with a tassel to it, stands with the wind astern and his brow bent like a meditative Bonaparte, trying to light a twisted roll of paper in the hollow of his hand. Two Chinamen in blue, broad-sleeved blouses, their shiny black cues swinging behind like bell-ropes in mourning, stood near, shying their ebony almonds at the whole scene. On the track, waiting for a shake of the bridle, waited the engine, breathing a little louder now and then, like a man turning over in his sleep.

"Regarded with thoughtful eyes, the grouping was impressive. Here, in the Desert, as far away from blue water as they could possibly get, standing upon the same hundred square feet of platform, were Mongolians from pagoda-land of the "drowsy East," aborigines from the heart of the continent, men from Fatherland and Motherland, and the lands of the lilies, the storks, the long nights, the broad days and the—interrogation-points, all met and mingled here for a little minute, and the cause of it is the wonder of it. There it stands upon the track. It is number 110. It is the locomotive, at once a beast of burden, a royal charger, a civilizer and a circuit-rider."

* * * * *

SAN FRANCISCO STREET SCENES.

"San Francisco! Crowned with palaces and dense with business houses as a redwood forest, six currents of life surging along her congested streets that jar with the endless thunder of commerce, four on the sidewalks and two on the cars; the ships of the world courtesying through the Golden Gate and sailing into the Bay like stately old dowagers entering the reception-room of a monarch. And then remember it was a desert of sand-dunes, strown with seaweed and white bones, and desolate as an old African Gold Coast thirty years ago, a time hardly long enough for a century-plant to get a good ready for blossoming, and now more than three hundred thousand strong, it faces both ways and confronts the world!"

* * * * *

"Street life in San Francisco is a kaleidoscope that is never at rest. There is nothing like it on the continent. The flower-stands with their gorgeous array, the open-fronted alcoves fairly heaped with floral beauty, as if Eve had just moved in and had no time to arrange her "things"; the glimpses of bright color from leaf and blossom, that catch the eye everywhere, in mansion, shop and shed; the bits of bouquets you see on draymen's coat-collars, and blooming from broken cups in tinker's dens and smithies; smiling in churches in prayer-time; adorning brides with genuine orange blossoms; strewing coffins with everlasting June.

"Then the fruit-stands that are never out of sight, with the mosaics of beauty spread upon them, as if Pomona's own self presided at the board. Rubies of tomatoes, plums and cherries; varnished apples from Oregon, as cheeky and ruddy as "a fine ould Irish gentleman"; pears, peaches, apricots, nectarines, oranges, and those cunning Lilliputs of lemons, the limes; strawberries, blackberries and raspberries, that melt at a touch of your tongue; fresh figs, looking like little dark leather purses, and full of seeds and sugar—all these grouped upon the same broad table; everything from all the year round but snowballs, as if the gifts of the seasons were converged, like sunbeams through a lens, upon one luscious spot of summer luxury and brilliance. You halt if you are not hungry, for you have learned that the richest beauty is not always in the flower. You find that fruit goes by avoirdupois; peaches are in pounds and not in pecks;

that it is not much cheaper than it is three thousand miles away; that your dimes have turned into "short bits," your quarters into "two bits"; that three "bits" are thirty-seven and a half cents, and it takes forty cents to make it; that pennies are curiosities, and poor little nickels nowhere; if an article is not five cents it is nothing; if it is twelve cents it is fifteen. So you buy something at a "bit" a bite and move on.

"This is the paradise of boot-blacks, the rainless-sky weather from spring to fall rendering 'a shine' a good investment. These artists on leather have little wardrobes of affairs set against the buildings along the sidewalks, furnished with easy-chairs and foot-rests, and often carpeted and adorned with mirrors and pictures. At the first glance, they remind you of the wayside niches in foreign countries wherein some saintly image is enshrined, but a second look, and the saint is resolved into a very earthly piece of human-ware, armed with brushes and French polish, to make looking-glasses of your upper leathers. And these Mother Hubbard's cupboards of places are as good as a weather-gauge to a stranger, telling him that the year is one long genial season, neither summer nor winter, but the tonic of the one and the glow of the other. * * *

"You notice in the ever-moving tides of street life an absence of the rainbow tints and the flickering white of woman's Eastern apparel. The hues are soberer. Seldom a day in a whole year that fur sacques, shawls and overcoats are not in order at some hour between sunrise and bedtime. It is July, but see the fur-trimmed garments and the dark cloaks and the heavy veils go flitting along, and the sun just emptying his quiver of golden arrows all the while."

* * * * *

'JOHN,' THE HEATHEN.

"You seem to be in the sign of Libra, the Scales. There is John, the taper-eyed, with his blue shirt and his wapsy trousers, and stubby shoes, and his black braid of stub and twist, thirty thousand of him, going about with a springy pole balanced upon his shoulder, and a deep bushel basket swung from each end, filled with 'garden truck.' Libra, the Scales, catches the spring of that pole in his knee-joints, and goes teetering about in the most *outre* and monkeyish manner. If you leave the city and plunge into a cannon, you meet John with his panniers, a peripatetic pair of scales. He is the only man in the world who makes a trunk of a spring-pole.

"John always forgets to tuck in his shirt, and if he is well-to-do he wears two, white beneath and blue or black without. He *finishes* dressing where the rest of mankind *begin*. What would you have? He advances backward and retreats forward, and falls upward and rises downward. He is the animal man inverted, subverted, perverted, and everything but converted. Discover how the world always does anything, and that is precisely the way John *never* does it. Thus, the other day he was arrested for stabbing a countryman, and where do you suppose he struck him? Why, in the *sole of his foot*, and that is the Chinese of it.

"To me he looks as much alike as a flock of sheep. Shepherds tell me they can distinguish any one in a flock of a thousand by its face, but John is too much alike for me. I pass him on the street, and then in a minute I meet him. To be sure he has changed his shirt and his shoes, but he has kept his face. He took some soiled handkerchiefs of mine one day to wash, which he did not return, and his name it was Foo Ling. So I went out to find him. I succeeded in three minutes. I overtook him, and passed him, and met him. He had those little wipers-away of tears, as white and square as so many satin invitations to a wedding, in his hand, in a towel, in a basket, but he said he was not he, and I was somebody else. It was a fearful case of mistaken identity. The streets were crowded with him,—but alas for Foo Ling, it was fooling he was. It was one of his 'ways that are dark.' If the devil should have his due, why not John? Without him the Central Pacific road would have waited completion many a long day. Without him San Francisco would not be the cleanest-collared and cuffed and bosomed city in America. Its inhabitants are as white around the edges as the brim of a lily. Neither in New York nor Chicago do you see faultless linen so universal. A laborer's clothes may be out at the knees or the elbows, or any other point exposed to wear and tear, but he is quite sure to show a bosom and collar immaculate. John is a laundry. He can wash, iron, crimp and flute fit for an angel. He is handier than Bridget. He is master of suds, an artist in starch, and a marvel to sprinkle. You should see him do it. He takes up a mouthful of water as your horse drinks, and out it plays in a spray so fine that were it not a breath mistier it would float away in a cloud. People have unfortunate ways of putting things. They say he *spits* on the clothes. It is as little like it as the feathery spray of a garden fountain. People visiting China, as you and I will, look through the Celestial markets for *rats*. They hunt the flie-tailed rodent like Scotch terriers. They expect to find him hung by the heels to a perch, just as good Christians bestride that same roost with the delicate and infantile hinder legs of Batrachians, which are frogs, which are tadpoles, which are polliwogs, which are the verdant scum called spawn. Let us play leap-frog and be happy! Let us suffer him to make a *bonnebouche* of hen's feet while we dispose of the gizzards, and serve up his bird's nests at will while we eat pinfeathery squabs with not a bone in their bodies.

"John is a problem that never got into Euclid. We speak slightingly of him, we despise his effeminate look, his insignificant stature, his shirt, his slouch, and the three feet of heathenism in his back-hair. We scout him altogether. But somehow he has gotten into every crack and crevice of the Pacific Coast. Like an invasion of ants, he is everywhere under foot. He is born into this country, not one at a time, but five hundred at a birth He has made himself useful within doors and without. We eat of his cookery, we wear the garments he has kissed with a hot iron, we ride over the railroads he has builded, and lie upon the pillow he has smoothed. Dogs have been known to take to cats instead of after them, but it is not the rule. Americans have been known to love John, but it is seldom. The sight of him seems to rouse something of the ugliness that lurks in almost everybody.

"But his position and destiny have assumed a dignity that commands respect. John has gotten into Congress, and inspired a virulent hatred in the breasts of thousands. They would organize him out of existence with the Anti-Coolie Societies, and the Caucasian Orders, and the White Leagues. But he is here, spring-poles, baskets, opium, pig-tails, idols and all. He came legally. He remains lawfully. He labors assiduously. The only general sentiment of admiration he inspires is when he dies and goes to—China. Sensible men want some of him, but not the five hundred millions behind. Those mighty magnates of hot water, the railroad kings, and the mighty ranchmen who cannot look upon their ranges in a day's ride, and whose flocks and herds are uncounted—these men, these monstrous and unnatural products of the Pacific Slope, want all they can get of him. They would elude the true 'golden mean' of American society, the white Christians who toil with their hands, and leave Midases at one end of humanity and heathons and slaves at the other—a social state that is a libel on the age, a disgrace to man and a dishonor to man."

Bits of Talk about Home Matters. Bits of Talk for the Young. By H. H. (Square, 18mo.) Cloth, $1.00. Red edges. Boston; Roberts Brothers.

WE have taken occasion in previous numbers of the RURAL to speak words of approval of the first of above-named books. We have sometimes wished it had a different title. "Bits" seems diminutive. The book is not large, but it contains more large thought and good sound common sense, than are often found in single volumes of any size. And still the title may not be unappropriate, for the book contains forty separate and distinct articles, each a treasure in itself. We wish every mother in the land could be so fortunate as to have opportunity to read this book. She would soon find that it was not to be read hastily or carelessly, but "soberly, discreetly and in the fear of God;" and we pity her sincerely who can read it without being made better by it. We shall be glad, too, for the children of the households where this book is read; they will be blessed and enobled by its influence. Those who read the first will want the other, above named, "Bits of Talk for the Young." A collection of twenty-six stories for children. Illustrated—and such stories. There isn't one that the most uneasy little boy or girl would'nt keep quiet to hear, and ask for another when the one was finished.

Atlas Essays, No. 3: Labor. The Republic. New York: A. S. Barnes & Co. $1.00.

THESE essays originally appeared in the International Review; the title "Atlas" being designed to indicate that the essays are contributed by writers from both hemispheres. The subjects are chosen with a view to elucidating the absorbing problems of present interest, and it is only necessary to see the names of the writers in connection with the questions discussed, to be warranted in seeking, in these discoures, edifying and useful information. Among the essays classed under the above title in No. 3, are "The Working Classes in Europe" by Thomas Hughes, M. P., "Labor in England" by Thomas Brassey, M. P., "Grangerism" by Dr. Francis Wharton, "The American Republic" by Gen. Franz Sigel, "Indian Citizenship" by Gen. Francis A. Walker, "The Chinese Question" by Dr. E. D. Mansfield, etc.

The Gospel according to Luke. With Notes, Comments, Maps and Illustrations, by Rev. LYMAN ABBOT. New York: A. S. Barnes & Co. Price $1.50.

THIS admirable work will be of the greatest service to Sabbath-school teachers and Bible-class scholars. Nothing which could possibly help to a clearer understanding of this gospel, either in the way of commentary or of illustrations has been omitted. The book reflects great credit both on the editor and on the publishers.

The Reading Club. GEO. M. BAKER. Boston: Lee & Shepard.

MR. BAKER makes it his aim to give such selections as have not as yet appeared in other compilations, and he offers the present volume with the assurance that those who are seeking for something new, cannot fail to be satisfied. The author has shown judgment and taste in the selections given.

PETTINGILL'S NEWSPAPER DIRECTORY for 1878 is strongly bound and printed on fine, toned paper. The information is concise and well arranged for easy reference. The prefatory remarks on advertising are cogent and, well digested, would save many a man's money. There is a blemish, however. In an evil moment the editor thought it advisable to put some pictures in the book. Two are good; the remainder about equal the high art that adorns dead walls, circus posters, etc.

FRESHMAN & BRO'S ADVERTISERS' MANUAL, toned paper, cloth covers, has been received. It has been bandied about, with parrot-like iteration, that a man can spend a fortune in injudicious advertising, and in the end have plenty of advertising and no results. If such a man were to profit by the condensed, practical advice set forth in the manuals, injudicious advertising would be a worn-out phrase. We commend the FRESHMANS and their manner of doing business.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

NUMBER NINE TO NUMBER ONE.

WELL, Marian, fair eldest sister,
I've come. You are sorry, I know,
For I'll yell like the other eight babies,
Now grown to a down-sloping row.
And I'll hiccup and stare and fall over,
And tear every novel and note,
I'll grab at your ear-rings and bracelet,
And twist off the tie at your throat.

I'll wake up at six in the morning,
And cry to get up and be dressed.
When poor little mother is weary,
And need's ev'ry moment of rest.
I'll hit little Ann, if I choose to,
I'll take Kitty's doll by its clothes,
And I'll hammer it over the fender
Till it hasn't a scrap of a nose.

I'll make the cat dance in your basket,
And tangle your knitting and wool,
I'll muss up my father's shirt-bosom;
And give Tommy's white hair a pull.
I won't have to be whipped for it either,
As you were. You poor "Number one."
You got all the discipline over,
While I come in time for the fun.

For the mother, you see, is so weary,
And tired of nine little cares,
And papa too busy to mind us
Whilst struggling with business affairs.
But then, when your heart is nigh broken,
And weary and worried, you cry,
I'll come with my own little apron
To wipe off the tears from your eye.

And putting both fat arms around you,
I'll kiss your soft, velvety cheek,
And I'll tell you I'll try to be better,
As plain as a baby can speak,
And then, "Number One," you will hug me,
You know, to your warm, loving breast,
And will never tell mother your trouble,
But leave her to health-giving rest.

And if I wilt down in the summer,
And, tooth-cutting, wimper and pine,
Don't I know how your tenderest touches
Are waiting for small "Number Nine?"
Ah! if I should slip out of trouble,
To the bright other side of the sky,
And your arms that are tired, were empty,
Don't I know how you'd sorrowing, cry?"

It's queer how they love us—wee babies—
It don't seem as tho' we *could* pay;
And yet, how the arms close about us
To keep the dark Shadow away!
Just wait a few years, sister darling,
I'll grow up as quick as I can;
And then—won't I smooth the rough places
For you, when I've grown up a man?

[*Ethel Lynn.*

A PARISIAN BEAUTY'S REVENGE.

AN English marchioness, resident in the legitimist faubourg, and avoiding the Napoleonites as low, gave parties on a grand scale. To one of these an English lady took, uninvited, a pretty French woman, a friend of the Empress. The pretty woman made herself conspicuous by her prettiness and flirtations, but the Marchioness found out who she was, and was disgusted. She said to her:

"I am so conscious of the honor you have done me in visiting me that I dare not expect a repetition of the unexpected compliment."

The pretty woman grew pale, but smiled and ordered a cavalier to go for her carriage. The pretty woman was clever, and finessed a revenge. She bribed the Marchioness' *femme de chambre* to give her the list of the guests invited for the next party. Armed with this she prepared a circular note which she dispatched to each of the invited late in the afternoon of the following day:—"The Marchioness presents her compliments to So-and-so, and regrets that a domestic calamity will prevent her, &c." She then went to a great Mad Doctor, representing herself as the daughter of the Marchioness, and acting with the consent of the ladyship's family, she represented that her mother, the Marchioness, was afflicted with insanity, and her madness was in the delusion that she was always having great parties. For instance, if Monsieur, the Doctor, went to her ladyship's hotel that evening he would find her dressed in great splendor, with the saloon illuminated, adorned with flowers, and buffets covered with refreshments.

The doctor went, on the understanding that he was to obtain the proper police authority to take the Marchioness to a Maison de Sante in the event of the representation made to him being confirmed by his own observation. He arrived at ten in the evening. He was the first, the only guest. And though the Marchioness did not remember his name she took it for granted she had invited him, and was profusely civil. His manner puzzled and his questions startled her; lunacy became more clear; she was at last offended and rang for her servants. At the same time he made a proper intimation of his police authority; and the end of the story is that she was taken off by the doctor in hysterics and detained as a prisoner in his asylum until the whole truth came out. All Paris was in roars; and the pretty flirt was a heroine forever. Protected by her august friend, she escaped retaliation—a British marchioness is too grand for wit.

THE MAN IN SCARLET.

It is usual for the press to chronicle the costumes worn by ladies on great occasions, and when one of the sterner sex elects to appear in public in silk attire, it seems but fair that he should also receive some recognition of his taste in millinery at the hands of newspapers. As a matter of justice then, to Cardinal MCCLOSKEY (surnamed the American flamingo), we publish the following description of the toilet worn by him on the occasion of his first appearance since his return from Rome, at Saint Patrick's Cathedral, in this city:

The cardinal's soutane was of lustrous watered red silk, the train flowing yards behind. This garment was gathered at the waist with a broad girdle of red silk, with heavy gold tassels. Over the soutane was a surplice of fine lace. A chasuble of embroidered cloth of gold fell from his shoulders. In the center of the cross embroidered on the chasuble, and surrounded by rays of gold, was a pelican, feeding her young in her nest, signifying the motherly care of the Church for her children. About the collar of the chasuble was the pallium—a distinctive mark of the cardinal's state—woven by pious nuns, whose cloister is within the shadow of the Vatican, from wool shorn from lambs by priestly hands, on the anniversary of their patron saint. On the cardinal's head was the berretta. His hands were incased in red silk gloves, crosses of golden embroidery being on the backs. On the third finger of his right hand was the signet, a sapphire, encircled with diamonds. On his feet were sandals of red kid, with crosses of gold, being embroidered at the instep. Behind the cardinal was a row of pages, in white soutanes, bound with red silk, red silk sashes, and lace surplices. Two of them bore on silken cushion the cardinal's miter, and the others held his triple cross of gold, set with many jewels, his golden crosier, and his missal, bound in crimson velvet and gold. F. R.

A ROLLING STONE GATHERS NO MOSS.

THIS proverb is only the assertion of a fact that is not very remarkable. Moss is by no means a necessary adjunct to a stone. The mossy condition is not the normal state of a stone. The moss is no more necessary to to the stone than the stone is to the moss; indeed, the stone is more *stone-like without* the moss than *with it*. So, a craving-knife that is kept in active use gathers no rust. So, an individual who has moved about over the face of the globe, and borne the attrition of life is free (or ought to be) from the many prejudices which clug to and choke the growth of one who has spent his life on the side of some obscure hill, seeing no one but some dozen persons similar to himself. I have seen some of these mossy creatures so completely covered by this vegetable growth, as to be themselves little better than plants. They could not see or hear, or comprehend anything beyond their circle. Let the moss grow over the decayed trees and barren places, but let the rolling stone keep on, on, bright and clear, and free from all incrustation. J. L.

WOMEN HELP IN MONTANA.

THE days of John Chinaman in Montana are numbered so far as his services in the kitchen are concerned. Already he has given way to the industrious and economical women cooks just arrived in Helena from St. Louis and other points below. The advent of a goodly number of these tidy housekeepers by the "Big Horn" and "Rosebud" is only the precursor of others that are to follow, seeking the remunerative wages offered in Montana. For economy and cleanliness one good woman cook is worth to any household a whole generation of Chinamen. Those who have already arrived have found agreeable employment in private families at thirty dollars a month. From letters received it is believed that every steamer that arrives at Benton will bring other additions to this desirable and profitable immigration of women help.—*Helena, Mont., Herald.*

GOOD NEWS FOR HOUSEKEEPERS.

CELLULOID has been put to ingenious uses, but its usefulness promises to be yet more widely extended. The Paterson (N. J.) Guardian states that a factory at Riverside, bolted and barred to keep out all curious intruders, has been for some time engaged in the manufacture of celluloid cuffs, collars and other articles heretofore made of linen or paper. The Guardian says:—"It will ruin the laundry business and rob Monday of all its horrors for married men, for when this material gets soiled, all that is necessary is to hold it under the hydrant, or shake it in a pail of water, and then dry it with a towel, the same as one would wash a slate or a plate. Despite its durable character, the material is said to be as pliable and comfortable to the wearer as linen, which it so closely resembles as to deceive the most thorough expert."

PRETTY HANGING BASKETS can be made of oyster or peach cans, by removing one end, and cutting them in strips one-third of an inch wide, leaving one-half of an inch at the bottom. Press it the shape you desire, and clinch the ends at the top over a strong wire, several inches larger in circumference than the bottom of the can. Paint it green, and when dry line it with green moss from the woods or with cultivated moss from the garden. Fill with good, rich soil and plant therein Kenilworth Ivy, Strawberry Geranium, or some other pretty trailing vine. Suspend it at the window by a wire or tiny chain. This is indeed a "thing of beauty," if kept in a thrifty condition. Hang it over and in a pail of rain water occasionally to water the moss.

JULIA M. W.

KISSES.

EIGHT basial diversities of kisses are mentioned in the Scriptures:—The kiss of Salutation, Sam. xx. 41; Valediction, Ruth, ii 9; Reconciliation, 2 Sam. xiv. 33; Subjection, Psalm ii, 12; Approbation, Proverbs, ii 3; Adoration, 1 Kings, xix. 18; Treachery, Matt. xxiv. 49; Affection, Gen. xiv. 15. There are some other kinds of kisses which young ladies receive over gates o' moonlight nights, which the scriptures do not mention—neither do the young ladies.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

THE KITCHEN CLUB AMONG THE ROSES.

ANNIE L. JACK.

It happened by the merest accident that so many members of the Kitchen Club stood together under the Maples, and breathed the perfume of Roses and Honeysuckles, with the fragrance of the wild grape, flowers that festooned some of the trees, that pleasant day in June. One neighbor called to bring some of her visitors; another to spend the afternoon; and two others happened to run in on a friendly errand. Pale Mrs. Lockston was envying her more robust friends, their rosy cheeks, and Ellis Davenport ventured to ask why she was so delicate and pale, "for we remember in your youth you were so different."

Mrs. Lockston gave a short and distressing cough as she answered, "I think it is the sewing machine. You know I do all the children's clothing, and the way clothes are made nowadays, it is no easy task."

"Ah! there is the secret!" said Mrs. Bunster; "*the way they are made*, and until women free themselves from the thraldom of frills and fluting, there is no hope for their health or happiness."

Smiling at her energetic response, I ventured to add: "Last week I went to the city, and into a hardware store, where, after necessary purchases, I asked the obliging clerk if they had anything new in household conveniences, as on this subject I feel great interest. Would you believe it, the first thing he brought out was a new patent *fluting machine!* Useful, of course; but what I wished to see was something to ease the work of washing, ironing or cooking, with the inevitable dish-washing and cleaning; and yet he imagined my first and greatest need was a fluting machine!"

The ladies laughed, and, of course, asked me about the new patent, of which I had to confess I know nothing, and then we sat down to tea out-of-doors, under a grand old maple tree, with an oriole's nest overhead, and robbins hopping tamely around. It does not take much to make a tea in June, when butter is so sweet with clover, and strawberries are plentiful—with a bountiful supply of Roses to ornament the table, and pleasant company around it.

We talked of many things, and among others the aid the RURAL had been to us in gardening and domestic matters, of its steady improvement in matter and utility, until the hour of parting arrived. Who would be without the June Roses, the memory of which makes the summer so sweet to us? And depend upon it, mothers, the remembrance of a rose-surrounded home in their childhood, will be life's happy June to your sons and daughters, a sweet and pleasant association with "mother" long after she rests beneath the Roses they will lovingly plant above her.

BUTTER MAKING.

Every neighborhood has its good and poor butter makers and ours is no exception. Among our best is Miss C. who in answer to several questions touching the butter subject, gave me a brief outline of her method. She is at present making butter from three cows, two of them Alderneys, and averages from twenty to twenty-five pounds a week. Her cellar it quite cool, scrupulously clean, as are also the pans, pails etc. The milk is strained into both deep and shallow pans and Miss C. says she has yet to discover that the cream rises in one better than in the other.

The churning is done twice a week winter or summer, not oftener, and ice is never used. From twenty to twenty-five quarts of cream, including some thick milk, is the average churning; and time, from fifteen to twenty minutes to do it in. After churning about five minutes, she pours in two quarts of *boiling* water. This she never omits, except it may be in the hottest of weather. As soon as the butter commences to gather, two or three quarts of cold water are added, and the test when sufficiently gathered, is, "when the butter holds up the dash." The butter is then taken up into a wooden bowl and worked and washed with the ladle in two or three cold waters, that the milk may be all washed out; then salted, worked through and through and set aside for three or four hours, occasionally working it in the meanwhile. At the end of this time it receives the final working, and is weighed out and made into prints for market.

MILK PAINT.

A subscriber writes us that she has used the following preparation instead of common paint for inside work and thinks well of it. To those persons sickened by the smell of fresh paint, it would, no doubt, prove a blessing; but for general use, we have little faith in its taking the place of lead and turpentine, or the so-called chemical paints.

Into a clean pail put six ounces of newly-slacked lime, and over it pour part of two quarts of *sweet* skimmed milk. Stir with a stick, and add by degrees four ounces of oil of poppy, after which add the rest of the milk and three pounds of Spanish white, which should be powdered and poured slowly into the mixture. Apply with a brush the same as other paint.

DOMESTIC RECIPES.

Currant Jelly.

Pick over the currants carefully, and rinse with cold water; put on the stove, in a porcelain kettle, *without* any water. Bruise the currants, and when warmed through, put in a jelly-bag to drain. Strain the juice, and boil ten or fifteen minutes; skim, take from the stove, and pour *boiling* over the sugar. Do not set it over the fire again, but take to a cool room, and stir till the sugar is dissolved; also stir often until cold. Granulated sugar is best for jellies, allowing a pound to a pint of juice. Pour the jelly into glasses, and if thin, set in the sun for a few days. This method will not answer for all jellies, but is an excellent way for currant jelly, as the natural flavor of the fruit is retained more perfectly than by the old rule of boiling sugar and juice together. Currants that are not quite ripe are best for jelly.

Rice Cakes for Breakfast, (Excellent.)

A pint of cold, boiled rice, one-half pint of bread crumbs; cover with milk that is just beginning to turn sour, and leave in a cool place over night. In the morning, add one quart of sour milk, one quart of flour, two beaten eggs, one teaspoon salt and soda (bicarbonate) to sweeten. Bake on a griddle. The milk must not be too sour.

Rice Waffles, for Tea.

"One quart of thin sour milk, poured over one teacupful of cold, boiled rice. Do this two or three hours before the waffles are wanted. When ready to bake, add a pint and a half of flour, two or three beaten eggs, and soda. Oil the waffle-irons each time they are used, with lard that is perfectly sweet. The rice, used for rice griddle-cakes and waffles, should be *salted* when boiling."

Corn Cake, for Breakfast.

Beat together one egg, two tablespoons of sugar, two of melted butter, one-half teaspoon salt, two teacups corn-meal, one tablespoon flour, one teaspoon cream-of-tartar, mixed with the dry meal and flour, half teaspoon soda, and two teacups sweet milk. Dissolve the soda in the milk, and add last. Bake in a shallow tin-pan, about fifteen minutes, in a well-heated oven.

Lyons. MRS. M. G. RAND.

Jellied Chicken.

Cut up two chickens and boil in water, only enough to cover, until tender. Then remove skin and bones and season the liquor, of which there would be a little less than a quart, with butter, pepper, salt and the juice of a lemon, if liked. Dissolve one-fourth box of gelatine in a little warm water, and add with the chicken to the liquor; boil up once and pour into a mold. This is very nice for tea or evening company, when cut into thin slices. A very sharp knife, however, must be used in cutting, or the slices will break into separate pieces. MRS. BRADY.

Leamon's Aniline Dyes.

Allow me to add to Mrs. Maple's experience with these dyes, in RURAL of May 4th, that I have used them, and with great success for spatter-work on either wood or muslin. Pretty sofa pillows or chair cushions may be made of Turkish toweling by first splashing with green, then pinning clusters of small ferns in the center and corners: splash delicately with dark brown. Even unbleached muslin may be made into pretty chair covers in this way, and has the advantage of being less expensive than the toweling. MARY B.

Remedy for Rheumatism.

Just before retiring, bathe the parts affected with water, as hot as can be borne, in which potatoes have been boiled.

This remedy, simple as it seems, has been known to relieve the most obstinate rheumatic pains. E. M.

Relief for a Weak Back.

Add one pint of alcohol to a beef's gall, and bathe frequently. A. B.

QUERIES ANSWERED.

Please give recipe for a clam soup? E. G.

Ans.—Open fifty clams, strain the juice, allow as much hot water as juice and add the clams; boil ten minutes, skim, add a little minced parsley and onion, if liked, and boil ten minutes longer; season plentifully with butter, add salt and pepper to taste, and three or four butter-crackers rolled fine. Put a coffee-cupful or more of milk previously heated, into the tureen, pour in the soup and serve with a plate of butter or soda crackers.

What will relieve the sting of musquito bites? SUFFERER.

Ans.—A solution of carbolic acid and glycerine—fifty or sixty drops of the acid to an ounce of the glycerine.

News of the Week.

POLITICAL.

Monday, July 1.

Since the passage by the House of the resolution with regard to the inviolability of Hayes' position in the presidency, interest in the doings of the Potter Investigating Committee has very sensibly diminished, and the subsequent course of the investigation has tended greatly to increase this feeling of indifference. Mrs. Jenks has been the chief witness again during the week, and has, if possible, been more saucy, impertinent, flippant, and unmanageable than ever. She persists in her story about having, herself, dictated the so-called Sherman letter, and still declines to give the name of the person who wrote it, though she declares emphatically that she did not do this herself. As the committee cannot now punish her contumacy, since the House is not in session, she answers or refuses to do so, just as it suits her whim or convenience, while she makes abundant use of woman's right to be impertinent, impudent, insulting and abusive, without fear of reproof or retaliation. Her evidence is copious and amusing, but while laying bare the rottenness of Louisiana politics, is in all other respects untrustworthy.

Dennis, of Florida, testified that 219 fraudulent republican votes were added to the count in Precinct 13; that he had been appointed to several offices in recognition of his services, without being examined as to his fitness in either case; and that nearly all connected with the presidential election in Florida, had been provided for by the Administration. Ex. U. S. Marshal Pitkin, of Louisiana; W. E. Chandler, ex-Congressman from Maine, and ex-Secretary of the Republican National Committee; "Returning Board" Thos. C. Anderson, of Louisiana, were the other chief witnesses examined by the Committee in Washington. The sub-committee sent to New Orleans, has there examined ex-Gov. Packard, who is about to start to discharge the duties of his office as Consul at Liverpool. He insisted that he had been fairly elected as governor of the State by a larger majority than five of the Hayes' electors; that armed mobs in the interest of Nichols, alone prevented his peaceful inauguration; that if recognized at Washington, he would soon have been able to maintain his position without the aid of U. S. troops; and that he knew nothing, personally, of any trickery on the part of the visiting statesmen. All the witnesses hitherto examined with regard to Louisiana politics, have each emphatically contradicted one or more of the assertions made by James E. Anderson, the ex-superintendent of registration in East Feliciana.

Owing to the haste which marked the transaction of business during the last hours of Congress, the bill for making import duties payable in legal-tender notes failed to become a law. During the enrollment of the Omnibus Bill, an urgent appropriation in regard to the government property at the Hot Springs, Arkansas, was omitted in copying the document, although passed by both Houses. The funds, therefore, cannot be used, and as the failure benefits the numerous present occupiers of the property, it is considered probable that the "error" was paid for by them. More detailed returns from Oregon give the governorship of that State to the democrats by a small majority, as well as a majority of twelve on joint ballot of both Houses of the Legislature. On Wednesday last, Alexander H. Stephens, delivered an eloquent speech at Atlanta, Ga., in which he vindicated his course with regard to the Potter Committee, said that he couldn't be ruled out of the democratic party by a set of political tricksters, and that, if the coming democratic convention failed to re-nominate him, he would "go it alone" and appeal to the people. The Republican State Convention of Illinois was held at Springfield on Wednesday, and the Democratic State Convention of Ohio, at Columbus, on the same day. Both favor the greenback movement, especially the democrats, while the republicans lay the main stress upon the possible payment of rebel war claims. The former, while denouncing the means by which Hayes reached the presidency, declare the question now finally settled; and the latter have nothing to say for or against the President. No Governor is to be elected this year in either State, only subordinate officers.

MISCELLANEOUS.

At Faribault, Minn., the chief business part of the town, including two banks and seven stores, has been burnt; loss, $200,000. Lord Dufferin is reported to have refused the prolongation of his term as Governor-general of Canada offered to him by the home ministry. Gen. Escobedo, after his Mexican defeat, has again found refuge in the United States. Gen. Fitz John Porter, and ex-Surgeon-General Hammond, both formerly dismissed from the army by court-martial, are being re-tried at West Point by a Board of Officers appointed by the President, to the end that any injustice done to them in the heat of war, should be righted. It has been decided, as cattle raids still continue to be made along the Rio Grande, that the United States troops shall in future follow the thieves across the frontier, entirely disregarding all Mexican protests. In the boat race between the Universities of Harvard and Yale on Friday last, the former won easily by twelve boat lengths.

The Azor which started some time back with 250 colored emigrants from Charleston to Liberia has put back short of water after having lost 23 passengers by ship-fever. The Moffet bell-punch has been introduced into Chicago saloons. To-day Virginia's new criminal code goes into operation. Under it, whipping-posts will be set up for the special use of petty criminals and the benefit of the community at large. Farmers in many parts of the West, especially in Ohio, are receiving notices signed "Working men's Bread and Blood Committee," warning them against buying labor-saving machinery, and threatening the destruction of all such implements together with the grain stacks of their owners. Another Mammoth cave has just been discovered in Ky., quite close to Glasgow Junction and named the Grand Crystal. It is said to have been explored 23 miles in one direction and 16 in another. Mummies found in it have been sold for $400; $10,000 have been offered for the cave to Thomas Kelley the farmer on whose 23 acres of land its entrance has been discovered. Among the appropriations made by the late Congress is one of $10,000 to investigate the diseases of swine. This little sop to the farmer, added to the $10,000 already offered by Missouri for the discovery of a specific remedy for hog cholera, may stimulate our cattle doctors and others to greater efforts.

Friday was a very good day for executions. At Frederick, Maryland, Edward H. Costley was hung for murdering his cousin, Solomon Costly; at Cincinnati, Perry Bowman "stretched hemp" for murdering a toll-gate keeper and his wife; Jacob Levels, colored, was hung at Little Rock for the murder of another colored man; John Burns stepped into space at Paris, Ill, for the murder of Elijah Burdell; at St. John N. B. Vaughan, a notorious murderer, received his due, and at Chicago, Jeremiah Connolly aged 19, and Geo. Sherry aged 21, were hung for the murder of Hugh McConville. For some time before their execution these worthies received all manner of loving attentions from the Chicago female, crowds of her daily visiting their cells with all manner of delicacies seasoned with kisses from their pouting lips inserted between the bars, until the jail officials had to put a check on the gushing nuisances.

On Sunday, June 24, four companies of cavalry under Capt. Barnard, making, with the scouts, etc., about 200 men, attacked the Bannock Indians about 45 miles from Harney and killed 42, among whom was the chief, Buffalo Horn. The Indians are estimated to have numbered all the way from considerably under 700 to somewhat over 2,000. Notwithstanding his present fate, Buffalo Horn will probably fight again, as it takes a good deal of killing to get rid of one of those many-lived aborigines. As usual, Gen. Howard, by means of severe marching, reached the battle-field just after the fight was over. The Indians are being hotly pursued. Herders are being numerously murdered by the savages; settlers are fleeing in affright; the Black Hills are threatened; Chief Moses, in Oregon, is said to have 1,500 well armed and desperate warriors, mostly renegades from many tribes, and has also the sympathy of Reservation Indians, who, at a pinch, will reinforce him with 4,000 men, when it would require 20,000 troops to take care of him. Like the English Jingoites, however, he don't want to fight, but if the white men do——

The $19,000,000 deficit which has lately been claimed to exist in the Treasury accounts, is said to be not real but only apparent, and due to a change in the system of book-keeping practiced in that Department.

In East St. Louis, which is in Illinois, just across the Mississippi river from St. Louis city, there has been for a time back a bitter quarrel between the Metropolitan Police and the Mayor who, a short time ago, organized a set of City Marshals to replace the police. The latter seized upon an engine house which was attacked yesterday by the Mayor and his marshals. Three Metropolitans in the house at the time barricaded themselves in and fired at the assailants, killing two and wounding a third.

FOREIGN.

The Congress on the Eastern Question, in session at Berlin, is progressing satisfactorily with the settlement of the points in dispute. The principal matters agreed upon have become known to the public despite the silence which was to be observed with regard to the discussions of the assembly. Greece has been admitted to the meeting with a voice only on subjects connected with her own immediate interests. Bulgaria, north of the Balkans, is to become a semi-independent State, and it is proposed to make Prince Charles of Roumania sovereign of the new principality, also. By this means Russia would be repaid by the retrocession to her of Bessarabia or of the greater part of it; the two petty principalities would be consolidated into a respectable kingdom, and Bismarck's labors would be rewarded by the installation on its throne of a Hohenzollern Prince; thus making German interests paramount on the Danube, as well as on the Rhine. Bulgaria, south of the Balkans, is to be united with Roumelia, under the title of Eastern Roumelia. This is to have a Christian governor, and an administration like that of the British colonies; the governor to be named by the Porte with the approval of the Powers, for a term of five or ten years. Turkish troops are to be withdrawn from the country and to enter it only in case of insurrection or invasion. The Turks are to fortify the passes of the Balkans and to garrison them with a stipulated number of men, and on the roads to the passes, certain spots shall be specified in Roumelia, at which troops on their march from and to the Balkans shall be privileged to halt. Bosnia, and Herzegovina are to be occupied by Austria—a mere preliminary step, it is thought, to their annexation to that empire. Servia is to be independent provided she enfranchises her Jewish inhabitants; Greece is to receive an addition of territory, Montenegro to gain her independence, and all parties in Europe to be satisfied at the expense of Turkey. The arrangements leave the latter in some respects in a worse plight than the treaty of San Stefano, and very considerably worse off than she would have been had she accepted the terms which she refused owing to British encouragement, at the conference of Constantinople, before the outbreak of the late war. Discontent among the Turks is exceedingly bitter; and another revolution at Constantinople is prevented only by the proxi-

mity of the Russian army and the English fleet. Nothing definite has as yet been arranged with regard to Asia, but a considerable Russian accession of territory a small interchange of territory with Persia, and a British protectcrate over what shall remain to the Turks, are not improbable. There are a large number of other conflicting reports, and even some of the above particulars may yet be subjected to modification. The chief diplomatists will probably return home in about a week or ten days, leaving some of their subordinates to settle matters of detail.

The Prince of Hanover has agreed to renounce the royal title, and accordingly Prussia has consented to restore to him the sequestered property of the late King. Queen Mercedes of Spain, after five months of married life, died last Wednesday at the age of eighteen, of gastric fever. Young King Alfonzo, her husband, is prostrated with grief, and the whole nation is mourning. The Emperor William is now all right, and is said to be opposed to the execution of either Hoedel or Nobiling. Gen. Grant has been banqueted in Berlin by the Crown Prince and Bismarck. The Pope has given permission to the Neapolitan Bishops to accept the pay assigned them by the Italian Government. This is said to be due to the falling off in the contribution of "Peter's Pence" from which fund they have been supported since the abolition of the papal temporal power.

The Viceroy of Canton, China, has proclaimed that any attempts by Chinese to lure emigrants on false pretenses to Peru, the Sandwich Islands, or *elsewhere*, will be punished by instant death. The Emperor of Brazil, the Empress and most of the Ministers of State visited the Steamer Rio de Janeiro, the first vessel of a line between this country and Brazil. Dom Pedro says he will do all in his power to cement the ties of commerce and friendship between the two countries.

HERMAN.

VARIOUS.

The death of Marshal Barraguay d'Hilliers reduces the number of Marshals of France to three —MacMahon, Canrobert, and Leboeuf.

Cardinal Franchi has addressed a circular to the Roman Catholic prelates of Germany instructing them to spare no efforts in combating Socialism.

The Quebec rioters who broke into a flour store and stole 400 barrels of flour on pretence of being in danger of starvation, sold it to grocers for $1.50 a barrel, and used the money in buying whiskey.

A Nebraska man asks people to believe that his dog deliberately walked in front of a railroad train, laid his head on the rail, and was killed because of sorrow for the death of a child for whom it had shown a strong attachment.

Frederick Hasse graduated at the head of his class in a German University, in 1870. He was heir to $80,000, and his prospect of a successful career could hardly have been brighter. A few days ago he died in Saint Louis, where he had for a year been a porter in a medical college. An appetite for opium killed him.

A Buffalo Alderman astonished the board, in a meeting for consideration as to the building of a new jail, by remarking; "I makes der motion as der new jail build on der same spot as der old all what's now standing, dat saves der money for der land, and I makes der motion as der old jail shall not be pull down till der new jail is built, so ve vill not be mitout der jail."

Madam Rudersdorff, the popular singer, has settled down on a farm of her own, at Berlin, Mass. She manages her land entirely herself, and is solving the extremely easy problem of making money out of farming. Her dairy products and vegetables find sale at higher prices than those of her neighbors. Her house is full of Turkish and Persian rugs, old china, and precious bric-a-brac she has been gathering up for years. She rises at five in the morning, and works in her garden vigorously with a hoe herself. Besides this, she trains in music young lady pupils who reside with her, and she gives lessons in languages.

Every time the Czar announces his intention of visiting a military barrack, that place immediately becomes a show. When he went to Odessa the Colonel in command spent several thousand roubles in making his and their quarters presentable. For three days the soldiers lived, had good clothes, fine dinners, money in their pockets, vodki to drink, and clean rugs to lie on. No wonder their loyalty was pleasantly stimulated toward the sovereign, whose presence brought such luxury; but as soon as he had turned his back, things relapsed into their old condition, which is one of squalor. The money set down for the keeping of a regiment is amply sufficient if applied to that purpose, but a large part of it is stolen by those who handle it.

Hearing Restared.—Great invention by one who was deaf for 20 years. Send stamp for particulars. VERRY & HARPER, Lock Box 80, Madison, Ind.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, June 29, 1878.

BEANS AND PEAS.—The bean market has now one of the slack, listless phases that frequently occur in summer when local demands are limited and exportation calls for light orders. Mediums, Marrows or White Kidneys seldom exceed $1.60 for selected. Red Kidneys very scarce, as prices indicate. Pea beans can be hardly said to have a market here. The N. E. States formerly drew supplies from this point, but latterly the West ships right through. Canadian field Peas in bulk and hand quiet and lower, at 75½c; green peas have a fair call for warm weather at $1.05@1.10; Southern B.E. per 2 bush. bag, $3@3.25.

We quote medium beans, primo, $1 57½@1 60; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 40@1 50; Pea, $1 40@1 65; white $1 60@$1.62½; kidney, $1.40@1.60; red do., $2.85@3.95; black, $2.35@2.40; Lima, $3.75@4.25.

Receipts of beans past week, 3,420 bush. Exports of beans, 107 bbls. Exports of peas, 1,300 bush.

BEESWAX.—There is only a small business as from 26½@27½c. for Western and Southern.

Exports past week, 5,929 lbs.; since Jan. 1, 107,432 do.; same time last year, 60,719 do.

BROOM CORN.—There is very little business with prices essentially unchanged. Quoted at 6@7c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red-tipped, per lb.

BUTTER.—There is nothing favorable to note in prices. Shippers of lines or round lots have had in some cases better bargains than at our last. It must be, however, a close buyer who contends for much concession from lately current rates for fine grades of State. Still, quotations may be regarded as extreme for local trade, as business will be of light volume for the coming week—the Fourth of July will start many consumers out of town. Of late years the weeks on which the day has occurred, have been worse broken up commercially than other holiday periods. The weather has been hard on butter for several days, and as fine, strong-bodied State has a precedence of most other in hot times, we do not look for a sudden or material shrinkage in prices for choice stock. On the other hand, Western is regarded more shyly, as it does not bore out on the trier with attractive solidity after a warm ear-voyage. Very low rates are named for Western dairy and factory. In fact, low marks are good enough to fetch the extreme for the former, while the latter, either indio packed or milled, is quoted very irregular, and few dealers care to advance liberally upon it. Export demand large, considering it is not speculative.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 16@17c.; other, 12@15c.; Welsh tubs, best, 15@16c.; other, 10@12c.; poor State, 6@8c.; State firkins, 15@17c.; Western creamery, choice, 19@20c.; other, 16@18c.; Western dairy, best, 12@13½c.; other, 9@10c.; factory (indie packed), 10@10½c.; other, 8@9c.; milled Western, 5@6c.; old and grease, 3½@5c.

Receipts for the week, 30,432 pkgs.; exports past week, 30,052 do.

CHEESE.—The arrivals for the week have been the largest of the season. Prices held up very well early in the week, but towards the close became weak, and ½ lower on fancy, and ½ off on good grades. The exports reach the large total of 120,000 boxes. The closing sales are at 8@8¼ for fancy white, chiefly at 8, and of fancy colored at 8¼.

Quotations are for fancy, 8@8½c., respectively for white and colored; 7¼@7½c. for good and prime; 6½@7c. for fair; 4½@6½c. for half skimmed; 3@3½c. for skimmed. State, farm dairy at 6½@7½c. for good to choice, 5@6½c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¼@8c.; do. good to prime, 6½@7¼c.; do. fair, to good 6@6½c.; Western factory, fine, full cream, cheddar, 7½@7¾c.; do. fine, full cream, flat, 7½@7½c; do. slightly skimmed, flat, 5½@6½c.; do. half skimmed, 4@5½c.; do. full skimmed, 3@3½c.

Receipts for the week, 146,882 boxes.

Exports, past week 120,273 boxes.

Gold closes at 100⅞.

Liverpool cable quotation, 45s.

COTTON has been very dull but closed firm, with quotations for June, 11 53@11.54c.; for July, 11.55c.; for August, 11.52@11.53c.; for September 11.21c.; for October, 11.05c.; for November, 10.91@10 92c.; for December, 10.80@10.91c.; for January, 10.8@10.86c., for February, 11.03@11.05c.; for March, 11.10@11.12c.; for April, 11.20@11.22c. and for May, 11.30@11.31c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9 9-16	9 9-16	9 11-16	9 11-16
Strict ordinary	9 15-16	9 15-16	10 1-16	10 1-16
Good ordinary	10 7-16	10 7-16	10 9-16	10 9-16
Strict good do	10 13-16	10 13-16	10 15-16	10 15-16
Low middling	11 1-16	11 1-16	11 3-16	11 3-16
Strict low middling	11⅝	11⅝	11⅝	11⅝
Middling	11 7-16	11 7-16	11 9-16	11 9-16
Good middling	11⅝	11⅝	12	12
Strict good middling	12 3-16	12 3-16	12 5-16	12 5-16
Middling fair	12 11-16	12 11-16	12 13-16	12 13-16
Fair	13 7-16	13 7-16	13 9-16	13 9-16

Stained.

Good ordinary..9 7-16c.; Strict good ordinary.10 7-16c. Low middling..9 15-16c.; Middling .....11 1-16c.

DRIED FRUITS.—Towards the close there appears some speculative demands for apples, which is prompted by the impression that current low prices will somewhat limit the production; no large sales have as yet occurred, other articles are wholly nominal.

Peaches—Fancy North Carolina 10@11c.; Choice Georgia, 10c.; good to prime Georgia; 8@9c.; evaporated, 20@22c.; unpeeled halves, 3½@4½c.; quarters, 3½@3¾c.; unpeeled evaporated, 7½@8c. Pitted cherries, choice new, 19@20c.; Raspberries, 26c. New York State plums, 10c.; Southern plums, 9c. Blackberries nominal. Apples—State quarters, 4@4¾c., do sliced, prime, 4½@5c.; good, 4@4½c.; Western quarters, 3@3½c.; Southern at 4½@5c. for prime sliced; 3½@4½c. for fair to good; Southern quarters, 3@3½c.; Tennessee quarters, in bags, at 2½@3.

Exports past week, 317 bbls. dried apples; since January 1st, 8,811 do.; same time last year, 24,741 do.

EGGS.—Receipts for the week, 9,978 bbls.; do last week, 10,586 do. Trade has been unaccountably blocked for the season and prices have dropped materially. A good trade is expected next week but prices will not have a good murmer tone. Vegetables are low and abundant and cut off considerable local trade.

Near points, 14@15c.; State and Penn., 12½@13c.; choice Western and Canadian, 11@11½c.; a few off quality lots, 10½c. Sales all loss off.

FRESH FRUITS.—There is now a very varied representation, and after the early morning sales berries have an unsettled position, sometimes the difference is 2@4c. New York apples are of good size, quoted at $2.50 a bbl. N. C., $3@4; Southern astrachan half bbl. crate, $2@2.50; Up River strawberries 3ds, 2½@4c.; Oswego prime, 2@11c. qt.; Oswego and Oneida poor to fair, 5@8c.; L. I., 5@7c.; black caps N. J., 7@8c. qt.; Del. 6@8c.; Antwerp, 6@7c. 8d qts.; red native do. 3½@4c.; Brandywine, pints, 4@5c. Whortleberries, bush., $4@5; demand good. Currants very plenty at 2½@3c. for small red, and 5@6c. for cherry. Blackberries, ib. Wilson's, 12@14c.; Dorchester, 8@10c. qt. It hardly pays to send wild lines. Gooseberries, $3@5 bbl. as to qual. Cherries are abundant, the State crop and shipments amply making up any deficiency in N. J. or S. I.; fancy oxhearts or tarpparran, 12@14c. lb.; white amber, 5@8c.; sour, 8@10c.; common, 4@5c. Watermelons were never before in such large supply at this early date; sales slow at $20@25 per C. Peaches are quite a feature, and the enlarged Southern product will be very acceptable if the unfavorable rumors about the Del. and Md. crops are well founded; Georgia choice, $4@5 bush.; others, $1.50@2.50; N. C. choice, $3@3.50; other, $1.50@2. Very glowing accounts come from the N. C. orchards, and although the enterprise of sending fruit is young in that State, nurserymen evidently mean business; several points have a setting of 15,000 bearing trees. Hothouse grapes lower; B. Hamburg, 50c. lb.; Sweet Water 30@40c. Peanuts are higher, but trade is dull; Va. hand-picked, $1.60; fine Va., $1.50; good grades, $1.35@1.40.

FLOUR has declined in sympathy with wheat, and also on account of the warm weather being against keeping stock sound.

Latest prices are $3.15@3.85 for very inferior to very choice superfine State; $3.85@4.15 for very poor to very good extra do. and lots and lines; $4.15@4.45 for good to fancy do.; $3.15@3.85 for very poor to very choice superfine Indiana, Iowa, Michigan, Ohio, &c., $3.85@4.15 for inferior to very good shipping extra do. and $4.15@4.45 for very good to very choice extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.10 for good to very fancy; Minnesota clear, very inferior to very choice at $4.10@5.50; Minnesota "straight," inferior to fancy, at $5.25@6.50, and patent poor to fancy at $5.25@8.00; unsound stock at from $2.00@5.25; city mill extra at $5 00@6.25 for West Indies; do. for England, $3.85@4.00; do. trade and family extras, $5.65@6.75; do. for South America, $5.25@6.00 for fair to fancy; No. 2 $2.25@3.00 for inferior to very fancy.

CORN MEAL.—Sales at $2.60@2.75 for Brandywine, and $2.15@2.35 for Western yellow.

GRAIN.—For wheat prices have been steadily declining on the crop prospects, good weather on the other side and tame markets there. Corn has been held firmly until within two or three days, when the crop reports have weakened prices. Oats are offered lower.

Latest sales of wheat are of ungraded spring at 95@96c.; New York No. 2 spring at 96@97c.; do., June delivery at 97½c.; No. 2 northwest spring July delivery at 97c; No. 2 Milwaukee spring in store at 98c.; No. 1 Milwaukee and Minnesota spring at $1@1.01; No. 2 red spot at $1.05; do., July option at $1.01@1.02; do., delivery by July 27 at $1.05; white State at $1.19; No. 1 white, mainly at $1.15. Rye at 60@63 for western. Corn—steamer mixed at 42@43½c.; ungraded mixed at 41½@41¾c., New York No. 2 at 44@44½c.; New York No. 3 at 41½c.; white western at 53c., and round yellow at 43@45c.; No. 2, June, at 41c.; do., July at 44½c.; do., first half July delivery, at 44½c.; do., August delivery, at 46@46½c.; steamer mixed, June, at 43c.; do., July, at 42½c.; do.; delivery six July, at 43@43½c.; do., August, at 46c. Oats at 1or New York No. 2 white at 33c.; white western at 31@36½c.; mixed western at 30@32½c.; No. 2 Chicago at 30c.; do., July delivery, at 30½@31c.; white State at 31@35½c; mixed State at 30@31½c.; New York extra white quoted at 37@37½c.; New York No. 1 white at 36c.; New York No. 3 white at 31½@32c.; New York extra at 31@31½c.; New York No. 1 at 30½@31c.; New York No. 2 at 30@30½c.; New York No. 3 at 29@29½.

HAY AND STRAW.—The new crop now is expected very shortly, and with large supplies of old yet on hand, prices are easy.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 35@40c. for short rye; and 30@35c. for oat.

HOPS.—The shipments for the week have been only 129 bales. The recent advance has been well maintained. Crop reports are rather more favorable, but the stocks of desirable grades are very moderate. Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

Exports past week, 2,350 bales. Since Jan. 1, 34,100 do.; same time last year, 27,700.

LEATHER.—Sales at 19@20c. for light hemlock, 19@21c. for middle; 20@21c. for heavy and 17@19c. for good damaged.

POULTRY AND GAME.—Live poultry has had one of its favorable fluctuations for sellers this week, and the market closes firm in fowls. Spring chickens have an extra demand for excursions and nearby watering-places since the weather has improved. Turkeys dull, ducks and geese scarcely inquired for.

Fowls.—Spring chicks, N. J., 16@17c.; N. J. choice, 12@13c; Southern and Western, 13@14c.; Roosters, 6@7c.; Turkeys, 10@13.c.; Ducks, Choice, 62@75c. pair, other, 40@55c.; Geese, N. J., $1.25@1.50; other, 88c.@$1.12.

Dressed poultry has a fair demand; not much country-dressed asked for.

Dressed poultry, quoted nominally for country packed as follows: Dry picked Phila., 13@14c.; other fair to prime, including N. J., 11@13c.; Spring Chickens, Phila., 20@22c.; Western, 16@18c.; N. J., 18@20c.; Phila. fowls, 13@14c.; other 10@12c.

Game has no rates except for pigeons; quoted, stall-fed, $1.25@1.50 doz.; flight, 95c.@1.00 doz.; Wild Squab, 70@75c. Tame do., $1.75@2. Items will be more numerous after the Fourth.

PROVISIONS.—Hog products have been stronger under more active demands. Mess pork quoted $10 30@10 60 for spot lots; $10 25 for August; $10 40 for September, and $10 50 for October. Bacon at 5¾c. for long clear, and 6¼c. for short clear. Lard at $7 20 for spot lots; $7 20@7 22½ for July; $7 25@7 27½ for August, and $7 32½@7 35 for September. Steamline at 8 for prime. Tallow at 7 for prime. Beef hams at $21@22 50 for old and new. Beef—For extra mess, $11 75@12; plain mess, $10@11 50; packet, $10 50@12 50 for bbls.; extra India mess, $19@21 for city brands; do. Philadelphia, $18.50@$19.

TOBACCO.—The export demand has been quite brisk. The offerings of the new crop are large, but prices sustained. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5½@ 6¾	6½@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1877.

New England wrappers, common	10 @—12
fine, do	18 @22
medium	12½@14
selections	25 @35
seconds	9 @12
Fillers	6 @ 7
Pennsylvania assorted lots	8 @17
wrappers	20 @50
New York assorted lots, common to medium	8 @ 9
Good	10 @12
Ohio assorted lots	7½@10
Wisconsin assorted lots	7½@ 9

VEGETABLES.—Old potatoes are no longer quotable. Buyers can have the remnant anywhere from 50c. to $1 00 bbl. New Southern are in liberal supply, and to exceed $2 must be selected. Long Island have not been rushed in owing to the low rates, truck farmers preferring to give them extra growth. Bermuda potatoes, $2 50@3; Southern, $1 75@2; L. I., $1 87@2 25. Green peas are cheap, 50@75c. for two-bush. bag, large, 40@50c. do, small. String beans, bag, $1 75@2; N. J. bbl. $3; Nor. do. $2@2 50. Cucumbers—Nor. $1 50@1 75 crate; Chas. 75c.@$1 25. Egg plants—Flor. crate, $3 00@3 50. Tomatoes will be a good Virginia crop this season; Nor, $, 62@1 87, crate; Fla. 50c.@$1 00; Chas. 75c.@1 50. Bermuda onions, bush., 60@75c.; Southern do., bbl. $1 50. Squash, L. I. farm basket, $1 00; Southern half bbl. 75c.@$1 00. Asparagus—$1 50@2. Radishes—100 bunches, 50c. Beets, $1 50@2. Carrots' $1 50@2. Turnips, $2@3 50; R. turnips, bbl., 75c.@$1 00. Lettuce, bbl. 25c. Spinach, 75c.@2 00. Rhubarb, 100 bunches, 2 50@3; Cabbages, $3@4. Cauliflower, bbl. $3@4; prime small, $1 25@2.

WOOL.—The new clips are in large assortment, but a the reports from the country have indicated higher prices there and some little excitement prices here have been very strong. X and above Ohio fleeces have sold here at 35c.; one small lot of Pennsylvania fleeces at 36c.

LIVE STOCK MARKETS.

Saturday, June 29th, 1878.

BEEVES.—Receipts for the week, 9,109 head; do., last week, 11,945 do. Warm weather this week has made wholesale buyers cautious, and the market has not much animation. With a tame market we again report easy figures. Very common to best native steers, 7¼@10½c.; common Texas, 7c.; fair do., 8c.; fat Montana, 7¼@8¼c. Export demand continues steady, using fine stock.

COWS AND CALVES.—There is nothing doing upon which to base quotations.

VEAL CALVES.—The market has declined during the past few days, and at the close 6¾c. is extreme for best milk calves. Course to good grades, 4¾@6c. Buttermilk, 2½@3½c.

SHEEP AND LAMBS.—Receipts for the week 23,171 head; receipts last week 22,406 head. The market is dull at 3¾@4¾c. for sheep and 6@7½c. for lambs.

SWINE.—Receipts for the week 22,811 head; do. last week 28,720 do. No late sales alive. Nominal quotation, 4¼@4¾.

INDEX TO NEW ADVERTISEMENTS.

Aultman & Co., C.—Canton Monitor Engine.
Battle Creek Machinery Co.—Marsh's Cylinder Bed Foot Lathe.
Boomer & Boschert Press Co.—Cider Presses and Graters.
Challenge Mill Co.—Double and Single Header Wind Engines.
Cornish & Curtis—The Rectangular Churn.
Dingee & Conard Co.—Beautiful Ever-blooming Roses.
Eclipse Wind Mill Co.—The Eclipse Wind Mill.
Ertel, Geo.—Economy Hay, Straw and Moss Press.
Higganum Mf'g Corporation—The Farmers' Favorite Cider Mill.
Jayne & Son, Dr. D.—Jayne's Expectorant.
Justice, Philip S.—Elastic Galvanized Cable Strand.
Kingsford & Son, T.—Oswego Corn Starch.
Mast, Foos & Co.—Iron Turbine Wind Engine.
Payne & Sons, B. W.—Eureka Safety Power.
Pomeroy & Son, Geo. E.—Fine Farms and Homes for Sale.
Taylor Mf'g Co.—Portable Farm Engines.
Tourjee, E.—New England Conservatory of Music.
Wells & Co., S. R.—International S. S. Lessons.
Westinghouse & Co., G.—Threshing Machines, Horse Powers and Engines.
Wheeler & Melick Co.—Medal Machines.
Wheeler & Melick Co.—Spring Steel Tooth Horse Rakes.
Young, Oscar W.—Embossed Pictures for Decorating.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is:

Single Copy, per Year	$2 50
" " Six Months	1 25
Five Copies or more, per Year	2 00
" " " Six Months	1 00
Three Months' Trial	65
Great Britain, Ireland, Australia and Germany, per Year, post-paid	$3 54 (14s. 6d.)
France, " "	3 54 (18f.)
French Colonies, " "	4 58 (23f.)

Any one sending a club of ten is entitled to one copy, one year, free.

Agents will be supplied with canvassing outfit on application.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c.	per line.
" 13th page	50	"
Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

SPECIAL NOTICES.

For particulars regarding Electric Belts, &c., address PULVERMACHER GALVANIC CO., Cincinnati, O.

New Advertisements.

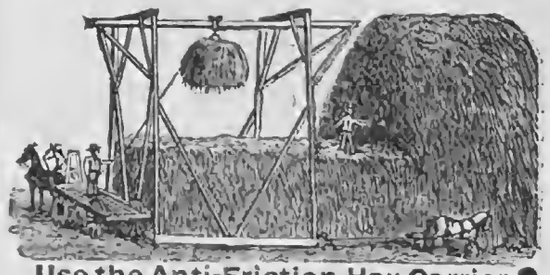
FOR SALE --- FINE DAIRY FARM.

A very fine Dairy Farm of 160 acres, two miles from the city limits of Toledo. In the most farming section adjacent to the city. 100 acres in Grass, 27 acres of Corn and Oats, 15 acres fine Wheat, 18 acres good Timber. Convenient brick residence, with barn and stable for 40 cows. Abundant supply of pure water that never fails. Three apple orchards. A valuable "lolik track," with cows to supply it, if desired. The Farm is on a good road, planked to within ¼ a mile, and is a valuable living for some one. The party now owning the farm has nearly made it clear in the past six years, from the proceeds of his dairy.

Also, a Farm of 320 acres, adjacent a flourishing city in Michigan. The dwelling upon it cost over $20,000. Will be sold for less than the buildings cost.

For further particulars, address

GEO. E. POMEROY & SON,
Real Estate Agents, Toledo, Ohio.



Use the Anti-Friction Hay Carrier.

For elevating and conveying Hay, Grain, etc., in barn, barrack, shed or field. It elevates perpendicularly and conveys horizontally any desired distance. No trouble about getting over high beams and to the end of deep mows or to the top of high stacks. Thousands are now in use. Five tons have been stacked and the frame moved in forty-five consecutive minutes. Fifty tons have been stacked in a single day with this Frame and Carrier. SEND STAMP FOR CIRCULAR. "3" as U. S. WIND ENGINE & PUMP CO., BATAVIA, ILL.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.

Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.

For further particulars, send for Price Lists and Circulars to

KIDDER & LAIRD, 88 John St., New York.

***WEAK LUNGS** are cruelly racked, and the general strength gradually wasted by a persistent Cough, which Dr. Jayne's Expectorant may be relied on to cure. It will certainly benefit you also, if troubled with either Asthma or Bronchitis.*

Reading for the Young.

COATS-OF-ARMS.

It may have occurred to some of my young friends to wonder how those astonishing devices, coats-of-arms, originated. Usually the history is curious. One of those laborious, plodding German students, Dr. Grasse, has been delving into this peculiar lore with interesting results. I propose to tell you of some of them.

Many of you have read and reading, remembered, during the reign of Napoleon III, accounts of the beautiful Princess Metternich, who was a warm friend of the Empress Eugenie. Her husband was the Austrian ambassador near the Imperial Court, and was a very proud person, but his family tree was a not uncommon sapling in the beginning. His ancestor was a plain Captain at the Court of Henry II, and his name was simply Metter. The emperor had the greatest confidence in this captain of his bodyguard, and thereby awakened the envy of certain courtiers, who, imitating the favorite's handwriting, wrote a treasonable letter, and contrived to let this fall, as if by accident, in the emperor's way. The stratagem failed, for Henry had no sooner read it than he quietly put it aside, with the words "*O Metter nicht!*" (No, not Metter!) On the captain's entrance he was greeted by all present with the emperor's exclamation, which, with the slightest alteration, is repeated in the family name.

This was the beginning of his fortune. He presently acquired property which was added to by his successors, until to-day the family is one of the richest and most powerful in the Austro-Hungarian Empire. The famous Joanisberger wine grows on the Metternicht estates, and so highly is it esteemed that a present of a few dozen bottles is considered a great honor.

The family of Andrassy, whose name has of late een so conspicuously before the world, owes its ms to a tournament held at Grau by St. Stephen the year 1000, when he was crowned king of ungary. A foreign knight had unhorsed many ompetitors, and showed himself somewhat inolent in consequence, when a Magyar, of Scythian descent, named Andoras, challenged him to mortal combat. The challenge having been accepted, Andoras, in the presence of the whole assembly, severed the head and right shoulder of his heavily-armed adversary from the body with a single blow. On account of this exploit he was allowed to bear on his shield a man in armor, placed between two lions, erect, who held a crown. Through his subsequent marriage he became founder of the Andrassey family in all its branches. The story is told, however, in another way, with especial reference to a crest representing a Magyar brandishing a sabre. When, we read, St. Stephen was crowned at Stuhlweissenburg in 1100 (*sic*), a strange knight came to him complaining that a lady betrothed to him had fled, and was now in the queen's train. The king promised to repair the wrong if the plaint was just; but learned from the lady, Elsbeth of Elmenau, that her relatives, treating her as an orphan, had assigned her against her will to Willibald of Lundenburg, the complaining stranger, to escape from whose clutches she had fled to the protection of the queen, having bestowed her affections upon another. This was the Magyar noble Andoras, who had seen Elsbeth at the court of Bavaria, while the queen resided there. To settle the dispute, the king adopted the ordinary expedient of a judicial combat, which took place on the following day, when Andoras smote off the head and the right hand of his opponent. He was rewarded with the hand of Elsbeth, and was appointed governor of Transylvania. Of three sons, the issue of his marriage, only one survived, the founder of the house of Andrassey.

KIDNAPPING A SLOTH.

When I first went to live at Larangeiras, which is a suburb of Rio de Janeiro, one of my especial pets was a young sloth. Rather a curious favorite, you may say; but the fact was, that I had heard several travelers deny the possibility of rearing a sloth to recognize and become familiar with you, and I had a fancy to try the experiment for myself.

At first (as might be expected) my native friends made great fun of the idea, and were always asking how my pupil was getting on, and whether I had not better send him to school, now that he was getting too big for a private tutor. However, I stuck to my own way, and in course of time the beast got to know me quite well. Many a time, when I was sitting reading in the garden, under the shade of my favorite palm-tree, I would be startled by feeling a huge hairy paw passed inquiringly along the back of my neck, and, turning round, find myself face to face with Senhor Melhado, as I had named him, in compliment to a very take-it-easy neighbor of mine.

These reminders, I must confess, generally meant getting a bit of sugarcane or a sup of molasses, for he was a shocking "sweet-tooth." When we sat eating our sugareane on the veranda, in the cool of the evening, he used to come for *his* piece as regularly as the clock struck; and whenever he had misbehaved himself, I used to punish him by giving him none. Having got his education to this point, I began to think whether I could not carry it further still, when lo! one fine morning my pet was nowhere to be found.

This discovery was not made till after I had started for the city as usual; but my black retainers were naturally dismayed at a catastrophe, the whole blame of which would evidently fall upon *them*. Moreover, the garden being entirely surrounded by a high wall, and all the trees standing well back from it, it was difficult to imagine how he could have got out. The whole affair had quite an air of witchcraft; and (as is wont to be the case in a public crisis) a great deal was said, and nothing done.

Now, it happened that this same difficulty of getting out was Mr. Sloth's special grievance; for, although one might have thought that long walks were not much in *his* line, he had a great hankering to know what lay on the other side of that wall. And so, one morning, as if on purpose to gratify him, while he was sitting disconsolate upon a projecting bough, there came sliding up over the top of the wall, right towards him, the end of a pole, long, strong, and well-smoothed as heart of sloth could wish.

Slowly and heavily, one after another, the huge clumsy paws fastened upon this unexpeed windfall. But, alas! for the poor beast, he had no sooner trusted himself to his new perch than he discovered that there was a black man in ambush underneath it; and before he could collect his scattered ideas, he found himself whisked up and marched away down the street, to the cry of "*Preguica! boa preguica! Quem quer comprar!*" (Sloth! good sloth! Who'll buy?)

Meanwhile I, little dreaming of what had befallen my poor favorite, was riding leisurely along the great road leading from the suburb of Larangeiras to the city, when I suddenly discovered that I had forgotten some papers which I wanted. To save time, I went back by a short cut through some of the by-streets, and it was just as well that I did, for I suddenly encountered a sloth tied by his claws to a pole, and looking very much ashamed of himself: and in this disconsolate captive I recognized, to my no small amazement, my own cherished pupil, Senhor Melhado!

In an instant I was off my horse, and pounced upon the thief, who loudly protested his innocence. A crowd gathered, and there was a great hue-and-cry; but my recognition of the sloth—and, better still, *his* recognition of *me*—carried the day, and my black friend, seeing the case going against him, abandoned the booty and took to his heels. The delight of my household at the prodigal's return may be imagined; and I think the lesson must have done him good, for he never broke bounds again. D. Ker.

A JAPANESE NEWSPAPER.

Turning over the leaves of a diminutive blue-book of no particular interest, we lighted upon a translation of the six hundred and thirty-third number of the Yokohama Daily News, published on the 20th day, 2d month, 6th year of Meiji, 20th day of 2d month of Solar Calendar; that is to say, Thusday, February 20th, 1873. The date is not of the best, but the contents of the paper have lost none of their savor by keeping.

Compared with more familiar journals, our Japanese newspaper is but lightly laden. Immediately after the date comes the announcement: "Weather fine. Thermometer at noon, fifty-two degrees." This is followed by an official communication from Inouye, vice-minister of the treasury, setting forth the number and description of the ships at anchor in the bay of Yokohama, the amount of customs receipts for the preceding day, the rates of exchange, and a notification that the Budget of News, the Daily Intelligence Association News, and the Yokohama Daily News, being conductive, "be it in ever so slight a degree," to energy and progress, by furnishing correct information about home and foreign affairs, it is ordered that these journals be forwarded daily to every *fen* and *ken*—city and district—in the empire.

As at least one and a half of the four pages of the moderate-sized sheet are devoted to advertisements, the editor of the Yokohama Daily News has very little space at his disposal for chronicling the events of the day. We find only one incident recorded in its columns, but that is a strange one. A Japanese boat in distress being sighted off O'Shima by a British steamer, the captain put his ship about and picked up the six occupants of the boat, just in time to save them from drowning. One of the rescued Japanese, who appeared more dead than alive, had his whole body so scorched and inflamed, that his shirt was sticking to his flesh, and could not be peeled off him. Upon the captain questioning his companions, they stated that, as their boat was running before the wind about noon, this man and another were sitting facing each other, when, all of a sudden, a flash of lightning struck the boat, stunning the scorched man, while the one opposite him was hit right in the head by the lightning, smashed into little bits, and disappeared in the sea. "Foreigners" is the editorial comment, "have a contrivance for warding off lightning strokes, not only at sea, where there is no shelter at hand, but also on every one of their houses. Therefore, our countrymen should adopt this system without delay; if this is done, we shall have no more loss of life and destruction of houses by lightning, such as have heretofore been frequent."

Our journalist gives us a better taste of his quality, when he deals with a bit of social scandal, airing his morality in quaint fashion, as he relates the story of a frail dame, the course of whose love ran anything but smoothly: "Near the Imadobridge, in Asakusa, Yokiyo, there was a restaurant known as the Zumeiro, the proprietress of which was named O'Kiku. This lady, though fully forty years of age, is uncommonly handsome, and of very attractive manners. She is, however, of a fickle disposition, and some years ago was free of her favors to the play-actor, Suwamuro Dossho, in consequence of which she lost her lawful husband, and brought confusion on the household. Still she paid but little regard to censure of the world; and, about four years ago, the pair started off to Œsaka, intending to become man and wife. As she had slipped away from home on the sly, the lady was followed, and was overtaken and brought back by the pursuers when they had got as far as Sogayeki. Thus their intercourse was interrupted for that time. But within the last year or so they drew together again; and as love brooks no denial, the lady called in her go-between, and arrangements were made for the marriage. However, on the very night before, a fire broke out in her house, and it together with four or five houses adjoining, was burned to the ground. In consequence, the bridal preparations have had to be postponed. It is said that O'Kiku cares very little either for her own or her neighbors' losses by the fire, but that she is inconsolable because the mischance has marred her nuptials.

As regards the tender passion between the sexes, it were useless to enter upon the question of wisdom or folly. Just as in old times, so now, the cleverer the man the greater fool he makes himself; but when women like the O'Kiku, whose brows are beginning to wrinkle with age, forget, for the sake of a young spark, their family and household ties, Heaven visits them either with a fire, as in this case, or with some other calamity. As for Dossho, his family cognomen of Edderburnhouse is only too likely to be changed into Wed-her-burnt-house. Surely a man ought to guard against so scathing a fire as that!"

The Daily News complains that lottery-boxes, called "your fortune," are allowed to be placed outside fanes and temples, out of which a numbered stick is shaken, and a ticket marked with the same number, foretelling good or bad luck, sold to the devotee; while close at hand stands a fortune-reader, prepared to explain the drift of the lot, who, by talking confidentially about life and death, so frightens ignorant folk that he can extort money from them at his pleasure. "Unless these fellows," says the Daily News, "are put down by the government, it is not likely that this superstitious abuse will cease." "Such improper things as fortune-telling and saying prayers ought, as a matter of course, to be suppressed."

The Puzzler.

ENIGMA OF GENERALS.

I am composed of 96 letters:

My 48, 2, 17, 35, 18, 19, 5, 46, 1, 53 a Confederate general.
My 33, 7, 10, 13, 14, 68, 59, 8, 20 a Union general.
My 3, 28, 47, 36, 64, 11, 89, 16, 23, 21 a Confederate general.
My 57, 88, 91, 74, 26, 4, 77, 25 a Union general.
My 96, 34, 48, 30, 1, 22, 44, 15, 49, 56 a Confederate general.
My 88, 70, 24, 52, 93, 90, 58 a Union general.
My 43, 12, 6, 31, 9, 76, 81 a Confederate general.
My 10, 37, 63, 33, 40, 84, 75, 47 a Union general.
My 86, 51, 65, 54, 69 a Union general.
My 27, 32, 60, 18, 41, 39, 62, 3, 15 a Confederate general.
My 29, 73, 1, 61, 80, 89 a Union general.
My 42, 82, 83, 77 a Confederate general.
My 66, 85, 63, 89, 92, 20, 71 a Confederate general.
My 45, 87, 74, 67, 50 a sort of shell.
My 73, 95, 78, 94, 55 a masticator.
My 79, 72, 10 a pronoun.

My whole defines religion.

☞ Answer in two weeks. Floridian.

ENIGMA.

I was there with good Eve 'mongst her fruits and her grass,
And with old Tubal Cain when he molded his brass;
And I saw the rude cross on which Christ hung to die,
Nor was far from the tomb where so many did lie.
I have sailed the rough ocean, and crossed the wide plain,
And have climbed the high mountains where men seek for gain.
Quite at home with the prince in his purple and gold,
And enjoy with the vulgar his squalor and cold.
I've always loved women far more than the men,
So tell me this riddle as soon as you can.

☞ Answer in two weeks. E. S. Hulin.

FRACTIONAL PUZZLE.

1. One-tenth of strawberry. 2. One-quarter of date. 3. One-fifth of lemon. 4. One-sixth of squash. 5. One-fifth of prune. 6. One-seventh of apricot. 7. One-eighth of plantain. 8. One-sixth of damson. Take one from each and form a fruit.

☞ Answer in two weeks. May.

HOUR-GLASS PUZZLE.

1. Northern. 2. A city of New England. 3. A town of Long Island. 4. To bury. 5. Possessive case of a pronoun. 6. A consonant. 7. Overtook. 8. An ante-room. 9. The Blessed Virgin. 10. A town of Vermont. 11. A man worth several millions. Centrals form a town of Vermont.

☞ Answer in two weeks. Little One.

PUZZLER ANSWERS.—June 22.

Hidden Apparel.—1, Garter; 2, Pinafore; 3, Bib; 4, Belt; 5, Sash; 6, Ruffle; 7, Sandal; 8, Pannier; 9, Cuff; 10, Dolman; 11, Shirt; 12, Shoe; 13, Boot; 14, Slipper; 15, Smock; 16, Shift; 17, Chemise; 18, Socks; 19, Spencer; 20, Stomacher; 21, Drawers; 22, Surplice; 23, Suspenders; 24, Polonaise; 25, Redingote.

Cross-word Enigma.—Henry W. Longfellow.

Hidden Names.—1, Rosa; 2, Mabel; 3, Eve; 4, Ann; 5, Irene; 6, Emma; 7, Kate; 8, Bertha; 9, Ella; 10, Carrie.

Classical Double Acrostic.—Initials, Leverna; finals, Nemesis.

Transposition.—

The warm summer rain
Comes trickling down the window pane,
Bursting the buds of the climbing rose;
Welcome summer rain.

Sabbath Reading.

WORDS OF STRENGTH.

BY SCHILLER.

There are three lessons I would write—
Three words as with a burning pen,
In tracings of eternal light,
Upon the hearts of men.

Have hope. Though clouds environ now,
And gladness hides her face in scorn,
Put thou the shadow from thy brow—
No night but hath its morn.

Have faith. Where'er thy bark is driven—
The calm's disport, the tempest's mirth—
Know this—God rates the hosts of Heaven,
The inhabitants of earth.

Have love. Not love alone for one,
But man as man thy brother call,
And scatter like the circling sun
Thy charities on all.

Thus grave these lessons on thy soul—
Hope, Faith and Love—and thou shalt find
Strength when life's surges rudest roll,
Light when thou else were blind.

"ROCK OF AGES."

The hymn beginning,

"Rock of Ages, cleft for me,"

may well be esteemed one of the brightest gems of Christain psalmody.

It is a grand tone that nerves and strengthens faith, that associates the sublime imagery of the Hebrew Scriptures with the all-protecting love of Christ, and that has consoled thousands of Christians in the dying hour.

Augustus Montague Toplady, the author was born at Farnham, Surrey, England, in 1740. His father fell at the battle of Carthagena, and he was brought up in charge of an exemplary and pious mother. He was educated at the Westminister school.

At the age of sixteen, Toplady chanced to go into a barn at an obscure place, called Codymain, Ireland, to hear an illiterate layman preach. The sermon made upon him an unexpected impression and led to his immediate conversion. He thus speaks of this interesting experience in his diary: "That sweet text, 'Ye who were sometimes afar off are made nigh by the blood of Christ,' was particularly delightful and refreshing to my soul. Strange that I, who had so long been under the means of grace in England, should be brought nigh to God in an obscure part of Ireland, amidst a handful of God's people met together in a barn, and under the ministry of one who could scarcely spell his name. The excellency of such power must be of God and cannot be of men."

He became a minister of the church of England, maintained the Calvinistic doctrines in opposition to the Wesleys, and preached and wrote with self-consuming zeal. The only blemish of his high character was heated language and intolerance in controversy.

In the year 1775 his health began to fail. It was evident that the sword was too sharp for the scabbard. His physical energies were being destroyed by the fiery ardor of soul that over-taxed them. His physician commanded him to go to London. Here a new field opened before him, and he became pastor of the French Calvinist Reformed Church.

On the year of his settlement in London, he published in the *Gospel Magazine* an article, entitled "Questions and Answers Relative to the National Debt," in which he adverts to the debt of sin, and shows how multitudinous are the sins of mankind. By numerical calculations, he exhibits the enormity of the debt of the redeemed soul, which Christ has canceled, and impresses the readers with the transcendent love and value of Christ's atonement. With these thoughts growing like a vision in his mind, he then added:

Rock of ages, cleft for me,
Let me hide myself in thee;
Let the water and the blood,
From thy riven side which flowed,
Be of sin the double cure,
Cleanse me from its guilt and power.

Not the labor of my hands
Can fulfill thy laws' demands;
Could my zeal no respite know,
Could my tears for ever flow,
All for sin could not atone,
Thou must save, and thou alone.

Nothing in my hand I bring,
Simply to thy cross I cling;
Naked, come to thee for dress,
Helpless, look to thee for grace;
Foul, I to the fountain fly;
Wash me, Saviour, or I die.

Whilst I draw this fleeting breath,
When my eyestrings break in death;
When I soar through tracts unknown,
See thee on thy judgment throne,
Rock of ages cleft for me,
Let me hide myself in thee.

The above is the original version, from which it will be seen that the hymn in common use has been greatly transposed and altered.

It was composed in Toplady's last years, when he already felt that he was beginning to lose his hold on life, and that his feet were already standing on celestial altitudes. Some two years afterwards, when he was yet but thirty-five years of age, the full time of his departure came, and he found the prayer in the last stanza of this hymn fully and sweetly answered in the revelation of Divine love to his soul. He seemed to walk in Bulah, to breathe immortal airs and to hear the tuning of unseen harps, and by faith to discover what the Protomartyr saw and the Revelator described.

"Your pulse," said the doctor, "is becoming weaker."

"That is a good sign," said Toplady, "that my death is fast approaching, and I can add that my heart beats every day stronger and stronger for glory."

As his end drew immediately near, tears of joy filled his eyes, before which already seemed to pass visions of Paradise, and he exclaimed: "It will not be long before God takes me, for no mortal can live after the glories God has manifested to my soul."—*Story of the Hymns by American Tract Society.*

PERSONAL ITEMS.

Garibaldi gets his mail once a week, and it generally averages six hundred letters and as many papers.

Mr. Ross says it has cost him $80,000 not to find his lost Charlie. A good many men would gladly lose all their boys for half the money.

The center of public curiosity at Berlin just now is Lord Beaconsfield, and his hotel is visited daily by hundreds of people to get a sight of him.

Marshall McMahon has intimated to Gen. Grant that he may visit this country a couple of years hence, when his present term of office is ended.

A daughter of Brigham Young has lately married a man who, during her father's life time, had the care of his horses. She is young, pretty, and has $20,000.

A tall, slender, fine-looking man is Mr. Charles Reade, the famous novelist, with gray hair and a moustache; a broad forehead, and a peculiarly dilating blue eye.

Major Forsyth, General Sheridan's chief of staff, has been promoted to the rank of lieutenant-colonel and ordered to join his regiment in Washington Territory.

Mrs. Jenks thinks Butler "is just beautiful," and "when he smiles he is perfectly lovely." But "when he sits up straight and tries to look important, then he is simply horrid."

Senator Bruce, Mississippi's colored Senator, just married, was formerly engaged to the daughter of a highly respectable colored family of Cleveland, O., named Vosburg. The "happy pair" have gone on a four months' trip to Europe.

Mrs Swisshelm has been preaching a sermon for tramps. She believes that all honest work is its own exceeding great reward. We should like to see Madame Swisshelm at an intelligence office trying to hire a stout Irish girl on those terms

The author of the once famous Confederate song, "Maryland, my Maryland," is Mr. James R. Randall, now associate editor of the Augusta, Ga., Chronicle. He is a native of Baltimore, thirty-nine years of age and a gentleman of polished manner.

Mrs. Fry, of Oswego, has been smoking tobacco altogether too much of late. She is nearly one hundred and eight years of age, but still her physician thinks she is not old enough to care for herself properly, and has cut down her daily allowance.

Dr. J. C. Ayer, the millionaire pill man, who has been at Dr. Russell's insane asylum at Winchendon, Mass,, for a year past, is said to be gradually failing. His disease has reached the placid state, and he does not suffer, but his mind is wholly wrecked.

Thurlow Weed is one of the largest and most muscular of the editorial fraternity. This remark of course applies to his earlier days, for he now feels the effect of time. He is just three years younger than Bryant, having been born in 1797, and considering his age, he is in remarkable preservation.

The lady formerly known as the Princess Salm-Salm, who figured so conspicuously in this country and Mexico some years ago, is now prominent in the divorce courts of London, seeking a separation from her husband, Mr. Heneage, a promising diplomat, who willingly agrees to a separation, but demurs to the alimony.

Oxford, which made Grant a doctor, is now about to confer the honorary degree of doctor of common law on Edwards Pierrepont. Next to the conferring of a patent of nobility on that elegant and culchawed gentleman, nothing would probably give him more satisfaction than this recognition by Oxford. Carry the news to "dear Mary."

"Mais, monsieur le presidong," said General Grant, "you will be toujours le marechal de France, while I am jamais lo general, but a plain citoyen." "But ze fame of your grande battailles will make you always live in ze hearts of ze peuple as ze marshall d'Amerique," replied McMahon. "Ah, qu'estce que c'est your donnezing us; taffy?" inquired Grant.

Edward S. Rand, Jr., the swindling lawyer and horticulturist of Boston and Dedham, Mass., who fled from justice a year or two ago, is at Juraty, South America, on the south bank of the river Amazon, 700 miles in the interior. He is associated with a Portuguese in exporting rubber, gums, dyes, etc., and has every prospect of amassing a fortune, which he promises to come home and spend in paying his creditors.

There is a touch of pathos in General Fremont's remarks upon his appointment as Governor of Arizona. He expresses himself as extremely gratified at this mark of favor from the President, and says that his has been a checkered career, filled with much honor and misfortune, and that he is convinced that the only course left for him is to begin life anew. Mrs. Freemont is said to fully sympathize with her husband's new ambition, and she will share with him the honor of his new position.

Mrs. Agnes D. Jenks, the spicy witness in the Potter inquiry, is a woman about 35 years of age, with a good figure, blonde complexion, a full, round face, and is rather good-looking. At her examination, recently, she was plainly and neatly attired in a dress of light material made to fit her closely, and wore a dark turban hat. During the progress of her testimony she exhibited a knowledge of Louisiana politics that bore out the remark made by her husband, to the effect that "Mrs. Jenks was prominent in politics in Louisiana." She spoke clearly and distinctly, her slight Creole accent falling pleasantly on the ear. This accent has been mistaken for French, but the female political trickster is Scotch-Irish.

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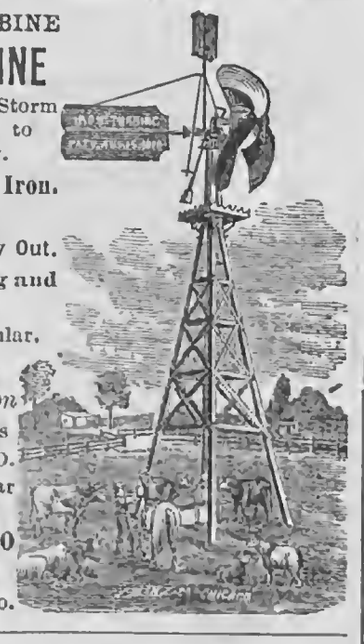

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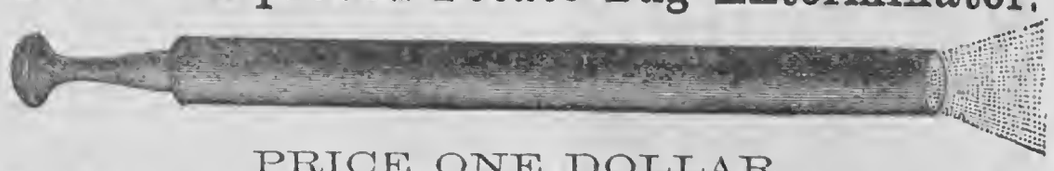

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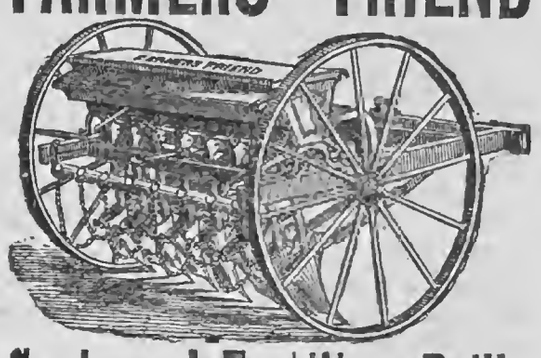

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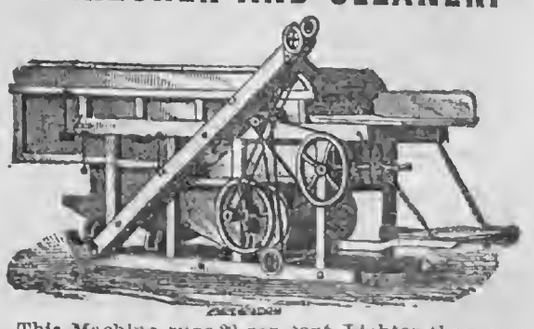

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THE Norristown Herald insists that no man likes to hold a girl baby in his arm until she is seventeen years old.

A CLERGYMEN says: "A young women died in my neighborhood yesterday, while I was preaching in a beastly state of intoxication."

A BEAUTIFUL widow of Newport, R. I., having let her chalet for the season, was asked what induced her to desert such a charming retreat. "Too much balcony and too little Romeo," was her reply.

A MONKEYISH letter—ape X. [*Keokuk Constitution.* A sharper letter—keen O. [*Cincinnati Saturday Night.* A noisy letter—blue J. [*Philadelphia Bulletin.* A stinging letter—bumble B. [*Boston Post.*

An Irishman who stood near the third base watching a game of base-ball was sent to grass by a foul which struck him under the fifth rib. "A fowl, wuz ut? Begorra I thought it wuz a mule."—*Boston Pilot.*

ELIZABETH ALLEN, in a poem, asks, "Oh, willow, why forever weep?" Elizabeth is a little mistaken as to the facts. It isn't the willow that weeps; it is the boy who dances under the limber end of it.—*Burlington Hawkeye.*

A WIDOW in the west, intending to succeed her husband in the management of a hotel, advertises that "the hotel will be kept by the widow of the former landlord, Mr. Brown, who died last summer on a new and improved plan."

A MICHIGAN school teacher received the following unique excuse from a pupil's mother: "pleas Excuse Minnie for she was helping me. She is a grate help to me thou Small she may be I would miss hur if the Lord should call hur at any time and oblige Mrs. B——."

A MINISTER was riding through a section of the State of South Carolina, where custom forbade innkeepers to take pay from the clergy who stayed with them. The minister in question took supper without prayer, and ate breakfast without prayer or grace, and was about to take his departure when "mine host" presented his bill. "Ah, sir," said he, "I am a clergyman!" "That may be," responded Boniface, "But you came here, smoked like a sinner, and ate and drank like a sinner, and slept like a sinner; and now, sir, you shall pay like a sinner."

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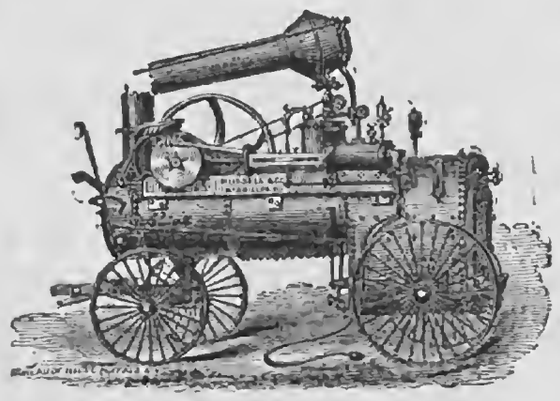

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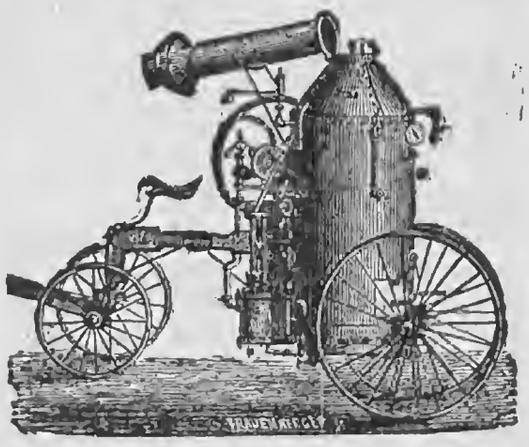

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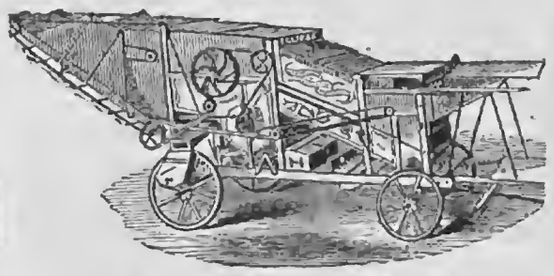

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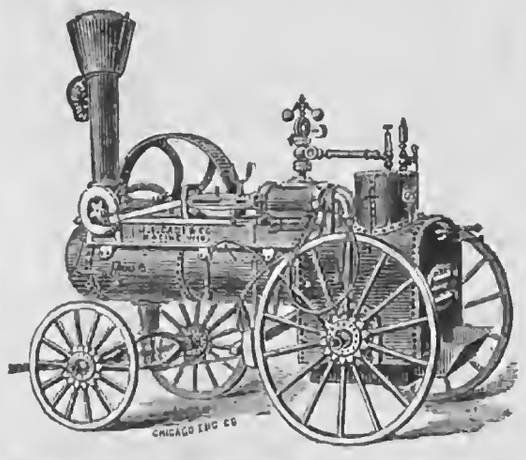

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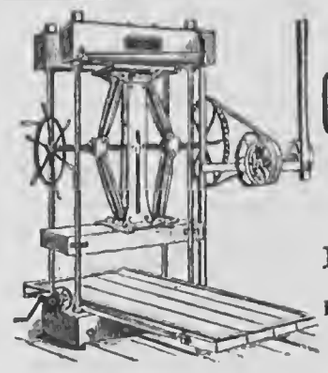

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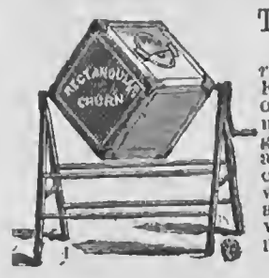

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The Herdsman.

THE JERSEY HERD OF MR. H. S. PARKE.

BAY-SIDE is one of the most delightful spots on Long Island. It is just at the mouth of Flushing Bay, and commands views of the Bay and East River just at its *debouchment* into the Sound. The far-off Connecticut shore looms through the mist, or stands out clean-cut, showing its varied coast-line of rock and meadow and bay, flecked with the white sails which one can hardly distinguish, in the extreme distance, from the granite rocks. Nearer one sees the eastern headland of the bay crowned with wood; opposite, the green slopes of Fort Schuyler, and, quite in the foreground, the garrison flag at Willet's Point waves above the trees.

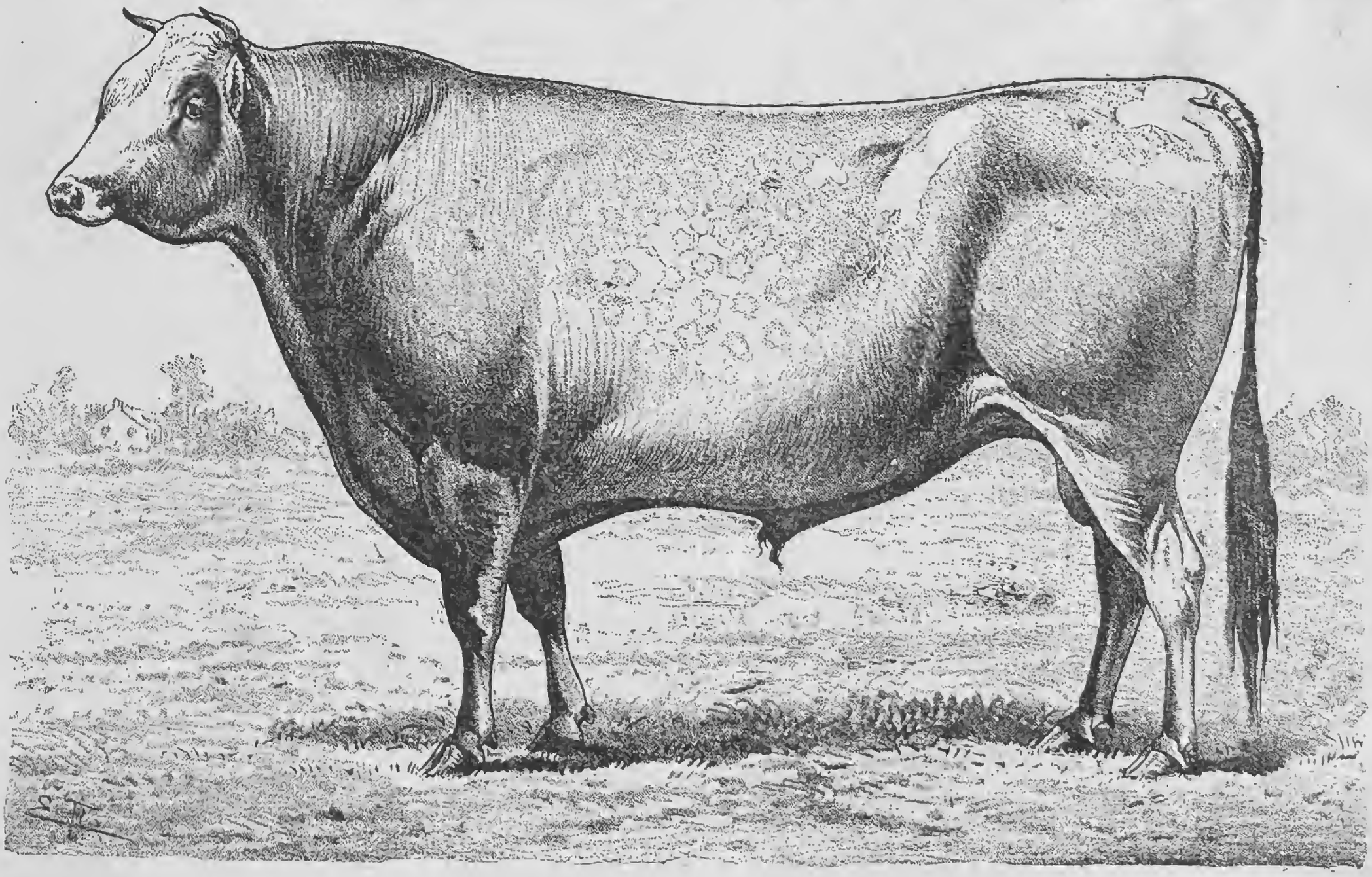
This is our remembrance of the view from the piazza of Mr. Parke's house, an old-fashioned shingle-sided mansion, laid out with a breadth and liberality of hall-ways, and a general spaciousness, indicating cheerful views of life and home comforts. Far too pleasant a home for an old bachelor, if a bachelor can be said ever to have a home, other than that of his childhood. One is struck with the excellence of the deep alluvial soil, as it is evinced by the growth of trees about the house, most noticeable among which, is a group of Pines obviously planted as lawn trees and rather crowded, now towering up, naked boles, without a branch within 20 or 30 feet from the ground, having, we should think, diameters of eighteen inches to two and a half feet.

The Bay-Side herd of Jerseys was established by Mr. Parke by the purchase of a number of the best of the dark-colored, solid, black-pointed heifers and young cows that he could buy, confining himself, in a good measure, to what was then the most fashionable type, and heading the herd with "Son of Alphea," who, like his famous dam, was solid with black points and of the richest quality. They were altogether decidedly above average excellence, but this was hardly satisfactory, and rightly or wrongly, Mr. P. took a prejudice against solid-colored Jerseys that had not more substantial merits. Going to the other extreme, he added "Young Duchess" to his herd, a heifer imported in dam by Charles Sharpless. She proved a great milker and butter-maker, having repeatedly yielded over 15, and once over 16½ pounds of butter a week. She is, however, lacking in personal beauty—spotted, flecked, and speckled like an Ayrshire; breeds well, however, and has been a valuable animal in the herd.

Gradually, by purchase, by breeding, and by weeding, Mr. Parke has reduced his herd in numbers and improved it in quality, until now it is really one of the most beautiful as well as most useful herds in the country. In fact, we know not of its equal in both particulars.

Young Duchess 497, now no longer young, sets off the beautiful proportions and colors of her younger sisters of the herd to good effect. Bluebird 599, a blue-gray cow, with some white, not herself a great milker, but very rich, is a fine large-bodied animal and a great beauty. Annie Paige 2,690, is famous for having milked ten months before she had her first calf, which occurred when she was 21 months old. She is now giving eleven pounds one ounce of butter per week, and weighs just 800 lbs. The rest of the herd are very beautiful and above the average as butter-yielders, characterized by particularly delicate and beautiful horns and heads.

JERSEY GOLDDUST 2134.—Two years ago, Mr. Parke had Col. M. C. Weld, of New York, select for him, upon the Island of Jersey, a yearling bull, to be of a yellowish fawn color, and of a form to meet the demand of his critical eye. It seems remarkable that he could have been so entirely pleased with his purchase. The portrait which we give of him, by Edwin Forbes, is a fair one; in no sense flattering, and yet representing a very handsome Jersey bull. He is of a solid creamy fawn color, with black points, more or less dappled upon the sides, with very delicate horns, dishing face, very long, broad and deep-bodied, straight-backed, very fine in bone, with superb muscular development; altogether, a perfect beauty, and of a mild and quiet disposition. His son, Jersey Golddust 2d, a year old in April, is very like his sire, but considerably larger for his age, and sure to make a very large and fine animal. He is also of a solid creamy fawn color, inclining to gray on neck and head.



JERSEY GOLDDUST 2134.

FAT-STOCK SHOW AT CHICAGO.

I SHALL be disappointed if the show of fat stock appointed to be held in the inter-State Exposition Building, Chicago, Dec., 2-7, next, under the auspices of the Illinois State Board of Agriculture, does not prove one of the most useful Agricultural Exhibitions ever held in America. The prize-list has just been made public; and while it is not just such a one as I should have prepared, it offers liberal inducements for the owners of fat-stock of superior excellence to exhibit them—more especially as the exhibition and prize-taking will directly add to their selling price, in almost all cases. The aggregate of the regular prizes, to which it is probable considerable additions will be made by special prizes offered by breeders or special friends of each class—amounts to $3,350. Of this sum $1,875 will be awarded to cattle; $725 to sheep; $580 to hogs, and $180 to poultry and game. For cattle: there are classes for Short-Horns, Devons, Herefords, "other pure breeds," grades and crosses. In each a prize of $25, with a second of $15, is offered for steer over four, between three and four, and between two and three years; with first prize of $50 and second of $25 for cow over three years. In "sweepstakes," a prize of $50 is offered for steer of each age; with $100 for a cow. A special prize of $200 is offered for best steer or cow in show; and a first of $200, with second of $150 for best car-load of cattle. It will be possible for the exhibitor of a single cow to secure $350.

In sheep the classification is into long-wool, middle-wool, fine-wool, and grades or crosses, with premiums of $15 and $10 for wethers and ewes and lambs, with liberal sweepstakes. In swine the classsification is into large breeds, small breeds, and grades or crosses, with prizes of $20 and $10 for best specimens of the usual ages, and quite liberal sweepstakes prizes. The National Live Stock Journal offers "Challenge Cups," of value of $100 and $50 each, for best beef animal, best fat sheep and best fat hog shown.

It is not unnatural that many should look on this show as purely a local affair—at most something in which the farmers of the West may be interested; but this feeling is a mistaken one. It is hardly to be expected that feeders or breeders in the Eastern States will become exhibitors, but they have a quite direct interest in this show nevertheless. The East eats Western beef; the Eastern breeder and feeder are directly in competition with their fellows in the West, and now both are being brought into competition with British meat producers. I count it quite as important to the Eastern stock-grower

as it is to him of the West, that the newly opened market for fat cattle and fresh meats, which we have found in Great Britian, shall be developed as fully and as speedily as is practicable, and the influence of such an exhibition as that arranged for at Chicago, will be an important factor in developing this trade. We have more good cattle in this country than most of our British friends believe, and it will do good to collect together a large number of the best specimens.

But, aside from this, there is another field in which such a show will do much good—that of educating our own people. There are still many thousands of farmers who do not really believe there is any advantage in "improved stock"; who do not appreciate the value of such stock. Somewhat indirectly, it is true, but still in an important sense, a first class show of first-class fat stock will be an educator to such persons; perhaps more so than are the exhibitions of breeding stock at our fairs. Again the show will give a capital opportunity for testing the correctness of the claims made for different breeds. If the Hereford will make a better fat ox at a given age than will the Short-Horn; if the Cotswold is to be preferred to the Leicester for fattening: if there are better breeds than the Poland-China, the fat-stock show will give opportunity to demonstrate these things.

No agricultural event of the year is more important, in its way, in England, than is the fat-stock show at Smithfield, London. It will not so be counted at the first, but I believe in the future we will regard such exhibitions as among the most important of our agricultural shows, and that the Illinois State Board of Agriculture will look back with pride to this first exhibition of the kind held in this country. I hope it may receive the attention its importance demands from the East as well as from the West.

G. E. MORROW.

Illinois Industrial University, Champaign.

THE sale of Bow Park Short-Horns at Brantford, Canada, July 11, under the auspices of the Canada West Farm Stock Association will comprise forty head of thoroughbred cows, heifers and bulls, all registered, or entitled to registry in the American Herd Book, besides Cotswold and Leicester sheep, and Berkshire swine. Details will be found in our advertising columns in this issue.

Farm Economy.

DRAINAGE.

R. C. CARPENTER.

DISCHARGE OF DRAINS COMPARED WITH THE RAINFALL.

To ascertain the law which governs this matter, Mr. J. BAILEY DENTON, in the year 1856-7, caused observations of rainfall and discharge from drains to be taken during the months of October, November, December, January, February, March, April and May. The area experimented upon consisted of two kinds of soil: first, soil of a mixed nature, consisting of clay gravel and sand; and second, a very stiff clay considered hard and almost impenetrable. The mixed soil was drained by occasional and wide parallel drains sufficient to discharge the rainfall and deep enough to relieve the pressure of subterranean water. The clay soil was drained uniformly by a parallel system of drains four feet deep and 25 to 27 feet apart. The total cost of draining the 800 acres included in the area experimented on was £3,357 10s. or $16,787. The discharge from the open soils was more regular than that from the clays, probably because of their greater distance apart.

The rainfall per acre was 227,240 gallons, and the discharge per acre on the mixed soil was 160,920 gallons, or about 71 per cent. of the rainfall; on the clay soil it was 59,936 gallons, or about 21 per cent of the rainfall. The reason why clay discharges less than loam is doubtless found in the fact, that it has greater power of retaining water by capillary attraction; thus Professor SCHUBLER, of Tubingen, found that 100 pounds of dry soil would retain the following amount of water, that would not flow off:

Sand	25 pounds.
Loamy soil	50 "
Clay loam	50 "
Pure clay	70 "

Observations conducted by Mr. JOHN DICKINSON, of England, for eight years gave the following mean values of the discharge as compared with the rainfall: October to March, 75 5 per cent; April to September, 7.1 per cent; average 42.4 per cent. Mr. TRACEY, in 1849, made some experiments in regard to the drainage of certain valleys near Boston, and concludes that the discharge varies from 45 to 44 per cent. of the rain-fall.

COMPUTATION OF TABLE FOR DRAINAGE.

From the tables for rainfall we see that showers exceeding one inch are rare, but that about one-fourth of our rain falls in these heavy showers. From that it is safe to conclude that if the drains are capable of conveying away the water that reaches them during the next 24 hours after a rainfall of one inch, little or no surface water will remain on the land during any portion of the year.

The amount of discharge as compared with the rainfall depends upon so many conditions, that it cannot be accurately stated; but probably will seldom or never exceed 50 per cent of the rainfall during the next 24 hours, under any conditions. In order to produce thorough drainage—that is, to so drain land that surface water shall not exist on it on an average longer than six hours oftener than once a year,—it is necessary to assume that the capacity of the drains should be sufficient to carry off, during 24 hours, one-half the water that fell the previous 24 hours. The probability of the rainfall in any day exceeding one inch, is so slight that we shall be safe in assuming the greatest ordinary rainfall to be one inch in 24 hours, and the necessary carrying capacity of the drains, one-half inch for the same time. One inch of rainfall produces 3,630 cubic feet per acre, consequently our drains, to produce under all conditions thorough drainage, should be able to convey 1,815 cubic feet of water for each acre drained.

The results in the following table accord well with my experience regarding the size of drains necessary to produce thorough drainage. Thus in the west portion of the College grounds is an area of a little less than nine acres, thoroughly drained with drains 60 feet apart. The fall of the main is 1 in 200, and it is a 4-inch tile. This is none too large, for the drain runs full several weeks each spring, and considering the perfect manner in which it works, I feel justified in considering it the proper size. Until a very recent date we did not proportion the size of the tiles to the area to be drained by the following table, and we have several instances where the drains are entirely inadequate for the work imposed on them. For instance, the main drain to the orchard, which was built several years ago, has an inclination of 1 in 200, and is a 6-inch tile. The whole area to be drained through this main is not far from 40 acres. The drainage from this area is conveyed to the main by laterals with a considerable fall. The result has been that for days at a time, although the main was running full, water has stood on the surface of the ground directly over it, in several places.

For ordinary farm drainage, where the drains are simply to run under the low places on the surface of the fields, the water will be longer in reaching the drains, and consequently the acres drained by a given sized tile may be increased with perfectly satisfactory results. Again, if flooding is of little moment for a few days at a time, it may receive another corresponding increase. I would recommend that the areas in the following table be doubled, for ordinary farm drainage, but they must be changed with caution if thorough drainage, such as a gardener would need, is desired.

TABLE FOR SIZE OF TILE.

RATE OF INCLINATION.	ACRES DRAINED (THOROUGH DRAINAGE). 2-inch Tile.	3-inch Tile.	4-inch Tile.	6-inch Tile.	8-inch Pipe.	10-inch Pipe.	12-inch Pipe.
1 foot in 21	6.7	18.6	26.8	74.4	150.0	270.0	435.0
1 foot in 30	5.5	15.1	21.8	60.4	136.0	220.8	346.6
1 foot in 40	4.7	13.9	18.6	51.6	108.8	189.6	288.4
1 foot in 50	4.3	11.9	17.0	47.7	98.0	169.4	253.4
1 foot in 60	3.9	10.9	15.9	43.4	90.0	150.4	229.0
1 foot in 80	3.6	10.0	14.5	39.9	81.6	144.4	228.1
1 foot in 90	3.4	9.3	13.6	37.2	77.0	135.0	215.0
1 foot in 100	3.2	8.8	12.9	35.1	72.5	127.0	201.5
1 foot in 150	3.0	8.3	12.0	33.1	69.2	120.6	190.5
1 foot in 200	2.4	6.7	9.6	26.6	55.2	97.3	154.4
1 foot in 250	2.1	5.7	8.5	23.8	48.0	83.9	132.5
1 foot in 300	1.9	5.1	7.6	20.4	42.4	74.4	117.0
1 foot in 400	1.6	4.6	6.9	18.4	38.5	65.5	107.0
1 foot in 450	1.5	4.1	6.3	16.5	35.2	60.3	99.2
1 foot in 500	1.3	3.8	5.5	14.8	32.0	54.0	81.6
1 foot in 600	1.2	3.3	4.7	13.3	28.0	48.6	74.0
1 foot in 800	1.0	2.9	4.1	11.4	24.0	41.2	68.0
1 foot in 1000	0.9	2.6	3.7	10.2	21.2	36.5	60.0
1 foot in 1500	0.8	2.1	3.0	8.5	16.8	30.5	47.0
1 foot in 2000	0.7	1.9	2.8	7.4	15.0	25.7	43.8

To afford a simple rule for those who wish to construct drains simply through the low places of a farm, and who do not possess means of ascertaining the fall, the following will probably be sufficiently accurate:—On the average the fall usually secured is about one in 200, and for ordinary farm drainage, doubling the results given in the table, we find that a drain of 2-inch tile will drain four acres; 3 inch tile will drain 11½ acres; 4-inch tile will drain 16½ acres; 6-inch tile will drain 45.6 acres; 8-inch tile will drain 96.0 acres; which rule does not differ essentially from the one given by Waring in his work on Farm Drainage. The above rule is for casual, not thorough drainage.

GRADE OF THE DRAIN.

From what has already been said in reference to the capacity of a drain, it is seen that the greater the fall the greater is the amount of water that will pass through in a given time, other things being equal. For this reason the fall should be as great as possible within certain limits. It is possible to have drains so steep that the water, instead of entering the drain at the joint, will run along the outside of the tile, and finally undermine and destroy the drain; this danger is to be anticipated only for large drains where there is a great deal of water, and never for small drains, which serve only as feeders. The limits of steepness for main drains that convey much water, we may put at from one in ten to one in thirty, depending on the tenacity of the soil. The least grade admissible depends entirely upon the mechanical execution. Drains cannot be laid like water pipes, alternately descending and ascending, but they must descend continuously from their commencement to their outlet. If laid with any portion ascending from the commencement, even though that portion may not rise above the head, the drains, not being tight, will let out at their joints much of the water from above them, the ground at that point being constantly wet, and the objects for which the drains were laid will entirely be destroyed. It is not material that uniformity of descent be preserved, but although it makes little difference how much the grade changes, it is absolutely necessary that it always changes in the same manner. That is, as you leave the outlet, you must continually go up, though you may ascend at times much faster than at others. Now, the greater the ascent in a given distance, the less danger is there of giving any portion of the drain an inclination in the wrong direction; but if the ascent is small, any mistake of this kind becomes exceedingly difficult to detect. Probably any one could see that an inclination of one in fifty was not a level line, but an inclination of one in five hundred is quite a different thing, and there are few persons that could detect the difference from a level line, or even tell which end was the highest. Great care is necessary to keep a continual descent or ascent, whichever the case may be, and with a less inclination than one in five hundred, the difficulty becomes so great that, except in cases of extreme necessity, it should not be resorted to.

It is thought to be better to have the steepest grades for the drain nearest the outlet, as in that case the water from above would run rapidly off without any deposit of silt. But this consideration very seldom can be taken into account in practice, as the drains must be made to nearly conform to the surface of the ground on the score of economy.

SILT BASIN.

When a grade changes from a greater to a less on the way to the outlet, it is a good plan to build a small well about six inches deeper than the drains, and bricked or stoned up. This well or basin may or may not extend to the top of the ground; the inside diameter may be from 12 to 18 inches. The drain which flows out of this well should have its first tile laid about three inches below those that empty into this well, or, as it is technically called, "silt basin." The object of this is to break the current of water which is flowing through the tile, and thus cause a deposition of all matter, technically called silt, held in suspension in the water. This silt can be cleared out at any time by removing the cover to the top of the basin. The silt basin also affords the advantage of allowing an examination of the workings of the tile at any time, without the trouble or expense of digging up the drain. The silt basin can be profitably put at the junction of two or more drains, and is usually located in such a position only.

THE LOCATION OF DRAINS.

For the economic construction of drains nothing is more important than their location, compared with the land they are expected to drain. Often the choice of a location may make half the difference in the cost of a drain, and time spent in locating a drain should not be counted as lost, for a bad location can never be remedied. No definite rules can be laid down for the location of drains in all cases. Usually the outlet must be at the lowest point in the area to be drained, and from this the main must be laid up the depressions or valleys, and from the main at various points branch drains or laterals are to be laid. That is, the main drains usually follow the lowest portions of the field, and receive the feeders or laterals, which drains make an oblique angle with the main drain, and run from the main drain directly up the slopes to be drained.

This method of running the laterals is now universally conceded to give the best results, though in the early days of drainage, a considerable number of agriculturists advocated and practiced the method of laying their drains obliquely across the slopes. After the drain is constructed, the outlet should be built so as to be a permanent record of the existence of the drain. It is best to build, at right angles to the direction of the drain, a stone wall laid in masonry, and with foundations below the reach of frost. Through this stone wall should pass the last or outlet tile of the drain; this tile should have a diameter one inch greater than the remainder of the drain, so that its end may be grated to keep out vermin, without obstructing the flow of water in the remainder of the drain.

THE SURVEY.

No matter how carefully the drain is constructed, it is liable to be obstructed or injured in some manner so as to make the whole inoperative, for

> "The best laid plans o' mice an' men
> Gang aft agley."

It then becomes necessary to know the exact location of the drain in order to remove the obstruction. This exact location may be preserved in various ways, but whatever method may be used, whether with or without instruments, it will be a method of surveying. If a permanent outlet is made as described, and a silt basin is made which rises above the surface, the whole system of drains may be referred to these two points. I suppose in this instance that all possess means of measuring distance. For instance, if the main drain runs straight from the outlet to the silt basin, the distance alone will be sufficient to thoroughly locate that portion.

If it is not straight, measure a straight course from the outlet to the silt basin, and from that, and as nearly as possible at right angles to it, measure the distance to each bend in the drain. Record these measurements in a book and also the general direction in which they were taken. If any small drain leaves this drain, record the distance from its outlet to the main outlet, and also its general direction and length. The drains beyond the silt basin can be described in the same way, by fixing some kind of permanent monument at the end of each drain, or by giving their general direction and length. When no silt basin is constructed, the direction and lengths of the drains should be stated, remembering that the most explicit direction is not north, south, east, or west, but toward some well-defined permanent point, as the corner of a building, a large tree, etc.

Whenever a drain passes under a fence on the college farm, it is our practice to set a post directly over the drain, and so protected by the fence as to be quite certain of remaining a long time. No directions, however explicit, could cover all cases, but your own ingenuity would doubtless suggest a good method of marking the locations of the drains in any one case, if not exactly, yet sufficiently near for practical purposes. The result of this survey should be fully recorded in a book that is certain to be preserved, and not left to the uncertain record in the tablet of your memory. I feel strongly the importance of preserving such a record of drains, for I have experienced all the uncertainty which results from the want of such a record. I have known quite a sum to be spent in redraining a piece of land, which had already been once drained, and the old drains could, with the expenditure of a few dollars, have been put in a good condition—all because no one knew of their existence, and having an outlet in a different place from the new drains, they were not found until it was cheaper to finish the new than repair the old.

At the College all drains are surveyed with a surveyor's instrument in the following manner: We first pass over the drain with the transit or compass, taking the bearing of every portion of the main drain and laterals. Then, commencing at the outlet, we measure toward the other end of the drain with a chain and set stakes every fifty feet; these stakes are numbered consecutively from the outlet, and are called stations. The station stakes are directly on the center line of the ditch. Two feet to the right of each station stake we set two other stakes, one of which is driven until its head is level with the surface of the ground, the other is made smooth so that its surface can readily be marked and left projecting out of the ground 12 to 15 inches; the first of these last stakes we denominate a "peg," the other is used merely to show the depth that the bottom of the ditch is to be, below the top of the peg.—To be continued.

HAY AND HAY-MAKING.

REPORTED BY A. M. VAN AUKEN.

THE Brown County, Wisconsin, Horticultural and Agricultural Society held its June meeting at the farm of Stephen Burdon, in the town of Howard, on Saturday, June 1st, the subject for discussion being that which heads this article.

The discussion was opened with a paper from Thomas Bennet, who, after a little preliminary skirmishing, said that the question of dollars and cents should cause us to look to the interest of our stock, if we did so for no other reason. It was a losing job to let an animal lose in the winter what it had gained in the summer, and then to have "deacon skins" to bring us pocket-money in the spring; but there was a higher principle, that of humanity to dumb brutes, that should keep us from starving them on poor hay. He cited several cases to show that by giving good feed we would gain one year in the growth of an animal, and that an animal could be kept thrifty on *good* hay and pasture. By way of illustration, he said that he had bought some wood from a man, which was to be good hard wood, but which when delivered, proved to be

red oak which had stood several years after it was dead, and both bark and sap were gone; he refused to take it, as his stove could not hold enough to keep his family warm; and he believed that if our animals could speak, they would most strongly object to this dead hay with which, although it has neither bark nor sap left in it, they are compelled to satisfy their hunger during the winter, owing to the idea which many farmers hold, that hay should get its full growth, which means, that it should stand till its juices are gone and its seed is ripe. The argument that cattle would eat too much hay if it were cut early, was like the economy of men who bought rancid butter.

J. H. Potter, of Pittsfield, spoke next. His paper went into statistics of the average production in Wisconsin of hay and wheat, showing that while wheat took the most labor, yet at each census hay brought the most per acre; that while wheat was all sold off the farm and much of it went abroad, almost all the hay stayed at home, and much of it never left the farm. Hence, while the hay was the most profitable crop to raise, in its actual money value, it was at the same time increasing the fertility of our farms, which the wheat was continually running down. In giving his experience with hay, he said that his farming was on new land, and that he always tried to get a good "burn"; then he dragged well with an A-harrow; sowed his grain, harrowed in, and sowed four quarts of timothy and two pounds of clover to the acre. This makes the best yield of hay, but not the best meadow. After it has been in meadow for some years, he plows it up, gets out all the stumps he can, and plants corn. After corn he manures as well as he can—twenty loads to the acre if he has enough—and plants potatoes. The next spring, he harrows his ground well with a square harrow, and sows his wheat, and with it six quarts of timothy and eight pounds of clover to the acre. His method of curing was much the same as Mr. Campbell's.

Porter Campbell, of Scott, was the author of the next paper. He began by saying that the most natural food for cattle was young and tender grass; that in the pasture they avoided all dead grass; and that the nearer our hay approached to this, the better our stock would like it; he would cut in blossom for timothy, and use the tedder till well dried. Clover he would cut as soon as the heads began to turn brown; use the tedder a little, and cock up; let it cure in the cock several days, and then open out and haul into the barn. Care must be taken not to let it get dry enough to crumble, as clover leaves are the best of the hay. He would cut as soon as the dew was off if there was a heavy dew; if the dew is light, it will do no hurt.

President J. M. Smith now called on those present to discuss the subject, ask questions, etc. Rev. Wm. Crawford, of Green Bay, made a few happy remarks and asked some questions, in reply to which Mr. Campbell said that if you let your grass get ripe, you would have straw and grain; if you cut your rye or oats green, you would have hay; timothy straw was worth more than rye or oat straw, but still it was only straw. The writer said that he understood from their remarks, that Messrs. Potter and Campbell referred to the proper time for cutting hay for market, and asked at what period of its growth it was best to cut clover for feed for milch cows?

S. Burden said: "When half or two-thirds of the heads are turned brown."

Wm. Rowbotham said: "When it has got its growth, I don't care whether a head is brown or not, for after it has its growth, it deteriorates every day it stands." He couldn't agree with Bro. Potter, that we should keep all our farm in hay, but maintained that we should keep only enough in grass and hay to keep our wheat yield up to its best.

Potter said if he had a good market he would prefer to buy his flour and sell nothing but beef and butter. Rowbotham said if all farmers were of Potter's mind and carried his view out, the people would have to "go to grass" or "come to the barn"; bread was the staff of life, and he didn't see what Bro. P. would do with his butter, if we had no bread to spread it on.

President Smith said that he had seen the statement in the principal Minnesota paper a few weeks ago, that no man had ever made a fortune in that State growing wheat. Burden said that in Illinois there was a settlement of Pennsylvania Dutch who had all become wealthy, and he said their money came from wheat.

After the meeting your correspondent moved among the farmers present to get their opinion of Millet and Hungarian grass as a food for stock. One man had sowed five acres of Millet the day before, and would sow five acres more as soon as he had cut his hay, sowing the newly-plowed sod. He could raise double the amount per acre that he could of common hay—timothy and clover—and considered it worth more per ton; it was the best possible food for milch cows. Cut as soon as it begins to turn a little yellow.

No one present had any experience with Orchard grass. Will some reader of the RURAL, who has tried it on a heavy soil, please report?

Miscellaneous

FARM NOTES.

THOROUGH CULTIVATION.

MR. M. B. PRINCE asks whether thorough cultivation is any protection against insects. All insects which infest the soil itself, or which bore the roots of plants beneath the soil, are wonderfully fond of a quiet life; they cannot stand a constant disturbance of their haunts, and will leave for quieter places. On the other hand, vigorous plants of all kinds are produced by very frequent cultivation, and are able to repel insects because they are vigorous. In the same way, a vigorous, healthy animal never becomes lousy or sickly, because it is only weakness which invites the enemy. Therefore frequent cultivation kills two birds with one stone. Mr. P. will, probably, never again apply unrotted manure to his land, unless he wants to perpetuate some pet variety of weed, of which he may accidentally have lost the seed.

He should at once mulch his small fruit-bushes heavily, after a thorough hoeing and loosening of the soil for two feet, at least, around each one.

DEPTH FOR COVERING SEEDS.

MR FOWLER'S remarks on this subject are altogether too local for a journal of extensive circulation like the RURAL NEW-YORKER. We do more harm than good when we undertake to lay down precise rules for a country so vast in extent, so varied in climate, and having such a diversity of soils and conditions of humidity as ours. If the RURAL NEW-YORKER only circulated in Mr. FOWLER'S own immediate neighborhood, or only in localities exactly similar, his rules would be entirely correct; but if the soil was much heavier and wetter, or much lighter and dryer, the depth he advises would be fatal. There must be sufficient covering to exclude light and heat—as opposed to warmth—and to keep the seed in sufficient moisture to induce germination; any more or any less is wrong.

Then, again, explicit rules for a vast extent of country, create mere "clod-hoppers"—men who are mere machines, whose minds are never exercised, who are not forced to think. Thinking, in a correct order, makes a farmer *par excellence*. He should be taught principles, and how to apply them. When writers for the agricultural Press once adopt that plan, their labors will be vastly lessened, and the thinking farmer will not have to wade knee-deep for a fact or an idea.

If Mr. FOWLER'S rules were followed here in Nebraska, we should have no crops.

S. RUFUS MASON.

Dodge Co., Nebraska.

KENTUCKY NOTES.

I REGRET exceedingly that we are compelled to postpone indefinitely our promised "farewell to the potato beetle." But "life is made up of disappointments," and this is one of them. The millions of eggs that we thought the lady-bugs had sucked, or the cool, wet weather had addled, commenced hatching the 2d of June, and, almost before we knew it, our vines were swarming with the ravenous rascals. But a liberal use of Paris-green has so nearly exterminated them that our crop will not be materially injured.

We hear of some fields of wheat in this vicinity being almost destroyed by the midge; but doubtless the reports are exaggerated. The general opinion of farmers in this neighborhood—Hunter's Bottom, which contains nearly a thousand acres of wheat—is that we will have from 10 to 25 per cent. above an average yield. Harvesting will commence just as soon as the weather permits. The Clawson, to my great disappointment, is at least a week later than the Fultz or the English Rough Chaff. But the heads are fine.

We had fine rains on the 8th, 9th and 10th, which were very much needed and have made many a joyous heart but aching back among our tobacco-growers, this being the first "season" they have had since the plants were large enough to "set out."

Apples, peaches, cherries, plums—and blackberries in Trimble Co.—will be in great abundance, cherries being already in excess of demand. We cannot grow Peaches in this Bottom and do not grow Blackberries. But in the adjoining county of Trimble they are both grown to perfection and in immense quantities.

Hog cholera has disappeared, and consequently the talk of State aid in helping us to ascertain the cause, cure or prevention of this great scourge, has ceased, and will not be revived until our herds are again decimated.

S. E. HAMPTON.

Carroll Co., Ky., June 11, 1878.

CATALOGUES, &c., RECEIVED.

ANNUAL REPORTS of the Buffalo General Hospital for the years 1876-'7.

FARM DRAINAGE, [Circular No. 43]. Illinois Dept. of Ag. S. D. Fisher, Secretary.

CROP PROSPECTS, [Circular No. 44]. Consolidation of Reports returned to this Dept Illinois Dept. of Ag. S. D. Fisher, Secretary

THE West Point Centennial Historic Oration, by Major Henry C. Dane. Published by C. W. Carlton & Co., New York. Price twenty-five cents.

ANALYSES AND VALUATION OF FERTILIZERS—Report to the Commissioner of Agriculture on the chemical examination of fertilizers sold in North Carolina during 1877-'8. By Albert R. Ledoux. Chapel Hill, N. C.

NEW ENGLAND CONSERVATORY OF MUSIC, Boston.—This famous music school—the largest institution of its kind in the country—gives no less than 125 hours' instruction at the low price of $15. It employs 75 of the best instructors, and offers superior advantages. It places a thorough musical education within the reach of all.

A SENSIBLE SCHOOL.—Of all our schools, Lasell Seminary, at Auburndale, Mass., seems to be quickest to feel the real needs of education for women. It has a delightful and healthful location. The comforts of its home are remarked by all who visit or attend it. The quality of its instruction is beyond question, and the moderation of its prices brings its great advantages within the reach of all—a rare combination of excellent points.

EARLY in the Spring Mr. E. P. ROE sent us plants of his seedling gooseberries, "Early Ruby" and "Late Emerald." We have now to acknowledge the receipt of fruit from those varieties. There are ten berries of Early Ruby, the average short circumference of which is three inches. They are shaded with purple-red and of an agreeable flavor, neither sweet nor sour. The "Late Emerald" is about the same size, shape and flavor, and of a bright green color. Both are fine fruit, and we hope they may meet the favorable expectations which have been raised respecting them.

WE received a can of "Naiad" Oil from the Rubber Paint Co., N.Y., for trial, and after applying it to the varied purposes for which it was recommended, we found it to be a very serviceable article. It is an excellent water-proofing and leather preservative. We gave our harness, carriage tops, and everything susceptible of being benefited by its use, a coating, and carefully noted if it came up to representations. It has been a satisfactory test. If the price is not too high, it is a good thing to have about the farm. The Company will doubtless be happy to furnish all information.

Everywhere.

GARDEN CITY, LONG ISLAND.

L. A. ROBERTS.

IN times long past—say 150 years ago—many Europeans visiting New York, were taken to see the Plains of Long Island, then a great curiosity. The visitors found a tract of country about 15 miles long and five wide, destitute of trees, and so generally level as to present an unobstructed view. The southern portion, bordering on L. I. Sound, was marshy and covered with rank grass, while, inland, the ground soon became firmer and afforded common pasturage for large herds of cattle. Of this plain 16,000 acres or thereabouts belonged to the town of Hempstead, and, although its extreme distance from New York was but 25 miles, it was allowed to remain uncultivated, and notwithstanding fertile farms and luxuriant gardens were found within its limits, the general verdict was that the plains were barren and not worth cultivating.

About eight years ago, Mr. A. T. STEWART, the merchant prince of New York, conceived the idea of redeeming this barren plain from its ignominious condition and purchased about 10,000 acres of it from the town of Hempstead, a tract extending along the south side of the Long Island rail-road, which is in about the middle of the Island, for four miles with an average width of about two miles. This tract is varied with slight undulations and has a general southern descent of about 20 feet in a mile. Its peculiar situation, in relation to the surrounding country—the sea on the south, and the hills on the north—insures a constant breeze. In the hottest days of summer, with the thermometer in the nineties, the heat does not seem unbearable, while the evenings and nights are cool and comfortable. The surface soil, from 10 to 15 inches in depth, is a dark loam, under which is a layer of yellow loam of about equal thickness. With few exceptions where a clay-loam intervenes, this rests on the gravel-bed which underlies the greater part of the island, and is from 50 to 100 feet in depth. There is not a marsh, pond, or stream, throughout its whole extent, and not a foot of the land that is not susceptible of cultivation.

Near the center of this tract Mr. STEWART determined to establish a town in which persons of moderate means could have homes healthful, beautiful, commodious, and at reasonable rates. Calling to his aid able assistants in all departments, he at once commenced work. Streets wide and spacious were opened and lined with trees; houses sprang up as if by magic; connection by rail was made with New York and the surrounding country, and before the neighbors were aware of it, the wilderness had blossomed and Garden City was a fact.

I have visited the place occasionally since its inception, and watched its progress; but, on a recent visit, after an interval of about two years, I was astonished at the change during that time, and determined to tell the readers of the RURAL what I found.

First, in the central portion of the city is a park of from 25 to 30 acres, beautifully laid out in walks of clean gravel, the borders of which were ornamented with flowering plants and shrubs. Shade trees showing vigorous growth, and the larger-growing evergreens stood further back; and from half a dozen fountains the sparkling water shot up in jets and sprays. The green and well-kept turf gave a deliciously cooling aspect; and, under the rays of the sun, shone bright and clear like emerald. In the distance a flock of fine sheep, under the careful watch of the shepherd, lest they should injure the plants and shrubs, gave a pastoral aspect to the scene. In the rear portion of the park, distant a few rods north of the depot, is a hotel, a four-story structure of brick, built in keeping with the surroundings. This I found to be commodious, clean, complete in its appointments and attendance. Near the depot, in a handsome structure which might be mistaken for a dwelling-house, is the office of the resident manager and superintendent, Mr. W. R. HINSDALE, whose ability, originality, and energy render him indespensable to the prosperity of the enterprise.

The city is divided by streets, eighty feet wide, into squares, which are subdivided into lots varying in area from half an acre to an acre or more. These, when built upon, are separated by open picket fences. The front line of each house is 75 feet from the street. The houses are of various sizes and styles—some of brick; others of wood; and rent at prices varying from $350 to $1000 a year, which sum includes payment for water, gas, removal of ashes and garbage, cleaning streets, etc. The price of rental depends mainly on the size of the house rather than on location or conveniences, as in these respects the man of moderate means fares as well as his richer neighbor. No stables or other out-houses are permitted on the lots. Those having horses are required to keep them in the building erected for the purpose, on the business square, where are also stores, shops, markets, etc., etc. The streets are bordered with trees, of which more than 50,000 have been planted, and with scarcely an exception, all are growing vigorously.

The water supply of the plains is wholly from rainfall, which is about 43 inches a year. Of this but a small proportion goes off by surface drainage, the rest sinks at once into the subsoil, which, as before said, is almost entirely gravel. The well, at Garden City, is in a depression 14 feet below the general surface, is 50 feet in diameter, and about 30 feet deep. The stratum of gravel underlying this was found by boring to be about 40 feet thick. This forms a vast reservoir, free from any mineral or vegetable material that can give impurity to the water, the volume of which is practically inexhaustable. The water enters the well entirely from the bottom, and is supplied to all the houses by Holly pumps, having a capacity to discharge 3,000,000 gallons daily. In purity it excels any other in the county, showing, in a gallon, only 2.7 grains of both organic and inorganic solids.

Notwithstanding the fact that the natural drainage is so complete, not a particle of the sewage is permitted to enter the soil. At present it is discharged into cement tanks and quickly removed, but an extensive and complete system of sewerage has been planned and will soon be completed, in which the whole will be gathered in reservoirs, covered by buildings, deodorized, and every particle used for fertilizing purposes.

Before Mr. STEWART'S death, he had planned to erect a church on the premises, which should be chaste in design and architecture, honest in construction, and free to all. After his death, Mrs. STEWART determined to make this church his monument, under which they both should rest in their last sleep. Under the sanction, and with the approbation of the Bishop and clergy of the Episcopal Diocese of Long Island, she founded a cathedral, now in progress of erection, to be completed within a year, which, with all its appointments and a large endowment, is a free gift to the Diocese. I will not attempt a description of this gem of church architecture. In size it is not equal to many other church edifices, but in beauty of design, completeness and elegance of finish, it will have no superior.

As adjuncts to the Cathedral, schools have been established in which youth of both sexes, will receive instruction from the best of teachers under the direct supervision of the church authorities, and it is probable that this alone will draw to Garden City many families of the most intelligent and refined classes in the country. For here they can have homes with all the advantages of fresh air, pure water, complete drainage—everything that is conducive to health, within about an hour's ride of New York.

But the reader may ask, "Are there not some disadvantages connected with all this, for, certainly, without them, no such place has existe since the Garden of Eden?"

As this article is not, in any respect, intended as a puff or advertisement, but as a plain statement of facts as the writer found them, he will not hesitate to say that—for him—the lack of shade-trees is an objection, one which, however, is being rapidly overcome; the monotony of the level plain that meets the eye on every side, except where, in the distant north, the view is bounded by the blue of the hills, the "backbone" of the island, is not so pleasing as a succession of hill and dale; the newness of everything—streets, houses, fences—seems unnatural, and the absolute neatness of the surroundings does not entirely agree with the habits of the writer. If you take a drive, you go on the same general level for miles, without a rock or a tree for company. The houses are as complete in appointments as they can be made, but it seems as if one must feel under constraint, as if living in a hotel. He can't go into the back-yard and build a pig-pen or a hennery, or muss up things generally as much as he pleases. The regulations won't admit of such things, having constantly in view your neighbors—as if one must consider their likes and dislikes before his own; —and you have the feeling always of a want of ownership. You may lease the premises so long as you pay rent and behave yourself, but never a foot of it can you buy. These are about all the drawbacks I can think of, and now they are written, they don't seem to amount to much, and it is a fair conclusion that there are worse places in which to live than GARDEN CITY.

NORTH CAROLINA NOTES.

REV. A. W. MANGUM.

CHAPEL HILL, N. C., June 26, 1878.

So far we have had an extraordinary summer. Up to the middle of June it was quite seasonable, as to rains; but the temperature has been lower, on the average, than I have ever known it in May and June. At present the sun is hot, but the winds are dry and cool; and signs of drought are appearing around us.

The crop reports are not very encouraging. Wheat suffered from the rust in some parts of the State, and, from that and other causes, has fallen short of expectation. The oat crop, though not a failure, is not a success. In this State oats have nearly always been treated with unfairness. They are seldom sown in any but poor land that is considered unsuited to anything else. Doubtless fewer bushels on fewer and richer acres would be far more remunerative. Where Orchard grass and clover are raised, oats are probably not so much esteemed; at any rate, they are not so much needed. Three crops of hay, during the year, are worth much more than one cutting of oats.

The farmers are much discouraged on account of the destruction of corn by the worms. They cut and destroy it to such an extent that it has been almost impossible, in some cases, to get "a stand." The best prescription that I know for the destruction of the cut-worm, is winter-plowing; but the mild winter in this State probably prevented the usual destruction in that way, there being so few freezes.

The fruit is in plentiful quantity, though the apple crop is very light. One explanatory theory is, that the trees yielded so abundantly last year that they exhausted themselves, and need a year for recuperation. This, I think, depends on the restoration of the fertility. I am almost a believer in the doctrine that a tree ought to bear every year if it escapes the frost or blight. I have a *large* tree that bears *large* apples in *large* quantities, and has borne in great abundance for the three years that I have observed it. I have fertilized it after each crop. Two other trees near it have been treated in the same way, but have not done so well. Their relative situations may explain the difference. I am thankful to the Giver of all good for the prospect for delicious peaches, as they are my favorite fruit. They, too, are in limited quantity, though they will be the better developed in consequence. One of my friends, a fruit-culturist, succeeded this year in ripening a variety of the peach in May. He is not yet certain that it will mature so early regularly.

While speaking of the Peach I will mention a singular species that appears to be a hybrid between the Peach and Nectarine. It grows in a garden in our village, and I am raising some that I got from the garden this year, with the purpose of sending you a specimen or two next season, for the Rural Grounds.

We have a rich harvest of berries which, you know, are quite a profitable article of trade with us; particularly the blackberry.

Gardens have been very successful so far. I have learned, by experience, that in this latitude where the summer is so apt to bring dry seasons, the wisest policy is to plant the earliest seeds liberally. The first crop of almost everything is quite sure to be matured before the dry weather begins. Of course, there should be a succession of certain staple vegetables where it is practicable. There has been some uneasiness about the Colorado beetle in Warren County, N. C. I have not learned, with certainty, that the fears were well-grounded. The beetles were thought to have come in seed potatoes. There was also a "huge" report about the genuine Western grasshopper having been found within a few miles of this place. The statement was made that they were destroying the clover, confining themselves almost exclusively to that; but I failed to get a confirmation of the report in a visit to an adjacent community, and therefore trust that there was some mistake about it.

The peculiar seasons have, to date, been very unfavorable to the cotton. It has suffered much injury. The early rains were helpful to the tobacco-planters, and with suitable seasons hereafter, the crop is likely to be large.

Our State chemist, Dr. LEDOUX, is taking a well-earned rest in the North, perhaps in your city or on the Hudson. He has done a noble and faithful work in testing fertilizers, and enjoys the confidence of all our leading citizens. Of course, he has stirred the ire of some whose articles cannot bear the ordeal of truth and honesty, but he has opened the way for brands that are worthy and will not disappoint.

The second session of our State Normal School is now in operation at this place. It is under the superintendence of Prof. LADD, formerly of Mass., now of the schools of Staunton, Va. He was recommended by Dr. SEARS of the Peabody Fund, who has shown us much liberality, for which we sincerely thank him. This is but one feature of the general movement in favor of more thoroughness and genuine progress in all important interests in the Old North State.

ACROSS CALIFORNIA.

TIME, the tenth day of June; starting point, the city of San Francisco; route, steamer across the bay to Vallejo, thence by rail to Sacramento. The Napa valley is a good farming region, thickly settled, and promising a plentiful harvest. As far as the sight will reach, it is very beautiful, being bounded with low ranges of mountains, which melt into the distant haze, reminding one of Indian summer.

A sharp curve through a canyon carried our train across the divide into the plains of the Sacremento. Thence, about fifty miles through a prairie-looking country, dotted with orchards and grain fields, to the State capital. Around Dixon there are some large pear orchards, containing thousands of trees in bearing. The branches are suffered to head low, for the better protection of the trunks and roots in this hot climate. The plan, here, is a good one, and interferes little with the clean cultivation given. The temptation is sometimes yielded to,—the raising of a crop between the trees,—always with bad results. For it is found that orchards thrive better with frequent and clean cultivation, and without a stolen crop. The fruit is better, and the trees are stronger. So far in our history fire blight has not troubled our pear orchards.

Hundreds of your middle-aged readers, scattered from Maine across the continent, who were familiar with the appearance of Sacramento early in the fifties, would see but little change. The street in front of the Orleans Hotel is raised ten feet higher, where in early times we descended a flight of steps. Nearly across the way is to be seen the modest two-story hardware store of Huntington, Hopkins & Co.

Most of the miners laid in supplies purchased there for the mountains. The same old sign, weather-worn and dim with age, is still above the door, as if in ostentatious humility. This firm of hardware dealers were the famous builders of the Central Pacific railroad, out of which they made colossal fortunes. Hopkins died the other day, leaving to brothers and nephews an estate valued at twenty millions.

In early days the town was a rival of San Francisco. Its proximity to the mines gave great advantages. But with the decay of gold mining, and extended facilities for travel, the rush is passing it by. There is an appearance, a something indescribable, indicating the languor of age. The city, however, will not share the fate of the mining towns. It is slowly prospering in manufactures, and building up a local trade. Away from the sea breeze, we found it uncomfortably warm. The sensation was novel. It was a reminder of old times to see people in linen suits. For, be it known, there is no change of garb the year round in San Francisco. Thick clothes and woolens are necessary in midsummer, and furs are as often worn by ladies in the evenings as at other seasons. There is no great occasion, to be sure, at any time, for wearing them; for there is but little frost. But the sea breeze, on this coast, is searching and cold in the evening. It is the great drawback to our summer climate.

The old sign of the hardware firm reminds me of the history of John P. Jones, in the early days of California. He was engaged, with nine others, at Weaverville, in Trinity County, in 1851, digging a ditch to drain Sidney Flat, for the gold supposed to be hidden there. They all worked hard with pick and shovel; but the enterprise did not "pan out," and was abandoned. In those days the future Senator made little money, and that went with a free hand. He was glad to clerk for a groceryman named Farley, I believe, in the years 1852-3, and sleep under the counter in the store. One night the weight of the snow broke down the roof, and would have crushed him but for the friendly protection of the counter. He was always a student, and would lie on his back reading nights when others were asleep. He was a Justice of the Peace from 1856 to 1858. In the latter year he was a candidate for County Judge, against R. T. Miller, who beat him one vote for the nomination. About 1861 he was the Sheriff of Trinity County. Afterwards he was a State Senator. In 1867 he was a candidate for Lieutenant-governor and defeated. Then he went to the Washoe mines (Nevada), as superintendent of a mine for Alvinza Hayward, at a salary of six hundred dollars a month. Here his star began to ascend. The student who used to lie awake and read of nights in the rough mining camp, entered a broader field. Fortune waited on him and smiled. In the tide of prosperity his abilities became known, and, thenceforth, his life is part of the history of this coast.

Leaving Sacramento by rail, at twenty miles up the American River, we arrive at Folsom. In February, 1856, it was a roaring mining camp, alive with red-shirted adventurers, whose white tents dotted the hill sides overshadowed with pine trees. Its mines are worked out, and hardly a trace of its former prosperity remains. A branch penitentiary is being built there, because the location affords granite. The writer looked in vain for the forest trees. In their stead were prim rows of Australian Gums, hiding weather-beaten rows of old houses.

Resuming our journey towards Placerville, the road began to climb the foot-hills of the Sierra Nevada. As we looked back over a great extent of the plain, yellow with ripening grain, we saw headers at work in the barley. The pastures are turning brown, and great droves of cattle are heading for the snow line, where the grass is plentiful. The snow-covered peaks seem quite near, though seventy-five miles distant, and we begin to look down on hill tops covered with timber. Away to the south, the course of the Cosumnes River can be traced by an irregular boundary of bolder cliffs. From the railway terminus it is a ten-mile stage-ride, via Diamond Springs and Mud Springs, to Placerville. On every hand there are numerous traces of ditches, and flumes, and worked-out mines. These Springs are tumble-down villages of one long street, with rows of cut-stone business houses, mingled with wooden ones, staring at each other across an empty, dusty road. One half of them are untenanted. Others, with imposing fronts and iron shutters, are used for stables and old lumber. Twenty-five years ago these places were hives of industry. A numerous population ebbed and flowed through these mines, and, later, poured along this very highway towards Washoe, like lava from a spent crater. About Placerville there is yet some hydraulic mining. Mountain sides where little more than color could be obtained in early times with the pan, places unworthy of the bold prospector's attention when he could make his ounce or two a day in the gulches, are now sluiced away with vast hydraulic appliances on a scale that pays. A mile from the town the stage crossed a sluice-box about five feet wide and three feet deep, nearly filled with muddy, red water in which gravel and stones are surging past with the speed of a railway train. The fall is tremendous from a bluff where the earth is loosened by streams of water, which wash away through this tail race, as it were. Once in six months there is a "clean up," when the amalgam of quicksilver and gold is carefully taken from the "riffle-bars," of the sluice-boxes.

The traveler looks down on Placerville from the top of a high bluff. There are numerous public buildings and cozy dwellings embowered in orchards and vineyards. It is 2,000 feet above the sea, and, in flush times, boasted a population of 6,000. In early times, Judge LYNCH had occasion to convene his court and hang half a dozen thieves and assassins on a tree by the road-side. These rough and ready men at once christened the camp Hangtown, and to this day it is better known by that name than by the modern one of Placerville. The off-hand manner of dealing with wrongs yet lingers with the inhabitants, and they enjoy the enviable distinction, to-day, of being the only community which ever "got away with" a railroad company.

The story is funny and worth relating. El Dorado County subscribed 200,000 dollars, and Placerville 100,000 dollars, in bonds, to aid the building of a proposed road to the towns. The bonds were delivered in good faith in advance of the work. Then the company sold their franchise, with the unfinished line, to parties who would not complete it. The owners of the bonds wanted their money and brought suit for its payment. On the eve of obtaining a mandamus to compel the local authorities to levy a tax to pay the debt, every one of the country and town officials, liable to be served by the sheriff, resigned. The bond-holders went for relief to the legislature where they received small sympathy; for the El Dorado people succeeded in getting an act passed granting them a board of auditors, with power to transact all sorts of public business except the levying of taxes. This flanked the monopolists, and so the matter stands.

Twenty miles south-eastwardly, on the Cosumnes River, there is a gold mine which we drove out to see, the evening of our arrival. The road leads up and down across ridges and hollows, by abandoned mines and decaying flumes, past lonely farm-houses and orchards, and through stretches of pine woods to the first bend of the river. A quartz mill on the road was thundering away, crushing rocks with a noise like a huge coffee mill. The last six miles of the way ran through an elevated plateau of pine woods, still unsettled and belonging to the Government. Within a mile of the mine we put up with a hospitable ranchman for the night. He grows good wheat, barley, potatoes and fruit, at an elevation of 3,000 feet above the sea, and, when not employed otherwise, is engaged in mining. Leaving our horses next morning we walked to the mine, where we found two Cornishmen lately from Reading, Pa., at breakfast, in a rude shanty made of boards riven from cedar. They were hospitable, intelligent men, and very willingly showed us through the works. The vein was recently discovered, and, so far as prospected, is rich enough; but it is hardly a foot thick. We followed the miners through a long and narrow tunnel, supported here and there by timbers. At the termination we examined the vein or lead, which was inclosed in slate walls. Samples of the ore since assayed at the rate of $211 per ton. The cost of milling and mining is about $12, which would leave a handsome profit with a two-foot ledge.

The surface is covered with a forest; there are no rocks cropping out, or other indications of auriferous deposits. How it happened to be discovered we did not learn, but judged the prospector to be possessed of much faith and a strong imagination. The claim, 600 by 1500 feet, the mill and free water power, were all for sale at $1,600. But there are no good mines for sale. Their owners hold them. It is no longer possible to forage through the mining region and pick up lumps of the virgin metal, as in former days. The reign of enchantment is over. Aladdin and his lamp long ago gave place to the plowshare. As a rule, every dollar of gold mined costs ninety cents in labor. SPECS.

San Francisco, June 24.

LIFE AMONG FARMERS IN NOTRH CAROLINA.

ONE may travel the world over, share the oatmeal porridge of the Scotch Highlander, under the shadow of Ben Nevis; or the Schebzieger cheese of the dwellers by Lake Lucerne; or the barley cake and pickled herring of the Scandinavian, yet he will find no kinder, truer hearts, no friendlier folk, than the plain, unpretending people of the old "Rip Van Winkle," whose simplicity of manner, dress and conversation, reminds one of Diedrich Knickerbocker's New Amsterdamers in the days of "Orloff the Dreamer" and "William the Testy." They are, without exception, hospitable, and one often gets a dainty meal of delicate, wheaten loaves, savory chicken and creamy milk, in an humble log-hut with a worm-fence straggling round it, a pole with a parcel of martin-gourds surmounting it, the sole ornament of the front yard, and in the rear of the dwelling, a rough-looking corn-crib and hen-house.

Somehow or other, these people, on land that looks poor poverty itself, raise nearly all they require for comfortable living—plenty of corn, wheat, rye, oats, buck-wheat, clover, orchard-grass, potatoes, pears and pumpkins.

Their cotton patches, too, by dint of close culture and picking, put considerable money in their pockets, which, along with other home products, enable them to procure "extras." Those poor old sand-hills produce superb peaches, apples, pears, melons and grapes; also strawberries, raspberries and blackberries, besides huckleberries, which grow in the "slashes," on moist, shaded ground along the course of "branches"—the local name for little brooks from springs. These fruits have grown into a source of income of late years, great quantities being shipped, either ripe or dried. I remember eating peaches—"Crawford's Early"—in one of those old orchards the 1st of May--blushing ripe they were; and I have seen no other pears equal to the incomparable Sekel!

The farmers' wives and daughters of the Old North State are women for the times. They keep up the old-fashioned arts of spinning and weaving, and think nothing of turning off eight yards a day. There are a good many cloth factories in the State, and from these the home-weavers buy their warp, spinning their filling at home. This home-woven cloth lasts working men and boys two years. They weave most beautiful counterpanes—such figures as the "snowdrop," "basket" and the "wreath" being commonest, and those are bleached white as snow-drifts, or if woven of wool are colored blue, crimson or orange, as taste suggests. Thrifty, cleanly, industrious and hospitable, it is a pleasure to visit those people, for they give you the heartiest of welcomes, the coziest of white oak chairs, the most tempting of well-cooked dinners, prepared by their own hands.

If you are sick they nurse you patiently and tenderly; they have balms, cordials and tonics of their own make, that will restore you to health

and strength. In the big kitchen-garden are herbs of all kinds; not only sage, fennel, pennyroyal, carraway, and the rest, but stately, Palma Christi, nodding poppies, and tall gold-hearted lilies that yield a healing salve. In the front yard are Monthly Roses of tree-like proportions, Althœas, Privet and "Virgins'-bower." In the long winter nights you hear the spinning-wheel buzzing till eleven o'clock, and the knitting needles clicking in tireless fingers. Before bed-time you are treated to mellow apples, walnuts and hickory-nuts, dry and sweet.

In the glowing firelight you look around the room and see long strings of red pepper, bunches of hyssop and tansy and numerous small bags of seed hanging on the walls. There are the piles of light-wood knots in the corner, the great fire-place filled with burning logs, and you sit up late, enjoying the stories your host tells of his grandfather's days, when the women picked the seed out of the cotton with their fingers, and the happy owner of a bale of cotton hauled it a hundred miles to market, or *trundled* his hogshead of tobacco that far for a buyer—the good old days, when 20 lbs. of sugar and coffee constituted a year's supply, being only used on Sunday.

VIRGINIA DURANT COVINGTON.

RURAL SPECIAL REPORTS.

DALLAS Co., Ala., June 28, 1878.

WE had a very wet spell some time back, but about a week ago it cleared up and the weather is now fine for getting the cotton cleaned out. The prospect never was better for a good crop. We have had fine seasons so far. Corn and cotton look well, and we have had a fine oat crop; some say it was the best ever raised in this county. I grow no cotton; the great drawback here is that they plant too much cotton and not near enough of corn. If the people would raise corn and meat to "do" them, this would be a fine country. They plant more cotton, however, than they can attend to, and have to buy their meat and corn. They say they cannot raise hogs here, but it is a mistake: they can raise anything here that can be raised in the West. There is not so much stealing as there was a few years ago.

JAS. MULLEN.

QUEBEC, July 1st, 1878.

WE have four Pelargoniums from a package of seed sent by the RURAL this spring, and all our seeds did very well. I think Pelargoniums the most satisfactory of plants, and have quite a fancy for them this season; and the children feel the same way. If they have money to spend, they do not say, "I will buy candy," but always: "*I shall buy a plant;*" even little Three-year-old, getting ten cents the other day, handed it to me to buy a plant for her garden.

A. L. J.

SHERMAN, Chautauqua Co., N. Y., July 4.

WEATHER warm, and with frequent showers. Everything growing finely. Grass looking well and with prospects of a good hay crop. Fine warm weather for corn. Potatoes, 60 cents per bushel; butter, 14@16 cents; cheese, 8½@11 cents per pound; eggs, 9 cents per doz. Haying will be commenced immediately. Quail are again heard in this section. Travel to the well-known summer resort, Chautauqua Lake, has commenced.

M. L. DORMAN.

Industrial Societies.

PARISIAN CORRESPONDENCE.

PARIS, June 21st, 1878.

THE French Exhibition is under the special auspices of the Ministry of Agriculture whose chief, M. TEISSERENC DE BORT, has been mentioned, in a former letter, as taking a prominent part in the opening ceremonies. It is but natural therefore that the agricultural interests of the country should be largely represented, and, as a matter of fact, no department of French industry occupies so much space or receives more attention than that which relates to agriculture and allied pursuits.

Of the latter, the department of forestry receives special attention, and in a handsome wooden building devoted to it on the Trocadero side of the Seine, is a fine display of materials and completed utensils made of wood together with a collection of the various tools and appliances used in manufacturing the article. More important still is the exhibit of plans, photographs and models illustrative of the planting and culture of forests, the management of mountain streams, and the reclamation of dunes and sand wastes along the sea-shore. A great part of the fuel used in France consists of charcoal or timber in some form, and both on this account, the general importance of timber for manufacturing purposes, and the destruction as well as destitution caused in past times by sudden floods and prolonged droughts due to the wasteful denudation of timber lands on mountain and plain, great attention is now bestowed on forestry by the Government. Before a tree growing even on a steep mountain side, can be cut down in France, a permit must be obtained from an official of the department of forestry and arrangements in most cases be made to set a younger tree in its place. Nor is it considered enough that trees shall grow where trees have grown before, but constant efforts are being made to win from the mountain, the sea and the desert waste, new space for the cultivation of timber trees.

In this connection, there is a very complete sketch of the drainage effected, several years ago, in the Landes of Gascony. This flat tract of country towards the Spanish frontier, was an arid waste with two feet of sandy soil, beneath which was an impermeable subsoil. Winter rains converted it into a sea of mud; summer heats transformed it into a desert fertile only in fevers. In this land 1375 miles of small canals were constructed, pine trees were liberally planted, and now 460,000 acres of communal lands bear a forest worth, at a low estimate, $16,000,000, while the value of trees on nearly 850,000 acres belonging to private individuals, amounts to about $27,000,000. All this work has been done, too, at the expense of 162 communes, or parishes, without any cost to the Government. Moreover, the land already sold after drainage has netted the proprietors upwards of $1,600,000, half of which has been expended in erecting schools, churches and other public buildings, while the other half has been laid aside as a reserve fund.

Another set of interesting models consists of a pair, showing the aspect of a valley before and after government had taken measures for controlling the water and replanting the denuded mountain sides. One of these models shows the barren, stony gorge, half-choked with boulders and rubbish, the bare base-rock from which fierce torrents have swept the soil, with here and there a ragged tree, clinging solitary to the wind-swept slopes—a scene of ruin and desolation. In the second is seen the same valley, with immense dams of masonry constructed at intervals across it, and between these smaller dams, or steps, made of facines, bedded in stones and banked at both ends with clay. The rock-ribbed hillsides are covered with soil, kept from slipping by rows of stakes, bundles of facines, and low hedges, while on every available yard waves a vigorous young tree. The brook is no longer a capricious torrent, half-dry in summer, and in winter a furious flood, sweeping away the soil and covering the lowlands with gravel and *debris*, but is now a steady stream, pouring a sparkling tide over its many cascades, and bearing health and fertility to the plains below. There are also a number of other models, all representing, not imaginary theories of how such feats might be accomplished, but actual works already successfully completed; and beside these, are hundreds of photographs showing all the details of the works, the camps of the workmen, the young plantations set out in terrace above terrace up the mountain side, the disposal of the facines for retaining the soil until the growth of the trees should hold it permanently, the culverts, and the present genial aspect of the woodland, ornamenting and enriching the mountain side.

It's nearly a week since the close of the great International Cattle Show, held in connection with the Exhibition on the Esplanade of the Invalides, a large open space skirting the Avenue which runs past the splendid retreat of the disabled veterans of France. Here some forty lofty and spacious sheds accommodated the cattle; while sheep, pigs, and poultry were penned in at each end, under rows of umbrageous trees. The number of French exhibitors was 356, while there were in the foreign classes, 145 from Great Britain; 39 from Belgium: 12 from Holland; 12 from Italy; 9 from Switzerland; 2 from Denmark, and 1 from Portugal. Some of these had each on show a large number of animals in several classes. It is a common opinion among Americans that for the highest type of cattle for meat or milk, recourse must be had to British breeds exclusively, but an inspection of the splendid animals here exhibited, might well account for the fact that this opinion is by no means common among those who are nearer neighbors to Great Britain and have ampler opportunities of comparing her stock with those which are esteemed most highly elsewhere. Among the French cattle, the Normans were the most numerous and various in form and color, but all robust, quiet and excellent milk and beef-producers; the Charolaise, however, were by far the most beautiful, with white silky coats, fine heads, large gentle eyes, cylindrical bodies, famous for their fattening qualities, but indifferent milkers. There were also some fine specimens of the Gascon, Garonnaise, Bazadaise, Ponthenaise, Pyrenees, and Breton breeds, each of which is a popular strain in one or another part of sunny France. French Short-horns, lineal and indirect descendants of English Durhams, were likewise largely represented, and bore away a goodly share of prizes. Twelve fine Merinos from the Rambouillet flock, were exhibited by the Government, but did not, of course, compete for prizes. This flock serves as a nursery for French and foreign breeders, the race having been kept pure from its first importation from Spain towards the end of the last century. Within the last fifteen years considerable modification, however, has been made by selection in the fleece, form and capacity for fattening of the animals, on account of the lower price for wool and the higher price for mutton. There were about 250 Merinos also exhibited by private parties, chiefly from the south of France. Among the crosses which the French have made with the Merino, that with the Dishley or New Leicester, seems to be the most successful, eight out of sixteen prizes for cross-breeds having fallen to the lot of this class.

Of British Short-horns, there were 25 entries; of Herefords, only two; one of which, a fine bull from the Queen's herds, took a first prize. There were no entries of Channel Island cattle; only two of Ayrshires; five of polled cattle, including Norfolk and Highland; three of Kerry, and the same number of Longhorns. A very liberal quota of prizes and honorable mentions fell to the lot of the exhibitors of these animals, the Short-horns, of course, bearing off the majority of them. Of English sheep, the best exhibit was Lord Walsingham's South Downs, which won the prize for the best exhibit in the foreign department, besides three first prizes for particular sheep. The Oxford and Hampshire Downs also were well represented, the former bearing off three prizes and the latter one. The Leicesters and Lincolns won two prizes each, while with the Cotswolds Mr. Swanwick of Cirencester, bore away all the prizes, two breeders only having ventured to compete with him.

The Dutch made a very fine display of large—some monstrously large—cattle as elegant in shape as such mountains of flesh could well be, while the cows have a reputation for milk second to none in the show. The Danish cattle also were very fine, one exhibitor, a Danish count, bearing off several prizes. Little Switzerland had fifty head of cattle on exhibition, splendid animals every one of them, mostly from the Cantons of Schwytz and Simmenthal.

The awards of prizes at the poultry show was attended with the caviling, discontent, and hints at unfairness and prejudice apparently inseparable from the bestowal of awards in such competitions. Here the French made not only far away the largest but, it is generally conceded, also the best display. In no country is there made from poultry a tithe of the money which the thrifty and abstemious Gallic peasantry economize from this source. Doubtless more eggs and chickens, even in proportion to your greater population, are eaten in the United States, but more eggs and pullets are exported from France, and bring into the country every year a very large amount of capital. Chicken for breakfast or dinner is by no means an uncommon dish on the poor man's week-a-day table across the Atlantic, but here among the peasantry who own thousands of them, such a repast would be considered an extravagance justifiable only by the occurrence of a wedding or some other memorable *fete*. The French classes were very large. Of Creve-cœurs there were eighty-five cocks and eighty-two lots of hens; of Houdans 80 cocks and 70 lots of hens; of La Fleche 50 entries in each class; of the breeds of La Mans and La Bresse a smaller quantity; and an innumerable swarm of mongrels and provincial types. For table poultry the French breed bones extraordinarily small, and they are strong in the belief that crosses with Asiatics spoil table-fowls. Cochins, Brahmas, Dorkings, Hamburgs, Spanish, Game, Russian, Malays, Polish, and Paduans, all had hosts of admirers, especially the latter, which certainly are truly magnificent fowls. Most of the foreign poultry was English, but despite the fact that the exhibitors have been accustomed to win prizes easily at home, but few fell to their share here; and of the small number of prize-winners one of the most successful was Mr. Belden, of Bingley, whose home was well described by the graphic pen of a RURAL correspondent about a year ago.

THEBER.

PROCEEDINGS OF THE NURSERYMEN'S CONVENTION.

THE proceedings of the Nurserymen's Convention held in Rochester, June 19-21, to which we have already referred several times, were of an unusually interesting character. Mr. MEEHAN thinks that the falling off of the interest in the adornment of the grounds of country homes, is in a measure due to the fact that people of wealth devote more time to summer travel and to visiting places of summer resort than in years gone by, and, in consequence, less time is left for horticultural improvement. Of course, the nursery business suffers accordingly.

During the war and for several years after, the grand rush for country places accessible to New York and other large cities, is fresh in the memory of all. Hundreds of villages sprang up along the lines of rail-roads and bits of land were sold for fabulous prices. All of these new homes were planted with shrubs and trees and the nursery business was flourishing. The tide is now the other way. Many of those new homes are not now worth the sums for which a good share were mortgaged. All out-door embellishments are at an end. Never before in the history of this country was ornamental planting carried on to such an extent as during the period just referred to. Perhaps we might say the same of fruit planting. The depression of business now experienced is felt most where it was most overdone. After a season of rest, and it has already experienced quite a long one, we trust that the interest in the adornment of all country homes, which we are confident is ever on the increase in our new country, will again manifest itself as vigorously as ever and that those nurserymen who in the past have served their patrons most faithfully, will be those to reap a full measure of benefit.

The Vineyard.

GRAFTING GRAPE VINES.

THAT the thing can be done I know, for I have done it myself and employed others to do it, and I doubt not that it can be done successfully, for it is so stated on good authority, but of the latter I have no ocular proof except in the following cases.

In the early days of the Iona and Isabella grapes, I obtained two of each by joining a club and paying ten dollars and express charges. The next season I bought some 50 to 100 for myself and others at a less price, and paid about five and a half dollars express charges on the package which might possibly weigh fifty pounds.

In due time the first four bore fruit of the expected color, and the next season several of the thirty I had planted for myself, fruited, and among the Ionas was one which bore black fruit. So I could not but conclude that through my own carelessness one of the Isabellas had got misplaced. Well, time went on, and the vines grew apace, most especially this misplaced black one, and as I saved cuttings from the most thrifty and propagated for my own use, I soon had quite a row of bearing Isabellas, but they did not fully answer my expectations in flavor. About the year 1874 a neighbor's attention was attracted by the superior vigor of this one misplaced *Isabella* vine, and, on examination, pronounced it a *Concord*, which I was very ready to admit as a fact when I came to examine it. The next season, as I was showing a friend a row of fine Isabellas bearing their first crop, he thought they looked like Concords. Sure enough! their every feature showed it. As to the first four vines, one of the two Isabellas yearly bears a light crop true to name, the other bears a fine crop of Clintons; and of the two Ionas, one bears Concords. Now I do not accuse the seller of these vines of fraud, or even of making mistakes; I think these first four vines bore for a time honest fruit, but as I have been in the habit of training up a new stock from the root when the old one becomes weak, I conclude that is what happened in these cases. The Isabella has ever been with me a feeble affair and in this way do I account for the fact that every vine that I have propagated from what I supposed Isabella parents, has thus far borne Concord grapes. True, I have planted cuttings from true Isabellas, but the sequel shows that they all failed. So I have little faith in my own ability to graft grape vines successfully.

S. B. PECK.

The Garden.

PEA NOTES.

PEAS differ so much in different soils and with different modes of culture, that a good idea of their relative earliness cannot be got from a single experience like that given in "Notes from the Rural Grounds," p. 410. This day, June 29, we have had our first mess from Little Gem, planted April 10. Our earliest pea—the Magog Early, a cross by the writer of Carter's First Crop on Dan O'Rourke, and the product again crossed with Little Gem—planted the same day, is now getting too hard, so that Little Gem forms a perfect succession. The American Wonder, also planted April 10, is not distinguishable, as to maturity, from the Little Gem, wherein it disappoints me. In growth it is more dwarf, and in productiveness not superior; quality not yet tested; but I ask for nothing better than Little Gem. All were planted five inches deep in a moderately light loam; exposure, a slight southerly slope; the peas follow corn, being but lightly manured. The American Wonder very much resembles the Little Gem as I first had it, grown from imported seed. After six or eight generations in Northern Vermont, it has increased in growth of vine, average length of pod, and productiveness, with no loss of quality. One-fourth of the pods carry eight peas. I have a late pea that stands heat well, does not mildew, is a great bearer of long, large pods, the peas of fine quality. Name and origin unknown to me, having received it from a neighbor who got it in the same way, without history.

T. H. HOSKINS, M. D.

Orleans Co., Vt.

The Telegraph Pea is among the most lauded by London horticultural journals. We received seeds of this variety from the Messrs. THORBURN, though rather late to give them a fair trial.

The Querist.

ANSWERS TO CORRESPONDENTS.

Rhinoceros Beetle.

H. C. Smith, Marshall Co., Miss., sends for name and description of a beetle which is to him an entire stranger, and is willing to accept whatever price the specimen may be worth.

ANS.—The insect sent is a male specimen of Dynastes tityus, the gigantic Rhinoceros Beetle of North America. The female of this beetle has not horns like those borne by the male. Its size and form make it recognizable with ease and certainty, but the colors are various, some specimens being dark-brown all over, and others light-green with dark blotches. Sometimes a part of the body is of one color and the rest of another. The beetle is found not rarely in the Southern United States, reaching at least as far north as Pennsylvania and Missouri. It is said to breed in the old stumps of several kinds of trees. Mr. MANN tells us he has found it under heaps of the manure of the Carrion Crow (Cathartes atratus) in the Sea Islands of South Carolina.

The specimen was damaged by having one wing-cover broken, and if sound, it might bring five cents.

Churning Cream.

F. P. Leonard, Noble Co., Minn., is anxious to learn how he can get his churning done quickly and uniformly; of late it has taken an hour, and sometimes two, to bring butter. Accordingly he asks: (1) What should be the temperature of the cream to insure speedy, yet hard butter? (2) Is it uniform temperature that causes butter to come in uniform lengths of time? (3) What makes the cream swell as it does sometimes? (4) What churn is the best to produce good butter in a reasonable time? He is now using a common upright dasher. (5) How quickly would such a good churn make butter? (6) Does it require less labor than the old-style upright dasher? (7) Its price and manufacturers? (8) Is there any chemical substance which, if put into the cream, will hasten the coming of the butter without injuring it? (9) If cows go unsalted, does it prolong the churning of the cream from their milk?

ANSWERS, BY DR. HOSKINS.

(1) This depends somewhat on the season, and on the quantity of cream operated upon at one time. Sixty-two degrees may be called the standard or average temperature, and in large dairies and creameries it need not be much varied for season. But where a few quarts only of cream are churned at once, the temperature should be from five to eight degrees higher in winter, and lower in summer.

(2) Yes, other things being all right.

(3) Churning too warm, generally—always, unless something is the matter with the milk.

(4) The barrel for large dairies, a box-churn for small ones. Jersey cream raised in small pans, is apt to be too thick for any but the dash-churn. Really, the kind of churn is immaterial, except as regards convenience, provided it thoroughly and equally agitates all the cream. The Blanchard is a good churn.

(5) Any good churn will bring the butter in from 15 to 30 minutes if the cream is right. I would recommend inexperienced persons beginning to make butter, to scald their milk before setting. The temperature should be raised to 135 degrees. Be careful about burning. Cream from scalded milk does not usually require over ten or fifteen minutes' churning.

(6) Yes.

(7) See advertising columns, *passim*.

(8) No.

(9) Yes,—at least that is the general belief, though I know of no conclusive experiments on this point.

Raising Onions

M. H. De Ruyter, Madison Co., N. Y., asks: (1) Whether onion seed should be sown in the fall, and what is the best month to do it in? (2) Which is best: the small black seed or onion sets? (3) If a crop is started in the fall, how is it to be protected through the winter. (4) Is fall sowing better than spring?

ANS.—To produce "sets" which are the small bulbs, sow seeds thickly on poor but finely prepared ground in spring, the object of poor soil being to raise "sets" as small as possible and prevent their running to seed. These "sets" are gathered in summer, dried and placed in a loft of the barn or other suitable place. In spring the best, richest soil is prepared and the "sets" which are now to produce onions of the largest size, are planted in drills. If proper care be given to weeding, etc., the earliest of the crop will be fit for market early in June and may all be gathered by the middle of July.

To raise onions from the "black seed," sow as early in spring as the ground can be prepared. The crop will be ready to harvest late in summer. (2) It will appear, therefore, that whether the "black seeds" or "sets" succeed best will depend upon the purposes for which the crop is wanted. (3) On Long Island, N. Y., no protection is given. But a covering of some kind may be needed in your climate. (4) We should prefer spring for sowing the seed. This produces the great onion crop. But if earliness is a first consideration, sow in September—cover the bed after the first hard frost, and uncover in early spring as soon as the frost is out. In this way onions are secured a month or so earlier than by spring planting of seed.

Layering Grape Vines.

J. A. S., Gallatin, Mo., asks what is the proper time and method for propagating Grapes by layering.

ANS.—1. Spring or Fall. Summer shoots may be laid now—but vines from them are not so strong as others. For single vines, make a little trench, six inches deep, and bend the cane into it, securing it by a stone or forked stick. Then cover with earth. The soil should be rich.

Miscellaneous.

M. Knight, living in some one of the nine Hulls in the country, asks for the length, breadth, and probable cost of the "Cheap and Convenient House," a plan of which was given in the RURAL for March 16th.

ANS.—As shown on the plan, the length and breadth vary somewhat, as the house is neither an exact parallelogram nor square; the greatest length, however, is about 51 feet; greatest breadth, about 38 feet; probable cost, in the neighborhood of $2,500. The cost will, of course, depend in part upon the price of labor and materials in the place where the house is to be built; and as these vary somewhat in each of the nine Hulls in which Mr. Knight may live, so far as his note indicates, we can give him no precise information on this point.

E. B. Reynolds, Olmsted Falls, Ohio, says: I would like to know something about artificial egg-hatching. Please let me know where I can find machines used for this purpose, and oblige a reader.

ANS.—Several firms make incubators, each, of course, having some special claim to excellence. We suppose you propose to go into the business, if at all, in a small way, and therefore suggest that you send for circulars to Prof. Corbet of Warren street, N. Y., and Day Bros. & Co., Baltimore, Md., who make good incubators. So far as we have been able to learn, artificial incubation has not proved entirely satisfactory in its results; the most pronounced failure recorded is that of a Mr. Baker, near New York, who has expended upwards of thirty thousand dollars in the unsuccessful attempt to supply our markets with spring chickens whose only mother was an artificial creature. Perhaps the science is not yet in good working order. In any event, it were well to make haste slowly.

C. P., Youngstown, Ohio, says she bought a plant of Eulalia Japonica zebrina, but that there is as yet no variegation of any kind. She asks if the florist ought not to refund the money or supply the variety purchased.

ANS.—Assuredly. We would say, however, that the leaves of this "Zebra-striped" Eulalia do not at first show their transverse stripes. They appear after a while, however, as if the variegated parts were a sort of discoloration.

R. M. Mauzey, Dewitt, Mo., wants to know where he can get a good stump puller.

ANS.—We refer him to the Chamberlain Mfg. Co., Olean, N. Y., who make a very efficient implement.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JULY 6TH.

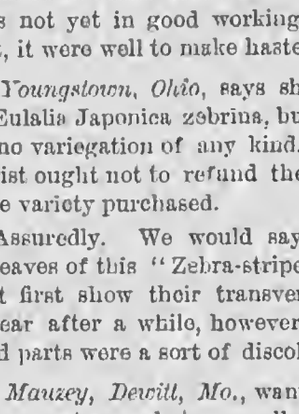
R. C. J.—E. W. S.—A. L. J.—A. E. S.—T. H. H.—H. H.—B. W.—L. A. R.—J. B. A.—N. R.—T. H. H., No. 2.—F. H. D.—S. H.—D. E. S.—L. R., thanks—T. M. S.—H. W. B.—V. D. C.—"May Maple"—S. P.—W. J. B.—E. P.—H. J.—L. A. R., N. 2—C. B.—J. C.—E. S.—C.—R. L.—J. C., No. 2.

Entomological.

THE HESSIAN FLY.

(CECIDOMYIA DESTRUCTOR.)

PROF. A. J. COOK, of the Michigan State Agricultural College, delivered a lecture upon the Hessian Fly at two Farmers' Institutes, held respectively at Paw-Paw and at Climax, Michigan.



THE FLY MAGNIFIED.

This lecture he has printed in a 14 page pamphlet, 24x16 cm., and offers to send, prepaid by mail, for ten cents, the cost of publishing and mailing. Prof. COOK is well-known to us for his successful endeavors to advance and diffuse the knowledge of agricultural entomology in his own State, and incidentally in other States.

He outlines briefly a portion of the history of this insect since its appearance in the United States at the time of the Revolutionary War, and mentions some of the books in which fuller accounts of it are given; describes it in all its forms; gives an account of its habits; what varieties of wheat it attacks most and least, and how it may be combatted. The following account is drawn mostly from Prof. COOK's pamphlet.

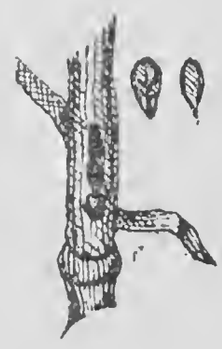
It is a true fly or gnat, having but two wings. The wings are a little longer than the abdomen, are bordered by a fringe of delicate gray-black hairs, and, when at rest, lie flat on the back. They are strengthened by three ribs running lengthwise; the two anterior ribs unbranched, the third rib sending a branch to the inner edge of the wing. The poisers, which grow where hind wings might be looked for, are short and hairy, having a yellow stem and a black head. The legs are long and hairy, with no spines on them. The head bears a half-moon-shaped eye on each side, but has no eyes on its forehead. The antennæ are nearly as long as the body, and are divided into from fourteen to seventeen bead-like "whip" joints, each one of these giving rise to hairs which seem to stand out in a circle round it. The whole length of the fly, from the front of the head to the tip of the abdomen, is three millimeters, and the spread of the wings is six millimeters. The fly is black when its body is nearly empty, except that the base of the wings, the lines of union of the joints, the spaces around the breathing-holes on the sides of the abdomen, the under surface of the body and especially the legs, are more or less marked with very light-yellow. When the female is full of eggs, her abdomen is bright-red, as that is the color of the eggs, which show through the walls of the body. A variable line of the same color may be seen in the abdomen of the male for a brief period before copulation. The entire body in both sexes is covered with short, black hairs.

At the end of the seventh, that is, of the last joint of the abdomen of the female, is a yellow, two-jointed egg-layer, which can be opened or shut like a spy-glass. Instead of this the male has curved forceps or claspers on the end of his abdomen.

The egg is about a half of a millimeter long, and a tenth of a millimeter in diameter, cylindrical, translucent, and of a red color.

The maggot grows to be four mm's long. When first hatched it is reddish; then it becomes pale and clouded with whitish spots, and the food in it shows through the skin as a green line running lengthwise; then its skin turns brown and hardens, and becomes of a bright, chestnut color. Meanwhile the insect shrinks within and away from its skin, which thereafter serves only as a case inclosing the pupa loosely. This case is commonly likened to a flax-seed, from its shape and color, and the insect, when inclosed in it, is said to be in the flax-seed state.

The insects in flax-seed state as they appear under the leaf-sheath of the wheat plant.



THE LARVA OR MAGGOT.

THE PUPA.

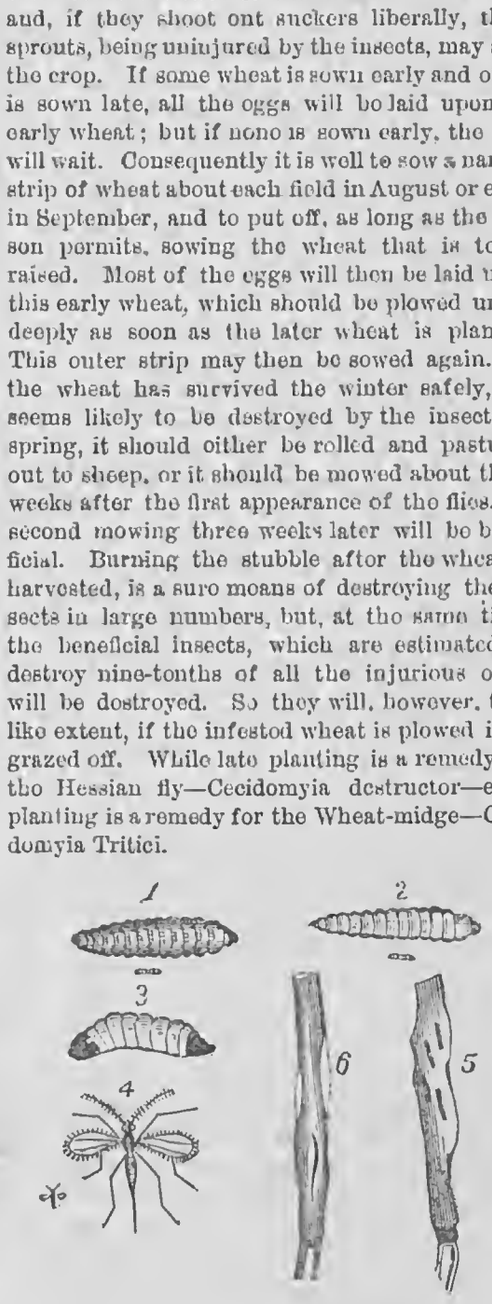
The pupa enclosed in the case resembles a maggot until shortly before the fly is to appear, its internal changes making no outward show for a long time. When the form of the fly appears, it is inclosed in a thin skin, which is shed after the fly has left its case.

HABITS.

The first brood of flies appears between April 10 and the early part of May, and the second brood in July and August, and sometimes a third brood in October. In two to four weeks thereafter, the eggs are laid. The eggs of the spring broood are laid upon spring wheat or barley, rye or grass, if this is sufficiently advanced, but otherwise they are laid upon similar plants of the previous year's seeding. In the former case, they are committed to the lowest leaves, but in the latter case, to the leaves above the first or second joint, rarely to those above the third joint. The eggs of the summer and fall broods are committed to the lowest leaves. They are laid usually on the upper surface of the leaf, sometimes on the under surface, and occasionally on the stalk. Very rarely are more than three eggs committed to one leaf; more frequently only two, and generally only one. The maggots appear in from four to ten days after the eggs are laid, according to the weather, and work down the leaf within the sheath to the base. In about five weeks, the maggot is full-grown, and soon after, it is in the flax-seed condition. By this time the young plant has turned yellow and become bent, or the older plant has become crippled at the swollen joint where the maggot lies.

REMEDIES.

The flies will lay their eggs upon the first suitable plants which they find after they are ready to lay. They injure the Diehl wheat the most severely, then, in successively less ratio, White Amber, Egyptian White Chaff, Lancaster, Lincoln, Gold Medal, Treadwell, Fultz, Clawson and other varieties of red wheat. All varieties which are very vigorous, and which stool largely in autumn, are desirable to plant in autumn; for, if sown late, they will still make a sufficient growth; and, if attacked, they will be more able than other varieties to withstand the damage; and, if they shoot out suckers liberally, these sprouts, being uninjured by the insects, may save the crop. If some wheat is sown early and other is sown late, all the eggs will be laid upon the early wheat; but if none is sown early, the flies will wait. Consequently it is well to sow a narrow strip of wheat about each field in August or early in September, and to put off, as long as the season permits, sowing the wheat that is to be raised. Most of the eggs will then be laid upon this early wheat, which should be plowed under deeply as soon as the later wheat is planted. This outer strip may then be sowed again. If the wheat has survived the winter safely, but seems likely to be destroyed by the insects in spring, it should either be rolled and pastured out to sheep, or it should be mowed about three weeks after the first appearance of the flies. A second mowing three weeks later will be beneficial. Burning the stubble after the wheat is harvested, is a sure means of destroying the insects in large numbers, but, at the same time, the beneficial insects, which are estimated to destroy nine-tenths of all the injurious ones, will be destroyed. So they will, however, to a like extent, if the infested wheat is plowed in or grazed off. While late planting is a remedy for the Hessian fly—Cecidomyia destructor—early planting is a remedy for the Wheat-midge—Cecidomyia Tritici.



THE HESSIAN FLY—VARIOUS STAGES.

Industrial Implements.

AUTOMATIC COW-MILKER.

THE Automatic Cow-Milker is a sterling-silver tube with highly-polished surface, and in all respects a nice piece of work. The tubes are sold in sets of four attached to each other by strips of leather, and seem to be as convenient a contrivance for lessening the labors of the dairy as has been introduced. W. F. ELY, Madison, N. J., is the inventor and proprietor. The following letter from Col. WELD, to whom we sent a set for trial, gives his opinion on the subject:

"I have tried the Automatic Cow-Milker sent me to be tested. If worked well on one cow repeatedly. I have no hesitation in saying that the milker is a valuable article in any dairy establishment, especially for cows with sore or wounded teats, and for milking very short-teated cows, and I think it would be particularly convenient for gentlemen having one or more cows, and liable to be left, now and then, without a person to milk them when changing servants.

"M. C. WELD."

THE AMERICAN FRUIT DRIER.

OUR market reports quote fruit that has been dried by improved processes at a much higher figure than that offered for the ordinary kind. It would appear, then, that fruit so dried must be more acceptable to the buyer, and if this is so, farmers cannot afford to deprive themselves of the increased profit derived from employing the best processes. The American Drier is a new apparatus which has secured the silver medal and approval of the Maryland Institute, for the best fruit evaporator. It is constructed on scientific principles, is simple in application, portable and cheap, and it is claimed that it not only does thorough work but produces fruit that equals that evaporated by the costly large apparatus. Those having fruit should investigate these claims, as it would be greatly to their advantage to produce fine evaporated fruit without being compelled to go to the large expense necessary in most instances. Catalogues, etc., on application to the American Drier Co., Chambersburg, Pa.

The Poultry Yard.

FEEDING YOUNG DUCKLINGS.

GEN. W. H. NOBLE, BRIDGEPORT, CT.

SOME one says, in a recent RURAL, that young ducks should be fed on curds. Pray tell, can nobody raise the quacking pets but those who keep cows, or are close by some great dairy? Why do so many writers about the homestead and the farm, put out just such crude ideas? Why, in face of death from the solid pack of Indian-meal in the stomach of duck or horse, not say that both should be fed on curds? There would be just as much sense in putting the horse on that regimen as the ducklings. Now, when you get at the trouble with fine-ground, raw Indian-meal, it comes to every animal fed on it pure and simple. It not always, but often, packs in the stomach into a hard fermenting mass that kills, unless you loosen its solidity, or in some way rid the inner animal of its load. Much of it, taken alone, just wet up or quite dry, is a pretty sure kill, for duck, hog, or horse. The reason is that its swelling, moisture-absorbing mass does not get softened by the fluids which the glands and stomach secrete, and the stomachic movement works on a solid ball. Warmed by the animal heat and its own fermentation, it cements into a mass that ferments and kills.

There is another reason that comes home closer to the duck. Broad bills were not made, as a rule, to furnish their inside food machinery with dry grist. The duck and all aquatic birds by nature feed on soft, and pretty much on animal food of the softest kind. Now, boiled Indian-meal mush-like, soft and well cooked, never hurt a duck. Grub in the style of spoon victuals, whether of corn or flour cooked or raw, never yet killed one.

As a rule, a duck likes soft food, and loves dearly to muss it over, and search through it for dainty bits with his bill. They should, therefore, be fed in a pan, or a little trough, in which they can fish around and glory in nabbing some morsel about the fit of their gullet. How quickly their bill goes up, and the goody goes down. Then back goes the greedy spoon-bill for another search.

Now, I do not think pure, fine corn-meal, however mixed, uncooked, is best for young ducks. But if given raw, and mixed with fluid, so that when stirred up and tousled over with their bills it's about as thick as gruel, I will pay well for all the ducks it kills, even if they don't have curds. But if you feed them corn-meal raw, by all means have it merely cracked. I think all who raise fowls largely should have a small iron hand-mill, made to regulate the fineness of the meal. It will take but a few moments to grind all needed for the juveniles.

Now, when anybody has a tale to tell through the RURAL, about this or that, let him remember that it is looked to for instruction. Nobody has any business to put forth a rule of work in any line, till he knows the whole wherefor he speaks.

The regimen of young turkies and chickens should follow pretty much the same caution as to fine Indian-meal. Nobody ever knew the young turkey to die much, which a half-wild mother bred up in the woods. She has got some sense about their food, and does'nt find much fine-run Indian-meal to cram them with. Turkeys like curds, too, and eggs mixed therewith and with any meal. But they wont die, if you give soft, cooked Indian-meal alone; nor will cracked Indian-corn kill them, though when quite young, fine meal and potatoes mixed will suit well.

All fowls like variety in food. So, bread, dry, or soaked to be soft and pulpy; or bread and meal and cracked corn together; or potatoes mashed up with all or either, find ready market on their feeding ground. Above all, every fowl loves meat, raw or cooked—raw best. When you live near a city or large town, it's easy to get the butchers' raw bone-scrap. Mash this up with a heavy stone sledge, on a sawed-off block of hard wood, and chop up the mashed mass fine with a hatchet. This is the cheapest food out, if you except scraps. Poultry relish fine-pounded raw bone better. It's egg food and shell material for laying fowls. It may be given quite largely with plenty of other food, though scraps are above all available for those distant from large marts, and can be reached by all. Chop or pound them fine and soak; or soak them and then chop fine; or chop and pound fine and feed dry. Either way will do, as they like the change.

But above all, about young ducks, remember that soft food is their delight. It rejoices their souls to muddle it around after it is in a thick soup-like liquid. "It's their nature to." Boiled potatoes are the one thing that leaveneth the lump to their hearts' content. They live by the sifting and search which they give to the mud-hole and the pool, and the soft food they there find. So give them soft food—meal and bread soaked in a little milk or the water in which meats have been boiled, and the sundries of the swill-tub. Plain stale bread, meal and water mixed with boiled potatoes, will in either state meet with welcome.

Another whim about young ducks is, that they must not be allowed a bath till some weeks old. This is a mistake. It is indeed best, till they get strength and the growth of some weeks, not to let them wander around loose after it, or to tramp with their mother-duck or old hen, through the wet grass. But in the little pen, to which at first they should be confined, a sunken shallow pan or basin, or any reservoir out of which they can readily climb, will be their delight.

Now my hand is in, let me say that the counsel so often given about variety of food for poultry I heartily indorse. But that variety can be had out of different states of the same grain. As a rule, the full kernel best suits their taste, and will do well enough when they have good range in which they can pick the coveted variety, in bugs and grass, and little seeds of weeds, and worms. But the practice of one of our best poultry markets, shows that Indian corn, whole or cracked, or fine meal scalded into mush, or cracked corn boiled into a hominy, or the fine meal merely wet up with water and swollen, will, each on different days or meals, furnish a variety to fatten and delight.

CHICKENS AND EGGS.

THE poultry business, although there is of it only a little here and little there over the whole country, yet when all counted together, is of immense extent. Probably no people, as a nation, consume more poultry and eggs than Americans. Indeed, the quantity of eggs and fowls consumed in our large cities is enormous, amounting every year to millions of dollars in value. The trade in poultry and their product is in fact one of our largest internal commercial interests. I will not here trouble with figures or census returns, for one would then be lost in the vastness of the the business which seems almost incredibly large, but which, nevertheless, is a matter of indubitable reality.

Besides the large numbers of poultry raised for markets, what would an American country home be without its chickens! As soon as the farmer's or laborer's children are old enough to know a chicken when they see it, so soon does their interest begin with regard to their prating, cackling pets, and they soon want to be busy with the little chicks—feeding or protecting them; nor do they think it anything laborious, but take delight in driving away the dog or cat, carrying them scraps from the table, and otherwise making themselves useful. The labor performed in families by young people in this way, if all added together, would, like the value of the stock, prove to be immense. If not done by these, much of it would not be done at all, as men are generally employed at harder work on the farm. Much, indeed, of the great amount of poultry is a clear accumulation of wealth by the farmers' wives and children.

Nothing on a farm brings more pleasure than the poultry when well cared for. Too many look upon poultry-raising as a lottery; they say it's all in *luck*. No, it is management; even the dreaded gapes has no more terrors for those who can extract the vile worm that causes such distressing annoyance; and it is easily done, when one has once seen the operation performed. Where hens have a good run, they cost but little to keep during the summer, and supply many a good morsel. This is so often done, that it is sometimes forgotten or taken as a matter of course; but let the eggs and chickens used for one year in a country home, be taken into account, and one is astonished at the quantity. In summer, when the farmer's wife is too busy to cook fresh, tough meat, she flies to the egg-basket and quickly makes up a good meal with fresh-laid eggs, but often forgets the quantity used in this way. The number of chickens used in some families during a year, is quite large. Our chicken pot-pie is now considered a national dish, and truly it deserves to be so. Either broiled, roasted, or served up in any other way, chickens are toothsome and handy, until the one-year-old fowl makes a good stew or pot-pie. Some prefer a fowl of that age to a young chicken, as the flesh is firmer on the bones and is of a rich, full flavor. Often, too, the farm is situated far from a market, and then a chicken comes very handy to a meat-hungry hard-worked family. In harvesting or busy times, when both horses and men are too tired to go far to market, what is more agreeable than a nicely-cooked chicken!

HENRY HALES

Dairy Husbandry.

HOW TO MAKE THE DAIRY PROFITABLE.

E. W. STEWART.

THE present outlook for dairy products is considered, by the great body of dairymen, as discouraging, and no doubt causes many to desire a change for some other specialty. This uneasiness is often exhibited by some dairymen when dairy products are more remunerative than now. They are wont to change from cows to sheep, from sheep to beef cattle, then back to the dairy again, remaining in one branch only long enough to incur the expense and not to have reached the legitimate profits.

There is not any specialty in agriculture which can be tested properly in two or three years. Experience is a large factor in success in any branch of business. One dairyman will make more clear profit out of his herd with butter at 20 cents than another with butter at 30 cents. The increase of his product per cow from selection and his management in feeding, will add to his neighbor's result more than the 33⅓ per cent. The one will milk his herd, year after year, without learning anything of the individual character of his cows. He does not know which ones pay or which run him in debt. He is one of those who think a cow is a cow, and that all cows average about alike.

A wise dairyman knows that each of his cows has a character of her own, and that that character determines her value in the dairy. He knows that, when dairy products rule strong in the market, it requires a product of 3 000 pounds of milk to pay expenses. If a cow does not exceed that, she pays him no profit and often runs him in debt even for a portion of her food, when the milk is sent to the cheese factory. If the milk is used for butter making, he then knows that 20 lbs. of milk from some cows will make more butter than 30 lbs. from others, and thus it is a question of quality as much as quantity. One cow gives milk yielding very rich, yellow, aromatic cream, another colorless and flavorless cream. The latter animal is seldom worth keeping, even though yielding a large quantity of milk.

Again, a cow is often given a better character than she deserves because she yields a large mess of milk for a short time at the flush, whilst her yield through the season is less than that of another cow that gives only two-thirds as much per day at the best, but holds out her milk two months longer. The value of a cow depends upon her gross proceeds per year, and not upon her yield of milk for two or three months. All these facts must be determined by a test of each cow on her own merits.

Every dairyman should fix a standard, below which no cow should be retained in the permanent herd. This standard should not require the highest production, but rather such average yield as may easily be reached with good feed and care. This standard will then be the yield of the lowest cow in the herd, while the average will be considerably higher. No dairyman, who has studied the question of profit and loss in his business, will fix a standard below 4,000 pounds of milk per year, for this is the minimum yield on which a profit may be made. But he will often be able to reach 6,000 pounds or more, and, with reasonable care in the selection, his average will reach 5,000 pounds per cow for the herd. And if butter be made, the yield should be 200 lbs. per cow, with a herd of common stock. Yielding this average, and if they have been selected for richness of cream, they should yield 250 lbs. of butter per cow. This will form a basis also for 500 lbs. of cheese per cow, and therefore should yield, on an average for any term of years, at least $50 per cow, besides what may be made from the refuse milk in butter making or whey in cheese making. The refuse milk, in butter making, should pay for the labor, leaving the $50 for the keeping, interest on the cost of the cow, and profit. In cheese making the whey is worth less than this for pigs or calves, and would thus reduce the profits somewhat.

The selection of these profitable cows may be made very easily, by simply weighing the milk one day in each week, if cheese alone is to be made; and if butter is to be the product, then in addition to weighing the milk, each cow's milk, for a limited time, must be set by itself, so that the color, quality and quantity of cream may be noted, and the cream must also be churned into butter, as the percentage of cream does not determine the percentage of butter. A cow whose milk requires more than 25 lbs. for a pound of butter should not be kept for butter making, but should be sold for cheese making. Now whilst dairy products are low, the time is most favorable for selecting the herd, and weeding out all cows that do not come up to the standard for which the cows are kept.

Landscape Gardening.

ORNAMENTAL WATER SPOTS IN GARDENS.

WATER in landscape attracts the eye more powerfully than any other surrounding object, and therefore it should never, if avoidable, be placed near a boundary, or near any object to which it is not desirable to attract attention. The margin of pieces of water in garden grounds, when designed to imitate nature, should be as nearly as possible a refined representation of what is seen in natural lakes. The grass sods should never touch the water, as they too frequently do, because the green of the one and the blue of the other do not harmonize. In nature the harmony is provided for by the water sinking lower at one time than it does at others, which naturally leaves a dark line of soil even in the most unfavorable cases, or a narrow line of bright gravel or sand in cases most worthy of refined imitation. As substitutes for gravel, stones may be introduced here and there, being grouped either with plants on the shore, or with aquatics, the shades and reflections of which will produce a degree of variety and effect which will go far towards completing the beauty of the scene. Another rule to be remembered in the placing of water, whether in imitation of nature or in the creation of artificial effects, is that regard should always be had to the surrounding scenery. Water, in imitation of nature, should be placed, like the natural element, in what is in reality or in appearance the lowest portion of the grounds; water in highly artificial scenes is not, however, subject to this rule.

E. Dorado Co., Cal. W. C. L. DREW.

Horticultural.

STRAWBERRY BLIGHT.

SPAULDING CO., GA., June 15, 1878.

I SEE in the RURAL for June 15 a communication from Messrs. E & J. C. WILLIAMS concerning Blight in Strawberry plants, a subject which I am anxious to see further discussed through the same valuable medium. I have been experimenting for several years with Strawberries, often paying as high as one dollar and a half for a dozen plants to make a trial, and then throw away after proving them worthless in this soil and climate.

Last year I bought two new varieties, "Monarch of the West" and "Hexamer's Seedling." They were planted in February and grew well, showing on each variety a few berries which were left to ripen, so that their comparative merits might be tested. Early in the season, however, the Hexamer's Seedling began to wither and die out until I nearly lost the stock of them, while the Monarchs continued to grow and spread until the whole bed was covered with runners. Then, when winter came on, they continued to grow and were green all winter, and early in the spring began to bloom, and were first in ripening of seven different varieties. They were very large, many of them measuring five inches in circumference, and of very sweet and delicious flavor, while the Hexamer Seedlings showed but little disposition to grow, and what did grow ripened but few berries—inferior in size, but of good flavor.

About the first of June, I noticed one of the plants of Hexamer wilting and attributed it to heat, as we were then having very hot, dry weather; but since then it has been raining several days, and still my plant did not revive; so when the RURAL came and I read the article on "Strawberry Blight," I went and examined the roots of my plant and found one large grub and two small, dark-brown, long-nosed beetles, all of which seemed to be living on the roots of the plant. I had come to the conclusion that there was a difference in the hardiness of the Strawberry, and that some would not stand our hot summers and others would, and had also concluded that the Wilson Albany and Monarch of the West, both of which have short foot-stalks and broad, thick, green leaves, would stand our climate well and yield remunerative crops, while the "Hexamer's Seedling" and "Agriculturist," both of which have a light-grayish leaf, thin and woolly, with longer petioles, would succumb to our hot, arid climate, and prove to be a poor berry in Georgia. I have had the Agriculturist to die out badly before, but never sought out the cause, and as the question is up, would be glad to hear from some other Strawberry-growers in the Southern States on the subject. I am satisfied that because a Strawberry is good in New Jersey is no evidence that it will prove equally good in Georgia. Climate and soil have something to do with the growth and fruiting of the variety.

J. G. RHEA.

STRAWBERRY NOTES.

WITH us, the strawberry season has just closed. The acreage exceeds that of former years, and the yield has been enormous, beyond all precedent. The main crop sold at four cents per quart. This low price was a great blessing to consumers, while the grower realized about the usual profits, per acre, necessitating, however, much additional labor.

Among the many thousands of quarts literally thrown upon our market, one rarely found any other variety than the familiar "Wilson." Finer-flavored varieties, when offered in market, sold only a trifle higher. Growers of fine-flavored fruits receive very little encouragement from consumers.

A writer in the N. Y. Tribune, charges strawberry growers with desiring only three qualities in the strawberry: that they shall be "big, red, and prolific." If this charge be true, why is it true? I think fruit-growers will find it to their advantage to grow for the public just what the public requires. So long as consumers are unwilling to pay a fair price for a good article, just so long will we raise "big, red, and prolific" strawberries for their consumption. A person can buy plenty of choice fruit, if he is willing to pay a remunerative price for it, but to expect the best, at the cost of the poorest, is unreasonable. People who desire choice fruits, grown at a loss, had better engage in the business themselves instead of writing complaining newspaper articles.

In this vicinity I find these complaining gentlemen will spend their own time, and hinder me, to cheapen their purchases; will travel whole blocks to save one cent per box on berries, and then when they get beat, as they almost invariably do, their indignation is great. Now, Gentlemen, whether correspondents of newspapers or not, you can get the best of every thing by paying a just price, and only in this way. Try it, and if you do not find it so, then please engage in that line yourself, and thus supply what others fail to do.

NELSON RITTER.

Onondaga Co., July 1, 1878.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Jersey Herd of H. S. Parke, The (Illustrated).... 437
Fat-Stock Show at Chicago—G. E. Morrow..... 437
Bow Park Short-Horn Sale..... 438
Drainage—B. C Carpenter..... 438
Hay and Hay-Making—A. M. Van Auken..... 438
Farm Notes—S. Rufus Mason..... 439
Kentucky Notes—S. E. Hampton..... 439
Catalogues, &c., Received..... 439
Parisian Correspondence—Threber..... 441
Nurserymen's Convention, Proceeding of the.... 441
Hessian Fly, The (Illustrated)..... 442
Cow-Milker, Automatic..... 442
Fruit Drier, The American..... 442
Feeding Young Ducklings—Gen. W. H. Noble.... 443
Chickens and Eggs—Henry Hales..... 443
How to Make the Dairy Profitable—E. W. Stewart..... 443
Ornamental Water Spots in Gardens—W. C. L. Drew..... 443
Strawberry Blight—J. G. Rhea..... 443
Strawberry Notes—Nelson Ritter..... 443

Everywhere:

Garden City, Long Island—L. A. Roberts..... 439
North Carolina Notes—Rev. A. W. Mangum.... 440
Across California—Specs..... 440
Life among Farmers in North Carolina—Virginia Durant Covington..... 440
Dallas Co., Ala..... 441
Quebec, Canada..... 441
Sherman, N. Y..... 441

Answers to Correspondents:

Rhinoceros Beetle..... 442
Churning Cream—Dr. Hoskins..... 442
Raising Onions..... 442
Layering Grape Vines..... 442
Miscellaneous..... 442

Domestic Economy:

Summer Siftings—Annie L. Jack..... 448
Washing—May Day..... 448
Queries Answered..... 448

Markets..... 449

EDITORIAL PAGE:

Farm Lines..... 444
New Market for Horses, A..... 444
From Another Point of View..... 444
The Outlook..... 444
Brevities..... 444

LITERARY:

Poetry..... 445, 446, 447, 450
Chris' Graduation Dress..... 445
"Hang the Baby!"—Alice Gray..... 446
A Plan for the Communists..... 446
How to Keep a Piano..... 446
Americanisms..... 446
Magazines..... 446
Bric-a-Brac..... 447
Whisky Drinking in New York..... 447
Mabel's Homily on Parlors—J. E. McC..... 447
A Mother's Heart..... 447
Commended to Mothers, in the Interests of the Children—Busy Brains..... 447

Reading for the Young:

Pocket-Money for Young People: No. 9—Mrs. A. E Story..... 450
A Giantess..... 450
"They Write too Old for their Age"..... 450

Sabbath Reading:

Interruptions in Our Work—E. M. G..... 450
Personals..... 451
News of the Week—Herman..... 448
Wit and Humor..... 452
Advertisements..... 449, 451, 452

THE
RURAL NEW-YORKER.
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Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY JULY 13, 1878.

MANY of our old subscribers have written to us requesting that we would sell them the Cricket Clock. Others have complained that the offer (now withdrawn) was of advantage only to new subscribers. In order to satisfy all so far as we are able to do so, we have now the consent of the manufacturers of the clock to offer it to our subscribers—*and to them only*—until the 20th inst. at $1.75 each, delivered to the express office.

A NEW MARKET FOR HORSES.

WITHIN the past year the exportation of horses from this country to Great Britain has acquired very considerable dimensions. With only two fast exceptions, all the lines of steamers leaving this port for the British Isles are accustomed to carry over weekly shipments averaging from forty to seventy animals, while on all the vessels of the two largest lines there are stables especially arranged to accommodate upwards of 100 horses at a time. The prospect of war between England and Russia may, of late, have given a special impetus to this branch of trade; but apart from this, the requirements of business and the comparative scarcity of horses across the Atlantic, render it highly probable that, ere long, this country may become a large source of supply of horses for the British and Continental markets. Leaving war out of the question, England does not breed horses enough to supply her domestic wants; and the increasing use of "tramways" or street cars in the United Kingdom and the Continent, must create a large and growing demand. According to the last census in each country, there are 9,333,000 horses in the United States against 2,762,000 in Great Britain, and the newspaper press of the latter have recently been full of comments on the scarcity and high price of horses. Animals worth from $100 to $150 in the market here, fetch $350 across the water, which certainly leaves a liberal margin of profit above the cost and risk of transhipment. The agricultural returns of Great Britain for 1875 estimate the average selling price of horses in that country at £77, or about $375 per head, whereas the statistics of our Department of Agriculture for 1877, show that horses between five and seven years old, broken to saddle and harness, can, on an average, be purchased where reared in this country—those 15 to 15½ hands high at from $75 to $100, and those 15½ to 16½ hands at from $100 to $125.

In view of the inadequacy of the supply of good, sound horses in Great Britain, therefore, as well as of their comparatively high price, a company has been lately formed there under the patronage of some of the highest names, civil and military, in the kingdom, the title of which—The British Horse Supply Association—sufficiently explains its object. Canada and our Western States, especially Kentucky and Illinois will, at least at the outset, be the principal points where purchases on account of this organization, will be made. The extent the trade has reached in individual hands down to the present time, affords to the new company ample assurances of the success of its undertaking, and renders it highly probable that, within a short time, its agents will be purchasing stock from the practically illimitable supplies to be found in our markets.

In view of the transatlantic outlet for this branch of agricultural industry, which must soon be opened either by the action of this company, by private effort or by both combined, it is of importance to our farmers and breeders to know the kind of horses that will be most in demand for this promising trade. The prospectus of the company and the character of the animals already purchased by the private individuals engaged in the business, show that the horses which will find the readiest demand at the best figures must be large, powerful, well shaped, upstanding animals, with good bone, substance and stamina, such as are suited for every description of work—in a word, good general-purpose horses. Carriage horses, stout saddle horses, and hunters able to carry weight, will also find a good market; but the general-purpose horse, being alike serviceable for home use and profitable for exportation, will be the best animal our farmers can breed.

FARM LINES.

How many of our readers, owning farms outside of the districts surveyed by the Government, have descriptive maps or plots of them by which the boundary lines could be re-established if they should, from any cause, be destroyed? It would seem that a matter so important would not be so often overlooked when the expense of surveying and plotting is so comparatively small.

It does not require the highest degree of engineering skill to measure the courses and distances of farm bounds. Any boy, or girl either, of ordinary intelligence, can learn enough of surveying in three months, by giving to its study one hour each day, to do it correctly. No further knowledge of mathematics is necessary than is taught in any district school. With this and an elementary work on surveying, no teacher is necessary, although as in the case of any other study, a competent instructor is of great assistance.

Of course there will be exceptional cases where the tyro would meet with obstacles to overcome which further knowledge of Trigonometry and Geometry would be necessary, but such will not often occur. An endless number of lawsuits and their attendant expenses have grown out of misunderstandings relative to the proper location of division fences, to say nothing of the family feuds thereby engendered, which have in some cases outlasted several generations, all of which could easily have been avoided. No deed for land should be accepted that does not contain a definite description of the premises purchased. To say it adjoins Smith's land on the north and that of Jones on the east is not sufficient. The limits should be accurately set down by "metes and bounds;" the length of each line and the bearing of each course concisely given. The point of departure, or starting place, should have a permanent monument, and it is well, but not necessary, to place such at some or all of the angles.

To-day a small tree, so small as to be of no value, may be growing on or near a division line of two farms. Fifty years from now that tree alone may be worth as much as an acre of land. The fence has decayed and been reset; if one proprietor chances to be a non-resident, and the other unscrupulous, it would not be very strange if the fence should be on one side of the tree, when by virtue of right it should be on the other. How, without definite record of his bounds, can the rightful owner prove his claim? Cases similar to this are often occurring.

There seems to be prevalent in the community an idea, that if one occupies land and claims it as his for a certain term of years, without molestation, he becomes the legal owner of the same, or in other words, if he can steal his neighbor's land and not be found out until after twenty years, the land becomes legally his. But this is a mistake. The possession and occupation for any number of years do not give title, unless they be accompanied by a claim in some recorded instrument, as a deed, order of court, or the like, and not then if the title be in minor children, insane or imbecile persons.

No honest man has any inclination to take that which does not belong to him, and no rogue should be allowed to do it. To guard against this, have your farm lines surveyed, giving the adjoining owners notice of your intention to do so, that an agreement be made that the lines shall be and remain as run, and have this agreement noted by the surveyor on his minute and signed by the parties in interest.

FROM ANOTHER POINT OF VIEW.

WITH the exception of a frenzied interval, during the riots of last summer, the tramp has confined himself to mild depredations. He has had an eye single to raids on the larder, and his rashness has rarely transgressed the limit of a fierce intimidation of the women of the household after the men were afield.

This moderation, inspired by whatever cause, has, in some quarters, led to a *quasi* sentiment of pity in his behalf, and the country has had an opportunity to read magazine articles fraught with a sympathetic view of the situation, inspired, no doubt, by a philanthrophy that would have done the writers great credit in a more perfect state of society.

The methods in vogue in Delaware for abating the thievish propensities of this nomadic class have been decried, notwithstanding the fact that the existence of the whipping-post has led the tramp to eschew rambles in that State from the wholesome dread inspired by that contrivance for the suppression of crime.

Elated by an increase in numbers, or emboldened by the lenient manner in which he has been dealt with, the tramp now assumes a more threatening front. Late advices from Ohio, report that farmers are commanded to cease from using labor-saving machinery on pain of having their implements destroyed; that notices have been served, warning them that buildings as well as crops would be fired, were not these behests obeyed. Instances are reported of the actual destruction of mowers and reapers, and that timid agriculturists have reverted to the primitive methods of the hand-scythe to secure ripening crops. The braver men have met the crisis with threats of shooting the first tramp that attempts to carry out the programme.

Meanwhile, labor is in demand, at prices ranging as high as one dollar and fifty cents per day, with very little response to the offer. This is a plain demonstration of what has been affirmed, namely, that the cry of "bread or lead" is not sincere. Work is the last thing in the tramp's list of wants, but it is now high time that the subject was taken in hand seriously, and that the fellow be made to feel that law outweighs bluster.

The example set in Ohio, unless checked, will spread rapidly, and not only endanger the harvest, but paralyze one of our most important manufacturing industries. Our laws must, indeed, be impotent, if they are not equal to coping with this new danger. We do not approve of the farmer taking the matter, as he would his revolver, in his own hand. The constable and his posse were created for nothing, if not to crush just such malefactors. The justification is sufficient to warrant the wholesale arrest of tramps wherever found. If this were done, and the prisoners compelled to work for their food under State or county supervision, the active intellects of the leaders would find little appetite for composing threatening notices.

These tramps, who are at present a waste product, could be advantageously employed at repairing roads and similar occupations of a public nature, with the immediate effect of relieving from such irksome duties, those whose time and interests are of more value, thereby decreasing the assessments on property for road and poor-house taxes; for it is patent that the tramp is supported in his idleness indirectly at the expense of property.

Individual and spasmodic effort will be useless in effecting this reform, but it is right here the machinery of the Grange should be powerfully felt. The subject vitally concerns farmers, and if their organization is efficient, they have the means at hand to powerfully influence legislation to that end.

Let the grangers consolidate their efforts, send men to the legislature with matured plans, enact laws that will regulate the abuse, and teach politicians that there are interests more important, and a vote more influential to be secured, than can be obtained by meeting in convention and passing resolutions that are a sop to socialistic and communistic support,—a support which is shown to be, as in the case of the recent elections in California, in the nature of a boomerang, which always returns to plague the party that uses it.

Let there be, then, no more philandering, but prompt, energetic action, and we shall soon have the refreshing sight of the scales of justice weighing out the appropriate punishment for wrong-doing.

THE OUTLOOK.

TRUSTWORTHY reports would seem to assure the harvesting of a fair crop. It is computed that we will garner more than three hundred and fifty million bushels of wheat. About thirty million acres will be wheat, and fifty millions corn. The acreage in cotton, wheat, corn and oats is in excess of last year's. It is noteworthy that the Southern States are devoting a greater area to food crops than formerly, and that New England is increasing her wheat fields.

We shall have, barring accidents, about seventy million bushels of wheat for export, and although the price will probably be lower than it would have been had war been declared, still everything points to a strong foreign demand at remunerative figures.

The States of Pennsylvania, Tennessee, Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Minnesota, Kansas, Missouri and California will produce four-fifths of the entire wheat crop, while Illinois, with her nine million acres of corn, will certainly bear off the palm for the largest acreage in this grain.

Added to last year's magnificent harvest, this splendid exhibit should be most gratifying, and with a balance of trade in our favor, due almost solely to our agricultural products, we may surely look forward to a revival of business, and to bidding a glad farewell to one of the most severe and prolonged crises that has ever convulsed the business interests of this country.

BREVITIES.

THE Columbia College crew has been victorious at the Henley Regatta in England, beating two picked crews from England, and one from Dublin. This is a great achievement in rowing annals. It really begins to look as if there was nothing in which subjects of effete despotisms think they excel, that Americans cannot do better!

THE Woodcock "had he man's reason" would quit the woods and meadows of New Jersey before the Fourth of July. We think, in spite of the terrible heat in the morning and the rain of the afternoon, there is not one left to mourn his companions. The energy and powers of endurance which Fourth-of-July "hunters" display are worthy of a better cause.

Dr. FRANK E. BECKWITH has examined under the microscope the "blighted" strawberry vines of the Messrs. WILLIAMS referred to in this journal a few weeks since. He found in the cells of the fibrils a species of fungus belonging to the genus Perinospora. He thinks that high cultivation may have induced a weakly condition favorable to the development of this fungus. He calls it the "Brown Strawberry Rust."

MR. CLEVELAND thinks there can be no more mistaken and foolish economy than shallow draining which, in his opinion, is simply the abandonment of the chief advantages which can accrue to the soil from drainage. No person whose experience has been sufficient to give weight to his opinion, will admit that a less depth than three feet is worthy of consideration in any case, and in clay soils, or loams having a clay sub-soil, the advantages of a greater depth are so obvious and important, that it may be said—speaking comparatively—that no man can afford to lay his tiles at a less depth than four feet.

NOTES FROM THE RURAL FARM, July 6.—A little rain would be thankfully received by the farmers of the South side of Long Island. Still nothing is suffering. The soil is sandy and the sub-soil gravelly, so that we have never yet known the time that we have had too much rain at this season of the year. We need not designate particular crops when all are as abundant as the care they have received would allow. Those who take occasion to complain merely show that they have not done their part of the work.

Winter wheat is for the most part cut, and spring wheat will be ripe enough in a few days. The field of timothy and clover, referred to a week or so ago, yielded three and a half tons to the acre. Onions, both from potato-onions (multipliers), and from seeds (black), are an important crop in this section of country. The former are ready for market—the latter are looking unusually fine. The abundance of horse-flies and mosquitoes, together with the burning sun of this very hot spell, are trying alike to man and beast. Hoping that the weather may grow a trifle cooler, we are putting off for a day or so the cutting of our six acres of Clawson wheat, which ought, in fact, to have been cut ere this.

A LONG JOURNEY.

JOSEPHINE POLLARD.

"We sail to-day," said the captain gay,
As he stepped on board the boat that lay
So high and dry. "Come, now, be spry;
We'll land at Jerusalem by and by!"

Away they sailed, and each craft they hailed;
While down in the cabin they bailed and bailed;
For the sea was rough, and they had to luff
And tack, till the captain cried out "Enough!"

They stopped at Peru, this jolly crew,
And went to Paris and Timbuctoo;
And after a while they found the Nile,
And watched the sports of the crocodile.

They called on the Shah, and the mighty Czar,
And on all the crowned heads near and far;
Shook hands with the Cid—they really did!
And lunched on top of the pyramid!

To Afric's strand, or northern land,
They steer as the captain gives command;
And fly so fast that the slender mast
Goes quivering, shivering in the blast!

Then on to the ground with a sudden bound,
Leaps Jack—'t was a mercy he wasn't drowned!
The sail is furled, the anchor hurled,
"We've been," cry the children, "all round the world!"

By billows tossed, by tempests crossed,
Yet never a soul on board was lost!
Though the boat be a sieve, I do not grieve,
They sail on the ocean of "Make-believe."

[*St. Nicholas.*

CHRIS' GRADUATION DRESS.

HOWE BENNING.

"They'll be perfectly splendid, of course," said Kate Cox. "Con Livingston is going to wear India mull, with puffs and quillings and lace *ad libitum*, and Fan Ellis is to have pale blue silk; she knows what's good for a blonde, and Isa True, white crape."

"And what is Lou's?" asked Kate's audience.

"Oh, mamma and she are not agreed yet. Lou wants silk and mamma says white is the only proper thing; she was a Holyokite, you know, and the law there was white and blue sashes."

"Somewhat different style, though, I fancy, from the white of to-day, when your mamma graduated."

"Just think of it, girls! Her dress was white Swiss muslin, full round waist, plain skirt and puffed sleeves, and her blue sash—she has it yet—is not as wide as my finger is long. How they must have looked!"

"My mother says it was a great deal more sensible than the present way," remarked Cathie Floss. "I never should dare to graduate now, for fear of being the dowdy of the class. All you hear the seniors talk about is just dress, dress."

"Oh, it's splendid, I think," said another. "Almost as good as one's first ball. I mean to make a sensation when my turn comes, and be got up regardless for once."

"It will be her only hope," whispered Kate; "the sensation never'll come from the inside of her head. But it's stopped raining, girls; let's go." And the merry group scattered down the stairs and homeward.

Meanwhile, in the dressing-room adjoining, Chris sat on the floor listening to the lively chatter with a sudden dread numbing her heart. Her head had been so full of mental philosophy, literature and essays that she had forgotten she was to graduate in a dress, and now—silk and India mull! Poor Chris might as well expect a piece out of the blue sky as either of these. It had been such a happy life to study the dear books and feel that every day was bringing nearer the time when, as a teacher, she could help the patient, hard-working father and mother, and give the little ones a chance in the world. She had known that they were poor and her classmates rich, but that never troubled her sunny nature before. Everybody was good to Chris. Even the haughty Fan Ellis found it convenient to get her help over hard places, and as for Con Livingston, whom Chris worshipped in a girl fashion, hadn't she many a sweet little note and word treasured away of hers? But this dress question! Con in India mull with ruffles and lace was set entirely away.

The little plain home in a poor street was reached at last, and Chris went in to find the busy mother with hands and lap full of mending and foot outstretched for baby to stand by. He crowed and shouted at sight of his sister, and Chris took him up and went to the window.

"Mother," she said, after a while, "what am I going to wear to graduate in?"

The mother sighed. She had thought of that a great deal.

"I don't know, daughter," she said at last. "I did hope to get you a neat white, but times are so hard and father's wages are lowered and you have outgrown everything."

"Yes," said Chris, "what can it be then?"

"I don't see how it can be anything more than a light calico."

"A calico? O mother!"

"Yes, dear, I know."

"But the others have silk and mull and crape."

"Yes, dear, I know, and so does Christ who had not where to lay His head. Think it over in that way. You know, Chris, mother would if she could," and the voice trembled.

"Yes, mother, never mind; it'll be all right, I guess."

But Chris set the baby down and went up to her little room. She did not care much for supper, and the children wondered what made her so still.

When she went up to bed, and Liz and Cora were sound asleep, the poor child sat down by the open window to think it out. But the great tears welled up, and finally the head sank on the window-seat and the aching heart said all the time, "It is very hard, very hard!" and the tears rolled faster and faster.

After a long time, as it seemed to Chris, she heard some one calling very softly, "Chris! Chris!"

She lifted her head; but at first could see nothing, the room was so bright to her dimmed eyes. Then, as she became accustomed to the light, she saw a lovely face smiling upon her.

"Who is it?" asked Chris, wondering.

"I was sent to bring you a dress," replied the visitor, "to wear on your great school-day. It is only a very common one now, but it depends upon yourself to make it as beautiful as you will. Here is a little sprig of a plant called Heartsease that I picked from my Master's garden, and if you wear it with the dress it will be lovely in every eye. Will you keep it?"

And Chris said "Yes," for the fragrance was very sweet; so sweet that she thought she must pin it in her neck and wear it at once. And as she and her mother worked upon the simple dress it seemed to grow more beautiful every day, until the time for wearing it came.

"Why, Chris, how you shine!" said the little ones when she was dressed and kissed them all around.

"O Chris, how splendid!" the girls cried. "Has your uncle come from India or wherever did you find such a love of a dress?" and Con Livingston, in her dainty dress, swept all its grace and laces about her while she gathered Chris in her arms and kissed her again and again, saying, "You are just the sweetest fairy that ever was seen on this platform," until the tears filled Chris' eyes, she was so full of joy, and with a great sob she started up to find herself in the little low chamber with sloping ceiling, the vision and the dress disappeared, and only the memory of the bright dream left. But looking out to the silent moon and the still night, Chris sat and thought, until the perfume of the wonderful plant stole into her soul, and she prayed the loving Master that, however plain the dress she must wear in earthly eyes, in His sight it might be fair indeed.

"When shall I go to look for my bonny calico, mother?" she asked in the morning. "I must begin it soon."

"Do you think you can be satisfied, Chris?"

And such an anxious question as it was. The mother had lain awake too that night.

"Of course I can, mother. It's me, not my dress, people must admire for once."

"Here is the money, then. I have saved it as I could."

Chris thought so when her pocket was weighed down with the nickels. But she realized, too, what the "saving" of her mother had been.

Liz wanted to go, so her sister waited to comb the tangled hair and find the lost hat before starting out, throwing back kisses to Cora and baby.

"I was afraid Chris would be broken-hearted quite," said the mother, fondly; "but I do believe she's the best girl ever a mother had."

And, meanwhile, up in a great block of stores Chris and Liz were turning over the many piles of prints, selecting first one and then another, until fairly bewildered with so many.

"I think I'll have this," said Chris at last, choosing a white ground with a delicate sprig of black.

"O Chris, take this. See, it's almost the same, but it's blue, and so pretty."

"But I like this better, dear."

"Oh, no, this is so lovely."

Now Liz was only a harum-scarum girl of eleven, and the black did seem the prettiest; but Chris thought it did not matter so much as pleasing her sister. So Liz was gratified, the little bundle made up, and they went out.

They were very busy days that followed. The dress got along but slowly, for lessons and baby must have first place of course.

It was almost examination-day, and Chris had stopped one night where she could have the quiet schoolroom to go over the topics of that long Literature that was to be the final recitation of the seniors, when she heard Fan Ellis' voice:

"I do wish some one would go over these topics with me. I never can recite unless I go over them once out loud. Won't some one hear me?"

But the girls all had too much business of their own, and they realized what hearing Fan, the dunce of the class, would be. Chris saw her coming out of the dressing-room with tears on her cheeks. That touched her.

"What is it, Fan? can I help you?" she asked from her corner.

Fan turned. "Is that you, Chris? I want to go over my topics with some one, and the girls are too busy. They have time enough for me when I have a treat."

"I'll hear you, Fan."

"O Chris, that's good! When?"

"Now and here," was the reply.

It was almost dark when the two girls left the school building, and the topics only two-thirds through then.

"We'll finish to-morrow night," said Chris.

"Thank you, Chris: I never studied so hard before, but you see my father is to be here, and he says if I do well he will give me a watch and chain, but if not, I cannot have one for two years."

"I hope you will," said Chris heartily, "and I guess you will, too." But she wondered about her own lesson until she found that helping to fix it in Fan's mind had been better for herself than any amount of study, and so she was fully repaid.

It was the night before the great day, and Chris came home late to find the dress still unfinished. Baby had been sick all day and the mother looked pale and anxious.

"Only one ruffle more for the overskirt, dear," but Chris knew that it was three hours of hard work, and it was already nearly nine o'clock. She went up to her little room a moment and then came back.

"Let me try it all on, mother," she said then; "the children want to see it before they go to bed;" and after all had been duly admired, she said, "There is enough on it now, mother; and we'll hang it up till morning, when I'll come out like a queen, see if I don't."

"But you wanted another ruffle, dear."

"I did—but do not. Tenses change you see, and so must moods. We'll have a good sleep, and baby'll be all right in the morning. So that's all;" and the look of glad relief that came to the tired mother's face was ample reward for the girl's self-denial.

But Chris was not to do all the good work of the world. While she was reading her essay that night to the Professor. Con Livingston called a secret session of Seniors in the dressing-room. "Girls," said Con, "I've found out something splendid to do. Do you know Chris has got to graduate in a calico. Our sewing-girl knows them, and she has seen it. She says it is just as sweet as a calico can be, but Chris felt dreadfully about it at first, of course, then she gave it all up. Now you all know Chris is just as good as she can be and has helped every one of us at some time."

"That's so," said Fan Ellis.

"And she's got a splendid essay," continued Con; "Miss Markham says so; and now let's each one engage one or two friends to throw her bouquets, so she'll be sure to have as many as anybody and be as happy as she deserves; will you agree?"

The girls promised in chorus. "And let's get her a fan," said one, "a pretty plain white one. She'll be so pleased." So that was settled, and the confab broke up and every listening mouse kept the surprise from Chris.

It must be confessed that she made a very pretty picture at home, the trim black-kid boots, the jaunty dress with filmy ruff at the throat and a pale rosebud in place of jewels; but as she came to the great building and saw the crowds of gayly-dressed ladies and elegant gentlemen going up the steps her heart sank a little, and she stole up the back-stairs to the recitation-room where the class were to meet. They were all there when Chris opened the door, glorifying it, the girls thought for a moment with the bright flash and glimmer of the trailing robes.

"Here she is, girls!" exclaimed Connie, catching sight of the figure in the door. "How late you are, but come here, please, we have something sweet to tell you. Come, Fan."

"Please accept this, Chris, from your classmates," said Fan, gently. "We all wanted you to remember us," and the daintily-gloved hand laid the pretty box in Chris' ungloved one, and then they all eagerly watched the little blushing face with smiles and tears chasing over it as she unfolded her gift, and were more than thanked.

Then Con led her into the dressing-room. "I brought a flower on purpose for your golden locks, dear; let me put it in. There, that's lovely!"

"You thought of me?" said Chris, lifting wondering eyes.

"Why, of course, you pet!" and then the dream came true, for the beautiful, dainty Con folded her right into all the delicate finery and kissed her again and again. "You have helped me to be a better girl, Chris, and I thank you for it always."

Then they all went down together and took their seats on the platform, and as one after another came forward to that most dreaded ordeal, reading her essay, and was thanked by thoughtful friends with bouquets and applause, Chris was so happy for each, and over her fan, and Con's kiss, that her speaking face was fairly radiant; and when her name was called, the seventh on the list, she had no thought of fear, but her sweet, clear tones rendered the essay full of feeling. It was a tender, pathetic thing, and many hearts were touched by its simple words, but when it was finished, and Chris turned to go, there was a perfect storm of applause, led by Judge Livingston, and the bouquets came fast and thick. Chris sat down with her lap full in a perfect maze, and every one of her classmates found occasion for the handkerchiefs they had provided only for ornament. And so Chris learned that wearing love in the heart makes fair in all eyes the simplest dress.—*Christian Weekly.*

A LONG JOURNEY.

MANY people are puzzled to understand what the terms "fourpenny," and "sixpenny," and "tenpenny" means as applied to nails. "Fourpenny" means four pounds to the thousand nails, or "sixpenny" six pounds to the thousand, and so on. It is an old English term, and meant at first "tenpound" nails (the thousand being understood); but the old English clipped it to "tenpun," and from that it degenerated until "penny" was substituted for "pounds." So when you ask for fourpenny nails now-a-days you want those of which a thousand will weigh four pounds. When a thousand nails weigh less than one pound, they are called tacks, brads, etc., and are reckoned by ounces.

THE thoroughness of school education in Massachusetts is shown by the recent statistics of the bureau of labor. Only one per cent. of the native farmers of the State are illiterate, while 20 per cent. of the foreign-born inhabitants are so. It is not strange that the illiterate stay in the lower, poorly-paid grades of labor. The moment a man's intellectual faculties are trained he can do something better than saw wood or carry a hod; or, if reduced to common labor, he can do it more neatly and rapidly, so as to secure better pay and more permanent employment.

Literary Miscellany.

THE BACKBITER.

THERE'S some one living in this town,
(Maybe you know her name,
And maybe, should I write it down,
Your own might prove the same.)
Who, when you say, "He's good," will cry,
"Indeed! You think that's true,
But," very confidentially,
"You wouldn't—if you knew!"

One says, "What pretty girl goes by?"
"Oh, horrors! you don't think
So!—Since we're you and I,
I'll say her parents *drink*.
And she,—well, I won't tell it out,
Though I've no doubt 'tis true.
You think she's nice and pretty,—but
You wouldn't, if you knew!"

If one sings sweetly, "How she flats!"
If dressed in taste, "*What* style!"
Supremely "vulgar" all her hats,
Her dresses simply "vile."
And when good Deacon Busby failed,
(A noble man and true,)
She said, when we his lot bewailed,
"You wouldn't,—if you knew!"

Let those admire and love who can
This malice-breathing dame,
Who seems to think a prosperous man
Must surely be to blame,
That beauty is a mark of sin;
That goodness must be crime;
She sees but thieves and rascals in
The heroes of the time.

Sometimes she doesn't hesitate
To tell us what *she* knows,
And in nine cases out of eight
A lie is all she shows.
For virtue's sake, I hope to find
One good old doctrine true.
Some heat for such *I* should not mind,
You wouldn't—if you knew.

[*Springfield Republican.*

"HANG THE BABY!"

ALICE GRAY.

"THEN you won't go, Alice?"

"No, Herbert—I am sorry—but the baby!"

"Oh, hang the baby!" and Herbert flung out of the room, slamming the door behind him.

Alice stood looking at the door, growing whiter and whiter. Then she gave a heart-breaking cry, fell on her knees by the cradle, and hiding her face in her hands, sobbed bitterly.

She had looked forward so long to going to this particular party. It was given by Mrs. Mountjoy, one of the leaders in society, and all who were eminent in politics, diplomacy, or literature, as well as distinguished in the fashionable world, were sure to be there. She had been kept at home so much since baby had been born, that she really felt the need of a little variety and relaxation. But baby had been threatened with croup a week before, and the fond mother had not yet recovered from her fright. Baby, she admitted, was now better, "but not fit," she declared, to be left, at least with only the nurse to look after it. Nurses are so careless, everybody had told her, even the best of them. So she felt it her duty to give up the party. She had not asked Herbert to give it up also, and even said there was no reason he should stay at home; but still, in her heart of all hearts, she hoped he would.

"He said, 'hang the baby;" yes, he did, darling," she murmured, with indignant emphasis, as she bent over the little unsconscious sleeper. "It was your papa who said that, and he has gone to a brilliant party, with such thoughts of his wife and child! Did you come, dearest, to estrange us from each other?"

This awful idea called for bitter sighs.

Herbert had said such beautiful things in her trusting young maidenhood. "Never should their lives run in separate channels, as those of some married people of their acquaintance did"—"never a joy accepted that did not make them one"—"never a barrier should come between them." And now to think that this wee babe, with its golden curls, this beautiful little helpless creature should part them, as never strong hands could!

She pictured the gay assemblage, and her Herbert dancing with fair young girls, smiling on others, and leaving her to die of heart-break.

Her imagination, always too vivid, viewed him in his triumphs, until her misery took almost the form of madness.

"He didn't want me to go," she said; "he acted as if he didn't, and then he pretended to throw all blame on dear, helpless baby."

Suddenly she heard the sound of carriage-wheels outside; they stopped at the door; the bell rung; and a fairy-like figure stood on the threshold of the room, in all the wistfulness of expectancy, with dimpling smiles and laughing eyes.

"Oh, Mabel!" cried Alice starting to her feet with a glad cry. "This is indeed, a surprise. I'm so glad you've come. My darling sister!"

Forthwith ensued a scene of rapturous welcome. Then the baby was exhibited, and one would not have dreamed that a tear had ever stained the cheek of the proud mother. Then the visitor's trunks were ordered to be carried upstairs.

"But where's Herbert? In the study?" said Mabel at last.

All the light went out of her sister's eyes; her hands fell.

"He's out—out, dear."

"Good! Don't be angry, because I'm glad, for we can have such a nice little chat. You didn't expect me."

"Of course I didn't."

"Well, I didn't think of coming, as you know, for a month yet. But I thought it would be so nice to surprise you."

"Oh! I'm so glad."

And then Paul is coming," she said, blushing, "next week, to stay a month; he has business here; and he wanted me so badly to be here too. "I declare," she said, laughing, "I'll have to marry him soon to get rid of him."

"Oh, Mabel! don't marry him unless you're certain you'll be happy!" cried Alice, hysterically. "Be sure, first, he won't go to parties, and le—ave you a—lone with ba—baby," she sobbed.

"What! Is Herbert at a party?" querried Mabel, quite subdued.

"Yes, he is; and when I told him I couldn't go on account of baby, he said, 'hang ba—baby!' Yes, you little angel, your own father sai d those awful words—and then he sl—slammed the door."

"He's a viper!" exclaimed Mabel, with sudden vehemence. "A nice way to treat a wife like you—a baby like that! But why couldn't you leave baby?"

"Because he was threatened with croup last week."

"But he's well enough now—sleeps deliciously. He'll not wake up all the night, perhaps. And the nurse would have taken good care of him."

"I should have been thinking of fire, and all that."

"Oh, nonsense! You ought to have gone. But Herbert had no right to behave as he did; and he must be punished;" and Mabel threw her wraps on the bed, and took her seat by the glowing fire. "It won't do to let him get the upper hand. Ah! I have it. I've thought of a splendid plan. A charming, delightful little plot," and she clapped her hands in glee.

"Oh, Mabel, what is it?" and Alice slid down at her sister's feet, gazing in her face with expectant smiles. "What are you going to do?"

"I'm not going to do it. I shall stay here and watch baby. You are going to the party."

"Mabel! impossible!"

"Quite possible. In fact it must be done. You must let Herbert see that you're as pretty as anybody, and quite as much admired. It is decided. You are to go to the party and play a part. Let me arrange the programme."

"But, Mabel, I haven't a dress prepared—or anything. I gave up going a week ago, you see, when baby was threatened with the croup."

"Pshaw! You shall wear one of mine, one of the most bewitching, bewildering of dresses, bought from my last allowance from Uncle Curtis. Only to see it will throw you into ecstacies. Worth never composed anything more lovely. I want to see it on you. Come, come, call your maid; I am all impatience. We'll shame our bad husband into good behavior, see if we don't. No irresolution, pretty sister, mine. I'll stay at home and fancy myself mistress here, and count your pictures, vases, and pretty things, and catalogue them, so as to make mamma happy with a letter to-morrow. Order John, or Jack, or Will, or whoever your coachman is, to get the carriage—if that's impossible, send for a cab."

In less than an hour Mabel led her sister to the great French mirror, and laughingly introduced her to the loveliest and best-dressed woman she had almost ever seen.

Alice trembled a little when she found herself actually on the way to Mrs. Mountjoy's; but her sister's urgent will had conquered, and her heart was hardened by Herbert's emphatic expression concerning the baby. She was reassured, however, by Mrs. Mountjoy's hearty welcome.

"So glad you've come, my dear," she said. "Your usband said he feared 'baby' would keep you at home; but I told him it was all nonsense. You did right to reconsider the matter."

Herbert, like many handsome society men, was a little spoiled and selfish without knowing it. He loved Alice devotedly; but he was not unwilling to receive the sweet smiles and honeyed words of others; while, with a man's inconsistency, he was not desirous that his wife should play the part of a married belle.

It was while he was dancing with one of the most noted and beautiful women of the metropolis, who was more than willing to listen to his nonsense, that Herbert, looking up from the face leaning against his shoulder, while the dreamy waltz music "thrilled hearts sensitive to sadness as to joy," encountered the sparkling face of his wife, and saw her arrayed in the freshest and most graceful costume in the room. She was moving quietly along with an escort in uniform.

"Pray, don't stumble," said his partner, petulantly, for from that moment the grand repose of his manner was gone, and the lady on his arm might have been made of wax, or any other ductile material, for all he cared now.

"How the dickens came she here?" he muttered to himself, as he led his partner, absently, to a seat, deaf to all her pretty words, blind to her fascinations. "It certainly is Alice—but that dress—the prettiest thing here! and I left her quite determined not to come. I don't understand it. Dancing with that military puppy, Guinnett, too. She knows I hate him."

With these amiable thoughts, he laid himself out to gain the attention of his wife, and make her explain. It was some time before he had the chance, so he was obliged to content himself with following her graceful motions, angry with himself and with her.

"Alice! Can I believe my eyes?" he said, at last, in the pause of the dance.

"I should think you might, rather," was the nonchalant reply.

"Pray, how did you come?"

"Pray, how did you come? I rode. Did you walk?"

"Well, but——"

"Excuse me. I'm engaged four deep already;" and Herbert was forced to move aside, as a pompous acquaintance claimed her hand.

"I'd like to knock that fellow down," he muttered, angry in earnest.

Another pause, and another *tete-a-tete*. No satisfaction given. Herbert had hardly the grace to redeem his dancing engagements.

"About the baby, Alice?" he asked, anxiously.

She put her rosy lips to his ear, and in a subdued voice, exclaimed:

"Hang the baby!"

Herbert started, and changed color. To be sure he had used the same language; but from her it was too exasperating. How he got through the evening he could hardly tell. When, at last, they were together in the carriage, driving home, there might have been an open rupture, but for the determined calmness of Alice, who took everything as a matter of course.

One glance in the beautiful nursery unsealed his eyes. There by the fire, sat Mabel, in all the *abandon* of a *negligé* toilet, her luxuriant tresses falling in glossy freedom over her shoulders, while the little fellow on her lap, clutching at one long, shining curl, crowed and laughed, as well as he could for "auntie's" smothering kisses.

A sudden revulsion of feeling came to the father's heart at sight of this sweet home-picture.

"Aha! I know who contrived this plot," he said. "But I am glad to see you, Mabel, nevertheless."

"Wasn't she the belle of the ball?" answered Mabel, saucily.

"There's no doubt of that. At any rate, I didn't get a chance to dance with her."

"Of course. Who ever heard in society of dancing with one's wife?" she said, sarcastically. "I see that she followed my directions implicitly. You must learn, sir, that a house divided against itself cannot stand—that is, if one half is flirting at a party, and the other half at home crying her eyes out."

"Oh, Alice—were you really?"

"I should think she was. I can assure you that I myself saw half the house dissolved in tears, and so wretched that——"

"Mabel, hush!" said Alice, imploringly.

"Traitor, do you turn on me" exclaimed Mabel, with mock displeasure.

"My child," she went on, tossing the crowing cherub, "tell your selfish papa that he also has *some* obligations, and that if you had known you were to be the bone of contention in this family, you'd have staid in the garden of angels, where you were wanted."

Herbert was strongly affected by this audacious outburst, but it had the effect of leading him to see his duty in a new light. It taught him to reflect; opened his eyes to his selfishness; and made him, from that evening, a better and more considerate husband.

Six months from that time Alice was dressed for a party. But this time the party was given at her own house, and in honor of Mabel's marriage. Even the bride did not look lovelier; for nothing now occurred to mar Alice's happiness; and happiness, after all, is the best preservative of beauty.

"Ah! how charming you look," whispered Mabel, with an aren glance, as they passed each other in the dance. "Prettier, even, and it is saying a great deal, than when I cured your husband, by sending you to Mrs. Mountjoy's party."

A PLAN FOR THE COMMUNISTS.

SUPPOSE the communists take the money they squander in one year and apply it to the realization of communism. Let them send out a committee to Kansas, Nebraska, or Texas, where there are millions of acres as fair and fertile as the sun shines upon, with instructions to pick out and purchase a county adapted to the necessities of communism. They can buy on long time, and will have to make but a very small payment down. As a matter of fact, the money now squandered by them in one year will complete the purchase. Then let them divide their county into townships capable of accommodating two or three hundred families each, and take out their twenty thousand who are hostile to republican institutions and to society on its present basis. The railroads will be glad to transport them for almost nothing, and the avaricious grasping capitalists will be mean enough to furnish them with almost everything they need for their experiment, and the rest of the population will escort them to the depot with a brass band, and throw their old shoes after them for luck. The leaders should be made to give bonds to remain there, and to help in the work and share whatever they may have with the rest, otherwise they may get their dupes out there and then leave them in the lurch.

As for the rank and file, they might be depended upon to do something, as nine-tents of them were brought up at manual labor on the soil. Having located themselves, there need be no delay in launching their experiment, as their wants are very few. As they do not believe in churches, they wouldn't have to spend money for churches, Sunday-school books, Bibles, preachers, pew-rents, choirs, strawberry-festivals, oyster-soirees, or necktie-kettledrums. Not believing in any hereafter, their ideas of immortality would be satisfied with a small patch for a graveyard, and they could all be dumped into one grave, on the true communistic plan. Not desiring to be educated beyond the ability to read and write, graded schools, professors, colleges, text books, laboratories, polytechnics, the languages, globes, lead pencils, india-rubber, Berlin wool, pianos, foot-rules, and other dangerous menaces to the general liberty could be avoided. Having a horror of labor-saving machines, they could make it a capital crime for any communist who should be found with anything more labor-saving on his premises than a spade and hoe, and any person favoring the use of the sewing machine, printing press, telegraph, telephone, steam engine, locomotive, loom, mower and reaper, harvester and binder, fire engine, street car, windmill or water-wheel might be shot on the spot as a malefactor of the deepest dye and a conspirator against the peace and good order of the community.

In this manner the vicious and the virtuous, the strong and the weak, the sick and the healthy, could all settle down together upon a common level, share everything in common, labor for the common good or not labor at all, and have women, children, stock, goods, ground, fire, water, and air in common. They would be out of the reach of poverty, and freed from the grip of the bloated capitalist. No factory chimneys would pollute their pure air. No wheel would vex their running streams. No sound of psalm would disturb their Sabbath mornings. No shrieking engines would traverse their domain. No hum of mower or whirr of shuttle would disturb the drone of the beetle and bee in their broad acres. In a very short time they might solve the problem of maintaining existence without self-effort, self-respect, responsibilities, aspirations, or ambitions, and with no other object of life than food and clothing.—[Chicago Tribune.

HOW TO KEEP A PIANO.

THE piano is constructed almost exclusively of various kinds of woods and metals; cloth, skin, and felt being used in the mechanical portion. For this reason atmospheric changes have a great effect on the quality and durability of the instrument, and it is necessary to protect it from all external influences which might affect the materials of which it is composed. It must be shaded from the sun, kept out of a draught, and, above all, guarded against sudden changes of temperature. This latter is a most frequent cause of the piano getting out of tune, and the instrument should be kept in a temperature not lower than fifty-four degrees and not higher than eighty-six degrees Farhenheit. When too cold, the wood, cloth and skin swell, and the mechanism works badly; when too warm, these materials shrink and cause clinking, squeaking, and other disagreeable sounds. Moisture is the greatest enemy of the piano, and it cannot be too carefully guarded against. In a short time damp will destroy every good point in the instrument.

The tone becomes dull and flat, the wires rusty and easily broken, the joints of the mechanism stiff, and the hammers do not strike with precision, and if these symptoms are not attended to at once, the piano is irretrievably spoilt. Therefore do not put your piano in a damp ground-floor room, or between two windows, or between the door and the window where there is a through draught. Never leave the piano open when not in use, and above all when the room is being cleaned. Do not put it near a stove, chimney, or hot-air pipes. Always wipe the keys after playing. Never pile books, music, or other heavy things on the top. Be careful when using the soft pedal not to thump the notes. Do not allow five-note or other exercises of a small compass on a piano you have any regard for. A leather cover should be kept on the instrument when not in use, and removed every day for the purpose of dusting. A cushion of wadding or a strip of flannel laid on the keys will help to keep them white and preserve the polish. Never leave the piano open after a musical evening or dance. If you are obliged to have it in a damp room, do not place it against the wall, and raise it from the floor by means of insulators, and always cover it after playing. Employ the best tuner you can get, and, if a new instrument, let it be tuned every two months during the first year, and at least three times a year afterward. Always have it tuned after a soiree if the room has been very hot.

AMERICANISMS.

AMONG the best known Americanisms, unused and scarcely understood in England, are locomotive for "engine," railroad for "railway," horse-cars for "tramway," depot for "station," switch for "shunt" baggage for "luggage," store for "shop," bureau for "chest of drawers," clever for "good-natured," boards for "deals," calico for "prints" corn for "maize," dry goods for drapers' articles or "haberdashery," fall for "autumn," dress for "gown," fix for "repair," guess for "think," hardware for "iron-mongery," hold on for "stop," homely for "ugly," loafer for "loungor," mad for "angry," mail for "post," pantaloons for "trowsers," vest for "waistcoat," quite for "very," rooster for "cock," sick for "ill" sleigh for "sledge," stoop for "porch," suspenders for "braces," venison for "deer meat," and woods for "a wood."

MAGAZINES.

ST. NICHOLAS for July opens brightly and seasonably with a story of patriotic interest, by Charles H. Woodman, entitled "The Girl who saved the General."

After this come several lively stories. There is "The Barbecue," by Sarah Winter Kellogg, with a fine picture by Walter Shirlaw. Then comes "Sneeze Dodson's First Independence Day," by Mrs M. H. W. Jaquith, with a laughable picture, and the flavor of July fun is well kept up by the tale of "A Boy's Experience with Tar Marbles" on a very warm day, its three illustrations being by Jessie Curtis.

Besides these attractions there is a story entitled "Too many Birthdays;" and a funny poem, "The Yankee Boys that did'nt number Ten," with ten comical silhouette illustrations by Hopkins.

"How the Weather is Foretold" is clearly explained in an article by Mr. James H. Flint; Professor W.H. Brooks of Johns Hopkins' University, in a liberally illustrated paper, discourses pleasantly about various "Birds and their Families;" and "The Story of Perseus," by Mary A. Robinson, gives a pleasant peep into the wonderland of ancient mythology.

The two serials,—"Dab Kinzer," by William O. Stoddard, and "Under the Lilacs," by Louisa M. Alcott—with striking pictures by Mary Hallock Foote and Sol. Eytinge, have long and exciting installments in this number; and the poems of the issue are "Rain," by Edgar Fawcett;

"Forty, less One," by James Richardson; and "Meadow Talk," by Caroline Leslie,—the last two with capital illustrations. The Departments "For Very Little Folks," "Jack-in-the-pulpit," "Letter-Box," and "Riddle-Box," are varied and attractive.

IN SCRIBNERS' for July is continued the series of illustrated articles on Bird Architecture. A Few Antiques, shows some quaint and curious designs in necklaces, spoons and crosses. An interesting article on The Police of New York has a most ludicrous out "Mustering the Rattle Watch;" nothing could possibly present a greater contrast to our modern police in their fine uniforms than does this primitive-looking "Rattle Watch." Luigi Monti, (whose American Consul Abroad was noticed in these columns a week or two ago), contributes an article on Italy and the Pope, which throws considerable light on the much-discussed question of the "temporal power." "His Inheritance," is concluded and few who have followed the fortunes of Robert Elyot but what will be disappointed that so bright and promising a story should have so commonplace an ending. Frank R. Stockton's "Pomona Takes the Helm at Rudder Grange" is exquisitely funny. We commend its perusal to the suburban resident whose life is made burdensome by lightning-rod men, agents and tramps; more ingenious and efficacious methods of procedure against these very objectionable classes of the community than were employed by Pomona, it would be hard to devise.

THE ECLECTIC for July contains an admirable article on the Eastern Crisis by Goldwin Smith; the second installment of H. Taine's State of Paris before the outbreak of the Revolution, and an instructive paper on Vienna and Viennese Life. Beside these are, a biographical sketch of Edmund Burke; the Greatness of the Romans, by Goldwin Smith; Man and Science, a Reply to Tyndall; The Earth's Place in Nature, besides poetry, domestic and foreign literary notes and science and art. A fine steel engraving, "The Roman Children," adorns the title page.

THE article in LIPPINCOTS for July which will probably excite more interest than any other is Leonard W. Bacon's The Real Prisoner of Chillon: to those who know of this historic personage only through the medium of Byron's poem, Mr. Bacon's article will be a revelation. Margaret B. Wright gives an insight into Parisian student-life in her *An Atelier de Dames*. Chang-How and Anarky by Jennie Woodlile is an amusing account of an attempted fusion of the Celestial and Negro races. The other short stories are, a Bird Story by Wm M. F. Round; Aunt Edith's Foreign Lover by Mary W. Fisher. There is an interesting installment of the serial For Percival. A Levantine Picnic; Popular Marriage Customs in Sicily, by Guiseppo Pitre; Census of 1880, by Henry Stone; The Idyl of the Vaucluse by Charlotte Adams; A Tartar "Fight," by David Ker, and Monthly Gossip and Literature of the Day, complete a most interesting number of this popular magazine.

"SOME War SCENES REVISITED," by T. W. Higginson in Atlantic for July, contains much that will interest those who are curious to learn the effect of freedom on the late slave negroes of the South. The same magazine contains The Will of Peter the Great and the Eastern Question, by Allan B. Magruder, a most interesting and timely article. The first installment of Henry James', Europeans, promises well; Mosumo Sets Yo; or, Womans Sacrifice, by N. T. Kaucko, a Japanese story, is a novelty in magazine literature; St. George's Company, by H. E. Scudder, is an account of the society the eccentric John Ruskin proposes to found. Weak Sight, by H. C. Angell M. D., Americanisms, by R. W. White, besides poems, the Contributors Club and notices of recent literature go to make up a most entertaining number.

THE POPULAR SCIENCE MONTHLY for July, is a notable number. The leading article, by Prof. Du Bois-Raymond, on "Civilization and Science," shows the relations of science and civilization in a new light. He makes a brilliant argument, and is most happy in illustration. Prof. Tyndall tells of "Recent Experiments on Fog Signals," giving a series of interesting experiments, notably the marked results of exploding gun-cotton from rockets in air, as an effectual means of producing powerful sound waves. Mr. Geo. Chahoon has a "Warning for Destroyers of Our Forests." He shows that our water-supply is dependent on keeping our forests intact—especially spruce forests. He makes some original points not heretofore advanced, to our knowledge. Prof. Tenney, in "Seaside Studies," (illustrated), treats of anemones, etc. The question of "Pain in Hanging" is shown to be no question at all. There is no pain, at least Dr. Stacy so maintains. We are glad of it. Mr. R. G. Eccles, plain "Mister," takes up "Radical Fallacy of Materialism," and demonstrates, to our complete satisfaction, that consciousness is not matter, is not energy, is not a combination of these qualities; in short, puts the soul above everything. It is a strongly argued paper. The whole number is very interesting and brimful of popular science.

SUNDAY AFTERNOON, July number, is a very readable volume but not, we think, up to the average level of this exceptionally good magazine. The editor breaks a lance with sundry carping religious papers, and shows pretty clearly that the scope and aim of his journal is certainly as "religious" as anything offered under denominational cloaks. The serials continue, and Rose T. Cooke does a "Funeral Psalm." C. H. Richards asks, "Have we a Christian State?" and C. H. Woodworth has a paper on "The Protestants of Russia." Mr. Gilman enters the arena with, "What is the Use of an Alphabet?" and Olive A. Wadsworth talks about "Little Pilkins." We think an investment in Sunday Afternoon would be a wholesome move, and recommend it.

BRIC-A-BRAC.

GRAMMATICAL SMILES.

A CORRESPONDENT of the New England Journal has collected the following specimens of false syntax:

An Iowa editor thus acknowledges a present of grapes: "We have recieved a basket of grapes from our friend W., for which he will accept our compliments some of which are nearly two inches in diameter."

One of Sir Boyle Roche's invitations to an Irish nobleman was rather equivocal. He writes: "I hope, my Lord, if you ever come within a mile of my house you will stay there all night."

A coroner's verdict reads thus: "The deceased came to his death by excessive drinking, producing apoplexy in the minds of the jury."

A correspondent in writing of a recent convention in the city of Cleveland, says: "The procession was very fine, and nearly two miles long, as was also the report of Dr. Perry, the chaplain."

In the annual report of a town in Massachusetts we find the following: "The town farm-house and alms-house have been carried on the past year to our reasonable satisfaction, especially the alms-house, at which there have been an unusual amount of sickness and three deaths."

A Western paper says: "A child was run over by a wagon three years old, and cross-eyed, with pantalets on, which never spoke afterwards."

A SWARM OF BEES.

B patient, B prayerful, B humble, B mild;
B wise as a Solon, B meek as a child;
B studious, B thoughtful, B loving, B kind;
B sure you make matter subservient to mind;
B cautious, B prudent, B trustful, B true,
B temperate in argument, pleasure and wine,
B careful of conduct, of money, of time,
B cheerful, B grateful, B hopeful, B firm,
B peaceful, benevolent, willing to learn;
B courageous, B gentle, B liberal, B just,
B aspiring, B humble, because thou art dust:
B penitent, circumspect, sound in the faith,
B active, devoted, B faithful till death.
B honest, B holy, transparent and pure:
B dependent, B virtuous, and you'll B secure.

POISONING BY BURNING GAS.

To have our rooms pleasantly illuminated with gas is to undergo a process of poisoning, the more disastrous because, instead of directly producing the characteristic symptoms of defective blood oxygenation, the gas-polluted atmosphere insidiously lowers the tone of vitality, and establishes a condition favorable to disease. It would be difficult to overrate the importance of this household peril. Pictures are spoiled by gas, gilt moldings are tarnished, the colors of decorated walls and ceilings fade, and men and women of delicate organization are enfeebled and injured by the foul air in which gas is discharged and supposed to burn innocuously. The extent to which this evil works in the midst of domesticated families during the long evenings is not adequately appreciated. After the first few unpleasant experiences are over, the physical sensibility becomes inured to the immediate results of breathing an atmosphere charged, more or less heavily, with the products of combustion and unconsumed coal gas. It is not creditable to the ingenuity of practical men that no method has yet been devised by which the advantages of gas as an illuminating agent may be secured without the drawback of slow poisoning, with the host of maladies a depressed vitality is sure to bring in its train.—[London Lancet.

ONE DAY.

Give me joy, give me joy, O my friends,
For once in my life has a day
Passed over my head and out of my sight,
And my soul has naught to unsay.
No querulous word to the fair little child
Who drew me from study to play:
No murmuring word to the beautiful wife,
The angel who walks by my way;
No snappish reply to the hundred and one
Who question me gravely and gay,
No angry retorts to those who misjudge
And desire not a nay, but a yea;
No word to the beggar I fain would take back
No word to the tenant at bay;
No word, though I know I remember them all,
Which I would, if I could, e'er unsay.
Give me joy, give me joy, O my friends,
For the patience that lasted all day!

[*Christian Leader*..

WHISKY DRINKING IN NEW YORK.

A NEW YORK correspondent says: The proprietor of the Metropolitan Hotel told me that his bar receipts were $175 a day. If we suppose the average receipts at the bars to be $20 a day, about $220,000 would have been spent every day for liquor in New York by tippers alone. This is equal to $70,000,000 a year. It is computed that 1,260,000,000 drinks are taken in New York, and a tariff of two cents on spirits and half a cent on ale will aggregate $9,100,000 city revenue. We spend for liquors in the United States $735,000,000 a year, or nearly four times the cost of running the general government; and yet the English exceed us in guzzling by $59,000,000.

TYING her bonnet under her chin,
She tied her roving ringlets in,
But not alone in the silken snare
Did she catch her lovely floating hair;
For, tying her bonnet under her chin,
She tied a young man's heart within.

[*Nora Perry*.

NEARLY ONE THOUSAND YEARS OLD.—Alcohol was invented 950 years ago in Arabia, and was used by ladies with a powder for painting their faces. Since that time it has been used mainly by gentlemen for painting their noses, and used in a plain state because they required no powder to fire them off.

For Women.

CONDUCTED BY MISS FAITH RIPLEY

THE FARMER'S WIFE.

ANNIE L. JACK.

UP in the morning at dawn of day,
Then hardly time to her Maker to pray.
Milking her cows with a "Co, boss, co,"
Under her feet no grass can grow.
Busy, so busy, and this her song—
"The summer is short, and the winter long."
Old in her youth, often weary of life,
Bless her! GOD help her! the farmer's wife.

Chickens to feed, such a hungry crowd,
Calves to be tended of which she is proud.
Bread of the lightest and sweetest to bake,
Butter the golden, and fragrant to make;
Honey, like amber, to strain and to clear,
Fruit to preserve in its season each year,
Cheese to press, and to turn each day,
Bless her! GOD bless her! we sigh, as we say.

Washing and ironing to do each week,
Hundreds of things that a pen cannot speak;
Cook and confectioner, seamstress, is she,
Dairymaid, housemaid, and teacher to be,
Nurse, and physician, and preacher, at home,
City of refuge when erring ones roam.
"She hath done what she could," short her life's little day.
Bless her! GOD help her! my friends let us pray.

MABEL'S HOMILY ON PARLORS.

J. E. M'C.

"WHEN I get a bird and "a nest," said Howard, "I'll have no parlor in it. See what a fuss this room makes for you, cousin Mabel,—twice a year, at least. I'll warrant. There, ma'am, there is the last tack pounded down, and I'm not sorry. When will you have the things hove in?"

"Right away," said Mabel, delightedly; "while I have such excellent help. What a good thing you happened to drive over just as you did; though I will admit you have grumbled amazingly,—for you, I mean cousin Howard. Such an even-tempered, peaceable man as you are, I didn't know anything could bring you down to the commonplace level with the rest of us."

"Much obliged for your good opinion, Mrs. Mac. But seriously, Mabel, what is the use of this room, anyhow, when you have such a cosy sitting-room across the hall? Any one with sense, would ten times rather sit down there and chat and enjoy himself."

"You talk exactly like a man," said Mabel, as if that was saying about all there was to say with regard to incompetency of judgment respecting household affairs. "How would it answer to ask the prim Miss Watson, or the stately Mrs. Bullers into my sitting-room, to find that your namesake had four chairs tied together for a line of cars, and Milly had sprinkled cut papers all over the carpet?"

"First-rate; they would, of course, make allowances, knowing it was your family room."

"You remind me," said Mabel, as she carefully wiped and put in their places some pretty mantel ornaments, "of a celebrated musician who was asked to play on a piano out of tune. He was told that 'the audience would make allowances.' 'Ah! that is what people never do,' he answered. 'Nobody makes allowances, they always expect you to be at your best.' It is twice as true about the housekeeper. Nobody makes any allowance for her, or at least that sort of people is so scarce you would need to go out in the daytime with a lantern to hunt them, as Diogenes hunted for an honest man."

"A cosy little parlor, fresh and pretty, and shut up *and locked up*, if necessary, is a great promoter of peace in the housekeeper's mind. If she is ever so busy and her work is in the most unfinished state, and if the children have been made happy by the freedom of the living-rooms, there is the parlor all 'set aside' ready for any chance caller. There are a good many other luxuries we could give up before that. So don't flatter yourself, young man, that your wife will consent to abolish the parlor, at least until society can be reorganized."

"It is a good thing for the children, too, to have some spot they are obliged to respect, and that it is a special treat to have thrown open to them on birth-days, and at holiday times. I know it does them good and makes them happier and better. Now, sir, what do you say to my homily on parlors,—looks as pink as a rose, doesn't the room?" she added, stepping back to the door, and surveying her work with housewifely pride."

"I say, let's adjourn," said Howard, "and go to the other room, where we can lie off at our ease, and get out the fishing tackle, for I must have some fish yet, for supper, if you have kept me so long over that old parlor."

"I do believe your foot seems on your native heath where you can stir a room up from top to bottom, but you have been such a good, helpful, old cousin this afternoon I'll give you leave. You know where to find John's tackle, but do be careful, Howard, about your fish-hooks. I am about as afraid of them as I would be of a loaded pistol, with that crawling baby about the floor."

A MOTHER'S HEART.

THESE are Mrs. Besant's thoughts about the robbery of her child:

"Sir George Jessel is a Jew; he thinks that a parent should be deprived of a child if he or she withholds from it religious training. Two hundred years ago, Sir George Jessel's children might have been taken from him because he did not bring them up as Christains; Sir Geo. Jessel and his race have been relieved from disabilities, and he now joins the persecuting majority, and deals out to the atheist the same measure dealt to his forefathers by the Christians. The Master of the Rolls pretended that by depriving me of my child he was inflicting no punishment on me. If the Master of the Rolls has any children he must be as hard-hearted in the home as on the bench, if he would not feel that any penalty was inflicted on him if his little ones were torn from him and handed over to a Christian priest, who would teach them to despise him as a Jew and hate him as a denier of Christ. Even now Jews are under many social disabilities, and richly-gilt Christian society looks upon them with thinly-concealed dislike. The old wicked prejudice still survives against them, and it is with shame and with disgust that liberals see a Jew trying to curry favor with Christian society by reviving the obsolete penalties once inflicted on his own people. Of one thing Sir George Jessel and his Christian friends may be sure, that neither prosecution nor penalty will prevent me from teaching both my religious belief and my social doctrine to all who will listen to me, and since Christianity is still so bigoted as to take the child from the mother because of a difference of creed, I will strain every nerve to convert the men and women around me, and more especially the young, to a creed more worthy of humanity.

Sir George Jessel pretended to have the child's interests at heart; in reality he utterly ignored them. I offered to settle £110 a year on the child if she were placed in the charge of some trustworthy and respectable person, but the Master did not even notice the offer. He takes away the child from plenty and comfort, and throws her into comparative poverty; he takes her away from the most tender and watchful care, and places her under the guardianship of a man so reckless of her health, that he chose the moment of her serious illness to ask for her removal; he takes her away from cultured and thoughtful society to place her among half-educated farmers. Nay, he goes further: Dr. Drysdale's affidavit stated that it was absolutely necessary at present that she should have a mother's care; and Sir George Jessel disregards this, and in her still weak state, drags her from her home and from all she cares for and throws her into the hands of strangers. If any serious results follow, Sir George Jessel will be morally, though not legally responsible for them. In her new home she can have no gentle womanly attendance. No Christian lady of high character will risk the misconstruction to which she would be exposed by living alone at Sibsey vicarage with a young clergyman who is neither a bachelor nor a widower. The child will be condemned either to solitary neglect at home, or to the cold strictness of a boarding-school. She is bright, gay, intelligent, merry, now. What will she be at a year's end? My worst wish for Sir George Jessel is that the measure he has meted out to me may, before he dies, be measured out to him or his."

COMMENDED TO MOTHERS,
In the Interests of the Children.

Do you not think that we are apt to underrate the amount of help which the little ones are able to give us? And when the children see that their efforts are appreciated, how willingly they seem and how anxious to do their very best! But we must remember that what may be mole-hills of trouble to us, are mountains of difficulty to the inexperienced, unpractised hands; and we must only give them such tasks as are suitable to their strength and capacity. In a household where the majority of the work devolves upon their mother, how much better it would be if a certain share were allotted to each child, and the little one held responsible for the proper performance of its task.

I have a neighbor, a widow with a large family of children, who seldom hires help, and also finds time for exchanging friendly calls with her neighbors and doing many kind deeds of charity, and yet her house is the perfection of neatness, and her children tastefully dressed. The two oldest, girls of fourteen and twelve, make the beds and put the rooms in order. Charley feeds the chickens and does some weeding, while the youngest, a boy of nine and a girl of seven, wash the breakfast dishes and lay them in the closet. All this time "mother" is free to attend to the calls of the bucther or grocer, gets the churn ready, or kneads the dough into wholesome loaves, and a thousand other things that are the better for being attended to in the early morning.

Before school-time the house is in order, and "mother" is left to wash or iron or sew as it may happen, and the busy B's are off to school as happy as if no such thing as work was known. I must not forget to mention one rule which this wise little woman observed and to which she attributes the readiness with which the children accomplish their tasks. She never encroaches upon the children's hours of play. After school is done they are perfectly free from all care until evening.

This is no fancy sketch, but a veritable, though very poor, description of a family that were my neighbors for years. BUSY BRAINS.

SOME years ago at Port Shieldsborough, Miss., a man held the position of Collector of the Port, and while in office became afflicted with softening of the brain. Under these circumstances his wife performed all the duties of the place for five years faithfully attending to every detail. During three years of the time her husband was bedridden and helpless, but when he at last died and the widow petitioned to be continued in the position, her application was refused, although her application set forth how she had virtually acted as Collector for a long period and had now a family of children dependent on her for support. And although the paper was endorsed by the leading citizens of the place, and by the two Senators from Mississippi, Mr. Boutwell, at that time Secretary of the Interior, returned the petition ungranted, expressing his regret at his inability to comply with it, but stating that the law was explicit—"No one not an elector could hold the position of Collector of a Port."

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SUMMER SIFTINGS.

ANNIE L. JACK.

I DINED in the city lately, and was surprised to hear the lady of the house apologize because they had *ham* for dinner. The half-grown daughter of the house, with all the airs of a full-grown young lady, discussed the question with her mamma, telling her, with the sanitary wisdom that fourteen years of life had taught her, that "ham was not good food, and should not be eaten." While I perfectly agreed with her that too much pork, in hot weather, might not be wholesome, I thought no one could find fault with good, sweet, home-fed, home-cured bacon or ham, if thoroughly and properly cooked. The contrary opinion was lately expressed by a gentleman of the writer's family, who, when suffering from a disturbed state of the stomach, attributed it to "too much *fresh* meat." Moderation in these matters is very necessary in hot weather, and I add to these notes a recipe that forms a choice and dainty dish in summer, much to be preferred to the hot joints so much used.

Presuming that every housekeeper reserves tongues in good pickle for summer use, I suggest that one be soaked over night, and the next day boiled and skimmed. Then dissolve an ounce of gelatine in a quarter of a pint of water, add a little good gravy, and a little burnt sugar for coloring. A pint of boiling water is then added and stirred thoroughly. Cut the tongue into slices and, when the jelly begins to thicken, pour into a large mold a layer of jelly; then one of tongue alternately; and so on till it is all in the mold. When cold, it can be instantly removed by dipping the mold into hot water and inverting quickly. We garnish it with nasturtium flowers and leaves, and find it a tempting dish for breakfast or dinner. Cold meat can often be utilized in the same way, especially mutton or veal, the only difference being that they require the usual seasoning—of which the tongue retains enough after its curing in pickle. These cold and easily-prepared dishes are more appetizing than the usual fry and boil that make the summer dinner hour a terror in many a farmer's hot kitchen.

WASHING.

I HAVE never owned a washing-machine, but I have learned to wash on the same principle and like my new way very much.

It was taught me by a friend who has lived West for many years and, as help there is very poor and hard to get, she has had to rely on her own strength and wits to get through with the wash of a large household. It is as follows: Put all the pieces that are to be boiled in soak the night before, using only clear, cold water, the coarse ones underneath and the finest on top. Put the boiler on early in the morning, about three-quarters full of water, and shred about two inches of a bar of soap in the water. Meanwhile wring out all the fine clothes and, laying them on the table one by one, rub the soiled parts with soap, and when the water in the boiler comes to a hard boil, put them in, a few at a time. Do not fill the boiler too full, as the water must wash through the clothes to extract the dirt. Let them boil from twenty minutes to half an hour, not more. While these are boiling, you can be preparing the coarser pieces in the same way as the first. Take out the fine pieces into a tub and put in the other clothes, adding water if necessary and a little more soap. You now begin to see the advantage of the new system; for when you begin to rub the clothes, you find that they need very little rubbing, indeed the napkins and tablecloths seldom need any. Rinse the same as usual, and I, for one, will be surprised if you do not own how much less labor your washing has cost than in the days of old. MAY DAY.

QUERIES ANSWERED.

Recipe for Soap.

-PLEASE give recipe for a good hard soap, and oblige, RURAL READER.

Ohio.

ANS.—Concentrate lye by boiling until a medium-sized potato will not sink below the surface. Fill an iron kettle two-thirds full of this lye; add melted fat—the firmer sorts of fat like that obtained from cattle or sheep are best—a ladleful at a time, stirring constantly until the mass becomes creamy; then add salt in small quantities at a time; boil gently until it thickens and becomes ropy, or until a perfect ring can be made on the surface with a stick; let the fire go out and the soap will rise to the surface and harden as it cools. The lye may be drawn off by tilting the kettle, or the soap may be lifted off and laid out to dry until hard enough to cut into bars. Resin is sometimes used to make it harder, and one pound and a half to six pounds of grease, form good proportions. When it is added, dissolve it in the melted fat before adding it to the lye.

Another good domestic soap is made as follows: Dissolve six pounds of washing soda in four gallons of warm water; slack six pounds of fresh quicklime in a tub, using only enough water to crumble it nicely; then add to the dissolved soda; stir well together and add about four gallons of boiling water; let settle and pour off the clear lye into a clean iron kettle; stir constantly and add, little by little, twelve pounds of clarified grease; dust in four ounces of powdered borax, and boil fifteen minutes or until it thickens. Line a tub with a piece of cloth, letting the ends hang over to allow of the soap being lifted out when cool; pour in the soap and let it stand a few days, when it may be turned out and cut into bars with a thin wire.

Ammonia.

Is liquid ammonia used in making cake, if so, is it injurious? Please give a recipe in which it is used, giving the quantity?

MRS. MARTHA HINDS.

ANS.—We have never tried *liquid* ammonia in cake, neither do we know of its being used. Baker's, or salts of ammonia is, however, used, and we do not believe it injurious when used as directed. The following proportions for cookies—we have not a recipe for cake—will be found good: one pound of sugar; one pint sour cream; one ounce of salts of hartshorn; a little salt and nutmeg to taste; add flour sufficient to roll. The hartshorn must be pulverized and dissolved in the cream.

Regilding Mirrors, etc.

(1.) Please give directions for regilding mirror or picture frames? (2.) A recipe for coloring a light Japanese silk dress brown.

RURAL SUBSCRIBER.

ANS.—(1.) Implements for gilding are: A gilder's cushion, which is an oblong piece of wood stuffed with several thicknesses of flannel, and covered with rough calf-skin with a border of parchment, about four inches deep, at one end to prevent the air blowing the gold leaves about when on the cushion; a gilding knife; several camel's-hair pencils of assorted sizes, and a burnisher. Turn the gold leaves out of the book, one at a time, on to the cushion, and with the gilding-knife cut it into the size required; place the frame in nearly a horizontal position and, with a long-haired camel's hair pencil, dipped in water, go over as much of the frame as the piece of gold is to cover; take up the gold leaf with the tip of a pencil and carefully place over the wetted frame; breathe on it and it will adhere. Do not attempt to cover too much at a time, and the part of the frame to which the piece is applied must be sufficiently wet. When covered, set by to dry for ten or twelve hours; wipe the burnisher and only burnish an inch or so in length at a time, taking care not to lean too hard, but with a gentle and quick motion apply the tool until the frame is equally bright in every part. (2.) If you care to color your dress yourself, I should advise you to try Aniline Dyes according to directions.

News of the Week.

POLITICAL.

ON Tuesday the Potter, or as it is often called, the Butler investigating committee, had before them Mr. Boulds Baker of Texas, who is supposed to have influenced by a lengthy telegram the appointment of Key to a Cabinet position. Since his bankruptcy, as commission merchant in Galveston, in 1866, Baker has been dabbling in politics, with but little influence in Texas, and less elsewhere. He is an employe of the Post Office, and having declined to give evidence, missed his only chance of becoming famous or even notorious. A batch of letters between Mrs. Jenks and Anderson was handed in by the former. They are all spicey, especially the female's, although these are, now and then, a trifle ungrammatical. Neither party seems to have formed a very exalted opinion either of the good sense or the morality of the other. On Wednesday E. L. Weber, brother of D. A. Weber, Anderson's "pal," took the witness stand. He alone of all the Louisiana crowd seems never to have sought an office as a reward for services in 1876. He testified that before the election in Louisiana, it was the intention of the republican politicians, in whose hands rested the entire machinery for controlling the returns, to secure victory by throwing out some parishes on fabricated protests of intimidation, and to have no republican votes cast in others, so that they might be rejected by the Returning Board, on similar grounds; that in his position as republican sheriff, and intimate of Kellogg, Packard, and all the other republican politicians, he knew of this intention and protested against it as regards East and West Feliciana, but that his protest was disregarded, and the original intention dishonestly carried out, although there was really no disturbance during the election.

He also swore that he saw the notorious Sherman letter; that he read it repeatedly and knows it to have been genuine; and that after his brother's assassination, he hunted it up among the dead man's effects, and destroyed it late in 1877, so that it could cause no more trouble and lest others should profit by what was his brother's disgrace. He adds that both Mr. and Mrs. Jenks knew of the letter; set up claims to be "taken care of" because of that knowledge; that Mrs. Jenks visited the dead Weber's wife at Baton Rouge to get hold of the document; and that, until that sprightly woman testified that she had dictated the letter, he had never heard her or any one else advance such a claim. He also swore to affidavits made by Capt Jenks in New Orleans directly contradictory of his evidence in Washington, and it is said the Committee intend to prosecute the Captain for perjury.

Here is a copy of the so-called Sherman letter, the genuineness of which the committee have spent most of their time in trying to establish.

NEW ORLEANS, Nov. 20, 1876.

"GENTLEMAN: Your note of even date has just been received. Neither Mr. HAYES, myself, the gentlemen who accompany me, nor the country at large can ever forget the obligations under which you will have placed us, should you stand firm in the position you have taken. From a long and intimate acquaintance with GOV. HAYES, I am justified in assuming responsibility for promises made, and will guarantee that you shall be provided for as soon after the 4th of March as may be practicable, and in such manner as will enable you both to leave Louisiana, should you deem it necessary. Very truly yours. "JOHN SHERMAN.

"Mr. D. A. WEBER and JAMES E. ANDERSON.

Gov. Noyes, in the opinion of all candid men, has cleared himself of the charge of trickery in the Florida election. His evidence was clear, and emphatic that he went South without communicating with Hayes, made no promises while there; and only sought that no injustice should be done to his own party, and that it should have fair play. His testimony is fully supported by that of Gen. Lew Wallace, his companion down South; and is hardly contradicted even in details, by that of Dennis, McLin & Co. It was evidently a mistake, and still worse, an injustice, for the democratic managers to have mentioned his name specially in the resolution asking for the appointment of the Investigating Committee. Noyes returns as American Ambassador to Paris on August 1, fully vindicated, whatever may be the action of the Committee.

The sub-committee sweltering down in New Orleans have elicited little, except that Anderson was culpably backward in registering votes in East Feliciana: that in 1874 the parish gave 800 republican majority in a vote of 2,500; that Anderson complained of not being paid for his work, and during the election sought to trade with the democrats, and that these would not believe him under oath unless his testimony were corroborated by other evidence. Reed, the republican member of the sub-committee, has to leave for home on business, so that the two democratic members will, in future, have their own sweet way.

Much discontent is shown by the democratic press at circulars sent by the republican Congressional Committee to republican office-holders, requesting them to contribute a small percentage of their pay towards the expenses of the coming political campaign. Money is not demanded under penalty of dismissal as in past times, but it is urged upon them that funds are needed, and that those who benefit most by republican success should be willing to contribute financially towards it. It grieves the democrats sorely, however, that by this means the rules of Civil Service Reform may be infringed, though there is no doubt but they now tax all their own employes for political purposes, and that in case of their success in the national contest, they would not hesitate to deprive of their entire wages, the very men whom they now protest should not be even asked for a small part of it. Gen. Hartranft declines to be a candidate for the U. S. Senate for Pennsylvania; this leaves the course clear for Don Cameron, so far as the republicans are concerned.

Now comes a strong rumor that E. L. Weber, the great witness for the democratic side before the Investigating Committee, while senator in the Louisiana Legislature, sold out for $2,500 to Pinchback, while the latter was trying to get elected to the United States Senate. Immediately afterwards he is said to have turned about and sold out again for $10,000 to Kellogg, anxious to obtain the same position; while it is reported to be capable of proof that his present testimony in favor of Anderson's stories, has been purchased by a purse of $7,000, deposited in the hands of a New Orleans broker. So utterly corrupt has the present investigation shown Louisiana politicians, that one is ready to believe of them an amount of turpitude incredible with regard even to politicians elsewhere.

MISCELLANEOUS.

Among the economies of Congress has been the stoppage of allowances for the keep of horses to all army officers east of the Mississippi, from Sherman downwards. This causes much discontent and some inconvenience, as officers of cavalry, while on foot, will have to drill their men on horseback. Sherman has had some of his old war-horses shot, and grumbles vigorously and somewhat profanely at this cheese-paring parsimony. Grain is now being shipped on boats at Kansas City, to be sent, via St. Louis, to New Orleans. In future, the Missouri is to be in this way utilized as an outlet for the immense grain crops of the West. Out in Oregon there has been more fighting with Indians, who are constantly being reinforced by belligerent stragglers from other tribes. Lately the Umatillas, having placed their women and children in safety, on their reservation, to be fed and guarded by Uncle Sam, have gone on the war-path themselves to fight the old fellow's troops and scalp his defenceless children. In Idaho, also, the red-skins are busy stealing horses and cattle, and that chronic bug-bear, a general Indian war, is once more threatened.

Gen. Butler has come out flat-footed in favor of the National and Greenback party as against the republicans and democrats, and will, probably be their candidate for Governor of Massachusetts at the next election. In the Allegheny Valley near Pittsburg, on the fourth, there was a terrific thunder and rain storm which struck the city in the afternoon doing considerable harm. Hail as large as chestnuts fell, and many large trees were uprooted. A large one of these fell on a pic-nic party who had fled to it for shelter, instantly killing ten, and seriously injuring fifteen, four or five of whom will probably die. On the same day, lightning also struck and killed a woman near New London, Conn. It is said that Attorney-General Devens has finished his opinion on the eight-hour law, holding that it was intended to give men working for the Government ten hours' pay for eight hours' work, and should be so construed. The maligned mother-in-law has been unfortunate this week—three of her having been shot or otherwise killed in different parts of the country.

The pleasure of Gov. Van Zandt, of Rhode Island, and still more that of his wife, during their summer stay at Newport, will be somewhat spoiled by the robbery from their house of $35,000 worth of jewelry, while they were at tea on Saturday last. Most people are too careless in leaving windows and doors open in summer time, and some people are too extravagant in the jewelry line at all times.

Joseph P. Carr, who married the daughter of George Knapp, proprietor of the St. Louis Republican, and after her death married Lillie Morrison, daughter of Col. Don Morrison and the belle of St. Louis, and who was himself called the handsomest young man in the city, has forged the name of Morrison to a note for $5,000 and disappeared. Gambling and other dissipations were what led to the crime.

Kansas claims to be the banner State for grain this year, good judges estimating that it will send fully 45,000,000 bushels of wheat to market, or about 35 per cent. above the largest yield heretofore known in any one State, California having had the honor so far, with a crop of 30,000,000 bushels. Col. Reno of the 7th cavalry, is ordered to go to St. Paul, Minn., and report to Gen. Terry, commanding in Dakota, with a view to an investigation of his alleged misconduct and cowardice at the battle of the Little Big Horn, where Custer and his men were massacred.

The farmers of Ohio who have lately suffered severely from communists and tramps, are said to be busy forming secret organizations for mutual protection. Every member is to have his gun at all times ready, and be willing to use it in defence of his own property and that of his neighbors, and to be constantly on the look-out for fire. The following is a sample of the notices served on some of them; all such threats being much of the same style: "You better look out; if you don't stop usin' that machine for bindin' you will never hev any grain to thrash out. We are watching you"

On the fourth, at Lexington Ky, old John Harper's Ten Broeck and Mollie McCarthy, the celebrated California mare, ran a four-mile race at which great speed was expected. This expectation, however, was disappointed, for the mare was distanced in the first heat and the race was won in slower time than she had previously made. Some attribute the laggard space to the extreme heat of the day, while others—and among them the trustworthy editor of the Kentucky Live-Stock Record—insist that Ten Broeck was drugged just before the race and that this could not well be done without the knowledge of his owner.

FOREIGN.

The London News agrees with Mehemet Ali that Turkey would have been better off to have accepted the treaty of San Stefano as it stood and never gone to Berlin at all. Yet Beaconsfield is said to be the only person at Berlin who denies that the dissolution of the Turkish empire is inevitable and will have it restored. Schouvaloff, who descends from a line of princes older than the czars, seems to have supplanted Ignatieff in the imperial favor and is a likely candidate for the seat of Gortschakoff. All persons arrested in connection with Nobiling's attempt upon the life of Emperor William of Germany have been liberated, including Nobiling's youngest brother.

Gen. Philipovich, the Sclav general of the Austrian army in Bohemia, has been summoned to Vienna to take command of the army about to occupy Bosnia and Herzegovina. Turkey asks that the term of occupation be fixed at two years But in view of the unforeseen circumstances that may arise, Austria declines to be hampered by any distinct engagement. The troops will not cross the border until the Congress is over. It is highly probable Austria will so manage matters that the occupation will be permanent. There is a rather reliable rumor that England intends to acquire the island of Cyprus, as her share of the Turkish spoils. In Berlin and throughout Germany, numerous arrests still continue to be made of prominent socialists and of hot-headed revolutionists who express chagrin at the failure of the nefarious attempts of Hoedel and Nobiling. The organic, municipal, and provincial laws in Spain are to be provisionally enforced in Cuba.

On the 4th there was a series of boat races on the Thames at Henley, near Oxford, England. Two American crews, the Shoe-wae-cae-mettes of Michigan, and the Columbia of Columbia College, New York City, took part in the races for the Visitors' cup and the Stewards' race. The jaw-breakers of the northwest won in the latter the first heat, but lost the second and the prize, the following day, owing to one of the crew suddenly falling sick, when near the goal, in the middle of the contest. On the 5th, Columbia won the Visitors' cup, beating the picked crews of Oxford and Cambridge Universities. The star-spangled eagle has been soaring away up the empyrean and shrieking himself hoarse ever since. For the China, during which it is calculated upwards of past year there has been a terrible famine in five million people have been starved to death, and now comes the news that in Brazil the springs, brooks and rivers in three important provinces have dried up; crops have not grown on account of the drought, and the people are perishing by thousands. In the city of Aracaty, from February 10th to 18th, 664 persons died of starvation and at least 10,000 people have perished of hunger

in the single province of Cara since the commencement of the calamity. Thomas Guardia, Dictator of Costa Rica, a very wealthy, able and ambitious man, is said to be about to attempt to bring the republics of Nicaragua, Honduras, Guatemala and San Salvador under his rule at the cost of war with them.

Although there are still rumors about difficulties in the Congress at Berlin, especially regarding the boundaries of Eastern Roumalia, most people agree with Bismarck, that peace, for the present, is assured. Batoum, on the Black Sea, north of Armenia, in Asia, has, after many protests, been ceded to Russia, and is to be a free port of entry. In carving up Turkey, Greece must be content with a small slice of Epirus and a bit of Thessaly, though the diminutive kingdom is alternately praying and blustering for more. There is a multitude of rumors with regard to other points settled by the Assembly, but although some of our mammoth dailies have published ponderous articles freighted with much political wisdom on some of these modes of settlement, the very next day's telegrams have sometimes unblushingly contradicted the reports on which the articles were founded. To such ludicrous errors daily papers can afford to give currency, because few remember to-morrow what they say to-day; but the RURAL must be more careful, and therefore defers giving these rumors until something definite is known.

HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 6, 1878.

The week has been almost a lost one in the regular commeree of this city, owing to the very general and prolonged celebration of the Fourth. Prices for articles, usually largely dealt in, through the changes of New York have been nominal most of the week, while stuff of a perishable nature has had only a chance trade, and that always means irregular prices. Of late years, however, since the Fourth of July has caused such a broken week, dealers and shippers have been quite successful in preventing an over-stock that would result in a severe loss, and the markets are expected to reopen with as much vigor as the warm weather will permit.

BEANS AND PEAS.—There are no new features in beans; prices generally easy and quite uniform for all grades except Red Kidney, which are scarce and high. For government use, 700 lbs. Mediums were sold at $1.70¾ deliverable in Chicago; a Rochester contract. Peas of all kinds unchanged.

We quote medium beans, prime, $1 67½@1 60; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 40@1 50; Pea, $1 40@1 65; white $1 40@$1.62½; kidney, $1.40@1.62; red do., $3@3.25; black, $2.35@2.40; Lima, $3.75@4.25.

Receipts of beans past week, 6,252 bush. Exports of beans, 545 bbls. Exports of peas, 21,032 bush.

BUTTER.—At the close of last week better had become very weak, and there is not much possibility of early recovery when trade renewed, as a neglected week, will be apt to leave some surplus. Western creamery now quoted below State. Extremely hot weather has hurt the sale of tender makes of butter, such as are included in creamery and pails, and there has been more inquiry for hard half tubs. Shippers have operated up to the freight accommodations of steamers, that is, refrigerator room. Receipts of State are now expected to fall off, and moderated supplies may help prices. The exports for June were equal to 22,791 firkins, the largest total in six years for same month.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 16@17c.; other, 14@15c.; Welsh tubs, best, 15@16c.; other, 10@12c.; poor State, 5@8c.; State firkins, 15@17c.; Western creamery, choice, 19c.; other, 16@18c.; Western dairy, best, 12c.; other, 8@10c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 5½@8c.; old and grease, 3½@5c.

Receipts for the week, 24,670 pkgs.; exports past week, 4,669 do.

BEESWAX.—Offerings are not large, and the market is very steady at 26½@27½c. for Western and Southern.

BROOM CORN.—The reports from the crop show an average acreage. The plant is backward, an account of the wet season. Trade is small; good to prime hurl quoted at 6½@6½c.; medium green, at 5@6c., and red, stubby and crooked, 3½@4½c.

COTTON.—This has been a dull week, and on the whole but slight changes. Latest prices are for July, 11.02c.; for August, 11.54@11.55c.; for September 11.21@11.22c.; for October, 11.0c.; for November, 10.91@10 92c.; for December, 10.90@10.91c.; for January, 10.95@10.96c., for February, 11.02@11.03c.; for March, 11.09@11.11c.; for April, 11.19@11.20c. and for May, 11.29@11.30c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala. Orleans.*	*Texas.*
Ordinary	9 9-16	9 9-16	9 11-16	9 11-16
Strict ordinary	9 15-16	9 15-16	10 1-16	10 1-16
Good ordinary	10 7-16	10 7-16	10 9-16	10 9-16
Strict good do	10 13-16	10 13-16	10 15-16	10 15-16
Low middling	11 1-16	11 1-16	11 3-16	11 3-16
Strict low middling	11¼	11¼	11¼	11¼
Middling	11 7-16	11 7-16	11 9-16	11 9-16
Good middling	11¾	11¾	12	12
Strict good middling	12 3-16	12 3-16	12 5-16	12 5-16
Middling fair	12 11-16	12 11-16	12 13-16	12 13-16
Fair	13 7-16	13 7-16	13 9-16	13 9-16

Stained.

Good ordinary..9 7-16c.; Strict good ordinary.10 7-16c.
Low middling..9 15-16c.; Middling .....11 1-16c.

CHEESE.—There has been a slight easing of prices on the better grades, and on heated lots a very irregular range. The supplies this week have been largely of parcels out of condition, affected by the hot weather, and the comparatively meager showing of first class stock has discouraged shippers, a strictly fancy factory, colored, would bring 8¼, and of white 8¼; but few lots exceed 8¼ and 8, respectively, and standard factories that are heated have sold ¼ under the inside figures.

Quotations are for fancy, 8@8¼c., respectively for white and colored; 7@7¾c. for good and prime; 6½@7c. for fair; 5@6c. for half skimmed; 2½@3c. for skimmed. State, farm dairy at 6¾@7¼c. for good to choice, 5@6½c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¾@8c.; do. good to prime, 6¾@7¾c.; do. fair, to good 6@6¾c.; Western factory, fine, full cream, cheddar, 7¼@7¾c.; do. fine, full cream, flat, 7@7c; do. slightly skimmed, flat, 5¾@6¼c.; do. half skimmed, 4@5½c.; do. full skimmed, 3@3½c.

Receipts for the week, 114,056 boxes.
Exports, past week 113,143 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 46, 8d.
Export of cheese for June, 23,415,921 lbs.

DRIED FRUITS.—Apples have some export demand at low prices, but closed quiet. New pitted cherries have been received: the first sale was at 20, but it is now difficult to get a bid of 17.

Peaches—Fancy North Carolina 10@11c.; good to prime Georgia 8@9c.; unpeeled halves, 3¾@4¼c.; quarters, 3¼@3¾c. Pitted cherries, nominally, 17@18c.; Raspberries, 26c.; New York State plums, 10c.; Southern plums, 9c.; Blackberries nominal. Apples—State quarters, 4c.; do. sliced, prime, 4½c.; good, 3½@4c.; Western quarters, 2½@3c.; Southern at 4@4½c. for prime sliced; 3@3½c. for fair to good; Southern quarter, 2½@3c.; Tennessee quarters, in bags, at 2@2½c.

EGGS.—Receipts for the week, 6,808 bbls. We are going into the dullest season for local trade, and prices are unusually low with much of the arrival left over. The fresher the stock the quicker the sale; ice-house lots regarded suspiciously; they do not hold up well or long after exposure.

Near points, 13@14c.; State and Penn., 12½@13c.; Western, fresh, 10c.; Canadian, 10½@11c.; poor stock, 9@9½c.

FRESH FRUITS.—There is a long list in market, though several items will be gone after this week. The remnant of strawberries came from Oswego sold at a range of 4@7c.; selections, 11c. qt. Raspberries are lower, Black caps, 6@7c. qt.; Red Brandywine, 8@10c.; Antwerps, 3ds, 4@5c.; Native, 2½@3c.; Apples are abundant but good stock scarce and the range of prices is wide. Nort. green, $1.50@4.00 bbl.; Red astrachan, $5@6. Whortleberries, $4@4.50 bush. Currants small, 2@4c. lb.; Cherry, 6@8c.; Black, 7@8c. Blackberries, cultivated, 8@11c. qt.; Choice wild, 5@7c. Fancy cherries, western N. Y., 10@12c.; Fair, 8@9c.; Sour, 9@12c. Peaches have been scarce and ruled high as the demand was active for the holiday; Marylands are in but run poor, $1.50@2.50 per crate; Choice Georgia, $4@5; other, $1.50@2; S. C., $1.50@2 50; N. C., $1.50@3.50. Watermelons low; Florida, $20@30 per C.; Char. $30@35; Georgia, $25@35. Hot-house grapes B. Hamburg, 50c. lb.; Sweet water, 30@40c. Receipts of Peanuts are larger and prices are lower and demand only fair: Hand-picked Va. $1.55; Fancy, $1.45; other, $1.20@$1.35.

FLOUR has improved, to a considerable extent on export demands, and prices have reacted a little and closed in the seller's favor.

Latest prices are $3.15@3.85 for very inferior to very choice superfine State; $3.90@4.15 for very poor to very good extra do. odd lots and lines; $4.15@4.45 for good to fancy do.; $3.15@3.85 for very poor to very choice superfine Indiana, Iowa, Michigan, Ohio, &c., $3.90@4.15 for inferior to very good shipping extra do. and $4.15@4.45 for very good to very choice extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.30 for good to very fancy; Minnesota clear, very inferior to very choice, at $4.10@5.00; Minnesota "straight," inferior to fancy, at $5.25@6.50, and patent poor to strictly fancy at $5.25@8.00; unsound stock at from $2.00@5.25; city mill extra at $4 10@5.25 for West Indies; do. for England, $4.00@4.15; do. trade and family extras, $5.65@6.75; do. for South America, $5.25@6.00 for fair to fancy; No. 2 $2.25@3.00 for inferior to fancy.

CORN MEAL.—Sales at $2.75@2.80 for Brandywine, and $2.10@2.35 for Western yellow.

GRAIN.—Reports of rainy weather affecting the crop prospects abroad, and higher markets there, have infused more life into the markets here, and prices have advanced.

Latest sales of wheat are of No. 2 red at $1 10@$1 11; ungraded red western at $1 08@1 11; amber western at $1 12@$1 13; ungraded white western at $1 10@$1 13; No. 1 white at $1 18; new amber Southern at $1 05@1 06; No. 1 Milwaukee and Minnesota spring at $1 07; No. 2 Chicago spring at $1 03@$1 03½; New York No. 2 spring at $1 02½@$1 03; No. 3 spring, in lots, at 98@98c.; ungraded spring at 92@98c.; No. 2 red, July option at $1.05@1.06 do. August delivery, at $1 03, No. 1 Minnesota spring, July delivery, at $1 08; New York No. 2 spring, July delivery, at $1 02½@$1 03; do. August delivery, at 98c.; do. September delivery, at 95@ 96c.; No. 2 northwest spring, July delivery, at $1 03. Rye at 62@64c. for State and 60@62c. for western. Corn—at for No. 2, July option, at 45½@46¼c.; No. 2, August option, at 46¾@47¼c.; c.; steamer mixed, July option, at 44¾@45½c.; do., August option, at 44¾@45½c.; spot lots New York No. 2 at 45¾@46¼c.; Kansas mixed at 46@46¾c.; steamer mixed at 44@45½c.; ungraded mixed at 42@46¾c.; New York No. 2 at 41½@42½c.; western yellow at 46@47¾c.; steamer yellow at 42¾c., and western white at 53¾c. Oats at for New York No. 2 white at 32¾@33c.; New York No. 1 at 31c.; New York No. 2 at 30@30½c.; white western at 32¾@37¾c.; mixed western at 30@33½c.; white State at 32¾@35½c; mixed State at 30@31¾c.; New York extra white quoted at 36@37c.; New York No. 1 white at 36c.; New York No. 3 white at 31@31½c.; New York extra at 31@31½c.; New York No. 3 at 29@29¾c.; No. 2 Chicago at 31c.

HAY AND STRAW.—There is a little new hay in the receipts, and the old crop is coming in yet freely, with prices unsettled.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@50c. for long rye, and 35@40c. for short rye; and 30@35c. for oat.

Exports for week 463 bales.

HOPS.—There is a lull in the market. Supplies of desirable lots are small, and trade is necessarily of a limited description. Prices hold steady. New Yorks, good to prime, 10@12c; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

OIL CAKE has sold at $28.50 per ton, which is a decline.

POULTRY AND GAME.—Live poultry has been in heavy supply, and fowls and chickens are very low. N. J. chickens, 15c; Southern and Western, 12@13c.; Near-by fowls, 10@11c.; S. & W., 8@9c.; Turkeys, 9@12c., few wanted: Ducks, Choice, including Spring, 60@75c.; common, 40@50c.; N. J. Geese, $1.25@1.50; S. & W., 85c.@$1.25.

The demand uses up the small recipes at following rates: Turkeys, dry picked, 13@15c.; other, 11@14c.; Phila. Spring Chicks, 20@22c.; N. J., 17@18; Western, 15@16c.; Fowls, Phila., dry picked, 13@14c.; good, 10@11c.; common, 9c.

Stall fed pigeons make the game list at present, quoted $1.00@$1.25; same, squab, $1.75 doz.; Woodcock, saleable after August 1st.

PROVISIONS.—Hog products have been depressed and dull. Mess pork quoted $10 12½@10 37½ for spot lots; $10 10 for August, and $10 20 for September. Bacon at 5¾c. for long clear. Lard at $7 12½ for spot; $7 05 for July and 7 15 for August; $7 20@7 22½ for September. Stearine at 8¼ for prime. Tallow at 6 15-16@7 for prime. Beef hams at $22@22 50. Beef—For extra mess, $11 75@12; plain mess, $10@11 50; packet, $10 50@12 30 for bbls.; extra India mess, $19@21 for city brands; do. Philadelphia, $18.50@$19.

VEGETABLES.—Supplies of all kinds are heavy and prices generally easy. Southern stuff can now hardly compete with Northern. L. I., Norfolk and Maryland potatoes, $1.75@2 bbl.; Culls 75c.@$1: exports potatoes past week, 590 bbls. Green peas have rarely been so cheap: L. I., 2 bush. bag, 30@50c.; L. I. string beans, bag, $1. Nor. cucumbers, crate, 50@75c.; L. I. and N. J., per 100, $1@1.25; Fla. egg plant, crate, $3. Nor. tomatoes, crate, $1@1.50; Fla. and Chas., 75c.@$1.50 as to condition. Bermuda onions, bush., 50@65c.; Southern, bbl., $1.50. Squash, bbl., 50c.@$1. Radishes, 100 bunches 50c.; Beets, do., $1@1.50; Carrots, do., 50c.@1; Turnips, 75c @$1. Spinach, bbl. 5'@30c. Cabbage, flat Dutch, $4@6 per hundred; Wakefield, 3@4. Cauliflower, $1@3 bbl. R. Turnips, bbl. new 75c.@$1.

WOOL.—The advance made last week on the excitement in the country is barely sustained, as the later reports show a quieter feeling at the West. There is but little doing here.

Ohio, Pennsylvania and Virginia quoted at 40@43c., for XXX and picklock; 36@38 for XX; 35@37 for X 36@39 for No. 1.

New York, Michigan, Indiana and Wisconsin. XX, 33@35c.; X, 33@35c.; No. 1, 35@37c.; No. 2, 30@33c.

Iowa, Vermont and Illinois 30@32c. for X and XX; No. 1 32@35c.

Missouri, Kentucky, and Tennessee — Washed fleece, 30@31c.; unwashed, 23@26c.

LIVE STOCK MARKETS.

NEW YORK, Saturday July 6, 1878.

BEEVES.—Receipts for the week, 8,964 head: do., last week, 9,490 do. A light supply met with a dragging market at the close and there was no improvement upon Wednesday's prices. Distillery-fed and coarse Texas steers sold at 8¼@8¾c.; other decent to extra stock, 8@10c., with a few tops at 10¼c., to dress 57 lbs. Considerable stock was held back at Albany.

MILCH COWS.—No transactions to report. Good cows worth more, or as much, at home than here.

VEAL CALVES.—It has been mostly a low week for calves, but at the close the market is better. N. J. and Bucks Co., 6¼@7c. for prime: good, 6@6¼c.; State, 5¼@6¼c.; buttermilk calves dull and low, 2@2¼c.

SHEEP AND LAMBS.—Receipts for the week 26,109 head; do. last week 23,171 do. Market dull, especially for lambs. N. J. ewes, 3@3¼c.; other, 3¼@4¼c. Lambs, extra, 6¼c.; good, 5¼@6c.; Va. and Ky., 5@6c.

SWINE.—Receips for the week 25,443 head; do. last week 22,811 do. Market quiet; 'Change closed for two days. Nominal price for prime hve, 4¼@4½c.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is:

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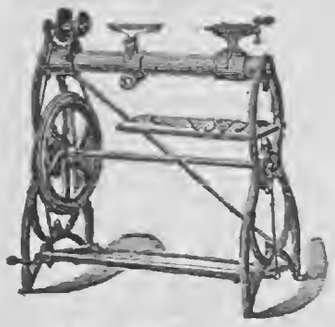

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THE
Canada West Farm Stock Ass'n
Will sell by PUBLIC AUCTION, on the AGRICULTURAL SHOW GROUNDS, at BRANTFORD, CANADA, a selection of
FORTY HEAD THOROUGHBRED
COWS, HEIFERS and BULLS,
Comprising fine specimens of the
Rose of Sharon, Gwynne, Knightly, Cambridge, Fawsley, Roan Duchess, Dereham Abbey, Adeliza, Woodhill, Isabella, Wildame, Golden Pippin, and other well-known families—all of them registered or entitled to registry in the American Herd Books.
ALSO—Twenty pure COTSWOLD and LEICESTER Rams, Ewes and Lambs, imported from the best English flocks, or bred from such on both sides.
And—Twenty pure BERKSHIRE Boars, Sows and Pigs, imported from the best Herds of England or bred from such importations on both sides.

Sale to commence at noon.

Terms.—All sums under $100, nett cash; 100 and over, approved note at six months, or discount for cash, at the rate of eight per cent. per annum.

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BUYERS from the WESTERN STATES can leave DETROIT by the Great Western Express at 4 o'clock on the morning of the sale, and have time to examine the cattle before it commences. They can leave the same evening at 5:40, and reach Detroit in good time for the early trains next morning.

Parties leaving SUSPENSION BRIDGE by the Great Western train at 8:00 on the morning of the sale will reach Brantford in ample time, and can return the same evening by the train leaving Brantford at 5:40.

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I WILL SELL TO SUBSCRIBERS OF the RURAL, Duroc pigs, 8 weeks old, for $7; pairs, $13. Fifty pigs of this breed, nine months old, averaged 400 pounds. Shipped at Schenectady.
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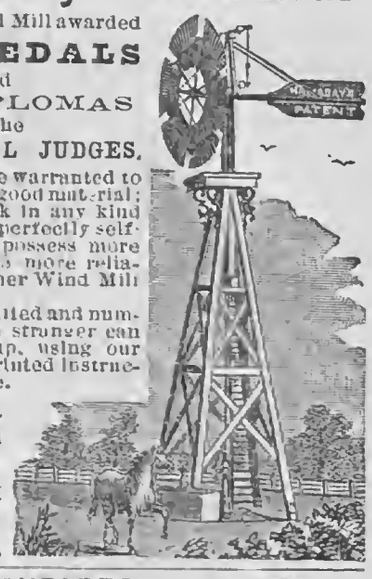

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Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 9.

MRS. A. E. STORY.

Did anyone ever know a spirited young person who did not prefer earning his "spending-money" to having it as a gift from his elders? It is well, too, that young people should know "how the money comes" which is theirs to spend. It trains them to a habit of self-reliance. If the boy or girl who has to work patiently for the wherewithal to purchase the various little needs and pleasures so dear to the heart of youth, does not develop into a painstaking, economical man and woman, the personal experience of thousands who had to earn the pennies that went to pay for their holiday whistles, goes for nothing.

My young friend, to avoid the disagreeableness of doing something for which you have no liking, or what is worse, leaving it before it is fairly begun, turn the question "What shall I do?" over in your mind before you set to work. If you have a taste for poultry rearing and none for gardening, keep out of the garden by all means. If you have no fancy for poultry, you will most likely be on the lookout for a calf or two, or a pig or a lamb, to raise on your own account. Calves, toward which youthful eyes are often turned with longing, are killed because the milk cannot be spared for them. In such cases hay tea, with just milk enough to give it the color of coffee, has been found an excellent substitue. The tea should be made daily,—enough each time for two feeds.

In some families the eggs over and above a stated number each day, are given to the child who gathers them. This answers for the "little shavers," and if anyone thinks there will be many hens sitting around on stolen nests, let him try it and see. In the same way the surplus butter goes to "the girls" to do as they please with it, and when this is done, even young girls, provided they have been properly taught, may be safely trusted with the milk work without fear of having quantities of cream, at every skimming, left in rims around the pans, or otherwise wasted.

A pair of canary birds provided with a nest—a collar box stuffed with cotton to the proper shape, and lined with flannel, makes a good one—and given a little extra care in the way of keeping the cage supplied with food suitable for the young, may be made a source of profit. The proper food for the young birds is the yolks of a hard-boiled egg, made fine and mixed with double the quantity of bread crumbs. Nothing else, save water and, of course, seed for the old birds, should be given. Green food of all kinds must be kept away until the young ones are out of the nest, which will be in about two weeks after hatching; and by that time the mother-bird will have commenced laying again. To get the young birds out of her way, put them, as soon as they begin to peck at the contents of the feed-dish—which should be kept in the bottom of the cage—into another cage. A healthy bird, if not too old, will rear several broods before the molting season, when the nest should be taken away. A male bird often sings a *very little* when it is but three weeks old. If a bird has not been heard to sing by the time it is six or seven weeks old, you may be pretty certain it is not a singer. One thing more: do not allow the cage to be taken from its place after your bird has commenced laying, until the eggs are hatched.

Here are several ways by which boys and girls may "pick up a little money" at certain seasons: By nut-gathering, especially if you live where chestnuts abound. They do not fill the measure so fast as some other kinds, but they sell for more. By saving cherry stones, peach pits, apple seeds, etc., for the nursery-men. To get the apple seeds: take the cores after a quantity of the fruit has been pared and quartered, as for drying, put them in a barrel with water enough to float them, "churn" them for a few minutes with a churn-dasher, skim out the cores and find the seed, a quart, or less, in the bottom of the barrel.

Then for boys, there is the trapping of minks, musk-rats, raccoons and other furry animals; but what farmer's son doesn't know all about that? How many a warm breakfast has been forgotten till it was no longer warm, while John, or Fred, or Tom, went whistling off to the brook where his half-dozen Oneida Communities were set? Shooting game, too, is a pastime which many boys contrive to turn to good account financially, and when the passion for hunting is not indulged in at the expense of the corn-husking or apple-gathering, who shall say that the boys are injured by it?

LETTERS FROM BOYS AND GIRLS.

A Giantess.

Dear Uncle True:—I am a new cousin seeking an introduction. I have often wished to write before, but visions of a grim editor and a huge waste-basket loomed up before my mental vision, and so terrified me that I never could pluck up courage to commit myself to paper. But this evening, as I was reading the Rural, I could contain myself no longer. So now, after having spread myself over forty acres, more or less, of paper, I proceed to introduce myself. I am Giantess, at your service. Now, what I want to know is this: What has "Slayerofconceit" done? We missed six or seven Ruruls since the 1st of January, so I am somewhat in the dark. "Wild Cherry," you write that you "feel like saying *dreadful* things of him, but suppose you must not." I see he has been catching it right and left, so I have felt for some time that I must take his part. Poor fellow! everyone seems to be down on him. But I see, Wild Cherry, that you hint at his thinking himself wiser than mankind in general, also that he speaks slightingly of girls. Now I tell you he touches me there! for I am a girl. Beware how you rouse me, for remember, I am a Giantess! Good for you, Wild Cherry, just stick to your version of the couplet concerning whistling girls. I whistle too—when I wish to. Hurrah! for Brown Badger. I just tell you that you must stick to your resolution not to use liquor of any kind. But there! I never have been credited with knowing enough to stop.

Giantess.

"They Write too Old for their Age."

Uncle True:—I scarcely know how to introduce myself. But for this I should have joined the Cousins long ago. I have just read Wild Cherry's letter and like it, except that I have the same opinion of her letter that I have had of many others among the Cousin's letters: they write too old for their age. I am neither sixteen nor sixty. You can guess all the way between—and under—if you choose; but please do not go abroad to find the indefinite article. I have not the faintest hope that my letter will prove interesting to the Cousins, as theirs have been to me. I have been a reader of the Rural for many years—if I should tell you how many, you would easily guess my age. In good time, I will tell you, if some one don't guess it in the meantime.

Unknown.

Sabbath Reading.

DECREED.

"Into all lives some rain must fall,"
Into all eyes some tear-drops start,
Whether they fall as a gentle shower
Or drop, like fire, from an aching heart.
Into all hearts some sorrow must creep,
Into all souls some doubtings come,
Lashing the waves of Life's great deep
From dimpling waters to seething foam.

Over all pathways some clouds must lower,
Under all feet some sharp thorns spring,
Tearing the flesh to bleeding wounds,
Or entering the heart with their bitter sting.
Upon all brows rough winds must blow,
Over all shoulders a cross must be lain,
Bowing the form in its lofty might
Down to the dust in bitter pain.

Into all hands is some duty thrust,
Unto all arms some burden given,
Crushing the heart with its dreary weight,
Or lifting the soul from earth to heaven.
Into all hearts and homes and lives
God's dear sunshine comes streaming down,
Gilding the ruins of Life's great plain—
Weaving for all a golden crown.

INTERRUPTIONS IN OUR WORK.

E. M. G.

"We are created in Christ Jesus unto good works, which God hath before ordained that we should walk in them."—Eph. ii. 10.

He who tries to infuse this spirit into his daily work will do it earnestly. He will throw all his powers of heart and soul into it; and whereas before much of his duty has been done mechanically, his nobler faculties will now be called into exercise in the doing of it.

And the very earnestness with which the work is now done may bring with it a snare. When the mind is intently bent upon one action, and that action is felt to be a serious one, it is greatly embarrassed and annoyed by interruptions. Other things making a claim upon the attention, distract and harass us. Of course it is not so with the man who hangs about upon life with no serious pursuit. Interruptions are to him a pleasing variety; nor can he at all appreciate the trial of which we speak. But in proportion to the seriousness with which the Christian does his work will be, if I may so say, his sensitiveness to interruptions. And as this sensitiveness is very apt to disturb his peace (and in so doing retard his progress), we will show the manner in which interruptions should be met, and the spirit with which they should be encountered.

The great remedy, then, for the sensitiveness to which I have alluded, is a closer study of the mind that was in Christ, as that mind transpires in His recorded conduct. The point in the life of Our Lord to which I wish to call attention, is the apparent want of what may be called method or plan in His life,—I mean method or plan of His own devising, the fact that his good works were not in pursuance of some scheme laid down by Himself, but such as entered into God's scheme for Him, such as the Father had prepared for Him to walk in. And, first, notice His discourses, both in their occasions and in their contexture.

They most often take their rise from some object which is thrown across His path in nature, from some occurrence which takes place under His eyes, or from some question which is put to Him. For the wonderful discourse in John vi. upon the Living Bread, we are entirely indebted to the circumstance that after the miracle of the loaves the carnal multitude sought Him, in anxiety to have their natural wants once again satisfied by miracle. It was not that Jesus had previously prepared them for such a discourse; but this was the discourse which their conduct drew from Him.—He meets a Samaritan woman at Jacob's well, and oppressed with the noontide heat, asks her for water from her bucket. Her answer leads on to a close dealing with the woman's conscience, and to the announcement of certain great truths respecting that living Water, whereof whosoever drinketh shall never thirst. But here again the words rise spontaneously from the occasion.—The murmurs of the Pharisees and Scribes, because Jesus received sinners and ate with them, elicited for our everlasting consolation the noble parables of the lost sheep, the lost coin, and the prodigal son.—An observation falling from a guest at table, a mere devout sentiment casually dropped in His hearing, "Blessed is he that shall eat bread in the kingdom of God," drew from His lips the parable of the great Supper.—A certain man asked Him to undertake an arbitration between himself and his brother as to their respective shares of their hereditary property. This suggested to Our Lord the topic of covetousness, and the parable of the rich fool, illustrative of that topic.

All the above are instances in which Scripture itself explicitly *traces* the connection between certain occasions and the discourses of Our Lord. And divines have recognized many others, where the connection, though not expressed, is not obscurely implied.

But a similar remark holds good respecting the contexture of these wonderful discourses. For Our Lord's great discourses are not constructed upon any such method or plan as the human intellect recognizes. Take the Sermon on the Mount, and try to analyze it. You will find that it defies methodical analysis. While no head of Christian precept is left untouched, there is no such systematic arrangement as we can easily put upon paper. There was no doubt an undercurrent of thought in the mind of the Divine Preacher, welding together the different sections of the great Sermon, and leading Him on fluently from topic to topic; but nothing can less wear the aspect of a discourse framed upon a dry preconceived plan. Doubtless it was as the swallow caught His eye, skimming along to its nest with food for its young, and as the lily or blue-bell of Palestine waved before Him on the hill-side, that He took occasion to illustrate His precepts against worldly carefulness by those wonderful sections, beginning, "Behold the fowls of the air," "Consider the lilies of the field." This is the only plan observable in the discourse,—the plan of a loving heart pouring itself out, as occasion serves, for the edification of mankind.

But the absence of mere human plan, or rather strict faithfulness to the plan of God, as hourly developed by the movements of His Providence, characterizes the life of Our Lord even more than His discourses. His object throughout is not to carry out schemes preconceived by Himself, but to study God's guidings, and to be true to God's inspirations. Take only that portion of His life recorded in a single chapter,—the ninth of St. Matthew. Jesus is interrupted in the midst of a discourse which He was holding in the house, by the appearance of a couch with a palsied man upon it, lowered into the midst of the court under His eyes. So far from accounting the interruption unseasonable, He first absolves, and then heals the patient, and thus secures glory to God from the multitude. The miracle performed, He passes out into the open air, perhaps for refreshment, and His eye catches Matthew sitting at the receipt of custom. He calls him, and Matthew follows. Matthew invites Our Lord to a meal, and our Lord accepts the invitation; sits down with publicans and sinners, and profits by the occasion to speak of the freeness of His Grace.—In connection probably with His appearance at a festival, the disciples of John ask Him why *His* disciples did not fast. He explains why. Jairus comes to solicit His merciful interference in behalf of a dying daughter. Jesus follows him forthwith to his house, when, lo and behold, another interruption, which to the feelings of Jairus, all impatient to have the great Healer under his roof, must have been extremely galling. The woman with an issue of blood steals a cure from Him on the road. Jesus stops to draw from her an acknowledgment of the benefit, and to dismiss her with a word of consolation and blessing. Then He resumes His former errand of love, arrives at Jairus' house, and raises the dead maiden.—Coming out, probably on His return to His own abode, the blind men follow Him into the house, and receive their cure.—They have scarcely gone out, when the man possessed with a dumb devil is brought to Him, and restored; and thus ends the detailed portion of the chapter, what follows being a general and summary survey.

This is a good specimen of Our Lord's whole way of life, and of how He went about doing good, not on a rigid, unbending, preconcerted plan, but as the Father, in the course of His Providence, ministered to Him the occasion.

Now, as God ordained beforehand certain good works in which the Son of His Love was to walk, so He deals with each follower of His Son, according to the humble capacity of that follower, on a similar principle. Christian, whoever you are, whatever your station, God has a plan of life for you, a plan of doing good,—certain occasions and opportunities of doing good all mapped out for you in His eternal counsels. These occasions and opportunities are to arise day by day upon you, as you pursue your beaten path of life, just as while the globe turns round upon its axis, the sun in course of time rises upon those parts of it which before were dark. Now this, perhaps, is a novel view to some of my readers. They are accustomed to think of the place which Our Lord has prepared for His followers,—of the joys which God has prepared for those who unfeignedly love Him;—but they think comparatively little of the sphere of good works, which is just as much prepared for them to occupy here as is the sphere of glory hereafter. Yet this is a certain and infallible truth. If God hath before ordained certain persons to eternal life, He hath also before ordained good works for those individuals to walk in.

Do you believe that the whole of your affairs—trivial as well as great, irregular as well as in the ordinary course—are under his absolute, daily, hourly supervision and control? that nothing can possibly arise to you or any other, which is not foreseen by Him, arranged for by Him, brought by Him within the circle of His great plan? that the little incidents of each day, as well as the solemn crisis of life, are His ordering? Then you virtually concede all that the Apostle asserts in this verse. For you admit that the occurrences of each day, however unlooked for, however contrary to expectation, are God-sent, and those which affect *you* sent specially and with discrimination to yourself.

Now it cannot be thought that God sends events to a living soul, in order that the soul may be simply passive under the events. If God sends you an event, it must have a meaning; it must be a sign to you that you are to do something, to brace yourself up to some action or to some state or feeling. All that God sends to a human spirit must be significant. God has sent us His Word. We know that He designs us not simply to hear it, but to embrace it with a living faith and a loving obedience. We are to meditate upon it, to apply it to our consciences, mold our character and conduct in conformity to it. Now the same God who has sent us His Word equally sends us the daily occurrences of life, the chief difference being that, whereas the Word has a general voice for all, in which each is to find his own case represented, the occurrences are charged with a more specific message to individuals. Now there is many a man who says, "I will conform myself to the general indications of God's Will made to me by His Word;" comparatively few who say, "I will conform myself to the special indication of God's Will made to me by his Providence." But why so few? Does not God come home to us more closely, more searchingly, more personally by His Providence than even by His Word? Does not His finger rest upon each of us more particularly in the government of affairs than even in Revelation? And why are we to imagine, as many seem to imagine, that no other events but such as are afflictive and calamitous have a voice for us? Why not every event? Why is not the ordinary intercourse of life to be regarded as furnishing in God's design and intention opportunities of either doing or receiving good? I say of doing or receiving good. Surely either one or the other is a thing greatly to be coveted. In nine cases out of ten we may fail of doing good; but if in those cases we have received good, and received it too in the course of His plan for us, and in the way of His Providence, surely the occurrence which has called us off from our ordinary pursuit is not to be regretted.

Here, then, lies the real remedy for the uneasiness of mind which is caused by interruptions. View them as part of God's loving and wise plan for your day, and try to make out His meaning in sending them. When in your hour of morning devotion you distribute your time before hand (as it is in every way wise and proper to do), let it always be so with the proviso that the said arrangement shall be subject to modifications by God's plan for you, as that plan shall unfold itself hour by hour to your apprehensions. When you have entered upon the day, observe narrowly the quarter in which His finger points, and be true to that direction. There lies thy prepared task. There are the good works, not which thou hast devised, but in which God hath before ordained that thou shouldest walk. A case of distress is flung in your way as you are bound upon your daily occupations. The spirit of the age says, "Dismiss it,—you have no time to spare,—leave it to the Poor-house and pass on." Or it is suggested, in the midst of your avocations, that there is some word of sympathy to be said or to be written to a friend in trouble, only a cup of cold water in point of intrinsic value, but still a very refreshing one to a man in the furnace of affliction. "But you are too much occupied," says the busy, bustling, hard spirit of the age; "you have no time for sympathies or sentimentalities; you must go forward; if you desire to be successful in life, you cannot afford to stop on the way." Now without denying that in particular cases such counsel may admit of palliation in a greater or less degree, truth compels us to say that this was not the mind which was in Christ Jesus.

His ear was never inaccessible to human suffering, and His mind was never unobservant of God's plans. He does not pass over the woman with the issue of blood. He does not leave her without her lesson and without her consolation, because he is bound on an errand of love to the house of Jairus. He does not make occasions bend to Him; but, knowing that occasions are the Father's call, He addresses Himself to serve occasions. He is constantly redeeming the opportunity."

But supposing that during the day no opportunity occurs of *doing* good. Supposing, for example, that the case of distress into which we have patiently examined turns out, as it very frequently will, to be a gross imposture,—have we, therefore, lost our labor in a spiritual point of view? Not surely, if we have conformed our will to God's design for us. The radical fault of our nature, be it remembered, is self-will; and we little suspect how largely self-will and self-pleasing may be at the bottom of plans and pursuits, which still have God's glory and the furtherance of His Service for their professed end.

The path which we have indicated is the path not of sanctity only, but of peace also. We shall never serve God with a quiet mind, unless we more or less tread in this path. It is a miserable thing to be the sport and prey of interruptions: it wastes the energies of the human spirit, and excites fretfulness, and so leads us into temptation, as it is written, "Fret not thyself; else shalt thou be moved to do evil." But suppose the mind to be well grounded in the truth that God's foresight and fore-arrangement embraces all which seems to us an interruption,—that in this interruption lies awaiting us a good work in which it is part of His Eternal counsel that we should walk, or a good frame of mind which he wishes us to cultivate; then we are fore-armed against surprises and contradictions; we have found an alchemy which converts each unforeseen and untoward occurrence into gold; and the balm of peace distils upon our heart, even though we be disappointed of the end which we had proposed to ourselves. For which is better, safer, sweeter,—to walk in the works which God hath before ordained, or to walk in the way of our own heart and in the sight of our eyes?

PERSONAL ITEMS.

Matthew Arnold is very near sighted.

The stem of Carlyle's clay pipe is very long.

Ex-Congressman Vance is now in a lunatic asylum.

Young Fremont is to be his father's secretary in Arizona.

The Duchess Dowager of Montrose won $52,500 at the Derby.

Edward S. Stokes, who killed Fisk, is now a Detroit book agent.

Prof. Fawcett, the blind M. P., is passionately fond of fishing and hunting.

Count Andrassy has a brilliant and penetrating mind and a fascinating manner.

The Shah sports a thin, waxed moustache, and wears a frock coat and blue eye-glasses.

General Grant is said to look exceedingly well, light-footed, red-cheeked and bright-eyed.

Count Schouvaloff is the handsomest diplomat in Europe, fifty-five, white-haired and keen-eyed.

Life-size portraits of Anderson and The Jenks have been ordered by the Sazerac Lying Club, of Austin, Nev.

Vice-Admiral Popoff of the Imperial Russian navy, the inventor of the circular ironclad bearing his name, has been stricken by partial paralysis.

R. L. Potter, the wheelbarrow idiot, who is shoving a creaky push-cart all the way from Albany, New York, to San Francisco, has passed his half-way point.

In Board of Trade phraseology, Gortschakoff tried to "bear" the stock at the congress, while Beaconsfield resolved either to (John) "Bull" it, or bullet. That's our first attempt.

Thomas Ewing Sherman, the son of General Sherman, who has gone to England to become a Jesuit, is twenty-two years old, and is a young man of very scholarly tastes, who was educated at the Yale College Law School.

Olebillallen is described as being "youthful, rosy and as full of the fire of conquest as a mule colt." He expects to be the next President and to be called "the Patriarch President," for his years will number ninety-four in 1880.

Mr. Alexander H. Stephens is now enjoying better health than for many years past. The secret of his strange vitality is said to be a remarkably sound stomach, which, during his long illness, has never failed to perform its functions.

Mrs. Fanny Fairchild Bryant, wife of the great poet, was born in 1797, and died in 1868. She was described by her husband as "An humble disciple of Christ, exemplary in every relation of life, affectionate, sympathetic, and sincere, and ever occupied with the welfare of others."

In a list of British pensions, and sinecures, in 1810, appear the names of Edward Shippen Arnold, James Robertson Arnold, George Arnold, and Sophia Matilda Arnold—the first three for £400 a year, the last for £100. They are pensions by royal sign manual, and a note is appended: N. B. —These are the children of the notorious American General Arnold.

Prince Bismarck is not an early riser and is fond of sitting up late at night, chatting over a bottle of wine or a glass of beer. It is said that nearly all his diplomatic negotiations, beginning with General Govonne's confidential overtures in 1866 for an alliance between Italy and Prussia, until the most recent *pourparlers* on the Eastern Question, have been transacted by him in a convivial way in the nocturnal hours.

Lord Castlereagh's mission cost, in 1814-15, $200,000, and England will have to pay a pretty long bill in Berlin and Constantinople. The British suite occupy at the Kaiserhof, Berlin, twelve sitting and eighteen bedrooms, besides seventeen servants' rooms, probably more than all the other representatives put together. Beaconsfield's reception room is furnished in the style of Louis XIV., his dining room in old German fashion.

Samuel J. Tilden, as a stockholder of the bankrupt Michigan Iron Co., was sued in Detroit by a laborer named Andrew Young, who recovered judgment. Tilden carried his case to the Supreme Court of Michigan, claiming that it had not been shown that he was actually a stockholder when the debt accrued, and that the corporation had not been made a co-defendant. The Superior Court has just affirmed the judgment below. The liabilities incurred in this way by Tilden will amount to upwards of $25,000, Young's case being a "test" case.

Of Lord Beaconsfield innumerable *mots* are just now current. Here is one: "A Conservative peer was expressing to the Premier the anxiety with which he looked forward to his prolonged absence from England. 'It won't be a long business,' was the reassuring reply; and, after a pause, Lord Beaconsfield added, 'We mean to carry the position by a koo di mang' (coup-de-main). The peer in question moved away, muttering as he went, 'They may say what they like about his being a foreigner, about his character being un-English; but, at any rate, there is one thing that is unmistakably British, and that is—his French.'"

Madame Patterson-Bonaparte, now 93 years of age, appears as plaintiff in a lawsuit brought at Baltimore, where she has resided since her birth. The affair is made the pretext for telling her romantic story, which has been narrated time and again through all the generations of the republic of America. Though abandoned by Jerome at the command of his imperial brother, she still believes in the family, and hopes to see the dynasty resume the throne of France. Her present suit is for the purpose of escaping taxation on $472,000 worth of bonds, and as she has a great deal of other property also, there is little fear of her old age being pinched for lack of funds.

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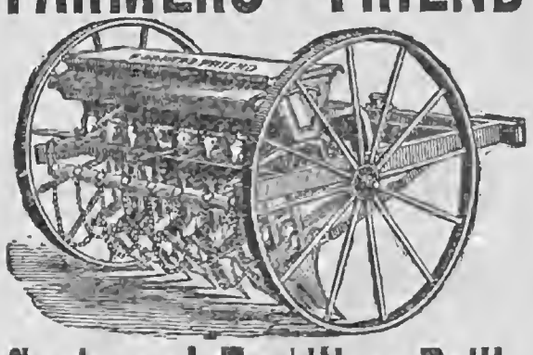

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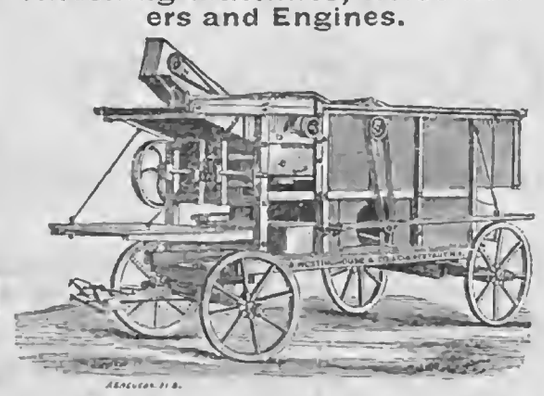

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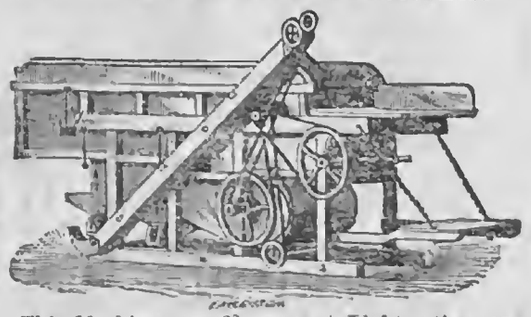

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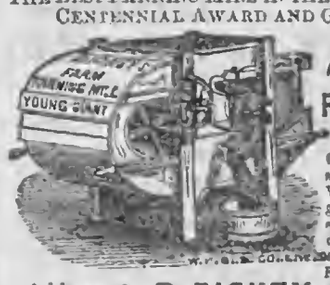

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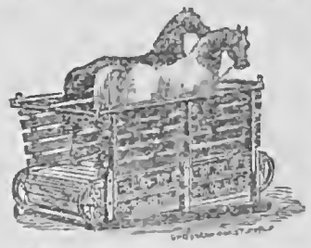

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50 Best Mixed Cards, with name, in case, 13c., or 25 no 2 alike 10c. Outfit 10c. Dowd & Co., Bristol, Ct

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$1200 Salary. Salesmen wanted to sell our Staple Goods to dealers. No peddling. Expenses paid. Permanent employment. address S. A. GRANT & CO., 2, 4, 6 & 8 Home St., Cincinnati, O.

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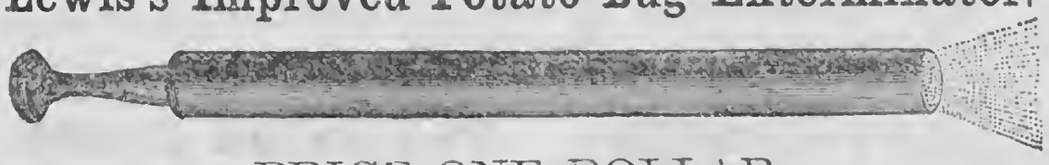

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Wit and Humor.

IN THE SWEET BY-AND-BY.

THE lawyer leaned back in his easy chair,
His client stood nervously by,
And the man of law sang, till the office walls rang,
"All right; in the suc it, by-and-by."

Cheerfully warbled the butcher,
Blood in his apron and eye;
"Summer is no time for puddings,
Wait for the suet by-and-by."

"Ah me," groaned the man with the meerschaum,
"I'll color it yet, or I'll die;"
And he threw his cigars out of the window;
"Give me this weed by-and-by."

Whenever the sons of Gustavus
Labor and warble and cry,
Earning their bread by the sweat of their face,
You'll hear the "Swede by-and-by."

And the man who went out to hunt lodgings
For a month and a day had to try,
Till he lit on some rooms that just suited his wife,
"We'll go in this suite by-and-by."

In the theater, minstrel, cathedral,
In the church and the beer-garden nigh;
In the concert saloon and the circus,
They all sing the "Sweet by-and-by."

"WHISKY is your greatest oncmy," said a minister to Deacon Jones. "But," said Jones, "don't the Bible say, Mr. Preacher, that we are to love our enemies?" "Oh, yes, Deacon Jones; but it don't say we are to swallow them."

THE following notice is posted verbatim by a Frenchman in Peacham, Vt., as a warning to persons inclined to trespass on his premises:

One mans come on my place, fish;
One mans come on my place, trap;
One mans come on my place, hunt;
Ten dollars lose for him.

WHO ever saw a rope walk?—*Rome Sentinel.* Who ever saw a horse fly?—*Albany Argus.* Who ever saw a cat fish?—*Yonkers Gazette.* Who ever saw a tree toed?—*Hackensack Republican.* Who ever saw a milk made?—*P. I. Man.* Who ever saw a lamb chop?—*Baltimore Sun.* Whoever saw an onion peel, or a corn "crib," or an apple paring?

A COUPLE of young men were out fishing the other day, and on returning, were going past a farm-house, and felt hungry. They yelled to the farmer's daughters: "Girls, have you any buttermilk?" The reply was gently wafted back to their ears: "Yes; but we keep it for our own calves." The boys calculated that they had business away—and they went.

Two sweet little girls sat upon the sidewalk in front of the Elko post-office, one of them nursing a large wax doll. Her companion asked in tones of deep earnestness, "Does 'oo have much twouble wif 'oo baby?" "Oh, doodness, yes!" was the reply. "She cwies mos' all 'e time. She jes cwied and cwied ever since she was born. I'm jes' discouraged, an' I don't fink I'll ever born any more."

THE only true matches are made by love, and when two people have really loved from the depth of their very hearts—nothing can ever part them again.—Yonkers Gazette. How beautiful! how tender! And yet there are hearts that the world in vain has tried; hearts that have beat as only one heart can thump; hearts that the same ice-cream spoon, as it were, has fed; hearts that have parted forever, because one of the twain didn't appreciate cold meat.—Com'l Adv.

THE following dialogue is reported as having taken place between a game-keeper and a patient looking through the iron gate of a French lunatic asylum: Patient—That 's a fine horse. What 's it worth? Keeper—Five hundred dollars. Patient—And what did that gun cost? Keeper—One hundred dollars. Patient—And those dogs? Keeper—Eighty dollars, I believe. Patient—What have you got in that game bag? Keeper—A woodcock. Patient—Well, now, you had better hurry on, for if our governor catches a man who has spent $680 to get a woodcock worth thirty cents, he 'll have him under lock and key in no time, I tell you.

Blindly Groping

For some medicinal alcoholic resuscitant of physical energy which should take the place of the heady and frequently adulterated stimulants of commerce, the medical practitioners of a quarter of a century ago were electrified on first observing the reviving effects upon the system of a tonic then recently introduced, but which has since become the most popular medicine sold on this continent, viz., Hostetter's Stomach Bitters. Their astonishment and admiration were increased when experience further disclosed that this botanic remedy effected results which the mineral drugs of the pharmacopœia often utterly failed to produce,—among others, the permanent restoration of vigor, the removal of digestive, secretive and evacuative irregularities, and the eradication and provention of periodic fevers. Speedy recognition of the merits of the Bitters by unprejudiced and enlightened physicians naturally followed this revelation of medical facts, which have since received such frequent and positive confirmation.

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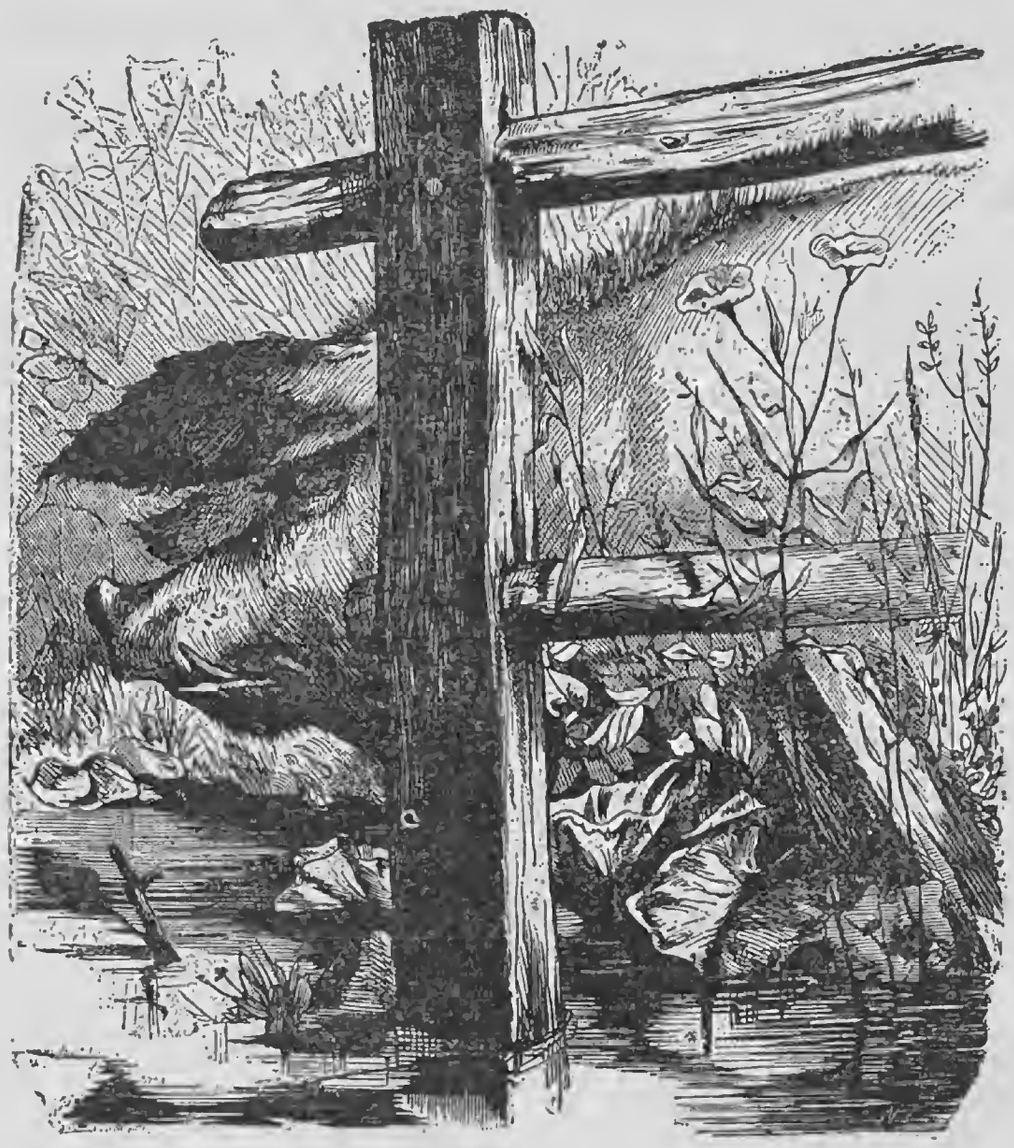

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Is perfectly PURE—free from acids and other foreign substances that injure Linen.

Is STRONGER than any other—requiring much less quantity in using.

Is UNIFORM—stiffens and finishes work always the same.

SOME OF ITS PECULIAR ADVANTAGES:

1st. That each tray receives immediately upon its entrance into the machine, the direct and greatest heat.
2d. That each subsequently inserted tray removes the preceding one into a lower temperature, out of danger.
3d. That it is thus almost impossible to burn the fruit during its process of evaporation.
4th. That the currents of dry, hot air, automatically created through its inclined flue are strong, and swift enough to make a toy wind wheel spin when held at the rear end, thus precluding the possibility of straining, cooking and discoloring the fruit. This accounts for the fancy work it does.
5th. That its evaporating capacity per square foot of surface is unequaled.
6th. That with it the individual farmer and orchardist can speedily, cheaply and conveniently convert his surplus or unmarketable fruits, &c., into a product, which will equal in appearance and value that produced by the costly commercial evaporators.
7th. That it is the only original inclined flue machine. Thoroughly protected by letters patent, and the only one which can guarantee protection and safety in its use against costly litigation or royalties.
8th. That it is the only portable evaporator, the manufacturers of which offer a market for their patron's product.
9th. That owing to the quality, appearance and market value of its products, it is the only cheap machine.
10th. That no farm implement will pay its cost as many times in a season as it will.
11th. That owing to the universal practice of sun and oven drying of fruits, the market for that kind is overstocked and does not pay, while evaporated fruit pays well.
12th. That it embraces more philosophical, correctly-applied science and peculiar advantages than can be enumerated in twelve points. Send for Catalogue and judge for yourself.

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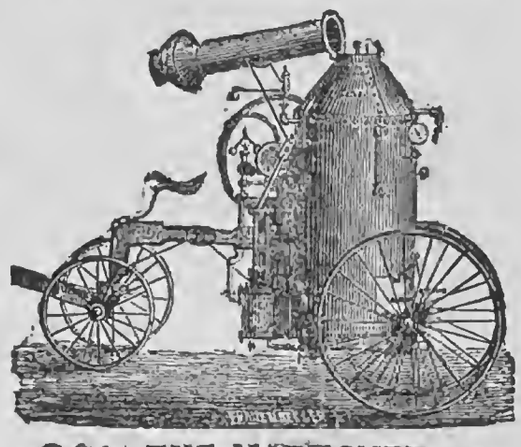

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 29.
WHOLE No. 1486.

NEW YORK CITY, JULY 20, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

Floricultural.

NOTES FROM THE RURAL GROUNDS.

July 10.

THE Willow of which we have to speak, is one very little known as an ornamental tree in this country. And because it is well worthy of being known, we propose to distribute cuttings of it among our readers. To assist them in determining whether it is worth the trouble of sending for cuttings or not, we give a somewhat descriptive article which we contributed to the London Garden and which was published by that Journal July 28, 1877.

SALIX LAURIFOLIA?

"In several of our nurserymen's catalogues is mentioned a tree which they call Salix laurifolia. The specific name is not authorized, and I have not found it even as a synonym in any works to which I have had access. S. pentandra is the nearest, from which, in several respects, it is yet notably different. Be this as it may, the tree, though but a Willow, is such a gem among Willows, that one admires it without charging upon it the blemishes of its family. I have been educated to a full appreciation of this medium-sized tree by slow degrees. No other in our grounds has excited from visitors the same amount of praise; in truth it at first annoyed me, that friends would pass by costly novelties, with polite expressions of approval, to pour out upon this words of real admiration; and so at length it happened that I saw this tree not as a Willow at all, with a malarial atmosphere of swamps about it, but as one of remarkable beauty, none the worse for its lowly connections.

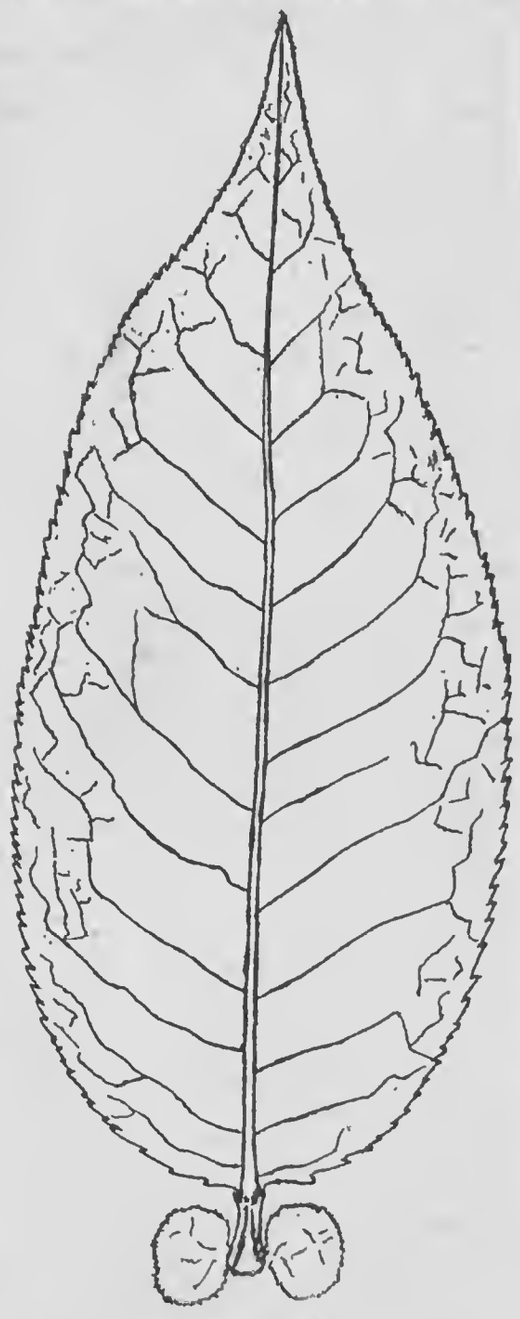
That it should be one of the first to unfold its leaves in the spring, and one of the last to lose them in the autumn, is a characteristic of Willows generally, though possessed by this species in an unusual degree; while that it should thrive in extremely dry situations, as well as in those of medium and excessive moisture is, as far as I am aware, peculiar to this species. We have one specimen growing beside a lake, upon a bank less than one foot above its level, so that its roots are perpetually in the water. Another specimen is placed in a situation that is neither dry nor moist; another grows upon high, dry ground, within three feet of a wing of our dwelling, and still another in a situation so sandy and dry, that we have been obliged, after repeated failures with other plants, to use such salamanders as Pines, Locusts, Privets, Matrimony Vines (Lycium barbarum), and the like, to secure something of an ornamental appearance to this half-arid belt.

Between the above specimens—growing in soils and situations so widely different—there is little difference in growth or thrift, and this little is in favor of the specimen growing near the dwelling.

The Weeping Willow (S. Babylonica) is in England a far handsomer tree than it is with us—at least in the Middle and Northern States. It is not quite hardy in this climate (New York)—not perhaps owing to the severity and extremes of weather alone, but because it is often weakened by various insects or their larvæ, that infest and sometimes girdle the stem. Thus, if not killed outright, it is often so injured by the frosts of winter as to present anything but a pleasing appearance the following summer. Hence we seldom see it in its full size and beauty; besides, it is not, like the S. laurifolia, at home in sandy, dry situations. In view of this, as also of the fact that I have never known the stems of S. laurifolia to be injured by insects, I attempted last summer to bud the one upon the other. The bud of S. laurifolia upon the S. Babylonica lived, and is now growing vigorously; the bud of the S. Babylonica upon the S. laurifolia perished. Doubtless, however, the rule would work both ways, and thus the insect and drought-resisting S. laurifolia could be made the stock of the Weeping Willow, which cannot so well endure drought, and is so often at the mercy of insect depredations.

As to the identity of S. laurifolia and S. pentandra, the leaves of the former are longer averaging at this time (June 27) 4 in.; they are also more finely crenate, more acuminate, and provided with reniform stipules. The tree is of more rapid growth, and attains to a somewhat greater hight than S. pentandra, which, according to London, is from 18 ft. to 20 ft. S. Meyeriana, which Linnæus calls S pentandra, more nearly corresponds with the form and size of the leaf, but the branches cannot be called "brownish," and the stipules do not "soon fall off." One of our oldest nurserymen, Mr. S. B. PARSONS, imported it from Angers in 1860, under the name of S. laurifolia, which, had it been either S. pentandra or S. Meyeriana, would have been quite unnecessary.

In the above respects there may be a difference between the male and female trees. I speak only of the female, never having seen any other; but of it I may say with enthusiasm that, on account of its incomparably glossy leaves that reflect the slightest light, its tall, smooth branches that sway in the wind as if they would surely be torn into shreds, and, withal, its elasticity, freshness, and shapeliness, it is worthy to fill not only those out-of-the-way places which are deemed unworthy of the finer plants, but of an imposing position upon the lawn, where, by the free use of the pruning-knife, it may be made to assume a round, spreading head, or, if



LEAF AND STIPULES OF SALIX LAURIFOLIA. (?)

left to itself, a fastigiate form, more glossy than, and as darkly green as, Magnolia grandiflora, and as compact and symmetrical as need be desired.

I should be glad if you could determine the name of this Willow." * * *

River Edge, Bergen Co., N. J.

[The Willow leaf which the editor of the RURAL NEW-YORKER has sent is, according to Mr. Gordon, that of Salix lucida of Michaux, and Salix Forbesi of Sweet's "Hortus Britannicus" for 1830.—EDS. GARDEN.]

Respecting the species we have only to add there are very decided points of difference between this tree and S. lucida as we have seen it in several nurseries. It has more ovate leaves, (see cut), they are more abruptly acuminate, the upper surface is darker the entire leaf heavier; the petioles shorter — the stipules more kidney and less heart-shaped. However, while we must accept the decision of an authority so trustworthy, we may be permitted to believe that it so differs from the species as to be entitled to a variety name.

Such as it is, however, we are happy to be able to say that we are prepared to send cuttings to any of our subscribers upon the receipt of a two-cent stamp for postage. The cuttings will grow with scarcely a failure, if placed in earth where they are to remain and be kept moderately moist for a week or so.

PLEASE OBSERVE.

For reasons which will occur to our friends, we are obliged to limit this offer as to time. We cannot fill any applications received after August 3d.

Farm Economy.

DRAINAGE.

R. C. CARPENTER.

LEVELING.

THE survey already described relates only to the location of drains, but there is another branch of surveying more intimately connected with their construction, and absolutely necessary in some cases. I refer to the branch called leveling, which gives us a knowledge of the rise or fall so essential to the proper construction of the drain. Leveling can be done in various ways, but whatever way it is done, the principle always remains the same. To perform leveling, you must secure a horizontal line of sight, then having a rod graduated into feet and fractions of a foot, hold it up, and sighting across the line of sight, see how far from the foot the line of sight intersects the rod. Call this distance a rod reading. Move the rod to a second point, and keeping the line of sight horizontal, repeat the process, the difference between the two rod readings will be the difference of level. It is to be noticed that we have no information of the point above which our instrument stands, but simply of the points occupied by our rod. This horizontal line of sight may be secured by many devices. The first to which I shall call your attention is the Wye level, in which the line of sight passes through a telescope, which is parallel to a spirit-level attached underneath. This is the most perfect of all leveling instruments, is easily adjusted and easily managed. The cost, however, is so great as to preclude an extensive use of it. But there is an instrument sufficiently accurate for all ordinary purposes of leveling for underdrains, and with a price sufficiently low to place it within the reach of all. I refer to Sibley's level.

DESCRIPTION AND DIRECTIONS FOR USE.*

The level is made of iron, and consequently is not liable to warp and change like the wooden level. The sight marked A is made of brass, with an adjustable ring, in which are set cross wires, the intersection of which is at equal distance from the bottom of the level with the pin-hole brass sight B. In the center of the table, on which the instrument sits, is a hollow pivot fitting a hole in the center of the instrument, on which it revolves. On the board is marked any angle desired, a plumb-line passes through the pivot and falls over the starting point. Place the line seen in the engraving on the end of the sight and the line marked on the table together, and place them on a line with the given line of which the plumb-line marks the center; place the level on that line, and then turn the instrument to any angle marked on the table, and all points on that line are at a given angle with the given line. For example, a mason or carpenter has to stake out the foundations of a building: drive a corner stake, let the plumb-line fall over it, and place the instrument and table as before explained; and, after getting the levels on the given lines, turn the instrument to an angle of ninety degrees marked on the table, and all points on that line are at a right angle with the given line. You have your foundations, square and level. To use as a draining level, set up near the line of the drain, level the instrument, and the line A—B will be a level line, hold a staff divided into feet and inches, or feet and tenths of a foot, at the point you wish to find the level of. If the staff have its gradnations numbered from the bottom up, the point where the level line through A—B intersects it, will be the number of feet that the bottom of the staff is below the level line A—B. In the same way, setting the staff on another point, find how far that is below the line A—B. The difference between the hight of the line A—B from the bottom of the staff, in its two positions, is the difference of level of these two points.

The drain-level notes at the College are taken in the following manner: A projecting portion of the brick work of one of our buildings is taken as a reference point, and is assumed to be 100 feet high, although but two feet above the ground. The level is set in a convenient position so that its line of sight is above this point, a rod graduated into feet and decimals is next held on the point so that the feet are numbered from the bottom up. Where the line of sight intersects this rod is called a reading, for it shows the feet and fractions of a foot that the bottom of the rod is below the line of sight. This reading is called a + sight, for added to the hight of the point (technically called a bench), it gives the hight of the instrument.

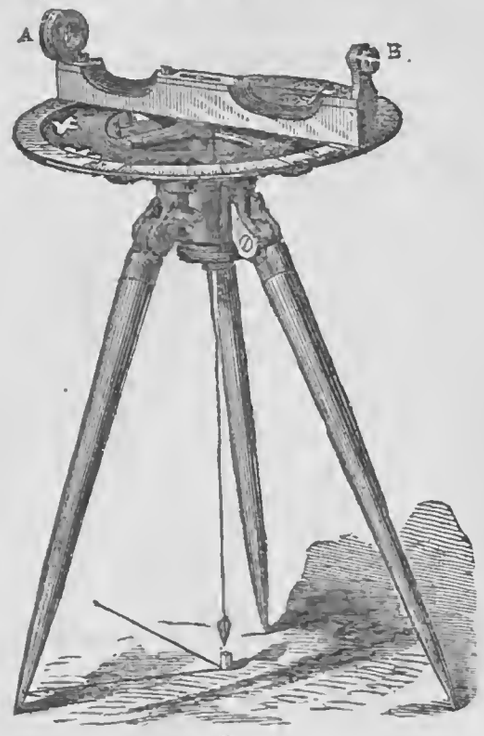


FIG. 1.

Now, if the instrument be kept level, and a rod held on any of the pegs, the reading on the rod will show the distance of the peg below the instrument, this we call a — sight, because, subtracted from the elevation of the instrument, it gives the elevation of the peg, which is the same as that of the ground.

The elevation of the outlet of the drain is next ascertained in the same manner to this elevation adding the rise per station, which is found by dividing the whole rise by the number of stations. We get the elevation of the bottom at the next station, proceeding in the same manner we find the elevation for the bottom of the ditch throughout. The depth at any point will then be found by taking the difference between the

* For the use of the cut of Sibley's Level we have to thank Mr. A. J. Bicknell of this city.

elevation of the peg and the elevation of the bottom. The depth is marked on the stake by the peg.

We give a portion of the field notes of a drain in field No. 2, to show the method in which they are kept:

LEVEL NOTES.

Station.	+ Sight.	Hight of Instrument.	— Sight.	Elevation Surface.	Elevation Bottom.	Depth.	Remarks.
Bench Mark. T. P.	0.87	100.87		100.00			Bench mark is on northeast corner of College Hall, and is assumed to be 100 feet high.
0	1.34	91.64		90.30			Surface of ground at outlet.
1			8.97	82.67	80.50	2.17	Top of tile in main (0.5 feet in diameter).
2*			10.64	81.00	81.03	1.86	
3*			8.78	82.86	81.50	0.39	
4			9.76	81.88	81.50	1.94	
5			7.70	83.94	82.00	4.23	
6*			4.41	87.23	83.00	4.19	
7			3.45	88.19	84.00	4.29	
8			2.86	88.78	84.50	4.01	
9			2.63	89.01	85.00	3.68	
10			2.16	89.48	85.50	4.42	
11			1.22	90.42	86.00	3.84	
			1.30	90.34	86.50	3.67	
			1.03	90.61	87.00		
+ 21 feet.			1.65	89.99	87.21	2.78	Ends in lane fence 67 feet north of drain previously described.

* Grade changes.
NOTE.—Stations 1, 2 and 3 are in a muck marsh, from which most of the muck has been drawn out for composting purposes, and not replaced as yet with firm ground.

OTHER METHODS OF LEVELING.

The carpenter's spirit-level may be used by setting it on the horizontal arm of a boning rod which is in the exact line of a ditch. It is used in the manner already described, and for short distances gives quite accurate results. The square with a small 75-cent level attached to its horizontal arm, which is stuck through the slit in an upright stake on the exact line of the ditch, is nearly as good. With a plumb-bob and string hung over the vertical arm of a square suspended as before, approximate leveling can be done. Leveling that depends for accuracy on a plumb-bob will be liable to considerable variation, for the bob swings with all the ease of a pendulum, and the exact point where it is vertical cannot with accuracy be determined. If the plumb-bob is immersed in water it is somewhat more quiet, but even then it is liable to be moved by a breath of air.

A straight-edge, mounted on a table of some kind, can be approximately leveled by pouring on it some water and noticing which way it runs. If it runs equally in all directions it is about level. I say about, for it is a rough instrument, and you need not expect to do accurate work with it. There are a great many other devices for securing a horizontal line of sight, but all of them depend on the principles already enumerated, and we will not further consider them.

CONSTRUCTION OF A DRAIN.

Most of the points necessary for the successful working of a drain have already been noticed, and it remains only to briefly call attention to the construction of the drain itself. The first thing is the digging; this is done after laying out the center line of the ditch, by throwing out a trench from 18 to 30 inches wide. This trench is gradually narrowed as the bottom of the ditch is reached, until at that point it is but one spading wide. The best implement for most ditchers with which to do this work, is the ordinary spade; some spades made tapering especially for this work, are of little or no value, as it is very difficult to do clean work with them. Great care should be taken not to dig beneath the proposed bottom of the ditch at any point, as that will cause uneven settling of the bottom. To prevent this it is best to throw out at first no dirt nearer than six inches to the bottom, leaving the remainder in until nearly ready to lay the tiles.

The next step is to set a line above and parallel to the desired bottom of the ditch; this is done in a very simple manner by supporting the line at each end by two sticks fastened together with a bolt, and called shears, which can be raised or lowered by shoving the legs in or out.

The shears are shown in Fig 4, and are made of two strips of light wood about 7 feet long and 2½ to 3 inches wide, held together by a small carriage-bolt about six inches from the upper ends.

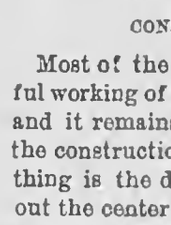


FIG. 4.

Two of these shears are placed astride of the ditch at a distance of 4 to 6 rods from each other. They are then adjusted to the proper hight by spreading or contracting the legs, at the same time keeping their point of intersection over the center of the ditch. At the same time, or before the shears are adjusted, a small and strong line is passed over them and wound once around one of the short arms of each set of shears to prevent slipping. The line is then fastened by connecting it with a peg driven into the ground somewhat farther from the shears than the hight of the line above the ground. To prevent the line from sagging, boning rods, as shown in Fig. 5, are used. These are made of a round rod of hard wood about seven feet long, and 1½ inch in diameter, to which is fastened a horizontal arm about two feet long, which is 2 by 2½ inches next the rod and made tapering for the sake of lightness. This is held in position by a wedge, as shown in Fig. 5.

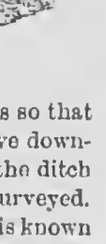


FIG. 5.

Fig. 6 shows the line, shears and boning rod in position. The line in our practice is set just 7 feet above and parallel to the desired line of the ditch. Each set of ditches at the College is provided with a staff just seven feet long and graduated into feet and tenths. To set the line,

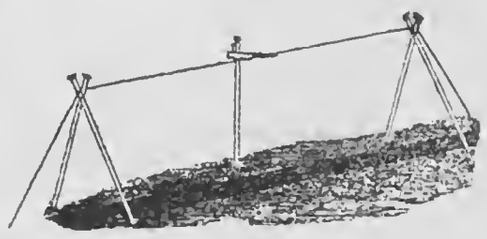


FIG. 6.

the staff is held bottom side up (that is so that the graduations are numbered from above downward) on the "peg" by the side of the ditch which was set when the ditch was surveyed. (The hight of this peg above the bottom is known and recorded on a stake by the side of it.) From the upper end of this staff take a distance equal to the depth of the ditch below the top of the peg, and it will give the proper position of the line. This you notice is the same as subtracting the depth of the ditch from seven feet.

After setting the line, you are then prepared to finish digging the ditch, the depth of which you can test from time to time by means of the line above it. The final cleaning of the ditch can best be done with a semi-cylindrical scoop, somewhat larger than the tile, mounted on a handle. This scoop leaves a round groove in the bottom very convenient to lay the tile in. There are several kinds of scoops in use by ditchers. The two in most common use are the "push scoop," shown in Fig. 7, and the "pull scoop," shown in Fig. 8. An improved form which combines the properties of both these scoops, was devised by Dr. Miles, and has been in use on the College farm a number of years. It is shown in Fig. 9, and was named by him the "College scoop." The position of the shank in the middle of the blade gives a balance to this scoop, that not only makes it easier to manage but makes it stronger. The blade of this scoop need not exceed twelve inches in length when used in connection with the line already described.

FIG. 7.

FIG. 8.

The bottom made by the scoop should be tested by measuring from the line, and if correct for three or four feet (the distance you can reach with a scoop) you are then prepared to commence laying your tile, the first tile should be carefully laid; then, in the groove left by the scoop, lay the second tile, turning it around until a good joint is secured, then if no collar, cut a piece of closely shaven turf about six inches long and four wide, and lay, grass side down, over the joint, tucking it fairly around with the fingers. If a collar is provided, no turf will be needed; the collar should be put for half its length over the first tile, and the second tile slipped into that. In heavy land no joint-covering is usually needed, the drains working perfectly well without it.

FIG. 9.

After the first two tiles are laid, they can be covered with about six inches of dirt, and you can stand upon them to lay the third without danger of displacement. In this way proceed until all the tiles are laid, measuring the distance of each tile from the string, to be sure that the correct grade is preserved.

It is not safe except in stiff land, where the ditch will remain clean, to lay the tile from the bank of the ditch, with an instrument made on purpose. Better work is usually done by getting in the ditch and laying them in the method described.

COST OF UNDERDRAINING.

The cost of underdraining depends upon so many considerations that it cannot be very accurately stated. It depends on the price of tile, character of the soil, grade of the drain, and various other circumstances which may arise. The cost of the tile at the brick-kiln at Lansing, Mich., is as follows: Two-inch tile, $11 per M., or 18 cents per rod; three-inch tile, $16 per M., or 24 cents per rod; four-inch tile, $26 per M., or 44 cents per rod; six-inch tile, $50 per M., or 84 cents per rod.

The Jackson Fire Clay Company of Jackson, Michigan, make an excellent vitrified tile of fire-clay, of unusual strength and excellence. These tiles being vitrified do not absorb water, and consequently are less liable to be affected by frost. Their prices for carload lots, delivered on the cars at Jackson, are as follows:

2-inch tile per 1,000 feet	$11 00
3-inch tile per 1,000 feet	17 00
4-inch tile per 1,000 feet	26 00
5-inch tile per 1,000 feet	36 00
6-inch tile per 1,000 feet	46 00
6-inch tile per 1,000 feet (each tile two ft. long).	50 00

It is commonly estimated that two-inch tile can be made with good living profit for $10 to $11 per thousand, and the rates should not in any portion of the State differ materially from those given above. The cost of digging is estimated by Waring to average for drains four feet deep, 29 cents per rod, and for laying and filling 7 cents, when labor can be had for $1 per day. The cost of preparing drains three feet deep is about two-thirds of the cost of those four feet deep. The cost can be considerably reduced by the use of the plow and the scraper; some say the cost can be reduced one-half, and I should always advise their use both for filling and digging. The cost per acre depends upon the distance apart; four-foot drains do good work four rods apart; this would require forty rods per acre: if three-inch tile be used, the total cost would be about 50 cents per rod, or $20 per acre. If but eight or ten rods be constructed per acre, as is usually the case, the cost would be reduced to $5.00.—[To be continued.

Field Crops.

ONE OF OUR BEST GRASSES.

An Experiment on a Disputed Point.

PROFESSOR W. J. BEAL.

QUITE often we hear the question discussed, "Which is the best breed of horses, cattle, sheep, or swine." Before answering this, the best informed men ask the pertinent question, "What do you want them for?"

A similar rule applies to grasses in cultivation. Some are best for one soil or purpose and some for another. On the richest pasture lands of Kentucky, they boast of Blue-grass as the best the world affords. The rapid growth, good quality, and bountiful yield of this grass have rendered certain counties of Kentucky famous throughout the Northern States, and even in Great Britain.

The writer has heard of some instances of farmers in the Northern States who have sent to the South to procure seed of this famous grass. They have been disappointed. For many years the botanists have been telling the farmers that the plant which is known as "Blue-grass" in Kentucky is generally known at the North as "June-grass, Green-grass, or Spear-grass." The writer has, through the press and public lectures, probably answered this question ten times or more a year for the last ten years, and during the last few years oftener than ever before. Are they the same? There is nothing like giving the matter a practical test.

Two years ago, I sent to a reliable friend in Louisville and had him procure a small sample of what is there known as "Blue-grass." He procured two samples of two different seedsmen who knew where the seed was raised. I planted these in two small beds among my grass-plots. Between them I planted seeds of June-grass, which I selected myself from the hay which had been cut on the farm of this place. They were sown at the same time, on soils to all appearances alike. The three plots came up alike, grew alike, and blossomed together. A careful examination showed as great a variation in size and color of the stalks in one plat as in the other. Every one who saw them, farmer, student, and botanist, pronounced them identical. This grass is Poa pratensis. A great many farmers and writers confound this grass with another called Poa compressa. The latter has a flattened stem, flowers a month later, has a smaller head and shorter leaves. It does not run and spread all over, as is the case with June-grass. The stems of Poa compressa remain green for a long time after the plant goes to seed. The stalks are a dark bluish-green, well meriting the name "Blue-grass," by which it is usually known at the North. The latter runs the scythe badly when it is mowed. It usually looks rather thin, but yields a great weight according to its bulk. I do not include this Poa compressa among the grasses recommended for pasture or meadow, unless it thrives unusually well.

Some of our raisers of stock have visited Kentucky and have read the papers. They are beginning to talk of "Blue-grass" in the manner of Southern people. Others call it "Kentucky Blue-grass." This makes the confusion still greater. I wish our Southern friends, many years ago I presume, had never applied the term "Blue-grass" to Poa pratensis. The grass is certainly not as blue as Poa compressa. Some may think it useless to write so much on this point, but there are many who want to know the truth about the matter.

In Michigan, June-grass flowers only once a year, about the first days of June. The stalks are usually fine and short and make but a little hay to the acre, though this, if cut in season and well cured, is very sweet and nutritious for horses and cattle. This grass usually runs out clover and timothy in about two years. It is a great pest in cornfields, especially if the land is low, rich and not well drained. The grass is very hardy, starts early in spring and grows all summer till cold weather. It is too often judged by its single growth of short stems, while its chief value consists in the continued growth of its leaves. For permanent pastures, even on low or mucky or bottom land, I know of no better grass. When it once gets started it spreads with great rapidity, much like Quack-grass. It is well supplied with underground stems, which are erroneously called roots.

This is our most valuable grass for lawns, at least in nearly all places. If cut often and sown on rich ground, it makes a soft, thick, green turf which is a delight to the eye and to the feet which tread upon it. Poa pratensis is one of the most common, and ranks among the best grasses of the United States.

Agricultural College, Lansing, Mich.

The Herdsman.

ANIMAL FOOD AND ANIMAL PRODUCE.

L. A. R., writing to the RURAL, says:

"There was once a man thin and spare, of whom his neighbors said he eat so much it made him poor to carry it around.—I was reminded of this when reading in the leader of this week's RURAL that it is those animals which have the capacity to eat, digest and transform the greatest quantity of food which are the *most profitable*. Now, I should make objection to this rule of selection unless you can make it appear that "transform" is a saving word. Certain breeds of cows are known to be gross feeders, while others will thrive on much less percentage; so with horses—and we do not find in cows the greatest eaters to give the most or richest milk, or in horses that those which consume the most food are, as a class, better workers or drivers—at least so far as my observation goes—can that position be sustained?"

ANS.—If our friend owned a mill and manufactured flour, for which he received a certain advance on the cost of the wheat used, he would have no trouble in understanding that a certain number of bushels must be ground each day to pay the miller and to cover the interest on the investment; and that if he made a profit, his mill must have a capacity beyond this number of bushels; and finally, that his profit must be in proportion to this extra capacity.

The same principle holds good when we come to manufacture butter or cheese or wool, beef or mutton or pork—the animal must be supported and the interest on its cost covered before we get any profit; consequently, the animal which has the capacity to manufacture the most raw material into finished products, must, of necessity, be the most profitable. The case is generally more complicated than this, however—it may be, that if we attempt to screen more wheat, a certain proportion will be lost with the screenings, a certain proportion may be spoiled by grinding too rapidly, or a part of the flour may be carried into the bran by overtasking our bolter. And so with animals—if they are fed more than they will eat, a part will find its way into the litter and be lost—screenings; if they eat more than they can digest, another part will fail to be made into proper material for assimilation and pass off with the excrements—too rapid grinding—or if they assimilate more than the cells which secrete the milk, fat or wool can use, this extra amount will be lost as a waste product—overcharged bolter. It may be said that we need not feed our animals beyond their capacity and then this loss will not occur; very well, we may also say it of the manufacturer of flour, but unless he grinds a certain number of bushels per day he *cannot expect* a profit. The miller, however, will be quick to see what was wanting and replace his insufficient machinery with that of greater capacity—why not the farmer as well?

It would seem that our friend has lost sight of the fact that every animal's product is the result of the transformation of the food, and if no waste occurred a certain amount of food should invariably produce a certain return, whether this consists of muscular power, fat, milk or wool; but wastes do occur in the different ways we have mentioned, and in still others which we have not space to consider, and the most profitable animal, like the most profitable machine of any kind, is the one that can use the most raw material with the smallest proportion of waste. It may be that the farmer cannot discover just how the waste occurs, but he certainly can ascertain, by the method pointed out in our editorial of July 6th, which animal uses its food in the most economical manner.

Now, these are general principles applicable to manufactures of all kinds—they are incontro-

vertible and self-evident; but we have some special problems offered for solution, to which, from the importance of the subject, we will give special consideration. In our editorial, we used the words, eat, digest and transform, and each of these was necessary to convey our whole meaning; we will now attempt to explain what was meant by the word transform. The milk given by a cow, the muscular force produced by a horse or ox, the wool grown on a sheep, the fat secreted by certain tissues in an animal, are *above all* dependent on the constitution and activity of the individual cells which make up the organ that gives us these products in the different cases; and this constitution and activity of the cells are partly inherited, and partly acquired by the conditions under which the animal lives from birth to a given time. No matter how much food is eaten and digested by a half-wild Texan cow, no matter what care she receives, she will not be a large milker on this account; neither can a precocious Short-Horn steer hold his own if worked by the side of oxen of some other breeds; nor yet will a long-nosed native hog lay on fat like an improved Berkshire though otherwise under the same conditions. The same amount may be eaten and digested, but the cells of the udder, of the muscles or the fat secreting tissues have not the capacity to use it—it is burnt up in the system and leaves it as waste products. But this does not affect our position—if we had simply said the more an animal eats the more profitable it is, this would have been an imperfect statement; or if we had stopped by saying the more an animal eats and digests, we would still be short of the truth; but we intended to include all of these processes and we believe our position is impregnable.

A certain amount of heat is necessary to sustain the body at a proper temperature, to warm the food and drink, to keep up the circulation, the digestive and nutritive processes; and a certain amount of nutritive elements must be destroyed to supply this heat and force, and it is a physical impossibility for it to be supplied by less; again, one part of fat may be manufactured from 2.44 parts of starch or 1.94 parts of albuminoids, and it is a chemical impossibility for it to be produced by less; so that when a cow digests all that she eats, when her udder has the capacity to use all that remains after the wants of the body are supplied, and when these wants remain constant, an increased quantity of food eaten should invariably produce a corresponding increase in the nutritive elements of the milk. It is evident, however, that the same conditions are not always present, and, consequently, the milk does not always bear a definite relation to the food, and for similar reasons the capacity for work or producing fat may not always correspond with the quantity of food taken. The post-horses of Paris, however, have a nearly constant weight to draw; they are fed on a ration of support, and, in addition, 400 grams of oats for every kilometre traveled; that is, their feed is exactly in proportion to their work; it has been determined by long experience, and it is found when they do not receive this amount they use up their own flesh and very soon become unfit for work. And so with any other animal, the produce which it supplies is manufactured from the food, and, within certain limits, bears a constant relation to it, but the amount of food which it can use profitably depends upon the capacity of its internal machinery; consequently, we repeat, "*it is those animals which have the capacity to eat, digest and transform the greatest quantity of food, which are the most profitable.*"

PRIZE CATTLE AT THE OXFORD SHOW.

The "Bath and West of England" Society held its annual Agricultural and Horticultural show this year the first week in June at Oxford, the Oxfordshire Agricultural Society co-operating. It is universally admitted to have been one of the most interesting and valuable shows ever held in England, which, considering that the exposition of Live Stock at Paris occurred at the same time, is noticeable.

We re-produce, from the Agricultural Gazette, three photographs of those animals most likely to interest American farmers: first the Herefordshire Bull, three years old, winner of the first prize in the Old Bull Class, and declared by the judges to be the best male animal on the grounds, even superior to the superb and famous Short-Horn bull "Sir ARTHUR INGRAM" owned by Mr. W. LINTON, Sheriff of Hutton, York. The owner of the Hereford is Mr. A. ROGERS, The Rodd, Kington, Herefordshire. The photograph is copied with the free pen of a real artist and is no doubt a faithful likeness of the sleek and sleepy original. One of DANIEL WEBSTER'S clients, commenting to him about the opposing counsel, said: "He is a sleepy-looking old fellow." "Ah" said Mr. WEBSTER, "if Judge So-and-So is asleep, don't let anything wake him up." We feel a good deal so about a sleepy bull of those proportions.

In his anxiety to show the breadth of breast and depth of brisket, the photographer foreshortened the animal a good deal, so that we lose the great length characteristic of the breed. It is nevertheless a strikingly real picture.

Next Mr. SIMPSON'S Jersey cow "Luna" which won first in the class of cows three years old or over in milk or in calf. She is said to be a grand cow and a splendid milker. Mr. SIMPSON'S herd at Wray Park, Reigate, Surrey, is one of the best in England. He is very careful as a breeder, a close student of pedigrees, and quick to secure at any cost whatever may improve his herd. He breeds from solid-colored animals, gray or blue or inclining strongly to these colors, and when the herd was

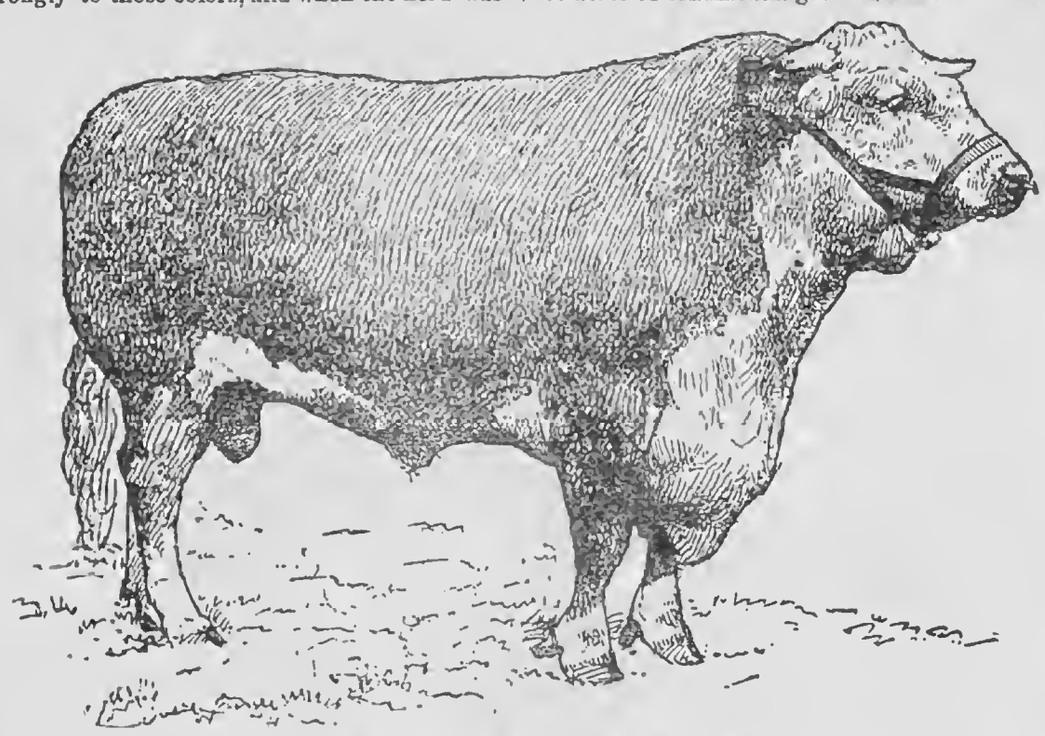
Horticultural.

GARDEN TALKS AND WALKS.

THE BEECHES, Mass., July 6, 1876.

MR. HUNNEWELL'S RHODODENDRONS.

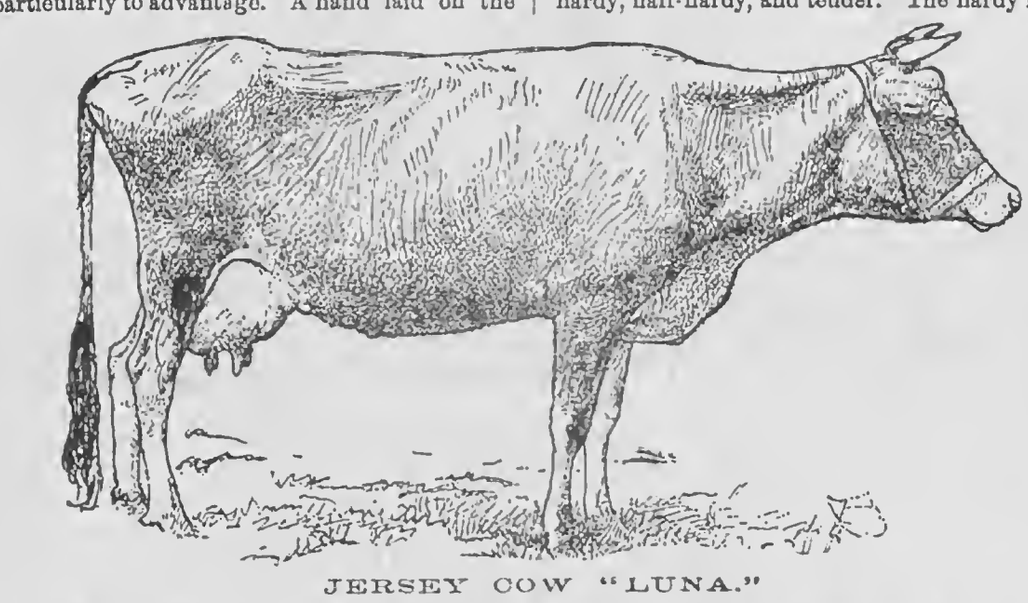
Mr. H.'s garden at Wellesley comprises some 50 acres of ornamental ground, and is one of the



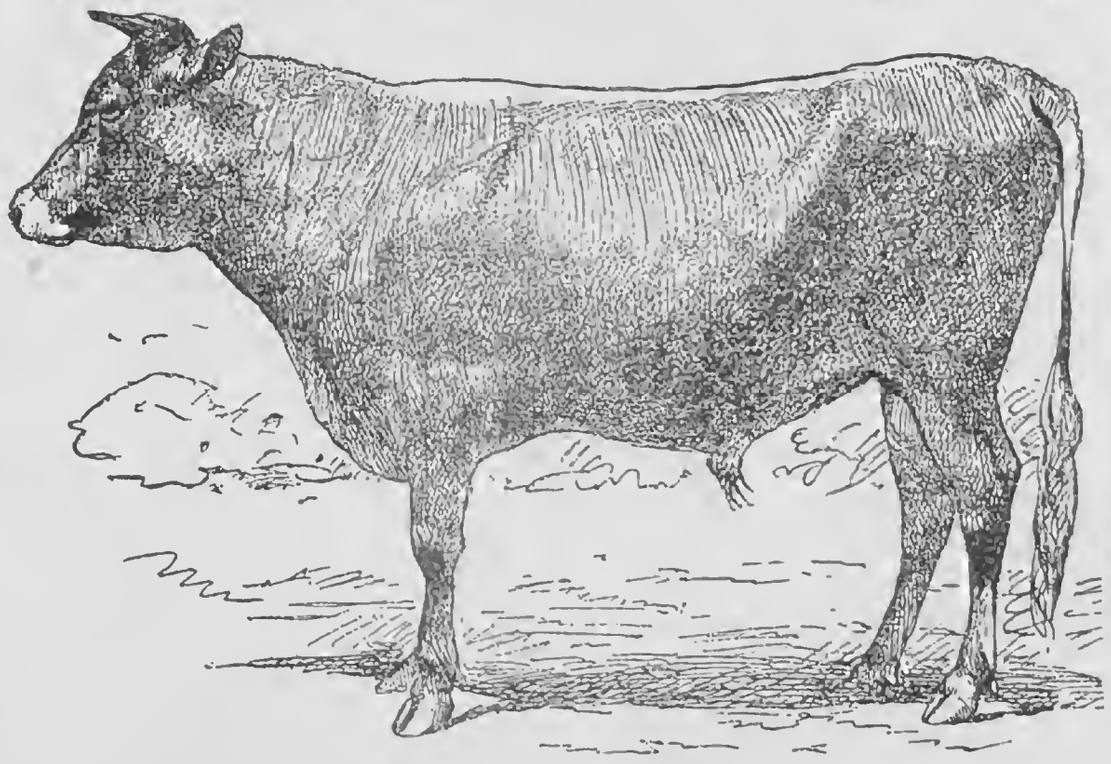
HEREFORDSHIRE BULL.

visited by the writer he would have no others in it; nevertheless he was realizing a great amount of milk of the richest quality, which makes it plain that the possession in the highest degree of fancy points by an entire herd is not incompatible with great excellence, perhaps the very greatest excellence as butter producers. The picture is not a handsome one, but it without doubt represents a very handsome and excellent cow. Her pose is bad, not showing the hind quarters particularly to advantage. A hand laid on the back would have corrected the apparent droop of the rump, and neither this nor the picture of "Gipsy Lad" is so skillfully drawn as is that of the Hereford.

The third picture "Gipsy Lad" is another of Mr. SIMPSON'S breeding, though shown by Mr. H. A. RIGG of Walton-on-Thames. This year he is highly commended, while last year he won the first honors of this Society, 3rd. at Liverpool and H. C. at Banbury, evidently an excellent two-year-old and quite likely with a pedigree containing the names of more prize-winners than any Jersey animal in America can show, and yet he and his progeny are no doubt excluded from American herds, or from those whose proprietors wish their stock entered in the Herd Register of the American Jersey Cattle Club, because the pedigree runs back beyond the time for which the most accurate documentary evidence has existed.



JERSEY COW "LUNA."



BULL "GIPSY LAD."

most princely establishments of its kind in our Union. Most kinds of gardening are well represented, but Rhododendrons, Azaleas, and hardy conifers are objective points. A public exhibition is made of the Rhododendrons when they are in full bloom, which is usually from the last week in May till the second week in June; and a more gorgeous and profuse display can hardly be imagined.

The Rhododendrons are of three kinds, viz.: hardy, half-hardy, and tender. The hardy kinds occupy beds and sheltered banks and borders in immense masses through the grounds. The soil is a light loam on a gravelly bottom. The beds for the plants have been well prepared by deep working and liberal enriching with peat and leaf-soil. Before winter sets in, the ground is heavily mulched with leaves, which are permitted to stay during the summer time, and thus decompose, and enrich the earth. During the summer months, for tidiness' sake, the rougher part of the mulching is pushed back from the front of the beds. I noticed a deep trench along the back of some of the larger beds, and was informed by Mr. Harris, the gardener, that it is to prevent encroachment of the roots of the neighboring trees to feed on the compost prepared for the shrubs. Mr. Harris does not think that the cases of failure, so often experienced, are due to cold, but instead, to drought and the consequences resulting from exposure to mid-day sun. In order to grow them successfully, he advises a sheltered location, partial shade from noon-day sun, deeply-prepared soil liberally mixed with peat, leaf-mold, and sand, a heavy mulching of leaves in winter to lighten the severity of hard frosts, and the mulching to remain during the summer time, to assist in keeping the soil moist and cool. Peat, however, is not absolutely necessary, but a location where water will not lodge in pools in the winter time is imperative. These hardy sorts are mostly varieties and crosses of R. Catawbiense, a species indigenous to the high Alleghanies, from Virginia southwards. Some of the finest hardy Rhododendrons are; giganteum, bright rose; atrosanguineum, deep red; Everestianum, rosy lilac; Caractacus, deep purplish crimson; grandiflorum, rosy crimson; Blandyanum, bright cherry; delicatissimum, white to blush; album elegans, blush to white; Glennyanum, blush; and Lee's, purple.

The members of the half-hardy section are very beautiful and many of them brilliantly colored. They are a progeny (hybrids, crosses and varieties) mostly obtained from R. Catawbiense and Ponticum, hybridized with the more glowingly-colored Asiatic species, notably R. arboreum of the Himalayan Mountains, and which is a noble scarlet-flowering kind. Before winter sets in Mr. H. lifts these half-hardy sorts with their roots as intact as possible, and heels them in in light soil in a cellar, pit, or shed, there to remain till the following spring, when they are again transplanted to their summer quarters out-of-doors. All the light and ventilation practicable are admitted during the winter months, of course, regulating the amount of ventilation by the state of the weather. Instead of the plants objecting to this mode of treatment, they seem to like it, and grow freely, blossom lavishly, and make a proportionate annual increase of roots. A few of the best of them are: Purity, white; The Queen, blush to white; Helen Waterer, rose with white center, a most lovely sort and now only one among many of like marking; Scipio, rose; Stella, pale rose; Lady Armstrong, pale rose; concessum, pink; Crown Prince, bright rose; H. W. Sargent, crimson; Mrs. Milner, crimson; James Bateman, rosy scarlet; Prince Albert, rich lake; and Joseph Whitworth, rich lake, considered by Mr. Harris the finest dark-blooming Rhododendron in their collection.

The tender sorts are grown in pots and treated as green-house plants. They are mostly species from the mountains of India, but now, too, we have many beautiful garden-raised sorts among them. They all have beautiful flowers, and several of them, exceptionally handsome leaves. Just now they are in a shady, cool green-house, in which the temperature is even and the atmosphere moist, and when they shall have completed their growth, they will be transferred out-of-doors to ripen their wood. Rhododendron Edgeworthi, arborenm, Dalhousiæ (naturally an epiphyte), campanulatum, Princess Alice, and the like, represent this group. RENOCLAF.

KISSENA NOTES.

UNUSUAL GROWTH.

IT is an oft-noted fact that the amount of growth produced during different years varies widely. Conditions of heat, moisture, etc., retard or advance the development of tissues. Old Oaks, sawed down, indicate their best years of growth by annual rings which, in some cases, will be much broader than in others, proving that the increase has been greater during some particular years. The present season has been thus far remarkable for the unusual growth made by both trees and shrubs. In many cases, the increase is a third greater than is generally attained. It is pleasant, undoubtedly, to contemplate such abounding vigor, but we must pause before giving way to exultant feeling. Growth made during such copious rains must be necessarily succulent, and not consolidated as it would have been during drier weather. Should we have frequent rains during the remainder of summer, a hard succeeding winter may teach us to rue what appears to us now a decided advantage. Even a drought may prove a blessing in disguise. The experience of a recent Horticultural Exhibition of deciduous trees in Gilmore's Garden, N. Y. City, will exemplify the correctness of our inferences. Plants, taken up and either balled with moss, or potted, during a pouring rain, and carted 10 miles under the same conditions, failed to retain the freshness of similar trees exhibited last year in the same place. Last year, however, the week preceding the exhibition, was very dry, a fact which is quite significant. Japanese Maples have been accused of defective hardiness during the extreme heat of midsummer. It is therefore interesting to note that under the burning suns of the present July days, they neither scald, nor burn, nor shrivel up. Much of the fault that has been found with them has grown out of their behavior the year succeeding their importation from Japan. Transplanting also checks a plant under any circumstances, and renders it less able to resist hardships during the year immediately following.

NONE BETTER.

What a grand Clematis Jackmanni is! A specimen of large size, just before me as I write,

shows such masses of flowers that its surface is literally covered. Its color is rich, and size large. There are indeed larger and more exquisite Clematises, but none blooms better or grows more vigorously, or, in a word, is better suited for general employment.

A PRETTY SPIRÆA.

The pretty dwarf Spiræa crispifolia, introduced by Mr. THOS. HOGG, and certainly very novel, is just now in bloom. Its entire surface is covered with pretty pink flowers that will come a second time during the latter part of summer and early fall. It looks and acts very like Spiræa callosa in many ways. This habit of late blooming renders it valuable for completing the succession of bloom at a season when flowers are scarce. The landscape gardener will also find its round, dwarf form useful in shading off the outskirts of a group of shrubs. As it grows older, it becomes more spherical and compact.

THE GOLDEN YEW,

so long and justly celebrated, is especially beautiful during June. There is a softness and brilliancy about its gold, that is very charming. Unlike the Golden Retinospora, this fine coloring changes to a greener hue during the maturity of late summer and fall. No tree can be trained into artificial shapes more perfectly than the Golden Yew. I can recall now a compact group of three specimens so pruned that the imagination might readily conceive them as representing the identical quadruped that wore the Golden Fleece. And yet I question whether the Golden Yew is ever more graceful and attractive than when it has been pruned just enough to simply develop the natural curves of its true character.

SIBERIAN ARBOR-VITÆ.

The custom of using Siberian Arbor-Vitæs in quantities for surrounding the lots in cemeteries seems to have fallen into disfavor. People are coming generally to recognize the superior attractions of a park-like cemetery. It would be a pity, however, to neglect the Siberian Arbor-Vitæ, for although its shape is somewhat too formal and definite for a hedge, yet it is, after all, the hardiest and most richly colored Arbor-Vitæ we have. In groups of three or five about the lawn, its effect is pleasing and valuable. The peculiar form it assumes does not combine harmoniously with most other trees. It should be only used sparingly in mixed groups and then always among slow-growing evergreens of slightly similar forms. SAMUEL PARSONS.

THE BANANA IN CALIFORNIA.

WM. O. L. DREW.

PROSPECTS OF BANANA CULTURE.

THE Banana, Musa sapientum, has until recently, been looked upon as only possible of successful cultivation in full tropical climates, but as our knowledge of the capabilities of our soil and climate has increased, the possibility of successfully growing the Banana within our borders has been advanced, and a few have been bold enough to attempt its cultivation. These pioneer attempts or rather experiments at Banana culture, have been attended with very satisfactory results.

As yet it has only been shown that the Banana can be successfully and profitably cultivated in Los Angeles and San Diego counties, but experiments will probably prove that it will thrive in other localities. Not many years ago it was the general opinion that the cultivation of such tropical fruit as the Lemon, Orange and Lime, was only possible in the same favored section. A few years' trial and experiment, however, have shown that they may become with us quite as common and plentiful as other less tropical fruit; for instance, the Apple, Peach, Plum, or Pear. They are now grown successfully in quite every county from one end of the State to the other. As with the Orange, a few years' experiment with the Banana will probably extend its range of successful growth to many other counties.

THE PRESS AND BANANA CULTURE.

To show what has been done, I would make a few extracts from some of our State papers. The San Diego News, August 8th, 1877, says: "Mr. ASHER sent us on Saturday, a package of the Bananas raised on his place, that, we think, are very good, so far as we are capable of judging. The variety is the "Dwarf Sandwich Island," and although the fruit is not very large, it is delicious, and we are told the yield is good. Mr. ASHER is testing this variety, and seems impressed with the idea that it will do well. He has a large number of them now fully acclimated, and, before long, sufficient tests will have been made. Up to this time, they have given the best assurances of successful cultivation."

The same journal in a later issue says:—"We looked in at the Bananas of Mr. ASHER, yesterday, and found them doing well. His Cavendish variety is fruiting in good style, and we noticed among the other sorts, one of the largest we have ever seen, but did not get the name of it."

The Los Angeles Mirror, Nov., 1877, says:—"During the present week, we saw a Banana plant of the variety known as the Chinese Dwarf, growing upon the place of Mr. C. E. WHITE, which beats anything in the Banana line we ever heard of. This plant has one bunch containing about 170 nicely formed and rapidly developing bananas. The fruit retails in our market at five cents each, which would make the value of this bunch to be the handsome sum of $8 50. All of this variety upon his place promise the same prolific yield." I might give many other similar extracts, showing that the successful culture of the Banana is no longer a doubt in California.

SORTS.

FLORIDA BANANA.—This variety will, without doubt, be the most profitable in California. It is known botanically as Musa Cavondishi. It is a native of China, grows five to seven feet high; fruits in ten months, bears considerable cold; indeed, it will stand quite a severe frost, and still fruit. The outer leaves, it is stated, may all be cut off with frost, but with such warm suns as we have, they will soon send out new leaves and keep on growing. They have no seed and are propagated only from suckers.

CHINESE DWARF BANANA.—It has generally been considered that the Chinese Dwarf was too tender for this climate It has been fruited, however, during the last season in several instances, and will probably prove a staple variety: native of China; grows three to five feet high; fruit fair to medium size and delicious.

SANDWICH ISLAND, OR PANAMA BANANA.—This species will hardly be found satisfactory in California, as it requires a longer season of warm weather than can be had in any locality in this State, unless started under cover and protected in the fall and early winter. It is known botanically as Musa paradisiaca; grows from seven to twelve feet high; fruit large, delicious and wholesome.

CULTURE.

The Banana has a perennial root or bulb, about the size of a large, say two to four pound, turnip. Having procured bulbs, or plants rather, from one-half to four or five feet high, plant them eight to twelve inches deep, and six to eight feet apart. It will require two years to fruit plants under four feet high, while plants over that will generally fruit inside of a year. The soil should be rich, warm and deep, as they require forcing and will stand plenty of it; mix half-decayed manure thoroughly with the soil, in no case must fresh manure be used, as it will burn or kill the bulbs. Irrigate and cultivate well. As they require plenty of moisture, a good soaking should be given them every week or, at least, once a fortnight. In one year from planting, if small plants have been set out, the sucker or bulb first planted will stand five to six feet high, and will be surrounded by three or four smaller suckers from the root. One of these suckers or new plants makes it appearance from the root every two to four months. Each stalk produces but one bunch of fruit, then it dies down or should be cut off near the ground, to decay by the root, and furnish fertilizing food for the new plants coming on, which continually sprout from the old root. By the end of from one to two years, according to size of plants set out, fruit may be gathered from the parent stalk, while from five to six suckers will be growing from the root. All of these but three should be removed, for more than three growing at once, are not to be desired. If not removed, in the course of three to four years there will be six to twelve plants struggling to out-do each other and live. Many of them would fail to bear at all, while those that would, could hardly perfect fruit; consequently remove and set out somewhere else all but three.

THE BANANA AS IT IS.

The Banana, or Musa sapientum, is a near relative of the Lily family. They are not trees, as so many ask, or as you will frequently see in some journal, "Banana Tree."

Each stalk bears but once and then dies as does the Lily, only the lily stalk dies in one year, while the Banana takes two years to attain its growth before it dies. In its tropical home, the plant attains a greater hight than under cultivation; the stem is round and straight—light yellowish-green in color; the foliage is large and spreading, ovate in shape, some four to six feet long by fifteen to twenty inches broad; it is of very delicate texture and is seldom met with perfect, being torn more or less by the wind; it has a thick, strong mid-rib running through the center. The foliage surmounts the stem like a crown. When the stalk is from eight to ten months old, a tuft of blossoms appears in the center of this green, leafy crown, a great brownish-colored bud, which lifts up a covering every day or two, displaying ten little Bananas, more or less, with a peculiar bloom on each. The blossoms are heavy with odor, and while in bloom are the delight of the bees. They are followed by a cluster of fruit, eight to ten inches in length, which attain their growth and maturity in from ten to twelve months. The clusters, when ripe, weigh from 35 to 80 pounds, and contain from 75 to 150 separate bananas.

Such is the plant from which is obtained the rich clusters of roseate and golden fruit so delicious to the taste, and known as the banana.

It is claimed that half an acre of Bananas in the tropics, will support fifty persons.

El Dorado Co., Cal.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

CAUSE AND EFFECT.

L. A. ROBERTS.

IT has been the custom among all nations to credit effects of which the causes were not readily perceptible to a supernatural origin, and we find that the more ignorant a people were, the more permanently had superstition its home among them: the less they knew of the laws which govern the universe, the more ready they were to attribute physical changes to some imaginary cause, however distant it might be from the right one.

It is intensely interesting and highly instructive to follow the progress of nations and see, with the passage of time, the clouds of superstition break away before the advance of intelligence. One who has read such works as Leckey's History of Rationalism in Europe, and noticed how slowly false ideas and beliefs give place to truth, can scarcely wonder that there is yet so much superstition left among us—for much there is, deny it as we will.

Of this much, not a little holds its place against intelligence and against reason, being the effect of early education which, although it may be erroneous, often obtains such an influence that it is impossible to entirely eradicate its effects. How many of you who read this fail to experience at least a symptom of a shudder, when you first see a new moon over your left shoulder, and how many hesitate to commence on a Friday a journey or any undertaking of importance that can be done as conveniently on any other day.

There is an influence, name it what you will, that has grown with you from your childhood, and although your reason and your education, alike prove to you your weakness in being affected by it, still it exists and will so long as you live, but probably not to an extent to control your actions in any great degree.

That every effect has a cause is a maxim so self-evident that uneducated people accept it without question. But their ideas of the relation of cause and effect are vague and erroneous in the extreme. The list of "infallible signs" is slowly but constantly growing shorter with us, as some drop out with every generation. Fifty years ago the belief that the planets exerted influence on the earth and its inhabitants was rife, and the signs of the Zodiac were studied with as much confidence in their power and authority as were the ten commandments, while the weather prognosticatious, as laid down in the almanac, were relied upon as explicitly as are those of "Old Probabilities" to-day.

Among the many signs that were current in the rural community where I spent my boyhood, a few occur to me as I write.

"Kill your hogs in the waxing of the moon, or your pork will shrivel in the pot."

"Timber cut while the moon is growing smaller, will decay with great rapidity."

To spill salt indicated a quarrel. [This must be very old. In the picture of the Last Supper, Judas appears to have just overturned the salt-celler.]

To sow or plant fennel seed is sure to occasion a death in the family. [In order to avoid this sad contingency and still have fennel—profanely called meeting seed, from the fact that the dried heads were usually carried to church to be nibbled—it was customary to beg *roots* from neighbors: when none could be had, the seed was placed on a stone just before a shower that it might be washed off and take root, an easy way of circumventing fate.]

The inner bark of the Box Elder was valued for its medicinal properties. When needed as an emetic, it was scraped off by an upward motion; for a cathartic, by one downward. [We once heard a physician, who seemed somewhat skeptical, inquire if the experiment had been tried of administering it when obtained by scraping around the stem instead of either up or down; and if so, what was the result.]

When the head of the household died some one was deputed to visit the bee-hives, and, after rapping on each three times, informed the occupants that they should be taken care of, else they would all leave the hives.

When a new moon appeared, it was said to be either a wet or dry moon according as the position of its horns approached a horizontal line, and the work of the farm was arranged accordingly.

Certain days in one month were regarded as indications of the state of the weather for the next month, but I remember there was a difference of opinion as to which were the almanac days.

To break a looking-glass was a bad sign; information of the death of a friend would surely follow.

I might extend these signs but, doubtless, most readers, especially those in the country, have recollections of those now or formerly current in their neighborhoods sufficient to fill a full page of the RURAL.

It is curious how one coincidence will, with those who believe in signs, overbalance a score of failures—but perhaps not wonderful after all,—for it is well known that the manner and mind with which we search for a thing, materially affects the finding of it. A lawyer passes over half a dozen decisions averse to his case, hastily, but reads with the closest attention one that is favorable—and with a theologian, one text in proof of the correctness of his position weighs more than a dozen against him.

The howling of a dog in the night is a sign that a death will soon occur. The Pennsylvania Dutchman whose faith was fixed on this sign, gave an incident in proof of its correctness thus: "One night mine old dog Bose he howls all the evening, and he howl like every tings, when me and mine frau go to bed and in the night Katrine she vake me up and say: 'Hans I not sleep pretty much any. Bose he howl so, vat ish de matter?' And I say, 'Sompody vill be dead pretty quick already'—and den we go to sleep mit ourselves, and de next morning I look in mine paper and by jingo dere was a man died in Cincinnati."

There are, among the multitude of signs, some that are entitled to consideration, being the result of intelligent observations and having their foundation in natural laws; as when the smoke ascends from the chimney in an upright column, it is a sign of fair weather, but when it soon falls to the ground and when the water in the pot quickly flies away in steam, rain may be expected. 'When it is evening, ye say it will be fair weather, for the sky is red; and in the morning it will be foul weather to-day, for the sky is red and lowering.

Observing men in the country, and those who sail the seas, acquire a reputation for being weather-wise. "Where are you going in your Sunday clothes?" said an old fellow who lived in a town adjoining ours. "To church," was the reply. "On account of this continued drought we have appointed to-day on which to meet and pray for rain." "Praying may be well enough," was the irreverent reply, "but so long as the wind goes round with the sun you won't get rain." That man had observed that while the wind was easterly in the morning, southerly at noon, and westerly at night, no rain fell, but probably never thought what was the reason of it, or imagined that it was the result of a law.

The truth about it is that the whole physical world is governed by laws fixed and invariable; nothing is left to accident or chance. Not a cloud is formed; not a drop of rain falls except in harmony with these laws that have existed since the beginning, and will continue to exist to the end of time.

The study of the Natural Sciences is all that is necessary to banish superstition, and it is not necessary for this purpose that the study should be very thorough or extended. The merest tyro in astronomy knows the reason why the position of the horns of the new moon is not always the same, and in Physical Geography, that whether they be in one position or the other, no rain will fall in certain sections during the dry season, and that a dry moon would be a misnomer during the other part of the year.

When we are wiser than now we shall study nature's laws more attentively and with greater practical results.

CAPT. CUTTLE'S ADVICE.

B. PICKMAN MANN.

To "make a note of it" is a very good piece of advice, but to know how to "make a note of it" is an art which must be acquired by experience or instruction. It may not be amiss, therefore, to offer a few hints which are the outcome of years of experience in this very direction.

It is startling to realize, in the first place, how many ways there are in which a note may be made. We may copy what we are interested by, or we may refer to the place in which we find it, by preparing some sort of index. We may make these notes on loose sheets of paper or in a book; if we use loose sheets, they may all be of one size or may be of different sizes; they may be arranged by subjects or alphabetically, and the same way of arrangement may be adopted for the index to a copy-book or a book of references.

If we arrange our index by subjects we are plunged immediately into an infinite world. What are the leading divisions of knowledge? A classification which has obtained wide recognition divides all knowledge into—1. Philosophy, 2. Theology, 3. Sociology, 4. Philology, 5. Natural Science, 6. Useful Arts, 7. Fine Arts, 8. Literature, 9. History. The same classification divides the Useful Arts into—(6)1. Medicine, (6)2. Engineering, (6)3. Agriculture, (6)4. Domestic Economy, (6)5. Communication and

Commeree, (6)6. Chemical Technology, (6)7. Mauufactures, (6)8, Mechanic Trades, (6)9. Building. The same classification divides Agriculture into—(63)1. Soil and preparation, (63)2. Pests and hindrances, (63)3. Productions of the soil, (63)4. Fruits, (63)6. Garden, (63)7. Dairy, (63)8. Bees and silkworms, (63)9. Fishing and trapping. (This ninth division is put here, not because it really is a part of Agriculture, but because any other place for the subject would be still more unnatural).

Suppose the classification is a good one. We read an article about the diseases of cows, and wish to make a note of it. Shall it go under 619. Veterinary medicine, or 632. Pests and hindrances, or 636. Domestic animals, or 637. Dairy? Will anybody else know what classification you have adopted, and where you have placed your subject?

Suppose the classification is not a good one, or that you are not satisfied with it, can you make a better one, and will other people accept yours when it is made? Can you remember next year what your arrangement of subjects was this year? Will you not want to make a new classification every year as your knowledge grows and you see things in new relations? Such has been the experience of former workers in all times. It is necessary to have an alphabetical index to the classified index, in order to be able to use the latter, and to change the latter as often as we find it is unnatural, unless we prefer the inconvenience of a changing one. Still, for some purposes a classified arrangement is needed, and learned men have made such. How nice it would be if they had only made one! If you will adopt and stick to one of those which other people have access to also, then, and then only, can other people use your index, or can you use it yourself after a few years.

To obviate the difficulties mentioned above, it is pretty generally agreed that it is well to make alphabetical indexes, and to avoid all classification, when this can be done. We all know the alphabet—the classification of the letters. In a systematic index we do not know whether horses come before pigs, or hogs before cows, or cattle before swine; but in an alphabetical index we can turn immediately to bull, calf, cattle, cow, ox, or to colt, hog, horse, mare, pig. But here is another difficulty. How shall we choose the word which is to determine the place of our subject in the index? Shall one writing be indexed under the word swine, and another under hog, and another under pig? Shall this which I am writing now, be referred to under Capt., or under Cuttle, or under Advice, or under Index? For you know you want to look for the article some time in your index, and you will have forgotten what the title of it was; you will look for what has been written on the *subject*. The publishers of the RURAL NEW-YORKER say that the RURAL is indexed with great care, but I look for articles on grasshoppers and find them indexed thus:

Around the Republic.	Grasshoppers, a visit from..	235
Editorial.	Grasshoppers in Minnesota.....	284
"	" on the plains.....	124
"	Locusts, Rocky Mountain.....	156
Entomological.	Grasshopper, Congress and the...	249
"	" scourge, conference of Governors on the,...263,	263
"	Locusts, the Western.....202,	203
Farm Economy.	Grasshoppers, protection ag'st...	198
"	" routed, the	9
Industrial Topics.	Grasshoppers' Convention....	342

If these leading words, which have a very accidental relation to the subject, were removed, and the subjects arranged alphabetically without them, I might find all these articles under two words, "Grasshoppers" and "Locusts," without having to read every title in ten columns of fine print. Here are some more entomological titles from the RURAL NEW-YORKER, arranged without reference to such division headings as those above.

"A little learning not always a dangerous thing,"	70
American vines in France.....	332
Exterminate the potato bug.....	384
Facts and fancies from the Rocky Mountains,....	377
Fighting the potato beetle.....	32
Hennery, the pest of the.....	41
New potato enemy.....48,	64
Pen-liners on tomatoes.....	174
The hickory scolytus.....	174
To drive away grasshoppers.....	384
Wonderful power of an insect.....	318

Having chosen our kind of index, shall we make it continuous or shall we leave spaces for future insertions? If the latter, where shall we leave spaces, and what will we do if we want space where we have not left it? To overcome this difficulty, general use is made of slips of paper or card, large enough for one full reference, but small enough so that a new card may be afforded for each new reference. My cards are so ruled that I can put at least fifteen references on each card, but yet each card is confined to only one subject. For instance:—Iceland; Ignorance; Entomological; Immigration; Immortality; India; Infant mortality; Inheritance of mental qualities.

The librarians and the publishers have most occasion to make indexes. Those of the United States and of Great Britain have agreed upon the manner in which indexes should be made, the size of card that should be used, and co-operation in the publication and exchange of these card-indexes, so that soon all the English-speaking people will be working in harmony in making the former writings more accessible to future inquirers.

YOUNG MAN, GO WEST?

HAVING JUDGMENT, AND USING IT NOT.

VERY much gratuitous advice to go West has been given to a class of individuals who may be considered as having natural sense and judgment, but who seem to be lacking in independence of character and executive abilities, or having judgment, use it not. The advice may be all well meant and honestly expressed, but may it not be somewhat differently expressed, and at the same time be more practicable? I imagine that those who give such advice do not look at it in all its bearings.

Why is it thus expressed, and given? a question I am unable to answer, unless those who give it, do so without looking at the matter from every side. The more general reason given for recommending this course of going West, is that these men may become possessed of cheap lands; have a home of their own; become producers instead of consumers only. What if we all, at least all the surplus not actively engaged in business, become producers? From certain standpoints the advice is good, but viewed from a different point it may assume another aspect.

Look at it as it really is: do not the farmer-producers of the West find their surplus products have a slow market, and at very low prices, and that they must produce in very large quantities in order to pay their way, or often to make even enough to meet taxes, beyond a meager support. And how is it that anything is accumulated? Let those who have there gained a competency tell us if they have got it by legitimate farming only. Setting aside the rise in value of farm lands, etc., they have probably done it by close economy, hard work, and denying themselves most of the luxuries and privileges of life, if not very many of what are usually considered its necessities.

Now, I claim that one living in any of the older-settled States and communities, by exercising the same self-denial, etc., may do even better at home than he would by going to some far-away place to settle. In the first place, he is at home among friends and acquaintances, is acclimated, knows all the "ropes," is in the vicinity of as good markets as there are in the country, can produce and sell at a better profit than can be done where markets must be sought at long distance, saves the expense always attendant upon locating in a new country and escapes consequent hardships, besides many other considerations of social and other privileges; advantages which are not so freely offered in new settlements.

As to products; let us consider the one product of corn, which is so largely depended on in many newly-settled sections. Can we not at the East grow it at a better profit than the settler on new land? And is not the value of the farm products, taking into account the whole acreage, as great, or even greater here, than at the West, generally? Let us see: here in Massachusetts, not more that 50 miles from Worcester, a few years since—and it is done yearly although not reported or noticed as publicly—a reverend gentleman grew a field of corn, produced entirely by hired labor—the yield of which was 100 bushels of shelled corn per acre, costing, at that time, only 45 cents per bushel, in the barrel or bag. This same corn sold at 90 cents per bushel at home, thus netting a profit of $45.00 per acre. With later improvements in culture, the cost of production would be less; will the richest virgin soil do better, or even as well?

Take a farm of 100 or 160 acres at the East or West, if on the line of R. R. or near communication with good markets, the price per acre of land, will range nearly as high in the West as in the East. At the latter place, however, this will include fair to good buildings, fences, etc. If the products are the same, those in the eastern section will bring the greater sum, so that the gross product will be greater at the East, because of better home-markets, and then home-products are worth more than those produced at a distance, handled and rehandled, sweating and often moldy. I believe experimenters claim that corn grown in New England is worth for feeding at least one-fourth more than the average corn we get from the West; some claim it to be even better.

Look at the deprivations which the pioneer settler must put up with. In order to obtain free homesteads one must go into parts where settlements are very far apart, where perhaps none of his kind may be found in a day's journey; where there are no social or other privileges except such resources as they may have within themselves. If sickness or accident overtake them, what then? A young man from a village in this locality went to Kansas, four or five years since, stock raising for a relative of his; a year or two afterwards, his married brother and wife visited him and stayed some three weeks. The lady, in speaking of it afterwards, said that she saw only one other woman during her stay, and she, a washerwoman who came to do the young man's washing, etc. Now, suppose this, or any other young man, would work as hard, deprive himself of as much, in any of the Eastern or Middle States, where he was at home, etc., and was in every way as economical, who supposes he would be less successful at home than abroad? The truth of it is, that it is not what a person receives that constitutes wealth, financially, but what he *saves* after expenses are paid. And one working and doing as economically where he is already known, close to good markets, will usually take the lead of the restless one who desires change and can see all of the advantages in some different locality. All honor, however, should be accorded to the pioneer who opens new territory, when he can do the same without injustice to previous occupants.

W. H. WHITE.

CATALOGUES, ETC., RECEIVED.

LASELL SEMINARY for Young Women, Auburndale, Mass.

WE would invite attention to Col. CURTIS' offer to RURAL subscribers, of Duroc pigs at reduced rates.

E. E. HARDIN & Co. Descriptive Circular of superior pure-bred chicks, to be delivered after Sept. 1st. Scotia, N. Y.

RYDER'S AMERICAN FRUIT DRIER or Pneumatic Evaporator. A catalogue of sixteen pages. Chambersburg, Pa. Catalogue free.

R. H. HAINES, Saugerties-on-Hudson, N. J. Summer Price-list of Strawberry plants. The rapidly increasing demand for plants for setting out at this time of the year, induces Mr. HAINES to issue this list.

THE Texas State Hort. and Pomolog. Ass'n will hold its fourth annual exhibition in the city of Houston, Texas, commencing Wednesday, July 17, and continuing three days. A. B. Small, Pres.; Geo. Kidd, Sec'y.

CATALOGUE of the List of Premiums offered by the Jefferson County Ag. Society for 1878, Annual Fair to be held in the city of Watertown, N. Y., Tuesday, Wednesday and Thursday, Sept. 17-19. W. R. Skeels, Sec'y.

L. L. Crocker, Buffalo Fertilizer Works, No. 252 Washington St., informs his customers and friends by circular that he inteuds immediately to rebuild his works which were destroyed by fire and which involved him in a loss of over $100,000. He will be prepared to meet the wants of his customers for the fall trade and guarantees to furnish a super-phosphate which shall be at least equal in quality to his former shipments and which can be used in any drill.

THE American Berkshire Association, through the earnest efforts of the Secretary, Mr. PHIL M. SPRINGER, Springfield, Mass., and other officers, is growing apace. Volumes one and two of the American Berkshire Record, have been issued, and volume three is in course of preparation. That the advantages of a recorded pedigree are appreciated, is evident by the fact that the second volume contains some five hundred more entries than the first, and the approaching issue bids fair to show a still greater increase. These records are one of the best guarantees that inexperienced buyers will get pure stock in their purchases, and breeders should lose no time in forwarding for entry pedigrees of their stock. Blanks for the purpose will be furnished, by applying to the secretary.

A. HANCE & SON, Red Bank, N. J. Pamphlet of pot-grown and other Strawberry plants. Cultural Notes; Soil and Situation; Preparing the Soil; Hill System—Matted-row System; Mulching. Messrs. Hance give a tabular list which, from their many years of practical experience, they have found to be the best:

ARRANGED IN ORDER OF MERIT.

For light soil.	For loamy soil.	For heavy soil.
	EARLY.	
Wilson.	Duchesse, Wilson, Black Defiance.	Duchesse, Black Defiance, Wilson.
	MEDIUM OR MAIN CROP.	
Chas. Downing, Seth Boyden, Wilson, Agriculturist.	Monarch, Chas. Downing, Seth Boyden, Wilson, Agriculturist.	Monarch, Jucunda, T. de Gand, Seth Boyden, Chas. Downing.
	LATE.	
Seth Boyden, Kentucky, Capt. Jack.	Seth Boyden, Kentucky, Capt. Jack, Col. Cheney.	Jucunda, Seth Boyden, T. de Gand, Pres't Wilder, Col. Cheney.
	VERY LATE.	
Kentucky, Capt. Jack.	Kentucky, Col. Cheney, Capt. Jack.	Pres't Wilder, T. de Gand, Col. Cheney.

The pamphlet will be sent free to applicants.

Entomological.

JOTTINGS FROM MY NOTE BOOK.

CLINTON.

A NEW INSECT.

A new insect has appeared this season, infesting my Wiegelas—at least it is new to me. It would seem to be the product of an egg, deposited in the newly-grown wood, usually a few inches below the terminal bud. The first indication of the presence of the insect is the wilting of the branch above the place where it is punctured. On examination, I have usually found one, and sometimes two insects in the heart of the branch, evidently eating their way upwards. The insect, when full grown, is about one-eighth of an inch in length, which is about three times its diameter. The color is a brownish-black, with several bright yellow rings marking the body transversely. Of course, all that portion of the branch which is above the puncture speedily dies, materially disfiguring the shrub. Circumstances beyond my control prevented my making as full an investigation at the time as I intended, and now—July 2—I am unable to find any specimens remaining. From my imperfect description of the insect, can any of your readers name it?

HELLEBORE AND THE CURRANT WORM.

I am somewhat surprised that a writer possessing the evident general intelligence of your correspondent, Col. F. D. Curtis, should, at this late day, even indirectly recommend the use of *soap-suds*, as a remedy for the currant worm. After using the white hellebore a few times, he will find it to be the most sure remedy, and if it is properly applied, the expense for the material is but a trifle. My method of applying it differs from Dr. Hoskins', as described by him in the RURAL of June 8, and for my purpose, I think it is much more convenient. He mixes the drug with water, and applies it with a sprinkler. His method, it seems, involves the necessity of a horse, a stone-boat, and a barrel of water. The necessity for these incumbrances may be obviated by using the material in a dry state. I take a tin box, like a cook's dredger, put the powdered material in that—first crushing the lumps, if there be any—substitute for a cover a piece of gauze or mill-cloth, large enough to fold down the outside of the box sufficiently to be tied with a piece of twine, and I am ready for action. A sufficient number of thicknesses of covering should be used to prevent the hellebore from coming out too rapidly when the box is shaken. Taking the box by the bottom, shake it rapidly about and among the bushes, so that the powder shall pass out, like a fine, impalpable dust, and settle on the leaves. This should be done when there is no wind, and if the leaves are wet with dew, the drug will adhere to the leaves as surely as if applied with a sprinkler. It is surprising what a small quantity of the hellebore will prove sufficient, if properly applied. As Dr. Hoskins says, it is entirely unnecessary to apply it to the under-side of the leaf, as the worm eats the leaf clean, and is sure to get the poison, if it is on the leaf at all. But I notice in your "Brevities," in the same number of the RURAL, you refer to his opinion as being just the reverse of this—probably a mis-print or an oversight. [It was our neglect.—EDS.]

THE POTATO BEETLE—IS HE PLAYED OUT?

S. E. Hampton, of Kentucky, in the RURAL of June 8th, gives to the Potato Beetle an exultant "*farewell*," because he found on his field of 15 acres of potatoes, but very few of the beetle's eggs had hatched up to the 26th of May. The RURAL expresses a similar opinion in its "Brevities" of June 15, with reference to Bergen Co., N. J. I confess I had been inclined to lay the same "flattering unction to my soul" until quite recently. But at this date, July 2d, with the mercury ranging from 85 to 95° in the shade, the eggs are hatching in great abundance, and I shall at once resort to the use of Paris-green, as formerly. The delay in the hatching of the eggs cannot be attributed to any *frosts* in this locality; for, although we are in the latitude of 43° north, yet we have had no frosts in our valley to injure vegetation in any perceptible degree since April, and, of course, not sufficient to affect the eggs of the potato beetle. At the identical time that the RURAL GROUNDS, and other localities even further south, suffered so severely from frosts, I had in my grounds, not only Tomatoes, Cucumbers, Squashes and other tender vegetable plants, but also such house-plants as Heliotropes, Achyranthes, Coleus, Balsams and choice Pelargoniums, standing out without any protection whatever, and coming out entirely bright and uninjured. It was not so in other parts of the county, however.

Veterinary.

MALADIES OF STOCK.

INQUIRIES ANSWERED BY D. E. SALMON, D.V.M.

Bone Sprain and Ringbone.

F. H. D. No address—inquires if there is any sure and safe cure for bone sprain and ringbone of several years' standing?

ANS.—No; there is no *certain* cure for either of these troubles; and, unfortunately, the same holds true in most other diseases. Proper treatment, however, greatly increases the chances of recovery. In case of an old-standing sprain or ringbone, there will always remain more or less enlargement. The best treatment is to apply bandages and keep constantly wet with cold water, for about a week; then blister several times in succession or until the lameness disappears. Cantharides ointment—one part to four of lard—may be used, with the usual precautions, to only blister one limb at a time, to tie the animal so that it cannot get its nose to the part, to wash off the ointment and apply oil or lard after a suitable effect is produced, etc. Firing sometimes succeeds when blistering fails.

Blind Staggers in Horses.

S. Hoxie, Madison Co., N. Y., asks the cause of blind staggers in horses and a remedy therefor.

ANS.—Blind staggers is a term applied to several diseases, and it generally requires an expert to decide what is the matter. Thus, it may be caused by pressure of the collar on the large veins of the neck; by congestion of the brain; tumors or effusion in this organ. The term is also applied to the brain symptoms resulting from overloaded stomach or indigestion, or from poisons. In other cases the real trouble is blood poisoning from disease of liver or kidneys, or, perhaps, cerebro-spinal meningitis. It is impossible for us to give particulars in regard to all of these diseases; a good veterinary surgeon is indispensable for the successful treatment of most of them.

The Querist.

ANSWERS TO CORRESPONDENTS.

The best Breed of Cows for Milk.

R. N. Richards, Newton Co., Ind., asks which is the best breed of cows for milk.

ANS.—The answer will, in a measure, depend on the use made of the milk. Farmers who sell milk and care nothing for its quality, patronize mostly Short-Horn grades ont of good-milking common cows. Those who make cheese or butter prefer Ayrshire or Ayrshire grades. Those who aim chiefly at fancy butter, or who wish very rich milk for special customers or for their own table, have a preference for Jerseys. Great milkers occur occasionally in all breeds. The Devons, too, give a great deal of rich milk, while the Holstein, or Dutch, cows have likewise a great name as very heavy milkers. In France also, there are several native breeds which are highly prized, but whose names are hardly known to even the skillful stockmen of this country.

What is Muck?

H. R. Clemens, Bradford Co., Pa., asks what is meant by the term "muck," as he sometimes sees it applied to substances which, according to his opinion, are by no means included under it.

ANS.—Muck is manure, in English parlance, and embraces pretty nearly everything in that line that is soft or moist and pasty. In this country the word, in agricultural technology, is almost exclusively applied to the partly decayed vegetable matter of swamps and peat mosses, sometimes even to peat fit for fuel, if it is used as manure or an absorbent in cattle stalls.

Steam-Plowing.

W. L. Walker, Sedgwick Co., Kans., asks whether steam-plowing is found profitable among farmers in England, or whether its use there is confined merely to amateurs?

ANS.—Certainly steam-plowing is decidedly profitable on land suitably level among the best kind of practical farmers across the Atlantic, not only in Great Britain, but also here and there on the Continent, in India and in the cotton fields of Egypt, and its use is yearly becoming more common. The cost is still high, from £400 to £750. The average area of grass land turned under in a day's work is about ten acres, while of stubble land fully twenty-five acres are thoroughly broken up to a depth of nine or ten inches with the grubber or cultivator, which is considered to do better work than the turning plow used for grass lands. Our western prairies are excellently suited for this kind of cultivation, and despite the comparative scarcity of fuel in some places, and the lower price of horse labor everywhere, still there is little doubt but that steam-plowing would there prove profitable. Indeed the plows have been used with satisfaction in several parts of this country, notably in New Jersey, Illinois and Louisiana, and have been on exhibition at several of our fairs.

Destroying the Canada Thistle.

R. H. S., Linesville Station, Pa., asks for the shortest, surest and best means of destroying the Canada thistle?

ANS.—The more persistent any evil, the greater the number of "infallible" remedies for it; and so it is with the Canada thistle—so many methods of "certainly" eradicating it have been given, that it is a trifle strange it should still be a pest to the farmer. The three that answer most closely to the above requirements are, First: Cut Canada thistles in the summer, after they have thrown up their flower stalk, but before they have bloomed, and if a pinch of salt be dropped into the hollow stems, they will soon die. Second: When the thistles are cut frequently with a spud or other tool just at or below the surface, they rapidly disappear. Third: If a small quantity of coal oil is applied to them whenever they show themselves, there will be an end of them; but as coal oil kills other plants with which it is brought into contact as well as weeds, and may prevent the growth of vegetation on the same spot for a considerable time, care must be taken in using it.

Saltpetering Stumps.

S. M. Smith, St. Louis Co., Minn., writes: "I saw it stated some time ago in the RURAL that, if a quantity of saltpeter, together with some water, be inserted in a hole bored in the top of a stump, and the hole be then plugged up, the saltpeter will enter every root and fiber of the stump, so that in dry time next spring, it can be easily burnt and destroyed. In this woodland country, where many are engaged in clearing land, if such a simple device were really practicable, it would be a great help to hundreds of us." And he requests that some reader of the RURAL NEW-YORKER who has actually tested the matter, will state through these columns the real result of his experiment or labor.

The Wiegela.

M. F. C., Ovid, N. Y., asks the correct mode of spelling the name of a shrub which he has seen spelt in several different ways.

ANS.—It is Wiegela, after the Latinized name of a German botanist who lived toward the end of last century. Botanists have since, however, placed it in the older genus Diervilla, after a French surgeon named Dierville; but the name Wiegela has become so well established that it still remains the common, or English, name for this beautiful shrub, originally imported from Japan.

Propagating the Wistaria.

Mrs. Minnie Ellis, Eaton Co., Mich., asks how and when to propagate the Wistaria Vine.

ANS.—By cuttings and layers. Layers may be made now or later. Take the long shoots and bury them six inches deep and press the earth firmly over the buried parts. Next year the stems connecting the buried and parent stems may be severed, and the rooted cuttings transplanted.

Miscellaneous.

Mrs. H. W. Burton, Lincoln Co., N. C., asks what is the matter with her Apple Geraniums. They appear to be very flourishing, and, all at once, they begin to wilt; the leaves commence to turn yellow until all fall off. Having taken them up, she can find no cause for the mishap.

ANS.—If kept in pots, it may be that they are watered too much or too little; if out-of-doors, the situation may be too hot and dry. Otherwise, if free of insects, as you say, we can not guess at the cause.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JULY 13TH:

"Hector Bertram"—E. J. S.—M. L. D.—S. L.—J. G. R.—S. B. P.—A. L. J.—J. E. G.—P. A.—L. & M.—W. F.—U. M. S, thanks—O. A. G., thanks—L. W. S.—J. O. D.—"Hawaii-nei—R. T.—J. B —F. M. S.—"Madcap Mollie"—T. T. L., thanks—J. F. —M. B. P.—J. E. McC.—W. P. B.—F. H. D.—D. M. J.—B. P. M.—W. T. M.—K.—M. P.

Everywhere.

GEORGIA NOTES.

GRIFFIN, GA., July 3d, 1878:

I HAVE have just planted my second crop of Early Rose potatoes from seed that were planted on the 20th of last February, and which, by the 10th of May, were of good size for table use, and, the vines being dry on the 10th of June, were dug and stored away in sand, to keep through the hot weather. Of course, they are stored in the shade. The small ones were kept out and allowed to dry off for a second planting. I planted in this way last year with such marked success that I am led to try it again, and in exactly the same way. In the hope that it may lead some other reader of the RURAL to try the experiment, I will give in detail how, as "Uncle Archie," my old colored gardener, says I make my garden patches do double duty both summer and winter.

First: the ground is covered with a good coat of manure from the compost heap; then it is deeply spaded and pulverized; laid off in rows three feet apart, and, at least, six inches deep. In the bottom of these furrows I plant the small-sized potatoes, without cutting, say about four to six inches in the drill. These I cover by running the "plow-hoe," my most indispensable garden tool, on each side of the drill, covering the potatoes up to a level with the surface and leaving a shallow opening, or light drill, immediately over the potatoes. Next, I fill this shallow drill with "Dwarf German Black Wax Beans," covering them with the rake, and then patting down the dirt so as to "firm it," as the gardeners say, and the work is done, leaving two crops planted in the same drill, one about four inches above the other.

Now, will the two crops grow off and mature, each as well as if planted alone? I say they will, and think I can prove it by the first of October, when I expect to have all the bean haulm pulled up and thrown on the manure heap, and a fine crop of young potatoes in good growing condition. I will state, as a reason for this practice, that the Wax Bean comes up readily and grows off, maturing in eight weeks with me. It is tropical in growth, delighting in hot summer weather, grows shallow in the ground, with comparatively few roots, and will not interfere with the potatoes. The potatoes, being planted whole, will not sprout so readily, and, being deep in the soil, will remain sound until the rains in the latter part of August, and the approaching cool weather will cause them to come up about the time the beans are in full bearing, then if the beans are so thick as to interfere with the potatoes coming up, just pick and market them and pull out the bunches, and give the potatoes a good working over, and all will go on well with them; but if they don't come until the September rains, all the better—they will then be able to stand the frost in six weeks, and that never comes until the 10th of November, after which dig and store away the potatoes.

I had fine success with both the beans and potatoes last year, and hope to have the like this. I take two chances of getting a crop on the ground, and can, at any time, remove the beans if in the way of the potatoes; if not sure of a good crop of both. The potatoes might be planted later, but with me they keep better in the ground than out after they are dried off, and the labor of planting may as well be done at one time as at another. The Early Rose with me is all the time growing, and reproducing itself, and the patch once planted, is never rid of volunteers; but these volunteers become watery, and it is best to get new seed once a year from the North. These notes are applicable to Georgia and latitudes similar, or south of it, and are not expected to benefit the grower where seasons are so short as in the New England and Middle States.

J. G. RHEA.

FRIEND SAM'S MISHAP.

Or, Farming at a Disadvantage.

The other day I met a gentleman who is such a complete example of a certain class in the South, that I must give you a sketch of him, for preservation as a typical specimen.

SAM CAPEL'S father was a large slave-owner and had, besides, two farms of considerable proportions. Sam was brought up to expect riches, and to forestall any personal exertion he might be disposed to make, he had negro boys always at his beck and call, to amuse him, to wait upon him, and to talk to him. The war ruined Sam's expectations; for, not only were the slaves set free, but his father's land had to be sold for security debts. Now Sam's only accomplishment, in an agricultural point of view, lay in his ability to "get work out of the darkeys." To do this he had only to ride round and talk to them, for they were very fond of their generous, good-natured, young master. Thrown upon his own resources, Sam rented land and hired hands to work it, but this plan resulted badly, bringing him out behind every year. As fast as he built up in one way he would lose ground in another, and this notwithstanding that he had become the happy possessor of an intelligent, helpful little wife, who economized judiciously and manged his housekeeping to the best advantage. The poor fellow finally decided to take HORACE GREELEY'S advice, and "go West."

To hear him tell his tribulations since he came out here, is pitiful and funny too. "I spent fifteen dollars last winter," says he, "to get my wheat plowed in and now won't make enough for a barrel of flour. The wretched crop took the rust! I had the most serious time getting "hands" this year I ever had; picked up a red-headed vagrant hailing from Missouri, and kept him a fortnight, didn't get two good days' work out of him. He would lie down in a furrow and let his horse and plow stand for hours at a time. My next make-shift was a man who talked and walked so fast that I concluded he must be a tip-top worker, but he soon proved a "perfect stick," and a nuisance for his unreasonable demands and impertinence;—would get out to his work about nine o'clock in the fresh spring mornings, take out at eleven, and not go back till three.

'Why, Mr. Sam, I'm astonished that you should have kept such a fellow!'

"Well, you see, I was afraid I'd have his crop on my hands, and I'm too stout to work long in the hot sun. I got rid of him at last, and by dint of extra managing got his crop cleaned, had a fair prospect for a good crop of corn and cotton, when—what do you think happened?—Why a negro that I had "picked up" to do a few days' hoeing, came back in the night and stole my best horse out of my stable, bridle, saddle, and even saddle-blanket."

I never heard of such a country as this for horse thieves. Their general plan is to take the stolen horse to the city, lie out with him a few days, till the excitement of his loss subsides, then sell him, and run off with the money.

Happy husbandman indeed, mourning dog-slaughtered sheep, cholera-killed hogs, rust-eaten crops, and mysterious disappearance of horses, with such fancy touches as "billious spells" "chills" and "typhoid malarial" to serve as mile-posts along his route.

A word of advice in your ear, friend Sam: plant a smaller acreage, hire less help, don't eat so much hog meat, and take a hand yourself every day; maybe then your luck will turn.

MRS. V. D. COVINGTON.

De Soto Co., Miss.

RURAL SPECIAL REPORTS.

CRAWFORD CO., ARK., July 3d, 1878.

WE of the West, are not a reading people. Farm work is poorly done, as a general rule, while our plows and all farming implements are of inferior quality; horticulture is much neglected, and what there is of it, is done in a slovenly manner. Had we not the most genial climate and a highly productive soil, with good water, fine timber, and broad ranges for stock, our people could not afford to neglect their farms, their gardens and orchards, as they now do. The lazy man is fortunate that finds his way into western Arkansas, and it would seem that many a one has struck the lucky path that has led to this land of easy plenty. Literally speaking, this is the easiest country for a poor man to live in while indulging his lazy habits, that exists in America. For, notwithstanding all her drawbacks, our country abounds in the greatest abundance of food, with an immense cheap surplus.

The cereals, especially wheat and oats, are grown in great quantities, with almost no preparation of the soil whatever. Corn is planted very often without previous breaking or preparation of the land after the previous crop, and pretty fair returns are withal produced. Although orchards, consisting largely of seedlings of accidental or spontaneous growth, like all other things, receive but little or no attention in regard to pruning or cultivation, yet our land abounds in fruit, much of which is equal, or even superior in quality, to that grown in the Old States.

I do not desire, however, to be understood as saying that we have no good farmers, gardeners and stock-raisers, or fine orchards and nurseries of the choicest selections of all kind of fruits suited to our climate. Our finest Apples, and some of our finest Peaches are native seedlings. Of Apples, the Shannon, the Stevenson Pippin, the Red Reserve, the Red Banana, the Peerless, the Arkansas Queen and some others, are all choice early and late winter fruit. The Shannon, which I am very certain is an Arkansas seedling, I find confounded with the Ohio Pippin, by Doctor Warder, in his able work on pomology. The fruits of the two varieties, when compared by sight alone, resemble each other very closely; but try them by the palate, and the difference is not hard to distinguish. With regard to the Shannon apple, it is the expressed opinion of every one that I have yet seen and conversed with who had eaten it in its prime, that it has few if any equals, and no superiors in the world. Its large size, its obconic form, its rich, golden color, together with its creamy pulp, its high flavor and sprightly juice can hardly be surpassed by any one apple in America. I have promised Mr. Charles Downing, of Newburgh, N. Y., to send him some specimen Shannon and other Arkansas seedlings, and shall be very much disappointed if he does not report favorably of them.

Myself and others forwarded a few barrels of our fine apples to the Centennial; among them the Shannon and Stevenson Pippin, our finest varieties. But, unfortunately for us, they reached there in bad order, and were not, of course, calculated to attract attention. Very nearly all of western Arkansas is a broken, rolling, hilly country, and none of it is too poor to produce choice Apples, Pears, Peaches, Grapes, Plums, Cherries, etc. And yet it is absolutely necessary to plant certain varieties of each and every kind of fruit trees, if success is obtained.

RICHARD THURSTON.

Northumberland Co., Ontario, July 4.

SEEING accounts of the crops from all parts of the States, I thought I would give you some from Canada. Fall wheat is looking splendid and beginning to color. Clawson is looking the best. All varieties have rusted somewhat. Of spring wheat, the greatest amount I have ever known has been sown. It has been injured some by the fly but is generally good. Of barley 50 per cent less has been sown; injured some by frost, but still a fair crop. Hay is good, potatoes looking well, but the bug crop is looking better than I have ever seen it. Potatoes will be destroyed if not attended to. We have had very hot weather for the last week, the thermometer ranging from 80 to 90 in the shade to 120 in the sun. We have several varieties of spring wheat sown. Pringle's Defiance looking splendid.

JAMES FORD.

PITCHER, CHEN. CO., N. Y., July 7th, 1878.

THE weather here is dry and warm. On July 3d we had a very peculiar shower. Two miles north of us, they had the heaviest shower of the season. Clouds stood nearly still, and poured for nearly three hours. It rained a little here, while a short distance south, the sky was clear. The warm weather of late has changed the size and complexion of corn very much. Potato bugs are extremely plentiful, and the warmer the weather the better their appetite.

L. W. S.

HIGGANUM, Conn., July 9.

IT has been very warm and dry up to the 4th, when we had a splendid rain; we had another heavy shower to-day. Rye and oats are looking well and promise a heavy yield. We have a fine crop of hay. Farmers in this section cut their grass very late. We will have a fair crop of apples, but not as good as two years ago.

L. C. M.

RURAL GROUNDS, July 13.

FOR these grounds we are having too much rain, though in sandier soil, a mile distant, the weather is just what is needed. We have just completed setting out Celery plants and late Cabbages.

BOTANIC GARDEN, CAMBRIDGE, MASS., July 8, '78.

WE are having very warm and dry weather. Maximum temperature, 92° to 97° in the shade. Grass and shallow-rooting plants are suffering badly. Strawberries are about used up.

W. F.

PASADENA Co., Cal., June 26.

WE are having very fine weather now. Barley crop below average; corn looks splendid; will have a good crop of peaches, apricots, nectarines, and apples &c.

P. W. HOLLINGSWORTH.

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY JULY 20, 1878.

MANY of our old subscribers have written to us requesting that we would sell them the Cricket Clock. Others have complained that the offer (now withdrawn) was of advantage only to new subscribers. In order to satisfy all so far as we are able to do so, we have now the consent of the manufacturers of the clock to offer it to our subscribers—*and to them only*—until the 20th inst. at $1.75 each, delivered to the express office.

WE desire to make our respectful and very sincere thanks to the friends of the RURAL NEW-YORKER, for the support they have rendered us during the present year. Our success is simply beyond our expectation. We shall have no excuse whatever to offer if, for the last half of the year, the RURAL should prove, in any respect, inferior to what it has been during the first half.

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

WE have concluded to issue our index annually for the future, and to give it more care and elaboration than heretofore.

SANITARY PRECAUTIONS.

AMONG the sanitary precautions which should be observed in summer time, especially by those resident in country places, perhaps none is more important than that they should breakfast before going out to work in the morning. Compliance with this rule is particularly beneficial in newly-settled districts, on flat-lying lands, on all river bottoms, and wherever vegetation is rank and of rapid growth. In early morning science and experience alike prove that the mischievous ingredients of the air are particularly active, while the human system is unusually lax and debilitated and proportionately liable to be injuriously affected by noxious atmospheric influences, a liability greatly lessened by the bracing up of the system produced by an early breakfast.

In all places subject to miasma some of the settlers die yearly of it, while others live to a ripe old age, and an examination of the causes leading to these very different results, will, in almost every case, show that an early breakfast holds probably the most prominent place. The Creoles of Louisiana, like the old settlers in Florida, rarely venture out of doors in the morning, in summer time, before taking at least a cup of strong coffee with biscuit or crackers; the traveler foolish enough to venture before breakfast across the miasmatic Pontine marshes near Rome, is pretty certain to die in a few days thereafter, whereas if fortified with breakfast, he may make the journey in safety.

A few other brief hints on what one's conduct should be in warm weather may not be out of place. Keep the head cool in the sun, by placing in the hat a cabbage leaf or wet cloth; after work, change the sweat-moistened clothing, and invigorate the system with a daily bath. Avoid all carbonaceous, or heat-producing food, such as fat meats, butter, sugar etc., and eat liberally of vegetables, such as spinach, melons etc, as well as of ripe fruit, while eschewing carefully that which is unripe. In bathing be careful to put cotton or some other substance into the ears, for frequent injury to the hearing and sometimes permanent deafness result from diving without such precaution. Keep the bowels open by a mild aperient, such as Turkey rhubarb, Epsom salts etc; and it would also be well to keep on hand some diarrhea mixture. Keep cool in body, and especially keep cool in temper.

A friend seeing these lines, remarked that he thought ninety-nine out of every hundred readers never acted on such advice. "In that case" was the reply, "the article was written for the sensible one."

A SERIOUS CONSIDERATION.

THE most formidable argument against war, sulphurous Fourth of July celebrations, and any event that is accentuated by the combustion of gunpowder, is the absolute, irrecoverable loss of nitrogen, or food-producing power.

It is said, on the authority of science, that the production of one hundred thousand pounds of gunpowder annually, is equivalent to the destruction in advance of five hundred thousand pounds of bread. We believe the production is really one hundred million pounds, which adds, of course, three ciphers to the total amount of the waste of bread.

Gunpowder contains about seventy-five per cent. of saltpeter, which is equal to ten and two-tenths per cent. of combined nitrogen. Of this, nine and ninety-eight one hundredths, or about all of it, escapes in the form of free nitrogen, and is hence rendered useless. Therefore, every ounce of powder used destroys a certain quantity of food and makes it more difficult for the Micawbers of life to exist, as the chances for something other than starvation turning up, are very meager.

A war not only quenches the vital spark of many useful lives, but destroys the chances of existence of generations to come.

To put it in a homely way, we will say that if mankind buried five hundred million pounds of food in the earth, they would, of course, be guilty of heinous waste, but the nitrogen contained in it would still be of use in the future: if, on the other hand, they burn one-fifth as many pounds of gunpowder, they really commit a shocking crime, as they permanently diminish the amount of food the earth is capable of yielding.

This is a serious consideration and should give pause to the more warlike spirits, while furnishing a brilliant argument to the Peace Society.

NOTES.

Poultry on a large scale.—Like everything else, poultry requires to have common sense used in its management. There is common sense in a few hens being kept by any man living in a city and having a small yard at the back of his house where perhaps he has a stable with a pair of horses, but there would be folly in his having great numbers. There is good common sense in having a fine lot of fowls running around every farm homestead, but none in keeping so many as to bring on disease. There would be common sense in placing 1000 hens in families of 50 over 200 acres, giving them full liberty to range where they pleased, and and having their roosts so constructed that a yoke of oxen or a pair of horses could be hitched to them and haul them to a new site when crops growing near required the absence of the poultry, or when a coop had been a good while in one place, and the surroundings were becoming saturated too much with the manure. On a large farm with springs and running streams of water, 10,000 might be kept, by persevering attention in moving when necessary, and by plowing some ground all the while, near the fowls, and also by planting patches of rye in September to give them green food through the winter, which would be available whenever the snow is not lying thereon. But it would be folly for 10,000 or only 1000 to be kept confined on a few acres, and expect anything but disaster. With ample range fowls will be healthy in small families and require little besides what they will find by foraging, at the same time they will lay eggs enough to make $2 per hen; but confine them on a few acres and they will eat double of purchased food and lay not more than 75 cents' worth of eggs per head in proportion to the close confinement.

Give Your Girls a Chance.—Experience is a valuable part of an education. Girls should early learn to purchase materials for their own clothing. Parents can advise them at the start, but it will be a good plan for girls to learn to rely on their own judgment. The purchases can be talked over after they are made. Let your daughter, with a little advice, cut up a few yards of calico and make aprons and dresses, bed-quilts, even if there is a little waste and some poor fits. She will be likely to see her own mistakes and profit by them. Let her make some cakes and bread, and broil some meat and pop some corn, no matter if she does have to throw some into the swill pail. It is better to make a few small mistakes while young, in acquiring an education, than to grow up without experience. They must learn some time, or make great blunders during a good portion of their lives, when left to rely on themselves. In many respects, children are not trusted enough. They are "bossed" too much.

Renovating old pasture.—Pasture fields in the South as well as the North have most of them been exhausted before being grazed, the owners having grown cotton, hemp, tobacco till the fertility was all extracted. It is absurd for farmers to talk or write about the merits of such soil as pastures, and all the arguments about such land paying for stock-raising, dairying, or fattening mutton or beef, is nonsense. Good meat, butter, wool or stock of any paying kind, must have rich, fat land to feed on; but whenever farmers' possess a tract of land in every way adapted for permanent pasture they can't resist the inclination to plow, cultivate, and extract all the plant-food, and then having seeded to timothy as the chief grass and after having boasted of the fine meadow obtained, in two or three years they come to the chemist or agricultural press to know how to renovate the land.

Virginia and other Southern States.—On account of the winters being so short in the South, there is a great advantage in the less expense in sheltering and feeding stock, and whoever could take capital enough to buy a good variety of female animals at a cheap rate and purchase first-class, pure-bred males, might rest happily assured of success. In the horse department alone a fortune could be made; for on a farm of 300 to 400 acres, three-fourths original Blue-grass; in addition to cattle and sheep a fine stud of mares, all in their prime for breeding, could be bought so as to produce annually 30 foals which would sell at high prices and cost a mere trifle in raising, as there need be no expense for grooms or attendants of any kind.

High Cultivation.—We speak of "high cultivation" as weakening to plants. Thus the strawberry disease lately brought to examination by the Messrs. WILLIAMS of Mt. Clair, N. J., is said to be induced by successive "high cultivation." What harm can it do? If a man eat and drink too much, dyspepsia, gout, "nervousness," or a general breaking down, is attributed to "high living." Strawberries, by many of our propagators, and especially by many of those who have new "Hybrid Seedlings" to sell, literally gorge the soil in which they are planted with all sorts of manures, both barn-yard and commercial. Are not such plants "living too high?" Mightn't the "Brown Strawberry Rust" be to the strawberry plant what dyspepsia, gout, "nervousness," or a general break down is to the man plant?

Discriminating Wages.—Every farmer knows that some hands are worth more to him than others. Nevertheless, especially in busy times, he finds himself obliged to pay all alike. The effect has been that of "leveling down" instead of "leveling up," as Mr. CURTIS expresses it, thereby destroying that energy and spirit which, in some men, are natural. It is no matter of surprise, therefore, to find our hired farm hands moving about like turtles, and extremely ingenious in making a parade of diligent work stand in lieu of labor that may be judged by its results. Such is the tendency of rewards that do not discriminate between the good, bad, and indifferent.

BREVITIES.

GIVE the poultry shade.

TOMATOES are good for chicks.

STEAM cultivation is rapidly extending in England.

THE Agricultural Gazette (London) gives a picture of a Devon bull belonging to Viscount Falmouth, and the bull's name is "The only Jones."

SAMUEL RUMPH, of Marshallville, is credited with producing the first ripe Peach this season. The date was the 10th of May, and the variety the Early Am[illegible].

WHEN new feathers come out, the old ones fall from the wings which are not willing to carry them any longer, and afterwards the bird flies so much the better."—*Liebig.*

MR. R. B. PARSONS thinks that a commission to obtain better acquaintance with our climate and soils, and the wants of tree-growing in this country, would be better than sending a commission to Europe.

IT may be well to remind persons agriculturally inclined, who contemplate visiting the Paris Exhibition, that M. Ville will receive all who are thus interested up to August 1st at his laboratory, 48 Rue de Buffon.

WE have several times imported Melon seeds from England. Whether they are not so fresh as our own or those purchased here, or whether the sea-voyage harms them, we cannot say. But certain it is they are slower to germinate, and the present season many (seeds of mush-melons) have not germinated at all.

THE flowers of Catalpa syringæfolia, now blooming, are white, striped with purple and "splashed" with orange. They are borne in panacles nearly a foot in length and the trees present at this time a beautiful appearance. The flowers remind one of Orchids.

ASPARAGUS beds are very often neglected after cutting is done. But they should be kept free from weeds and a strong growth, upon which their next year's value depends, be insured by liberal top-dressings of manure. An application of liquid manure and salt at this time would prove of great service to beds which are not fairly vigorous.

DR. STURTEVANT says: "One of the best results which could happen to our talking agriculturists would be to sweep from existence the idea that cheap results can be of other than of cheap value. The true results are always costly of time and of thought. Let the agricultural thinker receive recognition, in accordance as his thought is based on facts."

AT the Nurserymen's Convention, speaking of the advisability of appointing a committee to confer with railroad agents for the purpose of obtaining lower rates, Mr. Robert Douglas remarked that little could be accomplished by conferring with the railroads. On common roads he has always given half of the way, but if walking on railroads he always gives the whole.

MR. COX, a Minchinhampton farmer, says: "Many of us have been committing a great blunder in causing our manure heaps to decay too fast; we want it to be too soon soluble; yet we sometimes let it remain a whole year after it has become soluble, and feel proud to have a good heap of 'two-year-old dung.' I think many who keep their dung to get old are picking their own pockets."

A LADY of our acquaintance had it in her power to render a service to a stranger who, it afterwards appeared, was a rank Communist. He thanked her and vanished, but quickly returned, and drawing from his pocket a card with a name written thereon in blood-red characters, handed it to his benefactress with the assurance that when the revolution began that card would protect her from the attacks of infuriate communists. How awful!

GET READY.—By all means, whatever you undertake make a deep, broad foundation, and, with good health, energy, and continued effort in some one direction, success is sure to come sooner or later. It may not come as soon as you would like. It may not be apparent till the coming of gray hairs, but honest toil hurts no one while it benefits all, both those who participate and those who are looking on. It is the last part of a thorough training which pays the best.

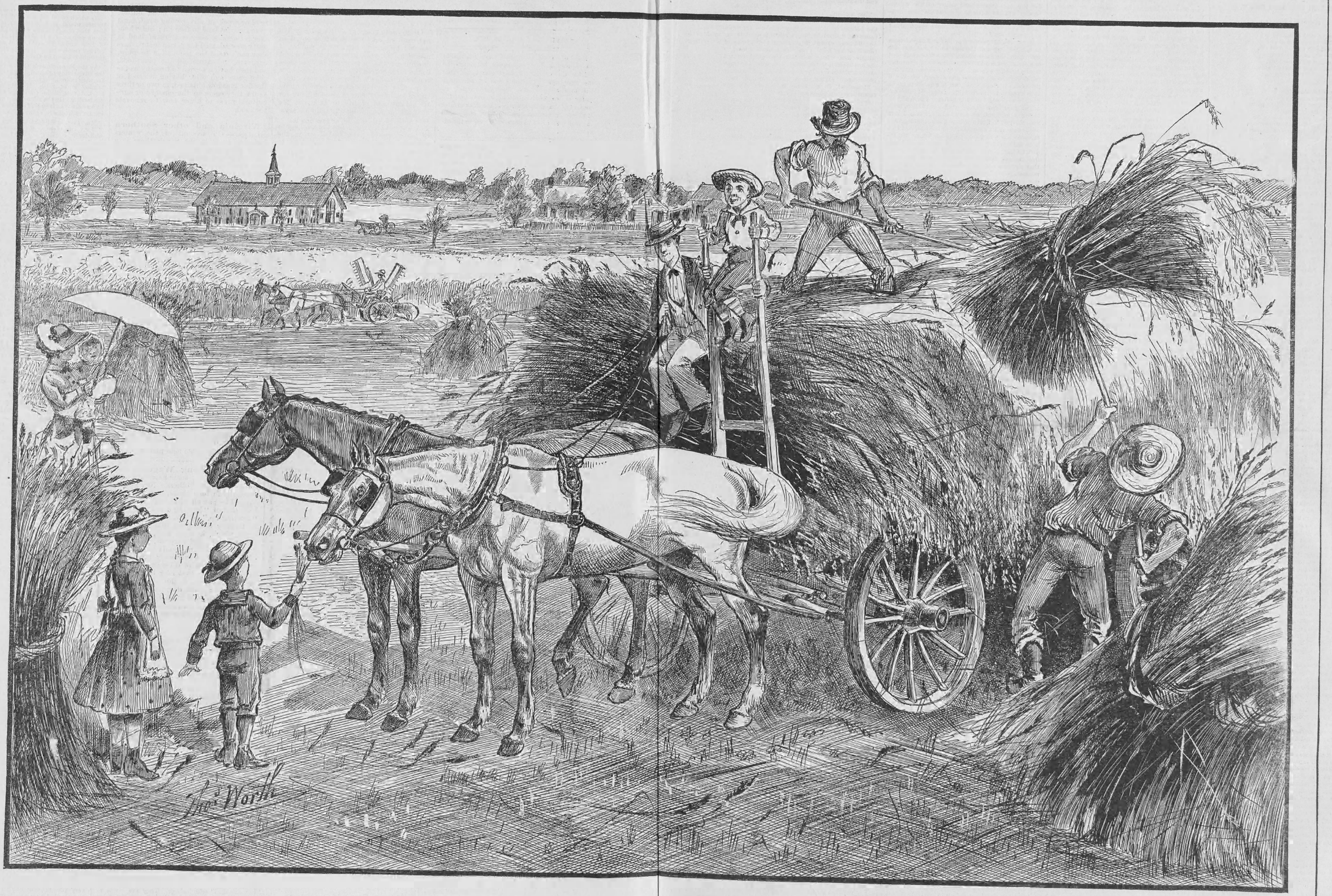
AN experienced farmer says: "The only plan I can suggest to the man who has not been brought up a practical farmer, is to be in the yard before his men go to work in the morning. Put every man to his intended work quietly and agreeably. See that every horse is placed to the right implement, and every implement in its right place, so as to do the best and greatest amount of cultivation with the fewest men and horses.

"Be on the farm as much as possible, and see that two men don't get to a job that one can do."

KEEPING WHEAT AND OTHER GRAIN.—Difference of climate has a good deal to do with thrashing and selling grain at harvest or immediately after. In England more than half the grain of all varieties remains in the straw unthrashed till the next spring. Oats are never put in barns at harvest; they are stacked, very neatly and carefully thatched by a professional laboring thatcher. Wheat, barley, beans and peas also are chiefly put into ricks and thatched, remaining till, stack by stack, they are required to be thrashed for the straw quite as much as for the grain, excepting where capital is short.

AMONG several notes kindly furnished at our request by Mr. J. J. MECHI, the well-known owner of Tiptree Farm, England, is the following: Said my wife to-day, "your wheat is too thick," and I had to remind her that she had said so years ago, although I only drill 4 pecks to 4½ pecks per acre, and when it first comes up, the thin lines are complained of as being "much too thin." How they have thickened by branching this spring! Surely there never was a better prospect for a crop so far—so warm was the ground from sunshine (despite the piercing winds) that this morning a dewy rain on fresh plowed ground was a bed of dense steam for half an hour. If we observed how many juvenile weeds we destroyed in a day's hoeing, we should congratulate ourselves upon the profit of the operation. My wheat is drilled at intervals of 9 inches from row to row. It is evident that abundant sunshine has so warmed the soil that all crops spring up quickly and grow healthily. A warm, dry May, will "do the needful," and strengthen our convictions. The prospect for a full hay crop is very comforting for the occupiers of permanent pasture. I have only 6 acres. Essex farmers are (with some exceptions) careful hoers of wheat. If the weeds are removed before the wheat closes in, they have little chance afterwards. All my land is under crop now, except about 2½ acres to be drilled shortly with kohl rabi.

FARMING AS A MIXED SPECIALTY.—As commonly pursued, mixed husbandry is usually a coarse business, unless the man possesses extraordinary ability in many directions. To keep a model farm and thrive, he must be something of a mechanic, a gardener, a stock breeder, a trader. He must have an eye to the beautiful and keep things in good order and well picked up. We do not mean that fancy farming is profitable, or that any one should be advised to follow it, for this has been repeatedly shown to be unprofitable. There is, or may be, a wide difference between fancy farming and farming where everything is neat, orderly and well done. In agriculture our ideal is a mixed specialty. By this, we mean that a man may be engaged in general or mixed farming, and at the same time give especial attention to some one department. He will select something for which he has a decided taste, as horses, some breed of cattle, sheep, swine, poultry, bees, raising and improving seeds of some grain or grass or vegetables, or raising fruit, or in some other produce. This specialty will give him interesting study, and he will likely feel gratified in becoming quite proficient in something, while if he divided his energy about equally on all departments, he could not become very proficient in any of them. A specialty alone makes a man narrow, while the broad field of agriculture gives breadth at the expense of depth and finish.



SCENE NEAR THE "RURAL" FARM.—Drawn by Thomas Worth.

Literary Miscellany.

ERE THE SUN GOES DOWN.

JOSEPHINE POLLARD.

I HAVE work enough to do
Ere the sun goes down,
For myself and kindred too,
Ere the sun goes down.
Every idle whisper stilling,
With a purpose firm and willing
All my daily tasks fulfilling
Ere the sun goes down.

I must overcome my wrath
Ere the sun goes down;
I must walk the heavenly path
Ere the sun goes down;
For it may be death is wending
Hither with the night descending,
And my life will have an ending
Ere the sun goes down.

I must speak the loving word
Ere the sun goes down;
I must let my voice be heard
Ere the sun goes down;
Every cry of pity heeding,
For the injured interceding,
To the light the lost ones leading
Ere the sun goes down!

As I journey on my way,
Ere the sun goes down,
God's command's I must obey,
Ere the sun goes down.
There are sins that need confessing,
There are wrongs that need redressing,
If I would obtain the blessing
Ere the sun goes down!

MARGARET'S VICTORY.

H. E. CLIFFORD.

"GOLLY!" Rather unceremonious for an introduction, but it was certainly expressive, coming from the lips of Johnny Edwards as he burst into the spacious kitchen of the old homestead one Saturday afternoon toward the close of December, 1874.

Just look at him, standing there in the center of the room, a ruddy-faced rough-handed farmer-lad of nineteen, his general appearance suggesting the possibility of a snow storm thereabouts.

"Neow John!" cries bustling Mother Edwards, as she steps from behind the pantry door, "Won't you men folks never learn to come in through the shed when it storms?" and with a doleful glance at the shower already strewn on the floor she quickly marshaled him out of the pleasant room.

The table is spread for the evening meal, and company must be expected, for mother Edwards has out her wedding set of china and her modest array of silverware.

The good farmer has gone to the village, a few miles down the valley, on his usual Saturday afternoon trip, and, standing at one of the windows, is a young girl awaiting his return. A slender figure, slightly above medium hight, rich brown hair, falling a wavy mass over her shoulders, a sweet, pale face with large clear eyes, give the girl claims to beauty of no mean order.

Margaret Martyn, for that is her name, is an orphan. Ten years before, she was a little match-girl, wandering to and fro in the busy streets of the great metropolis, with scanty clothing and tattered shoes, and her long brown hair only a tangled mat about her face. Thus she appeared to honest farmer Edwards, as he strode down Chambers Street toward the Erie depot at the close of a visit to the New York market with his yearly invoice of butter and cheese, and the sight so touched the warm-hearted man that it took but brief inquiry to satisfy the farmer that it would be no sin to transplant the frost-bitten little daisy from this sterile atmosphere to the more genial climate of his homestead, among the hills of B—— County. Mother Edwards remonstrated with surprise when, twenty-four hours later, he led the trembling little waif into the broad kitchen, but the farmer said softly, "Mother! 'Inasmuch as ye have done it unto one of the least of these, ye have done it unto me;'" and it was enough. The good wife opened her heart and home to the young stranger, who is now the sunlight of the household.

She has stood for half an hour looking out upon the snown storm, and it is a storm indeed, whirling, dancing, tumbling down. Sitting in at the casement, circling round the chimneys, banking up the door-way, piling on the porch—there is no noisy patter on the window pane; no boisterous roaring of the storm-king—no fitful dashes and calms as if the effort were too great for nature's endurance, but it falls

"Soft and pure as an Angel's wing
So gently shrouding everything
Pearly, beautiful snow"

Suddenly a restive span of grays dashes up to the door and farmer Edwards unloads sundry mysterious bundles and budgets that bespeak the near approach of Christmas time, and see! here enters the expected guest, closely followed by the farmer crying "Mother, Maggie, where are you all. Here's Nevey Elliott, my sister's boy." And a cordial welcome "Nevey" Elliott received from mother Edwards, and a shy glance and smile from Margaret as she gave him her hand, when the farmer introduced her, by saying, "She's our 'dopted daughter." Then, after having hung his great coat on its accustomed peg and deposited the fringed mittens on the clock, he stood warming his hands and rubbing them together in his quick, good-natured way. mother Edwards bustled about in eager haste to prepare the evening meal, and the cheerful "Come father, supper's ready," was answered by a general rally around the table.

George Herbert Elliot, the guest is not a handsome man, but there is something attractive in that full, noble brow, with the curling locks of dark hair, brushed carelessly back, and there is a good look in his large, dark eyes, but, his face is a little too thin for perfection.

The twenty-five years of his life (or at least that part of it since his freedom from school-day thraldom) have been passed in his father's counting-room—one of those dingy, wholesale houses on Washington Street, New York, where from early morning till long after business hours, he labored unceasingly over the tiresome pages of journal and ledger. The old rule "business before pleasure" was the standard he forced himself to follow till he began to realize that even his strong constitution was failing under the continued strain of nerve and brain and it took but little persuasion on the part of his mother, who with a woman's quick perception saw his need of rest, to induce him to take a short trip to his uncle's home in the country.

"Well, Well! George my boy, you ain't so little by a foot or two as you was when we saw you last," said farmer Edwards as he rose from the table and led the way to the best room, then speaking half to himself he added "but there's no use in living if you can't grow somehow, not a bit, my boy, not a bit."

Already Elliott began to feel that he had entered a new atmosphere, and the change was alike pleasant and novel. The quaint stories of the old farmer, and the curious questions of Mother Edwards about City life, amused and interested him while he did ample justice to the nuts and apples, which, with a brimming mug of cider, were served by John. But the greatest charm of the evening was Margaret. He fancied that Margaret in her modest suit of gray, was more lovely than the belles of Fifth Avenue: and although he numbered among his friends some who were musicians, he had never heard the charm in their artistic productions, that he found in the old ballad songs which Margaret sang, accompanying herself on the cottage organ. He did not fall in love, he had too much self-respect for that; but after he had been shown to his chamber and was comfortably quartered in the old-fashioned rocker before the open fire, enjoying his favorite Havana as he dreamily watched the blue rings of smoke fade into space, he said to himself. "On the whole, I think I rather like my little country cousin."

Next day was the Sabbath, just such a Sabbath as so often follows a Saturday's snow storm—calm and beautiful. A blessed quiet reigned over all, broken only by the cackle of the plump Cochin Chinas, as, pacing to and fro behind the windows of their tidy quarters, they bade defiance to the winter chill; or the shrill piping of the Bantam cock, whose energy makes up for all deficiency in size; and now and then the dull lowing of the cattle in the farm-yard, or the distant barking of a watch-dog. This quiet Sabbath seems to pervade all within the Edwards homestead; the bountiful morning meal had been prepared and eaten, the house set to rights as if by magic, the chapter read, the good old hymn sung, and the earnest, heartfelt prayer of the farmer most reverently said, not forgetting to crave a blessing for their guest. All this was new to Herbert Elliott; it seemed a strange transition in a few short hours from Bedlam to Eden.

Margaret, having finished the needful household tasks, was seated by the window with an open book before her. She had asked Herbert the evening before if he liked poetry, and he, though admiring the standard writers, found no pleasure in the class of sentimental rhymes that flood the drawing-rooms of the city, and so had answered: "I scarcely know, Miss Martyn. I have very little leisure to enjoy it, and then, you know, poetry, to be appreciated, must be heard or read aloud, and I have no companion." Now, as he entered the room, she extended her hand, saying: "Come, cousin Herbert, let me be your companion while we read some poetry." Advancing to her side, he saw she held a copy of Whittier, and, turning to "Snow-bound," she said: "Now, I will read, and as you listen, look from the window, and tell me if it is not a glorious description of the scene before us." He had often read the lines before, yet he never fully realized their beauty till his eye wandered over the snow-clad landscape while she read in a low sweet voice. It would be difficult to guess how long he would have remained lost in day-dreams, had not the spell been broken by Margaret, whose quick ears caught the sound of the village church bells, soft and clear in the distance, calling the thoughts from created beauties to the praise of the Creator; and when, half an hour later, John drove to the door with the long red sleigh, all were ready to step in. The farmer, with his great-coat buttoned to the chin, cheerily helped mother Edwards to the front seat, and insisted on seating Herbert, or George, as he would always call him, beside Margaret.

The ride, though short, gave time for a slight interchange of thought, which our young friends did not neglect, and it is to be feared the wholesome teachings of the good old clergyman did not meet with the usual appreciation from Margaret on this pleasant Sabbath morning, for other thoughts claimed her attention. The waters were being drawn from the deep-hidden well of the soul and spreading a fresh verdure over all her life.

"Two tides of the infinite ocean,
That chafeth the shores of Time,
Two waves of the passionate sea of life,
Have mingled their mystic rhyme—
And the holy music goes echoing up
To the peaceful courts above,
And the song is a song with an old refrain.
And the rhyme is a rhyme of love."

To Margaret there was something sacred in this companionship of thought and heart. Although she had kind friends ever near, and a pleasant home with the comforts and luxuries of life at her command, there was still something lacking in her life. It could not be admiration or praise, for these she received at every turn; and could it be love? Why! did not honest John Edwards love her, to use his own expression, "like all tarnation," and there was William L——, who told her only last summer, that "for her sake alone" he cared to live, and more than that, did not the handsome, young editor of the village Gazette whisper softly to her that his "best articles" were written when thinking of her,—surely here was love. What more could the heart of any woman wish?

Margaret had treasured up all these experiences in her memory and thought over them, but not with quite the same interest that was awakened one evening when Elliott and she were returning from a skating expedition, that had brought the ruddy glow to her cheeks and a merry sparkle to her eyes. Herbert took both her hands in his as they stood in the moonlight, saying, "Little Coz, you are so pretty I can't help liking you, and you are so good I can't help loving you;" then, hesitating a moment, he softly added, "May I love you, Marjie?" There was a quick, timid glance at his face and a little quiver of the lips, and in a moment she was gathered to his arms. Mr. Elliott still held her hands as they walked on, and, in fact, conducted himself in such a lover-like manner during the remainder of his visit, that nothing but our knowledge of his previous resistance to all attacks of cupid would prevent one suspecting it of being really a case of love, which, of course, no one would believe of the sedate Herbert Elliott.

Time, which tradition says waits for no man, declined to tarry even for Herbert Elliott's pleasure, and so the limit of a month's visit was reached.

It was the evening before Elliott's return to the weary routine of city life, and he had retired to his chamber early, to hold another of those soliloquies, induced by an easy-chair and a favorite cigar, in the charm of the fire-light. More than once during the past week he had sat thus for hours, while a struggle was going on in his heart. Whenever he thought of Marjie (by her request he called her Marjie instead of Margaret since the evening of the skating party), and every time he thought of her and spoke the name softly to himself, something seemed to say, "Herbert Elliott, you love that little woman, and cannot be happy without her," and as often he would strive to crush such thoughts; but this night they came with unusual earnestness, and for a long time he allowed himself to picture a future of radiant and bright possibilities,—then, recollecting the stern realities of life, he put away the tempting visions saying, "No! I have no right to bind the guileless heart by any vows, before it has learned that there are souls more noble, and lives more true than mine has been. Other men will love, perhaps, as fondly, and offer fortunes more ample and hearts less blighted by the world than mine. The strongest proof of love is sacrifice, and while it would be a stronger incentive to action than I have ever known, to feel that the hope and happiness of this young life were in my keeping, I will ask no troth, for, God knows,

"I'd rather weep to see thee free,
Than win thee, to destroy."

No! Marjie,—though your image is engraven on my heart, and the blessing of your influence will be ever present with me, there shall be no pledge till I have proved more worthy of the trust, and, if meantime another wins your love, no one shall ever know that Herbert Elliott has loved and lost; but if we meet again, and you are free, and still have faith in me, then—but I forget the thousand mischances that lie between—the strange, wild currents in life's sea are uncertainty itself. There is but one plain path before you, Herbert Elliott; it is to be a true man worthy of such a prize. It is enough that God knows your love, your hopes your fears; the future is with Him, and 'He doeth all things well.'"

This logic governed the conduct of Herbert next morning, when, with a delicate tenderness, he turned from the hearty "Good-bye" of mother Edwards, and taking Margaret's hand said, "I'll not forget you, Cousin Margie. I'll write to you sometimes, and if you'll send me word when the daisies blossom, and the strawberries begin to ripen, perhaps I'll come again." There was a slight pressure of the trembling hand, a quick glance into her eyes, and he was gone.

Farmer Edwards remarked at dinner, "It seems wrong to see George's chair empty;" and mother declared, "He seemed as much a son as John.' Which affectionate comparison the aforesaid John considered a great insult and heartily hoped, "The feller had got enough country to last him ten years," but Marjie said nothing.

Thus the days and weeks and months passed, and the visit of Herbert Elliott was remembered only by an occasional remark in the Edwards family, unless a deeper memory remained with Margaret.

Quite often there came to the village post-office a letter addressed in a bold, plain hand to, "Miss Margaret M. Martyn." At first they came in large business envelopes, printed across the end: "Return to Elliott & Co., Wholesale Grocers, No. — Washington Street, N. Y.;" and it was amusing to see how deliberately the old postmaster would turn them around and read this and then give Marjie such a reproachful look over his spectacles when he handed it out to her; but as time passed they came in neat little white envelopes, bearing a monogram in blue and gold which looked strangely like "E. & M," but of course was not, for that would have been very suggestive.

The blowy days of March have given place to showery April; these in turn are followed by the flowers of May, and even May is almost spent. Mother Edwards says she "Can't imagine what makes the girl go walking in the south meadow so often now-a-days." A random guess would be that she was watching the strawberries; at least she came back one day with a triumphant gleam in her eye and a stem of ripened berries in her hand, and there was a light in her chamber that night till after twelve o'clock, and lying before her is a small white envelope addressed to "G. Herbert Elliott, Esq., No. — Washington Street, New York."

"WOODSIDE FARM, May —, 187."

COUSIN HERBERT:—The daisies are in blossom, and the strawberries are ripe; will you come?
MARJIE."

That was all.

Next morning Margaret rode to the village with the farmer to do some shopping, but for some cause she seemed to forget about it when there, and did none except to purchase a few yards of ribbon for her hair, of the shade Herbert used to admire; but where was the wonderful letter? she has taken it to the depot, and when the train arrived, placed it in the hands of the gentlemanly postal-agent saying, in a timid, pleading way, "Please, sir, do not delay it." Then she was ready to return home and—wait.

Just at dusk, three days after, a quick rap at farmer Edwards' door announced the arrival of a guest, who proved to be none other than Herbert Elliott.

"Unexpected, but always welcome," mother Edwards said, and secretly she wondered why Marjie was not as much surprised as the rest of the family.

It was "only a flying trip," he said, "to see if they were all well," and while he no doubt felt some interest in the family, he certainly spent very little time in looking after their welfare, and devoted himself almost constantly to Marjie. Every day he would be seized by a sudden desire to visit the lake, or the strawberry meadow, or some pleasure resort in the vicinity, and it generally occurred—by accident, of course—that he chose a time when the rest of the family were too busy to go, and therefore Miss Marjie must be his companion.

One Sabbath afternoon they had been singing and talking together till sunset; then mother Edwards missed them, and, marching out on the porch, where the farmer sat dozing in his easy chair, with his glasses nearly slipped from his nose, and the family Bible open upon his knees—she placed her arms akimbo—a position only assumed on very extraordinary occasions—and said: "Now, look here, Henry Edwards, if that nevey of yourn' has any notion I'm goin' to see him coaxin' our Marg'et right away from us in this style, and not tell my opinion on it, he's mightily fooled."

"Tut, tut! Mother, don't be foolish, now," said the good farmer, as he gently took her hand and led her back to the west window, then parting the screen of honeysuckles, he pointed to the lovers, as they walked hand in hand across the lawn to their favorite seat under the maples, and said: "Do you forget, Mary, when we, too, walked the same path in the twilight?" and as she looked, her head sank upon his shoulder, while an expression of tenderness came into the faded eyes, and she forgot her anger in a tide of olden memories that came over her, laden with scenes from her own younger days, and she answered, slowly: "That was a long time ago, Henry." "But have you ever been sorry?" he asked; and her answer was a loving pressure of the toil-worn hand and a kiss on the wrinkled cheek, that for fifty years had known the salutation of no other lips; then, blushing with confusion, she hastened away.

Marjie is seated in a rustic chair, and Herbert by her side. Bending over her, he said: "Marjie, all the beauty and brightness of this world to me, and all my hopes for the future, rest on your answer; is it yes, or no?" A low murmured "yes," and he took from his pocket a little casket, which on opening, disclosed a slender ring—a diamond supported by two hearts—and, placing it on her finger, he whispered: "Darling, mine at last," as he knelt to imprint the first kiss of betrothal on her virgin brow.

Next morning there was another farewell on the front porch of the homestead, but it was slightly different from the scene six months before, and mother Edwards, with a watchful care toward the future, dropped a few well-directed hints, that the idea of her ever giving up her "Marg't" was preposterous in the extreme.

October has arrived, and at the Edwards' farm everything seems cheery and home-like The tea-kettle sings merrily on the stove in the kitchen, and the table is spread in the cool shade of the porch, the great Maltese cat lies stretched full length in the open window, and the canary hops gayly about his Gothic cage;—but there is a cloud on Marjie's brow! her face is sad, and the firm lips are compressed as if to smother a groan. Those letters, with the New York postmark, have been irregular of late, and none at all for two weeks past; and the last ones were so cold and forced—so filled with business—the state of the markets or the depression of stocks, and such matters as she could not understand; besides, there is a new sorrow to-day. It is Marjie's birthday—eighteen to-day,—and Herbert promised on that June evening, under the maples, to pass this day with her, and now the day is almost gone, with the promise unfulfilled; but listen! there is a foot-fall on the porch; can that be Herbert? It is, but how changed! he looks five years older than when we saw him last; there is a wild, uneasy light in his dark eyes, and while he greets Marjie cordially, he does not meet her gaze with the full, frank look of old; he seems abstracted, falls into reveries, and starts up suddenly, looking around as if he thought some one was watching him. His interest in the quaint, old songs seems lost, and the interviews with Marjie are always hurried. Sometimes he spends nearly all night writing—"business of importance," he says, and once he was gone all the day and evening, and returned, acting more strangely than ever; and, before a week had passed, a telegram recalled him to New York, and left such an aching void in Marjie's heart as she had never known before.

Through the dreary weeks that followed, there came occasional letters from Herbert; but they were short and disconnected, seemingly written more as a duty than a pleasure.—[Concluded next week.

BRIC-A-BRAC.

A STORY OF CHINESE LOVE.

THE festive Ah Goo,
And Too Hay, the fair—
They met, and the two
Concluded to pair.

They "spooned" in the way
That most lovers do,
And Ah Goo kissed Too Hay,
And Too Hay kissed Ah Goo.

Said the festive Ah Goo,
As his heart swelled with pride,
Me heap likee you—
You heap be my blide?"

And she, looking down
All so modest and pretty,
'Twixt a smile and a frown,
Gently murmured, "You bettee."

A PRETTY FANCY.

ONE of the pretty fancies of French people is to make colors the expression of sentiment. They hold that violet is analagous to friendship, blue to love, as suggested by blue eyes and azure sky. A bunch of violets would therefore tell a lady's suitor that friendship is all he has a right to expect. Yellow is paternity or maternity; it is the yellow rays of the spectrum which cause the germ to shoot. Red figures ambition; indigo, the spirit of rivalry; green, the love of change, fickleness; black, favoritism; white, unity, university. In addition to to the seven primitive colors, gray indicates power; brown, prudery; pink, modesty; silver gray (semi-white), feeble love; lilac (semi-violet), feeble friendship; pink, false shame.

GRAMMATICAL TAUTOLOGY.

I'LL prove the word that I've made my theme
Is that that may be doubled without any blame;
And that that *that*, thus trebled, I may use,
And that that *that* that critics may abuse
May be correct. Farther—the dons to bother—
Five *thats* may closely follow one another!
For it is known that we may safely write,
Or say that that *that* that *that* man writ was right;
Nay, e'en, that that *that* that *that* that followed
Through six repeats, the grammar rule has hallow'd;
And that that *that* (that *that* that *that* began)
Repeated seven times is right! Deny't who can.
—*Richard Grant White.*

TWENTY IMPOLITE THINGS.

1. Loud and boisterous laughing.
2. Reading when others are talking.
3. Talking when others are reading.
4. Cutting finger nails in company.
5. Joking others in company.
6. Gazing rudely at strangers.
7. Leaving a stranger without a seat.
8. Making yourself hero of your own story.
9. Reading aloud in company without being asked.
10. Spitting about the house, smoking or chewing.
11. Leaving church before worship is closed.
12. Whispering or laughing in the house of God.
13. A want of respect and reverence for seniors.
14. Correcting older persons than yourself, especially parents.
15. Receiving a present without an expression of gratitude.
16. Not listening to what one is saying in company.
17. Commencing to eat as soon as you get to the table.
18. Answering questions that have been put to others.
19. Commencing talking before others have finished speaking.
20. Laughing at mistakes of others.

THE owner of a house in Hartford, a widower, lived in the upper story and rented the lower part to a clergyman. A servant girl employed in the clergyman's family was young and pretty. Her mistress observed that she and the widower were devoting a great deal of attention to each other, and deeming the matter scandalous, said to her: "Pack up your things and quit." The girl obeyed; but on the following day she returned in a carriage, announced that she had been married to the landlord, and said to her former mistress: "Pack up your things and quit."

A FRENCH VERSION.

LA petite Marie had le june muttong,
Zee wool was blanche as ze snow;
And everywhere la belle Marie went,
Le june muttong was sure to go.

Oui, monsieur; von avez un very large imagination; mais comment est this, pour Deustche:

Dot Mary haf got ein leedle schaf;
Mit hair yust like some vool;
Und all der blace dot gal did vent,
Das schaf go like ein fool.

THE ingenuity of the Chinese is not confined to embroidery, ceramics, and decorative art, but extends to internal revenue. One of the latest schemes of the Celestial statesmen proposes a tax on new-born infants. The sum is ridiculously small—about ten cents—but as babies are one of the principal productions of the Celestial Empire, and the market is constantly overstocked, a handsome revenue from this source is confidently expected. The tax falls due when the infant enters the world, and the happy father, without delay, steps down to the captain's office and settles its passage. Strange as it may seem, there are no deductions in case of double entry. This is not in accordance with natural equity or customs of morality. The tax for twins surely ought not to exceed fifteen cents.

THE horse, bowed down by weight of woe,
To weakest oats will cling;
Nor whip nor spur can make him go,
Nor any other thing.

THE motto for lovers is, "E plural buss yum, yum!"

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

SOME ONE'S SERVANT GIRL.

SHE stood there leaning wearily
Against the window frame,
Her face was patient, sad, and sweet,
Her garments coarse and plain;
"Who is she, pray?" I asked a friend,
The red lip gave a curl—
"Really! I do not know her name
She's some one's servant girl."

Again I saw her on the street,
With burden trudge along;
Her face was sweet and patient still,
Amid the jostling throng;
Slowly but cheerfully she moved,
Guarding with watchful care
A market basket much too large
For her slight hands to bear.

A man I'd thought a gentleman,
Went pushing rudely by,
Sweeping the basket from her hands,
Yet turning not his eye;
For there was no necessity
Amid the busy whirl,
For him to be a gentleman
To some one's servant girl.

Ah! well it is that God above
Looks in upon the heart,
And never judges any one
By just the outer part:
For if the soul be pure and good,
He will not mind the rest,
Nor question what the garments were
In which the form was dressed.

And many a man and woman fair,
By fortune reared and fed,
Who will not mingle here below
With those who earn their bread,
When they have passed away from life,
Beyond the gates of pearl,
Will meet before their father's throne
With many a servant girl.

TALKS ON TIMELY TOPICS.—No. 7.

ROSE GERANIUM.

Phantom Work.

EVERY lady, who delights in dainty home-arts, should have, as a companion for her wax-flowers, a phantom bouquet. The fingers which are skillful in the one will not fail in the other effort.

In July or August, when the foliage, at its rankest, is yet unimpaired, all conditions favor the undertaking. In making selections, choose from the forest those leaves which possess the strongest fiber—Poplar, Beech and Gum—are representatives. If possible, have in your collection our favorite, the Pear. Place oak or other leaves containing tannin, in a separate vessel. Gather only foliage free from imperfections, and procure a generous quantity, in view of many possible failures. In addition to these, we may suggest the seed-vessels of various wild and cultivated plants, of which the Poppy and Columbine are types.

If in your researches you chance to discover some heads of Wild Cotton, Asclepias or Thistles, carry them home carefully—you will find them treasures, suggesting their own sphere of usefulness.

Place your leaves in a tub, weight them down with a plate, and cover with rain-water. Let them remain in a sunny exposure for about two weeks, or until they hint of a stagnation more delightful to the artist's prospects than to her senses!

In that state of decay necessary to a removal of the pulps, the leaves, it must be confessed, have entirely lost their charm, and it is only the stimulation of hope which prevents the worker from throwing the mass away in disgust. However, we are ambitious and bravely proceed. Remove a few leaves at a time into clean water, gently rub them between the fingers or tap them with a brush, giving a downward motion. In handling them, float them upon a card or a bit of glass to prevent breaking. When the pulp is entirely removed, place the specimens in a vessel of clear water, and as soon as possible get them all ready for the bleaching.

An easy method is to prepare a solution of chloride of lime, which is made by dissolving one tablespoonful of the lime in a quart of soft water. Add six or eight grains of citric acid, dissolve, drain off and bottle. Place your specimens in a shallow dish, cover them with this liquid, and set away in a dark room for a day or two, covering them closely. When sufficiently bleached, place again in clear water, leave them for another day and then float them out; press gently between folds of soft linen until dry, and them shape them to suit the taste. Some may be pressed between surfaces and others gracefully curled, as in nature.

Before leaving the subject I will give a second method, employed by more experienced persons for destroying the epidermis of the leaf. This plan greatly hastens the operation, although it requires a greater degree of delicacy and skill in handling. It is as follows: Dissolve eight ounces of soda and four ounces of air-slacked lime in two quarts of water; boil and strain. In this solution place the leaves and boil for an hour or more, adding water to supply what evaporates. Remove a leaf and determine by experimenting when the pulp is sufficiently softened for work. The cleansing and preparation are the same in this as in the method first given.

The taste will suggest various ways of mounting to produce fine effects. If placed under a glass globe, a wax or an alum basket or vase, will be found a dainty receptacle. Group a portion of the smaller leaves into blossoms of various shapes, occasionally employing thistle-down or fine floss-silk for centers. The stems should be of fine wire, wound with white silk.

A box lined with white, frosted plush, forms another appropriate receiver; and they look no less lovely made into a wreath or cross on rich black velvet. A few silver spangles may sometimes be introduced with good success, but great care must be taken not to place with these ethereal treasures anything which would add to the effect the slightest degrees of heaviness.

A HOUSE HOLD REFORM.

J. E. M'C.

I WISH I could prevail on all farmers' folks this abundant, summer time, to join an *anti-pie association*. I wish the Granges would take up and discuss the question of "Pie or no Pie;" I think it would bear as much upon practical, every-day life, as the never settled questions "Which has done the most damage, fire or water?" or "Which deserve the most commiseration the Africans or the Indians?"

When fruit can be had for the picking, when you can sugar down for dessert, golden or red or black raspberries, or blackberries, when you can pile up a beautiful, artistic pyramid of pears, peaches and grapes, for a center-piece to your table, and can flank it by plates of sliced melons and rosy apples, what more could a king ask?

Does'nt it seem half like desecration, to spoil all that beauty by making of it a fruity paste between two layers of pie-crust?

Do believe for once that "the best way, is as good as any" and let the fruit come on the table in all its freshness and beauty and wholesomeness.

I know it will be hard to convince the old house holds, for we are joined to our idols; but the younger ones just coming on, should start fair.

The gain in the point of time in the course of one summer would be immense, and when we take into consideration the health, strength and labor expended on the pie business, in the hottest, busiest season, over the quickest fire, the sum is simply incalculable!

The house-keeper who will gently beguile her house-hold out of this extravagance and show them by practical illustration a more excellent way, will do something worth doing this summer, and I do not doubt but that she will set out, for the autumn campaign with a rare vigor and courage, and none of her family will be be a whit the worse, but rather the better for it.

WOMAN AND THE FRANCHISE.

AT a meeting of Edgewood Grange, No. 14, the following answer was given to the question, "What would be the advantages of the franchise to woman?"

There would be many. In the first place it would create an incentive in woman to learn everything useful outside of domestic economy merely, entering into the wider and far more important fields of society and politics, making such study to take the place of the too prevalent devotion to amusement, flirtation, and the follies of fashion. It would give them the advantage of equal education with men in branches of knowledge now considered superfluous to their accomplishment for the sphere of duties they are expected to fill, but which would fit them for offices of responsibility and trust, in which men are often found to fail.

Their keen observation, in connection with their sympathetic nature, eminently fits them for the office of inspecting our prisons and almshouses, could they be but elected or appointed to such position; especially where women are inmates. Certainly they would make the former more like schools of reform, as they should be; and see to the better arrangement and administration of the latter. Their more extended education would take away every objection to their demand for equal compensation with men for equal labor performed, and so enable them to keep their own families whenever that necessity might devolve upon them.

That women owning property should help to make and amend the laws under which they live, is an advantage which should never have been left to depend upon special franchise; yet there are apparently many who would deny to woman this obvious right.

With woman's aid, the same economy and arrangement which pervades the domestic would be transferred with happy effect to the political; and with her more careful and humane characteristics as compared with those of men, war might be superseded by arbitration, and numberless barbarous and hurtful practices, injurious to individuals and society at large, be entirely abolished. Thus, while the Queen of England has ever expressed herself as in favor of that better mode, and always favoring peace, we see the humane wisdom of woman in strong contrast to the recklessness of the war-seeking Emperor of Russia, who seems to seek in blood the solution of every national question affecting other countries. Women certainly would not tolerate war for slight causes, or make maudlin speeches with rum-soaked brain, to precipitate war by unwise official utterances, as men (at other times of brilliant intellect) sometimes do. The rum traffic would be swept from the land, and every good reform encouraged and carried through. The national finances would be safe from defalcations; for should a woman be a defaulter, the world would never get over it, although a man may run to the extreme of crime and folly to-day, and to-morrow, perhaps, be restored to as high a position as before.

As school trustees, women are much more interested than men, in exact proportion as they have more to do with the rearing and home education of the family. The success of women as Sabbath-school teachers is universally appreciated, and their ability and fitness to preach the gospel have been already extensively acknowledged. In law their aim would be to administer impartial justice in the fear of God, and in the interest of an exalted humanity; not for greed of gain, but with purity of purpose, avoiding the muddy pools of politics, contending for and at all times defending and upholding the right. Their presence has ever the effect of a great moral force, carrying with it as it were, a halo of kindness and purity. The beautiful equilibrium that God has created between man and woman, was intended to be mutually used for mutual good; and "what God has joined, let no man put asunder." This constitutes the great fundamental principle of justice for which we contend, and upon which stand erect and fair the walls of our great republic.

Senators may laugh and sneer at the appeal of intelligent women, whose refinement at least, merits a less uncouth reply. But their voice will not be hushed by levity and trivial excuses, for they are descendants of women who nurtured this grand nation into being through the dark and trying hours that so emphatically "tried men's souls." Not dames of Utah, not devotees of spiritualism, free love, or any other abomination, but a constantly swelling host of the intelligent, thinking women of the land, are demanding the ballot, and their full and complete enfranchisement. These the Grange was wise in promptly granting, and has in consequence been richly benefited. And with these, as regards her social, legal and political position, although they may be slow in coming, as are the cycles of progression, she will make her influence felt, and effect a higher and nobler civilization, which will redeem the world and save, for all time, this good and glorious republic. AMANDA L. SCHOLL.

Edgewood Grange, No. 14, N. J.

AN HEROIC WOMAN.

SISTER S., of the Order of Troyes, needs no adjectives. It would be a waste of breath to call her a woman of sublime courage and superhuman heroism. The Paris papers do not even publish her name; but that is well, for it would not look well in columns that are stained and blurred with the names of miserable sinners. This was what she did: She had taken some sick children out for a walk in the country, the oldest being only eight years of age, and they were suddenly assailed by a sheep dog, whose jaws were running with foam. She instantly saw the danger of her charges, and, resolutely interposing between the terrified children and the furious animal, bravely withstood its attack. She was severely bitten, and the dog, excited at the cries of the children, endeavored to rush upon them. Protecting with her body the children, who hung on her petticoats shrieking with terror, this brave girl threw herself courageously on the dog, and for ten minutes grasped it, rolling over with it, and thrusting her hand into its mouth to prevent its biting the children. Some peasants, who came up at last, beat off and killed the dog. The Sister was found to have fifteen deep wounds on her hands and lacerated arms. Skillful care was given to her wounds, and for a short time after her return to Paris there was some hope that she might escape the ultimate fate which there was every reason to fear. In a week or two hydrophobia in all its characteristic symptoms appeared; and Sister S. died from this fearful disease. She had saved five lives.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

MRS. HARRIOT, Glens Falls, N. Y.—*De biege* is the best material for your traveling costume. Twelve yards will make you a full costume, including outside wrap. The best quality comes at five shillings a yard; inferior goods cost much less, but the higher-priced goods are worth more than the difference in price, both in durability and appearance.

LILY GRANT, Carbondale, Pa.—Some of the large fancy stores in New York are closing out their stock of straw hats at very low figures. One firm offers an excellent quality of straw, in drab, white, brown and black, and in all the fashionable shapes, for 46 cts. Ostrich feathers do not vary much in price. There is always a market for them, and those which you see advertised for 50 cts. are of very inferior quality. Stiff wings are sold at 25 cts.; larger ones, in two shades, come as high as $1.

MINNIE MARTIN, Champaign Co., Ill.—Take your purple and white silk and turn it, if the pattern is the same on both sides; if not, change the breadths so that the fresher ones will be in front and those that are worn, at the back. Rearrange the trimming, being careful to have no worn or frayed edges in sight. Then buy some purple lawn or a prettily designed organdy with purple figure, and use it as an overdress. Cut it in princess style, with Watteau back, and trim and loop it with purple ribbon.

—A RURAL subscriber wants a recipe for exterminating bed-bugs. Will some of the ladies give her the benefit of their experience?

THE Roumanian princess, Kottsoff-Massalsky who uses the pseudonym "Dora d' Istria," has recently published in Paris a book on "The Poetry of the Ottomans." This lady has made a study of the literature and social condition of the Turkish Empire, and has written many works relating thereto. She is now preparing a treatise on "The Civil Condition of Women among the Southern Slavonians," which, when completed, may, it is reported, be read before the American Social Science Association, of which she is a corresponding member. She was born in Bucharest, and spent her youth in the region where the war lately raged. Her husband is a Russian nobleman, but her own ancestors were Albanians from Prevosa, where her family name of Ghika is very common. Her book on Ottoman poetry is in French, and is said to display much knowledge of her subject, though its manner is somewhat sketchy.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Rural Grounds, Notes from the (Illustrated)..... 453
Drainage—R. C. Carpenter (Illustrated).......... 453
Grasses, One of our Best—Prof. W. J. Beal....... 454
Animal Food and Animal Produce—L. A. R 454
Prize Cattle at the Oxford Show (Illustrated)..... 455
Garden Talks and Walks—Renoclaf.............. 455
Kissena Notes—Sam'l Parsons.................. 455
The Banana in California—Wm. C. L. Drew...... 456
Cause and Effect—L. A. Roberts................ 456
Capt. Cuttle's Advice—B. Pickman Mann......... 456
Young Man, Go West—W. H. White.............. 457
Catalogues, &c., Received...................... 457
Jottings from my Note-Book—Clinton........... 457
Rural Farm, Scene near the (Illustrated)......460, 461

Veterinary:

Inquiries answered by D. E. Salmon, D. V. M.
Bone Sprain and Ringbone...................... 457
Blind Staggers in Horses....................... 457

Answers to Correspondents:

The best Breed of Cows for Milk................ 458
What is Muck?................................ 458
Steam-Plowing................................ 458
Destroying the Canada Thistle.................. 458
Saltpetering Stumps............................ 458
The Wiegela................................... 458
Propagating the Wistaria....................... 458
Miscellaneous................................. 458

Everywhere:

Georgia Notes—J. G. Rhea...................... 458
Friend Sam's Mishap—Mrs. V. D. Covington.... 458
Crawford Co., Ark............................. 458
Northumberland Co., Ont....................... 458
Pitcher, N. Y.................................. 458
Higganum Conn................................ 458
Rural Grounds................................. 458
Botanic Garden, Cambridge, Mass............... 458
Pasadena Co., Cal.............................. 458

Domestic Economy:

Summer Siftings—Annie L. Jack................. 464
Mop-Handle Papers: No. 1—May Maple.......... 464
Domestic Recipes.............................. 464
Markets...................................... 465

EDITORIAL PAGE:

Sanitary Precautions........................... 459
A Serious Consideration........................ 459
Poultry on a Large Scale....................... 459
Give Your Girls a Chance....................... 459
Renovating Old Pasture........................ 459
Virginia and other Southern States............. 459
High Cultivation.............................. 459
Discriminating Wages.......................... 459
Brevities..................................... 459

LITERARY:

Poetry..462, 463, 466
Margaret's Victory—H. E. Clifford.............. 462
Bric-a-Brac.................................... 463
Talks on Timely Topics: No. 7—Rose Geranium.. 463
A Household Reform........................... 463
Woman and the Franchise—Amanda L. Scholl... 463
A Heroic Woman............................... 463
Items for Correspondents...................... 463

Reading for the Young:

Pocket-Money for Young People: No. 10—Starr Morris... 466
English Literature for School Girls — Sans Souci... 466
News from Honolulu........................... 466
In what County is Valley Forge?................ 466
She is a Buckeye Girl.......................... 466
The Puzzler................................... 466

Sabbath Reading:

Exposing the Dead to the Gaze of the Curious. 466
Personals..................................... 467
News of the Week—Herman..................... 464
Wit and Humor................................ 468
Advertisements......................464, 467, 468

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SUMMER SIFTINGS.

ANNIE L. JACK.

" But Robin red-breast builds his nest,
Singing a song of the joy to come."

So writes my charming friend, L. C. M., whose poems have a tender pathos and sweet touches of nature that cannot fail to endear her to the reader's heart. But the RURAL finds the saucy fellow stealing his strawberries and cherries, so he revenges himself on me by spoiling the word robbin' in my "Kitchen Club' Meeting. Well, it is too warm to scold, and the RURAL ought to know best whether the pun was intended, or not.

How warm the last week has been! It is the first time in my life I ever saw gooseberries and currants fairly *cooked* on the bushes, the former especially being a serious loss as, spoiled and browned, they lie on the ground. "Sunstruck," said a neighbor, looking at them. The currants are a fruit not to be despised, being a corrective to the system eaten fresh, and when nicely canned, a treat of some value in winter. They must, however, be eaten to be appreciated, the acid taste being more grateful to many people than the cloying sweetness of some other fruits. In making jellies of any kind, I am sure it is a great help to warm the sugar in the oven while the juice is boiling. Sometimes I have made it too hot to touch, and even melting around the edges. It falls into the juice with a "hiss" as you stir it, but if it once comes to a boil you may take it off. Your jelly will be purer and form better for this simple process. Currant pies may be had in winter with the flavor of the fresh fruit, if all the small berries are canned. They do well even in narrow-necked bottles, if with plenty of syrup.

MOP-HANDLE PAPERS.—No. 1.

NOT long since I had occasion to make a morning call at the house of MRS. BLACKWELL, and found her engaged in cleaning her dinning-room floor. She seated me near a window which overlooked a well kept and well arranged flower-garden, and begged permission to finish the work, as it would occupy but a very few moments' time. Of course, she was quite excusable, as all know that a farmer's wife who does her own work, cannot obey all of the petty rules laid down in many books on etiquette. We were old school friends, and therefore did not stand on ceremony, but conversed upon topics which were most interesting to us, and at the same time the work was rapidly nearing its completion. MRS BLACKWELL's house was a new one, and therefore easily kept tidy. But I could not help observing the careless way she had of "slatting" the mop against the base-boards and leaving the muddy stain of the suds upon the unpainted wood, which was already blackened by previous washings. The newly-plastered walls were specimens—though far from beautiful—of spatter-work, made by the too forcible use of the mop-handle.

I might have suggested a little more care, but was too well aware that criticisms from those we deem our friends, are not always agreeable, and so refrained. But suggestions for the good of our rural population, are usually acceptable, when they come from the RURAL NEW-YORKER; and seeing the faults of others we often learn to correct our own. If a housewife observes a slackness in any department of the domestic machinery, outside of her own domain, she is pretty apt to improve upon the mode and so correct the infirmity whatever it may be. And when I call the attention of thousands of housekeepers, to those blackened base-boards, and spattered walls, I know that many of them will look about their homes, to see if the same fault is theirs. Occasionally a housewife takes a cloth and a pail of nice fresh suds, and washes away all stains after the floor has been wiped dry, but it is better to use a little care in the first work, and thus save the extra labor, by being sure that mop and water are clean. There are many conveniences for cleaning floors, for those who feel disposed to have them. Mrs. WHITE showed me a convenience which I should consider a triumph in the way of a mop. It consisted of a long-handled brush on the back of which was a box capable of holding a quart of water. The box was covered with rubber. After pouring a small quantity of water upon the floor, it was scrubbed thoroughly with the brush, and then all surplus water taken into the box by means of a rubber valve; and thence emptied into a pail, kept conveniently at hand. In this manner every square yard, could be thoroughly cleansed with clean water, applying soap where necessary. Mrs. BARTON says she always uses a large cloth, *and her hands.* She considers a mop with a long handle a nuisance. There are no stains, black and unsightly, on her walls or base-boards. MAY MAPLE.

DOMESTIC RECIPES.

Blackberry Pudding.

Three pints of milk, five well-beaten eggs, three pints of blackberries, which have been previously stewed, with a little sugar; flour, salt, and two teaspoonfuls of yeast-powder. The batter should be stiff enough to drop from the spoon. The pudding is nice, either boiled or baked, and may be eaten with a wine sauce flavored with nutmeg. E. K.

Blackberry Wine.

Press the juice from sufficient quantity of fruit to make two gallons; wash the pomace in two gallons of water; strain, dissolve ten pounds of white sugar in this, and add the strained, clear juice. Fill a clean cask perfectly full, and cover the bung-hole with a piece of cloth; let stand, filling up with some of the mixture, reserved for the purpose, until fermentation ceases; fill up again, drive in the bung tightly, and let stand in a cool place for six months. Then draw off without shaking the cask, put into bottles, cork tightly and seal.

MRS. CLARK.

Blackberry Jelly.

Place the fruit in a porcelain kettle with just water enough to keep from burning; stir often, and let stand over a slow fire until thoroughly scalded; then drain through a jelly-bag two or three times, if necessary to make it clear; measure, and allow as much sugar as juice; boil the juice briskly for ten minutes, add the sugar and boil ten minutes longer. To test the jelly, drop a little into a glass of very cold water, and if it goes to the bottom at once it is done.

Blackberry Mush.

Look over and wash two quarts of ripe berries; add two-thirds of a quart of boiling water and cook ten minutes; sweeten to taste and then stir in a scant pint of sifted flour; boil until the flour is thoroughly cooked; have a mold nicely buttered, pour in the mush and let it cool; serve with hard and wine sauce. E. M. M.

Pathenia Pudding.

One quart of milk; five eggs; five tablespoonfuls of flour; bring the milk to a boil, reserving enough to wet the flour; then stir in the wet flour while hot; when cool stir in the beaten eggs, reserving the whites of two; bake one-half hour, and when cool spread over an icing made from the beaten whites and powdered sugar.

Corn Pudding.

Three dozen ears of corn scraped from the cobs; one and one-half pint of milk; three eggs; two tablespoonfuls of sugar; one teacupful of flour; two ounces of butter; a little salt; bake one hour and a half.

MISS SUE. MCCHAIN.

News of the Week.

POLITICAL.

Monday, July 14.

THE Potter investigating committee is crawling slowly through the mire of Louisiana politics, until the people are pretty near tired as well as supremely disgusted with the mass of wholesale perjury and political corruption laid bare. Nor can it be said that the Administration wholly escapes smirching, as it has liberally rewarded all those who took part in the alleged frauds in Florida and Louisiana. Of those connected with the count in the former State, Noyes was made Minister to France, Kasson Minister to Austria, McLin Justice of New Mexico, Sterns Commissioner of the Hot Springs. Dennis went into the Supervising Architect's office, where he had nothing to do but draw his pay. Cessna, the County Judge, who took the affidavits in Alachua, was made a postmaster. Black and Vance, the canvassers there, went, one into the Treasury and the other into the Post Office. Howell, who was clerk of Baker county, was made Collector of Customs. Bowles, who was election officer in Leon county, where the democrats claimed there was a fraud of seventy-four votes, went into the Treasury. Bell, another County Judge in a contested count, was made a timber agent. Humphreys, one of the electors, was made Collector of Pensacola. Leons, Sterns' secretary, was put into the Treasury. Maxwell, a republican detective, was made a lieutenant in the army. Phelps went to Paris with McCormick. Varnum, one of Sterns' Cabinet, became a Receiver of the Land Office, where Taylor, one of the clerks of the county courts, found a haven also. In short, wherever there was a charge of fraud, places have been found for those connected with it. The list of those connected with the electoral count in Louisiana who have since been rewarded with office is too long for insertion here, reaching, as it does, all the way from the members of the Returning Board down to Mrs. Jenks' brother.

His own forced confessions show E. L. Weber, the glib supporter of Anderson's statements, to have been a thorough rascal. In 1876 he swore before the Boutwell committee that in East Feliciana a series of the most horrible outrages were perpetrated; now he flatly denies the truth of his former statement; he wrote a letter to Kellogg detailing some of these outrages, now he says it was false and merely intended to be published for effect; he cooly acknowledges that while a State Senator he was one of a gang of members of the legislature who were in the habit of selling, to the highest bidder, their joint votes in favor of measures; and though most of his alleged confederates deny their complicity, the fellow's evidence damns himself, at any rate. From his evidence there is no doubt but that he was bribed by Pinchback and Kellogg, as stated here last week; and there can be little doubt but that his present evidence too has been paid for. Secretary Sherman has written another letter to the committee, renewing his request for an investigation into intimidation in Louisiana, on the ground that they have admitted evidence that there was none.

On Friday last, Senator Kellogg testified that at the last Presidential election the republicans in some parishes of Louisiana were thoroughly terrorized; that Packard got there more votes as Governor than Hayes did as President; that the republican Legislature was purchased by the democrats with the connivance of the Harlan-McVeigh batch of visiting statesmen; that much of the evidence given by Anderson, Weber, Kelly, and some of that poured forth by the sprightly Jenks, was false; that he knows nothing whatever about the forged certificates of election, never having inquired into the matter, as he didn't think it in the line of his duty. The first democratic Legislature in Louisiana has conducted itself in a manner by no means satisfactory to the people of that State. The members have done those things which they ought not have done, and left undone those things they ought to have done; and therefore given cause for not a little popular dissatisfaction.

After all, the workingmen's party or the Kerneyites, of California, have not secured a majority of the Constitutional Convention of that State. Their vote was so heavy in San Francisco and other large towns that the telegrams at first conceded to them the State; but the farmers and other country folks have reversed the vote of the cities, and the official returns give the following as the constitution of the convention: Non-partizens, 81; workingmen, 52; republicans, 11; democrats, 6; independents, 2. The non-partisans elected all their delegates at large; and Kerney is keeping up his own courage and that of his followers by boasting that he will secure the next legislature; meanwhile the demagogue is about to visit some of the large cities east of the Rocky Mountains. In most of the Northern States the workingmen's party is as yet an unknown factor in politics, as its real strength has not hitherto been tested. In this State both of the old parties are trying to obtain its support; at present the new organization is split into factions, which are bitterly bandying charges of corruption and treachery, and there is little doubt but that internal discord is its greatest danger. Meanwhile the situation of republicans and democrats is that of an armed truce. Each party is fearful of laying fully open the entire scope and tendency of its views; nor will either of them do so until one or the other becomes overwhelmingly dominant—in other words, each is now on its good behavior before the country.

The republicans of Ohio are bitterly denouncing the action of the late democratic legislature in so gerrymandering that State that it will return 14 democratic Congressmen to 6 republicans on the basis of the vote of 1876, when Hayes had 7,000 majority. In Indiana the democrats are equally loud in their complaints against the republican gerrymandering of that State a few years ago, so that 9 republican Congressmen were returned in 1876 against 4 democrats by the same vote that gave the democratic candidate for governor 5,000 plurality. Congressman Hunton, of Virginia, has had the primaries at Alexandria carried against him on the distinct ground of his having taken so prominent a part in the "fraud" business to the neglect of legislation needed by the State. Chester Arthur, Collector of Customs at this port for eight years, has been replaced by Gen. Merritt; and Naval Officer Cornell, by a Mr. Burt. Hayes tried twice to effect the removal of these officers, but was thwarted by the Senate. No sooner, however, has that body adjourned than he defies or dodges its decision. Both officers were favorites with the public, especially Arthur: both have been thoroughly efficient; against neither has any charge been even remotely proved; most of the reforms advisable in their department, have been, from time to time, suggested by Arthur; yet, because they favored Conkling's re-election to the Senate by the legislature to be chosen this fall, they have been thrust aside to make room for Merritt, an apt pupil of Fenton, who will, it is supposed, use the power of the Administration to antagonize Conkling's re-election. Even papers usually pro-administration either simply excuse or bitterly denounce this specimen of bogus Civil Service Reform; and the most influential of them, like the N. Y. Times, says that the officers are merely suspended, as self-respect must force senators to teach Hayes that he cannot evade their deliberate opinion, emphasized by two decisions in this matter. The latest Civil Service decision is that postmasters may belong to political associations, but must not be officers thereof.

MISCELLANEOUS.

New York merchants are disgusted at Vanderbilt paying eight per cent. in these hard times on $40,000,000 of watered railroad stock—which on the real capital invested is a huge rate of interest which the trade of the country has to pay. The public debt has been reduced about $24,000,000 during the past year. It is said that three thousand teachers are up in the White Mountains coolly studying their geography, geology, and hygiene, especially the hygiene. Gen. Sherman has issued an order instructing officers with regard to the legal bearing of the recent enactment against the use of troops as a posse comitatus. He explains away much of the supposed force of the recent law; for, according to him, the army can still be used for the suppression of domestic violence, the execution of judicial processes under the Civil Rights law, the keeping of peace at the polls, the expulsion of intruders from the Indian country, the preservation of government timber in Florida, the warning off of such foreign vessels as may improperly be in our ports, the putting down of insurrection in the States and the protection of the rights of discoverers of guano islands.

On the 10th a severe rain and wind storm prevailed over a great part of the Northern States from Nebraska to the Atlantic, producing a large number of deaths by lightning, and doing severe damage to crops, railroads and buildings. The hearing in the case of Fitz John Porter is still in progress at West Point, under the charge of Gen. Schofield. Genls. Warren and Longstreet testified strongly in behalf of Porter, their evidence going to show that Pope, whose orders he was cashiered for disobeying at the second battle of Bull's Run, did not know either the position of Porter or that of the Confederates; that Porter did not receive the order at the time formerly stated, nor could he have made the movements directed. A number of other officers and gentlemen spoke strongly as to Porter's bravery and loyalty.

Contrary to expectation, the Orangemen's meeting at Montreal, on the 12th inst., the anniversary of the battle of the Boyne, passed off in comparative quiet. Most of the stores were closed, banks and public buildings guarded, troops massed in large numbers at advantageous points, five hundred deputy marshals sworn in by the mayor, the police placed early in readiness, and all preparations made to prevent riot arising from religious and party animosity, and which would certainly be aggravated by the swarm of tramps and other rascals that had swarmed to the city in expectation of plunder. The mayor, Baudry, a Catholic, had prohibited a procession; six protestant aldermen had received from the government the control of the troops, instead of leaving it in the hands of the mayor, as usual in such cases; and this divided authority would, it was thought, add to the difficulties. After several minor outrages on detached parties of Orangemen decorated with party colors, the body of them decided to obey the mayor's order not to march in procession, and after a day of excitement, were sent from their barracaded Hall to their homes in cabs provided by the municipal authorities. Several of the officers of the organization were arrested, and a test case, as to their right to march in procession, is in their case to be made. Elsewhere no trouble was caused by scattered local Orange demonstrations; but on the 16th, the anniversary of the death of Hackett, an Orangeman killed by a mob last year, it is expected that another demonstration will take place in Montreal. Not more than two or three deaths, and only ten times that number of cracked heads and broken bones have resulted from the late unpleasantness. Cases of death from sunstroke have been very numerous throughout the country during the past week—generally the result of imprudent exposure; and nearly always avoidable by a little precaution.

For once Gen. Howard himself has had a battle, or rather a brush, with the Indians. He attacked 400 Bannocks at Butler Creek, Oregon, captured about 400 head of stock, and, after a fierce struggle, routed the savages, with a loss to his own command of 15 wounded and two killed; Indian loss unknown. *Per contra*, the Umatillas, in northern Oregon, surrounded 50 white volunteers, of whom seven only escaped to tell the tale

of their comrades' massacre. The terror-stricken inhabitants of Canyon City have taken refuge in a mining tunnel. Gen. Sherman sanguinely believes the outbreak in Oregon will be quieted within a month. The roving bands of hostiles there are supposed to number 2,000 men, while about 550 braves from the reservations are on the war-path. Gen. Sheridan is about to take command in the Black Hills, where a strong dash by detached bands of Sitting Bull's forces is expected.

FOREIGN.

On Wednesday 10th, Hoedel was tried at Berlin for attempting to assassinate the Emperor, and pleaded not guilty, insisting that he only attempted, publicly, to commit suicide. Thirty witnesses, however, testified that he aimed at the Emperor, while many others swore to his socialistic principles and his threats against the aged monarch. He was finally sentenced to be beheaded. Through the trial his demeanor was defiant and insolent. Bogardus, the American champion pigeon shooter, has beaten Mr. Cholmondeley Pennell, who is considered the best wing shot in England. The Paris exhibition will not close at the end of October as expected; but will remain open until December. Nearly all the juries have performed their work and made their reports. America, it is said, recives more medals than any other nation in proportion to the number of exhibitors. In one class all the American exhibits have obtained prizes; in another all but one. Medals will be distributed almost as liberally as, and far more promptly than, at our Centennial, the General Commission having increased the number of gold medals by 20; of silver by 40; and of bronze by 60 per cent. The natives of New Caledonia, the French penal settlement whither the communists were sent, after their crimes in 1871, have rebelled and massacred 125 whites, including women and children, besides capturing two military stations—cause a truly communistic propensity to treat the wives and daughters of the natives as common property.

The Congress of Berlin has completed its labors, signed the treaty settling the Eastern Question, and the chief plenipotentaries have already gone home. This momentous treaty—the most important since that of Vienna in 1815—contains 64 articles. The first twelve relate to Bulgaria. It is constituted an automatic tributary principality under the suzeralnty of the Sultan. It is limited in the south by the Balkans. It is to have a Christian government, the prince to be elected by the people, not to be a member of any reigning European dynasty, and to be confirmed by the Porte and the Powers. All religions are to be equal before the law; there shall be a native militia; Mussulmans removing away can retain their property, if administered by third parties; the plan of government is to be prepared by an assembly of nobles convoked at Tirnova to elect the prince. This must be done before nine months, and meanwhile the country is to be governed by Russian Commissioners assisted by delegates of the great Powers. The annual tribute to the Porte shall be settled at the end of the first year by the Powers who have signed the treaty. The Turkish forces are to be withdrawn within a year, all the fortresses to be destroyed and no new ones erected.

From the thirteenth to the twenty-second articles, inclusive, relate to Eastern Roumelia. This is formed of the land south of the Balkans, containing among the population a majority of Christians. Its boundaries have not yet been telegraphed. It is to be under the direct political authority of the Sultan, having administrative independence and a Christian Governor-general, appointed for five years by the Porte with the assent of the Powers. A European Commission shall determine in three years the power of the Governor; also, the judicial, financial and administrative requirements of the province. The Sultan shall fortify the frontiers, keep troops there, but employ no irregulars or quarter troops on the inhabitants. Internal order shall be preserved by native constabulary and local militia, account to be taken in their formation of the religion of the inhabitants where they are stationed; the officers to be named by the Sultan. The Governor, however, may call in Turkish troops if security is menaced. The Russian army in Bulgaria and Roumelia shall not exceed 50,000 men. They shall begin to evacuate the territory in nine months, three months being allowed to complete the evacuation.

By the twenty-third article Austria is authorized to occupy and administer Bosnia and Herzegovina with the exception of Sandjak and Novi-Bazar. Austria and the Porte have come to an agreement on this point. The Porte is showing great good-will, and has ordered the submission of some of the inhabitants who intended to resist. Servia also has taken measures to prevent filibustering from her territory in case the inhabitants of these provinces should oppose the Austrians by a guerrilla warfare.

From the twenty-fourth to the thirtieth articles, inclusive, relate to Montenegro. Its independence is recognized; no religious distinctions must be tolerated. No fortifications must be constructed except to protect Scutari. Antivari is to be closed to war ships of all nations. A Turkish-Montenegrin Commission shall be engaged for three years regulating religious matters and transfers of property. The Austrian Consuls shall protect the Montenegrin flag; as it can have no flag or ship of war of its own. The Montenegrins must evacuate within twenty days the territory they occupy beyond the limits of the new principality.

From article thirty-one to article thirty-nine relate to Servia, whose independence is recognized on condition of freedom being allowed to all religions. The frontiers of the new State have not been telegraphed. The present commercial relations of the country with other nations shall remain in force until new arrangements are made. The Servians are allowed fifteen days to evacuate the territory not in their new limits.

From the fortieth to the forty-ninth article inclusive, relate to Roumania, which is declared independent on the same terms as Servia. Roumania gives back to Russia that part of Bessarabia taken from her under the treaty of Paris, in 1856, and in lieu thereof receives the Dobruscha and a strip of territory south of it. Servia's and Roumania's tribute to the Porte shall be capitalized into a gross sum, at a rate arranged by the Powers and the Porte, and all these new States have to bear a share of the Turkish public debt, in proportion to the extent of territory they occupy.

The fortifications on the lower Danube must be leveled, no ship of war must navigate this part, except that guard-ships of the Powers at the river mouth may ascend to Galatz. The regulation of the lower Danube rests in a Commission appointed by the Powers, and this will act independent of territorial authority. Austria-Hungary is to remove all obstructions placed in the river during the late war. The Porte engages to apply to Crete the liberal plan of government of 1868; and to deal liberally with its other subjects, taking into account their religions, and consulting the Commission on Eastern Roumelia. All parties throughout what is left of Turkey are to be allowed to testify in court, become public officers, and exercise all professions and industries without regard to their religious beliefs. Other articles relate to affairs in Asia, but these have not yet been telegraphed to this country. England has occupied the island of Cyprus, and guarantees the present Turkish possessions in Asia. HERMAN.

Hearing Restored.—Great invention by one who was deaf for 20 years. Send stamp for particulars. VERRY & HARPER, Lock Box 80, Madison, Ind.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 13, 1878.

BEANS AND PEAS.—Medium beans are weaker, the extreme is only given for such small parcels as the local trade requres in warm weather. Marrows are selling fairly for summer, but the totals do not compensate for recent dull trade. White kidney have no settled market. Red scarce; choice firm at $3.25; Pea beans nominal; Black beans firmer. Peas quoted about the same as before; Canadian in bulk and bond, 75c.; Green, $1.05@1.10; Southern B. E. $3@3.25.

We quote medium beans, prime, $1 57½@1 60; fair to good, $1 55@1 57½; marrows, prime, free on board ship, fair to good, $1 67½@1 70; Pea, $1 40@1 45; white $1 60@$1 63½; kidney, $1.40@1.60; red do., $3@3.25; black, $2.35@2.40; Lima, $3.75@4.25.

BUTTER.—Supplies as a whole continue very liberal and the uncertain trade of summer prevents sellers from taking any advantage of days that show limited receipts. Exporters have bought freely, and in fact they are the only buyers who support the upper quotations. Market buyers who use under-priced but sound, sweet stock, are looking at western more regularly, and some marks of dairy are very cheap at the extreme for such use. A good deal of western, however, goes into cold storage and will have to wait for a chance. Eastern buyers have been in market during the week but have aimed to buy state Welsh close, especially as some western lots have a very tempting difference in prices. With good useful dairy, and factory selling at 10@13c., low-priced State is apt to be neglected, quality being favorable. It is thought in the trade that sales of western could be kept steadier if more care was taken at shipping points to keep grades uniform. Firkins not active, some orders can be profitably repacked here. The future of butter looks cheap.

State creamery, choice, 19@20c.; other, 16@18c.; half tubs and pails, choice, 18@19c.; other, 14@15c.; Welsh tubs, best, 15@16c.; other, 10@12c.; poor State, 6@8c.; State firkins, 15@17c.; Western creamery, choice, 19c.; other, 16@18c.; Western dairy, best, 13c.; other, 8@9c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 5½@8c.; old and grease, 3½@5c.

Receipts for the week, 31,950 pkgs.; exports past week, 10,009 do.

CHEESE.—The market was in poor shape early in the week. The country advices showed an easy tendency; the supplies were piling in here to an excessive amount, and the hot weather was against holding. At one period 8c. was the general rate for fancy factories, and special lots at 8¼c, with white and colored lots selling alike. A large quantity of heated stock of standard factories had to be pressed at the best prices available, some selling down to 7@7½c. Towards the close, cooler weather and a falling off of receipts, with increased export interest, have put matters in better shape, and sales of average fancy lots now run at 8½c., and several special lots reaching 8¾c. The exports for the week have been 123,305 boxes.

Quotations are for factories fancy, 8½@8¾c.; 7@7½c. for good and prime; 6½@7c. for fair; 5@6c. for half skimmed; 2½@3c. for skimmed. State, farm dairy at 6½@7½c. for good to choice, 5@6½c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7½@8c.; do. good to prime, 6½@7½c.; do. fair, to good 6@6½c.; Western factory, fine, full cream, cheddar, 7½@7½c.; do, fine, full cream, flat, 7c; do. slightly skimmed, flat, 5½@6½c.; do. half skimmed, 4@5½c.; do. full skimmed, 3@3½c.

Exports, past week 123,305 boxes.
Receipts for the week, 120,000 boxes.
Gold closes at 100⅝.
Liverpool cable quotation, 45, 5d.

FRESH FRUITS.—Apples are making quite a show. Northern lots mostly too green. Norfolk, bbl., $1.50@2; State and N. J., sour bough, $2@2.50; sweet do., $2.50@3; Red Astrachan $3@3.50; smalls and windfalls, $1@1.50. Early pears quoted $2@3 ₱ bbl., including Sugar. Peaches are in good supply and sell well at paying prices, though Maryland cannot be included in the remark. These latter are "Hales," and buyers find it difficult to handle them after having displayed the finer grades of early more Southern sorts. Georgia, ₱ bu., $1@4.50 for prime; fair, $3@3.50; S. C., $2.50@3.50; N. C., choice, $3.50@4; fair, $2@3; Md., 75c.@$1.50 ₱ crate. Blackberries have been in heavy supply and many invoices have sold low to preservers; even now fine stock is easy. Wilsons, N. J., 7@9c. ₱ qt; Md. and Del., 5@7c.; Dorchester, 4@6c. Whortleberries, ₱ bu., $3@4; demand good. Every year increases the baking demand. Currants abundant at 4@5c. for small; 6@8c. for cherry; 5c. for black. Raspberries low; Antwerps, 3@4c. for thirds; natives, 1½@2½c. do.; Brandywine, 4@5c. Watermelons have improved; Florida, $20@35 ₱ 100; Charleston and Augusta, $35@45. Peanuts dull at $1.35 for best hand-picked Va.; good to fine, $1.25@1.45; ordinary trade is using some stock at $1.30. Hot-house Black Hamburg grapes, 50@75c.; Sweetwater, 30@40c.

DRIED FRUITS.—Apples have not shown further important improvement, with prices wholly nominal. Peaches and small fruits are very slow, and in the instance of new pitted cherries sales have been made lower.

Peaches—Fancy North Carolina 10@11c.; good to prime Georgia 8@9c.; unpeeled halves, 3½@4½c.; quarters, 3½@3¾c. Pitted cherries, nominally, 13½@14c.; Raspberries, 26c.; New York State plums, 10c.; Southern plums, 9c.; Blackberries nominal. Apples—State quarters, 3½@4c.; do sliced, prime, 4½c.; good, 3½@4c.; Western quarters, 2@3c.; Southern at 4@4½c. for prime sliced; 3@3½c. for fair to good; Southern quarter, 2@3c.; Tennessee quarters, in bags, at 1½@2c.

Exports past week, 736 bbls. apples.

EGGS.—Receipts for the week, 8,311 bbls. The market has ruled unseasonably weak, especially for Western. Dealers thought on Tuesday last that the bottom had been reached, but Western are losing so badly that most buyers prefer prime Canadian or good State.

Choice near points are firm; N. J. and L. I. 14@15c.; State and Penn., 12½@13½c.; fresh Western, 10½c.; do. Canadian, 11@12c.; inferior, 9@10c.

GRAIN.—The English markets have been hardening and with small receipts here, and a good trade proves shippers prices have been advanced slightly.

Latest sales of wheat are of white State in lots at $1 23½@1 26; ungraded white western at $1 25; ungraded amber at $1 12; extra white at $1 26; No. 1 amber round at $1 13; new ungraded red western at $1 12@$1 13; new No. 2 red at $1 12@$1 12½; No. 1 Minnesota spring afloat at $1 12; No. 1 Milwaukee spring, in store, at $1 10; No. 2 spring at $1 05¾@1 07; New York No. 2 spring, July option, at $1 05¼@1 05¾; do., August option, at $1 01¾; do., September option, at 96¾@97c.; No. 2 red, July option, at $1 11¾@1 12½; do., August option, at $1 05@$1 05¾, closing at $1 05¾@$1 05¾; do., September option, at $1 03¾. Rye at 69@61c. for western and 60¾@62 for State. Corn—at for No. 2, July option, at 47¾@48c; No. 2, August option, at 47¾@48c.; No. 2, September option, at 49c; steamer mixed July option, at 46¾@47c.; do., August option, at 46¾@47c.; do., September option, 47@47½c.; steamer mixed at 46@47¾c.; New York No. 2 at 47¾@48c.; New York No. 2 (old) at 49@50c.; ungraded mixed at 49@48c.; and round yellow at 52c Oats—New York No. 1 white at 39c., with large lots held at 42c.; New York No. 2 white at 35¾@.; New York No. 1 at 35c.; New York No. 2 at 34c.; white western at 33@40c.; mixed western at 32@35c.; No. 2 Chicago at 35c.; white State at 38@39c; mixed State at 33@35½c.; New York extra white quoted at 42@43c.; New York No. 3 white at 31c.; New York extra at 35½@36c.; New York No. 3 at 32c.

HAY AND STRAW.—The arrivals have fallen off, but as the new crop can be expected in full quantities shortly, there is a disposition to release supplies promptly, at current figures.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 40@45c. for short rye; and 30@35c. for oat.

Exports for week 1,810 bales.

HOPS.—The movement is slack, and prices are in a good degree nominal. As we are so close to the new crop, brewers buy only as against actual needs, but there is an indisposition to name easier prices among holders, with the consideration of moderate stocks. New Yorks, good to prime, 10@12c; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—The quotations are for hemlock, 19½@20c. for light; 19½@21½c. for middle; 20@21½c. for heavy and 17½@18c. for good damaged.

PROVISIONS have shown but little change in price and are dull. Mess pork quoted $10 25@10 50 for spot; $10 25 for July and August, and $10 30 for September. Bacon at 6c. for long clear, and 6¼c. for short clear. Lard at $7 20 for spot; $7 22½ for August; $7 30 for September. Stearine at 9 for choice. Tallow at 6¼ for prime. Beef hams at $22 for new. Beef—For extra mess, $11 75@12; plain mess, $10@11 50; packet, $11 50@12 for bbls. and $16@17 for tcs.; family at $13@14; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

TOBACCO.—Export demand has been very fair and the large receipts are closely sold at steady prices. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¼	6½@ 7
Good leaf	6½@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1877.

New England, fine, and selections	18	@35
seconds	10	@12
Fillers	5	@ 7
Pennsylvania assorted lots, common	8	@ 9
fair	10	@12
fine	14	@17
fillers	5½@	6
Ohio assorted lots	6¼@	8

VEGETABLES.—Export of potatoes, past week, 1,952 bbls. L. I. and N. J. now supply the market. General prices $1,15@2, with a few selected at $2.25; culls, 75c.@1. Green corn low; Keyport, 25@50c. ₱ 100; Burlington, 15@25c. Green peas, 50@50c. ₱ 2-bush. bag. String beans, bag, 75c.; wax, $1.25. Cucumbers, Southern, 75@$1 ₱ 100; Norfolk, bbl., $1.75@2. N. J. onions, bal., $1.75@1.75, Southern, $1@1.25. Squash, bbl., 50@$1. Spinach, 50@75c. Cabbages have grown elegantly this season. Flat Dutch, per 100, $4@6; Wakefield, $5. Good cauliflower, $2@3 ₱ bbl.; poor, $1@1.25. Lettuce, bbl., 25@50c. R. Turnips, bbl., 75c. @$1. Carrots, ₱ 100 bunches, $1@1.25. Norfolk tomatoes, per crate, 50@65c.; N. J. quotable next week.

WOOL.—Rather more life has been noted to trade and the position as to prices favors sellers. Quotations are for fleeces:

Ohio, Pennsylvania and West Virginia at 40@43c., for XXX and picklock; 36@38 for XX; 35@37 for X; 33@34c. for No. 1; 33@35c. for No. 2; 31@33c. for common, 40@44 c. for combing.

New York, Michigan, Indiana and Wisconsin. XX, 33@35c.; X, 33@35c.; No. 1, 33@37c.; No. 2, 30@33c. common, 27@30c.; combing, 38@41c.

Iowa, Vermont and Illinois 32@33c. for X and XX; No. 1 33@35c.; No. 2 27@30c.; combing, 37@40c.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@34c.; unwashed, 23@26c.; unwashed combing, 29@32c.

LIVE STOCK MARKETS.

Saturday, July 13th, 1878.

BEEVES.—Receipts for the week, 7,933 head; do., last week, 8,964 do. Light receipts and an active demand made a strong and higher market; the advance over Wednesday's rates is ½@¾c.; the most improvement being for ordinary slaughterers' stock. Colorado and Texas, 8¼@9¾c.; native, 9@11c.; with selections, 11½c. Exporters paid 10¼@11c., for good to prime fat steers, at the close with the prospect of liberal receipts, dealers do not look for next week's market to open with a repetition of the above high ranges.

COWS AND CALVES.—The market is only nominal; nothing to warrant the shipment of stock this way.

VEAL CALVES.—Live milk were in good demand at 6@7c. for ordinary good. Buttermilk, 2¾@3¾, which is better.

SHEEP AND LAMBS.—Receipts for the week, 20,475 head; do. last week, 26,109 do. The market has not been overstocked, and sales were quick at 3¾@5c. with a car load of nice Kentucky at 5¼c., and selected Ohio at 5¾c. N. Y. Lambs, 6¼@7¾c.; Western State and Southern, 5¾@6¾c.

SWINE.—Receipts for the week, 22,026 head; do. last week, 25,413 do. No late sales of live; market nominally, 4¾@4¾c. Dressed city, 5¾@5¾c. heavy to light; 6c. for pigs.

TERMS FOR 1878.

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" " " Six Months	1 00
Three Months' Trial	65
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I WILL SELL TO SUBSCRIBERS OF the RURAL. Duroc pigs, 8 weeks old, for $7; pairs, $13. Fifty pigs of this breed, nine months old, averaged 440 pounds. Shipped at Schenectady.
F. D. CURTIS.
July 3, 1878. Kirby Homestead, Charlton, N. Y.

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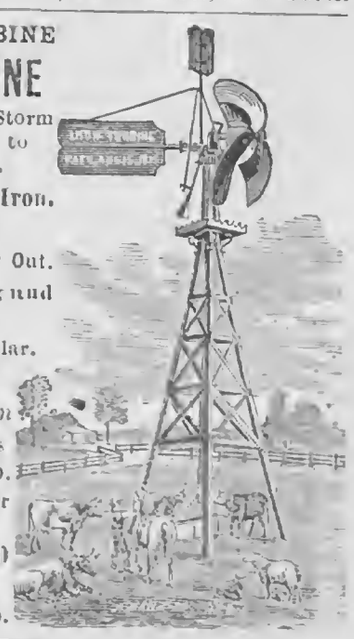

Patented May 28th, 1878.

The Patent Self-Acting Cow Milker M'f'g Co.

Every one who owns a cow should have one of our wonderful Milkers. Sent free to any part of the United States on receipt of $2. Send for our Illustrated Pamphlet on the Cow, containing sectional views of a cow's teats and bag dissected and scientifically explained, by Drs. White and Wilson of this city. Sent free to any address.

GEO. E. KING, President,
Office, 575 Broadway, New York.

Reading for the Young.

WHAT A BIRD THOUGHT.

Said the boy, "I'll climb that tree.
And bring down a nest, I know."
Quoth the girl, "I will not see
Little birds defrauded so!
Cowardly their nests to take,
And their little hearts to break,
And their little nests to steal;
Leave them happy for my sake!
Surely little birds can feel!"

Quoth the boy: "My senses whirl;
Until now I never heard
Of the wisdom of a girl,
Or the feeling of a bird!
Pretty Mrs. Solomon
Tell me what you reckon on
When you prate in such a strain;
If I wring their necks anon
Certainly they might feel pain!"

Quoth the girl, "I watch them all,
Making love and making fun,
In the pretty ash-tree walk,
When my daily task is done;
In their gentle eyes I find
They are very fond and kind.
Every change of song or voice
Plainly proveth to my soul
They can suffer and rejoice."

And the little robin-bird
(Nice brown-black and crimson breast)
All the conversation heard,
Sitting, trembling in his nest.
"What a world," he cried, "of bliss,
Full of birds and girls were this!
Blithe we'd answer to their call;
But a great mistake it is
Boys were ever made at all!"

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 10.

STARR MORRIS.

I should like to tell the Rural young people how some youthful neighbor of mine earned quite a sum of pocket-money.

Early in the autumn they provided themselves with a quantity of evergreens, Ground Pine, Hemlock, Spruce, etc., also white blossoms of Everlasting, a shrub that grows plentifully in New England pastures, together with the scarlet berries of the Bitter-Sweet, and as the holidays approached they, with the help of their elder sister, made them into the loveliest wreaths, crosses, crowns, anchors and stars, and sold them in the city for Christmas decorations. They were the prettiest things I have ever seen for that purpose.

Every day for two or three weeks, a bright-faced little girl and boy could be seen trudging a mile to the city, their baskets ladened with these lovely things, returning with empty baskets and full purses; and many of our homes were made bright all winter with specimens of their handi-work. I know their hearts were made glad with the money thus earned.

Perhaps some one would like to know how to make similar ones.

The process is simple: Make a form of a cross or whatever design you fancy, of thin pine or pasteboard, and cover it with the green, putting in the white blossoms or red berries to form an emblem or word. If the form is of pasteboard, sew the greens to it with coarse thread; if of wood, tie them on. I remember some beautiful moss baskets and crosses with which—when I was one of the young people—I used to delight the hearts of my friends, as well as my own. Not the green moss that grows in the damp woods, but the dry moss that grows on rocks, old stumps and logs, and can be found on old rail-fences. Only a close student of this class of plant-life can realize the wonderful beauty that is hidden away in what appears to be only an old stump, or an old gray rock. These mosses can be readily peeled from the rock or wood, and sewed on pasteboard made into basket form, and when filled with ferns or flowers, form a pretty ornament: or made into a cross can be hung under a picture. These things, so common to those who live in the country, are treasures to those who live in the city, or to the invalid who is shut away from all forms of life and beauty seen in the woods and hills. And to show that it is so, I append a bit of poetry written on seeing one of the crosses of which I have been speaking. I have had it a long time and have forgotten, if I ever knew, from what paper I took it:

A tiny cross
Of soft wood moss,
And that is all!
And yet it hath a voice that speaks to me,
Of patient faith and holy victory—
Faith that could triumph in Gethsemane,
And for our sins a sinless sufferer be,
Upon the Cross.

A shadowy cross
Of soft gray moss
And that is all!
But when from sinful thoughts I vain would flee,
This little cross reproaches silently,
As if it said: "Canst thou ungrateful be,
When Christ, to cleanse from sin hath died for thee,
Nailed to the cross?"

A little cross,
Of velvet moss,
And that is all!
Yet when I've left my darlings with the dead,
And storms of sorrow have swept o'er my head,
I've seen this beacon cross through tears, and said,
"What grief He bore! I will be comforted,
And bear my cross.

Oh! tiny cross
Of forest moss,
That is not all!
I'll have thee for my daily guard and guide,
And learn of thee to conquer sin and pride:
Thou shalt speak oft of Jesus crucified,
And all the burden of life's woes I'll hide
Beneath His cross.

[It was taken from the "Sabbath Reading" column of The Rural.—Eds.]

ENGLISH LITERATURE FOR SCHOOL-GIRLS.

And boys, too, if they are interested in Literature: if all their interest is not concentrated in bats and balls, fishing-tackle, boating, horses, etc.

When I was a school-girl and studied Literature I am sorry to say, I had a bad fashion of *not* studying it as I ought to do. When a lady asked me at what time Shakspeare lived, I could only stumble through several wrong guesses as to the century. That was all owing to my negligence in studying. Perhaps, like other foolish girls, I used to say, "Oh! I don't know anything about Literature; Miss H. is such a poor teacher." Whenever any of you, my girl-readers, are about to make any foolish remarks of that kind, stop a moment, and consider whether it is poor studying or poor teaching which makes you a poor scholar.

Now, if you will listen, I propose to give you short accounts of various popular authors. I don't propose, however, to do all the work. I shall leave a little "guess-work" for you to do. You must find out the name of the author of whom I write. Can you do as much as that?

Well, the person of whom I am going to write was born at Elphin, Ireland, November 29th, 1728. His life was full of adventure. When only seven or eight years of age he would amuse his father and mother with his poetical flights, but our poet does not seem to have been much elated at his success, as he threw his youthful effusions into the fire. He was by no means a handsome youth, as his body was short and thick, and his face was disfigured by small-pox.

In 1744 —— was sent to Trinity College, Dublin, where one day he invited a party to a supper and a ball in his rooms, which coming to the ears of his tutor, the latter entered the place in the midst of their jollity, abused the company, and administered manual correction to the host in their presence. This mortification had such an effect on the mind of the young man that he resolved to seek his fortune in some place where he should be unknown. Accordingly, he sold his books and clothes, and left the college, but loitered about the streets until his money was exhausted. With a solitary shilling in his pocket, he, at last, left Dublin. By abstinence, he made this sum last him three days, and then was obliged to part with the clothes on his back; in short, to such an extremity was he reduced, that a handful of peas, given him by a girl at a wake, was the most satisfactory repast of which he had ever partaken.

After many adventures he found his way home and was sent to college. He devoted himself for a short time to the study of law, which was abandoned for medicine. He could not make a living, as his generosity impelled him to administer to the wants of all who applied to him. His friends, if we can judge from an anecdote, had not much confidence in him as a physician. —— remarking that he prescribed only for his friends, some one rejoined, "I would advise you to prescribe only for your enemies." As he said, himself, "I got few fees, although I had few patients."

Referring to his forlorn condition, he writes:—"At London you can imagine what difficulties I had to encounter; without friends, recommendations or money; and that in a country where being born an Irishman was sufficient to keep me unemployed. Many in such circumstances would have had recourse to the friar's cord or the suicide's halter. But with all my follies I had principle to resist the one, and resolution to combat the other."

Besides poems, our author wrote novels and plays. We are told that in his last journey to school he had an adventure which is thought to have suggested his comedy, "She Stoops to Conquer."

On his journey, when he reached the town of Ardagh, he inquired for the best house in the place, meaning the best *inn*, but his informant, taking the question in its literal sense, showed him to the house of a private gentleman, where, calling for some one to take his horse, our hero alighted and was shown into a parlor, being supposed to have come on a visit to the master, whom he found sitting by the fire. This gentleman soon discovered the mistake, but being a man of humor he favored the deception. The Celt ordered a good supper, and invited his landlord and landlady, with their daughters, to partake of it. He treated them with a bottle or two of wine, and ordered a hot cake to be prepared for his breakfast. It was not until about to depart, and calling for his bill, that he discovered his mistake. In 1759, he was engaged, at a salary of one hundred pounds a year, to write for The Public Ledger a series of papers. These he called "Chinese Letters." They were afterwards collected under the title of "The Citizen of the World."

The Earl of Lisburne one day lamented —— that he should neglect the Muses, to compile histories and write novels, instead of composing poetry, with which he was sure to charm his readers. "My Lord," replied our author, "in courting the Muses I should starve; but by my other labors I eat, drink, wear good clothes, and enjoy the luxuries of life."

He wrote a History of England, a Roman History, a History of the Earth and Animated Nature, a Grecian History, from the earliest state to the Death of Alexander the Great. When you visit Westminister Abbey, as you doubtless all hope to do, you must see the monumental stone which was erected in honor of this man, in Poet's Corner, between those of Gay, and the Duke of Argyle.

Now, who can tell me the name of our author, and also the names of some of his more popular works? Sans Souci.

LETTERS FROM BOYS AND GIRLS.

News from Honolulu.

Dear Uncle and Cousins:—How are you all? Quite well, I hope. But what is the reason I see so few letters? Surely interest has not flagged, or have you my excuse, *i. e.*, so little time? "Pilikea," as the natives say. Oh Uncle True! Papa has a "Cricket," and a veritable cricket it is. Last Tuesday (the 11th) was Kamehameha Day, and a holiday. There were races at the Park and picnics in all directions, but I attended neither; had company at home instead. We are having a splendid big shower to-day, and it is much needed, the weather and roads are so hot and dusty. Our missionary brig left last week on her yearly trip to Micronisca. Our society, the "Missionary Gleaners," sent quite a large box of food and clothing. I had the superintendence of a large quilt. It was real pretty when finished, and much admired. To-morrow evening I hope to attend the last exercises of a graduating class from Punahou College. As the college is a distance from town the exercises will be held at Fort Street Church. I had a disappointment yesterday. By the steamer from San Francisco I expected a *real* cousin; owing to some delay he did not arrive, but we are sure that he is on his way. How glad I shall be to meet him; it is twelve years since I last saw him. Soon after my cousin's arrival I expect to steam away to Hawaii, and while there I may be able to find something interesting to tell you. As it is soon time for the mail to close, I will also close my letter with much "Aloha nui lo a" to all.

Hawaii Nei.

In What County is Valley Forge.

Uncle True and Cousins:—Will you admit me as one of your number? I am a girl sixteen years old. I live on a farm near Evansburg, a little village in northwestern Pennsylvania, on the banks of Conneaut Lake, which I have heard said is the largest lake in Pennsylvania. I go to school the greater part of the time, and study the common English branches. I think I can answer "Wild Cherry's" question; at least I can try. The word "girl" is found once in the Bible—in the book of Joel, in the third chapter and third verse. In what county is Valley Forge? In answer to "Kit's" question I would say, I think novels of almost any kind are injurious to the memory. Perhaps you will hear from me again. Clyde.

Evansburg, Pa.

She is a Buckeye Girl.

I am a Buckeye. Do you understand? I see the bed-quilt question has been fully discussed. I only wish to say I pieced one, and knitted myself a pair of stockings when eight years old, and assisted Grandma in the dairy too, as she lives on a farm. Some one has asked, through the Rural, what country girls can do to earn a little pocket-money? I am fearful of making this article too loog, or I might tell of a few ways by which I earned several dollars. Brightie.

Fairfield Co., Ohio.

[Should be glad to have you do so.]—U. T.

The Puzzler.

MOUNTAINOUS ENIGMA.

I am composed of 137 letters:
My 89, 122, 84, 17, 28, 36, 16, 24, 95, 88 a mountain on the Isle of St. Vincent, W. I.
My 21, 27, 9, 1, 10, 36, 41, 33, 52, 31, 23, 73 a mountain peak of Corsica.
My 82, 117, 36, 95, 127, 85, 39, 25, 61, 115 a mountain peak of Ireland.
My 29, 32, 51, 67, 4, 5, 38, 18, 42 a mountain peak of Spain.
My 63, 37, 65, 76, 71, 24, 79, 86, 115 another mountain of Spain.
My 129, 94, 106, 22, 53, 34, 55, 78 a peak of the Elborz range.
My 6, 88, 23, 36, 91, 92, 61, 133, 108, 115, 56, 127, 87, 72, 67 a mountain of Ceylon.
My 57, 74, 11, 46, 64, 45, 44, 68, 83 a mountain peak of Australia.
My 36, 84, 12, 23, 66, 102, 104, 82, 2, 131, 70 a peak of the Samen range of Africa.
My 128, 132, 53, 107, 23, 50, 129, 103, 93, 123, 134, 113, 48 a peak of the Andes in the United States of Columbia.
My 7, 25, 29, 37, 38, 47, 61, 77, 48, 80, 114 a mountain of Chili.
My 20, 119, 124, 110, 120, 121, 37, 95, 129 a peak of the Alps.
My 26, 5, 36, 97, 61, 43, 49, 84, 59 a peak of Greece.
My 112, 8, 100, 23, 84, 60 a range along the Adriatic.
My 125, 5, 81, 63, 32, 62 a peak of the Balkan Mountains.
My 82, 37, 126, 109, 57, 19, 15, 72 mountains of New York.
My 116 30, 118, 67, 40 a mountain of Palestine.
My 94, 90, 75 a mountain of the Isle of San Mayen.
My 54, 136, 137 is a suffix.
My 35 98, 111, 130 are duplicate consonants.
My 58, 69, 96, 99, 101, 105 are duplicate vowels.

My whole is a quotation from a collection of selected gems.

☞ Answer in two weeks. Little One.

TRIPLE ACROSTIC.

1. A heathen. 2. A man's name. 3. A flying banner. 4. A wanderer. 5. Bubbling. 6. To dress a second time. Primals, centrals and finals form three spices.

☞ Answer in two weeks. Dr.

PUZZLER ANSWERS.—July 6.

Enigma of Generals.—Religion is the clearest telescope through which we can behold the beauties of creation and the good of our Creator.

Enigma.—Man.

Fractional Puzzle.—Tamarind.

Hour-glass Puzzle.—

HYPERBOREAN
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Sabbath Reading.

TIRED.

Dear God, I am so weary of it all,
I fain would rest me for a little space.
Are there no great rocks where the shadows fall
That I may cast me down and hide my face?

I work and strive, sore burdened and afraid,
The road is flinty and the way is long,
And the weak staff whereby my steps are stayed,
Bends like a reed when bitter winds are strong.

The lofty thought proves fruitless in the deed;
The prize I toil for seems a glittering lie!
There is no comfort for present need,
No guerdon promised for futurity.

I shrink in terror from the endless task,
I look with horror on the barren land,
And ask, as only hopeless hearts can ask,
The meaning of my days to understand!

EXPOSING THE DEAD TO THR GAZE OF THE CURIOUS.

In a recent address the Rev. T. C. Jerome criticized the custom of exposing the the dead to the indiscriminate gaze of the curious and will, no doubt, meet with sympathetic approval from most readers. We give a gist of the sermon.

"When we are alive and strong and fair in the beauty and eloquence of the 'human face divine' above all other images of God, nevertheless, then, we regard it an impertinence for a stranger or casual acquaintance to stare at us. And if it so be that our features are marred by accident, disease or natural deformity, the more it is counted the part of courtesy and true kindness that even our friends should not allow their glance to rest upon the blemishes of our countenances.

"Then, how much the more when all health, gospel and soul have forever departed from the fleshy tabernacle, when it lies so soon after the supreme material dishonor and discomfiture of the earthly estate, the last enemy having triumphed over the flesh and set his stamp upon it, the worm already commencing to feed sweetly, earth to return to earth, dust to dust, ashes to ashes; then to bid all the curious or careless to linger to look and hasten to talk, is an ignominy and insult to those whom we have loved. Have not some of you dreaded it for yourselves? And was there ever a husband who may thus have had the face of a wife laid bare, or parents of a maiden daughter, but that an added involuntary pang and shame thrilled them as the crowd passed by?

"'It is sown in corruption,' the text says. Shall strangers be suffered to look upon that corruption? 'It is sown in dishonor." Shall strangers behold the dishonor of the flesh still so sacred and dear to kindred as having been but yesterday the loved one's tabernacle?

"Such gazing of a crowd upon the dead can but seem to me very like the sin of Noah's second born who looked upon his father's nakedness; wherefore was it written through all time, 'Cursed be Canaan.' Supreme nakedness, dishonor, defeat of the flesh is this when the spirit has forsaken it; as called in the word of God, 'unclothed,' 2 Cor. v: 4, 'not for that we would be unclothed but clothed upon that mortality might be swallowed up of life.' Oh, brother men, I beg you, let us henceforth keep the crowd away from the sacred dust of our loved ones, when that dust has been 'unclothed.'

"But it will be urged that, apart from the family circle, there may be many friends in the congregation who will wish a last look at their deceased friend. Yes, that is what I wish of my friends! And therefore I will not look at that poor clay in its coldness, corruption and cerements; lest it should take the place to me of the features of my friend, as I last saw them in life, beauty, health and soundness, or at least in the presence of the spirit which is the only real beauty or power of man. For the very reason, I say, of wishing to remember our friends we ought not to wish to look upon their corpses."

The sweetest comforts of this life are but like treasures of snow; do but take a handful of snow and crush it in your hands, and it will melt away presently; but if you let it lie upon the ground, it will continue for some time; and so is it with the contentments of this world. If you grasp them in your hands, and lay them too near your heart, they will quickly melt and vanish away; but if you will not hold them too fast in your hands, nor lay them too close to your heart, they will abide the longer with you.

God oftentimes delays, that his people may come to him with greater strength and importunity; he puts them off, that they may put on with more life and vigor. God seems to be cold, that he may make us the more hot; he seems to be slack, that he may make us the more earnest; he seems to be backward, that he may make us the more forward in pressing upon him.

The work of repentance is not the work of an hour, a day, or a year, but the work of a life. A sincere penitent makes as much conscience of repenting daily, as he does of believing daily; and he can as easily content himself with one act of faith, or love, or joy, as he can content himself with one act of repentance

---

Do not put off God to old age; for old, lame and sick sacrifices rarely reach as high as heaven.

Young saints often prove old angels, but old sinners seldom prove good saints.

PERSONAL ITEMS.

Milton died aged 66 years.
Cæsar died, aged 55 years.
Napolean died, aged 52 years.
Columbus died, aged 64 years.
Richelieu died, aged 57 years.
Shakspeare died, aged 52 years.
Henry VIII. died, aged 56 years.
Richard, III, died, aged 32 years.
Byron, Lord, died, aged 38 years.
Burr, Aaron, died. aged 80 years.
Demosthenes died, aged 53 years.
Pitt, William, died, aged 47 years.
John Hancock died, aged 56 years.
Burns, Robert, died, aged 36 years.
Hamilton, Alex., died, aged 47 years.
Cowper, William, died, aged 69 years.
Elizabeth (Queen) died, aged 69 years.
Fox, Charles James, died, aged 37 years.
Washington, George, died, aged 67 years.
Mary, Queen of Scotts, died, aged 45 years.

Thomas Nast and family sailed for Europe Tuesday.

Liberal journals in England call the Premier Czar Benjamin.

Brigham Young's heirs have settled the will case, and got $21,000 each.

Bob Ingersoll made $30,000 out of his pagan, and generally red-hot lectures.

Senator Withers is stumping through the North intent upon attracting settlers to Virginia.

Senator Sharon is said to be the possessor of the comfortable little fortune of $20,000,000.

William H. Vanderbilt is said to control railroad and telegraph companies having a capital of $233,070,479.

Senator Burnside was seriously injured at his summer home at Bristol R. I., on Saturday, by a window falling on him.

Commissioner of Agriculture Le Duc is at Ithaca to inspect matters in connection with the Cornell University farm.

Minister Turner from Liberia, pronounces the scheme of colonizing Liberia with colored emigrants a shameless fraud.

B. J. Robinson-Smith offers a reward of $5 for the best treatise on "How to Make Out-door Life Attractive to the Musquito."

The Emperor of Brazil is going to Paris for the Exhibition, and has engaged for July the rooms in the Grand Hotel now occupied by the Shah of Persia.

Dr. Mary Walker is well enough to be out again dressed in a new gray Knickerbocker plaid, boots, pantaloons, long tail coat, tall silk hat, and white cotton gloves.

Elder Orson Pratt, the Salt Lake Mormon, predicts the early destruction of the earth by fire; and yet we predict that coal will be as dear as ever next winter.

In the mind of Queen Victoria the distance between herself and the Duchess of Sutherland is immensely greater than the interval between the Duchess and her cook.

A Miss Aleta Jacobs is the first woman to receive a medical degree in Holland. The degree of M. D. has been conferred on her, and she will practise in Amsterdam.

Justice Clifford celebrated his golden wedding at Portland with three sons, two daughters, and twenty-two grandchildren. It is entirely proper to say that Mrs. Clifford was there also.

The ex-Confederate Major-General Harry Heth has been appointed a special agent of the Treasury Department. He was a West Point contemporary of Hancock and Burnside, and commanded a division of the Army of Northern Virginia.

Hon. Alexander H. Stephens of Georgia is making preparations for a vigorous canvass of his district. He has purchased a carriage and pair of horses and within the next ninety days proposes to visit every county in his district, some of which he has not visited for many years.

General Rosecrans, who has just returned to San Francisco from a two months' exploring expedition through Arizona and Northern Mexico, thinks that instead of fighting with Mexico, we should proceed to build up the vast commerce with our sister republic, which we can easily do.

Walt Whitman, for the good of his now weak and paralytic frame, treats himself to protracted sun-baths and rubbing. The gray old gentleman seems to have been awakened into unusual sprightliness by the death of his friend Bryant, and has written some rich bits of prose about him.

Ex-Secretary Chandler is something of a nabob, at his home in Detroit. On every fair evening he drives out in state with two footmen and a coachman. His usual turnout is a close carriage drawn by an enormous pair of Percherons, the weight of which together is about thirty-three hundred pounds.

Mrs. Jenks is described as a woman of about thirty-five, of about medium hight, rather stout, but with a form that is still shapely. Her hair is light auburn, her face nearly round, the chin firm, but not square and heavy. Her eyes are cold, steely gray, and the nose is long and straight, but not very prominent. The expression of the face is cold, calculating and passionless.

The Rev. Joseph H. Twichell of Hartford will sail next week for Europe, for the purpose of accepting an invitation of Mr. Samuel G. Clemens ("Mark Twain"), who is one of his parishioners, to join him in a summer tramp in Switzerland and Germany, the genial humorist to bear the expenses. Mr. Clemens is now rusticating in Germany, and current report has it that he is at work with his pen on some more of those "good things" which have made him famous.

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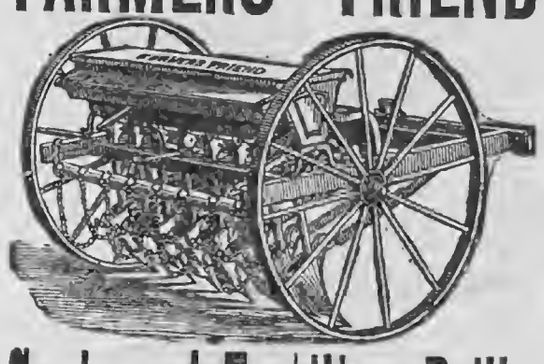

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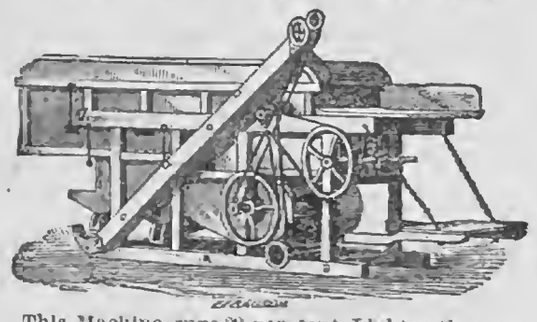

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Wit and Humor.

LOGIC.

He who would thrive must rise at five,

So says the proverb, though there is more rhyme than reason in it, for if

He who would thrive must rise at five.

it must follow naturally,

He who'd thrive more must rise at four;

and it will insure a consequence that,

He who'd still more thriving be,
Must leave his bed at turn of three;
And who this latter would outdo,
Will rouse him at the stroke of two.

And, by way of climax to it all, it should be held good that

He who'd never be outdone,
Must ever rise at stroke of one.

But the best illustration would be:

He who'd flourish best of all
Should never go to bed at all.

"This," said an agricultural implement dealer to an old farmer, expatiating on the merits of a new machine, "this is a patent corn planter," and putting it down, he planted it on the old Granger's corn, and raised an acher on the spot.

A MERCHANT tells us that he set a hen on an old tomato can, recently, and she had hatched five bottles of catsup, with lithographed labels, and a dozen fine tomato plants. The gentleman is an alderman, and cannot tell a lie, and would not if he could.

"WHAT will you be helped to in the way of earthly vegetables?" said M'Donald yesterday to a lady customer. "Lettuce, pray," was the quick reply. M'Donald looked sharply at the lady and concluded she was a lay preacher, until she pointed to the lettuce basket.

A YOUNG minister was preaching in Seabrook, N. H., from "I am the light of the world," and made a poor work of it, stammering and stuttering and almost stopping, when an indignant huckleberry picker, a sort of masculine woman, shouted out: "If you are the light o' the world you needs snuffing."

'T was even, and Fatalah Sayeghir
Frowned when he heard the wissokaja sing.
And the light tinkling of the foo khaloom
That echoed from the fulloha in the tayf
Filled him with grief. The tarboosh on his head.
Gay with the kossoms of the hill, he doffed,
And to the drayby with the gombaz on
He gave the shadoof that his father wore,
He leaned a little space upon his khoja khul,
And the sakiyeh in his hand, the bourhad jelb
He shook at Ibrahim Jones, the Tuarick,
And——

The remainder of the this interesting Oriental legend will have to go over until we can gather up a few more Bedouin terms. We have, as has the intelligent reader, frequently noticed that Oriental legends are valuable only in proportion to the number of unintelligible terms with which they glitter, like bits of buckle and collar plate in a link sausage. But we will hunt up a glossary and finish the legend of Balak al Shunyb some time, unless we should receive a memorial from two-thirds of our subscribers begging us us not to do so.—*Hawkeye.*

Restful Nights, Days free from Torture

Await the rheumatic sufferer who resorts to Hostetter's Stomach Bitters. That this benignant cordial and depurent is a far more reliable remedy than colchicum and other poisons used to expel the rheumatic virus from the blood, is a fact that experience has satisfactorily demonstrated. It also enjoys the advantage of being—unlike them—perfectly safe. With many persons a certain predisposition to rheumatism exists, which renders them liable to its attacks after exposure in wet weather, to currents of air, changes of temperature, or to cold when the body is hot. Such persons should take a wine-glass or two of the Bitters as soon as possible after incurring risk from the above causes, as this superb protective effectually nullifies the hurtful influence. For the functional derangements which accompany rheumatism, such as colic, spasms in the stomach, palpitation of the heart, imperfect digestion, &c., the Bitters is also a most useful remedy. It is only necessary in obstinate cases to use it with persistency.

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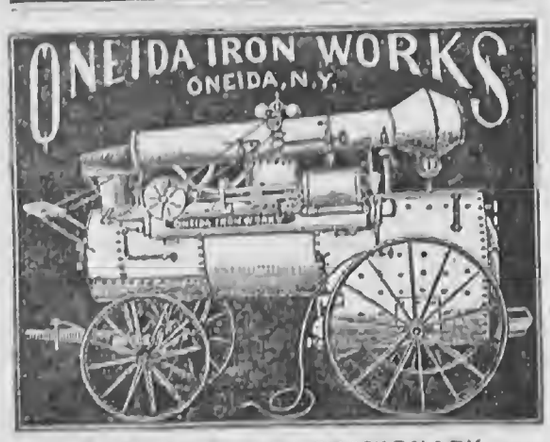

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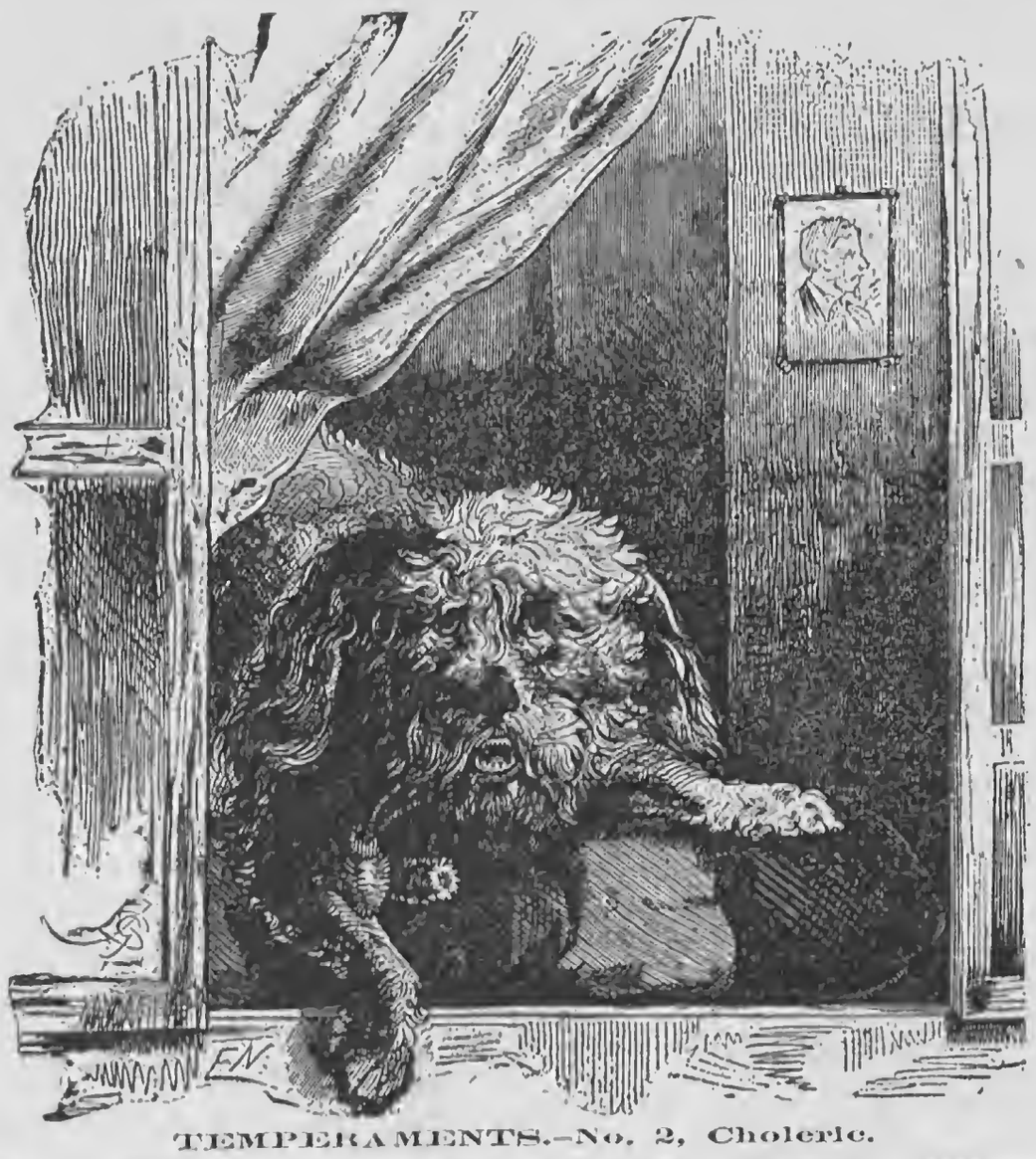

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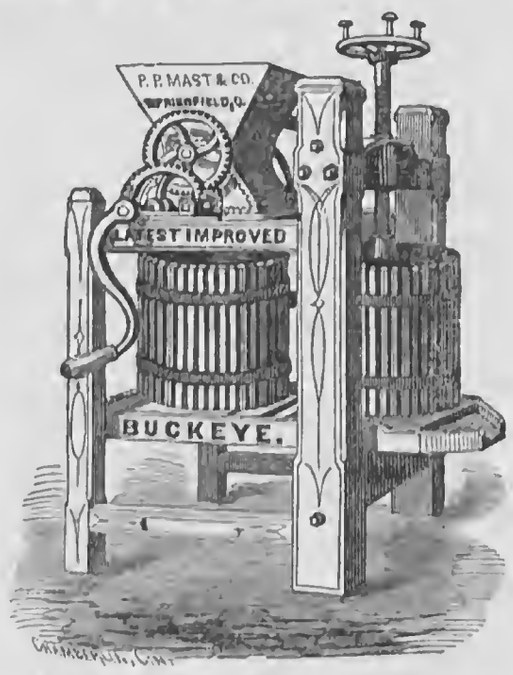

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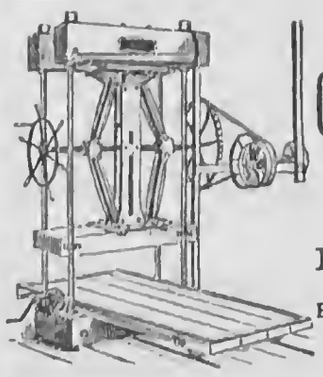

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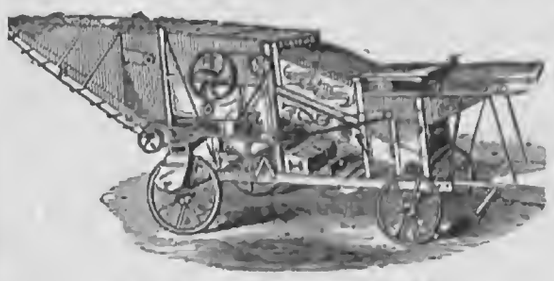

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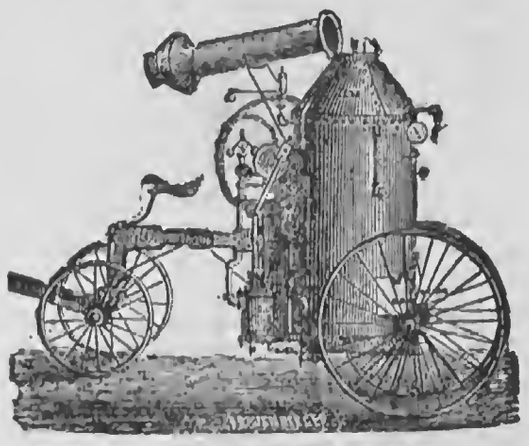

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VOL. XXXVII. No. 30.
WHOLE No. 1487.

NEW YORK CITY, JULY 27, 1878.

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Farm Topics.

J. B. LAWES' EXPERIMENTAL FARMING.

The several communications of Mr. J. B. Lawes, of Rothamsted, England, to the Rural New-Yorker, are still fresh in the memory of our readers. Professor Silliman has visited this great experimental farm that for over forty years has been conducted by Mr. Lawes in the interests of Agriculture with an intelligence and devotion which have rendered and do and will render the results of these experiments of a value to all agriculturists—indeed to the world—which it would be idle to attempt to estimate. If "Agriculture is the most healthful, most useful, and most noble employment of man," surely the life which Mr. Lawes has spent for its improvement with results so important and trustworthy, entitles him to a share of mankind's gratitude to which few other investigators in any field whatsoever can with equal justice lay claim.

Professor Silliman communicates to the New York World a short account of what he saw during his visit, the gist of a part of which will be found in the Rural New-Yorker of Oct. 17, '77, p. 240. "It is impossible," he says, "in any reasonable limits of space to follow the details of those most important and interesting experiments which it has required so many years to carry out, not even if I were to confine myself to a single example."

After all these years Mr. Lawes says he feels that he has but commenced a work which will demand many lives for its completion. He has therefore set apart a fund of $500,000 and a certain area of land for the continuance of these investigations when he is dead. But Mr. Lawes is still in vigorous health and scarcely over sixty years of age. We may therefore hope that he will be spared to continue his good work through many years.

Our engravings are reproductions of those published in the Gardener's Chronicle of Sep. 22 of last year, and we are indebted to the same source for the substance of what follows.

Mr. Lawes entered upon his hereditary property in 1834, when experiments were begun. But the foundation of the Rothamsted Experimental Station may be said to date from 1843. It has up to the present time been entirely disconnected from any external organization, and has been maintained entirely by Mr. Lawes

In 1854 5 a new laboratory was built, by public subscription of agriculturists, and presented to Mr. Lawes, in July, 1855, from which date an old barn laboratory was abandoned, and the new one has been occupied.

From June, 1843, up to the present time, Dr. J. H. Gilbert has been associated with Mr. Lawes, and had the direction of the laboratory.

The number of assistants and other helps has been increased from time to time. At first only one laboratory man was employed, but very soon chemical assistant was necessary, and next a computer and record-keeper. During the last twenty-five years the staff has consisted of one or two, and sometimes three, chemists, and two or three general assistants. One of these is usually employed in routine chemical work, but sometimes in more general work. The chief occupation of the general assistants is to superintend the field experiments—that is, the making of the manures, the measurement of the plots, the application of the manures, and the harvesting of the crops, also the taking of samples, the preparation of them for preserving or analysis, and the determination of dry matter, ash, &c. These assistants also superintend any experiments made with animals. There are now about 25,000 bottles of samples of experimentally-grown vegetable produce, of animal products, of ashes, or of soils, stored in the laboratory.

A botanical assistant is also occasionally employed, with from three to six boys under him, and with him is generally associated one of the permanent general assistants, who at other times undertakes the botanical work.

Two or three (for sometime over three) computers and record-keepers have been occupied in calculating and tabulating field, feeding, and laboratory results, copying, &c.

One, and sometimes two, laboratory men are employed.

The field experiments, and occasionally feeding experiments, also employ a considerable but a very variable number of agricultural laborers.

The general scope and plan of the field experiments have been:

To grow some of the most important crops of rotation, each separately, year after year, for many years in succession on the same land, without manure, with farmyard manure, and with a great variety of chemical manures; the same description of manure being, as a rule, applied year after year on the same plot. Experiments on an actual course of rotation with different manures have also been made. In this way field experiments have been conducted as follows:—

On Wheat, thirty-four years in succession, 13 acres, 35 plots, many of which are duplicates of others.

On Barley, twenty-six years in succession, 4½ acres, 23 (or 29) plots.

On Oats, nine years in succession, ¾ acre, 6 plots.

On Wheat, alternated with fallow, twenty-six years, 1 acre, 2 plots.

On different descriptions of Wheat, nine years, 7 acres (each year in a different field,) about 20 plots.

On Beans, thirty-one years (including one year Wheat and five years fallow), 1¼ acre, 10 plots.

On Beans, alternated with Wheat, twenty-eight years, 1 acre, 10 plots.

On Clover, with fallow or corn (grain) crop intervening, twenty-eight years, 8 acres, 18 plots.

On Turnips, twenty-five years, about 8 acres, 40 plots.

On Sugar Beet, five years, about 8 acres, 40 plots.

On Mangel-Wurzel, one year (in progress, about 8 acres, 40 plots.

On Potatoes, one year (in progress), 2 acres, 10 plots.

On rotation, thirty years, about 2½ acres, twelve plots.

On permanent grass land, twenty-two years, about 7 acres, twenty plots.

Comparative experiments with different manures have also been made on other descriptions of soil in other localities.

Samples of all the experimental crops are taken, and brought to the laboratory. Weighed portions of each are partially dried, and preserved for future reference or analysis. Duplicate weighed portions of each are dried at 100° C., the dry matter determined, and then burnt to ash on platinum sheets in cast-iron muffles. The quantities of ash are determined and recorded, and the ashes themselves are preserved for reference or analysis.

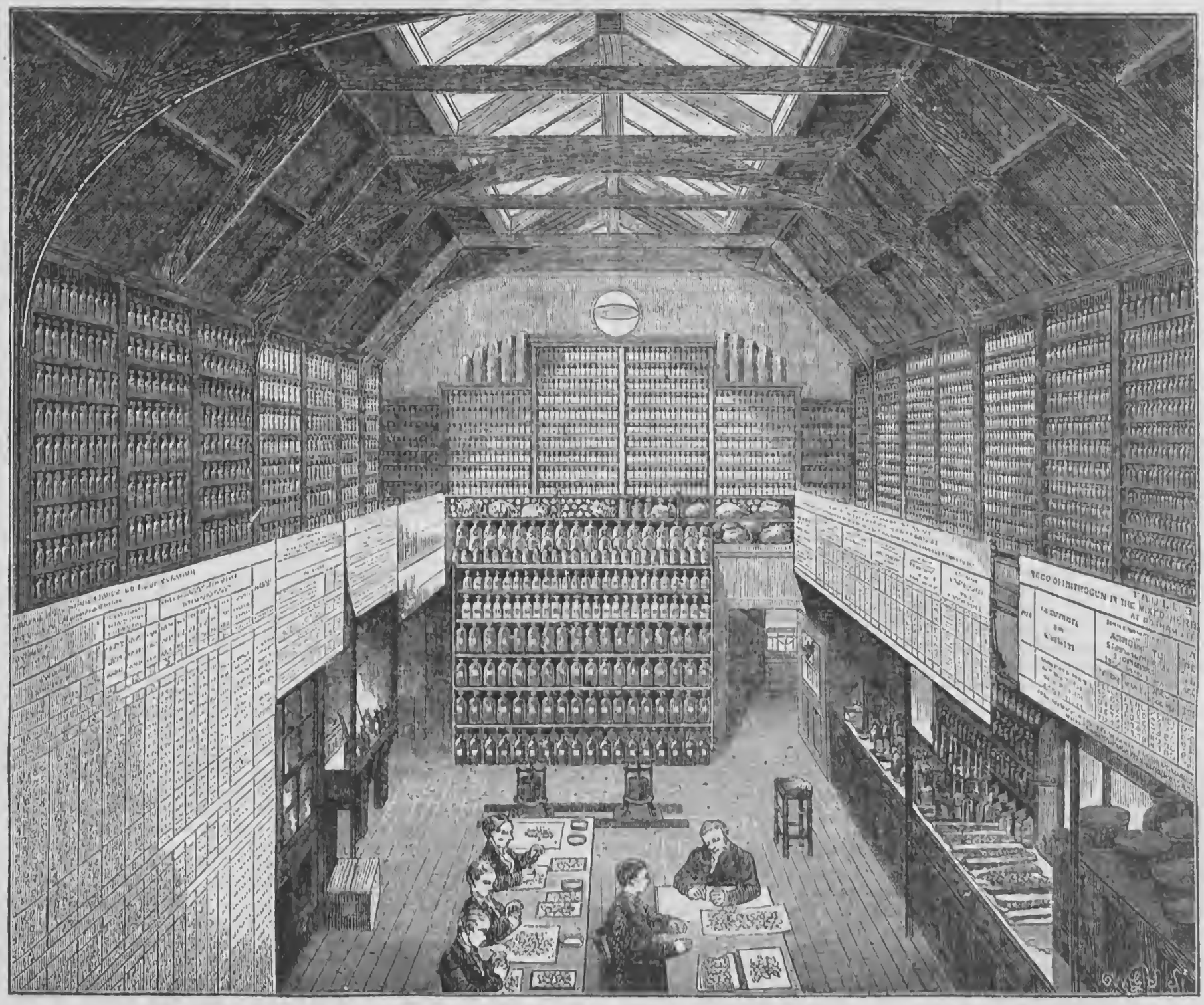
In a large proportion of the samples the nitrogen is determined.

In selected cases, illustrating the influence of of season, manures, exhaustion, &c, complete ash analyses have been made, numbering in all about five hundred.

Also in selected cases, illustrating the influence of season and manuring, quantities of the experimentally-grown wheat grain have been sent to the mill, and the proportion and composition of the different mill products determined.

In the case of Sugar Beet, the sugar, by polariscope, has in most cases been determined.

In the case of the experiments on the mixed herbage of permanent grassland, besides the samples taken for the determination of chemical composition (dry matter, ash, nitrogen, woody fiber, fatty matter, and compo



INTERIOR OF J. B. LAWES' LABORATORY AT ROTHAMSTED.

sition of ash,) carefully averaged samples have frequently been taken for the determination of the botanical composition. In this way on three occasions, at intervals of five years—viz., in 1862, 1867, and 1872—a sample of the produce of each plot was taken, and submitted to careful botanical separation, and the percentage by weight of each species in the mixed herbage determined. Partial separations have also been made in other years.

ANALYSES OF SOILS.

Samples of the soils of most of the experimental plots have been taken from time to time, generally to the depth of 9, 18, and 27 inches, but sometimes to twice this depth. In this way nearly 600 samples have been taken, submitted to partial mechanical separation, and portions of the mold have been carefully prepared and preserved for analysis. In a large proportion of the samples the loss on drying at different temperatures and at ignition has been determined. In most the nitrogen determinable by burning with soda-lime has been estimated. In some the carbon, and in some the nitrogen as nitric acid, have been determined. Some experiments have also been made on the comparative absorptive capacity (for water and ammonia) of different soils and subsoils. The systematic investigation of the amount and condition of the nitrogen, and of some of the more important mineral constituents of the soils of the different plots and depths, is now in progress or contemplated.

RAINFALL.

Almost from the commencement of the experiments the rainfall has been measured—for twenty-four years in a gauge of one-thousandth of an acre area, as well as in an ordinary small funnel-gauge of 5 inches diameter. From time to time the nitrogen, as ammonia and as nitric acid, has been determined in the rain waters.

Three "drain gauges," also of one-thousandth of an acre each, for the determination of the quantity and composition of the water percolating respectively through 20 inches, 40 inches, and 60 inches depth of soil (with its subsoil in natural state of consolidation), have also been constructed. A more numerous series of smaller "drain gauges," arranged for the investigation of the influence of different crops and of different manures, are in course of construction. Each of the differently manured plots of the permanent experimental wheat field having a separate pipe-drain, the drainage waters have frequently been collected and analyzed. Professor Frankland has determined the nitrogen, as ammonia, as nitric acid, and as organic nitrogen, and also some other constituents, in many samples both of the rain and of the various drainage waters collected at Rothamsted; and Dr. Voelcker has determined the combined nitrogen, and also the incombustible constituents in many of the drainage waters.

AMOUNT OF WATER TRANSPIRED.

For several years in succession, experiments were made to determine the amount of water given off by plants during their growth. In this way various plants, including representatives of the gramineous, the leguminous, and other families, have been experimented upon. Similar experiments have also been made with various trees.

We have no more space to give to the enumeration of the experiments which have been carried on at Rothamsted. The results of all this labor and skill have, to a considerable extent, been given in the Journals of the Royal Agricultural and Royal Horticultural Societies and in other publications, but the very number of these scattered records and their prodigious wealth, variety, and complexity of detail render them difficult to be grasped by an ordinary scientific reader. Life is short, art is long. The time seems to us to have come when the directors of this noble experimental station should gather together into one harmonious consecutive treatise the main results of their labor and the legitimate inferences therefrom. We are, of course, aware that to some extent this has already been done. Most of the very numerous publications of Messrs. LAWES and GILBERT contain summaries, but these summaries themselves now require consolidating, and their mutual relationship made clearly evident.

The Gardeners' Chronicle alluding to the descriptive article referred to, finishes a leading editorial with the following pertinent remarks:

"In what other country would services so splendid and so disinterested be allowed to pass unnoticed by the nation? True, such honors as science can give have been bestowed, and agriculturists have not been unmindful of what has been done for them; but surely this is a case for Governmental recognition. Had Messrs. LAWES and GILBERT and their several associates in their respective degrees been soldiers or sailors, they need not have effected a tenth part of what they have done to have been the recipients of State honors and rewards. Doubtless their own satisfaction at the results of their labors is the best and sweetest reward they themselves could look for; but, as a matter of national honor, it is greatly to our discredit that services so long continued and so valuable should have been allowed to pass without State recognition."

ILLUSTRATIONS.

Our illustrations represent views on the farm of Mr. LAWES at Rothamsted, Eng.; the interior of the laboratory, with its myriads of analyses and records; the rain-guage, one-thousandth of an acre in area; other drain-guages of like area, but filled with soil of various depths, to show the quantity of rain that percolates through strata of different depths, and others again of smaller area arranged in a circle, and destined to show the amount of rain penetrating through soils of various characters, degrees of consistency, in a natural state or artificially consolidated, and mixed with farm-yard and various artificial manures. Further, some of these gauges are intended to show the amount of rain that percolates through a given area and depth of soil when bearing a crop of cereals or other plants with different root and leaf action, etc. The rain so collected, together with the drainage water from some of the fields, is not only measured but subjected to chemical analysis, to show its constitution.

SOME IMPORTANT RESULTS.

Referring now to Prof. SILLIMAN'S communication to the World:

The experiments upon permanent meadow or park grass land have been continued over twenty years, and have been attended with curiously instructive and useful results. It appears from a careful botanical scrutiny by actual count of all the product ent upon a given area of land which had been in grass for centuries, and enriched only with barn-yard manure, that the flora contained about fifty species of plants, which were tabulated according to their respective abundance by actual count and with their systematic names. It is found that the more worthless of these meadow plants are subordinated by treatment to the more useful in such a way that, in case of the continuous treatment by certain mineral manures only, while the annual average clip for twenty years has risen from twenty-one and a quarter hundred-weight produce per acre, weighted as hay, to sixty-two and a half hundred-weight per acre, the number of species of plants has diminished from fifty to about twenty, and these the most useful of the grasses, &c. Not that the other thirty have been exterminated, but rather that they are smothered and subordinated by the vigor of the more valuable plants, although in the case of some of the most noxious weeds, they seem to be exterminated.

Those curious in such matters will wish to know what the exact treatment in this case was, and the facts are of sufficient interest to merit the attention of any thoughtful reader. The treatment was exclusively by mineral manures, without a particle of vegetable or carbonaceous substance whatever. For example, in this particular case the annual quantities per acre employed were as follows, viz.:

	Pounds.
Sulphate of potassa	300
Sulphate of soda	100
Sulphate of magnesia	100
Superphosphate of lime, 3½ cwt	392
Ammonia salts, equal parts sulphate and muriate of ammonia	800
Total per acre mineral manure	1,692
To this quantity was added on another equal plot silicate of soda	400
Total	2,092

The silicate of soda was commenced only in 1862, or thirteen years after the series of experiments was entered on. Its effects are most marked, for while for the first twenty years the average of hay cut was about 61 hundred-weight, it rose for the twenty-second season (1877) to the enormous aggregate of 110 hundred-weight! But it should be stated that in this year there were two cuttings or crops of 60¾ and 49¼ hundred-weight respectively, and that the continuously unmanured ground next adjoining gave in the same season also two crops of respectively 19½ and 25¼ hundred-weight, or a total of 44¾ hundred-weight. In other words, the land continuously fertilized with mineral manures of the above composition gave 5½ tons of hay per acre, and the adjacent unmanured gave 2 1-5 tons. It will be seen that the only source of nitrogen added by this treatment was from the salts of ammonia, while the carbon was evidently obtained by the plants from the carbonic acid of the atmosphere, since not a particle of carbonaceous food was supplied, and the soil had become practically exhausted of carbon.

CONCLUSIONS.

No single fertilizer, whether mineral or organic, is capable of producing the highest attainable production of hay; barn-yard manure alone will carry the production only to a certain point, where it remains stationary at about half the maximum attained by mineral manures alone, as in the example just cited above. This maximum for barn-yard manure alone is about forty-nine hundred-weight of hay per acre. The old notion that a certain amount of humus, or decomposing organic matter, is essential to enable plants to assimilate carbon, is an error, since the highest results attained have been reached and maintained steadily without a particle of carbonaceous substance added to the soil. Nitrogen, the most essential element of fertility, perhaps, for both cereals and grasses, is supplied most readily by use of ammoniacal salts, but its highest effects are not attainable by the use of such salts alone, since the effect of such nitrogenous fertilizers is much enhanced by the use of silicate of soda and ammoniacal salts alone do not effect the same results which are attained when they are used in connection with certain alkaline salts, whether sulphates or nitrates. The same or a larger amount of nitrogen in the form of nitrate of soda or potassa fails signally to promote, on grass land, the production attained by the use of sulphates of the same alkaline bases when ammoniacal salts are used as the source of the nitrogen. The question of whether plants can assimilate directly free or uncombined nitrogen was carefully investigated at Rothamsted by our lamented countryman, Dr. EVAN PUGH, many years since, and was decided in the negative. Dr. PUGH'S memory is tenderly cherished in the place where he worked so long and so well.

THE WHEAT FIELD

called "Broadbulk," of about thirteen acres, offers a most instructive and interesting study, as Prof. Silliman saw it on the 8th of June, under the guidance of Messrs. Lawes and Gilbert. It needed no skill to see the immense disparity between the several plots of grain growing side by side and under treatment for over a quarter of a century by different fertilizers. It is notable that this old field upon the English chalk, left unmanured continuously for the whole period of time of these experiments (there are two such plots upon it,) yields an average of 14 bushels of wheat per acre, and this is just about the average of the unmanured wheat lands of the United States; the total wheat lands with us averaging, if we do not mistake, about 15 bushels to the acre. At Rothamsted each plot of these 13 acres has its own under-drain, and has been subject all these years to a separate and distinct treatment. The results are most instructive and worthy of study. Many cherished notions of certain theorists are now completely demolished by the quiet logic of facts, while others are confirmed. Thus 14 tons per acre of farm-yard manure have raised the average yield of this land from 14 to 35 bushels of wheat to the acre. The addition of 200 pounds of sulphate of potassa, 100 pounds each of sulphate of soda and magnesia and of 3½ hundred-weights of superphosphate of lime resulted in raising the average yield of this land to only 16 bushels to the acre, a result quite insignificant, and discouraging, it would seem, to agricultural chemistry. But the one element of success was wanting, namely, ammonia, and consequently it was found when this is added to the same mixture just enumerated, a quantity of 200, 400 and 600 pounds respectively of ammonia salts, there was an increase of yield to 25⅜, 31¼ and 37⅛ bushels of wheat respectively. That it was the nitrogen of the ammonia which did the work was most evident, since it appeared when an equivalent of nitrogen was used in the form of nitrate of soda in place of the ammonia there was almost an identical maximum yield of wheat, all other things remaining quite the same. Nor was it sufficient to use the ammonia salts alone, for then the best result attained was the production of under 22 bushels of wheat. Even the addition of the superphosphate to the ammonia salts raised the product only to 27½ bushels, and it is clear from all the experiments that a combination of mineral manure with superphosphate of lime and ammoniacal salts is essential to the production of the highest condition of fertility.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

THE buckwheat is all sown—finished July 8th. Pretty late, some may say, and it may be, one season in six; but, as a general thing, the later buckwheat can be sown and avoid the Fall frost the better the yield. The hot glare of the sun causes the blossoms to wither before the grain is formed when sown early, in the majority of cases, while the cooler days of the later months are more congenial to its formation. It is a generally accepted idea among some farmers that buckwheat requires—yes, really *requires* poor soil for its successful growth. This, like many others that creep into the minds of many of us, is a very erroneous one. While it will, without doubt, yield larger returns from an impoverished soil than most grains, it can be grown to much better advantage on rich soil. The ground must be well shaded if satisfactory results are to be obtained, and if the ground is not in condition to produce sufficient straw for this purpose, the crop will be far from good.

Our grandfathers used to consider a half bushel of seed to the acre a great plenty; now, most farmers sow a bushel. Why the greater quantity of seed required now than then? Then the land was rich from the manurial deposits of ages, in the shape of decayed vegetation, leaves, and timber; now our soil, in many cases, is impoverished by constant cropping, and actually requires the extra amount of seed in order to produce a sufficient growth, to shade the land from the searching rays of an August sun. If our land were sufficiently rich, we would require no more than then. I remember my grandfather once sowed a field of buckwheat, using only a little over a peck of seed per acre. Of course, when the plants appeared they were far apart, hardly near enough to be neighborly. A neighbor passing exclaimed: "Why, man what were you thinking of? That is an excellent piece of ground, and would have given you an immense crop if you had only sown it thick enough."

The season was favorable and the grain grew finely, sending out numerous branches until it became a perfect mass all over the ground. The neighbor passing again just as the grain was forming, paused where the old gentleman was at work, and with an air of superior knowledge suggested, "You would have had an *awful* crop, Dr., if you hadn't sown it so thick." The trouble is this:—Farmers do not consider buckwheat a profitable crop, and only sow their poorest land with it, when, in reality, it is as much so as oats, and much better for subduing rough or new land. Mr. Morey advances an idea which I can hardly accept in regard to the time of sowing. It is this—that the grain is formed at the same hour in the day that the crop is sown, and always sows his buckwheat after sundown, in order to avoid the blasting effects of the sun upon the embryo grain, when it is changing from the ideal to the real. There may be something worthy of consideration in the thought, yet I think most men will set it down as simply "an old woman's whim."

Haying is here again, and coming with wheat harvest in this locality, will make busy times until the crop is all secured, which, judging by the present condition of the weather, will be for a considerable length of time. Our forty acres of meadow was never better. Much of it, owing to the heavy showers of the past week, lies nearly as flat as though it had been rolled. As a general thing, we do not begin our haying early enough. Judge Balcom advocates cutting the timothy as soon as the heads are formed, before the blossoms appear. This I consider *too* early. The grass requires much more care in curing, and when obtained, is tough and wirey. The cattle cannot masticate it sufficiently to obtain from it the full benefit. Besides, as old farmers say, there is not so much "heart" in it as when cut at maturity. However, I think this not so bad a fault as leaving it until over-ripe.

Three men and three horses, with the present improved machinery, can secure a large amount of hay in a short time when the weather is favorable, and there can be no excuse for the black timothy straw stripped of half the seed and offered in our markets as hay. Grass should never be left until it can be cut in the forenoon and drawn after dinner. And it gives hay of much better quality and better appearance if put up and cured in the cock than if left spread over the field until the sun's rays have drawn from it all moisture—the juice of the grass—which possesses its most nourishing qualities, and must be retained in order to constitute it "good hay." In cutting wheat, we prefer to leave it standing until it is sufficiently ripe, to bind and shock immediately. Left in the swath, there is much danger of the grain sprouting, especially when we have warm showers and hot sun alternately, as at present. In my own experience I have found few men who did not consider it better to let wheat cure in the shock.

Put up in round shocks, a dozen in a place, two of them placed crosswise for caps, wheat will remain uninjured for weeks in the field and cure out perfectly, withstanding severe storms, provided the caps are kept in place until settled. Michigan farmers have a rule by which to set up their wheat, and scarcely ever deviate from it. Four sheaves are set in a row, *north* and *south* at first, then three on each side. This makes ten sheaves, and the shock is perfectly round, with no place for another sheaf without marring its proportions. The two caps are then broken down at the ends and placed crosswise on top, forming a complete roof for the ten standing upright. They claim they stand much better in this manner than when the first sheaves are set east and west.

Farm Economy.

DRAINAGE.

PROFESSOR R. O. CARPENTER.

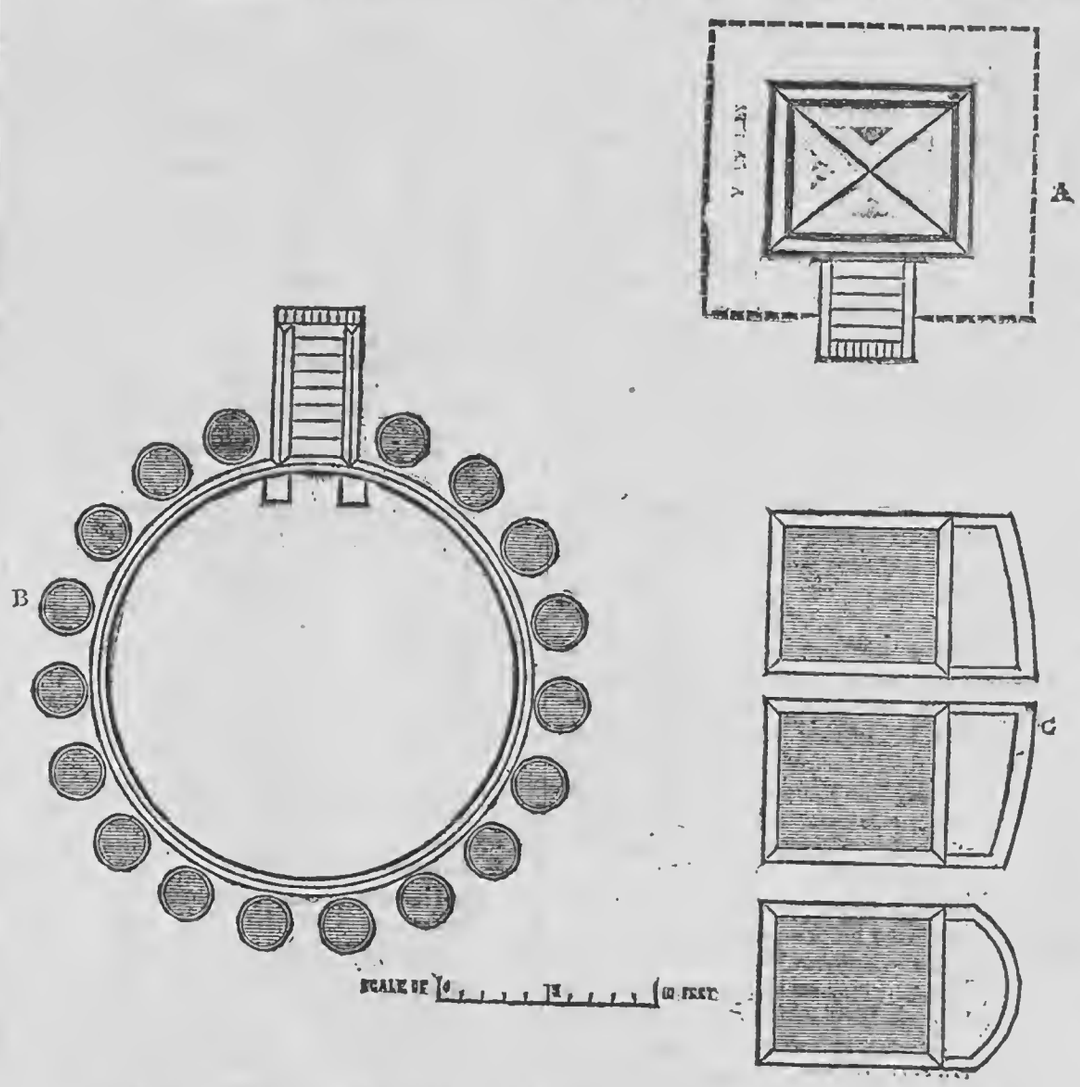
USE OF SYSTEM.

IT is probable that most of you have seen drains put down without all this preliminary work, and very likely a great many of these drains have worked well, and you will raise the question at once, "Is all this preliminary work necessary? Why not begin at once with the tile laying, and lay by the eye, instead of by the string, which requires considerable patience to set?" Your attention has been already called to the probability of mistakes, especially when the land is nearly level. If you practice much with the level you will soon find that although the eye can see straight it cannot see level. I will mention one instance of this: In the west portion of the College grounds is a valley, which, lying as it does, at the foot of quite a hill, seems very deep; separated from this by a small rise of ground, is a piece of land which gently slopes in the opposite direction. The valley was drained several years ago, an expensive outlet was built and a thorough system of drains was put in. More recently it became necessary to drain

the piece of land near by. This piece of land appeared to be entirely above the valley first mentioned, and a casual observer would say at once that the natural place for an outlet was in the valley. Thinking the same myself, I proceeded to lay out the drains so as to utilize the outlet already built. Judge of my surprise when after passing the ridge which separated the valley from the piece of land, I found my level notes indicated that I was descending instead of ascending. I thought there must be some mistake, and took the levels a second time, with the same result, however. The result was that a new outlet had to be built to drain this piece of land, and we were forced to run the drains in a direction nearly opposite that which we first intended. Had no level been run over this piece of land, I have no doubt that those drains would have been laid with the outlet higher than the other end. As it was, I experienced a terrible criticism by an experienced drain builder for not draining the lower piece of land through the upper outlet in the valley. He said, "any one could see that there was the proper place for the outlet;" yet the fact of the matter was, that the only thing that could induce water to flow through it would have been a powerful pump. You will doubtless think that a piece of land so deceptive, must have been nearly level, but such was not the case, for the distance between the valley spoken of and the land to be drained did not exceed ten rods, yet the bottom of the valley was five and a half feet higher. The reason for the deception was in this case very simple; the sloping land was mistaken for level land, and with that idea in the mind the valley appeared the lower. Indeed, I asked a friend how much he supposed that piece of land, the length of which was about thirty rods, would vary from the level. He said he should think it nearly perfectly level, yet in reality, in going that thirty rods, there was a fall of nearly ten feet.

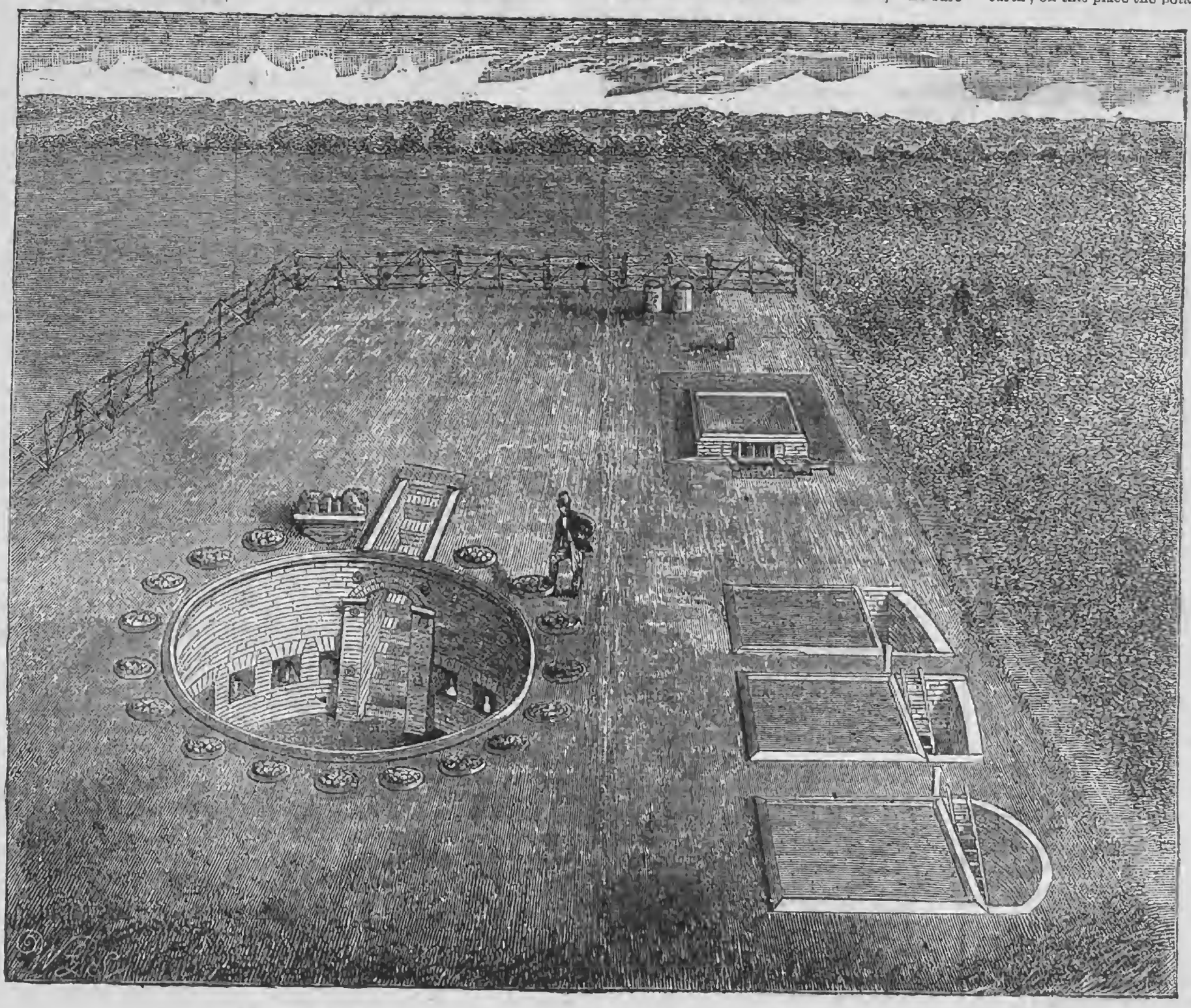
This case just cited shows how little dependence can be placed on the eye. Even men with much experience often find themselves sadly mistaken, and if they are men who profit by such experience they learn to be very cautious regarding the judgments of the eye, and ever distrustful of appearances.

If you can have running water through the ditch when laying the tile, you probably will be able to keep your ditch constantly rising in the same direction, but even then it is next to an impossibility to keep the ascent uniform, and there is danger of using all the fall before constructing the whole ditch. If you have no running water as a guide—and you very seldom will—the probability of having vertical bends and dips in your drain, forming effectual dams, is very great indeed, unless you adopt the method of building a guide for your bottom above your ditch as already described. The tendency is so great to follow undulations in the surface, without knowing it, however, that even the most experienced ditchers often make such blunders.



A, DRAIN-GAUGE. B, SMALLER DRAIN-GAUGES. C, LARGER DRAIN-GAUGE.

The method of construction used at the College, was devised and perfected by Dr. Miles, formerly Professor of Agriculture: the method is simple, and employs no instruments but what may be constructed by any man of ordinary ingennity. You may urge against the use of these instruments, viz.: level, shears, boning-rod and string, that it is a puttering job to set them up, and takes time that could better be employed in the actual work of constructing the ditch. That may be true, but the Yankee way of guessing also takes time, for the Yankee only guesses after he has examined all sides. Now which is cheaper, I leave it to you to decide, to spend one-half hour during the day in making preparations which will certainly lead to success in the construction of your ditch, or to be continually working in uncertainty; squinting up the ditch, going up and squinting back, and finally arriving at the undignified conclusion of a guess, which probably in one case out of five, at least, is erroneous, and the labor spent in that case is entirely thrown away. The cost of one blunder would pay the expense of many sewers. The motto of the under-drainer should be, "Be sure you are right, then push ahead," which, if properly lived up to, will do away with all the complaints of inefficient drainage.



DIFFERENTIAL DRAIN-GAGES AT ROTHAMSTED.

COOKING FOOD FOR STOCK.

It is claimed that by steaming or cooking food for Stock it is more nourishing, and that a less quantity is required to produce the same results as that not cooked. This is undoubtedly true, but the expense counteracts in a great measure the economy, and the cost of the apparatus to do it precludes its use unless there is a large amount of stock to be fed. The same purpose can be effected if the grain is malted the same as barley is in the making of beer. If hay be moistened with water and left in a pile till it heats and commences to ferment, it will answer the same purpose as cooking it. This converts a portion of the indigestible substances into digestible ones, which is what cooking the food does. This is more easily done than cooking the food and saves the costly apparatus. A large box to hold the hay that it may be somewhat compressed, is all that is required, and if grain and pulped roots are mixed with it and all fermented together, the whole makes a food superior to that fed raw, while the mixture is better than any of the ingredients alone. There is but little saved on labor, but the savings on fuel and cost of apparatus are items to be considered, and, moreover, malted grain is better than ground grain to feed.

Plymouth Co., Mass. ANDREW H. WARD.

Field Crops.

SWEET POTATO CULTURE.

M. B. PRINCE.

THE most common manner of growing sweet potatoes at the South—and with the exception that a hot-bed is required, the same mode of operation will do for any locality where they can be successfully cultivated—is to choose a warm locality, protected on the north and fully exposed to the sun, such as the south side of a building or fence. Mark off about twenty square feet of surface for each bushel of seed to be planted; remove three or four inches of the surface soil, placing it in a pile; then dig the pit some three inches deeper; place about two inches of fine fresh horse manure in the bottom, and on this two inches of good earth; then add another two inches of manure, filling up to an inch above the surrounding surface, with rich earth; on this place the potatoes thickly, though not touching each other. Use seed of medium size without splitting (as often recommended), better small than large, as they produce plants equally good in every respect and many more in number from a bushel. Press the potatoes firmly in the soil; cover with a mixture of sandy soil and manure, three inches deep; pat the surface down smoothly.

From this time on, until the plants are large enough to begin drawing—which will be in six weeks, more or less, according as the weather is warm or cold—they require bnt little attention, merely keeping the bed properly moist. I think sometimes it is well to remove one-half the covering if the manure produces some bottom heat and the weather is warm. A good soaking with soap-suds, once a week, is advantageous to the growth of the young sprouts. Heavy losses are often sustained from too early planting. Being a native of a warm climate, the sweet potato will not grow with vigor until the weather has become settled and warm. The first of April is early enough for the main crop anywhere north of the 36th parallel of latitude and, as we go north, the time should be correspondingly later.

When drawing the plants, get a firm hold as low down as possible with one hand, pressing on the tuber with the other; draw gently so that the tuber may not be disturbed in its bed. A light sandy soil is best for the sweet potato, and having been previously well plowed, we now properly commence the preparation of the land by making a liberal broadcast application of stable manure; run the furrows four feet apart, and, if we have them to spare, a sprinkling of ashes cannot be more profitably used than in the sweet potato rows. Throw up a sharp bed over this, and right here is where we come to a disagreement among our most successful growers; but, as fine crops are the result of both practices, I will describe both. The difference hinges only on the question, "Which is the cheaper?" This each reader can decide for himself.

The first and more common practice of the two is to set the plants eighteen inches in the row on these ridges, merely patting down with the hoe the point where the plant is to be set, thus "firming" the soil. The after cultivation consists in keeping the land clear of weeds and the soil loose by plow and hoe.

The other plan is to hill up a little further apart in the row and the rows a little nearer, setting in the same manner as in the former practice, and performing the necessary after-cultivation entirely with the hoe. As is often the case, we have the land prepared one or two weeks before we have a season of wet weather, which is important to success in planting, though no plant with which I am acquainted takes to its new home more readily than the sweet potato. Then we find it an advantage to hill up, thus more thoroughly preparing the soil and destroying the young weeds. Everybody says,—and "what everybody says must be true"—that the vines should be lifted once in ten days to prevent their taking root, but I have yet to discover the man who practices it. A finer crop than we harvested in 1877 I never saw, and not a vine was lifted until the roots were dug.

In harvesting the crop, we wait for a clear, warm day, when the soil is dry, unless cold weather threatens; or, if the vines have been scorched by frost, the digging must not long be delayed. We run the plow along each side of the row, turning the earth away, dig with the hoe, leaving them scattered on the ground to dry off, gathering up, however, before night those dug during the day. Assort while picking up into three lots: the large, fair, uninjured, for market or storing away; the small, smooth and regularly-formed, to be preserved for seed; and lastly, the culls to be used immediately either for the table or fed to stock, for which they are excellent food, horses, cattle and hogs being very fond of them.

Great care should be exercised in the handling, to prevent them from being bruised or cut, though the former is much more influential in producing decay. As to preservation, there seems to be no sure way, though a dry cellar or house where artificial heat can be introduced when the temperature goes below about 50°, is considered the safest kind of storage, not forgetting that perfect ventilation is all-important.

Warren Co., July 8, 1878.

RAISING FLAX.

The farmers of this country once knew the advantage of growing and working up flax for sheeting and table linen, and for tow trousers for summer wear. But this era of home manufacture has passed away, and hardly any attention is now given in this country to growing flax, or to working it up into linen goods. Cotton has taken the place of linen largely, and whatever else is used is purchased from European manufacturers, with the exception of yarn, thread and twine, and some crash. These are made in the United States, and in so doing the manufacturers use about 6,000 tons of raw flax annually.

The larger proportion of this flax is imported, because our farmers pay too little attention to the care of what flax they do raise, and do not raise enough of any kind to supply the demand, with the exception of tow for bagging and upholstering. The flax raised in the United States is all primarily for seed. In the West one peck of seed is sown to the acre, the flax mown, instead of being pulled, and most of the straw burned. A small part of it is thrown out upon the ground, and rotted and passed through a brake, and then taken to the bagging mills and the upholsterers. In this condition it is worth $40 to $50 per ton. In a few instances more care is taken in rotting and braking and clearing the flax of shives, and the coarse fiber is used to mix with finer fiber in making coarse twines, crash, etc., and is worth $80 to $100 per ton.

In New York State about one bushel of seed is sown to the acre, and the flax is generally left to get dead-ripe, and then pulled and after removing the seed, the flax is spread upon the grass to be dew-rotted, and then it is broken and scutched, and the fiber sent to the thread and crash mills, bring at this time 9@10c. per pound. There it is worked into the coarser yarns, twines and crash, and mixed with the finer imported fibers in cheapening the cost of manufacture.

There is no question bnt that flax-raising may be a profitable business for the farmer in the United States, and a little more attention to raising and preparing the fiber will give him double the present price. Importers now pay 20@25c. per pound for undressed Russian and Belgian flax, but the process of raising and preparing differs from that in the United States as follows: The seed is sown at the rate of 2½ to 3 bushels per acre, as early as the ground can be made ready, as the flax is a hardy plant, and is grown best in the moist, early spring months. Moist ground is also best for the crop. The flax is not allowed to become dead-ripe before being pulled, but as soon as the lower half of the stalk turns the flax is pulled, and the seed allowed to ripen in the bundle or shock. This gives a better fiber, and it is also thought a better seed, containing more and better oil.

After the seed is removed the flax may be kept any length of time before rotting, as in every process the fiber improves with age, or it may be rotted at once. The best time to rot is early in the spring or in the fall, as the hot, dry weather of summer causes it to become harsh and of a foxy color. The foreign process of rotting is to steep in a stagnant pond of water, for a few days, something being laid upon the flax to keep it under water, until fermentation takes place, and it is then spread upon the grass to complete; but great care is taken not to allow it to remain in the water or upon the ground too long.

When rotted, the flax may be broken and scutched at any time convenient, for, as said before, flax gains in value, as wine does, by age. This process pursued in this country, will give a fiber worth from $400 to $500 per ton. The steeping cannot be done in a stagnant pool of water in mid-summer in the United States, as the heat is too intense and fermentation too rapid. If in the shade or in vats in a barn cellar, it may be successfully done. If any of our readers have had experience in flax cultivation which is of different results, we shall be pleased to hear from them.

Arboricultural.

THE MUSIC OF THE TREES.

SAMUEL B. PARSONS.

There's music in the wild wind's roar,
And in the thunder's crash:
And in the waves that dash,
With crested beauty, on the brow
Of rocks all hoar and mossed,
Singing their melancholy dirge
For the ever loved and lost.

There's music in the flapping sail,
And in the creaking mast,
And round the prow whose graceful breast
The waters cleaveth fast.
There's music in the measured stroke,
Where voice and oars keep time,
And on the evening ripples clear,
Swelleth the village chime.

There's music in the organ's notes,
And voices gathered there,
In lofty nave, and arched dome,
For worship and for prayer;
And music, like the still small voice,
Breaks on the listening ear,
Where, reverent, my brethren wait
The Lord's own words to hear.

There's music in the merry tone
Of childhood's happy shout,
And in the gentle, loving kiss,
In which his heart goes out;
And yet, far sweeter still its tones,
When low, on bended knee,
It gives a simple faith and love,
And prays His child to be.

There's music in a woman's voice
Full gushing out in song,
Or in the fond, caressing tones
Which to her love belong;
When dimpled cheek, and rosy lip
The keys of music hold,
And all the heart's sweet melodies
Spring up in wealth untold.

The world is filled with music
To ears attuned aright,
And a soul in perfect harmony,
Is a soul all full of light;
But of true earthborn music,
That's thrown upon the breeze,
Few have such gentle beauty
As the music of the trees.

They all have different voices,
And were their language known,
A beauty all undreamed would swell
In every varied tone;
Their harps are swept by viewless wings,
Alike at eve or morn,
As to the tranced and listening ear,
Their melodies are borne.

From boyhood's happy hour,
To manhood's world of care,
Thro' joy, or calm, or suffering,
Their music met my ear.
The Maple sang in gladness,
While the Aspen danced in glee:
But the music of the mournful Pine
Was ever sweet to me.

When first I knew its swelling notes,
'Twas as a blithesome boy—
I loved to climb its sturdy trunk,
And in its arms to lie:
Full many a castle there I built
(They all are tumbled now).
And pleasant was the music then,
It breathed across my brow.

I made my Pine an errant knight,
Or troubadour of old:
And the Maple was his lady-love—
Dearer than gems or gold.
He brushed his leaves and spoke to her
Across my waving hair,
And her gentle voice would rustle back
Sweet answer to his prayer.

But manhood came, and 'mid its cares,
Sweet voices gladness brought;
My children in the old Pine played,
Its topmost branches sought,
Or, 'neath its sturdy, spreading arms,
They shouted in their glee,
While the Pine would roll its echo back,
Like the distant moaning sea.

Its voice was full of gladness then,
Its tone is mournful now;
The Fire King swept across its form,
And scathed its lofty brow;
The group that sought its welcome shade,
Is now a broken ring—
No hope of other life it has,
To meet their welcoming.

And ever still, in saddened tones,
It whispers in my ear,
"Tho' I am scared, my heart is sound,
And upward my career;
Be thou the same—for unto thee
A better lot is given:
My life is but for earth alone,
But thou canst enter Heaven."

Thus music is in every tree,
And each leaf has a tone,
And on the ear that listens,
Its melody is thrown.
So whate'er may be the music
That is flung upon the breeze,
There are few that have the sweetness
Like the music of the trees.

Horticultural.

KISSENA NOTES.

THE ROSE ACACIA.

Many plants that have been long familiar, and perhaps on that account less prized, renew their charms when presented under some novel or better form. Such a plant is the Rose Acacia—Robinia hispida,—under its usual low form very attractive, but straggling even to unsightliness. The flowers must be always beautiful and the foliage graceful and delicate, but, grown low, the bloom is often obscured and the leaves trailed in the dirt. But let it be once raised up by grafting on a high stem of Yellow Locust,—Robinia pseudacacia,—and it becomes graceful and weeping. Both flowers and leaves suggest tropical vegetation. Indeed, the rosy color and curious form of the flowers and the elegant appearance of the leaves attract the eye more readily than choicer and rarer plants. Even in this form, however, the Rose Acacia is not perfectly satisfactory, for the stems of the Robinias are very apt to be disfigured sadly by the borer, for which no efficient remedy seems to exist. Meantime, many years may pass before the borer fairly gains sway, so that abundant time for enjoyment will remain to repay the trouble of setting out the tree. Once unsightly, the ax will readily remove it.

SUMMER-FLOWERING SHRUBS.

The St John's-worts or Hypericums form a group of flowering deciduous shrubs most valuable in more than one way. Midsummer affords few flowers to relieve the general green of the landscape, often dimmed at that season by drought and dust. Bright and free-blooming shrubs have consequently special charms at this season. The St. John's-worts form such a group. Their leaves are fine, oftentimes glossy, as in Kalmianum, and the bright yellow flowers, distinguished by a crown of numerous anthers, frequently cover the entire plant. Their proper position is on the outskirts of a group, where they afford abundant bloom throughout the hottest part of summer. There is a number of varieties, one at least of which has flowers three inches in diameter, like some great yellow Clematis: although many of them are well-known, they are not used to any great extent, certainly not to anything like the extent they deserve.

BERRIES FOR ORNAMENT.

Among the beauties of midsummer and early autumn, are the richly-hued berries borne by many deciduous shrubs. They often succeed attractive flowers, but are themselves scarcely less attractive. Just now the deep-crimson, waxy berries of the Tartarian Honeysuckle, and the glowing fruit of the Viburnum lantana, are specially notable. The latter is a shrub not sufficiently appreciated. It is choice and not easily propagated, and the fine and peculiar coloring of the foliage, among other shrubs, is very effective. The berries of this Viburnum hang in clusters, while those of the Tartarian Honeysuckle cling singly here and there to the stem.

TWO HYDRANGEAS.

In dwelling on the splendid attractions of the Hydrangea paniculata grandiflora, properly almost a fall-flowering shrub, we are apt to forget that there are other Hydrangeas possessing very charming qualities. For the present season of midsummer, Hydrangea nivea and H. carnescens are very valuable. If their flowers are less showy than those of H. paniculata grandiflora, they are earlier, large and of fine tint and of curious formation. The shades of white or flesh-color that distinguish either variety are indicated by the names *nivea* and *carnescens*. They present, however, special attractions in their foliage over that of paniculata grandiflora, on account of the white color of the under-side of their leaves, as shown when tossed up by the breeze. A varied group of Hydrangeas forms an effective feature on the lawn.

A LATE-FLOWERING WIEGELA.

Wiegela Lavallee is again proving itself a most noteworthy member of the species. After all other Wiegelas have long done blooming, it puts forth a second and most vigorous set of its chocolate flowers, a fact that quite distinguishes it from others of the species. The foliage is equal in vigor and health to any Wiegela, while its flowers are unsurpassed for peculiar beauty. It remains, however, rare, and like most choice shrubs grows in popularity slowly.

Samuel Parsons.

NOTES FROM THE RURAL GROUNDS.

THE BEST THING TO BE DONE UNDER THE CIRCUMSTANCES.

Wise parents would not condemn their children to devote hours daily to the study of music unless they possessed natural musical talents. It is doubtful if, by the most earnest study, they could ever attain to excellence. It would be unwise to oblige a young student to give most of his time to the study of mathematics, with the view of educating him to be a civil engineer, if he had no natural aptness for the study. At the most he could only hope to attain to mediocrity, a result that would not pay for the cost of its attainment. Better afford the facilities to young students to excel in that which comes easy to them—in that which their minds readily comprehend, and for which they have an intuitive liking, even though the profession chosen is less flattering to the high aspirations of the parents or the "dignity" of the family. Success in any respectable occupation is better than failure in any occupation that may be deemed to rank higher.

We wish to apply this reasoning to the farm, garden and orchard. In the district from which we write, the cultivation of Fall and Winter Apples is impracticable, as we view it. Yet hundreds of acres of land are covered by apple trees. They are vigorous. The soil and climate are all that need be asked. The trees blossom, set their fruit. It grows apace, is attacked by the Codling Moth and destroyed. The entire harvest of late apples would not pay for a tenth of the interest of the value on crops which might be grown in their places. Pomologists tell us—"fight them!" "You need not look for grand crops without labor." "Crops raised without labor are worthless." "If you are not willing to take care of your fruit, you do not deserve to have any." This is all true within certain limits. So qualified, it is the doctrine we advocate. But as there is a point beyond which forbearance ceases to be a virtue, so there is a point beyond which the cost of production is greater than the value of that which is produced. And this is precisely the point we have reached in this and many other sections of our country with Fall and Winter Apples. If the entire country were alike subjected to the same destructive agency, then all would be placed upon equal ground and all would share alike the cost of fighting that agency. As it is, however, we stand pretty much the same chance of raising paying crops of apples that the youth having no aptitude for mathematics has of becoming a distinguished engineer, or of him having no "ear for music" of becoming a noted musician. The best thing we of the cost-more-to-raise-than-the-crop-comes-to sections of country can do is to destroy our apple orchards and cultivate in their stead pears, grapes, garden or farm crops that *can* be raised without a suicidal expenditure of labor, time and means, leaving to the other sections of country a monopoly in those crops to which all the conditions are specially favorable.

THE HORSECHESTNUT SHRUB.

This was introduced many years ago and is just the shrub we should select for a farmer's front garden. Before us, as we make these notes, is a specimen about four feet high and not less than fifteen feet in circumference. There are forty-nine racemes, varying from six inches to eighteen inches in length, bearing slender white flowers with stamens twice as long and pale-red anthers. It may easily be imagined that now, while few other hardy shrubs are blooming, it is a very pretty and showy object. Those who think of this in association with other horsechestnuts will picture an erroneous idea of its habit. It has no inclination to be confined to

a single stem, but sends up many slender radicled shoots which spread out and then ascend, giving at length a hemispherical form to the plant, the leaves of which well conceal the branches beneath. It should stand alone or else be placed in the foreground of evergreen groups to relieve them during the summer. One reason why this plant is seldom seen in ornamental grounds is, that when very young, there is little about it to engage the eye. It is a young horse-chestnut—that is all. But when placed in rich soil, and given plenty of room, it develops in the course of four or five years peculiar beauties, which secure it a full share of attention. Its botanical name is Æsculus macrostachya—by some A. parviflora and Pavia macrostachya. It is propagated by layers and seed, though in this climate it does not fruit abundantly. We have three plants, and have never been able to gather over half-a-dozen seeds.

EXPERIMENT WITH GREEN PEAS.

Soil rather clayey and moist. Twelve seeds planted in each case. Variety, Tom Thumb. All planted June 21.

Two inches deep came up June 27. Nine germinated. Are now (July 16) in bloom and five inches high.

Four inches deep came up June 28. Twelve germinated. Are now in bloom and four inches high.

Six inches deep came up July 4. Three germinated—two died. Two inches high—not in bloom.

Eight inches deep came up July 6. One germinated and died.

Ten inches deep—none came up.

Miscellaneous

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

"It beats everything" how hard it is to get a girl to help do housework. After riding three days we hired the first woman to be had, and her husband too, to get her. In three towns there are not more than fifteen girls, all told, who "go out" to do housework. Of course there is a great demand for this meager number. The wages are from a dollar and a half, to two dollars and a half per week, but this is no temptation. A false pride is at the bottom of this whole question of labor. A girl will marry and be a drudge all of her life, but she will not work for wages, however comfortable her home may be. What shall be done?

An old agricultural paper of fifty years ago says soaking the turnip seed in fish oil will keep the flies from destroying the plants when they come up.

We are going to sow turnip seed in the cornfield to make feed for the store hogs and the cows after the corn is drawn out of the lot. What is left will make manure. The turnips will not hurt the corn any, as they will make the most of their growth after the corn is ripe. We sow the common flat turnip. The ruta-baga seed are all up and growing well; as they were soaked a week in water before planting, they came right up and this we think to be clear gain. It will not do to plant seed after being soaked so long unless they are covered deep. We put these down an inch. Two big loads of clover were cut from the patch before it was plowed. These plants are ahead of the weeds, which is one other advantage of soaking the seed. We roll the seed in plaster, but dirt will do to dry them so that they can be separated.

Esquire Davidson uses a pair of shears to cut the pea pods, and this saves the vines from being pulled. The least pull will start the roots and cause the vines to dry up.

Orchard-grass will do well on hard land. This is in answer to a correspondent. As the seed makes a tiny or delicate start the land should be made fine and mellow on the surface. It is best to brush the seed in or to cover with a smoothing harrow or one with the teeth wide apart. It takes two years for orchard-grass to get fully rooted, and after that it will grow rank and protect itself.

Melons will grow much faster if stones are placed around the hills. The stones retain the heat at night and also increase it by day, and this helps to push the melons on. This advice is not of much consequence where the climate and soil are natural to them, but in our more northern latitude and on our hard, stiff soils it is a valuable hint, as there will be a scant supply of melons unless a high degree of heat is kept up.

Mr. Nathan Smith keeps his pigs in a yard and cuts clover for them. He calls it "soiling his pigs." As soon as the patch is cut over, it is ready with another crop beginning at the oldest part. His pigs look fine. They eat the clover greedily and are fed all they want, three times a day. It is certainly an economical plan, and a little ground is made to go a great ways. More manure is made and perhaps this will pay for the extra trouble in feeding. The great want of all farmers is manure, and as Mr. Crozier says, "it is the mother of everything."

We are adhering this year strictly to the rule not to allow but one service for any stock animal. A close observation for years has satisfied us that it is the surest, and at the same time altogether best for the male.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

New Haven, July 13, 1878.

Bulletin No. 18. Fertilizer Analyses.

166. Muck. Sent June 11, by J. Hamilton Lee, Secretary Killingworth Farmers' Club.

167. Bone Meal. Manufactured by Rafferty & Williams, N. Y. "Consigned to Rodney Kellogg, Hartford. Not offered for sale." Sampled May 2d, by J. J. Webb, New Haven.

172. Nova Scotia Plaster. Manufactnrod by G. W. Miller, Middlefield.

173, E. F. Coe's Ammoniated Superphosphate.

174. Abattoir Guano. E. F. Coe, Long Island.

172, 173 & 174 were sent June 26, by P. M. Augur, Secretary Middlefield Farmers' Club.

D—Guaranteed Strictly Pure Paris-Green. From stock of J. O. May, Naugatuck. Sampled and sent June 10, by J. B. Talles, President Naugatuck Farmers' Club. Price 50 cents per pound.

	167	172	173	174
Nitrogen	1.55		2.16	2.49
Soluble Phos. Acid			8.92	8.56
Reverted " "			1.18	.58
Insoluble " "	15.63		1.42	1.37
Potash				3.76
Gypsum		91.06		
Insoluble Matter		1.31		
Estimated Value	$27.46		35.05	39.96
Cost	25.00		40.00	40.00

166

Water	$73.54
Organic Matter (Containing Nitrogen .06 per cent.)	21.12
*Ash	5.34
	$100.00

*Of this 4.19 per cent. is insoluble in acid.

D—Contains 55.19 per cent. arsenic (arsenious acid) and 24.97 per cent. copper. It is accordingly very pure Paris-Green.

S. W. Johnson, Director.

Industrial Implements.

THE McSHERRY DRILL.

This drill, like many others, has the various attachments for sowing grass and fertilizers, being thoroughly equipped in such respects. Its cups, for any grain to shake out or escape in any other way than by the action of these wheels, the result is a regular, continuous flow of seed, making skips an undreaded interruption. They do not break the grain, because the spiral wheels are provided with a Patent Washer at the end of each, revolving with the wheel and preventing the grain from being caught and crushed. These wheels and washers are very durable.

The quantity to be sown per acre is regulated by cog wheels, and is governed by established rules. It can be regulated to sow any desired quantity per acre, and can be changed in a moment by taking off one wheel and slipping on another. The feed sows equally on all kinds of land, and exhausts the grain from the hopper uniformly.

The hoes may be changed from zigzag to straight rows by merely withdrawing bolts and removing the bar so as to bring the hoes into single or double rank; re-inserting the bolts holds the hoes rigid in their new positions. This is said to be a very strong and satisfactory hoe-shifting device, but, where preferred, a lever hoe-shifter is furnished at a small extra cost.

The patent lift-bar for raising hoes is strong, light and neat. By raising it hoes are withdrawn from the ground and the grain-flow cut off, the grass-seeder stopped, and the land-measure prevented from marking measurements. The drill is always in gear when the hoes are lowered into the ground, and out of gear when the hoes are raised. It is thrown in or out of gear by raising or lowering the hoes.

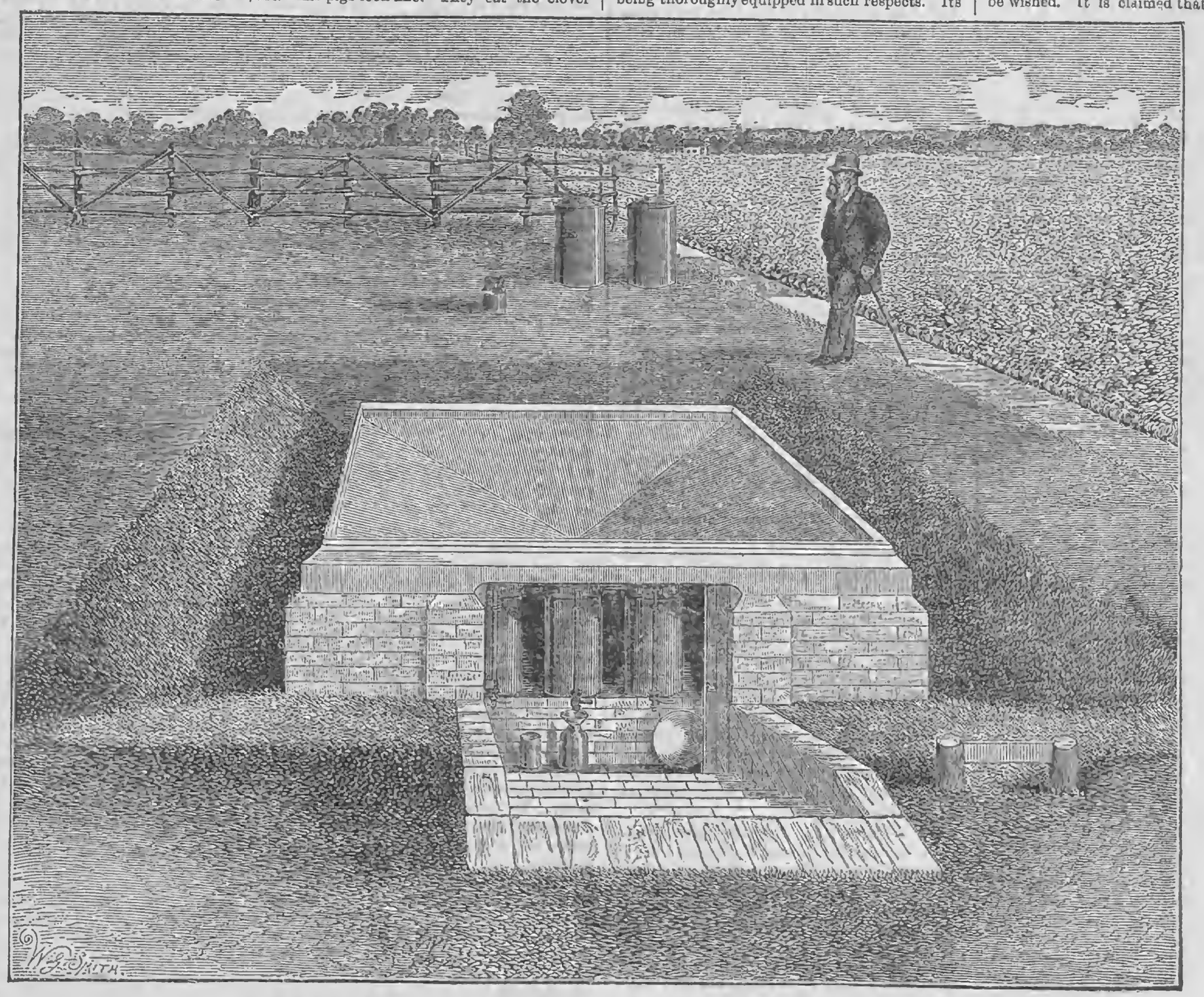
The size, shape and arrangement of the cups, illustrated by cuts, and circulars fully descriptive of the drill, may be had by applying to D. E. McSherry & Co., Dayton, Ohio.

CORNISH & CURTIS'S BUTTER-WORKER.

The Butter-worker sent us for trial by Cornish & Curtis, Fort Atkinson, Wis., has been steadily in use with good results. It is very simple in construction, being a triangular table with raised sides, resting on a tripod. The table inclines gently away from the operator, who stands at the base of the triangle. The worker, a hexagonal wooden bar, is fastened at one end, and works laterally, or perpendicularly as may be wished. It is claimed that cheapness, durability and effectiveness are secured by using th worker.

We can attest to the justness of the claims. It does good work, and is durable. Its price, $3.50, is not exorbitant.

The Wood-Binder is doing excellent work. A recent trial on a large grain-field in New Jersey where the grain stood up well, the Binder did the work of five men, tying the bundles and throwing them at least six feet clear of the harvester,



ROTHAMSTED EXPERIMENTAL FARM—(See page 470.)

The Querist.

ANSWERS TO CORRESPONDENTS.

The Grape-Vine Flea-Beetle.

E. S. Smith, Susquehanna Co., Pa., asks what is destroying his grape-vines, and incloses specimens of an insect that, from the first warm days of spring, eats into the buds, and then devours the leaves, if there are any. There is also a slug which is making its appearance on the leaves, in his opinion probably a descendant of the other. He is anxious to learn how to destroy them, for unless destroyed, they will not leave a grape another year.

ANS.—The specimens, which were excellently arranged for transportation, were the adult form of *Graptodera chalybea*, or the grape-vine flea-beetle. As mentioned by Mr. Smith, they appear early in spring. Soon after their appearance, they lay their eggs, as a second brood is found on the grape-vines towards the end of July, and other broods are found later. Probably the "slugs" which are making their appearance on the leaves are the descendants of the beetles, though no specimens were sent to be examined. The larva of this beetle is of a light-brown or chestnut color, with eight rows of black spots on the back, the spots of the two middle rows running together. When full-grown, the larva is about nine millimetres long. The head and feet are black. There are six true-jointed legs under the fore part of the body and there is one fleshy prop-leg at the other extremity, but the under side of the belly-rings is swollen, so that there seem to be prop-legs along the belly. When the larvæ have done feeding, as they have in about two weeks after hatching, they go into the ground to change into beetles. Grape-vines are much benefited by watering their roots with strong soap-suds, and there is no time when it is easier to kill the larvæ by pouring suds on them than just as they go under ground. While they are feeding on the leaves, they may be dusted with hellebore or with Paris-green; even lime dusted on the leaves is said to kill them. The beetles are hard to catch in ordinary ways, except by catching them with what the entomologists call a bag-net, that is, a bag on a hoop. This may be swept along close over the leaves of the vine, and then the beetles may be plunged into hot water.

Aphides on Grapes.

Mrs. Leverett P. Judd, Bethlehem, writes: In the RURAL for July 6th, I notice some one asks whether there is any remedy for the little brown Aphides upon young grapes, and so forth.

We have always used for all such things an old pan, partly filled with dry tobacco leaves: set the tobacco smoking, and hold the pan right under the parts affected. The smoke will kill all such troublesome pests, and will destroy the lice often found upon thrifty rose-bushes.

The Beautiful Wood-Nymp Moth.

Sylvester Leyman, Schoharie, N. Y., sends a miller new to him and wants to know all about it.

ANS.—The miller is known as the Beautiful Wood-nymph (Eudryas grata). Its caterpillar feeds on the leaves of wild and cultivated grape-vines, and on those of the Virginia-Creeper (Ampelopsis quinquefolia). Sometimes the caterpillars appear in such abundance on the latter plant, as it grows upon trellises on the walls of houses in ew York and other cities, as to strip the vines bare of leaves. Two other kinds of caterpillars, bearing so close a resemblance to this as to have made skilled entomologists find it difficult for a long time to distinguish them, occur also on the grape-vine and Virginia-Creeper. These are the caterpillars of the Eight-spotted Forest-moth (Alypia octomaculata) and of the Epimenis moth (Psychomorpha epimenis). Still a fourth kind of caterpillar resembles these three, but although the most nearly related to the Beautiful Wood-nymph, it feeds upon an entirely different plant—the Purple-veined Willow-herb pilobium coloratum). This last caterpillar produces the moth known as the Pearl Wood-nymph (Eudryas unio). Mr. J. A. Lintner, of Albany, upon whose writings we are relying in this statement, has pointed out the differences which serve to distingnish these four kinds of caterpillars, and these differences may be indicated sufficiently as follows:

All four of the caterpillars are humped on the eleventh segment behind the head, or the last segment but one of the body; but this hump is much more prominent on the caterpillar of ndryas grata than on the others, being, to use Mr. Lintner's words, "angulated at that point to a degree that were it a vertebrate it would suggest the idea of its terminal portion dragging, rom having been broken at that point." The body, otherwise, is nearly cylindrical, and tapers om the hump regularly toward the head, hich is round and rather more than half as ide as the widest portion of the body.

The body is transversely banded on each segment with white, black, and orange, except in ychomorpha epimenis, which lacks the orange bands. This caterpillar has on each segment our white and four black bands alternating. The other three caterpillars have six distinct black bands on each of the principal segments and the Alypia octomaculata has in addition a black edging on each side of the broad central orange band, so that it may be said to have eight black bands on each ring. It may be further distinguished from the two Eudryas caterpillars by having a row of white spots along the lower margin of the sides, and by having white hairs as long as the width of the body on each of the black spots on the back and sides. The two Eudryas caterpillars have quite short brown hairs on the black spots.

Thus the three of these caterpillars which are found on the grape-vine and the Virginia-Creeper, may be distinguished from each other, while the fourth is not so likely to be met with and not of so much interest to the horticulturist. However, the caterpillar of Eudryas unio has the black bands which cross it nearly twice as wide as the white ones, while the caterpillar of E. grata has these black bands only half as wide as the white ones, and, as mentioned above, it has the hump on the eleventh segment very prominent.

Figure of larva and imago of Ps. epimenis in Lintner's Entomological Contributions, No. 3, in the 26th Report on the State Museum or New York, p. 121. Do., of Alypia octomaculata l. c. p. 122. Do., of Eudryas grata l. c. 122, 123.

Making an Æolian Harp.

J. N. J., Mount Vernon, New York, asks: Can you give me instructions through your paper how to make an Æolian harp; particularly as to number of strings and manner of tuning?

I saw a home-made one on the 4th inst. that was not satisfactory to me, and I would like to make a better one. That had seven strings; too many *I* think. It was made entirely of pine. Would not spruce top be better?

ANSWER.—The harp commonly used is a box of *thin* wood, of suitable length,—the width of the window-sash, near which it is placed, being a good length. It should be about five inches wide and six inches deep. It adds to the effect to perforate the topmost board, over which the strings are suspended, in much the same way that the body of a violin or guitar is ventilated.

Fifteen strings of gut or wire should be employed, and fastened at one end of the box by pins. They are then passed up and over two glued strips of wood that serve to keep them from lying on the surface of the box, and fastened at the opposite side of the box by pegs, that perform the same functions as pegs in violins, etc. By turning to right or left the tension is increased or diminished until the desired unison is produced. The box is *open* on the sides presented to the room and to the exterior air, that is, the harp has only top, bottom and end pieces. The strings are sounded by the passage of air through this clear space.

Pine is not a satisfactory wood to employ in making an Æolian harp; something that is hard, not resinous, and will not easily be affected by moisture is the best material to be used. We should think ash a good wood for the purpose.

Another and simpler way to construct the harp is to stretch the strings over the open top of a box that has its three remaining sides closed. The effect is not as good, however. When placed in position, the window should be only partially open, that a strong current of air may be induced.

Miscellaneous.

W. Bernstein, Hennepin Co., Minnesota, asks for the best method of killing the wild Morning-glory in the field.

ANS.—The roots of this are creeping and perennial. There is no other practicable way to exterminate the plant but by a persistent disturbance of the roots by plowing.

A. R. C., Woonsocket, R. I., inquires as to the efficacy of prepared egg food, mentioning several preparations advertised for sale.

ANS.—Those that we have tried are no doubt good for poultry. They give, in a prepared state, food which poultry need, and which might not otherwise be given them. There is nothing in these preparations, however, that will produce eggs any more than good feeding, good care, and, once in a while, some cayenne pepper and ground bone. As a regular food it would be rather costly for farmers.

N. J. B., Little Rock, Arkansas, says: Please accept my thanks for the "Cricket." It is undoubtedly the neatest, handiest, and certainly the *cheapest* timepiece in existence. I cannot make out exactly what it cost me. I used to pay for the RURAL 10 cents per copy, that is, annually $5.20. Now I send you $3.50, leaving $1.70 in my pocket, and I receive the RURAL and "Cricket." Now, how much for the paper and how much for the clock, and to what account shall I credit the $1.70? Please solve this problem.

ANS.—The retail price of the RURAL should be but six cents.

Wm. T. Martin, Mifflin Co., Pa.—Is it beneficial to cantelope and melon vines to cut off the end? Why, and when? Should it be done with pumpkins, etc.? Please answer in the RURAL, and oblige yours.

ANS.—Cutting or pinching off the ends of such vines restricts the area of growth, inducing lateral shoots. If it is desired to raise large melons or pumpkins, stopping the vine by giving to the fruit more nutriment, will tend to accomplish it. The time for pinching is when they have made a considerable growth and the fruit has set.

L. W. S. What kind of a paper is the Burlington Hawkeye, and where is it printed?

ANS.—The Hawkeye is published at Burlington, Iowa, a daily and weekly edition is issued. It is in most respects similar to papers of its class, but has been brought into prominence by the humorous writings of one of its editors, Mr. BURDETTE. The paper is republican in politics.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JULY 20TH:

M. E. S.—May Maple—J. F.—J. H. C.—J. P. C., "samples" not yet received—"Hector Bertram"—C. D.—W. J. F.—E. E.—A. H.—S. B. P.—M. G. R.—L. P. J.—H. H.—Mrs. M. A.—W. J. B.—W. B.—W. J. F., No. 2—F. D. C.—"A Subscriber"—A. W. W.—"An Old Housekeeper"—J. L. R.—M. W.—J. E. M. C.—H. H., No. 2—H. M. S.—S. B. P., No. 2.—M. B. B.—W. R. B.—E. S.—D. E. S.—J. W. K., thanks—E. R. B.—S. R. M.—"A Subscriber" No. 2.

Everywhere.

CALIFORNIA PECULIARITIES.

W. C. L. DREW.

THROUGH the foot-hills, at this season of the year, the early morn is perfectly enchanting about sunrise. The healthy and invigorating atmosphere is filled with a dewy fragrance peculiarly Californian, making the happy spectator feel as buoyant as if freshly invigorated with a draught from the fountain of youth. On one hand, we behold the vineyards amid the rolling hills, covered with emerald leaves, and the grape in blossom; in the front is an apparently endless orchard, heavily laden trees completely shading the ground, while here and there we notice a giant cherry tree, crimson with ripe, luscious fruit, tempting us to invade the grounds. Looking to the other hand, many a hill covered with tall and waving rye, golden wheat, or newly-mown hay, presents a truly grand and imposing picture. Now is the time to enjoy scenes like this, while all nature is wearing her spring robes, while mankind is happy gathering in the abundance with which she has blessed him, and the ranks of KEARNEY (the San Francisco labor-reformer) are nearly deserted for the harvest field.

The equability, mildness, and dryness of our climate are peculiarly favorable to the sound action of the vital organs of the vegetable world. Vegetable growth is exceptionally vigorous here. Our fruit trees grow more rapidly than in the Eastern States, come to maturity earlier, and bear more abundantly and are free from insect depredations. The variety of our vegetation is greater, our vegetable markets are justly the pride of our people, differing from most of the great markets of the world—they are perpetual. And further, when frost and snow cover most of the Eastern States and cities, the greatest varieties of all kinds are produced here, and are most abundant in the city markets and peddlers' wagons. Winter and early spring are the most prolific seasons, in the summer and fall seasons vegetables are raised through irrigation, and consequently are much less abundant.

Even our flowers are far more prolific; we have not as many roses in June as they probably have in New York or Boston, but we have them all the year round. Further, ours form handsome trees with trunks from two to four inches in diameter, large spreading tops four to eight feet across and growing ten to twelve feet high; our Oleanders, instead of being puny pot-plants, grow in the open air the year round, forming handsome flowering trees twelve to twenty feet high, quite as large as an ordinary-sized apple tree. Our Verbenas and Pansies furnish flowers at Christmas as well as in June, without the aid of protection of glass or green-house. The palm tree and the persimmon, the orange and the apple, the vine and the pine-apple, the fir and the nopal (or prickly-pear), stand side by side to prove that the climate of California is favorable to the growth of plants indigenous to both the tropical and frosty regions.

California has already produced vast changes in the financial and commercial world. So rich has been her production of gold, that its value has been reduced heavily all over the civilized world. Its mines of cinnabar have affected the price of quicksilver to a like extent, and, for many years to come, our mines bid fair to hold their own. In our own vicinity, El Dorado County, the mines are, if anything, improving on what they have been during the last few years; in fact, so greatly has confidence in our mines been restored, that many which have been idle for five or six years were, this spring, started into new life again with new and improved machinery, thus bidding fair to restore California to her "good old days of yore."

El Dorado Co., Cal.

RURAL SPECIAL REPORTS.

ROCHESTER N. Y. July 18, 1878.

FOR the past five weeks we have had dry hot weather with but few showers—until last week when we had several light ones. Haying is nearly over; the crop generally having been good in quality and quantity. The market is overstocked, really fine timothy hay well cured having been sold as low as $8.50 per ton, although the average price is about $10 the ton. Good, clean timothy, of last year's crop, free from chaff, is offered at prices ranging from $10 to $14 per ton.

Wheat harvest has commenced, but few pieces being left standing. The acreage has been large, the straw generally good and in most cases the heads are long and well filled. Farmers are looking for a large number of bushels, but a low price, the general impression being that $1.00 the bushel will be the prevailing price, although some few will hold their crop for $1.10. Spring wheat is not grown much through this section, being considered an uncertain crop. There are some good pieces; but it is generally poor, owing, I think, to late planting, as every piece, so far as my observation goes, put in early, will turn well.

Oats, though a variable crop, are looking well. Barley is a small crop, but few acres planted and these promising poorly. Potatoes are coming on better than was at one time anticipated, still I do not think the crop will be large. Bugs are plentiful, but Paris-green kills them. Beans seem to have been neglected for wheat, particularly this is true of Orleans Co. and Niagara Co., as, in a recent trip through them, I noticed but few acres of this crop as compared with last season.

With a large crop of grain through the country, prices fairly remunerative, and confidence, in a measure, restored, this season should see the dawn of better times. H. T. J.

ALLEN CO., KANSAS, July 13, 1878.

On June 1st my corn was 4 feet 6 inches high; on June 15th, eight feet ten inches; on June 30th, eleven feet eight inches. How is that for high? I am going to cut it in another month, on the 15th, when I expect it will be about fifteen feet!

There is sure to be another rush out of Kansas and I will tell you why. First, we have only one market, namely, Kansas City. Everything has to go through there, and all the immigration is to the Western part of the State. They try to get as far as they can away from a poor market, if they can only get railroad land, and as far away as they can from timber brush also. They will get their eyes open after six months or a year, then they will face homewards. I can buy improved farms here, within one hundred miles of their poor market, all fenced and hedged-up, house, fruit and water, within one to four miles of good timber, for as low a figure as they pay for their railroad land. Fat steers are worth $3 to $3.50 here now; fat hogs are doing better; they sell now for $3, but have been down to $2. I for one go in for good land, coal, wood and water. In some places they have to go 25 to 50 miles for their wood. I spent about eight months looking over Kansas before I fetched up here, and if I stay in Kansas, here is the place for me. A. W. W.

BROOKLYN, N, Y., July 17.

I WAS much interested in the remarks of your correspondent Renoclaf, respecting Rhododendrons, as he saw them at Mr. Hunnewell's. Where a great variety and display are desired, and one has unlimited means, it may be desirable to have half-hardy varieties. But for ordinary collections it seems to me that the choicest of the Catawbiense varieties ought to suffice. With these, when once established, no especial care is needed afterwards. With the Ponticum varieties, there is no end of care, trouble, accident and disappointment. J. C.

PEQUONOC BRIDGE, Conn., July 17, 1878.

THE fore part of June was dry; since then fine showers have fallen at intervals of perhaps a week. Crops are exceptionally good; hay is heavy, and farmers have succeeded in getting it stored in good order. Despite beetles and slugs, new potatoes are plentiful and cheap. We have had some remarkably hot days this month. The fourth was said to be the hottest so far this season; I think times are getting better. I judge so by the smiling faces I meet on all sides.

M. W.

FULTON CO., Ga., July 10th, 1878.

WEATHER warm and dry, occasional showers, not sufficient for the demand. Cotton and Corn promising a full crop and a little surplus.

Fruit is in abundance. Peaches and Apples are now 50 cents per bushel. Irish potatoes very dull at 50 cents per bushel. Sweet potatoes just coming in at $1.50 per bushel. Wheat thrashed, and yield, averages 10 bushels to the acre—very good for this country. Times rapidly improving. CHAS. DECKNER.

PHELPS, N. Y., July 19th, 1878.

WE have had four days of intensely hot weather. Thermometer has ranged from 90° to 96° in the shade. No cases of prostration have as yet, however, come to my knowledge. Half of the wheat crop, which is very heavy, has been secured, and about all will be, in two days more.

Barley is cut, and a good crop. Apples plentiful; peaches will be a small crop. Grass was unusually heavy. W. R. B.

NEW YORK, July 18.

Thermometer in shade, highest, 98°; July 19, highest, 96°; July 20, 11.30 A. M., 86°.

PAINESVILLE, Ohio, July 17.

WEATHER hot, hotter, hottest. M. B. B.

Various.

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

ORCHARD PLANTING AND MANAGEMENT.

T. T. LYON.

VERY many farmers who would not hope to secure a profitable crop of grain without thorough tillage, and with whom the idea of successfully growing a hill of beans, corn or potatoes, without previous preparation of the soil, together with careful after-tillage, would be thought preposterous, so far forget these fundamental ideas that, when they contemplate the planting of an orchard, their first step is to sow the field with grain, and then proceed to plant the trees, leaving the grain to grow up directly about them, while yet others either seed the ground to grass, in advance of the planting of the trees, or do so immediately thereafter. Indeed, I am not sure that I may not be warranted in the charge that the average of farmers act upon the idea that a fruit or ornamental tree only requires to have its roots thrust into a hole and the earth drawn about them, after which the tree is expected to take care of itself.

Whatever may be the conviction of the average farmer of to-day on this subject, and however much he may be disposed to repel so discreditable an idea, the fact remains that, if judged by their practice, they are amenable to the charge that a very large proportion—perhaps fully three-fourths—of the trees annually purchased by them, and planted in farm orchards, fail to pass safely through the first two or three years of their orchard life; not, as in most cases we are compelled to believe, from any defect in the condition of the trees, but rather, as in cases above assumed; because, even when tillage is not wholly omitted, the soil in which they are planted is taxed nearly or quite to the extent of its capacity, in the effort to supply the demands of the accompanying crop, while the newly-planted trees are compelled to acquire a hold upon the soil, and to push their rootlets through a space preoccupied by the hungry roots of the growing crop; and too often to struggle against them for the moisture and food required to supply the means of growth as well as the waste from evaporation of an entire top, left unpruned at the time of transplanting under the fallacious assumption that so much will be gained (saved), in the future growth of the tree; oblivious of the fact that, in the process of removal, the roots must have lost three-fourths, if not even seven-eighths, of their capacity to draw sustenance from the soil, leaving the tree in imminent danger of starvation before the deficiency can be remedied by a renewed growth of roots.

I feel assured of the indorsement of every well-informed and experienced planter, in taking the position that no possible circumstances can render it profitable to plant young trees, in grounds that cannot be subjected to culture with the hoe or cultivator, or both, while many planters, especially on light soils, consider it necessary or profitable to give up the entire soil to the trees, to the exclusion of even hoed crops. In fact, I am persuaded that, upon any and all soils, whether light or heavy, the planting of even hoed crops, among young trees, is mainly to be commended for the reason that it supplies an excuse, not to say a necessity for the kind of culture requisite to the prosperity of the trees, which, beyond doubt, would be the better for such culture, with the entire absence of all other crops.

Agricultural writers not unfrequently recommend the mulching of newly-planted trees as a means of subduing weeds, and preventing the drying of the soil and the hardening of the surface. I would certainly prefer that trees be well mulched rather than allow the earth to become hardened about them, or to become subjected to the exhaustion of its moisture by the roots of growing vegetation of any kind; but, to me, this would be only the choice of a lesser evil: just a little better than nothing. I do not believe that a good crop of corn can be grown under any possible system of mulching; and from the entire absence of practice, in that direction, even among our worst farmers, I infer that they also lack faith in such practice. Indeed, I can conceive no adequate reason why it should prove more successful in the one case than in the other. Few persons, I imagine, can have failed to observe how effectively, even in the hottest weather, or during the severest drought, the deep and thorough disintegration of the soil operates in bringing up moisture from the subsoil, for the refreshment of flagging vegetation. In the nursery, during the season for budding, the occurrence of heat and drought not unfrequently stops the growth of young stocks, rendering budding impossible; in such case the thorough stirring of the soil between the rows, will usually renew the growth, and again render the process practicable.

As a striking instance of the success of this process, I recollect that one of the most extensive planters and thorough cultivators of this State, with from one to two hundred acres of newly-planted orchard, a few years since, in mid-summer, discovered that, during hot, dry weather, his trees were forming terminal buds, indicating the closing of their growth for the season. Not satisfied with this he, by the vigorous use of the cultivator, soon succeeded in the renewal of their growth, and in obtaining a very considerable increase of the same, during the remainder of the season. I will, however, add as a caution against the too persistent carrying out of even a good idea; that, in this case the cultivation was continued, and the growth maintained till so late a period, that the advent of an unusually trying winter found the young wood so imperfectly ripened that the orchard was seriously injured in consequence. The lesson drawn from this untoward experience is, that such cultivation cannot, in this climate, be safely continued beyond the middle of August.

South Haven, Mich., July 8th, 1878.

CATALOGUES, ETC., RECEIVED.

THE Native Flowers and Ferns of the United States, by THOMAS MEEHAN. Published by L. Prang & Co., Boston, Mass.

Parts III., IV. and V. have been received. Part III. presents colored plates of Hellenias bullata, which the author proposes to call Studflower, as it has no common name. This is suggested to him from the specific Latin name "bulla," meaning nail heads or studded ornaments;—Carex stricta (Tussock-Sedge);—Cuphea viscosissima (Blue Wax-Weed);—Thalictrum dioicum (Early Meadow-Rue). This is interesting chiefly to the botanical student, the male and female flowers being borne on different plants. The leaves are delicate and pretty. Thalictrum cornuti, whose foliage is prettier, is blooming now.

Part IV. gives first Anemone patens, var. Nuttalliana (Nuttall's Pasque-Flower);—Orchis spectabilis;—Symplocarpus foetidus—(Skunk-Cabbage)—(Of this we have a very decided variegated-leaved variety found in the woods last year);—Pedicularis Canadensis (Common Wood-Betony), with its bright, curious flowers and fern-like foliage.

Part V. gives our Yellow Dog-tooth Violet (Erythronium Americanum), millions of which may be found blooming in moist woods before the buds of trees and shrubs have thought of breaking. This thrives well under garden culture, and even in dry situations, though seeming to prefer moist ones by nature. There is a white variety of this found North and West (albidum) which with the Americanum, yellow, and the European variety (Dens-canis) should provide the material for a fine race of garden hybrids. It seems queer enough that Mr. Meehan should seem satisfied to call our Erythronium "Yellow Dog-tooth Violet" which mixes up our species with the European, in preference to Yellow Addor-tongue by which it is already quite well known. Besides it is not a violet or anything like one.

The other colored plates are (second) Phlox subulata (Moss-Pink);—Saxifraga Virginiensis (Early White Saxifrage) and, last Arctostaphylos Uva-ursi (Bear-berry). The text of all is exceedingly interesting and filled with instructive and suggestive particulars.

ELEVENTH ANNUAL EXHIBITION, Jersey County Fair to be held at their grounds, city of Jerseyville, Illinois, commencing Tuesday Oct. 15. Premiums $5,000 in cash. MORRIS R. LOCKE, Jerseyville, Secretary. Entries in any department or class can be made at any time before the exposition, by application to the Secretary either personally or by letter, at his office and on the Fair grounds, up to 12 o'clock M., on Wednesday, October 16, except in cases of live stock to be exhibited in the arena, which must be entered before 10 o'clock A. M. on the day of exhibition.

NEW YORK State Agricultural Society. List of Premiums and Regulations for the Thirty-eighth Annual Fair to be held at Elmira, Sept. 9 to 13. Corresponding Secretary, Thomas L. Harison of St. Lawrence; Recording Secretary, William H. Bogart of Cayuga. Copies of the premium list and blank forms for entries will be furnished on application to the Secretary at the Agricultural Rooms. Letters should be addressed to the New York State Agricultural Society, Albany, N. Y.

PRIDE OF THE HUDSON RASPBERRY.—Early in the Spring Mr. E. P. ROE sent to us a number of plants of the above Raspberry. They have made a strong growth and each has borne fruit. Our opinion upon so brief a trial would be next to worthless. So far as it can be judged from the test of a single season, we can confirm the highly favorable reports which have from time to time been published.

We have now to acknowledge having received a quart or more of the berries at this office, in excellent condition, from Mr. ROE's grounds. The average circumference is little less than two and a quarter inches; the color bright red and the flavor as good as that of any variety of which we have any knowledge.

THIRTY-SECOND ANNUAL FAIR of the Burlington County Agricultural Society and the First Annual Exhibition of the N. J. State Horticultural Society, to be held at Mount Holly, N. J., on Tuesday, Wednesday and Thursday, October 8th, 9th and 10th.

PREMIUM LIST of the Indiana State Fair to be held at Indianapolis Sept. 30, to Oct. 5. This fair offers $10,000 in premiums. It is held under the auspices of the Indiana State Board of Agriculture of which Alex. HERON is Secretary.

PREMIUM LIST of the Georgia State Fair to be held at Macon, Ga., beginning Oct. 28, and continuing one week. Premium lists will be sent by mail on application to the Secretary, MALCOLM JOHNSTON, Macon.

VIRGINIA State Agricultural Society. Regulations and Schedule of Premiums for Fair commencing Tuesday Oct. 29. W. C. KNIGHT, Secretary, Richmond, Va.

The Poultry Yard.

PEKIN DUCKS.

SEVERAL here bought eggs of Pekin Ducks this Spring, all have proved a complete failure but mine. Several of my eggs were broken at Chattanooga, though I succeeded in raising three ducks. One is not doing well, I fear I will lose it; so in my trouble I write to you, hoping you will write me what to do for it. Please tell me what they are fed upon. M. L. J.

Brownsboro, Ala.

ANSWERED BY HENRY HALES.

In answer to several inquiries through the RURAL in regard to Pekin Ducks, I will give a brief account of them. As their name suggests, they originally came from China; in 1873 were first exhibited at Hartford in the fall of that year, and rapidly came into favor from their great size, fine laying qualities, and domestic habits. At their first introduction many doubts were circulated as to their laying qualities, and next, their merits as table birds; these points have been fully answered by the birds themselves; they are tamer, larger, better layers, and fully equal to any other domestic duck in flavor and quality. In fact, they are well worthy the praise bestowed on them. Their eggs are very slightly larger than the Aylesbury's, and they average more white-shelled eggs; sometimes they will lay white eggs for quite a while, when suddenly a bluish-green egg appears again. I have kept most varieties of ducks, but seldom had them lay in fall till I kept the Pekins; these will lay heavily in the fall when hatched early and having a river's edge to feed by.

To give these ducks their original large dimensions, a water-edge where fish is obtainable will assist their size; yet, like their cousins, the Asiatic fowls, they are content with small space when well fed; they are not more greedy eaters of corn than other ducks; considering their size, I believe they consume less grain, and they will eat much more grass. They feed on green food almost like a goose, where they can find it. They are fine ducks for the South, but our very cold snaps in the North seem to affect them, still they lay as soon as any other ducks. The young mature very early, when well fed—most kinds of soft food that hens will eat are good for them. Fish chopped up, such as clams or horse-shoe crabs is the finest food; but if one does not live near water, curd is very good if one happens to keep a cow, but there is no necessity to buy either a water-front or a cow to keep ducks. They are such good feeders nothing comes amiss to them: boiled potatoes mashed up with a little ground scrap-cake, corn-meal, wheat middlings, oat-meal, rice, soaked bread, are all good for the ducklings, and they want change of food often; but all meals are best scalded, yet raw meal will not hurt them, but they grow faster on cooked food. Soft food should be given cold and not so stiff as when given to chickens. They should not be allowed to go off to water until they are five or six weeks old; the water does not hurt them in warm weather, but they get into much trouble from their helplessness: such as not being able to get up a bank from the water and so getting left behind to perish; others get caught by turtles and other enemies. I make a yard with four long boards to keep them in before venturing to the water, with a large low pan of water in it, with one side tipped up, or a piece of wood for a step, that the ducklings can get in it; this can be taken up and washed two or three times a day. Also, stand a flower-pot, inverted, in their soft-food pan, so they cannot drabble through it dirtying their food.

When ducklings get over six weeks old, oats in a pan of water make a

GOOD FOOD.

When full-grown, potatoes and turnips boiled and mashed with a sprinkle of meal are very good, in winter a little scrap cake keeps them in health. Any kind of vegetable green food is relished; a little onion at times chopped up in it helps their condition. I should have said there must be a warm box for the ducklings in the yard, and they must be kept in during cold rains, as nothing kills them off quicker than cold rains, when very young, they not knowing enough to get out of the wet.

Doctoring ducklings appears useless, for when once they ail at all, they are hard to cure, except what can be done by change of food and care.

HENRY HALES.

The Swine-Herd.

DUROC SWINE.

RED and sandy hogs, called Duroc, have been bred in parts of New York, for more than fifty years. They have been crossed and recrossed upon other breeds during all these years, and their progeny have always retained characteristics of the original sire first brought into the county about the year 1823. Mr. Isaac Frink purchased him of Mr. Kelsey, of the town of Florida, Montgomery County, N. Y., who claimed to have imported a pair, the immediate ancestors of Mr. Frink's pig, from England. Mr. Kelsey was the owner of the celebrated horse Duroc, and Mr. Frink named the descendants of his pig Duroc, in honor of the horse by that name.

The Duroc pigs were popular and spread into Washington and adjacent counties, where they are still bred. They are undoubtedly descended from the same original stock as the Jersey Reds, now bred in the State of New Jersey, and hogs called Red Berkshires in some parts of New England. They were probably an offshoot or family of old-fashioned Berkshires. This opinion was expressed in the National Swine-breeders' Convention, and no one has yet controverted it. The old type of Berkshires often showed pigs of reddish cast, and at the present time this characteristic breaks out in the form of plum color, sometimes with a hue quite red. It is remarkable that one pig should have so strongly stamped his color and characteristics on his progeny that at this late day all of his scions exhibit more or less marks of the original type. Some of them have been crossed upon the modern Berkshires to such an extent that the old form is changed, the ears being erect and the body shortened, but the inevitable red, or sandy color, is carried along from generation to generation.

The true Duroc, as now bred by those who are aiming to keep the breed perfect and establish them as thoroughbred, should be long and quite-deep bodied, not round but broad on the back and holding the width well out to the hips and hams. The head should be small compared with the body, with the cheek broad and full. The neck should be short and thick, and the face slightly curved, with the nose rather longer than in the English breeds, the ear rather large and lopped over the eye. They are not fine-lined nor yet coarse, but medium; the legs medium in length and size, but set well under the body and well apart, and not cut up high in the flank or above the knee. The hams should be broad and full well down to the hock. There should be a good coat of hair of medium fineness, inclining to bristles at the top of the shoulders, the tail being hairy and not small; the hair, usually straight, but in some cases a little wavy.

The color should be red, varying from dark glossy cherry red, and even brownish hairs, to light yellowish red, with occasionally a small fleck of black on the belly and legs. The darker shades of red are preferred by most breeders. And this is the type of color most desirable. In disposition they are remarkably mild and gentle, and are so docile that they are readily confined by low fences. They are kind and careful mothers and wonderfully prolific. They have a remarkable ability to digest food and to make growth. This is owing to their hardy constitutions and perfection in the proportions of their bodies, and the strong blood which has made its mark so notably for more than a half century. It is a common thing for Duroc pigs at six months of age to weigh 300 pounds, and at eight and ten months to turn the scales at 400 to 500 pounds. Hogs a year and a half old have weighed from 700 to 800 pounds. Pigs four weeks old will weigh from 20 to 30 pounds and measure over two feet in length and from 6 to 8 inches across the shoulders. For rapid growth and ability to lay on flesh the Durocs are not excelled. The meat is not coarse-grained, but fine and tender. Their powers of assimilating food are so great that they readily eat coarse food more dainty breeds would not touch, and will even fatten on grass alone, and in winter will eat with avidity clover hay and roots that other hogs will refuse. They are not subject to mange or liable to get sunburnt.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Experimental Farm—J. B. Lawes' (Illustrated)... 469
Notes from Maplewood Farm—Hector Bertram.. 470
Drainage—R. C. Carpenter..... 470
Cooking Food for Stock—A. H. Ward..... 471
Sweet Potato Culture—M. B. Prince..... 471
Raising Flax..... 472
Klasona Notes—Sam'l Parsons..... 472
Notes from the Rural Grounds..... 472
Catalogues, &c., Received..... 475
Jottings at Kirby Homestead—Col. F. D. Curtis.. 473
Connecticut Agricultural Experimental Station.—S. W. Johnson..... 473
McChesney Drill..... 473
Cornish and Curtis Butter-Worker..... 473
Orchard Planting and Management..... 475
Pekin Ducks..... 475
Duroc Swine..... 475

Answers to Correspondents:

Grapevine Flea Beetle..... 474
Aphides on Grapes..... 474
Wood Nymph Moth..... 474
Making an Æolian Harp..... 474
Killing the Wild Morning Glory in the Field... 474
Preparing Egg Food..... 474
Miscellaneous..... 474

Everywhere:

California Peculiarities—W. C. L. Drew..... 474
Rochester, N. Y..... 474
Allen Co., Kansas..... 474
Brooklyn, N. Y..... 474
Poquonock Bridge, Conn..... 474
Fulton Co., Ga..... 474
Phelps, N. Y..... 474
New York City, N. Y..... 475
Painesville, Ohio..... 475

Domestic Economy:

The Way it is Done—Mrs. A. E. Story..... 480
To Can Green Peas—Mary B..... 480
Baked Pork and Beans—Mrs. S..... 480
Domestic Recipes..... 480
Markets..... 481

EDITORIAL PAGE:

Keeping Ahead of Work..... 476
Transplanting..... 476
Reply of the Maine Farmer..... 476
New Varieties of Erythronium..... 476
Brevities..... 476

LITERARY:

Poetry..... 462, 477, 483
Fashion Notes (Illustrated)..... 477
Margaret's Victory—H. E. Clifford..... 478
Recent Literature..... 479
Bric-a-Brac..... 479

Reading for the Young:

Pocket-Money for Young People—No. 11—Annie L. Jack..... 482
Spending Money for the Young Girls—J. E. Mc..... 482
Our Foreign Cousin..... 482
Russian Commercial Villages..... 482

Sabbath Reading:

Of Reading—E. J. S. C..... 482
Personals..... 488
News of the Week—Herman..... 480
Wit and Humor..... 484
Advertisements..... 481, 483, 484

THE

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Address

RURAL PUBLISHING CO.,
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SATURDAY JULY 27, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

KEEPING AHEAD OF WORK.

A WITTY lecturer says that "some people have three hands." They have two hands the same as their neighbors, besides which they have always a little behind-hand. He might well add that this sort of men are wholly disqualified to be farmers, and if they are such, the three-handed farmers can never become forehanded. But, seriously, we have seen enough to prove that keeping ahead of the work from the opening of spring till the last job is finished in the fall, is the only way to farm with either pleasure or profit. The farmer who gets behind at any season works at a serious disadvantage ever after! And it is no easy matter to manage just right to keep abreast of the work. The direction of a large farm demands executive abilities as great as does the management of an army. The farmer has in fact an army; but his men are engaged in the work of production rather than of destruction. To keep two to ten men employed profitably in all kinds of weathers, requires thought and tact. The difficulty with most farmers is that they do not hire enough help. They underestimate the amount of work required, and make too little allowance for rainy days when little or nothing can be done out of doors.

Up to harvest time most farmers do pretty well. But unless work is pretty well advanced before haying and harvesting begin, it is pretty sure to be all in a tangle by the time the grain is in the barn. There are two, three or four weeks when little is usually done except securing the hay and grain crops. Then is the time when weeds run riot in potatoes, corn, beans and other hoed crops. We have often known fields to become so weedy in harvest time that the crops cost more to get out of the weeds than they were worth. Plenty of help at such times is all-important. Keep the cultivator going in the hoed crops though you have to pay harvest wages to do it. One day's work at the right time is worth five a week or two later. In the harvest field itself extra help is almost equally important. The present season is proving very showery and "catching" in many sections. When we have a really good day for curing hay or grain, there should be plenty of help to take advantage of it. We know farmers who at such times fit out an extra wagon and with two teams will keep the barn constantly filling. One or two men, if needed, are stationed in the barn to move away, and an equal number in the field to load. This rapid pushing of work is far the cheapest. Often after one or two days of fine weather we have rains which delay work in the hay or harvest field for twice that length of time. Meanwhile hay or grain is spoiling, and at last it costs more to get it housed in bad condition than it would at first to have it saved in good.

Of course, the good farmer will have all the labor-saving implements. This is the great advantage of using mowers and reapers. They will do the work with less men. The farmers, however, should not hire less; but employ the time and labor saved in getting the work promptly and therefore more cheaply done. Whoever uses mowers and reapers merely to save hired help gets very little advantage from them. In all probability he will lose as much on other crops, and possibly more than he will save in hired help. We know that prices of farm products are low; but labor is also nearly or quite as cheap as before the war, and considering the improvements in farm machinery, farmers can get more done for ten dollars now than they ever could before. The temptation to many farmers is to save in their help-expense account. But if the farm is worth working at all it is surely worth working well, and the larger the amount judiciously expended for farm labor, the larger will be the profits and the greater the improvement of the farm itself. Doing with too little help fills the soil with weeds, and where these obtain control, all hope of profit is at an end.

TRANSPLANTING.

WE once successfully transplanted in July, a young Grape-vine three feet high. The ground was daily watered plentifully for a month. We read that evergreens may be transplanted at *any* season of the year, if—if—if. The fact is small plants may be so transplanted that the slight disturbance to the roots and the after care are equivalent to no derangement of the plant economy at all. But the question is when is the *safest* time to transplant—that is, when is the time that a plant will best stand the disturbance usually attending transplantation. We say that, as a rule, spring is best for all climates like New York and north of it, in which the thermometer falls to ten degrees below zero, and lower, and just so soon in the spring as the frost is out of the ground. For climates like those south of Philadelphia, fall is no doubt better than spring, because the roots make some growth during the winter and a reciprocal action between the roots and buds and leaves is sooner established when spring growth begins.

For this climate, and north of it, many say that they prefer to plant in the fall, as soon as, or before the leaves begin to fall. Then, they reason, new fibrous roots are formed before settled cold weather, and the tree is so much ahead of that transplanted in spring. This reasoning might hold good if we could always be assured of such a mild winter as the last. But we believe that continued severely cold weather, which freezes the ground two feet or more in depth, will kill those tender roots formed in late fall, and that the tree will be found *less* vigorous than the one transplanted in early spring.

When trees make a late growth that has not time to ripen, not only will a severe winter kill the late growth, but the plant itself will be weakened. It is the same with the tender root-fibers.

If the northern farmer or horticulturist is so pressed for time in the spring that he is willing to take the chances of failure resulting from a severe winter and transplant in the fall, let him do so. But if our experience has taught us anything it has taught us that spring-planting is preferable to fall-planting in the ratio of at least three to one.

NEW VARIETIES OF ERYTHRONIUM.

WE cannot find that any attention has been given to the production of new varieties of this earliest of the spring-blooming Liliaceous plants. We have Erythronium Americanum, our native Adder's Tongue; also a white species E. albidum found north and west. Then there is the E. Dens-canis, the European species which is sometimes purple, sometimes rosy-lilac, sometimes white. Here we have as wide a range of colors as in the begining we had with the Gladiolus, a flower that has been more improved perhaps by artificial treatment than almost any other.

If these bulbs be taken up after they are matured, which may be known by the fading of the leaf, and planted in the garden, the size of the flowers will be increased and the bulbs will thrive as well as in their moist native habitats. Crosses between the purple, white and yellow could no doubt be effected which might perhaps result in beautiful intermediate varieties.

REPLY OF THE MAINE FARMER.

"THANK you, Editor of the RURAL. it *was* "an oversight." The enterprise of the RURAL NEW-YORKER (which, by the way, has been somewhat enlarged and much improved of late) secured for its columns a contribution from Mr. J. B. Lawes, of England, which article the London Farmer copied—giving credit, however, to its American contemporary—and we copied a paragraph or two from this article, giving credit not to the RURAL, as we should have done, but inadvertently, to the London Farmer. We are sorry to have been led into this error, but glad our attention has been called to it, that we may give credit to whom it justly belongs."

Upon reading the above we were reminded of the Latin proverb, "*Bis dat qui cito dat*"—he who gives promptly, gives twice as much—except, in this case, the oversight was one so liable to occur to any of us that we feel we have received ten times instead of twice our due from the Maine Farmer. We once knew a man that prided himself upon the fact that he had never made an apology in his life. But how could we appreciate the beautiful in this world if there were nothing ugly with which to contrast it!

BREVITIES.

MAN is "a bundle of habits."

J. J. MECHI is 76 years of age.

IT is now time to make cuttings of Pelargoniums and similar plants for late autumn blooming.

IN the way of green food, we have found nothing that poultry like better than Pearl Millet. The leaves, however, are still young and tender.

CUTTINGS OF HOLLYHOCKS may now be made of desirable roots, and many of the improved varieties are very desirable. The bottom shoots are best. Insert in sand and keep moist.

MR. WM. ROBINSON dedicates the thirteenth volume of his enterprising Garden (London, England,) to Dr. Moore of Glasnevin, in recognition of his long and faithful services to horticulture.

ANY of our readers who have cultivated any of the following Spring wheats will much oblige us by communicating the results: Champlain, Defiance, Mediterranean, China, White Spring Russian.

A HARD shower prevailed here (Rural Farm) this afternoon, Sunday, July 22. Of the spring wheats, one-third of White Russian is lodged and one-quarter of Champlain. Of the five varieties, Defiance is last to ripen.

"THOSE defenders of the faith are more zealous than wise who must needs fire away in their catapults the very bastions of the citadel in the defence of outposts that have become untenable"—*Dr. Asa Gray.*

OAT meal tea is an excellent drink for the harvest field. Put about fiftoen tablespoonfuls of meal into a gallon jug, adding some salt. Fill up with boiling water, stirring briskly. Then let it stand in a cool place until needed.

ENTOMOLOGISTS describe only four varieties of insects parasitic upon the bodies of hens, not including the mites of the chicken-house. Our correspondent, Mr. Hales, has sketched twelve additional varieties. He thinks there are others yet.

THE Michigan Farmer, whose opinion in such matters is entitled to much weight, anticipates that there will be a general drop in the price of wheats from this time till the income of the crop, when it will probably settle down to the lowest figures known here since 1853.

FOURTEEN years ago several fields of the "Rural Farm" were "alive" with the Wild Radish (Rhaphanus Rhaphanistrum). They were wholly extirpated by pulling them up as soon as the yellow flowers appeared. It is an annual, and of course is propagated by the seed. We mention it merely to say that the labor of eradicating this weed was far less than was supposed before the pulling-up process was begun.

"THE farmer who will carefully consult the catalogues of seed merchants and nurserymen, look for markets near home, and keep his wits as busy as the successful manufacturer must do, says the N. Y. Herald, will find in the long run that the most money does not come from the most popular crops or the greatest number of acres under cultivation."

That is true; but it is not the seedman's catalogue that is going to tell him what crop there will be an extra demand for. That gives the list. The farmer must judge for himself.

A NEW USE FOR POTATOES.—Potatoes are to come out as a manufacturing medium, and *Le Cultivateur* says that pipes similar in appearance to meerschaum are made by the following process:—You take a potato, and having peeled it, place it in water acidulated with sulphuric acid, in the proportion of 8 parts acid to 100 parts of water; let the tuber remain in this liquid for 36 hours to blacken, then dry it with blotting paper; you then submit it to a certain pressure, when you have a material which can be readily carved to any design. The counterfeit is marvellously perfect. By the same process a very good imitation of horn can be obtained, sufficiently hard and dense to make billiard balls, &c. A striking resemblance to coral is obtained by treating carrots in the same way.

ALL poultry authorities agree that poultry, especially chickens of course, should be fed "little and often." Our chickens and hens which are confined are fed five or six times every day. Besides grain food they are given all of the table scraps, finely cut meat, both cooked and raw, grass, clover, beet-tops, pea-tops, radish-tops, etc. We are raising chickens and keeping them confined (fifteen to an area about thirty feet square) as an experiment. Fine ashes in which a little flour of sulphur is occasionally mixed, is supplied for them to dust in. The house is whitewashed often and the droppings removed from the floor every few days. We have not yet had a case of sickness.

THE essentials in keeping butter in Summer consist in making it properly, and having a cool place to keep it, and excluding it from the air. No butter can be safely packed in warm weather which is not perfectly made, nor can it be kept if exposed to the air. Dairy-rooms cooled with a cheap refrigerator are coming into use now among butter-makers, both for keeping milk and keeping butter, and with ice and salt, secure a low temperature at small cost. The best packages for keeping butter a long time in warm weather are made of tin, and wood-lined. When filled the cover is soldered on and made air-tight. So says Prof. Arnold in the Weekly Tribune.

HENOPHONES.—The London Farmer says, it must draw the line somewhere. It has so frequently received "facts" from America which turned out "fancies," that it does not accept with implicit credulity the statements of its contemporaries on the other side of the "horring pond." It believes in the telephone but not in the "henophone." An exchange states that an intelligent farmer has invented a henophone. A henophone is modeled on the principle of the telephone. One old, reliable hen, occupying a central office in the hennery, sits on all the nests about the establishment, leaving other fowls free to lay eggs, scratch, and cackle. As soon as a new nest contains the full complement of eggs, it is connected with the central office by a copper wire, and the business is settled. The only trouble with the machine is, that it sits so hard it hatches out the porcelain nest-eggs with the others, so that one chick in every nest is born with glass eyes, and the farmer has to buy and train a dog to lead it around. This, it is said, makes it expensive. Hereafter the London Farmer will draw the line at "henophones."

THE Colorado beetle has been subjected to a series of experiments by a member of the Entomological Society of Ontario. Mr. W. BRODIE, of Toronto, has been studying its peculiar tastes for food, and also its fasting powers. Mr. Brodie, having kept thirty beetles without food for twenty-four hours, they refused leaves of carrot, parsnip, beet, pumpkin, lettuce, sunflower, sage, and cabbage. After eight more hours, when supplied with potato leaves, they ate them freely. A similar experiment was made and repeated with a large number of common weeds, but none was eaten. Again, thirty beetles, after being kept eleven days without food, were given the leaves of a large number of weeds, which remained untouched. Potato leaves were then eaten freely. Three repetitions gave the same results. To ascertain how long they would live without food, of forty-five beetles which were allowed nothing to eat after changing to beetles, four died the fourth day, thirty-three the fifth day, two on the sixth day, and three more by the eleventh day. Over 75 per cent. died within five days, the males dying first. The next experiment was to take thirty mature beetles, which had partaken of food; they were then kept without it. Two died the fourteenth day, six by the nineteenth, five by the twenty-third, three more by the twenty-seventh, while 20 per cent. survived forty-seven days' fasting. Other experiments were made, by which it was ascertained that on an average one beetle will eat an inch square of potato leaves in thirty hours, the maximum rate being ten hours and the minimum thirty-seven hours. One beetle is able to defoliate entirely one plant of potatoes during its beetle life.

FANCY BULBS.—Mr. J. J. Mechi is a believer in the influence of soil, climate and food, on human, animal and vegetable development. Hence there will be always great varieties in all vital subjects. Starvation causes diminution and malformation, especially when accompanied by an unkindly climate. Perfect development results from an opposite state of things. In rich and free soil or highly-manured land fibers are multiplied, and a single tap root does the needful; but where the plant food is widely and sparsely distributed bulbs will send out powerful fangs in search of it. When he impoverished his surface soil by steam ploughing it very deeply, and mixing with it a large quantity of poor and unaired subsoil, the plums in the pudding were too far apart; and the mangels knew it, and accordingly sent out searchers in the form of long and thick fangs, which brought to their bulb the good things which were widely diffused. Feeble-rooted plants could not have done this. He protests against the supposition that these fanged mangels are of inferior quality. On the contrary, they are dense and heavy, and keep well, and have the advantage of having buried their bulbs deeply in the soil, which is always a sign of quality, either in turnip or mangel. When his top soil is again rich, no doubt these mangels will use fibers, and only send the tap-root down to pump up moisture for the circulation. Red clover acts much like mangel, and goes deeply into the soil. A father and son divided some oats which they purchased of him. The father grew an abundant crop of excellent quality, the son's crop was wretched in sample and quantity. The different quality of their farms—both in his county—explained the apparent mystery. Plants, like animals, are grateful for good feeding and other suitable conditions. A turnip in deep rich land will send a single tap root a yard or more deep, but not so on poor, shallow or ill-cultivated and undrained land.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

ON BROADWAY.

SEE! Young America, his active arms
With bundles laden,
Escorting in a slipshod kind of way
A pretty maiden.
Often she drops a yard or two behind
Before he's missed her.
Ah! her relationship is plain—
His sister.

And close behind the couple we have seen
Appears another—
A young man with a venerable dame—
Of course, his mother;
For he has with a patronizing air
Her ear enlisted,
And tells her things of which she was aware
Ere he existed.

Another pair, who walking far apart,
Scorn conversation,
He eyeing all the young and blooming girls
With admiration;
She with a weary air, and loaded down
With goods he should have carried,
Seems filled with care; alas! the fact is clear.
These two are married.

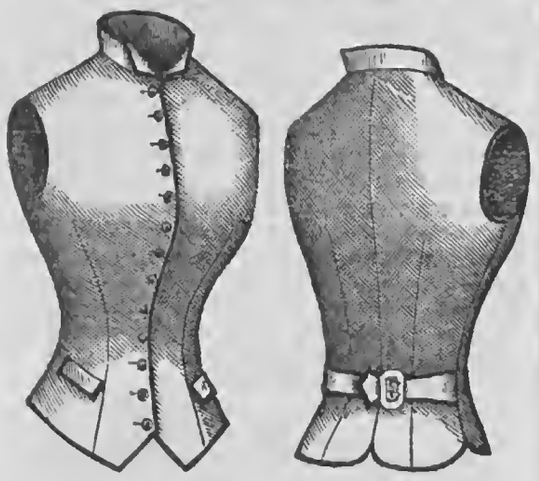
One couple more—their hands are slyly clasped.
They seem devoted.
The glances of sardonic passers-by
Are all unnoted,
Her eyes—the color of the radiant sky
So bright above us—
Look fondly into his. Come, let us go,
These two are lovers! [*N. Y. Sun.*

FASHION NOTES.

THE favor with which ladies have this season regarded costumes of washable goods has stimulated merchants to a display of many elegant novelties in this line of goods, and the prices at which they are offered tempt a woman to spend all her pin-money in buying up a stock of these beautiful materials.

In organdies, *Tilleul*, new gold, *beige* and *Havanne* tints are the newest, although pale-blue, rose, lavender and white are as popular as ever. On tinted grounds, the pattern is generally in the darkest shade of the same and in graceful clusters of blossoms, trailing foliage, sprays of rose-leaves in natural dimensions, wheat-heads, rose-buds, bouquets, &c.

Lawns with white grounds have gay little buds and blossoms, delicate vines, dainty grain-heads and starry flowerets in blue, black, purple, brown, green, drab, pink, etc., and are generally edged at one side with a fancy border, introducing the color of the pattern with or without gay tints. Lawns and organdies also come with unbroken grounds in white or tints, with borders representing gay wreaths on black or dark grounds, or else "lace pattern," borders, either being as pretty as one could desire.



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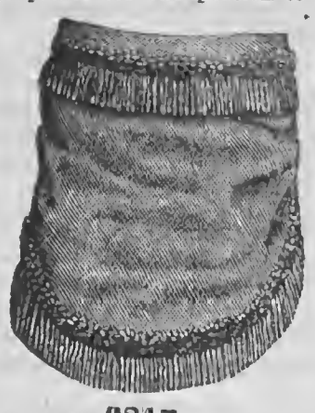
Bordered and unbordered lawns and organdies are about equally popular, the selection of either being more matter of taste than fashion. Coming to the more substantial fabrics, we find gingham, which, though it is nothing more nor less than gingham, is robbed of half its old-fashioned familiarity by new patterns and the new names of "Scotch Zephyr cloth" and "Madras suiting." Those of the plaid patterns which remain show the new colors in many of their commingings, while others still glory in the harmonious blue, gray, soft pink, and pale yellow, which combined in a regular oiass pattern, produce such a mellow, yet distinct effect. A few new ginghams show bourette designs, and others shaded stripes; while plain ginghams are presented to combine with the above patterns in accordance with the "two-shade" mania now affecting all costumes.

In linens, there are a few novelties, some of which may be classed as durable, and others as purely ornamental. Of the latter, there is a transparent variety called *crepe batiste*. It has the effect of very fine Swiss in its weave, but is wiry and has the gloss peculiar to linen. It comes in pink and the most delicate tints of *beige*, blue, cream and pink, and is exquisitely fairy-like in its effect when used for over-dresses to silk skirts that are trimmed with it. While it will wash, it still must be classed as ornamental, as it loses its delicate transparency through the process.

Durable Batistes have dark grounds, the color being a cross between the unbleached yellow and the drab shades. The new ones have tiny, clouded bourette checks of navy-blue, and white, or of brown and white, or bright blue and white cross-lines, and clouded yellow cardinal, blue, green and white lengthwise hair-lines. A bayadere bourette has its lines in cardidal and white, while other Batistes have patterns of self-color, white, black, brown, etc., in honey-comb pattern.

Trimming for Washable Fabrics.

The delicate organdies are prettiest when trimmed with themselves, and a dainty edge of either Italian or Smyrna. When the fabric is to be used it is formed into gathered or plaited ruffles, edged at each side with narrow lace, of widths appropriate for the portion to be deco-



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rated. Plaited ruffles are stitched on just below the top, and straight ruffles are gathered with a cord also about an inch from their upper edges. Two or three rows are placed upon the skirt, one on the polonaise and one about the basque, (if that takes the place of the polonaise); and generally two at the wrists, and a standing and falling one at the neck. When a fichu or mantle is worn, one is about all its edges, unless it has a regular neck, in which event two are used, the same as on the basque.

It is now a pretty fashion to take two or three shades of ribbon, about an inch or an inch and a

6245

quarter wide and form natty bows, using one or two of the shades as lining to the other, so that the edge shows at one side of the loops. Short, sharply-notched ends are also used with these loops, generally being no longer than the loops. The lace upon the edges of the ruffles may also have its dash of color. Some of the Italian and Smyrna edgings having pink and blue borders, or the two shades mixed, or else having a mixture of blue, olive, rose, etc. The same suggestions apply to lawn and Swiss, both of which are charmingly decorated with frills and bows

In using borders to lawns and organdies they are applied either as a heading to the trimming mentioned, or as a border to flounces; and when the latter arrangement is decided upon, the border is sometimes edged with lace and gathered or plaited to finish the over-dress and fichu.

In white Victoria lawns, nainsooks, cambrics and other opaque white goods, Hamburg embroidery, either white or colored is selected in preference to lace. In white a frill headed by an insertion is generally used, and sometimes a narrow edge stands from under the upper side of the insertion. In colored, there is deep blue, pale

6246

blue, cardinal, pink, brown and black, either separated or combined. These embroideries are used upon piques, ginghams and printed goods with a very pretty effect

Many materials, such as piques, linens, ginghams and prints are being cut in slashes, scollops, points or tabs, which are either bound with bias strips of the material or white cambric, or white braid: while the latter is put to a variety of uses, such as straight rows, scollops, curves, jacket and Breton outlines, and panel decorations. Bands and folds of the same or a contrasting shade, piped white or dark cambric hold their own, and with the plain mentioned and other fancy braids, form fashionable flat decorations.

Ruffles of the material are now generally cut straight instead of bias and trimmed with bias bands or else plainly hemmed, or perhaps outlined by rows of braid. A bias band for the heading is generally selected, as it irons nicely and produces a flat effect.

Smyrna and *Ecru* laces are principally used upon linen Batistes and also upon ginghams, the tint of the fabric determining the choice of the lace.

Plain linens are generally hemmed or slashed and bound or trimmed with bias bands piped at the edges.

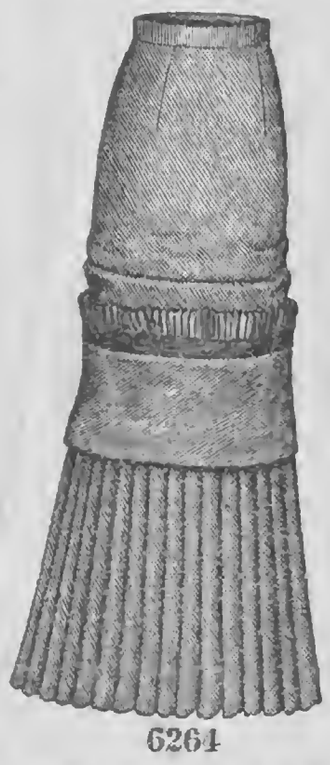
Barege and Crenadine.

This year back comes the old-fashioned barege. It possesses many advantages, among them is its

6246

concealing qualities. An old silk skirt may be used for a lining, with many a piecing seam which this thin fabric refuses to reveal. It may be made over alpaca, or above a silk-dressed Silesia, without injury to its elegance. Bareges are not expensive, and yet they are quite as lady-like as brocades or Mexicaines.

Among the latest novelties in costly goods are grenadines, with bourette effects—chenille lines, knots, loops, and tufts, which are woven into the tissue irregularly. They are intermingled with silks and made up into polonaises.



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Among the iron grenadines and bareges and among the *beige* buntings, real buntings and seaside grenadines, much effectiveness of combination is secured by the uses of both a plain and a plaided or striped material of the same quality, a pale blue skirt with a blue polonaise of the same shade, striped or plaided with *beige* pale-rose or silver-gray, and having blue sleeves or other interminglings of the goods, make a most charming costume.

Iron grenadine will be held in respect by elderly ladies, and also by ladies who wear mourning costumes. Barege will share favor with iron grenadine for black costumes, and especially will this be true in dresses for young ladies who are in mourning.

Perhaps the most distinguished material in point of richness of quality, and royalty of effect is the "velours grenadine," as it is sometimes called. It is a brocaded fabric that is thin, but so filled in with flossy or satiny threads, artistically brocaded together, that no figures are distinguishable. This material is very costly and is used but sparingly in combination with silk which it serves to illuminate beautifully.

6264

Veils and Scarfs.

Made veils are straight at the top and rounded upon the fringed or bordered edge; but owing to their inconvenient length, ladies continue to purchase plain or dotted, black or white net of the

FIG. 5—LADIES' HOUSE COSTUME.

length best adapted to their bonnets and arrange it as best suits them. Regular veiling with or without dots and having a chenille or shaded silk-broidered border comes by the yard, and is very becoming to some faces. The preference, however, above all this fancy assortment remains for the strip of plain black Brussels net for general wear, and white illusion for dress, unedged and unembroidered.

By scarfs, are generally meant those of lace. Spanish or Guipure net two and a-half to three yards wide broidered with corresponding edging is worn draped about the shoulders and tied in a single knot over the breast. Shorter scarfs are about a yard and three-eighths long, by one quarter of a yard wide, and are generally secured with a scarf-pin close under the points of the collar. Necktles are worn between the military and linen collar, or inside the linen collar and knotted in a double bow very carelessly under the chin. In silk ties those most in favor have a center of one shade and sides of another; the whole covered with an intricate and minute brocaded vine. Silk scarfs are very fanciful in effect, but have been almost universally laid aside on account of the season for the more suitable ones of sheer muslin, batiste or lace. The newest are white muslin with ends deeply embroidered in the fashionable tint of blue, cardinal, olive, etc. Other all-white ties have ends of an open pique embroidery that is very neat. Lace ties have their edges chain-stitched to hold a half-inch hem, and their ends are broidered in Marguerites, blossoms, scrolls and foliage, either in white or shaded silk.

Description of Cuts.

Figure 5.—Ladies' Costume. The skirt is walking length, and is cut by pattern No. 6053; price 35 cents. It is six-gored and requires no decoration, although plaited or gathered ruffles may be added about its entire circumference or to the front and sides only. The over-skirt is one of the latest models. The *tablier* is deep and wide and forms an irregular outline at the bottom where it is

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corded, and then edged with fringe. At each side it is overlaid with a semi-circular portion that with it is joined to the belt and a long back-breadth, the latter seam also confirming a *revers* extending from the belt to the bottom of the *tablier*, and turning backward over the breadth. The bottom of the *revers*, and the rounding edges of the side portion are each furnished to correspond with the *tablier*, while buttons in clusters extend along the *revers*, the lower corners of which are caught together over the breadth by the lower button. The breadth is formed of cashmere, and is laid in plaits at the top, while its edges are square and undecorated, being simply hemmed or forced underneath. Lace, plaitings, bands, or folds may be used in trimming an over-skirt like this, the variety selected depending upon the material used and the taste of the individual. The pattern is No. 6239; price 35 cents.

The basque is very stylish in shape and construction, and is elegantly proportioned. It is No. 6,238, price 30 cents. For plain goods or a combination of grenadine and plain silk, this is a very handsome model.

No. 6,216.—Ladies' Plaited Blouse, with a "Stole" collar.—This model is one of the many designed for washing fabrics. A novelty in collars is worn about the neck. It is called a "Stole" collar, and its shape at the back is a regular sailor style, with which the front corresponds in outline, although a narrow space intervenes between its front edges. It is closed by two frogs, and by its square appearance gives a peculiar effect to the garment. The new bourette cambrics are handsome made up in this way and decorated with folds of the material of a uniform color, or pipings of the predominating tint. Linen, lawn, muslin, organdy, flannel, or any other fabric may be elegantly made up by this model. Price of pattern 30 cents.

No. 6,245, Ladies' Scarf Wrap.—The quantity of material requisite for a wrap of this style is so small that a lady can easily procure one of these dainty articles with but a trifle of expense. The wrap is all in one piece and is deepest at the back, where it falls a little below the waist line. Any of the materials generally employed for the construction of wraps may be made up by this model and trimmed with any of the fashionable laces, galloons or fringes. Grenadines, organdies, lawns or cambrics are also charming made up in this way to complete a costume. A warp of this style made of crape, lined with silk and trimmed with grass fringe, would prove an elegant completion to a morning costume. Price of pattern, 20 cents.

No. 6,242—Ladies' Vest.—This engraving illustrates a charming vest, that may be composed of any material that will either harmonize or contrast with the jaunty out-away jacket with which it is to be worn. The vest requires but a small quantity of material, as the back is always made of lining. Hence a lady may have several vests of different colors and materials, to wear with the one jacket at different times. Price of pattern, 20 cents.

No. 6,274.—This dress is a very stylish one for the little folks, and is so simple in structure, that very little labor will be necessary to complete it. It may be made of fancy, desirable fabric, and ornamented with plaiting, ruffles, bands, braids, pipings or lace disposed in any way to suit the taste. The pattern comes in six sizes for children from one to six years, and costs 20 cents.

No. 6,275.—This jaunty, little costume consists of a jacket and kilt, each made of mixed brown-and-white summer cloth, trimmed with scal-brown mohair braid, and bone buttons. This costume will be popular for boys during summer season, and also during the coming fall and winter. For the present it will be made principally of summer cloth, which can be obtained in all the fashionable mixed gray, brown, and olive shades. To wear in the country, gray or navy-blue flannel will be both pretty and stylish. Linen is also

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available, and will be both cool and serviceable. The pattern comes in five sizes for boys from three to seven years of age. Price of pattern, 25 cents.

No. 6,264.—Ladies' round, short skirt, with deep yoke and attached overskirt. This presents a charming skirt, which, in combination with blouse-like model No. 6,245, would complete one of the jauntiest costumes of the season. Pattern costs 35 cents.

Figure 1.—Misses' Walking Costume.—The introduction of cottons that closely resemble the pretty bourette fabrics of the past season, makes costumes of washable goods generally popular, and, therefore, a number of modes suitable for fabrics of this description have been completed for the summer months.

The cut represents a costume including two of them, and also a skirt that is just the accompanying style they require. The jacket which is here used as a basque, is half-fitting, clasped by a bolt which may be of the trimming material as illustrated, or of ribbon metal or leather as preferred. A shawl collar passes across the neck of the back, and extends down the front for a few inches, its pointed ends finally meeting at the closing, which is performed with button-holes and buttons. A bow of ribbon conceals the meeting, and lends a jaunty air to the costume. The collar belt and simulated cuffs are made of plaid material, while a bias band of the same is the bottom of the garment. The overskirt is very simply formed and draped, and is trimmed to correspond with the jacket. The skirt reaches to the ankle, is shirred at the back to keep its fullness in place.

Fig. 1—MISSES WALKING COSTUME.

The bottom is trimmed with a flounce or ruffle of the plain print bordered with the plaid, and is gathered and set on so as to form its own heading. Any other method of trimming may be employed in furnishing the skirt such as kilts or side-plaitings of the plain goods set under a band of plaid or a band of the same piped with the plaid, or the skirt and trimming may be of one material if a combination is not fancied. The pattern of jacket is No. 6,201, and costs 25 cents; that of the overskirt is No. 6,200, cost 25 cents; that of the underskirt is No. 6,058, cost 35 cents.

Any of the patterns mentioned in this article may be purchased for prices named. Explicit printed directions accompany every pattern. The purchaser is told not only how to put the pattern together, but also the number of goods required for the garment.

If ladies who are about to dress-make would like any suggestions about styles, materials, or any hints as to how they can best remodel old dresses, I shall take great pleasure in furnishing any information which will help them out of their difficulties. FAITH RIPLEY.

Literary Miscellany.

MARGARET'S VICTORY.

H. E. CLIFFORD.

(Concluded from page 462.)

Thus, time passed till the approach of Christmas, the anniversary of the time when Marjie first met Herbert Elliott.

It was the week before Christmas, and Marjie had consented to visit the neighboring city of B—— to execute the numerous commissions of mother Edwards, and some of her good neighbors, incident to holiday festivities.

That morning she had received a letter from Herbert, and such a strange letter it was, too; he seemed to feel such a tenderness toward her, and yet there was not a word of love in the whole letter, but it was rather expressive of deep sorrow; as if some great calamity had befallen him: he charged her not to be anxious if she did not hear from him again in several weeks, and said if she lose him entirely, she must not mourn; then, as if to explain, he added, "for you know Marjie, dear, we must all die sometimes."

Taking it altogether, it was, indeed, a very strange letter; and all day Marjie had pondered over it, till the tenor of it seemed mingled with the yards of lace and muslin, and the pounds of confectionery she was purchasing.

At early nightfall, she entered the railway car that was to bear her home, so weary in body and mind, that she was scarcely conscious of her own existence. Only one seat was vacant, and that behind two men, whose appearance was anything but prepossessing. Marjie was too tired to hesitate for this, and, with a feeling of genuine relief, she sank down upon the yielding cushions, and rested her aching head against the casement.

After a few glances at her, the men continued their conversation in a low tone, and when the train started, one of them removed his coat, and carelessly flung it over his seat, allowing some letters and papers to drop from the pocket to the floor, at Marjie's feet. With a muttered "beg pardon, mum," he quickly stepped around and gathered them up, placed the coat in a safe position, and resumed his conversation.

A few moments later a brakeman passed through the car and the light from his lantern showed a letter on the floor of Marjie's seat, that had escaped the man's notice. She bent over and picked it up, in a dreary sort of a way, intending to hand it to the owner, but there was a strangely familiar look about that letter and, turning it toward the light, she read, though partially obliterated with a pen, "Return to Elliott & Co., Wholesale Grocers, N. Y." Instantly her apathy was gone, every nerve was on the alert, and with trembling fingers she drew forth the contents of the envelope and saw it was Herbert's handwriting. Not his usual bold, clear hand; but she was sure it was his—though why should his hand tremble so? It was never so in her letters.

This was only a short note. The printed business heading of the paper had been torn off, and there was no address, simply, "December 24th, 1875, 12 o'clock;" and no signature.

Hastily concealing the strange document, Marjie strained her ears to catch some word from the men that might unravel the mystery. The conductor's call for tickets caused a momentary lull in their conversation, and ere the silence was again broken Marjie had leaned heavily forward as near them as she dared, and was apparently asleep. But their words were guarded and she could get no clue to what was nearest her heart, only now and then a sentence, interspersed with oaths, such as, "Poor speculation fixed him, I guess;" "Of course he'll do it, he has got to or else go up;" "Back out! why I tell you he can't, we've got him in black and white." A whispering, of which she could distinguish nothing, followed, and then the remark by the younger of the men, "Ain't twelve early?" was answered, "Yes, rather, but that street is quiet early."

It was plainly evident to Marjie that mischief was on foot, and that in some way it concerned Herbert Elliott; but how, or where, or what it was, she could not tell.

A moment more and their tones were again audible, and she heard the elder one say, "No! we don't want to cut him much, only tie him fast and bruise him a little." Although this might be a link in the chain, still it gave her no light on the all important subject—how Herbert Elliott was connected with this plot.

As the slackening of the train gave warning of a station, one of the men carelessly remarked, "Ain't this where Ed meets us," and began to watch the door where a few new passengers were entering. Soon a man with a heavy black beard, and a fur cap drawn over his eyes, entered; and the one who had just spoken attracted his attention by a peculiar whistle. He came directly to them, and after a rough meeting said: "How is the York job on Elliott?" Which was answered by an oath and command of silence from the party addressed, and a frightened looking around by the other. The new comer was evidently much under the influence of liquor, and it was a constant task for his companions to keep him from talking audibly on matters they seemed to consider decidedly confidential. He insisted on being fully posted on some subject of which he now possessed only a partial knowledge. And after some hesitation and an anxious glance at the apparently sleeping woman near them, the first two consented to explain.

Now was the critical moment for Marjie. A few moments more would bring her to the end of her journey. It was now, or never, to solve the mystery. The light nearest her burned low and the dim light allowed her to draw still nearer the group in the advance seat. In a low, cautious tone, one of the party began to relate the particulars of the case in question, and Marjie dared scarcely breathe fearing she might lose a word of what she believed would explain how a letter from Herbert Elliott came in possession of these strangers. The first words she could understand were, "Fact is, the youngster got cramped, and the old man shut down on him; the feller must live somehow, and he——" Here she lost a sentence, and, fortunately, the third party in the other seat also failed to understand it clearly, and they repeated for his benefit, and she caught the words, "firm stock did it, and the job will cover up——;" and again their voices were unintelligible, and she heard no more except the careless remark, "Don't want to do it, but we had him foul, and he dare not squeal on us."

That was all, but every word she had heard was indelibly impressed upon her mind. A few moments later she was snugly tucked in Farmer Edwards' sleigh and was soon at home.

"Why! what on earth ails the child," exclaimed Mother Edwards as Marjie entered the kitchen with such a pale face, and a wild look in her eyes.

"Nothing, mother," was her quiet answer. "Only I'm so tired and have a headache; let me go to bed and I shall be well in the morning."

After a cup of strong tea and a feeble attempt at supper, Marjie sought her chamber, but not to sleep.

On entering, she locked the door, and dropping on her knees beside the snowy couch, she poured out such words of prayer as only a heart burdened with sorrow and rich in faith can offer; then rising in the possession of new strength for the task before her, she took the letter from her pocket, and calmly unfolding it, read again "December 24th, 1875, 12 o'clock," but it was still a riddle. Clasping her hands tightly over her throbbing temples, she bowed her head and remained several moments lost in thought. Then, raising her eyes slowly, she spoke low and clear, as if by inspiration, "Yes, I see it now; it is all plain to me. Herbert Elliott has become financially embarrassed, and by some careless indiscretion has incurred his father's anger and dare not ask his assistance; every endeavor to recover himself has only led to fresh reverses. This explains his distraction and coldness in correspondence. In a moment of weakness he has yielded to temptation and appropriated funds not his own, hoping to restore ere the loss was discovered; but the closing of the accounts for the year comes too soon for him. Some one who has gained knowledge of these circumstances has offered him this way of escape, and waiting till every other hope

has gone, he has yielded to this base step by a league with robbers, whom he has promised to admit to his father's store at midnight, December 24. He will allow them to bind and beat him to cover his sin, and perhaps they will kill him." A shudder shook her slight frame at the thought. "It's all clear to me now," she said. "Oh, Herbert, my poor Herbert! He has been tempted sorely, for he is not bad at heart, and I will save him. Yes!" clasping her hands tightly and raising her eyes to heaven, "with the help of heaven I WILL SAVE HIM."

There was no hesitation about her movements now and no tremor in her voice as she spoke her thoughts aloud. What was before her or how she was to accomplish her object she did not stop to consider, but seemed to be led by some unseen impulse and passively obeyed. Her only thought was to reach her lover without delay. It was Thursday night, and by to-morrow at this time she must be in New York. Not a moment was to be lost. Quietly gathering a few necessary articles together, she packed them in a small satchel and selected a plain traveling suit to be worn. Then, taking a railway guide that Herbert accidentally left and a small map of New York city, she occupied herself for an hour in gaining such knowledge of the undertaking before her as was possible from the conveniences at hand, till, overcome by weariness, her head bowed forward on the table and she slept. But it was only fitful naps, made hideous by dreams of unearthly terrors, and the morning found her but little refreshed and poorly prepared for the task before her.

There was earnest inquiry at breakfast for the cause of her strange conduct the previous evening, which she met with smiling explanations of the tediousness of shopping and the unaccustomed sights of the city; then, in her pleading way, asked leave to pass the day with a friend in the village, which was readily granted. Said farmer Edwards: "Yes! let her go, mother; she knows what she's about better than we can guess." And in due time she stepped from the farmer's sleigh at the place designated, and with a request to come for her early in the evening she entered the house, but remained only long enough to write a hasty note to be sent to her home at evening and then hurried to the depot.

It was nearly train time, and she could hear the distant rumble of its approach; it seemed as if her heart would flutter itself into fragments with mingled hope and fear. Summoning all her self-possession, she said to the ticket agent: "I want a ticket to New York, and please, sir, do not tell father Edwards where I have gone, until to-morrow."

Although it was a strange request, the official reluctantly gave the promise, and a few moments more found Marjie on the train whirling away toward the great city. Then such a feeling of utter desolation and loneliness came over her that she could scarcely suppress her tears; but she kept repeating to herself, "It's for his sake, poor Herbert, and I'll save him," and this thought seemed to renew her strength and courage. Hours rolled on, and faster sped the train, bringing her every instant nearer the final consummation of her daring scheme. What if she should be too late? God forbid it! The thought was maddening. The short gray twilight of winter had deepened into early night, and still on they flew. "An hour more, and we shall be in the city," remarked the man in the next seat. "In the city!" Marjie's heart gave a great bound. How much those three words meant to her!

A genial-looking old gentleman had for some time occupied the seat with Marjie, and as he opened his valise to receive some packages, she saw it was filled with Bibles, tracts, etc. Observing her inquiring look, he handed her a card, bearing the name "E. N. Soldier, City Missionary," saying, pleasantly, "You see I am a soldier, but these are the weapons of my warfare." Here was just what Marjie wanted,—a person whom she could trust to aid her, and without delay, she told him her mission was to save one who was near and dear to her, from a great crime; further than this, she refused to explain, and only asked his assistance to reach the locality she desired. "A very strange place for a lady to go alone, at night," said Mr. Soldier; but when he looked at her sweet, earnest face, and thought how far she had come on this journey of love, he could not believe evil of her, and before he had time to reason the case with her, the train had arrived in the depot at Jersey City. So taking Marjie's satchel, and bidding her cling close to his arm, they were soon jostling amidst the hurrying thousands of the great city.

What a Babel for Marjie's ears, so used to country quiet; but in a few moments something of her childhood nature seemed to come back to her, and as she remembered how she had roamed these very streets alone and unharmed in by-gone years, her tread was a trifle more firm, and she clung less closely to the arm of her protector. Marjie had requested to be left at the corner of Barclay and Washington streets, but it was plain the missionary had serious misgivings at the idea of deserting an inexperienced girl in that locality; but Marjie was firm, and bidding him "good evening," when that point was reached, with thanks for his kindness, she turned on Washington Street, and was soon out of sight.

A few steps brought her to the vicinity of the store, and by the light of the street lamp directly opposite, she plainly read the sign, "Elliott & Co., Wholesale Grocers," but the shutters were up and the doors all closed; for a moment she gazed at the place, with a blank stare, too confused to realize the situation; then her thoughts began to gather, but in an instant her mind was again a whirl of excitement. Was she too late? No; for she could inform the Police, and at least prevent the robbery; but this to her was a secondary consideration. Her aim was to save her lover from his temptation, and while she lingered in a vain attempt to form some plan of action, the door opened, and a porter appeared, broom in hand, finishing his day's toil by sweeping the pavement before the store. Marjie stood quiet in the shadow, and could scarcely be seen with her water-proof wrapper closely about her and the hood drawn over her head, and as the man reached the curb-stone, and stood for a moment, looking up and down the street, she slipped in the partly-open door, and had scarcely time to crouch behind a pile of boxes, when he returned, and hanging his broom in its place, gave a general glance around to see that all was right, then putting on his coat and hat, departed, closing the door with a heavy bang! and Marjie heard the bolt fly into its place as the key was turned, and, then his footsteps grew fainter, till lost in the distance; still she remained where she had first sank down, almost unconscious of her surroundings. She could hear the measured tread of the patrolman as he passed along the deserted street, then all was still as the grave.

Marjie was now within the warehouse doors, but with no definite plan of action; the promptings of a sudden impulse had brought her there, she scarcely knew how; the past seemed a dream and the future only chaos. She could only comprehend one thought, that was the necessity of immediate action, but what this action must be, her confused brain refused to dictate; sometimes a faint sense of the rashness of her actions would dawn on her mind, but was quickly overshadowed by the thought, "It is for Herbert's sake,—to save him."

At last, moving like one in a trance, she arose, and, supporting herself by the bales of goods which had concealed her, groped her way slowly toward the center of the store, till, in view of the office, where the gas was burning brightly; keeping in the shadow, she paused, to consider what to do next—but in vain she tried to think—her thoughts were in the wildest confusion; she could realize but one thing—that Herbert Elliott was in some great danger, which she had come to avert. She did not know whether he was near her then or not, but she believed that was to be the scene of his temptation, and moved by the vague impulse that she must save him, she again advanced toward the lighted office; a few steps showed her a man sitting at one of the desks with his head bowed forward perfectly motionless. She remained quiet a moment till he raised his head, and then saw it was Herbert Elliott, but how changed! The noble brow was contracted into painful wrinkles, and there was a look of bitterness and despair in his face—the hands of the clock over the desk, show it was nearly eleven, and its slow, even ticking seemed fearfully oppressive in the silence.

There was a rattling at the street door, which startled Elliott quickly to his feet, and then he smiled grimly at his own foolishness, for it was only the watchman on his usual rounds. "Only this, and nothing more."

A short distance in the rear of this office are two large doors, opening into a court or alley-way used for receiving and shipping goods; these were fastened by a stout, oaken bar placed transversely across them, and secured by a bolt; there was also a heavy spring-bolt at the top of the doors, and a double-lock near the bottom. At this entrance young Elliott glanced nervously, as the hands on the clock move slowly but surely around the dial nearing the fatal hour.

It is twenty minutes past eleven, and he piles up his books upon his desk, walks across the floor a few times, and then, carefully replies them, at least once in every minute of the quarter hour just past, and now examines the safe, leaving the door partially open. Eleven thirty! it is fearful to watch the varying expressions of his face, as with clenched fists he strides up and down that little room, as a caged lion treads his cramped prison-house, and anon drops his head forward and covers his face with his hands, while his whole form shakes with emotion. A glance at the dial shows eleven forty: with a wild groan he presses his hands to his temples, crying, "God, be merciful! Oh! God, be merciful!" What a moment for Marjie—trembling in every nerve, she is wholly undecided how to act—what *can* she do? It is a quarter of twelve, and again the latch of the door clicks at the the watchman's hand, and all is still; soon a faint tapping at the rear door brings Herbert to his feet with a bound. What a look! his eyes are blood-shot, and the purple veins stand out almost to bursting on his high forehead. He cries out, "Great Heaven! is there no help—no help for me?"

Marjie has crept close up to the door of the office, and can watch every motion.

He turns to his desk, and, taking up a small revolver, nervously draws back the hammer as if tempted to take his own life.

Marjie grows faint at the sight, her brain whirls, but she does not lose her self-possession for an instant; if he moves his hand to raise it, she will spring to him. Hark! the warning stroke of the clock—five minutes of twelve.

He hears it, drops the weapon and turning fiercely, almost brushing against Marjie in his haste, passes out of the office toward the doors he loosens the heavy bar and, takes it down, then walks back a few steps—one minute gone—he leans his head on a bale of goods for an instant, then slowly taking up the bar, partly replaces it. Oh! what a moment of anxiety for Marjie: will he have courage to be true? "God help my Herbert," she murmured. But with a fiendish laugh he throws it down again, the clock is on the stroke of twelve, a moment more it will be done and Herbert Elliott will be a felon. Oh! the wild passion that surges through Marjie's heart, her reason wavers, it seems to her that the canopy of heaven is about to fall, and her slender hand is all that holds it back, and now she thinks an awful tempest is to devastate, the earth and the winds are held in her feeble grasp, which she feels is weakening at every breath, the mental strain is too much for human endurance, it grows dark to her, and she cannot speak or move; but her eye is fixed on Herbert and she watches every motion of his hands. He has pulled down the spring-bolt from the top, one turn of his hand will complete the work. He staggers forward and looks wildly around him—his hand is on the key, and—Marjie is spell-bound, will she fail now at this last moment? has she fainted? not a feature moves—her face is livid and her eyes protruding; the clock begins to strike and Marjie moves, she takes a step nearer and at the rustle of her garments Herbert looks around. There she stands, full in the gas-light pale and motionless.

"Oh God! 'tis Marjie's spirit!" he cried, and reeled heavily clutching the door for support. The clock is striking and there is a loud tapping at the door. With a strong convulsive thrust he acts the spring bolt back in its socket, the oaken bar is quickly replaced and secured; then sinking on his knees, Herbert Elliott vowed for Marjie's sake to be *a man*.

There is impatient rapping at the door, but heeding it not he turned again toward Marjie and there she stood unmoved, the shock was almost too much for even his strong nerves, but he spoke calmly—the calmness of fear—saying:

"Is it you Marjie, or am I mad?" and with equal calmness she replied.

"Yes, Herbert, it's your Marjie come to save you."

"And, God be praised, she has saved me," cried he as, catching her fainting form, they both sank to the floor.

The noise at the door grows louder, but they hear it not till brought to consciousness by the sharp report of fire-arms and the rush of feet without.

The cause of this is readily explained by the action of Mr. Soldier, who, after leaving Marjie, met a friendly officer to whom he related what he knew of these strange circumstances. A special watch was placed in the vicinity and the three burglars were taken in the act of signaling to Herbert Elliott.

Their story of his connection with the plot was not believed, and as they were well known to the police as criminals, the proof was deemed sufficient for their conviction.

Thus, by the blessing of God on the intrepid daring of a simple country maiden, the fortunes of the house and the honor of Herbert Elliott were saved.

It is not for us to describe the confessions made, vows renewed, or prayers of thankfulness that rose from earnest hearts as the night hours waned; but we will mention that in the early dawn of that Christmas morning a carriage was driven from a dingy warehouse on Washington Street to a spacious residence on Madison Avenue, and a strange scene was witnessed in the library, where were present only Gilbert Elliott and wife, his son and Margaret Martyn,—and, strangest of all, this same austere Gilbert Elliott found tear-drops on his cheeks, where none had been for forty years before, and as he wiped them off he laid his hand tenderly on a maiden's head, saying, "God bless you! God bless you, my daughter!" A week later, when the New Year dawned, the sign at No. — Washington Street read no longer "Elliott & Co.," but "Gilbert Elliott & Son."

Mother Edwards had company from New York on Christmas week, and there was a long, earnest consultation in the quaint old keeping-room the night before they returned. When the daisies came and the strawberries began to ripen in the meadows, one daisy blossomed from girlhood into womanhood, and the accompanying strawberries were rosy blushes beneath a crown of orange blossoms.

MONKEY COOLIES.—A correspondent of a Ceylon newspaper states that large apes are now regularly employed in the Straits Settlements to pull cocoa-nuts. These monkeys are imported from Acheen in batches, like coolies, and are marched round the plantations by their owners, who let them out on hire. A line is first attached to each of these peculiar laborers, and he is then sent up a tree, where he is said to select fruit with great discrimination, and to twist the nut round and round until it falls to the ground. Each successive fall of a nut is hailed by the hairy operator above with a jump and a chuckle of satisfaction.

THE CONTENTS OF A CROCODILE'S STOMACH.—The stomach contained about five pounds' weight of pebbles, as though it had fed upon flesh resting upon a gravel bank, and had swallowed the pebbles that had adhered. Mixed with the pebbles was a greenish slimy matter that appeared woolly. In the midst of this were three undeniable witnesses that convicted the crocodile of wilful murder. A necklace and two armlets, such as are worn by the negro girls, were taken from the stomach. The girl has been digested. This was an old malefactor that was a good riddance.—Sir Samuel Baker's *Ismailia*.

RECENT LITERATURE.

Dosia. By HENRY GREVILLE. Translated by MARY NEAL SHERWOOD. Boston: Estes & Lauriat. Price, $1.50.

THIS is a charming story charmingly told, and felicitously translated. Dosia is a fresh, original creation, quite too good for the somewhat priggish fellow who won her. While the plot is extremely simple,—it can scarcely be called a plot, in fact,—the dialogue is sparkling, and the narrative is as smooth and graceful as a sun-beam. The story is so unlike the average French production, is so unlike some other stories by the same author, as to create a curious surprise that her pen could produce such dissimilar work. The book must prove a delight to those fortunate enough to read it.

The Cob-web series, to which it is the latest addition, has been very happy in its selections of foreign authors thus far, and if the standard is adhered to, we do not think we can recommend more pleasing translations to those whose scheme of education has not embraced foreign languages.

BRIC-A-BRAC.

IMITATION EBONY.—Ebonized wood is much in demand now-a-days for painted panels and other decorative purposes. In some respects it is preferable to the genuine ebony. Apple, pear, and walnut wood, especially if fine-grained, may be "ebonized" by the following process: Boil in a glazed vessel, with water, four ounces of gall-nuts, one ounce of logwood chips, half an ounce of vitriol, and half an ounce of crystalized verdigris; filter while warm, and brush the wood with the hot solution a number of times. The wood, thus stained black, is then to be coated two or three times (being allowed to dry completely after each coating) with a solution of iron filings in a quart of good wine vinegar. This is to be prepared hot and allowed to cool before use.

ONLY a boy; but he chanced to crawl,
Through a little rent of the circus wall,
And, taking breath, he stood bravely up
Till the clown came in with skip and hop.

Only a boot; but it chanced that day
That that there boot it bore down that way,
And the power that through that boot was sent,
Lifted the boy out of that circus tent.

[*Good Words.*

APPARATUS costing $2,000 has been successfully used in San Francisco to photograph a horse while trotting. A row of cameras was uncovered and covered by electricity, thus photographing the famous horse at successive points of his stride while going at a 2:25 gait. These pictures show that his feet were all off the ground together twice during the stride, notwithstanding the general belief of turfmen that a trotting horse always has one foot down while in action. They also upset accepted theories as to the shape of the fore leg when the foot touches the ground, for Occident is shown with the leg projecting at a considerable angle before him, as straight as an iron bar, with the heel in contact with the surface, and the toe not yet brought down.

"THERE goes a maiden wooed and won,"
Said Robinson to Brown.
As by there passed a dainty dame
With richly broidered gown;
"And there," said Brown to Robinson, with finger placed
A painted form upon
That fronted a tobacco mart,
"There stands a wooden one." [*Yonkers Gazette.*

ENTERPRISE IN HONEY.—A Chicago honey dealer has constructed a floating bee-house large enough to accommodate two thousand hives. This he is towing up the Mississippi River, from Louisiana to Minnesota, keeping pace with the blossoming of the flowers, thus stimulating the honey-making ability of his bees. In his return trip he designs to take advantage of the autumnal flowers at each point, just as he does of spring in going up the river. This plan of moving bees to get the benefit of fresh flowers has been tried in some parts of Europe.

HEAVEN'S PHONOGRAPH.

"For every idle word that man shall speak,"
For every low-breathed curse his lips shall mutter,
I've always read that man shall give account
At the last day, to his confusion utter.

Scoffers have sneer'd, "What, every word recorded
Nothing illegible on pages of gold?"
Earth has its phonograph—is heaven without it!
Scoffer, beware! the phonograph is old.

[*F. H. in Boston Advertiser.*

AN INN IN JAPAN.

THE certainty of having a pleasant resting-place after the toil and trouble of the day is one of the charms of pedestrianism in Japan. The "Pied Bulls" and "Red Lions" of our English highways make no pretence whatever to anything beyond the mere satisfying of the animal wants. How very different it is in Japan! From the moment the threshold is crossed to the moment of departure the visitor is the object of unceasing solicitude on the part of every one connected with the establishment, from highest to lowest. If it is midday, and he has arrived hot, dusty and a little tired, after a long morning's tramp, the whole force of the establishment ushers the visitor into a pretty, light apartment, looking on to one of those marvelious miniature gardens, in which, covering a space of a few feet, the mountains, woods, rivers and floods of an entire province are represented. By one neatly-dressed, pleasant-looking damsel his boots are taken off and his feet bathed in hot water, a second fans him and keeps up a voluble patter of conversation, a third on her knees offers him refreshing tea and sweetmeats, while the host himself with another detachment of waitresses if helping the coolies to unpack the box containing the European food. Everything that meets the eye is contrived to please it. There are pleasant rustic paintings the screens. There are vases with flowers dotted about; from the woodwork outside are suspended gayly colored lanterns, or festoons of glass through which the wind makes a soothing music, so that by the time the traveler has finished his repast, has smoked a pipe, and perhaps drank a cup of "Saki" with the host, he feels thoroughly refreshed and in capital humor to resume his journey. All this enjoyment is procured at a merely nominal cost, and the present of some bread or European liquor to the house at leaving brings out the whole establishment, who say "Sayonara"—that is "Good-bye"—with their foreheads on the mats.—*Belgravia.*

BLUE eyes smile and sorrow dies,
Blue eyes frown and gladness flies;
Smiling, frowning, laughing, weeping,
Blue eyes o'er my heart are keeping. DE.

"You may break, you may shatter the vase, if you will," but the frightful keramics pasted on by women folks will stick to it still.—[*Norristown Herald.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

THE WAY IT IS DONE.

MRS. A. E. STORY.

When we consider that, given the requisite knowledge, it is as easy to make good butter as poor, providing one is willing to take the needful pains, it becomes a marvel why there should be so much of an inferior quality produced. Plenty of water for the cows not simply night and morning, but so provided that they might have access to it at all times, and a cool airy room for the milk, are the first requisites, and without them it is next to impossible to have good butter.

Western butter, apart from the "creamery," takes a low rank in the Eastern markets, and judging of what is sent out by the other Western States, from what we know of what goes, and *how* it goes, from Michigan, it is not to be wondered at. At present butter brings ten cents per pound in Lansing, and is correspondingly low all over the State, not excepting in Detroit. One would think this price would cause makers to hold on to it; but, in the main, it does not. Butter is at present a drug in the market, the East having a tendency to keep it so.

Every grocer has constituted himself a shipper on a small or large scale, as the case may be, and oh! to see the way in which the butter is "put down" by the clerks. Good, bad and indifferent jumbled together in oily stickings! The golden rolls sent in by some one who knows how butter should be made, go into the firkin along with a lot of greasy-looking stuff out of which the buttermilk oozes unctiously as it is ladled and pressed down.

When the supply throughout the State only about equals the local demand, grocers respect the palates of their customers, in so far at least as to *look* at the butter they take in, but when once the packing season begins, there is an end of this. The butter comes in crocks, pails, pans and various nondescript utensils and generally is not so much as uncovered till it is ready to be weighed out and paid for. Then if a lot is found to be particularly fine, it is put aside for the home trade and the rest is squashed into the firkin, headed up and sent off to be eaten by whomsoever has a taste for it.

It ought to be a shame for a great State like Michigan, that any product of her soil should go forth to bring her discredit. It is not the grocers who are most to blame in this matter, though it would seem that a little care bestowed in purchasing, rejecting such as is manifestly unfit for the table, and properly assorting the lots so as to produce a uniformity in the contents of each firkin, would have a beneficial result, not only as yielding larger returns, but as having a tendency to work a change in the quality of the butter offered; for pride will do sometimes what nothing else will, and the housewife must be sadly lacking in pride who would be content to have her butter of an inferior grade when its inferiority is likely to be noticed, and its value weakened in consequence. But the main trouble lies with the farmers themselves, and instead of complaining of the prices they receive, they should seek the remedy in packing their own butter and holding it till the state of the market will warrant its shipment. This is already done by many farmers, and especially by such as have come to look upon the butter product of their farms as something more than an offset against their grocers' bills. But with too many there seems to be a disposition to be satisfied if the family cow supplies the family tea-pot and sugar-box.

This feeling as to the *littleness* of what might be made a source of wealth, is destined to undergo a change. Even now, in many portions of the State, grain-raising is—though to a limited extent—giving place to stock-raising and dairying. Michigan—many parts of it at least—is as well adapted to the latter, as it has long been known to be to the former. This the reports of the various cheese-factories and creameries scattered through the State fully show.

Clinton Co., Mich., June, 1878.

TO CAN GREEN PEAS.

Seeing an inquiry for a successful method for canning green peas, I append the following experience, knowing if the directions be strictly followed, that success will infallibly be the reward. Never attempt to can peas in glass or earthenware, as all efforts in that line, so far as I have knowledge, have proven unsuccessful. One should provide himself with *strong*, new tin cans, and the necessary conveniences for soldering. Another important feature is that the peas should be fresh from the vines, and cooked as soon as shelled. Boil the peas in water sufficient to cover, for ten or twelve minutes, seasoning with a little salt. Then fill the cans two-thirds full of peas, adding enough of the liquor in which they were boiled to fill to the brim. Wipe the groove dry, put on the cap, and solder air-tight at once. Make a small puncture in the center of the top, and place the cans in a boiler of hot water, to boil for an hour and a half. It is best to have something at the bottom of the boiler—broken crockery, wooden slats, in fact anything to keep the cans off from the bottom. Now, take the cans from out the boiling water, one at a time, and open the puncture with a needle, to allow of the escape of gas and steam. Then solder it tightly, and return to the boiler to boil two hours longer—even three will do no harm. If, at the expiration of this heroic treatment, the cans are still air-tight one need have little fear of fermentation of their contents.

Mary B.

BAKED PORK AND BEANS.

It may be granted that there is not a cook that does not "know beans;" but that there are many who do not know how to cook them properly, is a positive fact. Now, I will give you mother's way which I have never known to be excelled, but if there is a better way I should be pleased to know it. Three hours before dinner-time put on a nice piece of salt pork to boil, and about the same time put the beans to cook in another kettle, with much more water than enough to cover them; stand on the back of the stove at first so that they will swell nicely before boiling. When they have boiled about twenty minutes drain off the water and put on more, which should be boiling at the time. When they are very tender and begin to break, dip enough salt water from the pork to season them. If the pork is not yet tender, set the beans on the back part of the stove, for they will burn very easily after they begin to break. When the pork is boiled enough—it will generally be tender in about two hours—take the beans out into a dripping-pan and place the pork in the center; cut through the rind where it is to be sliced, and sprinkle black pepper over the whole. The beans must be quite juicy when put in the oven or they will be very dry when baked. A spoonful or two of molasses in half a cup of water, spread over before baking, make them brown nicely and also give them a good flavor. We usually boil the potatoes for dinner in the water the pork was boiled in, taking care to reduce it if too salt.

Mrs. S. C.

Wayne Co., N. Y.

DOMESTIC RECIPES.

Greens

Many people are too fastidious to eat greens, but let such remember: "Better is a dinner of herbs where love is, than a stalled ox, and hatred therewith." Mixed greens are far nicer than all of one kind. One-third horse-radish leaves and two-thirds narrow-dock—yellow rooted—make an appetizing dish, while beet leaves and mustard are far better mixed than either alone. All greens should be thoroughly looked over and cleansed from any impurities. Put them into boiling, salt water, and boil until tender, which will be in about one half-hour, although the narrow-dock will be tender in ten minutes' time. Drain, and press out all the water, mix in a lump of butter, smooth off, cut in squares and send to the table hot.

Rose Leaves.

These are nice to put in cake. Gather as many as wished, chop fine, mix in a little white sugar, spread on plates and dry. When perfectly dry, pack in cans and keep air-tight.

D. W. J.

Corn Pone.

Will some of the Rural housewives give a recipe for making and baking the old-fashioned corn pone? Can said pone be baked in the usual baking pans of the stoves of the present day?

W. E. L.

To Pickle Black-Walnuts.

Gather the nuts before the shells are hard, which may be known by piercing them with a pin, and let them soak in strong salt and water for one week, stirring them every day, and changing the water every other day. At the expiration of a week let them drain and remain in the open air until they turn black. Prepare some good cider vinegar, and to each quart allow one-fourth of an ounce each of cloves, black pepper, ginger, mace, Jamaica pepper and an ounce of salt. Bring to the boiling point and pour over the walnuts. When cold, turn off and again heat, pouring it over as before. Tie down with a bladder and let stand three months. If then they are to be kept any length of time, it is best to prepare fresh vinegar, with the same proportions of spice and salt; boil five or ten minutes and pour hot over the nuts.

Pickled Chicken.

Boil three chickens until the meat will fall from the bones; remove the meat as whole as possible and put into a stone jar; add to a pint of the water in which they were boiled enough vinegar to cover the meat; season with cloves, allspice, pepper and salt and pour hot over the chicken.

Clam Stew.

Wash fifty hard-shell clams clean and put in a kettle with a half pint of hot water; let them simmer and steam until the shells open; then take out of the shells, strain the juice and return to the fire with the clams; add half a pint of rich sweet milk; a piece of butter, pepper, and salt if necessary. Roll three crackers fine and add just before serving.

E. M.

News of the Week.

POLITICAL.

Monday, July 22.

The main body of the Potter investigating committee has happily given itself and the public a rest during the sweltering week just ended, but it will begin its labors again to-morrow at Atlantic City. There the "visiting statesmen" will tell as little as they can about how the electoral count was manipulated in Florida and Louisiana, while several other notabilities will add to the mass of information, contradiction, or perjury already accumulated. It is supposed that the committee will, by its presence, advertise Atlantic City as a pleasant sea resort, at least for the next fortnight. The labors of the sub-committee in New Orleans have been but poorly rewarded by the evidence taken during the week. The Secretary of the Louisiana democratic committee swore that J. E. Anderson tried to sell himself to them, but couldn't there find a market; while a number of colored witnesses testified that E. L. Weber endeavored to bribe them to perjury in support of some of his yarns. Judging by his own venality and that of the general run of Louisiana politicians, either he must have offered a ridiculously small price; or they took his money without working for it; or they have been better paid by the other side; or he never made an offer to them, and they are falsely boasting of having resisted temptation—or, well, anything except the supposition that a Louisiana politician was not purchasable.

Among the political parties of the day is a quiet organization known as the Farmers' Alliance, which, originating in Herkimer County, in this State, has already extended to Oneida, Jefferson and Lewis counties, and will soon spread widely abroad. If praiseworthy objects are as favorable to the growth of a political party as those of an indifferent, doubtful or demagogical nature. The reduction of official salaries and public expenditures generally; the election to the legislature of fewer lawyers and more farmers; and the relief of real property from the undue proportion of public burdens which now press upon it, are the chief objects which the Alliance proposes to accomplish. It has no affiliation with the Nationalists, though it may unite with them for common ends; but it is hardly likely that any close union can take place between those who proclaim war against the reaper, mower and threshing machine, and those to whom these implements are a god-send, who have a vital interest in making their ownership of the soil by these means profitable, and to whom the best government is that which rules most cheaply, justly and equitably, giving to each class the weight its numbers and importance merit. It is certainly time that the farming community took a more prominent part in politics, not merely as followers of the old parties, which prize them only for their votes; but as special advocates and representatives of the grandest, most permanent, and most virtuous branch of industry in this or any other country.

The Nationalists of this State will hold a convention at Syracuse to-morrow, and from present indications it's going to be by no means a "happy family," as there probably will be a desperate struggle for the leadership between the various factions of which the new party is composed. The Greenbackers want unlimited money; the Labor Reformers want limited hours of labor, higher wages, and no convict competition; the Communists desire that everyone should contribute according to his ability to the happiness of everyone according to his needs; and moreover, there is a multitude of sub-divisions of each of these factions, the leaders and ruck of which have their own particular axes to grind. Energy, however, is certainly not lacking to the organization, as investigation shows that its members are working vigorously, though secretly, and there is little doubt but that, at the next election, it will display considerably greater strength than the general public has hitherto thought possible. It would be well if the Farmers' Alliance manifested only a tithe of such vigor; but then, farmers have little time for idling, and their dispersion through the country renders it more difficult for them to meet and agitate, while the Nationalists are confined almost entirely to the idlers and workmen hived in cities, and ever ready to push at all risks what they consider their own interests.

Gen. Merritt, the new Collector of this port, has filed a bond for $400,000, and entered on his duties last Saturday. Hayes, it is said, intends to make war on those republicans who, like Conkling, are neither admirers nor supporters of his; consequently, he has removed the Postmaster at New Orleans, whose only offense consists in his being a brother-in-law of Gen. Butler, and ex-Chief of Police, Gen. Badger, has been appointed in his stead. Another effort at crossing the "bloody chasm" is about to be made at Marietta, Ohio, where preparations are under way for a grand re-union of "the blue and "the gray," next September. It is expected that 40,000 Union and Confederate veterans can be induced to meet there, besides a batallion of British regulars from Canada, come probably to see how a "bloody chasm" is bridged. The President and his cabinet, together with Sherman, Beauregard, Sheridan, Joseph E. Johnston and many State Governors, will be on show. Despite the scortcomings of the late Louisiana legislature, the people of New Orleans are jubilant over their prospects. The revenue of the city has been greater this year than any year since the war; the crops are excellent; the mouth of the Mississippi has been deepened enough to allow the passage of large European vessels; the grain trade of the upper part of the great valley is tending more and more, like the cotton trade of its lower part, to seek a cheap water outlet southward; and, altogether, there is a fair prospect of brighter days for that tax-ridden, swamp-begirt, late sink of political corruption—the Crescent City.

MISCELLANEOUS.

Jas. Gordon Bennett, of the Herald, who has been in Europe since his duel with May, returned in a lordly way last Tuesday. He and his sister and their six servants had 125 pieces of luggage—more than all the other passengers together. The vessel which he has purchased for the purpose of discovering the North Pole, and called the Jeanette after his sister, is on her way from Havre to San Francisco. There she will be fully equipped, and go polewards by way of Behring Straits, which has been selected as the most practicable route. During June $5,120,868 were received by the Government for public lands in Dakota, Kansas, Minnesota and Nebraska, an increase of $3,724,527 over the same month last year. This indicates a large prospective addition to the number of our farmers and stockmen—good for the country at large, whose prosperity mainly rests upon agriculture, but not so good for the farmers whose products are already almost too abundant to meet with a profitable market. Mr. Dodge, Statistician of the Department of Agriculture since its foundation, eighteen years ago, has resigned, "as a protest against the incompetency and recklessness" of his superiors. His protest is a trifle vague, to be sure, but his services have always been excellent, and by his withdrawal the public has lost an efficient servant, and the farmers of the country a valuable friend. At Owasco Lake on Wednesday, the Cornell Freshmen won a well-contested boat race against the Freshmen of Harvard University. Judging by the relative *eclat* gained by the various forms of competition in our Universities, it would seem that the main object of these institutions is to train their alumni in muscular Christianity.

The heat during the past week has been unprecedentedly severe in some parts of the country—notably in St. Louis, the hottest city in the United States in summer time. On Monday last, the number of deaths in that city from sunstroke and prostration due to the heat, amounted to forty adults, while upwards of one hundred non-fatal cases occurred. Twenty-five dead bodies, just brought in, lay at the Morgue at one time; and the fatality was exceptionally great among infants and children, not here enumerated. On Wednesday the thermometer rose up to 103 in the shade, and from seven o'clock in the morning patients began to arrive at the public medical institutions and at the Morgue. All out-door business was suspended. Fourteen of the staff of four newspapers were prostrated as well as five policemen, six letter-carriers, and a large number of citizens. In most of the Western States the weather was torrid, work in the heat of the sun generally suspended, and suffering caused to men and animals, and not a few deaths. By Thursday the hot wave had reached the Atlantic sea-board, and there were 123 sunstrokes in this city, and 48 deaths, while in all the neighboring cities from Boston to Philadelphia, the heat was also intense, the thermometer in the Quaker City registering 101. Harvesting everywhere has been considerably delayed by this tropical spell, the like of which only those upwards of a century old could faintly remember as happening in their infancy. No longer, however, does sweating and limp humanity pant for a breath of air, or stifle with that from the mouth of a glowing furnace; for yesterday and this morning the air has been delightfully cool and invigorating, and, moreover, there's a very great deal of it.

FOREIGN.

Across the Atlantic the treaty of Berlin and its consequences still form the chief topic of interest. Last week the terms agreed upon with regard to the settlement of European Turkey were here epitomized; and later advices show that the adjustment of Asiatic Turkey had already been anticipated. Kars, Erzeroum, and Batoum, together with the intervening section of Armenia, become Rusian property; while Bayazid, just at the foot of Mount Ararat, which Russia had set apart as a sop for Persia, has been retained among the Turkish possessions. About two-thirds of the Ottoman European territory still remains to the Porte, and this is the richest, most thickly populated, and most peaceful part of it. Late statistics of the population of European Turkey show the races therein approximately divided into 2,200,000 Osmanlis or Turks proper; 1,000,000 Greeks; 3,550,000 Solavs—half Bulgarians and half Serbs;—1,200,00 Albanians, together with a varying number of Armenians, Roumans, Gypsies, Jews and Tartars, making altogether about 9,000,000 souls. Of these 6,000,000 are still included in the Turkish Empire; while of the 14,000,000 population in Asiatic Turkey, scarcely a million have been transferred to Russia, so that in the words of Bismarck, "Turkey is once more a European Power."

In the Berlin instrument nothing has been said about the money indemnity imposed upon Turkey by the treaty of San Stefano, so that this question remains to be settled by the two parties at some future day, and may be made a cause of later bickering and battle, should Russia feel so disposed. At present, however, the Colossus of the North seems utterly exhausted. The late war cost the Czar upwards of $700,000,000 and 95,000 lives. His treasury is exhausted; his credit a thing of the past; his subjects generally discontented at the results of their heavy sacrifices, while unable, with a bankrupt exchequer, to renew the struggle. While the Muscovite bureaucracy, from the highest to the lowest, are corrupt and dishonest beyond comparison, throughout the Empire there is a growing feeling of discontent at the present government, manifested most openly by

the Nihilists, whose destructive principles were lately condensed here. The Czar accordingly will probably have his hands full of business for some time, in managing the internal affairs of his vast possessions, without intermeddling with Turkey, even to secure a little of the money much needed in his depleted coffers. This, however, would be impossible without depriving other creditors of the Porte of all chance of getting what is due them. Even away back in 1874 the floating debt of Turkey, which was secured simply by public credit, amounted to $64,600,000; while that due to foreigners, secured on special sources of revenue—a security far safer than Turkish public faith—ran away up to $772,000; while official reports in the following year put the entire Turkish debt at $969,600,000, with the outlay constantly growing larger than the income. Most—fully two-thirds—of this debt was due to British subjects; hence not a little of the anxiety felt by the British capitalist at the recent prospect of the death of the "sick man" who owed him so large a bill, all hope of any payment on which would end with the turbaned invalid's life. This debt—enormous for such a semi-civilized nation as Turkey—has since then been greatly increased, so that there is little prospect of Russia ever getting any money indemnity, and she has disclaimed all idea of exacting a territorial substitute.

Austria is about to occupy her slice of Turkey with 70,000 men. It was thought at first that the inhabitants of Bosnia and Herzegovina would resist the invasion of their territory; and the Austrian army of occupation would then have amounted to 140,000; but in view of the more peaceable disposition lately manifested, the army has been reduced one-half. For ages bloodshed and constant robbery and discord have kept these provinces desolate, and it will ultimately be fortunate for the inhabitants that the strong arm of the Hapsburg will make peace among them. Doubtless the presence of Austria here will also be a check upon the pro-Russian tendencies of Servia and Montenegro, as well as a restraint upon Muscovite machinations in that neighborhood.

The chief talk, however, is about the British treaty with Turkey, which caps the feat which Bismarck calls "a great triumph of British diplomacy." By this treaty England has already taken possession of the Island of Cyprus, the third largest island in the Mediterranean Sea. Its greatest length is 145 miles, its greatest breadth 60; it is 45 miles only from the coast of Syria; 250 from the entrance to the Suez Canal; and about 1,000 miles east of the nearest British possession, the Island of Malta. It can be made a second Gibraltar; gives England a masterly position in the Levant, within easy reach of Constantinople and Egypt; and at the same time offers her command of the valley of the Euphrates.

Along this British capital is about to build a railroad to the Persian Gulf, thus opening up the great natural riches of parts of the country, and affording another road to India. True it is that the responsibility England has undertaken, to defend Asiatic Turkey against all aggression, is by no means a light one; but it will lie most heavily on future years, and then it can be abandoned whenever it becomes inconvenient, or at least dangerous, and this with no more deceit and lack of good faith than have been displayed in undertaking it. HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 20, 1878.

BEANS AND PEAS.—Medium beans are quiet, and a rather free offering makes prices easier. Marrows of prime shipping quality are not over plenty, and prices are quoted firmer. Extra pea beans have a fair demand. Other marks or remnants neglected. White kidneys dull. Choice red kidneys held higher. The weather has been severe upon stock in store, and about all wholesale trade is transacted at the stations. Canadian peas have advanced; 77@78c. in bulk and bond. Green peas also better, at $1.15@1.20; Southern B. E. nominal, at $3@3.25.

We quote medium beans, prime, $1 55@1 57½; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 57½@1 60; Peas, $1 40@1 65; white $1 60@$1 62½; kidney, $1 40@1 60; red do., $3@3 25; black, $2 35@2 40; Limas, $3 75@4 25.

Receipts of beans, 2,868 bush.; exports, 1,315 bbl.
Exports of peas, 39,031 bu.

BUTTER.—Uninterrupted hot weather has distracted much of the ordinary demand. The quality of State has fallen off, and buyers are frequently compelled to trust to the reputation of marks in both State and western, and indeed, sometimes have waited for the arrival of specials rather than risk lots on sale. This shows the value of establishing a respectable mark. Firkins have sold well. The general stock is kept from accumulating by the export demand; shippers now have increased cold room on steamers. Late sales for Europe have included a wider range of qualities, but fine stock is still receiving surest attention. It is becoming quite a custom here to turn old-fashioned cellars into cold storage. Western, when it arrives right, holds up nicely by the system, and exporters are looking at it more frequently than before; while its easy quotations have called off a number of Eastern buyers from Welsh tubs.

State creamery, choice, 20@21c.; other, 18@20c.; half tubs and pails, choice, 14@16c.; other, 11@14c.; Welsh tubs, best, 12@13c.; other, 10@12c.; poor State, 6@8c.; State firkins, 15@17c.; Western creamery, choice, 20c.; other, 16@19c.; Western dairy, best, 13@14c.; other, 9@12c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 5½@8c.; old and grease, 3½@5c.

Receipts for the week, 30,160 pkgs.; exports past week, 12,675 do.

BEESWAX.—A small trade is in progress at 26½@27½c. for Western and Southern.

BROOM CORN.—There is the quiet trade usual approaching a new crop. Latest prices are 6@6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

CHEESE.—Early in the week the market stood up well under the unprecedented arrivals, reaching nearly 60,000 boxes in one day, and indeed on some of the fancy colored lots better prices were possible, the weather then being cool, and the position abroad as well favorable to shippers; 8¼ was made for the choicest, but at the close of the week the life has been taken out of the market; there is found to be a liberal accommodation, and the turn to hot weather discourages exporters. The closing market is 8¼ for fancy-colored, but white and lower grades are very much depressed, and have scarcely a fixed value

Quotations are for fancy, 8@8½c.; 7@7¾c. for good and prime; 6½@7c. for fair; 4@6c. for half skimmed; 2¼@3½c. for skimmed. State, farm dairy at 6½@7½c. for good to choice, 5@6½c. for fair to good, and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7½@8c.; do. good to prime, 6¾@7¾c.; do. fair to good, 6@6¾c.; Western factory, fine, full cream, cheddar, 7@7¼c.; do. fine, full cream, flat, 6¾@7¼c.; do. slightly skimmed, flat, 6@6¾c.; do. half skimmed, 4@5¼c.; do. full skimmed, 2@3c.

Liverpool cable, 44s.
Exports past week, 125,478 boxes.
Receipts, 150,512 boxes.
Gold closes, 100¼.

COTTON.—There is a much better spinning demand, and the general market is stronger. Latest prices are for July, 11.61c.; for August, 11.63@11.64c.; for September 11.23@11.29c.; for October, 11.14@11.15c.; for November, 10.99@11.00c.; for December, 10 99c. for January, 11.03@11.04c.; for February, 11.08@11.09c.; for March, 11.18@11.18c.; for April, 11.25@11.26c. and for May, 11.31@11.32c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans*	*Texas.*
Ordinary	9⅝	9¾	9⅞	9¾
Strict ordinary	10	10	10⅛	10⅛
Good ordinary	10¼	10⅜	10⅝	10⅜
Strict good do	10 15-16	10 15-16	11 1-16	11 1-16
Low middling	11 3-16	11 3-16	11 5-16	11 5-16
Strict low middling	11⅜	11⅜	11½	11¼
Middling	11½	11½	11⅝	11⅝
Good middling	11⅞	11⅞	12	12
Strict good middling	12 3-16	12 3-16	12 5-16	12 5-16
Middling fair	12 11-16	12 11-16	12 13-16	12 13-16
Fair	13 7-16	13 7-16	13 9-16	13 9-16

Stained.

Good ordinary 9¾; Strict good ordinary 10
Low middling 10¼; Middling 11 1-16

DRIED FRUITS.—There is a generally slack market, and prices wholly nominal.

Peaches—Fancy North Carolina at 10@11c.; good to prime Georgia at 8@9c.; unpeeled halves, 3¼@3¾c.; quarters, 3¼@3¾c. Pitted cherries, nominally 13½@14c; raspberries, 26c.; New York State plums, 12@12½c.; southern plums, nominal; blackberries nominal. Apples—State quarters, 3½@4c.; do. sliced, prime, 4½c; good, 3¼@4c; western quarters, 2@3c.; southern at 4@4¼ for prime sliced; 3@3½c. for fair to good; southern quarters, 2@3c.; Tennessee quarters, in bags, at 1¾@2c. New raspberries, 26c.

Exports—419 bbls. dried apples.

EGGS.—Receipts for the week, 7,107 bbls. The market has ruled somewhat firmer, but with the extremely hot weather trade drags, and prices are a shade off from a day or two ago. The receipts of fresh have mostly gone off, but there is quite a supply of cold stored lots. Sellers do not draw largely from these, as they must soon sell after leaving a low temperature.

Near points scarce, quoted, 14@15c.; State and N. J. 13@14c.; Western, fresh, 11½@12c.; Canadian do. 12@12½c.; other, 10@11½c.

FRESH FRUITS.—There is a large supply of apples, quality very good for date, and prices easy. Sweet and sour brought $1.50 2.00; Astrachan, small to prime, $1.25@3; small and windfalls, 75c.@$1.25 bbl., all open heads. Peaches have been scarce most of the week, and a very steady demand has kept prices strong. Georgia and S. C., $3@5. crate; N. C. $1.50@4.; Md. "Hales," $1@1.75; do. "Troths," $2.50@3. The first installment from California orchards arrived this week—a car-load, mostly Bartlett and Doyenne Pears. Pears, $5 box. Fine plums, $3 do. Jargonelle pears, $3@4 bbl.; Harvest do., $2@2.75; Whortleberries, $2@2.50 bush. Raspberries are low; Antwerps, 2½@1½c. third quarts. Brandywine, 3@5c., pint. This latter berry is growing in favor, as it has some shipping hardness and gives almost as much satisfaction as Antwerps in flavor. Currants cheap; small, 3@4c.; Cherry, 6@10c.; Black, 4@5c. Watermelons have begun to sell; market well supplied. Char., $30@40 per 100; Augusta, $30@45; N. C., $15@30; Nutmeg melons, Norfolk, $2.50@3.50 bbl. Black Hamburg, 50@75c. lb.; Muscat 50@75c.; Sweet Water, 40c. Peanuts quiet, at $1.55 for extra hand-picked; $1.40@1.45 for choice, and $1.25@1.35 for good.

FLOUR.—The hot weather has interfered with trade. Good lots that will hold well, not likely to be affected by the heat have sold higher, but otherwise buyers have had the advantage.

Latest prices are $3.35@3.90 for very inferior to very choice superfine State; $3.90@4.20 for poor to very good extra do. odd lots and lines; $4.20@4.55 for good to fancy do.; $3.35@3.90 for very poor to very choice superfine Indiana, Iowa, Michigan, Ohio, &c., $3.90@4.20 for inferior to good shipping extra do. and $4 30@4.55 for good to very choice extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@5.65; Minnesota "straight," inferior to fancy, at $5.00@6.75, few genuine brands of this class going under $5.40@5.50, and patent poor to strictly fancy at $5.40@8.25; unsound stock at from $2.00@5.25; city mill extra at $5 00@5.20 for West Indies, do. for England, $3.90@4.10; do. trade and family extras, $5.05@6.75; do. for South America, $5.25@5 85 for fair to fancy; No. 2 $2.25@3.25 for inferior to fancy.

CORN MEAL.—Is selling at $2.85@3.90 for Brandywine, and $2.10@2.35 for Western yellow.

GRAIN.—The markets are very sensitive to any reports of the crops, and when the heavy rains occurred, several days since, under the impression that injury would result prices advanced, but at the close prices are weak throughout.

Latest sales of wheat are of No. 2 Milwaukee spring, at $1 05¾; Nos. 1 and 2 spring, mixed, at $1 06; No. 2 spring, at $1 04@1 06; New York No. 2 spring, July option, at $1 04; No. 3 spring at 95c.; No. 2 Northwest spring, August option at $1 02; ungraded spring at 85c.@$1 05; amber Michigan at $1 1½; ungraded red at $1 02@1 09; No. 2 red at $1 08@1 12; do., July, at $1 10¾; do., August option, at $1 03¾; do., delivery by August 27, at $1 04; do., September option, at $1 02¾@1 02¾; No. 1 red, steamer, at $1 07; white State at $1 24@1 26; No. 1 white at $1 25; do., August delivery, at $1 14; do., September delivery, at $1.10@1.10¾; No. 3 white at $1.18; No. 2 amber at $1 07; do., steamer at $1 05; No. 1 amber round, July option, at $1 11; No. 1 red steamer at $1 07. Corn at for New York No. 2, July option, at 47¾@48c.; do., August option, at 47½@48c.; do., September option, at 48¾@49¼c.; steamer mixed, July option, at 46¼@46¾c.; do. August option, at 46¾c.; do., September option, at 47¾@48c.; steamer mixed at 46¾@47½c.; ungraded mixed at 45@48¼c., the latter for very choice: western white at 50¾c., and round yellow at 53c. Oats are for New York No. 2 white at 34c.; New York No. 1 at 34c.; New York No. 3 at 33c.; New York No. 2 at 47¾@48¾c.; Kansas mixed at 48c.; ungraded mixed at 45@48¼c., the latter for very choice: western white at 50¾c., and round yellow at 53c. Oats are for New York No. 2 white at 34c.; New York No. 1 at 34c.; New York No. 3 at 33c.; white western at 32@33½c.; mixed western at 31¾@33¾c.; white State at 33@36¾c.; mixed State at 32@33c.; New York No. 1 white quoted at 37@38c.; New York No. 3 white at 35c.; New York extra at 34¾@35c.; New York No. 3 at 31¾c.

HAY AND STRAW.—Most of the receipts of old are the lower grades, that have apparently been urged forward to make room for the new crop. On this lower grade of stock prices are easy.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 40@45c. for short rye; and 30@35c. for oat.

Exports past week 2,139 bales. Since Jan. 1st, 38,500 do.; same time last year, 28,975 do.

HOPS.—There is nothing doing outside of the small lots needed by brewers, but supplies being moderate, prices hold as before. New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@ 3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—The sales are at 19½@20c. for light; 19½@21c. for middle; 20@21½c. for heavy and 17½@19c. for good damaged.

PROVISIONS.—Hog products have been very dull, and prices barely supported, but no radical changes. Mess pork quoted $10 25@10 50 for spot lots; $10 10 for July and August; $10 20 for September; and $10 30 for October. Bacon at 6c. for long clear. Lard at $7 22½ for spot lots; $7 22½ for July and August; $7 30 for September. Stearine at 9 for prime. Beef hams at $22. Beef—extra mess, $11 75@12; plain mess, $10@11 50; packet, $12@13 50 for bbls. and $16@17 for tcs.; family at $13@14; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

POULTRY AND GAME.—Prices for live fowls are unusually strong. Chickens in good demand for near watering places; spring chickens, N. J. 18c.; State 16@17c.; Western, 13½@14½c.; Southern 13@14c. Fowls—N. J. 13@14c.; S. & W., 12@13c.; Roosters, 5@7c. Turkeys, 11@14c.. Ducks—Choice, pair, 60@75c.; other 40@85c.; Spring 50@78c. Geese—Choice, $1.25@1.50; other 88@$1.12.

Dressed poultry in good demand, and higher. Dry picked turkeys, 15@16c.; other, 13@14c.; spring chickens, Phila., 23@24c.; N. J. 18@20c.; S. & W. 15@17c.; Pa. fowls, 14@16c.; N. J., 12@15c.; State and Western, 11@12c.

Game still only represented by the stall-fed pigeons, $1 25@1 37 doz., full grown; young, $1@1 12.

TOBACCO.—There is a good degree of life to the market, and prices strong Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¾@ 6¼	6½@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8¼@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1877.

New England, fine, and selections	18 @35
seconds	10 @12
Fillers	5 @ 7
Pennsylvania assorted lots, common	8 @ 9
fair	10 @12
fine	14 @17
fillers	5½@ 6
Ohio assorted lots	6½@ 8

VEGETABLES.—Exports potatoes past week, 8,985 bbls. Prices for potatoes have fallen rapidly, but the low rates have brought out considerable exportation. L. I. and N. J., $1@1.25; $1.50 selected. Culls, 50@75c. N. J. tomatoes now quotable at 50@75c. bush.; Nor., crates, 65@75c. Hackensack sweet corn per 100, 75c.@$1; common, 15@30c. L. I. green peas, bag, 75c.@$1. String beans, 75c.@$1; wax do., $1@1.25. Cucumbers, L. I., $1.25@1.50 per 100. N. J. onions, bbl., $1@1.25; Southern, $1@1.25. Marrow squash, bbl., $1.75; crook-necked, $1.50; white, $1@1 25. Radishes, per 100 bunches, $1; beets, do., $1@1.50; carrots, $1. Russia Turnips, 75c.@$1. Cabbage, 100 Flat Dutch $3@4; Wakefield, $2@3.50. Cauliflower, $1@3.

WOOL.—There is more activity, and a generally strong market.

Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 36@33; X, 34@37; No. 1, 36@38c.; No. 2, 33@36c; common, 30@32c.; combing, 33@42c.

New York, Michigan, Indiana and Wisconsin. XX, 30@35c.; X, 30@35c.; No. 1, 34@37c.; No. 2, 30@33c. common, 27@30c.; combing, 36@40c.

Iowa, Vermont and Illinois—X and XX 30@33c.; No. 1, 32@35c.; No. 2, 28@30c.; combing, 3.@38c.

Missouri, Kentucky, and Tennessee—Washed fleece, 33@35c.; unwashed, 20@26c.; unwashed combing, 28@32c.

LIVE STOCK MARKETS.

Saturday, July 20th, 1878.

BEEVES.—Receipts for the week, 11,316 head: do., last week, 7,933 do. The demand has not been so sharp, as the remarkably hot weather has restricted sales to wholesale butchers. Grass fed Cherokee sold at 7c.; choice do., 9¼c.; Colorado steers, 8¼@9c; native, 8@10c.; a few at 10¾. Receipts large for the season, and especially for the hot weather that prevails.

COWS AND CALVES.—A few head have changed hands at $30@55. During the late high prices of beef some cows went to the slaughterers, but that class of stock does not require replenishment from high-priced milkers.

VEAL CALVES.—Market quiet and low, common to good. Buttermilk, 2½@3¼c.; a few at 3¾c.; ordinary to prime milk, 5@6¼c.

SHEEP AND LAMBS.—Receipts for the week, 27,419 head; do. last week, 20,445 do. Ordinary stock sold at 3¾@4¼c.; fancy sold for export at 5¼c. A few choice N. J. lambs, 7c.; others, 5¾@6¾c.

SWINE.—Receipts for the week, 20,049 head; do. last week, 22,005 do. Quotations nominally, 4¾@4¾c. per lb.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

Single Copy, per Year	$2 50
" " Six Months	1 25
Five Copies or more, per Year	2 00
" " " Six Months	1 00
Three Months' Trial	65
Great Britain, Ireland, Australia and Germany, per Year, post-paid	$3 54 (14s. 6d.)
France, " "	3 54 (18f.)
French Colonies, " "	4 58 (23f.)

Any one sending a club of ten is entitled to one copy, one year, free.

Agents will be supplied with canvassing outfit on application.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c.	per line
" 13th page	50	"
Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

SPECIAL NOTICES.

For particulars regarding Electric Belts, &c., address PULVERMACHER GALVANIC CO., Cincinnati, O.

INDEX TO NEW ADVERTISEMENTS.

Boomer & Boschert Press Co.—Cider Presses and Graters.
Boyer & Bro., Wm. L.—The Union Railway Horse Power.
Curtis, F. D.—Duroc Pigs for Sale.
Dederick & Co., P. K.—Best Hay Press.
Dillon, J. L.—New Strawberry.
Gifford, W. C.—Gifford's Swinging Stanchion.
Gregory, J. R.—Farm for Sale.
Harder, Minard—The Fearless Threshing Machine.
Hale, G. H. & J. W.—Strawberry Plants for Summer & Fall Planting.
Hubbard, T. S.—Grape Vines, Grape Wood, &c.
Harlow, Brothers.—Adams Horse Powers.
Hall, Elton & Co.—Electro-Plated Ware, German Silver and Britannia Spoons.
Hance, A. & Son.—A Million of Crescent Seedling Strawberry Plants.
Kingsford & Son, T.—Oswego Corn Starch.
Magie Co., D. M.—Magie or Poland China Hogs.
McSherry & Co.—Force Feed Grain Drill.
Mohawk & Hudson Mf'g Co.—Dodge Hay Press Family Cider and Wine Press.
Parsons & Sons Co.—Rare Evergreens.
Silver & Deming Mf'g Co.—Endless Chain Horse Powers.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

New Advertisements.

HOW TO BE YOUR OWN LAWYER AGENTS WANTED. $50 to $125 a Month. *An Encyclopedia of Law and Forms.* For Business Men, Farmers, Mechanics, Property Owners, Tenants, every body, every business. Saves many times cost. Selling fast. Send for Circular and Terms. P. W. ZIEGLER & CO., 518 Arch St., Philadelphia, Pa.

I WILL SELL TO SUBSCRIBERS OF the RURAL, Duroc pigs, 3 weeks old, for $7; pairs, $13. Fifty pigs of this breed, nine months old, averaged 400 pounds. Shipped at Seneneetady.
F. D. CURTIS.
July 3, 1878. Kirby Homestead, Charlton, N. Y.

JERSEY BULL.—No. 2227, A. J. C. C. H. R. Two years; a fine animal; dark squirrel-gray and white; kind and genle. For sale at half its value, as we have no use for him.
E. & J. C. WILLIAMS, Montclair, N. J.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.
Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.
For further particulars, send for Price Lists and Circulars to
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Halladay Standard.

The only Wind Mill awarded
TWO MEDALS
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TWO DIPLOMAS
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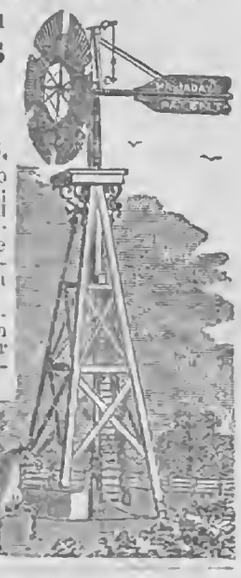

Every machine warranted to be well made of good material; to do good work in any kind of wind; to be perfectly self-regulating; to possess more power and to be more reliable than any other Wind Mill made.
Each piece is fitted and numbered so that a stranger can put the Mill up, using our drawings and printed instructions for a guide.
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U. S. WIND ENGINE & PUMP CO.,
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Farmers and Gardeners,
LOOK TO YOUR INTERESTS!
THE VITATIVE COMPOUND,
Or Seed and Plant Invigorator.

The greatest discovery of its kind of modern times, for increasing the vital force and early maturity of Seeds and Plants. Patented April 2d, 1878.
Early Maturity, Sure Crops, Large Yields, and
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Better than Guano or Plaster, at a fraction of their cost. The Compound is applied directly to the seed before planting, and its chemical properties insure speedy and certain germination, and by creating an artificial warmth aid the young shoot in its first stages, completely overcoming the dangers incident to wet, cold or late springs, and at the same time protecting the seed and shoot from the ravages of worms or insects. Put up in neat packages of three sizes—the smallest sufficient for a peck, the medium for a half bushel, and the largest for a bushel of seed. Price 50 cents, $1 and $2 respectively. Sent by mail or express on receipt of price.
Agents wanted. Send for Circulars containing testimonials. Address WAUGAMAN & CO.,
Care GEO. BINGHAM, Adams Express,
PITTSBURGH, PA.

HALL, ELTON & CO.,
Electro-Plated Ware, German Silver and Britannia Spoons.

THE "ORLEANS."

Factories, Wallingford, Conn. Salesroom, 75 Chambers St., New York.

Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 11.

ANNIE L. JACK.

"But," says practical Josie, "you know, mamma, the grapes were three years before bearing." "True," I answered, "that was learning to labor and to wait. But, if you want a fruit that yields quick returns, listen to this report of the little boy who planted Black-cap raspberries."

Two years ago, a small, but intelligent lad, of ten, was looking over the catalogue of fruit, when a picture of "Mammoth Cluster" attracted his fancy. He had "pocket-money," and after asking if he might plant his "tips" in the last furrow of the headland nearest the fence, and receiving permission, sent by mail for fifty of said tips. They were planted, grew and flowered the first season, and he was a proud boy in August, when he could bring in a dish-full for tea, as was done several times that year. The next summer a few stakes were put in and a wire run along near the top; the raspberry vines were thrown over, and twined along the wire, and the tips set out in another row; besides a sale of fifty which repaid the first outlay. The berries ripened full, large and black, and were regularly gathered and sent to market, in five-cent gallon baskets, although experience has proved that quart-boxes, as used for strawberries, would be better. During the flush of picking, this boy hired his brothers and sisters who could be spared, paying them five cents an hour, and they seemed to enjoy the business. The profits, after paying expenses, were twenty-two dollars, and this season the oldest vines and last year's planting are alike thrifty and full of bloom. Black-caps, especially the Mammoth Cluster, sell better than any other *black* berry we have seen in the market, and although prices may vary, I think I may safely say that there is pocket-money in this choice variety of raspberry.

One year, not very long ago, one of our girls determined to try peas. She chose "Carter's First Crop," and with a proper forethought, had begged of papa the previous autumn to make a few rows on a high knoll where the ground is first bare in spring. Here, one sunny day in March, the peas were sown, a foot apart, every third row being omitted to form the double rows so convenient for staking. This pea does not need tall stakes, and a girl can chop and point apple branches quite easily, and put them in as neatly as a boy. When the peas were ready to pick they were measured and put into old boxes, holding a bushel each. At the same time roses, lily of the valley, and fragrant honeysuckle were in their first bloom; and this enterprising girl went to the woods for moss; picked and arranged dainty little bouquets, rolling up the stems in moss and placing them around the peas. They were not plentiful on the market, and the flowers paid expenses of marketing the peas, and left a dollar balance, while the Carter's being the first fresh home-grown peas, brought in $2.50 a box, thus clearing $8.50, on the *first* which was, of course, the *best* picking. The chief secret was in getting the peas in *early*, having the rows ready in autumn. It did not injure them when, in April, a heavy snow-fall covered the ground; no doubt the poor man's manure, as it is called, was beneficial to them, and they were soaked slowly and ready to start while the ground was damp. I would impress on the minds of young people the necessity of planting the *best* of everything, as it costs no more labor, and you know, your grand old poet, Whittier, says:

"Give fools their gold, and knaves their power,
Let fortune's bubbles rise and fall;
Who sows a field, or trains a flower,
Or plants a tree, is more than all."

SPENDING-MONEY FOR THE GIRLS.

J. E. M'C.

A little girl called in one day to ask me if I did not wish to have her crochet some narrow edging for me. She showed me some pretty samples, told me how well it would wear, outlasting two sets of garments, and altogether was so convincing that I engaged her to make for me the amount of one spool of cotton. She set her price according to the cotton used, which was a very fair way, as it took about the same amount of crocheting to make up two hundred yards of thread, whether in wide or narrow lace. I was well pleased with my bargain, and found that the trimming wore for several years, though in regular use.

I found that she did a good deal of the work for other people, crocheting a beautiful wide lace for pillow-cases, that would almost last a lifetime.

The reason Susy made her pocket-money by this work was that she had *perfected* herself in it. Any bright, little girl a dozen years old might do the same, with the same painstaking, but not without. Then, she went among her own and her mother's friends, and modestly solicited custom. She did not press her wares offensively, but she went to work in a way that meant business. She was always ready to oblige, and would as readily crochet a strip for a pair of cuffs as for the hem of a skirt.

Half effort, or half knowledge never accomplished much, and a manner that is not pleasing will rarely meet with success.

I wish our good girls, who are so sadly in need of pocket-money, not merely for nick-nacks, but for the real necessities of life, as dresses, shoes and hats, were not so averse to helping a neighbor through her weary summer work. If they would cheerfully engage with some good house-mother for fair wages, for a few months, they might not only save the tax of their board at home, but also earn enough to supply the winter wardrobe handsomely. The experience they would get in regard to new modes of doing work (as each housekeeper has her system), would be worth as much as their wages. It is part of her business education, just as book-keeping is a part of a boy's business education. For as long as the world stands, and is divided off into households, the housekeeper's business will be the main trade for every woman to follow.

Perhaps the lady you live with is not exactly your ideal of sweetness and gentleness; but never mind, be as brave as the boys are in their pursuits. How much do they mind if their "boss" is not of the most approved type, so that they can learn their trade well with him. Don't be outdone by the boys in these days when there is such a buzz about "equal rights." Be brave enough to stick out this new line independently for yourself, and never fear that you will lose the respect of others. Very likely you may induce some good girl to try the same experiment, and so be doing a double good.

But whatever your tastes or aspirations, do not suffer yourself to be a burden to poor, hard-working parents when you can by some means help yourself.

Think over the subject by night and day, ask your Sabbath-school teacher or some other good friend, to advise you in the matter, and, above all, ask daily your Heavenly Friend to show you the way, and no doubt a way will be opened. You will taste the sweets of handling money fairly earned, and nothing else will ever show you the real worth of money. Be helpful yourself towards others, and you will never want for good friends.

OUR FOREIGN COUSIN

Tells of Some Methods of Farming.

Dear Rural Cousins: With great pleasure I noticed to-day in the Rural that two more boys, "Green John" and "Box Boy" desire to join our Cousinly Circle, and I am sure that all my new relatives will greet them with me with a hearty welcome. I think Box Boy is quite right about Slaverei or conceit, and I would advise the boys to take a lesson from this example in using more polite language towards the cousins of the tender sex, because we never can gain any advantage over them; they are too smart, and witty for us boys to dispute with.

In my last letter I promised to write some more about Switzerland and I shall fulfill that promise in describing, first the duties and burdens of the Rural, women and girls, for I believe that the greatest difference in the agricultural life of these two countries is found in the occupations of the fairer sex. To give you a true illustration of the work of a well-to-do farmer's wife or daughter, I will try to describe just one of their usual day's-work in summer, as I have witnessed it very often.

The woman or girl of the house is the first one to rise in the morning, usually at half past three o'clock. She has to prepare a cold lunch for the men, wake them up and wait on them. After the men are gone, she cleans out the cow stable, feeds the cows and milks them, takes care of the milk and cream, and after this is done she feeds the pigs, dogs, cats and other domestic animals; then she takes a tub, goes with it to the public fountain, perhaps a quarter of a mile from her home—fills it up with water, places the tub on her head and walks home straight as a soldier, never minding the weight of about fifty pounds on the top of her head. The next thing is to get breakfast ready. That consists of beefsteak and eggs? Oh no! of nothing but boiled milk, coffee and brown bread. After breakfast, while the men are doing chores and smoking their cigars, the women wash up the dishes, clean the house, make the beds etc., until in a very short time the men with scythes on their backs are appearing before the doorsteps, hallowing for the women to come in the field and to fetch with them the forks, rakes, a jug-full of wine and a loaf of bread, and then the poor women have to drop their housework and follow the men out into the field where they have to handle the forks and hand-rakes until noon. Then all go home together, the women to prepare the dinner and the men to hammer the edge of their scythes thin again, for they never use any grindstones to grind them.

After a hearty dinner consisting of boiled pork and potatoes,—the whole year round the same thing,—plenty of grape wine and bread without butter, the men harness up the oxen and take the whole family out in the field again. The men pitch and load the hay, the women have to rake it up. After the hay is loaded they all go home again to unload it, the men pitch it from the wagon and the women have to store it away: in this way they keep at work until night. About sun-down the women go home, milk the cows, feed the domestic animals, and get the boiled milk and coffee ready again for supper. If the ordinary house-work is all done and it happens to be Saturday evening, the hired girl has to grease the hired men's boots and shoes and mop the floors in the kitchen and dining-rooms, and for all this hard work the ladies belonging to the family don't get anything in recompense, not even a calico dress; they have to make the dresses during the long winter evenings, and the hired girl gets generally only $25 a year, a couple of aprons and a pair of shoes with strings to them, and on Christmas the hired men make her a present of ten cents for greasing their shoes and mending the whole year! In the spring the women have to go out almost every day in the meadows and grain fields to pull out thistles or other weeds, load them on a kind of wheel-barrow, and carry them home to be fed out to the goats. The hoeing, the grain-cutting, or binding is mostly done by female help. I could tell you a good deal more about female occupations in my native country, having had sufficient chance to compare the difference between the female labor in Europe and America, but I am afraid that some of my lady cousins here might feel a little offended towards me, thinking perhaps, that at a future day I would be one of those great lords too, who like to see women doing the work that belongs to the masculine department. Certainly I think sometimes that many of the American ladies are too extravagant. Some of them are too proud to do even the lightest housework, but the greater part of them, and I hope that all our Cousins belong to them, understand their place and future position and make, through their work, the fire-side a pleasant and agreeable place, not only for themselves but for everybody. With the ardent desire that I may not be mistaken in those hopes, I ask once more the girls' indulgence and bid adieu!

Clinton Co., N. Y. John Schwyn.

RUSSIAN COMMUNAL VILLAGES.

Amongst the families composing a Russian village, a state of isolation is impossible. The heads of the households must often meet together and consult in the village assembly, and their daily occupations must be influenced by the communal decrees. They cannot begin to mow the hay or plow the fallow field until the village assembly has passed a resolution on the subject. If a peasant becomes a drunkard, or takes some equally efficient means to become insolvent, every family in the village has a right to complain, not merely in the interests of public morality, but from selfish motives, because all the families are collectively responsible for his taxes. For the same reason no peasant can permanently leave the village without the consent of the commune, and this consent will not be granted until the applicant gives satisfactory security for the fulfilment of all his actual and future liabilities. If a peasant wishes to go away for a short time, in order to work elsewhere, he must obtain a written permission, which serves him as a passport during his absence; and he may be recalled at any moment by a communal decree. In reality he is rarely recalled so long as he sends home regularly the full amount of his taxes—including the dues which he has to pay for the temporary passport—but sometimes the commune uses the power of recall for the purpose of extorting money from the absent member.

Sabbath Reading.

WHAT OF THAT?

Tired! Well, what of that?
Didst fancy life was spent on beds of ease,
Fluttering the rose leaves scattered by the breeze?
Come, rouse thee! work while it is called to-day!
Coward, arise! go forth upon thy way!

Lonely! And what of that?
Some must be lonely! 'tis not given to all
To feel a heart responsive rise and fall,
To blend another life into its own.
Work may be done in loneliness. Work on.

Dark! Well, what of that?
Didst fondly dream the sun would never set?
Dost fear to lose the way? Take courage yet!
Learn thou to walk by faith, and not by sight;
Thy steps will guided be, and guided right.

Hard! Well, what of that?
Didst fancy life one summer holiday,
With lessons none to learn, and naught but play?
Go, get thee to thy task! Conquer or die!
It must be learned! Learn it, then, patiently.

No help! Nay, 'tis not so!
Though human help be far, thy God is nigh,
Who feeds the ravens, hears his children cry.
He's near thee, wheresoe'er thy footsteps roam;
And He will guide thee, light thee, help thee home.

OF READING.

E. J. S. O.

Were we asked to name one of the most important influences that can affect the complex machinery of the brain, or mold the character of the mind for good or evil, we should reply—Reading. And this because we are fully convinced that its subtle power over our moral and intellectual natures is beyond the power of calculation. Memory, that mystery of mysteries, never fathomed because unfathomable, is ever reproducing in endless variety all that has passed into the brain through this medium by the instrumentality of books. Too often, however, does it happen that the good loses its hold but too quickly, whilst the evil is retained tenaciously, and endlessly recurs in thought. Our sinful natures are prone to assimilate the evil impressions produced by reading, rather than the beneficial, which pass but too rapidly away. And it is because we feel that so much of the evil that is in us is due to the influence of reading, and is yet so little realized or considered to be thus introduced to the mind, that we have selected the subject for an essay addressed to Sunday-school teachers. They surely, of all classes, need to be most watchful regarding what they read, since upon the healthy tone of their minds must of necessity depend so much of the good effects resulting from their teaching. Reading therefore is especially an important subject, and we solicit attention to a few "thoughts" thereupon.

The most casual observer must often be struck by the fact that great variety exists amongst his fellowmen as to the *methods* of reading. This, at first sight, might seem a trivial and unimportant matter; but on consideration we think otherwise. To read in a state of true and perfect intellectual enjoyment we firmly believe that solitude is necessary. Buzz of conversation or of company, distracting influences of what kind soever, must of necessity divide the attention of the reader between his book and other objects. Probably, nay likely, this remark will hardly apply to "light reading." This we can quite understand. But to reading that has a didactic object in view, reading which promises something more than amusement for a leisure hour, it does apply; and such classes of reading, to be fully appreciated, and to prove beneficial, ought to be perused whilst the reader is in a state of ease and solitude, with naught to distract the thoughts from the subject or subjects in hand.

A few remarks on fiction, as relating to Sunday-school teachers, will be necessary at this point. Should teachers read fiction? We think that within certain limits they undoubtedly may, and indeed ought to do so. But what, it is asked, are these limits? Where is the line dividing commendable fiction from objectionable? What is the criterion for deciding what is fit for reading, and what only for rejection? Truly important questions these. Yet we imagine that the heart attuned aright, the mind that loves to linger over the sacred pages of the word of God, will not err much in its selection. Fiction which, without partaking of the sensation element, is merely an allegorical mode of inculcating good truths and a pleasant way of increasing our knowledge, cannot be objectionable unless read to excess, when its effects, on the mind must be weakening. But what shall we say of the harmful sensational literature so abundant? Truly such literature, pandering to our lowest appetites, is but a powerful agency for deteriorating the youthful mind. Shun it, teachers; for be assured that its evil effects are beyond the power of computation.

A word, however, regarding *quantity* of reading. We are not of those who uphold what is termed "book devouring," or, to speak plainly, an inordinate desire for new books to any extent imaginable. We are of opinion that the *many* are not at all bettered by the *quantity* of reading they manage to get through. Depend upon it, far greater importance lies in the *quality* than in the quantity of the books perused. The fact of a person having read an immense number of works does not render it certain that a commensurate amount of knowledge has been attained. On the contrary, it very frequently happens that those who read with such astonishing rapidity are as ignorant of the real design and drift of a book when they lay it down as before perusing it. Fast reading is a mistake. To fully master the sense of any work in which thought has been exercised by the author, a certain amount of reflection, varying of course with the intellectual ability of the reader, must be exercised by him when reading. Indeed many books require to be gone through several times before they can be at all appreciated or understood. Of course the more obscure the writer the greater must be the amount of study on perusal. And works of this nature, though popularly called "dry," are particularly suitable reading for teachers, expanding their power of instructing, and giving force to their powers of comprehension.

And, whilst speaking of suitable reading for teachers, let us devote a few thoughts to another branch of the topic. We think that Sunday-school teachers hardly attach sufficient importance to the necessity of understanding in some measure difficult portions of Scripture. They too often lose sight of the fact that the absence of knowledge on such points will probably cause astonishment in their little hearers, preternaturally quick in selecting difficult passages for explanation and seeking a key to hidden mysteries. To the end that all such difficulties may be obviated, teachers should devote more of their time to the study of God's word; and aided by commentaries and other works elucidating difficult texts and passages, they might be more fitted to teach, instead of needing themselves to be instructed (in the most important of knowledge), as is but too often the case. They would then be more ready and able to dissipate the darkness lingering over the youthful minds of their charge in regard to the mysteries of the Bible. There are so many works on these subjects that teachers need never to be at a loss for the means of Bible doctrines that they may have to explain at future times to their children. Careful and prayerful study of the word of God, therefore, should form the most important branch of reading in which the teacher can engage.

Historical and biographical are especially beneficial reading for Sunday-school teachers. A knowledge of the lives of good and great men, and general information regarding history, relating both to our own and other countries—these are almost indispensable adjuncts to the teacher's requirements if he would teach efficiently and well. The power of illustrating his addresses to the young is thus very greatly increased, enabling him to rivet the attention and augment the interest of his class. Such reading, besides fitting him for his labors, is of course extremely expanding in its effects upon the whole tenor of his mind. So also is the study of works relating to nature. Whilst loving the word of God, teachers should not neglect the open book of His works. Truly a marvelous book is this! Reading on natural history, in order to the possession of a knowledge of God's handiwork, is desirable for every Sunday-school teacher. For in teaching the young concerning the goodness of a kind Creator to His creatures, how greatly is the effect deepened and strengthened when the teacher can illustrate his meaning by giving instances of remarkable and interesting facts in the economy of nature! Therefore should teachers never neglect this class of reading, remembering that the young heart is often led, by simple wonder and astonishment at the goodness of the God of nature, to love and serve the God of grace revealed in the word read and explained.

Finally, we particularly wish our readers to be impressed with a sense of the vast importance of the subject. By some this may be considered a trivial matter; but to us it is one of great, nay of solemn moment. Those who have not carefully and thoughtfully considered the question can hardly comprehend how wondrous is the effect of reading on the mysterious tracery of the mind, the under-current of its subtle workings held in memory's casket. Truly we are fearfully and wonderfully made! Reading there is before us, of two classes—good and bad. We choose the bad; and lo! how mighty its evil influence! The unbidden evil thought, desire, imagination, the objectionable morals, and low "mannerism," once implanted in the mind by reading and never effaced,—all these, and many other evils, rise up from time to time, continually reproaching us, everlasting sources of wrong thinking and wrong acting. But if we select the good, how genial and beneficial its effects! How invigorating its influence over our natures, how great its power of increasing our intellectual capacities!

PERSONAL ITEMS.

Mr. Justice Davis will make Chicago his permanent home.

Mrs. Grant now weighs six pounds more than her husband, who tips the beam at 168, the madame requiring 174.

General Fitz Lee and Senator Johnson will visit England for the purpose of capturing Virginia immigrants.

A SOUTH CAROLINA negro says of Wade Hampton: "Fo' do Lawd! but ebery time dat man opens his mouf I feels dat I am turnin' whiter an' gettin' de kinks out'n my h'ar."

One of General Fremont's shoulders is much higher than the other, and the old campaigner is very gray, too. He is now in New York and will not enter upon his Gubernatorial duties in Arizona until August.

When Jeff Davis unfortunately came to life the other day and spoke his secession piece before the army of Tennessee, the star-spangled banner kept up such a patriotic flapping just over his head that it annoyed him.

"Will and Ella," said Mrs. Agent Hughes of the Standing Rock, D. T., Indian Post, speaking of General and Mrs. Sherman, "are my warmest, friends;" and when the profane W. Tecumseh heard about it he wrote a letter denying the soft impeachment.

Beaconsfield was once dining with Princess Mary of Teck, when the hostess said; "You have the Queen with you, Parliament, and the country; what more do you want?" Lord Beaconsfield glanced at his plate, and solemnly replied, "Potatoes, ma'am."

Congressman Schleicher, of Texas, deposited his three hundred pounds avoirdupois in a Houston chair and was interviewed. The Mexicans, he said, want to fight; they must fight; they doubtless will fight, and the only thing for us to do is to guard the Rio Grande in a proper way.

Tilden is an early riser, and the neighbors can see him any pleasant morning he is in Gramercy Square attired in a negligent costume of dressing-gown, slippers and other articles, from which mysterious strings dangle, engaged in interviewing every bud and blossom that springs from the well-kept grounds.

Senor Mata, the newly-appointed Mexican Minister of Foreign Affairs, is a black-haired, black-eyed and black-bearded little fellow, well oiled at the joints of the knee. But what is of more importance, he is a good friend to this country, seeing that we could swallow the land of the Montezumas at a gulp, and wants peace on the Rio Grande.

After he had so dramatically electrified the New York politicians by the suspension of Arthur and Cornell, during his recent visit to this city, Sec. Sherman went down to Long Branch and touched off a sensation there. In a chat with ex-Governor Warmouth and Tom Murphy, Mr. Sherman said: "Grant is now the man I think. If the Republican Convention were held now he would be nominated easily."

Chin Han Pin, the new ambassador to the United States from China, is accompanied by a Consular corps accredited to Cuba, Peru and San Francisco. Chin Han Pin is a highly educated and distinguished diplomat and statesman, and has been commissioner to several countries. He visited this country some years ago to arrange for the education of Chinese students. He will remain here about ten years at Washington.

Mr. Thurman is described as the most unostentatious-looking man in the Senate. He dislikes an undertaker-like suit of black broadcloth, and generally wears light gray clothes of loose and comfortable fit. He is independent enough to carry a snuff-box, as Henry Clay and other statesmen of earlier days did. His daily life in Washington is more like that of an honest, well-to-do farmer than a Senator's, and he thoroughly enjoys the comforts of home.

George S. Appleton, who died in New York lately, was the linguist and business man of the Appleton publishing firm. He understood all the modern languages, arranged for all press contracts and advertisements, and attended to the publication of all the works. His two elder brothers were among the founders of the Century Club, but he only became a member in 1873. Of the completed club roll of 600 members, Mr. William Cullen Bryant was the first to die, and Mr. Appleton was the second.

The Shah of Persia left 25 of his 36 caskets of gold at Paris, where he spent $600,000. His expenses at the Grand Hotel were $680 a day. Extracts from his disputed bill at Fontainbleau are published. He was charged $300 for flowers, $12 for a melon, $5 for a cigar, $160 for three carriage drives, and $4 each for twenty chickens; his rooms were set down at $10 a day each; two boxes of cigarettes cost $10, and $2 apiece for a dozen peaches. He received during his stay at Paris 5,400 begging letters, asking for amounts varying from 50 francs to 3,000,000 francs, the aggregate amount sought being $50,000,000 francs.

Great men are having a bad time of it just now, for besides the pickle Sherman and the other "visiting statesmen" are in, Thomas Ewing has been blown up in a Mississippi steamer; Disraeli is a tramp at Ottawa; James Madison has been acquitted of a charge of burglary at St. Louis; Daniel Webster, a shoemaker of Washington, has been figuring in a law-suit about a pair of boots he made for John C. Breckenridge; George Washington is in jail in twenty different places; Henry Clay was sentenced to be hanged last week; Andrew Jackson was arrested in St. Louis a few days ago under the vagrant clause, and given twenty-four hours to get out of town. The country seems to be drifting to the d—— well, to the dogs.

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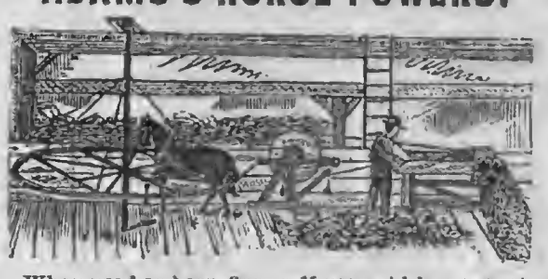

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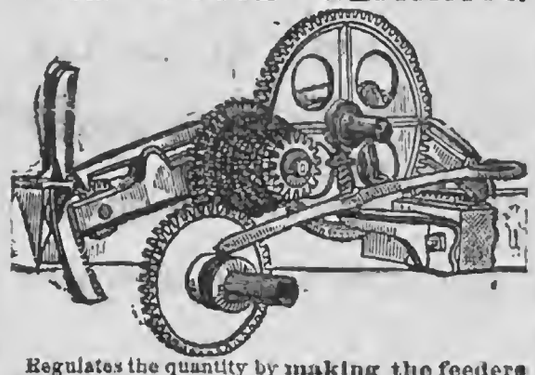

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AN attached couple—Oyster shells.

WE have had a whole week of sundays.—[*Commercial Bulletin.*

"CAN love die?" inquires Mary E. Nealy in a recently published poem. It cannot, though it gets dreadfully adjourned occasionally.

IT is bad enough to have dog days; but it is almost too much for good nature to be afflicted also with cat nights.—[*New York Commercial Advertiser.*

"TELL your mistress that I've torn the curtain," said a lodger to a female domestic. ".Very well, sir; mistress will put it down in the bill as extra rent."

A LITTLE deaf-mute boy was asked to show his skill in the use of the English language on his slate, and he wrote: "A man ran from a cow. He is a *coward.*"

SWELL—"I want you to make a short coat without tails or seams in the back. Do you know what I mean?" German tailor—"Yaas, yaas, I know vat you vant. You vant a straight jacket."

A BIG Yankee from Maine, on paying his bill in a London restaurant, was told that the sum put down didn t include the waiter. "Wal," he roared, "I didn't eat any waiter, did I?" He looked as though he could, though, and there was no further discussion.[—*Ex.*

THE New York Communists recently paraded with a banner saying "Bread or lead." If that's all they want they can stop into some North-river restaurant and get both in one. These fellows don't want anything containing yeast, as that is inclined to work.—*Lowell Courier.*

IT is said that Richard Grant White's good lady has just presented him with a blessing, and that he is in a quandary as to the correctness of saying "I have got a baby," or "I have gotten a baby," several very fine philologic distinctions being involved. Somebody asks "why don't he keep quiet about it, or say, 'I have obtained an infant.'"

DAN HOOK (the late Dean of Chichester) was associated with one of the late Bishop Wilberforce's favorite witticisms. "What articles of ladies' attire," the bishop used to ask, "give the name of two of the most eloquent men in the Church?" When the auditory gave up the puzzle, Dr. Wilberforce would say, with great glee, at the astonishment at his own egotism, "Hook and I."

AN old colored woman of one of the back counties sings all the good old Methodist hymns, but she gets them mixed sometimes. She sings:

Sweet prospects, sweet birds and sweet flowers
Have lost all their sweetness but me.

And another:

Am I shoulder of a hoss,
A quarter of a lamb?

The old lady probably means well.

AN Irish gentleman writes to *Truth* to say that he has never found a Frenchman who can pronounce this: "Twimblerig Thistlethwaite thievishly thought to thrive through thick and thin by throwing his thimbles about, but he was thwarted and thwacked, thumped and thrashed with thirty-thousand thistles and thorns for thievishly thinking to thrive through thick and through thin by throwing the thimbles about."

AN old pioneer, who was something of a fatalist, lived in a region infested by Indians. He always took his gun with him, and once, finding that some of his family had taken it out, he would not go without it. His friends rallied him, saying that there was no danger of the Indians, as he would not die till his time came anyhow, "Yes," said old Leather-stocking; "but suppose I was to meet an Indian, and his time was come, it wouldn't do not to have my gun."

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THE surest tranquilizer of the nerves is a medicine which remedies their supersensitiveness by invigorating them. Over-tension of the nerves always weakens them. What they need, then, is a tonic, not a sedative. The latter is only useful when there is intense mental excitement and an immediate necessity exists for producing quietude of the brain. Hostetter's Stomach Bitters restores tranquility of the nerves by endowing them with the vigor requisite to bear, without being jarred or disturbed unhealthfully, the ordinary impressions produced through the media of sight, hearing and reflection. Nay, it does more than this,—it enables them to sustain a degree of tension from mental application which they, would be totally unable to endure without its assistance. Such at least is the irresistible conclusion to be drawn from the testimony of business and professional men, litterateurs, clergymen and others who have tested the fortifying and reparative influence of this celebrated tonic and nervine.

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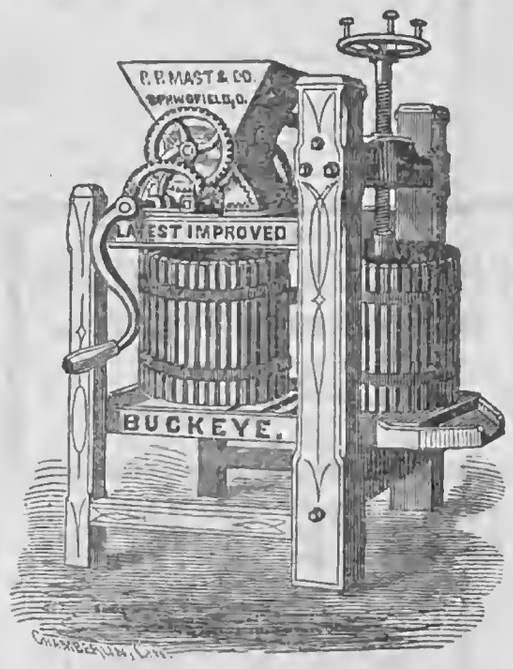

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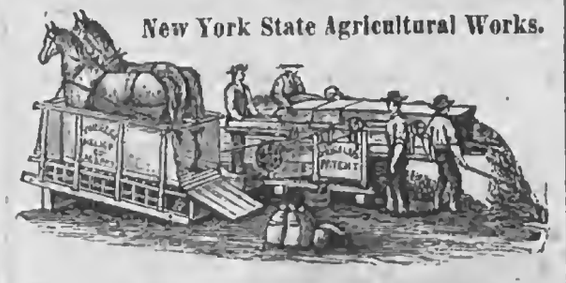

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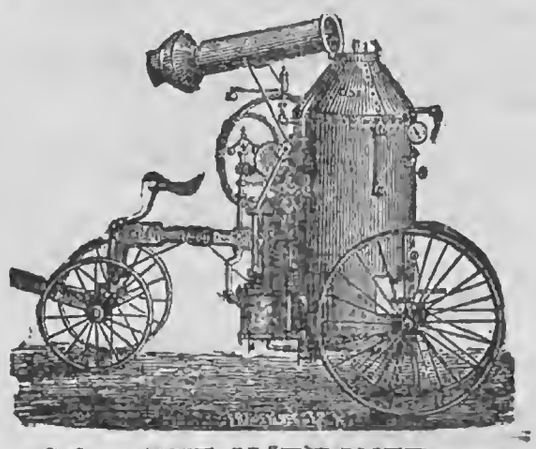

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EVERY WAGON FULLY WARRANTED.
This is the best, handsomest, lightest and strongest wagon of its kind in the market. Every Farmer and Dairyman should have one.
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VOL. XXXVII. No. 31.
WHOLE No. 1488.

NEW YORK CITY, AUG. 3, 1878.

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$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

The Horseman.

THE ARABIAN HORSE.

For ages it has been the fashion to speak of the Arabian horse as the type of equine perfection physically and morally, and down to to-day the fashion has a multitude of adherents, especially among those who go to books rather than to nature for their facts. The Oriental descent of the Arab, his remoteness, the difficulty of securing a specimen, the high esteem in which he is held in the land of his birth, together with his undoubted excellencies, all tend to invest him with poetic attributes, and poetry has to do with the imagination rather than with reality. Moreover, there is little doubt but that in many points the courser of the desert greatly excelled even the best of the horses owned by Europeans a couple of centuries ago; but while with Oriental fixedness, the Arabian of to-day is the same as the Arabian of a century ago, the thoroughbred of our times is a vast improvement on the thoroughbred that excited the admiration of last century. In effecting this improvement, the care and skill of breeders in selecting and coupling the stoutest, best and fleetest for generations, have certainly been more potent than the admixture of Oriental blood to which it is usually attributed by the writers above spoken of. Yet in view of the fact that nearly all of the fleetest horses on the European and American turf, trace their descent more or less directly from some of these Eastern flyers, the Arabian horse will, for ages to come, excite a degree of interest disproportionate with his merits.

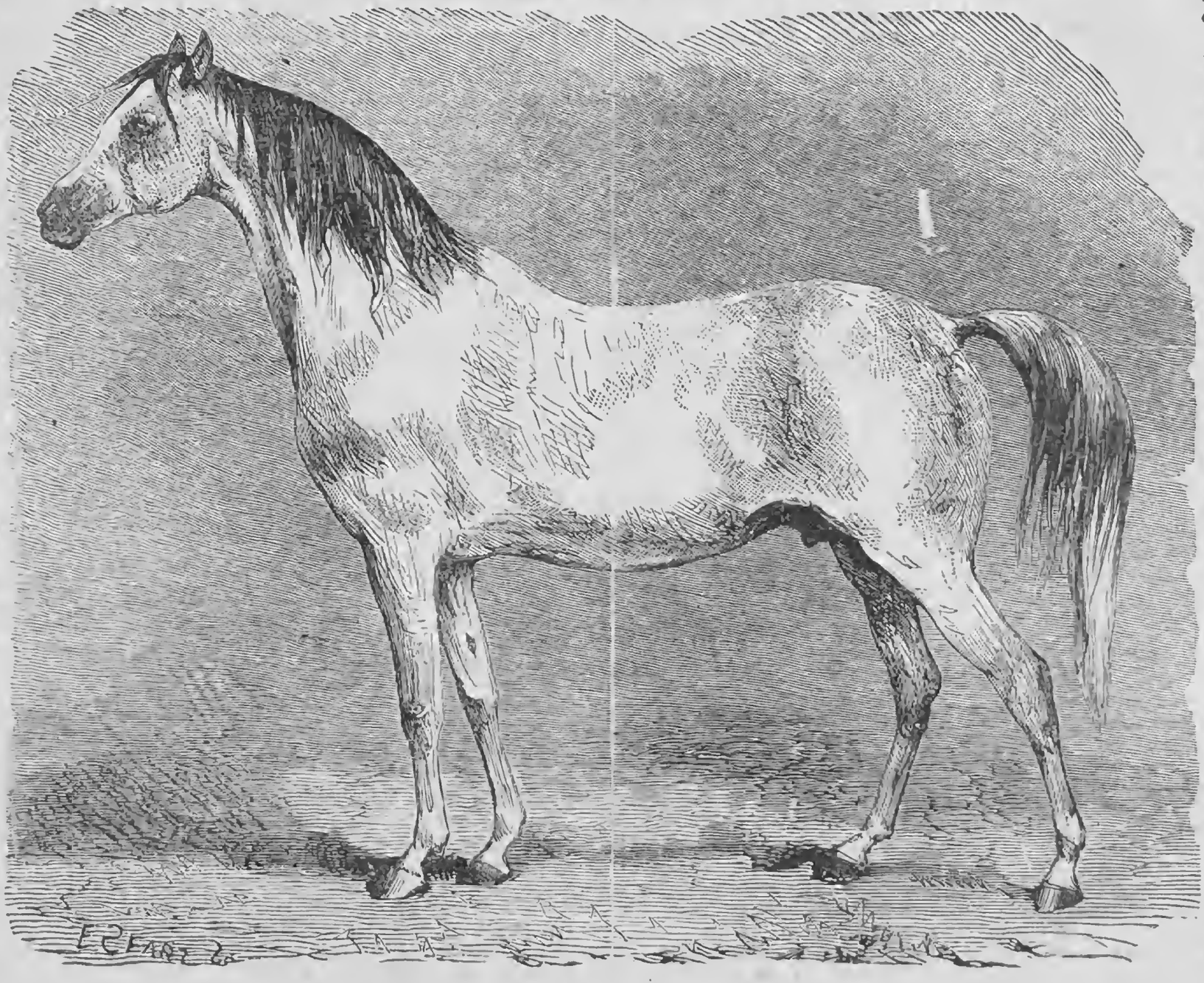
There are three breeds or varieties of the Arabian horse; the Attechi, the Kadischi, and the Kochlani or Koheylani. The last trace their genealogy back two thousand years; are principally bred by the Bedouins in remote desert places, and are much more highly prized than either of the others. Males of this strain can be purchased without much difficulty, at a high price, but a mare is rarely obtainable at any price, as the Arabs set a far higher value on the female than on the male, trace the pedigree through her, and on her alone center their pride and affection. When suckling, the filly is fed camel's milk along with that of its dam; when able to masticate, it is given in addition bruised and softened barley; and after it is weaned, it is fed partly on grass, though through life barley and dates constitute its principal food. It is broken early, the children first riding it, then the youngsters, and finally full-grown men. It lives with the family, shares their tent, plays with the children, and is always treated with tenderness and affection. This treatment it repays with mildness, docility and great regard for its owners, in whose behalf it is at all times rejoiced to strain its utmost powers.

The Arabian horse, though small — seldom much over 14 hands high — is an extremely handsome animal. The forehead is wide and flat; the face short, with a stright, flattened and broad nose; the nostrils wide and open; the lips thin; the cheeks flat; the mouth small. The ears are small, straight and mobile, and placed rather widely apart; the eye prominent, bright, and energetic. The neck is long and arched; the joints large and strong; muscles of great power stand out under a glossy, short-haired, silky coat, underneath which, in every direction, can be noticed the tracery of veins. The chest is broad and deep; the legs shapely and sinewy; the hoofs rounded and hard; the whole appearance mild yet prond. The color is generally white, light-gray or mottled; often chestnut, rarely black or bay. Its form combines great strength and agility; its powers of endurance in traveling great distances over the arid sands, without food or water, are marvelous; and though small, it is a better weight carrier for its size than any other breed.

(CHAMPION HEREFORD.—See Page 486.)

Of the most famous of these horses introduced into England, the first to gain celebrity was the Darley Arabian, imported during the end of Queen Anne's reign. This animal was the progenitor of some of the finest horses that ever ran; among which were Flying Childers and Eclipse, and the 334 winners begot by the latter. The horse usually known as the Godolphin Arabian, imported one hundred and fifty years ago from Paris, where he trudged before a water cart, is now generally thought to have been a Barb. Of his progeny 354 have been winners on different race-courses, and it is generally admitted that no imported Oriental sire, either Turk, Barb or Arabian, has been of any benefit to the English stock, or consequently to that of the United States, since his day.

While the Arabian is more docile and good-tempered, the English thoroughbred is higher, longer, and larger in every way; fully as enduring when not weakened by overtraining; fleeter of foot, as shown in numerous trials; and in all respects a finer and more serviceable animal than the small but shapely courser of the Arabian wilderness.



ARABIAN HORSE.

The Poultry Yard.

POULTRY BREEDING.

A. M. VAN AUKEN.

Many persons keep their fowls in one or more flocks, feed all alike, and set eggs from the lot in the basket. Now, with this course, your chickens will "run out," or at least get no better; you will have to keep one or more cocks with each flock; and if you introduce new blood, you will have to get new cocks all round. Now, I propose to divide fowls into two classes—one class to be designated as breeders, and the other as layers. In this article I shall describe the management of the breeders.

The best time of the year to hatch out the stock intended for breeders is in the month of June, for this latitude; for the reason that, if hatched then, they will not be quite mature enough to begin to lay before February; then, when we begin to set about that time, we shall have eggs to set from fresh instead of from jaded stock, while our chickens will be more apt to hatch and will be stronger when hatched than those from fowls that begin to lay in November and December.

In order to make the matter as plain as possible, let us suppose that we buy a setting of eggs from Mr. Jones, one from Mr. Black, another from Mr. Smith, and still another from Mr. White. Then when the chickens from these are grown, we pick a cockerel from Mr. Jones' chickens and mate it with the pullets from the eggs bought of Mr. Smith, while a cockerel from Smith's chicks is mated with the pullets from the eggs bought from Mr. Black, and so on. Now, then, we find among the pullets in a certain coop an exceedingly good layer; we save all the eggs from her apart from the rest and keep the chicks from them separate, and use cockerels from her for our stock o breeders.

Now, as to mating and feeding: never mate a cock with less than ten hens, and if he is a vigorous cock, twenty will be better. You look surprised! Well, I know that it is usual to say "from five to ten are enough for one cock," but I am not the only one who stands on the above plank. J. K. Felch, says: "According as the cock is vigorous, assign from twelve to twenty hens; there must be no coercion on the part of the cock; let his flock be large enough so that the invitation shall come from the female side of the house." W. A. Burpee, of Philadelphia, says, that he bred his Brown Leghorn cock "All Right" to twenty-seven hens with satisfactory results. J. W. P. Hovey, says, that he "mated a son of Honest Abe—Light Brahma—to eighteen hens, when ten months old, with splendid results, and no decrease in vigor till, when four years old, he was stolen."

As to feeding: while growing, feed all they want; I feed three times a day till the chickens are ten weeks old; after that, twice, and give plenty of bone-making food; not corn-meal, as it will make too much flesh, and not enough frame. After they are put up in the fall, make them work for their living; bury the feed in straw or dirt and scatter it well, so that it will keep them busy. Don't give them very much, and don't make their house very warm. Many will remember the numerous complaints sometimes heard about eggs not hatching.

The following, from the pen of J. K Felch, will be new to some and is worth reading a dozen times: "One man, from sixty-five eggs hatched sixty-two chickens, common grade stock. Another, from six settings, hatched sixty-five chicks, Brahmas. Still another has hatched from nine to fourteen chicks to a clutch, stock Brahmas mated with pullets. In all these cases the stock was mated in the early winter and allowed to go in and out in all kinds of weather, being fed in the morning all that they would eat, and the balance of the day made to shift for themselves."

It will require no little backbone to keep your breeders, your best fowls, in poor flesh, and have people ask you "why don't you feed those fowls better?" and so on, but the progeny of those birds will amply repay you for all such sharp criticism. The owner of a fast horse will not keep him rolling fat, even if all the people that saw him were to remark the scarcity of oats in his stable; and it is just as necessary that we should keep our breeders thin in order to have our eggs hatch as it is for a trotter to be kept thin in order to trot his best. How is it with cows, sheep, and hogs? Do those that are fat breed as well as those which are thin?

Now, let me copy one more paragraph from Mr. Felch: "Breeder, look to your pleasure in choosing nice fat pullets that you cannot injure, while growing, by over-feeding, and in your treatment of your breeding stock, use a little common sense." Be independent, and do not care if your breeding birds are called "scrubs."

Brown Co., Wis.

NEGLECT OF YOUNG CHICKENS.

While the farmer is busy during harvesting, and while his family in the stress of the season is pressed into the service, the growing chickens are sometimes forgotten, and perhaps a few hints may bring to mind their situation. As the hens leave the chicks, they feel lost at night, and poke themselves into nasty corners, or into old boxes, coops, or barrels, where they pile together, sometimes one on the other, crushing the weaker ones to death before this state of things is discovered. Often the filth accumulates so thickly that they lie on a heap of it at night, and become infested with parasites. A very little care will remedy this and keep the birds in health. Sometimes, however, they are very stubborn about a place of their own choosing. They either run back to the same place, after being driven away, or they scatter in all directions, thus running into greater danger.

Provide temporary houses or large boxes with low perches, and place them near the coops which were occupied by the hens and chicks. Gradually move the coops towards the temporary house a little every day. By this means the chicks will get near to the new roosting-places, and by moving away one coop at a time, they will settle into the temporary house. This, in turn, can be moved near the fowl-house which they are to occupy. This will save a great deal of annoyance, for what is more tantalizing than running down chickens night after night, while they are willing that you should repeat the operation as often as you please. If they take to a place where you cannot get in, and they are persistent, you may sometimes drive down a few stakes and block the entrance with an old door, or a few boards. If you have convenient trees for them to roost on, by all means let them use them during summer and early fall. Although it is some trouble and requires a little good temper to get them in their houses for the first time or two, when cold weather comes, yet their healthy condition will repay your pains. Feed them with grain twice a day, even though they get much of their own living; for some grain is necessary for their health, and moreover it lessens any inclination of theirs to do mischief in the garden amongst the fruit.

Henry Hales.

The Herdsman.

THE CHAMPION HEREFORD.

Herefords not unfrequently carry off the big prizes of the Smithfield club, but such an event as a Hereford bull's winning the champion prize over a Shorthorn which had been regarded as the best bull in England, makes the lovers of this admirable beef race not unreasonably jubilant. We published in the Rural of the 13th a portrait of Mr. A. Rogers' bull which won this enviable distinction. Now we recieve from the same source a large photographic portrait of his head alone which, accompanied as it is by the statement that it is regarded by good judges as representing an ideal Hereford head, we think will be of interest to our readers.

Farm Topics.

FARM WORK FOR AUGUST.

WEEDING.

The farmer's life is a busy one. During August there is little time for idling. In this hot weather weeds grow and mature with great rapidity. Weeds should be often mowed or dug up or pulled in the pasture and in waste places. This is an excellent time in which to kill quack-grass by frequent cultivation. Docks, thistles, and other coarse rubbish should be burned or buried, and never thrown into the highway to be run over or to remain in an unsightly pile. It is the best time for killing all sorts of bushes and briars, by cutting off the tops near the ground. After they are so cut, if the place is suitable, sheep are a great aid in the work, and it is work which they do cheerfully.

ODD JOBS.

There is no better time of year for clearing out swamps and digging ditches. Tiles can be laid in low places where needed when the fields are used for pasture or after the hay is cut from meadows. Keep a sharp lookout and work frequently among ruta-bagas and mangels. They should be well thinned, if not already thinned. Most field crops are so conspicuously before the eyes of the farmer, that they are less likely to be overlooked than many other items of equal importance.

If you ever draw manure from town, now is a good time, for several reasons. It is usually plenty in summer, and it is dry and light. The roads are apt to be good, so that twice as much may be hauled at a load as in wet weather. A compost started at this time rots down rapidly. It is a good time for getting out muck. This is pleasanter and easier to have than road dust. It is almost a necessity to have a large lot of dry muck or dry loam to use about privies and stables. A generous layer all around the barnyard will prove an excellent investment.

WHEAT.

Of course, the farmer will be preparing ground for wheat. The land which produced oats, barley, clover or peas will be turned over and well cultivated,

The enterprising man has already selected his seed wheat from the best part of his field, or he has purchased some which was raised on a different soil. The selection should be made for a small part of the seed each year in the manner long ago recommended by George Geddes. That was, to select the best heads from the best bundles before threshing. After this, submit the wheat to the test of a good fanning mill.

When sowing wheat, drill in a little rather thinner than usual, with every other tooth of the drill stopped. In spring, two or three times give this a cultivating or hoeing. Count the cost, and note the result, and thus try to learn whether it will pay to cultivate wheat in our country.

ORCHARD.

The young orchard will be left without cultivation after the first of August. Weeds will be allowed to grow there, or more likely, there is a crop of some kind to cover the ground till winter or next spring.

EXPERIMENT.

Try an experiment on Autumn and winter squashes while in flower. Several persons have much increased the yield by artificially carrying the pollen from staminate to pistillate flowers every other morning. The work is easily done and costs but little.

STRAWBERRIES.

Strawberries may be set in this month and if they were started in small pots, or if they are on good land and watered when the weather is dry, they will produce a good crop next spring. In any case it will hardly ever pay to set strawberries on poor land or on land poorly prepared.

TRIMMING EVERGREENS.

Perhaps it is best to trim evergreens in spring, but that time of year is over-crowded with work. Cut them back now. Shear off the ends of straggling branches; cut off the tops where they run up thin or spindling. In some places they may be allowed to grow in their natural shape, but in most cases, the frequent use of the knife will improve an evergreen or cause it to take on a form which will best please a majority of people.

CARE OF STOCK.

Domestic animals need watching. They should all be kept in a thrifty condition, and young stock should grow all the time. Bucks should be examined for maggots about the horns. They should be fed a little grain. Feed stock some freshly mown grass or corn, or rye or grain, if the pasture is short, or else buy or hire more pasture, or sell off part of the stock. Look especially after lambs, colts and calves. See them often and handle them. Calves and colts should be well broken to the halter when young. Feed swine well. We know several farmers who always begin feeding considerable grain to swine in August. They have a stock of old corn left over for this purpose. The animals take on fat very readily at this time. A pound of corn will make more pork in warm weather than in cold. Again, it is often the case that swine can be sold to the best advantage early in the season. If started early they will be ready early. Of course, swine may be over-crowded in August, but those which are to be butchered in autumn should be started early.

Look to the supply of water in pastures. Do not trust to swamps and low stagnant water, but dig good wells, unless running water is plenty. Remember not to dig wells on the lower side of a barn-yard, where the water will soon become unfit for use. Much of the water, poor as well as the good, soon finds its way into the blood of animals, and from the blood to the milk, in case of cows. Even living germs have been traced through this course. Who wants to drink milk from cows which have drank impure water?

SEASONABLE HINTS.

Apple-tree Borers.—Every one who owns an orchard, or even a single tree, should now be looking after the borers, to see that their trees are not destroyed. If taken early, it is not a very hard task to destroy the pests by the use of a pocket-knife and wire.

Thinning Fruit.—On small trees, at least, fruit should be thinned out so as not to injure the vitality of the tree by its over-bearing; and on large trees, too, it is advisable; for the fruit that is left on the tree will be very much larger and every way nicer, than if it were all left on to mature.

Pruning.—Now is a good time to cut off all suckers from the trees, and remove all superfluous limbs, if it was not attended to earlier in the season; and where large limbs are removed, it is always a good plan to apply a good coat of paint to the wound. Grafts which were set last spring should now receive prompt attention, and if more are growing than is desirable, they should be removed.

Turnips.—It is not too late to sow those for stock-feeding purposes, although I have had better satisfaction with early than late sowing; and as a general thing, I believe farmers do not sow their turnips early enough.

The Garden.—This plot of ground is often sadly neglected at this season of the year, when haying and harvesting are requiring the attention of all hands, but it should not be so, for in the summer season, when we can get green vegetables fresh from the garden, it should by all means be attended to, and the weeds kept from growing. As a rule, the garden is not appreciated by the farmer as it ought to be.

Water for Stock.—This matter should be atttended to by all owners of stock, to see that they have a good supply of fresh water at all times; for in hot weather it often happens that stock suffer for the want of water. I have often seen cows obliged to drink out of a dirty mud-hole, when by a little labor they might have had good water to drink out of a trough. Is it not strange why some men are so slack about important matters?

Draining.—Immediately after haying is a fine time to drain wet land, and there are but few farms that do not embrace more or less land which could be greatly improved by draining, and it would pay a big interest to do it. It is hard work though to make some farmers believe it. I have seen some of them lay out sums of money in some speculation or other business, and not get one-fourth of one per cent. on the amount invested, when if it had been put into ditches and clearing the fields of stumps and stones, it would have paid ten per cent. Why is it they do not have more confidence in the soil? If the land will not pay for improving it, why not sell it and get the money into something else that they will have more faith in?

Meadowbrook Farm, July, 1878. F. H. D.

ENCOURAGE HOME MANUFACTURES.

Insomuch as the farmer increases the density of the population near him, he enhances the value of his farm, and this in a two-fold ratio. The land itself is more valuable, while whatever the farmer has to sell finds a more ready market and at a higher price. Added to this, he sees the advantages of a greater intelligence near him, sees more people and more wealth to bear the expense of public improvements, can have better roads, more direct communication, better schools and advantages for his children, and life becomes in part the recreation of civilization, and not a mere ignorant, uncouth backwoods drudgery.

If there is a water-fall near-by, or some parties can be encouraged to put up steam for a grist-mill, a saw-mill, planing-mill, or carriage factory or for any of the larger industrial operations, no time should be lost in putting the new industry into operation. Every new manufacture and the addition of every new industry not only give greater employment and wealth, but the presence of these enables the farmer to find a market for a great variety of productions at a better profit than can be obtained from growing one or two great crops and sending them to distant points to market. A single acre of vegetables, carefully attended to, and near a town or village, will bring more profit than ten or even twenty acres of corn and wheat, and while raising these vegetables for sale the household can be better furnished, and with a very large proportion of all the food and that most necessary for health.

The parts of the United States where little manufactories have been from time to time established and have grown to be great ones, employing many hands and consuming a great deal of the farmers' products, are the wealthiest and the farms are worth double what they would be without this denser population.

There is but one way in which a farmer can increase the value of his farm as fast, and that is by increasing its fertility and productive power, but the increasing population enables him to increase that fertility to a better advantage, and gives a double value to his improvements. The true interest of the farmer is to have as much of his products consumed near by him as possible, and to have as much of his necessities produced near by him. It not only keeps wealth but brings more.

Field Crops.

TOBACCO CULTURE IN NEW ENGLAND.—No. 1.

The tobacco plant is a native of America, the discovery of the continent and the plant occurring almost simultaneously. It is a tropical plant but grows freely in temperate climes, but requires high culture and unlimited care on the part of the grower from seed-sowing until harvesting. Its culture first began in Virginia as early as 1616, and in 1634 we find the Puritans testing the "sovereign weed" in the Plymouth Colony. In 1757, it was the custom in the various towns in Connecticut and Massachusetts to appoint packers of tobacco, prizing it in hogsheads, the method then employed in "putting up" tobacco. Now all the tobacco grown in New England is packed in cases of from 375 to 400 pounds. About 1835 tobacco growing in the famous tobacco-growing section in the Connecticut Valley—comprising three counties in Connecticut and two or three in Massachusetts—received a fresh impetus which has continued until now. The plant also is being raised quite extensively in the Housatonic Valley, and is also cultivated to some extent in New Hampshire and Vermont. Connecticut and Massachusetts, however, are the great tobacco-growing States of New England, and together with 13 other States, furnish most of the amount grown in this country.

The variety grown in New England is known as "Connecticut seed-leaf," and is justly regarded as the finest cigar leaf wrapper grown in America. In this respect it has no successful rival so far as texture of leaf is considered. Its color ordinarily is a light cinnamon hue, and sometimes dark cinnamon. Of late the demand has been for dark-colored leaf, and in consequence the growers have tried every means within their power to raise a leaf tobacco suitable for the manufacture of "Maduro" cigars. In New England, beyond all question, the art of raising fine tobacco is better understood than in any other part of the world. When war prices prevailed, fine wrappers sold at from 40 to 60 cents per pound, while at present the growers of the Valley realize only from 10 to 12 cents for wrappers. The finest tobacco is grown in Hartford county in the light sandy soil at a little distance from the river. The soil and atmosphere seem well adapted for fine silky leaves of light color and great strength. At this point the plants get a sufficient quantity of atmospheric salt, but further down the river they get too much, while they don't get enough towards the source of the Connecticut. The experiment has been tried of cultivating the plants near the Sound, but the leaves are too thick and leathery to be of any value for cigar wrappers. Unlike the Southern and Western planters, New England growers select old fields instead of "new land," and I do not remember to have seen in all the Valley but one field of tobacco planted on new cleared land.

In order to raise a leaf of fine texture free from large veins, and of large size, the soil requires very high fertilizing by the application of manure well decomposed. Cigar-leaf tobacco

differs in this respect from cutting leaf (for chewing) or snuff leaf. When tobacco designed for cigars is grown in poor land, the leaves are usually small and frequently as yellow as saffron. It is therefore impossible to grow a fine cigar leaf on soil devoid of fertility. In Massachusetts a large amount of Havana seed-tobacco is being grown this season. The plants are grown from seeds imported from Cuba. This variety justly stands at the head of all cigar-leaf tobaccos, and its exportation from the island extends to all parts of the world. It is impossible to grow as fine a quality of leaf in the Valley as in the "Pearl of the Antilles," but we can approximate it rather closely in quality if sufficient pains are taken in securing fresh seed and allowing the plants to thoroughly ripen. Only about half as much can be secured from an acre as of Connecticut seed-leaf, but it sells for double the price, and sometimes fine selections command very high prices. In Massachusetts three-tenths of the growing crop this season are of this variety and its growth is eagerly watched by all of the leaf packers and cigar manufacturers in the country. If tropical varieties of this plant can be grown in the Valley, then unquestionably the growth of Havana seed-tobacco will assume mammoth proportions. Some six years ago its culture began, and now some 1200 acres are in cultivation this season. Our growers are undoubtedly the most progressive cultivators of the plant in America, so much so that of late the seed-leaf growers of Wisconsin have commenced the culture of Havana seed tobacco, which sells at double the rates of ordinary Wisconsin leaf. E. R. Billings.

GROWING BEANS CHEAPLY.

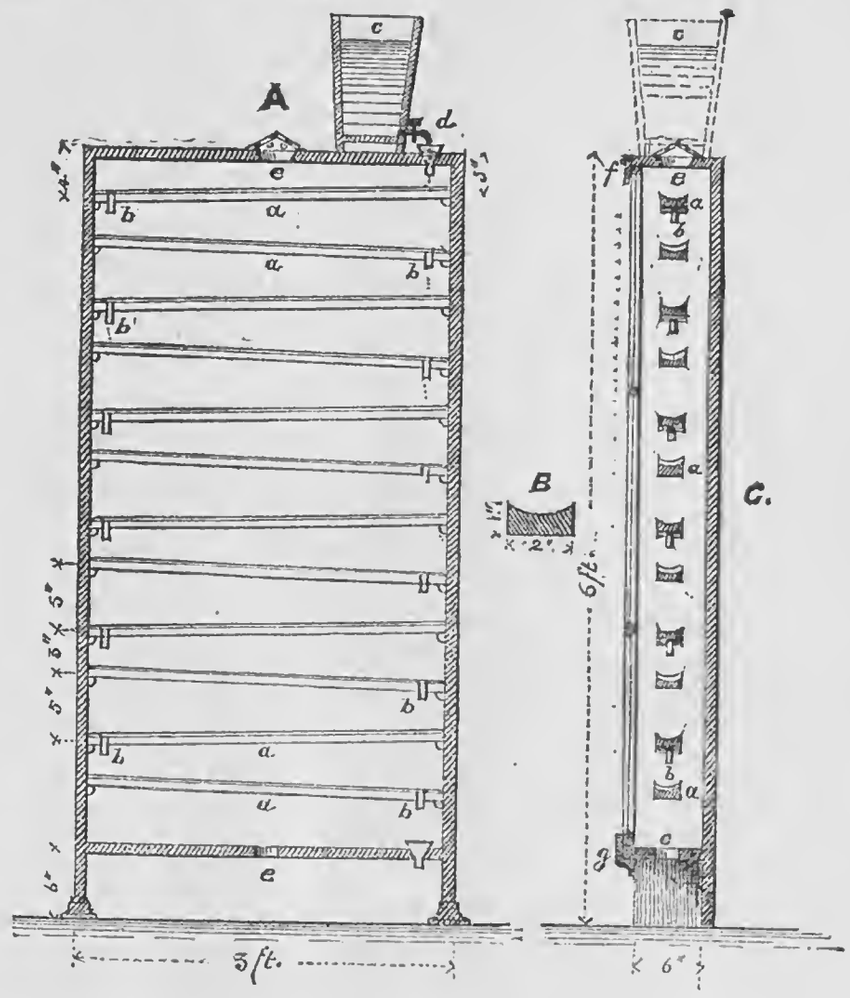
"I won't hoe beans." So said a friend to me a few days ago. I looked up in a little surprise; I had heard the same remark times before, but it was usually the utterance of shiftless farmers who let the crops grow up to weeds through sheer laziness. But I knew my friend for a different kind of man, so I listened respectfully while he continued: "If I can't keep them clean without hoeing I won't grow them. Hoeing beans is a slow, tedious work, and to attend to a bean-crop properly means letting the rest of the farm go with less care than it should." There is a good deal in this. If we can dispense with hoeing for beans, the labor thus saved may be very profitably employed in other farm-work. I have heretofore regarded hoeing as necessary in growing beans, and not only so, but as the cheapest mode of making the crop. What is saved in June and July is more than offset in pulling the crop from among the weeds. But neighbor H. keeps his land clean, and without the use of a hoe. He has his bean rows only twenty-two inches apart, and sown in a continuous drill. This last he considers important as after the first he makes the beans themselves keep down the weeds. He does not plant beans on land where thistles abound—if indeed he is troubled with this pest on his farm. Avoiding stony soil, he drills in a mellow seed-bed, keeping the rows perfectly straight and at the uniform distance of twenty-two or twenty-four inches. For a cultivator, he has what he calls a "bean-scraper"—a piece of thin iron plate about four or five inches wide, sharpened on its lower side and set at a slight angle. This is bolted to a shaft twenty inches high and attached to a light frame with handles. An old shovel-plow makes the best possible frame, removing the shovel-plow irons and substituting the "scraper." This is drawn by a horse walking between the rows, and cutting out the small weeds in the center, at the same time throwing a little loose earth under the bean plants, and effectually smothering weeds on either side. By beginning early, a field of beans may be kept entirely free from weeds with this implement. It is lighter than a cultivator, both for man and horse, and if weeds have not been allowed to grow large, will do as good or better work. Most of the dirt cut up by the scraper falls over its back, and only very little is thrown on either side. If necessary the scraper may be used twice in the row, throwing the dirt to the beans, first on one side and then on the other. After one or two cultivations the beans will shade the ground so completely as to smother the young weeds, except in the center of the rows.

I am satisfied that the implement I have described is a good thing in bean growing; but it needs that the rows should be not more than two feet apart to do perfect work. The ground must also be clear of large weeds and pretty free from stones. Although I use it this year, I am hoeing my beans to take out the few weeds which neither this nor the cultivator can reach. My beans this year are planted wider than I shall plant gain (rows two and one-half feet apart), and there will be some weeds in the rows with the beans, which it is cheaper to brush out with a hoe while young than to allow to grow and mature their seeds. W. J. F.

Monroe Co., N. Y.

RAMIE CULTURE.

The materials for a very large number of profitable new industrial enterprises are lying undeveloped in all parts of the United States; among them that of Ramie cultivation and manufacture, is one of the most interesting and promising. This plant, Bœhmeria nivea, is a perennial, of the nettle family, of the order Urticaceæ, growing to the hight of four feet, and throwing up numerous stems, and as thick as the little finger. It originated in the East Indies, but has been introduced into Jamaica, Mexico, California and Australia, with success, and recently into some of the Gulf States, where



SUMMER PROPAGATION.

the fiber is said to be superior to that produced in China.

Unlike the common nettle, it has no stings, has fertile flowers which, instead of two to five-parted calyx, have a tubular calyx which closely surrounds the small nut-like fruit. It has opposite pointed serrate leaves, six inches long by four inches broad, and long, hairy petioles, the upper surface dark-green and the under surface covered with a white down suggestive of the specific name—nivea—snowy, making the contrasts between the two surfaces very marked. The inconspicuous flowers are in little clusters upon axillary stems.

One species, Bœhmeria cylindrica, a coarse nettle-like wild plant, is native to, and very common in moist, shady places in the United States. Another variety, Bœhmeria tenacissima, is sometimes cultivated, but is a more robust, coarse plant, and the under surface of the leaf is scarcely whitened.

The Ramie plant may be raised from the seed, but the more common practice is to break up and transplant the parts of the old roots. The ground requires to be rich, where the finest fiber is desired to be produced, and well drained, although it stands drought and moisture remarkably, and in California it thrives best where irrigation is practiced. Three crops a year are easily grown in the Gulf States, the second growing quickest, being best, and the yield is 1500 lbs. of fiber to the acre each cutting. The plants are set in rows four to five feet apart, and close together so as to produce slender straight plants. Little care is required after the plants are once set. The crop is cut when the stalks begin to turn brown. At the bottom the useful part is the fiber, or inner bark, and it is stripped from the stems in two long pieces, and cleaned of extraneous matter and dried and assorted according to the character of the fiber.

The greatest drawback to the cultivation is the want of machinery for preparing the fiber for the different uses required; this is done by picking to pieces by hand in the East Indies, and it is a tedious process. The East India Government has offered a prize of $25,000 for the best machine for this purpose, to be presented by September, 1879. The fiber, known as China-grass, has been in use from time immemorial in the production of grass cloth, Japan silk, Nankin linen, Canton goods, etc. Many of these goods have a rich, glossy appearance, equal to silk. The fiber is also largely used in France, England and the United States as a substitute for, or to mix with silk in silk manufacture; and with the prevailing use of jute, instead of or with worsted, in the manufacture of Wilton and Brussels carpets this would, if to be had, take its place as a much more serviceable and durable article; it would also be a substitute for hemp, as it is stronger and finer and more durable than linen, and almost as lustrous as silk, and would enter into the manufacture of these and woolen goods, and mixed with wool to a very large extent. There is no doubt but the Gulf States have it in their power to introduce another fiber to the world, which shall rival cotton in importance and as a source of wealth to the nation.

Farm Economy.

CARE OF VILLAGE REFUSE.

The farmer's greatest want is manure for his exhausted lands. To obtain this economically, near by him, and know its character, that he run no risks, are the all-important necessity. His first resource is the *saving* of everything upon his farm, not merely in returning straw and all kinds of green manure to the land, to be dried up, or burned up in the sun and blown away, but in composting and rotting until it is so dissolved or pulverized, or in other words, "digested," that the roots have nothing to do but to suck up the food they require. When the resources of the barn-yard, the out-houses, and the swamps and woodlands, and roadsides are exhausted, the nearest additional supply is usually at the outskirts of large towns, or in smaller villages, and here the farmer can readily find enough and the best food for his compost heap and for his crops.

The refuse lying around almost any dwelling in the outskirts of towns, especially those of the poorer classes, who do not seem to value the benefits of a healthy atmosphere, of "sweetness and light," will give the farmer ample reward for cleaning up thoroughly and hauling it away, and the inmates will hardly object to the operation.

Of course, there are a great many kinds of refuse which the farmer can obtain if on the lookout for it, some of which from manufacturing establishments, he may have to pay a small sum for, but this is generally better than paying for unknown commercial fertilizers. The organization of scavenger companies should be encouraged by the town authorities of every village or city, and every facility afforded for cleaning the parts of the town not thoroughly cared for by the occupants. Cess-pools and water-closets should be systematically constructed, and so as to allow of the easy application of deodorizers of any kind and a frequent thorough cleaning. This neglect is the great waste of the country at this time, and its perfect utilization is the source of great benefit to exhausted lands as well as of health to the town's people. No other expense of deodorizing is needed than burned peat, or any very dry or burned earth, and that not in large quantities, but just sufficient to render the operation not disagreeable. Any company which could obtain from a city of no more than five thousand inhabitants the exclusive right to clean the city and be authorized so to do, would have the foundation of a profitable business, and would be doing the people of the town as well as the farmers a great benefit.

WASTE OF MANURE ON THE FARM.

The subject of keeping up the fertility of the farm is of interest to every farmer, particularly in the older States of the Union, where many farms are becoming more and more exhausted by constant cropping, without a sufficiency of fertilizing matter being returned to the land. Many thousands of dollars have been expended for artificial fertilizers in these parts, yet only a few farms have been improved in productiveness within the last ten years. Many farmers, since the introduction of the artificial fertilizers, have neglected proper attention to the making and saving of manure about the farm; where, I am satisfied from experience and observation, much more valuable fertilizers can and may readily be made and applied at a less cost, by properly utilizing the waste material about the farm, and by a proper care in preventing waste of the manure after it is made. An observing farmer, let him turn which way he may, can scarcely fail to see the greatest negligence and waste of which the general farmer can be guilty, in the neglect to save and apply fertilizers, or matter that may be turned into such.

A few weeks since I was traveling along a road that was partially covered with hay. For near a quarter of a mile the farmer had carefully mowed the sides of the roadway and raked the grass, weeds, etc., into the middle of the road. The owner of this farm was a young man whom I never saw at a Farmers' Club, and I strongly suspect he is not a subscriber to the Rural. On several other farms I passed, the road-sides were mowed and the grass lying there. In this county stock is not permitted to run at large on the highways, and in many places the grass would be well worth taking to the barn for fodder, and where too many weeds or other rough material are mixed with it for hay, it is well worth gathering for litter and manure, and careful farmers, who take agricultural papers, do utilize it in preference to buying doubtful phosphates.

Pig-pens, with the hogs kept in them the year round, are excellent places to make manure in. Last year I had six pigs in a pen, and I supplied them with all kinds of material for them to work up into fertilizers—leaves from the woods, all sorts of weeds, grass and rubbish from the truck patch and road-sides, potato-tops, straw, etc., and in the fall I drew out eighteen one-horse cart-loads of pretty good manure, although the pens had been cleaned out in early spring of the same year. A neighbor of mine, who buys phosphate, has his pig-pens by the side of a public road, along which I often pass, and I find his pen littered with stones. I never heard of this man taking an agricultural paper, and fear he would not were I to urge him to do so, but I shall try him with the Rural. Many farmers waste a great deal of their manure, after it is made, by exposure in an uncovered barn-yard during summer. S. S.

Floricultural.

ROOTING CUTTINGS IN AUGUST.

The following is a description of my mode of rooting cuttings through the hottest part of the season. It is done in an upright frame the size of a hot-bed sash, and six inches deep. The long sides project about six inches to form feet, and the back is boarded up. In the middle of it are shelves two inches wide, leaving two inches space in front and the same behind. These shelves are slightly hollowed out, gutter-like, to about one inch on either side. In each is a half-inch hole, one a half inch off from one end. These holes are lined with a piece of tube, like bent zinc, protuding one-half inch below. There are also corresponding holes in the top and bottom boards. The shelves are arranged in a sort of slanting manner, the ends diverging from and approaching each other alternately, the explanation being rendered clearer by an inspection of the accompanying cut.

The side with the hole is placed at the lowest end letter. In the middle of each, top and bottom, a two-inch hole serves as ventilator. On the top, a reservoir of water, provided with a faucet, is placed. Any water-tight vessel will answer for this purpose, such as a bucket, keg or kerosene-can. The last of these I employ, and it needs filling-up only twice a week. Two hook-like brackets at the bottom, and a catch above, hold a sash to its place in front of the frame. The whole has to receive a thick coat of paint. It is placed perfectly level on the north side of a building. Thumb-pots containing clear sand, with their holes stopped up with clear wax, are placed all along the shelves.

In these pots the cuttings are inserted. Water is put in the vessel and the faucet opened wide enough to allow, about every second, a drop of water to escape. This falls through the top to the first shelf, runs down to the lower end, from this through the zinc tube to the next shelf, etc., to the bottom, keeping, in its course, all the pots moist which in turn suck up the moisture and impart it to the sand. This procedure, when once started, needs no further attention, except putting in cuttings, taking them out when rooted, and filling up the vessel once or twice a week. The cuttings never flag or wilt; a free circulation of air is about them, and no fungoid growth causes their damping off. The shoots are taken when of the same degree of maturity at which florists generally root them in their heated sand-beds in propagation houses. If possible, no leaves ought to be taken off, except those which would reach in the sand. This method is only applicable when the temperature is above 75°. A frame three by six feet will hold from 250 to 300 cuttings.

In the sketch *A* is front elevation; *a*, shelves; *b*, zinc tubes; *c*, reservoir; *d*, faucet, *e*, place for air holes; *f*, catch to hold the sash to its place; *B*, cross-section of shelves; *C*, sides; *g*, brackets to support the sash. One end of the uppermost shelf is three inches from the top, the other four. All the other shelves are alternately three by five inches from each other.

Harris Co., Texas. G. Marti.

Arboricultural.

SALIX LUCIDA?

A Note From Mr. Downing.

In your article on the Salix laurifolia, you say the specific name is not authorized, and that you have not found it even as a synomyn. Mr. LOUDON, in his Aboretum Britannicum, describes between two and three hundred varieties of the Willow, and gives outlines of many of them, and among them is S. laurina, the laurel-leaved or shining dark-green Willow," which he says is "a shrub or small tree attaining the hight of six feet, and if neglected becomes a small tree; the twigs are very brittle and unfit for any useful purpose." Of course, this can not be what we have as S. laurifolia which grows three times that hight, and is probably what Mr. LOUDON describes as S. pentandra, as the description agrees pretty nearly and they may prove identical, and if what I received as such were correct, I think they are. Salix lucida and S. Meyeriana, as described by LOUDON, are very similar to S. pentandra, so much as to require to be grown side by side to come to a correct decision. The S. laurifolia, as we have it, is very beautiful when grown as single specimens on the lawn as a tree of medium size, especially when the young shoots are cut back annually nearly of their last season's growth. It is also useful when planted in a bed to be cut back annually for sticks or rods for florists and nurserymen. They should be cut of suitable lengths, and tied closely together in small bundles until they are sufficiently dried to prevent their growing, when they make the best of rods for this purpose, and a small plot will give a large number from a half inch in diameter to the smallest size, and when cut down annually they grow from five to ten feet high; cuttings strike easily and grow vigorously in almost any uplaud soil.

Newburgh, N. Y. CHARLES DOWNING.

Horticultural.

TRANSPLANTING CABBAGE, ETC.

ISAAC F. TILLINGHAST.

THERE is still time in many localities to put out cabbage and celery plants for winter and spring use. So far as I can judge from personal observation in my own locality, from correspondence with my patrons in various sections, and from the demand for seeds and plants, compared with that in other years, the acreage of cabbage for late use this season is very much less than at any time during the past ten years. The cause of this is, that the business was entirely overdone last season and the market was glutted, prices ruling so extremely low that cultivators were disgusted with the very name of cabbage. The result will be a scarcity the coming winter, with fairer prices, which will stimulate to renewed exertion another year. But those who make the money are those who produce an article in times of scarcity. Many persons think they cannot safely transplant succulent plants, like cabbage and celery, successfully during the hot, dry months of midsummer. Of course, it can be more easily accomplished when the weather is cool and cloudy, and the ground moist, but by observing the following points, I have had no difficulty in accomplishing it at any time, no matter how hot the weather may be. When removed from the seed-bed, many of the fine rootlets are broken, and the supply of moisture cut off. The first tendency of the plant is then to wilt and perish, particularly if the leaves are exposed to the sun, so that evaporation goes on rapidly. Therefore, if transplanted at once after being removed from the bed on a hot day, the chances are that it will die. But dip the roots in water and place the plants loosely in a cool place where they may be shaded from the sun, but not shut out from daylight, for 24 or 36 hours, and an abundance of new, white rootlets will be formed. The whole plant will have a fresh, vigorous look, as though it had determined to live and grow despite its removal. All its reviving forces are now at work, it is convalescent, and with half a chance, it will rapidly recover. Now remove a few of the larger leaves, that the evaporation of moisture may not be greater than the new roots can supply and "puddle" the roots. This is done by stirring fine garden soil into a pail of water, until it is of the consistency of thick cream. Dip the roots, a few at a time, into this, until a heavy coating adheres to them. A slight sprinkling of dry gypsum or "plaster" will admirably serve to retain the moisture, though too heavy a coating will sometimes bake so hard as to effect more harm than benefit. If the plant is now set in newly-plowed soil, it will live and commence growing immediately, no matter how hot and dry the weather may be. As it is not always convenient to plow the ground just before setting the plants, the fresh moist condition may be attained by ridging it up with a horse-hoe or corn plow, and raking or hoeing down the ridges immediately before setting the plants. When managed in this manner, transplanting may nearly always be made a successful operation. Still, if convenient to put the plants out in the after part of the day, they will get accustomed to their new quarters during the cool hours of night and not mind the sun's rays the following day.

I have frequently put out cabbage plants so late in the season that the heads became but half-formed when winter set in. Just before the ground freezes, a deep furrow is plowed on some dry sandy knoll, the cabbages are carefully lifted and set as thickly as convenient in the furrow in their natural position, with the soil adhering to the roots. The furrow is then covered with three or four inches of dry straw, and this in turn with about the same thickness of soil, which can mostly be done by running a plow along each side and forming a ridge above the straw. The formation of the head will go on during the winter to nearly the extent that it would had the season been prolonged. They will come out in spring white and tender and be greatly relished because of their scarcity. Cabbages to do well should be hoed frequently. The soil around them should be loosened as often as the showers pack it down.

This matter of freqnent cultivation will apply to nearly all vegetables with nearly equal force. It is actually less work to hoe a field as often as a weed can be seen than to allow them to get the start of you and then try to conquer. This is a lesson I have learned many times and yet I confess the weeds occasionally get the better of me. It is so much easier to keep square with this world in all respects than to catch up after once getting behind.

Wyoming Co., Pa., July 20, 1878.

The Vineyard.

GRAFTING GRAPE-VINES AGAIN.

BUT for an error in your issue of 13th inst., under the above head, I should have let this subject remain where I then left it. To those who do not know the difference in the histories, the advents, the size and the qualities of the two grapes—the *Isabella* and the *Israella*—my article of the 13th is well enough as it is, as it merely shows the liability of the stronger stock to eventually obliterate the weaker cion, and that the vine that once produced red fruit may eventually produce black. In the manuscript of the article alluded to, the word *Isabella* did not occur, while in the printed article it occurs seven or more times.

The practical grape-grower doubtless knows that the Iona and the Israella originated some fifteen years since, with C. W. GRANT, near Peekskill, N. Y., and that the Isabella is one of the two oldest varieties under general cultivation in the Northern States. The Israella is claimed by the originator to be a seedling from the Isabella, which it has every appearance of being; and while I am on the subject I venture to express my own experience of the two; that the former is no improvement upon its parent, except that it ripens some ten to fifteen days earlier, while at the same time it lacks the size, vigor, hardiness and productiveness of the parent. Of the liability to disease of either I cannot say much, for here we are not troubled with mildew or rot. All the disease I have ever seen here is a few dark-colored spots on the Ionas, Northern Muscadines and Franklins, which have more effect to disfigure them than to do any material injury.

My experience in grapes is confined to this eastern shore of Lake Michigan, where I have cultivated a few for the past eighteen years, and I am aware that different altitudes, climates and soils, may produce different results in many varieties. The object of this article is not to censure either the type-setter or the proof reader, whom I have found praiseworthily correct; the error is a very natural one with the typo who is not skilled in grape nomenclature, but I feared that some of the RURAL readers might think me foolish or ignorant for paying two and a half dollars each for Isabella grape-vines in 1866, neither of which charges do I admit to have been then, or to be now, true.

Fear of spinning out too long an article, and the fact that the mercury stands 88 in the shade at 2 P. M., hinder me from giving an account of the present grape prospects, which, in ordinary exposures, is not flattering but somewhat instructive.

S. B. PECK.

Miscellaneous

WHAT OTHERS SAY.

RUST.—The Pacific Rural Press (San Francisco) says: Now that the fields come to the test of the reaper, it is seen that nearly everywhere there is severe damage from rust. From the severe visitation in the Salinas valley, the evil extends north and south and eastwards, making some fields wholly unworthy of the harvester, and in others leaving naught but small weights of shrunken and shriveled grain. Sad indeed will be the consequences to many an honest worker, who, surviving the drought last year, put all his labor, his cash, his credit, and his hopes into this year's promise of plenty, and will hardly reap enough to nourish his family through the year.

COL. COLMAN (Colman's Rural World) says that just at this time, when the cheese market is depressed, it is a good opportunity to impress upon cheese-makers the importance of cultivating a demand for cheese in all our rural homes. Not one-fourth of the cheese is consumed which should be. In this respect we are not advocating more costly or extravagant living. But substitute good rich cheese for many of the injurious but fashionable articles now so often on our tables. Cheese can seldom be found in the houses of our common small farmers, for the reason that it cannot be had at consumption prices nor in a state to suit the demand.

MILLET AND BARLEY.—The New England Farmer says that if millet can be sown by the 20th of July, on rich mellow land free from weeds, and the season is favorable to immediate and rapid growth, a good crop may be expected, but if any of these conditions are wanting a failure must result. From present experiences we should recommend barley for very late sowing instead of either variety of millet. Barley will bear colder weather, is not easily injured by light frosts, and it makes a very good quality of fodder, either for feeding green or cured for hay. Millet is somewhat subject to rust, if sown very late after the nights begin to grow cool.

LUCK.—It is not luck says the Weekly Globe (Canada), but labor that makes men. "Luck," says an able writer whose name we know not, "is ever waiting for something to turn up: labor, with keen eye and streng will, always turns up something. Luck lies in bed and wishes the postman would bring him news of a legacy: labor turns out at six, and with busy pen or ringing hammer lays the foundation of a competence. Luck whines; labor whistles. Luck relies on chance; labor on character. Luck slips downward to self-indulgence: labor strikes boldly upward, and aspires to independence."

WATER FOR STOCK.—The Mass. Ploughman remarks, in a sensible article upon this subject, that cows may live if only watered night and morning at the barn yard, but it is not a normal mode of living. If any one will notice cows while grazing near a brook or spring, he will find that they drink half a dozen times in a day, and this is far better for them than to distend themselves, like an inflated bladder, night and morning.

THE TRUE FEAST.—The Phrenological Journal says that when the barbarous practice of stuffing one's guests shall have been abolished, a social gathering will not necessarily imply hard labor and dyspepsia. Perhaps, when that time arrives, we shall be sufficiently civilized to demand pleasures of a higher sort. True, the entertainments will then, in one sense, be more costly, as culture costs more than cake.

CABBAGE WORMS.—A writer in the Weekly Tribune says that he hunted last year cabbage-worms till he nearly crippled his back. One day a neighbor's wife came in and told him to use a tea made of cayenne pepper to sprinkle the cabbages with twice a day. He applied it, and his cabbages and back were saved. He watched the millers, and they would not light on the plants which had the pepper on them.

NITROGEN FROM THE AIR.—Mr. J. B. LAWES says, in the North British Agriculturist, that though it has often been said that broad leaves, such as the root crops possess, obtain the nitrogen from the atmosphere; yet he has no reason to think that such is the case.

RATS.—The American Poultry Journal says that it costs as much to feed the rats and mice of our country as it does to feed our poor, and even more.

Industrial Societies.

ANNUAL FAIR LIST.

THE following partial list of State and Local Fairs will be supplemented as fast as trustworthy advices are received. Corrections and alterations of dates previously announced and published have delayed the list slightly:

STATE AND GENERAL

American Institute, New York	Sept. 11, Nov. 23
California, Sacramento	Sept. 16, 21
Colorado, Denver	Sept. 21, 28
Connecticut, Hartford	Sept. 10, 13
Dakota, ——	Sept. 10, 13
Georgia, Macon	Oct. 28, Nov. 2
Illinois, Freeport	Sept. 16, 21
Indiana, Indianapolis	Sept. 30, Oct. 5
Inter-State, Chicago	Sept. 4, Oct. 19
Iowa, Cedar Rapids	Sept. 16, 20
Kansas City Exposition, Kansas City	Sept. 16, 21
Kentucky, Lexington	Aug. 27, 31
Maine, Portland	Sept. 17, 20
Mechanics' Institute, San Francisco, Cal.	Aug. 13, Sep. 14
Michigan, Detroit	Sept. 16, 20
Maryland, Pimlico	Sept. 24, 27
Minnesota, St. Paul	Sept. 2, 7
Missouri, Madison	Sept. 9, 13
Montana, Helena	Sept. 23, 29
Nebraska, Lincoln	Sept. 23, 27
Nevada, Reno	Oct. 7, 12
New England, Worcester, Mass	Sept. 3, 6
New Jersey, Waverley	Sept. 16, 20
New Jersey Horticultural, Mt. Holly	Oct. 8, 10
New York, Elmira	Sept. 9, 13
Northwestern Agricultural and Mechanics' Association, Dubuque, Iowa	Sep. 9, 13
Ohio, Columbus	Sept. 9, 13
Ohio Central, Mechanicsburg	Sep. 3, 6
Ohio Southern, Dayton	Sep. 23, 27
Oregon, Salem	Oct. 8, 18
Pennsylvania, Erie	Sept. 23, 27
St. Louis Association, St. Louis, Mo	Oct. 7, 12
Southern Cala. Agricultural and Horticultural, Los Angeles	Oct. 14, 19
Southwestern Wisconsin, Industrial Association, Mineral Point	Sep. 3, 6
Texas, Austin	Oct. 29, Nov. 2
Texas Southern, Houston	Oct. 22, 26
Vermont, St. Albans	Sept. 10, 12
Virginia, Richmond	Oct. 29, Nov. 1
Wisconsin, Madison	Sept. 9, 13

COUNTY AND LOCAL.

CALIFORNIA.

El Dorado, Placerville	Sep. 13, 15
Golden Gate, Oakland	Sep. 9, 16
Marin, Petaluma	Sep. 23, 28
Monterey, Salinas City	Oct. 15, 19
Napa, Vallejo	Sep. 3
Northern District, Marysville	Sep. 24, 28
Santa Clara, San Jose	Sep. 30, Oct. 5
San Joaquin Valley, Stockton	Sep. 24, 28
Stanislaus Stock Growers, Modesto	Oct. 9, 11
Solano, Vallejo	Sep. 3
Siskiyou, Yreka	Oct. 2, 5
Sonoma, Petaluma	Sep. 23, 28

COLORADO.

Boulder, Boulder City	Oct. 2, 5

CONNECTICUT.

Windham, Brooklyn	Sep. 24

ILLINOIS.

Adams, Camp Point	Sep. 2, 6
Adams, Quincy	Sep. 24, 27
Boone, Belvidere	Sep. 3, 6
Brown, Mt. Sterling	Sep. 17, 20
Bureau, Bureau	Sep. 3, 6
Carroll, Mt. Carroll	Aug. 27, 30
Cass, Virginia	Aug. 27, 30
Champaign, Champaign	Sep. 3, 6
Christian, Taylorville	Sep. 17, 20
Clay, Louisville	Oct. 8, 11
Clay, Flora	Sep. 24, 27
Coles, Charleston	Sep. 17, 21
Crawford, Robinson	Oct. 8, 11
Cumberland, Majority Point	Sep. 25, 28
DeKalb, Sandwich	Sep. 10, 13
DeKalb, Sycamore	Sep. 24, 27
DeKalb, DeKalb	Sep. 11, 13
De Witt, Clinton	Aug. 20, 23
DeWitt, Farmer City	Aug. 26, 30
Douglas, Tuscola	Sep. 10, 14
DuPage, Wheaton	Sep. 11, 13
Edgar, Paris	Sep. 3, 6
Edwards, Albion	Oct. 1, 4
Fayette, Vandalia	Oct. 2, 5
Ford, Paxton	Sep. 10, 13
Ford, Gibson City	Aug. 20, 23
Franklin, Benton	Sep. 24, 27
Fulton, Canton	Sep. 3, 6
Fulton, Avon	Sep 24, 27
Gallatin, Shawneetown	Oct. 1, 5
Greene, Carrollton	Oct. 1, 4
Grundy, Morris	Sep. 24, 27
Hardin, Elizabethtown	Sep. 18, 21
Henderson, Biggsville	Sep. 17, 20
Henry, Cambridge	Aug. 26, 30
Iroquois, Onarga	Sep. 2, 7
Jackson, Murphysboro	Sep. 10, 13
Jasper, Newton	Sep. 24, 27
Jefferson, Mt. Vernon	Oct. 8, 11
Jersey, Jerseyville	Oct. 15, 18
Jo Daviess, Galena	Sep. 24, 27
Jo Daviess, Warren	Sep. 24, 27
Kane, Aurora	Sep. 3, 6
Kankakee, Kankakee	Sep. 24, 27
Kendall, Bristol	Sep. 10, 12
Knox, Knoxville	Sep. 17, 20
Lake, Waukegan	Sep. 23, 28
LaSalle, Ottawa	Sep. 2, 6
Lawrence, Lawrenceville	Oct. 2, 5
Livingston, Pontiac	Sep. 2, 7
Livingston, Fairbury	Sep. 10, 13
Logan, Lincoln	Aug. 26, 31
Logan, Atlanta	Aug. 19, 23
Macon, Decatur	Sep. 30, Oct. 4
Macoupin, Carlinville	Sep. 30, Oct. 4
Marion, Centralia	Oct. 1, 4
Marshall, Henry	No report
Marshall, Wenona	Sep. 23, 27
Mason, Havana	Sep. 17, 20
Massac, Metropolis	Oct. 9, 11
McDonough, Macomb	Aug. 27, 31
McHenry, Woodstock	Sep. 21, 27
McHenry, Marengo	Sep. 10, 13
McLean, Bloomington	Sep. 3, 6
Menard, Petersburg	Sep. 3, 6
Mercer, Aledo	Sep. 24, 27
Montgomery, Hillsboro	Oct. 2, 4
Montgomery, Litchfield	Oct. 15, 18
Morgan, Jacksonville	Sep. 10, 13
Moultrie, Sullivan	Sep. 10, 14
Ogle, Oregon	Sep. 3, 6
Ogle, Rochelle	Sep. 23, 26
Peoria, Peoria	Sep. 10, 13
Perry, Pinckneyville	Oct. 2, 4
Piatt, Monticello	Aug. 20, 23
Pike, Pittsfield	Sep. 24
Pope, Golconda	Oct. 3, 5
Putnam, Hennepin	Sep. 10, 12
Randolph, Sparta	Sep. 25, 27
Randolph, Chester	Oct. 15, 18
Richland, Olney	Sep. 17, 20
Rock Island, Hillsdale	Sep. 17, 19
Saline, Harrisburg	No report
Sangamon, Springfield	Sep. 23, 27
Schuyler, Rushville	Sep. 24, 27
Stark, Toulon	Sep 24, 28
St Clair, Belleville	No report
Stephenson, Freeport	(State Fair)
Tazewell, Pekin	No report
Union, Jonesboro	Sep. 10, 13
Vermilion, Catlin	Sep. 10, 13
Vermilion Hoopeston	Aug. 27, 30
Vermilion, Danville	Sep. 16, 20
Wabash, Mount Carmel	Sep. 30, Oct. 3
Warren, Monmouth	Sep. 10, 13
Wayne, Fairfield	Sep. 17, 20
Whiteside, Sterling	Sep. 24, 27
Whiteside, Albany	Sep. 11, 13
Whiteside, Morrison	Sep. 3, 6
Will, Joliet	Sep. 9, 13
Williamson, Marion	Oct. 1, 4
Winnebago, Rockford	Sep. 10, 13

Fairs will also be held at Marshall (Clark Co.,) Carlyle (Clinton Co.,) McLeansboro (Hamilton Co.,) Carthage (Hancock Co.,) Libertyville (Lake Co.,) Amboy (Lee Co.,) Salem (Marion Co.,) Waterloo (Monroe Co.,) Shelbyville (Shelby Co.,) and Cazenovia (Woodford Co.)

INDIANA.

Allen, Fort Wayne	Sep. 9, 13
Bartholomew, Columbus	Aug. 27, 31
Blackford, Hartford	Sep. 24, 27
Boone, Lebanon	Sep. 9, 13
Cass, Logansport	Sep. 24, 28
Carroll, Delphi	Sep. 23, 27
Clinton, Frankfort	Sep. 16, 20
Clark, Charlestown	Sep. 10, 13
Decatur, Greensburg	Aug. 20, 23
Delaware, Muncie	Sep. 10, 13
Elkhart, Goshen	Sep. 1, 4
Fayette, Connersville	Sep. 5, 6
Franklin, Brookville	Sep 24, 27
Fulton, Rochester	Sep. 19, 21
Gibson, Princeton	Sep. 16, 20
Grant, Marion	Sep. 17, 20
Greene, Linton	Oct. 1, 5
Hendricks, Danville	Sep. 10, 13
Harrison, Corydon	Sep. 10, 24
Henry, New Castle	Sep. 17, 20
Howard, Kokomo	Sep. 16, 21
Huntington, Huntington	Sep. 17, 20
Hamilton, Cicero	Aug. 27, 30
Jackson, Brownstown	Sep.— —
Jasper, Rensselaer	Sep. 17, 21
Jay, Portland	Oct. 1, 4
Jefferson, Madison	Sep. 17, 20
Knox, Vincennes	Oct. 14, 19
Kosciusko, Warsaw	Sep. 23, 26
La Grange, La Grange	Sep. 25, 27
Lake, Crown Point	Sep. 24, 27
La Porte, La Porte	Sep. 25, 27
Lawrence, Bedford	Sep. 10, 13
Madison, Anderson	Sep. 3, 6
Marion, Valley Mills	Sep. 5, 7
Miami, Peru	Sep. 17, 20
Monroe, Bloomington	Sep. 18, 20
Morgan, Martinsville	Sep. 10, 15
Noble, Ligonier	Sep. 17, 20
Orange, Paoli	Sep. 17, 20
Perry, Rome	Oct. 1, 4
Pike, Petersburg	Sep. 2, 6

Porter, Valparaiso.....Sep, 18, 20
Posey, New Harmony.....Sep. 10, 13
Putnam, Greencastle.....Sep. 23, 28
Randolph, Winchester.....Sep. 17, 20
Ripley, Osgood.....Aug. 27, 30
Rush, Rushville.....Sep. 10, 13
Shelby, Shelbyville.....Sep. 3, 7
Stark, Knox.....Sep. 26, 28
Steuben, Angola.....Sep. 24 27
Sullivan, Sullivan.....Sep. 3, 7
Tippecanoe, Lafayette.....Sep. 2, 7
Vigo, Terre Haute.....Sep. 9, 14
Wabash, Wabash.....Sep. 10, 13
Warren, West Lebanon.....Sep. 9, 14
Warrick, Boonville.....Oct. 8, 12
Wells, Bluffton.....Sep. 24, 27
Whitley, Columbia.....Oct. 1, 4

INDIANA DISTRICT FAIRS.

Bridgeton Union, Bridgeton.....Aug. 26, 31
Dunkirk Union, Dunkirk.....Sep. 3, 6
Edinburg Union, Edinburg.....Sep. 24, 28
Fount'n, War and Ver, Covington.....Sep. 24, 27
Henry, Mad. and Del, Middletown.....Aug. 20, 23
Knightstown Union, Knightstown.....Aug. 27, 30
Loogootee District, Loogootee.....Oct. 8, 12
Mitchell District, Mitchell.....Sep. 25, 29
Middlefork District, Middlefork.....Aug. 26, 30
North E. Indiana, Waterloo.....Oct. 8, 11
Prairie Farmer, Francesville.....Sep. 10, 13
Russell Union, Russellville.....Aug. 19, 21
Remington District, Remington.....Aug. 27, 30
South E. Indiana, Aurora.....Sep. 3 —
Switzerland and Ohio, East Enterprise.....Sep. 10, 13
Thorntown Union, Thorntown.....Sep. 23, 28
Union City District, Union City.....Sep. 24, 27
Worthington, Ind'l, Worthington.....Sep. 24, 27

IOWA.

Alamakee, Wankon.....
Agr'l Mech. Association, Dubuque.....Sep. 9, 13
Appanoose, Centreville.....Sep. 4, 6
Benton, Vinton.....Sep. 3, 6
Butler, Butler Centre.....Sep. 21, 26
Cerro Gordo, Mason City.....Sep. 24, 26
Clark, Osceola.....Sep. 17, 19
Crawford, Denison.....Sep. 25, 27
Decatur, Leon.....Sep. 10, 13
Delaware, Manchester.....Sep. 21, 27
Des Moines, Burlington.....Sep. 24, 27
Fayette, West Union.....Sep. 24, 27
Franklin, Hampton.....Sep. 21, 26
Floyd, Charles City.....Sep. 25, 27
Hardin, Eldora.....Sep. 11, 13
Humboldt, Humboldt.....Sep. 18, 20
Jones, Monticello.....Sep. 3, 6
Jackson, Maquoketa.....Sep. 24, 27
Johnson, Iowa City.....Sep. 24, 27
Keokuk, Sigourney.....Sep. 24, 27
Lucas, Charlton.....Sep. 25, 27
Madison, Winterset.....Sep. 17, 24
Mahaska, Oskaloosa.....Sep. 4, 7
Marshall, Marshalltown.....Sep. 10, 12
Mitchell, Osage.....Sep. 26, 28
Muscatine, Muscatine.....Sep. 24, 27
Northern Iowa, Postville.....Sep. 3, 6
Page, Clarinda.....Sep. 10, 14
Plymouth, Le Mars.....Sep. 11, 13
Poweshiek, Malcom.....Sep. 10, 13
Ringold, Mt Ayer.....Sep. 12, 14
Scott, Davenport.....Sep. 2, 6
Union and Mech'nville, Mechanicsville.....Sep. 10, 13
Union at Villisca, Villisca.....Sep. 3, 7
Union at Mt. Joy, Long Grove.....Sep. 10, 13
Wapello, Ottumwa.....Sep. 24, 27
Warren, Indianola.....Sep. 3, 5
Washington, Washington.....Sep. 10, 13
Winneshiek, Hesper.....Sep. 17, 19
Woodbury Sioux City.....Sep. 3, 6

KANSAS.

Anderson, Garnett.....Sep. 18, 20
Allen, Iola.....Sep. 17, 20
Brown, Hiawatha.....Sep. 18, 21
Burlingame, Union, Burlingame.....Sep. 25, 27
Cherokee, Columbus.....Oct. 2, 4
Cloud, Concordia.....Sep. 18, 20
Doniphan, Troy.....Sep. 23, 28
Franklin, Ottawa.....Sep. 11, 14
Greenwood, Eureka.....Sep. 18, 20
Harvey, Halton.....Sep. 11, 13
Humboldt, Humboldt.....Oct. 1, 5
Harvey, Newton.....Oct. 2, 4
Jefferson, Oskaloosa.....Sep. 17, 20
Jewell, Jewell Center.....Sep. 15
Kansas Central, Junction City.....Oct. 9, 11
Kansas Valley, Lawrence.....Sep. 23, 28
Labette, Oswego.....Sep. 12, 14
Linn, La Cygna.....Oct. 2, 5
Lyon, Lyon.....Oct. 1, 4
Marion, Peabody.....Oct. 2, 4
McPherson, McPherson.....Sep. 25, 27
Marshall, Marysville.....Sep. 8, 10
Miami, Paoli, week after Kas City Ex.....
Northwestern Agr'l & Mech. Beloit.....Sep. 24, 26
Neosho Valley, Neosho Falls.....Sep. 26, 27
Osborne, Osborne.....Sep. 25, 27
Riley, Manhattan.....Sep. 24, 27
Reno, Hutchinson.....Oct. 3, 5
Sedgwick, Wichita.....Sep. 10, 14
Shawnee, Topeka.....Sep. 10, 13
Smith, Smith Center.....Sep. 18, 19
Seventh Judicial Dist., Chanute.....Sep. 4, 7
Wabaunsee, Alma.....Sep. 18, 19
Washington, Washington.....Sep. 25, 25
Wilson, Fredonia.....Sep. 18, 21

KENTUCKY.

Bourbon, Paris.....Sep. 3, 7
Christian, Hopkinsville.....Oct. 3, 5
Daviess, Owensboro.....Oct. 9, 11
Elm Spring, Mt. Carroll.....July 30, Aug. 3
Eminence Agr'l and Mech Ass., Eminence, Aug. 20, 24
Harrison, Cynthiana.....Aug. 20, 24
Ky. Industrial Ass'on Frankfort.....Sep. 4, 6
Lincoln, Lincoln Centre.....Sep. 25, 27
Mercer, McAfee.....July 31, Aug. 2
North Kentucky, Florence.....Aug. 27, 31
Nelson, Bardstown.....Sep. 3, 7
Paducah Fair Asso, Paducah.....Oct. 8, 11
Philips Phillipsburg.....Sep. 25, 27
Simpson, Franklin.....Sep. 26, 28
Union, Germantown.....Sep. 10, 14
Warren, Bowling Green.....Sep. 12, 14

MAINE.

Androscoggin, Lewiston.....Oct. 1, 3
Franklin, Farmington.....Oct. 8, 10

MASSACHUSETTS.

Barnstable, Barnstable.....Sep. 17, 18
Berkshire, Pittsfield.....Oct. 1, 3
Bristol, Taunton.....Sep. 24, 26
Bristol Center, Myrick's.....Sep. 11, 13
Deerfield Valley, Charlemont.....Sep. 19, 20
Essex, Lawrence.....Sep. 24, 25
Franklin, Greenfield.....Sep. 26, 27
Hampden, Springfield.....Sep. 21, 25
Hampden, East, Palmer.....Sep. 17, 18
Hampshire, Amherst.....Sep. 17, 18
Hampshire, Franklin, and Hampden, Northampton.....Sep. 19, 21
Highland Middlefield.....Sep. 12, 13
Hingham, Hingham.....Sep. 24, 25
Housac Valley, North Adams.....Sep. 17, 18
Housatonic, Great Barrington.....Sep. 25, 27
Marshfield, Marshfield.....Sep. 11, 12
Martha's Vineyard, West Tisbury.....Oct. 1, 2
Middlesex, Concord.....Sep. 25, 27
Middlesex, North, Lowell.....Sep. 24, 25
Middlesex, South Framingham.....Sep. 17, 18
Nantucket, Nantucket.....Sep. 4, 5
Natick, Natick.....Oct. 2, 3
Norfolk, Readville.....Sep. 26, 27
Plymouth, Bridgewater.....Sep. 18, 20
Union, Blandford.....Sep. 18, 20
Worcester, Worcester.....Sep. 19, 20
Worcester, North, Fitchburg.....Sep. 26
Worcester, Northwest, Athol.....Oct. 1, 2
Worcester, South, Sturbridge.....Sep. 12, 13
Worcester, Southeast, Milford.....Sep. 24, 26
Worcester, West Barre.....Sep. 26, 27

MISSOURI.

Knox, Newark.....Sep. 10, 13
Lewis, La Grange.....Aug. 26, 30
Pike, Louisiana.....Oct. 1, 5
Shelby, Shelbyville.....Oct. 1, 5

MICHIGAN.

Allegan, Allegan.....Sep. 23, 27

NEBRASKA.

Adams, Hastings.....Sep. 23, 26
Adams, Juniata.....Sep. 16, 18
Burt, Tekamah.....Sep. 18, 20
Butler, David City.....Sep. 18, 20
Cass, Plattsmouth.....Sep. 17, 20
Clay, Sutton.....Sep. 17, 18
Franklin, Bloomington.....Sep. 17, 18
Fremont District, Fremont.....Sep. 16, 18
Gage, Beatrice.....Sep. 17, 19
Hamilton, Aurora.....Sep. 19, 21
Hall, Grand Island.....Sep. 18, 20
Hastings District, Hastings.....Sep. 26, 28
Jefferson, Fairbury.....Sep. 11, 14
Jefferson, Nelson.....Sep. 11, 14
Johnson, Tecumseh.....Sep. 19, 21
Lancaster, Lincoln.....Sep. 25, 27
Nebraska District, Nebraska City.....Sep, 9, 15
Nemaha, Brownville.....Sep. 18, 20
Platte, Columbus.....Sep. 11, 13
Saunders, Wahoo.....Sep. 19, 21
Seward, Seward.....Sep. 19, 21
Otoe, Nebraska City.....Sep. 9, 15
Otoe, Syracuse.....Sep. 18, 19
Richardson, Salem.....Sep. 18, 20
Webster, Red Cloud.....Sep. 17, 19
York, York.....Sep. 17, 20

EUREKA SAFETY-POWER.

NEW HAMPSHIRE.

Cheshire, Keene.....Sep. 25, 26
Sullivan, Claremont.....Sep. 25, 26

NEW JERSEY.

Burlington, Mt. Holly.....Oct. 8, 10

NEW YORK.

Annsville and Lee, Taberg.....Sep. 10, 12
Antwerp Union, Antwerp.....Aug. 28, 30
Brookfield, Clarkville.....Sep. 24, 25
Broome, Whitney's Point.....Sep. 3, 5
Chautauqua, Jamestown.....Sep 11, 13
Danby, Danby.....Sep. 18
Delaware, Delhi.....Sep. 10, 12
Dutchess, Washington Hollow.....Sep. 17, 19
Edmeston, Edmeston.....Sep. 11, 13
Erie, Hamburg.....Sep. 10, 13
Essex, Westport.....Sep. 17, 19
Franklin, Malone.....Sep. 25, 27
Galen, Clyde.....Sep. 20, 21
Genesee, Batavia.....Sep. 6, 7
Greene, Cairo.....Sep. 18, 19
Hampton, Bridgehampton.....Oct. 1, 3
Iroquois, Cattaraugus Reservation.....Sep. 17, 20
Jefferson, Watertown.....Sep. 24, 26
Lenox, Oneida.....Sep. 24, 27
Maine Village, Maine, (Broome Co.).....Aug. 28, 30
Oneida, Rome.....Sep. 16, 20
Oneonta, Oneonta.....Sep. 26, 28
Onondaga, Syracuse.....Sep. 17, 19
Onondaga Indian, Onondaga Castle.....Sep. 25, 28
Onondaga, Northwestern, Baldwinsville.....Sep. 24, 27
Orwell, Sandy Creek.....Sep. 4, 6
Orleans, Albion.....Sep. 27, 28
Oswego Falls, Fulton Station.....Sep. 17, 19
Oswego, Mexico.....Sep. 10, 12
Otsego, Cooperstown.....Sep. 23, 15
Phœnix Union, Phœnix.....Sep. 10, 13
Racket, Putnam.....Sep. 17, 19
Richland, Sandy Creek.....Sep. 4, 6
Sandy Creek, Sandy Creek.....Sep. 4, 6
Sangerfield Marshall, Waterville.....Sep. 23, 25
Schenectady, Schenectady.....Sep. 19, 13
Schenevus Valley, Schenevus.....Sep. 19, 21
Schoharie, Schoharie.....Sep. 24, 26
Seneca, Waterloo.....Sep. 24, 26
Skaneateles Farmers' Club, Skaneateles.....Sep. 17, 18
Steuben, Bath.....Sep. 25, 27
Saint Lawrence, Gouverneur.....Sep. 4, 6
Susquehannah Valley, Unadilla.....Sep. 17, 19
Tompkins, Ithica.....Oct. 1, 3
Waddington, Waddington.....Sep. 8, 5
Warrensburg Union, Warrensburg.....Sep. 17, 20
Washington, Sandy Hill.....Sep. 4, 6
Western New York, Rochester.....Sep. 17, 21
Winfield, West Winfield.....Sep. 16, 18

OHIO.

Allen, Lima.....Oct. 1, 4
Ashtabula, Jefferson.....Sep. 24, 27
Athens, Athens.....Oct. 3, 4
Auglaize, Wapakoneta.....Sep. 25, 27
Belmont, St. Clairvill.....Sep. 18, 20
Brown, Georgetown.....Sep. 10, 13
Butler, Hamilton.....Oct. 1, 5
Carroll, Carrollton.....Oct. 9, 11
Clarke, Springfield.....Aug. 20, 23
Clermont, Boston.....Sep 3, 6
Clinton, Wilmington.....Sep. 2, 5
Columbiana, New Lisbon.....Sep. 24, 26
Coshocton, Coshocton.....Sep. 24, 27
Crawford, Bucyrus.....Sep. 24, 27
Cuyahoga, Chagrin Falls.....Oct. 1, 4
Defiance, Defiance.....Oct. 1, 4
Darke, Greenville.....Sep. 17, 20
Delaware, Delaware.....Sep. 25, 26
Erie, Sandusky.....Sep. 24, 27
Fairfield, Lancaster.....Oct. 9, 12
Fulton, Wauseon.....Sep. 24, 27
Gallia, Gallipolis.....Sep. 11, 13
Greene, Xenia.....Aug. 14, 16
Hancock, Findlay.....Oct. 2, 5
Hardin, Kenton.....Sep 25, 28
Harrison, Cadiz.....Sep. 3, 6
Hocking, Logan.....Oct. 2, 5
Holmes, Millersburg.....Sep. 25, 27
Jefferson, Smithfield.....Sep. 25, 27
Knox, Mt. Vernon.....Sep. 24, 27
Lake Painesville.....Sep. 4, 6
Lawrence, Ironton.....Sep. 17, 20
Licking, Newark.....Oct. 1, 4
Logan, Bellfountaine.....Oct. 1, 4
Mahoning, Canfield.....Oct. 1, 3
Marion, Marion.....Oct. 1, 4
Medina, Medina.....Sep. 17, 19
Meigs, Pomeroy.....Sep. 19 20
Mercer, Selina.....Sep. 10, 13
Miami, Troy.....Oct. 8, 11
Monroe, Woodsfield.....Sep. 17, 19
Morgan, McConnelsville.....Sep. 17, 19
Morrow, Mt Gilead.....Oct. 9, 10
Muskingham, Zanesville.....Sep. 3, 6
Ottawa, Port Clinton.....Sep. 16, 18
Paulding, Paulding.....Oct. 1, 4
Perr, New Lexington.....Sep. 25, 27
Pickaway, Circleville.....Oct. 1, 4
Preble, Eaton.....Sep. 24, 27
Putnam, Ottawa.....Oct. 9, 12
Richland, Mansfield.....Sep. 25, 27
Ross Chillicothe.....Sep. 3, 6
Sandusky, Fremont.....Oct. 1, 4
Seneca, Tiffin.....Oct. 1, 4
Shelby, Sidney.....Oct. 1, 4
Stark, Canton.....Oct. 1, 4
Summit, Akron.....Oct. 2, 5
Trumbull, Warren.....Sep. 17, 20
Tuscarawas, Canal Dover.....Oct. 1, 1
Union, Marysville.....Oct. 1, 4
Van Wert, Van Wert.....Sep. 17, 20
Warren, Lebanon.....Sep. 17, 20
Washington, Marrietta.....Sep. 1, 6
Wayne, Wooster.....Oct. 2, 3
Wood, Tontogany.....Sep. 3, 6

PENNSYLVANIA.

Agr'l & Industrial Association, Ringtown.....Sep. 17, 20
Bradford, East Towanda.....Sep. 25, 27
Chester, Westchester.....Sep. 16, 21
Columbia, Bloomsburg.....Oct. 9, 12
Chartiers Valley, Cannonsburg.....Sep. 24, 27
Cumberland, Carlisle.....Oct. 1, 4
Conoquenessing Valley, Harmony.....Sep. 10, 13
Franklin, Chambersburg.....Oct. 8, 11
French Creek Valley, Cochranton.....Sep. 17, 19
Farmers & Mech. Institute, Easton.....Oct. 1, 4
Gratz Driving Park, Gratz.....Sep. 24, 27
Indiana, Indiana.....Oct. 1, 3
Leghl, Allentown.....Sep. 24, 27
Mercer, Mercer.....Sep. 9 12
Monongahela Valley, Monongahela City.....Sep. 18, 20
Montgomery, Ambler Park.....Sep. 23, 26
Northumberland, Dewart.....Oct. 1, 4
Oxford, Oxford.....Sep. 25, 27
Somerset, Somerset.....Sep. 25, 27
Susquehannah, Montrose.....Sep. 25, 26
Schuylkill, Orwigsburg.....Sep. 23, 26
Tioga, Wellsburgh.....Sep. 25, 27
Union, Sugar Grove.....Sep. 17, 19
Union, Bursettstown.....Oct. 1, 3
Wayne, Honesdale.....Oct. 1, 4
West Umberland, Greensburg.....Sep. 25, 27
York, York.....Oct. 1, 4

TEXAS.

East Texas, Tyler.....Oct. 15, 19
Gulf Coast Fairs, Victoria.....Nov. 12, 16
Harrison, Marshall.....Oct. 8, 12
North Texas, Dallas.....Sep. 30, Oct. 5

VERMONT.

Caledonia, St Johnsbury.....Sep. 17, 19

VIRGINIA.

Lynchburg, Lynchburg.....Oct. 22, 25
Piedmont, Culpepper.....Oct. 15, 18

WISCONSIN.

Central Wisconsin, Watertown.....Sep. 16, 20
Dodge, Juneau.....Sep. 4, 6
Jefferson, Jefferson.....Sep 17, 20
Juneau, Manston.....Sep. 18, 20
Kenosha, Kenosha.....Sep. 17, 20
Monroe, Sparta.....Sep. 25, 27
Marquette, Montello.....Oct. 2, 4
North Wisconsin, Oshkosh.....Sep. 24, 26
Ozaukee, Saukville.....Sep. 25
Rock, Janesville.....Sep. 2, 6
Racine Burlington.....Oct. 1, 4
South Wisconsin, Beloit.....Sep. 2, 6
S. W. Wisconsin, Mineral Point.....Sep. 3, 6
Sauk, Baraboo.....Sep. 16, 18
Walworth, Elkhorn.....Sep. 24, 27
Waukesha, Waukesha.....Sep. 3, 6

Industrial Implements.

THE EUREKA SAFETY-POWER.

We illustrate this week the engine and boiler that scored the first prize in the second-class, at the trial of steam engines under the auspices of the New York State Agricultural Society in Syracuse, November, 1877.

This was, perhaps, one of the most exhaustive, scientific tests that it has been the fortune of farmers to have had made in their interests, and it would be well worth the while of gentlemen who can comprehend the value and importance of such tests (among whom we include our readers), to send to the Secretary of the Society for the Report. We condense from its pages some of the most important conclusions concerning the "Eureka," arrived at by Messrs. D. M. Greene and Henry Waterman, the experts who directed the trial. The totals are reckoned in percentages, and the items will show what qualities of the boiler were tested. It is flattering to the builders of the "Eureka," Messrs. B. W. Payne & Sons, Corning, N. Y., that the result of the test should so closely coincide with the testimony of purchasers of the engine as to its power, utility and endurance. We give the figures without further preface, merely premising that the construction of the "Eureka" reduces danger from explosion to a cipher.

Weight of engine, 1,500 lbs.; price, $250; horse power, rated 4; diameter of cylinder, 4 in.; dimension of grate, 14⅜ in. diameter; fire-box, 18 in. high; volume of water space, 2 cubic ft.; steam space, 1.34 cub. ft.; area of heating surface, 56 sq. ft.; ratio of steam to water space, 0.68: ratio of heating to grate surface, 49.12. Duration of trial, 2 hours; coal consumed during trial, 50 lbs.; water evaporated, 400 lbs.; mean steam pressure, 91.06; mean revolutions of engine, 227.06; mean temperature of water delivered to the boiler, 185°.

The deductions of the experts are:—Effective power expended on pump, 2.0 h. p.; expended by engine, 3.265 h. p.; coal per hour consumed, 25 lbs.; consumed per effective horse power expended by engine, 7¼ lbs.; water evaporated per hour, 200 lbs.; evaporated per sq. ft. of heating surface, 3.61; water evaporated per effective h. p. of engine per hour, 61.26 lbs.; water evaporated per lb. of coal, 8 lbs.; rate of effective power of engine to rate power, 0.816.

The main figures are given only, but they will serve to show that with a consumption of about 7¾ lbs. of coal per hour, eight-tenths, or nearly the whole rated horse power, was exerted on the engine, giving a pressure of 91 lbs. on the boiler, and turning the engine at the rate of 227 revolutions per minute.

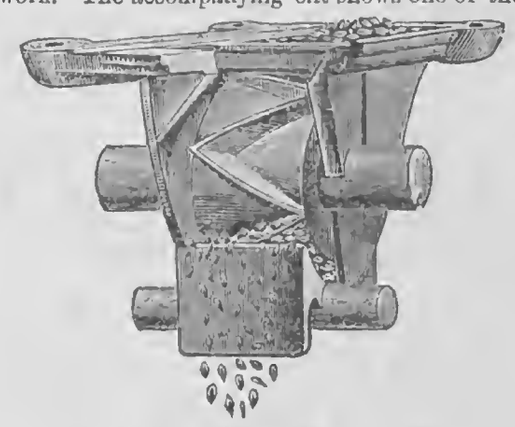
The engine is rated 4 horse power when run 300 revolutions per minute; in the test it developed 3,265 effective h. p., running 227 revolutions; if it had been run at its rated speed it would have afforded 4⅜ effective horse power. Its economy of fuel is in a small boiler unprotected by any non-conductor.

It must be borne in mind also that the experts limited the amount of steam to be carried to one-fifth the theoretical bursting pressure, which demonstrates that the "Eureka" would, if slightly pushed, exceed the rated power considerably.

THE FARMER'S FRIEND DRILL.

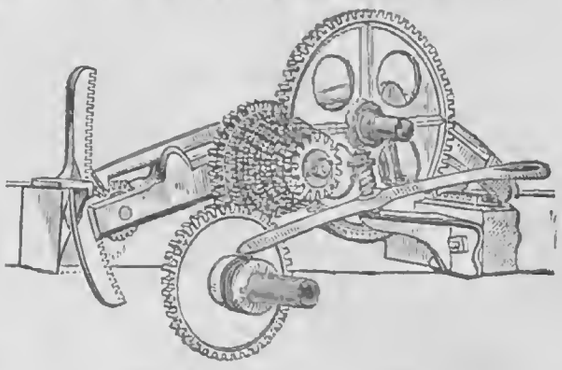
The chief objects to be attained in the making of a drill are the even distribution of the seed in the requisite quantities; a simple and thorough contrivance for covering; an apparatus that will distribute fertilizers evenly and without clogging; as also attachments for sowing grass or clover seed.

The Farmer's Friend Grain Drill claims to cover these points by patented improvements that we shall explain to our readers as clearly as space will allow. We have chosen for illustration the method of securing a positive or force-feed, and the means employed to change this feed at will, without stopping the drill while at work. The accompanying cut shows one of the



feed-cups, and the roller with its eight zigzag ribs. Each alternate rib runs in an opposite direction. During the revolution of this roller the grain drops into the feed cups, and in the delivery the seed is forced out from both sides of the cup, and a regular, even distribution secured. So admirable is this arrangement that at the Centennial Field trials, where the various drills were put to tests that would rarely if ever occur in practical agriculture, the Farmer's Friend varied but a trifle in the distribution of seed from the cups, and was warmly commended for this valuable characteristic.

The feed-rollers are fixed on a central shaft, revolving uniformly, and the rate at which the roller turns determines the quantity of seed sown. The device for controlling the quantity of seed to be sown is a most important improvement. The different sized gear wheels necessary for varying the rate of seed discharge, are bolted in a cone, and the changes are made by merely shifting a lever, which moves over a notched plate. Upon the latter is shown in figures the quantitiy of seed per acre which each wheel will sow. The accompanying cut shows this simple



mechanism, the cone gearing. By it the amount of seed is perfectly under the control of the driver, and may be varied in an instant without stopping the drill or the discharge of grain. This alone is a great gain.

The arrangement by which the alternate hoes can be set forward seven or eight inches, and thus present a broken line, with more space for the passage of clods, stones, or weeds, is not desirable when the soil is in a favorable condition, because the closer the hoes are the more will they act as harrows in breaking and pulverizing the surface; but when the land is new, stony, or badly cleared, the zigzig method of arrangement has its uses. In such conditions the precautions taken for preventing breakage, and consequent imperfect work of the hoes, are effective.

Where the soil is rocky, with large or fixed stones at or near the surface, a spring hoe is of great advantage.

The lower portion of the hoe-frame is hinged, so that in the event of coming in contact with a post, stone, or tree-root, the hoe flies back and accident is avoided. As soon as the machine is set free from obstruction, the hoe, acted upon by a powerful rubber spring, flies back into its place. This is a very perfect and ingenious arrangement. Then either in front of or behind the seed-box is placed a small seed-distributer, driven from the main wheel by a crank. With this the grass-seeds, clover and timothy can be sown at the same time as the grain.

The method of fastening the rubber tube that conveys each seed discharge to its respective box, is simple and durable. On the bottom of the feed-cup are two projecting arms, and the tube hooks over these, and fastens itself; so it can only get off when removed by the hand. No spring, bolt, or pin is used, yet the fixture is complete, at the same time permitting the tubes to be taken off and put in the hopper in an instant, and as quickly replaced.

The various attachments of minor import, such as land measurer, etc., are included in the equipment of the drill, adding to its perfect working without materially affecting the important points.

As regards construction, the machines are strong, durable, well-balanced, and adapted to the purpose for which they are made. The main points are those which we have dwelt upon. The saving of grain, uniformity and certainty in distribution, and convenience in changing gears.

The Farmer's Friend Mf'g Co., Dayton, Ohio, make the drill, and will supply particulars to those wishing to go more fully into its merits.

The Querist.

ANSWERS TO CORRESPONDENTS.

Grasses.

J. P. Corbin, Broome Co., N. Y., sends 16 samples of grasses and asks their names as numbered, together with the merits or demerits of each. He sowed different kinds of seed from their reputation, but cannot tell one from the other, nor does he know their respective qualities.

ANS. No 1. Anthoxanthum odoratum, Sweet-scented Vernal Grass. Naturalized from Europe. One of the earliest in spring and latest in autumn. The plant may be known by its perfume when pressed between the fingers. It is valuable for its early growth chiefly.

No. 2. Festuca nutans, the Nodding Fescue.

No. 3. Bromus secalinus, Chess or Cheat. This valuable to some agricultural editors and writers as affording a standing topic of controversy. There are as many as two or three persons about the country that yet contend that Wheat turns to Chess. While this is so the controversy must go on.

4. 8. 9. Different forms of Agrostis vulgaris, Redtop, Rhode Island Bent, and in the South Herd's Grass. It was formerly called English Grass. Its first value is in its permanence as a pasture grass. It does not yield as largely as Timothy.

5. Holcus lanatus. Velvet Grass, Meadow Soft Grass. This is of little value, cattle not caring for it. It readily spreads when once introduced as the seeds are light, but is not worth cultivating except where other grasses will not grow.

6. Dactylis glomerata. Orchard-Grass, Rough Cock's-foot. Palatable to stock of all kinds and one of the most valuable of all the pasture grasses. See article of PROFESSOR BEAL next week.

7. Poa. We cannot determine the species from the delapidated specimen. 10. is also Holcus lanatus.

11. Lolium. Cannot determine species from specimen.

12. 13. Trifolium. Common Red Clover.

14. Trifolium incarnatum (Crimson C.) This is a very pretty Italian Clover and valuable for soiling or hay. It is largely cultivated in Scotland.

15. Medicago sativa: Alfalfa, Lucern. The yield is abundant and of fine quality in warm deep soils. Suited to Southern States. Its roots grow deep in the ground and the plant therefore stands droughts.

16. Trifolium agrarium. Yellow or Hop Clover.

Manure Ingredients.

R. Saunders, Essex Co., Va., has some sandy and clay-loam land rendered poor by years of neglect, so that there is little grass on it. He wishes to sow it to clover and timothy, but has not enough of barn-yard manure for this patch and for his good land also. He has tried some chemical fertilizers with poor success, and asks for a recipe for mixing the ingredients of a complete manure suitable to this soil, as he has learnt that in this way he would be more likely to get a trustworthy article, while there would be a saving on the cost of materials and transportation.

ANS.—Without knowing the needs of the soil we cannot give such recipe. The following table will show the average composition of 1000 pounds of timothy and clover:

	Water.	Organic Matter.	Mineral Matter.	Nitrogen.	ASH.						
					Potash.	Soda.	Lime.	Magnesia.	Phos. Acid.	Sulp. Acid.	Silica.
Tim'y.	143	794	62.	15.5	20.4	1.5	4.6	1.9	7.2	1.8	22.
R. Cl'r	160	800	39.	24.	11.	1.2	13.5	5.0	4.0	1.6	1.6

Possibly plaster alone would, for a time, render the land fertile. It may require potash, phosphoric acid, nitrogen, one or all. Bone if finely pulverized, or dissolved in sulphuric acid, is immediately available in supplying phosphoric acid. But to pulverize it, a bone-mill would be necessary, and to dissolve it in sulphuric acid in a small way is both dangerous and unprofitable to inexperienced workmen. Wood-ashes would furnish potash; and salts of ammonia, nitrate of soda, fish, horn, hair, dried blood, etc., would supply nitrogen.

Very likely the phosphate used was an inferior article. The bulletins of Prof. JOHNSON, which we publish from time to time, will help to determine what establishments throughout the country sell fertilizers that are, in reality, what they profess to be. Actual fertilizing ingredients have a certain market value, and whenever any article is offered as such, considerably below that value, it is safe to conclude that it is inferior or worthless.

The commercial fertilizers now sold are compounded somewhat in accordance with the needs of the special crops to be raised, so that, unless one makes a business of it, we cannot suppose that it would be cheaper to buy the "chemicals" and mix them one's self.

Telling a Horse's Age by its Teeth.

John W. Glover, Gibson Co., Tennessee, asks how to tell a horse's age by his teeth.

ANS.—A horse has forty teeth, composed of twelve incisors or cutting teeth, placed in front of the dental arch; four tushes or canine teeth, one each side behind the incisors in the upper and lower jaws; and twenty-four molars or grinders, occupying the back of the mouth. The mare has the same number of teeth, except the tushes, which, in her case, are almost invariably absent, thus leaving her only thirty-six teeth. All teeth are composed essentially of enamel, dentine and cement or crusta petrosa, corresponding to bone. The teeth are constantly growing from their first development to the animal's death. As material is removed from their top by attrition, they are forced up from their sockets to supply its place. Tushes are never shed; they make their appearance when the animal is from four and a half to five years old. Hence, if they are just protruding, one can readily know, without any other evidence, the horse's age. Either at birth, or within four days thereafter, the colt has four milk teeth, called centrals. The lateral teeth appear between four and six weeks after birth; the corner teeth about the eighth month. The centrals, or those that first make their appearance, are shed when the owner is between two and a half and three years old; the laterals are shed between three and a half and four years old; the corner teeth between four and a half and five years. About this time, or a little before the tushes are full-grown, horsemen say the animal has a full mouth. On the incisors, in the upper and lower jaws, are black spots, called infundibula. These are worn out of the smooth surface of the central teeth in the lower jaw at six years of age, while those on the laterals commence to disappear at the same time, and have vanished when seven years old. Thus at this age the wearing surfaces of both central and lateral incisor teeth are smooth, the black marks having been worn away by attrition, and the marks of the corner teeth begin to disappear, and have entirely disappeared when the animal becomes eight years old. The horse is now considered "aged," and no conscientious veterinary surgeon or horseman would positively assert the animal's age, only approximately. Some people aver they can determine the exact age by signs other than the teeth, but such indications are unreliable.

As the animal advances in age his teeth gradually grow long, and appear to become more horizontal. The mouth, which at five years old was cup-shaped, now loses this appearance and becomes elongated. The teeth, which were in the age last mentioned nearly perpendicular, are now slanting; and this process increases with advancing age.

As a horse grows old, its teeth lose their beautiful whiteness; assume a cloudy or smoky yellow hue instead, and become streaked with brown and black marks, while not infrequently the tushes drop out.

A Good Potato Store-house.

A Subscriber—No address—has a root-house built of logs; one end extends into a bank and the rest is filled with dirt two feet thick. It will hold about 800 bushels. Last year the potatoes put into it rotted very badly and he inquires what sort of bins should be put into it, and how should it be ventilated so that another time the potatoes would keep well.

ANS.—There were probably two causes for the crop rotting so badly: first, the house was too warm, we should judge from the above description. Second, too many potatoes were placed together. Roots of all kinds require a cool, dry place for storage; just warm enough to be safe from frost. He should have an alley at least three feet wide running through the center the entire length of the cellar, with bins on each side to hold not more than fifty bushels each, narrow and deep, and raised a few inches from the ground by means of scantlings placed under them. The bins should stand with the ends to the alley, with a space between them sufficiently wide to admit of a free circulation of air. Too many roots deposited in a mass, are liable to sweat and be seriously injured by the heat and moisture. A shaft or flue, eight inches square, constructed of rough boards, and descending from an opening in the roof to within a foot or two of the floor near the center of the cellar, would be sufficient for ventilating purposes. The foul odors which arise from the decayed, or decaying vegetables, if retained in the cellar, will materially hasten the decomposition of the sound roots.

Salt and Water in Pastures.

W. L. Chambers, Linn Co., Kansas, asks how often should stock be watered and salted.

ANS.—If animals while pasturing can drink whenever they wish, they will do so often but never take much at a time; but if they can get drink only twice or thrice a day, they will frequently swallow enormous quantities, a thing which cannot be healthy. The same is true with regard to salt. If salt is always within their reach, animals will lick it once or twice a day or once every couple of days, just as their systems may need it; whereas, if they are given salt only occasionally, they should not be allowed all they are inclined to take. Both salt and water should be always within reach of cattle, and where this is impossible, they should be watered at least three or four times a day, especially in warm weather.

Cholera among Poultry.

A Subscriber, Mt. Morris, New York, writes that the poultry in his neighborhood are dropping off suddenly without any known cause, after a sickness of, at most, twenty hours. The first thing noticeable is that the droppings of the afflicted birds are yellow; the birds are dumpish and look as if they were lousy, though they are not. They mope around for maybe only an hour or two, and drop dead sometimes while laying in the nest. The young chicks are going too. A neighbor who had forty old chickens the other day, has now only three left, and these may die any moment. Some try alum water, kerosene, copperas; others, sulphur and pepper, but all are useless, and he inquires whether there is any remedy.

ANS.—The disease which afflicts the poultry is cholera. Green rue chopped up fine and given in thick oatmeal gruel, with about 20 drops of white carbolic acid to half a pint of gruel, is an excellent remedy. Pour two or three teaspoonfuls down their throats three times a day, while they cannot or do not care to eat. We have known this to work wonderful cures. While the fowls are weak, lay them in boxes of clean straw, dusting carbolate of lime over the boxes and through the feathers of the fowls.

Miscellaneous.

Henry Smith, Granville Co., N. C., has a Calla Lily that has been blooming three years. At first it did well in a two-quart can, then stopped growing, until put into a water bucket last winter; and he is, very naturally, anxious whether it will be necessary to go on enlarging the vessel in the same proportion. The bulb doesn't seem any larger than it was at first, and when turned out to dry in the summer it soon starts growing. He sends a leaf of what was sold to him as a Water Lily, but which he thinks a Calla Lily, and also a leaf of another plant whose name he has no idea of, and asks for information.

ANS.—The leaf is that of the Calla Lily, so called, though it belongs to the Arum family. A pot eight inches in diameter is large enough.

The other leaf is a Hibiscus Rosa-Sinensis.

Mary Wager Fisher, Bryn Mawr, Pa., asks: 1. Will Roses be as likely to do well procured from nurseries in the fall as in the spring? 2. If so, what fall month is best suited for their transplanting, special reference being had to climbing, hardy varieties.

ANS.—Roses (hardy) can, on the whole, be moved equally well in fall as in spring, if not better. Planted in the fall, they may, under unusual weather in winter, die; but the chance of their death is equally great, and indeed greater, when planted in spring. They are very excitable in spring, and sudden droughts are therefore apt to kill them. Plant them from Oct. 15th to Nov. 15th. The hardy, climbing varieties will endure more hardship than many other kinds reputed quite hardy.

J. L. Tomlinson, Albion, Ill., asks: Where can a person buy an Automatic Cow-Milker? How much do they cost, and are they good?

ANS.—There are two cow-milkers in the market; one sold by W. F. Ely, Madison, N. J., was spoken of in the RURAL, July 13, by Col. Wold, who had been asked by us to test its value. Another milker—and both of these spoken of are automatic in action—is sold by George E. King, 575 Broadway, New York city. This milker is now being tested for the benefit of the RURAL'S readers, and the report will be published as soon as received. We have heard informally that it does satisfactory work.

In consequence of a number of inquiries of this nature, received lately, we may be pardoned for asking, why do not readers consult our advertising columns on all such matters? The space devoted to the announcements of merchants and manufacturers is as important to our subscribers as any department of the paper, and they throw away one of the pronounced advantages of a high-class journal by not giving the business announcements their due importance and attention.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, JULY 27TH:

E. R. B. —R. S. — T. W. —M. W. F. — E. R. C.— S. S. R. — D. E. S.—L. T. — E. S. H. — W. T. A. — W. B. — C. D., many thanks — "Subscriber" — J. E. M. C. — I. F. T., thanks — A. M. V. A. — A. C. W.—A. H. W. —A. B.—C. N. C. —H. A. W.— J. L. N.—W. J. B. — R. W. F., thanks — W. J. B., No. 2—. L. A R.— D. S. M. — D. H. H.—T. H. H.— L. E. K. T.—S. P.— A. W. W.—M. B. D.—M. L. D. —H. H. —"Busy Brains."

Everywhere.

RURAL SPECIAL REPORTS.

DODGE CO., Neb., July 16, '78.

WE are having a heated term—thermometer, 101° in the shade, and 125° in the sun at 5 P. M., I do not believe we could keep cuttings alive in such a top heat. I am beating the world (of Nebraska) this year in corn. Planted on the 29th and 30th of April, it is now six feet high, showing tassels. It is common Yellow Dent or Horse-tooth as you call it in the East. Have been "through it" with shovel-plow three times and shall give it another touch,—all horse work, not a hoe or a hand put to it in any way. Planted by machine, cultivated by machine, and as regular in the field as machine work, it is a sight to see, and 30 acres of it. This is a small field out here, but a very big one it would be in the East. Nights are so hot that corn fairly jumps. The whole country is one big green, never had a better season for growth, and crops are sure to be very full. Why don't you folks send the tramps and communists out to fight the Bannocks? They complain that they can't get bannocks to eat at home. We have rather too many of them in Oregon, &c. Great country this West! We can feed the world and lick all creation as soon as they've done dinner.

Potatoes are "sum punkins" this year.

S. R. M.

BROWN CO., Wis., July 11.

OUR haying is just well under way and it is keeping up the old adage that "it never rains but it pours," and if we had a little less hay down we would be more complacent in our observations of things. Hay is a good crop and was being got in good shape before this storm played Cain with our calculations. The midge is at work in wheat fields and will probably help to reduce our threatened overplus of that grain. Corn is just beginning to grow, having had a sorry time of it thus far this year. Potato bugs are quite plentiful this year, but they don't terrify us any more. Rye harvest will begin next week and soon after we shall be in the oat fields. By the way, we are growing tall rye in this region this year. The ball was started by some one taking to one of our local papers a stalk six feet eight inches high, and farmers have been going one better until one has brought in one a little over nine feet. Who will beat this?

VAN.

UNICOI CO., Tenn., July 22.

WE have passed through a few months of very remarkable weather. The last half of the winter was unusually warm and dry, the spring but little if any warmer than the winter with not sufficient rains to push the wheat forward, leaving it behind to be overtaken by rust which has injured the crop severely—some fields are not worth harvesting. The weather continued cool till July, and now when the change has come, the heat is almost unbearable to the farmer. Oats are a medium crop, while corn and potatoes promise an abundant yield. A heavy rain storm passed over our town on Friday last, accompanied by heavy thunder. A lightning bolt struck the house of a neighbor instantly killing two children aged 7 and 9 years. Three other members of the family were severely shocked, but it is thought they will recover. Little or no damage was done to the house.

E. S. HULIN.

CLINTON CO., IOWA, July 20, 1878.

THE farmers are in the midst of their spring wheat harvest at present, but they find the crop injured to a considerable extent by too much rain in the early part of the season, followed by excessive heat and superabundant chinch bugs. Otherwise the agricultural out-look is very good; the hay crop is very large, and the pasture is extra good. Wheat, 85 cts.; corn, 30 cts.; oats, 22 cts. per bush.; butter 8 to 10 cts. per lb.; and eggs 8 cts. per doz.

DANIEL CONRAD.

WALKER CO., Ala., July 24.

WE are having very hot and dry weather; crops are suffering severely in some localities; the rain seems very partial. I have had sufficient rain at my place until the last two weeks, while only two miles east of here there has been none for a month; and only two days ago a considerable shower fell four miles south-west of here. The fruit crop is good, and so would be the prospects of the corn and cotton crops but for the drought.

BUEL ANDRUS.

ST. LAWRENCE CO., N. Y., July 15.

WEATHER very warm and dry; rain is needed very much; the hay crop not yet half secured; new meadow good; grain good; potato bugs very abundant; hired help plenty at 75 cents to $1.00 per day and board. Excursions, pic-nics, fishing parties and camp meetings seem to be the order of the day along the St. Lawrence and among the Islands.

A SUBSCRIBER.

JEFFERSON CO., N. Y., July 26th.

WHEAT and early crops were fine. Up to last week the hot weather and drought burned up everything. All things are so dry that fires along the railroad are frequent. Corn is all curled up, and the farmers' blue-grass pastures burnt up.

*

MEEKER CO., Minn.

CROPS of all kinds are promising a good yield. Barley and rye are being harvested and oats will be ripe in about two days. Grain is unusually tall this year and some of it is lodged. Rains very frequent.

M. E. B.

ESSEX CO., Va., July 18.

OUR wheat crop is very short this season and quality is poor.

R. SAUNDERS.

THE
RURAL NEW-YORKER.
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Address
RURAL PUBLISHING CO.,
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We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

POTATOES AS FOOD.

THERE are few articles of food which have been used to the same extent, and which have still been so persistently disparaged as potatoes. A few years ago some genius wrote an article, which was copied from Maine to Texas, in which he claimed that potatoes were nearly worthless as food, because their starch was locked up in insoluble cells, and could not be reached by the digestive juices. And, now, one of the leading agricultural journals of the West comes to us with an editorial in which it is claimed that the potato has always been overrated; that as an essential diet it would not be greatly missed; that it is rich only in starch; that this must be converted into sugar before it is valuable as nutriment; that it is by no means sure that even a reasonable quantity of it is ever so converted, and, finally, that, aside from its bulk, the amount of starch converted into sugar is the criterion of its value.

Now, we cannot agree with such views; we consider the potato, both theoretically and practically, an article of food of great value and we propose to offer some indisputable evidence in favor of this view. Taking the average of German analyses, which allows us to make a perfectly fair comparison, we find the composition of the dry substance of potatoes, wheat, corn and oats to be as follows:

Composition of dry substance in per cent.	Albumin-oids.	Fiber.	Carbo-hydrates.	Fat.
Potatoes	8.4	4.4	82.8	0.8
Wheat	15.2	3.5	77.2	1.7
Corn	11.7	6.4	72.4	7.6
Oats	14.0	10.6	64.3	7.0

We may see, therefore, that while potatoes contain a greater proportion of starch than grain, they still furnish a very important amount of the so-called flesh-formers and half as much fat as wheat; in the light of this table, therefore, some of the propositions laid down by our contemporary seem doubtful, to say the least. The Germans have, however, gone further than this and have tested the digestibility of these substances by a great many careful feeding experiments, and the results of these give potatoes a higher comparative value as food than the above table which simply shows the composition. This is shown by a second table as follows:

Digested in per cent. of dry substance.	Albumin-oids.	Carbo-hydrates.	Fat.
Potatoes	8.4	87.2	0.8
Wheat	12.4	73.6	1.4
Corn	9.3	71.0	5.6
Oats	10.5	50.5	5.5

Considered as an *article* of food and not as a *complete ration*, the dry substance of the potato compares favorably with that of our best feeding grain. In speaking of the digestibility of potatoes, WOLFF says that scarcely a particle of potato starch can be found in the excrements of ruminants which have been fed with them.

Now, whatever the transformations which it may undergo before it leaves the body, there is nothing to show that the digestible starch of potatoes does not produce the same effect as the digestible starch of any variety of grain. We believe, therefore, that there is no reason to give potatoes a less nutritive value than is shown by our table of digestibility; it is to be remembered, however, that this only considers the dry substance, and that, as potatoes are 75 per cent. water, and grain but 14.4 per cent., it requires three and one-half times the weight of potatoes for a given amount of dry substance that is required of grain.

The poor opinion of potatoes originates from not feeding them in a proper manner—there is nothing more certain than that, where they are fed in an improperly constituted ration, they may so decrease the digestibility of coarse fodder as to nearly neutralize their own constituents. But if the nutritive ratio is not greater than one to eight (i. e. if the albuminoids are to the carbo-hydrates, including the fat multiplied by 2.5, as 1:8) they may be fed with twice their weight of coarse fodder without occasioning any loss; and, if sufficient oil meal, flax or cotton seed, bran, shorts, malt sprouts, beans, etc., are added to keep the nutritive ratio about 1:6, they may equal the weight of the coarse fodder and still no loss result.

If these important points are remembered and a sufficient supply of salt allowed, which is more necessary when feeding potatoes than with most other kinds of food, there will be no occasion to doubt the food value of this tuber.

THE LATEST CROP REPORTS.

TOWARDS the end of the week gloomy reports of severe injury to all ungathered cereal crops have come from the Northwest. The hot suns of late had there, as elsewhere, produced an unusually large growth of stalk, and now excessive rain and wind storms have prostrated the wheat and corn fields and blighted many farmers' high hopes of a splendid harvest. Those railroads, too, whose prosperity depends mainly on transporting to the seaboard the vast harvests of that great grain-growing region, are sensitively affected by the prospect of diminished business, and already their stocks have dropped heavily in the money market.

Even before the occurrence of the calamity, however, the crop outlook in some parts of the affected section had become somewhat clouded. As early as the 17th inst. reliable estimates placed the damage done to the wheat crop by storms and excessive heat at seventeen per cent. in Wisconsin and twenty-seven per cent. in Iowa. In the southern part of Minnesota it was estimated that there would be a deficiency of twent-nine per cent. in the yield of wheat. And although this deficiency would probably be compensated by an average yield of from 12 to 25 bushels per acre on the larger area planted elsewhere, making the aggregate product the same as last year, yet the quality is held to be considerably below that of former seasons. Throughout the whole country tile-drained lands show superior crops; while crops on undrained lands are slow to recover from excessive rains.

In other parts of the country the latest reports of the Department of Agriculture, corrected by those we have received still more recently from other quarters, show that Illinois falls off in her acreage under corn seven per cent. or about 670,000 acres, and Wisconsin four per cent. or about 40,000 acres, while Texas has planted 200,000 acres more than last year. The yield throughout the country will hardly be above an average one, but in the South the prospects are remarkably promising. The crop of winter wheat gathered in the middle States is very large, and on the whole, the average is 101; while that of spring wheat was as high as 106 before the late disastrous news from the Northwest. Of rye, barley and oats there will be somewhat over an average yield. Reports from the fruit crop are fair, except from the peach region around Chesapeake Bay and the fruit belt of Michigan. Grapes too have been cut down nearly everywhere below the average by the May frosts.

"CORNERS" IN GRAIN.

CHICAGO and Milwaukee commission merchants, stimulated by the late unfavorable crop reports, are just now in the midst of a great "corner" in wheat. For the last two weeks the price has been steadily advancing, and now the interest has become intense in the results. There is a fair prospect that the present or even higher rates will rule for the next week or two, and shrewd farmers may thereby be the gainers. The visible supply of wheat is said to be only about four million bushels, yet it is stated that "short" sales for August delivery, already aggregate nearly twenty million bushels, and still such sales continue to be made. As those who have made sales of this kind have not, as a rule, as yet bought a bushel of the grain they have already sold, should its price increase before the date at which they are to deliver it, they will lose the difference between the figures at which they have sold it and those at which they would have to buy it to fill their contract. Should the price meanwhile fall, they will gain in like proportion. The point in which the farmer is here mainly interested is, that while the speculators when they gain are always willing to fill their contracts, when they lose they often declare themselves bankrupt; the purchases they have actually made are repudiated; an unusually large amount of grain is thus suddenly thrown on the market, and prices at once sink. Hence it is, that after the close of a "corner" in any product, that product generally falls in price, at least for a short time. As a rule, however much the farmer may lose, he gains comparatively little by "corners" in his products; for, apart from the action of middlemen, however high the price of his goods may in this way be temporarily run, it is seldom that the article sold is actually delivered; but instead thereof, the difference in money between the figures at which it was sold and its market price on the day on which it is to be delivered, is usually handed over to the purchaser, or to the seller, according as one or the other has gained by the transaction.

SCIENCE.

AMERICANS think that a love of science is one of the leading characteristics of our people, and attention is directed to a large attendance on lectures of this character as a very pointed demonstration of the fact.

The truth is that we are not scientific in our instincts in the best sense. Men whose bent is to pursue abstract inquiries, the successful result of which is to extend our knowledge and elevate civilization to a still higher plane, are not in the least encouraged, while wealth is freely expended in endowments of a less important kind.

The only science that is appreciated is of the kind that "has money in it;" whose application directly increases wealth in commercial channels. This fact is disgraceful to our culture, and so patent is it that in Europe the debasing result has coined a term—Americanization—that has the force of a stigma among scientific men.

Prof. Tyndall gave the proceeds of his lectures in this country as an endowment for the encouragement of pure science. The fund is in itself insufficient to accomplish the purpose, but not a dollar has been added to it by an American! We have numbers of wealthy farmers, but who among them has shown a willingness to devote his time and fortune to the science of agriculture as has Mr. J. B. Lawes, of England, solely that the science of agriculture might be advanced, and the results published for the advantage of the world?

We are a nation of money-getters, and that is about the best and the worst that can be said of us. And a humiliating confession it is!

NOTES.

Prickly Comfrey.—The RURAL was one of the first agricultural journals to talk about Prickly Comfrey as a forage plant two or three years ago. At that time we recommended its trial upon the authority of our English exchanges, which extolled it as one of the most promising summer forage plants grown, both as regards quality and quantity. The quantity which may be raised upon a given space was not much exaggerated, and Dr. VOELCKER's analysis of the quality is no doubt as trustworthy to-day as when it was made and published. But in spite of Dr. VOELCKER and the unusual amount of flesh-forming and heat and fat-producing substances, which he showed it to contain, our horses and cows are not educated up to the point of any appreciation of its value. We have also offered it to the horses and cows of our neighbors and we find them no less indifferent to their own welfare. Our experimental Prickly Comfrey is thriving splendidly. Some of it was cut early in the season and a second growth of leaves might now be cut again. But what shall we do with it?

A Singular Aquilegia.—Of the many self-sown Aquilegias (Columbines) which sprang up from self-sown seeds, one bloomed this season which bore a flower different from any other we have ever seen. We are tolerably familiar with the several species in cultivation, but this so differs from them that we can not even guess at its parentage. The flowers were as large as those of A. Canadensis—a little larger than those of A. cœrulea. Some were solid blue—some solid white; some were half blue and half white; but the majority were variously striped with those colors. It bore seeds abundantly and this is one of the plants seeds of which (as far as they go) we shall offer to our friends in the fall.

Watering Plants During Sunshine.—Our esteemed contemporary, The Gardener's Monthly, thinks that no harm results from watering plants during bright sunshine, and we have seen the remarks copied by several papers. Is it not true that the globules of water resting here and there upon the leaves, have power to converge the sun's rays, burning the leaf or stem on which they rest, and causing discoloration. We have the impression that these dead spots do occur on plants more frequently during hot summer weather when showers are frequent and brief.

BREVITIES.

THE Hessian Fly—and no man pursueth.

DR. SAMUEL SEXTON says that out of some eight hundred ear-difficulties during last summer, sixty-five were found to have had their origin in salt-water bathing.

MR. ROWE kindly sends us four quarts of his seedling gooseberries Ruby and Emerald. We find that it takes eighty-three of the first and eighty-six of the second to make a quart.

Mr. CHARLES DOWNING writes us that "the Japan Pear with its large, roundish heart-shape, glossy leaves, and showy fruit, makes a very handsome lawn tree and could be used by the landscape gardener with effect.

MISS EMMA A. SMITH, the entomologist, says: "If the birds should entirely leave us, it is a question if any fruits could ripen in all the land. It is impious to talk against the birds, and sacrilege to wantonly destroy their innocent lives."

IT is said that tomatoes fed to cows improve both the quantity and quality of the milk, imparting to the butter a golden color. Does any body know if in this last respect there is any difference whether the red or golden varieties be fed to them?

WE have measured our largest specimen of Salix laurifolia (lucida var.?) planted four years ago. It is eighteen feet high and fifty-seven feet in circumference. In some soils it seems very slow to begin a strong growth. One planted at the RURAL farm, three years ago, is but four feet high.

IN South Africa, Natal, we believe, grass is kept in a fresh, moist state for any time by simply digging a hole in the ground, packing the freshly-cut grass closely into it, and then covering all with a layer of earth well trampled. Thus treated, its character seems to remain unchanged, and cattle eat it with great relish, and thrive on it.

TEN years ago at the Rural farm we tried the effect of a little care upon cherry trees. The care was given to two in a double row of thirty planted along a lane. The earth about the roots was loosened, muck and hen-yard manure applied, and they were well watered through one summer. No further care has since been given them. Those two trees are at this time at least one-third larger than any of the others, both in the main stems and tops.

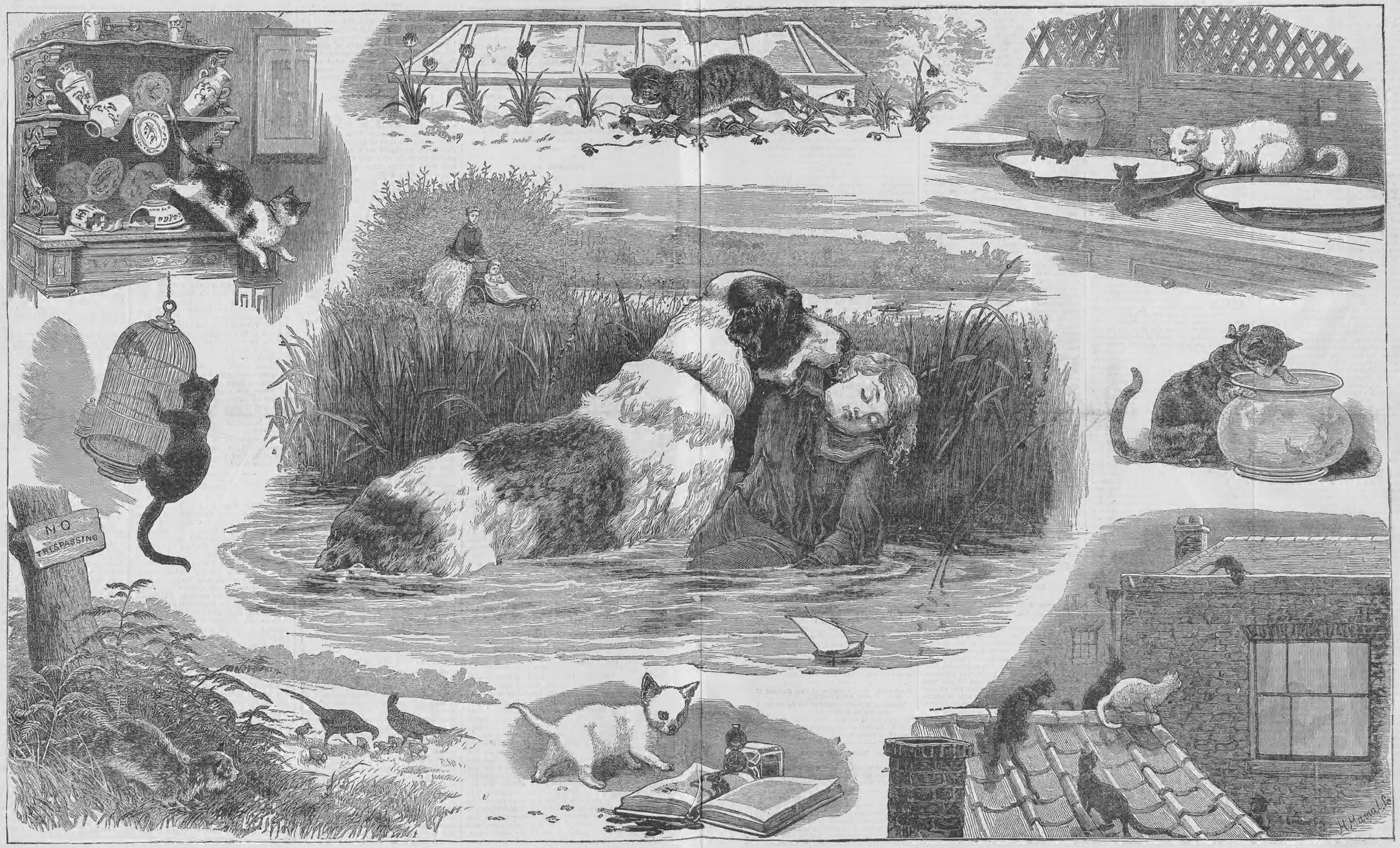
HAVE the objectors to vivisection ever paused to consider that every year millions are mutilated, nay, tortured, to give man pleasure, to make food palatable, while merely scores are mutilated (not often tortured) to discover remedial agents and scientific truths? What could be more inhuman than the torture inflicted on living geese, to obtain an epicurian delicacy, yet who has organized himself into a committee of one to decry the barbarism?

Mr. THOMAS, of the Country Gentleman, states in his American Fruit Culturist, that the roots of fruit trees may be considered to extend in every direction from the base of the trunk to a distance equal to the hight. According to this rule, the roots of a tree occupy a circle the diameter of which is double the hight of the tree. From recent observations he increases this distance so as to make the diameter of the root-circle *three times* the hight of the tree, "believing this to be a fair average for nearly all cases."

THE nurserymen's convention recommended hot tobacco water or a hot solution of whale-oil soap for the aphis of the cherry tree. The ends of the infected branches are to be dipped into the vessel containing the solution. We respectfully submit that there is an objection to this remedy. It is that the time and trouble of applying it would cost considerably more than the crop of cherries would be worth, as we think the members of the association recommending it would admit if they were seriously to consider this method in detail.

Mr. A. B. GRANDELL speaks of having seen a Lilium superbum (our Turk's-cap) seven feet high, that promised an enormous crop of flowers. We have never seen one attain such a hight, and give therefore the manner in which the bed was prepared. The soil had been excavated about 18 inches in depth, and 6 inches of small stones placed in the bottom for drainage; the bed was then filled with thoroughly decayed sods, and a very little old well-rotted manure. Some sharp sand was incorporated with the soil: when planted the bulb was completely surrounded by the same. During winter the bed received a light covering of manure, which was the only fertilizer that had been applied since it was formed.

THE Farm Journal says, that the RURAL NEW-YORKER has an experimental farm, and now the American Agriculturist is establishing one, and then humorously adds: "Just wait awhile till we get ours, and then you will see the dirt fly. We intend to dig a culvert through the middle of the farm for drainage; we shall plow eighteen inches deep and subsoil below that; we will make our own fertilizers by an ingenious mixture of soils; and carry on all operations by steam-power, from rocking the baby to grinding beets for sugar. And we shall let our readers into all our secrets. Subscribe now, before we buy the farm!"



A QUESTION OF EQUITY AND OF COUNTY REVENUE: WHY NOT TAX CATS AS WELL AS DOGS?

Literary Miscellany.

MAMIE GREY'S SACRIFICE.

BY M. B. C.

ONLY a torn, soiled letter lying on the sand at her feet, a few faded water-stained lines, and yet as the sea breeze wafted it hither and thither, a gloomy sadness seemed to cloud that fair young face.

The whole landscape which, but a moment before was lit with the resplendent glory of the departing rays of the sun, now appeared cold and grey to that lone watcher on the beach.

A sorrow seemed pending over her, and for a little while in sad thoughtfulness, she watched the fluttering paper as if she could find some solution of the strange mood that possessed her. Suddenly the breezes grew stronger, and the neglected scrap would have been whirled away to find a resting place beneath the ocean's waves, had not MAMIE GREY moved to rescue it from its insecure resting place. Stretching out her hands, she raised the forsaken waif from the sand, and shielding it from the pitiless wind, she glanced carelessly at it. A gleam of interest awoke at the first glance; the penmanship was not familiar, but the words,—how strange! From the broken, disjointed sentences, she gleaned news of a magnificent bridal in the distant city of W——. The description was so vivid and glowing that in her eagerness to learn the names of the happy couple, she forgot the sad unrest that had brought a cloud to her brow but a moment before; but it was only for a brief space, and then she realized why she had been so sad and lonesome all the long bright afternoon.

Only one clause, one name, and yet it had power to drive every particle of color from the fair rounded cheek,—to send a wild, frightened look into the sweet brown eyes, and to cause the ruby lips to grow pale and quiver with anguish. The whispering sea breezes little knew the sorrow they brought to MAMIE'S loving heart, when they bore to her feet this cruel bit of gossip; for it was news that would drain her life of all sweetness, and make the future a dreary burden.

From the gossiping maiden's letter, she learned of the marriage of one who was dearer to her than life itself. WALTER GRAYSON, the idol of her summer's dream, was lost to her, and as she thought of all the long, long years to come during which she must bear her sorrow alone, it cannot be wondered that she almost prayed for freedom from her suffering. One year before she was a merry-hearted maiden, living in her cottage home not far from where she now bemoaned her fate, with no thought of care, but to-night, how sad the change! The glorious sunset, the glittering foam of the surf, all the beauties in nature were lost to her in contemplation of this one great sorrow of her life. She could not weep, so deep was her emotion; and, as she sat there in mute anguish, gazing forth on the water, the evidence of the tumult raging within could be plainly traced on pallid brow and cheek.

Oh, how short had been her dreams of happiness! It was only in the early summer time, WALTER GRAYSON first came to the little country village for rest and a few months' fishing. His fickle, unstable nature was soon attracted by the lovely grace and modesty which MAMIE possessed; but no thought of more than merely relieving a few of the tedious summer days ever entered his head. Was not his betrothed, IDA PAYNE, at some summer resort whiling away her time by flirting, and why should not he enjoy himself as well? If in the end IDA'S thousands came to replenish his pocket, it mattered not though a dozen country girls' hearts were broken, if he only could enjoy himself. So, by all the arts in his power, he taught the tender, trusting heart to love the tall, handsome stranger who wished only to use her love as a pastime, and, then, when tired of it, to cast it aside, as a worthless bauble.

He succeeded well in his intentions, and when the leaves were tinged with autumn's mellow tints, he went away leaving MAMIE miserable at his cruel faithlessness.

In the early twilight she sat alone on the barren shore, heedless of the cold, dark gloom that was gathering about her.

A boat rounded a distant point, but she heeded it not, until a wild cry for help aroused her from the reverie into which she had fallen, and caused her to think of sorrow other than her own. The occupants of the approaching boat were a man and woman, undoubtedly some of the city guests at the Hall, who had been to the town below and were returning with the sail-boat; but what madness to think of sailing, when the sea is so rough! The slender craft was rocked to and fro by the cruel winds, and again that cry for aid rang out on the still evening air. The boat drifted nearer and nearer, why do they appear so helpless? can it be he has lost his oars? It is so; the oar is floating away on the tide.

Divesting herself of her outer wrap, MAMIE hastened to the place where she thought the boat might drift to land. She reached the spot just as the dainty craft was overturned, but living as she had from a child by the sea, she was an expert swimmer, and plunging into the rolling waves she struck out boldly for the place where she had last seen the dark-blue boating dress of the woman. From the first the man had nobly struggled to rescue his companion, but the rude waves had torn them apart, and weak from his exertion he was simply drifting with the tide nearer the shore.

Grasping firmly the dress of the woman, as she rose for the second time, MAMIE bravely sought to reach the sand; but it was hard, breasting the waves cumbered as she was, and when she recognized in the handsome face of the man her false lover, it was the last bitter drop in the cup she was forced to drain. Giving the form of her rival a push forward, she lost control of her limbs and sank beneath the seething foam. The cruel waves bore the insensible form of the wife to the feet of her husband; but WALTER GRAYSON saw only the white face of the one he had so cruelly deserted, upturned in the dusky twilight, and then the returning wave swept it back in its clutches.

When the morning sunlight came, the lonely watchers collected on the beach, found the dead body of MAMIE GREY. But the life thus sacrificed was not forgotten by one at least, during all the years of his future life. All the dross was burned from GRAYSON'S life by this fearful lesson, and when he appears in society it is hard to recognize him in the silver-haired man whom all delight to trust and honor; and, I think, in her home on high, MAMIE smiles her forgiveness down upon him, and in the glorious Hereafter all will be made right.

DIAMONDS.

F. M. ENDLICH.

As far as our reliable records reach back into the dim and mystic ages, we find the diamond occupying a prominent position in the estimation of man. Above all others of its qualities, which at present determine its value, the superior hardness to all substances then known, seems to have impressed the ancients. There appears to be but little doubt, that at very early ages the East Indians and the original inhabitants of the Chinese Empire knew the value of diamonds over all other gems. It is supposable, too, that the art of cutting was known to them, although it was not employed in the western countries until many centuries later.

Of all the countries which have furnished diamonds, India has been known as a prolific source for the longest period of time. Perhaps the most famous of diamond fields there are the Golconda Mines. Thousands of people have found and many do still find employment there, although much of the wealth has already been exhausted. During the reign of Louis XIV, Tavernier visited the Orient to collect diamonds and precious stones for his king. At that time (about 1680) he found 60,000 persons engaged in searching for diamonds in the mines of Ellore, in India. Next to India in importance is South America. The mines in Brazil were opened in 1727, and the best of them are situated north of the Rio Janeiro. On the Rio Jequitinhouha and Rio Pardo the most remunerative fields are found. Other placers have yielded very good diamonds, however.

On Borneo, in the Ural Mountains, and in Australia, diamonds have been found. In the United States they have been collected at several localities, but only in comparatively isolated specimens. Diamonds have been obtained from North Carolina, Georgia, Virginia and California. The notorious occurrence of these precious stones in what was termed the "Arizona diamond fields," situated in the North-western Colorado, is probably still too fresh in the memory of everybody to require special mention. Diamonds were certainly found there, but, to use a popular phrase, "they had not grown there."

Recently discoveries of extensive diamond fields have been made in Africa. They are situated on and near the Orange and Vaal Rivers, and are being worked with energy. Although their discovery dates back but a comparatively short time, it appears that the existence of diamonds there was already known during the last century. According to Dr. J. W. Morton, the natives have for a long time used diamonds from this locality to drill their stones, and formerly made periodical visits to replenish their supply of material.

As is frequently the case, the present impetus in that region to mining operations was given by the accidental discovery of a diamond. It was found in the hands of some children who were playing with the pretty pebble.

Wherever diamonds are found, they occur in redeposited material. River-drift or boulder-clay may contain them. No matrix for them has been recognized with certainty as yet, although it is claimed that the Itacolumite (flexible sandstone) of Brazil contains them. This assertion is scarcely proved, however, and even if it were so, this very Itacolumite is but the product of re-deposition. It may be regarded as a significant fact, perhaps, that the localities of North Carolina and Georgia, where diamonds have been found, are not far removed from occurrences of flexible sandstone. In the South African diamond fields the gems are contained in a conglomeritic mass. It is composed mainly of volcanic material, but has evidently been deposited by water. In its general, physical character it may be compared to the "blue cement" of California, which is auriferous.

Of all these localities mentioned, India has produced by far the greatest number of celebrated diamonds. The largest diamond of which we have any knowledge, is mentioned by Tavenier. It was found in 1550, was in the possession of the Great Mogul at the time of Tavenier's visit, and weighed 900 carats. The present "Great Mogul" weighs 279 carats, and may be a portion of the original one.

Among all materials the diamond is by far the hardest.

Physically, we may distinguish three varieties of diamond; the crystal, the carbon and the anthracite diamond. The specific gravity of diamond is 3.52, while that of carbon is 3.01 to 3.60, and that of anthracite diamond only 1.66. They show slight impurities, as compared with the crystals, but are chemically diamonds as also in their hardness. The carbon is put to practical uses, on account of its comparatively low price and great hardness. Instead of being colorless it is black, or gray, translucent only in very thin slabs.

Chemically, the diamond is carbon. At a high temperature it will burn, and be completely consumed, giving off carbonic acid gas. In an atmosphere of pure oxygen it will burn on, if once ignited. Between carbon points of a heavy battery, the diamond will become spongy, and turn to coals. In 1694 the first experiments of burning it were made. This was accomplished by means of a very powerful lens, concentrating the sun's rays. Much speculation became rife as to the behavior of diamonds under the action of great heat. Emperor Francis I, of Austria, conceived the brilliant idea of converting or melting a number of small diamonds together into a large one. In 1750 he placed a quantity of them, and some rubies, in a crucible, and subjected them to intense heat for twenty-four hours. After cooling, the rubies were found to be intact, but of the diamonds not a trace remained. Shortly before the French Revolution a Parisian jeweller asserted the possibility of exposing diamonds to a very high degree of heat without injuring them. He made his experiments before the famous chemist, Lavoisier. Maillard, the jeweller, had carefully surrounded his diamonds in the crucible with pulverized charcoal, and they withstood the fire perfectly. So long as the oxygen of the atmosphere can be excluded, the diamond cannot burn, and the only harm that might befall it would be a cracking from the heat. This, however, occurs comparatively rarely. Lavoisier, fully convinced by the demonstration, first offered a correct explanation of the phenomenon.

Impurities in diamonds are partly of a physical, partly of a chemical nature. Among the former must be classed cracks and cavities. The latter generally manifest themselves in discoloration, unequally distributed.

Regarding the formation of diamonds much has been said and written, and many well conceived experiments have been made. More than any other agent, heat has been employed to reproduce these treasures of nature's laboratory. Thus far all experiments have failed to attain any available result. Some of the most eminent chemists of the present century have expressed the opinion that diamonds owe their genesis not to the action of heat, but to an organic process. Newton, when studying the optical qualities of the diamond came to the conclusion that it must be a "coagulated oil." By means of electricity very minute crystals of carbon have been obtained, but all efforts to reach greater size have been baffled. Liebig regarded the formation of diamond as the result of organic decomposition. Though this view may not be perfectly tenable, it commends itself to the poetical mind from its allusion to the rejuvenated phœnix rising from his own ashes. With an ever-increasing knowledge of chemistry and the constant improvement of mechanical appliances, we may yet, some day, be able to produce diamonds that will compare favorably with those fashioned by the skillful hand of nature.

PRACTICAL USES OF DIAMOND.—Dependent upon its physical properties, the diamond is put to various uses. Perhaps the most prominent is that of drilling. The comparative cheapness of "carbon" makes it possible to utilize this material for such purposes. Diamonds with sharp, crystallized edges, are used for cutting glass and small fragments, and splinters are used to arm graver's tools. Dust is employed in cutting other stones as well as the diamond itself. Wherever a substance of very great hardness is required, diamond answers best. On account of its high power of refraction, diamond-lenses were formerly prepared, for the use of very high-power instruments. The application of diamonds for purposes of personal or artistic ornamentation, may perhaps be considered a practical one in a certain sense. For such use the total absence of color and the high degrees of refraction and dispersion of light, place the diamond in the most prominent position among all precious stones.—*Am. Naturalist*

RECENT LITERATURE.

How to Spend the Summer. Where To Go; How To Go. How To Save Money. "Christian Union" Print, 29 Park Place. Price 25c.

Do you contemplate a visit to the sea-shore? Take our advice and before you go read what Frank H. Converse has to say in The Sea-Girt Isle, of a charming spot on the coast of Maine, where for a moderate cost you may enjoy all the delights of Cape May and Long Branch, and more too, and where "dress parade" is unknown. Perhaps camping-out has charms for you, then you ought not fail to read what the pioneer camper, W. H. H. Murray, has to say. If you've a fancy for trout-fishing, Laicus tells of its mysteries and fascinations, and—but space fails us to enumerate all the topics discoursed on in this modest little book, so we'll say that whether your preference is for making a European tour, "doing" camp-meeting, spending your vacation on wheels or at a farm house, taking short trips around New York, or making yourself an amateur tramp, this book will be to you the best of counsellors. Even those of us who belong to that much-to-be-commiserated class who must remain in the dusty town are not forgotten—a chapter is devoted to telling us How To Stay at Home Without Grumbling.

The Fall of Damascus. A Historical Novel. By CHARLES WELLS RUSSELL. Boston: Lee & Shepard. $1.50.

It is seldom that we read a story wherein the causes seem so inadequate to produce the results described and the results themselves are so unsatisfactory. The "Fall of Damascus" is a narrative of a number of inconsequent events with what is supposed to be a sketch, for a background, of the history of Damascus before and after its seizure by the Mahommedans early in the Christian era. The characters are without special attributes and are decidedly insipid, with the exception of one, the Lady Anna, who is wicked, fitfully ambitious, daring, unscrupulous, and hopelessly in love with the hero, Jonas, whose affections have been enlisted by an exceedingly commonplace heroine. Mysterious incidents partaking of the nature of the supernatural are introduced without any connection whatever with the plot, but with intensely dramatic effect. Thus, a chapter full of exciting details is closed with an interjectional communion at midnight between Lady Anna and an apparition who mysteriously appears, professes a desperate passion for her, and as mysteriously disappears. But the nature of the apparition, the cause of the visitation or the connection of either with the story is not made apparent, and one reads on to the end with a vain hope of having the enigma solved. Scenes of Eastern magnificence and laciviousness are fervidly depicted. One must have a keen appreciation of the melodramatic in literature to enjoy the "Fall of Damascus."

Poke O' Moonshine, by Latham Cornell Strong. New York: G. P. Putnam's Sons. $1.00.

The author claims there is much of legendary lore still abounding in this comparatively new country, which the genius of Fenimore Cooper and the other romancers has failed to discover and develop. He is inspired to add his tribute to the small store of American romance, by a legend of the La Mollie Valley, out of which he essays to weave a poem that shall perpetuate it. The story is of the loves of an exiled French maiden and a young French soldier engaged under Gen. Dieskau in 1757, in what are known as the French and Indian wars. Poke O' Moonshine is the name of a crevasse in amountain, through which the rising moon casts its light. The theme is a sombre one and calculated to inspire the poet's pen, but it owes nothing of embellishment to poetic imagery or lofty conception. One might cavil at the outset at the title, which, to say the least, is not poetical, and the meaning is often obscured by the too apparent effort to effect the versification.

Voyages and Adventures of Vasco Da Gama by Geo. M. Towle. Boston: Lee & Shepard.

The Voyages and Adventures of Da Gama is the first of a series of books, called Heroes of History, to be published for the benefit of the young people. Pizarro, we are told, is already in press and others are soon to follow. There is no class of literature that can be read by the young folks with so much profit combined with entertainment, and we cordially commend this volume as an earnest of the fund of amusement and information the series will yield. The adventures of the great discoverer are told in a manner to fascinate the juvenile mind.

Shooting Stars as Observed From the "Sixth Column" of the Times. By W. L. Alden. New York: G. P. Putnam's Sons.

This is a collection of those articles which the regular readers of the N. Y. Times are wont to eagerly look for on the editorial page of that Journal.

Mr. Aldon permits his humor sometimes to run to coarseness and not unfrequently it hints of absolute vulgarity, but in making this compilation the more objectionable articles have been omitted; and those who enjoy a hearty laugh will do well to lay in a stock of "Shooting-Stars."

Gabrielle. By HENRY GREVILLE. Philadelphia: T. B. Peterson & Bro

This lady works out a small part of the social problem with a very free hand, but her estimate of the correct morality of married life does not agree with that set forth by the Puritans as obtaining in the best society. We are getting educated up to the French standard of morality by a series of graduated examples, and we have no doubt that if the publishers persist, we will be able to take our immorality without blushing, in the course of time. We do not, at the present stage of our progression, consider this a good book for general circulation.

Orville College, by Mrs. Henry Wood. T. B. Peterson & Bros. Phila.: 50c. Paper.

Mrs. Wood's admirers will be glad to welcome the advent of Orville College. Though a most prolific writer, Mrs. Wood is strikingly original and there is an endless variety in her stories which will always commend them. The Lost Will is uniform in binding and price with the above, and both stories conform in every respect to this popular writer's known standard.

Rothwell. By the Author of That Husband of Mine. Boston: Lee & Shepard.

This book is likely to build up for the author a more enduring fame than her earlier effort, although each in its way gives proof of decided talent. She is to be congratulated on her success in fields so widely diverse.

MAGAZINE NOTES.

In accordance with a plan of the editor, formed a year ago, the Midsummer Holiday number of SCRIBNER'S MONTHLY opens with a portrait of William Cullen Bryant, engraved by Cole from a crayon drawing by Wyatt Eaton, for which the poet gave repeated sittings during the past spring. The paper on Mr. Bryant's life and homes, which it was also planned to have with the portrait, is by Rev. H. N. Powers, and was written before the former's illness. The illustrations are about twenty in number and chiefly represent points of interest at or near the Cummington and Roslyn residences. Dr. Holland also writes editorially of Mr. Bryant, and The Old Cabinet contains an estimate of his standing as a poet, and a reprint of the curious original version of Thanatopsis. The whole number is beautifully illustrated, and the stories are pleasant.

The ATLANTIC opens with a very pretty story by Miss Olney, One Too Many; Moonshine,

by Aldrich; The Europeans, by James; and The Stage in Germany, by Sylvester Baxter, together with New England Women, John Bull and The Moolid of The Prophet, make an interesting number. The Contributors' Club is very sprightly for dog-day weather. Book reviews have taken the form of essays recently, and add considerably to the interest of the numbers in which they appear.

THE second paper of Impressions of America, by Rev. R. W. Dale, in the August ECLECTIC, is devoted to politics; and a very just appreciation the writer has of our ways and our manners. Johnson's Lives of The Poets by Arnold, The Great Tropical Fallacy by J. A. Wilson, and Midhat Pasha's ideas on Turkey are very interesting papers. It is not every month that the clever editor of the Eclectic can muster between the green covers such an array of interesting matter.

LIPPINCOTT'S has invited Mr. King to cover its first eighteen pages with an account of his impressions Along The Danube, but the most interesting and novel paper is that by Marie Howland on Musical Notation. Every one interested in music should read it, and help give the old method a parting kick.

MR. E. H. KNIGHT of Centennial renown says something on that worn-out subject, the Paris Exposition. Our learned Consul at Cardiff has broken away from the tread-mill of official duty to tell his American readers about A Welsh Watering Place. Lucy Hooper says The Empress Eugenie is not growing old gracefully, and more besides that will interest the gossips. A Saxon God, and the serial, Through Winding Ways, are excellent fiction. The gem of the number is Henry James, Jr's, The British Soldier.

APPLETON'S JOURNAL begins by relating the woes of Flora, the ideal representative of the New York girls who work on artificial flowers. Mr. Rieding has treated the theme gracefully. C. F. Woolson goes Up in The Blue Ridge, and weaves a story about the bad men who make whiskey all the night and drink it all the day,—the illicit distillers. Genius and Labor by J. Henri Brown, Views of Westminster Abbey, Part 1, Beautiful Actresses, and Out of London are articles that would sustain the interest of the most exacting reader.

THE August POPULAR SCIENCE MONTHLY has a varied and attractive table of contents. The number opens with a continuation of Prof. Du Bois-Raymond's address on Civilization and Science, the special subjects of discussion in this installment being The Technico-Inductive Period, and The Dangers which threaten Modern Civilization. The next article is a brief but forcible address, delivered at the Harvey Tricentenary by Prof. Huxley, who, on the strength of his own investigations, gives the most emphatic indorsement to Harvey's title as one of the world's greatest discoverers. The third article in this number is the first of two illustrated papers on the teredo, or ship-worm—the creature which makes such havoc of our marine timber. The author, Dr. E. H. von Baumhauer, brings to his subject the results of a long course of observation and experiment, carried on and completed under the auspices of the Government of Holland. Following this is an article on The Dread and Dislike of Science. Under the title Man and his Structural Affinities, Prof. A. R. Grote discusses our relationship with the apes, illustrating the subject with a variety of new and accurate representations of apo anatomy and physiognomy. Voluntary Motion, by Prof. Payton Spence, M. D., is a paper of great interest, especially to teachers, as it brings out in a very striking way the enormous importance of our inherited aptitudes in the process of education.

Prof. Youmans opens the editorial department with a strong article on Religion and Science at Vanderbilt University, in which he sharply criticises the inconsistency and bigotry of that institution in turning out Prof. Winchell. American Influence in Civilization, and a graceful and appreciative tribute to the memory of Mr. George S. Appleton, recently deceased, complete the Editor's Table. The remaining departments maintain their usual high standard of excellence.

The illustrations in HARPER'S MONTHLY for August are noteworthy, especially Birds and Plumage. The other illustrated papers, The Golden Age of Engraving, The White Sulphur Springs, An Old-Fashioned Spa, and A Glimpse of Nature from My Veranda, are just the kind of food that pleases the literary palate in the summer. The serials, Macleod of Dare, and the Return of the Native, are probably the two best of the year. The Chinese Question is expounded by a writer who uses John Comprador as an example. It is shown that John is not only able to hold his own among the outside Barbarians, but is equal to beating European traders at their own game in his flowery native land. The Editor's Easy Chair, Scientific Record, and The Drawer are as full and interesting as ever.

ST. NICHOLAS is as sprightly as if he were not a hoary old fellow, but as young as the most enthusiastic of his youthful admirers. Under the Lilacs, and Dab Kinzer are charming serials, so diverse that the tastes of the Magazine's wide circle of readers must be met and satisfied. Jack in the Pulpit, The Letter Box, and the department for the very well people are as pleasant as an iceberg in July.

DEMAREST'S MAGAZINE for August has a colored plate of Rip Van Winkle for a title-page, and it is further embellished with some half dozen full-page illustrations. The stories, excellent miscellany, useful hints on etiquette, and about the cuisine; answers to correspondents, fashion intelligence, with illustrations of the latest novelties in jewelry, ficlus, coiffures, combs and costumes, must interest every lady who is so fortunate as to see a copy of the magazine. The younger people cannot but be pleased with the Young America department.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

IN THE GARDENS OF KEW.

A Memory of 1849.

How well I remember the day that we went!
We sailed up the Thames in the Duchess of Kent;
And we both sat apart from the holiday crew;
And we landed at last by the Gardens of Kew.

And I wore a poke bonnet—they give one the blues,
When one looks at them now in an old London *News:*
But you said I looked lovely—it mayn't have been true—
But I liked it, I know, in the Gardens of Kew.

And Love spread his glorious glamour around
As you told me you'd been down to Fulham, and found
A small house with a lawn and an exquisite view—
O, it sounded so sweet in the Gardens of Kew.

But I doubted—you kissed me, and bade me be sure
That "the gas was laid on and the water was pure"—
It was foolish perhaps; but what could a girl do?
I gave you my heart in the Gardens of Kew.

I was only a governess, toiling till dark,
And you were an underpaid Government clerk;
But though friends said we'd multiplied sorrow by two,
The sum total was bliss—in the Gardens of Kew.

How we loitered and dreamed through the mid-summer day!
Was grass ever so green, were flowers ever so gay?
And a sunset, seraphic as Paradise knew,
Streamed its splendor that night on the Gardens of Kew.

Then the mellow moon rippled the flood with its gold,
And you put your coat round me for fear I was cold,
Though the balmiest zephyr July ever blew
Sped us blissfully home from the Gardens of Kew.

Three months after we took, a poor husband and wife
Our joint ticket, third class, for the journey of life;
We've had griefs, but the power of true love pulled us through—
The love that we sealed in the Gardens of Kew.

And sometimes, though now we have wealth and to spare,
With a house in Hyde Park, and a carriage and pair,
As we take our hebdomadal walk in the "Zoo,"
I cast a fond thought to the Gardens of Kew.

Well, taking the years as they've flashed by us fleet,
The sweet with the bitter, and bitter with sweet,
I don't quite regret it, my darling, do you?—
Our saunter that day in the Gardens of Kew.

[*London World.* H. B. F.

KEEP OUT OF THE KITCHEN.

J. E. M.

Now that the summer heat is upon us, I would urge mothers and housekeepers generally, to spend as little time in a hot kitchen as possible. It may seem like an idle piece of advice to a great many who, like the late Pope, regard themselves as "prisoners," with no chance of escape from their enthrallment. Yet the busiest worker can lessen the hours she spends in its torrid heat, if she will only practice a little headwork over the matter.

In the first place, much work may be done towards preparing meals before the fire is lighted; when the room is at its coolest, vegetables can be prepared, and the baking got well under way before striking the match. Then put on all steam and let the work go on with the greatest dispatch, while you betake yourself to the well-darkened dining-room and set your table, or do whatever work comes next to hand. You can keep your eye well on the kitchen and all its operations, without actually remaining in it.

I have seen women take their sewing into the kitchen on a July day, with the stove in full blast. I would not do it, if I had a wood-shed I could move my chair into.

The desire to keep the house well shut up and in order, induces many a poor woman to sacrifice health and life on that "American Moloch,"—as good Mrs. Blackwell calls the modern cooking-stove. Remember, that nothing you have is too good for you to use, toiling mother, and that too on every day of your life. Do not save up your house and furniture for your children's step-mother; very likely she will never appreciate your sacrifice and will be far more careless in its use than ever you were. Is it worth while to hoard for a stranger?

As far as you can, carry on household operations outside the kitchen. Never iron there. If you value health and comfort, choose the coolest spot you can find to spread your ironing blanket; though it takes a few steps in and out to get your irons, it will save ten times the labor in strength and comfort as you go along. Do not prepare your vegetables beside the hot stove, but take them into the back porch if possible, or some other shaded spot, in the fresh air if you can.

It is attention to these "little things" which are in reality great things, which will bring you through the summer heat with health and vigor unimpaired, instead of laying up in store the germs of a long, low fever, through the fall.

Keep out of the kitchen all you can, and while there, mitigate its severities so far as lies in your power.

THE LITTLE PLEASURES OF LIFE.

ELLA F. MOSEBY.

ONE of these is an observance of family festivals; the remembrance of the children's birthdays, the marriage anniversary, the rejoicing on the day of Thanksgiving, when all the fruits of the kindly earth are gathered and stored away, and the whole household, old and young, come together at the home with which their childish memories are all associated. The good cheer, the smiling faces, the friendly greetings, do much to foster a spirit of mutual love and thankfulness, which may keep a heart of warmth in the working days that follow. No nation, no family, no individual, can afford to lose his days of thanksgiving—the open recognition of the tender watchfulness and liberal bounty of a Divine Providence who numbers all our steps.

The marriage anniversary; how pleasant it is to see husband and wife, who have long borne the heat and the burden of the day, looking back to the joyous dawn of love and its fair anticipations of coming delight, with the earnest trust that all has been fulfilled in a higher and better sense than in their dreams, and that all the experiences of life, the sad as well as the bright, are working out a more perfect fulfillment in the great hereafter. The brothers and sisters in that home love each other more for the love which the father and mother bear each other. That love is like a fountain, sending down its pure influence and power into all the affections, the friendships and charities of the home.

The birthdays come like a succession of fair stones on the chain of gold. The baby's first birthday, with its dimly seen roses, its one summer and spring, and the dainty, pretty gifts that a baby has, the little dresses and wraps of the softest texture and the most delicate colors—all the household loves the baby's birthday! Then, perhaps, that of the big boy of the family—his fishing-rod and tackle, his balls and books of adventure, and kites, that overlop the roofs of the houses, and games to be shouted over. What a contrast it is; but it brings a breezy stir of muscular life and strength that is good for the quiet members of the household, carrying them closely into the out-of-doors flavor and zest of things.

A pretty German custom has upon the table of the birthday party as many candles grouped around the child's birthday cake, in the center, as the years it has lived, beginning with the one bright taper in the middle for the baby's first anniversary, and adding light after light to the brilliant collection of the fifteen-year old son or daughter with the shining ring of lighted candles.

I think the loveliest birthday of all is that of the grandmother—placid, gentle, serene, not caring overmuch for the things of this world, yet full of sympathy for every joy or trouble or care of others. Around her come the older sons and daughters, married and entered upon middle-life, with its responsibilities and labors. Then the younger children, or the elder grand-children, in all the flush of expectation and purpose, the younger ones, reveling in a hey-day of unconscious enjoyments, and, last of all the circle, the infant lying in its grandmother's loving arms, with the same serene look of peace on its young face, that shines in the sweet aged face that bends over its slumbers.

OLD SETTLERS' DAY.

B. C. D.

IN the comparatively newly settled States, there are societies organized in many places called Old Settlers' Societies. A residence in the State of a quarter of a century or more is necessary to gain admission. I had the pleasure of attending the annual reunion of such a society a few days ago. There is always an interest connected with the day which belongs to no other holiday of the year. It is a fourth of July with all the coarse and disagreeable elements omitted.

It was refreshing to see so many old people together, all manifesting such a lively interest in the proceedings. There were vigorous old men and others bowed with the weight of years, yet all enjoyed adding their share of pioneer experience to the common fund. The farmers recalled the time when they sold their wheat for fifty cents a bushel after hauling it to distant markets, and were paid in wild-cat money, which would hardly pass current until they reached home. Business men spoke of the convenience which they regarded a weekly mail in the olden time. The old ladies told of the time when they wore bonnets of such ancient shape that they would have cost them their social position in the Eastern homes where they were reared, yet the equality on which they all stood here made it quite endurable.

Housework in those days required the exercise of the heroic virtues: economy, to make a small income take the family through the year free from debt; energy, to accomplish a large amount of work without any of the modern conveniences; patience, to wait for returns for labor and capital invested in a new farm.

The pleasant-faced, gray-haired old ladies of the audience looked as if they felt rewarded for their early sacrifices, and one and all agreed that they had never taken more comfort in their lives than in those early days in a new country. One of the speakers remarked, that "in comparing the present with the past we seemed to be burdened with too much civilization, there were so many things required to keep up our state, that we exhausted ourselves in trying to enjoy ourselves, and that a departure towards the simple habits of the early pioneers would be profitable to all concerned."

WAITING FOR THE BOYS.

MRS. M'CONOUGHY.

"How I do miss my little sewing chair," said Grace as she seated herself to sew in one of the common sitting-room chairs, "I never feel at home in these chairs. But mine has been disabled six weeks, and I never can get the boys to take it to the cabinet-makers to get it fixed. I suppose a little glue would make it all right in two minutes."

"I would'nt wait for the boys," said Cousin Hester decidedly.

"Take it on my own shoulder and carry down the street? I fancy I see myself."

"No, just step down the street and buy five cents' worth of glue and we can fix it ourselves."

"But we have no glue-pot."

"But we can improvise one; take a little tin can and set it inside a larger one, that will make a first-rate glue pot. Pour a little water in the outside one, and put the glue, with a little water in the inside one, and thus set it on the stove to melt. That is all the fuss there is about making glue. Now there is Willie, who, I know, will do our errand for us, and we will mend his wagon to pay for it."

Cousin Hester was unlike most people. While they talked of doing things, and exploited on what a good idea it would be to have them done, she went to work and *did* them. So it was not an hour before she was tinkering that rocking chair which only needed a rocker glued on, and tied fast with a string for a day, and thus it was as good as new. Willie hovered around delighted to see his little wagon once more put in order; there were too or three books whose corners were glued on, and then Gracie remembered her Sunday fan which had a stitch broken. A tiny drop of the strong glue was enough to make that all fast, and thus the children set out to explore the house, and see what else needed mending. There seemed enough virtue in that five cents' worth of glue to put together a houseful of loose pieces. In fact they did not know how much things were out of repair until they came to look into the matter, nor how snug and comfortable they would feel to have the furniture all safe and sound again.

In the afternoon Grace and Hester warmed up the glue again and sat down to make the prettiest kind of a shell and rice frame, a little chromo for the mantle.

"Never wait for the boys to do what you can just as well do yourself, Grace," remarked Hester. "I never do; I can pound a nail as well as the best of them, and harness a horse, or dig up a flower bed; and you can learn, dear."

UNCONSIDERED TRIFLES.

IN making up handsome costumes, ladies buy a cheap silk for the skirt proper, as the trimming used upon the foot covers it, and the richer material is thus saved for more important portions of the toilette. Skirts are seldom lined now-a-days, and ladies think they wear quite as well if they are not stitched up with too fine a thread and too close a tension of the sewing-machine.

A great deal of work that once was thought important is now known to be of little consequence, and so, instead of carefully blind-stitching or hemming flounces, these are very generally prepared by the sewing-machine. The best French dresses are made almost entirely by machine-work, but in this country ladies prefer trimmings at least arranged by hand-work, unless in the case of muslin and other wash-dresses.

It is no economy to use black thread for hemming black silk flounces, for long before the dress is worn out the black thread is green, blue, or yellow, and shows a marked line wherever it has been used.

A fanciful style of trimming on a plain material or a showy mixture of colors upon a dress which is to be worn for service, only makes a poor return for the thought and labor expended. Some of the prettiest dresses recently prepared were made of striped seer-sucker, at twelve cents a yard, trimmed with a braid lace with a crocheted edge.

Some of the pleated yoke dresses sold in the shops this summer have been lined throughout, making them too warm for comfort. It is only the yoke which requires strengthening; the sleeves and pleated body are more satisfactory if not lined.

In remodeling it is easy work to cut off the long or old-fashioned fronts of polonaises and make the reversed apron, called the "washerwoman's;" the pieces cut off require to be fitted to the outline of the front, and the back may be draped in any way most liked, or most easily done with the material in hand.

Sometimes, in renovating a dress, the fabric is so handsome, and looks so new after having been turned, pressed, and generally revived, that a new trimming seems indispensable. In the case of really good material, it is economy to provide this, as the second wearing of a dress is frequently more satisfactory than the first, in every sense. This is always the case where the frugal woman has spent all the money devoted to a dress upon the bare material, exclusive of the trimming.

Buyers, or other managers, find the new Bonaz embroidery a great convenience in the work of renovation, as the manufacturers will supply it in every shade, and of every combination, at nearly the same price as is asked for it in the shops. Most of the blended embroideries on lace are also excellent garnitures, to which the perplexed economist may resort when a shade that is not at the moment a leading tint of fashion, is to be provided with a match or a contrast of color.

Industrious ladies will be glad to know that some of the handsomest piece trimmings promised for the autumn trade, are bands worked with fine split zephyr, in long sketchy stitches—effective but extremely simple. Borders worked in this manner will be used as headings, above lace or fringe.

CALIFORNIA is, for women, the modern Utopia, a judge of San Francisco having decided that under the laws of that State, a wife has full and exclusive control over her own property, and is competent to execute morigages or transfers of real or personal property held in her own right. In the words of the decision, the laws of the State are "intended to make the wife entirely free from the husband's care and guardianship and more free and independent in all things than the husband himself."

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Arabian Horse, The (Illustrated)..... 485
Poultry Breeding—A. M. Van Auken..... 485
Neglect of Young Chickens—Henry Hales..... 486
The Champion Hereford—(Illustrated)..... 486
Farm Work for August..... 486
Seasonable Hints—F. H. D..... 486
Encourage Home Manufactures..... 486
Tobacco Culture in New England, No. I..... 486
Growing Beans Cheaply—W. J. F..... 487
Ramie Culture..... 787
Care of Village Refuse..... 487
Waste of Manure on the Farm..... 487
Rooting Cuttings in August—G. H. (Ills.)..... 487
Salix Lucida—Charles Downing..... 488
Transplanting Cabbage, &c.,—I. F. Tillinghast... 488
Grafting Grape Vines—S. B. Peck..... 888
What Others Say..... 488
Annual Fair List..... 488
Eureka Safety-Power. (Illustrated)..... 489
Farmer's Friend Drill.—(Illustrated)..... 489

Answers to Correspondents:

Names of Grasses..... 490
Manure Ingredients..... 490
Telling a Horse's Age by its Teeth..... 490
A Good Potato Store-House..... 490
Salt and Water in Pastures..... 490
Cholera Among Poultry..... 490
Miscellaneous..... 490

Everywhere:

Dodge Co., Neb..... 490
Brown Co., Wis..... 490
Unicoi Co., Tenn..... 490
Clinton Co., Iowa..... 490
St. Lawrence Co., N. Y..... 490
Jefferson Co., N. Y..... 490
Meeker Co., Minn..... 490
Essex Co., Va..... 490

Domestic Economy:

About Mosquito Netting—Mary Wager-Fisher.. 496
Mop Handle Papers..... 496
Domestic Recipes..... 496
Markets..... 497

EDITORIAL PAGE:

Potatoes as Food..... 491
"Corners" in Grain..... 491
Latest Crop Reports..... 491
Prickly Comfrey..... 491
Singular Aquilegia..... 491
Watering Plants During Sunshine..... 491
Brevities..... 491

LITERARY:

Poetry..... 494
Mamie Grey's Sacrifice..... 494
Diamonds..... 494
Recent Literature..... 494
Magazine Notes..... 494
Keep Out of the Kitchen—J. E. M..... 495
Little Pleasures of Life—Ella F. Mosby..... 495
Old Settlers' Day—B. C. D..... 495
Waiting for the Boys—Mrs. McConoughly..... 495
Unconsidered Trifles..... 495
California a Paradise for Women..... 495

Reading for the Young:

A Pocket-Money Suggestion—(Illustrated..... 498
How Poor Readers are Manufactured—May Maple..... 498

Sabbath Reading:

Mischief and Danger of Exaggerations in Religion..... 498
Personals..... 499
News of the Week—Herman..... 496
Wit and Humor..... 500
Advertising..... 497, 499, 500

Domestic Economy.

CONDUCTED BY EMILY MAPLE

ABOUT MOSQUITO NETTING.

In the first place, buy it by the piece. It will probably cost half-a-dollar, and will cover all the sashes for windows that you will require—probably—and enough be left for a door or two. Most people know its value in summer time, but there are many farmers' families that do not, and upon such I urge its use. It saves in labor, ten times its cost in labor and money. It adds to the comfort of a room, beyond measure. Anybody who is clever with a carpenter's tools can make frames enough for doors and windows, in two or three days of the winter time, when there is no other driving work. Especially for the windows and doors of the dining-room is the netting a necessity for keeping out the flies. The frames for the doors should be hung on hinges, such as will admit of their being lifted off after the reign of the flies is ended. Nothing is more tantalizing and vulgar than to sit at table in a swarm of flies. With netting at the windows and doors—especially the outside door, if there be one—the room may be darkened between meals, leaving a tiny crack for the flies to crawl out, and in such easy wise, the room may be kept comparatively clear of them. Try it, and be gratified. MARY WAGER-FISHER.

Bryn Mawr, Pa.

MOP-HANDLE PAPERS—NO. 2.

I HAVE had occasion to wonder on cleaning days at the carelessness of house-keepers, who have little toddling children just beginning to run about. Perhaps I ought not to call the fault *carelessness*, but there surely must be a lack of calculation when the mother can not clean her kitchen floor—and, as it frequently happens in country places, the kitchen includes the nursery—without the use of boiling water. In how many incidents do we read of children being scalded by falling into the pail of boiling mop water! And all too often are we obliged to witness the agonies of the little household pet who has met with this frightful accident. The afflicted mother presses the darling to her heart, and crying over her own negligence, moans: "If I had only watched my darling closer, or tied him in his high chair out of the way, I might have kept him with me for long years to come, but now I must witness his dying agonies, and know that I am to blame for all this suffering and for the loss of his precious life. How can I ever forgive myself!"

And yet, strange as it may seem after such stern experience, the very next cleaning day, although there are other little toddlers about, she must heat the water to its boiling point, as though no other degree of temperature would do the work as well.

Now, I know from experience that luke-warm water, or even cold water, will cleanse wood from all ordinary impurities. I do not pretend that it will bleach a floor; but is it necessary that it should be snow-white? If it is, why not *paint* it the desired color, and thus save one's-self a "deal" of hard work, and do away with the last chance of scalding the little ones to death.

An innocent, God-given life and a clear conscience are of vastly more importance than a chalk-white floor. So I enter an earnest protest against the use of boiling water for cleaning purposes, so long as there are helpless, toddling children in the house or vicinity.

MAY MAPLE.

DOMESTIC RECIPES.

Blackberry Pie.

Make the paste as usual, and place the under crust upon a deep tin, and the upper one, cut the right size, on a flat tin; prick both crusts to prevent blistering, and bake until nicely browned. Fill the under crust, while hot, with *ripe* blackberries; sprinkle powdered sugar over them, cover with the flat crust, and return to the oven for a very few minutes—just long enough to heat the fruit. This pie may be served with cream and sugar, and, according to our taste, is preferable to the average berry pie with its soaked and heavy crusts. E. M. B.

Carbonate Ammonia Cookies.

For the benefit of Mrs. Martha Hinds, I send my recipes for the following:

One ounce of carbonate ammonia, one pint of sweet cream, two teacupfuls of sugar, half a grated nutmeg, and flour to roll very thin.

Ammonia Sponge Cake.

Three eggs, one cup of sugar, one cup of flour, one tablespoonful butter, one teaspoonful pulverized carbonate of ammonia, dissolved in a very little hot water and added the last thing. Flavor with nutmeg. MRS. M. ALDRICH.

Baked Tomatoes.

Scald and peel a sufficient quantity of smooth, round tomatoes; put into a deep earthenware dish, sprinkle plentifully with salt and pepper; have a teacupful or more—according to the quantity of tomatoes—of fine cracker crumbs, and spread over the top. Bake in a quick oven from thirty to forty-five minutes. Drop a few lumps of butter onto the tomatoes and serve.

Tomatoes on the Half-Shell.

Have toasted a few slices of bread nice and brown; butter, cut in half, and place where it is warm. Select tomatoes which are smooth, and not over-ripe; cut in two—flat-wise—and put, skin down, on a hot grid-iron; serve on slices of toast with butter, pepper and salt. We have eaten them with a teacupful of hot cream poured around the slices of toast and tomatoes—the addition of which did not improve them to our taste.

Scalloped Tomatoes.

Peel as many ripe tomatoes as required; cut into slices, and place in a pudding dish first, a layer of tomatoes, seasoned with butter, pepper and salt, then a thick layer of bread crumbs, also seasoned with butter, pepper and salt. Thus alternate the layers until the dish is nearly full, having tomatoes last; cover tightly, and bake one-half hour or longer if the oven be not hot.

Tomato Soup.

Take of a neck piece or from the round, two or three pounds of beef; remove every particle of fat, and cut the meat into very small pieces; put into the kettle, with two or three quarts of cold water, and simmer for one hour; as the scum arises, remove, and keep the kettle covered; strain the meat from the broth, and add a quart of tomatoes, which have been pressed through a colander, with a bunch of parsley, and boil twenty minutes; cut and scrape the kernels from three ears of sweet corn, and add to the soup, with a half teacupful of sweet cream, two small tablespoonfuls of flour, pepper and salt; boil fifteen minutes and serve.

Tomato Salad.

Skin, remove the seeds and pulp from fresh tomatoes; chop what is left with the heart—if it may be so called—of a cabbage and a little parsley, and serve with a good salad dressing.

Cucumber Relish.

This pickle may be made from those cucumbers which have grown too large for pickling whole.

Peel, cut in half, remove the seeds, and grate on a coarse grater; drain the water from the mass, season highly with pepper, salt and ground cloves, cover with cold vinegar, bottle and seal.

Stuffed Eggs.

Boil ten eggs until hard; plunge into cold water for a moment or two, remove the shells, cut in half, take out the yolks, chop, and mix with them some chopped cold chicken or veal; season with a little parsley, pepper and salt, and with a little melted butter, shape into a form to fill the cavities; press the two halves together; roll first, in a beaten egg, then in bread or cracker crumbs, put into a wire vegetable basket, and dip into boiling lard; when delicately browned serve with a tomato sauce. E. M.

QUERIES ANSWERED.

Stuffed Ham.

PLEASE give directions for stuffing a ham.

E. B.

ANS.—Wash and scrape the skin until it looks white and clean; cut out quite a large piece from the thickest part—which by the way may be used for frying—and steam four hours. The skin should be left as whole as possible on the ham as it answers for a sort of cape for the stuffing. Fill the space cut out with a dressing of bread-crumbs, seasoned with pepper, salt, sage, a little onion if liked, and all mixed together with a couple of raw eggs; bind a strip of cotton cloth around to keep in place; score the skin in slices a quarter of an inch deep and bake an hour and a half, turning so as to brown on all sides. The last half hour sprinkle with bread crumbs and baste frequently with butter and water. Many peel off the skin before baking and cover with a regular cake-icing just before it is done—it should be then left in the oven only long enough to brown.

Stuffed, baked or boiled ham, providing it has been nicely cured, can be made into the most tempting and healthful—so the writer thinks—dishes. The nicest portions may be cut into slices and served, while the ragged parts may be chopped fine and with pickles and other ingredients be made into sandwiches, omelet, grated ham on toast, etc.

News of the Week.

POLITICAL.

Monday, July 29.

The National party, now generally known in this State as the Greenback-Labor Party, held a convention at Syracuse on Tuesday and Wednesday. The greenback element of the party from the outset took control of the assembly, completely throwing the labor party into the background. Three sets of rival delegates, belonging chiefly to the later faction, presented themselves for admission from this city, but all three were stoutly excluded. In the main, the body was made up of farmers, country merchants and labor representatives, together with a fair sprinkling of lawyers, political enthusiasts and other adventurers. The political papers are loud in their sneers and jeers at the scenes of excitement, disturbance and recrimination that took place, but in reality, judging from even prejudiced accounts, these were hardly worse than those witnessed at most conventions of democrats or republicans.

They nominated Gideon Tucker as Judge of the Court of Appeals, and adopted a platform demanding, in brief, repeal of the Resumption Act; the withdrawal of national bank notes; the issue by the government of irredeemable legal tender notes receivable in payment of all debts, and the immediate payment of the whole of the national debt in such notes; a protective tariff upon all articles grown or made here; a graduated income tax, bearing heavily on the very rich, and more lightly on the less wealthy; a wise and judicious system of internal improvements; the adoption of a tax designed to limit the amount of land one man can own; a prohibition against competition with convict or Chinese cheap labor, and a few other planks of minor importance.

This seems to be a fair sample of the principles of the party throughout the country, judging from the platform adopted by it at the late convention in Ohio, and from other authorized declarations. Among many thoughtful men in this section, the notion is growing strong that the system of contempt, abuse and ridicule, with which this party has hitherto been generally treated by the Eastern press, is a false one; and that the principles of the new organization should be combatted by arguments as seriously and temperately as are the principles of the old political organizations. An allied organization, known as the Knights of Labor, a secret and professedly non-political party, claims a membership throughout the country of 870,000, of whom 500,000 have joined within the past year.

Yesterday morning Kearney, the California agitator, arrived in Boston, after a journey of eight days from San Francisco. Shortly after his arrival he was waited upon by a large crowd of workingmen, to whom he made a speech full of boisterous language—death to monopoly! death to debased capital! death to Mongolian as well as to African slavery! death to political plunderers!—blood-suckers of all parties, etc! etc! etc! Afterwards he attended a meeting—with his mother—a respectable, old Irish woman, who had not seen him for fourteen years. He goes in for Butler for governor of the old Bay State.

Sherman, Garfield, Trumbull, Kelly, and a number of other visiting statesmen, were before the Potter Committee during the week at Atlantic City. Their testimony directly contradicts that of Anderson and other "Fraud" witnesses on most points; but the public, all over the country, are getting tired of the endless mass of contradiction, perjury and corruption, and RURAL readers will, doubtless, wait with patience for a synopsis of the evidence later on when all is in, and it is possible to arrive at some definite conclusion as to its bearing and importance.

MISCELLANEOUS.

A farmer near Faribault, Minn., shot and instantly killed a couple of tramps whom he caught setting fire to a harvesting machine in his wheat field. He surrendered to the authorities, but was immediately released. The railroad presidents lately held a conference at which it was recommended to the Western roads to advance grain rates from Chicago to New York from 16 to 20 cents, and other freight in proportion. Another monster defalcation in Boston! The guilty party this time is John G. Tappan, Treasurer of the Boston Belting Co; President of the McKillop and Sprague Commercial Agency Company of this city and largely engaged in several other branches of business. His misappropriations will probably amount, when all are discovered, to over $1,000,000. He has surrendered property nominally worth that amount and claims sympathy for his dishonesty. It is the old story of reckless speculation. There has been a scare in Brooklyn and this city at the appearance of half a dozen cases of yellow fever on board a government vessel lately arrived from the West Indies. No new cases have appeared, however. The pest has already made its yearly visit to New Orleans, where some 40 odd deaths have already taken place, and that city has been quarantined by Memphis, Shreveport, Galveston, Mobile, and Pensacola.

Three men were killed and four others seriously injured by the explosion of the boiler of a threshing machine near Belleville Ill, a week ago. Such items might truthfully be very common for the next couple of months at least. A meeting of about 200 of Jay Cooke's creditors met a week since in Philadelphia. But after waiting five years they could learn nothing of the sum they are likely to get out of the assets of the bankrupt. As yet only five per cent has been paid on the $5,000,000 for which Cooke failed; and naturally some indignation is felt at the delay in closing up the estate. But then the receiver etc., would lose their present fat salaries and pickings. Forty per cent, it is hoped, will ultimately be realized from the assets. By a decision just rendered by Secretary Schurz all land granted to railroads to help to build them, and which have not been sold within three years from the date of the entire completion of such roads, are declared to be subject to the right of pre-emption at $1.25 per acre. It is unjust that these lands, after having been accepted distinctly on this condition, should be indefinitely held at much higher prices or for speculative purposes. This righteous decision will throw a vast extent of excellent land open to settlers on favorable terms, and though the Supreme Court has not yet been called upon to decide the question, it has given undoubted indications that its decision would coincide with that of the Secretary of the Interior. The land is some of best to be found, lying, here and there, right along the railroad and never far from it, and therefore it is probable most of it will soon be "entered."

Gross frauds in the accounts of the Indian Agent at the Crow Creek reservation have been discovered by Gen. Hammond, a recently appointed Indian Agent. The Government has been charged for a vast quantity of goods never purchased; agents, clerks and employes of all kinds, together with their families have been supported on supplies that ought to have been distributed among the Indians; trains to the Black Hills have been loaded with goods from the same source, and every form of peculation infamously practiced. The thing has been going on for years, enriching numbers of public plunderers, but just now the detected culprits are Dr. Livingston, the agent, and a number of subordinates, all shining lights of the Episcopal Church. It is much to be feared that this robbery is only a flagrant sample of what is going on, or has been going on, at many other Indian agencies. Out in Oregon, friendly Umatillas under Gen. Forsythe, have contributed greatly towards ending the war by falling upon the hostiles near Baker City, utterly routing them, and capturing many scalps, women and horses. Subsequently Howard joined Forsythe. The combined forces followed hot upon the trail of the hostiles, who soon separated, the Piutes heading for their reservation, probably there to surrender, and live on Uncle Sam until the next outbreak, and the Bannocks making for Camas Prairie and Capt. Jack's famous Lava Beds, which they too may use as a stronghold. It is thought, however, that this war is now virtually over. The Sioux, under Spotted Tail and Red Cloud, are about to move peacefully and contentedly to their new reservations on White Earth River and White Clay Creek, Missouri.

In the year ending June 30, 1879, the entire appropriations made by Congress for the benefit of all Indians amount to $4,741,076, and besides this, some of the tribes are nearly self-supporting, others have annuities from the proceeds of the sale of their lands, etc.; while a few claim no assistance; yet the chief cause of Indian disturbances every year is a scarcity of supplies. If, in addition to the above sums, we take into account the injury they do in war, the expenses of the army needed to keep them in order, and the value of their possessions, it would seem a cheap plan to bring them all East and board them at first-class hotels.

Sugar-cane culture is extending into all the Gulf States, and as far north as Georgia; the area under cultivation this year is considerably larger than hitherto, and the outlook is promising. The wool clip is about three per cent. larger than last year. There has been a falling off of 5 per cent. in New England, of 3 per cent. in the three northern Middle States, and of 9 per cent. in California, and an increase everywhere else, amounting to as high as 14 per cent. in North and South Carolina, Georgia, Florida, Alabama and Tennessee, with a very large increase in Texas also. A considerable weakening in prices, however, is indicated. Tramps are busy committing all manner of outrages through the country. A partial list of their crimes during the past week, as reported in the RURAL exchanges, would fill a couple of columns. The patience of farmers is getting exhausted, and it is not improbable that ere long many districts will be made too hot for the reckless vagabonds.

FOREIGN.

Escobedo, the Mexican general chiefly implicated in the death of Maximilian, and who has lately been trying to effect a revolution in favor of Lerdo across the Rio Grande, has been captured by the troops of Diaz, taken to Monteray and sentenced to death. A couple of weeks ago he issued a pronunciamento violently denouncing Diaz, and threatening him with Maximilian's fate should he ever fall into his hands, and accordingly he has but little right now to expect mercy from his captors. Gen. Mackenzie has crossed into Mexico at the head of 800 men in pursuit of cattle thieves. A strong party from the Texas side of the Rio Grande have retaliated on Mexico by stealing a large number of cattle from the other side of the river. There is doubtless a large number of men throughout Texas trying to embroil this country in a war with Mexico in expectation of feathering their nests with the results of land and other speculations as well as by the fat contracts that must then fall into their greedy hands. Many emigrants from this country have lately been induced to go to Brazil; but most of them are trying to get back by sending to their friends for money or by working their way on shipboard. They soon grow sick there, many of them die, the others get disgusted with the climate, the fare, the natives, broken promises, and their own foolish expectations.

Across the Atlantic lords Beaconsfield and Salisbury have both been made Knights of the Garter, in reward for their diplomatic services. Much dissatisfaction, however, exists among the majority of Liberals at the responsibilities put upon England by the late treaty; at Desraeli's consent to Turkey's dismemberment and his share in its spoliation; and at the Conservative triumph generally and the defeat of the policy they themselves advocated. Austria is ready to cross the frontier into Bosnia, although the Porte has not yet formally consented, and most of the inhabitants oppose the movement. The republican party in Italy are violently agitating for the cession by Austria to Italy of the southern part of the Tyrol about Trent, as well as of Trieste. Garibaldi has just written a letter warmly approving the popular demonstrations being made in favor of the annexation. The Italian government is opposed to the project; Austria disregards it; and Bismarck says such a measure is now and always will be inconsistent with German interests. The Russians are still negotiating for the purchase of fast vessels to be transformed into men-of-war, and people are naturally asking why so. Shumla has been evacuated by the Turks and occupied by the Russians; Varna is soon to share the same fate; whereupon the Muscovites will retire from before Constantinople. Peace is causing a brisker business and better times through most of Europe.

HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, July 27, 1878.

*BEANS AND PEAS.—In Mediums there is no special change to note; summer buyers make careful selections, and pay the extreme for small parcels. Marrow have a fair demand; extras have sold a shade above quotations. Stocks here in general are light compared with last year, but the fact does not help prices, as there is quite a large surplus in the country. Crops are looking well, but they are yet not beyond possible disaster. Red kidneys are in few hands, and have again advanced. White quiet. Peas firm for choice Eastern qualities. Canadian peas are scarce and stronger, 77@78c. for good and 80c. for choice, to arrive in bulk and bond. Green peas ll m at $1.20; do. B. E. peas steady for old at $3@3.25. Receipts of beans past week, 1,084 bush.

Exports, 775 bbls. Exports of peas, 1,087 bush.

We quote medium beans, prime, $1 55@1 57½; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 57½@1 60; Pea, $1 40@1 65; white $1 60@$1 62½; kidney, $1 40@1 60; red do., $3 25@3 50; black $2 35@2 40; Lima, $3 75@4 25.

BEESWAX.—Exporters have taken small lots at 26½@28c. for Western and Southern.

Exports past week, 2,313 lbs. Since Jan. 1st 110,200 do. Same time last year, 75,628.

BROOM CORN—Has a light sale, pending marketing of the new crop. Quotations are: 6@6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

BUTTER.—Supplies are liberal, but the want of really fancy has been felt more during the week than for the season. In fact, butter that has had the favorable features of fine quality, and near-by make has had almost a special market. To some degree the higher prices of extra selected creamery and faultless pails has stiffened some well-kept marks of remote made, but wholesale buyers can do about as well as they did last week. Exportation is of great assistance to the summer market, only the call it makes upon high-priced stock, is something New York has not been used to. Still this will be in the future interest of producers, and sellers put up with more or less grumbling on the part of local buyers. Western butter has a good run, as prices are decidedly in its favor: quality compared with State. Refrigerator space is lower on steamer; about 20,000 pkgs go abroad in this week's fleet.

Exports for the week, 23,909 pkgs.

State creamery, choice, 22c.; other, 19@21c.; half tubs and pails, choice, 18@19c.; other, 12@17c.; Welsh tubs, best, 16@17c.; other, 11@13c.; poor State, 8@10c.; State firkins, 16@19c.; Western creamery, choice, 20c.; other, 16@19c.; Western dairy, best, 13@14c.; other, 9@12c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 5½@8c.; old and grease, 3@5c.

Receipts for the week, 33,772 pkgs.; do. past week, 30,149 do.

COTTON.—There has been a brisk movement in spot cotton, and considerable inquiry as well from the "shorts" has tended to the higher prices. Latest quotations are for July, 11.7½c. for August, 11.73@11.7½c.; September 11.41c.; for October, 11.25@11.26c.; for November, 11.09@11.10c.; for December, 11.07@11.08c., for January, 11.11@11.12c.; for February, 11 17c.; for March, 11.25@11.26c.; for April, 11.31@11.33c. May, 11.40@11.42c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9⅞	9⅞
Strict ordinary	10¼	10¼	10¼	10¼
Good ordinary	10⅝	10⅝	10⅝	10⅝
Strict good do	11 1-16	11 1-16	11 3-16	11 3-16
Low middling	11⅜	11⅜	11⅝	11⅝
Strict low middling	11 9-16	11 9-16	11 11-16	11 11 16
Middling	11 11-16	11 11-16	11 13-16	11 13-16
Good middling	12	12	12¼	12¼
Strict good middling	12 5-16	12 5-16	12 7-16	12 7-16
Middling fair	12 13-16	12 13-16	12 15-16	12 15-16
Fair	13 9-16	13 9-16	13 11-16	13 11-16

Stained.

Good ordinary..... 9¾; Strict good ordinary. 10¼

Low middling..... 10⅝; Middling..... 11 3-16

CHEESE.—Shippers this week have been a little inclined to hold off since the English markets have been slack, and fully stocked by the large shipments that have been made thence. Receipts have been large again here, and although prices have declined there is left a larger accumulation to be carried over than previously this season. Latest sales are at 7¾@8c. for fancy white and colored.

Quotations are for fancy, 7¾@8c.; 7@7½c. for good and prime; 6x6½c. for fair; 4@6c. for half skimmed; 2@3½c. for skimmed. State, farm dairy at 6½@7½c. for good to choice, 5@6¼c. for fair to good, and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7½@8c.; do. good to prime, 6½@7¼c.; do. fair to good, 5@6¼c.; Western factory, fine, full cream, cheddar, 7@7¼c.; do. fine, full cream, flat, 6½@7c.; do. slightly skimmed, flat, 6@6½c.; do. half skimmed, 4@5½c.; do. full skimmed, 2@3c.

Exports, 88,305 boxes.

Gold closes, 100¼.

Liverpool cable, 45s., which is better.

DRIED FRUITS.—Small lots of new blackberries have been placed at 7@7¼c., and new cherries at 13½@14c. The general market is yet very dull. New blackberries, 7@7¼c. Peaches—Georgia at 7@8c.; unpeeled halves, 3½@4c.; quarters, 3@3½c. Pitted cherries, 13½@14c.; New York State plums, 12@12½c.; southern plums, nominal. Apples—State quarters, 3½@4c.; do. sliced, prime, 4½c.; good, 3½@4c.; western quarters, 2@3c.; southern at 4@4½c. for prime sliced; 3@3½c. for fair to good; southern quarters, 2@3c.; Tennessee quarters, in bags, at 1½@2c. New raspberries, 22@23c., and evaporated, 26c.

Exports past week, 90 bbls. dried apples. Since Jan. 1st, 10,050 do. Same time last year, 23,125 do.

EGGS.—Receipts for the week, 7,913 bbls.; do. last week, 7,107 do. Eggs are turning out so badly that buyers are neglecting nearly all marks; in Western and State a few shipments have a steady hotel and restaurant trade, but generally buyers will not invest even with the most liberal loss off included.

Near points, 14@15c.; State and Penn., 12@13c.; fresh Western and Canadian 10@11c.; inferior and ice-house that have missed a prompt sale after exposure, 8@10c.

FRESH FRUITS.—Apples are in good supply and bring very fair prices. Nyack pippins, bbl., $2@2 50; Sweet and sour boughs, $1.50@2; Astrachan, poor to fine, $1 50@2 50; Windfalls, 75c.@$1 25. Southern pears are making quite a display: Va. Bartletts, $2@4 crate; Georgia, $5@6 do.; Bell, barrel, $5; Common to good summer pears, $2@4. Whortleberries, $3@3.50 bush. Raspberries scarce, close higher; it has been a poor season for growers. Antwerps, 4@5c. thirds; Blackberries have sold very low, but now show some recovery; Wilson's 6@10c. quart; Lawton's 6@8c. Peaches arrive in limited quantities, rather endorsing the reports of a light crop: Geo., crates, $2.50@4.50; Tenn., $3@4.50; S. C., $3@4; N. C., $2@5; Md. and Del. Troth's, $2@2.50; Hales, $1@1.37. Melons in good supply and easier. Chas. and Augusta, Watermelons, $22@35; N. C., do., $10@25; Muskmelons, $2.50@4. Peanuts are unusually slack for summer; prices almost nominal. Va., hand-picked, $1.55; good to choice, $1.25@1.45. A late car-load of Cal. plums sold at $5 a box for McLaughlin, Purple Duane, German Prune, and Columbia; Hot-house grapes, Black Hamburg, lb., 50@75c.; Muscat, 50@75c.; Sweet water, 40@50c. The western crop of cranberries will be larger; easterward fair.

SUGAR—Refined at 10 for cut-loaf, 9⅞ for crushed; 9⅝ for powdered; 9⅜ for granulated; 8¾@9¼ for soft white, and 8¼@8 for soft yellow.

FLOUR.—The Minnesota grades have been especially active and higher; this is due largely to expected deficiency in qualities of the Minnesota wheats this year, otherwise there has been more activity and a strong market.

Latest prices are $3.35@4.00 for very inferior to very choice superfine State; $4.00@4.20 for poor to very good extra do, odd lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to very fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@5.65; Minnesota "straight," very inferior to very fancy, at $5.15@7.00, few genuine brands of this class going under $5.60@5.65, and patent poor to strictly fancy at $5.50@8.50; unsound stock at from $2.00@5.25; city mill extra at $5 00@5.35 for West Indies (the latter rate for fancy in new packages); do. for England, 4.10@$4.25; do. trade and family extras, $5.05@6.15; do. for South America, $5.25@5.85 for fair to fancy; No. 2 $2.25@3.25 for inferior to fancy.

CORN MEAL.—Is selling at $2.85@2.90 for Brandywine, and $2.15@2.35 for Western yellow.

GRAIN.—For wheat through the sharp, speculative manipulation, and buoyant Western markets, with improved English markets, prices are decidedly higher. Corn has also been active at an advance, and oats have sold a little better.

Latest sales of wheat are of No. 1 red at $1 12; No. 2 red at $1 10@$1 12; do., July option, at $1 11@$1 11⅛; do., August option at $1 07@$1 08; do., September option, at $1 06⅞@$1 07; steamer No. 2 red at $1 10; old amber Michigan at $1 15@$1 15½; ungraded red, August 1st to 25th, at $1 07⅛; ungraded white western at $1 07@1 19; ungraded red at 90c.@$1 12; amber Delaware at $1 12; No. 3 red and No. 3 steamer red at $1 05; No. 1 white choice old, at $1 24; steamer white at $1 15; No. 1 white, August option, at $1.19; do., August, September and October options, equally divided, at $1 19; No. 1 amber round, to arrive, at $1.14; do., spot, in lots, at $1 12@$1 14; No. 2 amber, at $1 10@1 11½; do., to arrive next week, at $1 11; do., steamer grade, at $1 08@1 10; New York No. 2, spring, at $1 08@$1 09; do., July option (in settlement), at $1 09¾; do, August option, at $1 05; do., September option, at $1 01@$1 01¾; No. 2 Northwest spring, July option, $1 11. Rye at 66c for State and 62@63c. for western. Corn at for—No. 2, July option, at 48¾@48¾c.; No. 2, August option, at 48¼@48½c; No. 2, September option, at 49½c; steamer mixed, July option, at 48c.; do., August option, at 47¾@48c.; do., September option, at 48¼@48¾c. The spot lots included New York No. 2 at 48½@48¾c; New York No. 3 at 46¾@46¾c.; steamer mixed at 47@48½c.; ungraded mixed western at 45@49c., and white western at 53c. Oats at for—New York No. 1 white at 37@38½c; New York No. 2 white at 34¾c.; New York No. 1 at 35@35½c; New York No. 2 at 34½c.; white western at at 33@38c., as to quality; mixed western at at 32@33c.; white State at 34@37½c.; mixed State at 32⅝@34½c; new white southern, poor, at 30c.; New York No. 3 quoted at 32@32¾c.; New York No. 3 white quoted at 33½@34c.; New York extra at 35½c.

HAY AND STRAW.—There is a good sale for prime stock, of which the receipts are moderate; common lots are plenty and easy in price.

Bale hay, 45@55c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye, and 40@45c. for short rye; and 30@35c. for oat.

Exports past week 2,360 bales. Since Jan. 1st, 40,900 do.; same time last year, 29,375 do.

HOPS.—Small lots have been taken by brewers at steady prices.

Emmet Wells says, in his circular, "Some of our exchanges are beginning to give estimates of the coming crop, a few putting the yield at one-half, and others at two-thirds of last year's, but they leave the growers in the dark as to what they consider the amount of hops grown last year. Estimates of the 1877 crop ranged all the way from 130,000 to 300,000 bales. Our estimate, as will be seen by referring to circular September 7, 1877, was 200,000: this was before the crop was entirely gathered. We now believe it reached nearer 250,000 bales, therefore putting the consumption at 125,000 bales. If we grow only one-half the amount we did last year, we will have just enough to carry us through, leaving none to spare for export, but if the yield equals two-thirds of last year's we shall have 40,000 to 50,000 bales surplus."

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@ 3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

Exports for the past week, 179 bales.

LEATHER.—Sales at 19½@20c. for light 19½@21½c. for middle; 20@21½c. for heavy and 17½@19c. for good damaged.

POULTRY AND GAME.—Chickens have declined under very free receipts. Fowls are lower, but held up better than other sorts. It is useless to send any but small hen turkeys at this season. Spring ducks are in fair demand when large and fine. Sprlug chickens, N. J. 15c.; State 14c.; Western, 12@13c.; Southern 12@13c. Fowls—N. J. 12@13c.; S. & W., 11@12c.; Roosters, 5@6c. Turkeys 11@14c. Ducks—Choice, pair, 70@75c.; other 40@85c.; Spring 50@75c. Geese—Choice, $1.25@1 50; other 88@$1.12.

City dressers have the run of the market trade in very hot weather; some buyers prefer fresh killed to best ice packed. Fowls and chickens quoted easier, especially for dry picked. Dry picked turkeys, 15@16c.; other, 13@14c.; spring chickens, Phila., 16@18c.; N. J. 15@16c.; S. & W, 12@13c.; Pa. fowls, 14@15c; N. J., 12@14c.; State and Western, 10@12c. In game, wild stuff-fed pigeons quoted $1 25@1 37 doz., for full grown; young, $1@1 12 for small. Tame squab $1.50.

PROVISIONS have hardened a little in price, through increased demands for supplies. Mess pork quoted $10 35@10 60 for spot lots; $10 30 for July and August; and $10 40 for September. Bacon at 6¼c. for long clear and 6⅝ for short clear. Lard—Western steam at $7 35 for new and $7 42½ for old; $7 32½@$7 35 for July and August deliveries; $7 40 for September, and $7 45@$7 47½ for October. Stearine at 9½ for choice city and 9⅜ for western. Tallow at 6 15-16 for prime. Beef hams at $21 50. Beef—for extra mess, $11 75@$12; plain mess, $10@11 50; packet, $11 50@12 25 for bbls, and $16@17 for tcs.; family at $13@14; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

TOBACCO.—Export trade is fair, and prices are strong and unchanged. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3¼
Good lugs	3½@ 4¼	3¾@ 4⅛
Low leaf	4½@ 5	5 @ 6
Medium leaf	5½@ 6¼	6½@ 7
Good leaf	6¼@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1877.

New England, fine, and selections	18	@35
seconds	10	@12
Fillers	5	@ 7
Pennsylvania assorted lots, common	8	@ 9
fair	10	@12
fine	14	@17
fillers	5½@	6
Ohio assorted lots	6½@	8

VEGETABLES.—Exports potatoes past week, 1,057 bbls. Prices are easy. L. I. and N. J., $1@1,37 bbl. Culls, 50@75c. Sweet corn, 50@75c. per 100. Green peas, bag, $1@$1.25. String beans, $1@$1.25. Cucumbers, 75c.@1 per 100. Tomatoes, $1@$1.25, bush. Norfolk, 65@75c. Onions, N. J., bbl., $1. Marrow squash, bbl., $1.50@$1.75; crook-necked, $1.; white, 75c.@$1. Radishes, per 100 bunches, 75c.; beets, do., $1@$1.25; carrots, do., $1. Egg plants, bbl., $4@$5. Lettuce, bbl., 50c. Cauliflower, $1.50@$2.50. Cabbages, Flat Dutch, $2.50@$3.50.

WOOL.—The demand has been very fair from manufacturers and prices generally firm and unchanged. Quotations are for domestic fleeces—

Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 36@38; X, 34@37; No. 1, 36@38c.; No. 2, 33@36c; common, 30@32c.; combing, 33@42c.

New York, Michigan, Indiana and Wisconsin, XX, 30@35c.; X, 30@35c.; No. 1, 34@37c.; No. 2, 30@33c. common, 27@30c.; combing, 36@40c.

Iowa, Vermont and Illinois—X and XX 30@33c.; No. 1, 33@35c.; No. 2, 28@30c.; combing, 35@38c.

Missouri, Kentucky, and Tennessee—Washed fleece, 33@35c.; unwashed, 20@26c.; unwashed combing, 28@32c.

LIVE STOCK MARKETS.

Saturday, July 27th, 1878.

BEEVES.—Receipts for the week, 11,213 head; do., last week, 11,316 do. Supplies still heavy for the season; few steers bring the extreme. Texas steers 7½c. pound to dress 55 pounds to gross cost; light Cherokee, 8c. some estimate; ordinary to strictly prime native steers, 8½@10¼c.; export grades quoted 9¾@10¼c. Shipments to Europe for the week, 1,850 live; 600 dressed.

COWS AND CALVES.—The sales have included fair to medium milkers at $30@50.

VEAL CALVES.—Receipts for the week, 3,107 head; do., last week, 3,621 do. Ordinary to good milk have sold well at fair prices, 5½@6¾ for good State and best N. J. Buttermilk 3@5½c.

SHEEP AND LAMBS.—Receipts for the week, 23,216 head; do. last week, 27,119 do. The market has ruled quite steady at 4@5½c. for sheep, the latter for selected wethers. Lambs, N. J., 6½@7c., the latter for fine 60 pounds average: other 5½@6½c.

SWINE.—Receipts for the week, 19,042 head; do. last week, 20,019 do. The supplies, as heretofore, have arrived chiefly to city killers. Nominal price of sale, hogs, $4.75@4.85 per 100 pounds.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

Single Copy, per Year	$2 50
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Five Copies or more, per Year	2 00
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Chappell, Geo. A.—Lead Pencils of the Best Quality
Dean, W. L.—Vassar College.
Ertel, Geo.—Economy Hay, Straw and Moss Press.
Gilmore, S. J. Farms and Free Homes in the West.
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Mother Superior—St. Mary's Academy.
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and wish to recover the same degree of health, strength, and energy as experienced in former years? Do any of the following symptoms or class of symptoms meet your diseased condition? Are you suffering from ill-health in any of its many and multifarious forms, consequent upon a lingering, nervous, chronic or functional disease? Do you feel nervous, debilitated, fretful, timid, and lack the power of will and action? Are you subject to loss of memory, have spells of fainting, fullness of blood in the head, feel listless, moping, unfit for business or pleasure, and subject to fits of melancholy? Are your kidneys, stomach, or blood, in a disordered condition? Do you suffer from rheumatism, neuralgia or aches and pains? Have you been indiscreet in early years and find yourself harassed with a multitude of gloomy symptoms? Are you timid, nervous, and forgetful, and your mind continually dwelling on the subject? Have you lost confidence in yourself and energy for business pursuits? Are you subject to any of the following symptoms: Restless nights, broken sleep, nightmare, dreams, palpitation of the heart, bashfulness, confusion of ideas, aversion to society, dizziness in the head, dimness of sight, pimples and blotches on the face and back, and other despondent symptoms? Thousands of young men, the middle-aged, and even the old, suffer from nervous and physical debility. Thousands of females, too, are broken down in health and spirits from disorders peculiar to their sex, and who, from false modesty or neglect prolong their sufferings. Why, then, further neglect a subject so productive of health and happiness when there is at hand a means of restoration?
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cure these various diseased conditions, after all other means fail, and we offer the most convincing testimony direct from the afflicted themselves, who have been restored to
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GEO. E. KING, President,
Office, 575 Broadway, New York.

Reading for the Young.

A POCKET-MONEY SUGGESTION.

THE inventor affirms that the artist has grasped his idea. We don't know what the artist thinks about it. He has not been seen in the editorial rooms since leaving the drawing. The inventor, however, claims for his invention: (1) amusement; (2) a quickly-selling article, and (3) æsthetic loveliness.

These figures may be said to be the fruit of the imagination, as the graceful forms owe their charm to raisins, dried apples, peaches, nuts, etc. The dorsal fin of those "queer fish" is made of a wire, and any boy or girl with an ounce of ingenuity can construct the figures. Their grotesque

appearance creates a market, and they can be made and sold at a price to pay for trouble of making, with a handsome profit added.

The inventor is a humane creature, with a great love for children and an abhorrence of wealth. Consequently he gives his idea to the RURAL cousins without price, reserving no right, and claiming nothing except their everlasting gratitude. He expects every household in the land to be adorned with this "object of bigotry and virtue," as Mrs. Malaprop would say, and as its manufacture will make an unusual demand on dried fruits, he will invest largely, control the market, and sell at an advance,—but he does not care to make anything, the toy is free!

We should like to hear who sells the greatest number of the little fruit men and women, and what is realized in pocket-money.

HOW POOR READERS ARE MANUFACTURED.

MAY MAPLE.

"Why are there so many poor readers?" is a question often asked. And yet but few, comparatively speaking, are able to give a satisfactory answer. But it is not, in my humble opinion, a difficult question to solve, though poor readers will long continue to weary the souls of their listeners before the nuisance will be banished. Of course, one's natural predilection has somewhat to do with good or bad reading.

But the fault lies principally in our common-school system. The constant changing of teachers every three, four or five months is enough to spoil the best natural reader in existence, even though each instructor was a clever elocutionist. Not one in five can lay claim to the merit.

One term brings a teacher with a strong nasal twang, and the next, one with a deep gutteral intonation. Another has the down-east Yankee drawl, uniting as many vowels in one syllable as possible; as, meauntain. This one runs vowels, consonants, syllables and words into one indistinguishable mass, without pauses or paragraphs, and his successor "clips" the words so much that one loses the meaning of the author—in trying to fill out the words with the proper sounds.

A clear and distinct articulation is entirely out of the programme when the instructor has neglected to cultivate his own voice, no matter how well he may drill his class in the rules of elocution. The child will imitate the tones he daily hears rather than follow any printed directions. All too soon, one hears the lisping, stammering teacher in the speech of the pupil. Such instructors do more harm to rising generations than can well be estimated.

Again the Jimmies and Harrys, Jennies and Matties are sent to school when five years of age. They are bright-eyed, rosy-cheeked, warm-hearted little home treasures; they have various capabilities, and if properly trained each would, in all probability, make a noble specimen of scholarship, and a good reader, if not the very best.

Miss A. has just entered the profession of teaching. She is anxious to please her patrons and to win a reputation as a successful instructor. She is pleased with the efforts of her pupils, and determines to push them forward in their studies, or rather in their books. The little ones are taught to know the *most* of the letters at sight, and are then put into sentences. Probably one out of six or eight in the class can master each simple sentence readily, and is thus able to make rapid advancement. The rest of the class are pushed along, taking the same lesson with this one (who chances, perhaps, to be exceptionally clever), stumbling and blundering, like people walking unfrequented paths in the night. Less and less do they understand of what they are trying to learn, as they rapidly approach the closing pages of the primer. The prodigy of the class has an aptitude for books that none of her mates possesses. She clings to her book as the bee to the honey-filled flower. It is seldom out of her hand, and never out of her mind. Of course, she makes rapid progress, and when she reads the last page, is ready, as far at least as pronouncing the words is concerned, to go into a higher book. But it will never do to "pass" that child above the rest of her class. There would be an appearance of injustice, and Miss A.'s patrons would have occasion to be offended. Her reputation as a successful teacher would be called in question, and that thought is not to be endured for a moment. So she sings the praises of her pupils, remarks upon their large capabilities and powers of learning easily; and when the little Mary has "her book by heart," new books for the whole class are ordered. The parents, thoughtlessly placing perfect confidence in the judgment of the teacher, get the required article without ever testing the ability of the children in the old book. And those pupils who cannot pronounce, at sight, the words of the most simple sentences in the primer, or even spell and pronounce the words, are put into the First Reader.

At the close of the term the children "speak their pieces," receive their rewards of merit from the teacher, and go home for vacation. The books are put upon the shelf, there to remain till the next term commences, two or three months later. Miss A. also receives her reward, financially, and goes her way.

Miss B., her successor, hears how rapidly the pupils, now under her (Miss B.'s) charge, learned at the last term, and determines not to be outdone; and so this little class of bright scholars are sent forward, but downward into the abyss of seeming stupidity, by having a Second and a Third Reader put into their hands all too soon.

If by chance Miss C. or Miss D. should have thoughtfulness and experience enough to see the utter folly of such proceedings, and so suggest the idea of returning the majority of the class to the Primer, she would at once be in disgrace with two-thirds of her patrons. Their children were just as smart and could learn "just as well as neighbor B.'s girl. No! they must read in the new books."

Alas! for them; their doom is sealed, as far as good reading is concerned. Six out of seven will go through life unable to read a single paragraph in a really intelligible manner. Amid so many difficulties, and with so little really good training, we do not wonder why there are so few superior readers, but are almost surprised that there are so many who render an article passably well.

Sabbath Reading.

OF THE MISCHIEF AND DANGER OF EXAGGERATIONS IN RELIGION.

E. M. G.

LORD BACON somewhere compares religion to the sun, which has two contrary effects upon live and dead substances. Live animal substances,—the living body of man, for example,—the sun invigorates, and cheers, and promotes the functions of life in them. But in dead animal substances the sun breeds worms, and turns them to corruption. Similarly, he says, religion invigorates a sound mind, and cheers a sound heart, while in a morbid mind it breeds noisome superstitions, and miserable scruples, and grotesque, and even monstrous fancies; the fault however not being in religion, but in the diseased mind, which is subjected to its influences. Such is the thought of the great philosopher, if these are not the very words in which he has expressed it.

We have only to survey the history of Christianity, to see how eminently just this comparison is. The Gospel, as taught by Our Lord and His Apostles, is holy, pure, divine, transparently clear, radiant alike with the glory of God and the happiness of man—of that there is no doubt; yet what twists has the mind of man contrived to give it, so that in some forms of Christianity you can hardly at all recognize the original draught, as it came from the Divine mind! What follies, fancies, superstitions, licentious doctrines, have founded themselves—not justly, of course, but with a most perverse ingenuity—upon the Scriptures of the Old and New Testament!

This has arisen, not from any fault or shortcoming in the Scriptures themselves (God forbid! His Word is, like Himself, perfect), but from a certain morbid tendency in the human mind to caricature truths presented to it. I believe we cannot express the tendency in question more exactly than by calling it a tendency to caricature. A caricature is the likeness of a person, in which the artist has caught some of the leading points of the countenance, but has so unduly exaggerated them as to make the whole likeness absurd and grotesque. There is always a point of resemblance in a caricature, or persons would not know for whom it was meant; but the point is excessively magnified and thrown out of all proportion to the other lineaments, or people would take it seriously, and it would cease to be a caricature, and become a portrait. Now it would be very interesting to consider every heresy which has hitherto arisen, and see how in each case it has been a caricature of some one point of Christian Truth,—an exaggeration by which the fair proportion of the Faith (of which St. Paul speaks in the Epistle to the Romans) has been distorted, and a single passage of Scripture or a single class of passages brought into undue prominence.

We will take one or more instances from those heresies which are better known. The truth upon which the Quaker founds his whole system, is that the New Dispensation is spiritual. No truth can well be more vital, more important, or more apt, through the subtle encroachments of formalism (a sin which is at all times waylaying us), to be dropt out of sight. It is quite necessary for all of us to turn round every now and then, and ask ourselves whether we are properly awake to it. That the law, under which Christians live, is the law, not of a written table, nor of a written book, but "the law of the Spirit of life in Christ Jesus," written on the fleshy table of the heart; that in place of a code prescribing or forbidding *actions*, our Legislator has given us a code of Beatitudes on certain states of heart and feeling; that in the Gospel morality what we do goes for comparatively little, and what we are—our motives and intentions—for every thing; that each movement of the heart is judged by Him who reads the heart; that God is a Spirit, and therefore to be worshiped in spirit and in truth, and that, accordingly, to approach Him with outward ceremonial, exclusive of the heart, is as much an impossibility in the nature of things, as to endow matter with the properties of mind, and make a stone work a mathematical problem; all this is not only true, but precious truth, of which we require to be reminded continually: and the Quakers would have deserved the warmest thanks of Christendom, if they had done nothing more than brought it forward prominently, and illustrated it strikingly. But, unhappily, having seized this one feature of the Truth as it is in Jesus, they caricatured it.

They proceeded on the theory of a spiritual dispensation to such an absurd extent, as to rob the Church of her Sacraments, the repositories and vehicles of that very inward spiritual grace, of which the Quakers themselves were the stoutest maintainers. "If religion is spiritual," they argued, "we must have nothing material about it; so, notwithstanding the Lord's words, 'Go ye, baptizing all nations,' and "Do this in remembrance of Me," we will banish from our meetings the water, the bread and the wine, and be baptized and communicate in the spirit only."

It has always been the opinion of pious and judicious divines in the Church, that because, even in the Sacraments, the inward spiritual grace is the chief matter, Christians shut out from communicating sacramentally (by illness or other necessity) may do so spiritually in their closets by uniting their prayers and intercessions with those which are passing in the Church; but the actual renunciation of the outward visible sign, as the Quakers have renounced it, would never have entered into the head of any one, unless his mind had been possessed with some one idea, and he had resolved to make the idea stand for the whole of Christianity.

We offer another and more recent instance of a very serious error, which we fear is fast assuming the proportions of a heresy. It is the delightful announcement of Holy Scripture—which should make every heart bound with joy,—and it may be said to be the very most fundamental truth of our religion, that "God is Love." His Love He has shown by a Sacrifice which must surely have wrung to the utmost His paternal heart, if a similar sacrifice would have proved to a mere human parent the most acutely painful of all trials,—the sacrifice of His dear Son, Who from all eternity had lain in His bosom. Certain divines of our own day have perceived this truth of God's Love clearly. They cannot proclaim it too loudly,—not if they had a hundred tongues, and the lungs of a Stentor. Down with all teaching, which by real logical inference contradicts this fundamental truth;—it must be false, unscriptural, mischievous.

That our God is a hard taskmaster, requiring of us services, which will not ultimately make for our own happiness; that austerities, as austerities, without any spiritual end, are pleasing to Him and propitiate his wrath (a notion utterly and simply heathen); that only the Second Person of the Blessed Trinity smiles upon us with a gracious welcome, and that the brow of the First is always contracted with a gloomy frown towards sinners:—let these sentiments by all means be demolished with axe and hammer, because they contradict God's own testimony respecting Himself. But to go the length of saying that anger is inconsistent with love, (an assertion which the analogy of parental affection surely enables us flatly to contradict,) or to go the further length of saying that justice is inconsistent with compassion, against all experience of human justice; (for ever what offender led out to execution, does not the heart of man relent at the last moment, while yet feeling the justice and necessity of the proceeding?) and to acknowledge no relations with God as a Judge, because He stands to us in the relation of a Father, this is a monstrous exaggeration, whereby the Faith once given to the saints is grievously caricatured, and its fair proportions marred. God loves me deeply, purely, intensely; longs to communicate himself to me;—that is indisputably true, and I may take to myself all the comfort of it without a moment's hesitation. But God hates my sin, detests it, brought Christ to a strict reckoning for it, and will never consent to save me from its guilt without saving me from the power of it too:—that is equally true, and I may take to myself all the warning of it, without a moment's hesitation.

These two instances are enough to show that very serious errors and heresies spring from not maintaining what St. Paul calls "the proportion of the faith,"—that is from giving to any one doctrine, however true and important, so great a prominence that it throws into the shade all others which counterbalance it.

And be it remembered that, where there is no formal or actual heresy, the one-sided tendency of the human mind is nevertheless operative in religious persons, and may lead to a vast amount of unsuspected mischief and error, which shall corrupt their religion, and breed in it many morbid and fanatical fancies. In many spiritual books, which in the main are excellent,—perhaps I may say in every spiritual book, more or less, which is not the Bible,—a strain is upon certain precepts of the Gospel, which not only caricatures them, and perhaps sets them at issue with other precepts resting on the same authority, but would have the effect of cramping into an unnatural state the mind which should strive after obedience to them. As nothing illustrates with the same effect as an example, I will give one; and, the better to exhibit the principle, it shall be in an extreme form. A Christian, who had attained a high degree of sanctity, and who died in the most acute suffering, which he bore with exemplary patience, gasped out to the spiritual adviser who attended him, the following words: "Dear friend, God has taught me a great secret, and I will tell it you, if you will put your head closer." His friend did as he desired, anxious to know what this saintly man considered as the crowning lesson of a life of holiness. "He has taught me," said the dying man, the lines of whose countenance were distorted by pain, "to ask nothing, and to refuse nothing."

Where has He forbidden us, under suffering, to cry for relief? Did Our Lord, or did He not, pray, "Father, if it be possible, let this cup pass from me?" If He did, God evidently had not taught His only-begotten Son to "ask for nothing." And His Son's Humanity was spotless in holiness,—He was clearly "void of sin, both in His flesh and in His spirit." Shall we, miserable sinners, presume with a frightful temerity to go further in conformity to the will of God than Jesus Himself went? Forbid it, Lord! We will go to Thee in our troubles with all simplicity, and make known to Thee our request for relief, in submission always to Thy Will; and having preferred our request, we will leave it there in our Father's hands, and account that we have thenceforth nothing more to do with it. But find a vent towards God for our burdened heart we will, because He Himself has opened such a vent when He says: "Ye people, pour out your hearts before Him."

Do you not see now how this holy man erred by exaggeration; how in his dying sentiment he caricatured the grace of resignation? Resignation no doubt is a heavenly and Christ-like grace; but if you will push it to any and every length, regardless of other precepts of God's Word, and even regardless of common sense, (a very valuable aid in religion), even resignation might become absolutely mischievous. Thus in countries where the weather is sultry, and the people constitutionally indolent, one might conceive a beggar continuing in mendicancy, and doing nothing to raise himself above it, or to improve his condition, on the plea that such was the Will of God, and that mendicancy was the state of life to which he had been called. Resignation is the only precept which such an one recognizes; and he has forgotten that in another corner of God's Word, there is a certain maxim, less chivalrous perhaps than resignation, but equally deserving his attention,—that "any man that would not work, neither should he eat." This, of course, is another extreme case. I only adduce it, because it illustrates the fault which we are at present exposing and censuring.

Be it remembered, in pursuing the train of thought which we have thus opened up, that in the lives of the early *Spiritual* saints, who, next to Our Blessed Lord, are our great models, nothing is so remarkable as their perfect naturalness, and freedom from all affected or overstrained spirituality. The great Apostle of the Gentiles, whose name and fame are in all the Churches, immediately after a miraculous escape from shipwreck, bestirs himself to gather a bundle of sticks, and puts them on the fire (for St. Paul was not above feeling cold and wet); and when writing under the afflatus of the Holy Ghost, he bids Timothy bring the cloak which he left at Troas with Carpus, in anticipation of an approaching winter, "and the books, but especially the parchments;" for what studious man—and every minister of Christ must be studious, if his ministry is to be effective—can bear to be without his books and papers? These particulars have seemed to some too frivolous for Inspiration, but they show that Inspiration did not destroy the perfect simplicity and naturalness of those who were the subjects of it.

Among the early disciples you would have seen nothing overcharged in character or manner; nay, you would have seen little foibles, (not that these are to be imitated,) of temper, of superstition, of prejudice;—you might have heard sharp words passing between great Apostles, and a rupture taking place in consequence; you might have heard even St. Peter roundly and publicly reproved for clinging to a prejudice; and you might have seen a damsel, recently engaged with others in prayer which received a miraculous answer, in such a joyful trepidation of nerves when the answer arrived, that she opened not the gate for gladness, but ran in and told "how Peter stood before the gate." Most of us would thankfully acquiesce in being as saintly as the primitive Christians; and surely it is a lesson for us that there is in their sanctity so little over-studied so little walking on stilts, so little of the forced unnatural attitude, into which modern books of devotion sometimes try to cramp the mind. In ancient piety there was not a particle of asceticism or of Puritanism,—which two things I mention together, because they are the Roman and Protestant sides of the same fault

How, then shall the devout man keep his mind free from exaggeration both in doctrine and practice; and hold in check its natural one-sidedness? An impartial study of the whole of Scripture is the corrective. Read with real openness of mind, quite willing to renounce any such preconceived views as do not square with the great Canon of Truth. Of set purpose study, and give their fair weight to, those doctrines or practices, to which your mind is not naturally drawn. Pray for the Bereans' nobleness of the mind, in that they brought even the doctrine of Apostles to the test of Inspiration, and searched the Scriptures daily, whether these things were so. How much more, when men are not Apostles, but simply possessors of the mind of Christ, must their doctrine be thus searched and sifted! Much irreverent nonsense has been talked of late about a verifying faculty, but, (God be praised!) we have some more certain criterion of Truth in a verifying Book. It is true that there is no error whatever, which may not be bolstered up by an appeal to some part of the Holy Scriptures. Atheism itself, it has been well said, may be proved from the Bible, by leaving out the words, "The fool hath said in his heart." But when applied impartially, without favor or prejudice, and in full view of the passages on the other side, Holy Scripture is a thoroughly safe and sound criterion. Do not merely read it, but imbue your minds with it. Do not merely quote it, (a very easy and somewhat poor attainment,) but frame your religious sentiments upon it, and then you shall bear a charmed life against error, and heresy, and all manner of morbid fancies and fanaticisms.

PERSONAL ITEMS.

President MacMahon's official salary is $200,000 a year; that of Louis Napoleon was $6,000,000.

Mr. Charles Reade is a tall, slender, fine-looking man, with gray hair and moustache, a broad forehead, and a peculiar dilating blue eye.

Secretary Evarts has gone to his country seat at Windsor, Vermont. He will be absent from Washington during the month of August.

Mrs. Mary A. Livermore is a thrifty woman. It is said that she realizes $18,000 a year from her lectures, which are all prepared with the greatest care.

Mr. Layard, British Minister at Constantinople, has become Sir Henry Layard, G. C. B. He is of Hugenot descent, and first was known to fame by discovering the Ninevah bulls. His intimacy with the East dates as far back as 1839, when he was only 22.

There is no truth in the statement that has lately been going tho rounds, to the effect that Jenny Lind is poor. She is worth at least $2,000,000, half of which was made in America. Her husband, Mr. Goldschmidt, invested it so successfully that it has largely increased.

The richest heiress in America is said to be Miss Celeste Winans, daughter of the late Mr. Thomas Winans, of Baltimore. The young lady is but twenty years of age, and is, as she was before she received the fortune of $20,000,000 inherited from her father, a very handsome girl.

Dr. Helmbold, of buchu fame, has just failed in an effort to supersede the commission in lunacy, which for some time has directed his affairs. The Philadelphia court, before which the application was made, in denying the petition, decides that Helmbold is a lunatic with lucid intervals.

Physicians to the Emperor William ascribe his Majesty's relatively slow progress towards recovery to the great loss of blood and appetite, to the shock to his system and to mental depression. His power of locomotion is small. His hands are helpless and he can only eat with assistance.

It is said of Prince Bismarck that in his youth he never parted with a manuscript without carefully revising it; and once, when rallied on his caution, rejoined: "It is no credit to be right where it would be inexcusable to be wrong." Would that all would carefully revise their manuscripts, before puzzling or exasperating others with them!

There is a kinship in royalty which blossoms out on occasions of grief. Queen Victoria's telegram of condolence to the King of Spain on the death of his young wife, was as follows:—"Dear Brother, my heart bleeds for you. What an awful misfortune it has pleased God to send you! May He give you strength to bear this terrible loss."

Mr. Bryant was probably the wealthiest poet this country has produced, and, with perhaps the exceptions of Samuel Rogers and Lord Byron, the wealthiest, or among the wealthiest, of the Old World. His estate is said to be worth $500,00. Newspaper writing, and still more judicious investment, however, added much more to his riches than ever his poetry did.

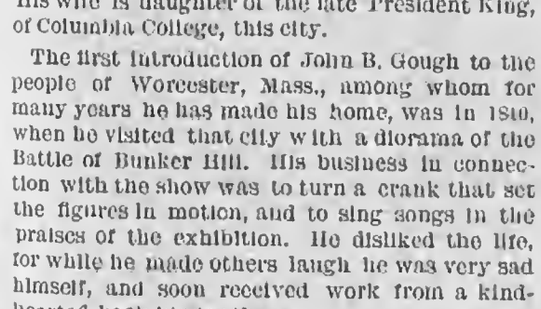
The town of Elton, Durham County, England, puts in a claim to having the oldest woman in the world as one of its citizens. Her name is Mary Benton, and though alleged to have been born February 12, 1731, and therefore to be in her 148th year, still she is in possession of all her faculties, perfect memory, hearing and eyesight. She cooks, washes and irons, threads her own needle and sews without spectacles.

A Paris letter-writer says that no American lady leads so brilliant a life as Madame Waddington, the wife of the French Minister of Foreign Affairs. A strange combination of nationalities this family presents. He is of naturalized British parents, was educated under Arnold at Rugby, and rowed in the Trinity eight at Cambridge. His wife is daughter of the late President King, of Columbia College, this city.

The first introduction of John B. Gough to the people of Worcester, Mass., among whom for many years he has made his home, was in 1840, when he visited that city with a diorama of the Battle of Bunker Hill. His business in connection with the show was to turn a crank that set the figures in motion, and to sing songs in the praises of the exhibition. He disliked the life, for while he made others laugh he was very sad himself, and soon received work from a kind-hearted book-binder there.

While few English Prime Ministers have been very rich, some have been conspicuously impecunious. Pitt never married, and declared that he couldn't afford it, and Canning and Disraeli were bolstered up by wealthy wives. The late Lord Derby and Sir Robert Peel are the only instances of very wealthy Prime Ministers, though Lord Melbourne was very well off. Lord Palmerston only become so, late in life, through a rise in mineral property. His wife, too, succeeded to her brother Lord Melbourne's estates.

Stock and Poultry.



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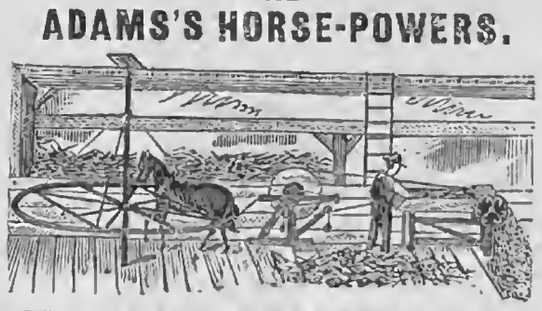

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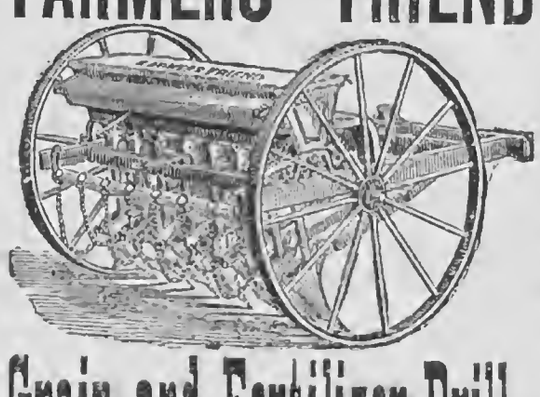

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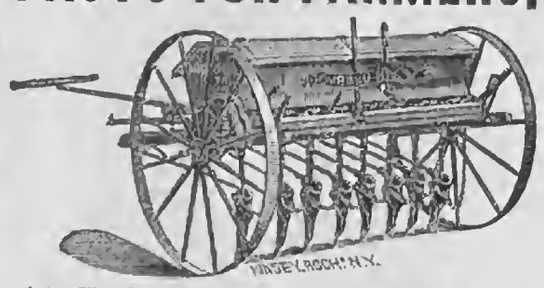

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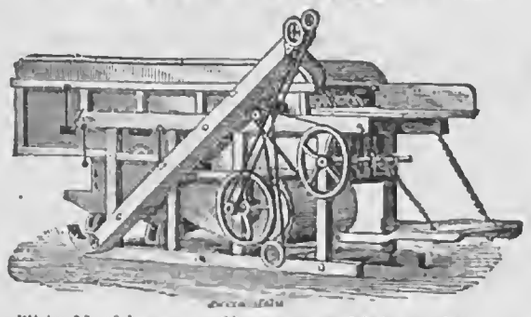

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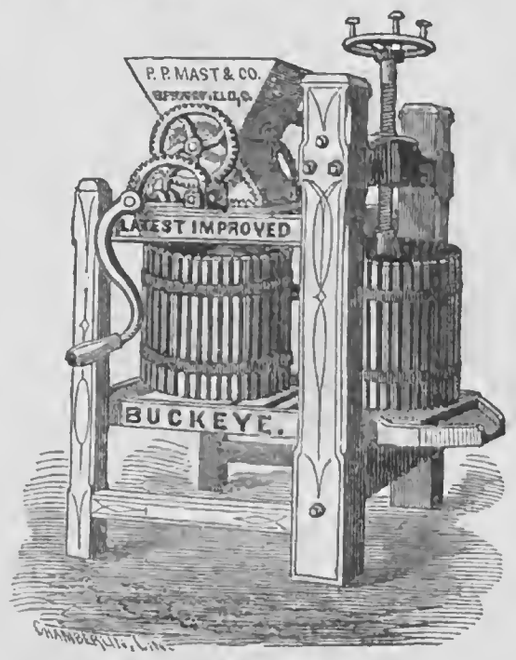

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HE had brought her the very things she wanted from the supper table to her safe retreat on the stairs, and she was moved to say, half langhingly, "You are a man after my own heart, Mr. B——." "Just what I am after," he answered, quick as a flash, covering her with confusion

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A LECTURER on natural history was called upon the other day to pay for a live rabbit which he had in a basket in a railway car, and which the conductor said would be charged the same as a dog. The lecturer vainly explained that he was going to use the rabbit in illustration of a lecture he was about to give in another town, and, indignantly taking a small live tortoise from his pocket, said, "you'll be telling me next that this is a dog, and that I must pay for it also." The conductor went for superior orders, and, on his return delivered this lecture on natural history: "Cats is dogs, rabbits is dogs, but a tortus is a hinsect." The professor had to pay dog fare for the rabbit.

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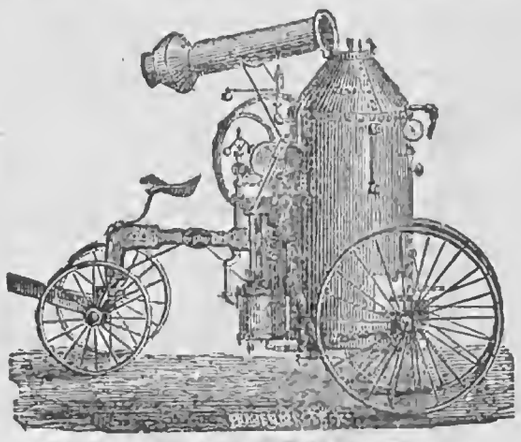

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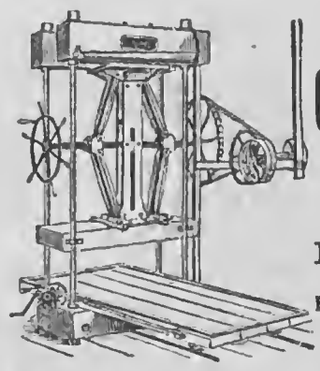

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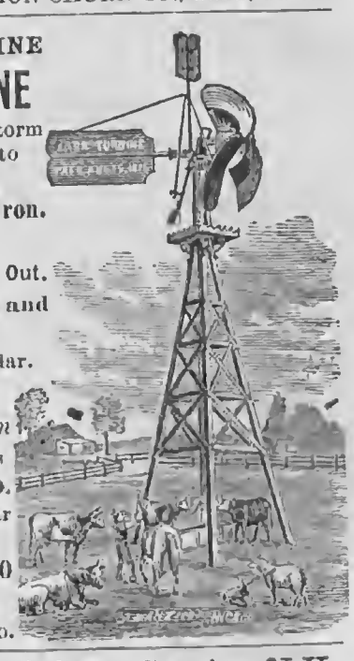

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VOL. XXXVII. No. 32.
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NEW YORK CITY, AUG. 10, 1878.

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The Naturalist.

THE PORCUPINE.

The small family of porcupines is divided by naturalists into four genera—the Porcupines proper; the Prehensible Porcupines; the Aulacodes, and the Mexican Porcupines; and of the first genus there are several species, named either from some peculiarity in their conformation or from their habitat.

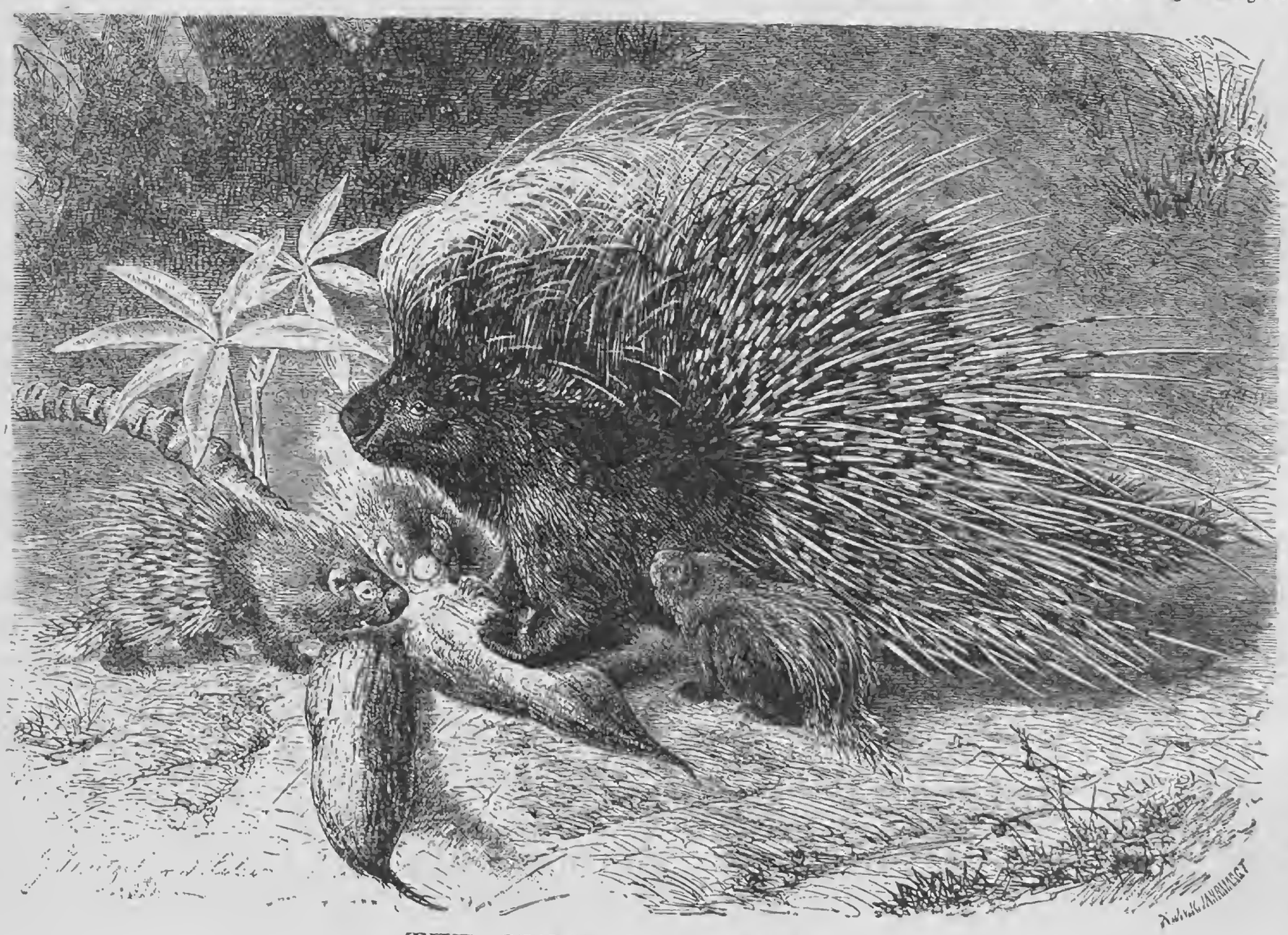
Of these the most widely diffused is the Crested Porcupine which is found in Italy, Greece and Spain, in Europe, as well as in Northern Africa and in many parts of Asia, especially in Hindoostan. It is the largest of the Rodents, its total length being about three feet six inches, and from this fact together with its wide dispersion, and marked characteristics, it deserves to be considered the legitimate representative of the whole genus. The spines or quills of the porcupine, the possession of which has won for the animal a widespread celebrity through the ages, under ordinary circumstances lie close down on its body; and one seeing them in this position would hardly suppose that at a moment's notice they could be transformed into formidable weapons of offense or defense. But let anger or fear seize upon the animal, and instantly a whole forest of bayonets bristles up on all sides. These vary considerably in length from five to twelve inches, the longest being flexible and incapable therefore of inflicting much injury on an opponent. Beneath these, however, is an abundant supply of shorter spines which are the really dangerous weapons in this bristling armory. Among the myths of former days was a generally believed story that the porcupine could hurl its pointed spears at an enemy with fatal precision, but although recent investigation has shown this report to be fabulous, yet these sharp quills are weapons not to be despised by any animal that may venture to attack their possessor.

Their hold on the skin is very slight, so that when struck into a foe they remain fixed in the wound, and, unless immediately removed, work sad misery to the sufferer. For the barbed quill is so constructed that it gradually bores its way into the flesh, burrowing deeper at every movement, and not unfrequently causing death even to so powerful a beast as the leopard or tiger. Conscious of its power, the porcupine is not an aggressive animal, and seldom if ever makes an unprovoked attack. If irritated or wounded, its bristles are spread widely abroad, and with its head between its fore-paws, at the same time uttering a hollow grunting noise, it rapidly backs against its assailant. There are few animals that have once come in contact with the spears of the fretful porcupine, willing to face them a second time, and even the preliminary rustle of the hollow tail quills, with which the creature generally prepares for each attack, is quite sufficient to make most animals flee in terror.

The porcupine is shy, solitary and nocturnal in its habits, seldom venturing before sunset from the deep burrow which it excavates with many entrances, in some unfrequented spot. Its food, which it seeks at night, is entirely of a vegetable nature, consisting of herbs, bark, fruit and roots. In winter it undergoes a partial hibernation. The female brings forth once a year three or four young which from their birth are covered with quills. It is said not to require water, as its thirst is amply satisfied by eating succulent fruit and roots. Its incisor teeth are so strong as to easily cut through the hardest wood as if it were butter; while its nose is so tender that the animal is instantly stunned by a slight blow on that organ. Its spines are encircled with alternate rings of black and white, producing a fine contrast of color. The muzzle is furnished with long and strong whiskers; the head and neck are crested with long stiff hairs which can be erected or depressed at pleasure. Its gait is slow, clumsy and plantigrade, and as it walks, its quills shake and rattle, while if suddenly surprised it coils itself up in a ball, like a hedgehog, and presents an array of threatening spikes which renders it safe from the attacks of all animals except man. Its flesh is not unpalatable, resembling pork somewhat in flavor; and it is doubtless this similarity, together with its grunting, to which it owes its name of Porcupine.

The best known member of the genus, however, in the northern part of this continent, is the Urson, Chawquaw, or Canadian Porcupine. This is a native of North America, where it is a destructive enemy of the trees among which alone it is found. It is seldom met with south of the 46 parallel; but north of that line it is a frequent inhabitant of pine woods whose living bark forms its principal food. Its custom is to ascend to the top of a tree, commence at the highest branches and eat its way downwards. Having peeled one tree, it takes to another, and then to a third, always selecting those that run in a line; so that its path through the woods may be readily traced by the row of barked and dying trees it leaves behind it. A single Urson has been known to destroy a hundred trees in one winter, while another is recorded to have killed a couple of acres of timber.

It is tolerably quiet; easily tamed, but subject to sudden fits of alarm at any strange object. When attacked, it draws its legs under its body, shoots out its quills, lashes around vigorously with its bristling tail, and woe to the foe that encounters its sweep.



THE CRESTED PORCUPINE.

THE RED-WINGED STARLING.

The Red-winged Starling, commonly known by the name of Blackbird, is widely met with from Labrador to Mexico. It is both a friend and an enemy of the farmer; but while its friendship is unobtrusive, its enmity is very flagrant. Assembling in vast numbers the descending swarms blacken the green fields with their presence and obscure the sun with their multitudinous wings. With them the soft immature grain of Indian corn is a favorite food. Swooping on the green stalks, their strong bills readily tear away the enveloping husks till little remains but the bare cob and the shriveled skins of the grain. From dawn to dusk the open devastation is carried on, and despite the utmost display of armed watchfulness by the farmer and his juvenile help, a goodly tithe of his crop falls a prey to these ubiquitous, black-coated pilferers.

They are the Ishmaelites of the country-side, for every man's hand is against them. Not an adult who owns a gun but blazes away ruthlessly at them, not an urchin able to fling a stone but hurls it hopefully at the sable flocks; while even the hawks that throng from afar to make havoc among them, cease for a moment to be regarded as the foes of the poultry-yard and the butts of its owner. After their day's pillaging, at night they are in the habit of resting among the profuse reeds growing in swampy and low-lying places. Then, not unfrequently, vast numbers of them fall victims, during the hours of darkness, to the wrath of those whose fields they have plundered; to the love of destruction inherent in human nature; and to the partiality for game not unknown to the human appetite. While wrapt in slumber, their roosting-places are stealthily invaded, the dry reeds set on fire, and as the startled birds dart wildly about, those that escape the smoke and the flames, generally fall victims to the ready sticks or guns of their excited assailants. A single night often witnesses the destruction of thousands of birds in this way; and as their flesh is quite edible, though not remarkably savory, many of their destroyers return to the scene next morning to pick up the game.

In this world of ours it is the rule that injuries are punished far oftener than benefits are rewarded, and so it is always with these Starlings. Constant enmity and frequent death follow them for their depredations; while but scanty thanks are ever felt for the good they do. Yet this is by no means small. During early spring they feed almost exclusively on insects, showing a benificent preference for those that in the larval state are devouring the young leaves of growing crops. As their own existence as well as that of their young depends on their obtaining a liberal supply of these, they hunt them with very praiseworthy perseverance. Whether the grub be deeply buried in the earth eating away the root of some doomed plant; whether it be concealed amid the thick foliage which it is consuming; or whether it be tunneling a passage into the living trunk of a tree, the Red-wing Starling detects its presence and drags it from its hiding-place. From numerous dissections, Wilson, the celebrated ornithologist, calculated that each bird eats at least fifty larvæ every day, and probably very many more, and that all the Starlings of this kind in the country destroy sixteen thousand million noxious insects during the season, even if they do not touch a single insect after their young are able to shift for themselves. In the North the birds are migratory, but in the South some of them remain the year round. There they are accordingly very numerous in winter, and collect in immense flocks on the rice and cornfields, where their ravages are even more disastrous than at the North. The males measure nine inches in length, are of a beautiful glossy black color, with scarlet shoulders. The females are

only a little over seven inches long; are a brownish black above, mottled with brown or white. Over each eye are two cream-colored stripes, while the lower surface is of a whitish cream-color, streaked and spotted with black. They pair about the middle of April, and build their nests generally a fortnight later, usually in marshy places, close to the earth or on the bare ground. The nest is generally composed of rushes and long grass, and lined with some soft material. In it are commonly laid five eggs, pale blue, slightly tinged with purple and marked with lines and spots of black. The young male and female birds are alike, but soon the plumage of the former begins to show the distinguishing reddish markings on the shoulders. When captured young the birds soon accommodate themselves to the situation; grow quite familiar with their owners, are fond of uttering their somewhat monotonous but not unmusical notes, and seem to be highly delighted with their performance.

Farm Topics.

MR. MECHI'S STATEMENT TO HIS VISITORS.

July 10th, 1878.

[This statement with which Mr. J. J. Mechi of Tiptree-Hall Farm, England, favors us, was received just too late for last week's issue.—Eds.]

Once more I am gratified to see around me a band of agricultural improvers, and of men interested in land. As this will probably be my last agricultural gathering (for I was 76 last May,) I make the following statement:—

My object in commencing and continuing these gatherings has ever been to stimulate to an improved agricultural practice, knowing, as I do, that the land of this kingdom, taken as a whole, is not half farmed, and that our home-grown food could be considerably and profitably increased by an additional investment of both landowners' and tenants' capital. Facts justify this conclusion, for, while in some well-farmed districts tenants' capital is £20 or more per acre, and the landowners' improvements have involved great costs, the average tenants' capital of Great Britain is estimated at, or under, only £6 per acre, and in Ireland at £1 less. The landowners' capital is probably £30 per acre. In consequence there is a low scale of production and profit, and a dependence on foreigners for more than half our daily bread, and much of our meat, butter, cheese, potatoes, &c.

There is not the excuse of want of capital, for it is in excess of our home utilization of it, so we loan it to other nations, to the extent of several hundred millions sterling, and thus enable them to grow food for us, and to compete with us in trade, commerce, and manufactures. An improvement of our land laws and a commercial practice applied to agriculture would tempt capital, and keep more of our money at home; but British agriculture is still shackled and fettered by antiquated land laws and restrictive covenants. Its feudal conditions still linger and struggle for existence in the midst and presence of a free, gigantic and wealthy commercial development, where millions change hands in minutes and hours, in printed slips of paper, such as bills of lading, commercial bills of exchange, &c.; while an acre of cold clay, worth £30 or £40, has a ceremonial of musty parchment and antique history, involving an unendurable delay of cost, time, and uncertainty.

In commerce, possession by a respectable person is an evidence of ownership. If you want to buy or sell a million of consols, you walk up to a comfortable old gentleman at a desk in the Bank of England, you are accompanied and identified by a known stockbroker, the buyer and seller sign their names in a book, and the million has changed owners. It is a disgrace that we have not public land register offices for cheap and ready transfer.

In 1841 I purchased Tiptree-Hall Farm (all freehold, except 17 acres) for £25 per acre. It has been since valued by eminent and opposing valuers at £50 per acre; and I believe that, even without the house and gardens, it would command nearly that sum. It is a notable and encouraging fact that in 1868 (a good wheat year) I sold the wheat crop off Willow Field, with its straw, at £29 4s. per acre, being £4 4s. more per acre than I paid for the purchase of the land. The wheat was sold for 63s. per qr. The following year I grew on the same field 7½ qr. of Rivett wheat per acre.

I have resided on the farm for 35 years, and all my children were born here; and, thanks to drainage and open fields, with pure air and good water, our doctor's bill has been at a minimum. My first act of improvement was to remove all fences and trees, drain every field, then deeply subsoil and well manure the land. Good roads were made, and sufficient buildings were erected.

I am pleased to be able to say that my endeavor to improve the general practice in agriculture has not been entirely unsuccessful—at all events, in this neighborhood, for great changes have taken place. The country has been cleared, land drained, new buildings erected, including especially covered yards. Within sight of my house my neighbor, Mr. Harvey, who is with us to-day, has recently erected some very excellent ones at a cost of many hundred pounds, and he finds it pay, and is prepared to say so.

When I first came here labor was in great excess and small demand. Now the reverse is the case. Wretched hovels are being superseded by decent cottages, and, in fact, all round here we are on the "improved track." Church, chapel and school accommodations have marched with the rest, and we are a changed, and, I believe, improved people. So much for once poor Tiptree.

THE GREAT AGRICULTURAL QUESTION OF THE DAY

is how can we so profitably improve our general agriculture (especially our large area of inferior waste land), so as to enable us to withstand the competition of fertile and foreign countries, where, as in the United States, India, and other colonies, immense areas of virgin soil can be had at a nominal cost, and with a more favorable climate than ours? My 35 years' experience on this farm, which is naturally a poor one, is that it can only be done by improvements, effected jointly by the action of land-owners and tenants—and by the abandonment of certain unprofitable, antiquated practices and conditions. All this means a larger arcable capital, both by land-owner and tenant.

We thought we were safe in the matter of meat, but that comforting illusion is being rapidly dispelled, for mighty steam has so bridged the wide ocean, that, aided by chemical science, foreign meat, alive and dead, may be said to walk into our markets side by side with our own supplies.

This is a land-owner's quite as much as a tenant's question, for non-profit must result in low rents.

Agricultural improvements will evidently fail to keep pace with our rapidly increasing population. Obsolete customs and habits are difficult to eradicate. Some idea of the capital required to amend our 47,000,000 of mixed acres may be deduced from the fact that only 1s. per acre amounts to £2,360,000. My improvements cost nearly £25 per acre. His Grace, the Duke of Sutherland (whose representative, Mr. Wright, we have the pleasure to see here), is expending £25,000 annually in reclaiming 1000 acres of his Scotch property, which represents 1,260,000 acres. Its present rental averages about 1s. per acre. Its future, or improved rent, will, no doubt, be 25 times that amount. On our 47,000,000 of farmed acres, £25 per acre would amount to the enormous sum of £1,175,000,000 added to the first cost of the land, so that there need be no hope or fear of our arriving quickly at the end of agricultural progress.

MEMORANDUM.

I take this opportunity of laying before you my views on several important agricultural questions, and I also add an account of my cropping, which is similar to that of other years:—

CROPS AT TIPTREE-HALL FARM—1878.

13	acres of	Taunton Dean wheat.
7	"	Golden Drop wheat.
	"	Club-headed Rough Chaff wheat.
	"	Square-headed wheat (apparently a cross between the old White Chaff Red and Piper's Thick-Set).
9¼	"	Suffolk Red wheat.
~~2¼~~	"	Rivett wheat (taken as usual after ordinary wheat).
6	"	Giant White wheat.
12½	"	Barley (taken as usual after wheat).
6½	"	Black oats (after a green and root crop in 1877).
17½	"	Blue peas.
7½	"	White peas.
4	"	Champion peas.
5	"	mangel.
2	"	kohl rabi.
4	"	cabbage.
3½	"	winter tares.
13	"	Red clover (for hay).
8	"	Italian rye-grass (1st year).
6½	"	Italian rye-grass (2d year).
6	"	permanent pasture for hay.

LIVE STOCK.

19	fattening cattle.
1	cow.
231	sheep (we breed them).
7	working farm horses, several of them very old servants, and must soon go.

AGRICULTURAL COMPETITION.

Although the reduction of rent is a gain, it is not that only which will save a farmer. There is a severe and, I fear, fatal competition going on and increasing between the ancient and modern farmer. The latter, with larger means and with all the mechanical and manurial aids of recent times, can and does produce his crops at a much smaller percentage of cost than his ancient competitor who may be deficient in these advantages. Landowners should consider this, and, by doing their share of progress, stimulate the adoption of a new and improved practice. Covered yards, drains, and steam in the field and at the homestead, deeper cultivation, the horse hoe, reapers and mowers, open fields, and suitable accommodation for abundant meat-making, are all elements in diminution of cost per bushel of grain, or pound of meat. So are the cutting up of straw and green crops, and the pulping of roots. The use of iron hurdles on wheels, and sewage irrigation where possible, pays.

PASTURE OR ARABLE.

I have been a good deal snubbed for strongly recommending the abolition of poor permanent pasture, and my critics, who farm their grass-land well, are rather hard on me, not observing the words "poor" or poorly-farmed pasture, where the practice is too common of feeding the sheep on pasture by day and folding them on the arable land at night—robbing Peter to pay Paul, or removing money from one pocket to another without gain or increase. The consequence is an exhaustion of manurial element, and a growth of weeds or inferior plants, which can exist where the better grasses have died out.

My plan of making grass pay is to fold sheep on it, and bring to the fold plenty of cake, corn, malt, culms, or other food. Where this is done, and the climate is suitable, grass-land often pays better than arable, because there is a minimum of horse and manual labor, and a saving of seeds and expensive implements and machinery. But now the statistics show a miserable estimate of hay cut—as only 18 cwt. per acre, and no doubt much of it poor in quality, for we have tall grass and hay made from it, which has little value for feeding purposes.

Bad farmers are safe and free from restrictions; they must not sell their hay, but they may sell the essence of it in the shape of milk, cheese, and lean stock, without the purchase of artificial food or manures, and they thus exhaust the soil.

DIFFICULT FARMS TO LET.

I could name a district in Essex where not a farm is to let, and where there would be many applicants for a vacant one. Around and near this district is an extensive area of dense clay farms, for which tenants can be only now obtained by a very considerable reduction of rent and other favorable conditions, such as a year's rent free, freedom of action, and perhaps only 10s. or 12s. per acre rent. In warm, dry seasons, when the land cracks widely, these lands produce abundant grain, mangel and clover; but in wet seasons they are unfruitful, and are always costly to work, requiring very powerful and expensive horses. Too many of these farms are undrained, and even when drained, woe betide the stranger who imagines that deep, open furrows and water furrows are unnecessary.

The most successful farmers of these lands are those who, immediately after harvest, plow out their furrows and water-furrows, so that when the winter rains come, the water may find a ready escape, instead of soaking the clay into dense mud. The plowed land, or seed-bed, is thus kept in a somewhat friable condition, and the horses can walk in the furrows, instead of plunging into deep mud.

Sheep cannot be kept on these lands in winter, hence their unacceptability. Covered yards and steam plows owned by the farmer are the best modifiers, for an opportunity lost is irrecoverable. The farmer must use his steam plow exactly at the right time—the happy opportunity.

STEAM PLOWING COMPANIES

are, I fear, too often unprofitable both to owners and farmers, and the causes appear to me very obvious, especially in a stiff clay or undrained district; for, during wet weather, they are unavailable on the muddy adhesive soil. When a farmer has his own steam plow he can choose his opportunity, and when not in use, the engine which works it, and the attendant, can be otherwise employed on the farm, but in the case of hired engines the drivers must be paid, work or no work. And as a result, the price charged to the farmer is much more than if he used his own tackle.

The removal to and from distant farms involves a heavy cost for fuel, wages, wear and tear, all which culminate in a far too heavy charge for the farmer's profit. It appears to me, clearly, that the farmer should be able to use his own tackle just when he finds it most profitable or convenient to do so. He can thus plow, cultivate, harrow, or roll, just in the way or to the depth that he chooses as most suitable, and, in my opinion, at half the cost of hired work. His engines and driver will be employed mostly at other work, and he has merely to incur the interest of money on the tackle when not in use.—J. J. Mechi.

The following is taken from an account of the visit to Mr. Mechi, published in the London Times, the next day:

"Tiptree-Hall Farm.—A party of Gentlemen interested in Agriculture, including Mr. Read, M.P., Sir T. Acland, M.P., Mr. Morley, M.P., and Mr. Pell, M.P., visited Mr. Mechi yesterday at Tiptree Hall. The London contingent left Liverpool-street station at 11 o'clock, and at Kelvedon station they found vehicles waiting, in which they were conveyed, through pleasant country roads, to Tiptree-hall Farm. Many of the neighboring agriculturists were already on the ground, and the whole party was welcomed with characteristic cordiality by Mr. Mechi. The leading features of Mr. Mechi's farming are well known. As he himself says, 35 years ago, when he purchased Tiptree-hall farm, he was considered a revolutionist. He was a leveller in a double sense. He not only disregarded the old notions as to drainage, but he cut down all the trees, removed the cumbrous and weed-producing fences, put in their place light iron hurdles on wheels, applied manure lavishly, made good roads, and erected strange-looking buildings, some of which now, owing to the general application of steam to the work of the farm, resemble more a manufactory in Lancashire than a farmstead in Essex. The visitors first examined the live stock, and it was made sufficiently clear that Mr. Mechi's system had not injuriously affected his interests as a breeder and feeder. The grain crops were in fine condition, though in two places deficiencies in the barley were observable. Compared with wheat seen before Tiptree-hall farm was reached, Mr. Mechi's was luxuriant; and when it is remembered that his land is naturally poor, the contrast was even, it may be said, remarkable. Of the complete nature of the change which has passed over Mr. Mechi's farm, perhaps it's only necessary to mention that whereas in 1841 he purchased the land, nearly all freehold, for £25 an acre, it has been since valued at £50 an acre. But at what outlay was this change brought about? Mr. Mechi says his improvements cost nearly £25 per acre. His improvements are not all, however, sunk in the soil. His interested visitors noted the covered yards, the steam machinery in the field and at the homestead, the suitable accommodation for meat making, the iron hurdles on wheels, and sewage irrigation. Deep cultivation, drains, and sewage irrigation have effected much at Tiptree-hall farm; but energetic application of all the scientific improvements connected with husbandry has helped in at least an equal proportion."

DAIRYING AND GRAIN RAISING.

E. W. STEWART.

The temptation during the first fifty years of the settlement of all our States has been to raise constant crops of grain, and, making no use of the straw for feeding, it has been burned to get it out of the way. If the straw were evenly distributed over the field on which it grew and burned, it would return a large proportion of the mineral constituents removed in the grain crop, but this is never done except when the header is used. It is necessary that some compensation should be provided for this great draft upon the fertility of the soil. The only permanent compensation to the soil for the losses in crops is in stock feeding. Every country that has held a respectable position in agriculture has done it by feeding stock to its full capacity. England has doubled her wheat production during the last fifty years, and has also doubled her stock feeding. She has besides shown her wisdom in using immense quantities of bones and guano.

This country is fast becoming the grain producer for a large part of Europe, and is no doubt destined to greatly increase this surplus of breadstuffs; and is it not high time that our farmers had entered upon the practice of a settled system of compensation for their depletion of the soil by cropping? Our dairy products are finding new and wider markets, year by year, and I believe are yet destined to reach as high figures as in meat exports. Dairying is admirably adapted to be the complement of grain raising. Its product is marketable at all times of the year. The returns may be had from month to month, or even weekly, and this assists the farmer in paying expenses between the annual crops. The cow gives a better return for the food consumed than the steer—that is, her product brings a much larger sum than the growth of the steer. The average cow produces about 4,000 lbs. of milk, which will make 400 lbs. of cheese, or 180 lbs. of butter. This cheese will bring during any series of ten years, at least $40, and the butter $45 to $50, whilst the growth of an ordinary steer will not reach more than half these sums. The best cows, as also the best steers, will just about double these figures, but there is generally a large balance in favor of the cow over the steer; besides the return for steers only comes once in two and one-half to four years. I advocate the propriety of keeping only the best cows and the best steers, for the profit must be very small on the poorer classes of stock, kept for any purpose; but our comparison is drawn between the averages of such as are generally kept.

Grain raising produces a large amount of straw, which, by a little study of the combination of foods, will enable the farmer to carry his cows through the winter. A little grain mixed with straw will give a proper balance of constituents. The grain farm may have plenty of land near the barn in condition to raise those annual summer green crops adapted to feeding milch cows. These are winter rye for early spring soiling or pasturing—rye makes good pasturage—oats, oats and peas; vetches and oats; Hungarian grass, millet and Indian corn. The oat and pea crop (one of oats to two of peas) makes one of the most desirable combinations of food for the production of milk. It should be cut when the pea is in blossom. Hungarian grass on a light and fine soil produces a large growth of excellent food for feeding green, or even for pasturing, if not fed too close, and also makes excellent hay if cut and cured before blossom. It becomes too woody if allowed to ripen. The same may be said of millet. But for profitable stock feeding or dairying, much reliance should be placed upon clover, both for pasture and winter feeding. Clover fed with straw in winter—an equal weight of each—makes a well-balanced food. Grain land should have clover every third year in the rotation. The clover penetrates deeply and brings up the dormant fertility of the subsoil. The roots ramify so extensively and furnish such a body of vegetable matter to decay in the soil as to furnish an important ma-

nuring. Clover, being freely raised and fed to cows in connection with straw and surplus grain, will not only produce milk profitably, but will compensate the soil for grain raising.

THISTLES OR NO THISTLES?

JUST before the thistle, or in fact any biennial or perennial weed, is ready to flower, cut it down to the ground, or a little below, to be sure to kill the eyes about to form, and the plant's growth is stopped. If the eyes upon the collar or running roots once get ripe—although dormant till next season—the plant lives. This time—only about two weeks between budding and blooming—is their critical term. Taken at this time, all last year's eyes have got above ground, and the seeds are not yet formed. No salt, kerosene or doctor's stuff is required—only pluck and elbow-grease.

Dodge Co., Neb. S. RUFUS MASON.

Field Crops.

TIMOTHY AND ORCHARD-GRASS.

THEIR GOOD QUALITIES AND THEIR DEFECTS.

PROFESSOR. W. J. BEAL.

A PERSON who is familiar with all the good points and defects of our domestic animals knows what to select for his especial purpose. Just so with the grasses. Bnt these are rather small and most of them look alike to a person who has little or no knowledge of botany. Although farmers are among some of these grasses from boyhood to old age, yet most men die ignorant of the names and peculiarities of the majority of valuable grasses.

TIMOTHY.

Timothy looks unlike any grass with which farmers come in contact. It resembles Meadow Fox-tail a little, but it is larger, coarser and the spike (head) is longer and rougher and the plant flowers appear a month later. Timothy produces an abundance of seeds of some size which are easily cleaned and quite sure to grow. These traits, with the large size and early maturity of the timothy-plant, are much in its favor. The quality of grass is excellent. In a good season in favorable soil, it yields a large crop of good hay which every man has learned to recognize. But few could tell the hay which was made of Orchard-grass, Fowl-meadow-grass, or Meadow-fescue. It might be just as good or even better than the load of Timothy, but they would prefer the latter, because they then know what they are buying. A good new pear, or apple, or strawberry or squash will not meet with ready sale till buyers become acquainted with it.

DEFECTS OF TIMOTHY.

Some of the defects of Timothy are these: It flowers rather late, two or three weeks later than Red Clover with which it is often sown. It starts rather slowly in spring and after it is once mown in summer, produces no seed and but very little feed or very little to mow. It very soon disappears in pastures as stock eat off the bulbs at the base of the stem. It does not spread to occupy the space left by annual weeds or by Red Clover when they are dead. It is the fashion to sow Timothy or Timothy and clover and has been for many years.

ORCHARD-GRASS.

Orchard-grass has been well-known for many generations in Europe where it is a great favorito. In the Old Country farmers pay large rents and they are obliged to watch very closely the expenses and the income. They prefer Orchard-grass, Cock's-foot as they call it, to Timothy. In this new country, in Michigan and Illinois at least, it is astonishing to see the ignorance which prevails among farmers as to Orchard-grass and many others of value.

Orchard-grass starts very early in spring and gets its growth and produces flowers three or four weeks before Timothy. It grows about the same hight as Timothy and if sown thickly on suitable land, and *cut at the proper time*, will yield nearly, or quite, as much—and sometimes more—grass of about the same quality. It may be cut and *must be cut early* to make good hay. After cutting it starts very quickly and is soon up ready for cutting again or for pasture a long time during the rest of the year. It bears pasturing well. For meadow or pasture I have known it to last ten or twelve years, and then appear thick and thrifty.

SHORTCOMINGS OF ORCHARD-GRASS.

What are the drawbacks in raising Orchard-grass? Why is it not a universal favorite for use in place of Timothy and for other purposes? Some of the reasons, if they are worthy the name of reasons, have been given: In some places, as on gravelly plains, Orchard-grass is said not to have done well. The seeds are light and sold in the chaff much of which contains no seed. A few seeds cost too much money. Sometimes the seeds are injured in harvesting and curing, or are kept too long by seedsmen, as they have to supply only a limited demand. Of well-filled seed, it takes from two to four bushels to the acre to produce a thick growth. It starts so early and grows so fast and flowers so soon that probably not one farmer in one hundred thinks of cutting it as soon as it is ready. He waits for the clover to show more flowers or for good weather or something else, or he is not used to haying so early, and his Orchard-grass is going to seed before he knows it. He cuts the grass, cures it, and finds the hay poor and woody. I believe the hay is often condemned because the mowing was not done at the proper time.

ORCHARD-GRASS WORTHY OF A TRIAL.

Orchard-grass is worthy of a good trial on every farm or in every neighborhood. I have, within the past ten years, induced a large number of farmers to give it a trial on a small scale. I have visited some of their farms and have frequently talked with the owners. The grass has been tried on quite a variety of soils. Of those who have been influenced by me to try Orchard-grass, I have yet to hear the first case where it has not given excellent satisfaction whether used one year, two years, or many; whether sown for meadow or pasture; whether sown alone or with Red Clover, Timothy or other forage plants. Let all give it a trial; study its peculiarities and do not condemn it without good reasons. PROFESSOR SHELTON tells us that it is one of the best for producing hay in Kansas and Nebraska.

Michigan Agricultural College, Lansing, Mich.

Floricultural.

AN OLLA PODRIDA LETTER.

PHLOX, ETC.

EVERY evening when Anaximander returns from the city, he is very apt to remark that the "bed of Phlox is really very beautiful," and this has been being said for a month, and there is no abatement in the rich beauty of the Phlox plot. Some writer in the RURAL complained, some time ago, of the bad habit of Phlox, its proneness to fall down, etc. I have no such trouble with mine. The plants are transplanted from the hot-bed at a distance of not more than three or four inches apart, and they grow up, branch out, and "stand by" each other in mutual self-support, and, when in bloom, present an almost solid surface of gorgeous color. There are twenty-five or thirty varieties in the bed of which I write, and that it is a glorious feast for the eye one can readily believe. I think the only true way to cultivate it is to mass it, and one can not have too large a bed of it, and if one has never had it in her garden or lawn, she may rest assured that there is a great store of beauty in the possible future for her. Take my advice and have a plot of Drummond Phlox next year.

PETUNIAS.

Nearly opposite my Phlox, is a large bed of Petunias—an almost numberless variety of beautiful shades and combinations of shades and colors, and this, too, is a continual feast for the eye. For filling vases I am very partial to Petunias, as they keep their freshness well, and give a brightness and frank-looking-ness to a bouquet, that nothing else so well does. Sprays of "Kenilworth Ivy" or of Smilax, falling from the top of the vase and draped about its stem, often give a pleasing gracefulness to its appearance.

To return to the Petunia, I find considerable interest in observing the varieties that will be produced by the seed from one pod. This year, I sowed the seed of one pod, that was pulled from a very large and rich Petunia—a velvety sort of blossom, nearly if not quite, three inches in diameter—and from that pod I find seven varieties, and not one like the original.

PANSIES AND POPPIES.

I do not think I have the right kind of success with Pansies. Last year, my seedlings throve well. I pinched off the flower buds for a month before allowing the plants to bloom, and the blossoms were magnificent; I never saw finer. But the plants grew tall—some of them a foot and a half high—in spite of me. They grew in very rich soil—a shaded place most of the day. In the late fall I put leaves and brush about the plants for winter protection. But not one was found alive this spring. I sowed seed again, and have now a fine bed of them. I keep the flower buds pinched off, and have pinched off the entire top of each plant, hoping to secure a bushy form to it. Is it right so to do? Moreover, some of the plants died from no find-outable cause—the stem separated at the surface of the soil, as if it had worn a corset and been laced until it came in two. What think you was the cause? I kept the soil well opened, and observed all the hygienic Pansy laws that I knew about. If you can tell me how to insure their precious lives throughout the winter, without transplanting, I will be greatly obliged.

[If the situation is shady, the soil rich and the flower-buds be pinched off, what else could be expected but a tall growth of stems and leaves? If then these plants are crowded the stems become weakened near the ground and will not stand the winters.—EDS.]

I have a clump of Poppies—almost the first mentioned flower in antiquity—that look like Passion Flowers from the window near which I write—various colors, masses of fringe with a pale-green heart surrounded by a border of dainty workmanship. The infinite pains, and the exquisite beauty that nature puts into some flowers—into most flowers—are a never-ending source of wonder to me.

MORNING-GLORIES, ETC.

I always gather my own flower seeds. This requires much time and patience, but in order to become well acquainted with flowers, it is necessary to observe their seed-producing habits. Of other seedling flowers in bloom just now, I find great pleasure in the rose-colored Vinca—the bright intelligent-looking blossom enthroned on a mass of rich green leaves, is a bouquet in itself. A mass of Viscaria gives a delicate and pleasing effect, and a group of red and white Malope looks well. A large bed of double, summer-blooming Chrysanthemums is very fine. The seedling Geraniums, scarlet and pink, double, are very showy, but except for bouquet-making, I do not care half so much for Geraniums as for Morning-glories and Portulaca. If any body judges of Morning-glories from the ordinary pale blue blossoming vines, that are more commonly seen, she knows nothing of the *glory* of the flowers. Imagine a curtain of green, starred with the richest hues of crimson and blue, that is violet in its depth of color and richness, and white, with delicate lines of blue or lavender, and mottled blossoms and yellow, too, if one chooses, and you will begin to understand why these flowers are called the Glory of the Morning.

HOLLYHOCKS.

I want to add a word about the Chater Hollyhock, the seeds of which came from the RURAL office last year. The Hollyhock has been in bloom for some time and the blossoms are, in school-girl parlance, perfectly elegant. A pretty neighbor of mine finds them "lovely" for the toilet, placing one in her hair, another at the throat, one on each arm, and fastening them in the drapery of her skirts. They form the most exquisite rosettes—being perfectly double, triple and quadruple, and sextuple for that matter, and of a delicate straw-color—for toilette decoration that can be had, especially against a frock of black grenadine, or of pure white. They form plate bouquets of striking beauty, set in a background of dark, crimson Phlox.

MARY WAGER-FISHER.

BULBS FOR THE FLOWER GARDEN.

W. C. L. DREW.

OXALIS.

FLOWERS of this kind are very popular for winter-flowering in pots, but they are no less desirable for border culture. The bulbs of all the varieties are small, but produce an abundance of bloom and foliage, the latter being almost as handsome and in every way as desirable as the many-colored flowers.

As I shall not speak of these bulbs again, I will, for the benefit of amateurs, give the most approved plan for potting them. Bulbs desired for pot culture should be kept strictly for that purpose and not be made to do extra service by occupying a position in the border during the spring and summer seasons. In potting the Oxalis, five or six bulbs may be planted in a six-inch pot. This should be done as early as possible in October or November.

Having clean pots ready, place an inch of drainage in the bottom; then fill the pots half way up with well-decayed manure; the rest of the pot should be filled with fresh light loam or leaf mold; in this plant the bulbs one inch deep; water and set in a cool, dark place for ten days, when the pot should be brought to the light. After flowering, when the foliage begins to turn yellow, they should be dried off. When dry, transplant the bulbs into pots of fresh soil and let them remain until the following October, when they will again start into growth.

For border culture, there are few more desirable subjects than the Oxalis, and those who plant it for its summer-blooming qualities will be more than satisfied with the result. During the entire season it will thrive and bloom, being continually covered with its pretty flowers.

In cultivating the flower for this purpose, set the bulbs one inch deep in the soil, which should be light and rich; for, while it will flower in a common poor soil, no plant will better repay a little extra care in the way of a good dressing of well-decayed manure—no rank manure must be used, as it injures the flowering of the bulb. In the autumn, the bulbs must be taken up, dried off, and packed in fine sawdust. They should be kept in a cool, dry place until the following spring, when they may be planted as before.

VARIETIES.

O. VERSICOLOR.—This is one of the most desirable varieties for winter-blooming. The bulbs of this variety are very small. The flowers are handsomely variegated, the ground-color being a pure white with an eye of the brightest yellow bordered with crimson.

O. BOWIEI.—This is also a winter-blooming variety, and makes a fine contrast with the former. The flowers are of a bright rosy pink color.

O. LUTEA.—This variety is sure to give satisfaction in window culture, as it never fails to bloom. The flowers are a rich yellow color.

O. FLORIBUNDA ALBA.—This is the best white flowering variety. It adapts itself to pot or border culture, and should be in every collection.

O. DEPPEI.—This is the best of the summer-blooming varieties. The leaves are quite distinct from those of other varieties; they are of a very bright green color, with a distinct brownish-black zone. The variety is frequently called the four-leaved Oxalis.

O. LASIANDRA.—This is one of the finest plants for edging purposes. The flowers are a rosy purple color, remaining open only while the sun shines. The leaves are in nine divisions. In Eastern gardens this is rapidly taking the place of other border plants.

El Dorado Co., Cal.

Arboricultural.

EVERY-DAY NOTES.

AN EARLY-FLOWERING TRUMPET CREEPER.

I SEE to-day that the early Trumpet Creeper, Bignonia, or more properly Tecoma, radicans sanguinea præcox, as exhibited in a specimen trained over a post, is fully perfected in flower and foliage. This method of training the strong-growing Trumpet Creepers to a heavy post ten or twelve feet high, in the form, as it were, of a tree, is very effective. An excellent way of accomplishing this consists in setting up a tree, cut fresh from the woods, and retaining its main branches. Over these the Trumpet Creepers, and in fact, many other climbers, will develop in their most perfect manner. Most trees should be trimmed somewhat, to permit the climbers to so cover them as to assume the appearance of trees of foliage. The Early Tecoma radicans blooms at least three weeks before the ordinary T. radicans, and bears longer flowers which are also, generally, of a richer color. It is, of course, no earlier than T. grandiflora, and has smaller flowers; but the different color affords variety, and the habit is hardier; that is, less liable to winter-kill.

THE OAK-LEAVED HYDRANGEA.

There are other Hydrangeas more showy in flower, but none of such rich and remarkable foliage as the Hydragea quercifolia. Well named oak-leaved, it takes on a massive vigor that gives grand effect to even a single specimen on the lawn. The foliage is, indeed, admired so much as to obscure somewhat the merit of the flowers, which is really great. Large, creamy-white, changing later into light rose, they really add much to the beauty of the plant. Complaint is sometimes made that the oak-leaved Hydrangea winter-kills, but I have only known this to happen once in ten years, and then the fresh growth of the following summer entirely renewed its beauty. I doubt very much whether a well established plant would ever be totally destroyed by the winter in this climate.

THE PURPLE BERBERRY.

The foliage of Berberis atropurpurea continues to retain its rich purple color almost throughout the summer. This can be said of few other shrubs or trees, which fact, as well as its peculiar erect form and small leaves, gives it special value for producing contrasted effects at this season. It is, indeed, a valuable old shrub, not sufficiently appreciated.

RUBUS ODORATUS

This old, well-known shrub also receives too little employment. The leaves are of quite peculiar form, at a distance reminding one somewhat of those of a grape-vine. But its special feature is the abundant rosy bloom it puts forth during mid-summer. At this season, it behooves us to treasure up flowering shrubs, for they are all too scarce. The Rubus odoratus is somewhat coarse in appearance. It would, however, be very effective in masses.

CLETHRA ALNIFOLIA.

This shrub, now flowering with full effect, has a value very similar to the last, on account of its summer-blooming nature. Otherwise, it is very different, being low in stature with numerous spikes of small white flowers. About Long Island, some knowing individuals are apt to despise it because it is abundant in our woods. It must be, however, grown in nursery-rows before it will transplant readily into anyone's grounds. As it is seldom, however, that anyone attempts to thus prepare its roots for lawn planting, the shrub really continues to be scarce. Used in very considerable masses for ornamental purposes, it may be made very attractive

THE PEA TREE.

Colutea arborescens and other varieties of the so-called Pea Tree still present very pleasing qualities mingled among other shrubs. The bright green, leguminous-looking, very vigorous foliage, and the peculiar rosy-colored pod that snaps between the fingers later in the season, unite effects scarcely inferior to those of the flowers that have passed away.

Flushing, L. I. SAMUEL PARSONS.

Pomological.

VERY EARLY PEACHES.

THERE seems to be no limit to the number of new varieties of very early peaches. Fifteen years ago, "Troth's Early Red" was the earliest peach known to American peach orchards, but following immediately upon the close of the rebellion, as the country was settling down to sowing and reaping again, the planters of peach orchards were introduced to the merits of the wonderful "Hale's Early"—two weeks earlier than any other peach known to cultivators. As the old adage runs, "Every dog has his day, etc.", so the Hale's Early had its day.

The gain in season secured by the Hale's, in comparison with the Troth's Early, created no little enthusiasm among peach growers; but when the startling intelligence skips across the Atlantic that a peach three weeks earlier than Hale's Early—one a better shipper, and wholly free from that rotting on the trees, that made the Hale's unpopular with many—is an unmistakable reality; then, and not till then, do American peach growers catch the "very early peach" distemper in its worst form. Early Beatrice shared the thoughts, conversation, and, I have no doubt, the dreams of thousands of speculators; and while large gains from the sale of trees stand out as a fact, the "day" of Beatrice was not a long one; for American enterprise, stung with remorse at being caught napping by this "English precocity" staggers the Beatrice, and drives into oblivion the Early Louise and Rivers' with the Alexander; and before growers have time to decide fairly between Beatrice and Alexander, news of the Amsden's June—still earlier and better (?) is spread everywhere. Nor does it stop here; for to-day nearly every county in the United States boasts of one or more new kinds of peaches earlier than Hale's Early.

It occurs to me, that if any one thing pertaining in any way to fruit growing, is thoroughly and completely overdone, it is this "Early-peach business." Take away from "the growers" of the country at large all kinds known to ripen in advance of Troth's Early, and where, I ask, would there be any loss outside of what has already been expended for trees at high prices, tillage, etc.? True! we now and then hear of isolated instances where handsome profits have been realized from Hale's, but these instances are only the exceptions to the rule; and while we had first-class testimonials in large supply, establishing the unequaled merits of the Beatrice as a shipper, the facts to-day are greatly at variance with testimonials of commission merchants. Five years back, Alexander, Amsden and Honeywell, were each claimed to be earlier and larger than Beatrice; but the facts here are at variance with the claims, as it would even puzzle the venerable Downing to tell one from the other, if indiscriminately thrown together in a basket; but then, in conclusion, it is a relief to know that "Peaches three weeks earlier than Hale's Early" (as a business), have about all had their "day." J. W. KERR.

Caroline Co., Md.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

FRAUD.

IT is claimed to be a matter of history that the nations which engage in war, as a consequence demoralize their people, rendering life and property less sacred and secure among themselves. It is claimed, too, that with the increase of population in a given area, there is also an increase of dissolute and vagabond habits, poverty, and hunger and the whole catalogue of crimes.

Whether all this be true or not, we can hardly fail to see that ever since the commencement of our late war, peculations, robberies and murders have been more frequent than ever before in our nation's history. Even after making due allowance for the increased facilities for transmitting news, by which the people are more generally informed of passing events, we cannot resist the conviction that we as a nation are going downward in immorality and crime, and that most conspicuous on the list of increased evils is FRAUD. Aside from the frauds which we as individuals see in our own neighborhoods, such as cheating in selling property, adulteration in food and medicine, new and worthless utensils, enticing but worthless patent rights, over-puffed fruits and vegetables, newly named but old and long discarded varieties, scrub stock under the fascinating names of genuine improvements; our newspapers are filled with accounts of gigantic frauds in high life. Doubtless many of these accounts are gotten up for political effect, but too many of them have come to light and been verified for us to disbelieve that there are continually going on, frauds in banks and insurance companies, incendiarism of over-insured property as well as for plunder, defaulting treasurers, frauds in elections and on duties, smuggling frauds and whiskey frauds, and frauds either in the election of the National President, or in the gigantic efforts being made to make it appear so.

Among the minor frauds none is more extensive and more prejudicial to the health and well-being of the community—than quack medicines and quack remedies—These are doubly evil because hidden under the semblance of good, and doubly baneful from appealing directly to the credulity of the credulous public, and especially to those already afflicted with disease. Not that all are bad in themselves, but that all are extortionate in price, and that their patrons discover their good or bad qualities at the peril of health and life.

The remedies for frauds are detection and exposure in their early stages. The press is the greatest engine of exposure, and if the people will patronize and sustain this mighty engine, they may, they can, and they *will* reap a rich reward in this one item of being thus shielded against fraud. When we read of the many cases of "confidence games" we know for a dead certainty that the victims "didn't take the papers." VIEILLARD.

CIDER VINEGAR, AND SUGAR FROM SUGAR BEETS.

SUGAR BEETS are a crop very easily raised, and in good soil the produce is abundant. All cattle are fond of the leaves which add much to the milk of cows, without giving it that bad taste which is unavoidable when they are fed with turnips or cabbages, and which is chiefly owing to the greater rapidity with which the latter undergo the putrefactive fermentation.

The seed is sown in drills 20 to 24 inches apart, and thinned out to the distance of 8 to 12 inches from plant to plant in the rows. From four to six pounds of seed are required per acre, and they should be steeped for 48 hours before planting; the best depth for doing this, is from three-fourths of an inch to an inch; the culture is similar to that of carrots or parsnips, and the cost for seed, labor and fertilizers will amount to about $40 per acre. The yield, according to the quality of the land, the fertilizer used and the cultivation bestowed, will be from 400 to 800 bushels per acre, and the last has been greatly exceeded.

Analyses show that 1,000 lbs. of sugar beets contain 184 lbs. dry substances, 1.60 nitrogen, 7 10 ashes, 3 914 potash, 0.379 lime, 0 536 magnesia, 0.780 phos. acid. In manufacturing these elements are distributed as follows:

	Dry Substances.	Nitrogen.	Ashes.	Potash.	Lime.	Magnesia.	Phosphoric Acid.
Tops and Bottoms	19	0 24	1 15	0.336	0.108	0.132	0.144
Fiber	46	0.44	1.71	0.585	0.390	0.100	5 105
Refuse	24	0.06	1.20	0.380	8.640	0.250	0.380
Molasses	25	0.32	2.47	1.741	0.141	0.009	0.045
Sugar	85	——	0.57	0.873	——	0.040	0.072

After harvesting the roots are first topped, then washed and pulped in a grater, and pressed to extract the juice.

50 lbs.	pressure	to the	sq. in.	ext's.	60	P cent.	of	juice.
80	"	"	"	"	64	"		"
400	"	"	"	"	75	"		"
750	"	"	"	"	80	"		"

Twenty-four pounds of pulp for every 100 square inches of press surface is the best proportion to use. The cider press and grater, made by the Boomer & Boschert Press Co., of Syracuse, N. Y., is worked by power, and has a capacity with the labor of two men of grating and pressing 725 bushels of beets per day, of 10 hours, and yields 3,625 gallons of juice.

The press and grater cost $510, and require less than six-horse power to run them, and the press is the best and cheapest there is for this use. The ordinary cider press will answer, but it costs more to run it, and not as much juice is obtained on account of its not being able to produce as much pressure as the other.

One bushel of sugar beets, mixed with nine bushels of apples, makes a cider richer and of superior flavor to that made from apples alone. Sugar beet juice can be converted into vinegar in the same manner cider now is; it makes a stronger vinegar than cider does, of an equally good but different flavor, and, if treated the same way as maple sap or sorghum juice, it will yield a good article of brown sugar, and all of this not used by the producer in the brown state, would be readily purchased to be refined, by the refineries already established.

To refine sugar requires costly machinery, such as vacuum pans, centrifugal machines, filters of bone coal, etc., and also skilled labor; but the manufacture of sugar from beet juice, requires only the evaporating pan and the addition of some lime to the juice, to neutralize the acid.

The best pan is that made by the Blymer Mfg. Co., Cincinnati, Ohio. 4x15 feet, of copper, costs $210, has a capacity to evaporate 4,000 gallons per day, of 24 hours, and requires three cords of wood, or its equivalent in coal. They also have larger and smaller pans, both iron and copper; the former being lower in price. I have no interest in presses or pans, and mention them that each, for himself, can make an estimate of the cost of the machinery required, and what it will cost to convert his sugar beets into cider, vinegar, or sugar. The estimated quantity of the sugar supply of the commercial world in 1875 was 2,140,000 tons of cane sugar and 1,317,625 tons of beet root sugar, of which latter France produced 462,256 tons as against 4,465 tons in 1828.

The consumption of sugar in the United States is about 700,000 tons, and is constantly increasing. We now produce of cane sugar 100,000 tons, and of beet root sugar 1,000 tons; and there is no reason why this cannot be increased to the quantity we require, if the farmers will raise the beets.

In France there is a heavy tax on the beet root sugar they produce, and cane sugar is admitted free, yet, notwithstanding these disadvantages, they successfully compete with it; here the reverse is the case—a heavy duty on sugar imported and no taxes levied on its manufacture; certainly under these conditions we should produce all the sugar we consume.

After the juice is expressed from the rasped beet, the dry pulp remaining is an admirable food for cattle, sheep and swine. The average amount of pulp is 20 per cent. of the original weight of the beet, and three tons of it for feeding purposes, are equal to one ton of hay, and should be fed in connection with straw and oil-cake or cotton-seed meal.

As the pulp is fed back to stock, the land is constantly growing richer, all the mineral substances taken from it being restored in the manure; this enables the farmer to raise larger crops of various produce, and consequently keep more stock which enables him to make more butter and cheese.

The present cider mills and cheese factories could add to their present machinery the pans or presses as required, and by co-operation on this, as in other products, we can produce profitably all the sugar we require. This will bring the business of sugar-making within the reach of small farmers, and is of vast importance. The notion prevails that to make sugar profitably it must be made extensively. This is certainly erroneous, and the sooner this illusion is dispelled the sooner we shall begin to realize the productive resources of our lands, and employ our now idle laborers on a very remunerative crop now grown to a very limited extent.

ANDREW H. WARD.

Plymouth Co., Mass.

WHAT OTHERS SAY.

WHEAT CULTIVATION.—The editor of The Practical Farmer visited the farm of Mr. Groff, in Lancaster Co., Pa., who has been experimenting on the cultivation of wheat, and last year his experiments were so satisfactory (resulting in double the yield heretofore,) that this year he has put in thirty acres of wheat, and has it in the highest state of cultivation, having worked it through three times this spring; he does not work it in the fall. In cultivating the wheat, Mr. Groff uses a wheat drill six feet between the wheels, and with four sowing tubes instead of eight. Each tube is so arranged with a spreader at the bottom of it as to put the seed in regular rows four inches wide, with nearly eleven inches of space between the rows. The distance between the outside tube and the wheel is the same as between the tubes. This leaves the space between the rows wide apart for the horse to walk between them without treading down the wheat. In using the drill for cultivation, the drilling tubes are removed and the three-clawed cultivating hoes are attached—being the same distance apart as the drilling tubes. The claws of the cultivating attachment are in triangular groups, the center one in advance of the two outer ones, which prevents clogging, leaving the ground even and clean. Protectors are also fastened on to prevent the wheat from being covered up by the dirt as it is thrown up by the claws, and they do the work perfectly. The cultivator leaves the ground fresh, loose and mellow, instead of beaten compactly by the spring rains. The whole thirty acres presented a delightful and pleasing appearance. The wheat looked vigorous, uniform in hight, firmly set, rich in color, having that peculiar shade of green which indicates a healthy state of the plant.

It was compared with adjoining fields on other farms having equally as good soil, equally enriched with fertilizers, and as well put in, but put in with the common drill. There was a difference of almost one-half in favor of the cultivated wheat.

HYDROPHOBIA CURED.—Two Russian doctors lately treated the case of a girl 12 years of age, who had been bitten in the hand by a mad dog. The wound was cauterized immediately with nitrate of silver. In eight days the cicatrization was complete. Seventeen days after the bite, the first symptoms of hydrophobia appeared. The doctors prescribed inhalation of three cubic feet of oxygen. The effect was immediate, and in two hours and a half the patient was quite calm. Two days after fresh symptoms of the malady occurred (difficulty of swallowing and breathing, convulsions, etc.) A fresh inhalation of oxygen for 45 minutes again counteracted these. There remained only a slight difficulty of breathing, and this was overcome by means of monobromide of camphor, the use of which was continued for three weeks. The girl recovered perfect health with the exception of having aphonia—a morbid consequence of diphtheria.

TOO MUCH BUTTER.—Mrs. Mary Wager-Fisher tells the Weekly Tribune that most American families feel that they are deserted by Providence—on the verge of starvation—if they cannot have butter on the table at every meal, and complain of their lack of it as a deprivation hard to be endured. There would be just as much sense in feeling so because they do not have preserved pine-apples three times a day. The very best families in France only serve butter at one meal. Butter with a meat, fish or fowl dinner, would be to them ridiculous, as it really is. But the American—even the poorest one—must have butter on beefsteak and eggs. Mrs. Fisher contends that the manufacture of butter is one of the hardest and most time-consuming tasks that a farmerine has to perform. Moreover, with all the work it involves, butter adds less to the health and sustenance of the family than would the eating of the cream that goes into the making of it. Where one physician advises the eating of butter, a thousand recommend the consumption of cream.

THE TREATMENT OF CHRONIC ALCOHOLISM.—Dr. d'Ancona, of Italy, concludes that

1. Phosphorus is a very useful remedy in the treatment of chronic alcoholism.

2. The medicine is perfectly tolerated in doses which no one has dared to give heretofore—ten centigrammes (nearly 1½ grains) a day for many weeks.

3. The remedy gives to drinkers a feeling of comfort and strength, and furnishes the force necessary to carry on their organic functions, which they have been accustomed to get from alcoholic liquors.

4. The medicine seems also to have the properties of a prophylactic and an antidote, for it causes very beneficial changes in the system, even when the use of liquor has not been entirely stopped.

He uses phosphorus in the form of Phosphide of Zinc.

ABORTION IN COWS.—The London Farmer says: "It is well known that the great proportion of abortions occur in the first and second pregnancies, and this for the following reasons: —Just as a cow is weakened by milking during the last three months of gestation, and thereby predisposed to eject the contents of the uterus, so a heifer, unless very generously fed, will also be weakened, for the reason that nature requires additional nutriment for her as yet incompletely developed body. If this can be avoided by liberal feeding, the danger recurs at the second pregnancy; for the animal is still not fully developed. To avoid this in its turn, the writer allows his young cows to be milked only for four months, when they are pregnant for the second time, and then dries them up. With this precaution he has been almost free from this mishap among his young stock."

ASPARAGUS PLANTING IN SUMMER.—The Germantown Telegraph says: "Select in the old beds new plants, which have sprouted since spring from last year's seeds, and plant in beds of deep, rich soil, of course, removing all the tops, and setting the roots three inches below the surface. Be very careful to prevent the roots from drying while transplanting. Set two feet six inches each way, and when the place or hole is made for the roots, fill with water, and let it alone for a couple of hours for the water to soak away, and then plant. On taking up the young plants they should be put in a pan of water, and taken from the pan one by one as they are set in the holes thus prepared, pressing them in firmly, in order that they may take instant hold of the soil and go on growing, as they will, with scarcely any delay. Asparagus roots thus set will yield sprouts for cutting, one year from the ensuing spring."

GOATS.—It appears that notwithstanding the disfavor with which some regard goats, there has been of late a remarkable increase in the number kept in Ireland. According to the official returns, remarks the Farmers' Gazette (Dublin), it appears that in 1851 there were 235,313 goats enumerated. By the year 1865 the number had dwindled down to 171,207; but the annual returns show that in every year since that date, the numbers have steadily increased, and last year no less than 266,755 goats were returned by the enumerators, being an increase of 95,540 head in twelve years; and, allowing one goat to a family, this shows that in each year since 1865 about 7,962 families have added to their stock a goat which they did not previously possess.

WASTE IN AGRICULTURE.—Mr. Henry Stewart says, in his admirable address before the N. Y. Farmers' Club: "What are we to do then to enlarge our production Let us look at the enorm-

ous wastes which our agriculture perpetrates. What farmer collects the liquid manure or the washings of his barn-yard? Where do all the valuable wastes of our villages, towns and cities disappear? What becomes of the bones, the oil-cakes, the numerous fertilizers that we yearly produce? The first we waste, these last we sell. We buy ribbons and silks and woolen goods with popular foreign brands and wines, and these not half so good as the products of our own looms and vineyards, and pay for them with the life blood of our agriculture."

HIGH FARMING.—The Agricultural Gazette, of London, says: "When crops lie down under the whip of artificial manures and foods, you must cease to drive them further. It seems a pity that production should thus be limited. But little can be done, unless it be by growing short, stiff-strawed wheats; and, if such are procurable, stiff and short-strawed barleys and oats." High farming has its limits—a circumstance, however, of which the farmers in our neighborhood do not much need to be reminded.

WHEN TO PLOW FOR POTATOES.—It is always best to plow in the spring for potatoes or corn that are to be planted on sod ground. If the sod is turned over in the fall, the sod will have all disappeared by the spring and the ammonia generated by its decay will, have passed away.

FARMERS' CLUB.

CATALOGUES, ETC.

G. H. and J. H. HALE, So. Glastonbury, Conn., offer among strawberries, the new and promising, Pres. Lincoln, Duncan, Duchesse, Cumberland Triumph, Forest Rose, Gt. American, Beauty, Crescent Seedling and Sharpless. Among Raspberries, Pride of the Hudson.

FIRST ANNUAL FAIR of the Farmers' Clubs of Massachusetts to be held in Boston on Columbus Ave., opening Oct. 2, and closing Nov. 2. Address Albert L. Murdock, Jamaica Plain, Boston.

PREMIUM LIST of the Nebraska State Board of Agriculture and State Hort. Society for the Twelfth Annual Exhibition to be held at Lincoln, Neb., Sept. 23-27. For Prem. lists or information apply to D. H. Wheeler, Plattsmouth.

ELLWANGER & BARRY, Rochester, N. Y. Descriptive price list of Strawberries. Directions for garden and field culture. Sharpless Seedling a specialty. Circular free.

LIST of Premiums for the Twenty-first Annual fair of the Sandy Creek, Richland, Oswell and Boylston Ag. Society, and list of officers for 1878, to be held at Sandy Creek, N. Y., on Sept. 4, 5, and 6. G. N. Harding, Sec'y., Lacona P. O.

CROP and Statistical Report for June. J. B. Killebrew, Com. of Ag., Nashville, Tenn.

QUARTERLY Report of the Chief of the Bureau of Statistics showing imports and exports of the U. S., for the three months ending March 31, and also for the corresponding quarter of the year immediately preceding.

PREMIUMS and Regulations for the Twenty-ninth Annual fair of the Ohio State Board of Agriculture, to be held in the city of Columbus, Sept. 9-13. John H. Kleppart, Columbus, Franklin Co., Sec'y.

ANNUAL FAIR of the Onondaga Co. Ag. Soc., to be held in the city of Syracuse on Sept. 17-19. Rules and Premiums. P. H. Agan, Sec'y.

CATALOGUE of Bulbs for 78-9. August Rolker and Sons, No. 44 Dey St., N. Y. Hyacinths, Tulips, Lilies, &c. Catalogue illustrated. Free.

MONTHLY Crop Reports of the North Carolina Dept. of Ag. for June. L. L. Polk, Com. Raleigh, N. C.

PREMIUM LIST and Regulations Wisconsin State Ag. Soc. for the Twenty-fifth General Ex., to be held at Madison, Sept. 9-13. Address Geo. E. Bryant, Madison, Sec'y.

L. B. CASE'S Botanical Index to the new, rare and beautiful plants grown at his establishment, Richmond, Ind.

JEFFERSON Co. Ag. So. fair to be held in the city of Watertown, N. Y., Sept. 17-19., Wines R. Skeels, Sec'y.

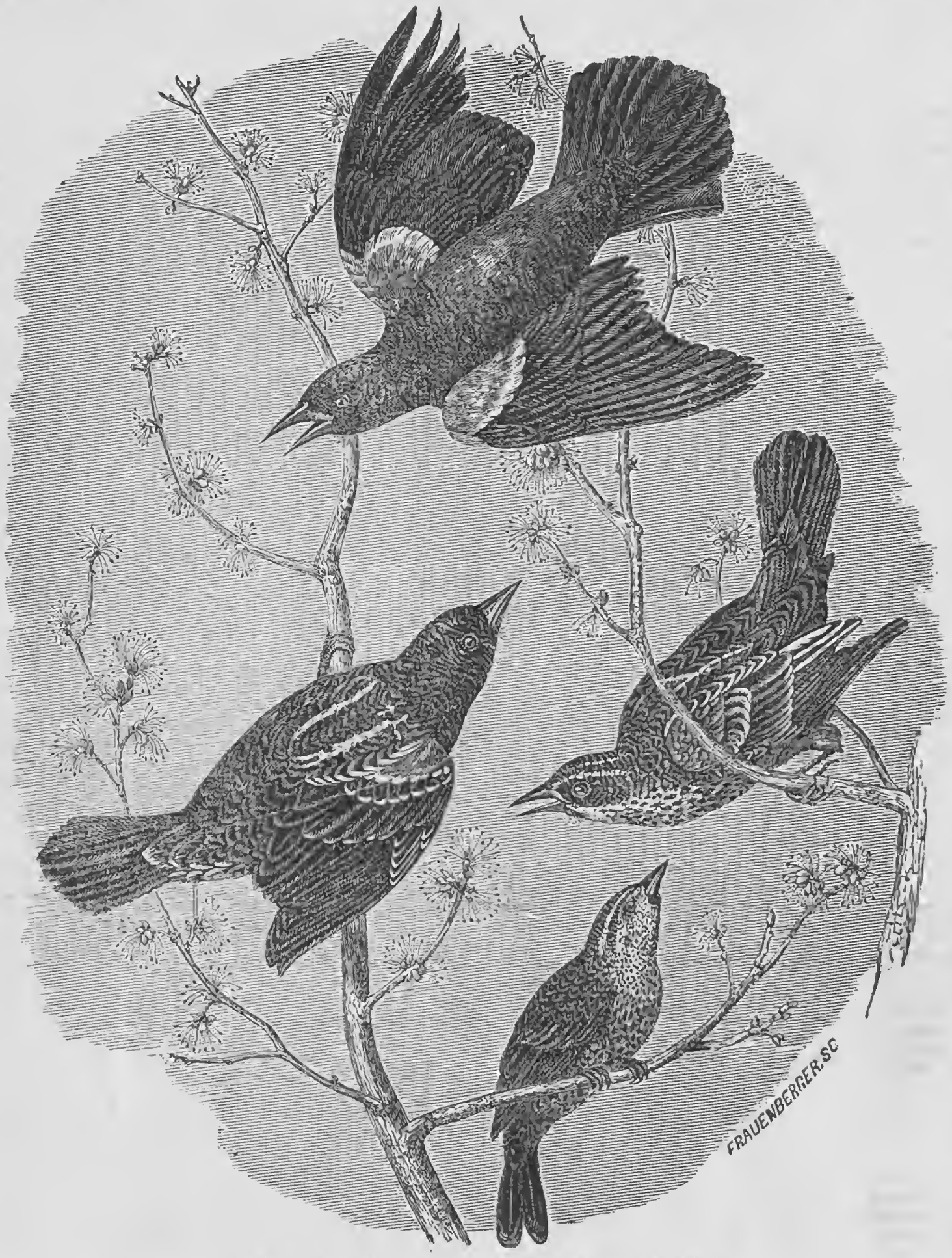
FARM Drainage Circular. For the benefit of those who contemplate underdraining their farms. Illinois Dept. Ag., Springfield, S. D. Fisher, Sec'y.

PREMIUM LIST for the Twenty-sixth Annual fair to be held at Freeport, Sept. 16. S. D. Fisher, Sec'y.

ST. MARY'S ACADEMY.—This excellent institution, under the control of the Sisters of the Holy Cross, has all the physical advantages that are thought to be most desirable for school situations, and the school itself, under the conduct of the Sisters, has become very thorough in the branches to which it pays particular attention, and is highly esteemed by those whose children have profited by its course of study.

The usual course is adopted, including the foreign languages and music. Especial care is devoted to domestic economy, as it is presumed that to be a good house-wife, presupposes a knowledge of the duties. The school is not local in its influence, which in itself is a favorable point.

The Notre Dame Scholastic, a bright little paper issued by the College, and catalogue containing the usual business information, will be sent to parents addressing Mother Superior, St. Mary's Academy, Notre Dame, Ind.



RED-WINGED STARLINGS.—(See page 501.)

Dairy Husbandry.

FRESH BUTTER FOREVER!

IT is the atmosphere coming in contact with the butter which causes it to become rancid. Keep the two separate and the butter cannot spoil. To do this economically: arrange any kind of a vessel, a keg, jar, or barrel, make up the butter in rolls in the very best manner, cover them with a wet cloth, put them into the vessel and fill up with strong, clean brine, and arrange the cover so that a board or plank on its under side shall press the lumps down under the brine. Then bury the vessel up to the brim in the earth in the coolest corner of the cellar. Never let the brine get below the butter and it will keep for years. This is an air-tight butter case; the butter can thus be kept till the price suits. The butter does not improve in quality by this mode of keeping, therefore make it well if you hope to take out a good article.

WHAT OLEOMARGARINE MEANS.

There it a great deal of science in butter-making, despite the old fogies, and when the maker introduces this science, *con-amore*, the article is always good. But when the new substitute was about to be introdnced, it seemed desirable to give it a highly scientific name, and as it was to supersede a very poor article, it was also desirable to give the latter a rap over the head as a kind of a squelcher. The public knows very well that the largest part of all the butter made in the country is detestable, that it is very *oily* and tastes more like lard than anything else.

Upon these facts, and with a business forethought, was built up the present name of the new product, "*Oleo*," meaning oily, fatty, greasy, rancid and nasty, and "Margarine" a substance containing margaric acid, a constituent of lard. The oil from beef suet, combined with "Margarine," and the addition of some sweet milk—of human kindness—are the constituents of Oleomargarine. Here is science employed to produce an article and also its name, both of which are meant to reduce the production of "fearful butter," and to increase and cheapen the manufacture of wagon grease, for to this condition must all the rancid butter hereafter come.

Here is science in butter-making carried to a high point; it gives an appropriate name to the new article, and sinks the old one to the very depths of disgrace. It is a splendid sarcasm, and if Oleomargarine compels the butter makers to cleanly habits, that will be glory enough for a generation. I say: "Up with Oleomargarine and down with dirty butter!"

S. R. M.

KING'S SELF-ACTING COW-MILKER.

EDITOR OF THE RURAL.—Your card referring to cow-milker, is received. I am not prepared, without longer trial, to give a definite opinion of its applicability to continuous milking, but I am convinced of its great value for occasional use,—so great that no farmer can afford to be without one. In cases of sore teats, or udder, or obstruction, it is invaluable, and may often save the cow as a milker when she would otherwise be lost. For occasional use by weak-handed persons, children or women, when male help is absent or disabled, the milker is also very useful. I am glad to hear that a small size is to be made, as in one of the cases when the milker would be most useful, — that of heifers with small teats—the size sent me is too large to be inserted without difficulty, or I think, without risk of injury by setting up inflammation of the duct.

T. H. HOSKINS.

Orleans Co., Vt., July 24.

Implements, &c.

SINGLE OR DOUBLE ROPES FOR HAY-FORKS?

I NOTICED in a recent issue of the RURAL that in writing about horse hay-forks and hay carrying apparatus, you mentioned some of the advantages of a single rope over the double rope for such purposes. I thought you wrote from a theoretical rather than a practical knowledge, and, with your consent, I will give my experience extending over a period of twenty years.

I first purchased a horse-fork, and used a single rope for several years, because a double rope for pitching hay was not known or used at that time—in this section at least. While using this single rope, I pulled out and broke off several rafters, and the team had to draw very hard to lift the forkful. Moreover, it strains and wrenches everything terribly, and, besides, you cannot take as large a forkful. I went to Utica, to the State Fair, and saw a double rope arranged for pitching hay, which worked admirably. The next year I rigged my fork with a double rope, and I think a double rope is as much better than a single rope as daylight is better than darkness to work in—as much better as knowledge is better than ignorance in editing a paper. To be sure the horses have to walk farther, but they can lift as much again with no more trouble, everything goes off like clockwork, and you do not strain and break everything to pieces as you are apt to do with a single rope.

For carrying hay back fifteen or twenty feet a double rope answers a good purpose, but if you want to carry back farther than that, a track and car that you can use a double rope with, are much the best. I used a car with a single rope for a few days, and I pronounce it an unmitigated nuisance. I remodeled the car so that I can use a double rope, and it works like a charm. I carry back about fifty feet. I have a wooden track which I think is far preferable to an iron rod. Some use a wooden track with an iron track fastened to the top of it. This works admirably, and I should think would be the best of all. I have a small cord, with a weight attached, fastened to the car, and when the forkful is let loose from the fork, the car will return to its place over the load, ready for use again. I have at the end of the draw-pole a patent hook, which can be tripped while the horses are drawing, if you choose, thus letting the rope loose from the whiffle-trees, so that the car returns immediately—and by the time the horses get back to the starting point, the man on the load has the fork set and ready to have the team go again.

Some use a patent post, around which you drive, catch the rope on an iron on the top and drive back to the starting point, and by pulling backward on the draw-rope, it slips off from the top of the post, leaving the rope slack and the team ready to start again as soon as the fork is set. To save carrying the whiffle-trees, I had my traces lengthened, by attaching pieces of trace-chain about fifteen inches in length to the whiffle-trees, and hooking the traces to the chains, so that when the horses are returning to the starting point the whiffle-trees drag on the ground, and with this rig a small boy or girl can drive the team—sometimes a great convenience.

Let me recapitulate and put in a nut-shell: Never use a single rope with or without a car. For carrying back only fifteen or twenty feet, a double rope answers a good purpose; for carry back farther than this, use track and car, such as you can use a double rope with. All things considered, I should prefer a wooden track fastened to rafters rather than an iron rod.

Cortland Co., N. Y. J. D. F. WOOLSTON.

The Querist.

ANSWERS TO CORRESPONDENTS.

Planting Raspberries from Cuttings in Summer.

Subscriber, Clinton, Mich., asks, 1. whether Black Raspberries can be propagated from cuttings during summer; if so, what canes should be used—the old or new; in what months should they be set out, and how? 2. He also inquires how he can best protect choice seedling Verbenas during winter.

ANS. (1).—Yes; at any time. Either the green or mature stems of this year's growth may be used. The old cane is worthless and should be cut away as soon as the bearing season is over. The canes which grow this year bear next and then die. If the canes are not cut back they will bend over from their weight until the tip rests upon the ground. This will root and the stem may then be cut off six inches above, and the plant be dug up and set out where desired. For cuttings, it is better to use the roots divided into pieces three inches long than to make cuttings of the stems and propagate in the usual manner.

The root cuttings may be placed in a box—first a layer of cuttings, then of soil, and so on—and placed in the cellar or buried in some high, well-drained ground. In the spring, plant in drills a few inches apart and two or three inches deep. (2). Only by removing them to the house or a dry frost-proof cellar.

How to Get Foul Air out of a Well, and Why it Gets There.

Edward Johnson, Chester Co., Tenn., asks what is the best way of getting foul air out of a well, and the cause of its accumulating there.

ANS.—The foul air in wells is mostly carbonic acid, a gas diffused through the air in proportions of about 4 volumes in every 10,000. It is about half as heavy again as the air, and its great weight tends to keep it in low places—where it is generated by the combustion and decay of organic bodies—and also to accumulate it in pits or unused wells. Unmixed with air it cannot be breathed, but is rejected with violent spasms of the glottis. Flame is instantly extinguished by it when mixed with air in proportion of one to four. Before descending into an unused well or pit of any kind, it is prudent to first lower into it a lighted candle, so as to make sure that it does not contain this fatal element. Wells in the barnyard that are used in winter for watering stock but seldom used in summer, are especially liable to have foul air in them at this season. In August, when the wells are low, it is always a good time to clean them out, but before descending into them, the above precaution should always be taken. If the light flickers badly or is extinguished, measures should be taken to remove the carbonic acid before venturing into it. If there is water in the well, all that is needed to get rid of the foul air is to pump out the water and dash it in again. The water will absorb an equal volume of carbonic acid, and the agitation will allow a sufficient quantity of pure air to mix with that in the well to permit of combustion, so that if a bundle of lighted straw be lowered into it the heat will cause the foul air to ascend. If bunches of lighted straw be thrown into the well, although at first the blaze will be instantly extinguished as soon as it strikes the carbonic acid, yet the heat is more or less retained and setting the air in motion, the foul gas will soon be dissipated. Indeed the pest may be driven out by any mode of ventilation, such as violently agitating the air in the well, exploding therein some gunpowder, or by lowering a vessel containing lighted charcoal nearly to the bottom. Burning coals have the property of absorbing many times their bulk of this gas, and when cooled they may be raised up, reignited and lowered down again.

he Best Cross for Mutton Sheep.

W. L. Mount, Chenango Co., N. Y., asks what cross will produce the most profitable kind of sheep and lambs for the butcher.

ANS.—As a rule, pure-bred sheep are quite too dear to raise for mutton. The fine-wools are small; the long-wools furnish too much fat in proportion to lean, to be profitable to the consumer. The South Downs supply fine-grained lean meat, but they have the drawback of being a trifle small. A cross between South Down rams and Merino ewes produces a favorite class of lambs for the Eastern markets. They are hardy, mature early, and strongly display the excellent South Down points. If these grades or South Down ewes are crossed with a Cotswold or Leicester ram, the progeny will be large, the growth rapid, while the flesh will have a choice flavor. To supply early lambs for the butcher, this is probably as good a cross as can be made, as there is always a demand for such lambs in New York and other Eastern cities, at profitable prices.

When to Shut up Swine to Fatten, etc.

Charles Edwards, Clinton, Co., Pa., asks how soon should hogs be shut up to fatten and at what rate should they lay on flesh, if well fed.

ANS.—If pens are furnished with shelter and water, August is not too early to shut up swine for fattening, as a pound of pork is made much more economically in warm weather than in cold. Little food is then required to keep up the animal heat, and many green kinds of food are available that are out of season in the fall. Hogs enjoy fresh clover, fed every day, with their cooked food or provender. Sweet corn in the green state is also highly relished, promotes thrift, and makes flesh economically. If a pig, put up to fatten and well fed, does not make a pound of flesh or more each day, it is not making a profitable use of its food. A pig of a good breed, nine months old, which has been fattened three months, should weigh 300 pounds, and many of them weigh considerably more.

Grafting Pœonies.

Henry Brink, Cedar Co., Iowa, asks what is the right time for grafting Pœonies, and whether they can be grafted in a cellar during winter in the same manner as apple grafts.

ANS.—We think not. The present is the best time. Tie the graft with bast and cover with grafting-wax, and place in a bed of tan or something of that kind. The tubers will make roots in the fall and may then be taken up and potted and placed in a cold-frame through the winter.

Planting White Pine Seeds.

Mrs. W. H. Carpenter, Warren Co., Ohio, asks when the seeds of White Pine should be gathered, how kept through the winter, and the best way of planting them to insure success in raising young trees.

ANS.—The cones of Pinus strobus ripen in the fall of the second year. They may then be gathered and placed in dry sand through the winter. Plant the seeds the latter part of April in light soil, cover them lightly—an eight of an inch is sufficient. Keep the ground from drying out by occasional watering through a fine rose, and give shade either by shaded lights or evergreen boughs. They will generally germinate the same season.

To Destroy Ant-Swarms.

J. O. Donnell, Lewis Co., N. Y., asks how to destroy ant-hills, as the little pests have multiplied tenfold in his orchard within a few years.

ANS.—We have no personal experience with modes of exterminating ants, but the little pests are so industrious in appropriating every edible substance within their reach that we presume the well-nigh universal insecticide, Paris-green, if mixed with some substance attractive to them, and placed in their vicinity, would exterminate them. Of course, it should be so placed as to be safe from appropriation by children or animals. Very probably crude petroleum or kerosene, either pure or diluted with water, if thoroughly and repeatedly applied, by pouring into the entrances of their nests, would produce the desired result. Carbolic acid and corrosive sublimate, especially the latter, affect an ant colony as poisonous agents. Solutions of tobacco, lime, and walnut leaves, with urine, are also said to be effective in destroying them, although these latter are decidedly inferior to carbolic acid and corrosive sublimate.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, AUGUST, 10TH:

E. W. S.—P. D.—A. C. B.—E. R. B.—J. J. M.—J. G. R.—S. E. H.—Leonora—W. F.—W. E. McE.—E. W. S.—H. S.—W. R. B.—R. C. B.—J. W. S.—D. E. S.—W. J. F.—J. E. McC.—W. H. W.—P. G.—D. H. W., thanks—L. A R.—R. H. L.—H. W. B.—"Young Farmerine"—L. H. K. R.—W. F.—T. W.—W. H. W.—I. P R.—W. B. D.—G. M.—M. B. C.—D. J. B.—E. W. H.—E. W. S.—J. L. N.—Dr. Goodenough.

Everywhere.

NOTES FROM ILLINOIS.

THE FARM.

As I have before stated, we have been rained out here for four consecutive years, and while we had entirely too much rain in May and June, we are now suffering for the want of it. Many vegetables are dying in the gardens.

I secured remarkably early field corn this spring,—a very new and valuable sort, and when six week old it was "midsides" to a large horse, but the dry weather is holding it back so that it will not make its reputed time this year, but will still come out ahead of any other early field corn that yields remunerative crops. Next fall I hope to be able to send you sufficient to test it on the "Rural Farm." It is yellow, of good size, and is not a flint corn.

THE VEGETABLE GARDEN.

I have been passing the season rather pleasantly watching the growing and maturing of new vegetables,—new to me, and this locality, anyhow. The new Queen Onion is indeed all that is claimed for it,—only it is not likely to keep as long with us as it is said to keep,—for the reason that the quality is such that we eat them all "up." Little Gem pea still proves to be the earliest with us. I am testing all the early sorts of tomatoes, and may be able this fall to determine which is earliest for our section. Giant Stutgart radish is the finest radish we have yet raised; as its name indicates, it is large. It was sent out this spring (for testing) by FOOTE of Terre Haute, the originator of "100 days Tomato;" he also sent me a new lettuce, the "Green-fringed," which has no equal unless it is the Hanson.

I am testing, for quality and earliness, about 25 sorts of sweet corn, and while I have the opportunity, I am making all the crosses I can, hoping to originate an early sort as sweet as the later sorts. I believe I am the pioneer in the growing of roots for stock in this part of the State. Those who think a cow can eat nothing but an ear of corn, laugh at me considerably, but I can stand it if they can.

Douglas Co., Ill. DR. A. C. WILLIAMS.

[The Green-fringed Lettuce referred to is excellent.—EDS]

NOTES FROM KENTUCKY.

CARROLL CO., KY., July 25, 1878.

POOR WHEAT CROP.—We have greatly overrated the present wheat crop, as proven by the thresher's tally. One field of 23 acres that was "splendid" and would "go 30 bushels per acre" before harvest, only threshed out 13⅓ bushels per acre. Fifty-one acres on another farm that last year averaged 31, only made 18 this. Another of 60 acres went 30 last and 17 1-10 bushels per acre this year. And the same may be said of the thousand acres of wheat here in Hunter's Bottom and of the entire State where the rust was at all bad.

THE WEATHER.—We are having the warmest and driest season for many years. The thermometer ranges from 90° to 100° in the shade every day, with a strong wind from the south or southwest that is literally parching our late potatoes and pastures, and is rolling the cornblades into mammoth cigars. I am told that six horses died of sunstroke while working in a threshing machine last Thursday, just across the river. (We have steam power on this side.) We have not had even a shower of rain since the 22nd. of last month.

FRUITS.—Blackberries are drying nicely on the vines, but our winter apples are already badly sunburnt. Our Fruit-growers' Association has induced the old and reliable firm of Evans & Co., of Baltimore, to establish a canning factory here and when thousands of bushels of blackberries, peaches, plums, tomatoes, sweet corn etc., can be bought for an average of one dollar per bushel at their factory, I cannot see why they should not make it pay handsomely. This is undoubtedly one of the best fruit regions in the country, and it is strange that it is only within the last four years that capitalists are willing to invest here in this industry. The best of fruit land can be had for $30 per acre; and yet not over three thousand acres are in fruit in this and the adjoining county of Trimble. I do not include apples in this estimate, although they grow to perfection, here; yet we have no market for them at paying prices.

S. E. HAMPTON.

RURAL SPECIAL REPORTS.

CHAUTAUQUA CO., N. Y., July 25, 1878.

FARMERS in this section are just now finishing their haying and making preparation to commence harvesting. The hay crop we think to be fully an average one; on some farms it is even larger than last season. Butter has sold for so low a price during the past few months that it is not to be wondered at that dairymen feel discouraged. When you can buy the finest table butter for a shilling a pound, it is getting down to rock bottom. No farmer can afford to manufacture butter for such figures and pay $14 to $17 per month for farm hands. Those who went into cheese making early in the spring are likely to have the most money this fall. Firkin butter sold here this week at 15 cents—about two cents per pound more than last week. Many are holding on to their summer butter hoping to realize better prices.

Everything is now growing finely. We have had some very warm weather during the past few weeks, which just makes corn jump. Green peas are plentiful, and some new potatoes will soon be in market. Potato bugs can be got along with.

Lake Chautauqua, one of the healthiest and pleasantest summer resorts, is now being visited daily by hundreds of people from different parts of the country. Hotels on the lake are fast being filled by those who desire to spend the heated term at "Chautauqua." The National Sunday-School Assembly commences at Fair Point, Chautauqua Lake, August 3d, and closes August 22d. The Rev. J. H. VINCENT, Rev. JOSEPH COOK and other eminent divines will be present. Pres. R. B. HAYES, of Washington, is expected. The National Baptist Meetings are now in session at Point Chautauqua, Chautauqua Lake, and are very largely attended, Chautauqua Lake is becoming more and more popular each year. M. L. DORMAN.

NEMAHA CO., Nebraska, July 20, 1878.

I WRITE from that region you folks in "York State" call the "Far West"—Fremont's "Great American Desert."

Our State official authorities have just completed a statistical report, showing the population of Nebraska for March, 1878, and the valuation, number of animals, and acreage and yield of the cultivated lands in the State for the year 1877. I came to the Territory of Nebraska twenty-two years ago last April. At that time there was not an acre of land under cultivation for purely agricultural purposes in what is now the State—only a few "Squatters' truck patches." Having been an eye-witness to the progress we have made, it is reasonable that I feel no little pride in what we have done and in letting our friends "Down East" know it.

These official reports show that we now have, under cultivation, 2,358,555 acres. The products were: Spring wheat, 8,712,761 bushels; fall wheat, 55,376 bushels; corn, 32,817,143 bushels; rye, 8,080,090 bushels; barley, 2,401,420 bushels; oats, 5,440,872 bushels; buckwheat, 27,533 bushels; sorghum, 98,973 gallons; flaxseed, 69,018 bushels; broom corn, 685 tons; tobacco, 22,729 pounds; potatoes, 778,330 bushels; turnips, 51,933 bushels; apples, 90,570 bushels; peaches, 17,876 bushels; grapes, 252,250 pounds: hedge fences, 5,212 miles. Of live stock we have: Horses, 130, 295; mules, 12,432; cattle, 433,015; sheep, 99,266; hogs, 497,050. We have cultivated forest trees, 30,346,571; fruit trees—Apple, Pear, Cherry, Plum and Peach—1,758,127; grape vines, 83,721.

Our first census was taken in 1855. The population then was 4,494; in 1860 it was 28,841; in 1870, 122,993; in 1876, 257,717; March, 1878, it was 313,748.

The acreage and farm products for 1878 will average an increase, over 1877, of at least 25 per cent., and, in many instances, of 50 per cent. The crops were never so fine—fine in every part of the State. The greater proportion of this development has been made within the past fifteen years. We have about 1,500 miles running railroads in this State, and some are being built this season.

How does this do for the "Great American Desert;" all accomplished within two decades, and nothing to begin with!

ROBT. W. FURNAS.

SPALDING CO., Ga., July 25th, 1878.

WE have had quite a heated term for two weeks past, the thermometer registering 98° one day last week. Very dry and dusty, and rain is badly needed on garden vegetables and corn crops. Cotton looks well, up to date, and while a rain would not injure it any, still the crop is not suffering. Farmers complain that their corn is cut off at least one-third. The drought coming on just as the grain was in the milky state causes it to dry up and harden prematurely without filling out to the ends of the ears. Peaches have rotted and fallen off the trees worse than I ever saw before; in fact, the middle crop is almost a loss. This we are unable to account for unless the very dry weather in May, followed by a season of copious rains in June, set the sap in motion again, and the new growth, so vigorously started, caused the fruit to fall off and rot. On examination, however, we find that nearly all the rotted fruit, whether on the tree or off, has a small white worm in it. Did the worm cause the fruit to rot? Or did the rot cause the worm to grow? Would be glad to hear from some of our RURAL friends on the subject. We have at last organized a Horticultural Society in Griffin,—W. W. Woodruff at its head, and one of our most enterprising fruit growers. One thing we can brag on, and that is our watermelons. Middle Georgia can certainly be relied on for watermelons from June 15th to September 15th, during which time the "average darkey" is always happy; for he can get a watermelon, large enough to feed his whole family, for five cents, and the warm sun renders but little clothing necessary.

J. G. RHEA.

FLOYD CO., Iowa, July 20th, 1878

WE are having the hottest weather ever known here. Last Friday and Saturday were excessively hot days, the mercury marked 103° in the shade. During the past week it has ranged from 90° to 100°. On the Friday named, at a circus in Osage, Mitchel Co., two performers and three horses died from the heat. The wheat crop will fall far short of that of last year, owing to the excessive rains and intense heat while filling. Blight and rust have done their work, and the grain is prematurely ready for the sickle. Most of the harvesting here is done with self-binders which use wire or cord. They work satisfactorily and do cleaner work than the old method of hand-binding on harvesters. Cost $300 and $325.

Much of the heavy wheat and oats is so badly lodged that only a small part of the crop can be secured. Our crop of hay is immense, timothy yielding 3 to 4 tons per acre. Corn stands six feet high and its growth is so rapid that one can almost see it. The small fruits were very abundant this season and the apple crop will be the largest ever had in this country. Of course, we have no very old orchards yet, but almost every farmer has one just coming into bearing, while a few of the oldest settlers will have hundreds of barrels of choice fruit. Wild plums, generally so plentiful here, are a total failure. The trees blossomed profusely, but the late frost killed them. Potato bugs put in an appearance in small numbers, but suddenly left for parts unknown, and the crop cannot fair

of being good, for which we shall be truly thankful.

I notice your correspondents from various Eastern States mention those pests as being numerous with them. Gentlemen, you have to go for them with Paris-green or lose your potatoes. This is an infallible remedy, a fact that ten years' experience with their depredations has taught us. W. S. McERRON.

HOWARD LAKE, Minnesota, July 23, 1878.

WERE our Eastern and Southern friends to see how we have been melting away, since the first of the month, they would cease fearing that we should freeze to death. So far as I can learn, there has been no such weather in the State before. Right-down sultry, and even a little foggy weather has continued until weeks have come and gone, with but slight change, and that all the time growing a little warmer, till about the 20th inst. when, to our great joy, the "gentle breezes," usually so prevalent here, came to our aid, since which time we are enjoying agreeable harvest weather.

On many of the warmest days I feared for many of the choicest plants which were bedded out, with what at the time I hoped would be sufficient shade; but time and practice have taught me that but few plants can stand much of the sun's rays in the middle of the day, and, although I have hitherto almost made sunshine a hobby, I now feel that one-third sun is better than to put them in more exposed positions. While a few plants have gloried in the sun, others have literally shriveled up, evidently from the intense heat. This is while we have had frequent showers—no drought—seldom any wind. It is said no injury to the wheat can be complained of, as was feared when the sultry weather was so severe. Good corn and potatoes everywhere in this region (unless cultivation was neglected)—beetles easily driven from potatoes—nor did as many eggs hatch as usual.

I have seen similar reports from many localities in this State, with only few exceptions where storms have done mischief by lodging grain. S. A. M.

CORNING, N. Y., July 28, 1878.

IN regard to spring wheat my experience has been rather limited and altogether unsatisfactory. This locality does not seem to be congenial to its successful cultivation. I am certain of one thing, however; it must be sown early, and on light, rich soil, to give good results.

Butter-making with us is not a paying business this season. It only brings ten cents per pound in our market. I never knew it to be so low and such a drug before. Immense quantities of hay are being secured in fine condition. Crops nearly all look fine. Apples are dropping badly. Wheat and barley nearly all secured. Oats are turning. A large acreage is sown to this cereal; but does it pay? I think not. No grain will more quickly impoverish the soil than this; and oats are only worth twenty-five cents per bushel. J. L. N.

MERCER CO., N. J., Aug. 1, 1878.

THERE have been heavy crops of hay, wheat and oats, gathered in good condition in this neighborhood; and we have just had two days of sultry and showery weather, which is favorable for the growing corn. At present this is uneven, but promises well. Potatoes turn out finely; pastures are very flush. Fruit, a scanty crop. Prices low. Wheat (old) $1.15 per bushel; oats (old) 28c. per 30 lbs.; corn 45c. per bushel; potatoes 50c. per bushel; butter 18c. per lb.

D. J. BLACKWELL.

STARK CO., Ill., July 24, 1878.

THE farmers are in the midst of their harvesting. Rye, wheat and oats, give a much better yield than was anticipated a month ago. Corn is looking well, notwithstanding the dry, hot weather we are having. The month of May and part of June were very cold and rainy, but now we are having just the reverse. There has been a number of cases of sunstroke through this part of the country. Harvest hands are scarce, although the country is running over with tramps. HATTIE E. MCCORMICK.

BRECKENRIDGE CO., KY., July 27th.

CROPS are tolerably good, but suffering for rain; we have had none for two weeks. The weather has been intensely hot; indications for rain are flattering now. Oats are heavier than for a number of years. Wheat good, when not injured by rust. Corn promises a fine crop if seasonable. Tobacco looks well.

MRS. M. J. CLAYCOMB.

TRUMANSBURG N. Y. Aug. 1.

We are having bad weather for the harvest, rain or showers every day. Hay all in and a good crop; wheat partly in; heavy growth of straw and a fair yield of wheat, but not up to our expectations, the berry in some cases being badly shrunk. We have a heavy yield of barley. K.

PRINCE WILLIAM CO., Va., July 28th, 1878.

WE have just enjoyed a fine shower which came in time to make our corn, and start buckwheat, as we had had a very dry spell. The corn crop will be quite fair; hay was good; no peaches and few apples. Times discouragingly hard. E. KEYSER.

CAMBRIDGE, MASS.

IT rained hard to-day; we needed it much. Grass and plants generally look well. Evergreens have made an exceptionally fine growth this year. The hay crop was uncommonly heavy, and as a rule is saved in fine condition. Pears are a very light crop; apples heavy. W. F.

HOUSTON, Texas, July 27, 1878.

WARM, but not excessively hot weather here, the highest thermometer stands at 96°. No cases of sunstroke. Plenty of rain, more than needed, a shower almost every dry, therefore weeds in the ascendency. G. M.

MONTGOMERY CO., Ia., July 24, 1878.

OUR harvesting is nearly finished under favorable circumstances, and promises a fair yield. New wheat is being sold at 70c. per bushel.

H. S. WEST.

WHITNEY'S POINT, N. Y., July 26, 1878.

VERY warm; haying well advanced; grass crop better than was expected. M. B. D.

Hygienic Information.

INTERMITTENT FEVER.

DR. GOODENOUGH.

INTERMITTENT Fever, otherwise called Fever and Agne or Chills and Fever, like the two other forms of miasmatic fever distinguished by the names of Remittent Fever and Pernicious or Congestive Fever, most frequently occurs in the latter part of summer and autumn. Indeed, as original affections, they almost exclusively make their appearance at this season; for when they occur in winter and spring, it is generally as returns of former attacks.

Types.

Of intermittent fever there are three ordinary types: the quotidian, in which the paroxysm recurs every day with intervals of about twenty-four hours; the tertian, in which the paroxysm recurs on every other day, with an interval of about forty-eight hours; and the quartan, with the paroxysm on every third day, with an interval of seventy-two hours. The inventors of the two latter names followed the ancient method of counting the order of days, by including both the paroxysmal days in their nomenclature. Other types, which are very rarely seen, are quintan, septan, sextan and octan, the last occurring at intervals of a week.

The regular types are subject to numerous diversities. The quotidian is sometimes double, having two paroxysms every day; so is the tertian, with paroxysms every day, but at different hours or with different characters, so that two tertians are going on together. The triple tertian has two paroxysms every second day, and one on the intervening day; that is, three instead of one in forty-eight hours. In the double quartan, out of three days, two have each one paroxysm and the other none; and in the triple quartan, there is a paroxysm every day, but the three successive paroxysms differ from each other, while corresponding respectively with the three that follow. There are also a number of other complications, an account of which would probably confuse rather than instruct.

Symptoms.

In regular intermittent fever each paroxysm consists of three stages: the cold, the hot and the sweating, succeeding each other in this order. Very often the first attack is preceded by general lassitude and uneasiness, stretching, impaired appetite, and perhaps some pains in the head or back. These symptoms pass off without attracting much attention until their recurrence, with increasing severity, at regular intervals afterwards. Attention to these preliminary paroxysms is, however, important, as at this early stage the disease may often be promptly arrested by the adoption of proper measures.

THE COLD STAGE varies in duration from a few minutes to four hours or more, but averages an hour. During it, sensations of chilliness pervade the limbs and trunk, sometimes in longitudinal lines, like steamlets of cold water; rapid shudders run successively through the frame; the teeth chatter; the hands are shrunken; the features contracted and pale; the lips and ends of the fingers often purplish or livid. The body generally feels cold even to an observer, especially the hands, feet, nose, ears and cheeks; but sometimes, though the patient feels cold, the surface of his body is hotter than in health. The appetite is lost; vomiting often occurs; the breathing is irregular; the chest oppressed, and the pulse small.

THE HOT STAGE.—In the passage from the chill to the hot stage cold shiverings, technically called rigors, alternate for a time with flushes of heat. The warmth, at first agreeable, ere long becomes a universal burning heat. The cheeks are flushed, the eyes sparkle, the surface everywhere becomes red, dry and hot, nor is the increased heat confined to the sensations of the patient, for the thermometer shows that the temperature of the body is positively considerably higher. The mouth is hot and dry, the tongue usually furred; the thirst generally great; the pulse frequent, full and strong. The head usually suffers with a deep-seated, throbbing pain and a feeling of distension in the temples. This stage varies from two to eighteen hours or more.

SWEATING STAGE.—The perspiration, which is sometimes slight, but generally copious, and occasionally profuse, appears first on the face and breast, but gradually spreads over the whole surface. From its first appearance the patient begins to feel relief; the skin becomes cool; the headache disappears; the mouth is moistened; the kidneys resume their functions, and frequently the patient falls into a calm sleep, from which he awakes free from fever.

VARIATIONS.—The variations in the symptoms are too numerous to be particularized here. The average duration of the whole paroxysm may be set down as from ten to twelve hours in the quotidian; from eight to ten in the tertian; and from five to six in the quartan; the attack growing shorter as the disease becomes of longer continuance. When the paroxysm begins at once, without any preceding chill, it is commonly called dumb ague, to distinguish it from the common form which is called shaking ague. Sometimes each succeeding paroxysm occurs an hour or two earlier than the preceding; in other cases, an hour or two later. The former type is said to be anticipating, the latter retarding intermittent; and by this means one regular type may be converted into another, for instance the quotidian into the tertian or *vice versa*.

Intermissions.

As a rule, especially at the commencement, after the paroxysm has subsided, the patient has a general feeling of languor; pains in the back and sides; impaired appetite; uneasy sensations in the head; a sallow complexion, and a sickly look. These diminish with the continuance of the disease, and sometimes, even from the outset, the patient is as free from all signs of disease, during the intermission, as if in perfect health.

Course.

Paroxysms, as a rule, occur only during the day; and when in the anticipating or retarding cases, the time for the paroxysm reaches the hour of darkness, either it does not take place at all, or it sets back into the evening or leaps over until the following morning. The shorter the intermission, the earlier in the day, as a rule, does the paroxysm take place, and *vice versa*. If left to themselves, quotidians usually end spontaneously in about ten weeks; tertians in about four months; and quartans in six, seven or eight months. In mild cases, they terminate sooner; but sometimes, if not interrupted, they continue much longer. When checked by any means, all types, especially the quartan, have a strong tendency to return on little or no provocation, the quotidian commonly at the end of one week, the tertian of two, and the quartan of four. An attack in autumn is frequently followed by another at the opening of warm weather in the succeeding spring. The liability to recurrence usually continues for two or three years, even if removed from the cause, but the symptoms are successively milder. When it terminates fatally, it is generally either complicated with other diseases, or it takes a pernicious or congestive form. The special causes of the latter are still hardly known, but unless detected and properly treated in the early stage, it is too likely to prove speedily fatal. It differs so much, however, from the ordinary types, that it cannot be described here.

Effects.

If the fever be speedily checked, it will leave behind it no other disagreeable consequence than a disposition to return. But if allowed to run on indefinitely, or if continued exposure to its cause brings about frequent returns, among its probable effects are: an enlargement of the spleen, which when great is known as ague cake, an affection well known in many miasmatic districts; an enlargement and induration of the liver, giving rise to jaundice, dyspepsia, diarrhœa etc; chronic intermittent fever, accompanied with a sallow, dejected countenance, feeble appetite, languor and muscular weakness as well as many other disagreeable effects; intermittent dropsy, often obstinate and sometimes incurable, though always much less hopeless than when the disorder is due to independent disease of the intestines; and several other minor maladies. On the other hand it is occasionally useful in superseding neuralgic affections, epilepsy, asthma, rheumatism, and various cutaneous diseases

Prevention.

Avoid miasmatic regions, if possible, from early in June until frost. If this cannot be done, avoid morning and evening air and never sleep out at night. If out at these times, it should not be with an empty stomach or after fatigue or exhaustion of any kind. Shun scrupulous excesses of every sort: never remain long in wet clothes: when heated be careful about exposing yourself to cold; avoid, if possible, the intense heat of the sun about noonday, and keep the system steadily under the moderate influence of quinia.

From want of space here, "Treatment" must be deferred until next issue.

The Poultry Yard.

POULTRY BREEDING.—Continued.

HOW TO GET MOST EGGS.

THE manner of feeding poultry that are layers, is considerably different from that of feeding those that are breeders. In the latter case we want eggs that will hatch chickens with a strong constitution and good qualities; while in the former case we want eggs, and only eggs; we care not whether they will hatch or not, our only aim is to get the greatest number of eggs from our fowls.

In order to accomplish this end, we keep only pullets of last year's hatch and feed all they will eat of rich food constantly growing richer. If they flag, we give a stimulant to impart to them a fresh start—red pepper is the cheapest and perhaps the best thing for the purpose. Fowls will continue to lay well the second year, but it will not be found as profitable to feed them through their molting season as it would be to keep them "laying their best" for one year and then kill them. Another thing: if you only keep them one year, you will have no "tough fowls" to haunt your dreams.

KILLING YOUNG HENS.

Young hens may be killed two weeks after ceasing to lay, and, if well handled, they will be fat and may be thrown on the market at an advance of from one to five cents per pound above common "choice lots," if they happen to be Brahmas. Many will, perhaps, object to this hot-house system as being detrimental to the constitution, but as we set no eggs from these fowls, the objection has no valid foundation, and falls through. Do men object to forcing steers, by high feeding, into rapid fattening on the plea that it is injurious to the constitution of others which are not so fed?

FOWLS CAN'T BE TOO FAT TO LAY.

There is one point to be remembered: it takes a certain amount of food to keep the animal alive, and after that all the food eaten *must* go either to make eggs, to build the body, or to produce fat. It is nonsense to talk of pullets being "too fat to lay." With old hens it *may be* possible, but I have never had this happen to any of mine, nor have I known of any one else that had a fowl so affected, although a friend of mine keeps a hopper of corn always before his fowls, and from October till March, in addition to this, gives, night and morning, a feed of boiled corn-meal, and yet his fowls lay extremely well.

Some time ago I gave the results of some experiments with pigs, which showed that it took fifty pounds of corn-meal to keep a hog one month, and that one hundred pounds of meal per month produced a gain of about twenty pounds; that is, fifty pounds went to supply the waste of the system and all above that went to increasing weight. In cows, a pair consuming a small quantity produced five quarts of milk for every 100 pounds of green Lucern eaten, while a pair consuming a larger quantity, produced six quarts of milk for every 100 pounds of lucern they eat. The same will be found to be the case with fowls—"the fowl that eats most will give the most profit," as a rule, though, of course, there will be exceptions, but not many.

EXERCISE AND FOOD FOR LAYERS.

Make your layers take exercise, not as much as the breeders, but still enough to ward off disease. One-half the feed for my layers is ground. The natural mill of a fowl's gizzard is capable of grinding all sorts of grain; but, though it is involuntary, it is at too great an expense of muscular force. All the ground feed is cooked. I should cook all, only the part raw is preferred by the fowls and they need it to keep them busy. The cooked food is placed in a trough, with slats over the top, to prevent the fowls from scratching it out and dirtying it. The unground, raw grain is so placed that the hens must scratch in order to get it. This is accomplished by burying it slightly in the ground in the summer, and in a pile of chaff or cut straw on the floor of the poultry-house in the winter.

The fowls should also be supplied with some vegetable and flesh food every day, winter and summer. The best way to get this is in the winter to feed turnips and potatoes; and in the summer cabbage leaves, tops of vegetables, weeds, etc, etc., will furnish what you want in this line. For flesh, butchers' waste is my staple, but I often get worthless fish which are both cheap and for this purpose good. Anything that is animal food will do, and where any one has but a few fowls and can get skim-milk, he need look no further. A. M. VAN AUKEN.

Brown Co., Wis.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Porcupine—(Illustrated)... 501
Red-Winged Starling—(Illustrated)... 501
Mr. Meehi's Statement to his Visitors... 502
Dairying and Grain Raising—E. W. Stewart... 502
Thistles or No Thistles—S. Rufus Mason... 503
Timothy and Orchard Grass—Prof. W. J. Beal... 503
Olla Podrida Letter—Mary Wager-Fisher... 503
Bulbs for the Flower Garden—W. C. L. Drew... 503
Everyday Notes—Samuel Parsons... 503
Very Early Peaches—J. W. Kerr... 504
Fraud—Viellard... 504
Cider Vinegar and Sugar from Sugar Beets—Andrew A. Ward... 504
What Others Say... 504
Catalogues, etc.... 505
St. Mary's Academy... 505
Fresh Butter Forever—S. R. M... 505
Self-Acting Cow Milker—T. H. Hoskins... 505
Single or Double Ropes for Hay Forks—J. D. F. Woolston... 505
Intermittent Fever—Dr. Gondenough... 507
Poultry Breeding—A. M. Van Auken... 507

Answers to Correspondents:

Planting Raspberries from Cuttings in Summer 506
Getting Foul Air from a Well... 506
Best Cross for Mutton Sheep... 506
When to Shut Up Swine to Fatten... 506
Grafting Pæonies... 506
Planting White Pine Seeds... 506
Miscellaneous... 506

Everywhere:

Notes from Illinois... 506
Notes from Kentucky... 506
Chautauqua Co., N. Y... 506
Nemeha Co., Neb... 506
Spaulding Co., Ga... 506
Floyd Co., Iowa... 506
Howard Lake, Minn... 507
Corning, N. Y... 507
Mercer Co., N. J... 507
Stark Co., Ill... 507
Breckenridge Co., Ky... 507
Trumansburgh, N. Y... 507
Prince William Co., Va... 507
Cambridge, Mass... 507
Houston, Tex... 507
Montgomery Co., Iowa... 507
Whitney's Point.... N. Y... 507

Domestic Economy:

Butter-Making—Grandmother... 512
Household Hints and Recipes—M. G. R... 512
Domestic Recipes... 512
Markets... 513

EDITORIAL PAGE:

To our Subscribers... 508
Minor Morals... 508
Dairying with Gardening... 508
Brevities... 508

LITERARY:

Poetry... 509, 511, 514
Dorothy's Rival... 509
Recent Literature... 510
Bric-a-Brac... 511
Mother's Vacation—Mrs. J. E. McConaughty... 511
Tasteful Arrangement of Ferns and Grasses—(Illustrated)... 511
Items for Correspondents... 511

Reading for the Young:

How to Grow Plants in Summer—(Illustrated—Julius J. Heiarich... 514
Puzzler... 514

Sabbath Reading:

Tempering Things... 514
Danger of Living to Be Wise... 514

Personals... 515
News of the Week—Herman... 512
Wit and Humor... 516
Advertisements... 513, 515, 516

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY AUG 10, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

TO OUR SUBSCRIBERS.

For our seed distribution last fall, we did suppose that we had raised a sufficient quantity of seeds to supply the probable demand. The supposition was a great mistake. We were obliged to buy seeds—the best we could obtain—to fill our orders. As the varieties originally offered were not procurable, there was no other alternative but to obtain the best we could. Hence it was that at least half of our friends, though receiving the *number* of packets announced, were disappointed in the varieties.

It is our intention to offer our subscribers the present season (on or before Nov. 1st) garden and field seeds, as well as flower seeds, and for the most part those which cannot be procured elsewhere, and there can now be little doubt that our supply will suffice for all demands. Five of the kinds to be offered originated on the Rural Grounds from cross-breeding, and the others are such as, with one or two exceptions, we have never seen offered for sale in any catalogue.

It will be observed that these seeds are to be offered in the latter part of the year to old subscribers, and not, as has often been suggested to us, as a premium, or for the purpose of attracting new ones. Indirectly, no doubt, if of any real value, they will tend to do so. But the plan is only one of many we are striving to carry out in order to be worthy of what we greatly desire to merit, the confidence and respect of our readers.

As we have before stated, we are obliged to limit these seed distributions absolutely to subscribers whose names are upon our books. Many have written to us, claiming that they were entitled to seeds, inasmuch as they purchased the RURAL NEW-YORKER of the news' dealers. For good reasons, however, which need not to be defined, we must take the liberty of disregarding such applications in the future.

We have now a word to say to our lady readers. For five years past we have been collecting what we judge to be the best Pelargoniums (Geraniums), in cultivation, both single and double. We have roughly estimated that by, or before, the first of October we shall be able to send a few cuttings to those who wish them. In a few weeks, probably by the middle of next month, we shall give a list of the names, from which our lady readers may take their choice.

MINOR MORALS.

We have often noticed how, at the announcement of every theft or defalcation in our larger cities, suburban and country papers eagerly seize the opportunity to inveigh, with holy horror, against the wickedness and depravity therein existing, and talk as if all morality and common honesty had fled therefrom and taken up their abode among the fields and forests of the country. That there has been, during the few years past, in our principal business centers, enough wrong-doing to attract the attention and excite the fears of all thoughtful men, is too true. That sin and wickedness more abound at the present than at any previous time, is doubtful. There are probably no writings extant that more clearly and truthfully show what human nature was, in the olden times, than the Proverbs of Solomon; and they need no change in order to make them applicable to the same human nature at present. That the centers of business attract from the country a large proportion of its enterprise and energy, is true; and that these talents are not always directed in the best channels, is also indisputable. Large cities are also the recipients of all immigrants. Of these it is only the more industrious who find their way to country homes, leaving the vile and dishonest to lower the standard of morality, which would be low enough without them.

We do not propose to take up the cudgel in defence of the morality of the city, not even to say to the country, in slang phraseology, "You're another." We would, however, suggest the impropriety of one culinary utensil reflecting on the complexion of its neighbor, for usually the pot is as black as the kettle. All immorality and dishonesty are not connected with energy and enterprise, and when these latter find their way to cities, the former, or some portions thereof, are left behind.

The enormity of a crime is often judged by the amount of dollars involved,—but a theft is a theft be it of one dollar or a million,—and he who steals the one is just as far as, and no farther, from being an honest man than is the other. The country was startled a few years ago by the revelations showing how the Tweed ring had misgoverned New York and misapplied the public funds. We believe we have within our knowledge small townships that have been managed with as little regard to the public good and with as much dishonesty in the application of public money, when the amounts are considered, as was New York in its worst days. And the same will hold good as regards manufacturing companies, corporations and individuals.

In cities a police force is sustained at large expense for the protection of property. In the country, a farmer is obliged to build and maintain fences to prevent his neighbor from stealing his crops—by means of cattle—at an expense greater than would be believed, without actual mathematical calculation.

If we were endeavoring to make a case against our country friends, it would be easy to remind them of a multitude of cases where the narrow path of morality is often overstepped. When have we seen a barrel of apples or potatoes that had as good fruit in the middle or bottom as on the top? Will the hoops about the bales of hay be as heavy when a pound of wood is worth more than a pound of hay—or will eggs average larger when they are sold by weight instead of number?

Little sins, so called, are often winked at, and there are many who would do you out of a dime to whom a dollar would be a stumbling block, and the stealing of a thousand dollars would seem an enormity at which the very gates of perdition would open. The temptations for wrong doing are greater in the city than in the country. Expensive habits of dress and living, indulged in by those who have money to spare, beget a want for the same things in those of limited incomes, to satisfy which, sense of right is put aside and sin committed, and while the prayer, "Lead us not into temptation," should be on every lip, it seems more necessary for him of city life and influences. But the power of resistance should grow in pace with surroundings, and we make no excuse for the sinner on this ground. When Adam eat the apple, his punishment was none the less because Eve gave it to him, nor her's because she was tempted by the serpent. As a man thinketh, so is he. If covetousness, deceitfulness, untruthfulness, avariciousness, have place in a man's heart, and he allows them to so gain ascendency over his uprightness and honesty, even in trifles where opportunities are limited as in the country, what shall prevent his allowing them full sweep when a city life puts him in position to gratify them? Nothing but an awakened sense of right and justice, which sometimes comes to save him. If temptations are strong in the city, so is virtue. Innocence thrives best in the country, but virtue in town. The depravity of a man in a quiet situation burns with a smoldering fire: put him amid the oxygen of an active life and it burns with a consuming flame. Who among us dare pray, "Lord, I thank thee I am not as other men?"

DAIRYING WITH GARDENING.

The drift of the American people is strongly towards cities and villages, and this, no doubt, arises to satisfy a desire for closer social relations. More than half of the population of the most populous States live in cities and villages, and are non-producers of food. This makes a large demand for the productions of market gardens, and these market gardens must be kept in a high state of fertility to produce remunerative crops. Contiguous to large cities manures may be obtained from city stables, but this is all absorbed by a small proportion of the gardeners, and the much greater number must depend upon other sources for fertilizers. Stable manures are so bulky that the cost of handling them more than five to eight miles renders them unprofitable. We have known gardeners to expend more in hauling manures fifteen miles from the city than the same manures could have been produced for at the garden. These city manures cost, delivered eight miles, not less than six dollars per cord. The same fertilizing material can be made at the garden from cows and pigs for less money. If we suppose (which is not too high) that a cow will make five cords of as good manure per year, this part of her product would be worth $30. A judicious selection of cows and proper feeding will give a small profit on the cost of labor and keeping in the production of milk, and the manure might be considered a sufficient profit.

We are aware that the gardener will have many objections to dairying for the supply of the manure required. He will be apt to object, first, that the extra labor will be too great to add to his gardening. But a large part of this extra labor may be performed by the men required to drive his teams to the city for manure. The labor that hauls his manure from the city will nearly suffice to care for and milk the cows. This labor occurs at stated times each day, and the balance of the time this help may be used in gardening labor. He will not require the labor of his expert hands in gardening for the dairy. The work of the dairy is separate occupation, and he will find these assistants outside the gardening class. Dairy products are always cash and will meet the expenses of this part of his business.

Another objection will be, that he has not land enough to afford room for cows—no pasture, etc. It is quite true that most gardeners have no room for pasturing cows, and the true system of manure-making for gardening will not admit of pasturing. His object is to produce manure and keep it within reach for use, and he does not want it scattered over the pasture. He must keep as many cows as space will permit. Pasturing does not belong to his system. The soiling system is here precisely his trump card. This does not require improper confinement of cows. A yard with abundance of pure water, where his cows may exercise and take the air, is all that is required on that point; they will be fed in stable with green food in summer. He should keep not less than two cows for each acre actually in garden crop. Let us see how completely soiling comes to his aid. Every gardener knows the advantage of rest for the land in these exhausting crops, and what new vigor is infused into it by seeding to clover for a year or two—and on this account, not more than one-third to one-half is cultivated each year in garden crops. This land, taking a short rest, will raise fine crops of clover and other grasses, with annual crops to come between cuttings, and furnish all the green food required, besides a large portion of the winter fodder.

Then note how the gardener may save everything he raises and turn it to good account. Peas sown for market will make excellent soiling food after the last picking. Green pea vines make good milk. Refuse cabbages, carrot and beet tops all turn to cash in the dairy. A large amount of such green food is furnished by a garden. But as the object of the gardener will be manure, he will not confine himself merely to feeding what grows on his own land, but will buy freely what he can feed with a profit. He will desire not only that his cows shall produce largely, but that the manure shall be of the best quality. He will therefore feed grain liberally, as he may well afford it, for it will be repaid every night in milk. Corn-meal, oat-meal, pea-meal, and middlings of wheat will be fully paid for in butter at twenty-five cents or cheese at ten cents.

The Native Flowers and Ferns of the United States.—We call attention to our remarks respecting this worthy work, in the RURAL NEW YORKER of June 8, p. 364. It was at first proposed to make one series of two volumes as a trial and to issue successive series if the public seemed to value it. We are happy to know that the public do value it, and that the publishers (L. PRANG & Co., Boston,) have been encouraged to go on with another series.

BREVITIES.

DIOSCOREA BATATAS is now in bloom. The air about it is redolent of the odor of cinnamon.

A DUTCH paper states that the flavor of coffee may be greatly improved and its delicate aroma increased by adding a little bi-carbonate of soda to the water with which it is made.

SEC'Y GARFIELD, from his observations during a late Eastern trip, is satisfied that "as farms run in Western N. Y. they are not so well managed as those in Southern Michigan."

NOTHING is more true than that many men of great natural abilities pass their lives in obscurity for the reason that they love the pursuit of knowledge more than they do the praise of the world.

IN the American Naturalist for August is an article by Professor W. J. BEAL, of the Michigan Agricultural College, upon the fertilization of Utricularia and Pyxidanthera. The special contrivance by which it is shown that insects are needed for this work is well portrayed by well-executed engravings.

DR. HOSKINS says: "Either a typographical or chirographical error (probably the latter, as I find I am very prone to "heterophemy," thinking one thing and saying or writing another,) caused my article on Dairying Fallacies in RURAL of June 29th, to say "chemical and *physical*," where I meant "chemical and *optical*." Chemistry was a branch of physics when I went to school, and probably still remains so.

MR. E. P. ROE, the enterprising small-fruit cultivator of Cornwall-on-the-Hudson replied to queries of ours, during a brief call a few days since, as follows: "The Thwack Raspberry is a weed on account of its persistent suckering habit"—"Cow manure is of all manures the best for the Strawberry"—"The Great American Strawberry is *great* only in particular localities and under the highest culture."

OUR horticulturally inexperienced friends are reminded that the budding season is at hand. They may refer to the R. N. Y. of July 28, last year, for particulars. We think, however, that for those who are possessed of a pinch of dexterity, the following abridgment may answer: We'll take a rose. Cut in the bark of the stem two slits forming a T in outline. Then cut off a bud from another variety with enough of the bark to form a shield half an inch long, and insert this shield in the perpendicular part of the T. Bind it with yarn or bass.

IN the exquisite poem by Mr. SAMUEL B. PARSONS, The Music of the Trees, published in the RURAL of July 27, the third line (verse) of the first stanza was omitted. The stanza should have read:

There's music in the wild wind's roar,
And in the thunder's crash;
There's music on the rippled shore,
And in the waves that dash,
With crested beauty, on the brow
Of rocks all hoar and mossed.
Singing their melancholy dirge
For the ever loved and lost.

PROF. LAZENBY, in an account of his garden experiments at Cornell University, published in The Husbandman, rates Philadelphia Extra Early peas as of "good" quality, placing them on a par with McLean's Little Gem which is generally admitted to be one of the sweetest peas in cultivation. Philadelphia is no doubt for most localities the earliest. In our experiments with twenty-seven varieties, we found it two days ahead. But to our taste it was of the poorest quality. It is in fact so insipid that we would prefer to go without peas a few days for Laxton's Alpha.

Since writing the above we read under "Notes from the Pines" (Am. Ag.): "Seedsmen make a point of five days in the earliness of peas, but I had rather wait twice five days and get peas like the Kentish Invicta than to bother with such flavorless things as the Daniel O'Rourke." In the article above referred to (RURAL of Sept. 15) is the following: "Kentish Invicta. First picking June 14. Narrow flat pods averaging four peas. Uniform size, well filled, bluish green color. The flavor is no better than that of the whiter varieties. June 25, all gone." From all of which we may conclude that it is hard to settle upon any one variety of fruit or vegetable to suit all tastes alike.

Literary Miscellany.

MOSS-ROSES.

WHITE with the whiteness of the snow,
Pink with the faintest rosy glow,
They blossom on their sprays;
They glad the borders with their bloom,
And sweeten with their rich perfume
The mossy garden ways.

The dew that from their brimming leaves
Drips down, the mignonette receives,
And sweeter grows thereby;
The tall June lilies stand anear,
In raiment white and gold, and here
The purple pansies lie.

Warm sunshine glitters over all,
On daisied sward and ivied wall,
On lily, pansy, rose;
While flitting round each garden bed,
With joyous laugh and airy tread,
A fairer sunbeam goes.

A little human blossom, bright
With childish, innocent delight
Of life yet in its dawn;
With sunshine prisoned in her hair,
Deep eyes unshadowed by a care,
She gambols on the lawn.

She checks the light elastic tread,
And stays to hear, far overhead,
The lark's song to its close;
Eyes shaded by two tiny hands—
We pray God bless her as she stands,
Our little daughter Rose.

Yea, bless the Rose, dear God, since we
Have given the Lily back to thee,
That bloomed with her awhile;
Yea, bless her deeply, doubly now,
For her dear sake, whose angel brow,
Reflects thine awful smile.

How often in her childish face,
Our hungry, longing eyes can trace
The looks of one away;
How often in her merry tone
A music wakes, more sad than moan,
Of accents hushed for aye!

God bless the child to blossom here,
Our clinging human hearts to cheer,
Till life has reached its close;
To grow in sweetest grace and bloom,
To beautify the dear old home,
Our precious daughter Rose!

[All the Year Roun

DOROTHY'S RIVAL.

BABINGTON WHITE.

IN the days when the thunder of Whitfield's voice had but newly resounded above the crowd at Moorfield's, Mr. William Bolton, a simple country parson of the Established Church, lived very happily with his only daughter, Dorothy, on the outskirts of Hammersley.

The parsonage was a comfortable red-brick house, very square and very uninteresting from a picturesque point of view. It stood a little way back from the high coach-road to London, with an orchard on one side, and on the other a common cottage-garden, with two long flower-beds and a broad gravel-path, and vegetables growing in the mild distance, and espaliers in the background. All the roads were London roads in those days; and people lived on the London road without ever seeing the metropolis, which figured, glorious and radiant, in their day-dreams; an enchanted city—not actually paved with gold, but altogether marvelous and beautiful.

To Dorothy Bolton the red house, the orchard, and the garden were very pleasant and dear. What, indeed, could be more beautiful than the parlor, with its two prim book-cases, the needlework pictures of a shepherd and shepherdess smirking from their oval frame; the little room in which her father composed his sermons, with much aid from grim-looking black-leather-bound books, labeled Barrow and Tillotson; the infallible eight-day clock in the hall, which groaned and rattled in such an awful manner before the striking of an hour, and above the dial of which there was something scientific in the way of a sun and moon that were never quite in working order. All these things to the eyes of Miss Dorothy were beautiful; nor did she pine for any brighter or gayer existence than that which she enjoyed, or languish for any respite from the many duties of her simple life. She had no higher aspiration than to sit in the parlor wearing out her bright young eyes in the fine stitching of her father's shirts, to help her mother at bread-making, or to trudge into Hammersley on a fine morning by the parson's side, to share in his round of visits among the poor folks, or to read that new and delightful story of Pamela aloud to her father and mother in the long winter evenings. These things were at once her duties and her pleasures. In this peaceful home she had grown from childhood to womanhood, and was so innocent and childlike still, that she thought it was her gipsy hat and scarlet ribbon that made such a picture of brightness and beauty in the little mirror that reflected her fair young face every Sunday morning while the bells were ringing for church. Yes, Miss Dorothy Bolton—or Mrs. Dorothy, as people were more apt to call a damsel in those days—had grown from a sunburnt, hoydenish girl into a very lovely young woman, without any consciousness of the transformation. The parson and his wife saw that their only child was now, indeed, a comely young person; but these good people would have cut their tongues out rather than they would have confessed as much to the damsel herself.

"Handsome is who handsome does," said Dorothy's mother; and the girl felt as if her good looks were in some manner dependent on the neatness of her stitching and the lightness of her last batch of bread.

By and by, however, there came to Hammersley Parsonage some one who, although by no means prone to dilate upon Dorothy's personal attractions, permitted the young lady to discover her power to charm. The new-comer was a certain Matthew Wall, a young clergyman, who came to share the burden of the vicar's duty, and who had so far proved himself a very worthy and efficient member of the Church.

Indeed, in sober truth, efficiency and energy were much needed for the cure of souls in Hammersley. The town was large and crowded, the people rough and disorderly; and an awakening voice was needed to arouse a people who had long been dead to the spirit and careless as to the letter of the faith.

William Bolton, the vicar, had a simple mind and a kindly nature; but something more than these are required for the salvation of such a town as Hammersley; and this something more seemed to have been given to the poor benighted creatures in the person of Matthew Wall.

The vicar preached a very orthodox sermon of the soporific school, and had a heart and hand ever open to the appeal of the poor; but, as his means were small and his judgment very fallible, he effected with the best intentions, very little real good. He was getting old; and he liked his after-dinner pipe in the orchard in summer, and by the chimney corner in winter. He liked to take his nap in the long winter evenings, while Dorothy read The Life and Surprising Adventures of Robinson Crusoe, or Religious Courtship, or an odd number of the Spectator. He visited his poor from time to time, and he was not unwelcome to them even when he came empty-handed; but it seemed as if his visits did very little good. Hammersley was, in truth, too big a place for this simple pastor, and the people of Hammersley too rugged a race for his mild rule.

Matthew Wall was a very different pastor. Fatigue and discouragement were alike unknown to him. He had the energy of a Whitfield or a Wesley; and, in that day, Whitfields and Wesleys were needed in the Church as well as out of it.

William Bolton invited his curate to dinner on Sundays; a dinner served directly after service—substantial and ponderous, after the old fashion. But Mr. Wall would eat very little between the services; he did better justice to the nine o'clock supper. The vicar, who exhibited a hearty appetite both at dinner and supper, called Matthew a poor trencherman. It is possible that Matthew's chief delight at the parsonage was not to be found in his trencher. He sat by Dorothy at supper, and seemed to derive much satisfaction from her society. He found her sweet-tempered and modest as Pamela, pious as Dorcas; and before he had been six months at Hammersley he made a formal demand for her hand.

The vicar hummed and hawed, and consulted his wife.

"Sure, 'twould be but a poor match for her," he said. "Matt Wall has but his cure of seventy pounds a year, and a few hundreds to come from his father by and by. The rogue has good parts, I dare say, and has done good service amongst Hammersley folk with his fiery talk and hunting them out in their dens; which is pushing a parson's trade farther than I should care to push it. I doubt but he's touched with the Wesley and Whitfield madness; and we shall have him turning his coat some day, as the two Wesleys did—to the shame of his family and friends."

Happily for Matthew Wall, the vicar, after consulting his wife, thought fit to say a few words to his daughter.

The girl reddened and cast down her eyes, and when hard pushed by her father's questions, confessed with tears that she loved Matthew very dearly, and would go to her grave unmarried sooner than she would give her hand to any but him. The vicar was no 'Squire Western. He expressed his astonishment by a long whistle, and reproved his daughter for a sly puss; after which feeble protest he consented to receive Matthew Wall as his future son-in-law. But there was to be no marriage for three years to come. Matthew was but five-and twenty, Dorothy just turned eighteen. The young couple pledged themselves very readily. They met on Sundays, walked to and fro together between the parsonage and the church, dined and supped together; and whenever Matthew's business happened to bring him near the garden-gate on week-days, he would step in to say a few words to his Dorothy.

The three years passed very pleasantly. Matthew Wall had become a power in Hammersley before his period of probation was ended. There were some who called him wild and fanatic,—for to be earnest in those luke-warm days seemed a kind of fanaticism; but since in many instances the drunken became sober, and the reprobate became decent beneath his sway, folks were fain to admire his earnestness. The bishop of the diocese complimented the young man on the change he had brought about in Hammersley.

"I'm pleased you should show these folk that 'tis possible to do good without deserting the Church we have sworn to hold by, sir, and that 'tis as easy to bring the stray sheep back to the true fold as to lure them into a strange one," said the bishop, at a grand ceremonial luncheon of which he deigned to partake on a certain occasion.

Parson Bolton was gratified that his curate and future son-in-law should win this meed of praise from episcopal lips.

"But there's more of the Methody about our Matt than I quite relish, for all that," he said to his wife in the confidence of connubial discourse. "It is not given to mortal man—least of all to a religious reformer—to please everyone. There were people in Hammersley who did not like Matthew Wall. His long, earnest, even fervid discourses displeased a few. He had refused invitations to tea and supper-parties—solemn and yet boisterous festivities given by the richer tradesfolk of Hammersley—and had thus offended many. There were Wallites and anti-Wallites in Hammersley; and the anti-Wallites were strong. Amongst them the most notable people were a certain Mr. Jorboys, grocer and cheesemonger, his wife, and daughters. The Misses Jorboys—Sally and Letty—were accounted beauties. They wore hats and muffs and gowns, which their father brought from London when he went thither for colonial produce; and they took it ill of Mr. Wall that he had been so prompt to devote himself to the parson's dowdy daughter, who had never known what it was to powder her hair, or sail along the High-street prim and stately in pannier-hoops.

It was nigh upon Christmas, and there was to be much joviality at the parsonage, for this must be Dorothy's last Christmas at home. A neat little house in Hammersly had been hired by the curate, and comfortably furnished out of funds provided by his father, with certain additions in the way of dragon-china tea-service, a brass-handled bureau, and liberal store of home-spun linen, provided by Mrs. Bolton, who with her own hands prepared the nest for these young turtle-doves.

"I could have wished my Dorothy had fancied Squire Hever, of Hever Farm, who was like to die for her last winter," the parson's wife said to her gossips; "but she's been like one bewitched since Matthew courted her. 'Sure, would you have me break my faith with a saint, dear madam?' she cried, when I told her how young Hever would have made a lady of her, with her own coach and a black footboy. And I do think the simpleton's right in that," Mrs. Bolton would add with an air of conviction. "I've seen young men more mannerly in turning a compliment, and softer spoken; but if ever there was a saint on earth since St. Paul, I think Matthew Wall is one."

Of late the lady's gossips had been somewhat slow to respond to this observation; and she was not a little vexed on one occasion by the conduct of her particular friend Mrs. Jorboys, who went so far as to shake her head and groan audibly at this point in the conversation.

"I hope you have nothing to say against my daughter's sweetheart, ma'am?" the parson's wife observed with some acidity.

"O no, ma'am," Mrs. Jorboys replied with a sigh more dismal than the last; "I have nothing to *say* against him."

There was an unpleasant emphasis on the word *say* that went nigh to freeze Mrs. Bolton's marrow.

"I don't quite take your meaning, ma'am," she said stiffly. "Mathew Wall may not be a rich husband for our Dorothy, but he don't need to be groaned over as if he were a beggar."

"You wasn't talking of beggars, as I know of, ma'am," Mrs. Jorboys answered with acrimony. "You was talking of saints."

"And what then, ma'am?"

"I have my thoughts, ma'am. I should be vastly sorry to hurt your feelings, Mrs. Bolton, but my thoughts are not my own making, and I can't help it if they are of a nature to lead to what you was so civil as to call groaning;" and hereupon Mrs. Jorboys sighed again, while Miss Letty and Miss Sally sighed in chorus. This occurred at a Hammersley tea-party, from which Dorothy chanced to be absent.

The parson's wife went home perplexed and miserable. The next batch of bread was heavy and by no fault of Dorothy's, though her simple head was a little distraught by thinking of the great change so near at hand. It was the chief bread-maker whose mind was most troubled, whose hand was most uncertain. Those groanings and head-shakings of Mrs. Jorboys haunted the good soul by day and night, and Dorothy could but wonder what made her mother so thoughtful.

"I fear there's something troubles you, ma'am," the girl said, in the petty, respectful manner of those days.

"Nay, my dear, I have no trouble but the thought of losing thee," answered the mother; "and if it's for thy good, I'm content we should part."

"But it's not parting, dear madam; 'tis but living in separate houses. Do you think there's a week will pass without my paying my duty to you? And I'll come to help with the bread-making, if you'll suffer me."

This was Christmas-eve. There was to be fine fun at the parsonage that evening, ending with the compounding of a beverage, made of eggs and spices and ale, that had been compounded at a certain hour on every Christmas-eve since the vicar had kept house. The beverage was always compounded in the parlor, and partaken of with all solemnity out of a great silver tankard that was said to have belonged to Oliver Cromwell. Dorothy vowed that it was but a battered old thing, and she had seen finer, spick-and-span new, at a silversmith's in the High-street.

The curate was to drink tea at the parsonage, and assist, not only in the compounding of the beverage, but in the composition of that much more sacred mixture, the Christmas pudding. To these simple diversions Dorothy looked forward with extreme pleasure. She thought of her betrothed with unmeasured tenderness, with reverence and devotion, amounting almost to fanaticism. She believed in him as a being almost too saintly for earth. Mrs. Bolton had ample occupation for her hands

MOSS-ROSES.

on this eve of the great Christmas festival; but her mind was not free to devote itself to her labors. The image of Mrs. Jorboys pursued her through all her duties.

"I'm very like to want more raisins and spices for the pudding between this and the New Year," she said to herself; "I'll walk to Hammersley this afternoon, and have it out with Mrs. Jorboys."

Having once resolved on this course, the matron was more at ease. She set out on her expedition directly after dinner, leaving the vicar smoking his pipe by the chimney-corner, and Dorothy busy with her plain sewing. The girl had offered to accompany her mother, but the offer had been refused. The dame departed in very good spirits, promising to return by tea-time. Dorothy sat sewing while her father smoked and dozed, and dozed and smoked; and at five o'clock in came the curate, tired with a day's hard work, but cheered by his Dorothy's welcome and well pleased to find himself seated by her side.

"I've come all the way from Liscott Common," he said, as he seated himself in the old-fashioned arm-chair which Dorothy had set ready to receive him; "and it's a long trudge."

It was five o'clock, and Dorothy had brewed the tea, which was an infusion to be partaken of with a certain ceremony in those days, as an expensive luxury implying refined taste and much gentility on the part of the consumer. Parson Bolton took no tea—but the curate liked all that Dorothy liked. The pretty little china teacups—fragile little things, without handles, like a child's toy cups and saucers—and the quaint little teapot were set out on the polished mahogany board, but there were no signs of Mrs. Bolton's return. So the lovers sat talking together in undertones while the father dozed for one brief happy hour, and then, after the usual preliminary groaning, the infallible eight-day clock struck six.

"I should be quite frightened about mother," said Dorothy, "if I did'nt know that Jorboys' man is to come home behind her with the parcels."

She had scarcely spoken when the door was opened, and shut again with a slamming noise, and Mrs. Bolton stalked into the room.

The matron's cheeks were crimson, and the matron's eyes flashed fire. Never before had Dorothy seen such a look in her mother's face.

"You're late home, madam," she said, trembling, she scarcely knew why, unless it were because of the strange look in her mother's face.

"Thanks be to God that I'm not too late," the parson's wife answered solemnly. The unfamiliar tone of her voice startled her husband from his comfortable doze, and he looked up alarmed, crying, "What, what?" like his revered sovereign King George in after-days.

"Sit down and drink thy tea, lass," said the good-natured parson, as his wife stood tugging at the string of her cloak, hindered by Dorothy, who made believe to assist with trembling fingers.

"Never, while that bad man is under this roof," answered the dame, pointing to Matthew Wall, who had risen to receive her.

"Bad man!" cried the parson; "art thou dreaming? There's no one here but Matthew Wall, thy son-in-law that is to be."

"My son-in-law that never shall be: I would see my daughter in her winding-sheet first."

"Why, what maggot has bitten thee, wife?"

"May I ask the meaning of this strange talk, madam?" asked the curate, with that awful calmness peculiar to a proud man who feels himself outraged.

"Thou mayst ask and shalt be told, too, as plain as I can speak before this simple, tender soul that loves thee," answered the matron. "I wonder thou art not ashamed to come to an honest man's house and steal his daughter's heart—you, that play saint on Sundays, and sinner on Mondays, and hypocrite all the week round."

"Mother!" cried the girl,—indignation, astonishment, anguish, reproach, all expressed in that piteous cry.

"I must ask for the second time what you are pleased to mean, madam?" said Matthew Wall with unshaken calmness.

"I'll answer that question with another, sir," returned the matron. "Will you be so good as to tell me—here, before my husband and daughter—whether you know Liscott Common?"

There was nothing very awful in the question itself, but Mrs. Bolton's tone made it awful, and it went like a pistol-shot through Dorothy's heart, as she remembered how her lover had talked of his walk from Liscott Common that very afternoon.

"Yes, Mrs. Bolton, I know Liscott Common."

"So, sir, you don't deny your wickedness?" cried the dame; "but perhaps you will deny your knowledge of Jane Gurd's cottage on the other side of the common, where you've been seen to go twice, three times, four times a week for this last six months; and where you've been known to stay two hours at a spell, times and often—you, that complain of wanting leisure for good works! You could find leisure for bad works, and to spare, I reckon. What, you start and change color at last, my fine master! I doubt you did not think Hammersley folks were sharp enough to find out your doings."

"I did not think Hammersley folks were so wicked as to impute evil to a man who, when most unworthy, is at least urgent in his duty."

"Upon my word, sir," exclaimed the infuriate matron, pushing aside the trembling girl, who would fain have restrained her wrath, "you carry matters with a bold front; and I must needs speak plainer than I care to speak before this simple child here, who was too quick to love and trust you against her parents' will that had higher hopes for her. Nay, dry thy tears, Dolly; I'll see thee mistress of Haver Grange, belike, instead of drudge and draggletail for love of that dirt yonder."

And the matron pointed at Matthew Wall with a trembling finger,—at Matthew, whose calmness was not yet shaken.

"Will it please you to speak quietly and civilly, madam?" he said. "You ask me if I know Liscott Common, and I answer yes; if I know Jane Gurd's cottage, and I answer yes again. I came straight from there to this house an hour ago."

"You came from there to my child!" shrieked Mrs. Bolton; "then, indeed, you are a shameless villain!"

"Come, come, dame," expostulated the parson; "civil words! civil words!"

"'Tis easy talking for you, William; but am I to pick and choose my words, when my heart is like to burst for grief and shame? That wretch yonder, that was to be married to our Dorothy a fortnight come Saturday—him that pretends to be a saint—must needs have his fancy. He keeps a fine madam hid away in Jane Gurd's cottage, and there's scarce a day passes that he does not waste a couple of hours in paying his duty to the lady; and he comes straight from that woman to my daughter; and you ask me to keep my patience, William Bolton!"

"I'll not believe it!" cried Dorothy suddenly, flinging herself away from her mother, and standing bolt upright, looking at the dame with flaming eyes. "I'll not believe it, mother, if all the people in Hammersley were to swear it on their Bibles."

"There is no need for so much warmth, Dorothy," the curate said gently. "I do not fear thou wilt believe ill of thy chosen husband. And you, madam, will soon be sorry for having done me so much wrong. Pray, who was it told you this pretty story?"

"I heard it from Mrs. Jorboys; but 'tis the common talk of Hammersley."

"I am sorry Hammersley should choose such vile discourse."

"Can you deny this story?"

"I will not trouble myself to deny it."

"O, indeed, Mr. Brazenface! You won't deny, then, that there is a young woman living in Jane Gurd's cottage, and that you took her there?"

"That is quite true."

"And is it true that you have paid for the vermin's board and lodging?"

"Vermin is a very hard word, Mrs. Bolton, and the girl at Jane Gurd's cottage deserves no such bad name. I have paid for her meat and drink hitherto: Jane is kind enough to give her shelter without recompense."

"And you took her there?"

"Yes, I took her there."

"You are a bad man, Matthew Wall."

"I thought you were too good a woman to be so ready to think ill, or to listen to gossip that is as idle as it is wicked," answered the curate with the gentle gravity that had distinguished his manner throughout this interview.

"If there is no harm in your doings, why have you kept them secret?" asked the dame with no less anger, but with a certain admixture of uncertainty.

"I can but answer you with Shylock, it has been 'my humor.' There are things a man does not care to talk about. I have had my fancy about that poor girl at Liscott Common. The fancy might have proved a foolish one, and I might have been laughed at for my pains."

"And this is all you have to say?"

"Yes; I will say no more to-night. If you want to know more, Mrs. Bolton, or if you would know more, Dorothy dear, you have but to walk to Liscott Common with me after service to-morrow, and you may find out more of poor Betty than you can learn by Hammersley's gossip."

"Betty!" exclaimed the matron, "Betty what, pray, sir?"

"She has no other name," replied Matthew; "she had one when I first met with her; but I have done my best to rid her of it. And now I will wish you good night, madam, and a heart less prone to give heed to slander. Sure, I know 'tis a kind one."

He took Dorothy's hand as he passed her, and pressed it tenderly to his lips.

"Thou art too pure to doubt me, dear creature," he murmured. "I will show thy kinsfolk to-morrow that thy purity is wiser than their experience."

In the next moment he was gone. The parson's wife sent Dorothy to bed—for in the days of Pamela and Clarissa it was within the scope of maternal authority to send a daughter of twenty-one years of age to bed—and immediately sat down and began to cry. She had her cry out, and then consented to answer her bewildered husband's inquiries. She told him how her suspicions had been aroused by certain hints and head-shakings on the part of Mrs. Jorboys, and how she had gone that afternoon to Hammersley determined to have it out with that lady; and how Mrs. Jorboys had told her with due solemnity that Matthew Wall's wickedness was the common talk of Hammersley, since he was known to have a mistress, some low common rubbish picked out of a Hammersley gutter, hidden away in Jane Gurd's cottage; and how his frequent visits to Mrs. Gurd's abode had in the first place aroused suspicion, after which he had been watched by good and zealous Christians anxious for the repute of their holy Church.

"But how do these spies and watchers know that the girl is Matthew's mistress?" asked the parson.

"What else should she be, William?" exclaimed the dame, with an awful shake of the head.

There was no compounding of spiced drink on this Christmas eve. The parson and his wife sat by the fire sad, angry, bewildered, altogether ill at ease. Dorothy lay awake very unhappy. It was not that she suspected her lover of any wrong-doing. That was impossible. She wept over the breach between these two whom she loved so dearly, and fell asleep at last in the midst of a prayer that all might be made right again to-morrow.

The Misses Jorboys and their mother nodded and smirked at Dorothy as they passed her pew in their Christmas finery before morning service. They marveled to see the girl's peaceful face, after the revelation at which they had assisted on the previous afternoon. It was the curate's turn to preach, and he chose for his Christmas discourse a very familiar text about the charity that thinketh no evil. Matthew Wall was a powerful preacher at all times; but to-day he seemed as one inspired, and the hearts of Mrs. Jorboys and her daughters quailed beneath their ribbon-bedizened stomachers as they heard him.

"It was but the common talk I repeated," thought the grocer's dame; "and 'twas for the good of yonder silly child I spoke so plain to her mother."

The parsonage dinner had been put off till half-past two o'clock, much to the parson's discontent, in order that there might be time for the visit to Liscott Common.

"It goes against me to go near the place where the creature lives," said Mrs. Bolton, when the matter was discussed; "but it's best to hear the truth from Jane Gurd."

Mrs. Gurd was the widow of a Hammersley tradesman who had died in extreme poverty. She lived partly by her own labor, partly on charity, and was supposed to be a decent sort of person.

The day was clear and bright. Mr. Wall and the vicar met Mrs. Bolton and her daughter at the gates of the churchyard; Matthew offered his arm to Dorothy, and the mother did not interfere to prevent the girl taking it. In sober truth, the dame was somewhat shaken by the young man's firmness, and she had been not a little melted by that eloquent discourse on the charity that thinketh no evil.

This walk was not unpleasant to Dorothy, in spite of the cloud that darkened her horizon. Mr. Wall, with a rare delicacy, avoided all allusion to the business of the last evening. He talked of his parish work, in which Dorothy was deeply interested. The parson and his wife trudged after the young people, both silent.

"He could never take us to that house if he was the wicked wretch Mrs. Jorboys would have me think him," the dame thought with some sense of remorse. Her confidence in her informant was beginning to falter. She had always liked Matthew; even when most ill-pleased that her daughter should make so poor a match.

They came to the humble little cottage. Matthew lifted the latch and entered, followed by his three companions. Jane Gurd was nodding in a roomy old chair by the chimney-corner, a girl was sitting by a window staring out at the common. Such a girl! If this was Matthew Wall's fancy, it was a passing strange caprice. The girl was the ugliest specimen of womankind on which Mrs. Bolton had ever looked. There was indeed something more than common ugliness in the vacant face, the heavy lower jaw, the low narrow forehead, scant sandy hair, and thick-set lumpish figure. The girl escaped by very little from being a monster.

"I have brought the vicar and his lady to see Betty, Mrs. Gurd," said the curate, as the widow stood up and curtsied to the quality.

The girl neither rose nor turned her head at the entrance of strangers. A figure of stone could not have been more still than this clumsy peasant girl.

"You have not taught the creature manners, Matthew Wall," said the outraged matron, "or she'd be quicker to show her reverence for her betters."

The curate smiled, and turned with a gentle compassionate look to the monster by the window.

"Bless your dear heart, ma'am," cried the widow Gurd, "Betty, knows no more of your honors' coming in at that door than the Emperor of Chaney."

"What!" cried the dame; "can't the creature see us?"

"Lord, no, ma'am; she's stone blind."

"But she can hear us, at any rate?"

"Not she, ma'am; the postes isn't deafer."

"But—but she can speak, I suppose?"

"Four words, ma'am, as Mr. Wall has taught her in this last six weeks. The Lord knows how he found the patience and the cleverness to do it."

"Blind, deaf, and dumb!" cried the vicar's wife, aghast. "O, Matthew Wall, can you forgive me?"

"With all my heart, dear madam. It was but a foolish mistake of the Hammersley folk;" and the curate held out his honest hand to the woman who had wronged him. "Yes, poor Betty yonder is blind and deaf and dumb. I found her in one of the back slums of the town, worse treated than a dog; for the sorriest cur has some ragamuffin that will stand by him; and Betty had no friend. She was beaten, starved, kept in a hole like a rat—a horror to look at, a horror to think of. I told those she belonged to that it was a sinful piece of work, and they only laughed at me. I told them it was against the law; but the law is a slow business, and they snapped their fingers at my talk of constables and justices of the peace. What could I do to help the poor wretch? They called her Idiot Betty, and said she wasn't worth the bite and sup they gave her. I asked if I was free to take her away. They said yes, and welcome too. So I brought her to Dame Gurd. The good soul was willing to take the charge of her and give her a comfortable shelter for nothing, and her bit of victuals costs but a few shillings a week. She was a little strange and difficult to manage at first, from never having known kindness since her wretched cradle, but she soon got to understand we meant well by her, and between us we have taught her a good deal."

"Between us!" cried the widow; "'twas all your doing, first and last, Muster Wall."

"No one need call her Idiot Betty now," continued the curate; "she has learnt to make baskets and rush mats, and can ask by signs for what she wants."

As he said this, the curate went softly towards the place where the girl sat, with the winter light shining on her dull sightless face. As he came close behind her chair the face changed all at once, and when he laid his hand gently upon her head, it was the face of a creature with a soul. The dull common clay—the mindless lump of ill-used humanity—brightened into life beneath that pitying hand. Here was a Pygmalion who might well be proud of his work.

"I have been teaching her to talk," said Matthew, "and I have hopes that she will do something in that way by-and-by. She can say four words—God, bread, mother (meaning the kind-hearted widow there), and parson (meaning me)."

He put his hand upon the girl's clumsy fingers. She understood the sign, and obeyed it. Her mouth opened like a box, and a sound came out of it—a loud, harsh, snapping, disagreeable sound, which was meant for the word "parson." It was more startling than pleasant, but to Matthew Wall it was sweeter than music.

"You'd never guess the trouble he had to bring her to that, your honors," said Mrs. Gurd, proud of this successful performance.

Mrs. Bolton took a seven-shilling piece from her capacious pocket, and bestowed it upon the widow.

"She shall want for nothing while I am alive," cried the mollified matron; and then she turned to Matthew and kissed him. It was an audible smack, that resounded in the cottage-chamber.

"God bless you, Matthew Wall!" she said; "I'd rather see my Dolly the wife of so good a man than riding in the squire's chariot."

RECENT LITERATURE.

Twenty-five Cent Dinners for Families of Six. By Juliet Corson, Superintendent of the N. Y. Cooking-School.

For fifteen cents those in the most straitened circumstances—those whose digestion waits upon an appetite that is never satisfied with really palatable food—can purchase the information that will enable them to cook rationally, at small expense, and in a manner that will make them wonder how they could have existed so long without the knowledge. A dinner for twenty-five cents is no chimera, as Miss Corson demonstrates, and she has taken the utmost pains to combat that gross ignorance in matters culinary by the plainest, simplest directions. The gentle reader is not to suppose that the horn of plenty will be tipped to the lips at an appetizing angle, but the solid information, clearly conveyed in language as tempting as a juicy joint, should bring happiness to many a household, content to thousands of diaphragms! Especially is this little manual commended to farmers' wives whose culinary resources are an arid tract that is vastly in need of some such irrigatory suggestions as will cause the noxious pie to wither and fade, while the abominable fried steak shall be uprooted and live in memory as a mere tradition. To become a Brillat Savarin on a small scale for an expenditure of only fifteen cents, is a worthy ambition. May thousands attempt it!

Bits of Travel at Home. by H. H. Square 18mo, 413 pages. Cloth. Red edges. Boston: Roberts Brothers.

Has it ever been your good fortune to have an acquaintance who was a capital story-teller and an extensive traveler, one who used his eyes to see what was to be seen—his ears to hear what was to be heard, and his tongue to tell you all about it. If so, you know what this book has in store for you? Travels in California—Travels in New England—Travels in Colorado—are divided into thirty-eight stories, each separate and distinct, each a gem in itself and as different from an ordinary book of travel as chalk is from cheese. It is entertaining and instructive; one is not ready to lay it down when a chapter is finished, but is per force compelled to look a little way into another, and when the whole is finished the book is put away with a sigh that there is not more of it.

How to Hunt and Trap. By J. H. Batty. New York: Albert Cogswell, 24 Bond Street. Price $1.50.

Mr. Batty is a Nimrod of varied experiences, and a taxidermist into the bargain. He does not indulge in any glowing description, or wander over limitless fields of personal reminiscence not germane to the subject. His prose is terse and practical. He supplies just such information as would be asked by the amateur if he had set his mind to hunting or trapping with a view to tangible results. Game is described, the best means of securing it are discussed, and the best localities, where it is most likely to be found, are mentioned. We have no knowledge of any book that supplies such useful information in such an available shape as does this one.

How to Take Care of our Eyes, with advice to parents and teachers in regard to the management of the eyes of children. By Henry C. Angell, M.D. Square 12mo. 72 pages. Illustrated. Boston: Roberts Brothers.

Many who are now spending an old age in partial or total blindness might have had this calamity averted by proper care of the eyes in childhood. The author presents in a simple style and free from technical terms, rules and instructions, by the aid of which many of the weaknesses and diseases of the eyes may be avoided, and many of the troubles already consequent on the wrong use of them, may be remedied.

The Iowa Liberal, issued at Le Mars, Iowa, is now published by Messrs Leidy & Phippen, a change having taken place a few days since. Of the Liberal we have heretofore spoken, and we now repeat that it is one of the best country exchanges on our list, is fully up to the times, gives strangers a good idea of the growing Northwest, and deserves the fullest measure of success.

The Homestead, a paper published in the interests of those desiring cheap homes in the West, will be sent to any one addressing S. J. Gilmore Lawrence, Kansas.

BRIC-A-BRAC.

THE HOTEL VERANDA.
JUST AFTER THE ARRIVAL OF THE SATURDAY NIGHT BOAT.

Why! How d'ye do?
Can it be you?
When did you get here, pray?
You know you wrote,
In your last note,
You couldn't get away.

You look quite ill.
(Now don't! Be still!
Don't squeeze my hand! I'll go!)
You've heard! Heard what!
Is it true, or not?
Oh! that! How did you know?

Yes! I've said yes.
To whom? Just guess—
I'll tell you if you're right—
It isn't out,
But you, no doubt,
Can keep it secret quite.

What can you mean?
I might have seen?
Seen what! You never said—
I couldn't guess,
I told him yes,
You don't wish you were dead.

I met him here—
No! Just this year,
There, that's his T cart—see?
Yes! 'tis quite swell,
And the groom as well,
There! that little man? That's he,

I must not wait,
I'll be too late,
He's going to drive with me.
I'll meet you then,
On the piazza, when
It's dark, and he can't see. [*N. Y. World.*

DIDN'T WRITE IT.—Mabel Clare writes us the following flattering inquiry; "Are you the author of that tender little ballad, 'Darling Kiss My Eyelids Down?'" We? We write such stuff as that? "Kiss our eyelids down!" Mabel, thou art beside thyself; much reading hath made thee mad. "Darling, kiss our eyelids down?" Now, isn't that a nice thing to accuse us of saying? Are we that devoid of intelligence! Mabel, don't you trouble our eyelids when you have a fancy to perform any operation of that delicate and tender nature. We have a large, comfortable, roomy, flexible gash just below our nose that has bought county rights for all business of that nature that comes within the limits of our face, and any eyelid found interfering or infringing will be prosecuted to the extreme limit of the law. No, we didn't write it.—*Burlington Hawk-Eye.*

GOING TO PRESS.

THE foreman of a newspaper composing-room died sometime since. Just before his death he became conscious for a moment, and in that gleam dwelling upon the habit of his life, he suddenly exclaimed: "The 'ads' are all right, lock up the forms and let's go to press."

Fellow man, a moment linger
On the dying printer's speech;
For it bears a mighty lesson,
Our unheeding hearts to teach.

Day by day thou art composing
What a universe shall read;
Type to type are ceaseless setting,
As thou addest deed to deed.

Soon the forms are locked forever,
Changeless shall th' impression be,
Scan the proofs in time, O, printer,
Thou art near eternity.

Are the 'ads' all right, composer?
Art thou standing justified?
Ready now for the Great Judgment,
Its unfoldings to abide.

So that now as night advances,
Greet the unstaying pressman's call;
Then await the morn eternal,
Publishing thy life to all.

GEORGE IV.'s extravagance and love of spending had no bounds, provided that it was not his own money that he spent. He always had money, although pretending at the time he hadn't. When he died there was found £10,000 in his boxes, and money scattered about everywhere, a great deal of gold. There were about 500 pocketbooks, of different dates, and in every one money—guineas, one-pound notes, one, two or three in each. There never was anything like the quantity of trinkets and trash that was found. He had never given away or parted with anything. There was a prodigious quantity of hair—women's hair—of all colors and lengths, some locks with the powder and pomatum still sticking to them, heaps of women's gloves, *gages d' amour* which he had got at balls, and with the perspiration still marked on the fingers, notes and letters in abundance, but not much that was of any political consequence, and the whole was destroyed.

"Unthinking, idle, wild and young,
I laughed, and danced, and talked and sung;
And proud of health, of freedom vain,
Dreamed not of sorrow, care or pain;
Concluding, in those hours of glee,
That all the world was made for me.

But, when the hour of trial came,
When sickness shook this trembling frame,
When folly's gay pursuits were o'er,
And I could sing and dance no more—
It then occurred how sad 't would be
Were this world only made for me."

THE author is the Princess Amelia, "the darling of George III.," his youngest daughter. She died on the 16th of November, 1810. The event of her death has an additional interest, because this was the last blow for her poor father, whose incurable insanity is dated from his parting with her on her death-bed.

THE three degrees in medical treatment—Positive, ill; comparative, pill; superlative, bill.—*N. Y. Medical Times.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

DEAR RURAL.—The following lines were printed for me more than twenty years ago; in making up my scrap-book I find I have mislaid them. If they will answer for the columns of the RURAL please reprint them, and oblige, M. W.

TO A MOURNING DOVE.

Sweet little birdie tell me why thou mourn'st so lone and long,
Sad tears are gathering in my eyes, as I listen to thy song;
Has thine own mate forsook thy bower, forever flown away,
No more to sit beside thee, say, pretty mourner, say?

Or else perchance thy little ones, so wondrous and so fair,
Unmindful of thy warning voice, thy kind and fostering care;
Far from thy soft and sheltering wing, now fain would seek to fly,
To find a higher, happier home, in yonder azure sky.

Ah, no, fair listening lady dear, thine anxious fears dispel,
'Tis nature's song of gratitude, my little throat doth swell;
From rosy morn till dewy eve, I thrill my mournful lay,
And cheer my mate and little ones, all through the livelong day.

MOTHER'S SUMMER VACATION.

MRS. J. E. M'CONAUGHY.

IF every one were as considerate towards wives and mothers as Mr. Marvin's folks were, they would last a great deal longer, and be happier women while they did live.

The last hired man had gone, and "the work of the reaper was done," and none too early, father thought, as he noticed how weary and worn his wife looked as they sat at the breakfast table the next morning.

"I'll tell you what we shall have to do for mother, children," he said; "we must pack her off to Aunt Susan's for a week. That will chirk her up."

There was silence for a minute at this startling proposal, for mother was not of a kind that could be easily spared. Then Bertie bravely said,

"I'm agreed."

"So am I," said Lewis, rather faintly.

"Yes, mother, go," said Bessie,—who was 'the main spoke in the wheel,'—as father always asserted. If Bessie was willing, then surely nobody could reasonably object.

"You know, father," said Mrs. Marvin, remonstratively, "that Bessie has always been used to having me go ahead with the cooking."

TASTEFUL ARRANGEMENT OF FERNS AND GRASSES.

"So she always will, mother, if you don't cast her on her own oars some time. If our nineteen-year-old daughter can't keep us in provender for one week, I'll get the neighbors to send in something, or maybe, I could get one of the Fisher girls to come over and help," he added, with a mischievous glance towards Bessie.

That young lady gave a slight upward set to her chin, and did not condescend to notice the glance that passed between the two brothers. Rob Fisher had been "shining around" there, as the boys expressed it, considerably of late. But nobody found any fault, for he was as likely a young man, and his farm "as pretty a-lying piece of land" as you could find in the whole country-side.

"Well, Bessie, you and mother talk the matter over," said the farmer, as he took down his broad straw hat; "you coax her into the plan."

"I would go, mother," said Bessie, as she stepped about briskly, clearing the table.

"But I have no dresses suitable, Bessie."

What woman ever did go anywhere without first making one dress at least? We need not laugh at "them," for quite likely you and I belong to the same class. Some cynic even goes so far as to say that if all the women in the country were sentenced to be hung the next day, nine-tenths of them would declare the first thing, "There, I haven't a dress fit to be hung in!"

We are, in a way, all of us Flora McFlimsies in our own estimate as to whether our ward-robes are overflowing, or are in the state of Mother Hubbard's cupboard.

"Wear my gray bourette, mother, for travelling. It will fit you nicely, unless it is a little too long. Then take my nice cambric for afternoons, and your own black silk for church. There, you are fixed out in half a minute, and not a penny outlay. Don't you see what a good thing it is to have a grown-up girl as large as yourself and a little larger?"

"Do you really believe you could get along?" said mother, half musingly, as she looked at the young woman, who was her "little girl" still, and would be for nineteen years more.

"Try me, and see," said Bessie, laughing; "you don't know what experiments I shall try in the cooking line. When the cat's away, you know how it is with the mice. Leave me a full sugar-box and spice-box, if you please."

"You must not pamper the children with too high living," cautioned mother, laughingly, "or they may want to have mother extend her visit. But we will study over the project at our leisure, to-day. I really should like to visit Aunt Susan."

So the matter was finally adjusted. Of course mother saw a hundred lions in the way, but the family set themselves to work to remove them one by one.

Aunt Susan welcomed her with wide-opened arms, and took her to the blue chamber, where she had slept so often in girlhood. There was much to talk of and tell on both sides, though Aunt Susan's quiet household consisted only of herself and a little serving-maid.

The house was a tasteful, cozy cottage in a beautiful elm-shaded street, and as the two ladies sat at twilight on the vine-shaded piazza in the coziest of Quaker rockers, Mrs. Marvin could hardly believe that she was the same hard-working woman, who had cooked and baked that summer time for a houseful of working men. The fresh cambric seemed so dainty and cool, and the blissful rest so delightful! What a good thought it was of father! If he would only do the same for himself! She would just see to that when she got home

Bessie had protested against her taking any sewing, but mother said she must take her knitting-work, or she should be home in two days. So they compromised on the knitting question, and mother had to send out and buy more yarn the third day.

"If you can only content yourself a little while, dear, you will get your family supplied for all winter," said Aunt Susan. Her own enthusiasm was awakened, seeing Mrs. Marvin's needles fly so fast, so she joined in the business and they had regular knitting bees every day. Old friends dropped in often, and one afternoon Auntie had a real old-fashioned quilting, which seemed to renew her youth, and took Mrs. Marvin back at least twenty years in her own history.

It was a visit to be forever remembered, but no entreaties could prevail on her to stay over the set time. More and more the query would come up, "How are they getting along at home?" and she felt that nothing would answer the question but actually seeing.

Father and little Dick were at the depot, smiling and watching anxiously, until at last mother appeared with "little box, big box, band-box and bundle," for Auntie was a famous hand at never forgetting anybody.

Mother was the center of attraction that evening, and was hung over and kissed and talked to as she had not been in half a dozen years. It was a good thing to go away once in a while just for the pleasure of the home coming. She had, down deep in her heart, however, the feeling that "the best of a journey is getting home," for there was where her treasures were. The gifts were distributed and gave a world of delight to the little folks. Little Dick said, as he nestled close to mammas side, "Next time you go, I want you to take me."

GRASSES are easily arranged in many beautiful forms. Now, that many sorts are in bloom in the meadows and fields, is a good time to collect them. The accompanying cut needs no explanation—a wire platform extending up as high as taste suggests, with the grasses so arranged as to conceal the wire.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

I ACKNOWLEDGE with thanks the following directions for the extermination of bed-bugs which some RURAL ladies have been so kind as to furnish in reply to a question asked a week or two ago, through these columns.

SOME one, signing herself a "Rural Subscriber," asks something relative to leather work but I cannot gather from what the lady writes just what she wants to know. Is it how to ornament leather for a what-not? If the correspondent will write a little more explicitly, I shall take pleasure in replying to her inquiry.

ELLA LESLIE, Venango Co., Pa.—Trim your underskirt with a deep-plaited flounce. I'd recommend the "washer-woman" overskirt, and you can either have a basque and vest or a waist buttoned at the back, and ornamented with six plaits, back and front.

I ASSURE the aggrieved lady that I sympathized with her or any one afflicted with this pest. But I found out a *certain* preventive for future young families of bugs as well as the means of destroying those which had already been established. Very salt water will set all right—sometimes with one application only. Pull the bedsteads apart and wash every lurking-place thoroughly, leaving the brine to dry on the bedsteads. Powder every available crack or joint with fine salt, and fill up any place with the salt that can be filled. Wash the corners of the mattresses with clean salt water, and let it dry on. MRS. S.

THE only remedy I have ever used is the following: 2 ozs. oxalic acid, 1 pint common whiskey. Keep corked in a bottle ready for use a few hours after mixing. It should be applied with a small paint brush. As it is a deadly poison care must be taken to keep it from children.

AN old housekeeper answers the query in a late RURAL NEW-YORKER, "What will exterminate bed-bugs?" Removing into an old house the bedsteads became infested with bugs. Carbolic acid soap was moistened and pressed into some old screw holes of a mahogany bedstead, which could not be thoroughly cleaned, and proved entirely efficacious. Common bar soap was used for cottage sets of light colors and the spring frames, and no bug has since been found in the bedsteads, although occasionally one or two have been found deposited on the bedding—probably brought by guests. The house has for several years been entirely free from the pest.

COAL-OIL is good, also corrosive sublimate dissolved in alcohol, and applied with a feather, will kill them immediately. It is also good to put around the feet of a safe or cupboard to keep the ants out, but anyone using it must remember it is poison. MRS. W. H. CARPENTER.
Warren Co., Ohio.

STAINING WOOD.—In the RURAL NEW YORKER, page 349, I find a request for a receipe for staining wood. For black walnut stain, I simply use sulphatum varnish, thinned with spirits of turpentine, and apply with a brush. It can be made light or dark as desired. F. H. D.

SOME one wants a cure for bed-bugs. I send this, which I will warrant. Wash the bedstead and wall, if the bed stands against it, with cold salt water (March is the proper time), then oil with any soft oil—lamp-oil is best.
MRS. J. C. COLLINS.

USE clean lard. Put it in every crack and crevice of bedsteads, walls or washboards. Take the bedsteads apart and fill the mortices full—whatever squeezes out can be wiped off. Cover every greasy part with thicknesses of newspaper to keep the bedding from getting soiled. Leave the lard in one year, to insure all eggs to be killed. It may have to be renewed several times as it dr s away. This is not as expensive as corrosive sublimate, and is a perfect remedy.

CORROSIVE sublimate in turpentine, put on with a feather, is a sure remedy. One ounce to one pint turpentine. WM. H. M.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

BUTTER MAKING.

Our gentlemen farmers are falling into the habit of discussing butter making as though it were their especial province, and as if they performed all of the labor and understood all the minute details of the business. They no doubt *think* they do, and we housewives are perfectly willing to give them their just dues, but somehow the care of a dairy comes rather hard upon us wives. Our husbands and sons may milk the cows, strain the milk, churn the butter, wash and work it over and pack it in tubs and boxes—all of which is a great help and lightens womens' labors very much—but the skimming of the milk, the keeping of the milk pans, churn, milk-room, etc. pure and sweet, with no sour smell to taint the cream, are all a woman's work. A sweet milk-room with a right temperature is of vast importance in the manufacture of good butter. There is little danger of keeping things too nice. By this I do not wish to imply that daily mopping of the floor is either a necessity or a benefit. On the contrary, the less you wet the floor the sweeter the room will remain. Once a week is often enough to give the place a thorough wetting. Add a little carbolic acid to the water and wipe the floor very dry and every sour or musty odor will be dispelled. Sunshine is a necessity in the milk-room. A little morning brightness helps to keep the atmosphere pure and wholesome. Flies and dust must be excluded while fresh air is admitted. Screen cloth will serve to keep the flies out, while cloth frames hung from the tops of the window frames, on the outside, will keep out the dust and will also give a perfect circulation within. I do not like water in any form about the milk-room. I have tried several methods of using it, such as running water, passed through tubs in which the pans were set; pans with water-pipes passing through them, etc. Butter made from cream which has risen in a dry atmosphere is certainly of better quality than that made where there is a water moisture exhaled constantly. And it is also firmer and keeps better.

I like large, flat pans best, for we get more cream from them; it is much easier to skim them than if they were smaller and deeper, and they are easier to keep clean.

I did not try the Cooley system of setting the milk in tin cans and placing them in a water tank, for years of experience had taught me that air was a necessity to the making of perfect butter. Those who were at first enchanted with this new arrangement have after a few months' trial discarded it and gone back to the open pans.

Perfect butter requires perfect management in making, as also perfect neatness. Dish-cloths, towels and strainers cannot be kept too sweet, and the breath of blooming flowers and green grass in a milk-room is of benefit. No odors which are not sweet should be admitted. Mats to wipe the feet upon are a necessity before coming in from the cow stables or yard, and sometimes the bottoms of the milk-pails need wiping too. A housewife has all this to see to as well as to know that a broom has been used to brush off the cows before milking that no dust or hairs shall fall into the milk. Good sweet pasturage as well as fresh, running water must be provided if good butter is to be the result. Stagnant water will impart to both milk and butter an offensive taste, and impair the health of the cattle as well. Frequent salting is not to be neglected as the butter comes much quicker and is harder if this be not omitted. Never put the hands into butter. There is no excuse for so doing, and every sense of cleanliness forbids it. True, the hands are clean, still as butter absorbs any and every impurity with which it comes in contact, excessive perspiration of the hands or any humor of the blood might thus be imparted to the butter. A wooden ladle to lift the butter from the churn, or to turn it over while being washed, answers just as well, and a vast deal better. As regards salting, use the best salt, and to work in just the right quantity, weigh both butter and salt. As regards quantity, there can be no rule, taste of the consumers alone being consulted. If the butter be well worked before salting, less salt is required than if salted when partially worked. Tubs and boxes should be well looked after before the butter is packed in them. Scrub them and soak in brine for a few days, then wash thoroughly and rub the inside with a little salt before packing in the butter.

GRANDMOTHER.

HOUSEHOLD HINTS AND RECIPES.

Care of Carpets, etc.

It is necessary to watch carpets closely in summer, especially if the early part of the season be rainy. Damp rooms, as well as dark ones, favor the ravages of moths. The good old rule of sweeping every Friday, whether rooms are used or not, should be heeded, as frequent sweeping and dusting disturb those little pests. All articles of furniture should be moved on sweeping day, not only to do the work more thoroughly, but to dislodge the moths, should there be any. After sweeping, strew fine tobacco or camphor gum all along the edges of the carpet. If pictures are hung by worsted cord, brush it often with the broom that is kept for walls. Lambrequins, if of woolen fabric, ought also to be brushed every few days. Some good housekeepers scatter corn-meal over carpets just before sweeping; others use salt. I prefer the latter, for it seems as if the meal would tend to harbor the moths. Woolens and furs, which were put away in newspapers in the spring, should be examined now, aired and beaten, and put up again in fresh papers. It is to be hoped that each parcel is labeled, in legible writing, so that when wanted—it may be in haste—no time need be lost. Neglecting to label articles leads to a great waste of time, in obliging one to undo and turn over a dozen packages, perhaps, before finding the one wanted.

Wedding Cake.

Three-fourths pound butter; one pound brown sugar; eight eggs; one pound flour; two pounds currants; three pounds raisins; one pound citron; one teaspoonful each of ground cinnamon, cloves, and nutmeg; half teacupful of molasses; half teacupful of brandy; one tablespoonful of thick sour milk; one tablespoon *even* full of soda dissolved in the milk.

To make: Soften the butter, and stir to a cream; add the sugar, and beat till light; then the eggs *without beating;* next the molasses, brandy and spices; then the fruit, which must first be rubbed with flour, to prevent settling; a teacupful of flour extra, or more, will be needed for the purpose. Work in the pound of flour, and, last, the soda and milk. Mix well, but quickly, after the soda is added, and place immediately in the oven. Bake in a tin milk-pan, holding six or eight quarts. The sides of the pan should be buttered, and the bottom of it covered with thick white paper, well buttered. It is best to put a tin cake-tube in the center of the pan. Any tinner can make one; it is only a scroll of tin, seamed at the sides with solder, and about six or seven inches long, and two inches in diameter at one end, and one inch at the other. By making an oblique cutting at the small end, the tube will answer to core apples with. If a tube cannot be obtained, it will be best to bake the cake in *two* basins holding three or four quarts each. Have very little fire when the cake is put in the oven. It will require an hour for it to *melt* and *rise*. It then begins to bake, which will take about two hours more. The heat may be increased after the first hour, but must not be quick, at any time. If the cake becomes brown before it is done, cover with paper, or put a dripping-pan on upper grate, directly over the cake. It is well for the housekeeper to make all necessary preparations for fruit-cake the day before it is to be made, as it saves time and fatigue at the time of baking. Even a week before wanted, the raisins can be seeded, the citron finely sliced, and the currants washed and dried. In that case, turn the brandy—one-half cup—over the fruit and cover closely.

Soda Biscuit.

One quart of flour; three teaspoonfuls of baking-powder; one-half teaspoonful of salt; all stirred together very thoroughly. One tablespoonful (heaped) of butter; one-half tablespoonful of lard mixed with the flour, etc. Sweet milk and cold water, equal parts, to make a soft dough; do not knead it. Roll an inch thick, cut into shape, and bake quickly. Instead of baking-powder, soda and cream-of-tartar can be used.

Muffins.

One heaped teacupful of flour; two teaspoonfuls of baking-powder; one tablespoonful of white sugar; one beaten egg; one tablespoonful of melted butter; one teacupful of sweet milk. Drop from a spoon into muffin rings set in pie-tins, and bake in a well-heated oven.

Graham Gems.

One teacupful of Graham flour; one teacupful of white flour; two teaspoonfuls of baking powder; one tablespoonful of brown sugar. After stirring, add one beaten egg, one large spoonful melted butter, and sweet milk to make a rather thin dough that will fall easily from the spoon. Drop into *hot* buttered gem irons, and bake on the upper grate of the oven. If made according to directions, the gems will be very tender and light.

M. G. R.

Lyons, Iowa.

DOMESTIC RECIPES.

Bread Pudding.

One pint of grated bread crumbs, one teacupful of sugar, six eggs, one quart of milk flavored to taste. Save the whites of four eggs, beat to a froth, add three tablespoonfuls of powdered sugar, and when the pudding is done pour over the top, and set in the oven until a nice brown.

Lemon Pie.

Press the juice from one lemon into a bowl and set aside. Then grate the remainder, and add to the grated part one cup of sugar, one whole egg and yelks of five others, two tablespoonfuls of flour, one quart of hot milk, and a pinch of salt. This fills two round tins. When the pies are done, put the following mixture on top: The juice of the lemon, and the whites of the five eggs beaten to a froth, four tablespoonfuls of sugar. Place in the oven for a few minutes, but be careful not to brown.

Jelly Cake.

One cup of sugar, three tablespoonfuls of butter, three eggs, three tablespoonfuls of milk, one and a half cup of sifted flour, two teaspoonfuls of baking-powder. This makes four layers.

MRS. M. ALDRICH.

Grandmothers Pancakes.

Three eggs, three tablespoonfuls of sugar, six tablespoonfuls of sweet milk, three tablespoonfuls of sour cream, one-half teaspoonful of soda, one-half teaspoonful of salt; spice to taste; stir to a thick batter, and drop by the spoonful into hot lard and fry like crullers.

D. M. J

Baked Pears.

Peel and bake ripe pears, with but little water. When cold, cover the top and sides with a cake-icing flavored with vanilla, and serve with cream and sugar. This makes a delicate and healthful dessert, and but little time is consumed in its preparation.

Tart apples may be baked in the same way, and are preferred by many.

Cucumber Toast.

Peel fresh, crisp cucumbers of medium size, cut lengthwise in thin slices, and place in cold water for a few minutes; drain, and dip each slice into flour; then fry quickly, until of a light-brown, in butter or beef drippings. Place the slices of cucumbers, hot from the pan, between slices of buttered toast and serve at once. The cucumbers may be seasoned with pepper and salt, or a little mustard may be added when taken from the pan.

Egg Plant.

Peel and cut into thin slices; soak in salt and water ten minutes; drain and steam five minutes. Make a batter of one pint of sweet milk, two beaten eggs, one-third cup of melted butter, one heaping teaspoonful of baking-powder and flour, to make batter as for pancakes; dip the slices into this, and fry in butter until of a light-brown.

Tomato Sauce.

Take full-grown tomatoes while yet green, cut out the stems, and stew until tender; press through a sieve; season highly with pepper, salt, ground cloves, allspice and nutmeg; boil the pulp until thick. Worcestershire sauce may be added if liked. Nice with cold meats. E. M.

News of the Week.

POLITICAL.

Monday, Aug. 5.

The Potter investigating committee has transfered the scene of its labors from Atlantic City to New York. Secretary Sherman has sworn, a trifle late, that he never wrote that so-called Sherman letter. Had his memory been equally clear on the matter, when he was formerly before the committee, much trouble would have been avoided and his memory would have helped much more effectually to clear his reputation. Now his enemies say that his recollection has been sharpened by the knowledge that the document cannot be produced to confound him with his own handwriting. Sherman's character, however, has always stood high, and as between his word and the oaths of the self-confessed perjurers who have glibly testified against him, few would hesitate to accord credit to the Secretary.

Yellow fever has peremptorily put an end to the labors of the sub-committee "smelling out" fraud in New Orleans. The most important testimony it took was that of Major Burke, a shrewd and trusted Louisiana democrat, formerly an independent. He swore that as the accredited representative of Gov. Nichols, he, together with several other prominent democrats, held a conference at Wormley's restaurant, in Washington, with a half dozen republican friends of Hayes, just before the House had confirmed the decision of the Electoral Committee assigning the presidency to the present incumbent. At the time there was a Bourbon party in the House trying, by filibustering, to delay the action of that body until after the fourth of March, thus nullifying the verdict of the Committee and throwing the presidential election into the House, or necessitating a new election. At the conference the democrats agreed to put an end to this filibustering on condition that Hayes should withdraw the troops from Louisiana and South Carolina, and recognize Nichols and Hampton as governors of those States, instead of Packard and Chamberlain. These terms were accepted by Hayes' friends, and he, himself, confirmed the agreement before he became President. The democratic dallying clique were at once overruled by their own party, as per agreement; Hayes was declared President, and fulfilled his contract. So much for the famous "Wormley Bargain."

The Supreme Court of Louisiana again asserts the doctrine of "State Rights" by deciding that Congress has no right to proscribe rules of evidence for State Courts, and that therefore it is not necessary that a United States internal revenue stamp should be affixed to a note or mortgage to make it competent evidence in the Louisiana Courts, though an act of Congress declares such unstamped instruments void. South Carolina, too, is again coming to the front in the same way. Some United States revenue officials on the hunt after a notorious "moonshiner" named Redmond, killed a man whom they mistook for him and who had just missed fire in shooting at them. They surrendered to the next authorities; were confined in prison without bail by a local judge, and when the officers of the United States Courts demanded their surrender it was stoutly refused. The law, however, is said to be clear on the matter; but rather than give them up, the State Judge will resist the decision of the United States Judge. Gov. Hampton urges that the case should be made a test one before the U. S. Supreme Court, to prevent bloodshed. President Hayes will, doubtless, conciliate the Palmetto State by consenting to this or any other proposition likely to soothe the ruffled feelings of the high-toned, Southern chivalry.

In Tennessee the main question to be decided in the fall election is whether the State shall repudiate its debt; and if not, how much it shall offer to pay. It is thought probable that the "State's men of honor" will be too powerful for the right-down repudiationists, and generously compromise by consenting to pay one-third, or 33⅓ per cent., of the indebtedness. Should the out-and-out repudiationists sweep the convention to meet a fortnight hence, the other party is expected to nominate Postmaster Key as an independent candidate.

MISCELLANEOUS.

The second person punished in Virginia, under the new law establishing the whipping-post, was a comely white girl of 17. She received 25 lashes laid gently on her bare back by a negro constable. Her crime, a petty theft. The President has proclaimed that Great Britain and the United States have agreed that the subjects of each nation shall have, in the other's territory, the same rights as native subjects in everything relating to property in trade-marks and labels. Last Tuesday a severe hail storm in Carver, Rice and Dakota counties, Minn., did much damage to crops. In the first-named county stones four and five inches in diameter covered the ground to the depth of two or three inches. Charles Montange was arrested in this city last Tuesday on complaint of George Clark, of Springfield, Otsego County, in this State, in suit for $46,000 damages for property alleged to have been burned within the last three or four years, by an association called the Montgomery Tenants' Mutual Society, to which, it is charged, Montange belonged. Clark is said to be the largest land-owner in the State, having between 40,000 and 50,000 acres in four counties. This was leased out for long terms at small rentals; the leases have lately been lapsing, and from two to three dollars an acre rent has been demanded. This increase has exasperated many of the tenants; some of them have gone elsewhere; others threaten new-comers who take the place of those evicted, and much property belonging to Clark has been burnt and otherwise injured. Nothing can be collected from the present prisoner, who is poor; but it is hoped to force him to turn State's evidence and so to secure the conviction of others who have means.

In some parts of the West there is a sad scarcity of willing labor to gather in the crops. The country is flooded with tramps who are said to refuse in some places as much as $2.50 a day and board; a tramp refuse money or good grub! Surely not. Work, of course, the regular tramp won't accept—but bread and meat as well as the price of whiskey—Never! The citizens of St. Louis who are opposed to spending $100,000 a year to have german taught in the public schools having had no attention paid to their protest by the School Board, are collecting subscriptions to test in the courts the legality of expending public taxes to teach anything except a common English education.

Lately at Cleveland, Ohio, Rarus, the celebrated California trotter, made the three fastest heats on record 2. 14½, 2. 15, 2. 14 equaling Goldsmith Maid's best time in the last heat. Again on Saturday last, at Buffalo, he trotted three mile-heats, against time, a running horse keeping by him most of the time, to stimulate him to greater exertion. The first heat he made in 2. 17; the second in 2. 50; the third without a break, in 2. 13¾, the fastest time on record. It is said that an enthusiastic admirer instantly offered for him $65,000; and that the offer was promptly refused.

Yellow fever is growing worse in New Orleans and all the surrounding towns are anxiously endeavoring to keep the pest from entering them, by strictly prohibiting the entrance of either passengers or merchandise from the afflicted city. Yesterday there were 20 new cases and 11 deaths. Nannest & Co., country produce commission merchants, doing business in New York, have failed. Liabilities 14,000, Assets, 1,000.

The wheat "corner" in Chicago and Milwaukee came to a head on Friday. In the former city, the highest cash price paid was $1.10. At the close, however, $1.10¾ was paid for July. There is a great discussion whether the contracts can be filled with winter wheat instead of spring, and a test case will be made in the courts. In Milwaukee the corner was stronger; more excitement prevailed, and towards the close the price was run up by a large operator to $1.30, for July wheat, at which price delinquents must settle. The national debt of Canada is $133,000,000, an increase of $58,000,000 since the Dominion government was established, eleven years ago. The debt of New York City is upwards of $127,000,000, despite the reduction of $4,000,000, during the past year.

The Philadelphia permanent Exhibition has once more been quietly opened on Sundays—for sacred concerts nominally. 'Tis doubtful if even this move will make the thing begin to pay. In Canada the wheat crop is reported above the average in quantity, and of average quality. Spring wheat is less satisfactory than fall; oats are only fairish, and a smaller area has been planted than last year; barley is good; but the acreage planted is less than usual.

His name is not Keely this time, but Francis Winters, Jr., and he lives in New York instead of Philadelphia, but his newly-discovered motor looks to the uninitiated marvelously like that advertised under the former name. The contrivance in which it is generated consists of two chambers, a few pumps and valves. Into one cylinder water is poured, the pumps are set a-going, and straightway in the other cylinder there is something found which burns like gas, but in whose odorless flame the hand can be held without burning, which neither explodes nor generates friction, heat, or moisture; and which, at half the cost of steam, will do all that steam can do. Its inventor has organized a company with a capital of $10,000,000, one-eighth of which is said to be already subscribed. He proposes to store his power, or motor, in a huge reservoir or tank that wont explode under a pressure of 1,000 pounds to the square inch, and peddle it out through pipes wherever it is wanted.

The Boston Belting Company, ruined by Tappan, is going into bankruptcy. But for his misappropalation of funds the company would be clear of debt with a surplus of $250,000. The business will be resumed with a new company. The New York Belting and Packing Co., which he also swindled heavily, has compromised with its creditors. It will pay in full, in installments, during three years. Efforts are being made to bring the defaulter to trial criminally; but—well, he has rich and influential friends and relatives. New England has lately spawned a number of first-class swindlers, such as Pond, Grace, Hathaway, Winslow, Sibley, Wright, Jackson and Tappan, all thoroughbred Yankees, and, of course, all strait-laced Pharasees. Be careful about giving change for $100 bills of the Pittsfield, Mass, National Bank, as there is an excellent counterfeit of them in circulation. It has already cost nearly $300,000 to look after the wreck of Jay Cooke's property. Unless the matter is closed up soon, lawyers, receivers, etc., will pocket every cent of the assets, leaving nothing for the long-suffering creditors. The State Treasurer, Gates, of Mo., is accused of cheating the State out of $250,000, by depositing $500,000 in a national bank whose president is one of his bondsmen, just before it failed and paid only 50 per cent. to its creditors. His whole accounts are in an unsatisfactory condition. It is said that Secretary Schurz's decision about Pacific railroad grants is to be opposed in the courts on the ground that the law says: "If the lands shall not be sold or otherwise disposed of within three years," they shall be subject to settlement or preemption. It is held that as the lands are mortgaged, they have been "otherwise disposed of." There is going to be a great strike in the Pennsylvania coal regions! There will be no strike this year in the Pennsylvania coal regions! A strike in the Pennsylvania coal region is at present impossible, but it will come later on! All these reports are on excellent authority!!!

FOREIGN.

The two conservative factions on which the government mainly relied in the last assembly were 77 strong in the old House now they muster 93; the two liberal factions which in the old House numbered 163 among whom the moderate men generally voted with the Government, now number 110; the ultramontanes formerly numbered 98 and now they amount to 96. Sixty-two second ballots will be necessary and from these elections each party will doubtless obtain some gains. But in any case Bismarck will not have a majority and must appeal to the moderate liberals or ultramontanes, and very probably it will be to the latter.

In England, during the week, there has been an acrimonious debate in Parliament on the late treaty of Berlin, and also in conjunction therewith, on the responsibilities England has undertaken in the East. Had the Government been hard pressed, Beaconsfield would have dissolved Parliament, appealed for support to the country, and would, in the present state of popular enthusiasm, have secured an overwhelming Conservative majority. When the vote reflecting censure on the Ministry, however, came to be taken on last Friday evening, it was rejected by 338 to 195. On Saturday, Beaconsfield and Salisbury were feasted and *feted* by the Lord Mayor of London, and in his after-dinner speech the Premier disclaimed any intention of advising Her Majesty to dissolve Parliament at present.

Some four or five weeks ago, it was here related how Bismarck found the German Reichstag not quite as obedient as he desired, and how believing that the attempts on the Emperor's life had roused a warm feeling of grateful loyalty throughout "fatherland," the wily diplomat dissolved the unruly assembly in the expectation that the people would send back another more amenable to reason—of the Bismarckian type. The elections have just taken place, and from present returns it would seem that these flattering expectations were somewhat delusive.

The Papal Nuncio at Munich has had several conferences with the great Chancellor, at Kissingen, and it is well understood that peace is to be re-established between Berlin and Rome. In the latter city Cardinal Franchi, chief minister of the Pope, and the most powerful of his competitors for the tiara, is dead, and has been succeeded by Cardinal de Luca.

Ratification of the treaty of Berlin has been exchanged between all the Powers except Turkey. Austrian troops have entered Bosnia, and are meeting with a guerrilla resistance from the inhabitants. Italians, it is said, are encouraging this opposition to their old enemy, Austria, and the feeling between the two governments is reported to be growing bitter.

Servia is discontented at the name of a principality and wants to be called a kingdom. The Marquis of Lorne, Queen Victoria's son-in-law, and the newly appointed Governor-General of Canada, will not cross the Atlantic until some time in November, after the Canadian elections—meanwhile the commander of the forces will act as his substitute. HERMAN.

ANNUAL FAIR LIST.

SUPPLEMENTARY to that published in RURAL of August 3d.

STATE.

New Hampshire, Manchester.....Oct. 8, 11

LOCAL.

CONNECTICUT.

Danbury, Danbury.....Oct. 1, 4
Fairfield, Norwalk.....Sep. 10, 13
Guilford, Guilford.....Sep. 24
Housatonic, New Milford.....Sep. 24, 26
Meriden, Meriden.....Sep. 18, 20
Milford and Orange, Milford.....Sep. 11, 12
New Haven, New Haven.....Sep. 25, 27
New London, Norwich.....Sep. 17, 19
Ridgefield, Ridgefield.....Sep. 24, 28
Union, Falls Village.....Sep. 10, 11
Watertown, Watertown.....Sep. 24, 26

MAINE.

Knox, Camden.....Oct. 1, 3
Montville, Montville.....Oct. 2
Scarboro, Prospect Hill.....Sep. 24, 25
Waldo and Penobscot, Monroe.....Oct. 1, 2

MARYLAND.

Talbot, Hambleton Park.....Sep. 11, 13
Washington, ——.....Oct. 16, 18
Western Maryland, Cumberland.....Oct. 22, 25

MISSOURI.

Sturgeon.....Aug. 27, 30
Sweet Springs.....Sep. 10, 13
St. Francois, Farmington.....Oct. 1, 5

NEBRASKA.

Buffalo, Kearney.....
Colfax, Schuyler.....
Dodge, Centerville.....
Furnas, Beaver City.....Sep. 12, 13
Kearney, Minden.....
Mickolls, Nelson.....
Saline, Crete.....Sep. 18, 20

NEW YORK.

Onondaga Co., Syracuse.....Sep. 17, 19

RHODE ISLAND.

Washington, West Kingston.....Sep. 10, 12

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Aug 3, 1878.

BEANS AND PEAS.—Medium beans have a fair trade for the season. The warm weather has rendered some stored lots off in quality and some irregularity in prices may be looked for. A good many parcels are already offered at the under rates. Marrows are firm and the offering is light. Some country owned lots are being held for higher figures than current quotations. Other grades, except R. K. of beans, show an easy tone without much business; Red Kidney scarce and high for prime smooth and even. Green peas firmer, with an advance in western freights; held $1.25@1.30. Southern B. E. peas nominal at $3@3.25 per 2-bu. bag. Canadian peas scarce; the small stock held for better figures than the nominal ones of 76½@77c. in bulk and bold.

Receipts of beans past week, 6,282 bush.
Exports, 456 mds. Exports of peas, 1,100 bush.

We quote medium beans, prime, $1 55@1 57½; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 57½@1 60; Pea, $1 35@1 50; white $1 60@$1 62½; kidney, $1 35@1 50; red do., $3 25@3 50; black $2 35@2 40; Lima, $5 75@4 25.

BEESWAX.—A small business is in progress at 27@28c. for Western and Southern.

Exports past week, 2,300 lbs. Since Jan. 1st 112,500 do. Same time last year, 77,125.

BROOM CORN.—Matters are at a stand pending the new crop. Nominal prices are: 6@6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

BUTTER.—Receipts for the week 35,316 pkgs.; do. last week, 33,772 do. Receipts ensure a supply of what leads the demand at this season—strictly fine butter. Buyers who are willing to pay for extra trying must have faultless stock and in this way fancy pails and half tubs may be quoted at the extreme. State Creamery still obtains the first call and there have been scant days when 25 cents was paid for little extra grocers' parcels. Choice invoices of State Creamery are firm at the close at 23c. Good or pretty good State has no definite place, as fresh western that is right has more attractive prices for medium and market buyers. Western creamery is slow of sale and few lots can be named at 20cts.; in fact, some regular dealers are over-supplied with it and would distribute it to jobbers or other commission houses at the under rates. Trade, however, has such an easy movement that most receivers can depend upon their own receipts to piece out daily wants. There is a decided lull in the export trade. Shippers have operated very timely; the largest express a determination to await results from abroad, before renewing wholesale operations.

State creamery, choice, 22@23c.; other, 19@21c.; half tubs and pails, choice, 18@19c.; other, 13@17c.; Welsh tubs, best, 17@18c.; other, 12@14c.; poor State, 9@11c.; State firkins, 16@19c.; Western creamery, choice, 20c.; other, 16@19c.; Western dairy, best, 13@14c.; other, 9@12c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 6½@8c.; old and grease, 3@5c.

Exports for the week, 12,535 pkgs.

CHEESE.—Early in the week the market broke sharply; 7¾ was difficult to get for fancy lots, and a considerable quantity of good stock was offered as low as 6¾c. This was due to the liberal accumulations that had been carried over; larger supplies steadily arriving than looked for, and the fact that exporters were very indifferent; the heavy shipments that had been made to the other side were apparently forming a momentary glut there, and the advices were dispiriting. Towards the close exporters have shown a little more interest, and, with receipts falling off, prices are the turn, steadier. Exports have reached 88,000 boxes for the week.

Quotations are for fancy, 7¼@7¾c.; 6½@6¾c. for good and prime; 5¼@6c. for fair; 4@5½c. for half skimmed; 2@3½c. for skimmed. State, farm dairy at 6¾@7¾c. for good to choice, 5@6c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¼@7½c.; do. good to prime, 6@6¾c.; do. fair, to good 5½@6c.; Western factory, fine, full cream, cheddar, 6¾c.; do. fine, full cream, flat, 6½@6¾c; do. slightly skimmed, flat, 5¾@6¼c.; do. half skimmed, 4@5c.; do. full skimmed, 2@3c.

Exports, past week 88,421 boxes.
Receipts for the week, 107,557 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 43s.

DRIED FRUITS.—The only business is in small lots of new fruits, which go at variable prices; cherries are held a little higher, but for other sorts there is a disposition to await larger assortments. New blackberries, are quoted at 7¼@7¾c. Peaches—Georgia pealed, 4@5c.; new, 4¾c. for poor to prime; unpeeled old halves, 3½@4c.; quarters, 3@3½c. Pitted cherries, 11c.; New York State plums, 12c.; southern plums, nominal. Apples—State quarters, 3½@4c.; do. sliced, prime, 4½c.; good, 3½@4c.; western quarters, 2@3c.; southern at 4@4¼c. for prime sliced; 3@3½c. for fair to good; southern quarters, 2@3c.; Tennessee quarters, in bags, at 1¾@2c. New raspberries, 22@22½c., and evaporated, 24@25c.

Exports past week, 267 obls. apples. Since Jan. 1st, 10,328 do. Same time last year, 25,400 do.

EGGS.—Receipts for the week, 6,002 bbls.; do. last week, 7,913 do. The market has been a badly-shaped one for a fortnight. Near points are absorbed in the country. Western are turning out at severe losses, many totally spoiled. Canadian have lost their usual warm weather reputation, and it requires a fine mark to bring 11c; very few Western attain that figure. States have about the steadiest sale, but even these do not give their customers satisfaction. Cold storing is still a problem; experiments are being made in packing so that stock does not sweat so badly after coming out of the chill. Oat hulls is the latest improvements.

We quote near points, 14@15c.; State, 13@13½c.; fresh Western and Canadian, 10@11c.; inferior 10c. down to 6c.

FLOUR.—All grades have felt the advance on wheat. The Minnesotas are decidedly higher; also from the crop reports there has been a liberal business.

Latest prices are $3.35@4.00 for very inferior to fancy superfine State; $4.00@4.20 for poor to good extra do. odd lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@5.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@5.75 (fancy brands at higher prices); Minnesota "straight," very inferior to very fancy, at $5.25@7.25, and patent poor to strictly fancy at $5.50@8.75; unsound stock at from $2.00@5.25; city mill extra at $5 00@5.75 for West Indies (the latter rate for fancy in new packages); do. for England, 4.05@$4.25; do. trade and family extras, $5.05@6.75; do. for South America, $5.25@5.85 for fair to fancy; No. 2 $2.25@3.25 for inferior to fancy.

CORN MEAL.—Sales are at $2.30@$2.35 for Brandywine, and $2.15@$2 35 yellow Western.

FRESH FRUITS.—A few invoices of peaches have shown fine quality; latest arrivals have run poor. Md. & Del. "Crawfords," $1.50@2.50 crate; "Yorks" and "Trochs," $1.25@1.75; baskets, $1@1.37. N. J. "Hales," $1.00. N. C. quoted $1.50@2.50. Apples are plenty and prices are easy. Nyack pippins, $1.75@2 bbl. Sour Boughs, $1.25@1.75; sweet, $1.50@2. Red Astrachan, $1.75@3.25; good poor, $1@1.50. Pears are coming freely. Southern Bartletts, extra, $4@4.50 crate; good, $2.00@3; very common, $1@1.75. Manning's Elizabeth, N. J., bbl., $3@4; Catherine, $1.50@5; Bell, $3.00@4; Scooter, $3@3.50; Jargonelle, $3@3.50; cooking, $2@2.50. California, $1@5 box, prime; soft, $2@2.50. Cal. plums, $3@4 box. Grapes, N. C. & Delawares, 10@12c. lb; Ives and Hartford, 8@10c. Blackberries are doing better; Wilson's, 7@8c., pints; Lawton's, 6 @7c.; poor, 3@5c. quart. Whortleberries, best, $2.00@3.50. Ga. & S. C. Watermelons, per 100, $15@25; N. C., $10@20. Muskmelons, Jenny Lind, bbl., $3.50@3.50; citron, $1.50@2.50. Peanuts dull; sellers willing to shade prices. Va. hand-picked, $1.50; other, $1.25@1.35. Hot-house grapes, Black Hamburg, lb., 50@75c.; Muscat, 50@75c.; Sweet water, 40@50c.

GRAIN.—Speculative manipulation and brisk export demand have carried prices of wheat up, and there has been an active business. Corn is also higher, and oats, at little easier prices have a fair sale.

Latest sales are for wheat No. 3 white at $1.00; No. 1 white at $1.19@1.21 for new and $1.21@1.24 for old; white State at $1.25; extra white at $1.27; No. 1 amber, round, at $1.10; No. 2 amber, in lots, at $1.07@1.08; No. 2 amber, steamer grade, at $1.05@1.05½; No. 2 red, steamer grade, at $1.04@1.05½; ungraded white at $1.08@1.21; ungraded amber at $1.05@1.10; ungraded red at $1.00@1.18; No. 2 Milwaukee spring, $1.08; No. 2 red $1.07½; No. 2 red, part near arrival, at $1.06@$1.07½, closing strong at $1.07½; New York No. 3 red, August option, at $1.06¾@1.07½; do. September option, at $1.00¾@1.07; New York No. 2 spring, September option, at $1.07; do., October option, at $1.05. Rye at 65 to 67 for State. Corn at for New York No. 2, August option, at 48¾@48¾c.; do. at 49c.; do., September option, at 45¾c.; do., October option, at 50¾c.; steamer mixed, August option, at 47¾@47¾c.; do., September option, at 48¾@48¾c. The spot lots included steamer mixed at 47@48c.; New York No. 2 at 48¾@49¾c.; New York No. 3 at 46¾@47c.; ungraded mixed at 46@49¾c. Oats, New York No. 1 at 34¾@34¾c.; New York No. 2 at 33¾@33¾c.; No. 2 Chicago at 34¾@34¾c.; New York No. 1 white at 37c.; New York No. 2 white at 34¾c.; white western at 33c. to 38c.; mixed western at 32c. to 35c.; white State at 34c. to 37½c.; mixed State at 32¾@34¾c.; New York No. 3 white quoted at 32¾c.; New York extra at 35¾@36c.; New York No. 3 at 31½c.

HOPS.—There have been no shipments this week, and trade otherwise has been slack. Emmet Wells says in his circular: "Our reports do not give promise of over 125,000 bales, or one-half of last year's yield. It will be a 'top crop,' which means a small crop of excellent quality. Now if growers will take the same pains in picking and curing that they did last year they will be well paid for their trouble. We do not look for very high prices, even though we grow less than half of last year's crop, for the reason that many of our large brewers are carrying a year's supply of '77s, which they took the precaution to buy at low prices, and therefore will not be compelled to come into market as early as usual. The crop in Wisconsin is reported to be almost a total failure; lice are destroying it. Advices from the Pacific coast are less favorable; rain is much needed there.

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@ 3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

HAY AND STRAW.—The new hay and straw is selling at from 40c. to 70c.; a larger portion of the parcels coming in are of poor quality. Prime old hay is wanted.

Bale hay, at 45@50c. for shipping, and 60@75c. for retail qualities; Straw quoted at 40@45c. for long rye; 40@45c. for short rye; and 30@35c. for oat.

Exports past week 136 bales. Since Jan. 1st, 40,975 do.; same time last year, 29,575 do.

LEATHER.—Prices are 19½@20c. for light hemlock; 19½@21½c. for middle; 20@21½c. for heavy and 17½@19c. for good damaged.

POULTRY AND GAME.—The supply of both live fowls and chickens is ahead of the demand, and prices are low and likely to settle further. Only choice hen turkeys wanted at this season. It hardly pays to pick out the specials that city killers will use, as buyers who have any sort of steady use for turkeys avail themselves of dry picked and other stock that comes from localities that make summer dressing a specialty. Ducks and geese are unchanged, chickens, N. J. 14c.; State 13c.; Western, 11@12c.; Southern 11@12c. Fowls—N. J. 12@12c.; S. & W., 11@12c.; Roosters, 5@6c. Turkeys 13@14c. Ducks—Choice, pair, 60@75c.; other 40@85c.; Spring 50@75c. Geese—Choice, $1.25@1.50; other 88c@$1.12.

Dressed poultry is in light supply, but prices favor buyers. Dry picked turkeys, 15@16c.; other, 13@14c.; spring chickens, Phila., 16@18c.; N. J. 15@16c.; S. & W. 12@13c.; Pa. fowls, 14@ 15c; N. J., 12@14c.; State and Western, 10@12c.

Woodcock have appeared; sales quick at 75@85c., pair. Eng. snipe, $1@2.25, doz. Wild gull-fed pigeons, from $1 25@1.37. Young, $1@1.12. Bay snipe from L. I. and the near waters will soon be in stock.

PROVISIONS have been tending upward, with an active trade. Mess pork quoted $10 50@$10 55 for spot lots; $10 45@$10 50 for August; $10 50@10 55 for September, and $10 65 for October deliveries. Bacon at 6¾@6¾c. for long clear. Lard—at $7 65@7 70 for spot lots; $7 65 for August, $7 65 September, and $7 70@$7 72½ for October delivery. Stearine at 9¼@9¾ for western, and 9¼@9¾ for city. Tallow at 6 15-16 for prime. Beef hams at $21 50. Beef—for extra mess, $11 75@$12; plain mess, $10@11 50; packet, $11 50@12 25 for bbls. and $16@17 for lcs.; family at $13@14; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

TOBACCO.—Larger export orders have been on the market, and the home demand has been very good, with prices steadier for the better grades, but not quotably changed for the better.

VEGETABLES.—Exports potatoes past week, 5,066 bbls. Supplies of potatoes have fallen off owing to late rains which have prevented digging; prices have advanced though not likely to hold: L. I. and N. J., Rose, $1.50@1.75; Culls, 50@75c. Sweet potatoes, Va., yellow, $4.50; red, $3@4.50. Receipts of garden stuff have been light and prices are temporarily higher. Green corn, sweet, per 100, $1@1.37; peas, bag, $1.50@$1.75. String beans, $1@$1.25. Cucumbers, 50@75c. per 100. Tomatoes, $1@$1.25. Irish, Onions, Chester red, $1@1.50 bbl.; N. J., $1@1.25; southern, $1. Marrow squash, $1.5 @$2.; crook-neck, $1.50@1.75; white, 75c.@$1 Beets, per 100 bun., $1; carrots do., $1. Egg plants, 100, $10@$12. Cabbages, Flat Dutch, $4@5; red, 6@7. Lettuce, bbl., 50@62c. R. Turnips, bbl., $1@1.25. Lima beans, bag; $3.

WOOL.—There is a strong market. Business is showing an improvement, particularly in western fleeces, California of the spring clip and Texas. Quotations are for domestic fleeces—

Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@41c.; XX, 37@39; X, 37@38; No. 1, 37@39c.; No. 2, 34@37c; common, 31@33c.; combing and De Laine, 42@45c.

New York, Michigan, Indiana and Wisconsin. XX, 34@37c.; X, 34@37c.; No. 1, 33@33c.; No. 2, 31@33c. common, 28@31c.; combing and De Laine, 39@42c.

Iowa, Vermont and Illinois—X and XX 33@36c.; No. 1, 34@36c.; No. 2, 29@32c.; combing, 37@40c.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@35c.; unwashed, 24@28c.; unwashed combing, 29@32c.

LIVE STOCK MARKETS.

Saturday, Aug. 3, 1878.

BEEVES.—Receipts for the week, 12,825 head; do., last week, 11,243 do. As receipts would indicate the market has been overstocked all the week, and prices have ruled weak and low every market day since our last. At the close the extreme is 10¾c., and that paid in only few cases: best steers sold, as a rule, 9¾@10c. For export cattle, 8½@9¾c. were quoted. Native steers ranged from 7½ to 9¾c. Texas and Cherokee ranged at 6@7¼c. State bulls, 2¾@2¾c.

COWS AND CALVES.—Not enough doing to base reliable quotations upon.

VEAL CALVES.—Receipts for the week, 3,437 head; do., last week, 3,107 do. Market fairly active at 5½@6¼c.: for ordinary to fair, extras, 6¼@6¾c. Grassers and buttermilk, 3@3½c.

SHEEP AND LAMBS.—Receipts for the week, 28,212 head; do. last week, 23,245 do. At the close sellers accepted lower prices to reduce the supply. Sheep ranged 3@4¼c.; lambs, 5¼@6½c.; quality of the latter in good order.

SWINE.—Receipts for the week, 18,506 head; do. last week, 19,042. Supplies go direct to killers. No city rate for live.

INDEX TO NEW ADVERTISEMENTS.

Ayer, N. W., & Sons.—Manual for Advertisers.
Collins, John S.—Strawberry Plants, and Jersey Red Swine.
Duryee, C.—Sea-side Cottages for Sale.
Dederick, P. K.—Perpetual Hay Press.
Gregg & Co.—Sulky Plows.
Hale, G. H. & J. W.—Strawberry Plants for Summer & Fall Planting.
Hubbard, T. S.—Grape Vines, Grape Wood, &c.
Hall, 53 Exchange Place, N. Y.—Farmer Wanted.
Harlow, Brothers.—Adams Horse Powers.
Hance, A. J. & Son.—A Million of Crescent Seedling Strawberry Plants.
Kingsford & Son, T.—Oswego Corn Starch.
Loring & Blake—Palace Organs.
Magie Co., D. M.—Magie or Poland China Hogs.
Madison University and Colgate Academy.
Mason, Geo. F.—Farm Wanted to Rent.
Matthews, G. W.—Pro Bono Publico.
McSherry & Co.—Force Feed Grain Drill.
Mohawk & Hudson Mf'g Co.—Dodge Hay Press; Family Cider and Wine Press.
Parsons & Sons Co.—Rare Evergreens.
Silver & Deming Mf'g Co.—Endless Chain Horse Powers.
Thompson, C. B.—Little Giant Scales.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.
Wade, C.—Seed Wheat.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

TERMS FOR 1878.

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Single Copy, per Year	$2 50
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Five Copies or more, per Year	2 00
" " " Six Months	1 00
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Reading for the Young.

A DEAR LITTLE GIRL.

GEORGE C. BRAGDON.

ONE fragrant and radiant day
There budded with blossoms of May,
Our May of the clustering curls—
The dearest of dear little girls.
How tiny the darling was then:
But now, only think, she is ten!
Ah me! How the swift seasons fly,
Like vanishing clouds in the sky!
But, well, as it has to be so,
Let's garner their joys as they go,
And put them down into our hearts
To lessen the aches and the smarts.
Let's romp with the dear little girls,
Like May of the clustering curls,
And shout with the dear little boys,
Like Claude of the clarion voice.
Let's gather them up in our laps,
And tell them the curious haps
And notions and fancies and fun
Abounding here under the sun,
And live our lives over again
In their lives—we women and men.

Oh ho! there are arms 'round my neck,
And my well-starched collar's a wreck;
And all over my face are the curls
Of the dearest of dear little girls;
And a pair of the reddest of lips
Is giving me nectarine sips;
And a voice murmurs whisperingly,
"Papa, tell a story to me;"
And because one has clearly been sold
For kisses, and ought to be told,
Repeating our sweet pantomime,
And commencing with "Once on a time,"
I invent her a fairly tale,
And give her a fanciful sail
On a gossamer boat of the sky,
From a harbor where cloud-lands lie,
Through space to a valley afar
In the west, on a glimmering star,
And stud it with rubies and pearls
For this dearest of dear little girls.

[*Rochester Democrat.*

HOW TO GROW PLANTS IN THE SUMMER FOR DECORATING THE ROOM OR WINDOW DURING WINTER.

JULIUS. J. HEINRICH.

THERE is rarely any surer test of a happy home than the flower-decorated window and neatly kept garden; and there is no occupation for the leisure hours better calculated to keep the home happy, or to sooth the mind. It yields pleasure without surfeit; the more we advance the more eager we become. How unlike this is to many of our employments! To those parents blessed with children, how delightful it is to bend their young minds to a pursuit so full of usefulness and intellectual instruction, combined with the advantages usually accompanying industry. As it promotes in children carefulness and thought about their plants, so it will lead to the same feeling respecting other matters.

Let me endeavor, therefore, by laying down a few simple and practical rules for the management of plants in the summer, for the room or window in the winter, to turn the children's attention or that of the female portion of the family, to this pleasing and innocent employment; for it is a subject calculated to give much more real enjoyment at far less expense than what are usually termed amusements.

As I intend and hope this may be for the benefit of young persons mostly, I shall exclude as much as possible all technical terms generally used in catalogues, and shall confine myself to the most simple expressions so as to make the subject easily understood.

FIG. 1.

The first thing to be attended to is procuring proper plants for the purpose; that is, plants which are healthy, strong and vigorous, as sickly plants in such situations would test the skill of the most experienced gardener to keep any length of time. The following list, although very small, contains those most suited for this

FIG. 2.

purpose, being easily obtained and not difficult to manage.

LIST OF PLANTS THAT WILL GROW IN THE SHADE OR WITH BUT LITTLE SUN.

No. 1. Dracænas (See Figs. 1 & 2.)
" 2. Ferns.
" 3. Lycopodiums.
4. Marantas.
5. Nemophilas.
6. Tradescantias.

PLANTS THAT GROW BEST IN THE SUN.

No. 7. Alyssum.
" 8. Begonias.
" 9. Bouvardias.
" 10. Carnations.
" 11. Callas.
" 12. Cannas (See Fig. 3.)
" 13. Centaureas.
14. Geraniums, Zonal.
15. " Scented.
16. Lobelia.
17. Mignonette.
18. Nasturtiums.
19. Primulas.
20. Pansies.

FIG. 3.

Plants intended for decorating the room or window during the winter, should not be planted in the garden borders or beds in the summer. If you plant them in the soil, and take them up in the fall and pot them for winter use, you will find that all the leaves of the plant will drop off, and in a few weeks you will have only the stalk left. It will be some time, and, in fact, almost all winter before they will recover. To prevent this,—and now is the time after selecting your plants—pot them in as small a pot as you can possibly get them into without crushing the roots too much, and plunge, bury or set the pot into the garden-border or bed, up to about one inch from the top of the pot, as shown in Fig. 4. Be careful not to fill the pots with soil when you plunge or bury them, because you will have to water them as if on a stand; but by burying them, they require less water. Later on, about the first or second week in August, they should be taken up and knocked out of the pot, to see if they are full of roots. If full, the plants must be repotted into a pot a size or two larger, in order to give them more room and nourishment. Repotting is much better than watering with guano water, as guano is a very heating fertilizer, and very dangerous. It may destroy more plants in a few hours than weeks or even months of care can replace. Plants treated in this way will answer the double purpose of decorating the garden in summer, and when Jack Frost comes, you need only to raise the pot and you have the plant, roots and all, in perfect order, ready to decorate the room in winter. Should the season be very mild in September, and allow you to leave them out late, give them, about the end of September, another repotting, which will carry them nearly through the winter.

FIG. 4.

Plants of almost every kind given in the above list, can be bought at the greenhouse of any florist, if not just now, later on, as they generally grow them for this purpose. For those who wish to grow such plants, they need only to adhere to the following rules:

Nos. 5, 7, 16, 17 and 20, must be grown from seeds later on (directions, etc., will be given in these columns in due time.)

Nos. 13, 14, 18 and 19, may be grown from seed sown now and also later on.

Nos. 2, 3, 4, 6 and 12, can be grown from division of the roots now.

No. 1.—Plants must be bought, though they may be grown from seed, but it takes some time. I have a few hundred growing from seed now in my window, sown on the 22d of last April, and they are only 1½ inch high.

Nos. 6, 8, 14 and 15, must be grown from slips or cuttings, and so may many very fine varieties of No. 18.

With regard to Nos. 9 and 10, it is best to buy plants later on, as they do not root well this warm weather, and they take some time to make good flowering plants.

No. 11.—If you have an old plant you can get plenty small bulbs from it. Repot it, and start it to growing at once, or else buy a plant later on.

The best way to grow Nos. 6, 8, 14, 15 and 18, from slips or cuttings is this: take a dish or tin pan from two to four inches deep, fill two-thirds full of fresh-water or river sand—no salt-water sand—wet this well with water; then make your slips taken from the end of the plant, green, young wood, about three inches long; cut off all the leaves except the small, young leaves at the end; make holes in the sand large enough to allow you to put the slip in; put in your slips about one to one and a half inches apart each way, and about half the depth of the sand, so as to leave about three-fourths to a inch of sand from the end of the slip to the bottom of the pan; now water them well through a fine rose watering-pot, and place them in the shade, and do not let the sun or wind get at them; use plenty of water to keep them saturated; as soon as they have rooted, pot into small 2½ inch pots, and shade well from the sun; later on repot as required.

To grow Nos. 13, 14, 18 and 19, from seed: take boxes of any length or width you like, but only four inches deep; fill each box three inches deep with light, sandy, rich soil; sow your seeds in rows about three inches apart, and cover with just enough soil to bury or cover the seed; water them now well through a fine rose watering-pot, and place them in a sunny situation, but do not forget to water them when they get dry. When the plants are large enough to handle, pot into small pots and water well, and shade from the sun until rooted; later on repot as needed.

The Puzzler.

HIDDEN METALS.

1. LET me plead his cause.
2. Why brag, old Dan?
3. Four zebras sank in the river.
4. They left the grass-plat in a muss.
5. On the banks of the Sil, verdure grows.
6. Put the ticket in your pocket.
7. No sir! on my honor.
8. Haste, Ella, or you'll be too late.
9. As best ushers cost little, they abound.
10. The cop perceived the robber.
11. I had the pew termed unsafe.
12. In the Hebron Zenobia bathed.
13. His initials were "R. Z." in Coptic.

☞ Answer in two weeks. BALTO.

FRACTIONAL PUZZLE.

1. TAKE one-quarter of crow. 2. One-tenth of kingfisher. 3. One-eighth of bobolink. 4. One-sixth of magpie. 5. One-seventh of lapwing. 6. One-ninth of goldfinch. 7. One-eighth of woodcock. 8. One-eighth of paroquet. 9. One-quarter of swan. 10. One-sixth of linnet. 11. One-eighth of starling. 12. One-seventh of vulture. Take one from each and form a bird.

☞ Answer in two weeks. MAY.

CENTRAL PUZZLE.

AN army officer; an animal; a pattern; signified; a mechanic; damp; fine rain; a town of Georgia; income; a walrus; Indian corn: an Irish poet: a moving power. Centrals form a Bible traitor. LITTLE ONE.

☞ Answer in two weeks. S. C.

PUZZLER ANSWERS.—July 20.

ANSWER TO TRIPLE ACROSTIC.—Primals, Pepper; Centrals, Ginger; Finals, Nutmeg.

ANSWER TO MOUNTAINOUS ENIGMA.—"The happiness of life is made up of minute fractions:—such as a loving kiss, a smile, a kind look and the countless other infinitesimals of pleasant thought and feeling."

Sabbath Reading.

RESIGNATION.

I WAS not patient in the olden time,
When my unchastened heart began to long
For bliss that lay beyond its reach; my prime
Was wild, impulsive, passionate, and strong.
Heaven-sent, to come and nestle in my breast;
I could not realize how time might prove
That patient waiting would avail me best.
"Let me be happy now," my heart cried out,
"In mine own way, and with my chosen lot;
The future is too dark, and full of doubt,
For me to tarry, and I trust it not.
Take all my blessings, all I am and have,
But give that glimpse of heaven before the grave!"

Ah me! God heard my wayward, selfish cry,
And taking pity on my blinded heart,
He bade me the angel of strong grief draw nigh,
Who pierced my bosom in its tenderest part.
I drank wrath's wine-cup to the bitter lees,
With strong amazement and a broken will;
Then, humbled, straightway fell upon my knees,
And God doth know my heart is kneeling still.

I have grown patient; seeking not to choose
Mine own blind lot, but take that God shall send,
In which, if what I long for I should lose,
I know the loss will work some blessed end,
Some better fate for mine and me than I
Could ever compass underneath the sky.

[*All the Year Round.*

TEMPERING THINGS.

OBSERVE the pains taken with the temperature of the globe. See how the earth has its shores cooled and bathed by the sea and air; its surface so graded that the rains shall neither rest on it too long nor run off it too speedily; the strata are so tipped that the water gushes out, here and there, in cool springs; the mountains and hills are so arranged that the rivers meander to and fro over the surface of each continent, fertilizing and connecting all parts; mountains rise in the heated tropics, carrying the land up into cooler regions, catching the sea-breeze, and compelling it to deposit its burden of water in daily and nightly showers. Great masses of ice at the poles set in motion currents in the ocean and atmosphere rolling down toward the equator, and bringing perpetual reinforcements of cool water and cool air. Clouds sail to and fro—great ships of heaven—going about their Master's business, carrying water from one part of the continent to the other; carrying also a freight of electric fire from where it is in excess to where it is needed. So they do the work of a mercantile navy; and sometimes, too, they meet in battle, like ships of war, and we have a terrific naval engagement, with awful discharges of lightning and rolling thunder, yet not to destroy life but to save it. Such pains are taken to keep the earth in good temper, with equal balance of hot and cold, moist and dry. So, too, when the aurora borealis appears in the heavens, it is not merely to delight us with its beauty. Use always lies under the beauty, as the skeleton beneath the outward human form. Those steady discharges of auroral light to the zenith along innumerable conducting lines come, it is thought, to equalize the electric conditions of the air. As the engine blows off its excess of steam, so the earth is blowing off its excess of electricity, and tempering its climate for human use.

If God takes such pains to temper the climate of the earth on which our bodies live, does he not also temper the climate for the soul? Let us trust in his providence; let us believe that the events of life, its trials and disasters, its varied experiences, come, not blindly nor by accident, but are sent to give the right temper to our moral and spiritual nature, to fit us for the work we have to do in time and eternity.

The word temper is applied to the manufacture of steel. To temper steel exactly is the difficult point, and even the cutlers themselves do not know how they do it; they see something in the look of the steel which shows them that it is of the right temper. The utmost care, the most delicate and constant attention, are necessary in that ancient and wonderful process by which iron imbibes carbon and turns to steel. The smallest crack in the side of the furnace vitiates the results. Day after day the fire rages in the heart of the shut trough, and there the work goes on. So the steel gets its proper temper, whether it is to be a razor, a coach-spring, or a file.

And does not God take as much care to temper us as the steel manufacturer in Damascus or Sheffield takes of his knives and sabres? We also are often put into a raging furnace, and there, amid the stern experiences of life, we lie in the fire to be tempered, and go under the hammer to be compacted for the work we are to do in the universe. One is to be made into a delicate instrument, like a razor; another into a hard one, like a file; and each needs to be brought to a different temper. So, too, has our nation been tempered in the fire and furnace of war, and since then in the financial disasters of peace. We have gone under the heavy hammer blows of disaster and ruin. We need to be tempered. We have been going into excesses of self-love, into aberations of egotism, which are destroying our national life. We have been intemperate in our self-love. We have forgotten to worship God with reverence, to love man with tenderness. We need to be tempered again, and our great war and all the subsequent evils have been sent to do the work.—*Rev. James Freeman Clark.*

IT is dangerous to love to be wise above what is written; to be curious and unsober in your desire of knowledge, and to trust to your own capacities and abilities, to undertake to pry into all secrets, and to be puffed up with a carnal mind. Souls that are thus soaring above the bounds and limits of humility, usually fall into the very worst of errors.

PERSONAL ITEMS.

It was Mr. Augustus Braham who wrote "Though lost to sight, to memory dear."

Ex-Governor Seymour is refusing invitations to speak at agricultural fairs this season, on account of the uncertain state of his health.

Ex-Senator Revels of Mississippi, who is now pastor of the African Methodist Church at Richmond, Ind., has had a stroke of paralysis.

Dr. Lemoyne, of Pennsylvania, who owns the fiery furnace in which people are cremated, has given $20,000 to a colored school in Tennessee.

Miss Abigail P. Smith, one of the Glastonbury, Conn., Smith sisters, widely known for their resistance to taxation without representation, died lately, aged eighty-two years.

With more than French politeness, Marshal Bragney, who died recently, shortly before that event, addressed cards to his friends with the letters P.P.C.—*Pour prendre conge*,—to take leave.

The Duke of Sutherland, who owns a million acres of land in Scotland, has obtained leave, his heir consenting, to disentail his estates in that country. They have been in the family five or six centuries.

General Butler says that he turned over all of Gen. Twigg's plate, down to the last spoon, to the Quartermaster's Department, and has the receipt for it. What became of it subsequently the General does not know.

Isaac Cohen, who brandished his flambeau nose at the head of the Washington rioters, is a German-born machinist, of thirty-five years, a recent Arkansan importation, and at Hammond's revival excitement he worked earnestly for the saving of souls.

Dennis Kearney, the notorious agitator, in personal appearance is rather short and stout, clean-shaven, with the exception of a moustache, which is of light color. He has the true Hibernian cast of features, neither repulsive nor yet attractive.

Old Peter Goelet, the rich but stingy New York bachelor, who is rated at ten millions, is idling away the summer days at West Point, farther than which place it is thought he has never ventured from the metropolis, the scene of his wealth.

Lord Beaconsfield will receive from the British residents of California a $1,500 silver brick, mounted in native wood—a first-rate way of letting Disraeli know that he's considered a "brick" on this side as well as a Sir Knight of the Garter on the other.

Bismarck says that the French must have some nation to hate. By the way, he has just cut off the full beard that disguised him from would-be-assassins during the winter, and now "sports" only the moustache known to all—but this nature has lately dyed white.

There is a story of love that smacks of the olden time. It is that the son of General Sherman was deeply enamored of his fair cousin, now Mrs. Don Cameron. He clung to his hope until the last moment, and then abandoned the world to devote his life to the Brotherhood of Ignatius.

The Hon. Hamilton Fish held the office of Secretary of State three or four days longer than any of his predecessors, Madison, Adams and Seward being the three who filled the position the longest before him. Mr. Fish is now living at Sea Girt, on the Jersey coast, and says he has dropped politics and become a farmer, in proof of which he shows hard blisters on his hands.

The engagement of Mr. Isaac Bell, Jr., of New York, to Miss Jeannette Bennett, the sister of James Gordon Bennett, is not of very recent date. Mr. Bell has long known Miss Bennett, but has never shown her marked attention until very recently, when he spent the last few weeks with Mr. and Miss Bennett in Europe. The groom-elect is twenty-nine years of age and a cotton merchant. His father is a prominent citizen of New York. Miss Bennett is six years younger than her future husband, and is now with her brother at Newport. The date of the marriage, which is to be a grand affair, is not announced.

General Garfield goes about his farm in a broad-brimmed chip hat, with his trousers tucked in a pair of stout cowhide boots, giving directions to his hired men, and lending a hand at the haying and harvesting. None of his Washington friends, should they see him driving a yoke of oxen in the broiling sun and emphasing with a gad the stentorian shouts of "Gee," "Haw," and "Whoa, Buck!" without which no oxen seem able to do a proper amount of work, would have suspected that the broad-shouldered, sun-burned farmer under the chip hat, was the the famous Republican chief, fresh from parliamentary victories on the floor of Congress.

The betrothal of the Duke of Connaught and Strathearn with Princess Marie Louise of Prussia, daughter of Prince Frederick Charles, has been formally announced in the House of Commons by Sir Stafford Northcote, Chancellor of the Exchequer. The Duke of Connaught is the third son of Queen Victoria, and was born in Buckingham Palace on the first of May, 1850. His full name is Arthur William Patrick Albert, Duke of Connaught and Strathearn, Earl of Sussex, Duke of Saxony, Prince of Coburg and Gotha, K. G., K. T., K. P., G. C., M. G. He has attained the military rank of major. Upon attaining his majority in 1871, he was granted £15,000 a year by Parliament. The duke's betrothed, Marie Elizabeth Louise Frederique, is the daughter of Prince Frederick Charles Nicholas, the only son of Prince Charles, younger brother of the Emperor William of Prussia, and was born on the fourteenth of September, 1855. Her father is one of the most distinguished soldiers in Europe, and was the commander of the second army in the Franco-German war, and as such compelled Marshal Bazaine to surrender Metz.

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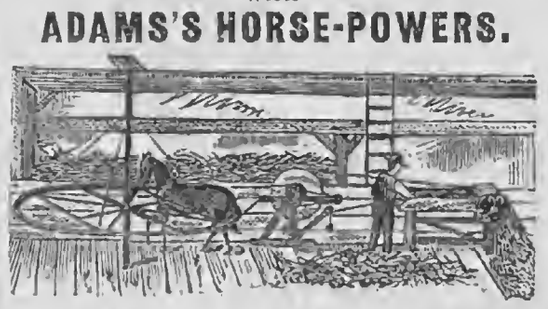
Farmers' Cut Feed Stormy Days
WITH
ADAMS'S HORSE-POWERS.



When used on barn floor a 15 year old boy can set-up, operate, and put it away alone. Occupies no useful room when not at work. Safest, most durable, most convenient and cheapest power made. Send for Circular. ☞ Responsible Agents Wanted.
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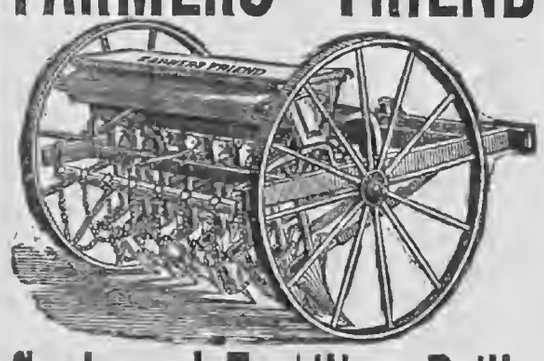

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The quantity is regulated with gear-wheels in a CONE, so there are no loose wheels or movable feeders, and it will sow any grain perfectly and accurately.
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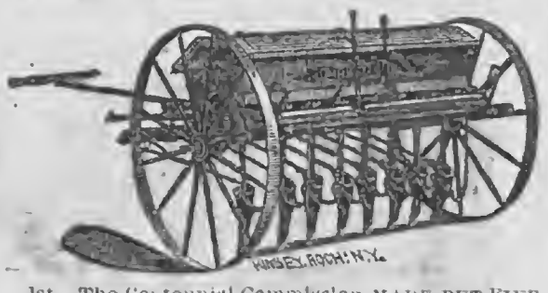

1st.—The Centennial Commission MADE BUT FIVE AWARDS to Grain Drills and Fertilizer Attachments.
2d.—Of these five, TWO were given Bickford & Huffman. One on the FARMER'S FAVORITE and one on Fertilizer Attachment.
3d.—NO OTHER MANUFACTURERS RECEIVED AN AWARD ON A FERTILIZER ATTACHMENT!
4th.—The award to the "Champion," built by Johnson, Gere and Truman, was "for a machine with attachable manure distributer;" an implement they did *not* exhibit and *do not offer for sale*, as their "manure distributer" is neither "attachable" nor detachable. The report does not commend this drill or its "manure distributer," for a single quality of work.
5th.—The award to the Farmer's Friend pronounces it defective by saying it *is capable of further improvement, as regards delivery up and down hill*; and also to the McSherry drill in these words: "*Some further adjustment appears desirable to enable this drill to deliver with equal equality up and down hill.*"
6th.—The Empire, Buckeye Hoosier, Superior and Hagerstown drills were *refused* EITHER AWARD OR REPORT, because of great "irregularities" or "variations" in the tests.
7th.—The variation of our nearest competitor. The Champion, *from its own distribution*, was MORE THAN 237 PER CENT. of that shown by the FARMER'S FAVORITE.
8th.—The award to the FARMER'S FAVORITE, distinguished it by commending it for "ACCURACY OF DELIVERY, AND REGULARITY OF DISCHARGE UNDER DIFFERENT CONDITIONS," and "REGULARITY OF DELIVERY UNDER ALL CONDITIONS." Qualities conspicuously lacking in its competitors.
We challenge contradiction of a single feature of the above statements.
Fully 80 per cent. of all the Fertilizer drills in use on the American Continent are built under our patents,—a fact that tersely and undisputably establishes superiority. For circulars, prices or information see our agents, or address Bickford & Huffman, Macedon, N. Y.
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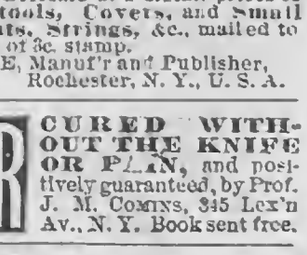

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WARM WEATHER POETRY.

Oh, for a lodge in a garden of cucumbers!
Oh, for an iceberg or two at control!
Oh, for a vale which at midday the sun cumbers!
Oh, for a pleasure trip up to the pole!

Oh, for a little one-story thermometer,
With nothing but zeroes all ranged in a row!
Oh, for a big double-barreled hygrometer,
To measure this moisture that rolls from my brow!

Oh, that this cold world were twenty times colder!
(That's irony, red-hot, it seemeth to me.)
Oh, for a turn of its dreaded cold shoulder!
Oh, what a comfort an ague would be!

Oh, for a grotto to typify heaven,
Scooped in the rock under cataract vast!
Oh, for a winter of discontent even!
Oh, for wet blankets judiciously cast!

Oh, for a soda fount spouting up boldly
From every hot lamp-post against the hot sky!
Oh, for a proud maiden to look at me coldly,
Freezing my soul with a glance of her eye!

[Old Wail, revived by St. Louis Journal.

How to remove weeds.—Marry the widow.

AT the depot the other day, a young man put his head out of the car window to kiss his girl good-by, when the train pulled out so rapidly that he kissed an old African female at the next station.

CONUNDRUM by Archimedes Johnson: "Why do de colored man always attrack mo' attention from assemblages ob people den the white brudder do? Gib her up? Kase the colored gemleman is always de center of the group!"

Who is it with funeral thread
Comes slowly home and goes to bed,
And utters what is best unsaid?
'Tis he who's fished since rose the sun,
Subsisting on a single bun,
And after all's caught nary one.

[*N. Y. Forest and Stream.*

A MAN who was not clever at conundrums, in attempting to get off one at a tea party at his own house, became exceedingly mixed. He intended to ask the old question, "Why is a woman like ivy?" the familiar but gallant answer to which is, "Because the more you're ruined the closer she clings." But he put it, "Why is ivy like a woman?" which none of the ladies could tell, and so the unfortunate man told them himself that it was "Because the closer it clings the more you're ruined."

A HEAVY LOAD OF CARE.—A little girl in the church at Ashland, Va., has been one of a band of workers to raise money to complete the church building. She had earned by her own work a considerable sum for a child, when a friend heard her express a great desire to own a canary bird. It was suggested to her that she could easily purchase one from her own purse. "Oh!" she replied, "I can't got a thing for myself while I have that church on my shoulders.' —*Charlestown News.*

WHERE it is going to stop no one knows. Before "Grandfather's Clock" is fairly run down, a music publisher advertises "Grandmother's Chair," and no doubt these will be followed by "Grandmother's Spectacles," and "Grandmother's Sun-bonnet," and "Grandfather's Bootjack," and "Grandmother's Candlestick," and all the other rubbish that once belonged to the old folks, and was not disposed of at public sale thirty years ago.—*Norristown Herald.*

Clear the Way.

FOR the escape from the system of its waste and debris, which, if retained, would vitiate the bodily fluids and overthrow health. That important channel of exit, the bowels, may be kept permanently free from obstructions by using the non-griping, gently acting and agreeable cathartic, Hostetter's Stomach Bitters, which not only liberates impurities, but invigorates the lining of the intestinal canal when weakened by constipation or the unwise use of violent purgatives. The stomach, liver and urinary organs are likewise reinforced and aroused to healthful action by this beneficent tonic and corrective, and every organ, fiber, muscle and nerve experiences a share of its invigorating influence. Unobjectionable in flavor, a most genial and wholesome medicinal stimulent, and owing its efficacy to botanic sources exclusively, it is the remedy best adapted to household use on account of its safety, wide scope and speedy action.

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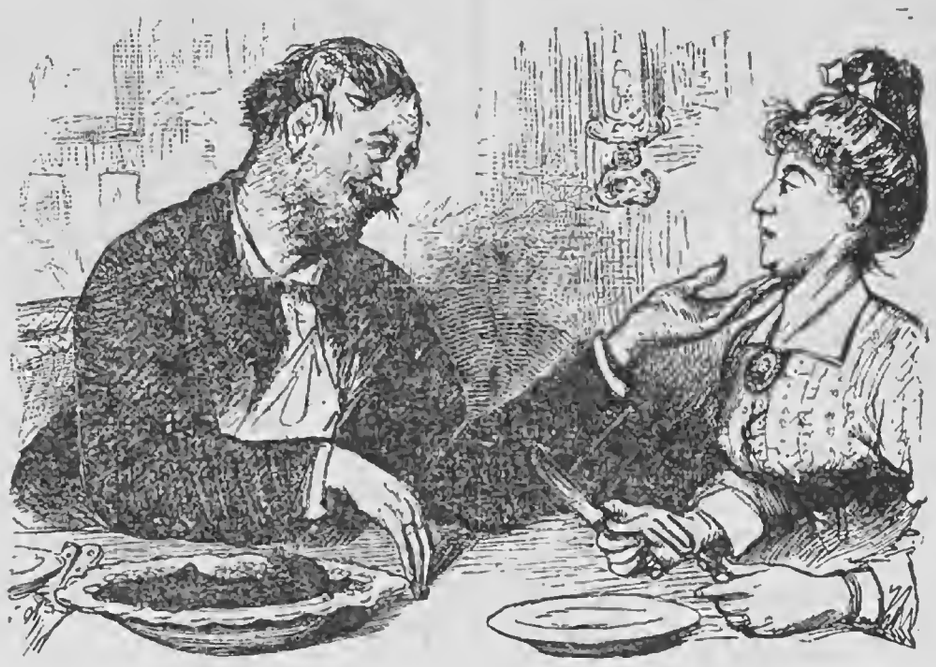

TOO CONSIDERATE.

HE—(persuasively)—My dear, you have said that what pleases me, pleases you. It is the same with me. Thus it will give you as much pleasure to see me eat the dinner as if you ate it yourself.

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Is the BEST and MOST ECONOMICAL in the World.

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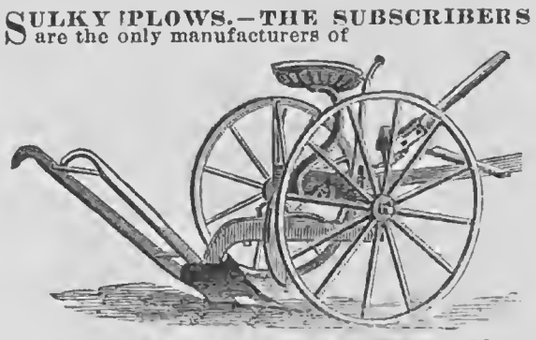

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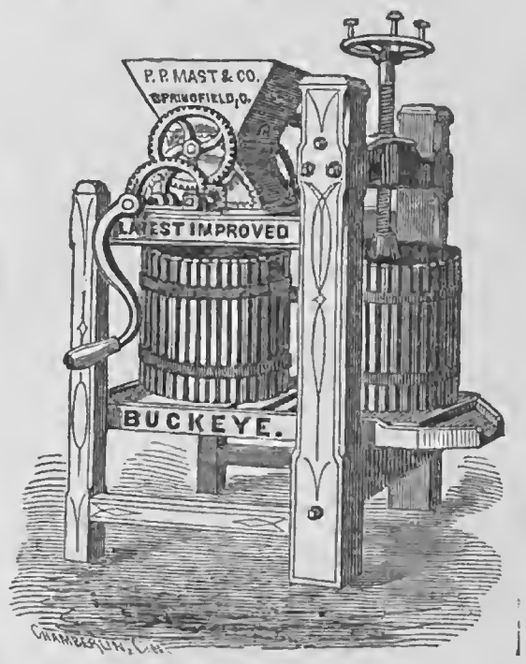

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MOORE'S RURAL NEW-YORKER.

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RURAL AND HOME AFFAIRS, ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

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Arboricultural.

THE STONE PINE.

PINUS CEMBRA.

It is specially necessary to give the botanical name in this case, as there is another Pine, Pinus Pinea, which is also termed the Stone Pine. This last, however, is an Italian Pine, and not hardy far northward in Europe, and not at all in the Northern States of America. The Stone Pine we have in our illustration, Pinus Cembra, is sometimes called the Swiss Stone Pine. It does well all over Europe, but is quite peculiar to the Tyrol and the Alps, where its large seeds are, in sections, used as an article of food. Probably the longest known and most special home of this Stone Pine is, however, Siberia, whence the name Cembra, Cimbria being the ancient name for all countries in the regions about Siberia. Loudon calls it the Siberian Stone Pine for similar reasons, but it is very generally known in America and Europe as the Swiss Stone Pine, or simply the Stone Pine. We dwell on these facts to prevent confusion that might otherwise readily occur. The Swiss Stone Pine is a very distinctive tree in its habit. It is erect, and of a bluntish, pyramidal shape, regularly furnished with branches down to the ground, thickly clothed with foliage, and attaining a hight of fifty feet. Much variation appears in its form, as seen in different specimens. Sometimes it becomes so erect in habit as to be perfectly conical. Again, the branches will be quite horizontal in their growth. Grafting may be used very profitably in such case to perpetuate desirable forms. There are in use, at the present time, several varieties of Pinus Cembra, not results of the propagator's art, exerted in selecting from sports in the nursery, but all apparently sports growing under the peculiar conditions of different countries, such as Cembra pygmæa, Helvetica, Siberica, monophylla. There is also a variegated variety of Cembra, of which we do not know the value. Scarcely any variegated Pine, except Pinus Massoniana variegata, has endured successfully American suns, so the chances are against the success of Pinus Cembra variegata. For all lawn planting purposes, the Swiss Stone Pine is essentially a low-growing tree. A dozen years will hardly increase its dimensions beyond the ordinary requirements of a village lot. Its pyramidal form and rich blueish-green color, make it very effective, when grouped among other dwarf evergreens, or standing alone in a favorable position to exhibit its peculiar beauty. In a group it should be placed somewhat in the rear, and, as a single specimen, it may be best used in small grounds in the corners. For all kinds of ornamental planting, the Swiss Stone Pine ranks very high, affording a marked individuality of form surpassed by few other trees. Though so old and well known, its appearance on the lawn is sufficiently uncommon to render it as yet decidedly novel to most people. It is hardly a rare, but certainly a very choice tree.

Horticultural.

NOTES FROM THE RURAL GROUNDS.

AN EXPERIMENT.

Arbor-vitæ hedges are not planted for the purpose of turning animals. At least they cannot be trusted to do so. We do not see, therefore, what good is derived from setting the plants so near each other as authorities instruct us to do. If Arbor-vitæ be set one foot apart, they will do well for several years. But, finally, the roots become crowded, and, as it were, pot-bound; the leaves and branches receive too little sun and air, so that sections of the hedge, or single plants or parts of single plants, will be killed by the first severe drought or exceptionally cold winter. For the purpose of ascertaining how far a single Arbor-vitæ could be made to extend over the ground, one was planted upon the lawn five years ago, and has since been cut back every season to within a foot or a little more of the ground. Its diameter is now six feet. Why not, therefore, in starting hedges set the plants, say, at least four feet apart? Or, if the effect of a continuous hedge is needed sooner, plant them two feet apart, and then when the branches meet, remove every other plant for the formation of another hedge, leaving now a space of four feet between those of the first?

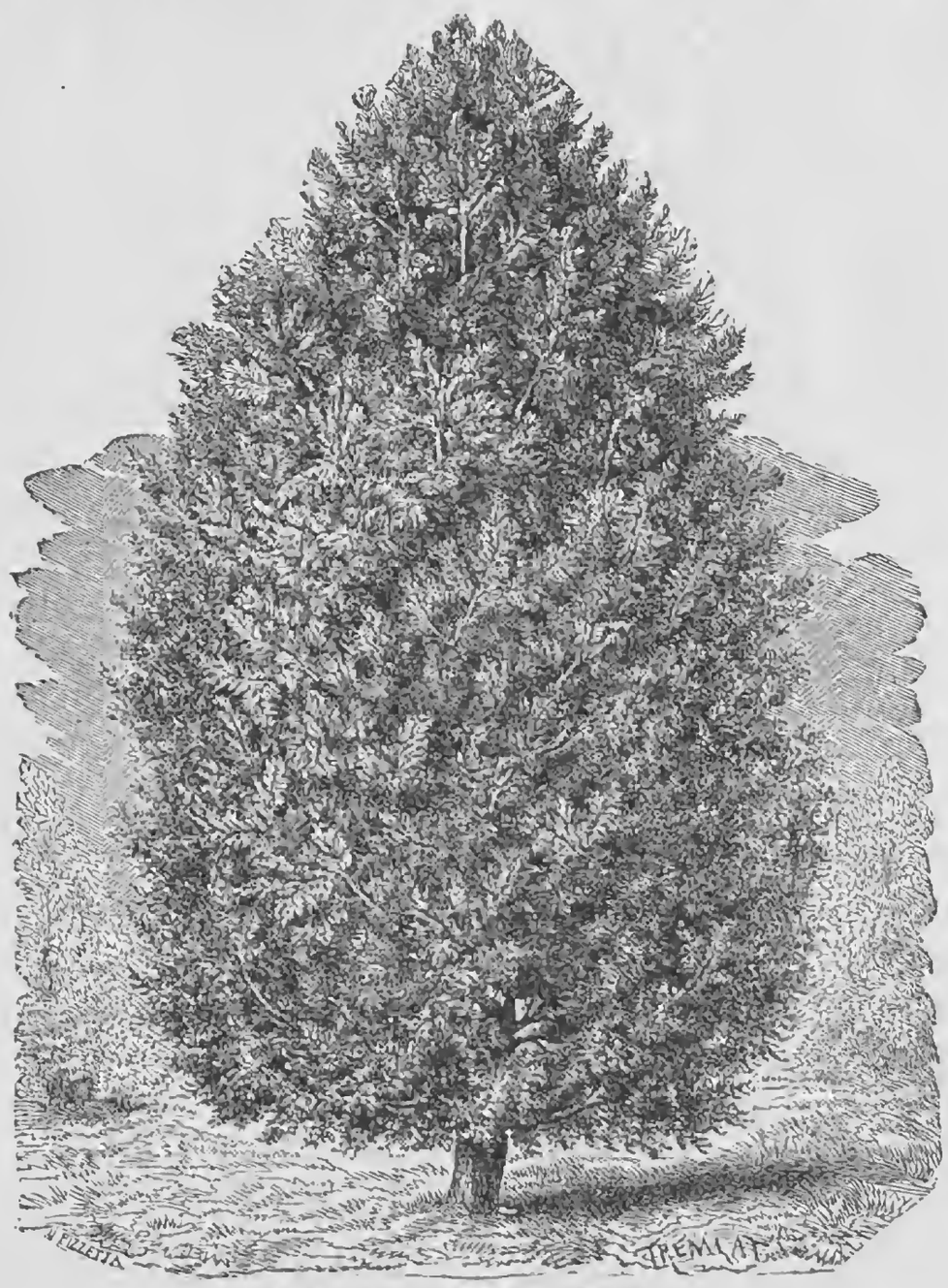
Ornamental evergreen hedges are seldom so ornamental as they might be if more care were given to the lateral and less to the perpendicular growth. Looking to permanent health and beauty, the plants should be set as far apart as we have indicated; should be kept cut back to two feet until the lowest branches meet and lie upon and cover the ground. Then they may be permitted to attain the desired hight. But the lower growth, which has been sacrificed to perpendicular growth, is sacrificed for all time, and that which would form a chief beauty is lost forever.

ORNAMENTAL VEGETABLE GARDENS AND FANCY BEETS.

We wish our readers might see our Fancy Beets. They were sent here by Messrs. Thorburn & Co., the old and trustworthy seed merchants of New York, for trial. Knowing that they were not to be cultivated for the roots alone or mainly, but for the leaves, the young stalks as large at the base as the half of one's wrist. The veinlets are also a purple scarlet, which contrasts showily with the wax-like colors of the blades. Some of these stalks and veins are a deep orange, some pink, some light green ("White-Ribbed") with all intermediate shades.

As a general thing very little care is bestowed upon the vegetable garden to make it ornamental as well as serviceable, and perhaps this is as it should be; but we have never known until this season with how little trouble it can be made the one as well as the other.

The back boundary of our garden is shown by a line of dwarf peaches, plums and crab-apples. On one side are rows of Kittatinny Blackberries and all sorts of red and black Raspberries. On the other side, concealing the fence, are seedling hardy shrubs of various sorts. The main paths are lined with Currants and Gooseberries. For want of space elsewhere this season, we were driven to plant a double row of Ricinus seeds across the entire width of the garden—a variety produced by crossing Ricinus Gibsonii with R. sanguinens. These are now about two feet high and the leaves present changeable shades of bright, shiny crimson. Water and Muskmelons, groups of different varieties of Corn, Pearl Millet, Celery, planted in lines as straight as possible, Tomatoes of many kinds well-staked, Cabbages, Brussels Sprouts, Green Peas, planted late which, by the way, we have never found of any value; parsnips, Chufas, Okra, Salsify which, again by the way, is worth its weight



SWISS STONE PINE.

plants were taken from the seed-beds and strung along the borders of the vegetable garden. They are now curious and beautiful. The leaves of the variety marked "No plus ultra" are of a deep purple or plum color, and small as compared with the others. Those of "Scarlet-ribbed" are, many of them at least, two feet long—we speak of the blades—with scarlet midveins and in any other vegetable; twenty-five rows of different strawberries, many different kinds of Lettuce, fill up the intervening spaces.

These plants are irregularly divided by main paths into several plots, and some of these plots, on one side, are bordered with the showy Beets of which we have spoken. The entire garden so planted and arranged is singularly attractive, and the members of the family, as well as our visitors, linger in this part of our grounds longer than in those parts which are nothing if not ornamental. Thus a pleasure has been created from this style of mixed gardening, that repays us far beyond its cost and settles us in the belief that the vegetable garden need not be a bald vegetable storehouse alone, to be resorted to only as the demands of the table render it necessary.

But we have yet a word to say about the Fancy Beets. Though highly ornamental, they are useful too. We have found that the great midribs, divested of the green parts and secondary veins, may be cooked and served in a variety of ways. They may be cut up into pieces, stewed as long as necessary and covered with spiced vinegar; or they may be stewed and dressed with drawn butter as for Asparagus. For other particulars see Domestic Economy next week. We claim this as a new and valuable dish.

Aug. 6.

GARDEN TALKS AND WALKS.

The Beeches, Mass., July 30, 1878.

FARMING V. CITY LIFE.

G. F. M. was brought up in Jersey City, where for some years past he has been an active member and partner in a business firm. He always had a longing for country life, particularly as a small-fruit culturist. Though practically and theoretically ignorant of the fruit-farming business, he was nevertheless determined to engage in it, and as a preliminary step he took last year's (77) course in botany at Harvard University and in this he distinguished himself as one of the brightest and best students of his class. Practically this step, though eminently useful was not imperative, but it strengthened his purpose, vitalized latent interest, and displayed undreamt of charms in his coveted avocation. Last spring he leased a small farm in N. J. some 24 miles from New York, and on the first of April practically entered upon the duties of the business of his choice. Knowing as I did his keen business capacity and indomitable perseverance, I had no fears for his success, providing he could overcome being "lonesome." The following extracts from a letter I had from him a few days ago justify my confidence.

"I put in one acre of strawberries and will set out two acres more next spring. I set two varieties, Seth Boyden's No. 30. and Great American. I also put in 400 Lawton Blackberries. * * * As to chickens I have about 200. The hennery contains two acres with a building 96x24 feet and which is divided into three compartments as is also the run; we keeping three breeds. * * * I find it a little lonesome sometimes, but in conquering the work that stares one out of countenance on a farm, I find the time pass away quite quickly. Nevertheless, I am so well pleased with country life that I would not return to the city for a good deal."

FLOWERS CHANGING COLOR.

Last spring a lady brought me a red bloom of a Cactus so that I might name it. While she eulogised it, I told her it was the bloom of a miserable variety or badly grown plant of Phyllocactus Ackermanni. She felt disappointed and affirmed that the plant was in excellent condition, plump and green, and she watered it every day herself, and it was growing in their sitting-room window where the temperature was never below 60°. Precisely the opposite conditions of its requirements I assured her, and advised her to place the plant in the sunniest window, in a temperature of 45° or so, if practicable, and stop watering it altogether.

She called three weeks ago to show me a glowing brilliant red blossom she had plucked from the same plant. "If I did not own the plant myself, and had not, with my own eyes, seen those two flowers growing on it, I could'nt have believed two such differently colored blooms could be borne on the same plant. I treated it as you advised me, though I must say it was

awfully cruel, it shrivelled so, and everybody said it would die, but it did'nt." It is the same with Cactuses as with other plants: over-luxuriance is productive of abortive and faded-colored blossoms; plants that are over-watered or kept in too close and shaded quarters and unseasonably or unnaturally high temperatures, never bear such brightly colored flowers as they otherwise would. This is well illustrated in forcing Roses and other plants; we cannot get too much sun to intensify the color of the petals. Blossoms plucked from plants out-of-doors are brighter and more substantial than they would be if raised in a greenhouse. And in order to have intensity of color in a flower we must secure a thoroughly ripened constitution in the plant, for every florist knows what absurdity it would be to expect profitable Roses in winter from sappy-stemmed plants that made their growth in the fall. Last spring I had a good example of the poor color of unseasonably forced flowers; we bloomed Crassula coccinea in March, and its flowers were washy pink. In June we bloomed some more (in both cases the plants were raised from cuttings taken from the same plant, therefore unmistakably the same variety) when the color was bright scarlet.

THE TEXAS HORTICULTURAL AND POMOLOGICAL FAIR.

HOUSTON, Texas, July 29.

THE Texas Horticultural and Pomological Exhibition came off on the 17, 18, and 19 inst. At the start the display was rather meager, but shortly afterwards the products began to pour in from the interior of the country and the numerous tables of the espacious exhibition-hall were soon teeming with the "fair" products of the land.

FIELD CROPS.

As to field crops, fine samples of corn, cotton, sugar-cane and tobacco were to be seen from the rich bottom lands of the adjacent counties, while Northern Texas made up the collection with every kind of small grains, as wheat, rye, oats, barley, millet, broom-corn and sorghum.

VEGETABLES.

The quality of vegetables was not as fine as it would have been, if the exhibition had taken place about a month or so sooner; for much of the garden truck is out of season at this time. Among the most noteworthy exhibits were some very fine Peerless potatoes; and a watermelon weighing 61 lbs.

FRUITS

In fruit, the leading varieties of peaches, together with seedlings no less beautiful and promising made a nice display, especially those from the more northern parts of the State. That section exhibited some apples of pretty fair appearance, though in pears it could not beat the more central parts of the State. This county exhibited figs, oranges and pomegranates, which helped to make the show still more diversified. In grapes, Delaware, Herbemont, Norton's Virginia, and others of the æstivalis sorts, were models of perfection, while all of the Labrusca varieties were imperfect and inferior, even those from Northern Texas, showing at a glance that this last species is not at home in this State.

FLOWERS.

In the floral department a numerous collection of pot-plants of the leading florist kinds, adorned the benches, though there was nothing especially novel or striking among them. Quite a commotion existed among amateur florists competing for Vick's premiums for cut flowers. The contest was animated; the varieties of flowers were numerous, some parties exhibiting from 150 to 180 varieties, including annuals, herbaceous, bedding, pot and shrubby plants.

MISCELLANEOUS.

Fort Bend County made an unusually fine and most diversified display of its products and resources, including 49 sorts of its indigenous woods and 9 different kinds of arable soils. This was in competition for a prize consisting of a silver fruit-stand, worth $100. It did not get this prize, however, much to the surprise of everybody, except the three sagacious (?) Judges of awards.

As a special feature, all the agricultural and horticultural periodicals of the U. S were on file, among which, the RURAL took a conspicuous rank. The patent-bee-gum man was there, too; instinctively I looked for his confederate with the patent butter-churn, but strange enough, I could not see him this time.

G. M.

CULTURE OF SMALL FRUITS.

To purchase strawberries from the South is to send money out of the country. We must raise later varieties. The Monarch of the West is hardy and profitable. It will not bear high culture, and must not be set in too rich a soil. The berries have a better flavor and color than the Wilson. They do well on heavy soil; but if you desire good flavor, set them on sandy or gravelly soil. The Colonel Cheeny is considered a good variety; also the Captain Jack which ought to be cultivated until it runs out the Wilson. Strawberries require moist land, but not land out of which the water oozes. Sawdust does not make a good mulch, as it forms a harbor for ants. Leaves from the forest or straw keep the plants moist and clean.

Raspberries ought to be set four by seven feet apart, as their roots reach far and form a complete net-work underground. Leaf mold and chip dirt should be put around the roots. More cherries should be raised. Pears do best on the hills. Coal ashes could be used with success around the roots of apple trees to prevent borers.

M. B. D.

Binghampton Farmers' Club.

CALIFORNIA FRUIT NOTES.

OUR orchardists are busy getting the early fruit into market, the Red Astrachan and Early Harvest apples were in great abundance. In quality they were choice, and yet they sold at only six dollars per ton, the purchaser picking at his own expense. Early peaches are coming in in large quantities, and bring a fair price; the quality is fine. Of apricots there was the largest crop ever raised in this vicinity—the trees were loaded. Blackberries are fine and in abundance—from 25 cents to 40 cents a gallon, delivered.

W. C. L. DREW.

El Dorado, Cal.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE want to suppose a case: Suppose some morning we should find the worms rapidly stripping the currant bushes of leaves, and although white hellebore had been used for a dozen years, yet none being now on hand, would it not be a good idea to try something else? soap-suds, for instance, and if it saved the currant bushes, tell of it. [We presume this is a reply to the criticism of S. Rufus Mason.—EDS.]

THE kine-pox after keeping the cow's teats sore for three months, has at last run its course and the pustules are all dried up. It cannot be cured, but the soreness of the pox may be lessened by the application of oil or any kind of grease, and they will dry up sooner if a weak solution of carbolic acid is applied.

THE summer grass has come up so thickly in the rutabaga patch that it is a tedious job to grub it out. There are no weeds, but the moist, growing weather has started the summer grass as thick as it can be. With the cultivator, with the three square and hooked teeth, it can all be destroyed except a narrow strip, and this must be done by hand. This is a trouble we did not anticipate, and it will add one-fourth to the cost of growing the crop. As soon as they are weeded out we shall sow plaster on them and then again in a week. The blood phosphate did not arrive in time to put into the drills, and so we scattered it on the top of the ground on each side of the roots. Plaster was mixed with it to prevent the ammonia from escaping. The buckwheat where the phosphate was sowed and harrowed in has come up with a broad leaf and evidently feels the effect of the strong stimulant. We expect it will double the crop.

THE potatoes dropped on the sod in the baby's nut grove and covered with straw, are now a mass of vines, and have received no attention except to pull out the thistles which forced their way up. Paris-green has been sprinkled on twice. The young potatoes are forming under the straw thickly and the crop gives fine promise. The grass is all dead and the trees show the favorable effects of the abundant mulch and no sod to rob them of the moisture and other nutriment. The potatoes come up equally well through the buckwheat and oat-straw and seem to grow alike vigorously in either. Many door-yards might be utilized in this way to the advantage of the trees, and the potato-bin. We cut our seed into very small pieces of one or two eyes and dropped them about a foot apart. Planting in this manner will cause the entire ground to be covered with the vines and help to keep down weeds.

THERE will not be more than one-third of a crop of pears in this section of the country. Apples are dropping badly, but notwithstanding there will be a large yield.

WEBB'S Swedish turnip kept sound and hard in the pig-house cellar until the last of July. This is the best variety to keep we know of, and it is an important item.

A NUMBER of our quince trees are blighted. Thus far, only a few twigs have been affected on the pear trees. The frozen-sap blights in the bark on the bodies of the small trees, in many cases, are becoming healed by the growth of new wood. Wherever the bark on the whole body is black inside, there is no use of hoping for a good tree, and the sooner such a tree is replaced by a sound one the better. They may live for two or three years, but are sure to die. In some cases, such a tree will send up a vigorous sucker from the base, and if this is near the ground, the old tree may be cut off and the earth being heaped up around the sprout, it will make new roots and sometimes a valuable tree. These are the exceptions, and generally it is best to replace all sickly or diseased young trees with a new one as soon as possible.

THE bugs and worms were thick in the cabbage-heads and injuring them. They were more partial to the younger ones, which they were fast destroying. Powdered sulphur has been thickly sprinkled in, and on the crowns of all the plants, and we expect to save them. Snuff would be more effectual but it is too costly. White hellebore would do it, but it is too poisonous to risk. Sulphur won't hurt any one—the little which might be eaten.

MR. DAVID SMITH and a number of other farmers cut their oats with a mowing machine. They begin before they are dead ripe and do the work while the dew is on. They also rake them up with a horse-rake. They think the waste is not equal to the cost of hand labor.

MR. HOYT kept seven sheep, grade Cotswolds, and raised thirteen lambs. He sold his wool for thirty cents a pound and his sheep averaged six pounds each; this makes an average income from each sheep of $8.30 or a total of $58.10 from the flock, rating the lambs at the market price, $3.50 each. The seven sheep can be kept on the same feed as one cow, and with ever so much less trouble they will afford a greater yield. Where there is a good market for lambs, farmers ought to keep more sheep.

AGRICULTURE—PAST, PRESENT AND FUTURE.

THE past shows plainly enough to all who are intelligent, that there are many very stupid people living at the present day, for, although there are men who assume to find fault with everything done by our forefathers, yet there is much being done now far more reprehensible. The good old folks would not plow and cultivate without manuring poor, worn-out soil, nor were they silly and presumptous enough to advise young men to wear themselves out by such long days of wearisome toiling and broiling while cultivating land which had lost its fertility. No! they liked to have something to show for what they did, and if any of their soil began to grow light crops, they would thoroughly renovate it.

At the present, cultivation is relied on to make a good crop, and the soil is worked backward and forward and across, this way and that way, and whoever fails in having an average number of bushels, is spoken of as being lazy. The facts of the case, however, generally are, that the soil and the owner of it have both been worked nearly to death, which is the case every year with hundreds of good, honest men, who are bringing themselves and their farms to a pitiable state of poverty, gradually getting poorer and poorer, and yet, before becoming totally discouraged, working harder and harder. Every bit of meadow having any sod upon it is plowed under with faith in its being able to feed a crop of corn, and with a forlorn hope of its growing good timothy, after a round of corn, oats and wheat.

Look at New England, where a few years since I saw, in New Hampshire, bits of two and three acres of the best portions of the meadows plowed and planted with corn, potatoes or grain, it being well known the rest of the fields were exhausted by annual mowing, and a few months ago, one of the agricultural papers claimed that New England was in a high state of fertility, because these little plots of one, two or three acres, being little dells of deeper soil, had grown as much per acre as the States where whole fields are not dotted out in this way but planted to one crop. Look again at States in other parts, where farmers have worked early and late, and led their hands from sunrise to sunset, all through the broiling sunshine, till every particle of fat has run out of their bodies in sweat and every atom of fertility has gone from the land in the crops so industriously worked out of it.

The future can be foretold: all the best of this poor, exhausted land, must lie in weeds and such grass as will grow, and sheep will have to run on it till time has thickened the grasses and lessened the weeds, while the worst and irreclaimable, poverty-stricken side-hills and barren districts, will have to be planted with trees to meet the future scarcity of timber. In the future, cattle, also, will be raised in greater numbers, so that they, along with the sheep, will restore to the soil much of the fertility of which it is now recklessly robbed.

GEO. GARDNER.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

PREMIUMS FOR THE BEST PRODUCTS.

WE have been having quite a lively competition as to who should or could produce the largest head of Timothy grass. Mr. COOPER led off with one nine inches in length, and challenged any one to match it. The result was a general search for heads of Timothy of large size, and Mr. COOPER was soon left out in the cold. A number of specimens were gathered ranging from nine to thirteen and a half inches. This may not be of interest to many of the RURAL readers, but the general interest manifested by each of the farmers in this vicinity to discover the largest head on his own premises, suggested an idea which, would others look at the matter as I do, might be of general good among farmer folk. It is this, that wherever a majority might be willing, a vote should be cast, at the annual town meeting, for an appropriation to be held by the Supervisor, as premiums for the best field of corn, the best crop of fruit, the heaviest fat hog or ox, etc.; that the competitors should select a committee to visit the premises of each, and make a report in writing as to the merits of each entry; and that a general meeting of all interested, be called at such time as may be deemed most expedient, when the reports shall be read, and premiums awarded. Now, I am not sure that this, if carried out, would prove successful; but I think it might, and that it would tempt farmers, generally, to endeavor to raise the best of everything. Write about it, Ruralists, and let us know your minds in regard to the matter.

STRAW MULCH IN ORCHARDS.

Mr. LEWIS utilizes his extra straw, left about the yards in spring, by spreading it under the apple trees to the depth of a foot, as far from the trunk as the branches extend. A few pieces of rails or a few stones are sufficient to keep it in place until it becomes so settled that hard winds will not scatter it about. It makes an excellent mulch for the trees, exterminating the grass entirely wherever it is deposited, leaving the ground perfectly clean and mellow. Besides, the windfalls are unbruised, and are kept perfectly clean by falling on the carpet of straw. It would be safest, however, to clear it away from about the stems of the trees in fall, as it would afford an excellent harbor for mice during the winter.

PROFIT FROM RAKING STUBBLE.

It pays to rake the stubbles. No matter how carefully the work is done, much of the grain will slip through the rake, or be scattered while binding, shocking, and drawing the crop. A neighbor was visited by an agent desiring to sell him a wheel-rake. The farmer demurred. The agent, as an inducement, proposed that he take the implement, carefully rake all his stubble, properly curing storing and thrashing what he might gather, and he agreed to take the grain thus obtained, as payment for the rake. In this the farmer imagined he saw an easy way of obtaining the tool he needed, but did not feel able to purchase. They shook hands on the contract, and the agent went his way. In the fall he called again. The farmer had concluded to pay the money for the rake, begging the other to release him from his former promise, which was done. The grain obtained by raking the stubbles was worth nearly double the price paid for the rake—and this in a single season!

A BURDOCK EXTERMINATOR.

For years we have been troubled with burdocks, and, notwithstanding repeated mowing during the summer, they would form seed in the fall. After many experiments, a certain and speedy remedy for the pests has been discovered in kerosene oil. If a small quantity be penred into the hearts of the plants, directly after cutting, they will disappear entirely, roots and stalks, leaving no trace of their former existence save a small hole in the earth where they stood. This may be styled by Gen. Noble, a *crude idea*, but refined or crude oil will accomplish the purpose equally well.

A BOON FOR HORSES.

If horses are rubbed, morning and noon, with a handful of smart-weed, the flies will not trouble them in the least through the day.

Field Crops.

THE TOBACCO PLANT.—No. 2.

E. R. BILLINGS.

VARIETIES.

THE tobacco plant, though an American product, has been transplanted to all lands, its cultivation seeming to follow its use, which has now become world-wide. It is doubtful, at the first discovery of America, whether there were more than one variety of tobacco cultivated or not; but it is altogether probable that there were several sorts, inasmuch as the plant was grown not only in North and South America, but also in the West Indies where the great Italian navigator first saw the plant and its novel mode of use. Some writers on tobacco place the number of varieties at upwards of forty, all of which have sprung from the varieties grown in America. The numerous sorts owe their variety to the various soils on which they are cultivated as well as to the effect of climate.

Late writers on tobacco place the number of kinds grown in the United States at fifty. Tobacco is now grown more or less in twenty-five

States in this country, while it is grown to some extent in Canada, as well as in Mexico, Honduras, Guatemala, and some others of the Central American States. In Europe, Asia and Africa tobacco is extensively cultivated, growing as far north in Europe as Moscow in Russia, as well as in Denmark and Switzerland. It grows equally well in interior Africa, while in China and Japan it proves a successful rival of the tea plant. In India, under the fostering care of the English Crown, it is already becoming an important product, while Spain has grown it in the Phillipine Islands for more than two hundred years.

Tobacco, for all of the uses for which it is intended, is divided into two classes—cigar and cutting-leaf; the latter class including snuff-leaf. Cigar-leaf tobacco includes the tobacco grown in New England (both Conn. seed-leaf and Havana seed tobacco), Pa., N. Y., Ohio, (this State also grows cutting-leaf), Wisconsin, Illinois, Indiana. Cigar-leaf is also grown in Cuba, St. Domingo, Mexico, Brazil, Paraguay, United States of Columbia, Hungary, Holland, Switzerland and Phillipine Islands, and in other portions of the world. In this country, owing to its vast extent, very many sorts are cultivated, and in two of the States, Virginia and Kentucky, it is the great agricultural product. America is, therefore, the greatest exporting country of tobacco in the world, and Louisville, Ky., the largest tobacco market.

It is important that the grower of tobacco should thoroughly understand the nature of his land in order to determine what variety to plant, cultivating only that sort that will give the largest returns. Massachusetts raises the largest number of pounds to the acre, 1750, and West Virginia the smallest, 575 pounds. Some varieties of the plant are very large of growth, reaching an altitude of some six feet, while others do not grow more than two feet high. Yara tobacco, grown in the island of Cuba, is one of the tallest sorts cultivated, growing as high as corn and, after being topped, usually bears from 18 to 22 leaves. The shape and size of the leaves vary greatly. Some sorts bear long, pointed leaves, while other kinds produce leaves nearly round. Some kinds bear pink flowers, like all of the sorts grown in this country, while Latakia tobacco bears a yellow flower, Guatemala a white blossom, and Japan tobacco a purple flower. Some tobacco leaves grow close together, like Yara, and others (dwarf tobacco) grow in a cluster at the foot of the plant. Some varieties have a large stalk, like Pa., Conn., Va. and Kentucky, while Havana, Yara, Persian and Latakia have a small hard stalk. Some leaves are attached to the stalk by a long stem, like Syrian tobacco, while most kinds grow closely to the stem. One variety, the White (Ohio), has a white stalk and midrib and light-colored leaves. The colors of tobacco are also various. The seed-leaf varieties are usually light and dark cinnamon in color, while Kentucky, Missouri, Holland, Perique and other sorts, are very dark or black. Some of the Southern sorts are very light in color (light yellow), while kinds grown in Asia are red.

No product grown affords more scope for study, both in the field and from books, than the tobacco plant. To raise fine tobacco is, in all respects, a science, and for really fine crops very high prices can most generally be realized. The growers of New England and Wisconsin are now trying to raise tropical varieties of the weed, and, if successful, will still further advance the culture of the plant as well as add very much to the profit from its cultivation. More than 250 years have passed away since the Virginians engaged in its culture, and to-day it is one of our greatest products as well as our oldest article of export.

Farm Economy.

COURAGE ON THE FARM AND IN THE SWAMP AND MUCK-BED—No. 1.

GEN. WM. H. NOBLE, OF BRIDGEPORT, CONN.

"L' homme propose, mais Dieu dispose."

This reverent French maxim is a thoughtful text, and a little sermon by itself. But its real spirit is lost many times, in a woe-begone rehearsal, "Man proposes, but God disposes." This is well said, if we mean thereby, when human effort gangs awry, that "there is a divinity which shapes our ends." "Uttered or unexpressed," it may be the heart-voice of a pious resignation; but sometimes it is the wail of a sinking hope, and about as often merely the impious growl at failure, doomed against some folly or madness from the start. The human tries his hand at something better left undone, or, venturing beyond his depth, charges the swamping of his endeavor on some special providence. This laying blame at God's door for the outcome of our folly, blunders or misdeeds, is, in the main, but a sham of reverence, and an impious conceit.

That God disposes events, I do not doubt. But my faith is, that he acts through general laws and the essential nature stamped on "all that moves and has being." Only at long intervals through the ages, does the Great Ruler of events descend to touch man's life and his infirmities by some special providence. It is against these general laws and that essential nature that the human wrecks his hopes. It was their help and following that lifted the prehistoric man from crude virility to a better manhood. Their study and alliance secure a mighty aid; but across the path of him who heeds them not, they rise a wall of adamant.

Now the farm furnishes examples of all this, as amply as any other phase of life. He who hangs his harp upon the willows and says, "I am a-weary and discouraged; God disposes not his elements to increase my store," is an impious drone, a blind man walking in the light of day. All around you God has disposed the ways and means wherewith to swell the returns to your toil. Besides, you and all are forces and treasures ordained and awaiting, through the centuries, some bright-eyed mortal to loose their bond or to lift their veil. When such a man, plunging beneath the shallows of the mass, studies out and reveals any of nature's dormant reserves and unmated forces, he has only done a duty, which, in part, belongs to all. It matters not whether the thing revealed is some sleeping energy, or some stored-up wealth. The human has not made them, nor has a special providence given them life. They were before him, awaiting summons to a higher mission.

It is no new element or form of motion just divinely ordered, that girts the world with speaking fire that makes vocal with song and greeting the wires that web the land—that calls back the wave pulsations of the voice from and through solid iron. Throughout the wondrous facts of science and invention, it is only some slumbering giant, among nature's unharnessed servants, whose power or store of good, inventive genius has singled out or mated for the use of man. After our first surprise, the real wonder always is, that our boasted intellect took so long to find that which has lurked close by our pathway through the ages. Yet the same bated breath and the same wonder will forever greet each new victory of endeavor.

Pretty much so it happens in the garden and the farm. Man's first lift from savage life was to them. In no line of life does he stand so close to nature in all her moods. But their study and help, the husbandman has not made a foremost interest and duty. He has not kept pace with the force, keenness and mobility of brain, begot of human contact in masses. So, clinging to inherited methods and ideas, and averse to new, he starves and wears out his land. New appliances and sources of enrichment close at hand are a sealed book, or neglected. Disheartened by his toil and scanty crops, "the plowman plods his weary way," uttering from his heart, if not his lips, the sad rendering of our text, "Man proposes, but God disposes." He charges failure not to his halting, timid proposing and blind-eyed doing, but lays on Providence the squelching to which their wish-wash destined both. The trouble is, that the proposing is greatly ahead of the doing, and neither gets much help from brains. Doing has other meaning than deeds of back-work and muscle. A brain, apt and eager to take on new ideas, has all to do, both with what we propose and what we perform.

Whether we work self-taught by eye and studious thought, or on something given us for trial out of the research and experience of others, such a brain and its mental frame-work lift the earthy man to higher and more telling toil. Not only is the farm-brain, as a rule, slack in self-teaching, but it turns its back on new lessons—sometimes under the conceit of knowing better, but as often through sheer stolidity. Even when some patient work and search have conquered larger and easier crops for the farm, instead of following up and testing this line of trial, its owner is mute with wonder and distrust. So he lives on. When his crops are glorious and barns well filled, the husbandman growls not, but sings with joy. The propose and the dispose are all right. But let the means of enrichment fail his lands—no increase come to his flocks and store; and right-away he says, "Alas! Providence disposes neither the elements, nor my place in life, to second my endeavor. I delve and plan but naught I do brings plenty. My lot has fallen in barren places, my soil is shallow and worn out; my acres starve for want of means and material for their enrichment. I should have guano from the far-off islands of the sea, the waste of the great city, the droppings of the stalls; but my product barely serves my table; I have not wherewith to buy these things for which my land hungers."

Despair not, fellow-husbandman. What you covet would work rapid cure to your dearth of crops, but there are other chances of enrichment than those you gain from afar, with great outlay of money, time and toil. Although you have not cash, nor manna showered down to feed your land, there may be store near-by from which to help your barrenness. Within the reach of every thoughtful, toilful, hopeful tiller of the soil, are unused forces and garnered stores for all the needs of his acres. They await your thoughtful labor, mated with the alchemy of the seasons, to transmute them into bounteous crops and gold. That tumbling mountain brook, plunging along its load of plant-food, offers you no end of help. Turn on to your meadows its flood, burthened with the waste and decay of the rocks and woodlands. The breeze that shakes out the tassels of your corn, or sweeps with swaying waves the fields of grain, or wafts the clover perfume on the air, when you rightly till, will unload its enrichment among the products of your farm. All these measure out to you their blessing, just as you mete to your land toil and fatness.

There is other stored-up food for hungry fields, that will not flow and blow to help you. Up in that rocky, woodland glen, the drift of rains and storms and melting snows has piled deep the moldering waste and vegetation of ages. Unload this, pure and simple, on your meadows and grain land, and at every step your product marks its coming; or, better, help with its richness the fatness of your stalls and manure pile. You may thus beyond count swell your increase.

Then, in sight of about every homestead, its owner holds some dank and miry swamp, or some sour grass bog-meadow. For centuries, it has been little but the home whence the hybernating frog wakes from his wintry sleep, with the first rude song of spring. That deep slum and wet footing, whence you only get, from the bog turfs, a few messes of young grass for your spring milkers, God meant for your best meadow. Deep muck, that registers the decay of centuries, there waits in sour blackness low-down under-drains and the clearing of its surface, to sweeten into your choice hay-land, or to become the joy of any crop. Take heed, no petty surface-drains, no half-way work! But dig them deep and large, and bottom with bulky tile. One way-down, big-tile drain, is worth a dozen shallow ones, lined with slender pipes. It gives you undertiers of acres. It builds downward stories to your land, that call for more lofts to your barns, and crowd them round with stacks.

But, best of all; there is on, or near by, every farm-land, a deep peat-bed, where sphagnum moss, or grasses and reeds, have recorded the ages, in countless tiny layers of growth and decay. This holds land wealth piled fathoms deep. Not half the owners know the depth, and less of them the value of this stored-up fertility. Its vast treasures of enrichment offer succor to your waning crops. Earth holds no like castaway and unheeded wealth. Seas, and savage noisome lands, and more savage tribes, stay not the search for gold or diamond. Toil, hardship and danger are defied to dig them pure and simple from earth placers or the solid rock. But the chance, right at hand, of transmuting this deep peat-bed into gold, through the alchemy of a crop, neither you nor the generations heed. The fog that broods over its chilly dampness, is but an emblem of the clammy brain that passes, unheeding, this vegetable wealth for which your soil so hankers. Yet every day records this same stolid neglect. But when you dump a horse-cart load of dry peat upon your land, or farm-yard, or compost heap, you make a dollar. In no way can the farmer so quickly reach substance in land wealth or funded stock, as by mining these peat beds.

The hundred dollars got by hard work, or scrimp of table raiment, put on mortgage, or in savings bank, or in government bonds, win you but a small return. But your hundred, put into the peat bed, with your own and others' toil well handled, will turn out a thousand, and keep it compounding. Why does not work or cash on the farm invest more in these Banks, which providence has disposed at our hands, and made so secure, and sure of dividend. There is no lottery, no chance of blanks or failure in this peat bed. It is God's insurance of prosperity to wit and toil.

Ah! purblind and self-cheating human! God disposes at your door his gifts, in full measure for your enrichment. The fault is yours! You do not propose, or set out with a will, to do the duty, or to grasp the chances before you. You put no brains, no study, no patient thought, into your toil. So you prosper not. Your business is in the soil. But what do you know about its assay of organic or mineral wealth, about the way to mine their richness, or to supply their needs? In solemn fact, beside the gain of a few handy implements, how much advance has the average farm-brain made ahead of the stalwart savage founders of our race? They tilled only a little patch. But in the line of their endeavor, they beat your brain work. No plodders went before to break their paths. The craft and alertness born of fight and rapine; of the stealthy hunt of beast and enemy; of the sharp watch of faint trails through the trackless woods, kept their brains alive. But the listless monotony and drag of farm life veil from the mass of its toilers resources of land enrichment sighted from their doors.

Wake up, man, and right off turn that swamp land and peat-bed into crops, brimming your mows and grain-bins. It is no abstruse job to map and mark the grades and lines and size and depth of their drainage. You need no engineer with levels, sights and chain measures. The simple sense of any man who can read figures on a rod or line, or sight a st o, is equal to the task. All you need is a tape-measure, a tin milk-pan, not too much bunged, a long, light pole, with a red rag tied thereto.

Now measure the length and breadth, and sound the depth of your water-logged area. Along that length-line, at each hundred feet, from the head of your drain, mark on a stake, the sum of that drain-head's depth below the surface, added to the feet of fall you give your drain to that point, and so on down. You can thus dig just to grade either at or between the stakes.

When, in this logic of your work, you come down to, or near the natural outlet of the wetness, look at the trend of the land beyond. Knowing the depth of digging at the last stake towards that outlet, judge how far down the grade or stream beyond, you must make the outlet of your drain, to insure a quick delivery. There plant your pole, with the red rag marking thereon the sum of drain-head's depth, and of drain-fall, from head to outflow. You may not guess exactly right. But place that brimming pan close to the surface of the peat, and sight along its water level that red rag. If you have not put that lowest stake aright, let your pole be moved up or down stream, till your level strike the rag. Then drive at the foot of your pole stake to mark the outlet of your drain. This completes the lines and features of your work. The same routine and logic will fit any drainage. —[To be Continued.

THE COMPOST HEAP.

We take it for granted that very little need be said in this day in favor of the largest and best possible collection of fertilizing elements properly prepared, as can only be done by composting. As a correspondent inquires for specific directions in composting, we give a short account of the simplest process which is believed to reduce the fertilizer to the nearest possible condition for immediate use by the young plants. Simply covering straw, vines and green manure in the earth is better than no manure, or than spreading them upon the surface, but it is very far from the most effective or economical use of such materials.

We take it for granted also that the farmer knows that a few dollars earned in preparing his own fertilizers, are just as well as if paid out for others, and that a perfect care of manures is as necessary as a perfect curing and storing of the crops he raises.

Composting should be done under cover, as all manure should be kept under cover in summer, especially. The location otherwise is of less moment. If the composting can be done upon the land where garden or other crops are to be raised, it is better than if done in the barn-yard, unless a water-tight floor is provided, as very much is washed into the ground, even with the best possible care. It is not necessary that any amount of leaching should take place; in fact, no liquids should escape or be added to the heap, except as absorbed by some bedding or deodorizer, or such as will readily be absorbed by the refuse already in the pile. The shape of the heap is of little account. It is more convenient to handle in a pile much longer than wide, but there is much saved by having the sides inclosed by a tight board fence. The practice of supplying a couple of hogs with all the refuse, and the additional ingredients, as obtained, and scattering a few kernels of corn upon it, is a good one, but whatever the first process of piling up the material, it must needs be forked over frequently during the year it is waiting for use, to allow of decomposition.

Manure should not be applied to land until it has rotted during one summer at least, and what has accumulated during the winter should be piled in the heap, so as to be turned over from time to time. The only remaining care to be exercised is to have a barrel or two of plaster on hand at all times, to prevent the loss of ammonia in the vapor arising during the heating. To prevent this, some twenty-five pounds of plaster to every ton of manure are thinly spread over the heap, as it is piled up or forked over, and if, during the heating, the smell shows that any great amount of ammonia is escaping, then a slight application of plaster will serve to keep this valuable ingredient within the pile. Any liquid draining from the pile should be absorbed by earth or muck and returned upon it.

DRAINAGE.

In an article under the above title, by Prof. R. C. Carpenter, I find much valuable information. Very few farms are perfectly drained naturally, and it is no exaggeration to say that a careful perusal of these articles is worth ten times the cost of the Rural for one year to any owner of an undrained farm. If any criticism can be made upon these articles it is that perfectly constructed drains can be made by any one who has average ability without one-half the appliances Mr. Carpenter uses, or one-tenth the preliminary surveys and levelings. In bottoming a drain a few barrels of water can be drawn upon a stone-boat along the line of the drain, and a perfect fall obtained. There can be no

mistake about a flow of water running in the groove made for the tile, and any inequalities can be removed and a perfect fall be obtained throughout the entire line of drain. Farmers ought to understand that, when it is inconvenient or impossible to obtain these surveys with instruments, with proper care a good working drain can be made—that nine farmers out of ten, after hiring a man who understands drainage to make a few drains, and carefully observing the work, can with such labor as they can readily procure, go on and complete their drains without incurring the expense of hiring professionals. By all means, though, observe Mr. CARPENTER'S general rules, and especially his system of marking drains and preserving a record of them. The land-owners of this country are indebted to Mr. C. for his articles.

E. L. MARSH.

IRRIGATION.

A PRACTICAL, economical system of irrigation is believed to be a growing necessity in the Eastern States, as well as a source of profit in the far West. The problem is how to store up a water supply for use, or how to return it from low places to the higher. And here is an opportunity for some inventive mind to work the problem out. Wind-mills are a partial success, but only partial, and, as at present constructed, they are too costly for general use. Another difficulty is that the wind-mill is practical only in exposed situations or upon elevations, while the water is generally found in the valleys. To make the wind-mill operative, it is necessary to have one of less cost and intricacy of construction and management, and it must be applied to drawing water a long distance and to a considerable hight, or to forcing it so to rise by the application of compressed air conveyed in a pipe and turning a force-pump, or to directly forcing the water through another pipe to the place desired.

Something similar to this has been found impracticable in one instance, after a trial of three or four years, although at first partially successful, and probably so far so as to suggest a basis for farther and more fortunate experiments. The ram is the simplest means of raising water where a running stream can be utilized, but this is not always to be had, especially in the dry season, when most needed.

An invention is suggested for compressing the air in the vicinity of the wind-mill to be conducted through a pipe into a tank full of water, forcing this through an outward opening and self-closing valve and through a pipe to the point desired. Such a supply of water would be irregular, but it could be managed at the vicinity of the wind-mill or water supply as the tank would be self-filling upon the withdrawal of the air force, and supplied with a self-closing valve opening inward to prevent the escape of the water excepting through the pipe in the direction desired. S. S. B.

Miscellaneous

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

BENEFITS OF EXCHANGING SEEDS.

M. B. BATEHAM.

IT is a common belief among farmers and gardeners, and one sometimes advocated by agricultural writers, that crops are improved and varieties of grain, potatoes and garden vegetables prevented from "running out," by occasionally procuring seed from a distant locality, even though it be not any better adapted for the growth and development of the particular crop than the one where the seed is to be sown. I have never seen or heard any satisfactory reason for this belief, and from long experience and observation, I am prepared to say it is contrary to the majority of facts and to the teachings of science, and is often detrimental to those who practice it.

Seedsmen of the largest experience tell us that where the soil and climate are suited to any kind of vegetable, and sufficient care is bestowed on its culture, and admixture of varieties is guarded against, the fullest perfection is maintained, and improvement often secured. Hence we find them growing the same varieties of cabbage, melon, onion, etc., for an entire lifetime, carefully avoiding any change of seed, and claiming for their own superiority over all others.

Farmers also can be found who have grown their own favorite wheat, oats or corn, saving their seed each season with care, for twenty or thirty years, with continuous improvement, rather than deterioration. Of course, it will be of advantage for the average class of farmers to send for seeds to such a farmer, but the latter would surely be a loser by taking seeds of them in exchange.

I admit that many kinds of vegetables will deteriorate by growing the seeds where the soil and climate are not adapted to them, or where the right system of culture is not bestowed; and hence many people do well to procure seeds from a distance, if it is done from sources where greater perfection is secured.

Take the article wheat, for illustration, and intelligent millers tell us that samples of the same variety grown by different farmers, with different soil and culture, will vary materially, some seasons, in their proportions of starch and gluten; the grain is more perfectly developed in one case than in the other, and will be worth more for seed as well as for flour, so that it will pay well for the poorer farmer to sell off his own and buy seed of his more skilled or fortunate neighbor. But there can be nothing but loss to the other party from an exchange of seed.

So with potatoes: it is found that the proportion of starch in the tubers is materially affected by the season, soil and culture; and when deficient in this element they are not so valuable for seed, as the growth is less healthy and the defect will appear in the succeeding crop. In such cases, of course, it is well to "change the seed," but otherwise the mere fact of change can do no good, and the man who is not careful as to the quality of the seed he procures, is liable to be a loser by the exchange.

Lake Co., O., July, 1878.

PARISIAN CORRESPONDENCE.

EXHIBIT OF AGRICULTURAL IMPLEMENTS, ETC.

LETTER FROM PROFESSOR I. P. ROBERTS, OF CORNELL UNIVERSITY.

As one wanders through the long halls devoted to the display of European farm machinery and hand implements, the first thing that attracts attention is the peculiarly American look of many of them. Stop and draw the attendant out, and he soon reveals the fact that they get their implements from the Centennial Exhibit in the United States.

Mowers, reapers, with and without self-binders, and horse hay-rakes, which would require an expert to distinguish them from those made in New York, appear in numbers both in the English and French Departments: and several other countries are but little behind in their adoption of the American reaper and mower in the minutest detail. There is no law here which protects the patentee, if he is not a resident. The question remains to be solved whether the valuable trade with Europe in farm machinery, largely built up since 1876, will have to be lost on account of this universal legalized theft of the labors of others, or whether successful competition can be carried on by Americans. The comparative cheapness of suitable woods and the use of machinery in manufacturing them, may carry the day.

The most part of France is not so well adapted to machinery as Holland, from the fact that the divisions of land are so numerous; many of the farms are from ten to twenty rods wide, and these are again sub-divided into three or more strips, with as many different kinds of products growing upon them. Viewed from a distance, they look very much like the American Flag. Notwithstanding this, the French take kindly to labor-saving machines, while the Dutch appear to delight not only in doing things well, but in doing everything the hardest and slowest way. From Rotterdam to Leyden is almost one continuous meadow, and yet I did not see a single mower at work, and but two horse-rakes. Their scythes, rakes, forks and carts appeared to my American eyes to be at least a hundred years behind the times. In farm implements, Holland's exhibit here is simply nothing.

The show of harvesting machines from the United States is creditable but not extended. While each individual machine is of the most perfect construction, the exhibit is too limited as to kinds, and too small in quantity, to give anything like a fair conception of either the number or great varieties used by Americans.

In hand tools for the farm, the United States are still a long way ahead of any other nation. But if one looks carefully, one will find that here, too, France and England are rapidly adopting the lighter, more efficient and graceful forms of the "Yankees." France certainly might improve on the length and shape of her hoe handles. What would a New York farmer think of having twenty acres of sugar beets planted so closely that the horse hoe could not be used, and the only other implement for their cultivation a hoe slightly wider and lighter than the American mattock, with a handle just *twenty inches* long! Yet it is not uncommon to find this state of things in France. The beets looked well, but the workmen had to try twice before they could straighten up to a semicircle.

I made a short visit to Grignon, the seat of the chief Agricultural school of France. At some future time I may give you a detailed account of this fine institution; for the present, suffice it to say that I found them using oxen, not with a yoke upon the neck, but with a padded one attached to the head at the base of the horns. The reaper was of French make and looked as though it might do good work, but the self-rake did not fold or in any wise change its direction, but made one grand sweep of a perfect circle; this necessitated a tongue upwards of sixteen feet long, to avoid raking on the horses with the grain. Their mower was from Providence, R. I. The horse hay-rake was French, and not by any means un-American, except that the driver walked. The thought struck me that a "Yankee" would use such a rake just half a day and then, while his horse ate his noonday meal, he would take an axe and an auger and construct a seat.

REMINISCENCES OF ROTHAMSTED AND TIPTREE-HALL FARM.

S. B. PARSONS.

ED. RURAL:—I am glad to see in your widely-circulating paper the valuable contributions of Mr. Lawes, of Rothamsted. I am surprised that he can find time to write for any paper, and think it an especial compliment to the value of your journal that he has written for you.

ROTHAMSTED.

It is now nineteen years since in all the beauty of an English June morning, I left London for Rothamsted on invitation of Dr. Pugh, who was then associated with Dr. Gilbert, and who afterward became President of the Pennsylvania Agricultural College. By his death soon afterward, our country lost a man whose mind was of remarkable breadth, who was thoroughly trained in the science of agriculture, and who was eminently fitted to continue in this country the experiments with which he was familiar at Rothamsted.

On arriving at the station I was met by Dr. Pugh, and we were soon walking over the grounds. The well-kept lawn and the rambling, home-like mansion, the architecture of which showed the mark of centuries, possessed for me great interest. I was disappointed to find that Mr. Lawes was absent, but in our rambles we came to the piazza, on which we found Mrs. Lawes with her easel and canvas. Thoroughly enjoying her country home with all its charms, she found time for her favorite pursuit, herself forming a picture framed in the vine-clad columns of the piazza. Being invited to lunch with her, I had much pleasant conversation, and was glad to have strengthened the impression which is always made by the charming manners of a high-bred English lady.

This pleasant hour being over, we continued our rambles. After some conversation with Dr. Gilbert, I was shown by Dr. Pugh the systematic manner in which all the experiments were made. You have recently described these so well that repetition would be needless. The extent of the enterprise, the great variety and accuracy of the experiments, the careful recording of them all, and the examination, year after year, of all the links which made the chain of evidence, were to me very remarkable, and I scarcely knew which to admire most, the enterprise and liberality which planned, or the executive ability which carried out the multitudinous details of this valuable work.

It is difficult for a stranger to grasp at a single visit the whole scope of the system or adequately to realize the momentous results which must flow from these experiments, but of one thing he feels certain—that if agriculture is the source of political, commercial and social prosperity and wealth comes by the increase of the product of the soil, then Rothamsted and its experiments will yet be recognized as unequaled benefactions to the human race. Leverrier may discover a planet, Proctor may announce a limitless universe, Daguerre may fix the shadows, Edison may record and render back our words, but a truer benefactor than them all is John Bennet Lawes, because he adds to the productive power of the soil and to every cultivator gives additional means to gather around him the essentials of a progressive civilization and thus aids to elevate the whole human race.

TIPTREE-HALL FARM.

I should not pass over another place which I visited soon afterward and where the beneficial results of subterranean irrigation are clearly shown.

About thirty-five years ago Mr. Mechi, a successful London merchant, essayed to teach English farmers how to farm. He purchased land of a poor character, thoroughly underdrained it, built cattle stables floored with slats on which the cattle stood and having tanks underneath, into which all excrement fell, erected a steam engine to wash this into another tank of immense size from which subterranean iron pipes were placed all over the farm, with hydrants near enough to each other to work a hose of reasonable length.

After inspecting the admirably arranged buildings I was led to the cattle stables. The steam engine was started, and a torrent of water washed the contents of the tanks below the stalls into the large tank outside 30 feet in diameter and 30 feet deep. Into this last I looked and on the surface there appeared to be a thick scum almost as tough as cartilage. I asked how it was possible to get this solid material into the pipes. He replied, "you will see," and then having turned off the water, started the air-pump and forced currents of air through holes in the bottom of the tank into the mass of liquid manure, which boiled and seethed until the tough mass on the surface was finely broken up and the whole ready for the pipes. Then he carried me to the field where I found a man and a boy with a hose pouring upon the grass the black and liquid mass. The resulting crop must have been marvelous for a parliamentary commission reported that the farm of Mr. Kennedy, in Ayrshire, which I also visited, had by this system of irrigation produced 70 tons of green grass to the acre in one season by 10 cuttings, a statement too amazing to be taken except from a parliamentary commission.

My letter is, however, getting beyond limits. I can only add that Rothamsted and Tiptree Hall are two places which should be visited by every American traveler who may be interested in agriculture.

Flushing, L. I., August 5, 1878.

WHAT OTHERS SAY.

CLOVER AS MANURE.—Speaking of the farm of Hon. George Geddes, Fair Mount, N. Y., the Country Gentleman says: "The twenty-acre field which was cultivated for 70 years without barn manure, and which continued to yield heavy crops during all this period, was treated with an application of yard manure a few years since, not from any necessity for it, but because there happened to be a surplus near at hand. Mr. Geddes thinks it caused some increase in the luxuriance of the crops, but he still prefers, as a matter of economy, the practice of plowing in clover. A mass of the stems and leaves copious enough to fill the furrow, he finds more valuable than any common coat of yard manure; while the roots are not only a valuable part of the crop, but they serve as an efficient loosener of the soil. All the manure made on the farm, is however, carefully saved and applied as a useful auxiliary in maintaining the fertility of the land."

GREAT AMERICAN STRAWBERRY.—We had looked for much from this much talked of berry, and have, as our readers well know, often alluded to it in these columns. It proved, however, with us, of medium size and poor flavor; and many of whom we have inquired speak of it in like terms. Mr. Idell, whose experience is of value, speaks of it in the American Rural Home as follows: "I am aware that many fruit growers are anxious to learn of the success of the Durand Seedling Strawberries in our market this season. The 'Great American' was grown by several parties, and they were all well pleased with it. As soon as it appeared it sold for sixty cents a quart, fell to forty cents, then, as it became better known, advanced to seventy-five cents per quart. There were three well known dealers who sold them, and all speak very highly of their size and firmness."

BEE NOTES FOR AUGUST.—The American Bee Journal says that all impotent queens should be superseded, so that the colonies may be kept strong to gather the fall crop of honey. Queenless colonies should be given queens or frames of brood, if they have none, in order to raise a queen. If the brood chamber is full of honey, it should be removed from a few of the central frames with the extractor, in order to give the queen room for brood. The opening of hives and the removal of surplus honey should be done at night, in the early morn, or on a cool day.

Surplus honey should be kept in a cool, dry place. Examine the boxes and sections occasionally; and if any moth worms are found, remove and destroy them. Extracted honey may be kept in barrels, wooden vats or tins; the barrels or vats should be coated with wax to prevent leakage.

Care should be taken not to expose the honey, to start robbing. The entrance to weak colonies should be contracted, to enable them to defend themselves from robbers.

By the last of August buckwheat will have come in; boxes partly filled should be removed and extracted before that, so as not to have the honey mixed.

During August and September the bees will be more irritable than usual, and all who are nervous or timid should provide themselves with a good smoker and veil, if they find such necessary. These will steady the nerves and enable even the most timid to control their bees at all times, and make the necessary examinations with confidence.

In handling them, let the novice be careful to avoid jars, working quietly and steadily, always keeping perfectly cool. Should a sting be given, remove it, squeeze out the poison, and apply honey, soap, hartshorn, essence of peppermint or even a little mud.

THE SO-CALLED PERSIAN LILAC.—According to M. Decaisne, the tree usually called Syringa Persica should be referred to S. Chinensis, of Willdenow, and the epithet Persian should be abandoned in favor of Chinese. The true Syringa Persica has become very rare in cultivation. In spite of the appellations, the native country of the two species is still unknown. Wild specimens are not to be found in herbaria. Up to

this time then the species in question are only known in a cultivated state. The Gardeners' Chronicle says: "How odd this ignorance concerning the habitat of many cultivated plants! It is only the other day that the horse-chestnut was found in a wild state, and even now no one has seen the Mignonette in a wild state. The so-called Mignonette belongs to quite a different species."

PARADISE STOCK FOR APPLES.—Our readers may recall what, from our own experience, we have said respecting the above stock for dwarf apple trees. The London Chamber of Agriculture has the following: "The Paradise stock appears effectually to moderate over-luxuriance of wood-growth, and to concentrate the energies of the tree on fruit and fruit-buds. We need scarcely enumerate the advantages of planting this class of fruit in gardens of all kinds, more especially in those of limited extent. Even a good selection of kinds for various seasons may be accommodated in the smallest of gardens, for if kept closely spurred in they may be planted as closely as gooseberry or currant bushes. A few dwarf apple-trees on the true Paradise stock, as single specimens on grass, or as centers to beds, might be tried in even the smallest of gardens."

THOROUGHBREDS.—The Western Rural says that while it has been a steady advocate of thorough breeding, when it can be done without serious inconvenience and profitably, it has never been blind to the fact that a good bull which is the get of a good thoroughbred animal and out of a grade or common cow of good merit, is better than a thoroughbred bull, which is the get of a poor thoroughbred bull. In the midst of the enthusiasm which has attended the business of thorough breeding in this country, the merits of anything but the thoroughbred have been largely lost sight of, and the fact of the animal being a thoroughbred has too often been regarded as a sufficient recommendation without inquiry as to its individual merits or its ancestors'.

HILLING VS. DRILLING CORN.—"Waldo" says, in the Ohio Farmer, that the more he experiments with it the less he likes drilled corn. If he could always do the plowing himself and choose his own tools, he could get a field of drilled corn tended well, but it is hard to get hands to do it rightly. He is satisfied that there will be less corn drilled in the next five years than in the past five. In traveling on the cars, three or four years ago, he paid careful attention to the corn and found it the rule to drill and the exception to hill. Recently in traveling he counted one hundred fields, eighty-three of which were hilled and seventeen drilled.

A SHREWD FRENCHMAN.—It is well known that M. Menier, the Paris chocolate manufacturer, has made a fortune, but it may not be so generally known that a furious letter from a customer gave him the push that started him up-hill. This letter denounced Menier's chocolate as a fraud, because after being kept for some time it turned white. Next morning it was advertised in all the Paris papers: "Buy Menier's chocolate—the only chocolate which turns white with age! See that you get no other! Keep a cake and test it! The only conclusive test of excellence!" And so on, and he was soon wealthy.

THE BOUNDARIES OF SCIENCE, the Journal of Chemistry remarks, are extended positively by only a few men; while there are many chemists and geologists and astronomers and biologists, there are few real investigators,—few that add anything to the sum of actual knowledge. . . . . Exalted genius may be bestowed upon a man, but without cultivation it is dormant and useless. Instances are known in which rare natural gifts have not been developed in the possessor until late in life, and then only through necessity urging to unusual and distasteful exertion.

TIMELY.—The London Farmer has the following: "A capital plan of protecting horses and cattle from the tormenting attacks of flies in hot weather, is to wash their coats in the morning with a decoction of walnut leaves, the peculiar smell of which effectually keeps the would-be marauders at a distance. The decoction is said to have the further power of destroying any eggs that may have been already deposited in the skin."

STINGS.—"Still another remedy for the *certain* cure of bee stings! Take a fresh tomato leaf, crush it, and rub upon the part stung. The pain will disappear immediately, and without the slightest trace of swelling. We would like to be able to transmit to posterity the name of the discoverer of this method."—*L'Apiculteur.*

WHITE HOUSES AND GREEN BLINDS.

A GREAT many sneers have been expended upon the "cold, precise, uninviting appearance" of the white houses and green blinds shut close, the neat lawns, and shading elms and evergreens so characteristic of the better-to-do people of the United States, and it is true that the world has no such example of the order, neatness, pride and good taste as this of the common people, the farming and village population of America. There may be an improvement upon these in the more numerous gables and French roofs, greater ornamentation and number of porticos and verandas, and the blended tints of cottage and railroad colors, which have been adopted in the places of rapid growth, railroad stations, and new western towns, but the cleanly, comfortable, substantial white house, where timber is abundant, and the brown red brick house farther westward, are still the indications that intelligence, industry and civilization are present. In these the United States are leading creation, and no American but look with pride upon these indications of thrift and enterprise, and, when seeing them, he unconsciously says to himself that the church-spire and the capacious academy and college are not far away. He knows, too, that the machine-shop, the implement-factory and planing-mill are near by, because there is a demand for their products. He feels in his heart that the newspaper, the telegraph, the steam-engine and iron horse, the thoroughly tilled fields and the sleek cattle and horses, and fat hogs and sheep, are all there, merely because there seems to be a demand for them.

The value of land where white houses are occupied by the farmers ranges from $100 to $250 per acre, while in the vicinity of wood-colored houses it can be bought for $25 to $50 per acre, and with the presence of block-houses and shanties, for $2.50 to $10. In every respect the land may have been the same when taken from nature's hand, and still the lowest-priced may be nearly, if not quite, as fertile as the high-priced, but the difference is in the enterprise and what man has done for the locality. Build houses, schools, churches, factories and establish reciprocating industries and railroad facilities, and the price of the land is doubled and quadrupled. The presence of a manufacturing village of five thousand will again double and triple the value, and a city of ten thousand increase it ten fold, while the advantages and conveniences of society, association, and of markets, will be of a value beyond estimation.

It only requires one enterprising individual to set the example of a neat house and surroundings, and of only three or four to organize a village improvement association, and invite industries to build thus some ten thousand city.

S. BOYCE.

WORK FOR THE HOGS.

HAVING a rough, stony piece of ground, too poor to grow grass and partly covered with young wood, and wishing to fertilize it, and at the same time to rid it of weeds and brier-roots, and not being able to plow it, a drove of hogs were yarded upon a couple of acres at a time, and a little corn scattered now and then in places where most rooting was desired, and the hogs completely dug over the ground, and were from time to time removed to other pieces. After removing the hogs the ground was raked over, the stones and roots removed, and clover and Orchard-grass and Blue-grass scattered, and two years afterward there was a growth of grass equal to two tons to the acre upon the ground.

This is practicable for large or small lots, using a large or small number of hogs, and under the trees of a second growth of timber or in an orchard, as may be desirable, but the bushes should be mown and the timber must be so thinned out as to allow grass to grow, if pasture is required. If water cannot be brought to the ground, then a lane leading to a supply must be provided. S. S. B.

AN OLD BUT GOOD REMEDY FOR GAPES.

Among our farmers there is a great increase of attention to poultry. Improved breeds are taking the place of inferior fowls, the Leghorns taking the front rank in most cases hereabouts. The results are seen in better feeding, larger flocks, improved houses, and, of course, larger profits.

I would recommend to RURAL readers the following as a sure cure for gapes in chickens. It has been tried repeatedly by myself and several others in this neighborhood, and has always proved effectual: To every hundred chickens take three teaspoonfuls of tincture of asafœtida and mix it daily in their food. There's no patent on this—'tis an old remedy for the ailment.

Malone, N. Y. W. G. H.

The Vineyard.

VITIS VULPINA, SOUTHERN FOX, OR THE CLASS OF THE SCUPPERNONG GRAPES.

D. S. MARVIN.

THE uses for which this class of grapes may be utilized in hybridizing and mixing with our other classes of northern Grapes, have not been appreciated. They are called the lazy man's Grapes, allowed to run at will over rude post and pole trellises a few feet above the ground, are generally untrimmed and otherwise almost uncared for; yet they yield heavy annual crops. The clusters are small, but the berries are large. They flourish only upon the low, flat lands of the South Atlantic sea-board, from Virginia to Texas. They possess a rich, juicy, vinous flavor, are without pulp, and have a coarse, thick skin. They are a good table grape; and probably, for certain wine purposes, they are unsurpassed by any other native or foreign grape, and, what is of vital importance, they seem to be more nearly exempt from all sporadic diseases than any other known sort.

When we add to these merits the other important characteristic, that Vitis vulpina is the only Grape comparatively exempt from the insidious depredations of Phylloxera vastatrix, it would seem that it should be made to come in and supplement some of the leading deficiencies of our other classes of foreign and native Grapes; for none of these flourishes in such low malarial districts, and all are more or less affected by Phylloxera vastatrix. If, by careful and judicious mixing and hybridizing, we can avoid or cure these defects, great good will result to our agriculture. Should we attempt this by grafting the Eumelan—an æstivalis grape, and one of the very best for this purpose—upon Scuppernong roots, using pollen for hybridizing from Concord and others of our popular Labrusca grapes, the root-power of the V. vulpina, acting upon the sexual functions of the pistillate and staminate organs of the other classes, should give us the highest attainable immediate results. Then these improvements should be followed up by again building other combinations, using for the purpose Vitis cordifolia vines in some of the experiments, as a new element, and varying the old combinations, so as to obtain root-power from one class, staminate, pollen, or male principle from another, and pistillate, or female force from a third, doing all with the greatest care and utmost possible precision,

There would seem to be no apparent or sufficient reason against carrying out these important suggestions. They should by all means be attempted; for if the best elements of the Southern can be united with the good that is in our Northern classes, one would supplement the other's deficiencies, and wonderful practical results would doubtless fitly reward and crown the skillful operator.

But herein lie the difficulties: horticulturists who understand the subject, and who have spent the necessary time in studying out its surroundings and bearings, and in acquiring the skill needed for such delicate manipulations and operations, from the very nature of their employment are not usually men of sufficient means to be able to go into the climate required, and devote the necessary years of time attending to such enterprises. Indeed, it would be well that any person who may be employed on such a labor, should be freed from all other cares, and be in this way enabled to lay aside all thought of other business, in order to devote his exclusive attention to the work in hand in studying it out more deliberately and carefully in all its intricacies and bearings. The peculiar exigencies of this department of our agriculture would seem to demand this. Such a person would find ample occupation for all the physical and higher faculties to which man is capable of attaining. Carrying on a commercial grape-vine nursery in these hard times, to my certain knowledge, does not afford sufficient time for such work. I would therefore earnestly commend the subject to the Commissioner of Agriculture, for Washington is situated in the region where these important experiments can be best conducted. The several Southern agricultural universities endowed by the Agricultural Act in the Southern States, should also give careful attention to so important a subject. Moreover, private individuals in the region indicated, who are situated so as to be able to experiment, should by all means do so. There might be fortune and fame in the first experiment, with the consciousness of having been of use in the world thrown in.

It is a mistake to say that the Scuppernong will not live in the North, as we have all repeatedly been told. Though residing in the forty-fourth parallel of latitude, I have three vines, set out three years ago, protected by a slight covering of earth during winter, just as other vines are protected in this climate. They are making a rather slow growth, but seem healthy. I am not entirely without hope that I may be able to utilize the roots by grafting to obtain root-power, although disappointed in my first intention, which was to utilize them to obtain pollen for hybridizing. The difference in climate, however, is so great that, at this date—the 20th of July—they are just in blossom, entirely too late for hybridizing, but during the coming spring the attempt will be made to graft them. Pollen sent from the South next spring could be used, and if some horticultural friend will send this, I shall be duly thankful.

There is some uncertainty; but it may turn out that all the benefits can be obtained from root-power. It is a fortunate circumstance that this power of grafting can be utilized in these operations; for it is far greater, more potent, and more under control, than any power in the hands of the breeder of domestic animals. The horticulturist is enabled to take short-cuts towards final results; the breeder, with but two individual animals at a time, must work for generations through the sexual functions and ameliorating circumstances of food and climate. If he could dissect the osseous structure and the form of the best of the Short-horns, splice into it the viscera of an Ayrshire, add the lacteal organs of the Jersey, and breed from such imaginary animal, it would be something like what the horticulturist is enabled to accomplish through the means of grafting and hybridizing.

Jefferson Co., N. Y.

[Any readers who have not seen Mr. MARVIN'S former articles, which we deem of much importance, and who desire to continue the subject, are referred to the RURAL NEW-YORKER of April 13 and June 29, last.—EDS.]

Floricultural.

POND LILIES.

WILLIAM FALCONER.

JUST now we have white, blue, red and yellow Water-lilies, all blooming freely in our pond. The white ones are Nymphæa odorata, so plentiful East, and N. tuberosa, a much larger but almost scentless species indigenous West and South, and, of course, both kinds are perfectly hardy. The others are tender; that is, we must take them in-doors in winter, and put them out into the pond in summer. The blue-flowered one is the Blue Lotus of the Nile, N. cærulea, a beautiful and fragrant species that throws up its flowers several inches above water in the daytime, but recalls them as closed buds beneath the water's surface at night. The red one is N. Devoniensis, a most beautiful carmine-blossomed hybrid, raised in 1851 at Chatsworth, in England; its parents being N. rubra and N. Lotus (white). Its flowers and leaves are larger, and its constitution stronger than those of either of its parents. It opens early in the morning and remains expanded till noon; its blossoms are thrown up several inches above the water, and by their brilliance and large size, are observable from a considerable distance; and it has the excellent quality of blooming all the season long without intermission. The yellow one is N. lutea, the true yellow Water-lily. It is a native of Florida, and was brought to notice by an engraving of it in Audubon's "North American Birds," some fifty years ago. Otherwise it was practically unknown, and remained so till two or three years ago, when it was rediscovered by Mrs. Treat, who sent many roots of it to the Botanic Garden here. So its existence is no longer a myth, but a reality. Its blossoms are a good yellow, rather medium-sized, and they open later in the morning and remain open longer in the daytime than the other tender sorts. Judging from garden-grown plants, it is altogether of medium size, but a free and continuous bloomer, and thrives well in a tub of water in a sunny corner of the greenhouse, where it blooms well in spring. Of course, the hardy Lilies are growing permanently in the pond, and need little or no care, beyond thinning them out when they overcrowd one another.

The tender Lilies are growing in 12 and 14 inch-wide pots, filled with a compost of rough, turfy loam, and sharp sand. Pond Lilies grow and flower better when not in over-deep water, consequently we raise the pots to within 8 or 12 inches of the surface of the water, by standing them on inverted pots, bricks, or other pedestals. And they grow amazingly. But the bull-frogs bother us a good deal; they seem to think the pots were set there as chairs for croaking water-men; at least they occupy them as such, and nothing short of a stone on the head will dislodge the unmannerly starers, and then they only leave the one pot to peer at you from off the next one.

On the approach of fall frosts, we take our Lilies in-doors and set them in a tank of water in the greenhouse, there to remain till next May, when, after being repotted, they are again transposed to the pond. But it is not necessary to leave them in their big, summer pots; the roots may be taken out carefully and put into as small pots as they can be conveniently lodged in, and in this way a number of plants can be wintered in a tub of water. They should be wintered in a light position and where the temperature does not fall below 40°, and, if practicable, 45°.

Industrial Implements.

THE UNION RAILWAY HORSE-POWER, made by Wm. L. BOYER & BRO., Philadelphia, Pa., has secured its success by slow degrees, but the result is of a most substantial kind, and the Power grows in popularity each season. The salient points claimed for this implement by the Messrs. BOYER, are great: power, very low elevation, substantial workmanship; a power in which cross rods are dispensed with, thus greatly reducing weight, and that the chain joints are hardened, and will wear a great length of time.

THE "Chautauqua" tin-lined butter package seems to be the coming package for the trade. It is spoken of highly, and its sales are steadily increasing. The tub is made in convenient sizes, will not rust, keeps the butter nicely without discoloration, obviates deductions for tare, and is as cheap as ordinary tubs, firkins, etc.

The Querist.

ANSWERS TO CORRESPONDENTS.

Fistula

R. Saunders, Essex Co., Va., asks: Can you, or some of your many readers, give me a remedy for a horse that has a bad sore on his neck, occasioned by being bruised by a careless driver? Some horsemen call it fistula.

ANS.—As we have stated before in these columns, the main point in treating a fistula is to get a dependent opening through which the pus can escape from the sore. It is necessary to find the bottom of the channels by probing, and then to cut down upon this point in such a way as to obtain the above condition. A seton may then be inserted to prevent the lower opening from closing before it is healed above, and astringent lotions may be applied once or twice a day. These may be made by dissolving one-half drachm of either sulphate of zinc or acetate of lead in half a pint of water; some prefer a solution made by using one-half drachm of the above astringents to half a pint of water. In some cases it is necessary to scarify the walls of the channels with a long, narrow-bladed knife, or to destroy their inner surface by caustics before they can be induced to heal. The caustic should be the last resort, as such sores are often needlessly enlarged and deepened by cauterizing, when this is not indicated.

Solution."

Dennis Farrell, Big Stone Co., Minn., asks the meaning of the term "Solution," and well remarks that it is often used very indefinitely.

ANS.—For a substance to be in solution in water or other liquid, it must be so intimately combined with it that the liquid shall be perfectly transparent, and that no separation or deposit shall occur except on change of temperature. When a liquid has taken up all the solid it can dissolve in this way, at a given temperature, it is said to be saturated. Most soluble solids are dissolved more readily and generally more liberally in hot than in cold liquids. When a substance is very soluble at a high temperature, and less so at a lower one, a portion of the substance is deposited as the liquid cools. For instance, a pint of boiling water will dissolve over a pound of alum, but when the solution cools, more than nine-tenths of the alum again assumes a solid form. The more finely the solid is divided or powdered, the more rapidly is it dissolved in any liquid; and to bring each of these minute sub-divisions into contact with fresh globules of water, the liquid should be stirred until the solution or saturization is complete. The expression, "a solution of lime as thick as cream," and similar remarks are therefore inaccurate; for such a mixture is no solution; so is the phrase, "a solution of starch in cold water;" for starch is quite insoluble in cold water, as may be readily seen by every particle of it that may have been stirred into the liquid settling at the bottom when at rest. Nearly all the lime stirred in water to make it milky, is deposited in the same way, when the water has had time to rest; a pint of pure water being able to hold only eight grains of lime in solution.

Cows Chewing Bones.

H. G. T., Round Mountain, N. C. asks, 1, whether it would be right to feed ground bone to cows to prevent them from chewing bones. 2, the names of firms that sell bird-cages and import canaries and gold-finches.

ANS.—It happens not unfrequently that there is two little bone-making material in the food of cattle. Among other ways in which this deficiency is shown by the animals, is an unhealthy appetite leading them to chew bones, wood, and various kinds of refuse. In such cases small rations of bone-dust given with their other food have a decidedly good effect. 2. Among the best firms dealing in bird-cages in this city are: O. Lindemann & Co., 254 Pearl St., and Osborn Mfg. Co., 79 Bleecker St.; well-known bird dealers are: Conrad Betz, 127 Liberty St., and Charles Reiche & Bro., 55 Chatham St.

A Turkey-cock's Harem.

R. H. Lymer, Page Co., Ia., asks how many turkey-hens can be kept to one male, where the eggs are wanted for hatching.

ANS.—Many consider that the number of turkey-hens allowed to one turkey-cock may be unlimited, on the ground that one visit of the cock will render fertile all the eggs laid by the hen. The best breeders, however, have learnt from close observation, that when even twenty hens are allowed to one cock, the chickens from their eggs are apt to be weak in constitution. Accordingly the best practice allows only about a dozen females to one male bird. The turkey-cock may be used for breeding when two years old, and the hen when only a year; but both are in their prime a year later, and, as a rule, they will be first-class breeding stock for two years more, at the very least.

Rouen and Aylesbury Ducks.

E. Mansfield, Westmoreland Co., Pa., asks—What is the relative weights of common, Rouen, and Aylesbury ducks.

ANS.—As a rule, a good-sized, common duck, weighs from six to eight pounds per pair; the average of Aylesburys is over ten pounds, while fair specimens of Rouens should be at least two pounds heavier than these. At the English poultry shows specimens of Rouens often weigh fully nineteen pounds, with Aylesburys only a little behind them.

Ration of Indian-meal for a Cow.

An amateur farmer, New Brunswick, N. J., asks how much corn-meal can be profitably fed to a cow per day.

ANS.—If intended to be fattened, she should be gradually accustomed to eat more and more, so long as her appetite remains keen, her health good and she gains in weight steadily. In all cases, the amount a cow can eat depends on her size, as experiments have pretty conclusively shown that there is a uniform ratio between the size of an animal and the quantity of food it will profitably consume. A large cow if fattening, would probably eat a half a bushel of meal a day for some time; but it would not be well to feed so much to a milch cow. The ration should be decided by a little experiment, by being increased until she shows a tendency to become too fat. It will vary considerably with different breeds of cows, and with different individual animals, as well as with the kind of pasture on which they are kept, and will range all the way from four to ten quarts.

Honey-Locust Hedge.

C. O. Gilkey, Plainwell, Mich. asks, where he can get Honey-Locusts cheapest, and how much longer will it take to get a hedge of them from seed than from purchased plants.

ANS.—The nearest nursery should prove the "cheapest place." Plants one year old will cost about $3.00 per thousand; two years old $5.00. It will take one year longer to get a hedge from seed than from purchased plants. It is best to scald the seeds. Sow in a seed-bed and transplant to the hedge row. We would remark that much of the efficacy of Honey-Locust hedges will depend upon the distance at which the plants are set apart and their being kept well back by timely pruning.

Eastman's Business College.

Willis Risler, Stockton, N. J., asks whether Eastman's Business College is a reliable institution; and whether, when one pays his money there in advance, the authorities would see him through all right, if he paid proper attention to his studies.

ANS.—This college is one of the best in the country, and those having it in charge are certain "to see a man through" honorably to the full value of his money.

Miscellaneous.

J. L. S., Attica, Ohio, asks, 1. Why some reader of the RURAL doesn't write an article or two on the management of bees; 2. Will pear trees bear pruning the same as apple trees, and if so, at what season of the year; 3. What will prevent sprouts coming up about the bottom of an apple tree; 4. What effect will half-rotten sawdust have around an apple tree, if applied in the fall; and will it pay to haul it one mile.

ANS. 1.—The RURAL has so many departments that it cannot always do justice to those who are especially interested in any one department.

2. Yes, we know of no difference. For your climate, we advise pruning during that period of the spring when it is reasonable to suppose that very cold snaps will no longer occur, and before the swelling of the buds.

3. Often in the case of grafted trees the stock is more vigorous than the cion or the union is not perfect. The suppressed vigor will seek to expend itself in the formation of sprouts. We knew of no other way but to rub off the shoots as soon as they appear.

4. We should not use it at all for this purpose.

E. H. H., Cedar Mills, Minn.—Plants for name: Orchis spectabilis; Calystegia pubescens.

Mrs. H. W. Burton, Lincoln Co., N. C. wants to know what to do with her Fuchsias. They are covered with red insects too small to be seen with the naked eye, but large enough to suck all the sap and vitality out of her floral pets whose leaves soon drop off.

ANS.—Sulphur fumes will exterminate the red spider which, we presume, is what infests these Fuchsias, but it is a dangerous remedy. Frequent syringing with a solution of whale-oil soap is effectual, syringing the under as well as the upper part of the leaf.

W. R. Glenwood, Ind.—A. R. Yates, Round Pond, Me. and others inquire who has Duroc Swine for sale.

ANS.—We profess to be very careful as to the class of advertisements we admit into our columns. But so far as many of our readers are concerned, this would seem to be of little advantage. The advertisement of Duroc Swine offered by a very trustworthy gentleman, appeared in our columns when these inquiries were written, to which numbers we refer our inquirers.

Anon, Ithaca, N. Y., asks: 1. For a recipe for good, cheap paint—lead color. 2. Information about Diamond Spring Wheat. 3. Price of RURALS from New-Year's until July 1st last.

ANS.—1. We could answer the question better if the purpose for which it is to be used had been stated. Raw and boiled oil with one-fifth of benzine, using the red mineral powders instead of white lead, and shaded with lamp-black, is the cheapest and most durable paint we know of, if oil is to be used at all.

2. It is Triticum Polonicum of African origin, and has been cultivated in Egypt and other portions of Northern Africa, from early times. The March number of the American Agriculturist, after a careful investigation, exposes the whole thing.

3. We cannot supply them.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, AUGUST. 17TH:

Wm. J. B.—"Clinton Place"—A. L. J.—L. A. R.—"Anon"—A. L. J. No. 2.—D. M. S.—R. H. C.—E. L. M.—H. A. J.—W. H.—J. H. L.—S. B. P.—W. C. L. D.—S. A. M.—C. O. G.—J. R.—J. S.—W. R.—Wm. C. H.—R. A. F.—W. J. Y.—D. E. S.—W. H. N.—J. F. S.—E. R. C.—Dr. Goodenough.

Everywhere.

WESTERN NOTES.

THE harvest in northern Illinois and throughout the northwest is progressing as fast as possible, considering the late hot weather and the tangled and prostrated condition of the grain from storms. For the past ten days the weather has been cooler and more favorable, and the harvest will soon close. The crops are variable, and not as good as was anticipated.

CORN was very backward and unpromising until about the middle of June, when it commenced improving, and has since been doing well. It is now mostly in tassel, and should the rest of this season prove favorable, the crop may be a large one.

POTATOES are also "doing well," and are quite abundant, but worth only 25 cents per bushel in our markets. The Colorado beetles threatened to take the crop on communistic principles, and devour it among themselves, but a little timely hand-picking, and sprinkling the infested vines with Paris-green, subdued the bugs and saved the potatoes. One tablespoonful of pure Paris-green to three gallons of water, mixed and applied with a common sprinkler or watering-pot, is the right quantity and way to do it.

FRUIT in northern Illinois is not as plentiful as appearances indicated at the time of blooming. We had some cherries, a good many berries, currants, etc., and will have a light crop of apples, and a few plums and grapes.

LIVE STOCK in general is in good condition, but a large number of horses died during the late heated term from over-work in the excessive heat.

STEAM WAGONS, two of them, have been constructed in Wisconsin, and were tested last week, and it is thought they will be able to stand the hottest of hot spells without sweating. They will run on common roads, draw heavy loads, plow and do general farm work. Verily this is an age of progress, and Edison is not the only inventive genius in America!

THE ILLINOIS STATE FAIR will be held again this year at Freeport, Stephenson County, in Taylor's Driving Park. The site is one of the best in the State and can scarcely be excelled anywhere. Last year the Fair proved a grand success, and it is thought it will be still better this fall, as special preparations are being made for it. Competition is open to the world, and we would be glad to see New York State represented again. S. D. Fisher, of the State Board of Agriculture, Springfield, Illinois, has recently issued the premium list, which he will send free to any persons wishing to attend the Fair or compete for premiums. The exhibition begins on the 16th day of September, and this would be a good time for Eastern people to visit the West and see our beautiful prairie-land and western products.

DAIRYING is spreading and improving in the West very rapidly. A large number of creameries and cheese factories have been built the past spring. The National Butter, Cheese and Egg Association is doing much toward elevating the standard of the American Dairy and improving its products, through its meetings, dairy-fairs and published reports.

W. B. DERRICK.

Ogle Co., Ill., July 30.

WEST VIRGINIA NOTES.

THE KANAWHA VALLEY.

CHARLESTON, the capital of this county, is situated on the Great Kanawha River, about fifty miles from the mouth, and, with a population of 7,000, is the second city in the State. The city stands in one of the most beautiful valleys in the State and is surrounded by mountains that contain inexhaustible supplies of coal, iron ore, and timber. As to the coal deposits, Kanawha County has few equals and no superiors in the Southern States. From Charleston to the Kanawha Falls—a distance of thirty-five miles—there is a continuous line of towns and villages, nearly all mining hamlets. The mines are mostly near the river and railroad, giving the companies little to do but to dump the coal into boats and cars. The Chesapeake and Ohio Rail Road enables coal companies to ship their coal East as well as West. Before it was built, coal was shipped exclusively West, to cities on the Ohio and Mississippi rivers. It is now shipped East where there is always a good market for it.

FARMING.

Farming is carried on to a considerable extent in the valley and hills, but the land, as a general thing, is very poor, having been worked for years in corn, wheat, and oats, without ever having a blade of grass on it. Why this has been so, I am unable to see, as hay is worth as much here per acre as any grain that can be raised on it, and does not require one-third as much labor, while it makes the land rich, killing the briers that have a tendency to grow on a poor soil.

Stock is not raised much here, as a rule, yet there is no valid reason why it should not be. Scarcity of land certainly could not be a reason, for within three miles of Charleston, hill land can be bought for five and ten dollars per acre, that will produce blue-grass in abundance. How much easier it would be for the farmers, if they would raise more stock and less grain! Wherever you see a farmer that raises stock, you generally see a good farm and a prosperous farmer.

D.

RURAL SPECIAL REPORTS.

BLOOMFIELD, Ct., Aug., 1878.

DEAR RURAL:—My ramblings have again brought me to this place, from which I had the pleasure of inditing a few epistles to you last year. A New England country town has little more change from year to year than have the stony features of the Old Man of the Mountain. The wider spreading branches shut out from sight some bit of landscape that has been familiar, and the absence of some old trees that have been landmarks for years, teaches lessons of growth and decay more forcibly doubtless to me than to those who live here. And so with faces. I meet the children of those I knew as children, and I miss the faces of their fathers. I look in vain for the old men I once knew. They are gone, and in their places are men, gray-haired and bent, it is true, but can they be old? It seems but a little while ago when, as a boy, I knew them as the young men of the place—then, as now, but a few years my seniors—and am I, too, growing old? Perhaps so. * * *

The season has been favorable for crops of all kinds. The frequent showers gave an abundant harvest of grass, which may be considered the staple production of this vicinity, most of which is cut, cured and housed. The warm weather of July seems to have made amends for the coolness of June. Rye and oats ripened speedily, and corn is growing apace. Tobacco, of which considerable is grown, notwithstanding its low price, is spreading itself, and some pieces already hide the ground from view. In another month it will be ready to cut. Is there any other crop that produces so much weight in the same time as this? The idea that it ruinously impoverishes the soil on which it is grown, is exploded. True, good crops cannot be grown on poor soil, nor can they be successively grown on the same land without application of suitable fertilizers, but it leaves the ground in good condition for any other crop.

Fruit is looking moderately well. The earlier apples, such as Germanboughs, Strawberry, Red Astrachan, Golden Sweet, etc., are marketable, but at small prices, say one dollar a barrel. The last-named originated in this vicinity, and in bearing years, thousands of barrels are marketed. Until recently the original Golden Sweet tree could be pointed out and although there is little doubt all trees bearing the name are more or less direct from the original stock, there is a vast difference in the fruit, while all have the general characteristics of the original to such an extent as to leave no doubt it is properly named. But it varies a little in size, juiciness, flavor, color and time of ripening. When asked for an opinion as to the causes for this variation, I say, situation, soil, and, more than either, the stock upon which it is grafted or budded. Why will not fruit growers root-graft more freely when they desire to propagate good varieties of seedlings in their purity?

HIGHLAND CREAMERY.—The proximity to Hartford, the nearest market, and the demand there for milk and butter, have induced many of the neighboring farmers to become dairymen on a more or less extensive scale—those nearer by taking milk to customers, and the more remote by making butter which is served by the season, usually at a price a few cents in advance of store rates. Recently the Highland Creamery Co. has been established a little way from here (West Hartford P. O.), which already somewhat changes the complexion of affairs. It is found more profitable for the farmers near by to sell their milk to the creamery at a reduced price (say two cents a pound) than to peddle it, or make butter. I had the pleasure of visiting the creamery recently, and found it not very extensive (making, say, 150 pounds a day), but a model of neatness. By their arrangements, which I should like, would your space permit, to describe at length, [Our space *will* permit.—EDS.

they make more and better butter from the same quality of milk than could be done at the farm-houses. They find it profitable also not to wait until all the cream has risen before skimming, leaving a portion in the milk. For this skimmed milk they received 1½ cents a quart from peddlers, who (at least *some* of them) sell it in the city as skimmed milk at one-half the price that new milk commands. We hear from those who have used it that it will keep sweet longer than new milk. If this is so, why?

The managers of the creamery have a custom of filling test glasses containing samples of milk from each producer with his name attached, and letting them stand in a prominent place for the cream to rise, thus showing at a glance who has the best cows. A commendable spirit of emulation will necessarily arise, each man will strive to be ahead of his neighbor, the grade of cream-producing cows will be raised, while the creamery company, with Yankee cuteness, will reap the profit by getting more butter from the same quantity of milk. L. A. R.

HURON CO., Ohio, Aug. 1st, 1878.

EDITORS RURAL NEW-YORKER:—Harvest being nearly over, a close estimate can be made of the present crop. Wheat is an average crop; it would have been an immense one but for the May frosts. Much of it is threshed and marketed from the machine at 85 cents per bushel. Oats are light, and continued wet weather has prevented harvesting until they are over-ripe and shell badly—not over two-thirds of a crop. Corn, of which a little below the average acreage was planted, will be a good crop. Pastures good. Meadows below an average yield. Potatoes very light, injured by blight. A heavy crop of apples and an abundance of other fruits. Prices lower, but labor cheaper and more plentiful, while prices of what we have to buy have fallen nearly in proportion to prices of produce. On the whole, a prosperous season for farmers. E. L. M.

CLINTON PLACE, N. Y., Sept. 3.

SORRY, very sorry am I to see that you will lend a hand towards getting puss in trouble. Never did I see a more one-sided effort than that of last week's RURAL. You gave one illustration of Jack's good traits and none of Tom's, while for the latter you depicted many of his naughty ones. I hold that the good qualities are about evenly balanced, and as for *bad* ones, give me the cat every time in preference. I hope to see no more of this preaching taxation on cats from you. Castrate the male dogs, and do your best to do away with their wholesale slaughter. Save, of course, those wanted for breeding purposes, as has been proposed in one of the papers.
CLINTON PLACE.

Various.

THE AMERICAN ART UNION SWINDLE.

THE snares laid for entrapping the very foolish are not constructed with conspicuous ingenuity, yet their success is a melancholy proof that thousands live in an Arcadian simplicity, with a trick of opening wide their mouths, like young crows, and swallowing everything that is presented without stopping to taste.

Where such an appetite exists, it is only natural that food should be provided for it, and thus it happens that the American Art Union of Cincinnati has prepared a circular, which of itself, may be catalogued among their other works of "art."

This announcement proclaims a generous deed. It is nothing less than that "in consideration of the success we (they) enjoy as publishers of works of art," they will, prompted by an uncontrollable impulse of generosity, born of the aforesaid success, actually give away 265 original oil paintings by distribution among their customers. Now this is truly generous. Such munificence is confined to millionaires like Mr. Lennox and the American Art Union. We are told that thousands might be realized by the sale of these gems, even at auction, but a spirit of true generosity forbade such vulgar barter. They must be a free-gift offering.

The philanthropists were anxious to give a picture to each of their 26,500 patrons, but the entire "gallery" numbering only 265 (peculiarly fortunate combination of numbers), it was decided to take every one hundredth name in regular order. The circular continues——

"Your name appearing in regular order, you happen to be one of the *lucky* customers, and we take this method of notifying you that you are entitled to one of the Oil Paintings. Upon receipt of the inclosed certificate, carefully and plainly directed to us, it will be forwarded to you promptly. We shall immediately notify the balance of our patrons of our action, and, in the accumulation of paintings that must occur each year, can only hope that they may be the lucky ones next time. We know that some of our largest customers—many of whom are our warm personal friends—will feel disappointed at not receiving a Painting; still we feel proudly conscious that this is the best, and only fair way, of dealing with all, whether customers on a large or small scale."

Such proud consciousness could not fail to gratify even their warm personal friends, and as for "the lucky customers,"—well they expressed their sentiments probably after receiving one of the "choicest works." We have had the pleasure of conversing with one of the "customers," a friend of ours, who sent for one of the pictures as an experiment whose gratitude was abundant, as were likewise his epithets. In the language of the circular, "their grandeur and sublimity strike one with awe and wonder."

Having concluded to give away these "extravagant and unprecedented gifts," they may be pardoned, surely, for indulging themselves in a little selfish pleasure, so we are gleefully told that the entire scheme "has been framed and carried out so far without the knowledge or concurrence of a single one of our (their) customers, and is intended to be an agreeable surprise." Therefore, the first intimation the lucky art-worshiper has of his fortune, is a certificate and a circular. He is expected to fill out and return the certificate, because "The Paintings having cost us large amounts, we can only present the same to you *free of charge*, simply asking that you meet the expense of boxing, packing, printing of circulars, certificates, etc., etc., which amounts to about $1.85, and which, under the circumstances, you can not hesitate to regard as reasonable. This is one chance in a lifetime of securing a gem Oil Painting, that would add luster to the most elegant and fastidiously furnished home."

Any man who could refuse $1.85 after that explanation is no lover of art, besides if he neglects the opportunity he is lost, as he is told in so many words: "If we do not hear from you in thirty days from date, we will transfer the gift to the next name on our books, and would in this case request the return of the Gift Certificate."

Thus far the victim has been approached on the side of his cupidity, but now his æsthetic longings are intensified by a description of the paintings. The Editor of the Cincinnati Post, and Mr. W. Whitfield, an alleged well-known critic, were corraled and brought in to view the art treasures, and they were captivated. "It was a decided pleasure." "I should like to be the purchaser of some of these paintings myself." "They are objects of special interest to me;" and having seen one, we can well believe it, and he continues, "I hardly think you will be benefited in future business by presenting these Paintings to your customers in the manner you propose; for, of course, many of them will fall into the hands of those who will not fully appreciate their intrinsic value as works of art: while to me they are perfect gems. I lingered long and enthusiastically over the above-mentioned titles, and left them with reluctant steps. One can almost imagine himself in classic Italy, face to face with the exquisite beauty that greets and entrances the senses in that land of wondrous beauty.

"The magnificent mountain scenery, charming little lakes that kiss the sides of verdure-crowned hills as they sparkle and scintillate in the glorious sunlight, and the delicate tints of the fleecy clouds as they float away in a sea of gold and blue, have been seized by the artist and transferred to canvas without losing one iota of their natural beauty. Many of them recall to my mind, most vividly, scenes whose grandeur and beauty I shall never forget."

Who could withstand such eloquence? This poet-editor's diamond-tipped pen must have been dipped "in a sea of gold and blue," when he continued—"There can be no question but that advertising is a prime mover in business, and surely your house must be classed in the front ranks not only for fair dealing, but extended enterprise, and your patrons cannot too highly appreciate your liberality of spirit in making this distribution of oil paintings."

These "prime movers in business" having thus established the intent of "fair dealing," began the assault on the unsophisticated by supplementing the previous documents with a list of names and addresses duly numbered, in which it is stated that each name is entitled to one original oil painting. As there were but 265 gems to be lavished upon the public, and as this list contains 271 names, it is to be inferred that some one enthusiastic member of the Union must have taken a claw-hammer and robbed his private gallery to make up the deficit. Generosity could no further go!

The sequel is simple. The certificate and $1.85 are sent. After waiting impatiently a reasonable time, the picture does not arrive, and a sharp letter reaches the Union, most probably. This is answered by a printed form to meet the case, proving that the delay is a part of the scheme. This circular states that the painting was not sent because the Union was positive he would require a frame for his treasure, and "we think it advisable to mention that we are manufacturers and wholesale dealers in all kinds of frames," and "desiring to accommodate such of the two hundred and sixty-five parties as are the fortunate recipients of the distribution, we decide to supply and ship each and every one the following frames at *cost of manufacture*, namely: No. 1, 2½ inch solid *carved black-walnut*, with gilt lining, at only $1.45 each frame; and No. 2, consisting of a 3-inch gilt frame at $2.00."

Such solicitude is touching, and worthy of an association that can freely give away art-treasures costing thousands.

If the obliged patron concludes to have a frame he gets his picture, framed, by express, having expended $4.35, more or less, according to the kind of frame he selects, and the distance he lives from Cincinnati.

He finds he is the victim of a stupendous swindle. The picture looks as if it was stenciled on glazy muslin, that requires all the adhesive power of the varnish to hold it together. The frame is common, and is charged for at a higher price than it can be purchased of retail dealers.

We have often had occasion to advert to these swindles, including the present one, but we have concluded to give the whole *modus operandi*, in the hope that our subscribers, as well as the general reading public, will be more wary in future, and distrust all schemes that have for their chief allurement the giving of something of value for much less than its market price.

This Art-Union began its career by specious advertisements, in which it was stated that the readers of such papers as contained their advertisement would receive "as a premium" an elegant steel-engraving—"Christ in The Temple"—by remitting 25 cents for postage. Thus were the names received which afterwards are used in the more complicated swindle above described.

CATALOGUES, &c., RECEIVED.

AT this season of the year Strawberry plants are being advertised in our columns and we respectfully call the attention of those interested to such trustworthy firms as F. R. Pierson, Dr. F. M. Hexamer and Wm. Parry whose catalogues or circulars will be mailed free to applicants. Many new varieties of undoubted merit are offered. If we would excel our neighbors in strawberry cultivation, we must be familiar with the best methods, and these are given in the catalogues above referred to without unnecessary detail.

MR. W. T. ALAN of Greenville, Pa., a gentleman whose experience on executive committees of agricultural fairs has given him a thorough insight into their workings, has invented a combined Entry and Committee Book, a sample sheet of which has been sent us. It is a good thing. We cannot go into its merits, but any secretary will appreciate them at a glance. We think it would be a profitable employment of time if they should write to Mr. ALAN for a sample and prices. None more than an overworked Secretary can appreciate the benefit of any labor-saving contrivance about fair time.

A NEW association, the Onondaga Co., (N. Y.) Agricultural Society, holds its first fair at Syracuse, Sept. 17 to 19. This organization comprises many of the best men in the county. Fine grounds and buildings have been secured, and a liberal premium list compiled. Coming a week after the State fair, many exhibitors at that fair will also display their goods at Syracuse.

FIRST Annual Report of the U. S. Entomological Commission for the year 1877, relating to the Rocky Mountain Locust, and the best methods of preventing its injuries and of guarding against its invasions—with maps and illustrations.

THE Grasses of Tennessee including cereals and forage plants by J. B. Kellebrew, A. M., Ph. D., Commissioner of Agriculture, Statistics and Mines. A valuable work of 500 pages to which we hope to refer more in detail.

PRICE List of the Eastern Shore Nurseries, Denton, Caroline Co., Md. J. W. Kerr, Proprietor. An epitome of all the fruit trees (small fruits, grape vines) as well as evergreens, hardy shrubs, etc.

CIRCULAR No. 57. Analyses and statistics of Commercial Fertilizers inspected, analyzed and admitted to sale in Georgia during the season of 1877–8. Thomas P. Janes, Com. Ag., Atlanta, Ga.

LIST of Premiums and Regulations for the Eighth Annual Fair of the Broome Co. Ag. Society, to be held at Whitney's Point, N. Y., Sept. 3, inclusive. Milo B. Eldredge, Sec'y.

PREMIUM LIST of the Marshall Co. Ag. Society for the Twenty-first Annual Exhibition to be held on the Fair Grounds, Marshalltown, Iowa, Sept. 10–12.

RULES and premium list for the Third Annual fair of the Marengo Ag. Society, to be held at Marengo, Ill., 10–13. J. S. Rogers, Sec'y.

POMONA NURSERY, William Parry, Prop., Cinnaminson, N. J. Catalogue of Strawberries, Raspberries and Blackberries, illustrated.

J. L. DILLON, of Bloomsburg, Pa., offers a circular setting forth the merits of the much talked of Sharpless Seedling Strawberry.

A MANUAL of Georgia for the use of Capitalists, prepared under the direction of T. P. Janes, Com. of Ag., Atlanta, Ga. Page 116.

Hygienic Information.

INTERMITTENT FEVER.

DR. GOODENOUGH.

Treatment.

Formerly many thought it best to allow the disease to run its natural course; but now-a-days the opinion is nearly universal that an attempt should be made to arrest it, as there is no proof of morbific matter to be eliminated from the system; and the longer it continues the harder it is to get rid of, and the greater the danger of secondary diseases more dangerous than the original. Generally the paroxysms require little or no treatment except by way of alleviation.

DURING THE CHILL.—The patient should be in bed covered warmly. Hot drinks may be given, such as hot lemonade, toast-water, and an infusion of balm: heated bricks, bags of sand or bran or bottles of hot water may be applied to the feet and along the body. In severe or protracted cases a vapor or hot-air bath may be employed by raising the bed-clothes over the patient by means of half-hoops and placing, near the body, hot moistened bricks wrapped in flannel or introducing a current of hot air or vapor through a conical, round tin tube, at the broad, exterior, bell-shaped end of which a cup of alcohol is burning. There are a number of other remedies in this stage also, especially in severe cases, but these generally require medical advice in applying them.

IN THE HOT STAGE.—The patient should be allowed cold drinks; the effervescing draught every hour or two is especially beneficial; and should materials for it not be at hand, twenty grains of citrate of potassa, dissolved in water, may be substituted. Other remedies in this stage should be used only by advice of the nearest good doctor. In the sweating stage all that is needed is that the patient should not be exposed to cold. Hot gruel and hot chicken broth may also be given beneficially.

INTERMISSON.—This is the time for effective treatment. The bowels should first be thoroughly evacuated, preferably by the use of calomel, as it not only empties the bowels, but also unloads the congested liver. For adults, three or four compound cathartic pills, or from two to eight grains of calomel with a proportionate quantity of jalap, rhubarb or scammony may be employed, or the dose of calomel alone may be followed in six hours by one of sulphate of magnesia or castor-oil. As soon as the bowels are evacuated sulphate of quinia, in doses of two or three grains, every hour or two, either in pills or solution, should be given until from twelve to twenty-four grains have been administered between the paroxysms. To produce a complete solution of the quinine, it would be well to mix in the water twice as many drops of dilute sulphuric acid as there are grains of quinine. Pills, being tasteless, are preferable for some, but a solution is always safer and more effective. Some patients are more sensitive than others to its effects, as shown by noises in the head and partial deafness, and the quantity must be regulated accordingly. Some physicians give very much heavier doses but these are hardly ever necessary.

But when smaller doses do not prevent the paroxysms, recourse should be had to larger ones; and, as a rule, doses are much larger in warm than in cool or temperate climates. The specific should be all taken, say, a couple of hours before the time of the expected paroxysm, so as to allow time for it to get introduced into the system and operate; and when the paroxysms come close together, the doses should be increased so that the proper amount can be taken between them. Some advise that the whole quantity should be taken in one dose, and sometimes this mode has undoubtedly a good effect; but repeated small doses are much safer and more advisable.

Next to quinine the most efficacious remedy for intermittent fever is arsenic, taken with least danger in the form of Fowler's Solution. Indeed, in many cases where the action of quinine is slow or inefficient, that of arsenic has proved curative, but the danger from handling injudiciously so dangerous a substance must always restrict its use. Besides quinine, various other forms of Peruvian Bark are also in use; but concentrated in quinine, the merits of these are in nearly all cases, much more salutary. Other remedies which are also efficacious, but in a less degree, are salacine, bebeerine, ferrocyanide of iron or Prussian blue and strychnia; but in using these the next good doctor should always be consulted.

During the disease diet should be light, digestible, nutritious, but not stimulating, and a full meal should not be eaten within a couple of hours of the expected paroxysm.

By the way, among the preventives not the least effective is always to sleep in an upper room, as experience has shown that the malaria of unhealthy districts always tends to cling to the ground. Statistics show that the proportion of cases among those sleeping up-stairs, is one-third less than among those sleeping on the ground-floor. It is also of great importance that in malarial regions the houses should be built on the highest ground in the neighborhood, and, if possible, at some distance from river bottoms.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Stone Pine, The (Illustrated)..... 517
Notes from the Rural Grounds..... 517
Garden Walks and Talks..... 517
Texas Hort. and Pomological Fair—G. M..... 518
Culture of Small Fruits—N. B. D..... 518
California Fruit Notes—W. C. L. Drew..... 518
Jottings at Kirby Homestead—Col. F. D. Curtis.. 518
Agriculture—Past, Present, and Future—Geo. Gardner..... 518
Notes from Maplewood Farm—Hector Bertram.. 518
Tobacco Plant—E. R. Billings..... 518
Courage on the Farm, and in the Swamp and Muck Bed—Gen. W. H. Noble..... 519
Compost Heap, The..... 519
Drainage..... 519
Irrigation..... 520
Benefits of Exchanging Seeds—M. B. Bateham... 520
Parisian Correspondence—Prof. I. P. Roberts... 520
Reminiscences of Rothamsted and Tiptree-Hall Farm—S. B. Parsons..... 520
What Others Say..... 520
White Houses and Green Blinds..... 521
Work for the Hogs—S. S. B..... 521
Remedy for Gapes—W. G. H..... 521
Grapes, Southern Fox or Scuppernong—D. S. Marvin..... 521
Pond Lilies—Wm. Falconer..... 521
Union Railway Horse-Power..... 521
Chautauqua Tin-Lined Butter Package..... 521

Answers to Correspondents:

Fistula..... 522
Solution..... 522
Cows Chewing Bones..... 523
A Turkey-Cock's Harem..... 522
Rouen and Aylesbury Ducks..... 522
Ration of Indian Meal for a Cow..... 522
Honey Locust Hedge..... 523
Eastman's Business College..... 522
Miscellaneous..... 522

Everywhere:

Western Notes—W. B. Derrick..... 522
West Va. Notes—D..... 522
Bloomfield, Conn.—L. A. R..... 522
Huron Co., Ohio—E. L. M..... 523
Clinton Place, N. Y—Clinton Place..... 523
American Art-Union Swindle, The..... 523
Catalogues Received..... 523
Intermittent Fever—Dr. Goodenough..... 523

Domestic Economy:

Summer Siftings—Annie L. Jack..... 528
Domestic Recipes..... 528
Queries Answered..... 528

EDITORIAL PAGE:

National Dairy Fair..... 524
Short-Horns and Herefords..... 524
Purchasing vs. Producing..... 524
Hog-Cholera Commission, The..... 524
Co-operation in Producing and Manufacturing.. 524
Skeleton Leaves..... 524
Brevities..... 524

LITERARY:

Poetry..... 525, 527, 530
Euphrosyne..... 525
Some Thoughts Suggested by Geo. Macdonald's Stories—E. F. M..... 526
Recent Literature..... 526
Bric-a-Brac..... 526
A New Move—Faith Ripley..... 527
Shoes and Slippers..... 527
Items for Correspondents—By the Editor..... 527
As You go Along—J. E. M'C..... 527
Hair-Pin Receiver—Loretta E. Turner..... 527
Sweet-Smelling Toilet Hints..... 527

Reading for the Young:

Pocket-Money for Young People—No. 13—Annie L. Jack..... 530
The Beaver—Uncle True..... 530
Foot Ball—S. D..... 530

Sabbath Reading:

Jacob's Vision..... 530
News of the Week—Herman..... 528
Markets..... 529
Personals..... 531
Wit and Humor..... 532
Advertisements..... 529, 531, 532

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY AUG 17, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

THE NATIONAL DAIRY FAIR.

It will be remembered that during the session of the American Dairymen's Association, at Cleveland, early in spring, a resolution was unanimously adopted authorizing a committee of eleven to organize a National Dairy Fair. This committee, selected with care, embraced many of the men most widely known throughout the country for their skill in the various branches of this industry. In March last, the members met at Utica, and with them, as an advisory committee, representative men connected with the business in different parts of the country, and together they selected this city as the most eligible place for holding the fair some time in the fall.

At the time it was said that doubtless the merchants dealing in dairy products in New York would contribute liberally towards the eight or ten thousand dollars necessary to make the undertaking a success, and the members of the committee resident here have been diligently at work soliciting subscriptions. A fair measure of success has rewarded their efforts, and there is little doubt but that the needed sum will be raised, provided the country districts will subscribe their quota.

A large proportion of the trade here, however, is either positively opposed to the movement for a fair, or displays towards it a discouraging apathy. With a single prominent exception, these hostile or lukewarm dealers belong to the butter trade. The action of these, it is alleged, is based on the opinion that it might injure their business to bring the producers from the country into direct acquaintance with consumers in the city. Should this be substantially the ground of their conduct, it should add one more to the numerous reasons dairymen have for resolving to do all in their power to make this display of their products a grand success; for a closer acquaintance of producers and consumers will benefit these just in proportion as it may lessen the profits of the middlemen. Moreover, by this contact of producers, middlemen, and consumers, the farmers will learn more clearly the needs of the market, the relative standing of the different firms with which they may deal, and the most profitable manner of making and putting up their goods.

To accomplish this object, there will be ample means of instruction at the fair. In it there will be on exhibition specimens of the various kinds of cheese made in this country and Europe; illustrations of the different styles in which butter is put up; samples of the several sorts of apparatus employed in the manufacture of both articles, with models of cheese factories and butter creameries, and, in a word, every thing connected with the dairy business that can instruct the producer or interest the general public. It is to be hoped, therefore, that this grand opportunity of still more popularizing dairy products as well as of impressing upon dairymen the necessity for still greater improvements in their methods and appliances, shall not be neglected through the backwardness of a part of a single subordinate interest.

While we heartily wish success to this undertaking in the belief that it will afford many advantages to the dairymen and to farmers generally throughout the country, we must strongly protest against the introduction here of one feature which has of late been far too prominent in most of the dairy conventions elsewhere. In a very brief time oleomargarine has become a powerful competitor of butter in many markets, while its use is rapidly extending, and the larger the sales of this concoction the smaller will be those of the dairy product. That it can never compete successfully with first-class butter, of course, all concede; but unfortunately all the butter made is not first-class, nor is it likely to be for many a day, and a dairy convention should be even more careful of the interests of the farmers who cannot, or do not, make a prime article than of the interests of those whose product is gilt-edged, and who therefore stand less in need of the instruction and assistance of such assemblies. Now, it is very doubtful whether this class has been benefited by the discussions held at many recent conventions as much as they have been injured by the lavish opportunities afforded thereat for widely and gratuitously advertising the suety preparation which injures the sale of their product. It is not at all improbable that the rapid introduction of this article into use has been more promoted by the elaborate disquisitions upon its nature permitted at dairy conventions and widely circulated in reports of their proceedings than by any other means. Yet neither justice, usage, nor expediency requires that those interested in any branch of industry should, at meetings specially held to promote their own welfare, afford, to their own loss, free opportunities for puffing goods that come into direct competition with their own in the markets of the world.

SHORT-HORNS AND HEREFORDS.

Both in this country and across the Atlantic, the opinion has of late years been gaining strength that too much weight has been attached by breeders of Short-horns to fancy strains, to the neglect of proper regard for the individual merits of each animal. Hence the enormous price that has often been given for some animal of a particular family, whose conformation was inferior to that of a much cheaper Short-horn, belonging to a family less highly esteemed. So far has this craze been carried, that many excellent judges of stock maintain that within the last few years the race of Short-horns has actually deteriorated instead of improving. In England special attention has recently been drawn to this subject by the triumph of two Herefords over all other breeds, at the Bath and West of England Cattle Show, held at Oxford. Of Herefords there were only three at the fair, while of the Short-horns there were thirteen of the bull class alone; yet the Hereford bull, Grateful, was awarded the prize over the Short-horn, Sir Arthur Ingram, an animal famous at other shows and here selected by the Short-horn judges as the best of his race. In the same manner the conclave of judges awarded to the Hereford heifer, Leonora, the championship over the Short-horn, Diana, confessedly the best of the Short-horns at the fair. It would seem that while the admirers of Short-horns have lately been content to dwell on what their favorites have been, the breeders of Herefords have been diligently selecting and mating the best individual animals so as to advance the standard of the breed.

PURCHASING vs. PRODUCING.

Purchasing is impoverishing and producing is enriching: this is a fact quickly apparent to any thinking man, and applicable the same to an individual or to a nation. The nation has lands capable of producting, but idle. The nation pays out $100,000,000 a year for ten years and produces nothing from these lands. She is bankrupt; the land valueless and her money gone. Had the nation produced from these lands $100,000.000 a year for ten years what would be her condition? She would not only have the $1,000,000,000 otherwise expended, but she would be capable of producing indefinitely in the same way; besides $100,000,000 invested annually would in the ten years give her an addition of $500,000,000 more.

It is apparent, too, that the soil would be cultivated, the people employed would have the value in money, land and materials, that those who consumed the productions would have a better market in exchange for their own goods, that taxation would be lighter from the presence of more wealth; and let the same condition go on for one hundred years and imagine the result! And yet the United States are paying out $200,000,000 annually for goods which they have all the territory and idle labor to produce, wanting nothing but the paternal attention of the delegates of the States in Congress or of the States themselves to insure.

THE HOG-CHOLERA COMMISSION.

At the close of the last session of Congress the sum of $10,000 was appropriated for the expenses of a commission to investigate contagious diseases of swine in the United States. Under this provision a commission, consisting of our contributor, D. E. Salmon, D. V. M.; Prof. J. Laws, of Cornell University; Prof. H. J. Detmers, of Chicago, and five other veterinarians, has been appointed by the Department of Agriculture, and the members have received full instructions which are to govern their investigations. It appears that each is to pursue his research es independent of the others, in a line indicated by the Department, and this fact, coupled with the paltry sum that will fall to the lot of each investigator, renders it hardly likely that any beneficial discoveries will result from the project. Apart from the loss of advantages of combined study, the remuneration is so small that neither of the gentlemen can afford to neglect his professional business, a requirement necessary to secure the best chance of success in his investigation. Had the whole appropriation been placed at the disposal of the three well-known experts mentioned above, our hopes of a successful issue would have been stronger.

CO-OPERATION IN PRODUCING AND MANUFACTURING.

There can be no great degree of prosperity in any country where the greater portion of the people are engaged in any one system of industrial operations to the exclusion of others. England has less prosperity because of her necessity to largely purchase her provisions and raw materials, but Russia, the Southern and Western States have had a less prosperity from producing only raw materials or provisions at low prices and having to purchase manufactures at a high price. To be the most prosperous, the raw material and provisions should largely be consumed on the ground where produced and only the high-cost products exported.

The South should manufacture her cotton and wool and hemp and jute, refine her sugar and raise her provisions, as well as raw material. The West should have one-half her energies in manufacturing industries to consume her raw material, and that naturally passing by her and also to consume largely of her provisions, and increase the value of her lands and save transportation. Any nation or any portion of a nation should, after raising food, raise what they can manufacture upon their own territory to advantage.

The Cincinnati Art-Union imposition, details of which are given in other columns, is a greater fraud even than those details set forth. We do not write from hear-say. We may be pardoned for alluding to the fact that while several other journals, which undoubtedly hold a very high place in the regards of the public, accepted and published the advertisements of this swindling Union, the RURAL NEW YORKER rejected them as, for the past thirteen months, at least, it would have rejected any other advertisement upon the face of which "fraud" was written in such glowing letters. And in so doing it did not occur to us that we were extra virtuous either.

Skeleton Leaves.—There are no leaves or flowers, or parts of flowers, that skeletonize more perfectly than the cups (calyces) of the Molucella lævis. No artificial treatment is necessary. The parenchyma decays and disappears even upon the plants, leaving only the fine net-work of fibers. Speaking of this plant, a nice question for those who delight in such minute investigations, is to determine why some of the leaves are vertical, presenting the edges to the sky and earth, while others are horizontal, as in the case of most other plants.

BREVITIES.

We observe a good many twin flowers among our Gladioli this season. Others are "double."

The Germantown Telegraph says, "As well attempt to tame the hyena as the huckleberry."

We have heard some excellent accounts of the Beauty of Hebron Potato. Great size is not claimed for it. Quality, productiveness, earliness and keeping qualities are, and, judging from these accounts, the claim will be sustained.

We are disposed to think from our tests this summer, that the Acme tomato is one of the earliest, and, in connection with its earliness, one of the best. It averages as large as a Tomato needs to be, and is generally without a seam.

The Plymouth Rock breed of poultry is not yet old enough to insure Plymouth Rock characteristics to its progeny. We set one dozen eggs this spring. Seven were hatched, two of which were black without a colored feather. A neighbor repeats this experience.

A terrible warning to those who water their flowers in the morning, as well as to those who marry, has just been afforded by Thompson A. Godfrey, of Ocean Grove, N. J. The aged man married a girl of 22 the other day, and next day while watering his flowers, he dropped dead of heart-disease.

The present is the best time for destroying the Canada Thistle. Cut it off close to the ground. Nothing is gained by pulling it up. Only the perpendicular part of the root *can be* pulled up—the horizontal ramifications remaining deep in the ground. Their roots are perennial—the branches above ground are biennial.

One of the best gooseberries we have had to do with is the Downing. It is an immense bearer and the berries are tender and sweet—sweet for a gooseberry. The branches this season had to be propped up to support the fruit, two-thirds of which, however, were finally scalded by the hot moist weather. But the plants with us never mildew.

Col. Curtis, who is a regular correspondent of the ably conducted agricultural department of the N. Y. Tribune, as well as of the Rural, says: "The enterprising owner shot an owl in his barn and killed him and burned the barn. Whenever it is necessary to shoot a gun around buildings, wool should be used for wadding, as it will not readily take fire from powder." Or, we would suggest, the greased felt wads, now in general use among the sportsmen.

Among the assets of a farmer lately declared bankrupt in Ky., was an elephant which he had some time before bought cheap at an auction of the properties of a circus. In making the purchase he was probably actuated by the same spirit as Mrs. Toodles in buying that door-plate engraved with Thompson with a p; but he suffered more severely than that provident lady, for the elephant soon eat him out of house and home. Many another farmer, too, has been ruined by good bargains in elephants, in the shape of more lands than they can properly manage, patent-rights for which they neglect their legitimate duties and other unnecessary burdens.

An odd Annual.—Many people like odd plants. We know of one "rarely seen in the garden." Though it is not uncommon, it is little known among flower lovers. It grows about a foot high; is not particular as to soil or cultivation. The flowers are of a bright yellow and in diameter three times the length of the leaves!! Each plant will bear over one hundred flowers, we should judge. The main stem is branchless for two inches from the ground. Then it branches freely and the secondary branches are *square*. It is odd in other respects which may be left for those who conclude to cultivate it to determine. It is a St. John's-wort. Its botanical name is Hypericum Sarothra. It is blooming now in many sandy fields and road-sides and will be through August. This is one of the many plants that must be seen to be appreciated—"A word to the wise"—

Orchard in Grass.—An old friend writes us "There is a great deal of nonsense talked and written about apple trees requiring cultivated ground. The reason why the trees do not do so well when the ground is in grass, is because it is not grazed and kept short as it is in England, where all the orchards, or at least ninety-nine out of a hundred, are kept in grass, and never, under any circumstances, plowed. But the grass is grazed with sheep and calves and never mowed, as it is well-known to be wrong to grow what is not returned to the soil in some shape. Americans do not understand the difference between the fine old permanent sod which is never plowed and the timothy and clover temporary grass here. When the sward is grazed in England, there is nothing to prevent sun and air from benefiting the roots, and the sheep lie a great deal under the trees and leave droppings and urine.

Literary Miscellany.

GROWING OLD GRACEFULLY.

SOFTLY, oh! softly, the years have swept by thee,
Touching thee lightly with tenderest care;
Sorrow and care did they often bring nigh thee:
Yet they have left thee but beauty to wear.
Growing old gracefully,
Gracefully fair.

Far from the storms that are lashing the ocean;
Nearer each day to the pleasant home light;
Far from the waves that are big with commotion,
Under full sail and the harbor in sight!
Growing old cheerfully,
Cheerful and bright.

Past all the winds that were adverse and chilling;
Past all the islands that lured thee to rest!
Past all the currents that wooed thee unwilling,
Growing old peacefully;
Peacefully and blest.

Never a feeling of envy or sorrow,
Where the bright faces of children are seen;
Never a year from their youth wouldst thou borrow,
Thou dost remember what lieth between.
Growing old willingly;
Gladly, I ween!

Rich in experience that angels might covet;
Rich in a faith that has grown with thy years;
Rich in the love that grew from and above it;
Soothing thy sorrows and hushing thy fears.
Growing old wealthily;
Loving and dear.

Hearts at the sound of thy coming are lightened,
Ready and willing thy hand to receive;
Many a face at thy kind words has brightened,
"It is more blessed to give than receive!"
Growing old happily;
Blest, we believe.

[*Christian Globe.*

EUPHROSYNE:

AN OLD TALE OF THE NEW WORLD.

CHAPTER I.

IT was a bright October evening in the year 1690, when a group of officers stood upon the topmost point of Cape Diamond, the lofty citadel of Quebec, clustered round the flag-staff, from whose summit floated proudly the national banner of France. The last rays of the setting sun kissed its silken folds as they streamed out upon the breeze, waving defiance to the invaders who threatened to pluck it from the rock on which, nearly a century before, it had been planted by the adventurous Champlain.

Over the beautiful landscape, viewed from the pinnacle of that rock, hung the blue dome of heaven, pure and cloudless; while the horizon burning with gorgeous hues of purple and gold, shed a glory over the scene, such as is never witnessed in milder latitudes. The heads of the distant mountains that guard, like giant-sentinels, the lovely valley of St. Charles, were already crowned with the early-falling snows of Canada; and the Isle of Orleans gleamed, in the distance, like some brilliant gem on the bosom of the broad St. Lawrence.

Opposite the frowning hight, bristling with cannon, lay the precipitous shores of Point Levi, rising abruptly from the noble bay of Quebec, and terminating in a wooded promontory. Here and there, perched like an eagle's eyrie, on its craggy ledges, appeared the white-washed walls of the peasant's cottage gleaming through the foliage; while its swelling hills, and the undulating surface of its many-colored woods resting against the vivid background of the sky, gave to that point of land a picturesqueness of effect far surpassing that of the most finished productions of art.

But not to the eye alone did this ministry of beauty make its appeal: the air was full of harmonies—the whispering of leaves, the vesper-songs of birds, the humming of the insect tribes, and of odors, wafted from every woody dingle where the wild-flowers still brightened the fading earth with their beauty, while, mingled with these fainter perfumes, came the rich fragrance of exotics from the stately gardens of the castle, in whose gay parterres still lingered the rarer flowers of European climes—the rose of Provence, the "Frenchman's darling" mignonette, and the balmy violets of England.

But if the heavens above were glorious in their calm beauty, and the earth beneath peacefully radiant as a poet's dream, there were sounds abroad, marring with their dissonance the harmonies of nature. The tramp of soldiers, the rattling of arms, the hurrying to and fro of excited men jarred harshly on the silence of the night; while over all this was cast the spell of music from the military band, which played before the castle of St. Louis the national airs of France.

But the group of officers who in the deepening twilight, still remained standing on the summit of the citadel, looked not now with admiring eyes upon the scene. Danger menaced them even in their stronghold; nay, they gazed upon its very presence; and in the whole glowing landscape they saw but one object of interest—a hostile fleet, far from contemptible in force, lying in their own majestic river, under the walls of their city, its white canvass bellying in the breeze and the ensign of England streaming from the mast-head of the admiral's vessel.

The expedition had been fitted out by the British colonists of Massachusetts, and intrusted to the command of Sir William Phipps, a man whom humble birth had not prevented from rising to the highest posts of power and honor, and whose talents and virtues had won the favor and confidence of his sovereign.

Previous to the appearance of the gallant little armament before the walls of Quebec, it had almost without opposition, captured several French posts on the shores of Newfoundland and the lower St. Lawrence, and had actually arrived at Taloussac, on the Saguenay, before any tidings of the impending danger reached the Canadian capital. Rumors, it is true, were rife concerning its approach; and parties of observation had been sent out by its vigilant governor, Comte de Frontenac, and canoes despatched to seek for some ships laden with supplies, which were daily expected from France—their safe arrival in the event of a siege, being all-important to the garrison.

Defensive preparations had also been made, and were still going on, by order of M. de Frontenac, with unrelaxed vigor; for, although strong in natural defences, there was still need to strengthen its rocky bulwarks against insidious assault, and to defend by artificial barriers, those weak points which, in the lower parts of the city, were accessible from the river. But the lofty crest of Cape Diamond was not at that time crowned with works of solid masonry, although the present structure had even then been commenced, and from its northern angle there expanded an irregular line of bastions, crossing the promontory to the banks of the St. Charles.

The citadel, at that period, was a quadrangular fort, with flanking defences at each corner, protected by a wall on the inner side; while some rude field-works, with redoubts, strengthened the front towards the Plains of Abraham. The lower town, too, had its battery; and the narrow precipitous passages ascending from it to the upper part of the city, were protected by loop-holed walls, intrenchments, and rows of *chevaux-de-frise*.

Speculating upon the audacity which brought this British armament before the walls of their city, the knot of officers we have mentioned remained upon the hight till only the white shrouds and gleaming lights of the hostile vessels were discernible through the gathering darkness; and then one after another departed till only two remained, leaning against the broad flag-staff, and gazing down upon the illuminated windows of the castle. Suddenly a rich strain of music swelled upward from the balcony, when turning to his companion, the elder of the two young men said, with a gay smile:

"Light and music wherever *her* presence beams, Louis! Is it not so? Come, let us leave this breezy hight; and though with some of us, perchance, it may be our last night of life, it will be well to spend it where we may have a foretaste of the heaven that is to follow."

"Your light tone, Gaston, is in ill-keeping with my graver mood," answered the other with a gesture of impatience: "yet go, and bask in the radiance of her beauty; but——"

"And wherefore *but*, St. Ours?" interrupted his friend. "What means that settled gloom, that desponding tone, whenever Madame de Lavasseur is our theme?—she whom I know you love—and not in vain, if there is aught beside outward seeming in her smiles, in the conscious blush when you approach, in the tones of liquid sweetness from her lips—and such lips! Cupid be merciful! The honey of Hybla was vinegar to the dew that bathes those living roses!"

St. Ours sighed deeply, and was silent. He had not even a smile for the absurd rhapsody of his friend: in truth, he was struggling hard to subdue the emotion that well-nigh mastered him; but with all his efforts, he could not conceal it from the observation of D'Esperon, who, unable to divine the secret cause which never failed to arouse it in connection with Madame de Lavasseur's name, exclaimed with an impetuosity which formed a part of his frank and generous nature:

"In the name of all the saints, Louis St. Ours, explain to me the mystery which drives you to despair, when love and duty stand ready, amidst a score of hapless aspirants, to crown you with triumph! Montres, D'Aubigny, De Lorme—would they not barter all their hopes of fame in these northern wars, for one little token of that favor which the fair Euphrosyne showers, without stint or measure, upon you?"

"Ah, that is it, D'Esperon! If she looked upon me coldly, I could bear to suffer; but it is cruel destiny to know the treasure might be mine, were I permitted to possess it; and this it is which must explain to you the secret of that unhappiness whose manifestations have so often awakened your sympathy and wonder."

"I do not comprehend you, Louis. Why is it that the treasure won, may not be possessed?—that, in the very presence of this adored Euphrosyne, I mark your cheek grow pale, your brow become clouded, and see you steal away even from the smiles which are your life, to darkness and solitude."

"Forgive me, Gaston," said St. Ours; "I know I must have tried your patience sadly; but till the certainty was forced upon me that, unworthy as I am, I held the happiness of another in my keeping, I resolved to bury deep in my own breast a secret which is the haunting skeleton of my life. But from you I will no longer have any concealment. I have no formal history to relate, and only a few brief words to utter, but they are pregnant with fatal meaning, as you will believe when I tell you—I am married!"

"Married!" exclaimed D'Esperon in half-indignant astonishment. "Can I believe you, when no word of this has ever passed your lips?—not even to me, your comrade in arms, your brother in affection, your friend and confidant—as I thought—in every joy and sorrow, since first we knew each other, years and years ago!"

"Even so, Gaston, for I trained my thoughts never to dwell upon the odious theme. Or rather, I should say, indifferent to the ties that bound me, I scarcely realized their existence till the bright vision of Euphrosyne appeared, and awoke me to the bitter consciousness of my thraldom."

"But how and when was this fatal marriage contracted; and to whom, in the name of Heaven, are you sacrificed?"

"These, briefly, are the circumstances of the case:—My father and the Count de Lancey were bosom-friends from my boyhood, and in the ardor of their romantic attachment, they vowed to each other that, should they in after-years become parents, their first-born children, if of different sexes, should cement by marriage the union of the families. My father inherited a proud name with fallen fortunes; while the Count de Lancey, less illustrious by birth, was the possessor of immense wealth, so that the friends each derived his own advantage from the compact; and when, in the course of time, they became parents, the little girl and myself were taught, among the first lessons of our childhood, to regard each other as future husband and wife. Still, had the union been delayed till we arrived at maturity, it would perhaps have never taken place; but, unfortunately, the sudden illness of the count hastened its consummation. An injury received in the chase was pronounced fatal by his physicians; and when informed of his danger, he desired that myself and father should instantly be summoned.

We resided in a distant province, but we set out immediately on receiving the tidings, and traveled night and day. We arrived in time to see him alive, and though near his end, his faculties remained singularly clear. He expressed his satisfaction at my father's prompt compliance with his wishes, reminded him of their compact, and signified his desire to see the marriage solemnized between his daughter and myself before he breathed his last: "Otherwise," he said, "he must leave her in the power of those who would differently shape her destiny; and the dearest wish of his heart was to bestow her and her wealth, with his own hand, upon the son of his earliest and truest friend."

"It was a strange proposal, children as we both were—the girl-bride being but twelve years old, and I only three years her senior. But absorbed in grief for her father, she had no other will than his; and to me, who had always looked upon the union as a thing of course, it was a matter of perfect indifference whether it took place then and there, or was postponed for half-a-dozen years. And so we were married by the count's confessor, who was present with a lay-brother from a neighboring convent. Strangers to each other, we were united in indissoluble bonds—indifferent to the present, and regardless of the future, which by that act was rendered to one of us at least, dark and joyless for ever.

"But a secret presentiment of coming woe crept over me when I found my fate irrevocably fixed—a deep aversion to my child-wife filled my heart; but, as by the marriage stipulations, I was not to claim her till she had completed her sixteenth year, I rejoiced in the reprieve, and gave all anxious thought on the subject to the winds.

"I saw her but once after we parted at the altar, and then, in compliance with my father's wishes, I accompanied him to the convent where she was placed to complete her education. She replied to my distant greeting with averted looks, and I fancied that I inspired her with uncontrolable disgust. This conviction strengthened my repugnance to her; for, young as I was, I had a keen sense of the beautiful in woman; and when I looked at her undeveloped figure, her thin childish face, and large meaningless eyes, I passed gladly from her presence, hoping, almost resolving, never to enter it again."

"And you have never seen her since?" questioned D'Esperon.

"Never! Two years subsequently, my father died; and having entered upon a military life, I was sent upon foreign service, and remained abroad till recalled by the appointment which tranferred me to this Western world in the suite of the Comte de Frontenac."

"And your wife?" asked D'Esperon.

"I am ignorant of everything that concerns her," said St. Ours. "At various intervals, I heard that she always spoke with bitterness of her early marriage, denouncing it as the misfortune of her life; and this settled hate on her part fortified me in my resolution never to trouble her with a husband's claim, nor ever to intrude my unwelcome presence upon her. For aught I know, she may now be a veiled nun in the convent where I left her; but this is not probable. I only wish it were; and then I should be absolved from the vow I made my father on his death-bed—never voluntarily to break the tie which binds me to the daughter of his friend."

"It is indeed a forlorn hope, I fear," said D'Esperon. "Had such an event taken place, you would have heard through a hundred channels before now."

"True; it does not offer even a straw to the drowning man's grasp, and I have only to bear my doom with such patience as I can; and it would have been an easy task, this quiet submission to an iron destiny, had my heart remained untouched by another. But to long with all the ardor of passion, to know myself beloved by the most enchanting of women—Oh it is often more than manhood can endure!"

"But this child to whom you were wedded, St. Ours, has, with the lapse of years, become a woman. How know you that she has not blossomed into an angel, who would fill your whole soul with the ecstatic sense of her loveliness?"

"It could not be. You would not think so had you seen her. Beside, she is not Euphrosyne, and so could win no love of mine. Still, though I have wished to be forgotten by her—to be thought of, if remembered at all, as one dead—should she demand of me the protection of a husband, I would yield it, in fulfilment of my vow made to her, and of the promise to my father on his dying bed, never to rupture my marriage-tie. But I have little fear that she will claim from me any frigid duty, and I gladly interpret her unbroken silence into a repugnance as unconquerable as my own."

Louis drew his cloak around him as he ceased speaking, for the night air blew chill and damp from the river, and leaning against the flag-staff, remained for a few minutes lost in silent thought; then suddenly addressing his friend, he said with emotion:

"This is *her* birth-night, Gaston, and we but ill honor it by loitering here. Let us go and mingle with the crowd of her worshippers, it may be, as you say, for the last time; but the brief hours of life which, perchance, remain for some of us, I at least would wing with brightness such as her presence only can bestow."

Arm in arm, the two friends descended from the rock, and bent their steps toward the castle, from whence came the sounds of music and laughter, sickening to the aching heart of St. Ours, but exhilarating to the light spirits of his companion, who with quickened steps, pressed on, eager to share the revelry so congenial to his buoyant nature. They entered the vestibule; and D'Esperon had bounded half-way up the broad illuminated staircase, when he paused to look back for his more tardy companion, who was slowly ascending step by step, his fine face still bearing the overshadowing trace of his recent emotion.

"Courage, Louis! courage and hope Remember your family motto, and wear your heart as bravely as you do your sword," said D'Esperon, gaily.

St. Ours answered his friend's sally by a faint smile; and springing up to the landing on which he stood, they passed on together to the grand saloon, crowded, on this the birth-night of the governor's favorite niece, the Madame de Lavasseur, with a brilliant assemblage of the most distinguished residents, civil and military, of the place.

M. de Frontenac would not permit the threatening aspect of public affairs to interfere with the arrangements made for the occasion; and the festivities at the castle presented a scene of magnificence which would have been in better keeping with an era of festal victory, than with one which was probably to precede the deadly encounter of enemies.

Yet who could think of impending danger, in the midst of so much gaiety, and in the presence of the night's radiant queen, the charming Euphrosyne, the cynosure of all eyes, eclipsing, by her sweet simplicity, her exquisite grace, and a beauty more touching even than it was dazzling, the showy women who, in the imposing splendor of rich robes and jewels of countless value, lent *eclat* to the scene! She moved among the glittering throng, beautiful in her unadorned simplicity, a few natural flowers wreathed among the rich folds of her shining hair, and arrayed in robes of the purest white; for her weeds, if she had ever worn them for a husband who possessed not her affections, were long ago cast aside; and on this her twentieth birth-night, she resembled rather a youthful bride than a widow.

With a calm step but a throbbing heart, Louis St. Ours passed through the brilliant crowd. Not daring by one furtive glance to single out the object who filled his every thought, he made his way to the upper end of the saloon, where, surrounded by a group of officers, M. de Frontenac stood discussing the great topic of interest—the arrival of the hostile fleet in their waters.

St. Ours was becoming an attentive auditor to the circle, when, by a sudden evolution of the dancers, he caught a glimpse of Euphrosyne; then her sweet silver laugh rung upon his ear; and forgetting all things else in the thought of her, he drank eagerly in the low musical tones of her voice, as they came to him mingled with the general hum, yet separated to his ear from all other sounds, her lightest tone penetrating like some divine harmony into the secret recesses of his soul.

She was dancing with the young Baron D'Aubigny, an officer of the governor's household; and she moved with an airy grace that scarcely suffered her buoyant step to touch the floor; while, in the pauses of the figure, she conversed gaily with her partner, her animated face upturned to his with a beaming look that made St. Ours start.

Was it possible, he asked himself, that the tender devotion so long manifested towards her by the baron, was at last awaking an answering feeling in her heart, and could it be this subtle magic which lightened even her marvelous beauty, and lent to every gesture a diviner grace? At this surmise, admitted only for an instant, a jealous pang wrung his heart; but another stolen glance reassured him, for he met an answering look from her sweet eyes—a look which he knew never came but from the heart.

To some she might have seemed absorbed in the tender tale her handsome partner was whispering in her ear; but Louis better understood her, and knew that for him alone her lip was wreathed with smiles, and the light of love danced in her eyes. He could not resist her fascination, nay, he did not strive to do so, and he advanced a step, as if to approach her. She marked the gesture, and instantly her whole face became radiant with pleasurable emotion. His heart bounded with passionate joy at the sight; and repelling the cruel thought that she never could be his, he murmured to himself: "For this night, at least, which perhaps may be my last, I will bask in the sunshine of her smiles;" and the next moment saw him standing flushed with happiness at her side.

The young baron drew back, mortified and offended, at the approach of St. Ours, assured, by the smile of tender welcome with which the fair Euphrosyne greeted his approach, that he saw in him the rival destined to snatch away the treasure he coveted. But, unheeding his chagrin, the lovers, rapt in their dream of bliss, wandered away towards the open balcony, over which hung the cloudless moon, and where they found the silence which their spirits craved.

High in air hung the lofty terrace where they stood, overlooking that part of the city called the lower town, its narrow precipitous streets winding down hundreds of feet below the stately castle of St. Louis. It was October, but the weather was soft and balmy as a night in June; and the rossignol, the Canadian nightingale, at intervals broke forth into song from amid the thickets of lilac and acacia where he sat con-

cealed. The vault of heaven was brilliant with its countless stars, among which shone the young moon's crescent; but their glory was eclipsed by the coruscations of the mystical aurora, often so resplendent in the autumnal nights of northern latitudes.

St. Ours, with his fair companion, stood leaning against the massive stone-work that guarded the balcony, watching in silent admiration the splendid aurora—now darting its luminous arrows far up the heavens, now broadening and reddening into sheets of flame, that waved to and fro like blood-red banners—and again, paling to a silver radiance, as innumerable shafts of light, diverging from the horizon, streamed up to the very zenith, and there uniting, formed a vast curtain of inconceivable splendor, which seemed to inclose the hemisphere.

Attracted by the report of the brilliant phenomenon, many of the guests had gathered on the balcony to witness it; but behind the screen of a stone abutment, the lovers remained unobserved—communing in spirit, though their lips were silent. Suddenly the strange brightness grew more intense; the grand tent shook out its luminous folds, waving and shimmering till the heavens were one canopy of light, beneath whose radiance every feature of the landscape became distinctly visible—the rocky summits of Cape Diamond—the wooden promontory of Point Levi—the fair valley of St. Charles, with its guardian barrier of mountains—the little village of Beauport, and near its shores the dark ships of the invaders, lying motionless at their anchorage. Their tall masts, and the delicate tracery of their slender spars, were clearly defined against the glowing sky; and as St. Ours pointed them out to Euphrosyne, he felt a slight shudder pass through her frame, and he could scarcely catch her tremulous whisper as she murmured: "It is a fearful sight that hostile armament, which to-morrow—ah! to-morrow!"—— The concluding accents were inaudible, for she bent over the low balustrade to hide her emotion.

The heart of St. Ours throbbed wildly, nay, rapturously; he knew for whose safety she most feared, and the certainty that he was beloved, brought with it a dangerous delight. Yet the experience of each day's intercourse with her had taught him to wear an enforced calmness, which now sustained him as he answered her half-uttered fears with a few quiet words. At variance were his tones with the tumult of his feelings, but he dared not abandon himself to their control.

"There is, I think, little to fear from yonder invaders, who, in full view of our impregnable fortress, will scarcely venture an attack. But even should they be so foolhardy, and some of us, as it must be, fall in the service of our king, would there not be consolation fair Euphrosyne, in that saying of the ancients, which you yesterday repeated to me—'Whom the gods love die early?'"

She attempted no reply, but still bent in silence over the balcony, hiding her face in the flowers she held. He saw them tremble in her light grasp, and saw, too, glittering on their fragrant leaves, the precious tears which fell from her downcast eyes. How difficult he found it then to crush down the aching secret of his heart!—it trembled on his lips as, drawing her closer to his side, he repeated in loving and passionate accents her cherished name.

But only for an instant slept the cruel remembrance of this thraldom; and checking the rash confession he was almost in the act of pouring forth, he moved a few steps from her, and bowing his head upon his breast, strove to still the rebellious murmurs of his heart. She drew towards him, and, as though she understood the cause of his disturbance, laid her hand on his arm with that sweet familiarity which had of late grown up between them, and said in her sweet winning tone, and with a look of bewitching tenderness: "Louis, you are unhappy; and will you not suffer me, your friend—your sister—to be your comforter?"

"Sister!" he repeated with a sudden start. "Ah! Euphrosnye, could I tell you all!—but not to-night. Let me at least enjoy these fleeting hours, for we know not what the morrow may have in store for us."

An expression of pain crossed her face, but she answered him with cheerful tones and sweet chidings for the indulgence of his morbid fancies.

"Ah, sweetest Euphrosyne, chide me as you will," he said: "I deserve your harshest rebuke for casting one shadow from my own darkened life over the joyous sunshine of yours; by daring, with the web of an evil destiny around me, to lavish my love and my despair where I can neither ask nor hope for aught in return."

Transported by the fervor of his passion, St. Ours gave rapid utterance to these words—such words of tender meaning as he had never before spoken to the object of his hopeless love. Euphrosyne heard them with a thrill of joy which spoke eloquently in the glad light of her bashful eyes, as she raised them with a glance of soft reproach to his face, instantly to cast them down again, shrinking from his fervent regards. But when he read in that tender look the full and perfect love which her heart accorded him, he felt deeply the untruthfulness of his conduct in permitting the silent growth of her affection without striving to check it, by revealing to her his true position. Self-condemned and wretched, he stood before her, inwardly resolving, though it should for ever terminate their intercourse, to embrace the earliest opportunity of making known to her all the unhappy circumstances which placed an insurmountable barrier between them.

Euphrosyne, with the instinct of love, marked the deepening gloom of his manner; but she felt that she was dear to him, and the deep joy of her heart remained unchilled; her eyes met his with undimmed tenderness, and no shadow darkened the sunshine of her smiles. Louis marveled at her serenity; his own soul was in tumult, and he felt pursuaded that his sufferings could not escape her notice. Why, then, did she manifest no distrust, no disturbance? It was inexplicable to him, and almost was he tempted to believe that she valued his affections only as a triumph to her vanity; but a glance at her pure and innocent face dispelled the unworthy thought. She loved him with the fond undoubting trust of woman; and he, wretch that he was, had won her young and guileless heart, only to betray it to certain misery and despair. It was too much to bear; and to escape from it he could at that moment have been content to know that, in the coming strife, some leaden messenger of death would forever still the throbbings of his aching heart.—[Conclusion next week.

SOME THOUGHTS SUGGESTED BY GEORGE MACDONALD'S STORIES.

E. F. M.

This charming writer has a great audience, for not only thoughtful men and women read his works, attracted by his strong, earnest views of life and its duties, but the young delight in his lovely stories. And surely our truest, wisest, most loving books should be for the young, who are in that stage of growth, when every impression helps to form and color the after life. How necessary then is it that their desires should be guided towards the best things, and that their ideals of character should be pure and high! A writer says, "If the old are thoughtful, *their* warfare is almost ended; but for the young—to be thoughtless with all life before them—with so many other lives to be influenced by them for misery or joy!" So Macdonald in his "*Vicar's Daughter*," "*Ranald Bannerman's Boyhood*," would teach his readers to be nobly thoughtful, and in all their gladness to grow towards goodness also. And we know how often

> "Truth in closest words shall fail,
> When Truth embodied in a tale
> Shall enter in at open doors."

Macdonald is full of human sympathy for every life, however low and narrow it seems, and when there is everything to discourage us, and our labor seems in vain, and our patience is sorely tried, he calls to our remembrance the disciples in the garden, and the one hour they should have watched with the Saviour. He beautifully speaks of the perfect unfolding of that Divine Life in the midst of weariness, doubt and ingratitude, like the patient opening of the perfect blossom on dark and muddy waters. Christ's example of forbearance and of His ministry is set for us in our intercourse with one another.

He is continuously trying to bring to our dull perception, the love of God, as the Father, Saviour and Friend of each one of us. "He calleth his own sheep by name." "He goeth before them and the sheep follow Him." There is no description of our Lord which more fully tells His special Providence, His love and care for each individual one of us, than this of the Good Shepherd. He calls us *by name*,—no seeming accident, no trifling detail, no earthly care, is forgotten by Him. Our Father "*knoweth that ye have need of all these things*," said our Saviour, speaking of food and drink and clothes. Because His eyes behold eternity, He sees all the more clearly what to-day's troubles, this moment's joy or disappointment mean; and whatever comes to us we may be sure it is sent by a Father, who will make all things work for our good at last.

Our lives, our stories, mean many deep and beautiful things. Providence is continually unfolding our higher nature, if we will accept its guidance, weaving its grand and loving thoughts through the loom of time into the warp and woof of our character. God is with us as a quickening life, and if we would obediently hear His teachings no bird would fly by our window, or lily bud open, without something for us,—no, nor would you ever meet a friend or an acquaintance without giving or receiving some good. For little things keep alive the mental light and freshness in the atmosphere of our souls, or depress and deaden them. We all know how strong the influence of the invisible air is, though we may not think of it as the cause of our bright moods and dreary ones, but all feel it. "*The wind is in the East*," as Mr. Jarndyce said.

Macdonald says, "The east wind has a shadow-wind along with it, which blows in the minds of men." This writer has a quick and glad insight into the meanings of things about him. In one of his stories he speaks of a garden, fresh with dew and blooming with flowers, as "a lovely type of a Commonwealth, indeed, of the kingdom and garden of God." Even the shadows move him to tenderly beautiful thoughts. He says, "See how Nature has her own way in this crowded street! Not all the hurry and roar and confusion can keep the shadows out. Look: wherever the space is for a moment vacant, there falls a shadow as grotesque, as strange, as full of unutterable things as any shadows on a field of grass and daisies," and again, "the shadows look as if thrown from another world here, like angels from the lovely West and purer air" where the sunset still lingers.

We all know how little things comfort and cheer us sometimes when we are in the greatest trouble; how, when the heart seems to have grown into only a dull, aching throbbing, and the brain to have become so overstrained and weary that it will no longer bear weight, God sends some little thing, a few flowers, a little child's soft, sweet voice, a few notes of music, and we feel a strange relief, and hope springs up once more like a fountain of fresh waters. In one of Macdonald's books, "*Robert Falconer*," is in sore trouble, far away from home. Lying awake at night, he heard a flock of sheep passing under the windows of his room. "A faint, musical rain invaded his hearing; but the night was clear and the moon shining. The sound came nearer, and revealed itself a delicate tinkling of bells. It drew nearer still, and nearer, growing in sweet fullness as it came, until at length a slow torrent of tinklings went past. It was a flow of a thousand little currents of sound, a gliding of silvery threads, like the talking of water-ripples against the side of a barge in a slow canal, all as soft as the moonlight, as exquisite as an odor." No wonder the bruised heart felt quieted, and at rest, for with the passing of the flock might come the blended promises from Him who keepeth Israel like a flock, who *leadeth* his sheep into green pastures."

RECENT LITERATURE.

Sensible Etiquette of the Best Society.—Customs, Manners, Morals and House Culture. Compiled from the Best Authorities. By Mrs. H. O. WARD. Philadelphia: Porter & Coates.

THERE are those who scout at the idea of formulated rules for governing the conduct of affairs in social life. This class insist that a kind heart will dictate what is proper and expedient under any circumstances, and that it is a safer guide than the artificial customs established by frivolous society.

Tennyson's estimate of the value of a kind heart is undoubtedly a just one, but even admitting all that he says in praise of it, did ever the most amiable of kind hearts give one an inkling as to whether it is preferable to cut bread or to break it? to lay the napkin on the lap, or tuck it under the chin?

These matters may appear trivial, but it should be borne in mind that life is made up of details, and to know for a certainty just how and when to perform the thousand and one acts which are required of all who mingle in any society, however humble, will save one much pain and humiliation.

The book under notice is simply admirable. The author has consulted a wide range of authorities, and nothing in social life has been deemed of too little moment for her to notice. Whether it be calls, correspondence, cards, receptions, weddings, dress, salutations, kettle-drums, dinners, home education, chaperons, or any of the other topics which have any bearing on conduct, each and all are freely and intelligently treated. The strong, pure morality of the book should commend it to the careful attention of parents and educators, and although we think the author too conservative in her ideas of woman's mission, still she errs on the right side; and in these days when our youth are gravitating toward what is fast in behavior, and loud in dress, we gladly welcome this excellent work and trust that its influence may be felt in thousands of families.

A few extracts are given below:

When a letter is upon business, commencing "Sir" or "Dear Sir," it is customary to place the name of the person addressed at the close, in the left-hand corner.

When written in the third person the name is omitted of course; also in all letters commencing with the name of the person to whom you are writing, as "My dear Mrs. Jones." The name should *not* then be repeated in the left-hand corner as when one commences, "Dear Madam," or "Sir." It is astonishing to see how often this rule is violated by persons professing the greatest punctiliousness in observing the correct forms and ceremonies of social intercourse.

The custom of leaving a blank margin on the left-hand side of each page is now looked upon as obsolete, excepting in legal documents. No notes should be commenced very high or very low on the page, but should be nearer the top than the middle of the sheet.

In addressing a clergyman it is customary to commence "Reverend Sir" or "Dear Sir." It is no longer customary to write "B.A." or "M.A." after his name. "Rev. Henry Bell," is the correct form; where the first name is not known, "Rev. —— Bell."

Doctors of divinity and of medicine are thus distinguished: "To the Rev. James Haw, D.D.," or "Rev. Dr. Haw;" "To J. Latham, Esq., M.D.," "Doctor Latham," or "Dr. Latham."

Foreign ministers are addressed as "His Excellency" and "Honorable."

In writing to servants it is customary to begin thus: "To Ellen Weller: Mrs. Jones wishes to have her house in readiness on the 14th inst.," etc., etc. To trades-people the third person is used. If necessary to write in the first person, one commences, "Sir," and signs "Yours truly," giving the initials, as "J. E. Jones," not "Julia E. Jones."

There is a diversity of opinion as to the degrees of formality in commencing and signing notes and letters. Both in England and New England the scale is as follows: "Madam," "Dear Madam," "My dear Madam;" "Dear Mrs. Jones," "My dear Mrs. Jones," "My dear Friend." In closing a note the degrees are implied as follows: "Truly yours" or "Yours truly;" "Very truly yours," "Sincerely yours," "Cordially yours," "Faithfully yours," "Affectionately yours."

There are words enough in use to express every grade of feeling, and they should be carefully selected for the purpose; as the conclusion of a letter or a note makes an impression upon the person reading it. To aged persons "With great respect, yours sincerely," recommends itself as being less familiar than the other forms. A very rude ending is "Yours, etc."

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It is everywhere looked upon as a vulgarity when a married lady signs herself with a "Mrs." before her name, or a single lady with the "Miss." In writing to strangers who do not know whether to address you as "Mrs." or "Miss," the address should be given in full, *after signing your letter*; as, "Mrs. John Vaughan," followed by the direction: or, if unmarried, the "Miss" should be placed in brackets, at a short distance preceding the signature.

Never write of your children as "Miss Nellie" or "Master Edward." Reserve the "Miss" or "Master" for use in speaking or writing to inferiors.

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The expression "presents compliments" has been discarded for quite a number of years by all who are not admirers of the old-school forms and ceremonies. It is as obsolete as the word "genteel;" or as the word "polite," which was formerly so much used by Americans in their acceptances and regrets, the English form of "kind" or "very kind," being now generally substituted for "polite."

"I can give you no reason," says an English writer, "why these poor words 'polite,' 'present compliments,' and 'genteel,' are thought so vulgar; but it is quite certain that they mark the class to which you belong. They are tabooed or excluded in good society."

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Among the most trustworthy tests of good home training is placed that of table manners; and no individual can hope to acquire and to keep them who knows any difference in them in the privacy of the family circle, and when in company. The properly-trained youth does not annoy those next to whom he sits by fidgeting in his chair, moving his feet, playing with his bread, or with any of the table equipage. Neither does he chew his food with his mouth open, talk with it in his mouth, or make any of those noises in eating which are the characteristics of vulgarity. His food is not conveyed in too large or too small portions to his mouth; he neither holds his head as erect as if he had swallowed a ramrod, nor does he bury his face in his plate. He handles his knife and fork properly, and not "overhand," as a clown would; he removes them from the plate, as soon as it is placed before him, and he crosses them side by side when he has finished, and not before, as this is the signal which a well-drilled butler observes for removing the plate. He does not leave his coffee-spoon or tea-spoon in his cup. He avoids using his handkerchief unnecessarily, or disgusting those who are eating by trumpet-like performances with it. He does not converse in a loud tone, nor indulge in uproarious laughter. If he breaks an article he is not profuse in his apologies, but shows his regret in his face and in his manner rather than in words. Some writer has said: "As it is ill-mannered to express too much regret, so it is the essence of rudeness not to make any apology." Tittlebat Titmouse, when he broke a glass dish, assured his hostess that he would replace it with the best in London. This was rather too practical a form of showing his sincerity.

The well-bred youth breaks his bread instead of cutting it, taking care not to crumble it in a slovenly way; he takes his wine holding his glass by the stem, and never drains it. He does not take wine that he does not want, because he is too timid to refuse, nor does he hesitate to pass any course of which he does not wish to partake, instead of playing with it as a writer on table-etiquette advises. He swallows his food before he leaves the table, and sees no occasion for astonishment because eating in the street is forbidden. All the details of good breeding are as familiar to him as his alphabet, and he has been taught to think that attention to details in all things is the true sign of a great mind, and that he who can, in necessity, consider the smallest, can also compass the largest subjects.

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The foregoing are not to be taken as a fair index of what the book contains. It is almost an injustice to quote from it, for to properly appreciate how valuable a book it is, one should read it entire.

The American Antiquarian. A Journal of Anthropology, devoted especially to Early History, Ethnology and Archæology; Illustrated. Published quarterly by Brooks & Schinkel, Cleveland, O. Edited by Rev. Stephen D. Peet, Ashtabula, O. $2 per year.

THE scope of this magazine will be understood by the following list of topics:

The Early History, Exploration, Discoveries and Settlement of the different portions of the Continent.

The Native Races, their Physical and Mental Traits, Social Organization and Tribal Distinctions; their Religious Customs, Beliefs and Traditions, as well as their earlier and later Migrations and changes.

The Antiquities of America, especially the Prehistoric Relics and Remains Ancient Earth-works and Structures, Inscriptions, Hieroglyphics, Signs and Symbols.

Prehistoric Man, his Origin, Antiquity, Geological Position and Physical Structure.

The magazine will also treat of subjects of a more general character, such as The Origin of Man, the Rise of Society, the Origin of Writing, the Growth of Language, the History of Architecture, the Evolution of Ornament, and Ceremonial Observances, Comparative Religions, Serpent Worship and Religious Symbols, Man and the Mastodon, Man and Animals, Earth and Man, and many other topics which are connected with the Science of Anthropology, especially as they are viewed by the Antiquarian.

The articles are of a popular cast, though as a Scientific Journal, the aim will be to record all New Discoveries and Explorations, to notice the proceedings of the various scientific associations, and the latest publications; and to give the results of the latest investigations in each department.

The Contributors are gentlemen who stand high in the scientific world and who are thoroughly acquainted with their specialties.

The correspondents are also very intelligent men, residing in various localities on this Continent and in different parts of Europe. The design is to make the magazine partake of the advanced studies of the best scholars on the Continent. It will be a thoroughly reliable and valuable Scientific Journal.

HOME AND FARM, the clever semi-monthly published by B. F. Avery & Sons, Louisville, Ky., steadily improves in matter and appearance. It is unnecessary to wish it a success. It has already attained it. Its circulation is the largest of any journal published south of the Ohio. While devoting its columns mainly to the interests of the farm, it does not by any means neglect the family.

BRIC-A-BRAC.

HAMLET TO THE PLAYERS.

Speak the speech, I pray you,
As I pronounced it to you, trippingly on the tongue;
But if you mouth it, as many of our players do,
I had as lief Count Joannes had spoke my lines.
Nor do not saw the air too much
With your hands and feet,
After the fashion of a wind-mill, or Brother Talmadge,
But use all gently. Oh, it offends me to the soul
To see a robustious, periwig-pated fellow
Tear a passion to tatters, to very rags,
And mop the stage with it, so to speak.
Be not too tame, either,
But let discretion be your tutor,
As it is much cheaper than to take lessons
Of a professor of elocution.
Suit the action to the word, and *vice versa*,
And get your work in in some kind of style.
Anything overdone is from the purpose of playing,
Whose end is to hold, as 'twere, the mirror
Up to nature, that for herself she may see
How her clothes fit, and ascertain
If there is any powder in her ears or eyebrows.
A speech overdone, or come tardily off,
Though it make the gods in the cock-loft laugh,
Can not but make those in the parquette
Or dress circle grieve, the censure
Of one of whom must, in your allowance,
O'erweigh a whole theater of others,
For they pay from $1 to $1.50 each.
O there be players that I have seen play,
Not to speak it profanely,
That, neither having the accent of Christians,
Nor the gait of Christian, Pagan or man,
Have so strutted and bellowed—
And I do not by any means
Refer exclusively to Dr. Landis—
That I have been tempted to go out to the box-office,
Murder the treasurer, recover my money,
And set fire to the building. *Oil City Derrick.*

GOOD COMPLEXIONS.

In writing of Madame Rachel and her victims, the London Medical Examiner takes occasion to point out the silliness of those women who think that there is any artificial method of preserving the beauty of the complexion by enamelling and such like processes. It says that the complexion is dependent on the quality and quantity of the blood in the skin, and the condition of the cells of the skin through which the blood is seen. The way to ensure having a proper quantity of healthy blood in the skin is to rise early, to be much in the open air, especially during the hours of sunlight, to avoid over-heated, artificially lighted, unventilated rooms, and to retire early to rest. To keep the cells which protect the skin in a natural state, all that is necessary is to wash the surface of the body with soap and water only, or, in the case of some delicate skins, which the alkali of most soaps irritates, with water alone. Whoever will attend to these directions will do all that can be done to preserve, as all ought to try and preserve, their skin in the most healthy and, therefore, beautiful condition.

THE BEE KEEPER'S ASSOCIATION.

Come where the clover is kissed by the sun;
Come where the honey-bees drowsily hum;
Come where the bumble-bee, happy old thing,
Brings up the boys with a sting-a-ling ting!

Precious old bumble-bee, bird of my youth,
Sharper thy tail than the arrows of truth;
How oft, when the school-boy steps into your realm,
You knock him stone-blind with a touch of your helm.

How oft when the picnicing children of men
Sit down at the door of your grass-covered den,
You will kick a big man 'cross a ten-acre lot
By the lift of your foot when it's heated red-hot.

Far worse than the candidate's buzzing to me
Was the petulant buzz of a boy-hating bee:
Appalling to men and to gods was the sight
When a barefooted boy got a bumble-bee bite.

Bee of the bumble, like memory's chimes,
The notes of your bagpipe call up the old times;
And still boyish hearts, light as birds on the wing,
Will howl when you tinkle its sting-a-ling ting.
—*Hawkeye.*

PAPER BOTTOMS FOR IRON SHIPS.

After getting used to paper car-wheels, we need not be surprised to learn that a new coating for the bottoms of iron ships consists of brown paper attached by a suitable cement. It is the invention of Captain F. Warren, of England, and the substance he proposes to use is a preparation of *papier-mache*. It is stated that weeds and barnacles will not adhere to paper, and that the special cement by which the paper is secured may be applied cold, but it hardens under water, is unaffected by comparatively high temperature, and possesses great tenacity. A plate thus protected on one side has been immersed for six months, with the result that the protected side was found clean, while the unprotected metal was covered with rust and shellfish.

LITTLE JOHNNIE'S "PIECE" ON OWLS.

Wen you come to see 'em close they got ortle big eyes, but wen you feel 'em with yur fingers, which thay bites, you find thay have only got jest enuf meat to hold there fethers together. Once there was a man thot he would like a owl for a pet, so he tole the bird man to send him the best one in the shop; but when it was brot home he look at it and skoweezed it, but it didn't suit. So the man he rote a letter to the bird man, and said: "Dear sir: I take my pen in hand to inform you I'll keep the owl wich you have sent, tho it ain't like I wanted, but wen it is ded you must make me a other, with little eyes, cos I spose these is bout No. 12's, but if I pay you the same for No. 6's mebby you can afford to put in more owl."

"Hail, gentle Spring! etherial mildness, hail!"
Thus quoth the poet, and his prayer prevailed,
For scarcely had he tuned his lyre to sing
Before the weather altered, and it hailed.

Favorite song of the baker—"I knoad thee every hour."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE SOFT, WHITE HAND.

I've seen them sitting side by side—
A lady fair, of gentle mien,
And he in strength of manly pride—
In many a gay and glittering scene.

And sometimes, when from harp and band
Do thrilling floods of music stream,
I've seen her little, soft, white hand
A moment on his shoulder gleam.

And oft, at home, when passing by,
As he reclines in his arm-chair,
I've seen her little, soft hand lie
Unheeded on his shining hair.

But oftenest, when they're alone—
For hearts like hers are pure and shy—
Her little, soft hand seeks his own,
Alas! unnoticed there to lie.

He loves her! Yes; but love of man
"Is of his life a thing apart";
He cannot, as a woman can,
Enshrine an idol in his heart.

Love is, with him, a pleasant hour
Snatched from the ardor of the day;
Enjoyed as perfume of a flower,
And then as lightly cast away.

He dreams not of the longing there,
In her much-loving, trusting breast,
That makes her life one yearning prayer,
So mutely, touchingly expressed.

A prayer that, if he love her yet
With that sweet love of early years,
In mercy never to forget
That hidden love makes hidden tears.

And O, it yet may come to this:
That all of earth at his command
He'd give for that one transient bliss—
The vanished touch of that soft hand!

A NEW MOVE.

Many ladies would doubtless like occasionally to express an opinion or offer a suggestion to the Rural readers if they felt assured that their communication would be welcome, and if there was a nook reserved for them. I propose to give up the three columns of this department once a month to any such letters which subscribers may send. It shall be called the Women's Club, and it will "meet" the first week in every month. All lady subscribers may consider themselves members. The object of the club is the interchange of opinions and the discussion of any and all topics likely to interest women, and if the ladies will do what they can, "the club" can be made most useful. For example, Mrs. A. possibly has discovered an expeditious way of doing many little household tasks which younger or less enterprising housekeepers would be glad to learn. Mrs. B. may know the newest stitch in embroidery, another may have evolved a new style of undergarment, a third, an extensive and discriminating reader may be able to give some valuable hints on what and how to read; again a lady would perhaps like to exchange patterns of fancy articles or clothes for flower seeds or books, or —— a dozen other things, and in so large a family as the Rural there will be some who will be glad to respond to such requests. The first meeting of the club will come off in Rural of 7th September, and I shall hope for a goodly representation of members.

All letters intended for the club should be addressed "Women's Club, care Rural New-Yorker, New York." If any readers do not fully understand the aims and proposed workings of the club, I shall be very happy to reply to any inquiries on the subject. Faith Ripley.

SHOES AND SLIPPERS.

French heels are necessary to a fashionable pair of boots, and are seen upon the majority of them, and it is difficult to find ready-made, a pair of English walking boots—those with low heels and broad soles.

French kid, usually so popular, gives way this season to fancy-cloth tops or patent-leather vamps. This is the result of the popular style of cloth dress goods, and the prevailing caprice of customers for matching in all their accessories from the parasol to the boots. All shades of cloth are employed, such as very dark blue, brown, plum, green, the new deep claret or wine shade, and all the gradations of gray, and the recently introduced *beige* and *Havanne* colors. In mixed cloth there are the small-checked English effects, and the black-and-white shepherd's-plaid or check. The latter, and black alone are very popular for general use, with any costume; but the other shades go to match certain costumes of the same colors. Frequently a lady is obliged to take to her boot-maker some of her costume cloth, which roll may be of a peculiar shade and not in stock, and have her boots made to order.

A change in the buttoned boots is being attempted. It consists in making the closing straight down from the top, instead of curving it down to the front of the instep, as usual. This method preserves a pretty, unbroken outline over the instep, and the buttons are not as apt to press into the foot.

In slippers, a few changes may be noted. The large rosette has been replaced by three or four bows of narrow velvet, each bow held to an elastic strap by a buckle of steel, and each strap crossing the instep from side to side of the slipper. These slippers are very low cut at the toe, and high and pointed at the heel, and are kid-lined. When but one bow is used, it is square in effect, small in size, and confined by a larger buckle than those used on the strap-bows.

Another kind, lined with fancy kid, is sloped from the vamp and quarter to the side of the sole at the instep, and at the junction of the two a sandal strap of kid crosses the instep. They have a quaint, antique effect that is very pretty, but are suitable only for chamber wear. Others or the same use have red or blue morocco vamps ornamented with pricked patterns or applique of other colors, or of undressed calf or kid skin.

Low shoes are mostly buttoned, and are either all kid, or cloth and kid, or patent-leather. A few have ties, but these are not considered as stylish as those having four buttons. Like high shoes, they are principally made with round or box toes and have French heels.

Fancy high and low shoes have sandal straps across the ankle and foot, and button through the ends of the straps at one side. They are suitable only for the house, and to be effective, require to be worn over gay stockings.

Children's shoes are the same as they have been for a number of years, and are made with an extremely low heel or else a spring heel. Kid and morocco in black, bronze, buff, blue, white and pink comprise the assortment. Slippers are not as much worn by children as formerly, but those seen, have the ankle strap extending from the back of the heel.

For good, honest service for children as well as adults, dealers recommend straight-grained or pebbled goat shoes, and as the reputation of this material stands a practical test, there can be no doubt of its superior durability. French kid, however, has established itself as the popular leather for fine shoes, and will, undoubtedly, continue to hold its place as long as shoes are made, though now and then the tide of favor may be, as at present, disturbed by a temporary acceptance of another material.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

L. H. K., Bridgeport, Conn.—You do not state how your dress is made now and I can hardly tell how it would be best to remodel it. I will, however, describe a few of the latest styles suitable for your material, and you can perhaps get a hint which may help you.

Make skirt with a front gore, two gores at each side and a back-breadth, all of which, extend only to the knee. To them is sewed a plaiting that forms the remainder of the skirt. The upper portion of the skirt may be made of Silesia or cambric. The plaiting may be of cashmere or of silk. It is well in most cases to fasten the plaits underneath with a tape, so as to stay their folds. The front of the overskirt is a wide apron fitted to the belt by darts. The back-breadth is a long, straight piece, the edges of which are turned back, forming *revers* which may be faced with silk. The basque, completing the costume, is buttoned at the back. The side-backs are of silk, and corresponding side-fronts are similated with silk facings. The sleeves are coat shape and are furnished, at the wrists, with tiny silk cuffs in *revers* shape.

Another costume, which promises to be extremely popular, is known as the Princess Toilette. The polonaise to this costume is made of plain cashmere and silk, and buttons the whole length of the back, which is fitted by side-backs and side-back gores. The central portions are of cashmere, the side-backs of silk, and the remainder of the garment of cashmere. This style of combination is now *en regle*, and is adapted to all sorts of material—from the richest to the least expensive—unless a vest is used at the front, in which event the back is left plain. The front is plainly fitted by two bust darts at each side of the center, which is cut on a fold of the goods.

No decoration is required upon this polonaise, but trimming may be added if desired. The sleeves are close, and may have deep cuff-facings of silk. The skirt is made of silk and cashmere. It is six-gored, and falls just far enough upon the ground at the back to produce a graceful sweep, and may be trimmed with plaitings or flounces of silk.

In a third costume, the skirt is four-gored. The trimming at the foot is easy of accomplishment, especially if the plaits are made with a machine. Box-plaits, alternate with clusters of side-plaits. Three rows of stitching, confine the upper half of the trimming, while the lower half falls loosely. The front of the overskirt consists of a deep *tablier* smoothly fitted over the hips by short darts, and slashed up the center to a point about half-way between the belt and the lower edge. The back is merely a plain breadth, whose upper edge is closely gathered, and with the front is seamed to a belt, which fastens at the center of the back. Above the top of the slash, four upturned plaits are laid in the back edge of the *tablier*, while three downward-turning plaits are arranged in the adjacent edge of the back, after which both portions are joined in a seam a little below the lowest plait—a basque, with vest, completes this costume. The ladies costume, published in Rural of July 27, would be also suitable for your material.

Wraps still continue to be worn, and you might make one out of your dolman. Some end at the waist, others have tabs, which either hang down or are crossed and fastened with a band. They are trimmed with lace, silk, grass, *Clair de lune*, or worsted fringe beaded, plain or embroidered galloon.

If you prefer a coat, there is a walking coat with vest which would probably please you. The vest may be made of silk. It is sewed into the shoulder and under-arm seams. The coat itself has coquettish box pockets, button-trimmed, upright laps inserted into the folds of the back, a rolling collar, lapels and *mousquetaire* cuffs. This is an elegant garment. Its edges are all faced to the linings, and there is buckram stiffening in the breasts, cuffs, collar, etc., to the dainty shape. One button may close it upon the breast.

A correspondent wants to know how to make an afghan. Will some of our ladies furnish the desired information?

"BUGS" AGAIN.

Take a teaspoonful of quicksilver and beat it up with the white of an egg—it takes some little time to mix it thoroughly; apply to the bedstead and around the corners of the room, with a hair pencil or a feather; the next day there will be no bed-bugs in the room. I have used it in a log house for the last eight years and have never been troubled with bugs since I commenced using it. E. W. W.

AS YOU GO ALONG.

J. E. M'C.

"That is the first time I ever saw anyone stop in the midst of ironing to mend clothes," said Lucy. "I should not think you would get along very fast if you made a practice of it."

"That is one of my labor-saving plans," said Eunice, briskly pushing her needle back and forth through a drilled-eyed button. "In the first place, I am taking a moment's rest in this cool, sitting-room, which will refresh me, so I can work all the faster when I go to the ironing-table again. Then taking a few stitches now in these articles I have laid over a chair back to be mended, will save handling them all over a second time, and very likely having them piled up in my work-basket a day or two. You see I have everything handy in this little basket, even to a needle threaded with white and another with black thread. If a button is off, it takes but a minute to sew it on anew. If I put the articles away in the drawer, and thus have to go after them and mend them, it will add considerably to the amount of work. It will seem to add still more, for these little arrears of work are always the hardest to bring up. They are like little debts. I manage to do a good deal of work *as I go along*, that does not exactly belong to the work in hand. You may not think it very systematic, but it suits me. My system is to get my work done with as much dispatch as I can, and if it might not suit Mrs. Grundy to see me leave my wash-tub and take a basin of clean suds and wipe off a cupboard door, it does not disturb me at all. The cupboard door is clean, and it gives me pleasure every time I look towards it. That of itself is a rest, and a stimulus to help me on faster with the washing. I need not keep thinking, "there, I must wash that door when I am through with my clothes. There is nothing that succeeds like success, and every fresh success, with the housekeeper, is the foundation of a new one. Because hers is a war against dirt and disorder is no reason why she should not be fairly entitled to her laurels. I should like to have you find any enemy more persistent or more powerful. I think one who comes off victor is entitled to all the honor and glory she can get.

"There, Lucy, see how that pile of mending is reduced, and I am rested, and the irons have come up to a good heat, and I have taught you a good lesson, you will surely admit, so I am ready for work again, and feel that I have saved instead of wasted time."

HAIR-PIN RECEIVER.

LORETTA E. TURNER.

Take a square (about six inches) of silver card-board, and work it in some simple pattern—scarlet zephyr contrasts well with the silver board. Close it to form a cylinder, having first made a foundation of pasteboard, stuffed with sea-grass or some coarse stuff. Work the card-board over and over at the edge with the zephyr, where it is closed and crochet a covering for each, and in close stitch single zephyr. Then take split zephyr, crochet four stitches, turn, and in going back wrap the zephyr around the fore-finger on your left hand six times, slip it off and knit it into your stitch; crochet the four stitches in this way, then turn and crochet back *plain*. Repeat the loops, and continue in this way until you have a ruche long enough to go around one end of the receiver; then bind it off, and make another for the other end. The ruche is to be sewed on to the cover where the crochet ends meet the card-board. Finish with cord and balls. The balls are made quite expeditiously by winding over a silver fork. Then tie between the center tines, with a stout string, slip off, and trim to your satisfaction. A large ball with three tiny ones just below it, is very pretty, when one wishes to be very elaborate.

SOME SWEET-SMELLING TOILET HINTS.

Diamond Tooth Powder.—Precipitated chalk, 3 pounds; Powdered myrrh, 4 ounces; Powdered sugar, 1 pound; Powdered white castile soap, 8 ounces; Oil of wintergreen, sufficient.

Portugal Cologne.—Oil of orange peel, 3 ounces; Oil of lemon, 2 ounces; Oil of bergamot, 1 ounce; Oil of rose, 2 drops; Alcohol, 1 gallon.

Heliotrope Sachet Powder.—Powdered orris root, 1 pound; Vanilla beans, 4 ounces; Benzoin, 1 ounce; Musk, 5 grains; Civet, 15 grains; Oil of rose, 10 drops; Oil of bitter almonds, 10 drops.

Musk Sachet Powder.—Powdered orris root, 2½ pounds; Grain musk, 30 grains; Oil of rose, 30 grains.

White's Eau de Cologne.—Oil of bergamot, 1 ounce; Oil of lemon, 2 ounces; Oil of orange, 2 ounces; Oil of rosemary, 1 ounce. Oil of neroli, 2 drachms; Oil of rose geranium, 4 drachms; Oil of clove, 2 ounces; Extract of musk, 1 ounce; Orange flower water, 1 pint; Alcohol, 1 gallon.

French Lavender Water.—Alcohol, 8 gallons; Oil of lavender, 16 ounces; Oil of bergamot, 8 ounces; Oil of lemon, 4 ounces; Oil of clove, 1 ounce; Oil of rose, 1 ounce; Extract of musk, 8 ounces Extract of ambergris, 2 ounces.

The Norristown Herald insists that no man likes to hold a girl baby in his arms until she is 17 years old.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SUMMER SIFTINGS.

ANNIE L. JACK.

"That in some season, yet to be,
Our cares will leave us time for rest."

So "we all think," but to how many of us will our first rest be in the grave! Each week we think we shall be able to enjoy more leisure when the next comes, and it, in turn, finds us as busy with fruit or pickles to attend to, visitors to entertain, or the inevitable sowing, patching, and darning. Time for rest! Not while Jim and Joe can climb the tallest trees, and tear their garments on the jagged trunks; or, as this year, when weeds grow apace, and must be hoed. But I have enjoyed a pleasant time lately in the society of congenial friends, who came to see *me* and not to criticise or enjoy my hospitality in any other way. So we talked and talked of books and flowers and days that are past, without feeling any of the restraint so often imposed by the presence of visitors. For I hold that if hospitality becomes a burden, it should at once be dispensed with, and nothing is more trying to the feelings than to enter a house where a sudden flutter and lengthened preparation tell the new-comer of the changes that are occasioned in the domestic department by his or her arrival. "A dinner of herbs" quietly and without a "fuss," is better than the "stalled ox" that is got up with great ostentation, or a table set with unusual splendor that finds the household uncomfortable and ill at ease. So we prefer the quiet, plain, method, and can now look back upon a few days of real enjoyment. What if we did simplify our meals, and make fruit take the place of pie? It saved our strength and time, and was quite as palatable. And I wonder if the readers of the RURAL know how pleasant is a little pic-nic, unpremeditated, in the woods or orchard. How sweet the food—how hungry the guests at such a time, and how happy and gay the freedom from restraint renders one! The pleasing remembrance of such days remains long and deep in the hearts of guest and hostess, and puts them both at ease and capable of enjoyment while under its influence. For life is made up of little things that fret and worry or please us and rest the heart.

DOMESTIC RECIPES.

Yeast.

I have found the following to be an excellent yeast: Grate five raw potatoes and add one pint of boiling hop-water; let scald ten minutes, then when cool add a tablespoonful of brown sugar; one tablespoonful of vinegar; one tablespoonful of salt and a teacupful of yeast or one yeast-cake. Put into a stone jar and keep where it is cool, MRS. D. SNEDEKER.

Long Island.

Snow-Cake.

Whites of ten eggs beaten very light; one and one-half tumblerful of sugar; one tumblerful of flour; one small teaspoonful of cream-of-tartar; sift the flour, sugar and cream-of-tartar together and stir gradually to the beaten eggs. Bake in a round papered pan for twenty-five minutes in a slow oven. Ten minutes after baking, frost with the white of one egg, three spoonfuls of sugar and cover with grated cocoa-nut.

Willow St., Brooklyn. MRS. W. SPELMAN.

Chow-Chow.

One peck of green tomatoes chopped fine; sprinkle one cup of salt over them and let stand over night; in the morning drain in a colander, add eight green peppers chopped fine, one cup of white sugar, cover with vinegar and boil twenty minutes. Chop fine six large onions; two bunches—the white part—of celery, with three or four red peppers. Add to the other ingredients, when cool, with a cup of mixed mustard, whatever spice you like and a pint of grated horse-radish. Put into a stone jar, cover with cold vinegar and tie down tightly.

Woodsburg. MRS. BEEKMAN.

QUERIES ANSWERED.

Parker-House Rolls.

WILL you kindly give me a recipe for the celebrated Parker-house rolls? E. L.

ANS.—To one pint of boiled milk, which has been allowed to get almost cold, add two teaspoonfuls of white sugar, one-half cup of lively home-made yeast, or a quarter of a cake of compressed yeast dissolved in two teaspoonfuls of warm water. Stir in sifted flour to make a stiff batter; cover warmly and let rise; then when light, mix in one beaten egg, a tablespoonful of sugar, one tablespoonful each of soft butter and lard, a little salt and flour to make a dough which will not stick to the hands; knead well for one-half hour, if you have the patience, return to the pan, cover tightly and let rise again; flour the board and turn the dough onto it; roll out one inch thick, using as little flour as possible, and cut with a cake or biscuit cutter; put a little melted butter on one-half and lap nearly over on the other half; place in order in the pan, about three-quarters of an inch apart; again let rise until very light and bake in a quick oven. The rolls may be rubbed with a little beaten egg and milk just before baking if one so fancies, or a little powdered sugar and cinnamon may be dusted over as they are taken from the oven.

Rubber Rings.

Can rubber rings belonging to the self-sealing jars, which have become so hardened that they are useless, be replaced? DOMESTIC.

ANS.—Yes. If the dealer who furnished you with the cans does not keep them, have him order them, or write for them yourself direct to the manufacturer's.

Lemons.

Can lemons be kept fresh for any length of time so that they may be used for pies, lemonado, etc.? HOUSEWIFE.

ANS.—They may be, by covering with cold water and changing the water every second day.

Curry Powder.

So many dishes now-a-days are seasoned with curry powder, a seasoning of which I know nothing, I should be pleased if you would furnish me with a recipe. MRS. H. C.

ANS.—Two ounces of coriander seed; three-quarters of an ounce of cardamon seed; two ounces of cumin seed; three-quarters of an ounce of caraway seed; three-quarters of an ounce of Cayenne pepper; half of an ounce of black pepper; half of an ounce of fenugreek seed; one-fourth ounce of cinnamon; one-fourth ounce of mace; half of an ounce of cloves; and ten ounces of turmeric. Each of the above should be powdered fine and set before the fire to dry, then sift, put in glass bottles and cork tightly. One small teaspoonful of the above is sufficient to season anything for most persons. It gives a very nice flavor to boiled meats, gravies and stews.

Infants' Powder.

Please give directions for a harmless powder? MOTHER.

ANS.—Perfumed corn-starch we have found to make a most excellent powder. It is as little injurious as any cosmetic can be, is inexpensive and answers every purpose for which it is intended. To prepare: Take any suitable paper box and cover the bottom to the depth of one-half inch with corn-starch; over this place a piece of writing paper saturated with any extract—we use patchouly—and cover with starch to the depth of an inch. Repeat until you have in a sufficient quantity of the corn-starch; cover tightly and tie up in paper for a few days.

Tablecloths and Napkins.

Should tablecloths and napkins be starched? M. S.

ANS.—There is a softness and elegance about the unstarched cloth while the starched one is stiff and unyielding. As for napkins, the purpose for which they are to be used ought to determine whether they should be soft and pliable or stiff as a shingle.

News of the Week.

POLITICAL.

Monday, Aug. 12, 1878.

A congressional committee of three, with Mr. Hewitt at its head, has been in session during the week in this city to obtain from representative working men a statement of their views as to the cause of the present lack of employment through the country and also as to the best remedies therefor. Before them have appeared a large number of men belonging to various avocations and to different labor, socialistic, communistic and other associations the names even of which have been for the most part unknown to the general public. The opinions delivered were generally crude and often so extreme that to carry them out would completely revolutionize society. The general drift of them was that the depression is mainly due to the accumulation of capital in the hands of the wealthy, to the grasping greed of these, and the high rate of interest they charge as well as to the unfair advantage given them by the invention of labor-saving machinery, and perhaps more than all, to the scarcity of currency caused by contraction and the "insane" attempt at resumption.

Among the various remedies suggested or insisted upon were: that government should become the employer of all labor, pooling the profits and meting these out according to the wants of each family; that government should give a free homestead to each idle man and loan him say $5000 to work the farm, the same to be secured by mortgage and payable in a stipulated time; that government should issue all the way from ten to forty thousand millions in greenbacks, so that every one might have a pocketful and that these should be legal tender for all debts; that the government should at once do something; that it should start a vast series of works of internal improvement to cost at least $10,000,000,000; that the circulation should be increased to $58 per head; that all labor should be co-operative; that all employed in all offices under government or elsewhere, from the president to the street-sweeper, should receive the same pay; that taxation should be graduated, so that the accumulation of capital would be impossible; that more than six per cent interest should never be allowed; that all interest whatever should be absolutely prohibited; that eight hours should be a day's work; that six hours should be a day's work; that inventors of patents should be rewarded by the government and their devices declared public property; that church property should be taxed; that the religion of humanity should be made to supersede all others, and a multitude of similar panaceas.

Kearney, the California agitator, has been spouting wildly on Boston Common and elsewhere about the "Hub," and has formed a coalition with Ben. Butler with a view to the election of the latter next fall to the governorship of Massachusetts on the labor-greenback ticket. Butler, too, has been delivering his opinions up at Biddeford, Maine; and, unlike the California Irishman, he always has opinions which, if not correct, are nevertheless worth listening to. He left the Democratic and Republican parties because the former wished to destroy the nation, and the latter, founded to vindicate the rights of the lowest class of laborers, is now held bound hand and foot by capitalists. Ben talks interlainingly always, and often instructively; whereas his new ally merely pours forth a torrent of threats against capitalists and organized society, larded with a copious flood of billingsgate. He wishes all workingmen, whatever their religion, nationality or political affinity, "to pool" their issues until victory has been achieved. This is the dull season for news—Congress not in session, no elections, no interesting foreign developments—and accordingly the press generally is giving much more space to this foul-mouthed demagogue than would be accorded him at any other season.

Manton Marble, late editor of the N. Y. World, has, in a circular letter, given an inside history of Mr. Tilden's attitude towards the Electoral Commission which gave the presidency to his rival. He was always steadily opposed to the appointment of this court, insisting that it was unconstitutional, that the House of Representatives had a right to take part in counting the vote for president, and that the final decision of the question rested with that body. These opinions he had from the outset made known to the democratic leaders, and he was prepared to take all legitimate means to carry them into practice. It has been repeatedly said that the democrats lost the presidency through Tilden's timidity, uncertainty and vacillation; and this brochure is designed to remove this error and so strengthen Tilden's chances for a renomination as the democratic candidate in 1880.

The republican State Convention of Maine met on Tuesday at Portland, and renominated Governor Connor by acclamation. Resolutions of the usual republican import were passed and the administration utterly ignored. Blaine was the guiding spirit of the assembly—and Blaine is not a warm admirer of Hayes or his cabinet. By the way, the President has been interviewed with regard to the members of this, and expresses himself thoroughly satisfied with every one of them, and hopes they will all remain with him till the end of his term. A new Bureau has been established in the Interior Department for the purpose of crediting the accounts of the forty-four railroad companies in which the government is interested on account of the aid in the shape of land grants, indorsement of bonds, etc, given in building them. The election returns from North Carolina show slight republican gains and a strong independent movement, so that it is thought the republicans and independents combined can elect Merrimon senator against Vance, the Bourbon candidate. From the strong democratic press of the South there are numerous complaints of the treachery, villainy, and general terpitude of the independent voters, who seem likely to become the recipients of not a few of the compliments formerly reserved for the republicans.

The story that Editor Watterson of the Louisville Courier-Journal wants to be secretary of the United States Senate, which he has just denied, seems to have grown out of the fact that his father, Harvey Watterson, a congressman a generation ago, is a candidate for the place.

The clergyman is getting into politics a good deal out West this year. Rev. Gilbert de La Matyr was recently nominated for Congress by the nationals of the Indianapolis district, and now Rev. George Pepper has been taken by those of the 15th Ohio, both ministers having won the hearts of the new party by sermons they have preached on labor themes, Pepper having declared during the railroad strike last summer, that if any corner in hell was hotter than another, Tom Scott and other railroad magnates ought to be put there. Up in the 4th Michigan district the democrats have also fallen back on the clerical profession for a candidate, nominating Rev. A. D. Eldred, a leading Methodist minister. There is little prospect, however, that any one of the three will be called upon to serve the country.

MISCELLANEOUS.

Commissioner Baum, of the Interior Department, has written to the Southern collectors of internal revenue, virtually offering amnesty for past offenses to illicit distillers, if they will cease violating the law. From 60 to 80 "moonshiners" have surrendered in accordance with this agreement. The point of the entering wedge for Southern claims has just been driven in by a provision of the Sundry Civil Service Bill, allowing $10,000 to the Richmond and Danville Railroad on an old bill, whose payment, on account of its illegality, had twice been refused by the Department. Bankers, pretty nearly everywhere, are complaining of a glut of silver money which they cannot get into circulation, as greenbacks are more convenient, cheaper of transportation, and actually worth more in the money markets.

Another Boston defaulter! Conant is the name this one has disgraced by heavily swindling a bank of which he was the cashier. This illustration of the truth of some of Kearney's denunciation of dishonest capitalists, is now exciting the sympathy of the mawkish, behind prison bars. The Governor of Ohio is a bankrupt. He was the head of the firm of Bishop & Co., the largest grocery house in Cincinnati, doing a trade of over $3,000,000 a year. Shrinkage of real estate, and bad debts chiefly caused the ruin—liabilities $360,000, and its very unlikely creditors will get more than 40 cents on the dollar. The Pacific Railroads have issued a circular threatening to eject persons who attempt to preempt land under the "so-called decision" of Sec. Schurz. Most likely a test case will soon be made up for a judicial decision on the matter.

By the laws of Virginia, to prevent miscegenation, should a white person marry a colored one, both are liable to two years in the penitentiary, and the minister or official who dares to tie the knot, is liable to be fined $200 for the indiscretion. The enforcement of this law is now making three people miserable in Alexandria, Va. Six hundred journeymen shoemakers are on a strike in Chicago. They demand $12 instead of $9 a week; refuse to compromise on $10.50, and the "bosses" say they will get their work done cheaper in the East. St. Louis has 26 mills, with a capacity of 12,000 barrels a day; and a third more flour is produced there this year than last. In the past six months the receipts of wheat have been 4,832,693 bushels against 2,610,811 bushels the same time last year; and already the sanguine citizens dream of beating Chicago, and becoming the flour and grain market of the world. Well, perhaps their dreams may turn out true, after they have had about a score of first-class funerals. Twenty thousand cabin passengers have left this port for Europe this summer—the largest number on record during any single season. How about hard times!

Rarus, the new King of the trotting track, failed at Rochester to make his Buffalo time, the best he could do being 2.17. During the week there have been several violent storms or tornadoes in different parts of the country, the most destructive of which occurred at Wallingford, Conn., on Friday last. The path of the hurricane was about a quarter of a mile broad; it swept in full force only over a length of about three miles, and it lasted less than ten minutes. Its track was chiefly along the outskirts of the town, where there were a large number of ricketty frame houses, the homes of mechanics and poor people. These it leveled as it passed, crushing many of the inhabitants beneath the ruins, or slaying them with the beams and timbers it bore along in its course. Twenty-eight deaths have already occurred, and as a great number are more or less severely wounded, there will probably be more fatal cases. The pecuniary damage cannot be less than $250,000. Out at Lincoln, New Mexico, postmaster Dolan refused to surrender the office to McSween. The latter attacked the place at the head of 61 backers, and after firing at long range for four days, set the office on fire, and in a hand to hand struggle killed Dolan and eight of his men. A number of others were wounded on both sides. Four companies of soldiers were only nine miles away, but owing to the late law prohibiting their interference as a posse comitatus, they could not be used to quell the disturbance.

The ambassador who lately arrived from China, is at present at Hartford, Conn., and will not go to Washington until September. There he will be installed in the "Stewart Palace," and make a grand show. It is expected that, while commercial relations will be improved, the treaty stipulation in regard to immigration will be amended with the consent of the Celestials, who want to keep all of their 450,000,000 at home. There has been an over-issue of $100,000 on a Pennsylvania State loan for $400,000, made in 1853. Some rascal in office has pocketed the proceeds, and now the books relating to the matter are missing. The loan was payable this year, the legitimate amount of it has already been paid; and the above amount is still outstanding. There is no means of discriminating between the over-issue and the other bonds, but no more will be paid until the legislature acts. There were political thieves in the days of old, also!

The railroad men in session at Long Branch last week fixed the rates of freight for cattle from western points to the sea-board on the basis of 60 cents per cwt from Chicago to New York; 13 trunk and western lines represented.

FOREIGN.

The Austrians are meeting with a good deal of opposition in occupying Bosnia and Herzegovina. It is reported that there are in the field against them more than 100,000 well armed Bosnians, Arnauts, Albanians and disbanded Turkish troops. The country is very hilly, and the insurgents have fortified all the passes and strategic points along the roads. Several severe skirmishes have already taken place, the latest reported on Friday last, when 500 Bosnians were killed and 700 taken prisoners. This morning's telegrams announce that Turkey and Austria have come to an agreement with regard to the duration of the latter's occupation of the country and that the Sultan has notified the combatants accordingly that the Austrians enter the country as friends and that all resistance to them will be useless. To insure this, they are pouring forward reinforcements. The Porte is disposed to make liberal concessions to Crete; but is resolved to refuse the Grecian demands as unjustifiable.

An explosion occurred on the 2nd inst. in the fortification of Kars causing a fire which destroyed nearly the whole town. The inhabitants of Batoum, ceded to Russia, are resolved to resist and together with the neighboring semi-savage tribes have taken up arms to the number of 35,000 men. The Russians are reported to be still busily fortifying positions along the Black Sea and they do not believe the war yet ended.

It is Cardinal Nina that succeeds Cardinal Franchi as papal Secretary of State, not Luca, as the telegram said last week. He is reported of a liberal turn of mind, and is continuing the negotiations with Bismark. It is said that peace has been agreed upon between the Empire and the Vatican, on condition of free pardon to all orders of clergy for past offenses against the Falk laws; these laws are to continue on the statute books

however, but not to be enforced, just as in England the laws against the Roman Catholic hierarchy, passed in 1850, are still in existence, but have never been put into operation. By the way Falk, the author of these laws and one of the ministry failed to secure an election lately as did Bismarck's son, Count Herbert, and even the great Von Moltke.

The elections in Germany have been held, and the returns show the following resuls as regards the great parties: 93 Conservatives, 110 of the various Liberal parties and 96 Ultramontanes. Sixty-six second ballots will be necessary

The Liverpool Chamber of Commerce presented an address on Wednesday to General Fairchild on the occasion of his quitting the American Consulate. Mr. W. B. Forwood, president of the Chamber, prefaced the address with a few complimentary remarks. General Fairchild returned thanks. Mlle. Albani, prima donna, and Mr. Ernest Gye were married in Warwick Street Chapel, London, on the 6th. The American Free Masons visiting England were entertained at a banquet on Wednesday night by the Grand Lodge at Free Masons' Hall, London. The English army supplementary estimate for additional expenditures in consequence of the war between Turkey and Russia has been issued. It amounts to £1,545,500. The French government at the request of the United States, has formally invited the foreign powers to the international monetary congress which began in Paris on Saturday. The Mark Lane Express reports that English wheat-cutting has commenced a week earlier this season than last year, thanks to the weather. In spite of complaints or blight and defective ears, advices in the main are satisfactory, and, unless there should be an unexpected deficiency, the crop will be a fair average one.

France has bestowed the cross of the legion of honor on the German Prince Hohenlohe and Count von Bulow as a recognition of their kindness to France at the Berlin congress. It is also rumored that Marshal MacMahon declined attending the English concerts at the Trocadero, saying "No, that coquin, Disraeli, has cheated me." The first political mass-meeting ever held in Cuba took place at Havana, Saturday week. It was held by the liberal party, with the object of arranging a political programme for the November elections, when deputies to the Spanish Cortes will be chosen. Ricardo Galbis, government secretary, presided. Two programmes were submitted, and the meeting adjourned until the 10th, when a vote would be taken on them. The greatest order prevailed. Kossuth has published a sensational letter, bitterly attacking the occupation of Bosnia, and accusing the Austrian government of sacrificing the interests of Hungary. Garibaldi, too, is out with a proclamation that slaves have always a right to rebel, and urging the inhabitants of Trieste to take up arms and take to the mountains.

HERMAN.

VARIOUS.

Turkeys are natives of America, and were consequently unknown to the ancients. They were first brought to England about 1523, and to France about 1570.

Prince Bismarck signed the treaty of Berlin with an eagle's quill, ornamented with a silver figure of an Angel of Peace, which was presented to him for the purpose.

An influx of Mennonites is anticipated between this and 1880, in which year their exemption from military service will end in Russia, where they number 200,000.

In 1876, wolves in the Russian province of Samara, devoured 5,880 horses and horned cattle, 56,000 small cattle, 22,000 domestic fowls, and more than 1,000 dogs. In 1877 their ravages were even greater, and the loss in the two years is estimated at $600,000.

Two years ago Wisconsin offered a prize of $10,000 for a motor that would prove in all respects a desirable substitue for draught cattle on roads and for ordinary agricultural work. Three commissioners have just reported against a steam motor that answered all the requirements except that it was more expensive to run than a pair of horses.

Kearney's expenses on his oratorical tour in the East are not paid by him. He is not a bloated capitalist, though the owner of several trucks. Shortly before his departure from San Francisco a concert was given for his benefit that was, in point of attendance and peculiarity, one of the most successful ever witnessed in that city. The amount netted was sufficient to pay all the cost of a three months' trip to the East, and will leave something over.

When Patti sings in Berlin in the fall, it will not be in the Royal Opera House. The Emperor declined to permit her to appear there, solely on account of the enormous price—$2,500 per night—demanded by her for the services of herself and Nicolini. That would make it necessary to fix the cost of a seat in the parquet at $5 or more—a thing the Emperor would not hear of in these hard times. Nevertheless, Berlin must have Patti, and she is to sing on another stage at her own price.

The island of Cyprus at one time contained nine different kingdoms, and more than a million inhabitants. Owing to the alleged peculiar temperament of its people, it was called "the home of love and beauty."

Everybody who has been at Brussels has visited its beautiful Botanical gardens. They are principally the result of the labors of M. du Mosher, who died last month. He was a minister of State as well as the first botanist in Belgium.

The loss of the German ironclad Grosser Kurfurst has had a disastrous effect upon the fisheries at Folkstone. Many of the bodies picked up have been found to be sadly mutilated by the fish, and so the inhabitants generally have declined to take part in "eating the Germans," as they put it.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Aug. 10, 1878

BEANS AND PEAS.—There is only a light business in medlums or marrows, and with some holders forcing stock on the market prices are weak; quoted extremes are rarely obtained. White kidney and pea beans have no regular call; Red Kidney scarce and held at a fancy price for very choice. Green peas with a better supply on a shade off, $1.20@1.25. Southern B. E. peas, new crop, will appear in about ten days: old nominal. Canadian field peas in bulk and bond quiet at 76½@77c.

Receipts of beans past week, 5,389 bush.

Exports past week, 600 bbls, beans and only 38 bush. peas.

We quote medium beans, prime, $1 52½@1 55; fair to good, $1 35@1 50; marrows, prime, free on board ship, fair to good, $1 55@1 57½; Pea, $1 35@1 50; white $1 60@$1 62½; kidney, $1 35@1 50; red do., $3 25@3 50; black $2 35@2 40; Lima, $3 75@4 25.

BEESWAX.—There is a very meager business but prices steady: Western and Southern quoted 27@28c.

Exports past week, 458 lbs. Since Jan. 1st 41,425 do. Same time last year, 29,587.

BROOM CORN.—There is very little doing and prices unsettled. Quotations are: 6@6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

BUTTER.—Receipts for the week 32,661 pkgs.; do. last week, 35,316 do. Exports past week, 12,909 pkgs. State butter has advanced with scarcity of fine qualities, but the market is not steadily brisk with the new figures. The Southern demand, which calls mainly for firkins, is light. Yellow fever at New Orleans checking some business. Western creamery has ruled dull most of the week, and for wholesale parcels has been quoted two or three cents under State; at the close, however, with hardly enough fine State to go around, better figures are quotable. Shippers are moderating their purchases: native stock abroad is going into the British markets and operators here will hold up a while to see how American will turn. Besides there is a prospect of Canada sending her surplus, and if the amount proves large our recent rate of exports added would be apt to swamp the market on the other side. The total for the week is large, but we think does not include much late buying. Western dairy and a few marks of factory sell steadily to the under trade, while some fancy marks of Ohio and other points exceed the extreme.

State creamery, choice, 23@24c.; other, 20@22c.; half tubs and pails, choice, 20@21c.; other, 13@17c.; Welsh tubs, best, 17@18c.; other, 12@14c.; poor State, 9@11c.; State firkins, 17@20c.; Western creamery, choice, 22@25c.; other, 18@20c.; Western dairy, best, 13@14c.; other, 9@12c.; factory (ladle packed), 9½@10c.; other, 6½@8c.; milled Western, 5½@8c.; old and grease, 3@5c.

Comparative receipts and exports past three years.

	Receipts, pkgs.	Exports firkins.
June 1st, '78 to August 1st, '78.....	219,650	60,802
June 1st, '77 to August 1st, '77.....	241,075	44,685
June 1st, '76 to August 1st, '76.....	205,780	11,159

CHEESE.—Much more moderate. Receipts this week and the supplies in better condition, have tended to a slight advance. The fancy factories have been pretty closely picked out. The exports for the week were 47,300 boxes.

Latest sales are tuney, 7¾@8c.; 6¼@7¾c. for good and prime; 6@6½c. for fair; 4@5¼c. for half skimmed; 2@3½c. for skimmed. State, farm dairy at 6@6¾c. for good to choice, 5@6c. for fair to good and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¼@7¾c.; do. good to prime, 6@6¾c.; do fair, to good 5¾@6c.; Western factory, fine, full cream, cheddar, 6¾@6¾c.; do. fine, full cream, flat, 6¾@6¾c; do. slightly skimmed, flat, 5¾@6¼c.; do. half skimmed, 4@5c.; do. full skimmed, 2@3c.

Gold closes at 100⅛.

Liverpool cable quotation, 43s.

Exports, past week 80,500 boxes.

COMPARATIVE RECEIPTS AND EXPORTS FOR THE LAST THREE YEARS.

	Receipts, pkgs.	Exports. lbs.
June 1, '78 to Aug. 1, '78.....	1,061,802	49,202,716
June 1, '77 to Aug. 1, '77.....	812,252	39,934,798
June 1, '76 to Aug. 1, '76.....	659,613	30,138,462

COTTON.—There has been a variable market, but on the whole a gain has been made, with a liberal business. Latest quotations are for August, 11.88c.; for September, 11.56c.; for October, 11.32c.; for November, 11.14c.; for December, 11.11@11.12c.. for January, 11.12@11.14c.; for February, 11 17@11.18c.; for March, 11.24@11.26c.; for April, 11.32@11.33c.; for May, 11.40, and June, 11.46@11.48.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary.....	10¼	10¼	10⅜	10⅜
Strict ordinary.....	10⅜	10⅜	10⅜	10⅜
Good ordinary.....	11⅜	11⅜	11⅜	11⅜
Strict good do	11 7-16	11 7-16	11 11-16	11 11-16
Low middling.....	11 11-16	11 11-16	11 15-16	11 15-16
Strict low middling....	11⅞	11⅞	12⅛	12⅛
Middling	12	12	12¼	12¼
Good middling.....	12 3-16	12 3-16	12 7-16	12 7-16
Strict good middling...	12⅝	12⅝	12¾	13⅛
Middling fair.....	13	13	13⅛	13⅛
Fair.....	13⅜	13⅜	13⅜	13⅜

Stained.

Good ordinary.....10¼; Strict good ordinary.... 10⅜

Low middling..... 11⅛; Middling..... 11⅜

DRIED FRUITS.—There is a meagre showing of business; blackberries have declined, being more plenty; small lots of new apples have sold at 3¼; otherwise there are no important features.

New blackberries, are quoted at 6¼c. Peaches—Georgia peeled, 4@5c.; do. new, 4@5c. for poor to prime; unpeeled old halves, 3½@4c.; quarters, 3@3½c. Pitted cherries, 14c.; New York State plums, 12c.; southern plums, nominal. Apples—State quarters, 3½@4c.; do. sliced, prime, 4½c.; good, 3½@4c.; western quarters, 2@3c.; southern at 4@4½c. for prime sliced; 3@3½c. for fair to good; southern quarters, 2@3c.; Tennessee quarters, in bags, at 1½@2c. New raspberries, 22@22½c., and evaporated, 24@25c.

Exports past week, 209 pkgs. apples. Since Jan. 1st, 10,535 do. Same time last year, 28,485 do.

EGGS.—Receipts for the week, 4,618 bbls.; do. last 6,002 do. The market is in a decidedly better shape after running a long and unprofitable term. Western and Canadian have again obtained a place in regular sales, though State and the other near points have a quick sale. N. J., L. I. and up river 15@16c.; State and Penn. 14@15c.; Western and Canadian fresh 13½@14c.; poor stock 12@13c.

FRESH FRUITS.—It is quite a struggle for New York to get a fair share of the light crop of peaches! Philadelphia being so important a buyer this season. Prices are likely to rule high the whole season. Fine qualities, probably better than for several years are in market. The principle varieties are now Crawfords and Yorks. A few N. C. quoted $2@3 crate; Del. crates, $1.75@2.25; baskets, $1.25@1.75; extras, $2. N. J. prematures, 50@87c. Apples are a drug; a single bbl. must be very fancy to make $2; Nyack pippins, $1.25@1.50; Orange do., 75c.@$1.25. Roughs, $1.25@1.50. Southern Bartlett pears, prime crate, $3@3 50; poor, $1.50@2; Dutchess, $2.75@4.00. California pears out. Clapp's Favorite, bol., $6; Bell, $3.50@4; Bloodgood, $1@; Catherine, $4; Scooter, $3; Jargonelle, $3@3.50, cooking, $2@3. Plums, egg and gages, bbl., $6; blue, $1.50@1.75 crate. Grapes, N. C., Delaware, 10@12c. lb.; Ives. Seedling, 5@8c.; Hartford and Concord, 6@8c. Whortleberries, $2@2.50 bush. Last sales of blackberries, 3@4c. pint. Watermelons, prime, $22@25 per 100; others, $5@15. Muskmelons, $2,50@3.50 N. J.; $2@3 Southern. Cal. plums, $2@3 50 box. White grapes, 6@7 case of 40 lbs. Hothouse grapes, black Hamburg and muskat 75c.@$1.00 lb. Sweet water 50c. Peanuts dull, holders ready to accept inside rates. Va. hand-picked, $1.45@1.50 bush.; other $1.25@1.35. Pecans quotable next week.

FEED.—Sales of 40 lbs., av. at $14@14.50; 60 lbs., $14@15; 80 lbs., $14.50@15.50; 100 lbs., $16.50@$18.

FLOUR.—The tendency has been a little higher, on active trade demand, and in sympathy as well with the rise in wheat.

Latest prices are $3.35@4.00 for very inferior to fancy superfine State; $4.00@4.20 for poor to good extra do. odd lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@5.90 (fancy brands at higher prices); Minnesota "straight," very inferior to very fancy, at $5.25@7.25, and patent poor to strictly fancy at $5.50@8.75; unsound stock at from $2.00@5.25; city mill extra at $5 15@5.75 for West Indies (the latter rate for fancy in new packages); do. for England, 4.15@$4.20; do. trade and family extras, $5.75@6.75; do. for South America, $5.25@5.85 for fair to fancy; No. 2 $3.25@3.25 for inferior to very fancy.

CORN MEAL.—Is selling at $2.80@2.95 for Brandywine, and $2.15@2.40 for Western yellow.

GRAIN.—Wheat has been active at a decided advance; a good fair business in progress for exporters.

Sales are of No. 2 red at $1 09@$1 11; do., August option, at $1.10⅝@1.11⅜; do., deliveries in August, at $1.10⅝@1.11; do. September options, at $1.10⅛@1.11; do., October option, at $1.10⅜@1.11; No. 2 red steamer grade, spot in lots, at $1.08⅝@1.18⅝; ungraded white at $1.10@1.21; ungraded amber at $1.06@1.13; ungraded red at $1.03@1.05; No. 1 red, at $1 11@1 11⅛; do., steamer grade at $1 09⅜; No. 2 amber at $1 09¾@1.11; do., steamer grade, at $1.06@1.08⅜; No. 1 amber at $1.13@1 13⅜; white State, steamer grade, at $1 13@1 20; No. 1 white at $1 21@1 23; No. 2 white at $1 15@1 16⅜; No. 3 white at $1 11@1 11; New York No. 2 spring, September option, at $1 07⅝@1 08, Rye at 61@63c. for western, and 63@63c. for State. Corn is active; quoted for No. 2, August option, at 49c.; No. 2, September option, at 48⅝@12¾c.; do., October option, at 51c.; steamer mixed, August option, at 48c.; do., September option, at 49c.; do., October option at 50c.; steamer mixed at 47¾@48c.; New York No. 2 at 49@49½c.; chiefly at 49¼c.; New York No. 3 at 46½@46¾c.; and ungraded mixed at 45@49c. Oats have ruled lower, but closed strong; latest sales are of New York No. 2 white at @ 33½@33¾c.; New York No. 3 white at 31@31½c.; New York No. 1 at 33@33½c.; New York No. 2 at 32½c.; New York No. 1 white at 36@36½c.; New York rejected at 30c.; New York No. 2, August delivery, at 31c.; white western at 32@37½c.; mixed western at 30½@33½c.; white State at 33@35c.; mixed State at 31½@34c.; New York extra quoted at 34½c.; New York No. 3 at 30½@31c.

HAY AND STRAW.—New hay is in larger supply and easy in price. Old hay is taken promptly at steady figures.

New hay is selling at 45@75c., old bale hay, 44@50c. for shipping and 65@80c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@45c.; for short rye, and 20c. for oat.

Exports past week 445 bales. Since Jan. 1st, 41,425 do.; same time last year, 29,575 do.

HIGH WINES sell at $1.06½ regular.

HOPS.—The position of the market is essentially as last week. Trade is entirely from brewers, and prices unchanged.

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@ 3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—Sales at 19½@20c. for light hemlock; 19½@21½c. for middle; 20@21½c. for heavy and 17½@19c. for good damaged.

OIL-CAKE.—Is scarce and held firm at $30 per ton.

SALT.—Sales at $1@1.15 for sack lots other than Ashton's, which latter brings $2.50

POULTRY AND GAME.—Live poultry has ruled dull and easy in price: Chickens particularly so. The outlook is better as the Jewish trade is larger and Havana orders are likely to be filled. We quote: Chickens, N. J. 13@14c.; State and Penn., 12c@13.; Western and Southern 11@12c. Fowls—N. J. 12@13c; State and Penn., 11@12c.; S. & W., 11@11½c.; Roosters, 5@6c. Turkeys, choice, 12@14c.; poor, 10c.; Ducks—Western, 45@60; Southern, 40@55c.; N. J. Spring, 50c.@$1; N. J. Geese, $1.25@1.50; S. & W. 1@1.25.

The weather has been hot and muggy and dressed has shown up badly; prices are weak. Turkeys, dry picked, 14@16c.; other, 13@15c. Fine N. J. Chickens, Phila. dry picked, 14@16c; N. J. 13@14c.; State, 12@13c.; Western, 11@12c. Phila. fowls, 13@14c.; N. J., 12@13c.; State and Western, 10@12. Young Ducks, N. J., 12@14 for prime.

The supply of such few items of game as are current, is very small, and following rates could be readily obtained: Eng. snipe, $1 25@1 50 doz.; Woodcock, pairs, 75@85c. Stall-fed pigeons, grown, $1 25@$1.37 doz.; Young, $1@1.12. Tame squab, $1.50@1.62.

PROVISIONS.—The tendency has been upward with a brisk trading. Mess pork quoted $10 75@11,25 for spot lots; $10 75@$10 80 for August and September; $10 85@10 90 for October; Bacon at 6¼c. for long clear. Lard—at $7 80@7 82½ for spot lots; $7 82½ for September; $7 85 for October, $7 67½@7 70 for the year option. Stearine at 9@9½ for choice city, and 8¾@9 for western. Tallow at 6 15-16 for prime. Beef hams at $21 50. Beef—for extra mess, $11 75@$13; plain mess, $10@11 50; packet, $11 25@12 for bbls. and $16@17 for lcs.; family at $13@14; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

TOBACCO.—The receipts have fallen off, and the export and home trade movement continue of a very fair description, with prices steady.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs.....	2¾@ 3¾	3 @ 3½
Good lugs.....	3¾@ 4¼	3¾@ 4½
Low leaf.....	4¾@ 5	5 @ 6
Medium leaf.....	5¾@ 6¼	6¾@ 7
Good leaf	6¼@ 8	8 @ 9
Fine leaf.....	8½@10	10 @12
Selections	— @—	— @—

SEEDLEAF—CROP OF 1877.

New England, fine, and selections.....	18 @35
seconds.....	10 @12
Fillers.....	5 @ 7
Pennsylvania assorted lots, common.....	8 @ 9
fair.....	10 @12
fine.....	14 @17
fillers.....	5½@ 6
Ohio assorted lots.....	6½@ 8

VEGETABLES.—Exports potatoes past week, 3,160 bbls. Potatoes are in larger supply and prices are firmer; general quality not good; trade fair, with the help of exportation: N. J. and L. I., E. Rose, $1.25@1.50 per bbl.; Culls, 50@75c. Sweet potatoes, Va., yellow, $3.50@4; red, $2.50@3. Tomatoes have declined to 30c. for 3 peck package. Sweet corn, per 100, $1@1.25. Lima beans, bag, $2 50@3; string beans, 50@75c Cucumbers, 100, 25@50c. per 100. Onions, Chester red, $1 25@1.50 bbl.; yellow, $1.5'. Southern, $1@1 25. Marrow squash, $1.75@2.; crook-neck, $1.25@1.50; white, $1@1.5 . Bull-nose peppers, $2.50 Beets, per 100 bun., $1@1.25; carrots do., $1@1 25. Egg plants, 100, 6@9c. lower. Lettuce, bbl., 50@62c. Cabbages, Flat Dutch, $4@5; red, 5@6 Okra, per 100, 10@15c.

WOOL.—There has been more cautious tending this week; manufacturers buy wholly as against actual needs. Prices generally rule firm and as quoted last week.

Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@43c.; XX, 37@39; X, 37@38; No. 1, 37@39c.; No. 2, 34@37c; common, 31@34c.; combing and De Laine, 42@45c.

New York, Michigan, Indiana and Wisconsin. XX, 34@37c.; X, 34@37c.; No. 1, 36@38c.; No. 2, 31@33c. common, 28@31c.; combing and De Laine, 39@42c.

Iowa, Vermont and Illinois—X and XX 33@36c.; No. 1, 34@36c.; No. 2, 29@32c.; combing, 37@40c.

Missouri, Kentucky, and Tennessee—Washed fleece, 30@35c.; unwashed, 24@28c.; unwashed combing, 29@32c.

LIVE STOCK MARKETS

Saturday, Aug. 10, 1878.

BEEVES.—Receipts for the week, 11,115 head; do., last give some encouragement, but it was not kept up, last week, 12,825 do. A spurt in prices on Wednesday except for first-class cattle. Texas and grass fed stock were very weak at the close. The top price of the week is 10c.; the range, Texas, 6@6¾c.; Colorado, 7@8¾c.; Natives, 7½@10c. Some of the later shipments lost $50@80 per car-load for owners.

COWS AND CALVES.—No change of importance.

VEAL CALVES.—Prices low, and stock has been well cleared up at 5@7c., the extreme paid for fine State and N. J. Buttermilk and grassers, 2½@3½c.

SHEEP AND LAMBS.—Receipts for the week, 24,509 head; do. last week, 28,212 do. Trade is slow in live; retail market trade dull. Poor to prime sheep 3¼@4¾c.; do. lambs, 4@6c.

SWINE.—Receipts for the week, 20,637 head; do. last week, 18,500. No live on sale; stock going direct to packers. Nominal N. Y. rate, $4.60@4.70 per 100.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

Single Copy, per Year	$2 50
" " Six Months	1 25
Five Copies or more, per Year	2 00
" " " Six Months	1 00
Three Months' Trial	65
Great Britain, Ireland, Australia and Germany, per Year, post-paid	$3 54 (14s. 6d.)
France, " " "	3 54 (18f.)
French Colonies, " " "	4 58 (23f,)

Any one sending a club of ten is entitled to one copy, one year, free.

Agents will be supplied with canvassing outfit on application.

INDEX TO NEW ADVERTISEMENTS.

Baird, W. F.—Trees.
Boomer & Boschert Press Co.—Power Cider Wine Press.
Episcopal Academy, Haddonfield, N. J.
Heath, Wm. A.—Berkshire Pigs.
Hexamer, F. M.—First-class Strawberry Plants.
King, Geo. E.—The Patent Self-Acting Cow Milker.
Kingsford & Son, T.—Oswego Corn Starch.
Lubin's Portable Turkish Bath Co.
Mancha, J. F.—Delaware Farm Catalogues and Maps.
Mast, Foos & Co.—Iron Turbine Wind Engine.
Parry, Wm.—Sharpless' Strawberry.
Payne & Sons, B. W.—Eureka Safety Power.
Phelps, N. B.—Norwegian Balm for Catarrh.
Pierson F. R.—Strawberry Plants.
Roe, E. P.—Pride of the Hudson.
Taylor, Bros. & Co.—Rubber Printing Stamps.
Taylor M'f'g Co.—Portable Farm Engines.
Waters Horace—Organs.
Wheeler & Melick Co.—Medal Machines.
Young, Oscar W.—Embossed Pictures for Decorating.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c. per line
" 13th page	50 "
Outside or last page	60 "
Fifty per ct. extra for unusual display.	
Special Notices, leaded, by count	70 "
Business "	80 "
Reading "	1.00 "

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

SPECIAL NOTICES.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

New Advertisements.

$340 ORGANS like cut —FOR $100.— $300 for $90; $275 for $80; $235 for $75; other styles for $65, $60, $50; $10 and $35. $900 PIANOS—$225; $800 do for $200; $750 do for $175; $700 do for $165; $650 do for $150; $600 do for $135 CASH, Warranted 6 Yrs. GREATEST BARGAINS ever offered. Send for Catalogues. Sheet Music at Half Price; some at 1 cent a page. HORACE WATERS & SONS, 40 East 14th Street, New York.

BEST and CHEAPEST.

Buchan's Cresylic Sheep Dip prevents and cures the scab and all parasitic diseases of the skin.

Buchan's Cresylic Ointment is CERTAIN DEATH to the Screw-worm or Grub.

For further particulars, send for Price Lists and Circulars to

KIDDER & LAIRD, 83 John St., New York

Patented May 28th, 1878.

The Patent Self-Acting Cow Milker M'f'g Co.

Every one who owns a cow should have one of our wonderful Milkers. Sent free to any part of the United States on receipt of $2. Send for our Illustrated Pamphlet on the Cow, containing sectional views of a cow's teats and bag dissected and scientifically explained, by Drs. White and Wilson of this city. Sent free to any address.

GEO. E. KING, President,

Office, 575 Broadway, New York.

Reading for the Young.

GRANDMA A PRISONER.

As grandma—dear grandma, the life of the house—
  Slept into her closet one day,
She left little Arthur as still as a mouse,
  On the floor of her chamber at play.

While she shook out her dresses and smoothed out her shawl,
  And straightened the things on the shelf,
The boy, never dreaming of what might befall,
  Toddled up to the door, little elf!

In a twinkling he shut it and laughed in glee,!
  "'Ou tant tum out any more!"
"O, Arthur, my dear little boy," cried she,
  "Now how can I open the door!"

He could not reach the knob, she knew,
  And there was no knob inside,
And the hall-door was shut! O, what should she do!
  "Call—call to your aunty," she cried.

The gay little mischievous laughter ceased,
  While she stood perplexed in the dark;
As his fun died out and his fear increased,
  O, how he did call and bark!

"Now knock at the chamber-door," cried she,
  "And aunty will surely hear,"
And he knocked, and knocked again for me,
  Beginning to sob for fear.

I sat aloft in my easy-chair,
  My thoughts on my book intent,
And though calling and knocking reached me there,
  I dreamed not what they meant.

Grandma, indulgent as grandmas are,!
  Was letting him hammer and shout—
So I said to myself—and I did not care;
  My nerves at that distance were stout!

At length I leisurely sauntered down;
  And entered the room when he ran:
Sobbing, and holding me fast by the gown,
  To tell me the story began.

I caught the words "c'oset" and "grandma;" no more
  Was needed the whole to relate:
In a trice I had opened the closet-door,
  And the joy of that moment was great.

"Now what would grandma have done," said she,
  As he kissed her o'er and o'er,
"If no one had come to my boy and me
  To open the closet-door?"

While the tears still flowed from his shining eyes
  Like drops from a brimming cup,
"What tould 'ou do?" he cried, in surprise,
  "'Ou tould wait till me grow up!" [*Companion.*

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 13.

ANNIE L. JACK.

"Boys," said the father on his return from the city, "I have an order for 25 young cedars a foot long. So, as soon as you get up in the morning, Will, you can go to the woods and get them. You know where they grow, and the dollar is to be for yourself. The next order is to be yours," he added, nodding to a younger lad. In this way, and by gathering forest tree seeds, now in demand, boys can often earn a few dollars, learning quickly to know salable trees and the proper ripeness of seed. If a good selection is made, the city seedsmen soon learn where to send when they receive an order for trees—as is very often the case—from people who cannot pay nursery prices, or from nurserymen who have not the trees required.

One of our little men grows corn for his pocket-money. The ground is prepared as for field corn, and he always plants Early Minnesota as coming to green ears earlier than any kind we have tried. It is of rather dwarf habit, and can be planted a little closer than tall varieties; and as he sows he sings,

"One for the blackbird, two for the crow,
One for the cut-worm, and two to grow."

The profit of this crop is in being early in market, for although sweet and well-flavored, it is of no account when the large, coarse, common white corn is ready, so persistent are people to have big ears, whether the quality is good or not. When below 15 cents per dozen we let it ripen for seed, and have no trouble in disposing of it to seedsmen who know what we grow. In this way one small boy can hoe his patch of corn, and even learn to cultivate and keep it clean, and if careful to get a good variety, *very early*, and to grow only one kind, so as to be able to warrant the seed, he can easily realize twenty-five dollars from a quarter of an acre.

There is hardly any garden where a place cannot be found where two or three or even a dozen grape-vines may be planted—plant *Concord* for *profit*. No matter who may condemn them, and prefer finer sorts: we all know that they are not Black Hamburg or even Eumelan, but they are *hardy, productive* and abundant bearers, the "grape for the million," and they will *sell*. The prunings in the fall, if cut carefully, will make young plants that the boys will sell too, as when two years old they bring 25 cents each. The grapes, put up in boxes or baskets, are very cheap in the fall, but for fresh, well grown bunches there is always a market and money in them. The vine revels in black swamp muck and wood ashes and amply repays for care bestowed on it. If you are not tired of the prospect of a little work, I can tell you another time of more ways in which girls and boys can earn a nice little independent pocket-money.

THE BEAVER.

An animal that approaches near to man in the attributes of reason, reflection, foresight, and design, is the Beaver, whose name, as you know, is associated with the hats that are made from its soft downy under-fur. I call him an engineer; but I might with propriety style him an architect, a carpenter and a mason, for he unites all these occupations with a perseverance and energy that are remarkable. He constructs a habitation with floors, roofs, and separate apartments for storing food and for sleeping, and plasters the house over with the skill and effect of the most expert mason. But these are not the most curious works of the beaver, as you will learn.

In describing this animal, you will perceive how wonderfully he is adapted to carry on the operations necessary for his existence. The beaver is usually about two feet in length; the head is thick and pyramidal, with small eyes, short ears, almost concealed in its fur, a blunt nose, a thick and short neck, and a very strong compact body; the tail, about a foot in length, is partly enveloped in fur, and encased in close and compact scales, adjusted like those of the fish, and which, curved above, and broad and flat below, is particularly suited to the purposes for which this instrument seems to have been intended, namely, as a paddle and rudder to forward and regulate the animal's motion when swimming, and as a trowel to press together, and afterwards to plaster, the materials which it uses for the erection of its dwelling.

The fore-feet, which resemble in shape those of the rat, are small and short, having five divided toes, strongly armed with claws, well calculated for digging the holes in which are to be deposited the foundations of its building; and these feet, like the squirrel, the animal uses as hands, to convey substances to the mouth, or to assist in removing them from one place to another when collecting material. The hind feet are made large and powerful, like those of the goose, by a strong membrane, or web, which affords to the animal that facility in swimming that forms so peculiar a part of its habit. It is owing to this difference in the structure of the fore and hind legs that the beaver swims better than it walks. Its head, the whole of the body, and a part of its tail are covered with a double fur—the inner one being fine and glossy, while the outer one is formed of long, straight, and coarse hair, of a dark chestnut color, approaching to black; in a few, of a milky white, more rarely of a cream color, and sometimes of patches of black spots upon a white ground. This coat, while it adds to the warmth of the animal, seems intended, like the feathers of water-fowls, to throw off the water from its several points while the beaver is in the act of swimming, and thus to preserve the skin from the influence of the wet.

But the most interesting part of the animal's structure is the teeth, through the agency of which it is enabled to perform its surprising achievements. These, like those of the other animals of the same order, consist only of *molars*, or cheek teeth, and *incissors*, or cutting teeth. The molars, which are eight in each jaw, are divided by small ridges which increase their capability of grinding the hard substances, as wood, the bark of trees, and the like, which constitute the beaver's food, and of grasping them firmly when conveying them from one place to another; while the incissors, two above, and the same below, have a sharp, chisel-formed edge, with which the animal is enabled with great rapidity and dexterity to gnaw through and divide those trees and their branches used for its food, and as one of the chief materials of the buildings.

Thus these teeth serve the purposes of an axe, a saw, and an adze; and as they are in constant exercise, and liable to wear out, nature has provided the means of renewing them in exact proportion as they are exercised. You will thus perceive how the beaver is amply prepared for the busy purposes of its existence.

The food of the beaver consists of the bark of trees and shrubs, such as the birch, poplar, willow, &c., and of the roots of water-lilies and other water plants. In summer it will eat berries, leaves, and various kinds of herbage; and some persons have stated that it eats fish, but this is doubtful. They are extremely fond of water, and seldom wander far from some lake or river. In consequence of its habits, the beaver is also limited to wooded districts. When they are deprived of their habitations, they assemble in the early part of summer to erect others in a new, and, if possible, a more secure situation. For this purpose they select some part of a lake or river, on the banks of which they can easily procure a sufficient supply of timber, as well for their food as their building purposes. Having fixed upon the best situation, they begin to gnaw down one of the largest trees they can find, taking care that if on the bank of a river, it shall fall directly across the stream. As many as can conveniently sit around this tree continue to gnaw it about eighteen inches from the ground, until it begins to give way. While one party is thus employed, another is cutting down some smaller trees, and a third is making mortar of soft clay, and drawing it to the edge of the river, where the bridge or dam is to be. A gentleman who lived for some time in Canada, and had many opportunities of watching these curious animals, describes this part of their work as highly comical. After they have reduced the mortar or clay to a state of sufficient consistency and adhesiveness, one of the largest beavers lies down upon its back, and the others heap up a prodigious quantity of the prepared cement on its stomach. Thus laden, two carriers seize hold of their companion by the ears, and drag the passive creature to the water's edge; then entering the river, they float along to that part of the dam which more immediately requires the plastering assistance.

The use of these dams will be understood when I mention that the houses or lodges of beavers are grouped together near the edge of the water, the mud being scraped away from the front so that there may be a sufficient depth of water to allow free egress, even during the most severe frost. When the depth of water is not sufficient, a dam becomes necessary, by the side of which the lodge is placed. The dam is sometimes as much as *three hundred yards* in length, rising in a circular form towards the current; and particularly so where the currents are strong, sometimes extending on both sides, beyond the natural channel of the stream. The materials of which it is composed are sticks, roots, and branches, with stones, moss, grasses, and mud, mixed together so firmly as to become absolutely water-tight. Indeed, so remarkably solid is this part of their work, that "in places," says Hearne, "which have been long frequented by beavers undisturbed, their dams by constant repairing become a solid bank, capable of resisting a great force both of water and ice; and as the willow, poplar, and birch generally take root and shoot up, they by degrees form a kind of regular planted hedge, which I have seen in some places so tall that birds have built their nests among their branches." All this seems very marvelous, and beyond the blind impulse of instinct.

The next employment of the beavers is the division of the river below into equal compartments, the walls of which are raised to the surface of the water. These are made entirely of clay, and about two feet in thickness. Over these they build arches, and begin the erection of their apartments, which are of a circular form, and can only be entered from the water beneath. They are also arched and plastered so neatly, and with such durable materials, that they resist the force of the most violent and protracted rains, and severe storms. Each hut contains commonly one or two, but sometimes four families. The beavers cover their buildings each season, as soon as the frost sets in, with a new coat of plaster, their tails answering the twofold purpose of a spade and a trowel. Their store-rooms are constantly supplied with an abundance and variety of young and tender trees, of which they are particularly fond. In summer they make excursions in the woods, choosing the trees they mean to make use of, and marking the position of new settlements, when their increase of numbers requires them to plant colonies. Their wood-cutting begins at the end of summer. One of the worst enemies of the beaver, after man, is the glutton; and to protect themselves from that animal, whose principal food is small quadrupeds, they have subterraneous retreats along the banks of rivers or lakes, to which they retreat when they are attacked. The value of the fur makes the beaver an especial object of the hunter's labors. It is in winter, when the water is frozen, that these animals are destroyed in the greatest number. The hunter, on approaching the dam, cuts holes in the ice at a considerable distance from their habitations. Then, by breaking open the upper apartments, he succeeds in driving them under the ice; but as they cannot exist in the water without frequently rising to the surface to breathe, they are forced to the holes cut by the hunter, when their capture and death speedily follow.

From being quite numerous in our northern latitudes, these clever little animals have been so persistently hunted that, like the moose, deer, and bison, they are gradually being exterminated, and unless public sentiment intervenes to modify the destruction, our reminiscences of the beaver will be kept alive solely through the medium of museums. UNCLE TRUE.

FOOT-BALL.

It would be quite impossible for me to attempt to give within the limits of this article a description of the character of the game, and the rules and regulations adopted by various schools and clubs in foot-ball. As an humble but enthusiastic supporter of this pastime, I take the opportunity of expressing at the outset my strong antipathy for that brutal practice termed hacking, which can under no circumstances promote skill or interest, and indeed seems rather intended to enable a few powerful hulking fellows to keep all the fun to themselves. To call a thing by its right name, hacking means neither more nor less than kicking our adversary over, in order to get the ball away from him, a process which may give the particular school or club at which it is practiced a name for fierce playing; but it is not foot-ball. The real fact of the matter is, that some few individuals more amply blessed with muscle than brains, have come to the wise conclusion that ordinary foot-ball is very tame work, and that to give it vivacity the element of ferocity must be imported into it. They remind me very much of a certain General Boum. He is so tremendously war-like that he cannot take snuff like other people; but when he feels that his nose requires a little irritation, he draws a pistol out of his pocket, fires it off, and then snuffs the barrel. There is nothing a bit more extravagant in this than the insane length to which, not so long ago, hacking and fighting were carried. Goodness knows the shins come in for quite enough ill-usage in the unavoidable scrimmages that are inseparably attached to the game whenever and wherever it is played; and the knocking about that one gets is quite sufficient without any extra aids to bruises being introduced. It requires no small amount of courage and endurance to indulge in foot-ball, pure and simple, and I am sure there is no need to make it a struggle between a lot of wild beasts to see which can hurt and mangle the other most. I have seen some severe tussels in my time, and they excited far more emulation and display of prowess than all the hacking in the world ever could. On such occasions the real test of a player's merit was his ability to "dribble" and dodge with the ball; and when he had scientifically worked it to sufficiently close proximity to the adversary's base, to gently kick it into the hands of one of his own side, who was then entitled to take three yards and have a fair kick for the base. There was no nonsense about this, it really required considerable skill and a great deal of practice before that skill could be obtained. You might charge the other side as much as you liked, and give them as many spills when in a legitimate rescue of the ball from their attentions as might appear necessary; but to wait till one of them had got it in his arms, and then to rush up and kick his shins to make him let go was scarcely a practice to be countenanced. The truth is that all handling the ball in any shape or form is utterly and entirely a mistake; it is the one innovation on legitimate foot-ball that has done all the mischief, and afforded an opportunity for the introduction of a variety of novel elements, which go far to deprive the game of all pristine advantages. S. D

Sabbath Reading.

GETHSEMANE.

In golden Youth, when seems the Earth
A Summer-land for singing mirth,
When souls are glad, and hearts are light,
And not a shadow lurks in sight,
We do not know it, but there lies
Somewhere, veiled under evening skies,
A garden all must sometime see:
Gethsemane, Gethsemane—
Somewhere lies our Gethsemane.

With joyous steps we go our ways;
Love lends a halo to the days;
Light sorrows fall like clouds afar;
We laugh, and say how strong we are;
We hurry on, and hurrying, go
Close to the border-land of Wo,
That waits for you and waits for me:
Gethsemane, Gethsemane—
Forever waits Gethsemane.

Down shadowy lanes, across strange streams
Bridged over by our broken dreams,
Behind the misty caps of years,
Close to the great salt fount of tears,
The garden lies. Strive as you may,
You cannot miss it in your way,
All paths that have been, or shall be,
Pass somewhere through Gethsemane.

All those who journey, soon or late
Must pass within the garden's gate—
Must kneel alone in darkness there,
And battle with some fierce despair.
God pity those who cannot say,
"Not mine, but Thine": who only pray,
"Let this cup pass," and do not see
The *purpose* in Gethsemane:
Gethsemane, Gethsemane—
God help us through Gethsemane!

[*Chicago Times.*

JACOB'S VISION—CHRIST THE LADDER.

It is not often that we find the truths of the gospel so evenly balanced as in the following beautiful illustration from the pen of an eminent writer. His subject is Jacob's vision and vow and he has previously compared the ladder of the vision to the work of the Mediator, through which the lost communion may be renewed, and man again "have access to the Father," and has shown how the union of the Divine and human natures in Christ found an accurate emblem in this ladder—both resting on the ground, and reaching unto the sky; and he then proceeds to unfold the practical lesson which it teaches:—

"However we would avoid the straining a type, we own that the representation of Christ under the figure of a ladder appears to us to include the most exact references to the appointed mode of salvation. How do I look to be saved? By clinging to Christ. How do I expect to ascend up to heaven? By mounting, step by step, the whole hight of Christ's work, so that He is made unto me of God 'wisdom, and righteousness, and sanctification, and redemption.'

"It is no easy thing, the gaining eternal life through the finished work of the Mediator. It is a vast deal more than the sitting with the prophet in his car of fire, and being borne aloft without effort to an incorruptible inheritance. 'The kingdom of heaven suffereth violence, and the violent take it by force.' There must be, if we may thus express it, a holding fast to Christ, and a climbing up by Christ; to look back is to grow dizzy, to let go is to perish. And that we are to mount by the Mediator, and all the while to keep hold on the Mediator; that we are, in short, to ascend by successive stages, stretching the hand to one line after another in the work of the Redeemer, and planting the foot on one step after another in the covenant made with us and Christ,—what can more aptly exhibit this, than the exhibiting Christ as a ladder set upon the earth, that man may scale the heavens?

"The necessity of our own striving, and yet the uselessness of that striving, if not exerted in the right manner; the impossibility of our entering heaven except through Christ, and the equal impossibility of our entering it without effort and toil; the fearful peril of our relaxing for an instant our spiritual vigilance and earnestness, seeing that we hang as it were between earth and heaven, and may be thrown by a moment's carelessness headlong to the ground; the completeness and singleness of the salvation which is in Jesus, so that, if we adhere to it, it is sufficient, but there are no roads that meet in it or branch off from it—swerve a single inch and you have no footing, but must be hopelessly precipitated—all these particulars seem indicated under the image of a ladder, and could not perhaps have been equally marked, had some other emblem been given of the connecting of earth and heaven by the Mediator, Christ.

"And now, as I stand upon earth, the child of a fallen, and yet redeemed race, and examine how I may escape the heritage of shame which is naturally my portion, and soar to that sky which woos me by its brightness; oh, I read of 'entering into the holiest by the blood of Jesus,' and of 'laying hold upon the hope set before us,' and of following on to know the Lord, and of being 'raised up and being made to sit together in heavenly places in Christ.'"

Every minister's life should be a commentary upon Christ's life.

PERSONAL ITEMS.

Lord Dufferin will probably go to Asia Minor as British Commissioner.

Chace, the Fall River defaulter, takes his prison life easy. He is hammering iron hoops.

Lieutenant Gladstone, of the British navy, son of ex-Premier Gladstone, is in New York.

Ex-Senator Trumbull, of Illinois, does a large business at the bar of the Supreme Court.

A daughter of Colonel Mosby was elected Queen of Love and Beauty in Orkney, Va., last week. Miss Mosby's name is Mary.

Senator Bruce, of Mississippi will settle near Cleveland, Ohio, when his Senatorial term expires. He has purchased a farm there.

Miss Anna Dickinson will soon, with good health and energy, resume her literary labors in Philadelphia, and "go for" the scalps of some more "spotless" politicians.

Hon. J. Meredith Read, of the United States Legation in Greece, wants to stay there and do the work for nothing—the authorities having decided to abolish the office.

Paul De Cassagnac remarks that the treaty of Berlin was signed with the quills of four vultures, two geese and one pigeon. France, he admits, played the part of a goose.

Washington Irving's home at Sunnyside looks old and neglected. The decorations are all cheap, and pictures of the place so flatter it that the reality is in strong contrast.

Col. E. Z. C. Judson, formerly well known as "Ned Buntline," a sensational story writer, now lives quietly and happily at "Eagle's Nest," in Stamford, Delaware county.

King Alfonso proposes to erect a monument to his wife, the State voting $50,000 per annum toward building it until it is finished, the King giving $40,000 a year. It will cost $1,000,000.

Dom Pedro is getting to be more of a trump every day. Haydon Edwards, late Secretary of the Legation at Rio, says that the Emperor puts the United States twenty years ahead of Europe.

Michael Reese, who died recently at Wallenstein, Germany, leaves an estate worth about ten millions. With the exception of Senator Sharon, he was the largest real estate owner in San Francisco.

Bret Harte has arrived at Crefeld, Rhenish Prussia, and assumed his duties as United States Consul at that place. The town has a population of over 60,000, and is noted for its manufacture of silk goods.

A younger brother of the Earl of Beaconsfield has been discovered in the person of Mr. Ralph Disraeli, who is assistant clerk of Parliament—the second office of the House of Lords—with a salary of $9,000.

Mr. Jay Cooke, since his failure nearly five years ago, has been living with his son-in-law. He has grown old rapidly. His tall form and white hat can be seen almost daily on Third street, Philadelphia.

A marble bust of Charles Francis Adams by W. W. Story, and dated "Rome, 1878," was on Saturday placed on exhibition in Boston, and it is thought that even this bust will act as a refrigerator for the whole town.

Here is another New York inventor, Graham by name, who is experimenting on the phenomenon of the mirage, and believes that he can produce an instrument that "will photograph the deck of a ship 5,000 miles distant."

Mr. Burchard Hayes and his father, the President, have expressed themselves as greatly pleased with the federal weather reports. Burchard Hayes goes around a great deal at the expense of the United States, and his opinion is of vast importance.

Of the American notables abroad, Gen. Grant is on his way to St. Petersburg, Commissioner McCormick has returned from Scotland to Paris, General Meredith Read is doing the show, and General Davis has presented his Revolutionary relics of Lafayette and Rochambeau to the French government.

Of operatic stars—Adelina Patti is an American, Mlle. Minnie Hauck is an American, Mlle. Albani is a Canadian, Mlle. Thalberg is an American, Mme. Gerster Gardini is a Hungarian, Tremelli is a German, Trebelli is French, Gazarre is Spanish, Foli is Irish, Schoneroski is Austrian, Marie Roze is French, Mme. Nilsson is Swedish.

Ex-Premier Gladstone is six feet high, sallow, bony, square-cut and well defined. His eyes are somewhat merry-looking and brown; his forehead is receding, yet hard and square about the temples. In his costume Mr. Gladstone is loose. His shoes are big and never fit, his pantaloons are baggier than were Daniel Webster's. He wears but one glove, and seldom puts the other on, like Macauley.

Mr. F. J. Tandy, coin examiner at the Treasury in Washington, is, perhaps, the most notable expert in his *role* in the world. He will detect by the touch alone—being blindfolded at the time—a counterfeit coin in a heap of specie by simply running his hand through the same and bringing coin after coin in contact with his sensitive fingers, until he has touched them all. The fraudulent piece or pieces are sure to be detected.

Miss Braddon, the author of many sensational novels, is portrayed as stout, blowsy and prosaic-looking as any ale-wife in England. Romantic though her stories be, she is the incarnation of the unromantic in face and figure, and would never be suspected of the remotest connection with literature. Her conversation is said, however, to contradict her looks, for she talks very brightly, and has a pleasant, well-modulated voice, as so many of her countrywomen have.

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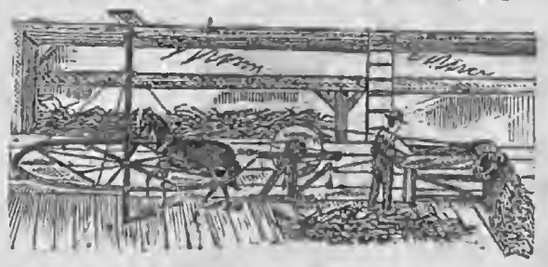

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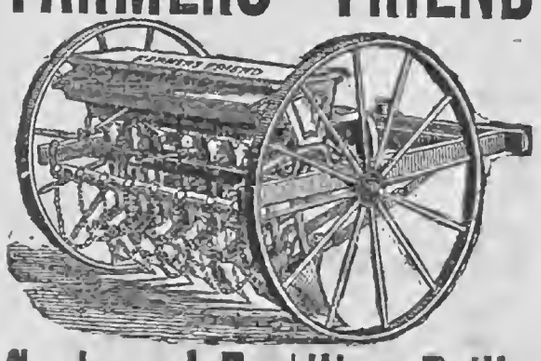

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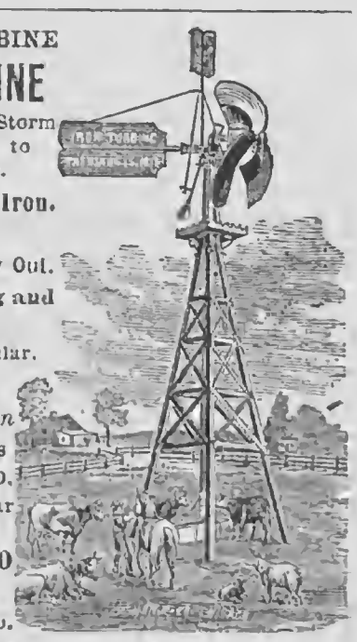

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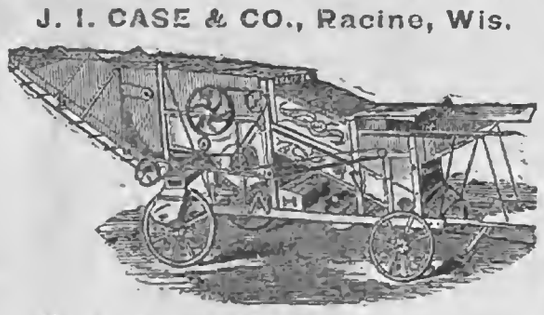

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SARCASM.

I called one evening last autumn
  On a demoiselle "treseau;".
In conversation brave and gay
The time passed pleasantly away
  Till the hour had come to go.

Then a pensive mood came o'er me;
  I remarked with many a sigh,
"The frost and cold will soon be here,
The landscape changed to brown and sere,
  And all things green will die."

She looked sweet and sympathetic,
  And the tear stood in her eye,
As she murmured in a voice divine,
Placing her lily hand in mine,
  "I'm sorry, but—good-bye!"

We saw a young man with two heads on his shoulder the other day, but didn't consider it much of a curiosity. One belonged to his girl.

An American tourist was visiting Naples, and saw Vesuvius during an eruption. "Have you anything like that in the New World?" was the question of an Italian spectator. "No," replied Jonathan," but I guess we have a mill-dam that would put it out in five minutes!"

The other day, as two newly-arrived Irishmen were walking up Kearney street, a pavement trap-door opened and a Chinese store-porter emerged. "Be gorra!" said one of them, "if the haythens haven't got a tunnel clane thro' fram Chinee, bad luck to thim!"—*San Francisco News Letter.*

That celebrated orchestra, the Katti, have commenced their open-air concerts for the season. The attendance last evening was numerous, and the old favorites were well supported by many promising amateurs. The programme included selections from Bawlini's well-known master-piece, "Hear me, gnaw ma," and Holy Bull's sympathy, on ze flat. Several bootjacks were thrown.—*Com'l. Adv.*

Picnic Lemonade.—Here is a recipe for making picnic lemonade. First get your barrel. Then fill it with water. Don't be mean, but put in plenty of water. Now throw a pound of white sugar into the barrel. Squeeze in a large-sized lemon. Don't be mean about the lemon, either, but put the whole of it into the barrel. Stir with a long pole, and call the children up immediately. As fast as they drink, fill the barrel with cold water. The beverage thus made is cheap, and is quite healthy.

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A Hard Case.—Enter young husband, who throws himself into a chair, and exclaims: "What! toothache again, Maria! I do call that hard upon a feller! Why, you had toothache when I left this morning! And here have I been at Epsom all day, with the jolliest lot o' fellers ever got together in one drag, and won a pot o' money, and had no end of a jolly time, and I did think I should find something cheerful and jolly to greet a feller when I got home! And there you are!—toothache again! I do call it hard upon a feller—precious hard!"—*Punch.*

Things not so generally known as they ought to be—That the evening song of the nightingale is nice, but that the morning lay of the barn-door fowl is nicer. That the end of the longest wail is blubber. That ships are frequently put into stays, but they only wear barnacles when they go to sea. That some lovers' quarrels begin, and that many end, with a smack. That, although one swallow may not make a summer, yet an inverted tack on a chair will make one spring. That the real and only correct system of bookkeeping is—not to lend them. That it is very difficult to keep your own peace of mind if the wife of your bosom will insist on frequently giving you a piece of hers.

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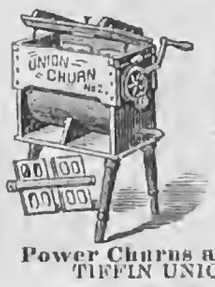

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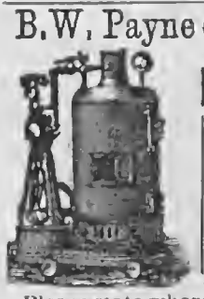

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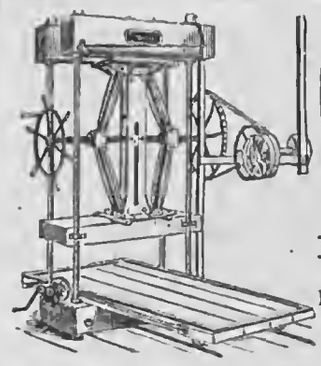

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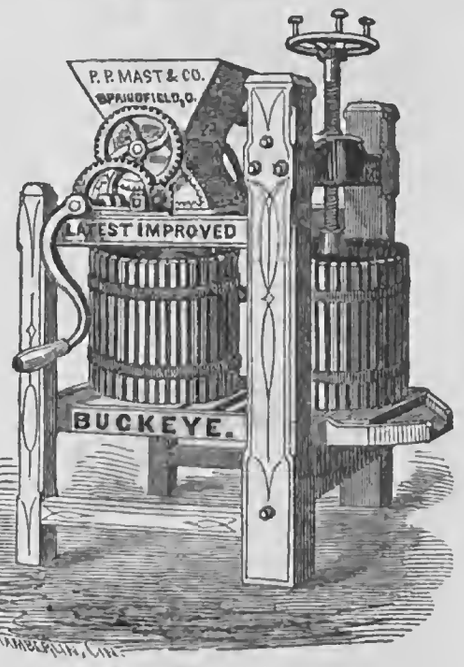

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NEW YORK.

CRANE HILL, Madison Co., N. Y., Aug. 11.

CORN in this vicinity has not as large a growth as last year, but it seems to be bearing finely—many stalks having three ears, and if the season is favorable, I see no reason why we cannot harvest a good crop. Oats will be light; straw very short and badly down; this not so well headed. Potatoes must be light, for the early spring induced many to plant very early, so that many pieces were frozen down and some of them never started again: others started and were frozen once more, while some suffered a third time from frosts. The ravages of the bug have been severe, and rust has struck the vines more or less so that there must be a sharp corner in favor of potatoes or the crop must be light.

HAY was expected to be light on account of the frosts, but of late it has improved so that some claim a heavier crop than last year.

DAIRY PRODUCE the fore part of the season was heavy, but we are shrinking badly the last part, and as the Midland railroad runs through this vicinity, New York prices govern us pretty much exclusively.

APPLES are not as plentiful in this vicinity this year as last, but yet there seems to be enough for home consumption.

THE WEATHER has been so wet for the last two weeks that not more than four days have been without rain, consequently hay and grain are not yet all secured, although both are getting over-ripe. About the middle of the afternoon on the 8th instant, we experienced here a heavy storm of rain, the singularity of which was that it came up in the northwest and most of it went south, then east, then north, then west, until it arrived at the point from which it started. But its fury was not yet spent, so it followed its first path until it got into the northeast, where it seemed to lull after making one whole circuit of the compass and three-fourths of another. The first circuit was accompanied with lightening, and nearly every flash was a chain, which came directly earthward, striking different objects quite frequently but doing no damage. Now the question is, why the shower traveled as it did, and why the lightening flashes were all perpendicular instead of being horizontal as in common showers. L. P. N.

DOE RUN, Chester Co., Pa., Aug. 13th, 1878.

THE corn crop in this and adjacent counties will not be equal to last year's crop, and I think, will be below an average. During a trip of 30 miles, last week, I noticed a few pretty good fields of corn, and many quite thin and light. The spring was cool and corn made very little progress till some time in June. Farmers worked their corn reasonably well while young and small, but harvest coming on rather early, and the hay and wheat crops being pretty heavy, by the time these were gathered the oat crop was ready, so that by the time this was in, the corn was then too old or forward to work. Some few who would have worked their corn in harvest, found it somewhat blown down just at that time by a rain-storm. As but little corn therefore got worked any after it was a foot or so high, it is evident the crop is much lighter than it would have been with additional cultivation. There was also much complaint of an insect working at the root or of some other unknown enemy, as some fields were very uneven in growth, stalks not over a foot high, yellow and "doucy-looking," while the next hill in the same row would be well up and in tassel.

As to fruit, the trees of many varieties of apples are full. There will be a much better crop than we had last year, but it will not be equal to that of the year before last. Peaches are doing but little good in this county; they rotted and fell off. The orchards I am acquainted with will not produce over a fourth as many peaches as last season. Apples below an average. Peaches not half a crop. Blackberries abundant. Pears an average. Grapes a full crop. T. W.

CLYDE, Wayne Co., N. Y., Aug. 12, 1878.

THE prospects of corn crop is good from the southern line of Wayne County to the lake. Though corn suffered from 10 to 15 days' severe drought—the leaves rolling badly, in July, in the southern tier of towns—yet there are no very poor pieces. The northern part of the county did not suffer, and as a whole the crop will be an extra good one. The best, 125 bushels of ears per acre, probably.

Notwithstanding the severe attacks of the Fly upon Clawson wheat, it is reported to be yielding well, many pieces turning all along between 30 and 40 bushels per acre, the Lancaster not reaching it, though unattacked. By sowing one bbl. of second-grade salt to the acre, the depredations of the Fly will be prevented, and the fertilizing results are exceedingly satisfactory. This grade of salt comes at 80c. or 90c. per bbl. Many acres of barley are destroyed by the Fly, some pieces which were better than the worst were raked up with horse rake without cutting with a scythe or machine, as the Hessian had so nearly cut it off that it would break. Wheat $1.10; barley $1.10, both rising. Rich extra-tilled pieces of barley turned largely. Oats good. The Norways and black varieties are again turning out the best, the Probiestier and white kinds of oats being behind in yield.

Apples abundant all over the county; peaches very plentiful in northern and lake towns of county; in southern towns none. Short crop of grapes, probably from extra yield last year. Little clover seed, very early. It is nearly ripe in some fields, but few acres in county. The yield will be good. W. L. D.

BELMONT, Allegany Co., N. Y., Aug. 12, 1878.

IN our valley, corn is exceptionally fine. Generally planted from May 20th to June 1st, the warm weather, with plenteous and frequent rains, gave it a rapid growth, and, from present appearances, it will be above the average. I think also that this is equally true with regard to this crop generally throughout the county. There was a larger acreage of wheat than usual, and it generally stood well on the ground, looked very promising from early spring throughout the season, and was harvested in good condition; but the general testimony of farmers is that we shall be disappointed in the yield—that the average will not be over 20 bushels, and probably under that. The midge injured it some in this locality, and more, as I am advised, in the other portions of the county. The oat crop is thought to be above the average. Barley, though formerly cultivated considerably, was this year generally left out. An unusually large quantity of potatoes was planted, with the expectation and prospect of a large yield; but we have *all* discovered recently that on this crop we have bestowed much labor to little profit. The vines, about two weeks ago, began to decay, and showed evident signs of disease—looked as though a fire had scorched them. On examination, I found my Extra-early Vermonts not fully grown, many of the vines entirely dead, many of the tubers having on them a white substance like mold, and some of them well started with soft spots. Brownell's Beauty seems so far to have escaped.

Apples and pears, in the valley, are nearly an entire failure—the result of that nipper of a frost on the morning of the 6th of June. Cherries, for the same reason, were nearly a failure. But on the uplands, all along the valley, there is a fair apple crop. H. A. P.

MARTINSBURG, Lewis Co., N. Y., Aug. 12.

ALTHOUGH this is not strictly a corn-growing section, yet the crop bids fair to be more than an average one. In fact, it is good for this locality. The hay crop, like that of last year, is superior, but few farmers finding their barns sufficiently large to hold the yield. Grain, generally, is a good growth, but I fear the recent rains have done great damage, and much that is cut and not gathered, and that is ready to cut will be greatly injured. The potato crop is, I think, a very poor one, as I see many pieces not worth the harvesting.

Apples are much more plentiful and better than last year, although the ground under some of the trees is pretty well covered with "wormy" fruit that has fallen off.

The great rain on the morning of the 9th has done much damage to almost everything unharvested. Direct individual losses, too, are considerable, but not so great probably as in many sections. All around us we hear of mills being swept away, barns struck by lightning and consumed, telegraph poles shattered, the low-lands flooded, and all are agreed that for rain, lightning and thunder-storms, this season is one to be remembered, M. N.

BEDFORD STATION, Westchester Co., N. Y., Aug. 12, 1878.

CORN doing finely. I have by a ride through the country seen many fine fields. Some of them average two ears to the stalk. Fodder corn excellent. Rye has turned out very well, but has been somewhat damaged by heavy rains which caused it to lay over badly, thus making bad cutting. Wheat, which in this section is raised only for home use, has turned out middling. The oats have yielded very heavy returns, yielding 45 to 50 bushels to the acre. The experience of a man who has seen crops in Europe, is that he has never seen the like. Hay very good The potato crop will, to all appearances, be a failure, the early ones dying off without any apparent cause, the late sorts are doing somewhat better. The bugs are not so thick as they were last year, a small insect has appeared which feeds upon the eggs.

Apple and pear trees were greatly damaged while in blossom, by the May frost in all low-lying places. On high land the frost affected the trees somewhat, nevertheless the yield has been exceptionally large. W. S.

WOLLKILL, Orange Co., N. Y., Aug. 12.

THE corn crop in this section has the appearance of turning out well, but there is very little corn or other grain raised in Orange Co. many farmers raise none, and the majority but a small proportion of what they consume. Making milk for the New York market is the specialty of Orange Co. farmers, and they purchase a great many car-loads of corn and other grain from the West. Probably not over three acres to the one hundred are planted with corn.

Farmers quite generally speak of the wheat being cut off by the Hessian Fly, and there will probably be less than usual put in this fall. Hay has been a very good crop, particularly on newly-seeded ground. The apple crop will be light so far as seen or heard from. The earth has been well watered here this season, and every thing is in a flourishing condition. T. A. M.

JAMESTOWN, Chautauqua Co., N. Y. Aug., 12.

THE corn crop in Chautauqua Co., although very backward in the early part of the season, is now looking well and will, I think, be a full average unless we have very early frosts. The hay crop is secured in fair condition, although the weather has been very unfavorable. The yield is above the average. Winter wheat, of which there was a large breadth sown, is the best it has been for many years. Spring wheat nearly a failure. Oats a medium crop. The long-continued rains in the spring drowned out a good many and the recent storms have lodged them badly. Of barley but little is sown in this section, a good average crop. Potatoes will be an extremely light crop. They were frozen down in the spring and many fields are a very poor stand; vines are small and they have already commenced dying. Apples a light crop. Many orchards that promised well, early in the season, are now nearly bare of fruit. The crop in this county, I think, will be far below the average. W. C. G.

BURNT HILLS, Saratoga Co., N. Y., Aug. 12.

THE prospect of the corn crop in this section at present is not very good. In July it was growing very finely, but the excessive rains of the past two or three weeks have injured it very much. I think at present that corn will be hardly an average crop. Oats not as good as last year, and very much damaged in harvesting by heavy rains. Early potatoes are turning out poorly—about half a crop; but few late ones planted. The prospect for apples is good at present; the trees are now quite full, but a great many wormy ones are dropping off; early ones are very plentiful now. The crop in this section will not be as large as two years ago. Pears are not abundant—not an average crop. Plums about an average crop. J. H. T.

GARRATSVILLE, Otsego Co., N. Y., Aug. 13.

CORN was planted earlier than usual in this section, but on account of cold weather was very backward until the hot days of July came, when it pushed forward rapidly, and, unless we have an early frost, it will be fully an average crop. Mixed farming is the rule here, nearly every farmer raising a little of each variety of crop, and depending principally on dairying as the backbone of his business. Fruit, the small fruits in particular, will not be as plentiful as last season; apples about the same on hill farms; they were injured by frost to some extent on streams. Hay was a very heavy crop; all other crops good except potatoes, which are likely to be a poor crop. C. B.

NUNDA, Livingston Co., July 11, 1878.

THE corn crop in the low-lands or valleys, has a good growth; but I fear it will be rather late. Winter wheat is a very heavy crop around here, although those that have thrashed say it does not yield very well from the straw. Oats and barley middling, not much of the latter sowed around here. The apple crop will not be very heavy; summer fruits were nearly all destroyed by the frost. This has been a very rainy summer, and we have had a terrible time getting in our spring crops and late hay harvest. Wages were from $1.50 to $2.50. G. B.

CLINTON, Oneida Co., N. Y., Aug. 10, 1878.

THE prospect of the corn crop is quite good; but it is a little backward in maturing, owing to the cool weather at the beginning of the season. The hay crop has been very abundant. Oats very heavy. Wheat and barley fair. Winter wheat better than an average crop. Continuous wet weather of late has interfered very seriously with harvest work. Potatoes are small, and the yield will be very light. Apples, about an average supply. The yield of pears will be light. Plums and cherries were almost an entire failure. L. B.

NAPLES, Ont. Co., N. Y., Aug. 10, 1878.

THE corn crop in this section is the best I ever saw at this time of the year. Putting the average, during a series of years at 100, this year it is 120, at least, and it is the same with all farm products; but some little of the hay and grain has been gathered in bad order on account of the hot weather. The fruit crop is light; the frost killed it on the high lands, but the valleys

have an average crop. The grape crop in Naples Valley is light, but enough unless the price is better than it has been for three years past.

J. C.

JOHNSON'S, Orange Co., N. Y., Aug. 12.

THE prospect is good for a fine corn crop if the Fall proves favorable. The stand is generally good, and the acreage about as large as usual in this vicinity, which is not very heavy, as we run mostly to grass. Potatoes are rather a light crop. Oats are not as good as expected, but very fair. Wheat was rather a failure owing to the Fly, some not being harvested. Rye good. The apple crop is good; some peaches where the trees are healthy; plums but few owing to early frosts. The hay crop is fine, and got in fine condition; fall pasture is looking well. Buckwheat has started finely. H. R. H.

NORTH LANSING, Tompkins Co., N. Y., Aug. 12.

THE prospect in this vicinity for corn is very good; although we are passing through a severe drought, there is a large growth of stalks well set with ears. Should we have rain soon, we shall harvest a large crop. Wheat is a bountiful yield, and secured in good condition. Oats rather light. Potatoes suffering greatly by drought, consequently small. Apples early, a fair crop; winter, with the exception of Russetts, not half a crop—indeed, very many orchards have but few. Peaches more than an average crop. Small fruits have not been very plenty.

H. S.

OPEN MEADOWS, Chautauqua Co., N. Y., Aug. 12.

FARMERS in this section are through haying, and the hay crop is better than in a number of years past. Wheat never better, and is all in the barns. Oats are being harvested and looking fine Potatoes are not as good as last year; neither is the apple crop, but the yield is enough for home use with some to spare. The corn crop is looking fine, considering the late spring, and if the frost holds off, there will be a fair crop yet. Taken altogether, the crop is fine.

M. L. D.

EAST HORNSFIELD, Jefferson Co., N. Y., Aug. 12, 1878.

THE present indications in regard to the corn crop, are that we shall have fully an average yield. Early potatoes are nearly a failure. The yield of late potatoes, I think, will be small. Early in the season wheat, oats, and barley looked very promising; but, owing to a severe drought in July, the yield will be no more than an average one, more or less damaged in harvesting by the continued wet weather. The apple crop will be smaller than usual. L. F. A.

SPERDWELL, Tompkins Co., N. Y., Aug. 13.

FINE weather so far this week, but for two weeks past have had a great deal of rain, which has put the farmers back. There are a great many acres of hay to be cut yet. Harvesting will be nearly done this week. Oats are very good, and so is winter wheat; spring wheat not up to last year's crop. Corn is looking splendid. About half a crop of potatoes. Small fruits are plenty, but not so apples. L. C. L.

POUGHKEEPSIE, Dutchess Co., Aug. 14.

CORN in Dutchess Co. came up very unevenly, owing to frost and cold, wet weather. On low lands it will be rather above the average; not so good on the higher portions of the County. Apples quite a full crop—not equal to yield of '74; hardly up to that of '76. Wheat, rye and oats were unusually fine, and hay abundant. Finest weather for growing crops within my recollection. W. H. H.

LOWVILLE, Lewis Co., N. Y., Aug. 13.

Rainy the most of the time; for two weeks we have had rain every day except three days. There is a great deal of hay to make yet. Winter wheat is good, coarse grain; oats and barley, not good crops—too dry to fill well, and now it is so wet that it is almost impossible to harvest it in good shape. Corn good. Apples half a crop. Potatoes poor. Hops are looking good, and bid fair. Cheese seven cents. M. B.

BRANT, Erie Co., N. Y., Aug. 11, 1878.

THE corn crop in this section I think will be fully an average one; throughout the county it will be considerably below—Potatoes not a third of a crop from appearances now. Wheat damaged by the Fly, but we are getting a fair yield—selling for $1.05 at mills. Oats below an average crop; grass extra good, secured in very good order. R. E.

FLUVANNA, Chautauqua Co., N. Y., Aug. 12.

The corn crop in this section is very promising, I think far above an average. The fruit crop is very little this season in this county, not one-fourth of a crop of apples. The prospect is that the potato crop will be very small in this section from being rusty, and potato tops are dying before the tubers have matured. J. S.

LIVINGSTON Co., N. Y., Aug. 10, 1878.

THE corn crop bids fair to be extra good this season. Winter wheat and oats are also extra good. Spring wheat is not filling well. Barley is a fair crop. Fruit of all kinds is scarce. Hay is abundant. There is a good deal of complaint about potatoes not yielding well, being small, and some rotting, also. J. A. S.

SHERMAN, Chautauqua, Co., N. Y., Aug. 13, 1878.

THE hay crop in this section is larger than it has been in many years. Grain crops are quite good. Potatoes will, doubtless, be scarce this fall, and will, no doubt, bring good prices. Apples are also a very small crop. Blackberries plenty. Corn is a fine growing condition.

M. L. D.

WALDEN, Orange Co., Aug. 12.

WE are glad to state that the prospect of the corn crop, for a large yield, is unusually good. We are having warm, showery weather, and unless an early frost should come, our farmers will have reason to feel thankful for abundant crops. Would judge that about the average amount of ground was planted this season. W. C. H.

TOWANDA, Cattaraugus Co., N. Y., Aug. 13.

THE corn crop is very good; more than half of it is glazed, so that it will be out of the way of frost this season in our section of the country. The fruit crop will be very light in our place. The hay crop is very heavy—never better. The oat crop is good, and pastures never better.

E. F.

MIDDLETOWN, Orange Co., Aug. 10, 1878.

THERE is a larger acreage of corn planted than common. It is looking very fine. All it needs is hot weather to ripen it. Hay and oats were above an average crop. Wheat is below the average. Apples are small, but about a medium crop. W. B. B.

ONEIDA, Madison Co., N. Y., Aug. 15, 1878.

CORN is looking well, and it is thought now will be more than an average. Grain, already harvested, is generally light. Hay crop was large and good. Potatoes few and small—especially those planted early. Fruit prospects are good. J. S. H.

WALES, Erie Co., N. Y., Aug. 14.

Crops are good; hay never better; oats, rye and barley, fair. Corn is looking finely; wheat was injured some by the rust. Fruit nearly all destroyed by the frost. Pastures are fresh. Plenty of rain through the season. S. W. H.

GENEVA, Ontario Co., N. Y., Aug. 10, 1878.

So far as observed the corn crop promises well hereabouts; though late in making a start, it seems to have made up for lost time. West of Geneva some damage has been done by hail and heavy storms. W. H. C.

CHEEKTOWAGA, Erie Co., N. Y., Aug. 13, 1878.

THE corn crop in this section, as far as my observation extends, is about an average one. Oats not an average; barley light and poor; wheat very good; and there is also a very large crop of hay. G. B. E.

SCHENEVUS, Otsego Co., N. Y., Aug. 14.

THE corn crop in this section will be fair. The hay crop is large. Rye very heavy. Early-planted potatoes will be a light crop; late-planted fair. we had plenty of potato bugs, but Paris-green fixed them. Fruit plenty. J. F. C.

CANESARAGA, Allegany Co., N. Y., Aug. 12.

THE corn crop, as far as we know, will hardly be an average one. Wheat—that is winter wheat—is a heavy crop, but fruit is a failure on account of the freeze in June. E. S. B.

MEDINA, Orleans Co., N. Y., Aug. 10.

THE corn crop is above the average, and so is wheat. The barley and oat crops are considerably below an average, and so will fruit be.

H. L. F.

NORTH BLOOMFIELD, Ontario Co., Aug. 12.

ALL farm crops are good in this section, the corn crop in particular. Fruit rather light.

A. G.

NEW JERSEY.

NEWTON, Sussex Co., N. J., Aug. 12., 1878.

THE corn crop this year is looking first-class—a great deal better than last season. We have had plenty of rain in this section, and I think that the crops will be a great deal better than the prices, this fall. Millet is doing extraordinarily well this year; last year it was hardly worth gathering. Apples are plentiful, and milk is very low, one cent per quart at the Brighton Creamery. Flour is at all prices, to suit the times—from $2 50 up to $6 and $7 per cwt. A man can live on apple dumplings, if the times are a little tough. My father-in-law has the best lot of corn, oats, wheat and apples of any one in the two counties of Sussex and Warren. They are splendid. He takes care of his manure and knows how to use it. It is the main part of successful farming to have a good captain at the head of it. Potatoes, I am afraid, are going to come out small this season. It has been almost too wet for them to turn out well. Pasture holds on well and the cows and stock of all kinds look excellent. Butter is way down so low that a man ought to be hung that will let his feet get sore on the account of hard boots or shoes, or let his horse sweat with dry wagon wheels and hard harness. A. V.

MENDHAM, Morris Co., N. J., Aug. 9, 1878.

THE prospect for an average yield of corn in this and adjoining townships, is good. Hay crop excellent. Wheat less than half a crop, injured by insect. Potatoes promise an average yield. Fruit a partial failure except apples, of which there will be two-thirds of a crop. Peaches are very scarce, and what few there are, rot badly. Oats a full crop. S.

ROSELLE, Union Co., N. J., Aug. 10, 1878.

OUR corn crop is good and more has been planted than usual. Our hay crop was very good, but it is worth only some $7 or $8 per ton. Oats are fine and apples look promising. Pear-trees are badly blighted and small fruit was generally injured by the frost. J. R.

PENNSYLVANIA.

OSWAYO, Potter Co., Pa., Aug. 11, 1878.

CORN hereabouts will be nearly a failure, owing to a superabundance of rain. There is but little planted in this section. Wheat will be about half a crop. Winter grain does not bid as fair as the spring grains. Oats are the best crop in this immediate vicinity. Potatoes will not amount to much; the prospect now is that they are going to rot a good deal. Hay is a drug; everybody has more than he knows what to do with. Plenty of old hay in the country and the new crop is as good as we have had in several years. The fruit was nearly all killed by the frosts we had the last of May.

This is a new county; people have been engaged in the lumber trade till within a few years; consequently there is not as much farming here as in the adjoining counties in N. Y.

S. L. M.

CHATASAUQUA, Lehigh Co., Pa., Aug. 12, 1878.

THE corn crop throughout the whole county never was better. It would delight you to take a ride through this section of Lehigh County. A great many old people say that for many years back they have not seen such a crop. Potatoes are also a good crop. Apples are poor around here. Grapes look well, especially my own, which suffered not at all from the frost. A great many of the farmers' barns are full, and you will see all around stack-yards of rye and oats. We have here a greenhouse containing about 2,000 plants, large and small. We have also about 200 chickens, which we raise ourselves. There are a great many varieties of grapes also, and about 400 roses, our "boss" rose being the Marechal Niel. C. M'C L.

GREENVILLE, Mercer Co., Pa., Aug. 12, 1878.

THE corn crop in this vicinity is going to be a *good* crop, much better than was expected; the rains brought it up finely. The peach crop is not an average one; apples will be plentiful; potatoes are a failure on account of dry weather.

J. L.

OHIO.

KENSINGTON, Columbia Co., Ohio, Aug. 12 1878.

THE corn crop of Columbiana and Carroll counties promises less than an average—as far as my observation and information extend—say 10 to 20 per cent less—though abundant showers and warm weather during this month and the first half of next, will have much to do with it. The whole month of June was very cold and wet, and corn did little good. Then harvest came with such a rush that many fields have been sadly neglected. My corn—with two good workings during harvest—will be very good. If the cold, wet, month of June held back the corn—it probably made it up in grass—a greater abundance of pasture was never seen, and a better hay crop, better secured, never harvested in this locality. Oat crop great—both in yield and area sown. Wheat, above an average, though some fields were injured by Fly and some late wheat by the hot weather.

This section of country is abundantly provided with barns for all ordinary seasons, but this year there is scarcely a farm on which there are not one or more stacks of hay or grain besides what filled the barns.

Fruit abundant, except on some farms in valleys, on which the fruit was killed about the 15th. of May. Fruit is not made a specialty by any one in this locality, but quite a quantity of peaches and apples are often shipped from here. The peach trade has just opened; Hale's Early, the principal early variety, is proving very unsatisfactory on account of rot.

Farmers generally are waking up to the fact that it pays to keep good stock, that a sheep that shears six lbs, is no more expensive than one that shears four. Still, some do not yet realize that any stock, to do well, must be properly cared for. D. J. P.

NEW WAY, Licking Co., O., Aug. 13th, '78.

CORN never looked better. In dangor, when shooting, from dry weather; timely rain savedit; ears well set; prospect better than last year. Wheat and oats are being threshed, amount and quality exceed expectations. This vicinity has rather too much heavy clay for wheat, wants draining, but is averaging, I think, 18 or 20 bushels per acre. One field of six acres threshed 120 bushels, highest estimate 90 bushels. Oats I think are averaging 40 bushels per acre or more, and heavy berry. Hay crop heaviest for years. Blackberries rotting, so plentiful. Peaches and apples abundant. Persons out of debt happy—can eat, drink and be merry.

S. S. W.

GAMBIER, Knox Co., Ohio, Aug. 13, 1878

CORN in our county now gives promise of a very fine crop, especially on the bottom lands. Upland crops may be a little light. We have the best crop of wheat that was ever known here. Oats, too, are very good. Of fruits we have the greatest abundance—an enormous crop of apples selling for 20 cents a bushel, and plenty of peaches just coming into market. More attention is given here to raising hogs than cattle. Stock hogs are not very plenty. We have some cholera amongst them; I have lost 50 head on my own farm this summer. J. T.

ROCKDALE, Warren Co., Ohio, Aug. 14, 1878.

CORN grew very slowly during the month of June—looked very discouraging, indeed; but with the hot weather of July and frequent showers of rain, the corn grew astonishingly rapid, and now it is all in tassel, with a good deal of it fit for roasting-ears. With the exception of perhaps one-tenth which will not ear from having been affected at the root by an in insect, we will have an average crop. There is a larger acreage planted than last year. The most of it is very tall, 10 and 12 feet: C. L.

SPRINGBURG, Warren Co., O., Aug. 12, 1878.

THE present prospect indicates an average crop of corn. Wheat good but not turning out as heavy as expected before threshing began. Barley not as many acres as usual and damaged by frost. Oats good. Apples near an average crop; Pears plentiful; Peaches scarce. Potatoes generally poor. W. H. C.

DOYLESTOWN, Wayne Co., O., Aug. 12,

CORN hereabouts is poor, it being too wet at the time of planting. Wheat is turning out well; it will be above an average crop. Oats and rye are good. Hay is plenty. Prospects for late potatoes are good, early ones poor. Fruits of all kinds are plentiful especially apples and peaches. F. C.

NEW CONCORD, Muskingum Co., Ohio, Aug. 12.

THE prospects for an abundant corn crop are not flattering, owing to the dry weather we have been having for the last two weeks; but if we have rain soon we may have a fair crop. Wheat and oats were good and are yielding well. Fruit of all kinds is abundant, but the early peaches are rotting badly. J. C. P.

URBICNSVILLE, Tuscarawas Co., Ohio, Aug. 10.

THE prospect now is that we shall have a good crop of corn in this county. Wheat and oats above an average crop; hay a good average, and all well saved. We have had an abundance of small fruit; there is a very heavy crop of apples and peaches; also of plums. In fact, we have a good crop of everything. F. B. H.

SALEM, Columbiana Co., Ohio, Aug. 13.

WE have had fine growing weather. Corn is looking well. Wheat, oats, and rye good. Oats averaged 60 bushels per acre. Apples and peaches will be a good turn-out. Pears a light crop. Plum trees are very full.

M. E. T.

PAULDING, Paulding Co., O., Aug. 13, 1878.

CORN is not very good in northwestern Ohio, owing to the heavy July rains. Will make two-thirds of an average crop. Fruit prospects good; apples in abundance; no end to blackberries; some peaches. F. B. D.

MICHIGAN.

ADRIAN, Lenawee Co., Mich., July 12.

CORN never looked better, and, if not injured by frost, will be the largest crop we have ever had. The wheat crop is the largest in the history of the county. Hay was also good. The farmers have had a remarkably favorable season for gathering their crops. One man told me he had 40 tons of timothy from 13 acres, all secured without a drop of rain on it. And that is the experience of hundreds of others. There is abundance of everything to eat at very low prices. White winter wheat, best quality, $1.00; No. 2 white 93c.; amber 93c; No. 2 amber 86c.; white oats 26c.; mixed 23c.; Early Rose potatoes 30 to 40c.; onions 75c. per bush.; fat cattle (steers) two to four years old $3 to $3. 50 and $4 per hundred pounds live-weight; timothy hay $6; butter, best quality, 10c.; eggs 7 to 8c.; cheese 7 to 7½c.; good wool 30c.; fall apples per bush. 25c., with good prospects of large crop of winter. Wheat will average from 20 to 25 bush. per acre, and be of good quality. A. W.

TECUMSEH, Lenawee Co., Mich., Aug. 12.

I HAVE lived in this State over 40 years and I think I never have seen better crops. In general wheat is already harvested. Some is a little shrunk, but, on the whole, it is more than an average yield and quality. One farmer told me that he had just threshed 2,200 bushels cut on less than 100 acres, 22 to 25 bushels per acre being about the average yield. All spring crops, oats, corn, potatoes, &c., never looked better at this season of the year. Fruit of all kinds is abundant in quantity and first-class in quality. I am speaking of this section in particular, but I have daily news from all parts of the State, and I unhesitatingly say that crops in general were never better. Wheat is worth now with us from 95 cents to $1.10, according to quality and color.

E. R. H.

PLYMOUTH, Wayne Co., Michigan, Aug. 13.

WITH regard to the corn crop hereabouts, on the low and heavy land the continued heavy showers—almost unprecedented in quantity per hour—did considerable damage; in many cases leaving the ground perfectly bare; but, on the average, a fair crop is expected, if the frost holds off long enough for it to mature, the most of it being planted a week or ten days later than usual.

J. H. J.

MUSKEGON, Muskegon Co., Mich., Aug. 13, '78.

THE wheat and grass crops here were above the average of seasons. Corn and late potatoes promise well to extra. Early potatoes very light on sandy land. All tree fruits bearing none or very little, except on the highest ground or where fogs prevented the frost of early May. Strawberries about one-third of a crop from the same cause. Wild berries in excess.

S. B. P.

MARSHALL, Calhoun Co., Mich., Aug. 13th.

THE corn crop never looked finer than it does at the present, but unless we have rain in a short time, it will shorten the crop tremendously. Wheat, an extraordinary yield and good. It is the largest yield Calhoun County has ever made. There is also a large and good crop of barley, oats and rye. Fruit is short. Potatoes a small yield for the want of rain.

D. H.

ILLINOIS.

WEST JERSEY, Stark Co., Ill., Aug. 13 1878.

RIGHT through this section of country the corn is good; but on flat lands, where there was poor drainage, the corn is considerably damaged, on account of the wet weather we had in corn planting time. Through this country corn will average a good crop, the same may be said of small grain. The hay was very heavy and was mostly harvested in good condition. People coming in here from different parts of the State say that corn is better here than in other sections of the country. A great deal of damage has been done to crops by the severe wind and hail storms that have passed throughout different portions of the State. There has been an abundance of small fruit, of all kinds. Apples are plenty but not as large a crop as we have some years. Peaches and pears are never a very large yield with us; but this year the yield is very fair. Early potatoes were not as good a yield as might have been, had we had more rain during the latter part of July.

H. E. M'C.

OTTAWA, Ottawa Co., Ill., Aug. 12, 1878.

CORN will be about 9 per cent. of the average crop of No. 1 quality unless early frosts cut it off. Spring unfavorable, heavy rains preventing low-land from being worked. Wheat saved; average, 18 bushels; sound, slightly shrunk. Oats, good above average. Little or no rye or barley raised here. This is not much of a county for apples or peaches; for, though almost every farmer has a small orchard, there is little fruit of this kind sold, it being mostly used at home. Small fruit does well, and the crop this year was fair and disposed of at paying prices. In my own garden, I have some twenty apple trees that yielded about two-thirds of a crop. The queer thing to me is that every year heretofore, from half to two-thirds would be wormy, whereas this year, so far, I have not seen a wormy apple. Season from Early Harvest to Golden Russet.

C. A. L. W.

PITTSFIELD, Pike Co., Illinois, Aug. 12.

CORN in this section of the county is about an average crop. Apple crop less than half. Peach, pear and quince crops very good; small fruits have been abundant—never better. A good crop of wheat, oats and hay. General prospects good.

M. R. P.

PITTSFIELD, Pike Co., Ill., Aug. 13, 1878.

THE corn crop in this section of the county, to all appearance, will be considerably below an average—probably a good two-third crop.

M. J.

INDIANA.

WILLIAMSBURG, Wayne Co., Indiana, Aug. 14.

WHEAT principally threshed and made a good yield, averaging 15 to 18 bushels per acre. Oats and flax good, and yielding well. Corn prospect good, but a week to ten days later than common. Apples badly blown off by heavy winds, the crop being below an average. Potatoes are small and only a moderate yield. Cabbage-worms are ruining the cabbage. Pastures are in need of rain in this immediate section. Health generally good. Times *said* to be hard, but if a show, such as P. T. Barnum's humbug, comes along, thousands can find time and money to spend.

W. M. H.

SOUTH BEND, St. Joseph Co., Aug. 15, 1878.

THE prospects for corn are exceedingly favorable in fact were never better. Fruit promises full return.

J. F. S.

IOWA.

COLESBURG, Delaware Co., Iowa, Aug. 10.

THE prospect for corn is the best that we have ever had. It is earing very large, and the warm weather has made a very large growth. Spring wheat is about fifty per cent. below the average. Fall wheat is about as good as or better than usual—will average about twenty-five bushels to the acre. The Poland wheat, a new variety, has done remarkably well. It will be the principal variety sown this fall. Oats have rusted badly—will be about twenty per cent. below the average. Hay is very heavy, and has been saved in good condition.

W. J. O.

MANCHESTER, Delaware Co., Iowa, Aug. 12.

THE weather, the past week, has been clear, bright, warm and drying. The prospect for corn is good, better than at this time last year. The chinch-bugs are troubling some pieces. Old corn is worth but 20 cents per bushel.

C. J. B.

LYONS, Clinton Co., Iowa, Aug. 12, 1878.

THE acreage of corn, in our section, is less by fifteen to twenty per cent. than last year. It is thought, however, that as the corn is heavy, the yield will be equal to the crop of 1877.

M. G. R.

KANSAS.

WILSON, Ellsworth Co. Kansas, Aug. 13.

In regard to the corn, I must say we have an unprecedented crop. Even "sod" corn, which usually produces but 15 or 20 bushels of "nubbins" will this year bring from 45 to 60 bushel to the acre, of as good corn as can be grown on old ground. Old-ground corn will produce from 85 to 120 bushel. Two-thirds of the corn grown in this county stands from 15 to 17 feet high. Corn sells for 35 cents per bushel.

In regard to the fruit, I must say, that fruit is scarce as yet, the county being but recently settled up, but what we do have, is as fine as the finest I ever saw in the New York markets. Peaches, apricots, quinces, grapes, currants, straw, black, and gooseberries, as well as plums, which grow wild, are in great profusion, and of immense size. In fact, the plums in this county are not cultivated, for the reason that they grow larger, and have a finer flavor than the cultivated plums of the Atlantic States.

Garden vegetables are of mammoth proportions, and grow with little care; we have squashes 2½ feet in diameter; watermelons 3 feet long; cucumbers, radishes, turnips, carrots, muskmelons, tomatoes, and all truck, grow in the greatest profusion.

O. L. S.

ROCKFORD, Floyd Co., Iowa, Aug. 13.

The prospect for an abundant corn crop was never better. Should no severe frost occur at an earlier date than usual, it will be the heaviest for years, good, we think, for 75 bushel per acre. The wheat crop is almost a total failure, yield per acre from 4 to 8 bushels, of very inferior quality. Had the hot spell begun one week later, it would have been immense. Oats are good. The apple crop is large for this section of country. No other except the smaller fruits are raised here, to any extent.

W. L. MC'E.

WHITING, Jackson Co., Ks., Aug. 12.

Crop report for this section good, except oats, which were a partial failure, on account of rust. Corn, A. No. 1; wheat good in quality and yield. Small fruits abundant. Apples and peaches a good average. Corn is worth 22 cents; wheat, 70 cents; oats, 12½ cents; cattle and hogs, $2,50 to $3,00 each; butter 10 cents. Hay crop good. Just rain enough to insure a great yield of corn.

J. W.

AXTELL, Marshall Co., Kansas, Aug. 13.

In regard to the corn crop, it is hard to find words to describe it. It is the best I ever saw in this or any other State. The fall wheat was good, as were the oats; but the spring wheat was badly injured by the chinch bug.

A. H. W.

July 28, 1878.

HARLAN COUNTY, Neb., is gathering a heavy crop. Immigration is large. The rainfall has been seasonable. Green corn and ripe melons are on the bill of fare.

R. H. C.

EASTERN STATES.

MANCHESTER DEPOT, Bennington Co., Vt. Aug. 12.

THE corn crop in this section is very backward, owing to the frost on the 6th of June, which cut most of it to the ground. By looking in my diary, I find the following at that date:—"Severe frost; ice formed half an inch thick." The crop will be light unless we have an uncommonly favorable autumn. The hay crop is mostly secured, and is about an average. From what we have observed, it is our opinion that potatoes will be scarce in this vicinity. The Colorado beetle is doing his share of the work of destruction.

In most apple orchards in this section, the cold weather in early summer destroyed the crop, but in some sheltered portions the trees are well loaded. Pears and plums are few, so far as I have seen.

E. L. T.

RUTLAND, Rutland Co., Vt., Aug. 10, 1878.

THE present prospect for the coming crop is that we shall have a most abundant yield—one indeed unusually heavy. Such are the reports from all parts of our State, as far as we have been able to learn. The recent plentiful rains, together with the warm temperature, have been exceedingly favorable for the growth of all kinds of vegetation.

M. S.

NEWPORT, Orleans Co., Vt., Aug. 10.

THE corn crop in northern Vermont is good, larger in quantity than an average by perhaps 25 per cent., and as far advanced as usual at this date. The wheat crop is also large, though somewhat injured by rainy weather at harvest. Our farmers will not buy much corn or flour this year.

T. H. H.

NELSON, Cheshire Co., N. H., Aug. 12.

THE prospect of the corn crop in this section is very good. The hay crop was better than it has been for several years. The farmers have had to fight the potato bug; some few have used Paris-green, but most have kept them off by hand-picking. The prospect is there will be a fair crop. The fruit crop is not quite as good as it promised to be in the spring, owing to a late frost; but still it will be good. We have had a great many heavy thunder showers the last few weeks. Fall feed is looking finely.

C. F. J.

BRIDGEPORT, Fairfield Co., Conn., Aug. 12, 1878.

CROPS of all kinds in this region of Conn. were never better. The corn crop never looked better, though the area planted is not as large as once, yet there seems now a full assurance of a good yield. The hay crop exceeds the product of any year since the war, but, were it not that the dry weather of two or three summers back has killed some of the grasses, it would have been greater. I hear, too, that very late frosts were in some sections injurious. Potatoes have turned out well; fear of the beetle kept back a large acreage from being planted. Still the grand yield will almost make up for that. But little complaint has been made this year about the pest. Buckwheat promises a glorious supply for our breakfasts. Farmers say they never knew a season of such seasonable rains and continued progress.

W. H. N.

BRIDGEWATER, Plymouth Co., Mass., Aug. 10.

THE corn crop in this section is looking well, though is no earlier than usual; but the hot weather and frequent showers are now pushing it—more attention is being given to this crop than formerly, and the acreage is increasing. Apples are plentiful, but pears are a small crop; small fruits abundant.

A. H. W.

BERLIN, Worcester Co., Mass., Aug. 19.

THE corn crop is very good, and so are other farm crops in general. Apples plenty and fair; peaches very scarce; pears few.

E. S. W.

WOONSOCKET, Providence Co., R. I.

CORN, so far as I have heard, is not an average crop hereabouts, and is considerably lighter than that of last year. The apple crop is very heavy, in this vicinity. Pears, quite light. Grapes, set well, but mildew and rot.

F. E. L.

SOUTHERN STATES.

LOVETTSVILLE, Loudoun Co., Va., Aug. 12.

THE corn crop is progressing rather poorly. It started weakly, owing to the continued cold weather in the early part of the season. The warm weather, and the several fine rains lately, have started it into new life; but the strength of stalk is wanting to secure a good crop. I am sure that, let the season be ever so favorable from this on, the crop will be short of an average one.

The wheat, I think, is about a fair average crop; occasional fields seemed to die off suddenly, and did not fill, while some filled quite well. This seems to apply to all of our section. The growth of straw was large enough. Oats were of unusually fine growth, but the excessively warm weather, just at the time of maturing, caused the kernel to be small and light. Early potatoes were unusually fine. The hay crop was very good. Grasses of all kinds grew very strong, clover particularly so.

The Virginia farmers attach a vast importance to clover. For a number of years past our clover has not been taking, and consequently fertilizing for wheat has been indispensable. We are now looking for a better time, as clover is quite promising at present. Our county is a noted wheat-growing section, and indeed all cereals do well. And if prices keep up to a fair standard, grain-growing will turn out a good business here. Our soil is very diversified. We have, through the middle of our county, a mountainous range that furnishes the very best of pasture lands.

Though the greater portion of our county is favorable to fruit growing, we have almost a famine in that line this year. The cherries, peaches, etc., were killed by a very sudden and severe snap of cold in January, and one morning at that time the mercury ran down 11° below zero. Then, on the 13th of May, we had a very severe frost that killed raspberry blooms and other things. Blackberries are usually very plentiful here, growing wild; but this year, just as they were ripening, the sharpest drought and heat set in and dried them badly.

J. G. R. K.

THOROUGHFARE, Prince Wm. Co., Va., Aug. 13.

THE corn crop here promises to be an average one. We have had fine showers the last two weeks to make the early and late planting well filled. On the best land it is well eared, and a good crop. Wheat is not an average yield, neither are oats. Most crops are already threshed. There is a great scarcity of all fruits, except grapes.

E. K.

DUNNSVILLE, Essex Co., Va., Aug. 13, 1878.

CROPS in some sections hereabouts are good, in others very poor. Wheat and oats were very poor crops. Gardens are like farm crops, variable.

R. S.

CHARLESTON, Jefferson Co., W. Va., Aug. 12.

OWING to the drought in the early part of the season, some fear was here entertained that the corn crop would be a failure; but for the last few weeks the season has been excellent, and the opinion is that there will be a good average crop.

E. B. D.

BENWOOD, Marshall Co., West Va., Aug. 12.

THE wheat crop never was better; the yield is some 35 bushels to the acre. It is winter wheat. Oats were a medium crop, but of good quality. Potatoes are only a fair crop. Small fruits of all kinds reasonably good. The corn crop, although planted late, will doubtless mature in time to yield a good crop, as the late rains have not, in any way, seriously damaged it in this section.

W. E. L.

SALISBURY, Rowan Co., N. C., Aug. 12.

THE small grain crops of this section were poor—only about a half crop. Corn was injured by drought, but is doing better since the late rains. Cotton backwards, but now blooming and fruiting freely. An average crop is expected. German millet has been sowed to some extent, and is well spoken of by those who have tried it. There is almost a total failure of the apple crop, and the peaches are very inferior in quality, but very plentiful. Potatoes (Irish) early and splendid both in yield and quality. Sweet potatoes are promising well. Country healthy.

M. E. H. S.

HENDERSON, Granville Co., N. C., Aug. 13.

THE prospect of the corn crop is very fair. The cotton is backward in consequence of a wet, cold spring, and a very poor stand in some places, but we have had some very warm, growing weather these last few weeks, and it looks well now. We had a fair crop of early peaches, but the late ones are not a very good crop any where hereabouts, and what there are seem mostly wormy. We have a very good crop of grapes; are shipping them now. Have no apples—being very few in the county.

W. B.

OKOLONA, Chickasaw Co., Miss., Aug. 13, 1878.

OUR corn crop will be moderate; wheat, sorry; oats, very fine this year. It is hard to tell about the cotton crop; we have too much rain. I am fearful that the worm will take the crop. Yesterday I saw four on one limb and three on another. It is cloudy and looks as if we should have too much rain. If so, the cotton crop will be short. There is too much late cotton this year, owing to a great deal of rain on the bottom land. It worked out of the grass late and that is the kind the cotton worm preys on.

T. Q. B.

GRIFFIN, Spalding Co. Ga., Aug. 13.

The corn crop was unusually promising in this section up to the middle of July. Dry, hot weather since, has cut it off to some extent, but the crop will be good; better than last year's.

J. J. R.

ROCKVILLE, Bates Co., Mo., Aug. 13.

CORN prospect below the average. Wheat injured by the rust—will average ten or twelve bushels per acre. Oats good. Potato prospect good. Timothy hay splendid. Apple crop short. Early peaches rotted; late ones good; rotting some. Small fruits were abundant. Weather has been extremely hot—is cooler now.

J. N. O.

LATEST REPORTS.

NEW YORK.

NORTH LAWRENCE, N. Y., Aug. 14.

The corn crop in this section is good, it is well cared for, and promises now to give a good yield of sound corn. Wheat and oats have done well in this section. The yield of hay has for the most part been very heavy. The potato, of all crops, has all through the season given the most uneasiness; the extreme earliness of the season led some to plant in March and April, and those fields were killed by frost in May, a great many potatoes also failed to germinate, and had to be replanted. The beetles came early, and so numerous were they, that people have had to work hard to save the crop. Some hand-pick, or knock them off, while others use Paris-green, but the bug doesn't care which way we try to kill him. It is very uncertain how the potato crop will turn out in this section. We have had a great deal of rain within the past month, and all lands, whether high or low, are wet; hence it is feared that potatoes will rot badly. The apple crop is very good, and we have good plums, we used ashes on our plum trees. Pastures are as fresh as they were in June. It is very warm, and we don't see any signs of fair weather.

A. H.

CARLISLE, Schoharie Co., N. Y., Aug. 14.

The hay crop was above an average in quantity, but the quality was not as good as usual; rainy weather ripened much before made, and much was damaged after being cut. Winter grain was good. There were many nice fields of wheat in this county. Spring grain of all kinds is below an average, spring rains having damaged the crops a good deal, and the rains in July causing them to rust. Potatoes will be a very poor crop—not that the beetles have injured them, for that is not allowed—but the season has not been right for them. Corn looks well; the growth of stalks is heavy, but the corn is two weeks later than last year. Buckwheat looks fine at present. Hops are not half a crop in quantity, and many are complaining of rust on them already, I saw one yard to-day looking as though it was honey-dewed; small fruit were a failure. There will be a fair crop of apples; some orchards are quite heavily laden, while others have but very few. Butter is selling for twelve and fourteen cents per pound. Cheese nets the patrons of the factory between six and seven cents per pound. H. J. S.

FRANKLIN, Delaware Co., N. Y., Aug. 15.

The crops taken as a whole, in this section, are considered above an average, as compared with the last five years. Oats and grass are considerably above an average. Corn a little late, but an average; an early frost may injure it. Potatoes, a light crop. Barley, heavy kernel, and an average growth. Apples, very wormy, rather small, and a light yield. Pears a light yield. These Delaware hills are a dairying region; comparatively little corn is raised here. Hay has to be stacked out this season on account of the quantity of it. A. T. M.

ORIENT, Suffolk Co., L. I., Aug. 14 1878.

CROPS here, are for the most part good. A large yield of wheat and oats, plenty of apples, but few pears. Late potatoes are looking nicely, early ones are of fair size and of most excellent quality. Corn is very promising in this immediate locality, but westward through Southhold, Peconic and at other places on the east end of the island, the Grub-worm is doing an immense amount of injury, insomuch that some fields will not yield over 20 bushels per acre. One farmer recently took 56 of these worms from one hill of corn. A. J. B.

NEW LONDON, Oneida Co., N. Y. Aug 15 1878.

THE corn crop, barring some accident, will be above the average. Potatoes rather poor, especially the early planted ones. The late ones may do better with favorable weather.

J. L.

PENNSYLVANIA.

WEST GREENE, Erie Co., Pa, Aug. 16, 1878.

THE corn crop in this vicinity promises to be fair; it is of larger growth than it has been for several years past. Wheat and grass, good, both more than an average crop; wheat about 25 bushels per acre. Apples and potatoes are nearly a failure; potatoes very small and but few in a hill. Oats about an average crop.

B. R.

DELMAR, Tioga Co., Pa., Aug. 14.

THE corn crop in this vicinity will not be over three-fourths of an average. No fruit, except on high ground, a few apples. The hay crop is uncommonly heavy. Oats, wheat and buckwheat fine. A. H. S.

WESTERN STATES.

BETHEL, Clermont Co., Ohio, Aug. 14.

The corn crop will not be more than two-thirds what it usually is, to take the county over. There are some exceptions, of course. The weather has been very warm, and there was not sufficient rain at the right time to make a good crop, but we have no reason to complain for the less of it, as we have had very good crops of wheat and oats, and in fact, of almost every thing which is produced in this part of the country, except potatoes; of them both early and late, there will be a short crop. We have had an abundance of all kinds of fruit, the products being so plentiful, the prices would not pay for the trouble of marketing. E. F. G.

BENNETT'S CORNER'S, Medina Co., O., Aug. 15.

Weather hot and dry. Corn was backward, but now bids fair for a good yield. Winter wheat and oats good; spring wheat injured by the fly. The bug and dry weather in July almost ruined the potato; the crop will be nearly a failure. Apples, pears, and peaches are abundant, early varieties decaying on the trees. J. A. B.

CHATHAM, Medina Co., Ohio, Aug. 14.

The crop of corn in most of the county is better than last year, but there has been so much rain that the corn on the river bottoms is badly injured, and also the potatoes. The oat crop is nearly one-fourth better than last year. Wheat, an abundant crop; hay, a very heavy crop.

W. H. M.

HANOVERTON, Col. Co., O., Aug 16.

Harvest is over. Wheat, a good crop in this section; hay is a large one; oats are excellent; corn is a good stand on the ground, but is late, not much of it in roasting-ears yet. Fruit plenty. E. R.

PENNVILLE, Jay Co., Ind., Aug. 13.

The prospect for the corn crop in this section is good. Wheat better than common, average 23 bushels per acre. The largest oat crop ever raised in the county. Potatoes injured by the heavy rains for the last four weeks. A heavy crop of hay, but, owing to the rainy weather, it did not get saved well. Apples and peaches scarce; plenty of small fruit; the worms are taking the cabbage; there are several remedies given, but none proves effectual. M. O. W.

LA FAYETTE, Tippecanoe Co., Ind., Aug. 15.

THE crops are above average as follows:—Corn, 25 per cent.; wheat, 75 per cent.; oats are medium; small fruits are and have been 50 per cent. above average. Potatoes are an average crop. Orchard produce 25 per cent. below average. L. K.

COLON, St. Joseph Co., Mich., Aug. 16, 1878.

AT this date the corn crop never bid fairer for a large yield. Apples—about half the orchards are full; some badly injured by May frost; fine quality; no worms this year. Wheat crop is good; farmer's price, seller's, $1 per bushel. Oats is a fair crop. Southern Michigan is hard to beat, hardly ever a failure in any crop. Some peaches; plenty of pears; only a few grapes, and these only where protected from frost. Farmers in general are going into mixed farming, raising wool, hogs, peppermint, etc. W. H. O.

LINCOLN, Mason Co., Mich., Aug. 13.

THE prospects for the corn crop are excellent in this part of the county. While riding through the county a distance of fourteen miles, last week, I noticed a great many fields and they all looked uniformly good. But we are having some dry weather just now, and if it should continue a week or two longer, it would materially hurt the earing. M. W.

BATTLE CREEK, Calhoun Co., Mich., Aug 15th.

THE corn crop bids fair for an average one in this section of the country. The fruit prospects are very poor. M. S. B.

QUINCY, Adam's Co., Illinois, Aug. 13.

The corn crop in this section seems to be fair but rather below the average. A hail storm in the spring damaged the fruit crop very much. There will be no apples to speak of. O. S. H.

SALEM, Kenosha Co., Wis., Aug. 13.

The corn crop will not be an average one, owing partly to the drought, but the spring was cold, and very rainy, so that it was late in starting a healthy growth. Oats and grass are excellent, and there were no winds and rains to throw them down. Potatoes are very poor, the tops are dying, and the tubers are few and small. I suppose this failure must be owing to want of rain at the proper time. The wheat crop is very light in this section, the failure being probably due to so many days of extreme heat. The earth is more like stone than like the soil, as it should be, for anything to grow. All kinds of fruit trees bloomed beautifully, and promised an abundant yield; but, like many fair prospects, there is but a portion of fulfillment, there are but few apples. I believe the buds were blighted by the cold rain, and last winds, and the frost in the spring. The strawberry crop was very light in this section, but raspberries were very good.

S. B.

DARIEN, Walworth Co., Wisconsin, Aug. 13.

Corn promises well, a little withered, but a heavy growth and good weather. Southern Wisconsin and northern Illinois, promise a large crop. Wheat poor, half a crop; oats and barley good. Potatoes light, small, and few in a hill. Hay crop, heavy. Wheat was injured by the extreme hot weather, and heavy showers. In some localities it was an average crop, in others, hardly worth harvesting. Apples, few and far between. The average, of course, I think, is less than last year. Z. H.

ARCADIA, Trempealeau Co., Wis. Aug. 14, 1878.

WHEAT, one-half crop; No. 2 oats are a good crop; barley, good yield but bleached; corn looks well now; there is but little grain raised here. Fruit was all killed by the frosts.

F. A. R.

PELLA, Marion Co., Iowa Aug. 15, 1878.

CORN and potatoes are needing rain pretty badly just now in this immediate vicinity. We are on the divide between the Desmoines and Skunk Rivers. They are about eight miles apart. It has been raining a good deal south of us lately, but on the divide it is getting quite dry. Corn was put in in good time and good condition; it is a good stand, and I think the prospects are better than they have been at this time for three years. T. N. H.

RED OAK, Montgomery Co., Iowa, Aug. 14.

THE prospects for our corn crop are most flattering, especially if frost holds off yet ten or fifteen days. Wheat is generally a light yield and poor quality. Oats fully an average crop. Rye good, but little sown. Flax good. No barley. Grass heavy. No winter wheat in this section. Fruit scarce because of late spring frost and for want of orchards. Farming community generally in good spirits and prospering. H. S. W.

CLARENCE, Cedar Co., Iowa, Aug. 15.

Wheat, five to fifteen bushels per acre, injured by rust and chinch bug. Oats, fifty bushels per acre, splendid. Barley, 30 to 40 bushels per acre. Corn promises well, where not injured by chinch bug. Potatoes poor, small. Apples scarce. Small fruit, poor crop; fruit-eating birds, ditto. Timothy, heavy on high ground, light on low ground. H. B.

HOWARD LAKE, Wright Co., Minn., Aug. 13.

The appearance of the corn crop, is, that there will be an extra one. Have never known it so good in the last twelve years. The prairies, doubtless, suffer more from recent winds, than we do in the "Big Woods." Fruit in this region promises only about two-thirds of a crop, although apples in some places are bending the trees to the ground, other trees have none. Grapes are much the same in amount, probably an average yield. Wild ones, mostly, if not all, killed by that noted frost in May. Also wild plums were killed as a general thing, but berries have been abundant. Minnesota is remarkable for its wild fruits and berries. A. A.

HOPKINS, Minn., Aug. 13.

The corn crop of this section is looking exceptionally good; the ears are large and well filled; a very heavy crop is expected. Oats are yielding from forty to sixty-five bushels. Wheat is very poor, ten to twenty bushels, and No. 2 is hard to get. A. E. B.

BROWNVILLE, Nemaha Co., Neb., Aug. 13.

THE prospect for corn in this county is splendid. There is a large increase in the area planted to this crop and the yield will be immense. Winter wheat is now being threshed, and some has already been sold; spring wheat has been considerably damaged by rust, the loss being estimated at about one-third. Nearly one-half the oat crop will be a loss from the same cause. Potatoes, cabbages and all vegetables, as well as apples, peaches and small fruit, are abundant. W. L. N.

CARLISLE, Eaton Co., Neb, Aug. 14.

THE corn crop in our vicinity is not as good as usual. The heavy rains in the spring delayed planting, and the severe drought of the last four weeks has injured it a good deal. Wheat and oats were both good. Wheat not as good quality as usual, however. Our fruit prospect is fair for peaches, but very few apples on the trees. Grapes were so hurt by the frost, that they will not amount to much. It is raining today, and the early corn will be a fair crop.

F. W. E.

SOUTHERN STATES.

CHAPEL HILL, Orange Co., N. C., August 18th.

THE cool, damp weather of the earlier part of the season injured nearly all the crops. The corn suffered, also, from cut-worms—in some places the farmer finding it difficult to get a stand. The summer has been very unfavorable, particularly to the corn, in much of the State of N. C. In June and July there was a great deal of dry weather, and the heat was intense. But about the main crisis the rains began and have continued, at short intervals, up to the present.

The CORN was, apparently, much damaged by the drought; but the improvement has been remarkable. Even the early corn shows promise of recovering, to a great extent, from its injuries. The later corn is flourishing. The crop has been well cultivated, and hence its rapid recovery from the dry weather. There is, at present, a cheering prospect of a sufficient yield of this indispensable cereal for the wants of the whole State.

The WHEAT turns out very discouragingly: While it has done exceedingly well in a few counties, it will average little, if any, over two-thirds of a good crop in the State. The rust was a leading cause. The yield of Oats is better than wheat, but considerably below a good crop.

TOBACCO has suffered from drought, and from various causes, the crop will, probably, be much short of a full one. Part of the best tobacco district has recently been visited by a very destructive hail storm. Cotton has been damaged, but shows hopeful growth since the rains.

From every part of the State the reports show an extraordinary product of Irish potatoes. All varieties have done well this season, remarkably well.

SWEET POTATOES are just beginning to seek the market freely. They will be in great abundance. The apples and peaches have disappointed us in both quantity and quality. The frosts destroyed them in some districts; while elsewhere, a peculiar blight, or insect on the leaves, or the "worm i' the bud," or sheer exhaustion from last year's heavy yield, or something else, damaged (if not destroyed,) what the frosts spared.

Many farmers are experimenting with golden millet and chufas. As to the former, I am quite sure that it does not equal red clover and Orchard-grass, on the same land, in this section. The difference is, in part, compensated by the fact that the millet comes so much sooner, can be cut several times in the year in which it is sowed.

At this writing the earth is thoroughly saturated, and the rains appear to be general. The signs augur much wet weather. The planters find an unexpected enemy in the abundant and rapidly growing grass, but it cannot do so much harm now. The season is timely for the turnip crop. In haste,

A. W. M.

BROOKSTON, Warren Co., N. C.

SEASONABLE rains are now improving our crop prospects. A large area under wheat, with a lower yield per acre, made the total number of bushels about the same as last year. Corn is now mostly in the milky state, and these frequent rains will insure a full average crop. Cotton suffered from cold during May and a part of June, though a good stand was secured, and the weather being favorable for the subjugation of grass and weeds, our fields are remarkably clean, and the plants are setting extremely full of balls. At this time planters are cheered with the prospect of a fair average crop. Probably there is not more than one-fifth the acreage in tobacco that there was in 1877; what there is looks fine. Sweet potatoes, beets, turnips, cow-peas, etc., are doing well. The third growth of clover is starting finely. Fruit crop various—many heavy crops, though some others light or total failures, owing to local causes, such as neglect, frost, hail, rot, etc. Prices realized for fruit generally satisfactory. M. B. C.

ALSTON, Fairfield Co., S. C.

THE crops are the best we have had in this county for years. D. R. E.

BOONE Co., Ky., August 16, 1878.

THE corn crop in this part of Kentucky will not be an average one, it is thought. The excessive heat dried the silk prematurely, and the grains are not filling out evenly. As to apples, the yield is a very fair one, while with the damson plum it is somewhat over the average. Trees of the large blue plum, and those of the wild red ones, have been excessively laden.

Y. S. G.

GLASGOW, Barren Co., Ky., Aug. 16.

CORN crop in this section of Kentucky has suffered for rain; we need rain now. The corn crop will be, perhaps, but little better than two-thirds of a good average crop. E. Y. K.

NEWPORT, Campbell Co., Ky., Aug. 13th.

JUST now a threatening drought prevails in this section. Unless rain should fall plentifully in a few days, but little corn will be raised. Apples and other fruits moderate in quantity.

EAU GALLIE, Fla., August 12, 1878.

HERE, on Indian River, crops have this year been excellent. Orange trees have made a fine growth and the crop will be very large. Pine-apples are found to do splendidly here and are receiving a great deal of attention. Grape culture also is attracting unusual attention hereabouts; Roger's Hybrids doing excellently, especially Goethe. Bees do well here, gathering large quantities of honey from this Flowery Land, and needing no feeding in winter. The cultivation of sugar-cane has lately been extensively entered upon with very satisfactory results. Many are also planting groves of guavas and bananas, and both are doing very well; the banana bunches being very large and the fruit well filled. A very large crop of sweet potatoes was put in, and they are doing remarkably well. T. H. S.

ATLANTA, Fulton Co., Ga., Aug. 14, 1878.

THE corn crop of this county is but 66 per cent. of a good crop at this time; but in conse-

quence of a rainy season, just set in, it may go as high as 80 per cent. C. D.

SIX MILE, Alabama, Aug. 13, 1878.

THE corn crop in this section is better, on an average, than in many years. Fruit crop almost a failure—very wormy and faulty. Cotton crop not so good as last year. Now having too much rain, and prospect of more. B. G.

COLUMBUS, Lowndes Co., Mississippi.

THE prospects of corn-crop are good—better than last year at this time for cotton. Corn in the uplands good, but in lowlands poor, in consequence of much rain in the spring. From the same cause fruit is in a great measure a failure. Oats all over our section are splendid. Wheat the same, although we do not do much at that. W. N. M.

APOPKA, Orange Co., Fla., Aug. 8.

THE crops of this county are corn, a little cotton, a great deal of sweet potatoes, watermelons of very large size and fine flavor, and for oranges, this section is especially well adapted. In some portions of the county banana culture is receiving considerable attention, and bids fair to turn out highly profitable, but as the plant is very susceptible to cold, it requires large water protection on the north to insure success. Grains suited to the soil are being extensively introduced. Para-grass for our lowlands and Guinea-grass for the uplands. The pine-apple, too, has lately been largely introduced and promises to be a paying crop. All crops this year have been very good. C. H. M.

PLEASANTON, Atascosa Co., Texas, Aug. 9.

THE cotton and corn crops in this county will be considerably above an average both in yield per acre and in area planted. Stock raising, however, is the principal industry, especially sheep; indeed the greater part of the county is a vast sheep farm, and there is more money invested in this branch of industry than in any other. It is calculated that sheep double in value in three years; and at present they are each worth $1.50 to $2.50. The soil consists mainly of a sandy surface with a clay subsoil, and contains a large admixture of vegetable matter, which renders it highly productive. There are here some of the finest farms in western Texas, producing large crops of corn, cotton, tobacco, peaches, figs, plums, and every variety of vegetables. The price of land varies considerably, but may be put down at 25c. per acre for unimproved, and from one to ten dollars for improved land. The area of the county is about 1,300 square miles, and its population in the neighborhood of 7,500, about half of whom are Mexicans. In this town, the capital of the county, beef is five cents per pound; bacon, ten cents; corn fifty cents per bushel; meal, seventy cents; flour, ten dollars per barrel. J. K. S.

HOUSTON, Harris Co., Texas, Aug. 16, 1878.

CROPS in general throughout the country are the best for many a year. Corn plentiful; a little worse in quality on account of too much wet at gathering time. Oats too, are damaged by the same cause, though a bountiful crop. Cotton is being picked and promises an A1 crop throughout the State. Peaches never as plentiful in the central and upper parts of the State. Grass knee-high through the prairies; therefore cattle are in tip-top condition. Weather warm; rains daily. G. M.

VAN BUREN, Crawford Co., Ark., 12th Aug., 1878.

The present and past season s have been most propitious for growing crops throughout our entire State. Scarcely, if at all, in the memory of the oldest citizen, has there been such a prospect of heavy crops of corn, cotton, and grapes. The wheat crop was a failure; too much wet weather through the past winter was the cause chiefly. The oat crop was simply enormous, from 40 to 80 bushels are represented to have been thrashed and cleaned per acre. Our fruit crop is variable. The peach crop measurably a failure. Grapes almost an entire failure from mildew and rot; wet weather the cause. Norton's Virginia and Ives' have done well. Apples are very fine, but the crop is not heavy, and why no one can tell, as they were no late frosts, or storms of any kind. Trees were full of bloom, but somehow did not set much fruit. Pears are extra fine; my Bartletts were the finest I ever saw; all ripe and gone. Seckels are extra beautiful and sound; are now being gathered, and must soon be disposed of, or they will rot, as the thermometer still stands up to 90 in the shade. Duchesse D'Angouleme, Howell and others, are looking well; the latter two varieties just about ready to be gathered to house-ripen. The blight has been very severe in certain localities. Much complaint from low and damp situations, while from high and dry well-drained lands but little complaint of blight. But for that one cause, we have, I do really think, the finest pear country in the United States. All kinds, up to about 41 varieties, have been tested by myself and immediate friends with the most perfect success, until struck by the blight, which does not often attack the tree until about the time it begins to fruit, when it is almost certain to show itself, and is terribly fatal to certain varieties, while Seckel, Duchesse, Winter Nelis, Virgalieu, and Howell, so far seem almost entirely exempt from the disease. I have Seckel and Duchesse 25 years old, and they have never been touched by blight, and have borne full crops of fruit for the last 15 or 16 years regularly. Our peach crop, which, as a rule, is the most reliable of all fruits in our State, was this year ruined by the curculio, which has never commenced extensive depredations on our peaches before. It was not the regular plum curculio, but something very nearly the same. R. T.

SEDALIA, Pettis Co., Mo., Aug. 16.

We have had a remarkably hot, dry season, a good rain last Saturday, which will help the corn very much. It is yet almost too early to form a correct estimate of the late corn crop, but I think it will give a very fair yield. Early corn good; also potatoes. Peaches, grapes, and other small fruits plentiful. The apple crop will be light. E. R. L.

BETHANY, Harrison Co., Mo., Aug. 14.

This county is 32x24, miles and the surface is diversified, rolling prairie, and level prairie, timbered ridges, and river bottoms. Corn in the north part of the county owing to more frequent showers, will be an average; in the center and south parts, will be out short by drought on timbered ridges; an entire failure on the bottoms, but will be good, all over the county, acreage larger than usual. J. W.

PROVINCE OF QUEBEC, Canada, Aug. 13.

The corn crop in this section is very good; the hot dry season we have experienced with a steady thermometer at 90° for weeks, has hastened the growth of this staple of the poor Canadian, and it bids fair to be an abundant yield. Sweet-corn was ready for the table by the end of July, and the fields of common yellow are looking well, except in localities where grasshoppers threaten to do some damage to the foliage, stripping the ears. A. L. J.

Various.

EUROPEAN CORRESPONDENCE.

LETTER FROM PROFESSOR I. P. ROBERTS, OF CORNELL UNIVERSITY.

A VISIT TO TIPTREE-HALL FARM.

Mr. Mechi and his Farm—A good Foundation—Reclaiming a Clay-bed—Stock Management—Rotation of Crops—Large Crops—Liquid Manure—Mr. Mechi's Principles and their Beneficent Results.

KELVEDON, ENGLAND.

TIPTREE-HALL, the home of J. J. MECHI, is situated four miles from the Railroad Station, and forty-five miles from London. I did not expect to find such poor land in all England as some I passed a half mile before reaching his farm; and yet out of land but a shade better than this by nature, he has made one of the most productive and profitable farms in England. He is still a hale and vigorous old man, and as enthusiastic as ever in improved and in improving agriculture. It is no superficial work that he does or aims at, but he commences at the root—education. His workmen could neither read nor write, so the first thing was a schoolhouse; but knowledge is worth but little without morality, so the next was a church. The effect of this early work I could see in the honest and intelligent look of his laborers.

The farm is composed of 173 acres, nearly all of which is heavy clay land. But "heavy clay" means quite a different thing here from what it does in America. Most of this farm is so intensely clayey that it will not make good brick or tile, and is by nature like a mortar-bed in wet weather, and like a rock in dry. Again, he strikes at the root of the matter and relieves the land of stagnant water by blind drains laid four feet deep. Next, the open ditches were filled up, and three miles of inside hedge fences removed. These improvements not only gave several additional acres of land, but transformed small irregular fields into large square ones suitable for cultivation by steam, a thing which he most fully believes in and puts into practice. The barns next received his attention. Covered yards were built adapted to soiling, and for years no cattle have run at large either in summer or winter, while the sheep are always folded in the fields, the fence used being an iron one on wheels, which is not only light and durable, but easily handled.

They were just sending their last consignment of green peas to the London market. The ground on which they grew will be plowed immediately and sowed to turnips. Half of the crop will be removed, and the other half fed to sheep on the ground, with the addition of some oil-cake and maize. This he claims will leave the ground as fertile as when the peas were planted. As dry and hard as the sand is now, it will take more labor to fit it for turnips than they would be worth in the United States. But here it is very different, and an Englishman never waits for rain but plows, cost what it may.

The immense clods I have seen turned up in the clay within the last few days, would appall anyone not used to them. Experiments in various courses of rotation, depth and time of plowing, have been conducted by Mr. MECHI for many years, and I understand from him that, as a rule, he would recommend a four-year rotation, deep plowing by steam, during the dry weather of the summer months; thus thoroughly aerating the soil and at the same time destroying the "twitch" grass that gives so much trouble in many parts of England. Whether the large crops of wheat and barley I saw growing were attributable to these causes or to the liberal application of farm manures, made by fattening animals in covered yards, or to all combined, I cannot say; but certain it is, that success has crowned his efforts, and the proof of it was before me in the large fields of wheat and barley almost ready for the reaper, which would not fall short of 50 bushels to the acre of the former, and 60 of the latter.

His system of sparred floors in a small portion of his cattle-sheds, whereby the manure—no bedding being used—drops directly into the manure cellar, did not strike me favorably, and they would certainly not do for a milk dairy or for animals in a cold climate. The stench and dampness are certainly both very objectionable, to say nothing of the discomfort to the animals from not having bedding. The manure that passes through the sparred floor is diluted, and then forced by steam-power through pipes, in some cases to the distance of half a mile, where it is usually distributed over land that is devoted to the production of Italian rye-grass—Setaria Italica—having learned by experience that it takes kindly to this liquid manure even on clay land, while most of the other grasses and clover do not. Though all might not agree as to the minor methods which he advocates and practices, yet it is certain that, as a whole, his system has resulted in not only remunerative harvests, but they have, in connection with his writings, been the means of bettering the condition of employed and employer, and they have also, by setting forth a more excellent way, done much to improve agriculture at home and abroad.

We cannot help but honor and admire this veteran farmer when we hear him, in his terse and forcible language, advocate deep plowing; covered barn-yards; soiling; uprooting of obstructing useless hedges and trees; large fields well under-drained; iron fences where any are needed; steam before horses; and horse before man-power; repeal of laws that hamper and obstruct agriculture; transfer of lands or leases; *intelligent* laborers; and, last but not least, free education to all.

STATE INDUSTRIAL SURVEYS.

WE have geological, botanical topographical and scientific surveys of the different states which have done much good in the directions specially required of them, but no complete industrial record or map of the state can be obtained from all these together. We know that in some parts there are coal; in some others peculiar kinds of clays or stones, but a map of hills and mountains and their contents, of valleys and streams together with an account of their adaptability to particular products or the amount of land uncultivated, the water-powers, forests, kinds and extents, and the products now found, and the practicability of other industries, of these we know of no State in the Union which possesses anything like an account.

This is the peculiar business of the several States, and their growth and prosperity depend upon such knowledge more than upon all other things together. The presence of moist or swamp lands which may be drained, the feasibleness of water-power, or railroad connections, and the labor for them to do, advantages offered to settlers or capital and what industries are in part or wholly established or neglected and in what particular localities situated, would do very much to direct attention to the development of resources and the establishment of new industrial enterprises.

There is no reason why emigration should go to the West of the Mississippi river for farms when half the lands of the Eastern States is idle, or why people should be idle when ten acres of land will give any man ample employment and hundreds of thousands of such plats may be had in any State upon the easiest terms imaginable. Probably no State in the Union has more water-power, more fertile idle lands, and other natural resources than North Carolina, yet it is next to impossible to ascertain trustworthy facts in relation thereto from any body in the State or out. Nor is this an isolated instance. Indiana has natural resources to place her upon an equal footing industrially with any State in the Union and half her lands are yet in their primeval fertility. The world needs but to know the industrial advantages and resources of each State in this great country to double its population in many instances and to add untold wealth in development of resources in others.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING MONDAY, AUGUST. 19TH:

J. R.—thanks, we have them.—H. L. F.—L. R.—J. C.—W. H. C.—A. H. W.—W. B. B.—F. B. H.—F. E. L.—E. R. H.—F. C.—J. H. T.—W. C. G.—M. N.—M. L. D.—H. A. P.—J. L.—L. L. M.—T. A. M.—D. J. P.—J. P. R.—J. G. R. K.—C. B.—R. C. J.—L. E. B.—E. R.—J. H. T.—C. F. J.—D. B.—R. E.—D. E. S.—E. L. T.—L. F. A.—S.—E. S. W.—W. C. H.—M. J. B.—T. H. H.—W. H. N.—A. V.—C. Mc. L.—W. S.—J. A. T.—M. S.—L. P. N.— G. G.—G. W. F.—"Farmer."—C. A. L.—E. B. D.—W. E. L.—G. L.—W. L. D.—H. S.—W. B.—M. E. T.—A. W.—A. G.—I. H. J.—M. R. P.—F. E.—D. E.—M. G. R.—J. C. P.—J. F.—F. B. D.—C. J. B.—C. H. D.—E. H. M. S.—W. H. H.—Hector Bertram—J. F. C.—F. F. M.—W. H. H.—W. H. C.—J. M.—R. S.—S. B. P.—D. H.—H. H.—C. B.—J. S.—S. W. H.—H. S.—M. W.—J. N. C.—J. W.—S. S. W.—T. N. R.—A. W. M.—W. J. C.—J. S. H.—J. L.—W. J. S.—J. G. R.—S. R. M.—A. H.—A. A. W.—T. J. B.—J. C. B.—Z. H.—W. B. J.—H. E. Mc'C.—L. W.—T. H. H.—W. L. Mc'E.—A. T. M.—S. A. M.—A. J. B.—R. M. M.—S. C. B.—W. M. H.—

Industrial Implements.

A FOREIGNER'S OPINION.

L'ECHO AGRICOLE has been looking at the American exhibit of farm machinery in the Paris Exposition, and has arrived at several conclusions that will be interesting to our manufacturers. It says:

Among the foreign sections it is the United States which first strikes our wondering attention. It is difficult to imagine a collection more rich and at the same time more elegant.

To see the threshing machines, constructed with perfect taste as to shape, and with richness in the materials employed, true specimens of cabinet-work and inlaying; these reapers and mowers, where all the metallic portions shine like silver, one does not imagine himself in the midst of apparatus destined for work which is reputed vulgar, such as cutting the wheat or mowing the grass, but in a store of enormous jewelry and among true works of art.

Never, in any country, have been seen such grace and splendor. If by the magnificence of the machine we are to judge of the character of the workman who runs it, one would be inclined to suppose the American farmer to be equally fine, walking the earth, not in blouse and wooden shoes as with us, but in full-dress and with hands gloved.

If you think we exaggerate, we ask you to come and examine the threshing machines, the reapers and mowers, the weighing machines and scales, the lawn-mower, the grain-drill, and the horse-rake, of which the seat resembles a throne and is shaded by a blue-satin canopy, having without doubt for its mission to guard from the sun the delicate complexion of the driver.

A NEW CHEAP HORSE-POWER.

A ONE, two or three horse-power that can be set up inside the barn in less than 30 minutes, and when its work has been performed may be folded up and laid aside out of the way, must, it would appear, be a serviceable implement. An illustration of such a power may be seen in our advertising columns.

A wooden wheel hinged through the middle is suspended horizontally upon an upright shaft by means of jointed guys. The belt is applied to the rim of the wheel and acts as a tire upon it. The shaft turns with the wheel, and as it makes but one revolution while the horse travels 30 feet, the friction is inconsiderable. Its uses will suggest themselves to any farmer, while its compactness, portability and cheapness are strong points in its favor. Messrs. Harlow Bros., Lancaster, N. Y., are the manufacturers.

THE PARIS AWARDS.

IN the award of prizes at the Paris Exposition, the United States agricultural exhibit has received a diploma of honor. Of the 11 objects of art offered by the Agricultural Society of France for exceptional merit in agricultural machinery in the recent field trials, eight have been awarded to American inventions. Dr. Edward H. Knight, the American Juror of Class No. 76, has been authorized to announce the awards. They are as follows: W. A. Wood M. & R. Mch. Co., on their reaper and binder; Johnston Harvester Company, on their machines; The Farmer's Friend Grain Drill Co., on their drill; Wheeler and Wilson on Sewing-machines. Jno. Daere & Co;, on gang-plows; P. K. Dederick & Co., on Hay Presses.

THE JOHNSTON HARVESTER COMPANY are perfecting in their works at Brockport, N. Y., a new light double-geared mower. Experiments in the field have been very satisfactory, and the implement promises to be a success. It will weigh about 540 pounds. The mower will be put upon the market next season.

THE N. Y. Plow Co. has just completed its new works comprising a main building 400 feet in length with foundries, &c. adjoining. Everything in the way of new machinery that can facilitate and improve its products is to be used. The shops are located at Newark, N. J.

Farm Topics.

HINTS FOR THE SEASON.

BY A JERSEY FARMER.

FODDER CORN.

THERE is no doubt that sweet corn makes the best fodder. The dry digestible matter is the measure of the nutriment contained in food; and, as sweet corn contains more sugar than the ordinary field corn, it must be therefore more nutritious. Sugar is nutriment. It furnishes carbon for the sustenance of the animal heat, and also for the function of respiration, as well as the formation of fat. An animal consumes much more of carbon than of nitrogen; and carbonaceous food for a butter cow, a greasy-wooled sheep, a fattening ox, or even a store animal, which is only expected to keep in fair, thrifty order, is by far the most needed kind of sustenance. Besides, one object, if not the chief one, of the good farmer, is to induce his stock to consume all the food they can; not to stint them, but quite the contrary; knowing that as they thrive, so he thrives with them and by them. A great deal of nonsense has been uttered about the poor character of fodder-corn, as to its watery nature when green, and its likeness to chips when dry. But it will be noticed that if a cow is provided with half a bushel of clean sweet corn-fodder at one end of her trough, she will often leave a mess of meal and middlings, to eat that first. It is always safe to trust to the judgment of a cow in matters of this kind, and the cows are invariably in favor of sweet-corn.

Where sweet-corn ears are sent to market from farms near the large cities, the stalks may yield a crop worth as much as the grain. When corn ears are sold for 40 to 60 cents a hundred, the stalks are actually worth more than that if they are properly saved. Where the ears can not be thus sold, the grain may be made worth their market value for the winter feeding of milk cows. No other food helps the pail and the churn so much as this—the stalks and ears being cut up and fed together. But to save them is the great trouble.

SAVING CORN-STALKS FOR FODDER.—This may be done as follows: — Take the Lima bean poles not in use, and where Lima beans are generally grown they are not now in use, because the value of beans is too low for profit; where they are not grown, poles six feet long should be procured from the woods, or fence stakes; defective rails, and such waste stuff may be utilized. Bore two holes cross-wise, an inch in diameter and a foot from the larger end, and put small rods, two feet long, in these, sharpening the small ends. The stake will appear as shown in the engraving (fig. 1). This is planted in the ground in the place where the shocks of fodder are to be placed. The stalks should be cut as soon as they are ripe. They may grow for two weeks after the ears are pulled. They will cure all the better when permitted to ripen their sap, and much of the usual difficulty of curing them will be avoided. If the ears are not pulled, and the corn has been grown solely for the fodder, and has been planted so closely as to prevent the formation of ears, the crop may be cut as soon as the first of the leaves change color, and extra care will have to be taken in the curing. When the stalks are cut, they should be left on the ground twenty-four hours to wilt thoroughly; then bound in small sheaves of not more than one good arm-full, and the sheaves set up against the stake before described. This will sustain the shock and prevent it from being blown or falling over, as well as from falling together in the center, so as to prevent thorough curing. When a good-sized stock is made, the top is bound above the stake, but left open below. Thus left, it is protected from the weather and will cure perfectly in two or three weeks; the time depending upon the condition of the weather.

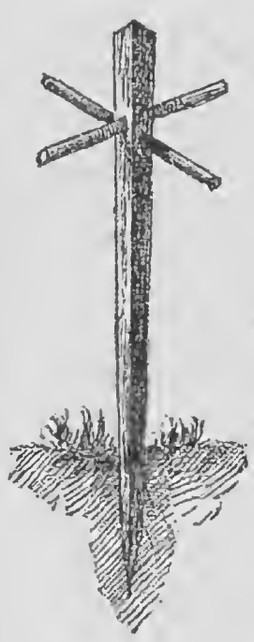

FIG. 1.

WATER-FURROWS FOR WINTER GRAIN.

Farmers are now fitting their ground for fall grain crops, and many, not having the fear of the Hessian Fly before their eyes, and wishing always to be forehanded with their work, will sow their fields this present month. The first thing that should be done after the ground is sown, is to make water-furrows to carry off the rain. No one knows how soon a heavy shower may fall upon the soft, loose soil, and if unprepared, the beating rain will soon wear many little furrows, which converging, will gather into larger ones, and these again into a torrent, which will wash the soil and perhaps carry off the fertilizers and grass seed on to a neighbor's farm, or certainly where they will not be wanted. So the water-furrows should be made without delay, and on the proper making of them depends their effectiveness and the safety of the field. A few rules for the making of water-furrows may be given.

HOW TO MAKE THEM.—They should never be carried directly down a slope. The quickest way to get rid of the water is the most injurious way. The water should be carried down the slope as nearly level, and should be distributed among as many channels, as possible. The ground covered by the channels is not lost, or useless; as many plants of wheat and grass will be found in them as elsewhere. By distributing the water in many channels, and delaying its escape, more of it will be absorbed by the ground and there will be less of it to run off. Thus the soil will be benefited to a greater extent, as well as damage to it be prevented. The form of the water-furrow is shown at fig. 2. It is made by throwing a furrow slice

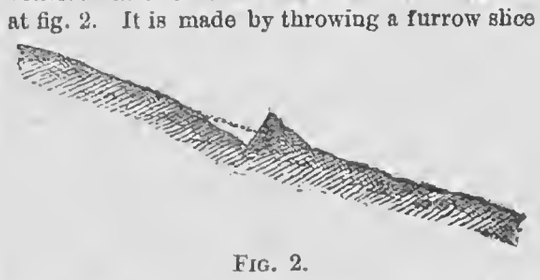

FIG. 2.

down the slope, thus leaving not only a channel to catch the water flowing from above, without impediment; but forming a dam to prevent it from overflowing down the declivity. If the furrow slice is turned the other way, the water must first collect above it, until it breaks through; when the loose earth is washed into the furrow, which is soon filled and choked, and the wash then begins straight down the slope and enlarges at every foot in its course. This is not infrequently done by careless hired men or by equally thoughtless farmers themselves. These furrows should be carried as little from a level as may be necessary to convey the water away as fast as it may collect. A slope of one foot in a hundred will do this.

A PROPERLY DRAINED FIELD.—A plan laid out for a typical field is given at figure 3. In the center is a piece of high ground gradually sloping to the diagonal lines *b b*. The highest points are at *a a*, and the lowest boundary of the field at *c*. The arrows show the general slope, being between that from *a a a* to *b b*, and from *a b* to *c*. Now, the usual way would be to carry furrows in the lines of *b b* only, down to *c*; or at least to make one or two down in the direction of the arrows. This would inevitably cause washing; first in the furrows down the main slopes, and then in those at *b b*; because all the water would be collected as rapidly as possible into one channel, which, in case of a heavy rain, could not dispose of it safely. But if the furrows were made in the directions shown by the lines, the water trickling down the slopes would be arrested before it became unmanageable, and would be conveyed away from the channels *b b* down to the foot of the field *c*; where it would find its escape in the ditch or along the fence row, which being grassed over

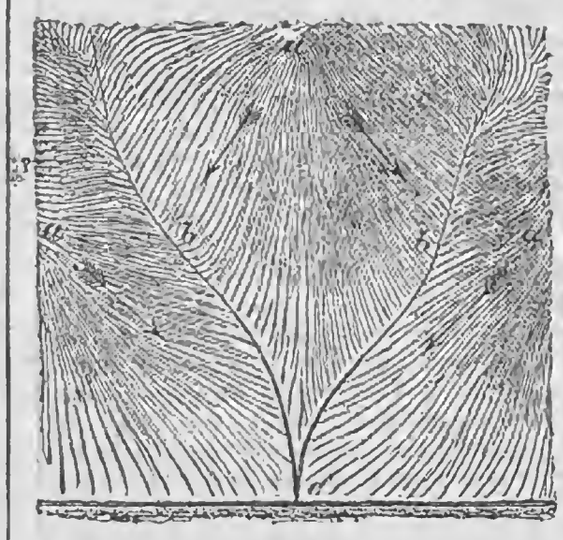

FIG. 3.

would not suffer. The channels *b b* would have to take water only from the center of the field, and a very large proportion of that which falls there would soak into the soil, leaving but a small quantity to run off. The fact is this plan would provide a method of irrigating the field as well as draining off the surplus, thus avoiding what is one of the most serious difficulties of our climate, viz.: an excessive rain-fall at some times and excessive droughts at others. The plan here given could be modified so as to suit any form of sloping ground with the greatest ease.

A GOOD SHOW FOR A CITY-BRED FARMER.

I HAVE been struck lately with the RURAL'S articles relating to the cultivation of wheat. I would love dearly to raise 60 bushels to the acre, as my average product heretofore has been but 30 and 35 bushels; but if I lose a year in after fallows, where is the gain? To be sure, I could, after harvesting the wheat, put in another crop seeded to grass, but that would be rather hard farming. I could, instead, the next spring, put in corn, oats or other spring-sown crop, but it might not suit to do this. It is always safe to have one's ground in grass, and it takes better with wheat than anything else, and there is no time lost. There is no better rotation, I conceive, than breaking up sod for corn, then oats, or, as I prefer, half in potatoes, and half in millet, then wheat, then clover. Oats I have discarded for many years, as it pays nothing. Potatoes are less hard on the ground, pay better, and wheat takes well after them. The advantage in millet (German is the best) is, that the grower has the option of converting it into hay, if the season has been a bad one for timothy or clover; and, if the contrary, he can let his millet ripen and he has either a good market for the grain or he can feed it to his horses, for which purpose it is more valuable than an equal measure of corn.

Every farmer should, I think, have a specialty, dictated by the character of his land and the wants of his market. Mine is gilt-edge butter, which pays well. With pastures running to green grass, with copious springs in every field, with an appreciative market within an hour's railroad time, with dairy women on every side, that can make choice butter as naturally as they eat or sleep, one drifts to butter as a natural sequence. If one could have permanent mowing ground, then it would pay best to keep cows enough to pasture all that was not needed to furnish them with a winter stock of hay. A dairyman could then well afford to purchase the needed corn and bran to keep his cows milking in winter. No one, however choice his butter, can command the best market price for it unless he has special customers, and they can only be had by furnishing them with the golden prints in winter as well as in summer.

Failing this permanent mowing ground, it follows that one field has to be broken up every year, and hence the study required to follow the best rotation. To a certain extent, I think I have attained the point in devoting two of my fields to a constant rotation of wheat and clover. I take off a crop of wheat this year; next, one crop of clover: let the grass grow till the clover-heads begin to ripen, turn it over with a Syracuse chilled plow—which is admirable in covering the grass—and seed to wheat. With no other manure, I find my ground growing richer and richer. I have never failed in getting a good clover catch, which I attribute principally to my practice of sowing 500 pounds of plaster to the acre. It costs only $1.75, and insures moisture in a dry spring, which I take to be the chief cause for a poor clover catch. This course gives me an abundance of clover hay, which is the only sort a butter-maker wants, gives an ample supply of barn-yard manure, and consequently good crops of corn, potatoes, millet or what-not. Last year my corn-field shelled out 98 bushels sound corn to the acre all over the field. My timothy field cut four three-horse loads to the acre. I could ask no more, for it was as much as there was room to cure.

If the RURAL will tell me how I can improve my system, I will gratefully listen.

Chester Co., Pa. A CITY-BRED FARMER.

Field Crops.

THE TOBACCO PLANT.—No. 3.

E. R. BILLINGS.

WHAT KINDS TO PLANT.

WE COME now to a very important question, and one which the grower of tobacco cannot well afford to lose sight of. What variety is best adapted to my lands, and what variety will bring me the greatest profit? are questions which we now propose to consider and answer.

Seed-leaf and cutting tobacco are ordinarily grown in different sections of the State or country. True, in some States, like Ohio and others, both cigar-leaf and cutting tobacco are grown, but this is the exception and not the rule. Then, too, there are some sorts of tobacco that may be used for nearly all purposes for which tobacco is designed. This is the case with Perique tobacco, grown on the banks of the Mississippi in Louisiana, by a few small planters. It is used for smoking (in the pipe), chewing, snuff, and is also used in the manufacture of cigarettes. I do not think it is used for cigars at all. In New England our growers have from the time of the first planting of tobacco in the States (1634), grown only cigar-leaf tobacco. I do not assert that cutting-leaf cannot be grown in this section, and with profit, too, but as it has not as yet been tried, mere conjecture does not avail. It would seem, however, as both kinds are grown in Ohio, that our soil might do equally well.

Along the Connecticut river, beginning at a point about 30 or 40 miles from its mouth and extending all through Massachusetts, and also into New Hampshire and Vermont, is doubtless one of the finest tobacco-growing sections in the world. The rich bottom or meadow lands bordering the river are particularly fine for the plants, while they grow luxuriantly farther from the river on land known as a sandy loam. Such has been the advance in the methods of fertilizing and cultivating, that from 1800 pounds to the acre the product has increased to 2,000 pounds, and sometimes 2,300 pounds have been grown to the acre, when the soil has been made very rich, or when the plants have been "set" close together.

A great advance is also noticeable in the color and size of the leaves. Formerly the color was very dark, but during the war and some few years after, the demand was for a leaf of a light cinnamon color. To meet this demand the growers selected light soil for the plants, and used freely of horse manure, and the color was usually light. Of late the demand has been for dark-colored leaf, and so the growers have chosen dark loamy soil and applied stable manure, tobacco stems, castor pomace, etc., and have again secured the color in demand. It will be seen, then, that the color and size of the leaf may be regulated by the selection of soil and the fertilizers applied.

The grower then inquiring what variety to plant, should be governed in a great measure by his lands, their situation, color, the elements composing the soil, etc. If his lands are light in color, then by nature they are better adapted for the growth of light-colored tobacco than for the dark. If the soil is dark, then dark-colored leaves will be the more readily and surely produced. Meadow lands usually produce darker-colored leaves than the uplands, while there is less liability to sudden frosts which spoil the leaves and render them wholly unfit for use. When the culture of Havana tobacco was first attempted in the valley, some few years since, the lightest-colored soil was selected and the very warmest situation was chosen, frequently planting the crop between two hills. Many supposed this was the method adopted by the Cuban growers, but such is not the case. They usually plant the tobacco in land bordering small streams and rivers or moist land, and instead of setting out the crop in the spring, plant in November or December. At the South and West "new-cleared" land is considered the best as the product is thought to be better-flavored.

For years the tobacco soil was not manured at all, and, as a consequence, vast tracts of land were ruined by the cultivation of this great exhauster of soils. Now, however, large quantities of guano and tobacco growers are used and the lands are improving by the use of fertilizers. New England is doubtless a better seed-leaf-growing section than either the West or the South, but in some of the Southern States seed-leaf has been tested and with the best results. In Florida seed-leaf is grown in one county (Gadsden) with much success. It is a variety of Havana, and though less pleasant of flavor, it closely resembles that famous variety of the plant. Experiments made with both cutting and cigar-leaf can be tried and the result will be apparent. I hope the day is not far distant when the growth of cutting-leaf will be tried by the growers in New England.

Veterinary.

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

IMAGINARY DISEASES OF ANIMALS.—No. 2.

D. E. SALMON, D. V. M.

WHEN an animal is sick, it is perfectly natural for the owner to endeavor to discover the nature of the disease, no matter how ignorant he may be of such subjects; consequently, an examination is always made in such cases, and if anything is noticed which has escaped observation in the healthy condition, or if real peculiarities are seen, these are generally associated with the disease and considered its cause. And, in case the supposed peculiarity exists in a single organ, there is a tendency to consider that similar symptoms are caused by that organ in other cases where the peculiarity does not exist; thus, in my first article on this subject, I stated that all cases of loss of appetite with horses are apt to be referred to Lampas whether there was congestion of the palate or not, and that lame back is treated by cutting the eyes even if known to be caused by a strain. And this is not surprising, for people naturally refer all effects to some cause—and such cause must be within their powers of observation. As most stock-owners know but little of anatomy, physiology, or the symptoms to be expected in different diseases, it is not to be expected that they can detect the diseases of deep-seated organs or discriminate between them; consequently, they recognize but few diseases. I have given some examples of this, and shall now give more.

BOTS.

Perhaps these insects should not be classed with the imaginary diseases or causes of disease; but so much more is ascribed to them than they

are guilty of, and the attempts to dislodge them often produce such injuries in the affected horses, that I cannot dismiss the subject without a few words. Bots, as found in the stomach, are the larval forms of several species of *gadfly*; when in large numbers, and especially when hooked to the walls of the sensitive part of the stomach, or to those of the intestines, they interfere with the processes of digestion, and in that way may be a cause of sudden and fatal colics. A very few cases are recorded by veterinarians where one or two of these parasites had perforated the walls of the stomach or bowels and were found in the abdominal cavity; but such cases are extremely rare, and we can only consider the many cases given by farmers where the stomach was said to be riddled by these parasites as errors of observation. The great majority of colics have no connection directly or indirectly with these insects; colic is usually the result of indigestion from other causes, of nervous cramps, of hard, impacted manure—constipation—of congestion or inflammation of the bowels, hernia, etc., and must be treated according to its nature. The general practice of treating all forms of colic with agents for the destruction of bots, is extremely irrational, and causes an immense loss to our farmers each year. I have sometimes thought that more horses die from such treatment than from all other causes combined. It must be remembered that, in cases of colic, the stomach and bowels are either inflamed or rapidly approaching this condition, and that we should be extremely careful in our choice of remedies. But so far is this principle forgotten that the most irritating agents are generally used, and I have known of cases where even *boiling water* was poured down an unfortunate animal's throat in the hope of killing "bots!"

HOLLOW-HORN.

Turning to cattle, we find here, too, the same ignorance of their diseases and the same blind adherence to the traditions of the dark ages. With the great mass of our farmers cattle have scarcely more than two diseases—"hollow-horn" and "wolf-in-the-tail"—opinions too ridiculous for notice were it not for their prevalence and widespread character. The horns of cattle are formed by the growth of a bony projection, which soon becomes attached to the skull, and the transformation of the epidermis over the protuberance into horn; they are, therefore, composed primarily of four different layers. Commencing on the outside, there is the horn or epidermis; then the true or sensitive skin; next to this, the periosteum or vascular membrane covering the bone, and finally the bone itself. By pressure between the horn and bone, the true skin and periosteum become consolidated into a single vascular and sensitive layer; and, very early in the life of the animal, a cavity begins to form in the bone of the skull beneath the horn, which extends by absorption of the bone, reaches the bony support of the horn and penetrates this, and continues to enlarge during the life of the animal. In old animals there is only a thin shell of bone with a large cavity inside, divided perhaps by a thin, bony partition, and lined with an internal periosteum and a delicate mucous membrane. This is the *natural* condition of the horn—a provision for lightening what would otherwise be a heavy and cumbrous structure; and so far from being a condition of disease it was designed by a wise Creator as a benefit to the animal.

Attention was probably directed to the horns as the seat of disease, because in all serious troubles there are times at which the extremities—the ears, horns and limbs—are cold, or alternately hot and cold. By boring, they were found to be hollow when it was supposed they should be solid, and it was, therefore, decided at once that they were the principal seat of the affection. Boring the horns causes intense pain, something similar to forcing a gimlet through the finger-nail, the tissues beneath, the bone and the flesh beyond it, and continuing till the skin is pierced on the opposite side; it cannot be defended from any point of view, and it is time for such treatment to be abolished in civilized and intelligent countries.

"WOLF-IN-THE-TAIL."

This trouble usually coexists with the so-called hollow-horn, and is equally without foundation as a cause of disease. I have space to devote but a few words to its consideration. Any one examining the tail of a healthy cow will find the bones, which are quite large at the root of the organ, gradually diminish in size till they finally disappear entirely when their place is supplied by a rather soft, flexible gristle. During any serious internal disease the circulation in the tail, as in other extremities, is lessened, and the part is consequently relaxed; there is even at times a slight dropsical infiltration which adds to the delusion and makes it no difficult matter for one to convince himself that some of the bones are really wanting. Their absence is then accounted for by supposing them to have been devoured by a hypothetical worm—the "wolf." This worm has never, to my knowledge, been discovered by a veterinarian, though it is not rare to find "cow leeches" who claim to have removed it. But even admitting the existence of such a parasite—which I am far from doing—it could not cause the *general* symptoms which are attributed to it; it might produce a local inflammation, of little consequence at the most, as we see with the larvæ of the œstrus which develop along the back of cattle, but no more.

The fact is, the ailments which I have mentioned are *imaginary* diseases—in the vast majority of cases they are merely symptoms of the real disease, but have no connection near or remote with its cause. It is time for farmers to recognize the fact that they are generally unable to discover the true disease; that they cannot trace its course or its complications; that it requires one with a thorough knowledge of the nature and effects of medicine, of the make-up of the animal body, and of the use and normal activity of every part of it, to be able to treat animals in a proper manner. It is time the usefulness of a veterinary profession was recognized; that efforts were made to provide competent practitioners for every section, and that these be called upon, as are human practitioners, at the first appearance of serious disease. When these points are appreciated, we shall see such cruel and unreasonable practices gradually give way—and instead of being killed in an effort to cure, the natural tendency to recovery will be assisted, and we cannot doubt that millions of dollars' worth of property would be saved in our country each year.

Industrial Societies.

THE MINNESOTA STATE FAIR.

ST. PAUL, Aug. 16th, 1873.

THE approaching exhibition of the Minnesota State Agricultural Society will be held at St. Paul the first week in September, and bids fair to be one of the largest and best fairs held in the West. The applications for space and kindred matters are so great as to keep Mr. Geo. R. Finch, the President, and R. C. Judson, the Secretary of the Society, busy almost day and night. The Premiums amount to $9,875 in cash, besides silver plate and medals. Competition is open to the world. The prospects of a large exhibit are promising. Geo. E. Brown of Ill., the Holstein breeder, T. L. Miller, of the same State, the Hereford breeder, Peter Davy, the Galloway breeder, and in fact, breeders of all noted stock will be ably represented, including sheep and swine.

The Purses offered amount to $14,500, which will undoubtedly attract a large number of fast horses. Rarus and Great Eastern have been engaged to trot during the week.

There is a large colony of English gentlemen in that State who have agreed to enliven the exercises by a series of English sports and games that will be exact imitations of the originals as seen in England, consisting of hurdle racing, fox chasing, steeple chasing, etc. Dr. Carver and Captain Bogardus, the greatest rifle and wing shots of the world, will display their skill during the Fair. A decided novelty will be Col. J. Bisshopp's stud of Shetland ponies, numbering some thirty or forty, which will be exhibited and driven before Rowan Chariots, four abreast, while A. H. Moore, of Dakota, will offer the opposite extreme in his trained Elk, that will be speeded before a trotting wagon. He will also show how the training of Elk for this purpose is accomplished. A patriotic feature will be "Old Abe" the Wisconson war eagle. He will be in custody of the veterans of Minnesota.

A new industry, the manufacture of Minnesota sugar, will be one of the sweetest things on the grounds. The importance of this industry has been suitably recognized by the erection of a building, containing machinery, where all may see and have explained the entire process, it being the desire of the managers to impress farmers practically with its importance.

The best breed of dogs will be displayed at the Bench-Show of the Minnesota Kennel Club, which has consented to hold its first exhibition on the grounds during the Fair. The dogs will be under the management of Mr. Chas. F. Lincoln, a gentleman well-known throughout the land, in connection with such displays. The bench-shows will close with a grand field-trial the following week.

The legitimate features of the Fair, such as grains, vegetables, woods, etc., will be supplemented by a similar exhibit grown upon the lines of the different railroads in the State, which will be an instructive showing for those contemplating immigration. The State Agricultural college will have a special display of its own.

Altogether the Fair this year promises to so far exceed former exhibitions as to be noteworthy in this respect alone, and the officers of the Society deserve the thanks of the community for their untiring efforts to accomplish the result. The customary arrangements with transportation companies for reduced fares and like details have been completed, and the Minnesotians may congratulate themselves on the prospect of a splendid exhibition. J.

ANNUAL MEETING OF THE NEW YORK STATE FARMERS' ALLIANCE.

THE Second Annual Meeting of the New York State Farmers' Alliance will be held at Association Hall, in Syracuse, commencing Wednesday, September 4, at 11 A. M. Reports from the Special Committees on Taxation, Transportation and Insurance will form an interesting feature of the occasion; and these, with discussions on recommendations they may offer, and addresses and debate upon topics of vital importance to the farming class, will make up the programme:

Any delegate from any Agricultural Society, Grange, Farmers' Club or other association of agriculturists in the State, is entitled to membership, on presentation of the proper credentials and payment of one dollar, and every such organization may send at least one delegate, or such number as shall not exceed three per cent. of its own membership. Several county alliances have been organized, and now enjoy full or partial representation. Only a few of the existing County Agricultural Societies are represented, and these but partially. But a small number of Granges are adequately represented. Those who believe in equitable taxation, just legislative representation, and equal statute rights, for farmers not less than for other classes of men, are earnestly urged to join in this movement, and to take such action as will secure to their respective localities full membership in this Alliance.

The time is ripe for successful opposition against monopoly and injustice; and to insure reformation of those abuses which the Alliance was organized to correct, we need only make prompt, and vigorous united effort, after wise counsel together.

A special meeting of the Executive Board will be held at the Temperance House, in Syracuse, Tuesday, Sept. 3d, at 11 A. M., and the several Special Committees are requested to be present thereat. HARRIS LEWIS, President.

A. A. HOPKINS, Secretary.

FAIRS.—There will be local fairs held under the auspices of the "South Kentucky Fair Ground Association," at Glasgow, Ky., October 1st–4th; Lamoille Co. Fair Ground Association, Morrisville, Vt., Sept. 17th and 18th; the Poultney Industrial Society, Poultney, Vt., September 17th–19th.

The Poultry Yard.

MODE OF EXTRACTING GAPE WORMS.

TAKE a low seat, hold the chick's feet tightly between your knees, with its head to your right hand; open its mouth, and with your right thumb and finger take hold of its tongue and draw it forward so as to bring the entrance to the wind-pipe so far forward that you can see the entrance plainly and get at it easily; pass your left hand on the off side of the patient, and place your left thumb on its tongue to keep it forward. The back part of the tongue forms a shoulder; placing the thumb on this enables the operator to hold it still, with the left forefinger under its lower mandible; the unoccupied fingers of the left hand can be placed behind the bird's head to prevent its pulling back. Have a stiffish feather—a secondary quill of a hen will do for chicks six or eight weeks old—regulated according to the size of the patient, but just stiff enough to prevent its doubling while it is being inserted. It must be stripped to within one-half or three-quarters of an inch of its end. To cut off the barbs close to the stem with the scissors, is the best way, as the stem often tears through if stripped by hand. Wet the tip end and twist it so that it forms a sharp point, and brush back the remaining barbs so as to form an arrow-head with the feathers.

When the chicken is held as described, you can see the wind-pipe opening and shutting; catch the opportunity while the wind-pipe is open and run down the feather as far as it will go without too much force, keeping the chick's head up and its throat extended up straight, so that the feather passes readily down. Make sure the feather is in the wind-pipe and not in the throat. When quite down commence to twist it sharply and draw it up slowly and it generally brings the worm or worms the first time.

Sometimes it is necessary to insert the feather a second time, but not often, as it disturbs the worms, so that the patient often coughs them out. The points to be remembered in this operation are: the preparation of the feather, the size to suit that of the chick, and the holding of the patient's tongue tightly, with the entrance to wind-pipe well forward and its head up, and neck up straight, to facilitate the operating of the feather. HENRY HALES.

DOG DAYS AND CHICKENS.

AUGUST is a trying month with most stock on a farm; the cows and horses are tormented with flies, pigs cannot keep cool, but chickens have a hard time in wet showery weather, when they often get wet. Even though the water is not cold, yet the continual drabbling from wet to hot sun, produces disorders of a malignant character. In a long-continued hot and wet spell, chickens do not find much convenience for dusting. And during such times lice are apt to increase fast. To remedy this, see that there is some dry corner, that is *kept* dry, with plenty of dust and sand in it. When the chickens take to it, put in some powdered sulphur, which will greatly assist in cleansing the birds.

Supply them with plenty of fresh drinking water, under the shade of a tree or something to protect it from the sun's rays. Neglect at this season often lays the foundation of disease. If birds are not kept in health and vigor now, they will not be worth much when they reach maturity; I have always found the success of the year greatly to depend on the condition of the young flock in August. H. H.

Miscellaneous

WHAT OTHERS SAY.

THE COLOR OF SOIL AND ITS TEMPERATURE.—Professor Wolley has recently undertaken a series of experiments upon the influence of the color of soil upon its temperature, the results of which are now published in a German paper and condensed by the London Farmer. Earlier investigation on the same point had already shown that in cold climates the development of plants whose growth requires a high degree of warmth, can be considerably encouraged by choosing a dark-colored soil, and that, on the other hand, a light-colored soil may be advantageously fixed on in extremely hot districts. Dard-colored soils not only become warm more quickly than those of a lighter hue, but they also appear to have the power of retaining the heat acquired from the sun for a longer time. Among these earlier observations may be noted that of Lampadius, who succeeded in bringing melons to perfection in the cooler months of the summer by strewing the soil with an inch-thick layer of charcoal powder; [Charcoal powder being one of the best of non-conductors of heat, its use over the surface of the ground would retard rather than promote maturity.—EDS.] and those of Girardin, who found that potatoes arrived at maturity sooner or later according to the darker or lighter color of the soil. In the new experiments of Wolley, cognizance is taken of the important influence upon temperature of the amount of water retained in the soil, and in order to exclude errors from this source, he operated on dry earth. The conclusions he arrived at are as follows:—1. During the warmer part of the year, dry earth, whose surface is dark-colored, is on the average warmer than light-colored soil. 2. The daily variations of temperature are greater under dark than under light soil. 3. The difference is most marked at the time of the daily maximum soil-temperature, and least marked at the time of minimum temperature. 4. The loss of heat at night goes on with greater absolute rapidity in dark-colored soil than in light, but the temperature does not sink to a lower point in the former than in the latter. 5. The differences of temperature between dark and light soil become less as the depth under the surface increases, and disappear altogether in the absence of sunshine, and at the colder seasons of the year.

GUINEA FOWLS are now being extolled for their destructive disposition towards the Colorado beetle. G. S. Scoville, of Hadley, N. Y., declares that they eat the Colorado beetles "as fast as other poultry eat corn," and that one Guinea hen will protect an acre of potatoes—which is giving the bird credit for large consumptive powers. These fowls also prey on other insect pests, lay more eggs than common poultry, and eggs unequaled for cakes, and, finally, are valuable as weather indicators, always setting up a terrible screeching just before a storm, and keeping it up until the storm bursts upon them. The Germantown Telegraph copying the above, adds: "They are good protectors against thieves, as they will always give the alarm of anyone approaching the premises they occupy. But woe to the little chicks they may encounter. Carefully guarded against as to these, the Guinea fowl, we should say, was valuable to the general farmer."

CRACKED clays and good wheat crops are concomitants, for the warm air is admitted deeply into the deep sub-soil, and evaporation from it is permitted, and it is a saving clause, even on undrained land. I can plunge my stick a yard deep down the cracks, 1½ to 3 inches wide at the surface, and they ramify in every direction. At the bottom of the cracks the point of the stick finds wet uncloven clay, and the wheat roots are there supplying the plant with moisture. The wheat roots descend 4 or 5 feet, as I have frequently witnessed.—*J. J. Mechi, in several English Journals.*

NITRATE OF SODA.—The mania for nitrate of soda will cause ultimate loss to many a farmer who is not aware that he should concurrently apply in the sub-soil plenty of phosphates. Its tendency to make crops look green and promising deludes many a farmer, who thus gets color and often mildew, instead of healthy increase. Its price will come down as rapidly as it has risen.—*J. J. Mechi.*

TABLE OF CONTENTS.

Everywhere:

SEASON NOTES.

New York—37 Towns and Counties.....533, 534, 536
New Jersey—4 " " " 534, 536
Pennsylvania—5 " " " 534, 536
Ohio—14 " " " 534, 536
Michigan—8 " " " 534, 536
Illinois—4 " " " 535
Indiana—4 " " " 535, 536
Iowa—5 " " " 535, 536
Wisconsin—3 " " " 536
Kansas—6 " " " 535, 536
Minnesota—2 " " " 536
Nebraska—2 " " " 536
Eastern States—8 " " " 535
Southern States—24 " " " 536, 537

PRACTICAL DEPARTMENTS:

Hints for the Season—By a Jersey Farmer..... 538
A Good Show for a City-Bred Farmer..... 538
The Tobacco Plant—No 2—E. R. Billings..... 528
Imaginary Diseases of Animals—No. 2—D. E. Salmon, D. V. M.....538, 539
Minnesota State Fair, The..... 539
Annual Meeting of the New York State Farmers' Alliance..... 539
Mode of Extracting Gape Worms..... 539
Dog Days and Chickens..... 539
What Others Say..... 539
European Correspondence..... 527
State Industrial Surveys..... 537
Communications Received..... 537
A Foreigner's Opinion..... 537
A New Cheap Horse-Power..... 537
Paris Awards..... 537
United States Agricultural Exhibit, The..... 537
Johnson Harvester Company, The..... 537
N. Y. Plow Company, The..... 537

EDITORIAL PAGE:

Our Crop Reports..... 540
All that is to be done!..... 540
Pearl Millet..... 540
A Positive Cure for Gapes..... 540
A Novelty Indeed!..... 540
Professor Gray..... 540
Fruit Crop of Michigan..... 540
Brevities..... 540

Domestic Economy:

Mop-Handle Papers—No. 2—..... 544
A New Dish..... 544
Domestic Recipes..... 544

LITERARY:

Poetry.....541, 543, 546
Euphrosyne.....541, 542
Catarina Cornaro's Abdication..... 542
Healthfulness of Fruit..... 542
Le Mannekin Figure..... 542
First Finger-Ring, The..... 542
An Expensive Boarder..... 542
Recent Literature..... 543
Bric-a-Brac..... 543
Degeneracy of Women, The..... 543
Barrel Chairs—(Illustrated)..... 543
"I Suffer Not a Woman to Preach."..... 543
Woman's Rebuke to Workingmen—Mrs. Swisshelm..... 543
A True Woman..... 543

Reading for the Young:

Pocket-Money for Young People—No. 13—Annie L. Jack..... 546
Letters from Boys and Girls..... 546
Puzzler, The..... 546

Sabbath Reading:

Great Help, The..... 546
News of the Week—Herman.....544, 545
Markets..... 545
Personals..... 547
Wit and Humor..... 546
Advertisements.....545, 547, 548

THE
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SATURDAY AUG 24, 1878.

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

OUR CROP REPORTS.

It has long been a fashion with witlings and wiseacres to characterize farmers as immemorial grumblers, always loud in their complaints of bad crops, never willing to acknowledge good ones, and when forced to do so by an abundant harvest, forever lustily growling at low prices in an over-stocked market. Of this alleged tendency to discontent among the agricultural community, however, there is little trace in the long list of crop reports furnished us for publication in this issue by our farmer friends in every part of the country. Of the multitude of reports with which we have been kindly favored, lack of space permits us to insert here only such a selection as will give to our readers a fair idea of the condition of the harvests throughout the land. Moreover, a large number of reports from our friends in the distant Southern and Western States have only reached us either after our columns had been filled up, or too late for publication, even if from their importance we had been willing to displace other matter to make room for their insertion.

These notes, coming as they do, in nearly every instance, from actual tillers of the soil, show that, despite a few partial failures here and there, generally confined to only a single crop, the harvest throughout the country is, on the whole, an unprecedently good one. The perusal of the reports is gratifying, not only because of the widespread prosperity they indicate, but also on account of the hearty and often enthusiastic language in which that prosperity is acknowledged. The spirit of gladness and content that finds expression in such words is infectious through them, and inspires pleasure and satisfaction in the minds of all who read them.

Down to about the middle of July, the prospects of a large yield was better for spring than for winter wheat. Since then, however, storms in some places and the intense heat everywhere have so seriously damaged the former that, although about 2,000,000 more acres were sown to it this year than last, the total yield will probably not be any heavier, while some estimate it at considerably less. According to the reports of the Department of Agriculture, supplemented by those of the various State Boards of Agriculture, the area under winter wheat this year is at least 2,500,000 acres greater than last year. Moreover, while last year the yield was only 90, assuming 100 to be a fair good average, this year the yield is 101. In other words, where eleven and a-half bushels per acre were harvested in 1877, twelve and one-tenth bushels will be gathered in 1878. From the total acreage under spring and winter wheat, amounting, according to the latest estimates, to 34,000,000, a yield of 429,000,000 bushels is confidently expected.

Many agricultural journals in spring strenuously urged that potatoes should be planted early; but it seems that those planted late are nearly everywhere more promising than those put in sooner—a proof that even agricultural journals are not always infallible. Here, however, there is a plausible excuse for their mistake; for neither of them pretends to foretell the weather a month or two ahead, and the failure of the early planted potatoes is due more to weatherly influences than to any other cause.

From all appearances the corn crop will be extremely abundant; and as very little of this is exported in its natural condition, there will be a splendid opportunity to send it abroad at low rates of freight in the shape of juicy beef and fat pork. It is doubtful, too, whether there has been so excellent an opportunity of testing the comparative value of cornstalks as fodder as that presented this year by the extraordinary growth of the stalks reported from all over the country. It is to be hoped that the abundance of maize in all forms will not lead to carelessness or wastefulness in its use.

Of all fruits, peaches and grapes came off decidedly the worst from that rude encounter with Jack Frost last May. It is the part of a wise man to learn, from the experience of the past, lessons for the guidance of his conduct in the future; the past spring's experience therefore will give the shrewd fruit culturist many a useful hint for his treatment of grapes and peaches during the next season resembling the past—probably fifty years hence.

ALL THAT IS TO BE DONE!

SUPPOSE we succeed in doubling the yield of corn, wheat and other crops by intelligent culture and the application of improved methods of agriculture. That would be a triumph for "intelligent culture" and "improved methods." Suppose then that their value in the market falls to half its present value? That would not be satisfactory. The problem before us is to double the yield and to maintain the price. Then there ought not to be a grumble. If this could be effected with half the expenditure of labor and time that is at present required, that would be a triumph indeed. Then farmers would find plenty of time to read agricultural papers; interest themselves in farmers' clubs; participate in politics; dress in the latest style; adorn their door-yards; plant evergreen windbreaks; stop up all the cracks in their barns; wear smiling faces at home, and occasionally go abroad. Or they could investigate hog-cholera, pear-blight, grape-rot, how to exterminate insect-pests, and so on until nothing in particular is left to investigate except the new questions which arise out of the elevated condition of things.

Our really slow progress in agricultural matters has been due in a great measure to a *lack of time*. To give the first illustration that occurs to us—it is known from actual experiment that it requires but one-twentieth the time to "kill weeds before they are born," that it requires to exterminate them after they have grown "apace." Whence it follows that if after "weeds have grown apace" twenty days are needed to kill weeds—under the killing-them-before-they-are-born system, one day would suffice. It is plain that nineteen days would be left for stopping up the cracks in the barn; for traveling abroad; reading agricultural literature, etc., etc. Again, agricultural progress has been retarded by an absence of concerted effort. The effort has been made, but upon the principle of equal forces pulling in opposite directions. The result of this sort of effort simply lacerates the object upon which the forces are applied. In fact, many an object has been broken all to pieces by this sort of effort.

We must first settle upon a plan, and then harmoniously and vigorously pull together. The problem, as we see it after a careful perusal of all of our agricultural literature, is as we have stated: To double the yield of all crops and to maintain the price with half the expenditure of time and labor at present employed!

PEARL MILLET.

SOMETIME ago we spoke discouragingly of Pearl Millet. A considerable quantity was planted at the farm with unusual care and the seed did not germinate. That sown later at the Rural Grounds germinated readily, but after attaining a few inches in hight, remained stationary so long that we were ready to conclude it was not at all adapted to this climate. Since that time, however, it has made a surprising growth, some plants measuring seven feet in diameter—a thick mass of long green leaves and short-jointed stalks, that animals eat most greedily. Some plants were cut off June 26. They have continued to grow since, but rather feebly, and there seems at present little chance of this second growth being of much value.

The portrait we have seen of Pearl Millet does not represent the plant as it grows now. That gives its hight as at least twice its width, and is the portrait of a mature plant. Ours will measure more than twice as much in diameter as in hight. The stalks—of which there are over fifty to a single root—so crowd each other that they seem to be thrown over, the entire plant assuming a round form. It shows no signs of heading yet, and indeed has never, that we are aware of, seeded in so cold a climate. Our correspondent, Col. M. C. WELD, tested this plant while editor of "The Homestead," (Hartford, Ct.,) twenty years ago, and disseminated the seed for others to try. The reports were favorable, in view of which, as well as of the fact that it has been cultivated in some of the southern States for many years, it is singular that Pearl Millet, if worthy of it, has escaped general cultivation.

A POSITIVE CURE FOR GAPES.

Many are the remedies that have been recommended for the pestilential and fatal disease among chickens known as the gapes. It is the result of one or more worms in the windpipe of the sufferer, and the use of horsehair, twisted and inserted into the windpipe, is often spoken of, and also the use of feathers; but the great difficulty seems to be to get anything into the windpipe (not the throat), and successfully bring away the worms. Generally the worms could not be caught; besides the loss of time, the bungling with the patient more often killed than cured it. The positive remedy of which we have to speak, is essentially the same in theory, but rendered effectual by a difference in the *modus operandi*.

Mr. Peter Van Buskirk instructed our correspondent, Mr. Hales, who has communicated it to us. The trouble, however, is, that so much depends on precision in performing the operation that one must almost see it done, to be able to perform it successfully. Mr. Hales thought that Mr. Van Buskirk's description would be sufficient, but he tried many times without success, until he *saw* one chicken relieved, by his instructor. Since that time he has relieved many, which the neighbors around have taken to him. We do not presume that his description of the process on another page, will enable our readers to practice the method with any greater success than he attained from the instructions of Mr. Van Buskirk. We have given the process described by Mr. Hales, and are satisfied that it will be acceptable to many of our readers as a positive, simple cure, and if only one in a neighborhood hits on a successful performance of it from the description, it will accomplish good results, and lessen the difficulty of rearing chickens.

A NOVELTY INDEED!

We were asked by a friend one day last week to call at the salesrooms of Young & Elliot, of this city, to see a *blue* seedling Gladiolus. It was among an extensive collection of seedlings of this beautiful flower raised by Mr. C. L. Allen of Queens, L. I.

Seeing that our friend was in earnest, which we doubted at first, almost the same as if he had spoken of a blue rose, we hastened to the place of exhibition. The individual flowers of the spike were rather large and well opened, and the color of all the petals except the lower ones, was a uniform grayish-blue, or lavender, without streak or blotch. The lower ones were marked with a tongue of a deeper color, a deep blue inclining to violet. The upper part of the spike alone was exhibited—the flowers of the other half, left upon the flowering stalk, had been pollenated, in the hopes of securing seeds. It was the first bloom of the seed-corm, and we sincerely hope that Mr. Allen may succeed in raising a stock from this bulb, of which, however, there may well rest in his mind many a misgiving.

FRUIT CROP OF MICHIGAN.

As we are about to go to press, the following is received from Secretary Garfield:

Our apple crop in Michigan has been dropping badly, and the peach crop will be below the average. The Hale's are just going to market at remunerative prices. We never can overdo the fruit business in Michigan, with the great indefinite West to supply, and our very best apples can be shipped abroad with a good profit. We can have our Michigan Red Canadas, Greenings, Baldwins, and Spys, handled in London, at an expense of $1,50 per barrel, including freight and commission. We are thinking about sending over some specimens to Paris, for we understand that the people there are somewhat skeptical about the Iowa wax collection being modeled from real fruit. If we could get a barrel of our Grand Traverse apples there in good shape, it would soon dispel all skepticism in that direction.

Hastily yours,
C. W. G.

Professor Asa Gray.—"We are pleased to learn that at the last meeting of the French Academy of Science, held on July 29, Prof. Asa Gray, the well-known American botanist, was elected corresponding member of the botanical section of that learned body, by thirty-two votes out of forty. Mr. Charles Darwin, who was the other candidate, only polled five votes. Although, of course, we should have been glad if the honor had fallen on our own countryman, we most cordially congratulate Professor Asa Gray, on the well-earned distinction conferred on him, a sentiment in which we are perfectly sure that his unsuccessful rival will join most heartily. It will be seen by this, that if one wants to consider the feelings of all, and particularly those of M. Decaisne, and the gentlemen who compose the French Academy of Science, it is not well to do too much. Professor Gray, however, is also an indefatigable worker, in the cause of science." We take the above from the London Garden, of August 3.

BREVITIES.

EARLY potatoes are generally a failure.

J. J. MEOHI makes meat to grow wheat, and it answers his purpose.

AT the RURAL farm the corn crop, it is thought, promises the best yield, for twelve years at least.

THE space given this week to crop reports from different sections delays the publication of several timely articles.

MR. A. B. CRANDALL asks: "Has anybody (seedsmen possibly excepted) realized a comfortable profit from Prickly Comfrey?"

To see the beautiful plums now offered in our markets and fruit stores and stands, one would not suppose there was such an insect as the Curculio.

LE CULTIVATEUR assures us that a piece of paper, cut round and applied to the palate, will stop bleeding at the nose in 45 seconds. That's a simple remedy and the authority is good.

COMMISSIONER KILLEBREW says that the natural destiny of Tennessee is to feed the population of the cotton States and supply them with animals, and he thinks she will never realize the full wealth of her real estate and climate until grass and stock take the place of cotton and corn.

THE editor of the Michigan Farmer and Sec'y GARFIELD visited the grounds and buildings in process of erection for the State Fair. The editor concludes—"We came away well satisfied that the buildings were the best and the cheapest that have ever been prepared for the annual exhibition of the Michigan State Agricultural Society."

BOYDEN 30.—So far as we are enabled to judge of the new large varieties of Strawberries that have excited so much interest during the past two or three years, we would prefer Boyden 30 to any one of them. It needs good culture, certainly. So do the others. But it is sweeter than any of them—will average as large and bear handling or carriage just as well as any and better than most of them. We have observed, however, (it may be owing to local peculiarities), that its second is its best year.

Literary Miscellany.

TO HERMIONE.

WHAT shall I liken unto thee?
A lily bright,
Whose virgin purity and grace
Fulfils the soul, as doth thy face,
With all delight.

What shall I liken unto thee?
A blushing rose,
Which redolent of fragrance rare,
Half opened to the summer air,
All sweetness grows.

What shall I liken unto thee?
Some glorious star,
Which, hung aloft at eventide,
Sheds its mild radiance every side,
Both near and far.

No! such comparison is vain,
For these all three,
Lily, and star, and rose so fair,
In radiance, grace, and sweetness rare
Must yield to thee.

[*Macmillan's Magazine.*

EUPHROSYNE:

AN OLD TALE OF THE NEW WORLD.

CHAPTER II.

(Concluded from page 535.)

A CROWD had by this time gathered on the balcony, all eager to watch the coruscations of the aurora; and there were many who saw in them a shadowing forth of hosts gathered in battle—portentous of impending woe to the loyal garrison of Quebec. But no such superstitious fears paralyzed the courage of its brave defenders; and stanchest among them, and of firmest resolve to maintain the rocky stronghold against all odds, was the governor himself, the Comte de Frontenac, a gallant old noble, bred in the warlike school of Louis XIV., and a true believer in the great Henry of Navarre.

M. de Frontenac possessed the entire confidence of his sovereign, and it was his endeavor to deserve it, by wise administration and judicious policy. But though just, generous and brave, the comte's imperious temper often balked his good purpose; towards those, especially, who in any way thwarted his views, he displayed his strong feelings, becoming frequently so irascible that his most familiar friends dreaded to approach him.

In these dark and stormy moods, Madame de Lavasseur was the only one who could exorcise the evil spirit that possessed him. She was never moved even by his wildest tempests of passion; and if manifested in her presence, they seldom failed to subside into calmness when she tried her feminine magic. He delighted to have her near him: "She seemed," he said, "to surround him with an atmosphere of joy and peace;" and the dutiful and tender affection she rendered him in return for his fond indulgence, might have been that of a loving daughter. Louis St. Ours shared with Euphrosyne the favor of the stately comte—for, like most persons who are fond of power, he loved to have his favorites, though they were not always so well chosen as in the present instance. The young man being attached to the personal suite of the governor, occupied apartments in the castle, and was thus thrown into intimate association with Euphrosyne in the daily and hourly courtesies of domestic life—a dangerous position for the enamored Louis, especially as M. de Frontenac seemed in nowise displeased at the intimacy which was rapidly knitting the young people more closely together.

It was past midnight when St. Ours said adieu to Euphrosyne, and left the castle on a private mission to the intendant; and the yellow dawn was just tinging the horizon, when again he found himself alone in his chamber. Wearied, yet too much excited to feel the want of sleep, he opened a small cabinet which stood in his apartment, and drew forth his writing materials, desirous of improving the short time that remained before the sound of the morning reveille in inditing a letter to Madame Lavasseur—perhaps the last.

Full of manly tenderness was this letter, and as full of sad and bitter regret at the fate that forbade him to consecrate to her his life. All was told—all mystery cleared away from his words and conduct: his whole soul was laid open to her gaze, with its anguish, its deep remorse for the wrong he had done in seeking, even indirectly, to awake her tenderness.

The letter was sealed and addressed; and the half-hour that remained before being summoned to active duty, he employed in looking over the contents of the cabinet, which contained his private papers and other articles of value. Letter after letter was given to the flames; but several brief notes, bearing the signature of "Euphrosyne," and containing, it might be, some half-dozen lines of acknowledgment for a book or other trifling favor, were gazed upon till the delicate characters became dim, and then restored to the cabinet.

Unclosing a private drawer, which he had almost forgotten, Louis started at the sight of a miniature that had lain there undisturbed for years, though the rich gold of its setting was undimmed by time, and the gems that incrusted it remained as lustrous as ever. It was the picture of his child-wife, upon which he had never looked since the day of his fatal marriage, when it was given to him by her father. With an involuntary shudder of aversion he closed the drawer.

The dawn was slowly advancing, painting the cast with hues that cast their splendor on the mist which enshrouded the landscape. As the sun ascended, the veil lifted and flickered, hanging like a soft cloud over the St. Lawrence, and wrapping in aerial robes the snow-capped mountains of St. Charles. St. Ours stood silently watching the tissue of vapor, curling and wreathing itself into a thousand forms of fantastic beauty, till it floated slowly upward, when the English fleet, lying off the shore of Beauport, was revealed. Every stitch of canvas was furled, and the only sign of hostility presented was the red-cross flag of England, floating from the mast-head of the admiral's vessel.

The morning passed away; noon arrived, and just as the bell in the tower of Notre Dame proclaimed the hour of twelve, a boat, conveying an officer, with a flag of truce, shot from the side of the admiral's ship, and soon touched the pier at St. Roch's.

Springing on shore, the young officer, with a courteous salutation to the commander of the detachment waiting to receive him, requested to be conducted to the Comte de Frontenac, to whom he was the bearer of dispatches from Sir William Phipps. The consent of the governor being signified, he was blindfolded, and led up the steep rocky streets of the lower town, past frowning batteries, and through formidable rows of chevaux-de-frise, to the lofty platform on which stood the castle of St. Louis.

Admitted within its gates, he was conducted to the council-chamber, where M. de Frontenac, surrounded by high dignitaries of the church, and officers both civil and military, sat in state. An imposing audience, thought the young man, when his eyes were unbandaged, and he stood, the bearer of a haughty message, before that silent and dignified assembly.

The stern proud countenance of the imperious governor, one would have thought, was in itself enough to daunt the courage of any ordinary man under such circumstances; but the English herald, with a bearing as haughty as that of the aristocratic noble he confronted, advanced towards him, and with a stately obeisance, awaited his permission to unfold his errand. Slightly returning the stranger's greeting, the governor said in a brief and peremptory manner:

"Read on, sir, and you shall have our answer."

The Englishman drew forth his document, and read the bold summons of his admiral, demanding, in the name of his sovereign lord, William, king of England, the immediate surrender of the fortress and city of Quebec; "to which demand," added the imperturable messenger, "your answer, Comte de Frontenac, is required in an hour hence, upon the peril that will ensue. I shall await your excellency's answer till the time specified has expired."

By a simultaneous impulse, the whole assembly rose from their seats, surprised out of their dignity by the insolence of the message and the audacity of its bearer. Rage and astonishment were depicted on the countenance of M. de Frontenac. For a minute, excessive anger prevented his utterance, but when at last his white lips parted to speak, a torrent of scorn and defiance flowed from them. Shaking his clenched hand with a menacing gesture:

"I do not recognise the supremacy of William of England," he said; "I know him only as the Prince of Orange—a usurper, who, to gratify his selfish ambition, has outraged the most sacred rights of blood and of religion, striving to persuade the nation that he is its savior, and the defender of its faith, even while he has violated its laws, and overturned the Church of England. Those offences the divine justice will not long delay to punish as they merit."

Perfectly unmoved by this hurricane of wrath stood the messenger of Sir William Phipps, except that a haughtier light gleamed in his clear blue eye, and a scarcely perceptible curl of his lip showed his contempt for the accusation alleged against his sovereign. He only asked:

"This, then, is your excellency's only reply?"

M. de Frontenac deigned no word in return to the question, but, with an air of frigid determination, slightly bent his head in token of assent.

"May it please your excellency, then," resumed the officer, still in the same imperturbable and authorative tone, "to cause that this, your answer to our summons, should be rendered in writing, for the satisfaction of my commander, to whom I would not willingly bear a false interpretation of your message."

"I will answer your master, sir, by the mouth of my cannon!" thundered the exasperated governor, whose scarcely smothered wrath leaped into a flame at the audacious coolness of the herald. "Thus, and thus only will I hold parley with him, and that ere long; for it is time to teach him that the Comte de Frontenac, the vicegerent of the greatest monarch in the world, is not to be dealt with in this manner even by his peers!"

With a haughty wave of his hand, the angry old noble rose and left the council-chamber, attended by his suite. It was the signal for the herald's departure; and again, with bandaged eyes, he was conducted through the fortified city to the boat which had borne him on his fruitless mission thither.

The hostilities which almost immediately ensued on the conclusion of this brief conference, are matter of history; and upon them, even did the limits of our tale permit, we have no desire to dwell. Hour after hour, the dreadful cannonade continued; but directed, as was the fire of the English colonists, against the heights of the upper town, their balls fell harmless; while the numerous guns of the rocky fortress replied with a power that told fatally upon the enemy's flotilla. All day the fearful strife went on. But the weary day declined at last; twilight, brief and bright, came on; and then the welcome night, shrouding all things in darkness, and stilling for a time the desperate fight.

St. Ours hailed the approach of night with joy. All day he had been active where peril was rifest, and had escaped unscathed; but he was sick of the noise of battle, and even a brief respite was grateful to him. Another evening might not find him breathing—loving—on that earth made radiant by the presence of Euphrosyne; for there lay the black hulks of the hostile vessels, waiting for dawn to renew the strife; and among the victims marked for death, might not himself be numbered?

With this thought sprang up an intense desire to see Euphrosyne, if only for a few moments to learn how she had borne the trials of the day, and to draw comfort and courage from her smile. But he had been left for the night in command of one of the batteries of the lower town; and to forsake his post, even for an instant, was impossible. So, sadly resigning himself to the hard necessity, he stood dreamily gazing at the turrets of the castle, as they stood against the evening sky, and picturing to himself the beloved image which had never left him even in the perils of the fight. He was interrupted by a message from M. de Frontenac, who required his immediate attendance at the castle. He needed no second bidding to make him obey the summons, trusting that when he had received the comte's commands, he should be able to steal a short interview with Euphrosyne before quitting the castle.

He was detained but a few minutes by the governor, who desired to charge him with a secret mission to the commander of a distant redoubt; and as Louis passed from his presence, he made a slight detour, in order to traverse the corridor in which the private apartments of Madame de Lavasseur were situated. His heart beat high with the hope of meeting her; but the place was vacant; though, seeing the door of her boudoir stand partly open, he paused opposite to it, irresolute, yet fearing to enter unbidden. No light gleamed from within, and he ventured softly to breathe her name; but there was no answer; not a sound broke the deep silence; only a faint odor of the flowers she most loved stole balmily, like her own sweet presence, upon his senses.

A glass door at the end of the corridor stood open, and with a trembling undefined hope he passed through it to the balcony, and there he found the object of his search. With traces of emotion still lingering on her face, she lay upon a cushioned seat, the folds of her white garments falling gracefully around her, and her attitude one of profound repose. The moonbeams trembling through a fleecy cloud quivered on her face, their pale soft light seeming to surround her head with a halo, and thus lending a celestial character to her beauty.

St. Ours stole towards her, shrinking at the sound of his own step, yet drawing nearer till her low measured breathing fell softly upon his ear. It seemed as if she had wept herself to sleep, for tears were yet glistening on her cheek, round which her hair fell in disorder, descending in rich folds to the floor. Suddenly her sleep became disturbed; she moved, and murmured softly, but his ear caught the whispered words, and the blood bounded wildly through his veins. Could it be?—Yes, again she spoke; and his own name was on her lips—his father's name; that which he had borne since he became known to her was his mother's.

He bent again to listen—a smile was on her lips. She seemed visited with happy dreams; and stooping low to catch her inarticulate murmurs, he again heard "Louis de Mornay," coupled with another name which had been familiar to his childhood. He was amazed—how could she have come to the knowledge of this name? He wished she would awake, but she seemed sinking into a deeper slumber; and he felt that he must depart without the interchange of a word. Still he remained, as if spell-bound, bending over her till her breath fanned his cheek, when, yielding to a resistless impulse, he slightly pressed his lips upon her brow.

Light as was the touch of that impassioned kiss, it awoke her, and she sprang to her feet. In her terror, she failed to recognize him; she saw only a tall figure standing beside her; and with a bound, she rushed from him towards the door which opened from the corridor. Her dress was caught by some slight obstacle as she was passing through; and in her eager haste to disengage it, she cast a furtive glance at the intruder, when she was struck by a certain something in his air, and in the outline of his figure, which arrested her flight.

"Euphrosyne!" whispered the well-known voice. Glowing with joy she turned towards him. He advanced.

"You are safe, thank God!" she said; but the sound of a closing door, and then of voices approaching, alarmed her; and snatching her hand from his clasp, she darted swiftly away. Louis stood for a minute like one entranced; but he had no time to linger; and comforted by having seen her, he strove to persuade himself that it was better for her happiness and for his honor that he had been saved the expression of feelings, into which, had the interview been prolonged, he might have been betrayed. He left the castle, and departed swiftly on his mission.

HERMIONE.

The brief truce of the night was broken at early dawn by the guns of the enemy, who stung by the ill-fortune of the preceding day, renewed the assault. But though, for six continuous hours, they pressed the attack with vigor, they were at last compelled to retreat before the overwhelming power of their opponents. Many there were on the decks of the little flotilla who would have preferred dying in the struggle; but Sir William Phipps, no less brave than he was humane, wished to avoid a useless waste of life, and assured that all chance of victory was at an end, he ordered the anchors to be weighed; and crippled by the guns of the fortress, many of her gallant hearts cold and silent, others bleeding on her decks, the defeated armament floated slowly down the stream.

Fast and continuous from the height of the citadel pouring on the retiring fleet the fire of its cannon; scarcely a ball sped through the air in vain; and when at last one of them, in its flight struck the mast of the admiral's vessel, and sent it headlong, with the proud flag of England at its top, into the St. Lawrence, what humiliation crushed the hearts of its defenders!—what joy swelled the triumph of the victors!

Borne up by its silken folds, the flag floated slowly towards the conquerors—a token of surrender, which they hailed with shouts that shook the city to its center. On it came, watched with breathless interest by that eager multitude, till suddenly, saturated by the waves, it disappeared beneath them, the end of the splintered flagstaff floating on the surface, designating the place where it had sunk. The breathless hush which succeeded its immersion, was broken by the clear commanding voice of de Frontenac impetuously exclaiming:

"Shall the trophy be lost to us, an

not an arm among the hundreds here outstretched to pluck it from the waves?"

"Heaven forbid!" shouted Louis St. Ours; and with the words he cast aside his coat and sword, and leaping from the bank, dashed out into the stream. The welkin rang with enthusiastic cheers; and many a one who had shrank from the peril, now envied the young man who had dared it the glory of the act.

The retreating foe were still near enough to mark the proceedings on shore; and hoping to rescue their fallen flag from the grasp of the victors, they renewed their slackened fire. But regardless of danger, though the balls fell fast around him, St. Ours pressed on. The throng upon the shore watched his progress in profound silence; but when he safely neared the flagstaff, and grasping it, held up the flag, a burst of gratulation, long and deafening, greeted his triumph, and was again renewed, and yet again, as he swam back with the trophy to the shore. Leaping up the bank, he laid it with a proudly throbbing heart, at the feet of M. de Frontenac.

Surrounded by his staff, the old noble stood upon the highest point of the bank, watching the scene with intense interest. A smile at its gallant issue lit up the veteran's haughty face softening its stern expression, and revealing by its sunshine the kindness which really formed a part of his character, though too often obscured by the arbitrary manner which his love of rule had fostered. Bending courteously towards St. Ours:

"Well and bravely done, young sir!" said he—"well and bravely! the crowning act of a heroic day! On the spot which has witnessed your valor, it is fitting that, in my sovereign's name, I decree you the guerdon it deserves. Kneel down, Louis St. Ours!"—and drawing his sword from its scabbard, he held the glittering blade, flashing in the sunlight, over the young man's head for a moment, then laying it upon his shoulder—"Rise, Baron de Mornay!" he exclaimed; "and be thou fortunate in love, as thou hast this day shewn thyself valiant in arms, and loyal to the service of thy king!"

At these words the new-made baron rose, flushed and excited, pleased by the approbation of his commander, and the approbation accorded him; but above all mystified and astonished at being accosted by the paternal name he had so long disused as the symbol of his legal bondage. Twice within the last few hours he had heard it repeated by those to whom he had never been known as other than Louis St. Ours; and now he was rebaptized with his family name, dignified with a lordly title.

The city that night presented a scene of rejoicing, except where, here and there, a closed dwelling told of the desolation which the brief combat had brought into it. A banquet at the castle celebrated the victory of the garrison; and conspicuous among the adornments of the grand saloon, hung the English flag, dividing the attention of the guests with the youthful hero, who, at the peril of his life, had snatched it from the waves. Euphrosyne looked the very incarnation of happiness. Never before had she so plainly manifested her preference; it seemed as if she designed to convince him of it, and that so undisguisedly, that even while his heart struggled between the joy and anguish which the certainty of her love brought with it, he was half inclined to censure its almost triumphant demonstration.

More painfully than ever came home to him his hopeless bondage—his hateful obligations to another; and reproaching himself that he had so long tacitly permitted the growth of her affection, he resolved that very evening, even while her hand held the cup of happiness to his lips, to turn from it, and reveal to her his true position. With this purpose he turned to seek her; but not finding her among the crowd, he strayed on towards a small apartment, whose glass-doors opened upon the terrace, which, at that hour, he thought to find untenanted, and where he could collect himself for the interview he sought.

With downcast eyes, and arms folded across his breast, the very impersonation of melancholy musing, Louis entered the apartment; but as he slowly crossed its threshold, a murmur of voices startled him, and raising his eyes, he saw, seated in a high-backed Gothic chair, surmounted by his own arms, the Comte de Frontenac, while beside him stood Euphrosyne, one arm thrown caressingly round his neck, and her fair face, a very April-face, with its mingled smiles and tears, half-hidden on his shoulder. Entranced by the unexpected sight, yet retaining a dim consciousness of intrusion, Louis mechanically turned to retreat, when the voice of the governor arrested his steps.

"Nay, do not quit us, Baron de Mornay," he cried. "There surely is an unseen Power that directs our actions, or you would not have been drawn hither at so apropos a moment. Come and tell me what shall be done to the man whom we delight to honor! I feel that I have but poorly acknowledged your chivalrous conduct by the bestowal of an empty title; and now I would signalize my sense of your brave and gallant bearing, by enriching you with a gift, priceless above rubies, if—as the young believe—the heart's affection is more to be coveted than worldly wealth and honors—Euphrosyne!"

She did not answer to his call, but kneeling in silence beside him, strove with her small hands to cover her blushing face, as it rested on his knee. The comte turned his eyes from her with a smile, and again addressed St. Ours:

"Young man, I knew your father, and loved him; and so loving him, rejoice that he has left such a son to honor his memory, and bear up his ancient name; and being such a one, I not unwillingly intrust to your keeping the happiness of my child, my Euphrosyne—mine by adoption, the precious gift of a sister whom I shall never cease to mourn."

There was a breathless pause: the young man's tongue clave to the roof of his mouth—his heart seemed to cease its pulsations; he stood for a minute as if transformed to marble, then roused by an overpowering rush of agony, he rapidly traversed the apartment. It was a moment of terrible suffering; he could not bear it long; and suddenly nerving himself to the act, he paused before the chair of M. de Frontenac, and raised his eyes to read a sentence of wrath and banishment in that despotic face, but instead thereof, he saw an expression of kindness, softening the eagle glance of the veteran, such as he had never witnessed there before.

A mist obscured his sight, and dimly through it he saw the still kneeling figure of Euphrosyne, her face bowed down and hidden in her hands; and impulsively he cast himself beside her, breathing out in broken sentences his love and his despair, rapidly detailing the history of his early and forced marriage, and deploring with passionate eloquence the relentless destiny that crushed from his heart the hope dearest to it on earth.

"This is a strange story, forsooth," said the comte in a tone that sounded mockingly to the diseased sense of the unhappy lover. "Euphrosyne, my bird, heard you ever the like of it?"

"Ay, almost the same, dear uncle," she said, raising her lovely face, now so radiant with happiness that the young baron, almost indignant, gazed fixedly upon her for a moment, half ready to believe himself the dupe of some concerted jest.

"The same, say you!—pray, how so?" questioned the comte.

"List if it be not," she answered. "A story of a maiden wedded in her childhood, left unclaimed, forsaken by her perjured lord, whose pictured face only kept alive her remembrance, ay, and nourished her affection till they met again; and now——" The words faltered on her lips, as, with a trembling hand, she unclasped a chain of gold from her neck, and held the miniature suspended from it towards him, bending down, hid her blushing face from his gaze.

He took it eagerly, and pressing the spring, disclosed the likeness of a youth, beautiful as Adonis; yet, was it not—could it be a transcript of his own boyish features! It was a strange bewildering thought, nor would he have yielded to the conviction of its truth, had it not been forced upon him beyond a doubt by his own name engraved upon the case. Yet even that evidence seemed insufficient, for he held it up in the strong light of the hanging lamp, reading with fixed gaze the name Louis de Mornay clearly cut upon the gold.

"Rosyne!" he cried, catching her impetuously in his arms—"Rosyne—Rosyne de Lancey! she whom I have wronged, and shunned, and hated! Can it be that she and the beautiful Euphrosyne, the day-star of my life, are one—the same? If this is true, will not she to whom I have been so unjust show mercy, and let the sufferings I have but feebly pictured atone for the fatal error of the past?" Looking up with a smile of trusting love, she replied:

"It is forgotten, now—forgotten dearest Louis, The joyful reunion of this moment seals and sanctifies the empty vows of our childhood. Henceforth, let us live for God, who has so blessed us, and for each other."

"Ah, take her, my young gallant; and make her what amends you can for your past folly and neglect," said M. de Frontenac in a tone of unwonted emotion. "For years she has been my precious charge, and for her sake I have marked your course, and at last brought you to my side, that in case I found you worthy of my peerless little blossom, a happy denouement might crown your melancholy romance. The name she bears is an assumed one, of course—for with that marriage-symbol on her finger, which I could never prevail on her to lay aside, it was not meet to deprive her of her matronly dignity. And now I will leave you to mutual explanations; our guests are dispersing, and a few hours still remain before the morrow summons us to sterner duties. Be well assured that you are satisfied with each other, else it will be easy for the church to undo the knot which affection has never rivetted. But if all is right and true in your hearts, we will have you re-married on the same day that we chant a Te Deum for the victory which has chased the invaders from our shores."

A bland smile brightened his face for a moment, then turning away, he left them to their happiness.—*Chamber's Miscellany.*

CATARINA CORNARO'S ABDICATION.

THE island of Cyprus, always an object of interest to the scholar, has become "popularly" attractive since its incorporation into the British Empire; everything which throws any light on its history, progress, peculiarities of soil or climate, is eagerly read. Catarina Cornaro, in Harpers for September, (from which we make following extracts) is a most entertaining and instructive addition to the fund of Cyprus information:—

The queen sat unshaken and erect upon her tottering throne, and turned a deaf ear to all the insinuations of the senate. The kingdom was her own, the people her subjects, and so long as one heart remained loyal to her she would find strength to shield it against the craft of her mother-state. The senate, finding that this soft tool of theirs had hardened to toughest steel in the stormy years of her reign, had recourse to open negotiation. They sent the queen's brother, Giorgio Cornaro, to the island to demand of her, in the name of the republic, to yield up her kingdom. To this proposal the queen proudly replied that she was astonished beyond measure at the charge the reverend senators brought against her of having allowed the sceptre to slip from her hands; that she had been too long accustomed to the splendor of a court to live at ease in the simple state of a private gentlewoman; that her strength had already been tried, and was able to meet whatever new misfortune might overtake her; that she had never known much of happiness, for her husband had died very early, and the sweetness of motherhood had been hers but a little space; her relations had been murdered before her eyes; the revolt of her vassals, the intrigues of her court, had familiarized her with danger in all its forms. She demanded of her brother, the state's ambassador, how he could have so little regard for the honor of their name as to ask of her a deed that would blacken it in the eyes of all posterity. She had resolved never to marry, and thus at her death the crown of Cyprus would revert to the republic. Until then the noble senators might wait.

This answer, with all its defiant strength and queenly dignity, flung at the feet of the Venetian senators, filled them with the surprise that one might feel who should watch a gazelle at its gambols, and returning in the morning find it transformed into a tigress.

The senate replied to the queen in an indignant strain. Catarina asked for the time to deliberate, and loud and angry were the discussions between herself and her brother. He was the only member of her family for whom she felt any affection, and the senate had remembered this when it chose him for its ambassador. The covert menace, the lurking insult of the senate's protest, showed Catrina what she had to expect from those tender nurturers of her youth. The threat of force which crouched behind the courtly phrases revealed the dread Venetian tribunal in all its hideousness. But resistance meant ruin and desolation to her people. If the senate withdrew its support, the barbarian hordes would rush down upon the helpless Cyprus and tear it limb from limb. If she threw down the gauntlet to the Venetians, their fleet would in a moment surround the island and take it by storm. Every outlet was closed, every avenue of escape walled up by the crafty senate. It was only the sacrifice of her own pride that was demanded, and she was a widow without a child. A few short years and all would be over, and should she make other wives widows and other mothers childless by fighting for her crown? The woman's heart was stronger within her than the sovereign's pride.

She avoided all direct mention of the Venetian coercoin. "Too well I see how fleeting was the show of happiness with which Fortune sought to tempt me in my first youth, for I have received nothing at her hands but grief and disappointment. Thus I renounce the pomps and the ambitions of the world as I renounce my kingdom. Never again will happiness enter my life. I see too clearly the uncertainty and the futility of earthly circumstance. I give my thoughts and my soul to God, imploring Him to grant me His grace in return for the sacrifice of my kingdom."

The news of the queen's abdication and return to her native land spread throughout Cyprus. The people followed her in procession to Famagusta with shouts of clamorous applause and demonstrations of regret. The people loved her deeply and truly, for they knew her to be a Cypriote at heart through her love for the dead king. In Famagusta the Venetian general offered her the dispatch from the senate. But she answered that she was disposed to obey the state blindly, only praying it to have at heart the happiness of her kingdom, for although her body was about to leave it, her soul would remain. A council was held, in which the queen made a formal renunciation of her rights, the island magistrates took the oath of allegiance to the republic, and after a solemn mass the standard of St. Mark was consigned by the queen to the Venetian general, who caused it to be reared aloft in the market-place of the city.

A few months later (A. D. 1489) the queen took her departure. Crowds followed her to the shore. Mothers held up their children that they might look upon the last of the sovereigns of Cyprus. The old proud line of Lusignan had been swept from the earth, and the storm-ridden island which had held its own for so many years was now but a vassal of the arrogant republic.

HEALTHFULNESS OF FRUIT.

No intelligent person can doubt that the free use of ripe fruit is conducive to health. On the other hand, it is obvious that fruits as an exclusive article of diet do not meet all the wants of the system. The chemistry of the apple, the pear, the tomato, the grape, etc., is well understood, and it can be stated how much nutriment or assimilable food each is capable of affording; but this does not answer all the questions connected with the subject of the healthfulness of fruit. Besides furnishing nutriment, fruit exerts other influences upon the animal economy of the highest importance. The acids of fruit are not properly nutritive substances, but they produce physiological effects of a cooling or corrective nature which are highly salutary.

Fruits are largely composed of water, and this fluid has come to them through extraodinary channels. The tiny root-fibres have collected it in the dark earth, and by vital action it has been forced through the most minute tubes, until it is finally deposited in the fruit cells. So far as we know, the water undergoes no modifications; it is water in the soil, and it is the same in its wonderful associations in fruits. It however holds saccharine elements and other principles which modify its physical appearance and taste. The great amount of water contained in fruits is in itself an advantage, as it aids in cleaning the alimentary canal and the other excretory ducts, and thus promotes healthy action.

Fruits are capable of sustaining life for long periods, but the lack of the nitrogenous elements detracts from their strength-giving power, and any one living exclusively upon them would not be able to labor effectively. We have heard of the man who rowed his boat along the entire coast of New England, sustained alone by wortleberries; but if the voyage had lasted six months, or even three, his nerves and muscles would have entirely failed him.

The past year was a season of abundant fruits. Perhaps never in the history of the Northern and Eastern States were apples more plentiful. We were glad to sell the products of our orchards at about twenty cents a bushel. The present season promises as good. The rich and the poor can indulge in this noble fruit, to the greatest possible extent, at small cost. If the fruit is largely consumed, in connection with a proper proportion of animal or nitrogenous foods, a much higher standard of health will be attained among all classes.—*Boston Journal of Chemistry.*

AMONG the fountains in Brussels there is none that commands such attention of the stranger as the diminutive figure called Le Manneckin, and there is none that is held in such reverence by the people of Brussels. It is a droll curiosity, whilst, at the same time, it is a true picture of innocence and nature. He stands on his pedestal showing by his countenance that he is oblivious of the fact that he is surrounded by spectators and that some of them glance at him from behind their fans. It is the figure of a hearty and robust little boy, about five years of age, standing on a pedestal over a half-circle basin, and as he has been frequently stolen or defaced, an ornamental iron railing incloses both the basin and the statue. But Le Manneckin is a historical character, and he has stood for four hundred years in his present position. The first statue was in stone, but 260 years ago it was replaced by the present bronze figure by Duquesney. There are various legends in connection with it, the best accepted of which is that the son of a distinguished man had been lost for some time, having strayed away. This part of Brussels was then a thicket, and it was on the spot that the fountain was subsequently erected by his father that he was found, after diligent search, just in the position and in the act which the statue represents. In gratitude for his recovery the fountain was erected, and has stood during all the vissitudes of war and changes of government. It has been from time immemorial an object of popular affection. On grand holidays it has always been the custom of Le Manneckin to wear a costume, and an officer is regularly appointed and paid by City Council of Brussels, whose duty is to dress him on these occasions and to keep him in repair and in running order. When Louis XV. captured Brussels 1747 he wore a large white cockade on his hat. In 1789 he was dressed out in colors of the Brabancon revolutionists, and the empire girded him with the French tri-color under Napoleon. The Dutch Government imposed the orange colors upon him. The days of September beheld him dressed in a blouse, and under the present reign, on grand occasions, he proudly wears the tunic of the civil guard. This little inanimate figure has been the object of several bequests, from which some ideas of the sentiment of the people of Brussels in relation to him may be judged. The object of these bequests was to furnish a fund, not only to furntsh him with dresses for fetes, but also to keep the fountain in good order, and repair and renew it when necessary. This is the fund which the city administers, and which pays for his chamberlain.—[Cor. Baltimore American.

THE FIRST FINGER-RING.—An amusing myth is told of the origin of the finger-ring. When Jove released Prometheus from the bonds by which he had been confined, he condemned him, as a sort of penance—perhaps somewhat after the fashion of a modern ticket-of-leave—to wear upon his finger as a ring a link of the iron chain that bound him to the Caucasian rock, in which was set a fragment of that rock itself. In this way, so fable goes, the custom of the finger-ring originated. There is every reason to believe that this use of the engraved stone began with the Greeks, and from them was copied by their servile imitators, the Romans. It is every way a convenient and natural one, and our grandfather's custom of wearing their seals at the fob, as it was called, or hanging from the side-pocket, was a recurrence to old Assyrian usages, which did not long hold its ground.

AN EXPENSIVE BOARDER.—The elephant, a large one, kept at the Zoological Gardens of London, seems to be a pretty hearty feeder. His daily food consists of four hundred pounds of hay and three bushels of oats. He washes this enormous quantity of provender down his throat with *four barrels of water*. Besides all this, he thankfully receives candles, cakes, apples, and such small trifles, from the visitors.

RECENT LITERATURE.

HENRY GREVILLE'S new book, and most dramatic and most powerful novel, and the one that established her fame in Europe, is "SAVELI'S EXPIATION," now in press and to be published in a few days by T. B. Peterson & Brothers, Philadelphia. It is a faithful portrayal of Russian despotism in the time of serfdom; and although the character on which the plot rests is strongly drawn, it is not overdrawn, but is true to the times and situation, for the pictures of Russian life are drawn in a manner which could only have been acquired through actual observation and experience. Powerful as it is, it is free from exaggeration, while a pathetic, tender love story is presented for relief. This novel shows more power and wonderful concentration than any the author has written; the descriptions are so vivid, and the characters and surroundings presented with such clearness and strength, that one is carried to the very scene and feels the atmosphere. Henry Greville, indeed, is a charming and exquisite writer. It will be issued in uniform style and price with "Theo," "Kathleen," "Gabrielle," and "Miss Crespigny," published by the same firm.

BRIC-A-BRAC.

WHO?

WHO ever read a swallow tale
Or wore a coat of arms?
Who ever saw the water pale,
Or give great falls alarms?
Who?

Who ever rode a wild saw horse,
Or over heard sand's tone?
Who ever saw the sun's rays course,
Or heard a pane full grown?
Phew!
[*Hackensack Republican.*

Who ever saw a door a-jar,
Or heard an oak lin-tel?
How many naves were in a church,
Beside the organ "swell?"
Who?

Who ever saw a black-king box,
Or carpenter Gim-let?
His neighbor's Bantam hatchets eggs,
Within a nail claw set?
Few! [*New York News.*

Whoever saw Anemone
Love a Lamprey-kin?
Or, who would a bumble-bee
And basque in muslin thin?
Who?

IMITATION TORTOISE SHELL AND MOTHER-OF-PEARL.

TORTOISE shell, the product of the shield of a species of sea-turtle, has long been in favor for the manufacture of ladies' hair-combs and the like. The richness of its color and the beauty of its markings account for this. But it is valuable, therefore beyond the reach of many a purse. It is long since imitation combs, made of horn and stained, and presenting a tolerably fair resemblance to the original, were provided to meet the requirements of the fair sex. We have now to direct attention to another simple method of getting up a "shell." On a piece of glass there is placed a layer of clear gelatine, on which the distinctive marking of the tortoise shell are obtained by dotting it with a concentrated solution of an aniline color named "vesuvin," to which a beautiful reddish tint may be given with "fox-in," another aniline color. The solution may also be scattered over the surface, and the drops allowed to run together. The whole when dry receives a coat of glue.

Mother-of-pearl, which is procured from the shells of large mullusks found in tropical seas, can also be imitated somewhat readily, though the process is more difficult. On a piece of glass place a gelatine layer containing a concentrated solution of some salt, such as white vitriol, Epsom salts, etc. When this salt solution has dried and become crystallized, a solution of so-called pearls is spread over the whole. This latter material is derived from the very fine and silver-like "sounds" or air-bladders of fish, which possess considerable iridescence. When the gelatine layer thus treated has dried, a coat of glue is applied, and the article is finished.—*Cassell's Magazine.*

WE love to lie beneath the shade
And quaff the cooling lemonade:
We love to feel the cheerful ants
Crawl calmly up our summer pants:
We love to see the appleworm
Prone on our shirt front squeam and squirm:
We love to watch with placid eye
The doodlebug go tumbling by:
We love to hear in distant bogs
The rueful rumbling of the frogs:
We love to hear the slimy snake
Wind in and out the verdant brake:
We love to hear the crispy cry
Of bumble-bees bumb-bumbling by:
We love to scent upon the air
The balm of squashbugs balming there:
With ivy trailing all the land,
And poison oak on every hand,
Far from the city's dusky strife,
How sweet to lead a rural life! [*A. Tennyson.*

WHAT "EASTLAKE" FURNITURE IS.

ALTHOUGH the archæology of Mr. Eastlake's volume is not always careful, most of the principles that he enunciates in it are beyond question and can be generally stated in a few words. He would have no carving or mounting or other ornament glued on—such work must be done in the solid; he would have no mitred joints made of the right angle and secured by mortise, tenon and pin; he would have woods in their native color and unvarnished, or else painted in flat color, with a contrasting line and a stencilled ornament at the angles; he would have unconcealed construction everywhere, and purposes plainly proclaimed; and he would have veneering, round corners, and all curves weakening the grain of the wood absolutely forbidden. The furniture that he thus proposes has straight, strong, squarely cut members equal to their intention. Its ornaments are painted panels, porcelain plaques and tiles, metal trimmings and conventionalized carvings in sunk relief, a part of the construction entering into the ornament, also in the shape of narrow striated strips of wood radiating in opposite lines, after a fashion not altogether unknown in the time of Henry III. It has the honesty and solidity but not the attraction, of the Mediæval; and if it is stiff and somewhat heavy, and fails entirely to please, it has yet a wholesome and healthy air.

TIME.

FORENOON, and afternoon, and night! Forenoon,
And afternoon, and night! Forenoon, and—
What? The empty song repeats itself. No more?
Yes, that is life. Make this forenoon sublime,
This afternoon a psalm, this night a prayer,
And Time is conquered, and thy crown is won.
[*Edward R. Sill.*

BIRDS are entitled to justice. When a man is indulging in a frolic, to say he "out on a lark" is a libel on that bird. He is really out on a swallow.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

CHERISH THY MOTHER.

BE gentle to thy mother; long she bore
Thy infant freshness and thy silly youth:
Nor rudely scorn the faithful voice that o'er
The cradle pray'd, and taught thy lispings truth,
Yes, she is old; yet on thine adult brow
She looks and claims thee as her own e'en now.

Uphold thy mother; close to her warm heart
She carried, fed thee, lull'd thee to thy rest,
Then taught thy tottering limbs their untried art,
Exulting in the fledgling from her nest:
And now her steps are feeble, be her stay,
Whose strength was thine in thy most feeble day.

Cherish thy mother; brief perchance the time
May be that she will claim the care she gave;
Past are her hopes of youth, her harvest prime
Of joy on earth; her friends are in the grave;
But for her children, she could lay her head
Gladly to rest among her precious dead.

Be tender to thy mother; words unkind,
Or light neglect from thee, will give a pang
To that fond bosom, where thou art enshrined
In love unutterable, more than fang
Of venom'd serpent. Wound not that strong trust,
As thou wouldst hope for peace when she is dust.

O mother mine! God grant I ne'er forget,
Whatever be my grief, or what my joy,
The unmeasured unextinguishable debt
I owe thy love; but wake my sweet employ
Ever through thy remaining days to be
To thee as faithful as thou wert to me.
[*Geo. W. Bethune.*

THE DEGENERACY OF WOMEN.

WHAT I desire to draw attention to is not weakness of intellect, unfeminine habits or tastes, or any impropriety of conduct. Far from it. I lament the general physical weakness, the lack of stamina and force in the "well to do" portion of the sex, and if it is in my power to do or say anything to check this growing evil, or to enable women to overcome this physical defect. I feel bound in duty to say and do it, asking only that I may be credited with sincerity of purpose.

A very pertinent question is, what is the cause of it? The girls and the young matrons of half a century ago were, as a rule, healthy and strong, and without any lack of feminine graces. They possessed a due proportion, as compared with their brothers, of force, strength and agility, and the physical differences between the sexes were the same in man as in the lower animals, the male being the superior in size and strength of muscle, while the female exceeded in agility and grace of motion, with no disparagement of vigor or bodily health. But now when half a century has passed, how is it? I need hardly answer the question; the majority of women under fifty are unhealthy and unfitted for the duties of life. What shall we do? Let us seek for the cause. It is customary to charge the fault to tight lacing. This fashion has, or has had its votaries, and no doubt the grave now covers its many martyrs; but this is not all; the human body is full of muscles designed by our maker for use, and if used properly they increase in size and strength; if allowed to remain idle they fail to develop, and shrink away, and their attendant tendons and their attachments to the bones become powerless. Instead then, of that sprightly and joyful activity which, in nature, characterizes the young of all mammals, there will be debility, languor, listlessness, impotence, premature old age and death; and in proportion as all these organs are disused, and their intended use perverted or neglected, in that proportion do all these results follow.

I wish to treat this subject in all fairness; men have their follies and imprudences, and suffer for them, but I do not design the discussion of their shortcomings for this chapter. It is one of the great faults of the age that mental development is crowding out the equally essential physical; parents and teachers seem to ignore the fact that a sound, strong and healthy mind cannot inhabit a weak, unhealthful body.

It has always been my opinion that the great prevalence of pulmonary and abdominal complaints and the general muscular weakness of the women of the present age are due mainly to the neglect of physical culture in early life.

Fashion in dress and behavior is the greatest tyrant on earth, and she who will not conform to its demands loses caste with her peers. Boys of ten years may run and jump, and they pride themselves on their fleetness, agility and strength, but girls of that age are not permitted to indulge in such masculine pastimes, for neither their mothers nor Mrs. Grundy will allow it. Boys thus develop and strengthen muscle, tendon, bones and lungs, but how is it with the girls? It is true that in country places and backwoods districts girl nature will assert its rights, but such girls when grown to womanhood and motherhood need no hygienic advice from me, and it is not for them that I write. The Creator has given to all an excess of physical force over and above the ordinary wants of the animal; this is brought into use on extraordinary occasions; the boy prepares himself for these extreme cases by athletic competitions with his fellows; it is a pity the girl is not allowed to do the same. Abdominal weakness amounting often to a displacement of some internal organ, is an almost universal complaint among women, and to reach the cause of this great evil, let us consider a few facts on the design and use of the muscles. If we decide to perform any muscular act, the muscles that need to be brought into play in its performance involuntarily prepare themselves, or hold themselves in readiness for it. If, in walking in the dark, we accidentally step down a few inches, it produces considerable of a shock, when, if we had seen the depression in our path, the same step would have been taken with perfect ease. In sitting, the abdominal muscles are relaxed and nearly idle, but when we rise to walk there is a tension of them that can be felt by pressing the hand upon them. The tension and exercise of these muscles in standing and walking is what a great share of the women in what are called "easy circumstances," lack, and these muscles especially, as well (as all others incidentally,) suffer or fail to obtain necessary tone and vigor to meet those emergencies to which all are liable. A lack of natural force is induced by early restrictions in exercise; a lack of tone and an aversion to muscular action in womanhood is the result, and ever after they never stand, walk or breathe enough to bring up and to keep the body in that vigor which is their natural birthright.

There is much more that might be said on this head, but I am reminded that brevity is more effectual than verbosity, and should the spirit move me again, and the mercury go down a few degrees, I may resume. S. B. P.

BARREL CHAIRS.

MANY articles of real utility may be fashioned out of abandoned material that is in everyone's way. We remember one ingenious family whose success at converting such flotsam into pretty serviceable things was the admiration and despair of imitating friends.

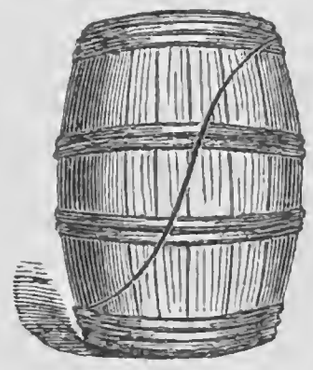

FIG. 1.

The disreputable barrels that have served their original purposes and are about to become unsightly obstructions to back-yard travel, are excellent subjects for an illustration of the use of refuse. We give three cuts, showing how one of these barrels may be converted into a comfortable rocking-chair.

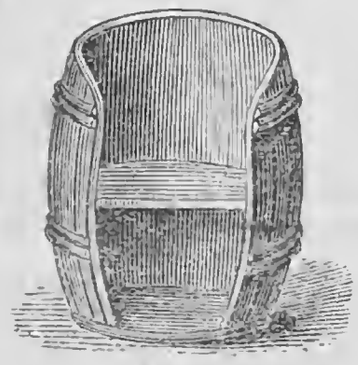

FIG. 2.

Fig. 1 is the barrel outlined the way it should be cut, and Fig. 2 shows how the seat is to be placed; while Fig. 3 gives a plain view of the manner of adding the rockers. It only remains to pad and cover the chair, and brighten up the rockers with a bit of color.

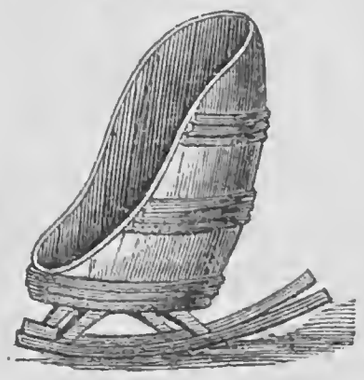

FIG. 3.

Some one of the charming patterns in cretone that are now so cheap is the prettiest covering that could be used. The details will depend greatly on the taste of the amateur upholsterer, but with only a scintilla of "knack" the article can be made to grace even a sitting-room, and is delightful as an easy chair on the veranda, or in the bed-room.

"I SUFFER NOT A WOMAN TO PREACH."

EACH successive generation seems obliged to fight truth's battle anew; thus after centuries, stained with the record of wars waged against those who strove to walk in some new path, "for conscience' sake;" here in America, in the golden dawn of the second century of our national history; in this land born out of the claim that men had a right, "in freedom to worship God," a Presbyterian Presbytery solemnly devotes three hours to the discussion of the right of women to preach the gospel.

Since these brethren base their opposition upon one or two texts in the Bible, arguing from these that revelation forbids women preaching, we desire in all earnestness to submit a few texts, which many of our clergymen seem to have utterly ignored. In that same "eleventh" chapter of First Corinthians, the same "Paul," who is quoted so often as the author of the command. "Let your women keep silence in the churches," writes, in regard to woman "praying and prophesying:" "But every woman that prayeth or prophesieth, with her head uncovered, dishonoreth her head." Yet, again, and in the sacred name of truth and justice, we ask every Biblical scholar to study the meaning of these words, in all their length and breadth, hights, and depths: "Neither was the man created for the woman [woman being complete in her spiritual nature], but the woman for the man." "For this cause ought the woman to have power on her head, because of the angels."—I. Corinthians, eleventh chapter, tenth verse. We have consulted many Biblical scholars, and all have admitted that this verse referred to woman's spiritual nature, being the necessary complement to man's. It has never been part of our creed that women were so much better than men, but of late, judging by the suicidal policy of our churches, we are beginning to conclude that women have finer spiritual insight, and just here we wish to call attention to one fact. Some of our most thoughtful statesmen have based their only objection to woman-suffrage on the ground that women, through their religious zeal and fanaticism, would endanger freedom of conscience, and yet, in national convention assembled, the women of the nation voted almost unanimously "yea," upon a resolution for the taxation of church property.

The Orthodox church has been almost suicidal in its treatment of women. (And I write as one whose name still stands on the membership list of a Presbyterian Church; church beloved of me for its sacred memories, not for its creed.) The course has however been beneficial in its effects upon women. Persons who have not looked into the subject, aye, persons who have not walked, with wounded, lacerated hearts, through the terrible realities can form no idea of the suffering occasioned young women (whose consciences summoned them to speak for temperence and woman suffrage) by the persecutions encountered in the church. We have known clergymen come straight from the pulpit where they have talked eloquently of "moral courage," of the heroism of "Martin Luther," and "Calvin and Wesley," and even of "Garrison" and "Harriet Beecher Stowe," to meet with a sneer some brave young woman who, with the same moral courage, was proclaiming the truth as revealed unto her. We wondered, sometimes in agony of soul, why such things are permitted to-day. We recognize that out of such warfare merge heroes ready for the race. If our young women had been petted, courted, and feted, as most of our male theological students are; if the church had made haste to superintend their theological studies, they would have been, to-day, shut up in musty libraries, poring over the lifeless thought of a century ago, and would have emerged, catechism in hand, with only the husks of truth; but they have been ostracised from theological schools; they have been compelled to go out into the by-ways and hedges; they have commenced their heaven-ordained ministry, not in the lofty pulpits of debt-bound churches, but in the unattractive halls where the people congregate; they have studied human nature; they have commenced a gospel of temperance, of peace, of purity, which the great sorrowing world was starving to hear; they have been persecuted for righteousness' sake, and their work is blessed of truth, and that truth shall make them free.

You may summon the theological world to discuss the question, you may write over every pulpit in Christendom, "Sacred to men," and though with closed doors you solemnly place the seal of the church upon your decree that women shall not preach, ere the deep amens die away into echoes, there shall float in through the partially opened windows some woman's voice, falling in benediction upon the waiting crowd outside, "Let us pray for a blessing."

You may decide that women shall not preach in Presbyterian, Methodist, Baptist, or Congregational churches. (You have the power to thus decide. You have decided that two-thirds of all your membership shall be governed by the masculine one-third, and it is well—women do not care to be held responsible for the present condition of affairs in church or state.) But, despite your decisions, women will preach, and the world will listen. The world is listening, waiting, now. —*Inter-Ocean.*

WOMAN'S REBUKE TO WORKINGMEN.—If workmen refuse to recognize and be governed by the laws of nature, which bind men together as opposites the complements of each other, they must suffer the consequences. He is the workingman's true friend who says to each one, "Paddle your own canoe." All this twaddle about taking care of them, as if they were a flock of tame pigeons, is an insult. It is bad enough to be a woman, and have men make spheres like toy balloons, and put one in to stay, but it must be worse to be a man and have to be taken care of like a little plaster-of-paris Samuel saying his prayers. A human biped with a beard must feel nice to have political economists discuss him as if he were one of a thousand bags of wheat which were to be disposed of to the best advantage. 'Pears to me, if I were a man, with all the waste cabins and idle fields in this country before me, I should save agitation committees and ex-secretaries the trouble of talking about me; for, if I did not raise my own pork and beans, it would be curious.—*Mrs Swisshelm.*

A TRUE woman is one who acts in harmony with the laws of her being, the laws of God and the universe, all the vast and varied germ of her spiritual nature as the offspring of God, a citizen of the universe, a candidate for eternity. Her potentialities are unmeasured and immeasurable. Neither wifehood nor motherhood affords a millionth part of the space or time which are required for their full play. Womanhood is a tree organized to strike the roots of her sympathies deep and wide into the realms of spiritual being, and send forth ever-multiplying branches of beneficent influence, shooting out in all directions and heavenward, from age to age. A true woman will always be a noble wife and a noble mother, but immeasurably more.—*Free Methodist.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP-HANDLE PAPERS—NO. 3.

"How nice you keep your floor;" said a friend to Mrs. King, "You must find it a great task with your large family."

There was not a yard of carpeting in the whole house; therefore each floor in the building must be scrubbed at least once a week, for Mrs. King was no slattern. Her housekeeping was her pride.

"Indeed, you may think it a task, but my floors stay clean for a while. I could never see the sense of nearly killing one's-self for the sake of a clean floor, and the very next minute have it completely covered with the tracks of muddy boots, as some folks do. But my folks know better than to track my clean floor, as I very soon give a walking paper to one who enters my door without properly cleaning his boots. Why no longer ago than yesterday I brought *forty* pails of water—its a fact—from the well out by the road—a distance of five or six rods—to clean my floors, and I had to climb over that rail fence with every one. My floor gets a pailful of clean water for every square yard, and I wash every bit of it with a cloth, getting down upon my knees to do it. That's the way I work, and when I get through I am so tired that I am just fit for the bed. But you could not find a teaspoonful of dirt in my house if you were to try. And when I put on a clean gown and fresh collar, and get seated in my easy rocker, I am as happy as a queen, or at least I should be if my whole body did not quiver so with actual weariness. But I never let my husband or children step a foot into the house until my floor is dry. They must take themselves off to the store or barn, whichever they please, but they cannot come near my work."

And I knew all this was too true. She would not have her floors covered with carpets—they were always full of dust. She knew no other sphere of usefulness than keeping her house in order according to the old Puritan style, and attending to the bodily wants of her family, consisting of herself, her husband, three children, and a dozen boarders. She seldom kept a girl, because one "wasted more than her wages amounted to, to say nothing of her board." She had broken down a once strong constitution by hard work, and so much of this work was unnecessarily hard, that I felt sympathy was wasted on such a nature.

Not many months later she was confined to her room with a lingering consumption, brought on, the physician said—and for once he was right—by overwork. And when her little daughters were needing a kind mother's care and counsel, they closed her eyes, folded her hands across her motionless breast, and then followed all that remained of their mother to the Silent City.

She had just as surely taken her life by her own hand as though she had taken poison or thrown herself in the swift-flowing river. And how many thousands of her sister women are following in the same track!

Voluntary slaves! they exile themselves from cultivated society, eschew books entirely, frown upon all works of art, and make their families desolate and homeless, while they preside over the hearthstone. Almost invariably we find the *scrupulously* clean housewife an inveterate scold. And the husband and children of such a one are no more to be envied than are the wife and children of a common drunkard. My mother says when a floor is too clean for the family and friends to walk upon, it had better be hung up out of the way.

Dear RURAL sisters, don't worship your floors to the destroying of body and soul. Garnish the floor of your hearts and adorn the mind with a cheerful spirit that shall be so attractive that an occasional bit of dust in your cottage or palace, will not be noticed. Kind words and beaming eyes go much farther in making a pleasant abiding place, than frets and frowns, though your floors are as white as milk and the print of a child's foot on them is never seen.

MAY MAPLE.

A NEW DISH.

I RECEIVED last spring from the editors of the RURAL, a package of assorted fancy beet seeds. Their growth has been luxuriant, the leaves of many now measuring over two feet from base to apex, while the petioles are often three inches in width. These last, that is the petioles or stalks, are very crisp and tender, and when boiled and served with drawn butter, make a most palatable dish. Friends, upon eating it at our table, dressed in this way, have called it asparagus and remarked on its tenderness and freedom from strings. Upon being told what they were eating, a few have made the bold assertion that they "preferred it to asparagus." While I cannot say I *prefer* it to asparagus, I may say that I have found the petioles and midribs of these fancy beets, especially those of what is termed the white and silver-ribbed varities, a very good substitute for it. Although heretofore cultivated chiefly for ornament—at least in this country—I have little doubt that the ribs, if prepared according to the following recipe, would prove an economical, acceptable dish. We shall call it

MOCK ASPARAGUS.

Wash, cut into lengths of eight inches and tie into bunches; boil in salted water until tender, which will be in from twenty to thirty minutes. Have toasted some slices of bread nice and brown; dip into hot milk, butter and place the stalks on them. Pour over a sauce made of milk, butter, pepper and salt, thickened with a trifle of corn-starch. Serve at once. The sauce may be omitted and the stalks garnished with poached eggs, in which case vinegar or catsup would be a savory addition.

Another way to prepare it is to cut into inch lengths; boil until tender, drain, add milk, butter the size of an egg and pepper and salt to taste; roll three or four butter crackers and add just before it is served.

DOMESTIC RECIPES.

Chowder.

One peck of green tomatoes chopped fine; soak over night in a strong brine; then drain, and add one large head of cabbage chopped fine; cover with vinegar, and cook slowly one hour. Prepare one pound of sugar, one tablespoonful each of cinnamon, cloves, allspice and pepper, four tablespoonfuls of ground mustard, and a pint of grated horse-radish; mix all together with two quarts of vinegar; bring to the boiling point; drain the cabbage and tomato, and pour this mixture over. Pack tightly in a jar, and set in a cool place. Two red peppers and six onions may be added if liked.

MRS. M. P. ALDRICH.

Canned Grapes.

Squeeze the pulps from the skins, and heat until they separate from the seeds; strain through a colander; boil the skins a few minutes in a little water; then add the pulp and sugar—one-half pound of sugar to each pound of fruit after the seeds are removed—and boil one-half hour. If once tried, I do not believe any one will cut each grape in half and take out the seeds.

Canned Quince.

Pare, halve, remove the cores; boil in water until soft; then make a sirup, allowing three pounds of sugar to seven or eight of quinces; cook the quinces for a few minutes in the sirup; then put in jars and seal.

Tomato Chowder.

For two gallons of chowder, take one-half bushel of green tomatoes, one head of cabbage, six green peppers, two onions, one teacupful of grated horse-radish, one tablespoonful of ground mustard, two teaspoonfuls each of ground cloves and cinnamon, and three teacupfuls of sugar. Chop the tomatoes at night; sprinkle a teacupful of salt through, and let drain over night in a colander; then cook slightly in vinegar, drain again, and add the cabbage, pepper and onions—each chopped separately; mix all together with the sugar and spice; put into a jar; pour over fresh, cold vinegar. Let it stand a few days before using.

MRS. BORT.

Tomato Pickles.

Slice green tomatoes; place them in salt and water over night; in the morning, drain; scald them in vinegar; again drain, pack in jars, and pour fresh, hot vinegar over, to which has been added horse-radish and spice.

Ripe Tomatoes.

These may be kept part of the winter by putting them in one part vinegar to two of water, with a weight on top to keep them under.

Lima Beans and Sweet Corn.

For a change I cook these together, cutting the corn from the cob and cooking with the beans until tender and about dry. Season with butter, cream and pepper, salt being added when they are put on to boil.

MRS. C. MCCOY.

Recooking Boiled Fish.

Take two pounds of cold fish and cut into quite small pieces; scald a pint of sweet milk; mix in one-fourth pound of butter; a tablespoonful of corn-starch; pepper and salt to taste and the beaten yolks of three eggs; butter a dish, put in, first a layer of fish, then one of paste; thus alternate, leaving the paste on top; bake three-quarters of an hour in a moderate oven.

Cauliflower.

Put to soak in salted water for an hour or more; look over carefully, remove the hard stalk and leaves; scald for five minutes; cut into pieces and put into a pie dish; add a little milk, and season with pepper, salt and butter. Cover the whole with dry grated cheese and bake.

A Side Dish.

Boil some eggs until hard; remove the shells; cut in half; take out the yelks and beat up with a little chopped parsley seasoned with pepper and salt; refill the whites and serve with drawn butter.

Okra and Tomatoes.

Peel and slice six ripe tomatoes; take the same amount of *tender* sliced okra and one sliced green pepper; stew in porcelain for twenty or thirty minutes. Season with butter and salt and serve.

Summer Squash.

When young and tender, do not peel or take out the seeds, but boil in as little water as possible, from one-half to three-quarters of an hour; drain, mash and set on the back of the range to dry out for ten or fifteen minutes, stirring often; season with pepper, salt, butter or cream. If the squash be old, peel and remove the seeds before boiling.

Vegetable Curry

Take carrots, celery, parsley, potatoes, onions and cucumbers; cut small and add to some good stock properly seasoned. When sufficiently stewed, mix in a piece of butter with flour to give it thickness, a table-spoonful of curry powder and the juice of a small lemon. Boil up and when serving add a spoonful of catsup.

Ripe Tomato Pickle

Peel ripe, round tomatoes—do not scald—put into a jar; scald spice—tied in a bag—in good vinegar and pour while hot over the tomatoes.

Cauliflower Pickle.

Cut away the leaves and pull apart the flowers in bunches; soak in brine twenty-four hours: drain, put into bottles and pour hot, spiced vinegar over. Seal at once.

Mock Olives.

Gather plums just before ripening; make a pickle of vinegar, mustard-seed, cloves and a little salt and pour hot over the plums; let them remain over night; drain off the vinegar, reheat and pour over.

Apple Preserve.

Peel, halve and core six large apples, selecting those of the same size, have prepared a sirup made of one pound of granulated sugar, and a pint of water; when it boils, drop in the apples with the rind and juice of a lemon, and two or three cloves. As soon as they are tender, care must be taken that they do not fall in pieces, take the halves out one by one, and arrange, concave side uppermost, in a glass dish. Drop a bit of currant jelly into each piece; boil down the sirup, and when cool, pour around the apples. This makes a very nice preserve for tea.

Apple Rice Pudding.

Peel, halve and core six tart apples; place them in a flat stew-pan, with a little water, two tablespoonfuls of sugar, two or three cloves, and a stick of cinnamon; when tender, take up carefully; boil the sirup a while longer, and pour over the pieces. Boil two-thirds of a teacupful of rice in milk, with a scant teacupful of white sugar, and the rind of a lemon, until the rice is thoroughly cooked; then take out the rind and stir in the beaten yelks of three eggs. Put half of the rice at the bottom of a pudding dish; spread over the apples; cover with the remaining rice, and place in a cool oven for ten or fifteen minutes; beat the whites of the eggs into a stiff froth, add the juice of a lemon, three tablespoonfuls of powdered sugar, and spread over the pudding. Return to the oven until of a delicate brown.

E. M.

News of the Week.

POLITICAL.

MONDAY, August 19, 1878.

Newspapers in Texas are once more agitating the policy of making two or even three States out of that huge commonwealth. Such a division would give them more political power, tend to foster the diverse interests of different parts of the State; but would at the same time necessitate the expense of different governments, and be likely to check public works, which are best prosecuted in a thinly settled State by the united action of the great body of citizens. On the question of electing a U. S. Senator, the Legislature of North Carolina is said to be divided thus: Vance, 73 votes; the present Senator Merrimon, 39 votes; republicans 58 votes on the first ballot. As it takes 86 votes to elect, the republicans will hold the balance of power and probably re-elect Merrimon. Special attention is drawn to this State, by the fact that it is the only Southern State in which, under the new order of things, the republicans have any show.

Gen. J. B. Gordon, of Georgia, is sure of being returned to the U. S. Senate, 117 members of the legislature having already declared in his favor. The Mexican border troubles seem to be about to come to a belligerent conclusion. For some time back parties of Mexicans have been drilling across the Rio Grande with a view of resisting any future expeditions of the U. S. troops in pursuit of cattle thieves. The "greasers" have been boasting very loudly of the ease with which they could whip the contemptible Yankee nation, and now it is reported from Washington that an opportunity will be given the braggarts to come into collision with the "boys in blue;" for orders have been issued to Gen. Mackenzie to continue to pursue any bands of white men or Indians who may run Texan stock into Mexico. Mackenzie will probably have so strong a force that no one will venture to attack him; but the prospects of war are said to be more threatening than they have been for years.

During the past week the Potter Investigating Committee has been in session in this city, the two principal witnesses examined being Mr. Roberts of the N. O. Times, and a Mr. Leete, its Washington correspondent. The former's testimony was mainly in confirmation of the evidence already given as to Hayes' readiness, before he was declared President, to bargain with the South for their assistance; he insisted, however, that the whole transaction was perfectly honest and honorable; but owned to Butler that whatever tended to benefit his own side bore that character. Leete out-did red-headed Jim Anderson, in glibness and self-conceit. He was a clerk in the N. O. Custom-House, and several other things down there, was the confidant of everybody and knew everybody's business, probably better than himself. His role was that of the Irishman at Donnybrook Fair—whenever he saw a head to hit it. Accordingly every man he spoke about, visiting statesman, governor, senators, politicians, were all rascals, and he knew and could prove it. Even his old friend, Andersen, was a rogue and, worse still, a fool. He was very amusing at any rate, and therefore 'tis pitiful that yesterday evening he became crazy; thought that so many had reason to fear his revelations, that they were secretely following him about; he fired three or four shots at imaginary enemies through his room door at the Astor House and slept last night in the lock-up.

England has come to an agreement with Turkey as to the reforms the latter is to introduce into the government of Asia Minor. These are to be the work of the Turks themselves, John Bull acting merely as spectator so long as everything pleases him. But he is mighty apt either to take the whole matter in his own hands, should the Ottomans prove intractable, or else leave them to their fate and the Russians, retaining for his own share of the spoils Cyprus and whatever else he might be able to appropriate.

MISCELLANEOUS.

The government has started in the manufacturing business, Secretary Thompson having, at the cost of $9,000, set up a rolling-mill in the neighborhood of the Navy Yard at Washington. Instead of putting a pretty penny into the pockets of speculators by the sale of scrap iron at a nominal price, it is there manufactured into excellent sheets, well suited for naval purposes, at less than half the cost of a similar article in the market. It is now in order for manufacturers to grumble at unfair government competition! Insurance against storms, a German practice, is getting a foothold among the farmers of the west,—the St. Paul Hail Insurance Company having just paid out $19,000 in Carver Co., Minn., for damage to crops. The Indian war in the Northwest is virtually over, the hostiles having broken up into small parties, most of which are anxious to submit. Train robbing seems to be becoming more frequent and easy in the Far West. The other day four armed men captured a train near Atchison, Kansas, took $5,000 from the express safe, and escaped unhurt, the attack being made on the express car, and the passengers being entirely ignorant of the occurrence until it was all over.

Along the Connecticut River, and elsewhere, in New England, large quantities of fish are being found dead in the waters, and the blame is laid upon the liberal use of Paris-green to destroy the potato beetle. The poison, it is claimed by some, is washed into the rivers in such quantities as to be fatal to the finny tribes, while others say that the fatality is due to the fact that the fish eat the poisoned beetles washed from the vines into the streams. Large numbers of birds are also found dead in different parts of the country; it is supposed from the same cause. It is not unlikely that less Paris-green will be used next year. The revenue and judicial troubles in South Carolina have been arranged amicably. The "moonshiners" are surrendering in large numbers on promise of pardon for past offenses, made to all with the exception of the notorious Redmond and a few others, who have shot at the revenue officers. The United States officials, held by the State in defiance of the authority of U. S. Court, have been surrendered under protest to the U. S. Marshal. In making the surrender the Sheriff acted on instructions from Gov. Hampton.

At Ottawa, Canada, on the 12th, 600 Orange Young Britons celebrated, by a procession, the anniversary of the closing of the gates of Londonderry during the war between James II. and his son-in-law, William of Orange, in 1689. The Roman Catholics of the city, taking this exhibition as an insult to their religion and to the Hibernian nationality of most of them, mobbed detached members of the organization. The Orangemen retaliated, sacked several houses, used pistols and bludgeons freely, and threatened to burn down the Catholic Cathedral. A huge crowd of their opponents collected about the building for its defense; for one night and a couple of days, the city was hourly in danger of a bloody riot, but by the intervention of the military, and the exertion of the mayor, the visiting Young Britons were sent quietly off, from a distant railroad station, and quiet was finally restored.

The ravages of yellow fever in the South are becoming truly terrible. Yesterday there were in New Orleans 115 new cases and 47 deaths, and during the past week the daily average was only slightly less. Every year the type of the disease differs more or less from that of former visitations. Sometimes it is much less fatal than at other times; but this year the proportion of deaths to cases is greater than at any time since 1853 in the Crescent City; and the disease has been unprecedently fatal in Grenada, Miss., where nearly every one attacked has perished. This town is depopulated by by its ravages; all who could do so have fled; and few remain except the sick, the nurses and the doctors. In Vicksburg there were, on last Saturday night, 48 cases, and it is estimated that about twenty new cases occurred yesterday. Memphis has been also terribly visited but there it is just now abating, only thirteen deaths having taken place yesterday, and

merely nine new cases. Despite the rigid quarantine, one case has just occurred in Mobile. Louisville, Cincinnati, St. Louis, Washington and all large cities in direct communication with the afflicted region, are establishing strict quarantine regulations, while the smaller towns are still more anxious to keep the plague at a distance. It is yet early in the season for the malady to have become so disastrous, and it is to be feared that its ravages will, later on, become still more widespread and fatal. Pecuniary help is earnestly solicited for the stricken towns, and in no more charitable way could money be expended.

FOREIGN.

On Tuesday last there was a grand review of the British fleet at Spithead, the Queen and a host of distinguished visitors were present, but the weather was wet and stormy, so that as a show it was hardly a sucess. It has just been officially announced in the House of Commons that the number of deaths from starvation during the late famine in British India, amounted to 1,350,000. The session of the British Parliament was prorogued by the Queen on Friday, until November, 2nd. In her speech from the throne, she congratulated the nation on the successful results of late negotiations; on the acquisition of Cyprus, and the loyalty of India and the Indian troops; and also on the assurances of an enduring peace, afforded by the late treaty of Berlin. The radicals of a part of London called Southwark propose to nominate Miss Helen Taylor, a neice of the late J. Stuart Mills, for Parliament, at the next general election; so as practically to raise the question of women's right to a seat in that body. London advices from the west coast of Africa say that great mortality has lately prevailed there, especially at Lagos, where nearly a quarter of the European population died of fever and dysentery within the two months ending July 4. Disraeli is conciliating Ireland by releasing the imprisoned Fenians. One of the few still in confinement, was set at liberty last week and another this week.

Hoedel, the would-be assasin of the German Emperor, was decapitated at Berlin on last Friday. The Emperor is said to have wished to spare his life, but to inspire terror it was deemed best to inflict capital punishment. Since June 2, the date of Nobeling's attempt, 563 persons have been arrested in different parts of Germany for speaking insultingly of the Emperor, and of these, 521 have been convicted, including 31 women. Five of the accused committed suicide before trial, and the aggregate of the imprisonment imposed amounts to 811 years. The recent elections in Alsace and Lorraine, it is said in Berlin, show an increase of the moderate party and a decline of the irreconcilables. A conference of French and American political economists now in session proposes a new commercial treaty between the two countries, by which the French prohibition laws with regard to some articles should be abolished, and their high duties on others reduced from 30 to 40 per cent. this country reciprocating. The greatest reductions would be on wines and silks, on which it is proposed to have a sliding scale of tariff for three years.

The phylloxera has paid a visit to Spain, where, in the neighborhood of Malaga, its ravages in the vineyards are increasing alarmingly. At St. Petersburg Gen. Mesentzow, chief of the Emperor's private police, was stabbed to death in the street last Friday. His two assassins, after firing at those who tried to arrest them, jumped into a drosky and escaped. It is said that the murder was a sign that the Russian socialist party sympathized with Hoedel, executed at Berlin on the same day.

The Russians begin to-day to embark on their way home from the vicinity of Constantinople, and at the same time some of the British fleet will withdraw, so that the disappearance of both from that neighborhood will be simultaneous. In a fortnight Batoum will be surrendered to the Muscovites, just as Varna and the other fortresses of the quadrilateral have already passed into their hands.

The Bosnians are offering a stubborn resistance to the occupation of their country by the Austrians. Several severe engagements have already been fought at places more hoplessly unpronounceable than the battle scenes in Bulgaria, and one division of the invading army was forced to retreat, but having been heavily reinforced, has again advanced. Large numbers of Turkish regular troops having been disbanded, have joined the insurgents; and there is little doubt but that the Porte is actually encouraging the movement. On this presumption, Bismarck has sent a curt message to Constantinople that unless Turkey rigidly obeys the terms of the Berlin treaty her position in Europe will be endangered. The Porte is naturally indignant at such a peremptory warning and is disposed to protest.

VARIOUS.

Mr. Moody, the evangelist, keeps a large number of strong brown-paper envelopes, labelled with different religious themes, and whenever he sees anything in the newspapers that bears upon one of the subjects, he cuts it out and puts it into the proper envelope. When he gets ready to think out his sermon, he refers to these clippings.

The late Mr. Reese, the California millionaire, was never known to keep a horse or carriage unless he got it accidentally in trade. He would wait ten minutes at a street corner before getting into a car in the hope of meeting an acquaintance who would pay his fare. When taunted by a friend one day in regard to his miserly habits, he said: "Well, I can't help it; I know it's foolish, but it's a disease I've got." In all matters not connected with money he was a man of great intelligence and liberality. It is said he has bequeathed a large part of his wealth to charitable purposes.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Aug. 17, 1878.

BEANS AND PEAS.—Medium beans have sold somewhat more freely, but it is more on account of concessions in price than from an improved or wholesome demand; 152½ is now accepted for best grades free to vessels. Medium beans are quiet, prime ranging with marrows. Pea and white kidney have no demand. Red kidneys are higher for extras. There is a strong inclination on the part of sellers in beans to reduce stocks as much as possible before the appearance of new. Red kidney is the only sort that does not show a late surplus. Green peas dull at $1.20@1.25; a car-load of reputed new held at $1.50; no quotations for Southern S. E. peas until new crop arrives. Canadian peas extremely quiet, at 76½@77c. $1 35@1 50; red do., black $3 25@3 35; $2 35@2 40. Lima, old not wanted, as green are in season.

We quote medium beans, prime, $1 50@1 52½; fair to good, $1 35@1 45; marrows, prime, free on board ship, fair to good, $1 40@1 45; Pea, $1 35@1 50; white kidney, Exports of beans past week, 1,304 bbls.; receipts, 4,524 bush.

BUTTER.—Since Tuesday, the market had weakened a trifle on fine grades; the recent firmness has sent in a larger supply of choice State, and, as the outlook is for further free receipts, dealers seem disposed to humor the local trade, which is now their main outlet. The market feels very sensibly the light export demand, Western particularly, especially as State has again obtained the run of retailers. When prices stiffened a short time ago, city retailers felt safe in marking up prices, but as buyers these days want quality to match high rates, grocers and others are forced to draw from State, which arrives regularly, instead of trusting to the promise of sellers, to the effect that "some fine, cheap Western is on the way." Western creamery has worked into a rather stronger position than before, but we notice that sellers do not let a customer go away when 22c. is objected to. The very common trade of the city is drawing upon well-kept cold stores; many new invoices of Western are running, and will be likely to drop from the asking prices; in fact, some marks of ladle packed are superior to some dairy lots. Firkins are dull and likely to be while the fever rages at the South. It is the feeling of the trade to work down stock as freely as possible, as a prosperous fall yield will make bad averages if sellers are caught with a surplus of that which will not pass soundly through the trying weather of August.

State creamery, choice, 22@23c.; other, 19@21c.; half tubs and pails, choice, 19@20c.; other, 13@17c.; Welsh tubs, best, 17@18c.; other, 12@14c.; poor State, 9@11c.; State firkins, 17@20c.; Western creamery, choice, 21@22c.; other, 18@20c.; Western dairy, best, 13@14c.; other, 9@12c.; factory (ladle packed), 9@10c.; other, 6½@8c.; milled Western, 5@7c.; old and grease, 3@5c.

Receipts for the week 30,025 pkgs.; do. last week, 32,681. Exports, 5,171 pkgs.

BROOM CORN.—Nothing doing beyond the small lots needed by manufacturers. Quotations are: 6@6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

COTTON has shown frequent wide fluctuations, but closed up strong. Latest quotations are for August, 11.33c.; for September, 11.60@11.61c.; for October, 11.37@11.39c.; for November, 11.20@11.21c.; for December, 11.15@11.16c.; for January, 11.16@11.17c.; for February, 11.22@11.24c.; for March, 11.30@11.31c.; for April, 11.37@11.38c.; for May, 11.44@11.46c.; June, 11.51@11.54.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	10 3-16	10 3-16	10 7-16	10 7-16
Strict ordinary	10 9-16	10 9-16	10 13-16	10 13-16
Good ordinary	11 1-16	11 1-16	11 5-16	11 5-16
Strict good do	11⅜	11⅜	11⅜	11⅜
Low middling	11⅝	11⅝	11¾	11¾
Strict low middling	11 13-16	11 13-16	12 1-16	12 1-16
Middling	11 15-16	11 15-16	12 3-16	12 3-16
Good middling	12⅛	12⅛	12⅜	12⅜
Strict good middling	12 7-16	12 7-16	12 11-16	12 11-16
Middling fair	12 15 16	12 15-16	13 3-16	13 3-16
Fair	13 9-16	13 9-16	13 13-16	13 13-16

Stained.

Good ordinary..10 3-16; Strict good ordinary...10 11-16
Low middling..11 3-16; Middling.....11 9-16

CHEESE.—Receipts have increased, but the better grades have been taken up pretty well, the receipts reaching 101,000 boxes. The slightly stronger feeling which developed with the close of last of last week, made headway after the country sales, and a sharp competition for the choicest colored lots; from S the market jumped up to 8¼, and then to 8⅜ for selections of colored, and fancy stock may be quoted at 8¼@8¾.

Quotations are: Fancy at 8¼@8¾c.; 6¼@7¾c. for good and prime; 6@6¼c. for fair; 4@5c. for half skimmed; 2@3¾c. for skimmed. State, farm dairy at 6@6¾c. for good to choice, 5@6c. for fair to good, and 2@3c. for poor skimmed. Wisconsin factory, fine to fancy, 7¾@8c.; do. good to prime, 6@7c.; do. fair, to good, 5¾@6c.; Western factory, fine, full cream, cheddar, 7¼@7¾c.; do. fine, full cream, flat, 7@7¼c; do. slightly skimmed, flat, 5¾@6¼c.; do. half skimmed, 4@5c.; do. full skimmed, 2@3c.

Receipts for week, 122,763 boxes; do. last week, 92,306 do.

Exports, past week, 101,010 boxes.
Liverpool cable quotation, 48s.
Gold closes at 100⅜.

DRIED FRUITS.—Small lots of new apples have been placed at 3@3½; the quality only fair. Blackberries are plenty and easy. Cherries hold firm. Peeled peaches show but little prime stock.

New blackberries, are quoted at 6@6¾c. Peaches—Georgia peeled, 4@7c.; do. new, 4@8¾c. for poor to prime; unpeeled old halves, 3¾@4c.; quarters, 3@3½c. Pitted cherries, 14¾c.; southern plums, new at 9@10c. Apples—State quarters, 3@4c.; do. sliced, prime, 4¾c.; good, 3¾@4c.; western quarters, 2@3c.; southern at 4@4¼c. for prime sliced; 3@3¼c. for fair to good; southern quarters, 2@3c.; Tennessee quarters, in bags, at 1¾@2c. New apples at 3@3¾c. for southern quarters in bbls. New raspberries, 22@22½c., and evaporated, 24@25c.

Exports past week, 218 bbls. apples, Since Jan. 1st, 10,753 do. Same time last year, 23,425 do.

EGGS.—Receipts for the week, 4,747 bbls.; do. last week, 4,618 do. The market has ruled irregular, without however violent fluctuations. Old stock is well out of the way, and as the outside cold is better, receipts of fresh are not weighty, and dealers now look for fair steady prices.

Near-points, 16@17c.; State and Penn., 15@15½c.; fresh Western, 14¾@15c.; do., Canadian, 15c.; poor to fair western, 13½@14c.

FRESH FRUITS.—The tradition of a heavy yield of apples after "locust year," is thoroughly fulfilled this season. Arrivals are far beyond the wants of trade or the means of distribution. Prices are low, and with expensive peaches this year they ought to sell better than they do. Orange pippins, per bbl., 75c.@$1 25; Nyack do., $1@1 50; Golden Sweet and Sour Boughs $1@1 50; fancy, including "King William," a new sort, $2@2 50. Pears are in fair demand. Southern run poor. So. Bartletts, crate, $1@1 50; Sickle, $2@2 50; choice Northern Bartletts, bbl., $6@7; other, $3@4 50; bloodgood's, Clapp's favorite, and other table pears, $3@5; cooking, $2 50@3 50. Plums, egg and green gages, bbl., $6 50@7; blue, $4@6. Grapes, Southern, Delaware, 11@13c. lb.; Ives, Concord and Hartford, 5@7c. Whortleberries, $1 50@2 50 bush., soft to hard. Peaches have arrived just fast enough to make steady prices. Extra crates Del., $2@2 50; good, $1 50@1 75; plain baskets, $1@1 25. Melons are in large supply. Extra $2@2 25. Watermelons, selected, $15@25 per 100; culls, $5@7; Keyport nutmegs, bbl., $2@3; South Jersey, $1 50@2. Peanuts dull at $1 40@1 50 bush., hand picked; other $1 25@1 35. California pears, $5@6 box; do. plums, $3@4. Hothouse grapes, black Hamburg and muscat, 70@90c. lb. Sweet water 40@50c.

FLOUR.—The course of the market has been to a higher basis, on the advance in wheat and liberal transactions.

Latest prices are $3.45@4.00 for very inferior to fancy superfine State; $4.00@4.20 for poor to good extra do. odd lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.30@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@5.90 (fancy brands at higher prices); Minnesota "straight," very inferior to very fancy, at $5.25@7.25, and patent poor to strictly fancy at $5.50@8.75; unsound stock at from $2.60@5.25; city mill extra at $5 15@5.35 for West Indies (the latter rate for fancy in new packages); do. for England, 4.00@4.15; do. trade and family extras, $5.65@6.75; do. for South America, $5.45@6.00 for fair to fancy; No. 2 $2.50@3.25 for inferior to very fancy.

CORN MEAL.—Sales are at $2.40@2.70 for yellow Western, and $2.95@3.00 for Brandywine.

GRAIN.—Wheat has sharply advanced; export demands have been liberal. Corn is also better, and oats have a fair sale but at easier prices.

Latest sales of wheat are of—No. 3 red at $1 05@1 06; ungraded red at $1 02@1 12½; No. 2 red at $1 10¼@1 11¼; No. 1 red at $1 12½@1 13½; No. 1 red, steamer quality, at $1 11¼@1 12; ungraded amber at $1 08@1 13¼; No. 2 amber at $1 11@1 12; No. 2 amber, steamer quality, at $1 08½@1 10¼; new white State at $1 21@1 22; No. 1 white at $1 21@1 22; do., steamer quality, in lots, at $1 18@1 18½; No. 2 white at $1 16; No. 3 white at $1 12; ungraded white in lots at $1 08@1 22; No. 1 white, early September delivery, $1 20@1 21; No. 2 amber, delivery in last ten days in August, quoted at about $1 12; New York No. 2 red, August option, at $1 10¾@1 11½; do., September option, at $1 11@1 12; do., October option, at $1 11¾@1 12¾; New York No. 2 spring, September option, at $1 08. Rye at 63@65c. for western and 62@66c. for State. Corn at for—New York No. 2, August option, at 49¾c.; do., September option, at 50¼c.; do., October, at 52c.; steamer mixed, August option, at 48¾@48¾c.; do., September option, at 49¾c.; do., October option, at 51c. Spot lots were of steamer mixed at 48@49c.; ungraded mixed at 45@49¾c.; New York No. 2 at 49¾@50c.; New York No. 3, 47¾c.; yellow western at 50@50¾c. and No. 2 white at 56¾c. Oats—No. 2 Chicago at 33c.; New York No. 2 white at 32½@33c.; New York No. 1 white at 35¾c.; do., August option, at 37c., New York No. 1 at 33@33¾c.; New York No. 2 at 32c.; white western at 32½@37½c.; mixed Western at 30¾@33½c.; white State at 32½@36c.; mixed State at 31@33½c.; New York No. 3 white quoted at 30¾c.; New York extra at 33¼@34c.; New York rejected at 30c.; New York No. 3 quoted at 30@30½c.

HAY AND STRAW.—The receipts are liberal of new hay, but the best of it is having a very fair sale, and prices steady. Sales of hay at 45@50c., for shipping, and 60@80c. for retail qualities. Straw quoted at 35@40c. for long rye; 30@45c.; for short rye, and 30@40c. for oat.

Exports past week 184 bales. Since Jan. 1st, 41,603 do.; same time last year, 30,950 do.

HONEY.—There are reports of collections of comb ready to ship. It should not be sent here at the earliest before the fall is well set.

HOPS.—There is no change in the situation, export demand is at a pause, and brewers buy sparingly. The lull is incident to the approach of the new crop, the first bale of which was received here this week, and brought a fancy price as usual, in the competition to secure it at 25c.

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—Latest prices are 19½@20c. for light hemlock; 19½@21c. for middle do.; 20@21c. for heavy do., and 17½@19c. for good damaged.

OIL-CAKE—Is scarce and wanted at about $30 per ton for western.

PROVISIONS have been advancing but closed weak with a decided decline. Mess pork on the spot quoted $10 70@10.90. $10 45 for August and September; $10 55 for October. Bacon at 6¾c. for western long clear. Lard—at $7 65 for new, $7 52½ for August and September; $7 60 for October. Steamine at 8¾ for western. Tallow at 6 15-16 for prime. Beef hams at $21 50. Beef—for extra mess, $11 25@11 50; plain mess, $10@11; packet, $11 25@12 for bbls. and $16 for tcs.; extra India mess, $19@20 for city brands; do. Philadelphia, $18@$19.

POULTRY AND GAME.—Live fowls and chickens have improved under some Havana export and a steady city and near-by watering place trade. Prime Turkeys are scarce, a few hens would bring the extreme. Ducks are dull. N. J. chickens, 14@15c.; N. Y. & Pa., 13@14c.; Western, 12@13c.; Southern 12@12½c. Fowls—N. J. 13@14c.; State and Penn., 12@13c.; S. & W., 11½@12c.; Roosters, 5@6c. Turkeys, choice small, 14@15c.; other 11@13c. Ducks—Choice and spring, 50@75c.; other 40@45c. Geese—N. J., $1.25@1 50; S. & W. $1.12@1.25.

Dressed Poultry with moderate supplies bring fair prices. Turkeys, dry picked, 15@18c; fair to good, 13@14c.; Pa. Spring Chickens, 17@19c.; State and N. J., 14@16c.; Western, 13@14c. Phila. fowls, 14@15c.; N. J., 12@14c.; State and Western, 12@13c.

Of game the arrivals are larger and more varied. State Woodcock pair 70@75c. Western, 50@60c.; Grass plover, $2@2.25 doz; Stall-fed pigeons as before. Yellow legged sn p, large, $1 50@$1.75; do. small, 75c.; Dowitch, $1.25, Sand or ox-eyed, 15@20c.

TOBACCO.—Exporters have taken fair quantities, and the market is strong.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2½@ 3¼	3 @ 3¼
Good lugs	3¼@ 4¼	3¾@ 4½
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¾@ 6¾	6¾@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8¾@10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England, fine, and selections	18 @35
seconds	10 @12
Fillers	5 @ 7
Pennsylvania assorted lots, common	8 @ 9
fair	10 @12
fine	14 @17
fillers	5½@ 7
Ohio assorted lots	6¾@ 8

VEGETABLES.—New Jersey potatoes are not of good quality of late, and L. I. outsell them. Prices for prime are firm as there is in addition to a steady local demand and considerable shipment to Cuba. Exports for the week 5,700 bbls. Egg plants and tomatoes have declined. Market generally well stocked in other items.

Potatoes $1 37@1 62 bbl. early rose; culls 50@75c.; sweet potatoes, Maryland and Virginia, $3 75@4; Virginia red $2 50@2 75; green corn 75@77c. per 100; Lima beans, bag, $1 25@1 75; string beans, 62@75c.; cucumbers, 1,000, $2@2 50; tomatoes, three peck crate, 15@20c.; onions, Chester red, $1@1 25 bbl.; yellow, $1@1 25; marrow squash, $1 75@2; crook neck, $1 25@1 50; white, $1@1 25; peppers, bullnose, bbl. $1@1 50; red turnips, $1 50@1 75; cabbage, 100 flat Dutch, $4@5; red, $5@6; egg plants, $3@4 per 100; carrots, 100 buches, $1; beets, $1@1 25; lettuce, N. J., bbl., 50@75c.

WOOL.—Manufacturers buy very cautiously, not exceeding actual needs. The market is sustained, however, and all grades placed have been at full prices.

Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@43c.; XX, 37@39; X, 36@38; No. 1, 37@39c.; No. 2, 34@36c; common, 30@32c.; combing, 40@45c.

New York, Michigan, and Wisconsin, XX, 34@36c.; X, 33@35c.; No. 1, 34@36c.; No. 2, 32@34c.; common, 27@30c.; combing, 38@43c.

Indiana, Kentucky and Tennessee—XX, 34@36c; X, 33@35c.; No. 1, 34@36c.; No. 2, 32@34c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 34@35c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 29@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@13c.

LIVE STOCK MARKETS

Saturday, Aug. 17, 1878.

BEEVES.—Receipts for the week, 10,023 head; do., last week, 11,115 do. The market has a very unsatisfactory phase; wholesale prices are damaging shippers, while slaughterers' and butchers' sales have to be made on a low basis. Only a few choice Kentucky steers brought the extreme this week; all grades under dragged through weak and depressed. Ordinary to decent Texas sold at 6@6¾c.; Cherokee, 7c.; poor to prime native steers, 7½@9¼c.; extra and fancy, 9¾@10¼c.

COWS AND CALVES.—No change to note.

VEAL CALVES.—Receipts for the week, 4,000 head; do., last week, 3,625 do. During the latter part of the week prices have declined; 6¾c. is the top for best N. J., while 5@6c. buys good milk market stock. Buttermilk and grassers, 3@3¾c.

SWINE.—Receipts for the week, 23,780 head; do. last week, 20,637. Trade is dull; the weather is bad for dressed stock, and buyers limit their purchases. Sheep, 3¾c.@4¾c.; lambs, 4¼@6c., with a few picked ones at 6¼.

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Excelsior Fertilizer Works.—Premium Bone.
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Gilmore, S. J.—Cheap Farms and Homes in the West
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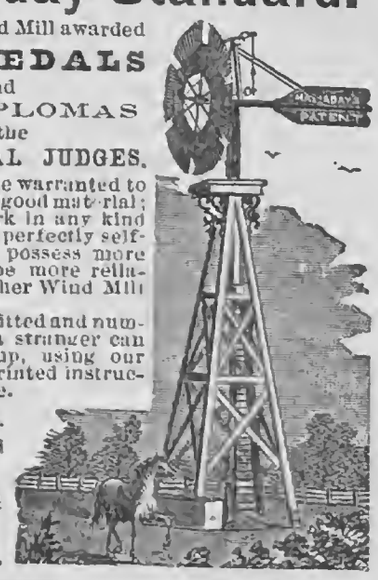

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Reading for the Young.

BABY'S TALK.

WHAT do you fink of such little star-paddles,
Wiv five little points on 'em all 'e way roun'!
Some day they'll dit to be bid lite my daddy's,
An' dit all 'e white off, an' dit awfle brown.

Does you see those two fums stut on each corner!
They taste awfle nice—dust sut 'em 'an see!
My name is old Sweet-heart an' little Jat Horner
An' little Tom Tutter, an' pretty babee.

Ma wants me a dirl, an' puts on 'ese dresses,
An' divs me a dolly, an' tells me her joy;
Pa doesn't half lite it, an' says he confesses
He's velly diad of it I turned out a boy.

I've dot a boy's hat on, my dear papa made me,
An' doin' to have boots on to-morrow, perhaps;
I'll dit a bid man, wiv my papa to aid me,
Too bid to have playfins an' sit on fotes' laps.

I's dittin' so hung'y I tant sut my finner;
My mamma is tummin' to feed me, I dess;
Tum tate me up, mamma, an' div me some dinner,
I'll al'ys be baby,—I dess' 'at 's 'e bes'.

[*Golden Hours.*

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 14.

AUNT FLORA.

As there are so many ways to secu re pocket-money, when children are taught to help themselves, in honorable as well as honest ways, may I suggest to others what I have already seen done by little children when the country was new and cash not very plenty for young or those older grown. Johnnie was a bright little boy, and one who interested his neighbors for his welfare, because he was disposed to do something else than leaning on his mother as so many children do, and Capt. Blank had a garden to be kept clear of weeds, so he proposed to Jonnie that he should help him to keep his garden clear by coming each morning and pulling weeds, and on Saturdays when there was no school, work an hour or so at a time, as many times as he was willing to do, through the day. His friend kept an account of the time, and paid Johnnie by the hour, with the understanding that he was not to waste time, but stop entirely when he was weary or wanted to play, and not attempt both work and play together. In this way the little fellow earned enough to get him a new coat, and make a present of a pair of gloves to his sister and have enough left for spending-money on the Fourth of July.

Succeeding so well in work made Johnnie anxious to earn something more, so he turned his attention to picking hazelnuts, and in the season for doing it, or before cold weather came, he had picked and sold three bushels of nuts to the grocer, for over two dollars per bushel. This made Johnnie very happy, as he could get for his mother some luxuries which she could not have had without his aid. In this, Johnnie's mother showed wisdom. She allowed him to help her and showed her gratitude for his willingness to do so, but never told him to keep it all to buy candies and toys with, as she knew it would make him selfish to do it when she was needy herself. Johnnie is to-day a noble and useful man.

LETTERS FROM BOYS AND GIRLS.

Our Swiss Cousin.

UNCLE TRUE AND COUSINS.—This will be probably the last letter that I shall address you from the Western Hemisphere, having now the firm intention to return to my native country during the latter part of September; this will give me a favorable chance to visit, at the same time, the Exposition in Paris where I have a number of old friends and schoolmates. I intend to stay there only two weeks, after which I shall proceed directly to my old mountain-home where I hope to meet my parents and friends once more. Though it is not without deep regret and sorrow that I take leave of the United States, whose political, rural and religious institutions I have enjoyed for almost four years, and whose inhabitants will leave a lasting impression upon me in regard to their hospitality, friendship and ingenuity; and though it seems to me very hard already to depart from the new friends I have acquired, during this sojourn; still I hope that they will write to me very often, as I shall do to them, and from my dear RURAL relatives especially I expect a constant correspondence through the RURAL. I would be pleased to give them from time to time some news concerning my career and welfare in Switzerland. Should it happen that UNCLE TRUE or any of my cousins ever come to Switzerland, I would be very much pleased to receive a call at my future residence in Neuhausen, near Schaffhausen; and I would be glad, if I could be of any help to them in any way.

You can see some of the finest curiosities and antiquities in my native city. I will mention by the way that our own residence was constructed Anno Domini 1567, and resembles a fort more than a peaceable farmer's dwelling. Only a few minutes' drive from our farm you could see the most picturesque scenery of Europe; namely, the Falls of the Rhine, where an immense mass of water comes down 120 feet over numberless rocks, so that the noise produced by this waterfall can be heard sometimes at a distance of 12 miles. At the foot of the Falls, about in the center of the river, nature has built, (probably for the accommodation of travelers) a solid rock that reaches about 30 feet above the water surface, and from whence you can obtain a splendid view of the Falls. The water tumbles down on both sides of the rock in the form of snow-white foam, and roaring so that the universe seems to tremble; and the air is filled with particles of water, that ascend to the zenith, where they are formed into clouds, and I am quite sure, that if "Dewdrop" our Ohio cousin, would stand a half hour only on the top of this rock, she would be transformed from a sweet looking dew-drop into a very wet-looking rain-drop!

But just now I remember, that this is not at all the subject I intended to write about. In my last letter, I described the duties of the peasant woman, and to-day I intend to write something concerning our manner of farming; but as this letter is almost too long already, I shall make it very short. In a former letter I told you that the farms in our country are generally small in extent, and consequently they have to be worked in a different way from yours, in order to secure to the farmers the interest on their money invested in the land.

Mowing, raking, sowing, etc., are done by hand. The area of land is so small and hilly, and labor is so cheap, that it would not pay small farmers to buy machines, even if they could afford to do it. The use of horses on farms is considered a luxury; their special work is all done by oxen and cows, that are harnessed instead of yoked up, as it is here the custom. I think that about two-thirds of the farmers in our state own neither horses nor oxen. They do all their work, teaming and plowing, with cows, which latter are usually hard to manage. They are mostly fickle, and run away at every convenient chance; and it is just as if nature told them that they were created for another purpose. Cattle are shut up in the stable the whole year round, when not in use, where they are fed and cleaned like horses, three times a day. Their food consists in winter of cut hay and straw, mixed with beets, turnips or malt. In summer, they are fed mostly on green clover and lucerne. Our chief products are wheat, barley, rye, oats, potatoes, wine, butter and cheese. Butter is made there without adding any salt to it, and tastes to us Europeans better than your finest creameries, with salt added. Cheese is made mostly in the Alpine regions, and a great amount of it is yearly exported to all parts of the world; and perhaps some of the Cousins have already tasted "Switzer Cheese" in America. Wine is made in the States of Schaffhausen and Geneva. The land cultivated for this purpose embraces six and a half per cent. of the total area of each state.

I will close this letter, and hope that Uncle True will have patience enough to correct the mistakes in it, and if it should be of any interest to you I will write you again after my arrival in Paris, telling you about my trip across the ocean and something about the Exhibition.

Expressing once more the ardent desire that some of you would honor me with a visit at home, I bid you all a hearty farewell.

JOHN SCHRYN.

Another Question.

DEAR UNCLE TRUE:—I am a new Cousin, claiming an introduction. I like to read the letters from the Cousins. I think the girls have worried Slayerofconceit long enough, and the boys ought to take his part. As some of the Cousins have been asking questions, I will ask one. Where is the Island of Cyprus, and to what country does it belong? ROB ROY.

[Cyprus is the most eastern of the Mediterranean group of islands. At its most easterly point it approaches within 65 miles of the coast of Syria, and on the north it approaches to within 44 miles of the coast of Asia Minor. It was a possession of Turkey, but by recent treaty has been ceded to England. It is an extremely fertile land, producing wine, cotton, silk, tobacco, and various medicinal products. The island has been a famous one in history. It early belonged to the Phœnicians, but was subsequently colonized by the Greeks, then passed under the rule of the Pharaohs, Persians, Ptolemies and Romans in succession, excepting a short period of independence. It was one of the chief seats of the worship of Venus, hence called Cypria. Salamis was one of its most famous ancient seaports. At the time of the Crusades it was made a separate kingdom for Guy of Lusignan. It then fell to the Venetians, the senate of the republic compelling the queen, Catarina Cornaro, to abdicate. Many of you may have remembered seeing, at the Centennial, the remarkable picture in the Austrian Exhibit, of this queen holding her court, but the time chosen by the painter was after her deposition, and when she was living in Italy, a queen without a material kingdom. U. T.]

Another Inquiry.

DEAR UNCLE AND COUSINS:—I am here again, and what think you brought me? Why I came purposely to see whether you were all dead, too busy, or too indolent to gather around Uncle True for our weekly chat. Come, come wake up, or I'll raise such a rumpus that you will have to. Instead of staying here in the close, warm study, let us hie to the shady lawn, or the cool summer-house, and chat as merrily as of old. Now I'm going to threaten you all, and it is a fearful threat as you may find later. Methinks I hear Sir Wildfire say, "What, *you* dare threaten *us*?" Yes, sir, I, your little Coz; four feet eleven inches tall, dare to threaten you "lords of creation," standing six feet high (more or less), and I will too, so here goes!

If you don't rouse up and make our own dear corner lively, by your pleasant chatter, I'll come every single week, and rattle like a magpie, and play more pranks than a monkey upon you.

There now! if that don't scare you, then nothing ever will, for I am an inveterate talker as you can plainly see. I often think it a good thing I was not at the Tower of Babel during the confusion of tongues, for if I had added my ceaseless chatter to the general jargon, mankind from that generation to this, would have been a race of lunatics. So beware how you tempt me to do desperate things. Well, as I have said all I wished, I will "fold my tent like the Arabs and silently steal away." Yours in tears,

MADCAP MOLLIE.

Too Diffident.

DEAR RURAL COUSINS:—I had the same trouble that Unknown had about introducing myself, till at last I decided to *come*. However I started, and said what I wanted to, but now I am here, I find there is no one so very formidable besides Uncle True, for most of the Cousins seem to have disappeared. Now, I want to hear from you again. Slayerofconceit, I think after that last letter of yours you deserve to be forgiven, but we don't want to forget you, too, so do join the ranks again. Now, I want to ask a question (going to display my ignorance in the first letter, you see.) Who was Poet-Laureate just before Tennyson? I wont describe myself this time, only say that I am an ordinary school-girl, between the ages of ten and twenty, and live in a little, *quiet*, not to say humdrum, village in the Empire State.

If Uncle True doesn't reject this letter, I will try to write a better one next time, and Uncle, please tell the Cousins how to direct their letters, and oblige LEONORA.

[Tennyson succeeded Wordsworth as Poet-Laureate. Address letters, Uncle True, Rural New Yorker, N. Y.]

Another Scouring-Board.

DEAR COUSINS,—If I may so call you, hoping that I may be accepted as one, as the rest tell their age, I will tell you mine. I am fourteen years old. Others have pets, I have none save one little sister, three years old. We live on a farm of seventy acres. I do not have a piece of land, as some of the cousins do, but my brother and myself pick up the chestnuts and sell them. We sold over two bushels last year. I thought I would try and make one of those scouring-boards. I made my aunt and my cousin one, and they liked it very well. But it was not like the one in THE RURAL. Have all the cousins gone to sleep, or where are they? Why do not they write? Where is young Bach? Have the girls shamed him out? Do not back out, we are as good as they. Let me hear from you all, boys and girls.

WILD WHISTLE.

The First Answer

DEAR RURAL:—May I be one of the cousins? I am a girl, fourteen years old, and live in Virginia. I have not noticed many letters from the cousins lately. Perhaps it is too hot to write. In regard to the novel question. I think a good novel once in a while does no harm; but when any one sits up 'till two in the morning crying over one, then I think it is time they ought to stop. The author of "She Stoops to Conquer," is Oliver Goldsmith. He also wrote "The Deserted Village," and The "Vicar of Wakefield." LIZZIE TAYLOR.

Lincoln, Va.

Only Two Years.

DEAR UNCLE TRUE AND COUSINS.—I have read your paper for one or two years, and I have been much interested in the letters from the Cousins. I should like to join you very much if UNCLE TRUE sees fit to put this in. I hope we shall hear from the Cousins often, and I should like to hear from UNCLE TRUE very much. ROBIN RED-BREAST.

The Puzzler.

HISTORICAL ENIGMA.

I AM composed of 101 letters:

My 5, 14, 66, 28, 58, 23 is a river in British America.
My 38, 35, 26, 98, 82, 8, 77, 45, 29, 70, 20 is a river in Canada.
My 34, 27, 2, 29, 89, 80, 92, 34 is a river in Russian America.
My 100, 90, 31, 86, 49, 96, 83, 10, 42 is a river in U. S. and Canada.
My 22, 81, 16, 27, 51, 54, 99 is a river in Birmah.
My 43, 79, 11, 25, 61, 88, 78, 72 is a river in Virginia.
My 24, 4, 85, 13, 6, 40, 93, 55, 95 is a river in Iowa.
My 59, 36, 19, 9, 71, 75, 53, 65, 18 is a river in Norway.
My 41, 50, 9, 21, 60, 47, 63, 48, 6, 87 is a river in Minnesota.
My 84, 67, 101, 44 is a river in England.
My 91, 33, 52, 12, 55, 64 is a river in N. & S. Carolina.
My 7, 57, 1, 17 is a river in Oregon.
My 68, 39, 37, 69 is a river in Colorado.
My 62, 30, 32, 46, 71, 16 is a river in Africa.
My 73, 3, 22, 15, 92 is a river in Russia.
My 56, 86 is a river in Italy.
My 79, 35, 76, 87, 20 is a river in Brazil.
My 57, 74, 94, 4 is a river in France.

My whole is an extract from one of Longfellow's poems.

☞ Answer in two weeks. PELIG GRIMES.

CENTRAL PUZZLE.

Hasty; power of producing; annoyance; capable of being coaxed; direct application to a person. Answers are words of eleven letters each, and the Centrals form a nut.

☞ Answer in two weeks. LITTLE ONE.

DOUBLE ACROSTIC.

1. A PRONOUN. 2. To take to pieces. 3. A round room. 4. One who steals children. Initials and finals form natives of two foreign countries.

☞ Answer in two weeks. L. O.

PUZZLER ANSWERS.—August 10.

FRACTIONAL PUZZLE.—"Whip-poor-will."

HIDDEN METALS.—1. Lead; 2. Gold; 3. Brass; 4. Platina; 5. Silver; 6. Tin; 7. Iron; 8. Steel; 9. Asbestus; 10. Pewter; 11. Copper; 12. Bronze; 13. Zinc.

CENTRAL PUZZLE.—"Judas Iscariot."

Sabbath Reading.

MY CONFIDENCE.

I HOLD Thy truth, O Lord, within my heart,
Thy law I love;
I hold Thy cross, and try to do my part
My faith to prove;
I hold Thy promise, Lord, and daily pray:
"My faith increase,
That I may closer cleave to Thee, the way,
And have Thy peace."
Yet little joy my holding brings to me,
Because I know
That, though my soul still trusting clings to Thee,
I may let go.

But I am held, O Lord; Thou hast my hand,
And Thou art strong,
Throughout my journey in this desert land,
However long,
Thou givest me support. I shall not fail.
Though foes assail
And press me hard, over myself and all
I shall prevail.
Great joy Thy presence and Thy pledge afford,
Because I know
That Thou wilt not—since Thou hast given Thy word—
Of me let go. [*Sunday Afternoon.*

THE GREAT HELP.

"Happy is he that hath the God of Jacob for his help, whose hope is in the Lord his God."—*Psalm* cxlvi. 5.

HAPPINESS is sought by all men. Some seek in one way, some in another. Many, in the gratification of self in one form or another, seek it in the wrong way and fail in their search. Others again are content to look for it in God's way—where God has placed it: these find and make it their own. David was one of these; he knew where and how true happiness is to be found; and, guided by God's Holy Spirit, he has left behind him directions for the seeker in every age. Let us look at the picture of the happy man, as painted by the hand of David thus guided.

The verse states, "Happy is he that hath the God of Jacob for his help, whose hope in the Lord his God." That man or child then is happy who has his help from, and his hope in, the God of Jacob. Now, to understand this, we must know the character of this God. What then was He to Jacob? This is the first question for us to consider.

If we look back at the life of the patriarch, we shall find that the first mentioned interview between him and his God is in the hour of trouble. In Genesis we read of him leaving his father's home. One false step, one sin, has led to this necessary exile. Behind him is his home, to which he may never return; before him the land of strangers, to which he is journeying. Well may he be sad! But we cannot pause longer at this point of Jacob's history; enough for us to know that he was in trouble.

As night sets in he tarries at "a certain place," and lies down to rest with no softer pillow than the stones the spot afforded. Before he laid down to rest, however, we can fully believe—though we are not told—that the son of Isaac knelt down in prayer to seek pardon from, and to commit himself to the care of, his father's God. Nay, indirect proof is given that he did so.

To return: while Jacob sleeps, God appears to him and comforts him with a promise—"The land whereon thou liest," etc. (Gen. xxviii. 13, 14.) What a promise, when we remember the Maker of it! It was Jacob's father's God who spoke it—One able to fulfil it, and One who did fulfil it; so we learn from the after history of Jacob. Then we see "a God of promises" was Jacob's God.

From this portion of the patriarch's history we learn too, indirectly, that He was a pardoning God. For had He not forgiven, in answer to prayer, the false step of Jacob in deceiving his father, He would certainly not have been with him to keep him in his ways.

Again, He stands before us in the character of a prayer-hearing God. Jacob himself tells us that "He answered him in the day of his distress," i.e. the day he left his home as a wanderer. We read, too, that when Jacob feared to meet his brother Esau, he prayed most earnestly to his father's God, reminding Him of His promise and was answered, after using all the means in his power to appease his brother's wrath. We find him on that memorable night wrestling with God in prayer until the daybreak, determined to get a blessing. In both cases he prevailed; in both he was heard and answered, for Esau was reconciled to him in a wonderful manner. Yes, the God of Jacob was preeminently a prayer-hearing God.

Lastly, a protecting God was the God of Jacob. Who watched over the patriarch in his journey to Pedaram, guided him to his uncle's house? Who protected him while there, and who watched over his interests? Who, while permitting him to be punished by means of retributive justice, as seen in his uncle's conduct, yet blessed him on his leaving Laban? Who protected him from his wrath? Again, who was it protected Jacob from the well deserved anger of his brother Esau, and turned the heart of that brother to Jacob? And lastly, when returning to Bethel, who was it protected him from the "cities" as he journeyed on his way? Who? None other but the God of his father Isaac—his own God.

O CHRISTIANS, how justly may that father be angry with his child who is unwilling to come home! and how justly may that husband be displeased with the wife who is unwilling to ride to him in a rainy day, or to cross the sea to enjoy his company? But is not this your case? is not this just your case, who have God for your portion, and yet are unwilling to die, that you may come to a full enjoyment of him?

WEAK Christians are afraid of the shadow of the cross.

PERSONAL ITEMS.

Victor Hugo says England produces wealth admirably, but distributes it miserably.

The actor Florence has been appointed on the jury for champagne at the Paris Exhibition.

Dr. Carver, the marksman, is engaged to a lady in New Haven, Conn., and will be married next autumn.

The sale of the jewels of Ex-Queen Isabella of Spain brought $720,000, and we wish we had our money back.

According to Darwin, our ancestors, the monkeys, were anything but ignorant, since they were familiar with all the higher branches.

Mr. Ira D. Sankey will take his family to England next month, and may spend the winter abroad, while Mr. Moody rests and studies at Baltimore.

The late Dr. Bigelow, of Boston, was asked by a lady if he thought tight-lacing led to consumption. "Not all, my dear," he replied, "it is what consumption lives on."

A guard of Bavarian gendarmes watches day and night before the closed door of the house of Prince Bismarck at Kissingen, and a line of telegraph connects his apartments with a police station.

Saratoga gossip asserts that Commodore Garrison, lame and nearly seventy, but worth from ten to twenty millions, is engaged to marry Miss Randall, of St. Louis, who is a brilliant brunette in the early twenties.

Mrs. Coates was conferring with a dentist about a new set of teeth. "The chewing capacity of these teeth is unsurpassed," said the dentist. "Maybe I can chaw with 'em," said the lady," "but can I jaw with 'em?"

Fame is priceless, but it brings its annoyances. "Jew," "adventurer," "Asian mystery," "arch Jingo," "charlatan," "mountebank," and "impostor," are some of the names given Lord Beaconsfield by the Radical press of England.

Being strongly urged by her father to retain the dowry of his late Queen, King Alfonso reluctantly consents to hold the Palace of Castilleja de la Cuesta, near Seville, and the jewels of Mercedes; but the money he received has been appropriated to the poor.

Senator Beck of Kentucky is 52 years old, weighs 222 pounds, and has never taken a dose of medicine in his life. He has left for the plains on a hunting expedition, and says that he can yet walk his thirty miles a day provided that some one will carry the game.

Mrs. Shoddy's views are interesting to those who are thinking about keeping a carriage. She says she has thought it all over, and come to the conclusion that broochos are almost too large, that these 'ere coupons are too shut up, but that a nice, stylish pony phantom seems to be just the thing.

Although Campbell says that "Freedom shrieked when Kosciusko fell," the Polish hero did not die in battle, but was killed by a leap of his horse over a precipice in Switzerland twenty-three years after the battle of Maciecwitz in 1794, where he fell wounded from his steed with the words, "This is the end of Poland!"

The Emperor William still shows the traces of the ordeal through which he has passed. His face is pale, and he has only begun to grow the white beard which was shaved off to allow the buckshot to be extracted from his face. He is learning to write with his left hand, the right having been injured permanently by Robeling's shot.

Professor Leone Levi of the University of London believes that the troubles of the English workingmen are caused largely by their own vices. They earn in the aggregate $1,500,000,000 in cash annually, of which they ought to save $75,000,000. As a matter of fact they save only $20,000,000. The bulk of the missing $55,000,000 is wasted mostly in drink.

Nothing is too good for the Earl of Beaconsfield just now. When he went to Osborn the other day to visit the Queen he traveled in one of the royal saloon carriages, the superintendent of the line drove the train, as he does when the Queen travels, and the platform in Victoria Station was covered with crimson cloth. No wonder Mr. Gladstone is disturbed.

Edison's visit to Nevada has given him a new idea. He thinks that the size, character, and point of croppings of a mineral lode may be determined by the difference of the conductivity of electricity, provided that the walls of the ledges are lined with clay or decomposed rock. He will test his theory on the Comstock lode when he returns from California. Should his plan prove practical, instead of running long tunnels, sinking deep shafts, or boring here and there with the diamond drill, a miner would apply the electrical apparatus, and thus find out how much ore there is in a mine, where it lies, its direction, and the point where its cropping may be looked for.

John Brown, the trusted servant of the Queen, is said to owe his popularity to the fact that the majority of English servants, from the palace to the plain residence in England, are great sticklers about their proper duties. If the Queen has to go anywhere, have anything done from getting a cup of tea to the packing of a trunk, from the selection of a horse to the purchasing of a book, John Brown is always on hand, ready, able, and willing to bound over all the barriers of red tape and formal deportments, and get and do these things, or see that they are done promptly and properly. By this readiness and untiring attendance he has ingratiated himself with the good Queen, who fully values his honest energy and integrity, and who has thus made him her favorite gillie.

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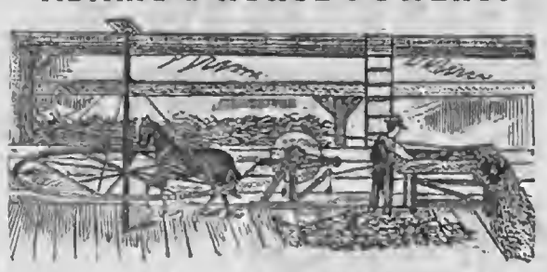

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OSBORN'S SULKY PLOW,
the only Plowing Machine that has proved a perfect success in all kinds of soil. Any kind of plow can be attached. The plowman rides and handles the plow with ease, regulating the depth and width of furrow. The draft for the team is materially less, and the ordinary laborious mode of plowing is reduced to one of comfort and ease.
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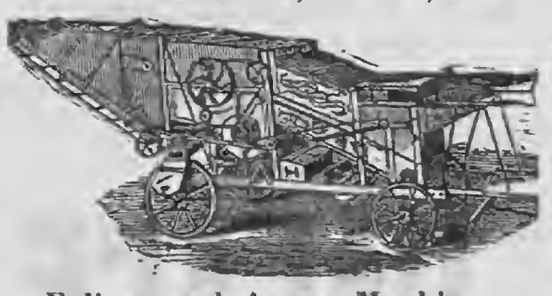

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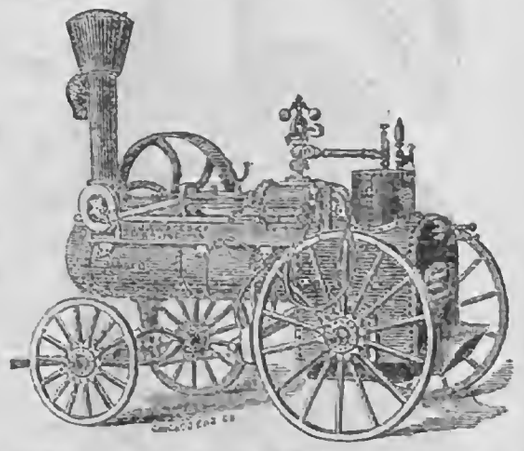

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Wit and Humor.

HOW HE DID AN ERRAND FOR HIS WIFE.

"Now, Leander, my dear, I want you to be sure and not forget these few things when you come down to-night," says the young wife, just before the kiss and "good-by," at the summer hotel in the morning, as the gentlemen were starting for the city.

"Certainly not my love."

And this is the way the list ran:

1. Two yards of blue barege.
2. Three yards Hamburg edgings.
3. My new braid from the hair store.
4. Half a dollar's worth of nainsook.
5. Box pearl powder from my upper drawer.
6. "Modern Minister" from Loring's library.

Arriving in town, he forgot all about the list till late in the afternoon and then could'nt find it in any of his pockets; but hadn't he read it over, and didn't he recollect it all? Of course he did, and this is what he brought home to his expectant wife:

1. Two heads of blue cabbage.
2. Three yards of handsome notting (mosquito.)
3. Some blue braid.
4. Half a dollar's worth of canned soup.
5. Box of sedlitz powder.
6. Loring said he hadn't any such book as the "Mug and Canister" in the library.

Exclamations on receiving the above, "O, Leander, Leander, you must have been dining at that horrid club again or you couldn't have made such a mistake!"—*Boston Commercial Bulletin.*

"Two heads are better than one," said the thief, as he crawled out of the cabbage patch.—*Derrick.*

SINGING is recommended as a cure for seasickness.—*Buffalo Express.* A good ballad for marine stomachic difficulties would be, "I give thee all, I can no more, though poor the offering be."—*N. Y. Commercial.*

MIND your stops. A compositor in setting up the toast: "Woman—without her, man would be a savage," got the punctuation in the wrong place, which made it read: "Woman—without her man, would be a savage."

SARAH ANN—"O, ain't my brother a clever boy, Eliza Jane? He's only been to school two months an' he's got the catechism." Eliza Jane—"Wot's that! Why, my brother's on'y bin to sch ol two weeks an' he's got the measles!"

In winter, rugs;
In summer, bugs;
In sickness, drugs;
In adversity, shrugs;
In thirst, mugs:
In courtship, hugs.

THERE is a terribly depraved joke about the lamb lying side by side with the lion. It was a dande-lion. The perpetrator thereof ought to have a "consulship in a warm climate." The thing Jim Anderson, the Louisiana witness, wanted.

"SAM, you are not honest. Why do you put all the good peaches on top of the measure and the little ones below?" "Same reason, sah, dat makes de front ob your house all marble, and de back gate chiefly slop bar'l, sah."—*St. Louis Journal.*

HE said the pastry was ever so much better made by her hands. This delighted her. But when she wanted the coal-scuttle at the other end of the room, and he suggested that she should get it, as the fire would feel so much better if the coal was brought by her dear hands, she was disgusted. Women are so changeable!

AT a ball at Long Branch, there was an immense concourse of people. A lady who had been jammed against the side of a hall in the crowd, accidentally caught the trimming of her cloak in the button of a gentleman's coat. After having been towed around a few moments in this sort of style, she remarked to her involuntary captor, "I'd thank you, sir, not to pull my cloak all off me!" "Good gracious, madame!" he replied, "I hope you will excuse me; but I'm just as anxious to keep my clothes on as you are."

A Healthy Body and a Clear Head.

If indigestion, constipation and billiousness torment the body, the head cannot be clear. These disorders react upon the brain most hurtfully, and produce a cloudiness in the organ of thought not experienced by a healthy man. Happily these brain-oppressing maladies may be entirely dispelled by that peerless alterative, Hostetter's Stomach Bitters, which cheers, refreshes and invigorates the brain and nerves, while it regtiates the organs of digestion, assimilation and billous secretion. It expels the morbid humors which poison the system through the bowels and urinary passages, and exerts a powerfully invigorating influence as well. Its catharic action is never irritating, violent or painful, but even, natural and progressive. As an appetizer and sleep promoter the Bitters is unrivalled; it mitigates the infirmities of old age, relieves the ailments peculiar to the gentler sex, arrests premature decay, and builds up an enfeebled physique.

NOTHING EVER LOST.

Careful Housewife, (Lifting a shoe from the soup turreen).—"La! who'd a-thonght baby's shoe would turn up in the soup. But I knew it wasn't lost. I never lose anything!

KINGSFORD'S
Oswego Starch!

Is the BEST and MOST ECONOMICAL in the World.

Is perfectly PURE—free from acids and other foreign substances that injure Linen.

Is STRONGER than any other—requiring much less quantity in using.

Is UNIFORM—stiffens and finishes work always the same.

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THE BEST IN THE WORLD

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The most exquisitely beautiful solo effects ever produced.

The only stop-action ever invented that can not be disarranged by use.

The only organ made with bellows capacity so great that it requires but little effort with the feet to supply all the air desired.

The *best made* and most elegant cases in market.

No shoddy ornaments used—*nothing but solid wood. Every Organ fully warranted for five years.*

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Eureka Safety Power

h.p.	cyl.	ht.	space.	wt.	price.
2	3½ 4	48in	40x25	900	$150
4	4x6	56	46x30	1600	250
6	5x7	72	72x42	2700	400

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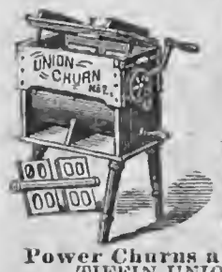
GUNS and Revolvers. Illustrated Price List free *Great Western Gun Works*, Pittsburg, Pa

THE UNION CHURN
AT REDUCED PRICES.



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THE GREAT EXPERIMENT
LOW PRICE FOR TRIAL.
PREMIUM BONE.

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SALEM, OHIO.

FARMERS FRIEND DRILL!
ITS DOUBLE FORCE FEED.

Sows all kinds of Grain from Flax-Seed to Corn and Beans.

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NORWEGIAN BALM
FOR
CATARRH

It soon allays all Soreness and Inflammation; softens the dry, hard flakes of offensive matter, and causes their discharge without difficulty or pain.

It Contains No Poisonous Drugs.

Can be taken into the Stomach without harm; is an excellent Wash for Sore Mouth; Cleanses the Teeth, Hardens the Gums, and purifies the Breath. All its properties are SOOTHING, CLEANSING, and HEALING. ☞ It never fails to give relief in the most obstinate cases of *Dry Catarrh.* *One Bottle is sufficient for Two Months' use.*

Natives gathering Gum from the Norway Spruce.

PRICE, $1.

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No. 6 MURRAY ST., NEW YORK.

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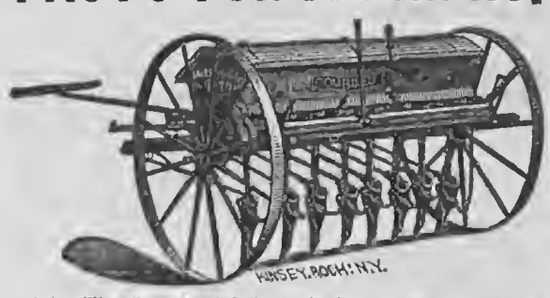
CIDER PRESSES AND GRATERS. BOOMER & BOSCHERT PRESS CO., Syracuse, N.Y

FACTS FOR FARMERS.



1st.—The Centennial Commission MADE BUT FIVE AWARDS to Grain Drills and Fertilizer Attachments.

2d.—Of these five, TWO were given Bickford & Huffman. One on the FARMER'S FAVORITE and one on Fertilizer Attachment.

3d.—NO OTHER MANUFACTURERS RECEIVED AN AWARD ON A FERTILIZER ATTACHMENT!

4th.—The award to the "Champion," built by Johnson, Gere and Truman, was "for a machine with attachable manure distributer;" an implement they did *not* exhibit and *do not offer for sale*, as their "manure distributer" is neither "attachable" nor detachable. The report does *not* commend this drill or its "manure distributer" for a single quality of work.

5th.—The award to the Farmer's Friend pronounces it defective by saying *it is capable of further improvement, as regards delivery up and down hill;* and also to the McSherry drill in these words: "*Some further adjustment appears desirable to enable this drill to deliver with equal equality up and down hill.*"

6th.—The Empire, Buckeye Hoosier, Superior and Hagerstown drills were *refused* EITHER AWARD OR REPORT, because of great "irregularities" or "variations" in the tests.

7th.—The variation of our nearest competitor, The Champion, *from its own distribution*, was MORE THAN 237 PER CENT. of that shown by the FARMER'S FAVORITE.

8th.—The award to the FARMER'S FAVORITE, distinguished it by commending it for "ACCURACY OF DELIVERY, AND REGULARITY OF DISCHARGE UNDER DIFFERENT CONDITIONS," and "REGULARITY OF DELIVERY UNDER ALL CONDITIONS." Qualities conspicuously lacking in its competitors.

We challenge contradiction of a single feature of the above statements.

Fully 80 per cent. of all the Fertilizer drills in use on the American Continent are built under our patents,—a fact that tersely and undisputably establishes superiority. For circulars, prices of information see our agents, or address **Buckford & Huffman, Macedon, N. Y.**

S. N. GALLUP, Genl. Agt.

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To NURSERYMEN, DEALERS and PLANTERS

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EXCELSIOR

MOORE'S RURAL NEW-YORKER.

RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 35.
WHOLE No. 1492.

NEW YORK CITY, AUG. 31, 1878.

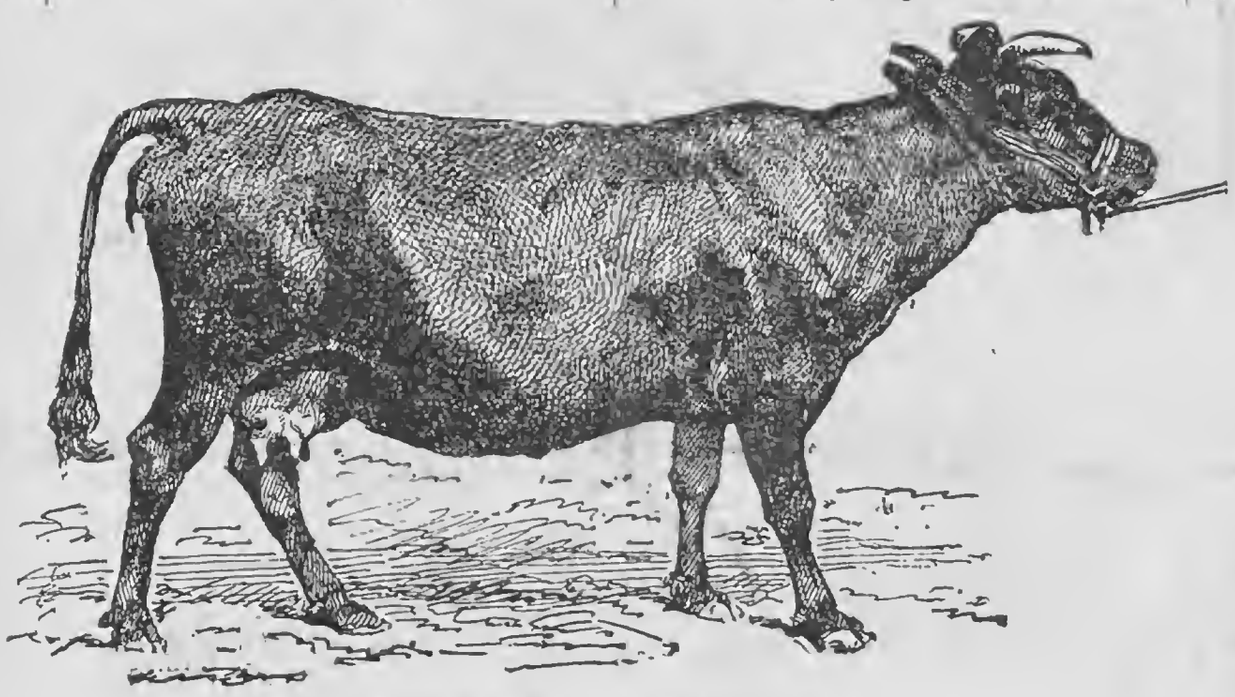
PRICE SIX CENTS.
$2.50 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

The Herdsman.

PRIZE CATTLE AT THE PARIS EXPOSITION.

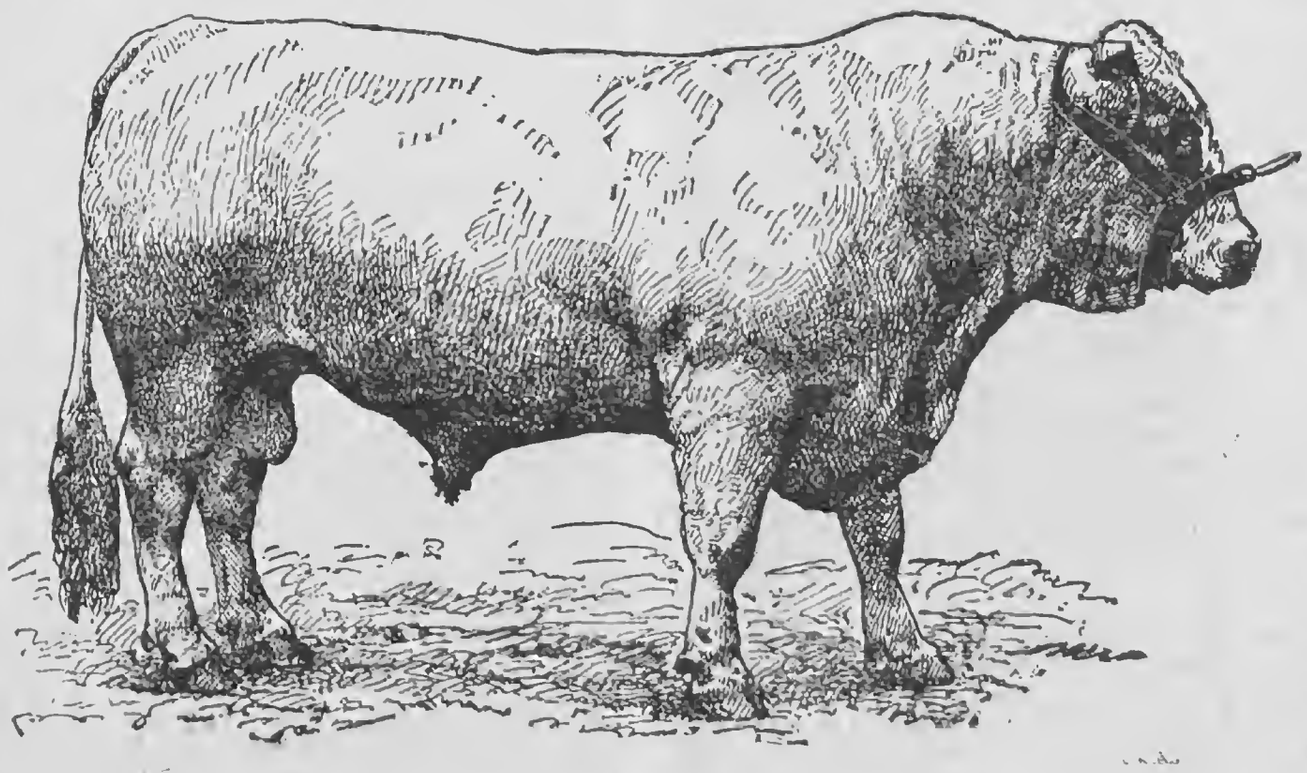
THE portraits which we present are engraved from photographs taken at the Paris cattle show for the London Agricultural Gazette. The Gazette says that the cow, 7 years and 3 months old, is the property of M. le Comte de Krag Juel Wind Frys, of Halsted-Maribo, Denmark. (This is copied from the official catalogue.) She is of the small red Danish breed, of which about ten specimens were exhibited, making, however, a great impression as to their qualities as a dairy breed, *i. e.*, as to their power of converting all their food into milk. They were in a perfectly healthy and prosperous condition, but as nearly mere skin and bone as any animals in a condition for exhibition well could be. This particular cow is one the editor happened to measure. She is 56 inches long, taken in the usual way from the front of the shoulder to the perpendicular line representing fairly the outline behind; and, as she stood, there was no projection of the bosom beyond the point on the shoulder to which the measure reached. She girthed 5 feet ten inches at the narrowest part behind the shoulder, and 7 feet 7 inches round the abdomen. Her back was 45 inches high at the shoulders, and the belly line immediately below that point, was 19 inches from the floor.



A PRIZE DANISH COW.

The bull, two years old, represents the massive Charolaise—the breed which probably, of all the French breeds, most nearly corresponds to our own Shorthorns, being, as a general rule, shorter, and, if one may say so, chubbier. The Charolaise breed is white and Short-horned, and carries a good quality of meat on a very symmetrical and well-made frame. This particular animal, it will be seen, possesses a good rump and thigh, and is good over the loins, fairly well covered on the back and crops and sides and well filled up both in front and behind the shoulders. He shows also a fairly good bosom, wide and fleshy. He is not well covered along the lower part of the sides—the flank and plates and chest. Of the bull here represented, No. 640 in the catalogue, the Ag. Gazette gives the measurements. He girths 7 feet 3 inches behind the shoulders; his back is 48 inches, and his belly line 22 inches from the floor at the same place, and his length taken as before, is 64 inches.

The Charolaise breed may possibly have had and may hereafter have a cross of the Shorthorn. The white color is an essential feature of the breed; and if, by the aid of Shorthorns—white for several generations, and not likely, therefore, to transmit any other color—the breed could obtain extra size and earlier maturity without losing hardiness of constitution, it is probable that good would be done. Mr. Thornton acting on a French commission, has procured bulls of the necessary character for this purpose, and no doubt enterprising French breeders will try experiments. But we can easily excuse the conservatism of those who, satisfied that they have already got an admirable breed in their hands, whether for labor or for beef, should prefer to seek its improvement by care and good judgment, without going beyond the limits of the breed itself for the means.



A PRIZE CHAROLAISE BULL.

THE WILD CATTLE OF CHILLINGHAM, England, are supposed to have descended from the ancient urus, whose immense size may be gathered from the fact that the skull of a urus found in Scotland, now in the British Museum, measures a yard in length, while the span of the horn cores is three feet six inches. The Chillingham breed is of a white color, except the tips of the horns, which are dark; and the ears and muzzle which are red and brown respectively. Uniformity of color however, is secured by the slaughter of all calves which differ from the pure type. They hide their young and feed in the night, basking or sleeping during the day. They are fierce when pressed, but generally very timorous, moving off on the appearance of any one even at a great distance. The bulls engage in fierce contests for the leadership of the herds and the wounded are set upon by the others and killed. Thus few bulls attain a great age, and even these when feeble are gored to death by their fellows. A breed similar to the Chillingham cattle, existed in Wales in the tenth century, being white with red ears; and Welsh chronicles relate how, once upon a time, a Prince of Wales demanded as compensation for certain injuries, 100 white, or 150 black cattle.

Farm Topics.

FARM MUSINGS.

WHERE IGNORANCE IS BLISS 'TIS FOLLY TO BE WISE.

If a man thinks he has the best home in the world, he must from thinking so, be a happy man and it would be folly indeed to try to make him feel otherwise. If the same or any other man imagines he has the very best managed farm in this world, or in any other, it would be a pity to undeceive him, unless the farm was held up as a pattern and was really calculated to mislead in such a way as to injure the prosperity of agriculture generally.

A MODEL FARM.

There is such an instance in Australia and, some years ago, a man went to see it. Having gone by railroad, on arriving at the place, the conductor stopped the cars and let the visitor get out at a station used for the convenience of the farm. It was at the foot of a mountain, and the land near to the depot was in an extraordinarily rough condition. It had been fenced into small fields by a former owner, but now the walls lay scattered about in all directions, the best stones having been fetched away and the useless ones left. The whole surface of these fields was about half covered with fixed stones, some of which could be pried while others required blasting. In addition to this covering with stones, brush-wood and briers occupied all of the ground best fitted for grass, and in some places water coming from springs on the hill-side, ran over the surface so that while the land remained in such a state no improvement was possible.

Some meadows came next into view, which had a brook running down the middle; on each side of this were many acres covered with all kinds of weeds, and moreover this wild, disgraceful-looking ground had all the top soil washed away by changes in the course of the stream which was still making farther inroads, sometimes on one side and then again on the other side. In the meadows there were also several large holes half-full of stagnant water and bordered with weeds and brush, while in two or three places a few acres had been plowed. The rest of the fields also had very unsightly holes and ditches in them, and, excepting some new walls by the roadsides and a little fencing around paddocks, there was no kind of protection to crops or any means of making the best of pasture.

Yet such a farm in Australia, is called a model farm, and a native who knows nothing whatever of modern breeds of cattle, modern improvements in agriculture, under-draining or application of manure, has charge of this one and thinks it the finest in the world.

FACTS.

are said to be stubborn things. There are some which are difficult to understand, and by stating a few of them, it will be seen that in many respects they are stranger than fiction.

If a man has a fit of sickness, his cheeks will become very hollow, and if a cow ails it is said her horns are hollow and an operation is generally proposed by the good old farmer and his neighbors; but nobody does anything to the man's cheeks, nor does a doctor call the sickness "hollow-cheek."

When it was reported in the newspapers that MR. BERGH had been trying to have a man punished for cutting a horse's tail off, it made me think of the evil which is said to exist in a cow's tail, and that it would have been a good defence to have said the horse had the "tail-evil" necessitating the cutting off of that appendage.

Is is well-known by everybody that an American is altogether much better able to manage live stock and farms generally than a native of any other country, yet how is it foreigners are so often put in charge?

It is conceded Americans are much more inventive than any of the inhabitants of other countries and are more industrious—why, then is it necessary to pay protective duty which robs every one furnishing a house with crockery, cutlery, bedding etc., also all those who require and use agricultural implements and wearing apparel.

It is said this foolish protection is the cause of England doing all the carrying trade: for Americans are not allowed to buy ships where they are cheapest, consequently England can convey every kind of merchandise much lower, and by doing so there is comparatively nothing done by the shipping of the United States. Protection gives the manufacturers of New England a great profit on the cotton and other goods made there; but all the customers they have are their own countrymen, for other nations will not buy of them when the English sell about 30 per cent lower. It is thus Americans try to raise tax on English manufactures and foreign articles of every kind, in doing which they cause the necessaries of life to be dearer than elsewhere, so that the cost of living is heavier than in older countries.

Education is cheaper and boys and girls are kept at school much longer here than in England, yet almost all the rural population still believe the moon will have an evil influence on wounds, on vegetables planted and on meat cured at certain stages. A farmer's daughter, next house to ours, always has her meat cut when the moon is at full because it would grow better. Another neighbor, and there are many like him elsewhere, will not commence any new work on a Friday.

AN OLD HAND

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

A GENTLEMAN called to-day to see the pigs. He remarked that he thonght "a swill pail was the best breed." We replied we could show him "swill pails," and that "it was not much satisfaction to show any one different breeds of pigs, who had such an opinion." Before we got around he said "there was a difference in pigs," and "it was not all swill pail." We confess his first remark was not a very pleasant "send-off" to go the rounds of the pig pens, for in any case snch talk is not agreeable to a man who has spent hundrods of dollars trying to improve and perfect pigs. It shows a lamentable ignorance of the characteristics of breeds or a determination to hang on to old notions and prejudices, which are a disgrace to the man and the age in which he lives.

Mr. David Wicks is removing the old picket-fence in front of his house. The house is large and built of brick and surrounded by trees. The effect of taking away the fence and opening up the grounds to an unobstructed view is a vast improvement. The fence had stood forty-five years and was getting dilapidated. He is going to follow the example of several others on the same street and not have any fence in front of his house, and so improve the appearance of the place and save the expense of a new fence. The law in New York makes its unlawful for animals to run at large on the highway, and so a road fence is not necessary. If any one must have a door-yard fence, the prettiest kind is to make it of wire number nine, which is bent in the form of pickets and run through ribs. It is durable, much more so than pickets, and not any more expensive. It has a light and airy look, and does not hide the yard or grounds as a more clumsy fence will do. The end posts should be square and solid and not large. The old-fashioned cased post is going out of style and ought to, for it is not in good taste, unless expensive things are considered in good taste, without reference to durability or harmony. As a rule, the simpler the surroundings and the less fuss about a farm-house, the better it will look. Beauty does not consist of a lot of fences, and gravel walks full of weeds and grass, but is rather found in an open lawn well cut, on which the eye may glance with vistas unbroken, save by the house or the fields and sky beyond.

If we have made a discovery, or if everybody knew it before us, we will tell it all the same. As soon as the cream shows signs of "coming," pour into the churn two or three quarts of water—as near ice-cold as it is possible to get—and the butter will gather a great deal quicker and come hard and firm. We tried the cold water (ice water) on the start and found it made the cream too cold and kept the butter from coming; but put, in at the last and it is a capital idea and will save hours of churning in the course of the season. Butter will come in fifteen or twenty minutes, as a rule, if the cream is in the right condition and temperature. A cool cellar is cool enough to start the churning, and as near right as most farmers can get it without thermometers and ice, and cold well-water will lower the temperature for gathering. The temperature of our cellar is 64 degrees, and the butter invariably comes quick with the help of the cold water, which is probably two degrees colder. When the cream stands too long on the milk before skimming, the butter will not come so quickly and it is always poorer, and such butter will not keep well. This is one reason, and the main one, why there is so much rancid butter. Better churn oftener and have good, sweet butter, and skim oftener also.

How pleased we are that the English walnuts, planted last fall, are coming up and doing well. The two trees set last year are also growing finely. If we can get these excellent nuts up here in our high latitudes it will be an event. There are now none nearer than Westchester County, not far from New York.

A hen was driven from the nest, where she was sitting, by the myriads of lice on her. We found her drooping and weak, and rubbed powdered sulphur all through her feathers, and shut her up in a coop with three inches of dry ashes over the bottom. We have since been told that a little kerosene oil poured on the roosts, and in the nests, will clear lice away; a little put on the body would do no harm, and would, undoubtedly, clear out the lice.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

SOWING WHEAT.

IT is time that land, calculated for wheat, should be in course of preparation for the reception of the seed. Many of us do not sow our wheat early enough. Last fall was an exception; but, as a general thing, wheat sown in the latter part of September does not, on the hills, obtain sufficient top to protect the roots before cold weather checks the growth. I have noticed the best results, in this locality, from that sown the very first days of September, or the last of August. There is much less danger of the plants getting too large a growth in fall than not enough, and the field may be pastured off if too forward, although this is scarcely necessary. Great care should be exercised in the selection of seed. It should be perfectly clean, and free from the seed of all noxious weeds. The seed from a single plant of cockle, scattered over ten acres, will nearly spoil the crop of wheat for market. Clawson has lost favor with us. It brings less in market than many varieties, and, unless cut quite green, shells badly.

I learnt something about sowing broadcast by hand this summer, and shall hereafter, when sowing by hand, follow this plan: Instead of the usual manner of sowing around a land, sow four paces wide across the field with one hand, then back with the other, throwing the grain all one way, and with the wind, if possible. Grain can be sown much more evenly and rapidly in this manner, and although to some it may prove rather awkward at first using the left hand, a little practice will overcome this difficulty; at least I found it so. Farmers differ as to the amount of seed required per acre, some sowing two bushels or two and a half, while others claim one and a half bushel to be amply sufficient. If the grain is threshed by hand, one and a half is probably plenty; but machine-threshed grain is injured to quite an extent, at least so much so that much of it will not germinate, and therefore it should be sown thicker.

Manure can be applied to wheat with returns as good as any crop yields, and it is the one where top-dressing is most practicable, I think. Besides the beneficial effects upon the soil, it forms a useful protection to the roots of the plants. The best wheat land is that strongly impregnated with lime and to that which lacks this element, the fertilizer should be applied, if large returns are expected. Wheat land should be well under-drained, and in localities where field-stones are plentiful, they answer the purpose almost or quite as well as tile, and are much more easily procurable.

In the assertion in regard to lime, I do not wish to be understood that it is impossible to raise a crop of wheat without it, but that the largest crops are raised on soil of which lime forms a prominent ingredient, either naturally or artificially. Probably no fertilizer will show its beneficial effects upon the soil for so long a time, which fact makes it one profitable to apply, even where it commands a medium price.

REMOVAL OF WEEDS AND STONES.

August is *the* month for cutting briers, weeds and thistles. Even fallows cut now will sprout less than at any other season of the year. It is a fine time for farmers to clear out the corners of the old zig-zag, rail fences. The weeds and briers should be gathered into heaps and burned, thus removing the unsightly nuisances entirely. The best time to remove loose stone from meadows, is immediately after haying, before the aftermath conceals them. Those of any consequence are loosened by the rake, and seem to invite a removal. It is much better in drawing them, to have them laid into a wall immediately, turning what before was a nuisance into a benefit. I noticed a wall which had stood many years uninjured, the durability of which was attributed to two layers of split white-oak staves, laid cross-wise, one a foot and a half from the bottom, the other a foot below the top. The wall was built three feet thick at the bottom, four feet high, tapering to a foot in width at the top. The staves bound it perfectly, and the action of the frost in spring had no injurious effect upon it, which is generally the most serious difficulty attending building a permanent and durable wall, on hill land.

RYE SOWN WITH BUCKWHEAT.

Last year Mr. Parcell sowed a bushel of rye with his buckwheat, and I watched the result with no little interest. The buckwheat did finely, giving a good crop. After this the rye, which had come up nearly as fine as timothy, began growing more stocky, and looked well in the fall. This year he harvested, rather earlier than usual, a fine crop; the best, he informed me, that he ever grew. The rye was nearly a complete profit, requiring no labor for plowing or seeding.

SUPPLEMENTARY FALL FOOD FOR MILCH COWS.

At this season, owing to sun-burnt pastures and the unceasing diligence of flies, cows are very apt to shrink of their milk and grow poor in flesh as well. A small piece of sowed corn for soiling, fed nights, the only time cattle can feed with any degree of comfort, will keep up the flow of milk and keep the cows in good condition, until fall pasture gets well started. Mr. Schutt sows the Horse-tooth variety, as furnishing much more feed than the other sorts, the foliage being denser.

NOTES FROM A BACKWOODS FARM.

FREEDOM, Outagamie Co., Wis., Aug. 15.

CROPS.

THOSE farmers among us who were so fortunate as to have winter wheat, have harvested a splendid crop. Spring wheat is badly injured. First, the weevil damaged it to some extent; then the hot weather and rain seemed to ripen up the grain prematurely; the heads were soft and light; some fields were hardly worth cutting; others may possibly yield ten bushels to the acre. Altogether there will scarcely be a third of a full crop in this part of the State. Barley was sown here quite extensively last spring; the crop and the price are both good. Oats promise an average crop, although there was not so large an acreage as usual of this grain. We have cut more hay this year than ever before in one season. The hot weather has brought corn forward so that it is just big. It is caring up finely and promises a heavy yield. Potatoes do no not promise very well. I think the heavy rains have been too much for them. A light crop and high prices. The beetles have not been very numerous this season; about one or two applications of Paris-green have kept them under. The weather during haying and the most part of harvesting has been hot, with frequent heavy rains. A little cooler now.

FARM MACHINERY.

But a few years ago our farms were covered thick with stumps, now we could hardly secure our crop without the aid of farm machinery; it is used on almost every farm. Good farm laborers are scarce and hardly to be had at any price. Threshing machines are beginning to run now. Spring wheat is yielding from five to fifteen bushels per acre, while winter wheat will go from 20 up to 30 bushels per acre in some fields.

BEE NOTES.

Starting with seven swarms last spring, I have now 16 strong natural swarms. I have taken from them 100 pounds extracted and about 200 pounds of cap honey with a few more caps to be removed yet. I do not propose to rob my bees for the sake of making a big show in honey, always making it a point that my bees shall go into winter quarters strong in honey. Honey is cheap this year, only selling at 10c. for extracted and 15c. per pound for box. The home market is the best, as my neighbors, although afraid of bees, like honey, and think they can afford to eat it at present prices. JOHN RUSTICUS.

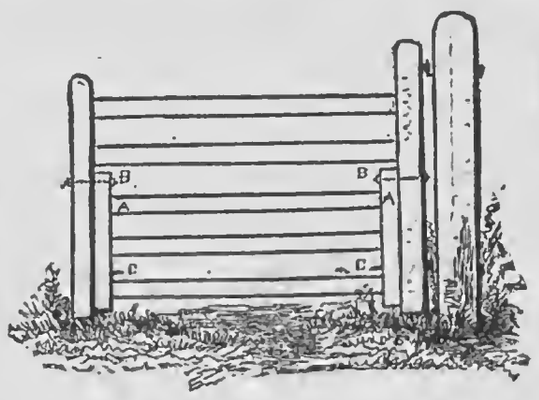
Farm Economy.

NOVEL AND USEFUL FARM GATE.

I HEREWITH present to the readers of the "RURAL" a drawing and description of a farm gate possessing novel and useful features.

Not long ago, I published a description of a gate of my own invention, in which, by means of a lever, the whole gate could be raised bodily from the ground to clear obstructions of snow, etc.

In this gate, recently designed, and which, I think, the accompanying cut clearly illustrates, the main part of the gate swings around upon



its hinges in the ordinary way; but there is an auxiliary part, shown at A.A., which is hinged or pivoted to the main gate by the bolts B.B. and free to swing on the same, except when fastened by the pins C.C. When it is desired to clear obstructions of snow, etc., the auxiliary part may be turned up on its pivots, and held in place by means of a strap or cord and hook. Also, when it is desired to allow free communication between one inclosure and another, for small animals, like sheep and pigs, or to drive the same through, and yet by the upper gate obstruct horses and cattle. It will be seen by the intelligent readers to be a very convenient device. I offer it for their use freely.

PROF. WILLIAM R. BROOKS.

Ontario Co., N. Y., July 30, 1878.

DRAINING THE SALT MARSHES.

THE value of lands now lying useless along the sea-coast and which can easily be drained and reclaimed by shutting out the tide and otherwise using the tidal flow for pumping, is almost above computation, and should be made to give employment to many idle people at no distant day. These salt marshes extend from Maine to Texas, but not with sufficient rise and fall in the tide at some southern points to complete the work by utilizing the tide alone, while the swamps under a hot climate are less habitable. But from the Chesapeake to Maine, the work of reclaiming the land is practicable, and when so done will add very largely to the acreage of fertile lands adapted to market gardening, cranberry growing and other crops. The success of reclaiming land in Holland is well known, and a few instances exist in the rice lands, the cranberry swamps and some other places in this country. The Marshfield Marshes in Massachusetts, to the extent of 1,500 acres, have been drained simply by shutting out the tide and fixing a gate for the outflow of the inland waters. Several thousands of acres have been partially dyked in the Hackensack, New Jersey, Meadows, both showing plainly what good results may be made to follow a perfect drainage of these lands.

Where lands are below the usual low water, the ebbing and flowing of the tide may be made to work pumping machinery steadily and economically, thus insuring a drainage of such lands. In this connection a suggestion of a simple manner of utilizing the tidal power may be valuable. The turning of a turbine wheel by the incoming and outgoing tide would be easily practicable during the time the tide was ebbing or flowing, and to insure the power while the tide was at its hight it would only require an additional empty basin to receive water while the tide was thus stationary, and the reserve of a basin to be emptied while the tide was out and stationary.

The construction of these basins would be the chief expense of the operation aside from the wheel and pumping machinery, as the work could all be make automatic or there might be an attendant. The importance of the work in the New Jersey swamps would be sufficient to warrant the employment of an attendant at nights, and another during the day, and a systematic prosecution of this work. The 250,000 acres of land which could here be brought into service as the best possible for market gardens, would bring an enormous income to the association which perfects the work. These additions to the industrial operations of the country will be absolutely required by and by.

Field Crops.

THE TOBACCO PLANT.—No. 4.

E. R. BILLINGS.

SELECTION AND USE OF FERTILIZERS.

THE tobacco plant, (more particularly cigar varieties,) requires the most fertile soil attainable. If not made fertile by the Creator then the grower must make use of manure in no stinted measure. Tobacco takes from the soil its most fertile elements and, like the grave, cries "give, give." We find, because the early Virginia growers did not so do on the rich soil of the old Dominion, that repeated crops soon laid waste their fields, and the fertile valley of the James became as barren as the sand flats along Cape Cod. In New England from 10 to 12 cords of manure are applied to the acre, or some 60 loads. In the South patent manures are used, as is also the case in Cuba, though in the latter the leaf is said to be injured in flavor by so doing. In Syria where Latakia tobacco is grown, the dung of goats is used, and a fine leaf for the pipe is secured. In Japan liquid manure is used in the cultivation of some five or six varieties grown in that country. In nearly all countries the tobacco ground is heavily manured. In Mexico when the Indians grow the plant, they select a rich clearing in the woods, thereby obtaining fine plants.

Of the great variety of fertilizers used doubtless the excrements of animals are the best and do not permit the soil to be so readily impoverished. Horse manure makes the lightest-colored leaf, and hog manure the darkest. Tobacco stems—four tons to the acre—produce a dark leaf of good texture and grain. Of the patent manures we have nothing to say, as we do not believe in their use on tobacco lands although from 300 to 500 pounds of Peruvian guano to the acre will doubtless give a good color to the leaf.

Tobacco stems may be applied, half at least, in the fall, and the balance in the spring. Stable manure should be thoroughly composted and plowed under and replowed to the surface afterwards, if thought best. When Havana seed tobacco is planted this will be the better way no doubt. Manure is also applied in the hill to hasten the growth of the seedlings. Clear manure is the best, free from all litter of any kind, not that such matter injures the plant, but only that the genuine article will produce the finest plants.

Some growers use the same field for several years in succession, claiming that a finer leaf is secured by so doing. I have seen planters try to grow a crop of tobacco without the aid of very much manure, but they have never succeeded. Doubtless some varieties require more fertilizers than others, but there is no sort with which I am acquainted that does not need a large supply in order to yield fine leafy tobacco. Formerly in New England growing crops were used to help enrich the soil, and there are some growers that do so now. Usually rye is the favorite crop to turn under, and when it is sown very thick it answers the double purpose of plant food and affords moisture. Decomposed manure is necessary for the immediate growth of this sturdy-growing plant as well as for all plants. Green or raw manure cannot be made available

for plant-food until it begins to decay. The tobacco usually matures in from 10 to 12 weeks, and it is necessary that the young seedlings should be provided with plant-food in the right condition in order to give them a "start," as old tobacco growers say.

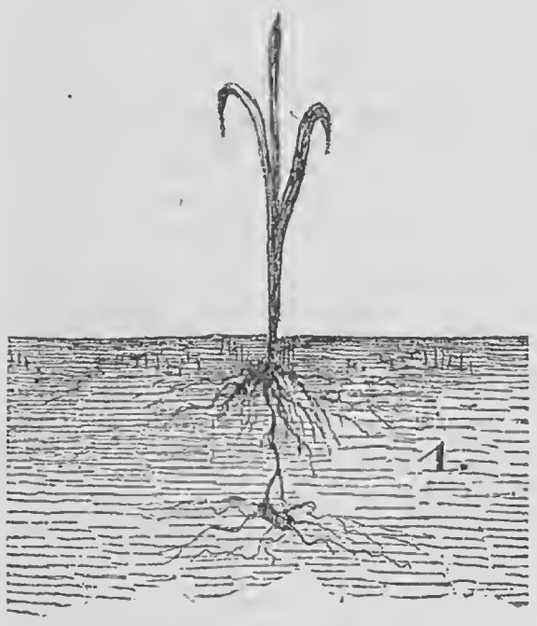
The Massachusetts growers, a few years since, tested very many kinds of fertilizers, such as cotton-seed meal, Indian meal, &c., and in some instances with considerable success. I would not recommend, however, the use of any great amount of fertilizers of the latter kinds by way of experimenting, until the grower is satisfied that his land is adapted for the use of such manure. Old tobacco planters say, and with truth, that stable manure is the best plant-food attainable, and years of trial with this and all other fertilizers help to convince our growers of the truth of the assertion. I know of but one other article used that will approach it, and that is tobacco stems! When used wholly to grow the crop, or in part, fine large leaves are obtained, and the results everyway seem to be the same as when grown with ordinary farm manure. The fertilizing of the tobacco ground is one of the most important things to be considered, as the application of plant-food will determine the quality of the crop. No one in New England should think for a moment of raising the weed without a heavy dose of some kind of manure. All who think otherwise are not at all acquainted with the habit of the plant and the enormous demands it makes on the fertility of the soil.

THE FALL WHEAT CROP.

BY A JERSEY FARMER.

THE WHEAT PLANT.

ALTHOUGH the majority of farmers do not find the wheat crop profitable, yet there is no way of avoiding the necessity for growing it. Fall grain of some kind is at the foundation of our system of agriculture, for it is the best preparation for getting the land into grass again. Besides, wheat is the "staff of life;" and what would the world do without its bread? What is necessary to be done should always be done in the best and most effective manner. If, then, the wheat crop is a necessity in our system of agriculture, it should be grown by the best possible methods. Thus grown, it may be made



1.

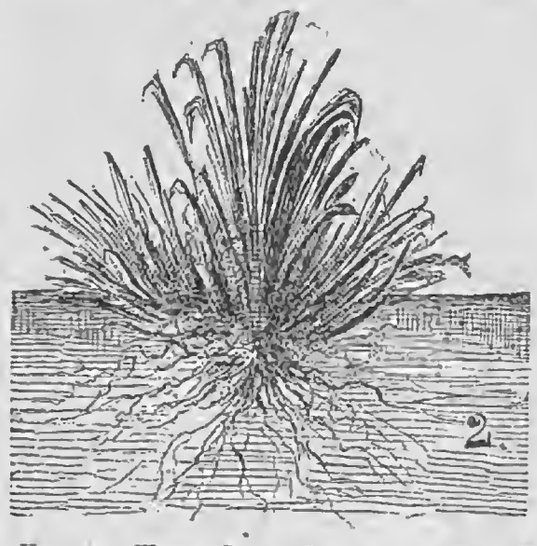
YOUNG WHEAT PLANT.

profitable even at present low prices. For the thorough understanding of the best system of wheat culture, the character of the wheat plant should be well understood, and it well deserves study. Wheat belongs to the family of grasses, and to that variety of them known by the botanical name of Triticum. This variety has a habit of spreading from the root as is well known in winter wheat and the related species, the common Quack-grass; although the manner of growth in these two differs somewhat in character. If a young wheat plant is carefully removed from the ground it will be found to have two sets of roots, one of which springs from the seed, and the other from a bulbous enlargement near the surface of the ground. As the latter set grows and becomes vigorous, the former dies away, and the plant depends for sustenance upon the surface roots.

The manner of root-growth is shown at Fig. 1. Here the young plant is just appearing above the ground; and having exhausted the nutriment furnished by the mother seed, is pushing roots here and there in search of food in the soil. Just here might be remarked the necessity of furnishing this needed food, of an exactly right and of the most available kind just at this important moment. As the plant grows, the well-known process of "tillering" is accomplished by the throwing out of offsets from the main root as shown at Fig. 2. Each of these offsets soon becomes an independent plant, which throws out a set of roots for itself, and which may be separated and transplanted if desired. This new plant also pushes out independent offsets of its own accord, and *if the growth is vigorous and there is room enough*, these offsets again push roots and other offsets, and so the plant increases very rapidly until the ground is fully occupied. But it is now that we should prepare to meet

THE DANGERS THAT MENACE THE WHEAT PLANT.

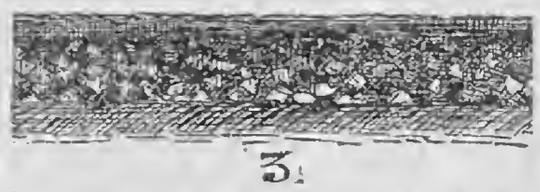
The first and most frequent danger is the improper condition of the soil. If the soil is not



2.

VIGOROUS WHEAT PLANT LATE IN THE FALL.

in such a condition that the roots can grow and spread safely, the plant is weak from the beginning. For instance, a soil that has been plowed at this season cannot help but be cloddy and uneven in texture. If the soil is then but lightly harrowed, the seed sown and harrowed in and the surface then rolled as a finishing operation, the seed has a hard time of it. The young rootlets need to be furnished with a fine mellow bed in which to grow; if there are clods and air spaces in their way, they cannot penetrate the one and they dry up in the other. A soil prepared as above mentioned, will be in the



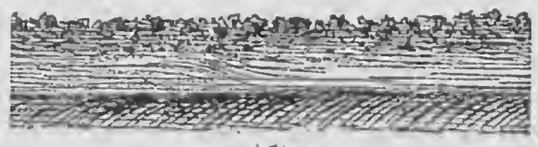
3.

A PLOWED SOIL ROLLED, BUT IMPERFECTLY HARROWED.

condition shown at Fig. 3. The surface will be fine and hard packed, but below this there will be a mass of lumps separated by interstices. The seeds deposited in these will either remain dormant or they will sprout to find impenetrable clods just above them, opposed to the passage of the spires; or the tender rootlets will perish by exposure to air in the open spaces and many plants will be abortive. Those which survive will be met by a hard, beaten, baked, surface impenetrable to air and to moisture; through which they will emerge with difficulty, weakened and injured. This condition of the young growth is more frequent than is suspected.

If, however, the soil had been rolled and then thoroughly harrowed, the mellow soil would have been worked down through the clods, and have filled the spaces between them, while the hardest and the largest of these would have been brought to the surface. The soil would then appear as at fig. 4, furnishing a perfect seed-bed and an open, loose soil, through which air and moisture, with consequent warmth, could penetrate in all directions.

It is useless to spend time in discussing the need for proper and sufficient supplies of plant-food. "That goes without saying." The wheat plant cannot feed upon raw, undecomposed food. It must be fit for immediate digestion and assimilation; and there is no other that can surpass in value thoroughly well decomposed stable manure, aided by a liberal addition of fertilizer,



4.

A WELL-HARROWED SOIL.

containing potash, nitrogen and phosphoric acid. Lime, in many soils, will be very acceptable. Our worst of all insect pests may be circumvented by giving vigor to the growth and enabling the plant to throw out new offsets for those injured or destroyed by the new industrious and frequent Hessian fly.

THE EFFECTS OF SURFACE WATER

seriously endanger the best sown crops. When frosts arrive, the surface soil is at first lifted from that below it by the expansion of the water contained in it; and as the cold penetrates

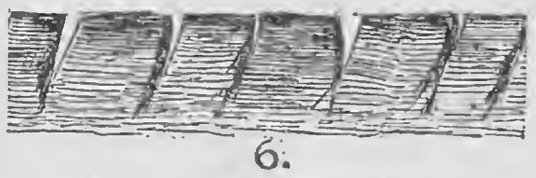
5.

SURFACE HEAVED BY A LIGHT FROST.

deeper, the soil is cracked perpendicularly into innumerable fissures. A surface frost acts as is seen at fig. 5; a deep frost acts as shown at fig. 6. Think for a moment of the effect of such a disturbance of the soil upon the roots as shown at fig. 2. In the first case, the plant is either torn bodily from its roots, or the roots are drawn out of the under-soil just so much as the crown of the plant is lifted. *These roots can never return to their place again.* The consequence is, a few such light frosts draw the weak plants with shallow roots completely out of the soil, and leave them naked upon the cold ground to die; or they rupture the fibers and entirely separate the plants from their roots. But a strong plant with abundant roots will be able *to lift up the soil with its roots*, just as in weeding we frequently pull up the roots and ball of earth together when a weed is strong and vigorous; and it will then resist the frosts successfully. When severe frosts occur, the weak plant succumbs in another way. The ground being fissured as shown at fig. 6, the root fibers must necessarily be ruptured, and the weak plant will be deprived of the most of its food gatherers. But the strong ones can stand this treatment even though they may suffer rupture of the roots. This rupturing process will tend only *to separate the individual offsets to make distinct plants of them.* Thus no harm will happen to the crop well sown, upon well-prepared fertile soil, excepting under very unusual circumstances, which would entirely destroy a weak crop.

BROADCAST AND DRILL SOWING

differ most in the depth to which the seed is deposited. This is a very material point, as may



6.

SURFACE SPLIT BY DEEP FROST.

be seen on reference to the annexed illustrations, figures 7, 8. At Fig. 7 is represented some seed sown broadcast; at Fig. 8 the drill-sown. Understanding the manner of growth of the wheat plant, and the effects of frost upon it, it is obvious and indisputable, that the broadcasted seed must suffer the most from the dangers incident to the winter season, and must be wasteful of seed, because some of it cannot grow in the best manner and must fail to thrive; at the same time many plants will be prevented from effecting their natural tendency to tiller and spread, because they have not room for it; while others will have more room than they can occupy.

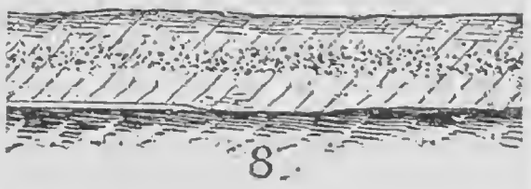
7.

BROADCAST SOWING.

However something of this matter must be left for the reader to deduce for himself, and this point may well be left.

METHODS OF DRAINING

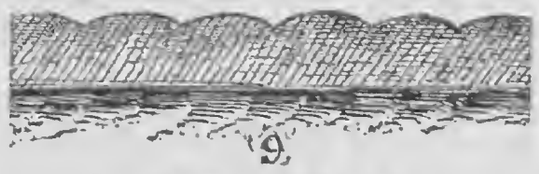
are very important. But where land is not already well drained naturally, or by means of tiles, it is useless to refer to the escape by these means from dangers which menace the wheat crop. A substitute for thorough drainage may however be found. This is by plowing the land



8.

DRILL-SOWING.

in ridges. It is an old fashion, but a good one; and if rightly done, may not interfere with the after use of the reaper or the mower. The appearance of a ridged field is shown at Fig. 9 These ridges may be made 11 to 22 paces wide, or of such widths as may be found desirable for the character of the soil. A wet, heavy clay would require narrow ridges, and a better soil those of the full width. The ridges are made by throwing deep back furrows where the centers will come, and plowing lands of the width required, with each successive furrow rather shallower than the last one, so as to give a slightly rounded form to the land. When the



9.

RIDGES FOR SURFACE-DRAINING.

field has been sown and finished, the open furrows between the ridges should be cleared out neatly, with a round-pointed shovel, if need be, both to make a smooth channel for the water and an even slope from the ridge to the bottom of the hollow. For an 11-pace ridge the rise of the crown need not be more than six inches; and nine inches will be sufficient rise for a 22-pace furrow. It will be obvious to thoughtful persons, but others may need to be told, that the ridges should be made to run with the slope of the field, so that the water may run off through the open furrows. If the field has considerable inclination the ridges should not be made directly up and down the slopes, but diagonally across them, so as to give the least inclination to the furrows possible with effective surface drainage. This will prevent a too rapid flow and washing of the soil. It is some extra trouble to plow a field in this manner when the surface is uneven, but it will pay well, if only the good, workmanlike appearance of a field thus plowed is considered. To have the work well done, makes it look well, and there is the advantage of making the work the most effective.

Bergen Co., N. J.

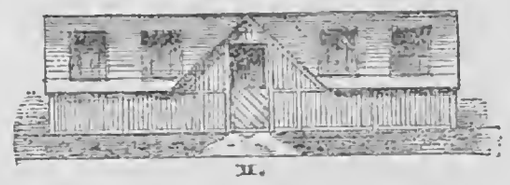
The Poultry Yard.

POULTRY BREEDING—No. 3.

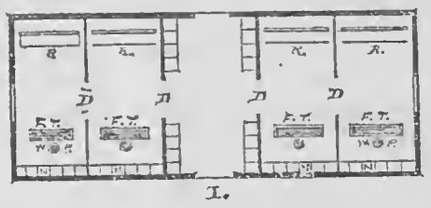
A. M. VAN AUKEN.

POULTRY HOUSES.

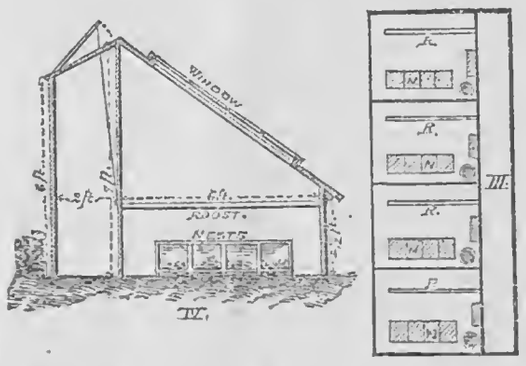
WE must have a house, in fact seven houses, in which to house our flocks, and as we are breeding for fowls and eggs for market, we can



II.



I.



IV. III.

afford no ingenious ventilators, no patent feed-hoppers or hens' nests, but all must be cheap and plain, though our house must be warm, well lighted and well ventilated.

First, I will describe our house for layers, which must also be the sitters'. Figure 1, is the ground-plan; it contains four rooms for layers and an apartment for sitting hens. Roosts are at R; F, T, is the feeding trough; W, P, is a common wooden water pail which we find to be the best water vessel; D, D, are doors; and N, N, are nests.

The roosts are of 2 by 4 scantling set flat-wise, with the upper edges rounded a little. In front of the roosts is a board partition coming up as high as the roosts, so that, in our monthly house-cleaning, we can mix the dirt with the manure and leave it under the roosts till spring. I prefer the roosts to be two feet from the ground.

The nests are made so that the hen enters by a covered passage in the rear of the nests, thus making them dark, which gratifies the hen's love of secrecy, and prevents the others from going into the nests to scratch and learn to eat eggs. The partitions are made tight for three feet, and above that are of strips two inches apart. The nests for sitters will be described in the article on sitting hens.

Fig. 2, is the elevation as seen from the south, of the house. It is built by setting posts in the ground eight feet apart, cut off three feet high; put a 2 by 4 on the top, and mortice another one in near the bottom, the same as you would for a picket fence, and set a post on each side of each door, as high as the door top. Fit your rafters on at a pitch of ½, and board them with surfaced lumber, then cover with tarred roofing; cover the sides and ends in the same manner. There are four windows in the roof, each made hot-bed fashion, 3 by 5 feet, and in each outside door is a sash. A strip of felt forms the gutter where the two roofs meet. The fence runs up over the roof, and lengthwise on the peak nail on pickets about three feet high. In the summer the doors are taken off and wire net doors take their places.

The breeders' house, is quickly described: the lenght is 20 feet and the width eight feet; it is divided into four apartments each 5 by 6 feet. The partitions are made of strips of 1 by 1½ inch pine, nailed two inches apart. The outside is of inch pine boards planed and battened, and the roof is of common matched flooring, and in each apartment is a 3 by 5 hot-bed sash in the roof. Ventilation is provided for by raising trap-doors in the short pitch of the roof. The fowls that go in the yards north of the house, pass through a movable box across the passage. No rafters are used in the building. In the plan, fig. 3, the nests are at N, and at R, are the roosts; the circle is a water pail, and by it is a feed-box, so that these may be filled from the passage.

The other house is just like this but it is only half the size.

Brown Co., Wis.

Pomological.

RIPENING AND MARKETING PEARS.

W. H. WHITE.

MOST SALABLE SORTS.

To ripen and market any product, especially pears, presupposes that we first produce such fruit in quality and quantity as to be worthy of such disposition. There is very little encouragement for the horticulturist, or for any one else, to produce and place on the market anything except a fairly good article—the greatest profit arises from superior products, well matured, and placed in market in an attractive form. Two or more specimens may be in most respects well grown or matured, and still be very unlike; and when offered as show samples, or for sale, the one will have precedence over the other in the eyes of the general public. A large or finely formed well-grown pear, unless properly ripened, will possess but little attraction either to the eye or taste; whereas, if the same be properly ripened, both these senses are gratified. Some varieties possess natural attractiveness to a greater degree than others, even when equally well matured and ripened, and such will frequently be preferred by the superficial observer and consumer, but the educated and experienced taste will sometimes see excellence underneath a somewhat unattractive exterior, and select accordingly. But in catering for the general public we can hardly be expected to educate and radically transform their taste at once, but we must take it as we find it and raise the standard gradually; therefore I say, that which possesses greatest attraction to the eye will generally be the thing sought; and this is true with regard to fruit as well as other things.

WHEN AND HOW TO GATHER.

Pears should not be allowed to ripen, but only to mature their growth on the tree, from which they must be picked at the proper stage—if we can determine that exact stage—and be ripened artificially. The exact time to gather the different varieties must be learned by observation and experience. Fruit of the same variety on the same tree matures at different dates and should not be all gathered at the same picking, but at different times as it becomes mature and is developed. Some varieties require to be taken from the tree at an earlier stage than others. A rule given and acted upon by many experienced horticulturists, is to "pick when the stem of the fruit will part from the spur without breaking." Either when the seeds have changed from a white to a brown color, or when the sugar begins to form, would be the most exact; and this time varies in different seasons, soils, condition of the trees, etc. etc. Pears always look better and sell more readily and for better prices when gathered with the stem entire, and for the same reason care should be taken that they are not bruised or otherwise disfigured. Therefore, when gathering or in any way handling them, this fact should be constantly kept in mind and acted upon. In gathering, carefully place the fruit, by hand, in suitable baskets—any bruise soon begins to decay, and will always show and detract from the value of the fruit.

STORING.

It is always best to assort the fruit at the time of gathering, especially if to be sold—large, medium, and small-sized should be placed in separate parcels and immediately removed to the place where they are to be kept, which may be any suitable dry room or place where light and air may be excluded from the fruit, and the temperature be kept at nearly an even standard. It sometimes occurs that there is in the market a kind of "glut" of certain varieties, and if they were held back a few days it would greatly relieve the market and enhance prices to the benefit of producers. As it is to the interest of these to arrange and create a continuous market, at remunerative rates, they should at such times place their pears in detention rooms where an even and low temperature may be maintained. Rooms suitable for this purpose may be arranged in connection with an ice house, say at one side or over it. The room should be double-walled—sides, doors, windows and roof—with air chambers between, all made tight.

ARTIFICIAL RIPENING.

All pears are superior when ripened at the particular date when they would naturally come to perfection, and in nature they do not retain this superiority long after such date; but by artificial means they may have that date delayed somewhat or hastened, yet they are somewhat less choice when these means are necessarily resorted to, especially if the difference in time is considerable. As a low temperature retards ripening, so also an increased temperature hastens or will cause premature ripening, so that fruit placed in the retarding room may be held till such time as better prices may be realized, while when fruit is to be disposed of as soon as ripe, it may be placed at once in a fruit-room where an even warm temperature is maintained, the warmer, of course, within reason, the sooner the ripening process is gone through. In all cases the fruit, while ripening, should be excluded from light and air, and the same precaution should be observed while it is held in the detention-room, as it is upon this measure that the color, firmness and, in part, the flavor depend. Frequent examinations of the ripening fruit, and the removal of the ripe ones, are also requisite. When it is necessary or desirable to ripen pears in perfection immediately after gathering, I find no better way than to place them in shallow boxes, drawers, or baskets in the fruit-room, excluding light and air from the fruit, and where a temperature of 50° to 60° may be maintained. This treatment brings out color and flavor. With care in gathering, handling, etc., I find that such management is all that is necessary in ripening summer and autumn varieties.

TREATMENT OF WINTER VARIETIES.

Winter varieties demand special treatment. They require to be left on the trees as long as the leaves remain green and healthy, or as long as they are safe from frosts. Different cultivators pursue different methods of treatment subsequent to gathering. Some pack them in close packages, as barrels, boxes, etc., and place these in some cool and dry place, such as the north side of a building or wall, etc., covering them with loose boards or the like, to shed rain. Here they remain till hard frosts come, when they are removed to some building, such as a barn, where they remain until it is decidedly cold, some straw or hay being thrown over the packages. Pears will bear 15° of frost without injury if kept in close packages, and if light and air are excluded and they remain undisturbed. Others place them in the cellar a day or two after being picked, while others, again, follow some course slightly different. I consider as good a plan as any is to assort them as gathered, place them in barrels or boxes, put these in the coolest and driest part of the barn, and there let them remain till the market is ready to receive them, or as long as it is safe to risk frosts, and I wish to remove them to the cellar. I do not like to have them become frosty, and so place them in a cool, dry cellar. If such a cellar is not available, a room can be made above ground to exclude hard freezing; in such storage allow them to remain till they may be required for ripening or other purposes. Various contrivances, patented and otherwise, for fruit preserving, are now employed in different localities and by different individuals; but in our New England climate I think there will be little or no difficulty in keeping pears as here described. The main requisites seem to be, to have sound, well-matured fruit and then to keep it cool and dry, away from light and a free circulation of air. Well grown and mature winter pears, as a general thing, will ripen perfectly in the cellar where the temperature ranges from 38° to 40°. If desirable to ripen them sooner, they can be brought into a warmer room where the temperature ranges higher but is still nearly uniform: here they will finish the ripening process finely.

PACKING.

As a rule, dealers understand the ripening of pears and prefer to have them before ripe. The better way, then, is to properly assort and send them to market in half-barrels, as the half-barrel package is generally preferred by dealers and others; such packages also sell more readily at better prices than those that are larger, while the freight on them is less than on boxes and crates. Should they be ripe, however, or nearly so, they will bear transportation better in small boxes or crates. Appearance goes a long way in our every-day life, so attractive packages aid largely in selling in market. New, clean barrels, boxes or crates, as the case may be, should be used for packing and sending them to market in. So put up, they will find a much readier sale at much better prices than when old or soiled packages are used.

Assort your pears carefully, putting fruit of only one variety and even quality in the same package, and have them even throughout. Establish a reputation so that your brand shall be a guarantee of excellence and command confidence. When the fruit arrives at the proper stage for packing and shipping, take a suitable barrel; knock off the hoops and remove the bottom; line it throughout with unsized white paper, as it will give the whole a much better appearance; pack your pears—one at a time—as close as they will lie on their sides, layer by layer on the head, till the barrel is one-third full; then gently shake it to settle the fruit closer. Continue packing as before, shaking three or four times till the package is full, so that when the bottom is pressed in it may come in close contact with the last layer; cover with the paper, place and press in the bottom, and drive the hoops on; then drive in three or four nails so as to hold the hoops and bottom in place.

MARKETING.

The package should then be marked 1, 2 or 3, according as the quality may be, so that your consignee may know without opening what the quality is. Always advise your consignee by letter of the number and quality, etc. of fruit packages. If the fruit is choice, half-barrels are decidedly preferable for packages. If one lives near market, and so desires, he can ripen his fruit and take it to market himself in baskets, which should always be lined with white paper to give their contents an attractively inviting appearance. I would advise lining all packages, whatever their shape may be, with white paper; and this should be done, whatever the quality of fruit sent to market. Make *all* the fruit in the same package *alike throughout, no facing* or the like whatever; and always mark the packages with your initials or brand, as well as with a figure denoting the quality of the fruit they contain. They should also have on them the name and address of the consignee in plain letters. Minor details, when attended to, often make the difference between a profit and a loss.

Worcester Co., Mass.

THE ORANGE IN CALIFORNIA.

WM. C. L. DREW.

VARIETIES.

The cultivation of the orange in California has deservedly attracted much attention, not only as a source of profit, but as an adjunct to the beauty of the home surroundings, the farm and the vineyard.

There is nothing that excites the attention of the cultivated and refined like an orange grove, whether in fruit or in blossoms, feasting the eye with its beautiful contrast of bright evergreen foliage and snow-white blossoms or golden fruit.

This article is not written to give the *modus operandi* of cultivating the orange, but to give a short description of the several varieties. I will first introduce the most numerous class.

SWEET ORANGE, CITRUS AURANTIUM.

This class is composed of numerous varieties, from which I shall select a few of the most distinct types. Just as in other fruits, I am of the opinion that many of the so-called varieties are not entirely distinct. All practical cultivators know that a fruit of any variety, under favorable conditions, will become more highly developed or perfected, both as regards size and flavor, and as there is no fruit more affected by local circumstances than the orange, which is affected not only by soil and situation, but also by age, it is presumable that the characteristic qualities of many of the so-called varieties are the results of some local circumstance and not the result of hybridization, by which new strains or varieties are originated. It is for this reason I shall confine myself to distinct typical varieties.

St. Michael Orange.—This is an excellent and favorite variety, being in great repute among orange growers. Where grown under favorable circumstances, it is sweet and delicious; but in uncongenial localities, it becomes deteriorated and inferior. The fruit of good size has a very thin skin, smooth and brilliant in color. Where grown in favorable situations it is very prolific, incredible numbers of good oranges having been gathered from one tree in a single season. It is not as hardy as many other varieties and requires some protection even in our most favorable sections.

The Naval Orange.—This is a popular variety. It bears fine, large fruit, is frequently seedless. It is also propagated under the name Bahia, but can always be distinguished by a naval-like scar when the blossom drops off. In flavor it has no superior. It is not a prolific bearer, but always produces fine fruit. It is rather tender and requires to be planted in a well-sheltered situation.

Siletta Orange.—This is a general favorite, and one that should be well represented in every orange grove. It is known by two other cognomens, viz:—"Cluster" and "Prolific" orange—the former name indicates the manner in which the fruit is produced in bunches or clusters, the latter is derived from the prolific manner in which it bears. It is one of the hardiest varieties grown on this coast. The fruit is of good size, superior quality and flavor, and very bright in color. On account of its fruitfulness it is a profitable sort.

Mandarin Orange.—The Dwarf Chinese or Mandarin Orange is cultivated both for ornament and fruit. It is a distinct species including several varieties. The trees are of dwarf growth, compact in habit, hardier than any other strain, bear very freely and while small. The fruit is of small size, flattened at both ends, and in flavor it is quite distinct from all other varieties. Trees of this kind, independent of their value for fruit, are very desirable for embellishing front yards and ornamental grounds, or for planting in shrubberies where they are highly effective.

Coolie Orange.—This variety is a close relation to the last mentioned. It forms a beautiful, symmetrical tree, with a fine, round head. Fruit small, similar to the last, but with a somewhat thicker skin, flavor excellent. When in full bloom, the tree presents an imposing appearance.

Paramata Orange.—This is one of the commonest varieties, being grown very extensively in all orange-growing sections of the world. It is very hardy, bears abundantly, and the fruit is of medium size and well-flavored.

Konah Orange.—This is a comparatively new introduction. The tree is an exceedingly vigorous grower, fruiting early and bearing regularly and heavily. The fruit is of good size, of an exceedingly fine flavor and of a handsome color

Acapulco Orange.—This is a standard variety, having no rival. The tree is a strong, vigorous grower, hardy and a good bearer. The fruit is of large size, very symmetrical and beautiful in form and color, and of an excellent flavor.

Maltese Orange.—The Maltese or blood orange, so named from the color of its flesh, is only worth growing for sake of variety. The flesh is blotched with red stains. It is an abundant bearer and very hardy.

Bouquet Orange.—This is a variety grown principally for its blossoms, for which it is highly esteemed. The fruit is worthless: it is hardy and of a symmetrical growth. It produces abundance of very fragrant blossoms.

Pumalo Orange.—This is grown only as an ornament. Fruit very large, showy, pear-shaped, but inferior. An exceedingly handsome tree when in fruit.

BITTER ORANGES

are now considered as quite distinct from the sweet. Of the Bitter orange—Citrus vulgaris—there is only one variety generally cultivated, namely the

Seville Orange.—The fruit of this variety is principally used as a conserve, being too bitter to make a palatable desert. Large quantities of it are used in making the candied peel of commerce and in making marmalade. It is grown principally, however, for the blossoms, which are used in making perfumery: The orange water of the perfumers is almost entirely the product of the flowers of this strain. It must not be supposed that the sweet orange blooms are not used, but they yield the essential oils in much less quantity than those of the bitter.

In the foregoing list I have neglected to mention the Mediterranean Sweet, the Los Angeles, the Mission, the Exquisite, and many other varieties in cultivation in the orange groves of California.

El Doraldo, Cal.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

A PLEA FOR ALTHÆAS.

More properly called Hibiscus in botanical phrase, these old-fashioned shrubs also delight in the lovely and ancient name of Rose of Sharon. Time out of mind Althæa hedges have surrounded gardens and lawns. Their characteristics have consequently become so familiar as to possibly detract from their real value in our eyes. Is it this, or something fairly attributable to the plant. True, the flowers are wanting somewhat in delicacy, but their tints are rich and varied in the most attractive manner. If there is a certain downright appearance of the stem, a little general coarseness not exactly suggestive of grace, the foliage has, on the other hand, a fine, bright hue and curious outlines. Sometimes, moreover, the leaves are so strikingly variegated with white as to draw forth expressions of delight from experienced horticulturists, who have just left much rarer plants with but passing notice. Perhaps, such a peculiar combination of qualities makes a really fine appearance suggest something odd and not quite graceful. Be that as it may, the Althæa is a most valuble shrub, especially in August when flowers are scarce. A vigorous habit also enables it to produce strong, compact hedges, useful as well as ornamental. Its individuality is certainly marked, so much so as to prevent a harmonious combination of its color and form in groups of other shrubs. I have always, therefore, preferred to see the Althæa standing singly or massed with its own kind.

THE WEEPING OAK.—QUERCUS PEDUNCULATA PENDULA.

This oak is well-known for its fine weeping nature, glossy foliage, and other choice qualities peculiar to the genus. It is by no means common, however, requiring a skilled grafter to perpetuate its beauty. I have long known and recognized its exceeding beauty and grace, but to-day one of its traits has been impressed upon me as never before, viz: Vigor of growth. The Oaks as a genus are not celebrated for rapid growth. They are sturdy, rugged, and attain, in time, massive size; but, as a rule, they grow slowly while young. Indeed, a purple oak—which, by the way, is also a variety of *pedunculata*—has been known to take ten years to grow less than two feet. To-day, however, I have seen a Weeping Oak, grafted during the spring of 1878, that had up to the present date in August, made a new growth of five feet, and that, too, on light, gravelly soil where other trees have thriven but poorly. The Pyramidal Oak can alone in this genus, as far as known, offer any parallel to this.

THE JAPAN DOGWOOD.—CORNUS BRACHYBOTRIA.

The variegated form of this Dogwood was first recognized and valued in America for the the remarkable permanence of its white shading, which, on other kinds of trees, fares so badly under our summer suns. Latterly, however, the parent stock, C. Brachybotria, has been imported for the purpose of propagating the variegated kinds by grafting. The habit of this shrub has proved vigorous and hardy, and remarkable for the broad layer-like masses of rich leaves, which grow very much after the manner of the American Dogwood, C. florida. Jus

now, in mid-August, the foliage of the Japan Dogwood is specially notable for its fine shading of purple on the decaying leaf. The whole firm, glossy surface is either suffused or mottled with purplish hues in a very effective manner.

RUSTY APPEARANCE OF HORSE-CHESTNUTS.

The Horse-chestnut is a tree that often fails to retain its beauty of foliage even in August. In June, arrayed in bright green, with the softest and roundest outlines, and studded with clusters of red or white flowers, nothing can be more beautiful in its way. But the beauty passes too soon. It is for this reason that we would give the palm to the Norway Maple as a shade or lawn tree, although in June it would be very difficult to choose between them.

THE DWARF CATALPA.

This has been termed, botanically, Catalpa Kæmpferi, and although comparatively well-known, fails of the reputation it deserves. For soft, rounded outlines and delicate shading, during late summer and fall, on a remarkable foliage, it deserves special mention. Lawn planters should employ it largely to accomplish effects produced by round-headed plants, for which purpose, among shrubs, it is quite as valuable as the Horse-chestnut is among trees.

Flushing, L. I

Floricultural.

NOTES FROM THE RURAL GROUNDS.

HIBISCUS MOSCHEUTOS

Though everybody admires flowers, it must be supposed the great majority of people know little or nothing about them. The above flower is now in bloom, and we hear passengers in the rail-road cars, struck by their extraordinary showiness, ask what they are and if they could be cultivated in gardens, and we have been asked such questions a dozen times or more within the past week during our time-wasting journeys to and from the Rural office. The meadows through which we pass, are now beautiful gardens of wild flowers, most brilliant and striking among which is the Swamp Rose-Mallow. Here and in similar places along the coast they have bloomed for many years no doubt—their brilliancy always admired and year after year provoking the same earnest questions. But the curiosity thus excited must die out with the flowers, for we have never seen them in any garden besides this, and know of few instances of their cultivation ever being attempted. The flowers vary from white to a bright purple rose—some with, others without a dark eye, and some with a pure white eye. We have just spread out and measured a flower that is exactly nine inches in diameter!

Some authorities have it that these plants do better in swampy land than in dry situations. But we have them in both raised from seeds, and and those in the high situation are the finest. They are more dwarf and compact, the flowers are larger and the leaves more enduring.

The leaves and stems are annual and the roots perennial. They are easily raised from the roots or from seed. In the meadows the flowers vary from a deep rose to white, as we have said. But under cultivation very likely their variation would prove greater. It is our intention to send and gather a quantity of the seeds this fall, in which case those of our friends who so desire can raise seedlings of their own.

PELARGONIUM "WONDERFUL" AND ABUTILON DARWINII.

Mr. John Saul, of Washington, D. C., sent us this spring a large variety of new or rare plants. It was our misfortune to lose many of them by the hard, late frost, about which so much was said in the Rural New-Yorker at the time. Among the survivors, however, is Abutilon Darwinii, a distinct and attractive plant with large, reddish flowers, similar to those of A. Boule de Neige in shape, though larger. The popularity of Boule de Neige seems to have awakened florists to an appreciation of Abutilons in general—an appreciation that is surely well-deserved. Easy to cultivate, very gay in their profusion of blossoms, adapted alike for the flower-bed, conservatory or window, their free beauty is secured with little trouble. Among Mr. Saul's plants was the Pelargonium "Wonderful," sent to us also by Mr. Henry Hales. It has been advertised extensively in England as one of the most profuse-flowering Pelargoniums known. And we have found it so to be. The flowers are double—the habit dwarf. Very small plants send up numbers of flowering stalks, and before these have ceased blooming, others are ready to take their places, until it would seem that the little plants would bloom themselves to death.

Dairy Husbandry.

DAIRYING AND SOIL IMPROVEMENT.

E. W. STEWART.

MILK AND CHEESE PRODUCTION.

I have had occasion to point out how dairying may deplete the soil on which the cows are fed, that milk is rich in nitrogen and mineral constituents. A cow that gives the moderate quantity of 4,000 lbs. of milk per year, would abstract from the soil, in her milk alone, 26 lbs. of ash and 24 lbs. of pure nitrogen in the 160 lbs. of caseine. If the milk were sold this would all be lost to the soil; or, if made into cheese, the mineral constituents, as well as nitrogen, will be mostly carried off in the cheese. The depletion is much greater in feeding milch cows than in fattening steers or cattle. If we are to suppose the steer to gain an average of 300 or 400 lbs. live weight per year, and then compare this with the moderate average we have supposed the cow to produce in milk, we find the steer only involves a loss of three to four lbs. of mineral constituents and about three lbs. of nitrogen. It will thus be seen that if the milk be sold, it will involve many times as much loss to the soil as in growth of the fattening steer. Whatever the steer eats more than sufficient to supply the elements of his growth, goes back to the soil in the manure. This explains the foundation for the opinion, quite prevalent, that dairying is more exhausting to the soil than beef raising.

But all dairying is not thus exhausting to the soil. Commercially the most valuable element of the milk is the cream. When cream is the only element of the milk sold, and all the rest is fed to pigs or calves on the farm, it takes little or nothing of value in the butter, for that contains no mineral matter, no nitrogen—it is merely carbon and water, which may be replaced from the atmosphere.

BUTTER DAIRYING.

This is not exhausting to the soil, as the mineral matter is all contained in the skimmed milk as well as the nitrogen. Butter has been the principal manufactured product of the dairy in the United States, as there are only 300,000,000 pounds of cheese to 700,000,000 pounds of butter made. The American people are said to be the greatest butter eaters in the world, and the home market is immense. There can be no doubt that the export butter-maker receives the best remuneration for his labor and capital; and, since this branch of dairying also keeps up the fertility of his soil, there is much to recommend it. The best article brings double the price of the common article and really costs no more, and probably less, than the poor article. For the dairyman, who has studied the business enough to know how to make the best quality of butter, has also studied the selection and feeding of cows, so as to produce the best yield of milk. And he thus produces more butter from the same food, and consequently produces butter at less cost per pound, besides its quality rendering it doubly valuable in market. The skimmed milk, being fed to pigs and calves, makes rich manure which goes back to the soil, and what is lost is only that which is assimilated into the body of the young animal. Let us see, on scientific principles, what fertility is lost in feeding refuse milk to pigs and calves.

REFUSE MILK FOR CALVES AND SWINE.

If we take a pig six weeks old, that weighs 20 lbs., and feed that pig skim milk for 200 days and increase his weight 200 lbs. it will require, on the average of pigs, 3,000 lbs. of milk to make this growth, or 15 lbs. to the pound of growth. The 3,000 lbs. of refuse milk will contain about 22 lbs. of ash constituents, and the 200 lbs. growth on the pig will contain only two lbs. of mineral matter, the milk will contain 18 lbs. nitrogen, and the 200 lbs. growth of pig, less than two lbs. of nitrogen, so that the loss in fertility from feeding the skim milk to the pig will be very little, provided the manure is all saved and applied. The result will be about the same on the calf, but requiring more milk to make a pound growth. We do not estimate the fat formed in the pig, because this contains no mineral constituents and no nitrogen. It is easy to keep up the fertility of the soil in butter dairying.

Miscellaneous

MIXED FARMING.

I am an advocate of mixed farming. I believe it better for a farmer to depend on several crops for his money than on one alone; for, how often does some particular crop become a complete failure? Then where are the funds coming from to meet store bills, pay taxes, the minister and printer? Some years there is so much of one product raised that it is very low, and if you happen to depend wholly on that crop, where are you then?

Now if you practice mixed husbandry it is entirely different; for you are almost certain of some crop selling for a good price; hence, you can be on a surer footing than if you raised simply one kind of crop, especially if your capital is limited; for then you cannot afford to wait until another crop can grow: accordingly I believe it always the surest and best plan, for the young farmer especially, to grow a variety of crops. The most independent farmer is the one who has more than one crop to depend on. The farm is a place where all the different varieties of food can be raised, and it seems to me the object of the farmer should be to grow all, or nearly all of such kinds of food as he will need to consume in his family and feed to his stock; or, in other words, let nothing be bought that can be grown on the farm at a fair cost.

If we can raise wheat at 80 cents per bushel, can we afford to buy it at $1.25? or, if we can raise our pork at $5 per hundred, can we afford to buy it at eight cents a pound? Let a farmer who has practiced mixed husbandry for a term of years, turn his attention to, and labor wholly upon one crop, and if he does not deny himself some of his customary luxuries I shall be very much mistaken. F. H. D.

Meadowbrook Farm.

WHAT OTHERS SAY.

American Pork.—The London Farmer says, on the authority of the Deutche Fleischer-Zeitung, that two butchers, in a large way of business at Cologne, have come to America with the intention of buying up here and taking over for home consumption a cargo of two thousand pigs. Their calculations are said to be based on the assumption that the current price on large transactions ranges from 3 to 3½ cents per lb. live-weight, at which figure there is room for a handsome margin of profit, after making liberal allowance for all the heavy expenses and risks beyond the mere purchase of the "raw material." Our contemporary is, however, inclined to doubt the wisdom of the speculation, owing to the apparent omission of one important element in the enterprising butchers calculations. It is now an established fact that American pork is far less free from trichinæ than the flesh of native pigs; popular prejudice runs high against it, and the official inspections of the meat are now so rigorously and systematically carried out that there is very little chance of any of it finding its way into consumption if not altogether above suspicion, as has previously happened with consignments from America on more than one occasion.

Much or Little Manure?—Mr. W. J. Fowler, in the Country Gentleman, speaks of the common theory with writers on agriculture, viz., that if soil is made very rich there is a constant tendency to loss of fertility by leaching or evaporation. On heavy soils with retentive subsoil, he has never experienced any serious difficulty from this cause. His observation and experience show that thoroughly enriching the soil is not only profitable, but the most permanent improvement that can be made. "Apply little manure and often," is the advice usually given. Rather manure thoroughly as fast as you can is his advice. As for the permanence of heavy manuring, Mr. Fowler instances a knoll in one of his lots where forty or fifty years ago stood a house and barn. That knoll has been cropped without manure thirty years or more, and still that old barn-yard is the richest part of the field, though other portions have been manured on the "little and often" theory at least five or six times. It is a question in his mind whether it would not have paid better to apply these several small dressings in one—make it as rich as the knoll and then leave it without further manuring, except clover, till the soil needed it.

Shingles and Shingling.—Cheap spruce shingles, says Col. Curtis in the Weekly Tribune, are not worth the cost and trouble of putting down. The best of sawed pine shingles may be had now for $4 per thousand. He had a man shingle a large barn once who insisted one nail was enough for a narrow shingle, and after a few years every high wind would blow them all over the farm. A leaky roof soon followed, and a new one. Two nails should be put into every shingle, and wide ones ought to have three or more. They ought not to be driven near the edge, and if the shingle is very narrow, the nails should not be put opposite each other, for a nail near the edge of a shingle will rust out and the shingle will get loose. A roof well laid will last many years longer than one put on in a hurry and by cheap and careless help.

Rothamsted.—Mr. Lawes' experiments, says a writer in the London Chamber of Agriculture, are now directed to ascertaining the grounds for the belief that the conversion of ammonia, when introduced into the soil, into nitric acid after a fall of rain is due to some living and obscure organism. But be this as it may, his remarks on the unceasing motion and circulation of ammonia in different forms through the earth and air, are very striking; while nowhere better than from the Rothamsted experiments can the farmer learn the fugitive, flighty character of this indispensable agent in its passage through the earth, and the "catch-you-when-I-can" efforts of the roots of plants to absorb it ere it passes out of their reach.

Clover.—In "The Grasses of Tenessee," a book to which we have lately referred, Mr. Killebrew says: "Upon whatever farm clover is grown in regular rotation, there will be found abundant crops, fat stock and improved husbandry." He deems it the main pillar of Tennesee agriculture, and says that it is worse than folly to attempt to make farming pay for any number of years without it. "A farmer who is too poor to sow clover seed is too poor to own a farm, and however great may be his exertions (unless within reach of large towns where manures are abundant), if he does not sow clover, he is doomed to a hopeless poverty."

Polluted Water.—An extraordinary fatality from diptheria, etc., in one house and family at Finchely, is recorded by Dr. Saunders in a report recently presented to the Barnet Rural Sanitary Authority. The water used for drinking purposes was from a shallow well, and was polluted. Dr. Saunders mentions the case particularly, because he thinks it very desirable to break down the tradition that familiar odors, such as farm-yards and certain offensive trades, are harmless. The cases of diptheria which have happened through his entire district have every one been under the influence of impure air, although from sources not unusual, and, therefore, thought little of.

The Season.—It is well understood, says the Mass. Ploughman, that in our fickle climate, subject to frequent and severe droughts, crops of all kinds are subject to considerable risk from want of water; it is also well known that the best results obtained by the use of chemical fertilizers have been in moist seasons. Is it not, therefore more than probable that the reason for the common and general preference for yard manure wherever it can be had, is due to its capacity to hold water through a severe drought and yield it to the growing crops in time of need?

The London Gardener's Chronicle speaks of another Eucalyptus—E. citriodora: "Lovers of interesting rather than 'strikingly showy' greenhouse plants should make the acquaintance of the new lemon-scented Gum tree, Eucalyptus citriodora. It is a slender-habited plant, with oblong leaves, covered with glandular hairs, which when gently rubbed, emit a powerful odor, resembling that of the lemon-scented Aloysia. A native of Australia."

Something for Nothing.—Labor and material cost money, and they must be paid for, or somebody must be wronged. It makes no difference whether the business is selling groceries, or publishing newspapers, or anything else, if anybody attempts to give something for nothing, or to get something for nothing, he or somebody else will get his fingers burned sooner or later.—*Western Rural.*

Clearing Rust from Steel.—As difficulty is frequently experienced in removing rust from steel, we (Dublin Farmers' Gazette) submit the following mode as one of the best and simplest for brightening rusted surfaces:—cover the metal with sweet oil, to be well rubbed in, and in forty-eight hours afterwards rub with finely pulverized unslacked lime.

The Poultry Bulletin says that air-slaked lime, such as used for agricultural purposes, should be put where the laying hens can get at it at will, for they need it constantly in the process of egg manufacture.

CATALOGUES, &c., RECEIVED.

We beg to say that owing to the space given to Crop reports, we are obliged to slight our acknowledgments of Catalogues, etc., received, which have accumulated in the meantime.

The Summer meeting of the National Agricultural Congress occurs at New Haven, Conn., on August 27 to 29, its object being the discussion of papers and addresses relating to agriculture and agricultural economy. The programme will be arranged from day to day. The following gentlemen have accepted appointments to address the Congress: J. R. Dodge, Prof. Eug. W. Hilgard, John L. Hayes, Dr. C. V. Riley, X. A. Willard, Dr. J. T. Tichenor, Prof. Wm. H. Brewer, Dr. E. Lewis Sturtevant, Prof. W. O. Atwater, B. G Northrop, J. J. Thomas, Horace J. Smith, Dr. N. H. Paren, Rev. Wm. F. Clark, Prof. S. W. Shattuck, Ernest Th. Gennert. The Governing Board of the Sheffield Scientific School, of Yale College, have kindly tendered North Sheffield Hall for the meeting of the Congress.

Hon. Thos. P. Janes, Pres., Atlanta, Ga.
Jonathan Perian, Sec'y, Chicago, Ill.

Premium List of the 28th Annual Fair of the Vermont State Agricultural Society and Wool Growers' Association, to be held at St. Albans, September 10-12. Henry Clark, Rutland, Sec'y.

Premium List of the Thirty-eighth Annual Fair and Cattle Show of the Fairfield Co. Agricultural Society, to be held at Norwalk, Conn., September 10-13. Wm. D. Gregory, Sec'y.

Broome Co. Agricultural Society. List of Premiums and Regulations for the Eighth Annual Fair, to be held at Whitney's Point, N. Y., September 3-6. Milo B. Eldridge, Sec'y.

We thank the Secretary of the State Agricultural Society, of Wisconsin, Mr. George E. Bryant, for a copy of its interesting transactions for '77-8. 500 pages.

We have to thank Gen. Albert J. Myer, chief signal officer, U. S. A., for his annual report to the Secretary of War for the year 1877.

Illustrated Catalogue of Rural Books. O. Judd & Co., 245 Broadway. The catalogue is handsomely illustrated.

Wholesale Price List of Grape Vines, Fruit Trees, etc., offered by T. S. Hubbard, Fredonia, N. Y.

The Querist.

ANSWERS TO CORRESPONDENTS.

To Transfer Bees.

ANSWER BY PROFESSOR A. J. COOK, OF MICHIGAN AGRICULTURAL COLLEGE.

Young Bee-keeper.—Having several colonies of bees which he wishes to transfer from old box hives to new ones with moveable frames, asks for advice as to the best manner of doing so.

ANS.—The best time to transfer is early in the season, when there is but little honey in the hives, though it may be done at any time, if sufficient caution is used; still it should never be done except on warm days, when the bees are actively engaged in storing. After the bees are busy at work, approach the old hive, blow a little smoke into the entrance to quiet the bees, then carry the hive off a few feet, and turn it bottom up. Place a box over the hive—it will make no difference whether it fits it close or not, if the bees are so smoked as to be thoroughly alarmed—and with a stick rap on the lower hive for about twenty minutes. The bees will fill with honey and go with the queen into the upper hive and cluster. If towards the last we carefully set the box off once or twice, and vigorously shake the hive, and then replace the box, we will hasten the emigration of the bees, and make it more complete. A few young bees will still remain in the old hive, but these will do no harm. Now put the box on the old stand, leaving the edge raised so that the bees which were out may enter, and so all the bees can get air. If other bees do not trouble, as they usually will not if busily gathering, we can proceed in the open air. If they do, we must go into some room. I have frequently transferred the comb in my kitchen, and often in a barn. Now, knock the old hive apart, cut the combs from the sides, and get the combs out of the old hive with just as little breakage as possible. If transferring in spring, a good plan would be to saw the combs and cross-sticks loose from the sides, turn the hive into the natural position, then strike against the top of the hive with a hammer till the fastenings are broken loose, next lift the hive, and the combs are all free and in convenient shape for rapid work.

We now need a barrel, set on end, on which we place a board fifteen to twenty inches square, covered with several thicknesses of cloth. Some apiarists think the cloth useless, but it serves, I think, to prevent injury to comb, brood or honey. We now place a comb on this cloth, and a frame on the comb, and cut out the comb the size of the inside of the frame, taking pains to save all the brood. Now crowd the frame over the comb so that the latter will be in the same position that it was when in the old hive; that is, so the honey will be above—the position is not very important—then fasten the comb in the frame, by winding about all one or two small wires or pieces of wrapping twine. To raise the frame and comb before fastening, raise the board beneath till the frame is vertical. Set this frame in the new hive, and proceed with the others in the same way till we have all the worker-comb—that with small cells—fastened in. To secure the pieces, which we shall find abundant at the end, take thin pieces of wood, one-half inch wide and a trifle longer than the frame is deep, place these in pairs either side the comb, extending up and down, and enough to hold the pieces secure till the bees shall fasten them, and secure the strips by winding with small wire, just above and below the frame, or else tack them to the frame with small tacks.

Having fastened all the worker-comb that we can into the frames—of course all the other, and all bright drone-comb, will be preserved for use as guide-comb—and placed the frames in the new hive—these should be put together if they contain brood, especially if the colony is not very strong, and the empty frames to one side—we then place our hive on the stand, pushing it forward so that the bees can enter anywhere along the alighting-board, and then shake all the bees from the box, and any young bees that may have clustered on any part of the old hive, or on the floor or ground, where we transferred the comb, immediately in front. They will enter at once and soon be at work, all the busier for having passed "from the old house into the new." In two or three days, remove the wires or strings and sticks, when we shall find the combs all fastened and smoothed off, and the bees as busily engaged as though their present home had always been the seat of their labors.

Of course, in transferring from one frame to another, the matter is much simplified. In this case, after thoroughly smoking the bees, we have but to lift the frames, and shake or brush the bees into the new hive. For a brush, a chicken or turkey wing, or a large wing or tail feather from a turkey, goose or peacock, serves admirably. Now, cut out the comb in the best form to accommodate the new frames, and fasten as already suggested. After the combs are all transferred, shake all remaining bees in front of the new hive, which has already been placed on the stand previously occupied by the old hive.

Sprain in the Coffin-joint:

D. M. S., Martinsburgh, Va., asks how to cure a sprain in the coffin joint. "I have," he says, "a very fine young horse that has sprained himself in that joint. It happened about six weeks ago and he is still lame from it—is it permanently curable?"

ANS.—If you are correct in your opinion as to the nature and seat of the injury—and of this we have no means of judging—you should treat it on those general principles which are applicable to all sprains. Give the animal rest; throw the sprained part out of use by shortening the toe, and putting on a high-heeled shoe; keep the injured joint enveloped, as well as possible, with bandages soaked in cold water, vinegar and water, salt and water, solution of acetate of lead, or other cooling lotion; when the inflammation and soreness have disappeared, apply a blister, (cantharides 1 part, lard 4 parts) to the front and side of the pastern, but not to the back, because of the bad effects which sometimes follow a blister, on that part. We cannot inform you in regard to the probability of a permanent cure, as that depends upon the degree of the injury, upon its exact location and also upon the changes that have already taken place in the part. It is always a difficult matter to say what is going to happen in such cases when one has the animal under his eye—it is *impossible* under other circumstances.

The Use of Muck.

J. S. Ryan, Queens Co., L. I., asks as to the advisability of his using muck upon his lands, giving no other data.

ANS.—The value of muck varies in different places. All chemical analyses show that it is of no great manural value. Nevertheless, we have used it with unquestionably excellent results, and we know of others who have used it without much apparent advantage. Much depends upon the character of the soil and sub-soil where it is used, and much also on the proper preparation of the article before it is applied. The best way is for each to try it himself.

[Fowl-Meadow-Grass.]

Jno. H. Williams, Washington Co., N. Y., asks where he can get some seed of Fowl-meadow-grass, which he wishes to sow on wet muck land, on which, though partly drained, the water stands in the spring and fall?

ANS.—Fowl-meadow-grass is a valuable grass for wet meadows; and seed of it can be purchased from R. H. Allen & Co. of this city.

Miscellaneous.

A. B. Dille, Johnson Co., Kansas, says: "The RURAL stated, some time ago, that there were three kinds of *fruits* that were fast being superseded, viz.: the coarse Concord Grape, the insipid Bartlett Pear, and the sour Wilson Strawberry. (1) Please state what they are being superseded by. (2) I would also like to know the best time to bud Oleander, and how to do it successfully. (3) Please give like information also about Kilmarnock Willow." (4) He also incloses leaf and flower of a plant for name.

ANS.—(1). For market varieties, perhaps they will never be superseded. They have been tested in many parts of the country, and have been found to yield more uniformly good crops than any others. It is an unfortunate fact for those who have to buy their fruit of markets, that quality is made quite a secondary consideration by those who raise the fruit to sell. But there are ten varieties of excellent fruits—such as apples, pears, grapes, etc.—offered in our markets to-day where one was offered a few years ago. Those who can now purchase Beyden 30 strawberries—Diana, Enmelan, Salem grapes—would certainly prefer them to Wilson or Concord.

(2). When the bark parts readily from the wood. This varies with the treatment of the plant, but can easily be ascertained by trying twigs from time to time.

(3). We think the Kilmarnock Willow may be budded now.

(4). Callirrhoe involucrata.

L. B. Santa Rosa, Sonoma Co., Cal., asks where he would be likely to obtain seeds of Ampelopsis variegata.

ANS.—Try Thorburn & Co., 15 John street, New York city.

L. E. R., Brandy Station, Va., having invented a means of preventing the noise made by the elevated railroads of this city, asks how the road is worked at present and to whom he should write to introduce his invention.

ANS.—There are two Elevated railroads; we suppose you refer to the "Metropolitan," on which road the noise is said to be unendurable. To describe its working would require more space than is here at our disposal. It is agreed that the noise is produced by the hammer-like concussion of the rim of the wheel striking the minute irregularities on the surface of the rail. That is what the plan must overcome. Either Mr. A. B. Pullman, the President, or Mr. Rapp the Sup't. of the road, would be the proper person to write to regarding this invention.

A Subscriber, Venango, Pa., asks at what figure he could purchase, in this city, dried apples, etc., through the RURAL Purchasing Agency.

ANS.—We could not make this purchase for our friend in a way to meet his approval, as we have not time at this season to devote to what would otherwise be a pleasure. Messrs. H. K. & F. B. Thurber & Co., New York, are the largest wholesale grocers, and would probably be the most satisfactory firm to deal with. As they also transact a large commission business, it might be to your advantage to send them your produce and trade it out. We no longer have a purchasing agency.

W. Hibbard, Niagara Co., N. Y., found on a Bartlett pear tree which is slightly blighted, a fly about three quarters of an inch long, and of a light color, also a number of nests containing eggs, presumably of the same insect, and in addition to these a large number of small red bugs, and he sends us a number of leaves to enable us to decide whether these insects might not be the cause of pear blight.

ANS.—On examining the leaves, we cannot see on them any evidence that they have been injured by insects.

Mrs M. Webber Mahoning Co., O., sends sample of plant for name and describes it as hardy perennial, recumbent, remaining in bloom six or eight weeks from the middle of June. A plant several years old covers almost a square yard, the dark green leaves nearly hidden by yellow flowers.

ANS.—It is Lotus corniculatus.

T. A. Mills, Orange Co., N. Y., asks: 1, Whether Japan Quinces will grow from cuttings; 2. Whether the fall is a good time to transplant blackberries, raspberries and cherry trees.

ANS.—1. It is best propagated from suckers and layers. 2. Yes, except for cherries; we should prefer spring for them in your climate.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, AUGUST 24TH:

R. T.—B. F. G.—A. H. W.—G. R. C.—E. F. M.—C. R.—F. W. E.—H. S. W.—A. E. B.—W. B. D.—L. B.—J. W.—G. M.—W. H. M.—W. H. C.—J. A. B.—E. J. B.—H. B.—W. H. W.—L. K.—M. S. B.—A. H. S.—F. A. R.—W. N. M.—D. R. E.—M. B. P.—V. S. G.—E. R. L.—U. W. P.—M. W.—J. N. H.—B. R—J. F. B.—H. S.—C. W. G.—M. G. R,—H.—J. T. L.—F. H. D.—W. C. L. D.—S. A. M.—F. Bros.—O. H. K.—A. V.—S. C.—M. W.—E. B. D.—A. B.—N. W. B.—H. B. N.—V.—S. C.—T. H. H.—E. A. F.—D. E. S.—A. E. S.—S. H. B.—W. W. F.—J. L.—A. C. W.—H. D. E.—A. L. J.—W. G. Le D.—S. R. M.—B. N. D.—D.—C. P.—

Everywhere.

WADSWORTH TOWER.

BLOOMFIELD, Conn., Aug., 1878.

DEAR RURAL:—It is not always the best known places that are most worthy of attention. I was never impressed with this fact more than when I recently made, in company with a few friends, a visit to "Wadsworth's Tower," a place of local resort for pleasure-seekers in this vicinity. In a former communication, I wrote that this township was bounded on the west by a line of hills known as Talcott Mountain. Many years ago, Daniel Wadsworth of Hartford, whose many acts of kindness, benevolence and munificent generosity, still keep his memory green, selected a fine plateau on the top of this mountain, where he built a villa for a summer residence. Adjoining the grounds is a beautiful lake about half a mile long and very deep, the surface of which is about 800 feet above the Connecticut River some eight miles away, and 600 above the Farmington, distant not more than three miles. On a high point near the lake Mr. Wadsworth erected a tower some 50 feet high, from which an extensive view of the surrounding country could be had. To this place all were made welcome. He named it Monte Video, but the public insisted on calling it WADSWORTH'S TOWER. The old man died many years ago, full of years and blessings; the property passed into the hands of strangers. The tower, which had become a landmark for miles around, was burned—but the name continued.

A few years ago a gentleman of intelligence, enterprise and love for the beautiful determined to rebuild the tower. Surveys showed that a peak at a little distance from the original site was considerably higher, beside having in its immediate vicinity many natural attractions. Here, at an elevation of a full thousand feet, Mr. Bartlett erected his structure, and built a small house for the accommodation of guests, also opening a new road for approach. From where I write, this tower is distant, in a direct line, 3½ miles; by the nearest road about five miles. The last part of the ascent of the mountain gives one an idea of climbing. In a distance of 110 rods we rose about 450 feet. This accomplished, we found ourselves at the point known as the Royal View, at the beginning of Royal Drive—and a Royal View it was. We were on the brink of a precipice. Hundreds of feet directly below us were the tops of tall trees; at a little distance ran the Farmington (properly *Tunxis*) River through a valley that was once the bottom of a lake,—but which is now covered with luxuriant meadows and cultivated grounds, and dotted with villages and farm-houses. A further drive of a mile or so along the level top of the mountain and we reach the Mountain House and pic-nic grounds.

Here we alight and leave our hampers—for although visitors can be supplied with good food and plenty of it, if desired, the almost universal rule is for parties to furnish their own provisions, depending on the house only for minor matters—tea, coffee and the like.

The view from this house is more extensive than from the Royal Drive. I have visited the place many times, and to me it has lost its novelty, and I am pleased to note its first effect on others. One will be attracted by the extreme distance, another by the apparent size of the lots into which the farms are divided. This one is engaged in observing the motions of workers in the field and that by the number of varieties of crops cultivated. I remember visiting the place some years ago with a lady who at first sight seemed overcome by the beauty and extent of the view. Then, as she seated herself she exclaimed, "Let no one touch me or speak to me for an hour."

But we must not stay at the house—our way to the tower is by romantic paths and over rocks, and shadowed by trees that give out fragrance from leaf and stem. We stop a minute at Mt. Philip on which is a pile of stones marking the spot where the bounds of three towns meet, past the Mohegan Monument, a curious result of the action of water, to see which we lean over a precipice in a manner dangerous to those whose heads are not steady,—and at last we reach the Tower, ascending it by an easy stairway. Our view heretofore has been confined to the west—here it extends in all directions for miles, and has been pronounced by those who have traveled extensively to be unexcelled by any thing similar in the world. To the north Mounts Tom and Holyoke, in Massachusetts, are clearly visible to the eye. The Valley of the Connecticut, 25 miles wide, lies before you to the east; southerly the lake lies at your feet, and the mountain divides the Valley of the Connecticut from that of the Tunxis—while westerly across the latter valley, line after line of hills rise one above the other, the last disappearing in the distance. By aid of the fine glass fixed on the top of the tower the view is rendered much more extensive. On a clear day Round Top, in the Catskills, is visible, and other points as far distant in other directions.

But your space will not admit of further description, and I must close with advice to such of your readers as may ever be in the vicinity, to visit WADSWORTH'S TOWER. L. A. R.

NORTHWESTERN ILLINOIS.

BAILEYVILLE, Ogle Co., Ill., Aug. 16, 1878.

THE harvest here is ended and threshing has begun. Most of the grain was stacked in good condition, though considerable damage was sustained from storms and hot weather at the beginning of harvest. The straw was unusually heavy and badly fallen, making it difficult to cut. The strength and efficiency of the various reapers, harvesters and self-binders were tested effectually, but most of them proved equal to the emergency, and a grand triumph for American ingenuity and skill in the construction of labor-saving agricultural machinery. Harvest hands were in demand at from $2 to $2.50 per day "and roast beef," for work at binding, and at $1 to $1 50 per day for other work. There were plenty of "tramps," but most of them refused to work for less than $3 a day, and some protested that they didn't want to work for only a few days, but wanted an all-summer's and all-winter's job!

As the threshing of the crops has only just begun in this section, we have not sufficient data as yet to estimate correctly the general average yield, but can say that the winter wheat and rye are above the common average in yield, and the quality good. There is but little winter wheat produced in this section, but a considerable amount of rye. Barley is yielding well, but the quality is poor—the most of it will grade "No. 3" and "Rejected"—as it was colored by the wet weather just previous to harvesting it. Oats are mostly good both in yield and quality. Spring wheat is variable—some good and some quite poor—damaged by blight, rust, etc. We can soon be able to report more definitely "what will the harvest be."

Corn is doing finely now, and if frost does not come too soon this crop in the West will be a large one, contrary to the general expectations on the first of July.

Potatoes also promise a large yield, though there have been some symptoms of rot. Garden vegetables of nearly all kinds were never better or more plentiful than they have been this season. Potatoes are a drug in the market at 25 cents per bushel; cabbages 3 cents per head; and other things in proportion.

Good dairy butter has been selling all summer at 9 to 12 cents per pound, and inferior as low as 1½ to 2 cents per pound for soap grease. It doesn't pay to make poor butter at any time, and especially these times when such wide differences are made in the price, according to quality. Our first-class western creameries and well-managed dairies are doing about as well as any other kind of business, but slip-shod farm dairies

are running at a loss.- The present prices of butter in Chicago are as follows: "Fancy creamery, 20@23c.; choice do., 16@19c.; dairy do., 13@15c. for fancy; 10@12c. for extra do.; 9@10c. for good sweet straight-colored do.; 7@8½c. for fair; 6@6½c. for common; 4@5c. for inferior." It takes as much milk and harder work to make a pound of poor butter than to make a pound of the best quality. Further comment is unnecessary.

The times appear to be improving in this part of the great West, and a long season of prosperity is hopefully anticipated. With the present abundance of everything and low scale of prices, all real wants can be supplied. Let the people be patient, watchful and industrious, and live within their means, and all will be well.

W. B. D.

KANSAS LETTER.

SUMNER Co., Aug. 15, 1878.

THIS county was organized in 1871, with a population of about five hundred. So rapid has the settlement been that the inhabitants now number 13,000. The people are enterprising, progressive and intelligent. The society is as good here as in the older States, as is evidenced by the numerous school-houses and church organizations. There are 110 organized school districts in the county with a commodious and comfortable school-house in each.

Wellington, the county-seat, is beautifully located, and contains a population of 1000. It has a good, substantial court-house, a bank and an excellent flouring-mill. The M. E. church now in process of construction, when completed, will be a handsome and creditable edifice. The county is well watered by three rivers; the Arkansas, Ninnescah, and Chicaskia and many other streams of less magnitude.

The scarcity of timber which was once urged as an objection to the country, proves to be of little consequence. Lying adjacent to the Indian Territory, as this county does, most of the fuel consumed has been procured from there; consequently the supply of timber has not been materially diminished in this county. Beautiful groves of forest trees now dot the prairie, which in a few years will be sufficient to supply all the fuel needed here for the next century. There never has been an absolute failure of crops since the organization of the county. In the summer of '74 corn was very poor, in consequence of the extremely dry weather. The wheat crop, however, was good that season, and there have been no justifiable grounds for complaint of any crop since.

This year 85,250 acres of wheat were harvested which will average between 22 and 25 bushels per acre. Reports from various localities since threshing commenced, give the yield as from 17 to 44 bushels per acre. This is evidently one of the best wheat-growing counties in the State. This is a broad assertion but the agricultural statistics of Kansas will bear it out. Even sagacious farmers would argue that a soil so well adapted to this cereal would not produce corn. This error prevented a large acreage from being planted until it was exploded by actual demonstrations. Corn has been successfully grown here for six years. The present season there are 41,343 acres which will yield no less than fifty bushels per acre. Farmers from various localities declare they never saw better corn growing, and estimate the yield of many fields at 75 bushels per acre. Potatoes are excellent.

Peaches cannot be surpassed in the State for size and quality. They were marketed here as early as June 10th and pronounced as fine as any grown in the great fruit belt of Michigan.

Very few apple trees were old enough to bear this season. This county, however, has produced apples equal to any in the State. Grapes are now in market and compare favorably with those grown on the vine-clad slopes of France. The condition of several fields of timothy, blue-grass and clover is a striking proof that these grasses can be successfully grown here. For a diversity of crops this county is in the front rank.

Notwithstanding the stream of immigration which has poured among us, land is still cheap. It is a large county and can sustain a population of 30,000. Land ranges in price from $3 to $15 per acre, according to locality and improvements.

ALBERT BROWN.

WEST VIRGINIA NOTES.

CHARLESTON, Kanawha Co., W. Va., Aug. 17.

THE fruit crop is very light in this section of the country this year; peaches in particular are scarce, there not being many raised in the Valley as they do not thrive well. The trees flourish for awhile but soon die, not bearing more than one or two crops before they commence withering up. It seems that small worms and insects bore in the roots of the trees, and there doesn't seem to be any remedy for it. In hill land it is different, and peaches are raised in abundance, the worms not bothering the trees, and the elevation of the land being particularly adapted to the nature of the fruit.

Apples are not so plentiful as usual, there not being much more than half a crop. There is plenty for home consumption, and those who have to buy feel the scarcity more than the farmers. It is a matter of great trouble to our farmers to save their apples through the winter. Ill-success is certainly not due to carelessness; for I have frequently seen men who had fine orchards gather their apples carefully, and put them up, some in cellars, some in garrets and others in barrels, and long before Christmas they would be rotten. Why this is I am unable to understand; for the same variety of apples that are shipped hither from various places, are perfectly sound and remain so through the winter always commanding a good price.

Tobacco is raised by most of the farmers, and is their principal money crop, but this year the money part failed, tobacco being worth so little that it hardly paid for the trouble of shipping it. Those who were able waited for a better price, but the price has risen very little if any, leaving them to chew it themselves or sell it at reduced prices.

Wheat, though not so good as expected, is very low, not being more than seventy-five or eighty cents per bushel, where before it ranged from one dollar to a dollar and thirty-five cents per bushel, and was scarce at that. Oats are raised by almost all of the farmers and will be only a moderate crop this year. Rye and barley are raised only by very few persons as there is very little demand for them. Millet is something that is very little grown and I think I can safely say that there are not more than one or two persons in the county that cultivate it, there being only one that I know of. It would be a great help to the farmers if they would raise it to use while green for stock and save hay and other feed for winter.

E. B. D.

RURAL SPECIAL REPORTS.

ALLEN Co., KANSAS, June 22nd 1878.

IT would be wise in those thinking of immigrating to this State to do as the Pilgrim Fathers did, on striking Plymouth Rock—stop. All the immigrants, this season, or at least eight-tenths of them, are making a great mistake. They are jumping over a country from fifteen to twenty-five per cent of which is timbered, and going into a part of the State where there is often none within fifteen miles of the settler, while, in some parts he will have to travel from thirty to fifty miles for fire-wood or timber and as far or farther for lumber. Here, in the eastern part of the State, we can get our lumber by going a few miles for it, at half the price which those living further west, have to pay for it; while wood can be had on the farm or by going a few miles for it. Moreover, coal is to be found in almost every county in this section. Another important point is that we are a hundred miles, more or less, nearer to market, an important consideration where, as here, freights are high. Then, again, we have the advantages of villages, churches, schools, and bridges, all of which those settling in the western counties of the State must be without for years yet.

Like myself, on my first arrival in the State, others may think that as this region has been settled so long, land would naturally be dear, and thickly populated. But to learn the price of some of the splendid farms here, would surprise many Eastern farmers living on high-priced rocky, hilly, hard-pan lands. As for unimproved land, it is extremely level or slightly rolling, but in both cases the soil is very deep. All a man has to do is to hitch his three-horse team to a plow and carve out a farm. A man with some means—and the more he has the better—can accomplish more here in a couple of years than the old settlers did in a score between Lake Erie and the Atlantic. I don't mean that he'll get richer, for he will have to wait until his land appreciates in value, but he can make for himself a nicer and more comfortable home.

To do this, however, a man must have some means. With a small capital, or none at all, this is a poor place to come to; and in nine cases out of ten the impecunious new-comer would strike back disappointed for his old home—if he thought there was a chance of ever reaching it.

A. W. WILCOX.

PURPLE CANE, Dodge Co., Neb., Aug. 18, 1878.

OUR country is composed of two levels, one the Platte River bottoms, always under water in spring, and the Bluff or Table-land, sometimes dried up in a specially dry term. This year we have had a very great amount of rain, falling gently, but so nearly continuously during May, June and July as to render cultivation on the bottoms and in the "sags" on the bluffs, nearly impossible. Corn is a failure in the wet lands, fair on the medium and on slopes where surface drainage is natural, and extraordinarily good on dry land. As near as I can learn, the crop will average over 110 in amount and in quality throughout the country, but will be in the hands of comparatively few. I am among the particularly favored ones.

Wheat, rye, oats and barley had, even on wet lands, an extra growth, but it proves to be blighted, rusty, fallen and chaffy, about as the corn crop is distributed, and in my opinion was not fully fertilized, as the rainy season kept the pollen in a soft, mushy state, unfavorable to that process. The crop prospects are, however, very good from the greatly increased acreage.

Fruit growing is confined to the southeast corner of the State; we know but little of it here.

Stock is in extra condition, from the earliness and abundance of young grass all the time. Our farmers are in good spirits, believing that the worst of the hard times are over, and that a good time is coming.

DE WITT, Clinton Co., Mich. Aug. 19.

CORN here is good. The growth during May and June was slow and unpromising, but the warm weather of July brought it forward rapidly. The stalk has not pushed so high, perhaps, as in some seasons, but the ears are large and well filled, and the yield, both as to quality and quantity, will be good.

Wheat, of which the acreage was large, is turning out well. The crop was in general well secured, though on account of its ripening fast and all at once, and the scarcity of help, there was some loss from the grain shelling. The Clawson gives the best yield. Oats came in light.

Potatoes are fair. The beetle has ceased to be a terror here.

Of fruit we have nothing to boast of. Apples about one-fourth of a crop; though the markets are over-supplied with early ones. Farmers in setting out orchards have given more space to perishable summer sorts than is profitable; but we have many pears, and the same may be said of grapes, though there will be more of these than the May frosts would have led one to expect. Plums hardly worth mentioning. This is a "poach year" with us, and though the fruit has dropped badly, we can still claim to have peaches.

A. E. S.

HANAWA FALLS, St. Lawrence Co., N. Y., Aug. 15.

THE wheat crop has been an average one, but that sown early was injured by drought, and later has been cut through the long-continued rain, and has been damaged one-third in value. Rye, both winter and spring, was damaged by drought about two-thirds of a crop. Oats the same. Corn never looked better in this county; it will be above the average if nothing befalls it. Barley an average crop. Potatoes about half a crop; early ones were hurt by frost, drought and bugs; later are being stricken with rust. The fruit crop about an average; more red plums than for ten years before.

Peas were nearly a failure on account of the drought. Onions, multipliers, good; from black seed the prospects now are fair; beets, parsnips, carrrots, never were better. Cabbage will be a fair crop. Hay was an average, some low meadows were hurt by frost in May. For the past three weeks we have had more rain than we have had for twelve years in the same time.

G. R. C.

OSBORNE CITY, Osborne Co., Ks., Aug. 17.

WE have a beautiful country out here—a very grand country. Rich soil, good climate, and an excellent class of people. The county was first settled in 1870, when about thirty took up their homes here. It now has a population of over 8,000, and not less than a quarter of a million bushels of wheat were raised here the present season. The corn crop also is very heavy.

We raise this season good winter wheat, average 20 bushels to the acre; good spring wheat, average 18 bushels to the acre; rye, average 20 bushels; oats, average 40 bushels. The corn will yield 40 to 50 bushels, shelled, to the acre. Irish potatoes are abundant; sweet potatoes excellent; peanuts do well; all kinds of garden truck are abundant. Fifteen inches of rain fell in the past month.

The people all came here poor—some very poor—but there are no tramps here. Plenty of work for all, and plenty to eat, and to spare.

D. W. C. O'N.

BARRY, Pike Co., Ill., Aug. 16, 1878.

WINTER wheat, of which more than a usual breadth was sown, was very good, but the yield only about one-third. Of spring wheat none has been sown. About an average breadth of oats was sown, and the crop is more than usually good. Hay crop very large. Of corn hardly the usual acreage was planted. That which was well attended to is good; but owing to the wet spring, and early harvest, a good deal of it has been neglected, and therefore the prospect is of less than an average crop. The early potatoes are good; poor prospects for those put in late, but not many were planted. All small fruit very abundant. Peach crop very light, so is the apple. Not half of the farmers will have what they would like for their own use. Not more than one orchard in a hundred, on an average, will yield any for market. This report applies to Pike and the southern part of Adam and Brown counties.

J. F. L.

COLEGROVE, McKean Co., Pa., Aug. 22.

The prospects of the corn crop here are very good, I don't think they were ever known to be better.

The wet weather put farmers back in their haying so that they have just finished. The hay crop is unusually good, and many are saying they never cut so much before. Oats, which are the staple grain product here, are yielding well. Potato vines are blighted by rust, and late planted will turn out "small potatoes;" everybody is prophesying that they will be "high" next winter; they are, at present, $1, per bushel. Fruit is a failure; orchards usually bearing from one to two hundred bushels, will not yield more than five or six.

B. N. H.

LOWELL, Walker Co, Ala., Aug. 18.

The corn crop in this particular locality is decidedly poor—as near as I can judge, about half a crop. It was largely injured by drought, and covers a comparatively small area. It is said, however, we shall have an average crop for the whole county, the yield being very large in some parts of it. The corn crops in adjoining counties are reported very good. This part of the county does not figure very largely as a corn-producing section; enough being produced to meet the local demands only. The wheat crop was poor in yield, as in quality. The apple crop is very good, and also the peach crop, where orchards are properly cared for. The drouth was broken the 10th.

B. A.

HOWARD LAKE, Wright Co., Minn., Aug. 16.

THE crops within a radius of ten miles of this place, are better than for two or more years past. Wheat, from 15 bushels to the acre, has mounted up to as high as 30 in some fields. About twenty miles south of this, the wheat was laid so low by wind, that it was mowed with a scythe. Oats are very, barley tolerably, good. Potatoes about two-thirds of a crop. Corn good—about fifty bushels to the acre. Hay is also good. Weather has changed to the pure bracing air, which we have so much of in this State.

S. A. M.

WATSON, Allegan Co., Mich., Aug. 19, 1878.

HAYING and harvesting are over, and thrashing has commenced. The yield of wheat is not so large as many anticipated from the growth of straw, probably owing to the extreme wet of last spring. Oats, poor from the same cause. Corn will be only a moderate crop. Hay good. Early potatoes light. Fruit of all kinds about medium. Good weather for harvest, except heat. Prices low: wheat 95c. Farm wages from $8 to $16 per month and board.

H. D. E.

ELMIRA, Chemung Co., N. Y., Aug. 17, 1878.

THE corn crop in this part of the country promises to be very fair; the very warm weather we have had and the rains have brought it forward very rapidly, though it was late getting started. The apple trees are quite loaded with fruit. Pears are doing better than for several years, though they are still suffering with the blight. Plums are very abundant.

H.

MILFORD, Barton Co., Mo., Aug. 16.

OUR wheat crop was light, too much rain through the winter. Oats very good, 50 to 75 bushels to the acre. Corn will be fair, though planted late and poorly cultivated on account of so much rain. Stock of all kinds look well, though very low prices are paid for the animals. Apples scarce; peaches, pears and smaller fruits plentiful. Money scarce.

A. B. S.

EDGERTON, Johnsen Co., Kan., Aug. 13.

THIS is a prosperous year for Kansas. Wheat and oats were very heavy; vegetables fine, with the best prospect for corn we have ever had. It is now in roasting-ears, and we are having plenty of rain. Peaches will be plenty, but apples a failure. Small fruits were in abundance. Bees never did better; mine have their boxes nearly all full now.

A. B. D.

NEWTON, Sussex Co., N. J., Aug. 20.

THE corn is growing yet, and is loaded with very heavy sets, but I think it wants a little more sun to bring it around all right. Buckwheat is looking fine; the fields are a splendid sight, white with blossoms and covered with honey bees. My father-in-law sold his apples for 75 cents per bushel in the orchard. They are splendid.

A. V.

GAYLORD, Smith Co., Kan., August 17, 1878.

THE prospect for the corn crop here this year is the best that we have ever had. We shall certainly get from 50 to 75 bushels per acre. Other crops, also, are good. Small fruits are a success; large fruits are not grown, as the country is new; it being only seven years ago that the first settlement was made here.

A. C. W.

CHURCH ROAD, Davidson Co., Va., Aug. 21st.

THE tea plants sent out by the Government to our part of Va. are doing well and our people take much interest in the experiment. The crops in this district are good.

T. E. O.

POQUONOC BRIDGE, Hartford Co., Conn.

OUR July was remarkable in its heavy southwest winds, some days blowing a complete gale, and continuing all through the month.

M. W.

OSWEGO, Oswego Co., N. Y., Aug. 17.

THE corn crop has not looked as promising in years; and more than the average number of acres are planted.

S. O.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Prize Cattle at the Paris Exposition (Illustrated). 549
Farm Musings—By an Old Hand 549
Jottings at Kirby Homestead—Col. F. D. Curtis .. 550
Notes from Maplewood Farm—Uncle Bertram.. 550
Notes from a Backwoods Farm—John Rusticus.. 550
Novel and Useful Farm Gate (Illustrated)—Prof. William R. Brooks..... 550
Draining the Salt Marshes..... 550
The Tobacco Plant—No. 4—E. R. Billings..... 550
Fall Wheat Crop, The (Illustrated)—By a Jersey Farmer..... 551
Poultry Breeding—No. 3—(Illustrated)—A. M. Van Auken..... 551
Ripening and Marketing Pears—W. H. White.... 553
Orange in California, The—W. C. L. Drew..... 552
Everyday Notes—Samuel Parsons..... 552
Notes from the Rural Grounds 553
Tillying and Soil Improvement—E. W. Stewart. 553
Mixed Farming—F. H. D..... 553
What Others Say..... 553
Catalogues, &c., Received..... 553

Answers to Correspondents:

To Transfer Bees—Answer by Prof. A. J. Cook, of Michigan Agricultural College..... 554
Sprain in the Collin-Joint..... 554
The Use of Muck..... 554
Fowl-Meadow-Grass..... 554
Miscellaneous..... 554
Communications Received..... 554

Everywhere:

Wadsworth's Tower—L. A. R..... 551
Northwestern Illinois—W. B. D..... 555
Kansas Letter—Albert Brown..... 555
West Va. Notes—E. S. D..... 555
Allen Co., Kansas—A. W. Wilcox..... 555
Purple Cane, Dodge Co., Neb—S. R. M..... 555
De Witt, Clinton Co., Mich—A. E. S..... 555
Hanawa Falls, St. Lawrence Co., N. Y—G. B. C. 555
Osborne City, Osborne Co., Kan—D. W. C. O'N.. 555
Barry, Pike Co., Ill—J. F. L..... 555
Colegrove, McKean Co., Pa—B. N. H..... 555
Lowell, Walker Co., Ala—B. A..... 555
Howard Lake, Wright Co., Minn—S. A. M..... 555
Watson, Allegan Co., Mich—H. D. B..... 555
Elmira, Chemung Co., N. Y—H. 555
Milford, Barton Co., Mo—A. B. S..... 555
Edgerton, Johnson Co., Kan—A. B. D..... 555
Newton, Sussex Co., N. J—A. V..... 555
Gaylord, Smith Co., Kan—A. C. W..... 555
Church Road, Davidson Co., Va—T. E. C..... 555
Poquonnoc Bridge, Hartford Co., Conn—M. W... 555
Oswego, Oswego Co., N. N—S. C..... 555

Domestic Economy:

My Neighbor's Lace Lambrequins—M. E. Stone.. 560
Crinkled Muslin 560
Domestic Recipes 560

EDITORIAL PAGE:

Phases of Hired Help 556
Rural Notes..... 556
Heliotropism..... 556
We Will Explain..... 556
Amusement at Fairs 556
Best Fodder Corn, The..... 556
Clean Tillage..... 556
Fatality from Impure Well-Water..... 556
Autumn, The..... 556
Brevities..... 556

LITERARY:

Poetry..... 557, 559, 562
Story of a Letter, The—Julia Kavanagh..... 557
Beware of Lightning..... 557, 558
Good Conversation..... 558
Recent Literature..... 558
Magazine Notes..... 558
Bric-a-Brac..... 559

Reading for the Young:

Letters from a Country Girl—No. 6—Margaret B. Harvey..... 559
English Country Homes—E. F. M..... 559
Take a Seat—J. E. M'C..... 559
Woman as a Pianoforte Tuner..... 559
Pocket-Money for Young People—No. 14—Practical..... 559
Machine for Feeding Poultry..... 562
Carlotta Patti Jones—Cat-Ter-ine..... 562
Letters from Boys and Girls..... 562

Sabbath Reading:

How to Observe Sunday..... 562
News of the Week—Herman..... 560
Markets..... 561
Personals..... 563
Wit and Humor..... 564
Advertisements..... 561, 563, 564

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PHASES OF HIRED HELP.

Vice seen too oft, familiar with its face,
We first endure, then pity, then embrace.

Nor is this true of vice alone, but also of many of the petty evils, annoyances, inconveniencies, and misfortunes of daily life, and especially of incompetent, distasteful, or incompatible hired help.

As soon as a new hand is engaged, we at once set about instructing him in the duties he will have to perform. Sooner or later, the length of time depending on his aptitude and industry, he becomes familiar with the routine of his work. So long as the newcomer continues a "new broom" he may impress us with the belief that he is just the man we wanted—the right man in the right place. But it sometimes happens that so soon as the notion enters into his mind that his situation is secure, that his services are so highly valued as to be substantially indispensable, just so soon does his conduct often change for the worse, and this though his treatment may be as considerate as formerly, and his remuneration equally good. He becomes less respectful, less assiduous and thoughtful; though no addition may be made to his former duties, and though he may still have the same facilities for properly performing them, yet he first neglects one thing, and then another. Although he may have abundance of time, yet he often shirks and slights his work whenever he can do so without the risk of immediate detection, and—a natural result of such conduct—he becomes untrustworthy.

Although all this may be apparent to his employer, yet remembering the valuable services of which his help may have shown himself capable, and dreading the tedious ordeal of breaking in another to supply his place, he may often feel disposed to permit his unsatisfactory hand to retain his position, in the hope that he may see the evil of his ways and reform. Frequently, however, this hope is disappointed; the man's conduct becomes unbearable, and he is finally discharged, perhaps after years of service.

Again, we have known instances in which utterly worthless men have been retained for years on the farm, because their plausible ingenuity gave a false appearance of value to their services. Perhaps they were possessed of considerable mechanical skill, and by deftly mending broken implements or handily executing odd bits of carpentry or painting, cunningly caused these occasional trivial jobs to stand instead of that hard, every-day labor on the farm, which, however profitable in its remote results, makes but little immediate show.

Then, again, in farming sometimes, but still oftener in mercantile life, there occur striking instances where utterly unprincipled men, by studying the weak points in their employer's character, and cunningly employing obsequiousness, subterfuge, misrepresentation, or sullenness, as occasion may require, have obtained absolute control over him and his business, and sometimes indeed over the entire family. In this they are often aided by gradually filling all vacancies about the place with creatures of their own type, and their own selection; by alternately treating their employer with bland submission and premeditated sulkiness; and by losing no opportunity of impressing upon him the vast extent of their own abilities and the absolute necessity of their aid to the success of his business.

Although, at the outset, the employer may only temporarily "endure" these diplomatic tricksters, yet habit may soon lead him to "pity," and finally to "embrace" them rather than suffer them to quit the business which, owing to their arts, might then be more justly called theirs than his. Although few men have ever stepped out of the most exalted positions in this world, and still fewer out of merely subordinate places in it, who could not be replaced, yet he has been educated to believe their services indispensable, and though groaning under their whims and edicts, is forced to retain them in control of his business.

We believe that so soon as an employer is satisfied of the incompetency, untrustworthiness or incompatability of those who work for him, the sooner a separation takes place the better for both sides, and that the upright employer, who, while wishing to retain his own manliness and independence, treats his help courteously and fairly in every respect, will in all cases strictly adhere to such a course.

RURAL NOTES.

The nights are cool at the Rural Grounds, and melons ripen slowly.

Pearl Millet grows surprisingly, and it would seem that this will prove of high value as a forage plant. Speaking with Col. Weld, who attempted its introduction before the war, we asked why its value did not at that time become known. He said that as it does not seed in this climate, the war, which soon followed his tests, cut off communication with those sections from which seed might have been procured. It is quite useless to plant the seed early. The entire failure of those sown at the farm was due, no doubt, to early sowing alone. As between this millet and corn leaves, both having been placed before them, we do not find that horses and cattle display any preference. The seed was sent to us by Mr. Wm. H. Carson, of this city, to be tested. He has distributed it liberally about the country, and to him is due whatever credit may accrue from its re-introduction.

If we were to judge from the present season's tests, we should pronounce the Acme the best tomato in cultivation, and our readers are well aware that we have given some attention to comparative tests between all of the new or well-known varieties. The shape is perfect, being nearly round, without the appearance of a seam or lobe. It is as large as it is desirable a tomato should grow. It ripens evenly and early, keeps well after it is ripe, and is notably firm, for which last reason, if not especially for the others, it will prove a favorite sort with market gardeners.

HELIOTROPISM.

As a rule the growing stems of plants incline towards the sun when they depart at all from their naturally more or less upright position. This curvature is supposed to be owing to the slower growth of the parts most exposed to the sun. Whence it would follow that plants which are shaded on every side grow faster than those that are exposed to light, and this is found to be a fact. We have observed, this season, that the growing shoots of several of our pear trees bend away from the sun, or rather they bend towards the north and northeast. The inclination varies with different trees and different branches upon the same tree. In the case of a Winter Nelis some of the top shoots bend over towards the north-east more than ninety degrees, forming an obtuse angle with a perpendicular. The lower branches growing on the south of this tree are twisted around towards the north as far as north-east. The long, slender branches of a Jos. de Malines bend over towards the north as uniformly as if they were receiving a strong, steady wind from the south. When the stems bend toward the sun they are termed positively heliotropic; when they bend away from it they are termed negatively heliotropic. Accepting the theory that a less growth on the sunny side causes the former, we have never heard of any sensible explanation of the latter.

WE WILL EXPLAIN.

Several of our friends have asked, "Wherein is the RURAL enlarged?"

Considering the expense which the change necessitated, and the additional cost which it entails, we are a little disappointed that such questions should be asked. Borders have the effect of making papers seem larger. These were removed from the RURAL as neither useful nor ornamental, and this removal has perhaps rendered the enlargement less apparent. If those of our friends who have not perceived wherein the enlargement consists, will take the pains to measure the printed matter, they will find that the columns of the new RURAL are three-quarters of an inch longer than those of the old. There are sixteen pages in the paper, and four columns to a page, making sixty-four columns, which, multiplied by three-quarters, will give forty-eight inches of extra reading matter. As in the old pages there were fifty-three inches, it follows that we have added, by lengthening the columns, an entire page, lacking five inches, which are made up by a trifling addition in the width of the page. This, as we remarked at the time, amounts to the same as issuing a four-paged supplement every four weeks. Whether the change is perceptible or not to our readers, we are confident that it is perceptible to those who have to fill its columns with reading matter, and pay for setting up the type.

AMUSEMENT AT FAIRS.

THERE is a little too much of the Gradgrind in much that is written about Agricultural Fairs lately. The desire is to have them more instructive, useful, practical. There is opportunity to improve them in this direction. We can, and ought, also, to exclude all demoralizing associations, gambling, drinking, and the like. But we must not exclude the idea of amusement, of recreation, or we lose what is by no means of the least consequence. Farmers have too few amusements. We believe that Fairs might be usefully developed in that direction until even the circus would be rivaled in interest to the boys and girls, the young men and maidens, to say nothing of the old men and matrons. Let us have plenty of fun at the Fairs.

THE BEST FODDER CORN.

THE best fodder corn is that grown thickly in drills—so thickly that no ears are developed. Let the ground be rich; let the cultivation be thorough; cut up when the tassels are dropping their pollen; let it wilt on the ground; tie in small bundles and set up in small stooks, binding firmly at the top, and also half way down. Then let it stand as late as possible before carrying to the barn. If the crop is planted early, it may be cut up so early as to get perfectly dry, if it has no ears. Then we have no moldy fodder, and our opinion of sowed corn improves until at least we may say, with JOAB HARGOOD, that it is worth as much as the best hay.

CLEAN TILLAGE.

The present season yields the thirty-sixth wheat crop which Mr. J. B. Lawes has raised upon the same unmanured plot. He thinks it will yield ten bushels per acre, which is more than the average yield of many parts of our own country. It would have been considered impossible that any soil could produce such an amount of wheat, after so many years without any manure whatever, and it seems to show what clean tillage can do.

Fatality From Impure Well-water.—The evils of impure water have been frequently discussed, often with only slight benefit in a sanitary way, but at Little Neck, Long Island, there has lately been preached on the subject a powerful sermon, which ought to appeal to the heart and the head of every householder. John Ryan's house there was a handsome structure in the midst of elaborately ornamented grounds, yet two years ago, despite the efforts of the best medical skill, he lost, by dysentery, two of his children, whose deaths the physicians attributed to the use of water from a well on the premises. The well was cleaned out, and the evil effects of the subsequent use of its waters lay dormant until about a fortnight ago, when Ryan himself was attacked with the disease that had already robbed him of two of his children. A few days later two more of them were stricken by the malady, and died in less than a week. Last Wednesday morning Ryan himself passed away, and was followed in the afternoon by his mother-in-law. The wife and one child alone survive of the family, and probably their systems are impregnated with the poison from that pestiferous well.

The Animus.—The loafer's communism is simply a manifestation of the too general desire to live idly on the fruits of other men's labors. This desire exists as strongly in the hearts of denizens of Wall Street and the Fifth Avenue, as among the frequenters of the slums and saloons and beer gardens. It fires the souls of politicians, speculators, and various other friends of the dear people. It is the foundation of every aristocracy, and the source of all demands for special legislation, and the grant of privileges and monopolies, whatever the specious protest. It is the constant danger of republics, no less than of monarchies.

BREVITIES.

"RELIGION never was designed
To make our pleasures less."

THE apple and pear crops are much under an average in England.

Mr. Wm. E. Dodge believes the fountain-head of the hard times in the whisky bottle.

THE Herald wants an *honest* editor for our next mayor! There ought to be no difficulty surely.

THE statement is repeated from many different sections that the yield of wheat is not so large as was anticipated from the growth of straw.

Mr. MECHI says, "In justice to my laborers who have served me faithfully for over thirty years, I may say not one is given to excess in drinking."

Mr. RICKETTS tells us that the Lady Washington grape is doing finely this year. There are some very large bunches. He thinks they will ripen before Concord.

IN SELECTING Weigelas, it is well to bear in mind that W. rosea, W. amabilis, W. hortensis and W. Lavallei form a varied group though not all blooming at the same time.

THE Pearl Millet of which we have been giving reports, is, according to Willdenow, Penicillaria spicata; according to Miller, it is Panicum cœruleum: and according to Richard, it is Pennisetum thyphoideum.

WE have received Parts VI, VII and VIII of Meehan's Native Flowers and Ferns. These parts sustain in every way the general excellence of the others. We are glad to hear of the success of this work. It is not likely to meet with a success beyond its deserts.

WE HAVE visited several vineyards in this section of country and find that the grape crop was substantially destroyed by the late spring frost. Concords have suffered as much as any, while more backward varieties, like the Delaware, will bear an occasional bunch.

WE would remind our readers that we are close upon the best time of the year for outside painting. The great objection to painting during hot weather, seems to be that the heated boards absorb the oil, leaving the lead in the form of a dry powder, which rubs off as freely as whitewash.

Mr. HENRY STEWART tells us that he places a little hill of slaked lime about his fruit trees every spring, and finds it an effective remedy against the borer, Saperda bivittata. We have never been troubled much with this borer, and have attributed it to the use of the wash which we apply to the stems two or three times every season.

A COMPLIMENT FOR THE RURAL FARM.—R. H. ALLEN & Co., the well-known seedsmen of this city, have received specimens of Clawson wheat, from various sections of the country, with the object of determining the best from which to select their fall stock. A bushel was sent from the Rural Farm, merely for comparison. The color was rather darker than some of the samples, but the kernels were decided to be the largest and plumpest.

LARGER yields may be got from hoed crops planted in drills than when planted in hills. This is true of corn, potatoes, beans, or any other crop of the kind. But it is not a good way on weedy land, or for a slovenly farmer. The rows should be as straight as a line, and at accurately even distances. Cultivation must be frequent and thorough. Proper implements should be used by skillful hands. These things promised, the drill system gives satisfaction.

Literary Miscellany.

UNNUMBERED GRAVES.

YON hillside with its shafts of gleaming white,
Bathed in the glory of the setting sun,
Holds many a grave where, hidden from our sight,
Some loved one sleeps, life's toil and labor done.
But there are graves over whose slumbering mold
No polished marble rears its stately head,
And where no fragrant flowers above unfold
To waken pity for the quiet dead.

These are the graves deep down within our hearts
Where lie the hopes and dreams of early years,
Buried from sight, but signalled by such marks
As only can be made by blood and tears—
Some early love that crowned us in our youth,
And made life glorious for a short sweet hour—
Some cherished promise, robbed of strength and truth—
Crushed in the morning of its new-born power.

Here is the spot where memory has engraved
The form and face of one we called a friend,
One for whose welfare we would e'en have braved
Censure and heartache to the bitter end.
But 'twas not wisely done and so we draw
Before the treachery of the smiling eyes
A heavy veil. The cold world if it saw,
Would proffer pity in a thousand lies.

So life goes on. We lay the forms away
Of things we loved not wisely but too well,
And in the lapse of years we learn to stay
The fretful chanting of their funeral knell.
We learn to smile, before the smiling throng,
Although the adder's fangs be deeply set;
And join, perhaps, our voices in the song,
To soothe the pain we never can forget.

And thus we learn to envy the calm rest
Of those who sleep beneath the sod.
Bound with life's galling chain, we know 'tis best
To bend our heads and pass beneath the rod.
And when we see some mourners heavy clad
In robes of black, haggard, with tear-dimmed eye,
We know their lives would be more bright and glad
Could they but reason—it is but life to die.

Mourn not the slumbering dead, but rather say,
Blest are the sleepers. Years may come and go;
Heads that are brown and gold may turn to gray;
But they are done with earth and tears and woe.
Somewhere, we know, beyond the world of stars,
They would at last have found sweet Lethe's stream,
Some time we'll meet them at God's judgment bar,
Where life is love, and love one long true dream.

(Ogden Freeman.

THE STORY OF A LETTER.*

JULIA KAVANAGH.

EVERY one has heard of Sir John Percy's great lawsuit. It is a great trouble to Sir John. At least, he says so; his first, he calls it; but I always thought that his troubles began with his name. He claimed to be a real Percy. Ill-natured people said that his grandfather had been a greengrocer: this may be true, or it may not, but I never knew a more honorable, noble-minded man than Sir John, and I mean to say that, whatever his real origin, the Percys might have been proud of such a kinsman. There would, therefore, have been little harm in his claim of noble descent, which no one had ever dreamed of opposing, if good Sir John had not thought fit to strengthen it by assuming the temper and department of Hotspur. One of his favorite theories was "race," and the transmissions of hereditary peculiarities.

"Look at me! Am I not one of the old Percys in physiognomy as well as in blood? And unluckily for me have I not got that dreadful Hotspur temper which, as it cannot be vented in rebellion, or on a battle field, has brought this eternal lawsuit on my hands?"

I groaned, for about one part of this statement there could be no doubt: it was the Hotspur temper that had brought on this lawsuit, and as I candidly believe that Sir John acquired that temper to prove his descent from the same illustrious line as gave Chevy Chase its hero, and Lord Douglas his enemy, I am justified in my assertion that his troubles began with his name.

Amongst the troubles of Sir John there was one which seemed to me as real as his relationship to the Percys. He complained that all his letters did not reach him, and he laid the blame to his legal opponents. At first, he concluded that they had an agent at the post-office; then he gave up this crotchet for one as improbable, but at least more plausible: the agent was not in the post-office, but out of it; and it was his habit to waylay the postman, and either bribe or drug him, as he might find most convenient; then abstract Sir John's letter—for this knowing agent never took but one letter, though, of course, it was always the right one.

This explanation of his losses, however, had to be given up as well as the first; and Sir John's third and last conclusion was the saddest and most ominous of the three, so far, at least, as his peace of mind was concerned: he declared that the agent was one of his three female servants. His only man servant, James, was incorruptible; but Mrs. Green, the housekeeper, Ann, the cook, and Martha, the housemaid, did not, unluckily, belong to that immaculate category. They were changed repeatedly—Mrs. Green became Mrs. Long, Ann and Martha turned into Eliza and Mary, a Braham lock was adapted to the letter-box; but letters—important letters, said Sir John, all referring to his lawsuit—continued to be lost, or, what came to the same thing, not to reach him.

I began to feel staggered. Sir John was positive, and though very angry, he preserved a sort of calmness in his anger which was unlike Hotspur's wrath, and helped to shake my skepticism. There could be no harm, at least, in trying to assist him out of this difficulty, and I undertook to provide him with a thoroughly reliable servant-girl. I applied to my sister-in-law in the country, a woman of strong sense and much penetration. I sent her down on account of Sir John's predicament, and begged of her to let us have a good, sensible, and honest girl, if she knew such a person in her neighborhood. Sir John preferred a girl from the country. "It is the lover who ruins everything," he said, "and the lover is the growth of time. If I can have a fortnight's fidelity, I shall be well pleased." By return of post my sister-in-law wrote: "I have got the very girl you want: she is a heroine, neither more nor less. She spent ten years in my cousin's family, and saved their youngest child from drowning by her presence of mind. Twice the house was attacked by burglars, and twice Nelly displayed the calmest courage. On one of those occasions she was *alone* with the children. Her fidelity is beyond suspicion. I defy any one to bribe Nelly. For the last three years she has been engaged to a young man of the best character, a carpenter; and it is for his sake as well as not to leave her mother and her little sister, that Nelly would not go to Australia with my cousin. The children were broken-hearted at the parting."

This high-flown eulogium concluded with the intimation that Nelly would be very glad of a situation in Sir John Percy's household, and especially of the liberal terms he offered, and that she would leave S—— at once, and call upon him the next day.

Sir John was taking his breakfast, when Mary, the housemaid, came in and said that "a young person wanted to speak to him."

Great was Sir John's surprise when the heroine of my sister-in-law's letter entered. A little childish thing stood before him.

"Why, my dear, how old are you?" he asked in some dismay.

"Twenty-five, sir," replied a quiet little voice.

Sir John looked at her. Yes, there were some of the lines on that young face. And, though it was a young face, with slight features, it was a remarkable face in its way; pale and resolute, with dark eyebrows, and dark eyes looking quietly at you from beneath their arch. "What is your name?" he asked a little abruptly.

"Ellen Kelly, sir."

Yes, she was Irish, and that was a drawback. Not that the prejudice which forms a part of the traditionary John Bull found any room in Sir Percy's mind; but he had been jilted, poor fellow, by an Irish girl, who had Ellen Kelly's eyes, and he considered this coincidence ominous. He assured me afterwards that if it had not been for my sister-in-law's sake, he would have sent Ellen back forthwith; he said so, but I rather doubt it. I have a fancy that those eyes of hers were pleasant to the good old bachelor—a memento of his young days that had a charm of its own.

"Well, Ellen," he resumed after a while, "I have heard a good account of you, and I trust you will justify it. Though you are but a small thing to be a heroine, we all know that the best goods are made up in the smallest packets. I am a good deal out, all on account of a confounded lawsuit which I have had in hand these thirty years, and I want a faithful, trustworthy servant to sit in this room and receive my letters. The housekeeper will give you some needlework to amuse you, should you need such entertainment; but you are to sit here from eight in the morning till twelve, and from two in the afternoon till evening. When you feel tired just touch that bell, and James will come and relieve you. He is too old and too active to bear the confinement—otherwise I should require no one else. And now, Nelly, please to mind my words. I suspect neither the housekeeper nor either of the two servants. I have laid traps for them, and they have come out of the snares white as driven snow; therefore I have no right to mistrust them; but I expressly desire you to act with as much prudence as if they were one and all bent upon stealing my letters. In short, you may be as civil and as friendly as you will, but you are not to trust them. That will not be pleasant, will it, eh?"

"No, sir; but I knew as much before coming."

"Well, then, as I said, you shall sit here and sew. When the postman comes, go and take the letters from him. I had a box, but I have suppressed it."

"And where shall I keep the letters if you are out, sir?"

"In your pocket, my dear; and do not let a soul lay a finger on one of them till I come in, and you hand them to me."

"Very well, sir."

"That is all, my dear. You have relatives, I believe."

"Mother and my little sister, sir."

"Do you expect any letters from them?"

"Mother can't write, sir, and my little sister is only seven."

"Nevertheless, you expect to hear from them?"

"We have a friend, sir," replied Nelly, blushing a little, "a sort of relation of ours, who will let me know how mother and my little sister are getting on."

"In plain speech, you have got a sweetheart—don't deny it."

"I do not deny it, sir," replied Ellen, rather warmly; "we are to be married as soon as he has saved a little money to set up business on his own account."

"Quite right; but my object in putting all these questions to you is simply this: when your sweetheart writes to you, you are not, if you please, to read the letter, but simply to hand it over to me."

Ellen turned crimson. No, she could not do that. She was very sorry to disoblige Sir John, but she could not do that.

"But my dear," he argued, with a smile, "I have not the least wish to read that young man's letter, and as soon as you have handed it to me, I shall give it back to you. I trust you with all my letters: can you not trust me with one of yours now and then?"

Still Ellen demurred. Her letter was her own, and it was plain that Ellen wished to do with her own what she pleased, and be subject to no one's control. But Sir John was firm, or, if you like it, obstinate; and, after some hesitation, and with evident reluctance, Ellen yielded. "Mind, you give me your word to obey me in all these injunctions," said Sir John.

"Yes, sir, I do."

"Well, then, repeat them for me." Ellen did as she was bid, and she went through the series of Sir John Percy's behests with a precision and correctness that pleased him highly.

"The housekeeper shall show you your room," he said, ringing the bell; "and, when you are rested, you can begin your duties."

The housekeeper was a very sour-looking lady, and, having little cause to be pleased with the step Sir John had taken, she treated Ellen with a supercilliousness which the girl had the good sense to ignore. She had come to fill a difficult position, and it was useless to quarrel with its inevitable troubles. Presently she came down in a lilac print dress, with plain white collar and sleeves, looking so trim and neat that Sir John was quite pleased with his new acquisition. He made her sit in the bow-window which commanded a view of the street door; he again rang for Mrs. Long, and requested her to provide Ellen with some darning or mending, or making, as she pleased, and, having seen this order executed, and Ellen's little hand dive into a deep basket and come forth with a pair of his own stockings, he left her, chuckling and rubbing his hands, with a "Now we shall see."

But alas! what was glee and hope to him was darkness and tribulation to Nelly. This gloomy London parlor, looking out on a gloomy London street, filled her heart with desolation. She had parted that morning with the widowed mother; with the little sister, and with the true-hearted fellow who had loved her for years so faithfully—she had left them all for this strange place, and this strange house, and oh! when should she see them again? Not for six months, perhaps; perhaps not for a year. She had done all that for a little money, tempted by Sir John Percy's liberal wages; but it was hard, very hard, and Nelly felt it keenly. But a postman's knock came to the door. Up jumped Nelly, and away flew the dream—lane, lime-tree, nightingale and all. She went and opened it; three letters were put in her hand, and, closing the door carefully, Nelly went up with these letters to Sir John, who happened to be within.

"All right," he said; "but I am afraid it is not all right," he added abruptly. "You have been crying. Have these women already began worrying you?"

Hotspur was up and ready for war, and Nelly hastened to assure him that no one had said a word to her—in fact, that she had not seen a soul since he had left her in the parlor.

"Then what are you crying for?" he asked, looking injured.

"I parted with them all this morning, sir, and this being the first time, and the first day, too, it seems a little hard."

"It is hard," confessed Sir John, "but time will comfort you, or at least enable you to bear it."

In her quiet way, Nelly said she hoped so, and she went back to the parlor and to her darning.

Poor Nelly! she soon had other troubles besides those of separation and remembrance. The housekeeper, the cook, and the housemaid combined to make her life wretched. Mrs. Long found fault with Nelly's sewing, and was bitter on the subject of her darns. The cook said nothing: "Deeds, not words," doubtless was her motto; but she made it a rule to make Nelly eat what she disliked. Nelly hated fat, and Nelly got none but fat meat. Nelly disliked Yorkshire pudding, and Yorkshire pudding became a rule in Sir John's kitchen. The housemaid, too, would not be behindhand. It had been her duty to receive the letters and to attend to the door. Not being now allowed to do the one, she loftily resolved not to do the other. But Nelly, who had been quiet hitherto, and scorned to complain, now rebelled, and showed some spirit. It was contrary to her instructions to open the door to any one save the postman, for he might come whilst she was showing a visitor up-stairs. She laid the case before Sir John. Hotspur flew into a towering passion, and threatened cook, maid, and housekeeper with instant dismissal, if they ever meddled with Ellen again. Nelly had not been loved before, but now she was fairly hated. I fancy hers was no pleasant life, sitting darning stockings in that grim old parlor, taking in letters, and feeling herself detested, in the regions below as well as in the housekeeper's room above. But, if his little maid looked rather pale and melancholy, Sir John was in tip-top spirits; he had not lost a letter, so he said, at least, since he had had Nelly. "The dearest little janitress that ever was," he said, "and true as steel, sir. They laid a plot to get her away from the door, but Nelly came and told me all about it. And I gave them a trimming, sir, by Jove, I did!"

A month and a day had Nelly been with Sir John when the postman gave her a packet of letters one morning. Nelly's heart beat as she looked at them. There was one for her. It had the S—— postmark upon it; besides, Nelly knew the writing. Now, there is a shy, delicate instinct in a girl's love—a feeling that makes her wish to hide what she is not ashamed of. Nelly longed to slip that dear letter into her pocket, and not let Sir John have a look at it. But she remembered her promise, and went up with it as well as the rest. "Oh! one for you," he said, detecting the stiff, round handwriting at once; "there's a good girl, I shall not keep you in pain; go down with it at once." Nell obeyed. She had a warm, impetuous little heart, I suppose, despite her calm face, for she was no sooner out on the staircase than she broke the seal and read her lover's epistle. But alas! no dear, no glad, home fragrance did that little sheet of paper enfold; nothing came out of it but the drearliest and the saddest news. Sir John had not got half through his first letter when the door of his study opened and Nelly broke in upon him, pale, distracted, and her open letter in her hand. "I must go, sir," she cried, "I must go at once. My mother is dying—she is dying, dying."

She seemed beside herself with grief. Sir John took up the letter she had dropped, and glanced over it. Yes, sure enough, Nelly's mother was dying, and asked to see her daughter "once more."

"Of course you must go," he said warmly. "I cannot spare you to-day, but you shall start to-morrow morning."

"To-morrow, sir; will death wait till to-morrow? I must go now—now."

"My dear child, I am to be out all day, and I expect a most important letter, and James, poor fellow, is lying ill in bed, as you know—I cannot spare you to-day."

"Sir John," resolutely said Nelly, "I shall go to-day. I am sorry to disoblige you; but I shall go."

"Hotspur had a great deal to do to keep his temper down," said Sir John, when he told me this, "especially as the little chit's black eyes had just a lurk in them which I remembered rather too well. However, I remained quite cool, and all I said was: 'Well, Nellie, I have servants to obey me, and not to have their own way. I give you a month's warning from this very day.'"

"Very well, sir," composedly replied Nelly. "I am sorry to have annoyed you, but I cannot help it."

Hotspur deigned her no answer, and Nelly went. S—— is within two hours of London by rail. It was three o'clock when Nelly reached it. She had to walk a mile from the station to her mother's cottage. Her road lay along the very lane in which she had wandered with her lover a month back; but how sad and changed was its aspect! Its June beauty was gone. The hot July sun had scorched it. The hedges were white with dust; the trees looked athirst for rain; the sky was grey and lowering, and the beautiful country seemed sad and plague-stricken to poor Ellen. "I felt sure, sir," she said to me later, "that my poor mother was dead."

At length she reached the cottage. Her hand shook as she raised the latch and entered. Her lover was the first person whom she saw. He came forward and comforted her with a word.

"Alive, and better, Nelly."

"Better!" If he had said "cured," Nelly's joy could scarcely have been greater. She cried, she laughed, she kissed her little sister, her mother, her lover, Mrs. Doring, a kind neighbor who had come in to nurse the sick woman. She could have kissed the ground in the gladness of her heart. Yes, the poor woman who had been dying the day before was better now, and, what was more, the doctor felt sure, from the turn her complaint had taken, that she would live. This glad news Nelly's lover gave her outside the cottage door, for the invalid was too low to bear much.—[Conclusion next week.

*This story was found amongst the MSS. of the lamented Miss Kavanagh. Other MSS. were also found by Mrs. Kavanagh, but in too incomplete a form to admit of their being published.

BEWARE OF LIGHTNING.

How to avoid Danger during a Thunder Storm.

UNDER what conditions is damage from lightning possible? and what are the means by which the risk may be lessened or avoided? An isolated tree, standing either upon a wide plain or upon an eminence, is obviously likely to determine a lightning discharge, to "attract the lightning," to use a common expression. The top of the tree is the nearest point to the cloud, and since the tree is a better conductor than the air, a line drawn vertically through it to the cloud marks the shortest and easiest course along which the electricities may pass. If, when the charged cloud arrives directly over this point, the tension is sufficient to overcome the resistance along that line, a discharge will take place, and the tree will be struck. But if the tension be not sufficient, the cloud will pass harmlessly over. Hence it appears that a person standing during a thunder storm beneath a tree so situated, is exposed to some risk. On no account, therefore, should a traveler take refuge under an isolated tree; generally he will do well to avoid its neighborhood altogether; but should he be overtaken by the storm when on a plain with no shelter near, the tree may still be made to afford him some protection. If he take up a position near it, but not under its branchess, he will probably escape unhurt, should the lightning descend upon it.

The safest distance from the tree is that which is equal to its hight. To approach much nearer than this is to incur the risk of being within the influence of the stroke; to remain at a much greater distance away is to place one's-self in the same condition of isolation as the tree itself. It will have been remarked by all the observers of the phenomenon that whenever a tree has been struck by lightning, it has generally occupied an isolated position. In describing the position as one of isolation, however, it is not meant that the tree is necessarily standing alone, but that it is not one of a numerous group. When there are many trees together their collective conductivity is often sufficient to cause an indestructive discharge of electricity. This is especially likely to happen when the trees are wet with rain, for then their surfaces are covered with a film of water, which is a good conductor. For this reason, the danger from lightning is much less after a rain has begun to fall than before, when everything is dry. It appears, therefore that the safest situation during a thunder storm is in the midst of a wood, particularly if the neighborhood of the tallest trees be avoided. In such a shelter, the traveler may take refuge in full assurance that he will there be effectually shielded from harm. The greatest risk of injury from lightning is undoubtedly incurred by persons traveling across a wide and very flat plain, be-

cause in such a situation they are the only elevated objects. To lessen the risk, which may here be somewhat serious, advantage should be taken of whatever undulations of surface may exist, to keep upon the lowest ground. No doubt the prostrate position would in these circumstances afford greater security than the erect. It happens not unfrequently that animals are killed by lightning under a tree to which they have betaken themselves for shelter. In these cases the tree is struck partly on account of its isolation, and partly on account of the presence of the animals beneath it.

Usually there are several, and often many of them assemble together, huddled probably by terror into contact one with another. The air, heated by their bodies, rises above them laden with moisture, derived mainly from their breath. Who has not noticed the cloud of vapor that in the early morning and in certain states of the weather hangs over a flock of sheep or a herd of kine? The column of moist air ascending through the branches of the trees toward the cloud offers, in consequence of the comparatively high conductivity of water, a favorable passage for the electricity. A herd of cattle under an isolated tree is thus exposed to a double risk; also it is evident that these animals are in the open country less secure from injury than human beings, who cannot affect the atmosphere in a like degree.—*Chamber's Journal.*

GOOD CONVERSATION.

THE Christian gentleman studies and practices such rules of the Bible, the best hand-book in the world on the art of conversation, as the following: "Let your speech be always with grace, seasoned with salt, that you may know how you ought to answer every man." "Let no corrupt communication proceed out of your mouth, but that which is good to the use of edifying." "Speak evil of no man." "Putting away lying, speak every man truth to his neighbor." "A word fitly spoken is like apples of gold in pictures of silver."

He despises gossip and hates slander. He would no sooner talk about your private affairs with others than he would steal your purse or peep through your key-hole; and he considers slander the most heinous of crimes.

His conversation is marked by its purity. He tells no story and utters no word that he would blush to have understood by the most chaste and refined woman.

He deems it ungentlemanly, as well as wicked, to emphasize his conversation with profane oaths. He respects the feelings of others too much to speak lightly of Him whom the Christian loves better than the dearest earthly friend.

He speaks his native language in its purity. He avoids slang. It matters little how well a man may be dressed, how elegant his manners or accomplished he may be in the classics and foreign languages, if he does not speak his mother tongue in its purity, he cannot be received as a perfect gentleman. False syntax, mixed idioms, the prostitution of sublime words to mean uses, slang phrases, betray want of culture and vulgarity in spite of all disguises. They frequently indicate a want of moral character. He who prefers a smattering of French to the mastery of his own language, must care more for show than for true worth. He who corrupts in the using the magnificent language which has been entrusted to him as a rich legacy for posterity, is not fit, it would seem, for places of high trust. The vocabulary and phrases of a man afford a fair estimate of his culture and character. Words are the balances by which we are weighed. "By thy *words*," says Jesus Christ, "shalt thou be justified, and by thy words shalt thou be condemned."

The conversation of the Christian gentleman is truthful. He never utters a falsehood for any purpose. He would not lie to escape from any difficulty or to secure any reward. Moreover, he avoids exaggeration and careless errors. Speaking always with authority, his declarations may ever be relied upon with safety.

He never descends to angry disputation. He is not one of those who are forever arguing. He is not an egotist who disputes on politics or religion to show that "e'en though vanquished he could argue still." He has opinions and is able at a fitting time to give his reasons; but he never descends into the arena to make a show of his controversial powers. He is free also from dogmatism, which mars the character of so many men of talent, never attempting to force his opinions upon any who will not gladly accept them. Neither is he a pedant who talks incessantly that he may overpower you with a sense of his musty learning. Nor has he a hobby which he is forever trying to make you ride behind him to the death. Nor does he insult your self-respect by descending to commonplace bandying of words and compliments, chatting nonsense, as if such food only were suited to your effeminate soul.

His talk is at once entertaining and instructive. With no assumption of airs, he teaches you as though he taught you not. He interests himself in those things which interest you. He discovers your best thoughts and gives to them a beautiful expression. He gives you the facts for which you have been in search. He tells you the news you delight to hear. He excites those emotions of your heart that please you, and then shares your enjoyment. If perchance he strikes a tender chord that reminds you of your grief, he heals the wound with genuine sympathy. He strengthens your good resolutions with new motives that you had not discovered. Avoiding base ridicule and biting sarcasm, he cheers you with his genial humor and banishes gloom with his sparkling wit.

Master of the art of conversation, he does not suffer the time to run to waste in awkward silence or vain words. He chooses the themes and talks with a purpose. He is as good a listener as he is a talker. He listens with such attentive interest that he makes the most reticent speak. In being a good listener, in knowing when to keep silent and how to draw out from others their best thoughts, consists half or more than half the art of successful conversation.

Such a Christian gentleman is welcome wherever he goes; for, at the head of the table or in the center of the drawing-room, he is the life of the company and the joy of the social circle.—*Sunday Afternoon.*

RECENT LITERATURE.

Words: Their Use and Abuse. By Prof. WILLIAM MATTHEWS, L.L.D. Published by Griggs & Co., Chicago, Ill.

THOSE who imagine this to be a dry dissertation on philology need read but a half dozen pages to convince themselves that the author has succeeded in writing a really fascinating book. Even those for whom the subject has no special attraction cannot fail to become very much interested in Prof. Matthews' work; and we cordially commend it to all who desire to learn how to express themselves with accuracy and elegance. We give a few extracts from this book, hoping thereby to awaken an interest among our readers in the subject of words, and to induce them, if possible, to study the significance and correct use of these "expressions of ideas." If one-half the time and money now expended in giving young people a smattering of modern foreign languages were devoted to training them to a thorough knowledge of their native tongue, one would not so often be amazed and disgusted at the ignorance of the correct use of even simple words and phrases displayed by many who pride themselves on being "educated."

We proceed to notice some of the common improprieties of speech. Many of them are of recent origin, others are old offenders that have been tried and condemned at the bar of criticism again and again:—

But, for that, or if. Example: "I have no doubt but he will come to-night." "I should not wonder but that was the case."

Agriculturalist, for agriculturist, is an impropriety of the grossest sort. Nine-tenths of our writers on agriculture use the former expression. They might as well say geologicalist, instead of geologist, or chemicalist, instead of chemist.

Illy is a barbarism, quite common in these days, especially with newly-fledged poets. There is no such word as illy in the language, and it is very silly to use it. The noun, adjective, and adverb, are ill.

Plenty, for plentiful. Stump politicians tell us that the adoption of a certain measure "will make money plenty in every man's pocket."

I have got, for I have. Hardly any other word in the language is so abused as the word get. A man says, "I have got a cold;" he means simply, "I have a cold."

Differ with, is often used, in public debate, instead of differ from. Example: "I differ with the learned gentleman, entirely,"—which is intended to mean, that the speaker holds views different from those of the gentleman; not that he agrees with the gentleman in differing from the views of a third person. Different to is often spoken and written in England, and occasionally in this country, instead of different from. An example of this occurs in Queen Victoria's book, edited by Mr. Helps.

Corporeal, for corporal, is a gross vulgarism, the use of which at this day should almost subject an educated man to the kind of punishment which the latter adjective designates. Corporeal means, having a body corporal, or belonging to a body.

Wearies, for is wearied. Example: "The reader soon wearies of such stuff."

Anyhow is an exceedingly vulgar phrase.

Lie, lay. Gross blunders are committed in the use of these words; e. g., "He laid down on the grass," instead of "he laid himself down," or, "he lay down." The verb to lie (to be in a horizontal position) is lay in the preterite. The book does not lay on the table; it lies there. Some years ago an old lady consulted an eccentric Boston physician, and, in describing her disease, said: "The trouble, Doctor, is that I can neither lay nor set." Then, Madam," was the reply, "I would respectfully suggest the propriety of roosting."

"Like I did," is a gross Western and Southern vulgarism for "as I did."

Less, for fewer. "Not less than fifty persons." Less relates to quantity; fewer, to number.

Balance, for remainder. "I'll take the balance of the goods."

Revolt, for are revolting to. "Such doctrines revolt us."

Likewise, for also. Also classes together things or qualities, whilst likewise couples actions or states of being. "He did it likewise," means he did in like manner.

Avocation, for vocation, or calling. A man's avocations are those pursuits or amusements which engage his attention when he is "called away from" his regular business or profession,—as music, fishing, boating.

Crushed out, for crushed. "The rebellion has been crushed out." Why out, rather than in? If you tread on a worm, you simply crush him,—that is all.

Of, for from. Example: "Received of John Smith fifty dollars." Usage, perhaps, sanctions this.

Had ought, had better, had rather. All these expressions are absurdities, not less gross than hisn, tother, hain't, theirn. No doubt there is plenty of good authority for had better and had rather; but how can future action be expressed by a verb that signifies past and completed possession?

At, for by. E. g., "Sales at auction." The word auction signifies a manner of sale; and this signification seems to require the preposition by.

Party, for a man or woman. This error, so common in England, is becoming more and more prevalent here. An English witness once testified that he saw "a short party" (meaning person) "go over the bridge." Another Englishman, who had looked at a portrait of St. Paul in a gallery at Florence, being asked his opinion of the picture, said that he thought "the party was very well executed." It is hardly necessary to say that it takes several persons to make a party.

Deceiving, for trying to deceive. E. g., a person says to another, "You are deceiving me," when he means exactly the opposite, namely, "You are trying to deceive me, but you cannot succeed, for your trickery is transparent."

The masses, for the people generally. "The masses must be educated." The masses of what?

In our midst. This vulgarism is continually heard in prayer-meetings, and from the lips of Doctors of Divinity, though its incorrectness has been exposed again and again. The possession or appurtenance. "The midst" of a company or society is not a thing belonging or appurtenant to the company, or to the individuals composing it. It is a mere term of relation of an adverbial, not of a substantive character, and is an intensified form of expression for among. Would any one say, "In our middle?"

Excessively, for exceedingly. Ladies often complain that the weather is "excessively hot," thereby implying that they do not object to the heat, but only to the excess of heat. They mean simply that the weather is very hot.

Either is applicable only to two objects; and the same remark is true of neither and both. "Either of the three" is wrong; so is this,—"Ten burglars broke into the house, but neither of them could be recognized." Either is sometimes improperly used for each; e. g., "On either side of the river was the tree of life."—Rev. xxi. 2.

Seldom or never is a common vulgarism. Say, "seldom, if ever."

Conduct. In conversation, this verb is frequently used without the personal pronoun; as, "he conducts well," for "he conducts himself well."

Least, for less. "Of two evils, choose the least."

A confirmed invalid. Can weakness be strong? If not, how can a man be a confirmed, or strengthened, invalid?

Previous, for previously. "Previous to my leaving America."

Appreciates, for rises in value. "Gold appreciated yesterday."

Proven for proved, and plead for pleaded, are clearly vulgarisms.

Bound, for ready or determined. "I am bound to do it." We may say properly that a ship is "bound to Liverpool;" the term is strictly a nautical one.

Such for so. E. g., "I never saw such a high spire." This means, "I never saw a high spire of such a form," or "of such architecture;" whereas the speaker, in all probability, means only that he never saw so high a spire.

How for that. "I have heard how some critics have been pacified with claret and a supper."

Equally as well, for equally well. E. g., "It will do equally as well."

Looks beautifully. No cultivated person would say, "she is beautifully," or "she seems beautifully," yet these phrases are no more improper than "she looks beautifully." We qualify what a person does by an adverb; what a person is, or seems to be, by an adjective; e. g., "she looks coldly on him;" "she looks cold."

Leave, as an intransitive verb. E. g., "He left yesterday." Many persons who use this phrase are mislead by what they deem the analogous expressions, to write, to read. These verbs express an occupation, as truly as to run, to walk, to stand. In answer to the question, "What is A. B. doing?" it is sufficient to say, "He is reading." Here a complete idea is conveyed, which is not true of the phrase, "He left yesterday."

First Principles of Agriculture. By HENRY TURNER, F. C. S. New York: Macmillan & Co.

THIS is a concise, clear, practical hand-book of the science of Agriculture; just such a book as should be in the hands of all farmers. It explains those subjects that it is usually taken for granted every one interested in the subject knows all about, but who, if compelled to give a succinct account of the formation of soils, for instance, would display a wealth of ignorance, out of proportion even to the assumed knowledge of the subject. Technical terms are avoided as much as possible. A few of the topics treated will give us an idea of the contents of the book. The Soil, Composition of Crops, Farm Manures, Natural and Artificial Manures, Rotation of Crops, Food of Farm Stock, etc. It is the best elementary book on the subject we have seen.

MAGAZINE NOTES.

THE September Atlantic opens with a poem by Whittier, The Vision of Echard, which is supplemented by three poems of minor bards, and The Silent Melody, by O. W. Holmes. J. W. Kearney contributes American Finances from 1789 to 1835, and Mr. Sedgwick explains Primitive Communism. Francis J. Lippitt has an able article on Pope's Virginia Campaign, and Porter's Part In It, which shows very clearly that Porter sustained a soldier's part and acted with more judgment than was displayed by the commanding general. Count Shouvaloff is the subject of an admiring article by Axel Gustafson, and Mr. Perry criticises some French novels. The Europeans is continued, and the commencement of a new serial, A House of Entertainment, by H. E. Scudder is very promising. Richard Grant White has his fourth article on Americanisms, and the Contributor's Club is as full of color as Jacob's coat.

HARPER'S MAGAZINE for September, with the two serial stories by Black and Hardy; three brilliant short stories by Mrs. E. W. Latimer, Rebecca Harding Davis and Rose Terry Cooke; a dramatic sketch of thrilling interest by T. B Aldrich, with three admirable illustrations by Abbey; a humorous sketch by Charles D. Deshler, entitled Ab'm: A Glimpse of Modern Dixie, illustrated by Pyle; an illustrated poem, of pathetic interest, The Foreclosure of the Mortgage, by Mrs. E. T. Corbett; other poems by Ruth Dana and Harriet Prescott Spofford; several illustrated articles, covering a variety of subjects; timely articles of great and immediate interest to all readers, and the five admirably sustained editorial departments—is an exceedingly rich, beautiful and entertaining number.

SCRIBNER for September opens with an engraving by Cole of Mr. W. M. Chase's painting, Ready for the Ride, recently exhibited in New York. The leading illustrated paper is entitled Hunting the Mule-Deer in Colorado, by Mr. J. Harrison Mills, who appears in the treble capacity of writer, wood-draughtsman and engraver. There are also drawings by George Inness, Jr., W. M. Cary and Frederick Dielman.

Dr. William J. Morton follows up his paper in the August number, entitled To South Africa for Diamonds! with a second and concluding installment of personal experience at "the diggins," chiefly about the Cape diamond, diamond buying and stealing, incidents and life in Kimberley, the morning markets, etc. Among the illustrations are views of the Dudley and Stewart diamonds in their settings. Maurice Thompson, of archery fame, has a paper on Glimpses of Western Farm Life, and introducing a novel first experiment in illustration, viz.: an engraving of a sketch in clay for a medallion of American farm life, modelled for the article by Mr. C. L. Warner, the sculptor. Following appropriately is a discussion by Stephen D. Dillaye of The Transportation Question, in advocacy of a narrow-gauge "pure freight" highway, organized and controlled by the government. The manufacture of A Spool of Thread, is described by Charles H. Clark. Mrs. Burnett's new story, Haworth's, will begin in November.

LITTELL'S LIVING AGE.—The number of Littell's Living Age for the weeks ending August 3d and 10th have the following valuable contents: Giordano Bruno and Galileo Galilei, Quarterly Review; Among the Burmese, Fraser; What the Sun is Made of, by J. Norman Lockyer, Nineteenth Century; A Doubting Heart, a serial story by the author of Castle Day, published from advance sheets; Cheap Literature for Village Children, Macmillan; American Misions in Turkey, Frazer; The Story of a Letter, by Julia Kavanagh, Argosy; The Constitution of Norway, Fraser; Stray Thoughts on Scenery, Cornhill; The Bishops at Lambeth, Saturday Review; Our Kentish Parish, Blackwood; How Three Princesses Purchased a Palace, Pall Mall Gazette; Admiral Sir George Black, Nature; The Will of Peter the Great, Academy; and the usual choice poetry etc.

For fifty two such numbers, of sixty-four large, pages each (or more than 3000 pages a year), the subscription price ($8) is low; or for $10.50 any one of the American $4 monthlies or weeklies is sent with The Living Age for a year, both postpaid. Littell & Gay, Boston, are the publishers.

THOSE who enjoyed the expression of Anna C. Garlin's views on church-fairs, in SUNDAY AFTERNOON, a month or two since, can learn much that is interesting from her about Mothers' Meeting in the September number of the above-mentioned magazine. What this bright, suggestive writer has to say ought to be read by all women who are interested in church work. For the rest the magazine contains Chrysanthem, a tale by Lizzie M. Champney, in which spiritualism is treated of. The Testimony of the Spirit, by Geo. Fisher; Dandelion Ghosts, by Elizabeth Akers Allen; Religion in College, by C. F. Thwing; Philanthrophy at Pitch Point, by L. K. Black; Embalmed, by Susan Coolidge; Chips from a Northwestern Log, III., by Campbell Wheaton; Religious Rights of Christian States, by Charles H. Richards; Aunt Huldahs' Scholars, by Edw. E. Hale; Quietness, by Julia Dorr; Martha Pitkin and Ursula Wolcott, by Henry Goddard; Judith and Judah, by Josephine R. Baker; A Water Lilly, by M. Y. Butts; After a Puck, by M. Louisa Pool; Good Conversation, by C. S. Walker, and the Editor's Table, where the Nobility of Labor, A Burning Question, Another Heresy, A Happy Sunday, and Notes on Current Events are discussed.

AN exceedingly fine steel engraving of Henry M. Stanley, of African fame, adorns the title page of the ECLECTIC MAGAZINE for September and the short biographical sketch which follows, adds to the interest one feels in this intrepid explorer. This number of the Eclectic embraces a wide range of subjects and some of the best foreign periodicals have been laid under contribution. The result is a most entertaining and instructive number. We give table of contents.

Life and Times of Jas. Madison, The Mystery of Edwin Drood, Lady Caroline Lamb, Freemasonry: Its History and Aims, Lower Life in the Tropics, Johnson without Boswell, What the Sun is made of, Stray Thoughts on Scenery, An instalment of Macleod of Dare, Posting and Post-offices of China, The Earth's Place in Nature, Through the Dark Continent, Italia and Literary Notices, Science and art—this latter department is a most useful one, and reflects great credit on the editor.

APPLETON'S opens with an illustrated article on the New York Post-office, by L. P. Richardson, which is followed by In Paraguay, by J. J. Platt. Will. Wallace Harney sings about The Old Home, and Barton Grey tells in tuneful numbers What may Happen at Your Gate. Mr. Wm. Minturn writes pleasantly of Ed. Manet. There are three pleasant stories in this number, two of them continued. For the price, three dollars per year, Appleton's furnishes very choice reading.

LIPPINCOTT'S MAGAZINE for September contains articles by Ellen W. Olney, Louise Chandler Moulton, Rebecca Harding Davis and Mary Dean, beside interesting contributions in prose and in verse from writers who are not so well known. Is it necessary to add, after enumerating such a galaxy of brilliant authors, that this number of the magazine is delightfully interesting?

BRIC-A-BRAC.

CHRISTIAN RULES FOR SUNDAY.

Dress hard all morning, such is fate,
Then enter church some minutes late.

All eyes will then be turned on you,
And will observe your bonnet new.

Let humble modesty wreathe your face,
And take your seat with faultless grace.

Let all your thoughts be fixed on high,
And rearrange your cardinal tie.

Think how religion's prone to bless,
And criticise your neighbor's dress.

Let all your heart be filled with praise,
And notice Mrs. Miggle's lace.

Put from your mind all thoughts of sin,
And readjust your diamond pin.

Think of how good religion proves,
And then smooth out your buttoned gloves.

Catch well the precepts as they fall,
And smooth the wrinkles in your shawl.

Think of the sinner's fearful fate,
And notice if your bonnet's straight.

Pray for the influence of divine—
That lady's basque, mark the design.

Let tender peace possess your mind,
And criticise that hat behind.

Reflect on Christian graces dear,
And fix those curls beside your ear.

Let your heart warm with silent prayer,
And view that horrid green silk there.

Reflect upon the wickeds' ways,
See if your gold chain's out of place.

Think of the peace the good shall find,
And wonder who are sitting behind.

Think of the burdens Christians bear,
And notice these strange ladies there.

The last words hear with contrite heart,
And fix your pull-back when you start.

[*Springfield Republican.*

HE SWALLOWED A TORPEDO!

It happened to the subscriber. I am a man-nurse at Bellevue Hospital. It is my duty to smother patients that don't seem likely to get better when their beds are wanted. I perform this nefarious act in the silence of midnight, my sole weapon, a hospital pillow. It's the regular thing up there, you know.

Well, one night when we were full there was a call for a bed, and I was about to create the accommodation, when I felt a hand from behind placed upon my shoulder. It was the nurse, Mary Ann. "Don't," she said, "it's dangerous. Follow me; I have something to say." I followed to a distant corner of the hall. There, her left hand toying idly with a medicine phial—she spoke in this strain: "He was in love with me once, and I don't want him silenced; besides, he has a mission to accomplish, and he'll get better." "What is it?" I asked. She drew me closer into the shadow of the wall, and whispered, "He has a torpedo in his inside!" "Impossible!" I gasped, preparing to dive under a cot. "Yes, but don't be alarmed; it is one of his own invention. It is no larger than a pill, and he swallowed it by mistake. It has made him very sick, but so long as he lives it will remain intact, unless, peradventure, he is subjected to violence, when it will explode!!"

"Aha! Then he musn't die here." "Of course not. That is why I cautioned you. To-morrow he will be taken carefully home to his mother-in-law's. There he proposes to manufacture these torpedo-pills by the gross. They will regenerate society. Husbands will be able to live at peace, and go to the lodge as often as convenient without fear of consequences. No man will dare to beat his wife, for fear of exploding her torpedo. Policemen will use the club with great caution, and not without previous inquiry. Ward primaries will fade into the dim past. War will be impossible; the killing of the enemy's soldiers, will be the destruction of your own troops. No stage-driver will dare to run down helpless pedestrians, because the torpedo-pill will be harmless during an unmolested life and a quiet death, but infernally deadly the instant violence is attempted. It is to be sold to editors at half——oh! what was that?"

Terrified, I listened. There was a hissing sound issuing from his bed, and then—then a loud report. The building quivered, the walls tottered, and the roof went soaring into space.

THE MAN WITH THE TORPEDO HAD GONE OFF!

* * * * * * *

I don't know how I escaped. When I awoke to consciousness I was lying against a lamp-post at the corner of Third avenue and 125th street. I have thought it over since, and concluded he must have hit himself, accidentally, in the chest. His loss can never be compensated for; no one possesses the secret of those pills. 7 x 9.

"OH, WHAT SHALL THE HARVEST BE?"

WITH VARIATIONS.

The farmer looks over his broad field of hay,
Rejoicing its progress to see,
And gleefully chants the appropriate lay,
"Oh, what shall the harvest be?"

The horse doctor comes on his horse to attend,
And finds a big lump on his knee;
He remarks, as he strives the excrescence to end,
"A wart shall the harvest be."

The thief plies his art in some crowded resort,
With the contents of pockets makes free,
Says in clutching a time-piece of elegant sort,
"A watch shall the harvest be."

The ascetic in search of a garment hirsute
(To atone for his sins seeketh he),
Exclaims as he starts on the pious pursuit,
"Oh, what shall the ha'r-vest be?"

[*Phillips Thompson, in St. John Torch.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

AUGUST DAYS.

"Now, what hath entered my loved woods
And touched their green with sudden change?
What is this last of nature's moods
That makes the roadside look so strange?
Who blanched my thistle's blushing face,
And gave the winds her silver hair?
Set golden rod within her place,
And scattered asters everywhere?"

So through my brain and in my heart these thoughts will come—of regret for Summer going, and I murmur as I sing—

"Return darling lilies and white roses,
And bring back the summer days again."

All too fleeting seemed the bright June days—too swiftly passed the rich-fruited July. August will soon wane, and everywhere there is a *stillness*, as of work done. Nothing speaks of Autumn—the harvest's fullness is with us, but we catch a glimpse of change in the tint of the leaves, the cry of the grasshopper, and the fields bereft of the yellow grain. Ah! me, only too soon the chill breath of Autumn will touch the leaves of our tenderest blossoms—we shall awake some morning to find a suspicious breath, as of a heavy mist, upon the window pane, and feel sure of frost—perhaps slight at first, but warning us of the season's change. Let us not anticipate, but while we may, we can enjoy the full fruition, the perfection and richness of the latter summer days.

ANNIE L. JACK.

LETTERS FROM A COUNTRY GIRL.—No. 6.

MARGARET B. HARVEY.

I HAVE said, I think, that I hoped to be able to point out several ways in which our countrywomen (and all women) may improve their minds. I still cherish the hope. For this season of the year, I think one of the most effective, most delightful, most satisfactory and least difficult means, would be to commence the study of Botany, or continue it, if it has been taken up.

The books recommended in a former letter were Mrs. Lincoln's (latest edition) and Gray's. The first contains a very thorough exposition of the principles of Vegetable Anatomy and Physiology, and descriptions of very many of our indigenous and exotic plants It is reliable in all particulars except Ferns, whose nomenclature has changed very much within the last few years. Gray's botanical books are from the pen of Prof. Asa Gray, of Harvard. Prof. Gray is *the* authority for North American plants. Of his several text-books of vegetable science, "How Plants Grow," in conjunction with, and followed by, "Gray's Manual," or, "Field, Forest and Garden Botany," will be best.

I fancy I hear some one say, "*Why* need a woman in a farm-house study botany, and *when* could she?" I shall try to answer these questions before going on to advise farther in its pursuit.

The first might be disposed of under the general assertion that knowledge brings its own reward. But I shall add that, surrounded as such a woman is by tall trees, bright flowers, luxuriant vines, fine vegetables, luscious fruits, waving grasses and velvet mosses, benefited constantly by their convenience and their beauty, it seems most natural, most appropriate for her to study as extensively, as intelligently as possible, objects so near and so useful to her. It is always best for us to know most of what pertains to our own domain.

The second is not very hard to answer. A little occasional reading, a paragraph now and a page then, in the little scraps of time, if accompanied by an earnest desire and supplemented by a pair of quick eyes, will accomplish wonders.

For instance, a woman sits shelling beans. She has that morning in the interval between ringing the breakfast bell and waiting for the appearance of the family, peeped into her Botany long enough to see that a *legume* is a pod with two sutures, having the seeds fastened to one, and opening by the other,—practice has long ago told her which. Now, as she sits there, a sudden charm is lent to the otherwise monotonous work, as she remembers that it is a *legume* she is breaking with her fingers. What other plants have legumes? Peas, sweet-peas, string-beans,—all varieties of beans, in fact. Here is an idea. If they are alike in the character of their fruit, is there any other likeness? Yes; all have flowers similarly shaped. (She *knows* the appearance, though as yet she is unable to describe it. She will afterwards learn that it is a *papilionaceous* corolla, or one having a *keel*, a *banner*, *wings*, and *diadelphous stamens*.) What other plants have like flowers? The wistaria, the acacia, the locust, the lupine, the judas-tree and the amphicarpa. So her mind runs on, as she recalls the form of one, the color of another, the size, perfume, fruit, etc., of still another and another, until she becomes conscious that there is in the vegetable kingdom a series of links and likenesses which she had not before taken into consideration. And in the quiet afternoon, when the work is all done up, she again turns to her book, and to her great joy, her sudden elevation and her eternal benefit, she finds that she has, almost unconsciously, learned the leading characteristics of the family *Leguminosæ*.

With what rapid wings will she travel for a time after this, and so naturally too. Among her rare currant and gooseberry bushes, will she not discover that there is a family, *Ribes*, even before she knows the name? In her flower-beds and orchards, will not her roses and apples and raspberries and pears, point her to the *Rosaceæ*? Can she not see in the gay hollyhock on the lawns, the althæa down the lane, the okra in the truck-patch, and the "cheesewally" in the neglected walk, the Malvraceæ? Believe me, yes.

And I venture to say she will not rest satisfied here. She will want to analyze separate specimens, and determine their family, genus and species. And if ever she is going to be discouraged, it is now. But with patience, perseverance, and a good pocket-lens ($1.25) she can accomplish much, with far less trouble and vexation than her mother and grandmother experienced in working the rectangular Adam and the paper circular Eve, or the cadaverous Moses and the spectacular Aaron, on the faded samplers in the garret, along with the relics of departed days and glories. And if at the end of summer and autumn she has carefully studied twenty specimens, dried them flatly, neatly gummed them into a blank book, and by them written their correct *genera*, *species*, *families* and *common names*, together with the date and locality of gathering, so as to have made a commencement for a herbarium, she will have done very well. And it is safe to say that from no other portion of her summer's work and enjoyment, will she have derived very much more real profit and pure sale.

ENGLISH COUNTRY HOMES.

E. F. M.

THE first thing which impresses an American in traveling in England, and visiting her country houses and cottages, is their substantial strength and age. Many of the manor-houses were built under the Tudors, and the walls of gray stone, or red brick, are massive and thick. At once you feel how thoroughly English is the beautiful word "home;" how truly it fits such a house where generation after generation were born and wedded, and from which they have been slowly borne to their last resting-place. These dwellings are full of stories and traditions, and seem thoroughly infused with human life and interests.

Another striking characteristic, which springs from the certainty that these houses are built for centuries and are strong to withstand the destructive influences of time and climate, is the rich and ornate style of architecture. The workman loved his work and expected it to endure. So you will see oriel and dormer windows, or gable ends and cornice, and frieze, and stairways, rich with heavily carved work in wood. There are stone-shafted casements, delicate traceries, lattice-worked windows with small diamond-shaped panes, portals of stone carved with armorial bearings. Even the massive oaken doors are carved in quaint devices of fruits, flowers and birds, with grotesque faces mixed with these.

The halls have immense open fire-places, in which whole logs used to blaze in cheerful flames at merry Christmas tide. In the long picture-galleries you may see with interest the types of countenance characteristic of different periods, and the quaint changes, not only in costume, but attitude, manner and expression, the stateliness of old days merging into the simplicity and directness of to-day.

The English are by nature so conservative, so fond of ancient things, that you may mark in their homes all the phases of change, from a distant period, in both building and gardening—although landscape gardening was introduced in the reign of William and Mary. In our country every vestige of the old style would long ago have been effaced, but in some old country houses you may look from a jutting bow-window, completely overrun with ivy, upon grounds laid in the old formal manner—clipped shrubberies, evergreens cut in queer shapes of peacocks, swans or animals; raised terraces, and heavy stone balustrades ornamented with urns or leaden statutes. But nothing can be lovelier after leaving these trim, precise gardens of old-fashioned tastes, than to wander in an English park, where nature's own requisite forms and combinations are carefully preserved. The cool green sward of wide lawns is shaded here and there by groups of stately trees. There are woodland glades, across which troop the silent herds of deer, and in the glens you hear the whir of the startled pheasant, or see the hare scurrying away to her hiding-place. The brook winds athwart the valley, now stretching into a small lake, now gliding into a quiet pool, which reflects the shining tree-boughs, and holds the shy trout safe in its shadowed recesses.

Our own Washington Irving speaks with enthusiasm of such gardening on a smaller scale. He says the most sterile and unpromising spot may be changed into beauty. "The cherishing and training of some trees; the cautious pruning of others; the nice distribution of flowers and plants of tender and graceful foliage; the introduction of a green slope of velvet turf; the partial opening to a peep of blue distance, or silver gleam of water; all these are managed with a delicate tact, a pervading yet quiet assiduity, like the magic touchings with which a painter finishes up a favorite picture." One slight difference in the management of chimneys adds to the picturesqueness of an English house. Rising over the rich masses of foliage, instead of one stiff and awkward chimney you will see a cluster of chimneys, ornamented with mouldings of brick work, an ornament rich and full of character, adding greatly to the general outline of the building, as well as to the comfort of the interior life.

Another thing that one soon learns to love in English farms is the green hedge-row that divides one field from another. These hedges are fragrant with flowers in summer and full of berries in autumn, and furnish homes for thousands of twittering, happy birds, which weave their nests in these green nooks and find protection here from predatory birds. A well-trodden path leads you through the quiet fields to the village church, where the dwellers in such houses, and the tillers of the lands, have worshipped under the same roof from youth to age. Many of these old churches are completely covered with ivy from the turret and tower to the base, and the jutting buttress or fantastically carved ornaments peer out through the rich green tapestry of close leaves. You walk between the graves to the very church doors, and the tablets on the walls bear the memorial stories of the departed.

Nor are you out of reach of such influences and associations when you leave the church walls. Even at a distance you may see the old tower,

"Which lifts the soul up silently
To Heaven, with all its dreams,"

and hear floating through the evening air the sweet, clear notes of the birds. It is no wonder, that a country so beautiful, and so rich in human memories, so strong in its ties of household affection and faith, should be dearly loved by her children, for even a stranger soon regards it with warmth, which no other foreign land can awaken.

TAKE A SEAT.

J. E. M'C.

IT is a motto of the Cary Indian that "it is ter to walk than to run, it is better to stand than to walk, it is better to sit than to stand, it is better to lie than to sit." Without taking it quite so far, I would urge every housekeeper never to stand about her work when she can sit. There is no danger but what she will get sufficient exercise, in any case, and the relief and rest she will find in often sitting down when she has a pan of potatoes to pare, or a dish of berries to hull, or a hundred other small matters to attend to, can not be computed until the days' work is done, and she sees the comparative comfort with which she has been able to perform her work.

Some very delicate ladies are able to carry on the affairs of a household with a very small outlay of strength by using great system and care in this respect, and the strongest-armed woman has need to husband her strength as she goes along, for she will need it all before her life-work is done. To make work easy when sitting down, a variety of seats are needful, placed in convenient corners, for if one must go out into another room to look for the right kind of a chair, the chances are that the work will be done standing.

A low seat made of a box, well-cushioned and simply covered is handy for a great many things. A low rocker, by a pleasant window, is a real bower of ease where a tired mother may catch many a little breathing space, and have for a few minutes an out-look that shall make her spirits brighter as she goes back to her work.

But a high stool, like an office chair, should form a part of every kitchen outfit, seated on it, one may wash dishes, fold and iron clothes, and do many things that most women suppose must be performed standing. A hundred women would be glad to make this change in their way of working if it was not for that great bug-bear "what will people say?" They have strength to drag about their work after a fashion, but they have not moral strength to stand up to that. A little tonic for the moral is what a great many women need. You must harden yourself to that carping, cynical Mrs. Grundy's talk, and go serenely on your way, when you are convinced it is the right way. A cheery, independent manner, disarms criticism and often brings the critic around to your way of thinking. Always yielding and always, in a manner, trembling for fear other folks won't like it, makes you a weary slave. You cannot wisely despise public opinion, or run against it determinately; but you may bend and mold it to your own service, and with lasting benefit to others as well as yourself.

WOMAN AS A PIANOFORTE TUNER.—Can any reasonable objection be advanced to the employment of women as pianoforte tuners? The present writer is totally ignorant of music, and therefore may have erroneous notions respecting the scientific acquirements necessary for the exercise of the tuner's art; but whatever these may be, is it proved that women cannot attain to them? If the tuner needs only a true ear for harmony, mechanical facility in handling the implements of his craft, and a knowledge of the construction and capacities of the various instruments on which he may be required to exercise it, there can be no doubt that women are as well qualified by nature as men to be pianoforte tuners. The true ear for harmony is the test requirement, and as many women as men possess that. The occupation is not fatiguing, and it is one that, like the cleaning, repairing and regulating of clocks and watches, might be secured to numbers of properly taught and qualified women, if the ladies who are interested in extending the area of employment for their own sex would commence the movement in favor of it. It cannot be too emphatically repeated that in all these suggestions there is no thought of anything but self-supporting industry, that it is distinctly to recommend certain kinds of work which, being fairly well done by women, shall recommend themselves to that only true and lastingly valuable patron, the public, these suggestions are offered, and that it is only the first "push" that is needed or asked.

THE party of teachers and students of Lasell Seminary, Auburndale, Mass., which is spending the vacation in Europe is having a profitable trip. Mr. Bragdon is getting some rare art treasures, with the generous provision of the Trustees, including some rare original etchings of masters for the use of the students in Drawing.

MRS. MARY F. MCCLOUD, Darlington, Beaver Co. Pa., wants to know name of the lady who wrote over *nom-de plume* "Alabama" from Carrollton Ala., in RURAL, 11 May.

FIRST meeting of the Woman's Club comes off in RURAL of September 7. Be sure and send you contributions in time for publication.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MY NEIGHBOR'S LACE LAMBREQUINS.

"For the land's sakes!" exclaimed Mrs. Brown, dropping in upon me for a morning's call, "what an extravagant creature that young Mrs. Harman is! why just as I was coming through the back yard, I happened to glance up, and I do declare, if there to all her kitchen windows didn't hang the most beautiful lace lambrequins I ever set my eyes on.

"Lace lambrequins at her kitchen windows! you must be mistaken."

"No, I am not, and if you don't believe it, jest go and look for yourself."

I did so; and there, sure enough, were hung what appeared to be elegant lace lambroquins.

"She'll ruin that husband of hers," continued Mrs. Brown. "I must say it makes me angry to see such doings. Mr. Brown is worth twice as much as her husband, and I never thought of having anything but green paper curtains at any of my windows."

"Well," I remarked, "I think myself, it is a very extravagant move. Young persons when starting in life, should be economical, if ever, and look out for a rainy day."

"Have you called?" asked Mrs. Brown.

"No, but I should like to."

"Then supposin' you slip on your bunnit, and we'll jest step over. Those lambrequins have made me kind o' curious."

I assented, and in less than five minutes we stood at the door of a pretty cottage.

"Good morning, ladies," said Mrs. Harman, appearing at the door in a neat calico morning dress, "walk in," and she ushered us into a cool, shady room, whose windows were draped with curtains of white dotted muslin.

She was very social, and we fell at once into a pleasant chat. At last Mrs. Brown introduced the topic of domestic economy.

"Yes, indeed," said Mrs. Harman, "I know something of economy. Harry and I are just starting in life, and I feel we ought to save in every way that we can, without infringing upon our real comfort. He wanted me to keep a girl, but I told him, no, that I had much rather do my own work, and I find it very pleasant too. Through the hot weather I arise bright and early, and get all the baking and sweeping out of the way before breakfast; then I have plenty of leisure to sew. Yesterday, I finished those curtains, (pointing to the window,) I didn't think they would do so well. I made them out of a couple of old white dresses that I had thrown aside—"

"You ought to have put your lace lambrequins in here," said Mrs. Brown.

Mrs. Harman looked puzzled.

"What do you mean?" she asked.

"Why them beautiful lace things you've got hanging up to your kitchen windows; I couldn't think of such extravagance in my house."

Mrs. Harman broke into a hearty laugh—

"Won't you step out and look at them?" she asked.

"Well I never! if I ain't beat!" uttered the amazed Mrs. Brown, as we surveyed them, For lo and behold, they were nothing but newspapers cut and notched in imitation of lace pattern.

Mrs. H., kindly showed us how to fold the papers and cut them, so we both walked home and hung lace lambrequins at *our* kitchen windows—try it. M. E. STONE.

CRINKLED MUSLIN.

The secret whereby sheer muslin is made to assume the new desirable appearance of crape, is this. The dress, tie or bow, is washed in cold water, without the use of soap or starch. To the rinsing water is added a little clear coffee—only enough to give the muslin a faint creamy cast. Then wring out by twisting the goods into a rope, as tightly as possible, and winding it around the clothes line—like a vine—securing it at each end. In this way let it dry thoroughly. Then carefully unwind and shake out, and if successful, the muslin will have that creamy, crinkled look alone known in crapes. MARY B.

DOMESTIC RECIPES.

Sliced Cucumber Pickles.

Medium-sized green cucumbers, pared, and sliced, as for the table. To four quarts of slices add one large spoonful of salt, mixing it through them. Let them stand over night, and in the morning, rinse, and drain through a colander. Boil vinegar with whole, white mustard seed, half a teacupful of seed to two quarts of vinegar and set it away to cool. Pack the sliced cucumbers in quart cans, and cover with the prepared vinegar. Place a bit of alum on top of the pickles in each can, and seal. Keep in a dark, cool place. Pickles made after this rule, retain much of the natural flavor of cucumbers.

Sliced Tomato Pickles.

One peck of green tomatoes, sliced; mix with them one half teacupful of salt. Let them stand twelve hours, then drain. Place them in a large porcelain kettle, or new tin pan. Add one pound of brown sugar; one-fourth pound of ground mustard; one tablespoonful of whole cloves; one tablespoonful of allspice; one-fourth pound of stick cinnamon; one large green pepper, left whole. Cover with best cider vinegar, and set on the stove. As soon as the vinegar begins to be warm, with a large spoon turn the slices over and over, until they are of a yellow color. Be careful not to break them. When done, pack in jars and cover closely. Tomatoes for this pickle should be *entirely* green.

Chopped Tomato Pickles.

One peck of green tomatoes sliced, and sprinkled with one teacupful of salt. Cover with cold water, and let stand over night; rinse in fresh water; put three onions and three green peppers (medium size,) to the tomatoes, and chop all fine. Scald in weak vinegar, and drain. Add one cupful of grated horse-radish; one pint of white mustard seed, (whole;) two teaspoonfuls of ground cloves; one of ground cinnamon, and one teacupful of brown sugar. Pack in jars, after mixing the mass very thoroughly, and cover with cold strong vinegar.

Peach, Flavoring Extract.

The meats of peach pits, in brandy, make an excellent flavoring extract, resembling that of bitter almonds. Allow one teaspoonful of the meats, to two of brandy. Take one teaspoonful of the liquor to a quart of custard, or cake dough.

Grape Pickles.

Select small bunches of ripe, firm grapes and pack in the jars, in which they are to be kept. To a quart of vinegar, add a half pound of sugar; one-fourth of a pound of stick cinnamon, and an ounce of allspice, (whole). Boil, and when cold, turn over the grapes. They will keep without sealing. Stone jars, holding a gallon each, may be used for these pickles. A piece of white cotton cloth, should be spread over the clusters, and a plate placed on top, to keep them under the vinegar.

Green Corn Griddle Cakes.

One pint of grated sweet corn; one teaspoonful of salt; one beaten egg; one large spoonful of sweet milk; two large spoonfuls of flour; and a little black pepper. Add a large spoonful of melted butter, and mix well with a spoon. Drop on a hot, buttered griddle, and fry until of a rich brown color, on both sides. Shape the cakes so as to resemble oysters, which they are like in taste. Nice with meats for dinner, if served very hot.

Lima Beans.

After shelling, let them lie in cold water for an hour; drain, and add enough boiling water just to cover; cook until tender, or until the beans are nearly dry. Season with pepper and salt. Add a teacupful of milk, and a bit of butter and let the beans boil up once before serving.

Tomato Sauce.

Pare and slice one peck of *ripe* tomatoes, and one quart of onions. Sprinkle with one teacupful of salt, and let them stand two hours; then drain; next, add one half ounce of black, ground pepper; one-fourth pound of whole, white mustard seed; one large spoonful of ground cloves; one teacupful of brown sugar, and one quart of vinegar. Boil all together, for three hours. To be eaten with meats, like catsup. Omit onions, if not liked.

Iowa, MRS. M. G R.

News of the Week.

POLITICAL.

MONDAY, August 26, 1878.

On Wednesday a conference of the principal Hayes republicans of this State met at Saratoga, principally to concert measures for the defeat of Conkling's re-election to the Senate. The participants are gentlemen of high character, but with a slim following, and many of them would sooner see a democrat elected than the present senior senator from the Empire State. The present outlook is that there will be a fierce struggle over the election, and that this very handsome, aristocratic tail will try hard to wag the shaggy republican dog. Should the dog refuse to be wagged, it is not improbable that the tail will attempt to disrupt it, and, failing in this, will, at least temporarily, part from it and try to find a place at the head of the rival animal. On the following day, Thursday, the Democratic State Committee decided, at the same place, to hold a State Convention at Syracuse on Sept. 25. The meeting was under control of the Tammany or anti-Tilden party: and it was made evident that the alleged bargain with the Conklingites is a myth. The general feeling was that the democrats would be able to secure a majority of the next legislature, and so be able to elect a United States Senator, even without the aid of disaffected republicans. The movement to place Ben Butler in the Governor's office in Mass. has been actually started by the circulation of a vast number of petitions asking him to run as an independent candidate. Up to yesterday these were open for signatures, and it is expected that 12,000 have been received in Boston, and 40,000 in the State at large. Meanwhile all the "kultsha" of the "Hub" and a good deal of the respectability of the State are in dire alarm lest "bug-bear" Butler should be elected by the "rabble" as the highest representative of the inhabitants of the commonwealth. It is said that President Hayes has contributed liberally towards campaign expenses in the fall, and notwithstanding the uplifted hands and eyes of civil-service reformers, it has been decided that the citizens of the different States employed in the Departments at Washington, shall be given leave of absence to go home and vote. Some time back postmaster Smith, of Chicago, refused to permit his subordinates to be taxed for campaign expenses, and thereby got into hot water with the Republican National Committee at Wahington; and now postmaster Loge, of Cincinnati, has bruskly refused to contribute, and there is a number of sportsmen hunting for his official scalp.

In spite of the number of times the newspapers have brought Alex. H. Stephens, of Georgia, to death's door, or even thrust him inside its threshold, the old man has lived to brilliantly defeat the bourbons of his district who wished to ostracise him from the democratic party on account of his patriotic independence during the late electoral troubles. He is now receiving congratulations from all sides on his unopposed renomination to Congress, after an active personal canvass of his district, during which he displayed much of the eloquence and statesmanship that, a generation ago, won him his celebrity. The numbers of men, up North here, willing to serve their country in Congress, is by no means small, but down South the number is vastly greater. For instance, outside Stephens' districts in Georgia, there are said to be at least five congressional candidates for the least contested districts in the State, and the number of aspirants range up to more than twenty for many districts. The fact is almost every Southern man with a common-school education, is a statesman, or flatters himself with that notion.

The Tenessee democratic convention arraigns the republicans for the conversion of greenbacks into bonds; for demonetizing silver; for establishing national banks; for fixing a period for resumption; for levying high duties on tobacco and alcoholic drinks and for administering the government in the interest of the rich and against the poor. It then demands the repeal of the Act making bonds payable in coin; the repeal of the Resumption Act; the substitution of greenbacks for national bank notes; the raising of all future government loans by the issue of paper money bearing no interest; the coinage of silver in unlimited quantities and the payment in it of all government obligations. This platform is condensed as a specimen of what the bulk of Southern platforms will substantially be this fall. By the way, Secretary Devens says he has no ambition to run for the governorship of Tennessee. Mr. Spear, Commissioner of Patents has been removed, and Gen. Paine, ex-member of Congress from Wisconsin, appointed in his stead, much to the disgust of civil-service reformers who think that a subordinate could easily have been found in the office capable of discharging the duties of the position much more effectively than the new appointee. What adds to their disappointment is that the change has occurred in the department of Secretary Schurz, the model S. C. R.

The Potter fraud committee still continues its investigation in this city; but during the past week its control has been entirely in the hands of Ben. Butler, who has spent nearly all the time in an attempt to fix directly upon the President the responsibility of the bargain, in accordance with which the republican governments in Louisiana and South Carolina were overthrown. The public of all parties are getting wearied of the interminable wrangles and contradictions of this body, and the wish seems pretty general that the committee should "give us a rest." Leet, the lively witness of last week, who became crazy at the close of his examination, has been sent to Bloomingdale Insane Asylum, suffering from acute dementa. Doctors say he may recover in six months or so. Howitt's Committee on Labor has been listening during the week to various theories on the present business depression. Only a few representaves of labor appeared before them, but their place was supplied by professors of colleges, manufacturers and merchants—the general opinion being that over-production is the cause of the stagnation. Out in Lee and Phillips counties, Arkansas, the democrats are reported to have adopted the "shot-gun" plan of carrying an election. The congressional district, of which these counties form a part, gave Hayes 2,000 majority, and now the republicans declare they are afraid to run a ticket. Governor Miller has ordered the armed bands to disperse, but the republicans say that, even if the order is obeyed, it has come too late.

MISCELLANEOUS.

Good news for dairymen! Cheese has been adopted as an army ration. The benefit from this measure will not arise so much from the quantity of cheese consumed by our handful of troops, as from its tendency to popularize its use among the people at large. For, although Americans eat more butter than any other nation proportionately, there is little doubt but that they use less cheese. Out in Dakota, on the Dairymple farm, 13,000 acres of wheat were cut in just a dozen days. It is all No. 1 wheat, aggregating at least 300,000, and 15 steam threshers, each threshing 1,000 bushels a day, will turn out the whole of it in 24 days. It is Chicago that furnishes the most noteworthy of dishonest rascals this week, in the person of C. W. Angell, secretary of the Pullman Palace Car Company, who has absconded to Europe with upwards of $120,000 of the money intrusted to his keeping. 'Twas a clear case of robbery not of defalcation, this time. Missouri is sadly burthened with a tricky State treasurer named Gates. This worthy has been bolstering a couple of rotten banks, controlled by his bondsmen, by depositing in them the money of the State. The banks, however, failed, and the State has thereby lost a round million, without getting rid of its treasurer, however, who still continues to deposit the public taxes in the bank of St. Joseph, whose president is also on his bond.

Some time back it was mentioned here that an act with regard to the Hot Springs, Arkansas, Government Reservation, passed just at the close of last session of Congress, had not been enrolled by the clerks, and thus remained inoperative. It is now stated that the error was due to the dishonesty of two congressmen and as many clerks, who were bribed to cause the omission, by parties interested in the springs who would gain by this rascality. Up in Western Vermont migrating quails are proving themselves as formidable enemies to potato beetles as Guinea fowls are reported to be elsewhere. For some time back there has been a heavy emigration of the industrious inhabitants of Iceland, who, at home, have been sorely troubled by volcanic fires and hyperborean cold and ice during their long nights and equally long days. Lately 400 of the wanderers arrived in Quebec, via Glasgow, Scotland. Of these, 100 will remain in Ontario, Canada, another 100 will settle in Lyon Co., Minn, while the remaining 200 will join the colony already established by former bands of their countrymen away out in Manatoba.

A prominent Chicago paper having lately charged that oleomargarine or "tallow-butter," was being mixed with the creamery butter manufactured in the neighborhood of Elgin, Ill., a number of the largest manufacturers of creamery butter thereabouts, together with the members of the Board of Trade for the sale of dairy butter, emphatically denounce the statement as false, *so far as they are concerned*, and strongly repudiate the use of the concoction. Granting full faith to the guarded denial of these gentlemen, there is no particle of doubt but that a vast quantity of oleomargarine is used in this country in the manufacture, or rather adulteration, of dairy products, and the restriction placed upon this denial, coupled with other reasons, renders it not improbable that other butter-makers in that region participate in the fraud. This is an abuse the prompt exposure of which is of importance to the entire dairy interest.

An abstract of a chapter from the Report of the Bureau of Statistics of Massachusetts has just been issued in anticipation of the publication of the whole book next January. It gives a detailed estimate of the unemployed skilled and unskilled laborers of that State on the first of June. The estimate has been compiled from reports on the subject forwarded by the officials of each district, and wherever the reports were conflicting, that giving the greatest number was invariably adopted. It is the first official attempt in any State in the Union to get at the actual number of unemployed laborers. It was roughly estimated that there were in the Bay State 200,000 pair of adult hands compulsorily idle. This Report gives the number of unemployed males and females over 18 in the whole State, at 28,508. About the first of June, it is true, laborers were busy in agricultural districts, but work in the factories was at that time especially slack and some of them had temporarily "shut down." On the above basis, the number of unemployed in the United States reaches 570,000—a vast number truly—but happily small, in comparison with the estimate of 3,000,000 about whom politicians, demagogues and growlers have lately been complaining. In view of the fact that, in the entire country, there are only 10,000,000 people engaged in productive industries, the exaggerated absurdity of the 3,000,000 estimate is readily apparent.

Last Wednesday a meeting of prominent lawyers from nearly every State in the Union, met at Saratoga, N. Y. to organize a National Bar Association, in response to a call signed by Sec. Evarts, Ex-Sec. Bristow, Stantley Mathews and three other prominent lawyers. A resolution was adopted to invite to membership those only to whom circulars to attend the convention had been issued. It is to be hoped the new organization will act as a censorship on the members of the legal profession and take measures to rid it of the host of pettifoggers and shysters that now disgrace it. Such a measure would be a boon to the public, by rescuing it from the exactions and disreputable machinations of these gentry, and greatly benefit honorable lawyers by freeing them from competition with—well, should one say two-thirds of the profession?

During the week there has been a great deal of newspaper wrangling going on between Dr. Carver, the wonderful rifle shot, and Capt. Bogardus, the shot-gun champion. The former has just married, and the latter has just got back from his European triumphs; and between them there is a good deal of jealousy as to their respective merits. Several challenges have been issued by both, but while each professes to be anxious to meet the other, they cannot decide on a stakeholder, the Captain nominating, as usual in such cases, the editor of a sporting paper, and the Doctor, as an advertising dodge, naming a manufacturer of fire-arms. Each has been calling the other "pet names" and accusing him of "funking," but to an outsider Bogardus certainly seems to be bent, more than the other, upon "business." During the week Kearney has been "swinging round the circle" out West, having addressed meetings in Chicago, Indianapolis and Cincinnati. His harangues were mere repetitions of his past tirades of abuse, profanity and black-guardism, intermingled with a chunk of sound sense here and there, and an occasional burst of genuine eloquence. The fact is, the fellow said all he had to say the first time, and unless he used a great many superfluous words, all he had to say worth listening to, could have been said in ten minutes.

Yellow fever still continues its ravages in the lower Mississippi valley with even increased virulence. Yesterday there were in New Orleans 163 new cases and 33 deaths; in Vicksburg there were 85 new cases and 22 deaths; in Memphis 61 new cases and 27 deaths, while in Grenada the dead and dying are huddled together in the same room, with not enough well people about to bury the former or nurse the latter. Many nurses and doctors after struggling heroically, have been either stricken down themselves or terrified into flight. All who could leave the

scenes of pestilence have done so, but of the fugitives many have borne away with them the germs of disease and perished as far away as Philadelphia, Cincinnati, St. Louis, Brooklyn and New York. Society is utterly demoralized; the poor are starving for want of work and want of food; the predatory classes are robbing the houses whose defenders are sick or dead; parents flee from their plague-stricken children and children shun their dying parents; while through the scenes of agony and death noble men and women, clergymen, doctors and merchants, are busy on errands of mercy and relief. From all the tormented cities come supplications for more nurses, more doctors, and, for Heaven's sake! more money with which to provide the necessaries of life for the suffering people.

FOREIGN.

Another famine is threatened in Ireland by the failure of the potato crop. In 1847 a similar failure caused half a million deaths by starvation in that unhappy country, despite the ill-managed aid of the British Government and the tardy charity of the world. So vast a calamity would now be impossible, yet there is every prospect there of a great deal of suffering. Last year the crop is said to have been a dead loss, the yield in some places not paying a tenth of the cost; and now come reports that the vines are blighted and the tubers tainted. It has been argued with a great deal of force that one of the heaviest curses on the Emerald Isle is the nearly universal culture there of potatoes. Besides the misery their failure has brought in late years on the inhabitants, the ease with which a wretched livelihood was formerly got from them, rendered the bulk of the natives lazy, improvident and unambitious—faults which years of suffering and often exile have not yet eradicated from the character of many of them.

Garribaldi has issued another letter bitterly inveighing against Austria and heartily approving German socialism. Recent elections in France indicate that the Senate will, after next elections, have a republican majority, the same as the Assembly. Hitherto the majority in that body was composed of monarchists and imperialists, and should the republicans gain control of it, it will tend to assure the permanence of the Republic after 1880, when McMahon's presidency terminates and the future form of government is to be definitely decided. Meanwhile, the ex-empress, Eugenie, is being brilliantly feted in Vienna by the Emperor and all the great Court dignitaries, while her son, the Prince Imperial, is being treated with equal distinction during a tour through Norway and Sweden. The Emperor of Morocco, in whose territory a terrible famine has lately been raging, has of late been killed several times by cablegrams, and now, once more, they place him at death's door from the effects of poison. It is reported that the negotiations between Bismarck and the Vatican have fallen to the ground, and that the Ultramontanes in the Reichstag will therefore oppose, as heretofore, the Chancellor's policy. The prizes at the Paris Exposition will be distributed October 21, when, contrary to a late announcement, the great show will close with a magnificent fete.

As an illustration of the all-pervading official corruption in Russia, it is now stated that the reason why Gen. Todelben replaced the Grand Duke Nicholas in command of the Russian army before Constantinople was that the latter had accepted a present of 7,000,000 francs from contractors for furnishing moldy bread and rotten hay to troops operating in Bulgaria, and that for this corrupt act he has been banished to his estate at Perm, Gen. Greigh, who established the fact, has been made minister of finance, and ninety field officers who shared in the plunder are to be disgraced. Numerous instances of the grossest kind of peculation and dishonesty in all ranks of Muscovite official life, have lately been made public, and it is highly doubtful whether the standard of official honesty is any higher in the huge monarchy across the water than it is in the great republic on this side of the Atlantic. A new Russian 6 per cent loan of $214,000,000 is about to be placed on the market. The funded debt of the empire is now $1,500,000,000 and its floating debt $1,000,000 more. Since the Muscovite war with Khiva, their forces have been kept pretty busy operating in Central Africa in the direction of British India. It was lately announced that they had received the submission of a Khan who had hitherto been dependent on Afghanistan and whose territory was only 250 miles distant from the English possessions. News now comes that all movements in that quarter have been terminated and that the troops have been recalled home. The war between the Austrians and Bosnians still continues, though the former have gained several important successes, and the latter begin to show signs of demoralization. Austria will soon have in the field 185,000 men, enough to crush all opposition, and perhaps to call Servia and Montenegro to account for aiding the insurgents. Greece has appealed to the Powers to force Turkey to concede to her the territory she was partly promised by the Berlin Congress, and her petition, it is said, meets with favorable consideration. The Russian troops near Constantinople are embarking for home, but fresh men are on their way from Russia to take their places.

With regard to the agricultural prospects in the British Isles, Mr. James Caird, the best English authority on the subject, wrote to the London Times, last Thursday, as follows:—"The agricultural returns of Great Britain show a small increase in wheat and barley and a decrease in oats. The acreage of wheat has increased 50,000. Estimating Ireland at a slight increase, the total acreage of wheat in the United Kingdom is 3,400,000. The new crop is fully up to the average and better than for some years. It will yield 92,000,000 bushels, leaving 104,000,000 bushels to be drawn from abroad. The French wheat crop is believed to be below the average, and the French will be buyers instead of sellers. The present prices will probably be maintained, or perhaps be slightly increased, but there will be no scarcity. The potato crop will be about the same in extent as last year's. There is less disease than for several years past at the same period. Young cattle have increased 40,500 and lambs 263,000."

HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Aug. 24, 1878

BEANS AND PEAS.—Dealers express very little confidence in the bean market, and nearly all holders who have missed much the light summer trade are willing to shade prices for the standard sorts; other grades almost nominal. One cheering feature has been developed lately; the supplies of old to come forward are less than anticipated, while it is thought that the principle growing districts will not have new cured specially early; farmers report cold rains and other impediments to an early harvest. Still at this date no speculative fever is likely to set in, and sellers will be apt to push stock out as fast as the demand will call. Green peas, $1 20@1 25 for crop of 1876. Canadian, in bulk and bond, unchanged, 76½@77c.

We quote medium beans, prime, $1 50@1 52½; fair to good, $1 35@1 35; marrows, prime, free on board ship, fair to good, $1 40@1 45; Pea, $1 35@1 50; white kidney,

Exports of beans past week, 749 bbls.; receipts, 3,000 bush.

BEESWAX.—There is a very meager business but prices steady; Western and Southern quoted 27@28c.

Exports since Jan. 1st 112,950 lbs. Same time 1877, 8,725 do.

BROOM CORN.—Offerings are moderate tight and prices are steady. Latest prices are 6a6½c. for hurl and short brush; 5@6c. for medium green, and 4@4½c. for red and red tipped per lb.

BUTTER.—Receipts are larger, but are largely composed of medium grade, and many parcels give evidence of having been held when they should have been sent in. Every season somebody learns a lesson through "holding for a rise." Prices have slackened, and with the moderate demand State is forming buyers; jobbers can obtain choicest lots at inside figures. The outlook for the coming week is a blue one, for both State and Western.

State dairy, pails, choice, 19@20c.; other, 14@18c.; half tubs and pails, choice, 18@19c.; other, 14@17c.; Welsh tubs, choice, 17@18c.; other, 14@16c.; poor State, 10@12c.; creamery, best, 23@24c.; good, 19@20c.; sweet cream, 19@21c.; Western creamery, best, 21@22c.; other, 14@20c.; Western dairy, selected, 13@14c.; fair to good, 10@11c.; factory, best, 10@12c.; fair to good, 8@9c.; very poor, 6@7c.; grease, 4@5c.

Receipts for the week 33,000 pkgs.; Exports, 13,317 pkgs.

CHEESE.—Early in the week prices hardened a little, but larger supplies coming forward since have forced an easier market, more particularly on other than the choicest colored lots. Shipments for the week are 115,000 boxes.

Quotations are: Fancy at 8¼@8½c.; 7¾@8¼c. for good and prime; 6¾@7¼c. for fair; 5½@7c. for half skimmed; 3@4¼c. for skimmed. State, farm dairy at 7@7½c. for good to choice, 6@6¾c. for fair to good, and 3@4¼c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@8½c.; do. good to prime, 7@8c.; do. fair, to good, 6@7c.; Western factory, fine, full cream, cheddar, 7¾@7¾c.; do. fine, full cream, flat, 7¼c; do. slightly skimmed, flat, 6¾@7c.; do. half skimmed, 5a6c.; do. full skimmed, 3@4c.

Receipts for week, 133,975 boxes,
Exports for week, 115,170 boxes,
Liverpool cable quotation, 44s.
Gold closes at 100¼.

COTTON.—Fluctuations have been frequent, but on the whole prices have tended to a higher basis through the southern advices. Latest prices are for August, 11.38a11.39c.; for September, 11.69a11.70c.; for October, 11.41@11.45c.; for November, 11.24c.; for December, 11.17@11.18c.; for January, 11.17a11.18c.; for February, 11.23@11.25c.; for March, 11.29@11.31c.; for April, 11.36@11.38c.; for May, 11.41a11.45c.; June, 11.48a11.50.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	10 5-16	10 5-16	10 9-16	10 9-16
Strict ordinary	10 11-16	10 11-16	10 15-16	10 15-16
Good ordinary	11 3-16	11 3-16	11 7-16	11 7-16
Strict good do	11⅛	11⅛	11⅛	11⅛
Low middling	11⅜	11⅜	12	12
Strict low middling	11⅞	11⅞	12⅛	12⅛
Middling	12	12	12⅛	12⅛
Good middling	12 3-16	12 3-16	12 7-16	12 7-16
Strict good middling	12⅝	12⅝	12⅝	12⅝
Middling fair	13⅜	13⅜	13⅜	13⅜
Fair	13⅞	13⅞	13⅞	13⅞

Stained.

Good ordinary..10 5-16; Strict good ordinary...10 13-16
Low middling..11 5-16; Middling.....11 11-16

DRIED FRUITS.—New fruits have tended easier, being plenty, freely offered and dull. Old stock is inactive.

New blackberries, are quoted at 5½c. Peaches—Peeled, new Georgia, 4a5c. for poor, 6a7c. for good and 7¾@8 for prime; unpeeled old halves, 3@3½c.; quarters, 2½@3¼c. Pitted cherries, 14c.; southern plums, new, at 9@10c. Apples—State quarters, 3@4c.; do. sliced, prime, 4¼c.; good, 3½@4c. New apples at 3c. for southern quarters in bbls, New raspberries, 22c., and evaporated, 24@25c.

Exports since Jan. 1st, 10,754 bbls. apples. Same time last year, 23,445 do.

EGGS.—Receipts for the week, 5,135 bbls.; do. last week, 4,747 do. Prices have run up quite rapidly during the past few days with a good business attending. Sellers are a little nervous over the favorable variation from past movement as they fear the market may be "too good," by which they mean that supplies may be loosened to an extent that will send rates down again—and they know it is a difficult matter to turn them up after a fall.

Near points, 18a19c.; State and Penn., 18@18½c.; Western, fresh 17a17.8c.; do., Canadian, 17½@18c.; inferior stock, 16½c.

FLOUR.—The supplies are large and prices tend a little easier, more especially for other than choice lots of winter wheats and Minnesotas.

Latest prices are $3.40@4.00 for very inferior to fancy superfine State, the latter an extreme; $4.00@4.30 for poor to good extra do. odd lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.20@5.40; choice to very fancy do at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.15@5.75; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@$5.75, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.20@6.00 (fancy brands at higher prices); Minnesota "straight," very inferior to very fancy, at $525.@7.25, and patent poor to strictly fancy at $5.50@8.85; unsound stock at from $3.00@5.25; city mill extra at $5 25@5.40 for West Indies (the latter rate for fancy in new packages); do. for England, 4.00@$4.15; do. trade and family extras, $5.25@6.75; do. for South America, $5.45@6.00 for fair to fancy; No. 2 $2.50@3.25 for inferior to very fancy.

CORN MEAL.—Is selling at $3.40@2.75 for yellow Western, and $2 95 for Brandywine.

FRESH FRUITS.—There has been a fairly brisk trade in apples, but the quantity is still bulky enough to prevent an advance in prices. The new "King William" brings the highest rate and is certainly the finest high colored variety ever shown here at such an early date. Peaches have lost much of their steady sale; quality has ruled poor for several days, and even with the comparatively light supply a good many failed to sell on arrival as has been the custom this season.

New Jersey fruit is turning out very badly, in fact dealers would rather not handle it. Prices this week showed a wide range. Pears are in liberal supply, but a good portion of them are rough; only first quality of fancy bring an extreme. Grapes are irregular in price; some southern stock, especially large packages of loose, cannot be definitely quoted. Plums are looking well. Dealers are annoyed with the lack of uniformity in bbls., and intend, if possible, to make bushel rates the standard. It is reported that rain has injured the Wisconsin cranberry crop. Apples, Nyack pippins, bbl., $1@1 50; Orange and Golden, $1@1 25; King William and a few other extras, $2@2 50. Pears, Bartlett choice, $5@6; common, $3@4; Clapp's favorite, $4@5; cooking and useful, but common table, $2 50@3. Plums, Quackenbos and Magnum Bonum, $7@8 bbl.; green gage and egg, $5@6; blue gage, $4@4 50; Davison, $5. Grapes, southern, Delaware, 11@13c. lb.; Ives and Concord in good order; 5@7c. Whortleberries, $2@2 50 bush. Peaches, Del, crate extra, $1 75@2; other, $1@1 50; baskets, extra, $1 75; other, 75c@$1 50; N. J., 40c.@$1 25. Watermelons, N. J., per 100, $15@25; Md. and Del., $10@25; Va., $8@10. Hackensack nutmegs, $2@2 50 bbl.; Keyport, 50c.@$1 00. Peanuts unchanged, holders anxious to sell; Va. hand-picked, $1 45@1 50; other, $1 25@1 35. Hot-house grapes, 30@65c. lb.; varieties, Black Hamburg, muscat and Sweet Water, California grapes brought $5 per 40 lb. crate. Seckel pears, $5 50 box; plums, $4.

GRAIN.—Wheat has shown the heaviest transactions ever known here, partly speculative, but to a fair extent on orders from the continent; prices after advancing have closed weak. Corn is active at firm prices. Oats have had a fair trade demand, and at steady prices.

Latest sales of wheat are of No. 1 Milwaukee or Minnesota spring at $1 18; amber southern at $1 11; ungraded red at 72c.@$1 10; No. 2 red, steamer grade, at $1 06@1 07, No. 2 red at $1 08¾@1 09¾; white State at $1 20@1 20¼; do. steamer grade, at $1 15@1 15½; No. 1 white at $1 18¾@1 19¾; No. 1 white, steamer grade, at $1 14@1 14½; No. 2 white at $1 10@1 11; No. 3 white at $1 07@$1 08; ungraded white in lots, at $1 08@1 08½; amber Michigan and No. 1 red, at $1 11@1 12; No. 2 amber in lots at $1 07¾@1 08¾; No. 2 amber, steamer grade, in lots at $1.04@1.05; ungraded amber in lots at $1 09@1 12; No. 2 red, first half September, $1 09¾; No. 2 amber, by sample, at $1 07½; New York No. 2 spring, October option, at $1 06; No. 2 red August option, at $1 09¾@1 09¾; do., September option, at $1 09¾@1 09¾; do. October option, at $1 08¾, Rye at 62@64c. for western, and 64@65c. for State. Corn for New York No. 2, August option, at 48¾c.; do., September option, at 49¾c.; do., October option at 51¾@52¾c.; steamer mixed, August option, at 48c.; do., September option, at 46c.; do., October option at 51@51¾c.; spot lots include ungraded mixed at 44@48c., mainly at 46@48c.; steamer mixed at 47@48c., and New York No. 2 at 48@49¾c.; mainly at 48½@48¾c.; yellow western at 53c., and New York No. 2 white at 54¾@55½c. Oats are for York No. 2 white at 31¾@32c.; No. 3 do. at 28@29c.; New York No. 1 at 32½c.; New York No. 2 at 30@31c.; do. for August delivery, at 31c.; New York No. 3 at 27@27½c.; New York rejected at 27c.; unmerchantable at 25½c.; while western at 29½ to 35½c.; mixed western at 26 to 33c.; white State at 32 to 37½c.; mixed State at 30@@33½c.; No. 2 Chicago quoted at 33c.; No. 2 Milwaukee at 33@33½c.; No. 1 white quoted at 38@38½c.; New York extra quoted at 33½@34.

HAY AND STRAW.—New hay comes in freely and prices are easy for other than prime lots, quoted at 45@50c. for shipping, and 70@80c. for retail qualities. Straw quoted at 35@45c. for long rye; 25@30c. for short rye, and 25@35c. for oat.

Exports past week 405 bales. Since Jan. 1st, 42,018 do.; same time last year, 31,418 do.

HOPS.—There is nothing doing outside of small lots to brewers, and prices are altogether nominal. The estimates of the new crop are of a freer yield than expected a fortnight since.

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@3c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

POULTRY AND GAME.—Live poultry is plenty and prices are low.

Chickens, N. J, 13@13½c. lb.; State and Penn., 12½@13c.; Southern and Western, 11@12c. Fowls—N. J. 12@12½c; S. & W., 11@12c.; Southern, 10@11c. Roosters, 5a6c. Turkeys, near by, 12@13c.; other, 10@11c. Ducks, 40@75c. pair, including spring. Geese—N. J., $1.50@1.75; S. & W., $1@1.50.

Dressed Poultry easy in price. Phila. dry picked, 15@16c.; other, fair to prime, 13@15c.; Pa. dry picked, chickens, 17@19c.; N. J., 15@17c.; State 15@16c.; Southern, 13@15c. Phila. dry picked fowls, 14@15c.; State and N. J., 13@14; poor, 11@12c.

Game is in light supply; prices weak. Woodcock, State, 70@80c. pair; do. Western 60@70c. Eng. Snipe, $1.25@1.50; grass plover, $2@2.20; stall-fed pigions, $1.62@1.75; tame squab, $1.50@1.75.

PROVISIONS have tended lower, and in less demand. Mess pork quoted $10 20; $10 25 for spot lots. $10 10@10 20 for September; $10 20@10 30 for October. Bacon at 6¾c. for long clear, and 6¾c. for short clear Lard—western steam at $7 45 for spot lots; $7 42½@7 45 for August and September; $7 50 for October. Stearine at 8½ for choice. Tallow at 6 15-16c.@7 for prime. Beef hams at $20 50@21. Beef—extra mess, $11 25@11 50; plain mess, $10@11; packet, $11 25@12 for bbls.; extra India mess, $18@20 for city brands; do. Philadelphia, $17 75@$18.

SEEDS.—Grass are quiet; old clover sold at 8; new timothy to arrive at $1.40, and flaxseed at $1.47½.

TOBACCO.—Export trade continues brisk, and prices are well sustained.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	3 @ 3½
Good lugs	3½@ 4¼	3¾@ 4¾
Low leaf	4½@ 5	5 @ 6
Medium leaf	5¼@ 6¾	6¾@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8¾@10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England, fine, and selections	18 @35
seconds	10 @12
Fillers	5 @ 7
Pennsylvania assorted lots, common	8 @ 9
fair	10 @12
fine	14 @17
fillers	5½@ 7
Ohio assorted lots	6½@ 8

VEGETABLES.—Exports for week 3,650 bbls. potatoes. The demand is still supported by exporters; prices are somewhat better, as quality is improving. Tomatoes are low; on some days the buyer has almost made the price. Egg plants show a large crop, and are extremely low. State E. Rose potatoes $1 75@2; double heads, L. I. and N. J, $1 50@1 75 bbl.; culls 40c.@62; sweet potatoes, yellow, $2 75@3; red $2. Hackensack sweet corn per 100, 50c.@$1. Lima beans, bag, $1@1 50; String beans 50@62c. Cucumbers per M. $1 25@1 75; small $.@3 50. Large tomatoes, 3 peck crates, 15@25c. Onions, white, $1@1 50 bbl.; yellow and red $1@1 12. Marrow squash $1 20@1 50; crook neck $1. Bullnose peppers $1. Beets, 100 bunches, $1. Carrots do. $1. Lettuce, bbl., 50@75c. Cabbages, flat Dutch, 100, $4@5; red $5@6. Egg plants, 100, $2@3. R. turnips, bbl., $1. Okra, per 100, 10@15c.

WOOL.—Manufacturers buy sparingly, but the temper of the market is steady on other than fine stock; sales of XX Ohio fleeces, 37c.; X and above Ohio, 36½@38c.; unwashed fleeces, 24@26c.; combing and delaine at 45c.; spring California at 20@23½c.

LIVE STOCK MARKETS.

Saturday, Aug. 24, 1878.

BEEVES.—Receipts for the week, 9,404 head; do., last week, 10,021 do. Receipts have been less oppressive, and the weather has been more favorable for butchers' business. Still buyers are not enlarging purchases to extent that insures very strong prices. Latterly the trade at the yards has been brisk, opening with a slight advance over Wednesday, but closing weak. Good to prime native steers, 8@10c.; selected 1 ¼c.; fair Colorado half breeds, 8¾@9c.; Colorado and Texas, 7¾@8¾c. Export sales light.

COWS AND CALVES.—Milch cows seem to be mentioned more from custom than from any steady business doing. Most of the arrivals meet with chance sales and in this way $35 for fair and $45@75 for better to good have been quoted during the week. Certainly nothing warrants the shipment of fine milkers to this market.

VEAL CALVES.—The demand has been slack during the week, especially at West Washington market. Milk range 5@6½c. for fair to good N. Y. and State, and 6¾c. for extra N. J.

SHEEP AND LAMBS.—Receipts for the week, 20,078 head; do. last week, 24,016 do. Lighter supplies made a better demand and rather firmer prices. Good to prime sheep, 4¾@5¼c.; bucks, 3@3½c. Lambs rated 6@6c.

SWINE.—Receipts for the week, 22,999 head; do. last week, 23,780. A few cars were offered at the close without buyers. Quotations for medium to good Ohio corn fed, 4¼@4½c; very common, 4@4¼c.; city dressed, 5¾@5¾c.; pigs, 6c.

INDEX TO NEW ADVERTISEMENTS.

Am Ende, C.—Regalin Preserving Powder.
Baird, W. F.—Trees.
Baker, Mercy N.—Woman's Medical College.
Boomer & Boschert Press Co.—Power Cider and Wine Press.
Dillon, J. L.—Sharpless Strawberry.
Gilmore, S. J.—Cheap Farms and Homes in the West.
Hanford, R. G. & Son.—Pear Trees.
Huested, J. B.—Cards.
King, Geo. E.—The Patent Self-Acting Cow Milker.
Kingsford & Son, T.—Oswego Corn Starch.
Mast, Foos & Co.—Iron Turbine Wind Engine.
Payne & Sons, B. W.—Eureka Safety Power.
Parry, Wm.—Sharpless' Strawberry.
Phelps, N. B.—Norwegian Balm for Catarrh.
Rubber Paint Company.—Cubber Paint.
Taylor, Bros. & Co.—Rubber Printing Stamps.
Taylor Mf'g Co.—Portable Farm Engines.
Waters Horace Organs.
Wheeler & Melick Co.—Medal Machines.

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Reading for the Young.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 15.

To be a successful farmer, merchant, or mechanic, it is a good thing to commence operations, if only on a small scale, when quite young. What! a *boy* begin to be farmer, merchant, or mechanic? Yes; it is within the reach of every boy to try some little business on his own account, and no boy has a better opportunity than a country boy. It is as much a part of his education as arithmetic or book-keeping, to expand his ideas beyond paper and books alone. On a farm there is generally a corner of an out-building, or an odd patch in the garden, which a boy, (with his parents' consent) can turn to account. It not only gives him an interest in his home, but also instructs him in care and industry. There is generally some demand for plants among his neighbors, such as cabbage, celery, hot-bed plants, etc. These can all be grown by any country youth with profit, where they are in demand; taking but little time in proportion to most farm productions; care being the most needful thing.

Another source of profit to boys is keeping a little live stock, such as rabbits, pigeons or poultry. The common rabbit is very easily kept, and all things considered, would probably be the most profitable, as they are hardy. Lop-eared rabbits are very tender, and poor breeders. All through the summer a little grass cut from the road-side, or a corner, will keep them. A few apples, or refuse vegetables (if only sound,) will be all that is required, and in winter vegetables that are not suited to market, or any parings will answer all feeding purposes. A little grain, once a day is best for their morning or night meal.

Pigeons are often in demand, but in this line something better than the common varieties will perhaps do better; but that depends on the locality, and one must be his own judge which kind is best before starting. But whatever is commenced let it be strictly honest, and fairly carried on. Now is the time that the foundation of the man is laid. Do not misrepresent anything you have to sell; integrity and a good name are worth more than anything you will ever have for sale. Many a youth has begun dealings not strictly honest, among his companions, and paid so dear for them that he could never recover his standing. When your companions grow up with you, if you are known to be honest, it is likely some may be able to assist you in a more extensive business, and at least they will have pleasant remembrances. PRACTICAL.

MACHINE FOR FEEDING POULTRY.

THE artificial hatching and rearing of poultry, ostriches and other birds has already become a science, and a profitable and important branch of business, and the further treatment of ducks and capons for market has created a demand for machinery for artificial feeding and fattening. The most important machine of this class consists of a circular cage of wood about 15 feet in diameter and 20 feet high, and containing 210 coops or nests for ducks and chickens, the cages being all on the outside.

A chick three months old is put in each nest, and by means of a band of skin or rubber fastened to a light chain is secured so that it cannot escape. In these nests the chicks, pigeons, ducks, turkeys, quails or other birds are kept till they are ready for market, each bird being artificially fed three times a day. The birds can move about and sit down, but cannot walk or fly, and this enforced rest causes them to fatten quickly. A chick having been placed in each nest, the apparatus for feeding is loaded with a mixture of barley meal, Indian meal, milk and water, and is brought up to the cage. Each fowl has been carefully examined, and the amount of food it will comfortably digest is marked plainly on the front of its nest.

The operator then takes a chick by the neck and by a gentle pressure compels it to open its mouth. A rubber tube is inserted in its mouth, and by means of pressure on a pedal, the semi-fluid food is forced into the creature's throat. A guage on the machine records the quantity of food given to each bird, and by watching this indicator just the right amount can be supplied. Ducks are at the same time given a drink of water, the other fowls not requiring water at any time. The cage containing the birds is mounted on rollers, and when one bird is fed, the cage is moved round and the next bird is brought opposite the feeding machine. When the cage has been turned round once the feeding apparatus is placed on an elevator, and the machine and the operator are raised to the next row.

In this manner every chick is in turn fed, the operation requiring about one minute for each bird. Another form of cage is made with only two rows of nests, one over the other, and with the nests disposed in lines. This apparatus does not move and the operator carries the feeding machine, by means of a truck from bird to bird. The feeding machine may be a simple pump that can be moved by a treadle, or it may be a reservoir, in which a constant pressure may be maintained by means of weights. In this case the supply of food given to each bird is controlled by a stop-cock. Contrasted with the barbarous methods of artificially feeding poultry that have been practiced for so many thousands of years in some parts of Europe, this method of machine-feeding has the advantage of neatness, dispatch, and the entire absence of cruelty to the birds. Ducks can be fattened in perfect safety and entire comfort by this method in fifteen days, and chickens in twenty days, and the loss from disease and accidents rarely exceeds two per cent.

The fowls thus treated are uniformly healthy and the quality of the dressed meat is excellent. Artificial incubators, artificial mothers, and this appliance are exhibited at the Paris Exposition. The incubators are all founded on the familiar plan of making a large reservoir of hot water and placing the eggs in a circular box in the middle. The American incubators are, in some respects, superior to the French machines, as a permanent fire is maintained, regulated by automatic governors. The artificial mothers or "hydromeres" shown at Paris, do not differ materially from those used in this country, and are all based on the same general plan of using a large mass of hot water as a means of obtaining the necessary warmth.—*Scribner for Sept.*

CARLOTTA PATTI JONES.

SHE ought to have been beautiful, she of whom I write, for who takes any interest in a heroine that is not; but in this case nature had decided otherwise, in direct opposition to every rule, a fact that is very trying to a writer, for one naturally feels a great responsibility in drawing the attention of a criticising public to one of whom the best that can be said is, that she has very bright eyes, or very white teeth; and truth prevents my saying any more regarding her personal appearance. And although I would fain endow her with every virtue, I cannot say that her disposition was any better than her looks. I know that in stories ugly people are always good, but it is not so in real life. She had an ugly temper, and a great deal of pride to contend with. Many, I suppose, will wonder why I write about one who has so few attractions, but she had a great deal of character! and, of course, a history, as who has not, be they homely or handsome. She prided herself on her family and her name, a good one, as we must admit, and one that has attained renown; but also one that caused her some trouble, for people would persist in calling her simply Puss, or just Patti.

Up to the beginning of our story her life was passed in the country, and she enjoyed new milk, fresh air, and all that goes to make life worth the living. Her people did their farming according to the RURAL, and all might have been happy had she not heard the story of those three little kittens that saved a house from burning, which filled her soul with so much ambition that she resolved to distinguish herself by learning to stand on her hind feet and look cross-eyed for five minutes at a time; and again she was known to go up to a baby, whose crying annoyed her, and strike it several times in the face with her paw; but cats, like people, do not always know how to bear their honors, for very soon she began to cultivate a taste for spring chicken, and carried this accomplishment so far that the gentleman with whom she lived expressed himself so decidedly on the subject, that she, being a cat of a great deal of spirit, very naturally felt hurt, and concluded to seek a home where her talents would be appreciated.

It was very hard lines to have to leave a place where she had been so happy, and caught so many rats, and it was here that she gave Buff Anders such a good thrashing; and had she twenty lives instead of nine, there would not have been sufficient to crowd in all the pleasant recollections. And then, her feelings overcoming her, she exclaimed, "Shall it ever more be thus, spirits, still imperious. Shall we never fairly stand, soul to soul, hand to hand. Will the time never come, when women and cats may have their rights? Must they always be kept down and dictated to by Man, whose right lies in his might, simply because curiosity led a weak woman to eat of an apple, and politeness caused her to pass it around? It is not kind, it is"—but we never found out what it was, as just then Dom Pedro, a big yellow dog, appeared around the corner, and she had business in another direction. We heard afterwards that she had taken Mr. Greeley's advice and "gone West," but no further than West Philadelphia, where she was living in style on Chestnut street, and was giving open-air concerts with great success. Some of her operas met with striking applause, people going so far as to throw boot-jacks and shaving cases, as something more uncommon and complimentary than bouquets.

What she might have become had she continued, is only left for us to imagine, for while her star was at its zenith she suddenly disappeared. Some say she has gone on the "Star Course," others more evil-disposed, think that she has gone in search of a land where cats can have spring chicken, but I am under the impression that she has fallen a victim to one of the above-mentioned compliments, and I shall mourn for her as long as my name is, CAT-TER-INE.

LETTERS FROM BOYS AND GIRLS.

Seeds from the Rural Experimental Grounds.

RURAL COUSINS:—I promised, in the golden days of a by-gone summer, to tell you of our beautiful grape-vine, and what came of the seeds furnished me from the Experimental Grounds of the RURAL. To make good that promise I seat myself near a vine-covered window, and with my faithful friend, my good gold pen, try to write you another letter. More than a quarter of a century ago was our grape-vine planted (please do not think I did it). It was my mother who planted the tiny roots in the rich earth so long ago, close by the wall of the old brick homestead. Year by year it grew and lengthened, and in time its clinging branches almost met, after covering many yards of the four walls. Every year it gives rich purple-black clusters, and "we girls" have each a favorite spot from which to satisfy the mind with the beauty of the fruit among the green leaves, as well as satisfy the cravings of appetite. Now it is so full of green bunches, and by-and-by, when a few more weeks are claimed by time, we all enjoy our yearly treat once more And not only in the autumn time, but through the snow-decked months of winter are we cheered by the pleasant fruit. The way we keep it is as follows: The grapes are gathered before the frost touches them, and put in shallow boxes; first line the bottom of the box with grape leaves, then put a layer of grapes, then some more leaves and grapes until the box is full, finishing the top with plenty of leaves. Place in a cool, dry cellar: and that is all until the time for treating our friends comes. The fruit is then washed, carefully drained, and is found plump, pretty, and very palatable.

And about the seeds. The first we received were Pelargoniums and Double Hollyhocks, and these I divided with a friend. Of the former only two seeds germinated, and with all my attention and interest would not be grown in the right way, and finally gave up altogether. But the Hollyhocks! how nice they grew; and this was their year of bloom. The bright stalks of blossoms were very much admired, and we divided the flowers with our friends that others, too, might enjoy the beauty of the bloom.

Among other seeds sent at another time, and satisfactorily grown, are four bulbs of the Chinese Yam, (but their growth is very slow) one curious Shell Flower, and as the labels of some others are lost, I cannot tell what they are or what they are like, as they've not blossomed yet. I am well satisfied with what I obtained, and think it liberal in giving the seeds free of charge. And next time when the editors make known the *divide*, I mean to take advantage of that too, and, perhaps, but, oh! no, I must not anticipate that I shall write again in a flower-y way, for may not the kind owners of the seeds pass me over when that time arrives, thinking I've already received benefit enough? But that I trust is not to be, and with a good-bye to you all, I continue YOUNG FARMERINE.

Independence, Pa.

Lily Lee's Letter.

DEAR UNCLE TRUE:—I wonder what all the cousins are doing now-a-days. You do not seem to have as extensive a correspondence as you did before the summer came. I expect croquet and base ball, hunting and fishing, occupy all the spare time of the boys; but there are so many nice things for girls to do, that I wonder they do not tell us about them. Just think! one of our boys had been planting beans and he had worked all day, and in only a few minutes' spare time, which he had before milking, he went into the garden and cut a pæony in full bloom. It was a dark red one, but he brought it into the sitting-room to show us, and, just think, the edges of all the petals were snowy white! It was very pretty, and odd, too. We all wondered over it, it looked so curious. I saw mother look in his face and smile. She told us to smell of it, and see if we were sure it was a pæony. Then it came out what it was. The rogue had burned some matches under it, and bleached the edges of the whole flower. He is always experimenting on something to see what he can do. Last fall he got his fingers all stained with butternuts. Of course, he did not care if they were brown, but we girls did not like to have ours look so badly. He went out and burned some matches, and bleached his fingers all white; every bit of the stain came off, and then he came to the kitchen and told us how to take the stain off ours. We thought it was very nice, and cracked all the butternuts we pleased afterwards. I think brothers are the best things in the world. We are going to preserve some of our summer flowers, for bouquets next Christmas. Grandmother tells us how to do it. They are cut off at the roots, and buried in dry sand, and kept dry till we want them for use. I think it will be splendid to have roses and pinks in vases at Christmas, all fresh and bright. She used to preserve them so when she was a girl. How funny it seems, to think of dear grandmother ever being a girl like us, and doing just as we do now. I am learning to ride horseback this summer, and it is just delightful. I hope all the little girl cousins will learn to ride, too. It is the best fun in the world. Now, I would like to know what the other cousins are doing these bright, long summer days. I hope they will tell us, but I have written a long letter, so must close. LILY LEE.

Going Home.

WE are going, slowly going
To that peaceful, heavenly shore
Where the Father now is waiting,
And our trials all are o'er.

I have felt it in my longings,
I have read it in my dreams,
And a source of joy and gladness
To my weary soul it seems.

I have loved ones in yon heaven
Of the good, the pure, the best;
I shall see them when God wills it,
And my soul will be at rest.

W. B. JONES, Rochester, N. Y.

What is the Matter?

DEAR COUSINS:—Has the summer heat paralyzed your energies, or what can be the matter with you all? This department, which I always have thought to be the most interesting part of this most interesting paper, (and I beg the pardon of the managers of the other departments) seems to be dying for want of breath. I only see an occasional letter written with fear and trembling lest it should find a waste-basket grave.

Come on! Boys and girls let's write. Who's afraid of the waste-basket anyhow? Let's have some life here if a few letters do find their final resting-place too soon in life. W. B. J.

Rochester, N. Y.

He Made One.

DEAR UNCLE TRUE:—I am only eight years old. I live on a farm in central New York. My pets are a calf, a dog, and two cats. But one of the cats has a bad habit. She kills little chickens. I wish some of the Cousins would tell me, if they can, what would break her of it. I made a "Rural scouring-board" to-day. Perhaps you would not think it very nice, but mother says it is well made for such a little boy. L. H. C.

Sabbath Reading.

BELSHAZZAR.

TRANSLATED FROM HEINE.

THE midnight hour was drawing on;
Hushed into rest lay Babylon.

All save the royal palace, where
Were the din of revel, and torches' flare.

There high within his royal hall
Belshazzar the King held festival.

His nobles around him in splendor shine,
And drain down goblets of sparkling wine.

The nobles shout and the goblets ring
'Twas sweet to hear of that stiff-necked King.

The cheeks of the King, they flushed with fire,
And still as he drank his conceit grew higher;

And, maddened with pride, his lips let fall
Wild words, that blaspheme the great Lord of All.

More vaunting he grew, and his blasphemous sneers
Were hailed by his lordly rout with cheers.

Proudly the King has a mandate passed;
Away hie the slaves, and come back full fast.

Many gold vessels they bring with them,
The spoils of God's House in Jerusalem.

With impious hand the King caught up,
Filled to the brim, a sacred cup;

And down to the bottom he drained it dry,
And aloud with his mouth a foam did cry,—

"Jehovah! I scoff at Thy greatness gone!
I am the King of Babylon."

The terrible words were ringing still,
When the King at his heart felt a secret chill.

The laughter ceased, the lords held their breath,
And all through the hall it was still as death.

And see, see there! on the white wall, see,
Comes forth what seems a man's hand to be!

And it wrote and wrote in letters of flame,
On the while wall—then vanished the way it came.

The King sat staring, he could not speak,
His knees knocked together, death-pale was his cheek.

With cold fear creeping his lords sat round,
They sat dum-stricken, with never a sound.

The Magians came, but not one of them all
Could interpret the writing upon the wall.

That self-same night—his soul God sain!—
Was Belshazzar the King by his nobles slain.

[*Theodore Martin, in Blackwood.*

HOW TO OBSERVE SUNDAY.

THE question of the proper observance of Sunday has been a much disputed one, and is one of much interest. A certain amount of religious services should of course form a part of each Sunday's life; should indeed be its central idea, but it should not infringe upon the demands of overworked nature for rest. But what is rest? Clearly what would be rest to one would not be to another. What would increase vitality and strength to the day laborer would make the weary student, book-keeper or editor more weary. The work of the six week days, whatever it is, should be put entirely out of sight from Saturday until Monday. Mental labor—reading, writing or other employment that requires mental effort. Physical laborers must cease physical labor, and can obtain the desired rest in mental improvement. Those whose week days are spent within the four walls of a store or an office, should be in the open air, in the broad fields, where they can breathe nature's purest aerial draughts, as much as possible. Those who labor out of doors will find their greatest rest and enjoyment on Sunday in their homes. The business man and the banker should cease all thought of business, take a complete respite from all thoughts of "shop," and Sunday for all classes should be made as widely different from any other days in the week as possible. It should be made enjoyable, especially for the children, that they may grow up with the love of the day, instead of an aversion for it, as is too common even in the best of Christian families. The observance of the day in each household should be made a study, that the most profitable and rest-giving enjoyments to suit each case may be found, and then let the observance of the day, once settled, be lived up to as strictly as a business transaction. The day should have its distinctive features; religious culture; freedom from toil for servant as well as master; rest in its true sense, and enjoyment of the higher order, which relaxes the nervous system, and is one of nature's greatest restoratives, all have their place, and none of them should be neglected.—*Pittsburg Telegraph.*

THE gifts that Jesus Christ gives widen the heart and enlarge the soul of a believer to take in more of Himself. Naturally we are narrow-mouthed heavenward, and wide-mouthed earthward; but the Lord Jesus, by casting his jewls, his pearls, his precious gifts into the soul, doth widen, enlarge, and make it more capacious to entertain himself. Christ, by his gifts, causes all doors to stand open, that the King of glory may come in.

REMEMBER, Christians, how many there are in the world, who sit sighing and mourning under the want of those very favors that you enjoy.

Why does the living man complain? What, out of hell, and complain? This is a man's sin and God's wonder.

As earthly portions carry away worldly hearts from God, so when God once comes to be a man's portion, He carries his heart away from the world, the flesh and the devil. All the world can not keep a man's interest and his heart asunder.

PERSONAL ITEMS.

Beaconsfield rather favors woman suffrage.

General Grant will bend his steps towards Siam and the grand Indian tour before coming home.

Emperor William is taking mud baths at Teplitz, which are considered a very efficacious remedy for rheumatism.

Evangelist Moody has given $5,000 to Wellesly College, Mass., from the proceeds of the sale of the Moody and Sankey Hymn Book.

A. S. Packard, Jr., the well known entomologist, of Salem, Mass., will fill the new chair of Geology and Zoology in Brown University.

Ex-Doorkeeper Fitzhugh, the "biger man than old Grant," will re-open Willard's Hotel, Washington, as a resort for Southern people.

Henry Ward Beecher and Henry C. Bowen are joint executors of the will of Miss Mervida Wood of Brooklyn, just deceased. The will was made twenty years ago.

Dom Pedro has addressed to Captain "Jetty" Eads an autograph letter congratulating the engineer upon his exploits at the mouth of the Mississippi, and inviting him to visit Brazil.

Minister Bayard Taylor was at Friedrichshoda, in the Thuringia Wald, during his recent illness. His doctors forbade all reading, writing and brain work of any kind. He with his family, are now back at Berlin.

Ten years ago Major E. A. Burke, whom the Democrats of Louisiana have just nominated for State Treasurer, and who has lately been testifying before the Potter Investigating Committee, was a day laborer in a brick-yard.

James Douglas, of Caves, last male descendant of the hero of Chevy Chase, died the other day. In his house was preserved the banner under which his ancestors fought, and the Percy gauntlet, captured under the walls of New Castle.

It is now stated that the marriage of James Gordon Bennett's sister, Jeannette, to Isaac Bell, Jr., will take place in the Catholic church at Newport about the middle of September, and that Cardinal McClosky, who is now at that fashionable resort, will perform the nuptial ceremony.

Mrs. Clarinda Newell, of Stonington, Ct., has a tree toad which she has kept over a year in an open fruit jar. His toadship avails himself of a small ladder to ascend to the top whenever damp or rainy weather is near, where he sings as loudly as in native haunts. As a barometer he is a complete success.

Edward Fretwell, Marshal of Austin, Mississippi, cracked the side of his top-boots with a riding whip and boasted that he could lick the whole Evans family. On Monday Fretwell and a young Evans met in the public square at Austin, paced off ten short, quick strides, wheeled and fired simultaneously. Both men fell dead.

Like his father, King Humbert, of Italy, affects a familiar tone to his audiences. Not long ago he received a delegation of Professors from the University. To the Professor of Anatomy the King said: "Heaven keep me from falling into your hands!" and the Professor answered, "Amen! For your Majesty's sake and the country's."

Lord Dufferin, Governar-General of Canada, has just received by the English mail, from Queen Victoria, £10,000 sterling, her majesty's gift to Quebec for the construction of that portion of the Dufferin improvements to be called Kent Gate, after her father, Edward, Duke of Kent, who resided in Quebec for several years of his life.

Dr. Carver, the glass-ball rifle shot, spent a thrilling and throughly dime-novel youth. His father, mother, brothers and a sister were massacred by the Sioux in Minnesota, and he was taken captive to be brought up in the tribe. A life of nineteen years as a nomad with the rifle his most-loved companion, gave him the wonderful skill recently exhibited.

Robert Lincoln, son of Abraham Lincoln, has no idea of accepting a nomination for Congress in Chicago or anywhere else. When a young man in Washington he formed the opinion that it was unwise for a young man to enter politics as a profession. He has consistently followed this course and has repeatedly declined to accept office, whether State or national.

The Marquis of Hartington, leader of the British Liberal party, is forty-five years of age, perhaps five feet ten inches high. He has auburn hair, a brain of moderate size, features fairly harmonious, and is just a tolerably good-looking English gentleman. He is a Cavendish, the son and heir of the Duke of Devonshire, and is valuable to the liberal cause by reason of his rank and connection.

In 1850, when the tide of political passion was still running very high, Bismarck went one day into a tavern at Berlin to take a glass of beer. A man near him began to abuse one of the royal family. Bismarck looked at him, and said quietly, "If you have not left this room before I have finished my beer, I will break this pot over your head." He then emptied his glass very deliberately, and as the man took no heed of the warning, he did as he had threatened. He walked away leisurely without any one having dared to molest him.

In the quaint old Bryant cottage at Roslyn, L. I., one room remains sacred to the memory of the poet's wife, who died in it in 1864. Everything in the room is as she left it—the old mahogany high post bedstead, her writing desk on a table in the center, containing the stationery with which her last letters were written; on her bureau her toilet articles; in the closet her wardrobe—dresses, slippers and complete attire; and on the bureau a half-burned candle in a brass candlestick, standing where it illuminated her death chamber fourteen years ago.

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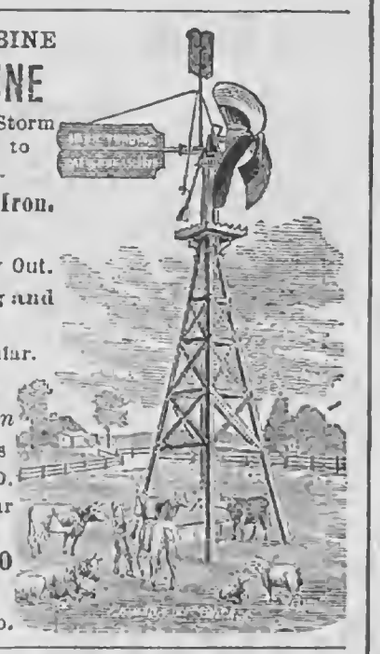

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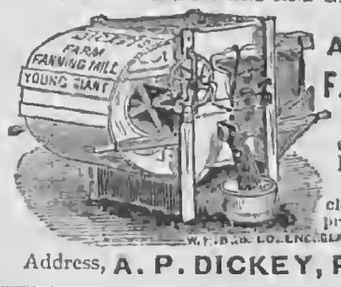

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Wit and Humor.

THE following two sets of week-day rhymes are common in the North of England :—

Monday's bairn is fair of face,
Tuesday's bairn is full of grace,
Wednesday's bairn is full of woe,
Thursday's bairn has far to go,
Friday's bairn is loving and giving,
Saturday's bairn must work for his living,
But the bairn that's born on Sunday
Is brisk, bonnie, wise and gay.

AGAIN,

Born on Monday will have health,
Born on Tuesday will have wealth,
Born on Wednesday will have good luck,
Born on Thursday will meet with losses,
Born on Friday will meet with crosses,
Born on Saturday will do no good,
Born on Sunday has nothing particular.

AN editor who has been married but a few days, inquires seriously, "Is civil war eminent?" This looks bad.

A RECENT issue of the Detroit Free Press contained an advertisement of "For Sale —A piano by a lady with modern legs."

SCIENCE says that it took millions of years to evolve man from the oyster; observation shows that it takes less than a minute to transfer the oyster to a man.

"I WISH to be a friend to the friendless, a father to the fatherless, and a widow to the widowless," said a gushing speaker at a recent revival meeting.

"FINE nainsook, embroidered, makes lovely slips for children," says a fashion writer. Orange peel on a sidewalk continues o be good enough for men.—*N. O. Picayune.*

SWELL: "I want you to make me a short coat, without tails or seams in the back. Do you know what I mean?" German tailor: "Yaas, yaas; I know vat you vant. You vant a strait-jacket."

HE gave her a hearty smack. "Don't kiss like that," she said. "I want a sweet, tender pressure when I'm kissed. I don't want any fireworks." He left out the explosion in the next act.

Two lawyers, while bathing at Santa Cruz the other day, were chased out of the water by a shark. This is the most flagrant case of want of professional courtesy on record.—*San Francisco Post.*

A WAG in New York seeing a man driving a tack into a card, through the letter "t" of the word "Boston" printed on it, seized the latter and exclaimed; "Why, what are you about: don't you know that laying *tax on tea in Boston* once raised a thundering muss there?"

A JUDICIOUS instance of punning upon a name once took place in a judicial court of New York, which is thus told: Counsel had been questioning a certain witness named Gunn, and in closing he said to him, "Mr. Gunn, you can now go off." The judge on the bench, seeing the pun, gravely added, "Sir, you are discharged." Of course an explosion in court immediately ensued. —*New Haven Register.*

ON the Fourth a native American was upbraiding a naturalized German for celebrating the day so enthusiastically. The German replied, "You, sir, are an American from necessity; I am one from choice. And besides, sir, when you came into the country, you hadn't a stitch of clothing upon your back, while I was comfortably clad." The American has been thinking about it ever since.—*Turners Falls Reporter.*

IRISH BULLS.—Mr. D., an Irish gentleman well-known in New York, was lately invited to dinner by a wealthy Scotch resident, at whose generous table he met a number of his host's countrymen. The conversation turned on Irish bulls, of which one and another of the company reported several, until the table was in a roar. The Irish guest kept quiet until his patience was exhausted, but at length blurted out: "Say, Mr. C., an' do you know what I think?" "Why, indeed, what do you think, Mr. D.?" "Shure, sir, an' do you know that I think, indade, that not more than one-half of these lies that they all tell about the Irish are true." This unintended contribution to the subject brought down the house.

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Those who suffer from disorder or inaction of the liver will never get the upper hand of the unruly organ so long as they use such irritational remedies as blue pill, calomel and podophyllin. But from the tried and popular medicine, Hostetter's Stomach Bitters, they may expect relief with a certainty of obtaining it. The influence of the bitters upon the great biliary gland is direct, powerful and speedily felt. The relief afforded is not spasmodic, but complete and permanent. The sallowness of the skin, furred appearance of the tongue, indigestion, costiveness, headache, nausea, pains through the right side and shoulder, in fact every accompaniment of the obstinate complaint are entirely and promptly removed by a course of this inestimable medicine, in behalf of which testimony is constantly emanating from every quarter and from all classes of society.

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It cleans perfectly OATS, CHESS, COCKLE, and all foul matter from Wheat and Barley. It grades, and separates for seeding and market, cleans all kinds of small seeds and will save any Farmer its cost annually.

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Sows all kinds of Grain from Flax-Seed to Corn and Beans.

The *general report* of the Centennial Judges re-published by us from the official report specially recommend it as *superior to others*, and for this reason no other Drill Manufacturers publish it. *Send for it.* For Particulars and Prices, mention this paper and address.
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It soon allays all Soreness and Inflammation; softens the dry, hard flakes of offensive matter, and causes their discharge without difficulty or pain.

It Contains No Poisonous Drugs.

Can be taken into the Stomach without harm; is an excellent Wash for Sore Mouth; Cleanses the Teeth, Hardens the Gums, and purifies the Breath. All its properties are SOOTHING, CLEANSING, and HEALING. ☞ It never fails to give relief in the most obstinate cases of *Dry Catarrh.*
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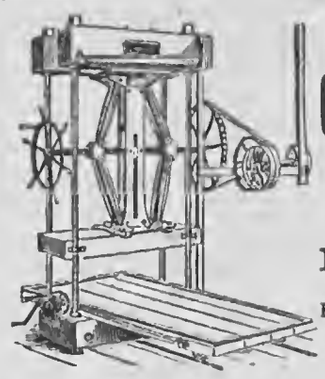

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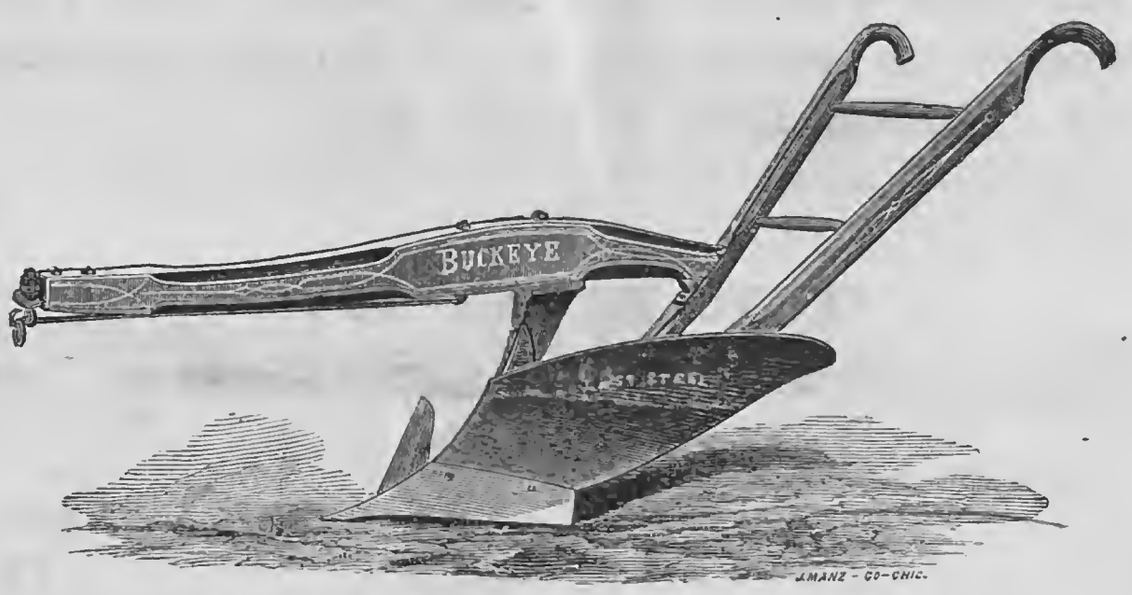

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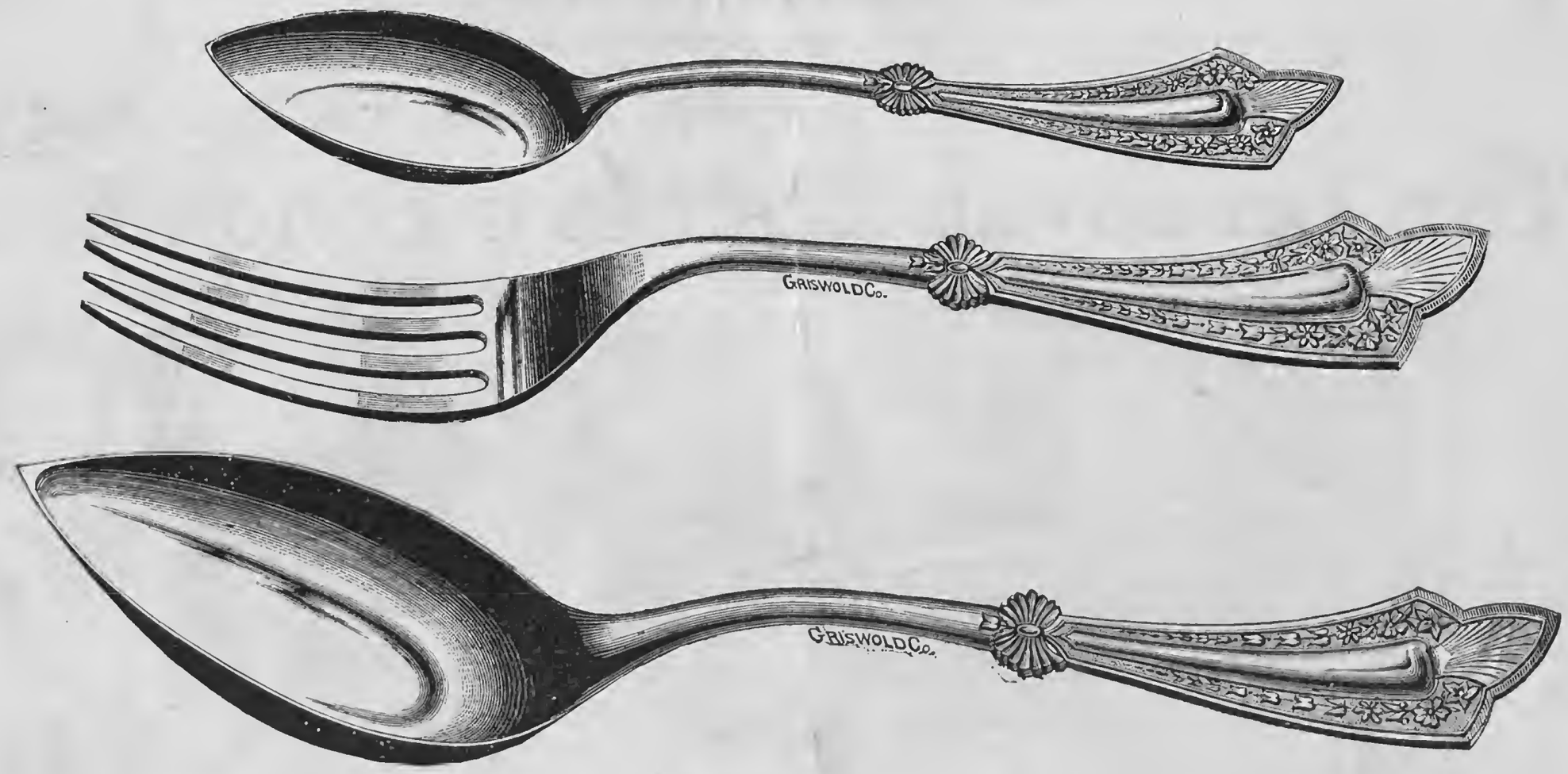

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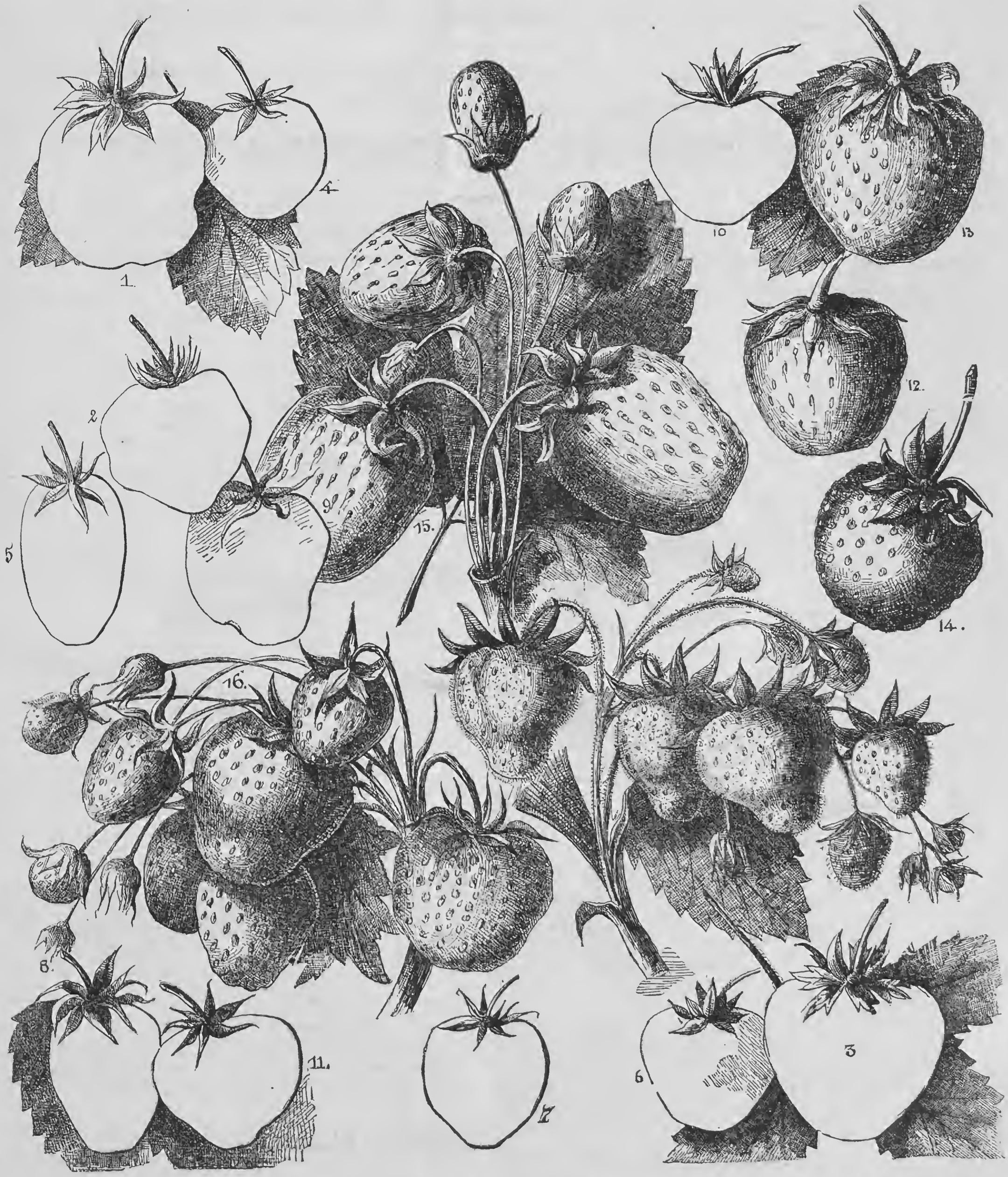

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"The Truth about them," so far as it can be told.

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NEW STRAWBERRIES.

DR. F. M. HEXAMER.

THE large number of new strawberries annually introduced and offered for sale at high prices, obliges the specialist in this branch of Pomology, to invest a considerable amount of money in plants and to devote much time and labor to the observation and study of their merits. Few varieties succeed equally well over a large extent of country and in different soils; and but a very small percentage of seedlings, however desirable in the place of their origin, retain their merits when planted elsewhere. Of the hundreds of seedlings which I had on trial, all of which were, by their originators, considered superior to anything ever grown, hardly ten per cent. proved to be worth cultivating.

Nearly all new varieties, when first offered for sale, have been grown on the place of their originators only, where they have been watchfully guarded by day and by night, cultivated and stimulated to the utmost extent, judiciously watered with solutions of special fertilizers, the fruit-stalks tied up and the blossoms and fruit thinned out so as to leave only the largest and most perfect berries to ripen for exhibition specimens. Can it be surprising that the uninitiated who buy such plants, expecting to harvest such Premium berries, will be disappointed and that even the practical cultivator, who reads descriptions of new varieties and their promising excellences, with some grains of allowance, has about as much chance to escape disappointment as he has to draw the great prize in the lottery? Yet the fact remains that unless we try for something better we can never get it, and it is only by comparing the experiences of growers in different localities that we can determine the general value of new varieties. With me, on a medium clay loam, the

GREAT AMERICAN (13), makes a very strong growth, bears a fair crop of large, handsome berries of rather indifferent quality. It ripens very late, which is one of its principal advantages. To develop its best features and produce berries of *fourteen inches* in circumference, as was a berry exhibited at the last exhibition of the New York Horticultural Society, require more skill and care than most growers are able to give.

PRESIDENT LINCOLN is not yet fruited on my own grounds, but plants grown only a few miles from here, under good but not extraordinary culture, on soil similar to mine, produced more uniformly large berries—some of them measuring eleven inches in circumference—than any variety I have ever seen or heard of. The berry is bright-red, glossy, very handsome, moderately firm and of very good quality; the plant is a very strong and healthy grower.

CRESCENT (16)—(Parmelee's Crescent Seedling.) In this variety the climax of productiveness seems to have been reached. From plants set out this spring, I have picked more berries than from many others a year old; and on the original place 15,000 quarts of berries were picked from one acre of ground. Of good size, handsome shape and color, fair quality, enormous productiveness and extraordinary vigor of growth—even under the most slovenly cultivation and on a great variety of soils—the "Crescent" seems really destined to become the "Strawberry for the Million."

FOREST ROSE (17,) originated in Ohio, where it had extensive trials and was, by competent judges, pronounced "one of the very best strawberries known." At the East it has had as yet but limited trials. The fruit is large, obtuse, conical, moderately firm, of good quality and light-red color, too pale, I think, for a market berry.

SHARPLESS' SEEDLING (15)—Unlike other new varieties, this one, previous to its being offered for sale, has had fair trials in several localities, and wherever grown has given most satisfactory results. I have not yet fruited it on my own grounds, but from the fact that, by the highest authorities, it was pronounced: "the largest and best strawberry in cultivation," I have no doubt that it will prove of great value.

Of the newer varieties which have been grown more extensively, sufficiently to enable us to determine their merits—

DUCHESSE (2) has proved to be a most valuable early variety, ripening with the earliest and holding out well. Its berries are uniformly large and well shaped, of good quality and color; the plant is very prolific and hardy and succeeds well in a great variety of soils and climates. No other early variety combines as many desirable qualities.

CUMBERLAND TRIUMPH (3) is a very large, pale, and juicy berry, too soft for even a near market, but for home use—on account of its great productiveness and size—it is a desirable variety.

CAPTAIN JACK (4.)—This is an immense bearer, much more so than Wilson, which it resembles in appearance but excels in quality and firmness. Were it not for its size, which averages below Wilson's, it would no doubt become the most profitable market variety.

PROUTY'S SEEDLING (5) is not as much known as it deserves to be. It is certainly one of the most handsome berries grown, of a peculiar elongated, conical shape, large size and excellent quality. With me the plant is vigorous and productive. On the table, few varieties present as beautiful and striking an appearance.

DUNCAN.—Very early, very productive and of good flavor. Too soft and pale for market.

STERLING, STAR OF THE WEST and several other highly recommended novelties refuse to bear, with me, enough even to give a fair taste of their qualities.

BEAUTY, CENTENNIAL, PIONEER, BELLE, CAROLINE and many others have still to be classed among the promising ones, but it is doubtful whether any of them will ever come up to expectations and produce satisfactory crops, outside of their originators' grounds.

WILSON, TRIOMPHE DE GAND. With all our grand array of new varieties—and I have named only the most prominent ones—have we a better market berry than the Wilson or the Triomphe de Gand. The almost unanimous answer of fruit-growers will be decidedly in the negative. And how many of them have actually proved to be better for general cultivation than Charles Downing and Seth Boyden? The number is exceedingly small.

MONARCH OF THE WEST will probably, for many years to come, be classed among the standard varieties. Although it does not succeed under as varying conditions as Wilson or Charles Downing, yet it has so many good qualities that it must be classed among our best varieties for home use and a near market.

DUCHESSE is a decided acquisition and will, undoubtedly, be planted in preference to other early varieties.

BLACK DEFIANCE and COL. CHENEY are both good amateur varieties, but too uncertain for general cultivation.

Obviously there is yet much room for improvement in strawberries, if not in size, then in texture and quality. Based upon the experience of the past twenty years, I am inclined to accept as a rule, that of all the new varieties produced during one decade, not more than two or three will survive the next one.

Westchester Co., N. Y., Aug. 1, 1878.

STRAWBERRY CULTURE.

J. C. WILLIAMS.

INFLUENCE OF LOCALITY ON CHARACTER.

WE are frequently asked what variety of strawberry we would plant for our own use, and we reply, "We don't know."

Many sorts possess individual merits and have become like so many friends, each having some good qualities, and to retain but one to the exclusion of all others, would be a truly unpleasant separation. No one variety will succeed equally well in all sections, and therefore we cannot commend *any one* as possessing all the requisites of a perfect berry. Some will prove valuable over a greater extent of country than others, like Wilson's Albany, and Charles Downing, both of which have, in reality, become public favorites, while even these are in some sections nearly worthless. Some that on our grounds are very desirable, are not worth growing on places within a mile of us, and *vice versa*.

Some do well if allowed to run freely, forming a matted row or bed, while others need keeping in hills or single rows, by clipping off all runners. With us, Wilson, Downer's Prolific, Champion, Crescent, etc., give good results on the former system, while Seth Boyden, Great American and Beauty are notable failures except on the latter.

VARIETIES.

THE DUNCAN, for earliness, fine flavor and productiveness, we regard as eminently desirable. It is probably too soft for a distant market, but for home use no collection should be without it.

CHARLES DOWNING, for home use or near market has few superiors. Its large size and beautiful, bright color, make it specially attractive, while in quality and productiveness it is hard to beat.

SETH BOYDEN retains its popularity as a market sort, more for its large size, productiveness and solidity, than for beauty or quality. Being rather dry-fleshed, it will bear without injury more careless handling in transportation than most others.

MONARCH OF THE WEST also bears carriage well, and but for the green, seedy end of nearly every berry, which gives them the appearance of being unripe, this variety would prove a rapidly-selling sort, being of very large size and of a bright, glossy color. For vigor of growth and quality of fruit this may be commended, but on our grounds it is too shy a bearer to grow with any satisfaction. Its popularity as a marketing berry, in southern New Jersey, would seem to indicate its being better adapted to a sandy soil, ours being a moderately stiff loam and quite stony.

CUMBERLAND TRIUMPH AND SPRINGDALE, both yield a liberal quantity of large, handsome and fine-flavored fruit, but are too soft for any but a near home market.

GREAT AMERICAN AND BEAUTY have doubtless disappointed many. That they will do well grown in matted rows and with but ordinary cultivation, I do not believe. Having been brought up by the most thorough culture, together with the use of an abundant supply of manurial elements for their perfect development, anything short of these conditions will lead to either partial or entire failure. With a like amount of care and attention to what they receive under Mr. Durand's management, we know of no reason why, with favorable conditions, they should fail to give satisfaction.

CRESCENT SEEDLING, proves to be a slender grower, but a free runner, and is well adapted for growing thickly, or on the matted-row system. Its claims for productiveness seem well founded, and, as quantity is more essential than quality in a market strawberry, the Crescent will doubtless become popular. In size and flavor, however, I am obliged to say that I see but little to commend it. Perhaps with another, and a more favorable season, I may have reason to change my opinion.

SHARPLESS AND FOREST ROSE, are berries of which I expect to report most favorably another year. Offered with the indorsement and commendations of noted and trustworthy pomologists, I indulge strong hopes that these varieties will prove really valuable acquisitions.

In the enthusiastic attention given to new varieties, some of the older sorts which have positive merits, are overlooked and forgotten.

THE CHAMPION, we believe to be one of this number, ripening an abundant yield of fruit late in the season, when most others are nearly done. Berries are of medium to large size, somewhat acid, but of a sprightly, pleasant flavor. We shall plant it more largely, believing it will prove remunerative.

ADVICE TO PROSPECTIVE STRAWBERRY GROWERS.

We would advise those who contemplate growing berries for market, to purchase a few plants of several of the most promising kinds, and fruit them on their own soil for one year at least, carefully noting the character and habits of each. The practical knowledge thus obtained will prove of much value, and save many dollars as well as disappointments. Of late years it has been only the large and choice fruits, that have yielded the grower much if any profit, and this can be had only by thorough culture and liberal fertilizing.

Probably well rotted barn-yard manure, well worked through the soil before planting, followed by a winter top-dressing of the same, will give as good results as anything. Not having tested any of the chemical manures prepared specially for fruits, we are unable to speak of their value.

Montclair, N. J.

STRAWBERRIES:

NOTES ON SOME OF THE NEW VARIETIES.

J. T. LOVETT.

ALTHOUGH there is perhaps no fruit that is found growing, with more or less success, over so large a portion of the globe as the Strawberry, yet there is none over which soil, situation and the season have greater influence. There are a few varieties that will succeed everywhere, others in certain soils only. So many are there of the latter class, that those that are generally valuable may be considered the exceptions rather than the rule. Then, again, there is an astonishing diversity of opinion as to the standard of excellence in a strawberry. Most persons consider Triomphe de Gand as that standard, yet I know an authority—and he *is* an authority—who considers it scarcely fit to eat; while, on the other hand, the Wilson is by most persons considered scarcely fit to eat, yet I know some who consider it without an equal. This matter of flavor varies with one's taste for sweet or acid fruit. For myself, I prefer a mingling of the two- a sort of lemon-ade character of flavor, and shall describe the following varieties accordingly. Wilson I consider entirely too tart—Agriculturist too sweet and insipid; while Monarch of the West and Charles Downing I call very good. These notes, where not otherwise stated, are taken from berries grown on good loamy soil—not at all light, and yet having no trace of clay—what would be considered first-class garden soil.

CENTENNIAL FAVORITE OR NEW No. 14.—From its behavior with me, it would seem that this variety has been very much over-estimated. Plant, a rather feeble grower and a poor yielder. Berries medium-sized and of excellent flavor, after one can be found to ascertain what that flavor is. It would perhaps do better on a heavy, deep, moist soil.

CINDERELLA.—As I saw this in its original home, a sandy slope, it is certainly a superior variety. Berries large, conical and regular, bright, glossy scarlet, with a large light-green "burr," making it, in the crate, one of the handsomest berries I have ever seen. It is also firm and of excellent flavor. Plant, an unusually strong, vigorous grower and moderately productive. With me the plant is one of the best growers, and I am of the opinion that it will prove of considerable value generally. It ripens quite early.

CONTINENTAL originated by the same gentleman as Cinderella, Mr. Oscar L. Felton, of Camden Co., N. J. In size and firmness it is about the same as Cinderella, rather late in ripening, and too dark in color to be attractive. Mr. Felton claims great productiveness for it, but the crop, he says, was damaged much this year by the frosts of May 10th and 11th—seeming less hardy than Cinderella. To my taste it is not of such good flavor as Cinderella, although a good grower on Mr. Felton's land and with me.

FOWLER'S SEEDLING.—A strong, robust grower and productive. Berries, medium to large, bright scarlet; seeds deeply imbedded, very soft and of poor quality—lacking character of any kind.

RUSSELL'S ADVANCE is really very early. Berries quite large, bright and of attractive color and fair flavor, but too soft for market. Plant, a good grower, free from disease and productive. A valuable variety for amateurs.

GREAT AMERICAN, Fig. 13, has with me been almost a failure, and I saw large patches on light land, that might be considered total failures. The plant lacks vigor, being feeble, and has the habit of the outer leaves turning to a bronze color and losing vitality. Berries few and far between and, to my surprise, quite small, only rarely one being found as large as a good-sized Monarch. As I saw it at Irvington, it surpassed any Strawberry I ever saw for size of fruit and plant, and was enormously productive. But I believe it only possible to bring it to that state of perfection by one who has devoted a life to the study and practice of the art of stimulating the Strawberry.

DURAND'S OR ESSEX BEAUTY, Figs. 12-14.—I agree with a correspondent of the RURAL, Mr. C. W. Idell, in pronouncing this the gem of Mr. Durand's collection. It has proved to be of large size, handsome, moderately firm, of good flavor and productive. I regret to state, however, that it, too, seems to be losing vigor of plant, although not to the extent of most of the others of Mr. Durand's seedlings. Like the Black Defiance, it is inclined to stool and send out but few runners. Large size, productiveness and *beauty* are its merits.

PIONEER.—This is receiving considerable comment at present, but I fear it will be of short duration. The plant is of strong growth with large leaf and tall leaf-stalk as yet, and productive. The berry is too light in color, to my palate lacks character, and I shall be surprised if it does not prove too soft for market. It resembles Agriculturist in plant and character of berry, and it is doubtful if it will prove superior to it.

MINER'S GREAT PROLIFIC.—I am greatly pleased with this variety; plant, a very vigorous grower, with large, rich, clean foliage, and exceedingly productive. Berries large to very large, regular deep crimson, of a rich aromatic flavor, juicy and moderately firm; ripens late, and holds out until very late. Its popularity seems to have been retarded by its being first offered for sale when the strawberry-growing public was inflated with Great American, but I believe it has a great future and will win honor for its originator, whose name it bears.

PRES. LINCOLN.—This has not yet fruited with me, but it is scarcely worth while to say it is one of the very largest strawberries that has yet been produced. I am happy to be able to report that the plant is a good, vigorous grower in Jersey, even on light land, and promises much value.

FOREST ROSE, Fig. 17.—For two years this has been the best of the large berries with me. Early, very large, conical, bright crimson, of splendid flavor, handsome, and exceedingly firm. Plant a very robust and vigorous grower, and productive, but alas! it rusts and burns. It has not only been affected in this respect but badly for the past few weeks. It may be owing to the excessive rain followed by hot sunny weather, and *may* not do it again. I had great hopes for this berry, believing it to be a variety of decided merit, and so it is if its foliage will remain healthy and vigorous.

* Beauty is sometimes irregular in shape, as in fig. 1. It is oftener as in fig. 12 or 14.

CRESCENT SEEDLING, Fig. 16.—I have no earlier berry than this, never saw a strawberry that could produce anywhere near so much fruit, or a more healthy, luxuriantly-growing plant. I cannot decry this variety though others may, for it has so many good points, although, like the best of us, it has some weak ones. Like the Concord grape, if you plant the plants, you will have fruit with very little after trouble, and, although not the best, there will be plenty of it, which to many is far better than none. Whether this is as it should be, or whether people who are not willing to give the best varieties the small amount of culture they require, are deserving of any at all, I will not attempt to argue, but taking human nature as it is, I believe Crescent will be of value in the reduction of doctors' bills, and the saving of medicine, if nothing more. Besides, it is not an inferior variety, according to my way of thinking. It is above medium in size, a portion of the berries being large, and of bright, attractive color. It is, very true, not very firm when fully ripe, but as much so as Chas. Downing, and, like the Wilson, it colors before it is ripe, and can then be marketed without difficulty. It possesses the quality of "standing up" well, and retaining its color for a long while after being picked. Unless my palate is very much at fault, the flavor too, when *ripe* is, as Dr. Thurber said of the Duncan, "more than fair, it is *good*." When it has just turned and is *not* yet ripe—Oh my! it is not sour; it is not sweet; it is—— very much like a piece of raw pumpkin.

EARLY ADELA.—Has disappointed me, being rather small, not especially early or productive, and of indifferent flavor. In fact it showed no special merit in any particular, although I should add, it did not have a very good chance, and may do better another year. Plant a strong grower and healthy.

SHARPLESS.—Was the largest and handsomest berry I fruited, and the plant is the most robust grower I have ever grown. Having only plants set in, in the spring, I could not determine as to its productiveness, but it indicates great excellence in this respect also. Berries oblong, quite often irregular and flattened, rich crimson with a smooth glossy surface, and very pretty; flavor good to very good. There is a whisper that this variety will not ship well, but judging from the berries, it appears decidedly firm, and cannot be other than a good shipper, unless like Col. Cheney, it should bleed badly during transportation. From this, the first year, I deem it by far the best very large berry I have yet seen.

GLENDALE.—This promises much as a *late* berry, being very large, very late, and very firm. Flavor very good, and plant a strong grower and healthy. Fruit stalks, however, are quite short, requiring thorough mulching in order to have clean fruit.

STAWBERRIES FOR THE FAMILY.

E. J. BROWNELL.

I WISH I could demonstrate to every reader of the RURAL how easily he can produce a supply of this most delicious of all the small fruits, for it seems to me that if it were generally known with what a small outlay of time and labor it can be done, strawberries would be more commonly found in the kitchen garden. Many have been deterred from planting a strawberry bed, because they supposed it such a formidable task to take care of them. Now, although strawberries will unquestionably pay for thorough culture, and I would not be understood as recommending that they should be slighted, still, I do argue, after considerable experience with them, both in the kitchen garden and nursery, that—if you will take the trouble to renew a plantation yearly, and give it fair, ordinary culture through the season, as much, for instance, as you ought to be willing to give any garden crop—there is nothing which will give better returns. Indeed, I am not sure but that, where land is less an object than labor, this is, all things considered, the more profitable course; that is, more so than continuing the bed for some years on the same ground. By having the land in good condition and planting in rows, about two and a half to three feet apart and ten or twelve inches in the row, then letting the plants run together in the row, thus forming a matted row, we get a good yield the second season—that is, provided we have taken good care of them the first season—without giving them any special culture this second year except to pull out the largest weeds. Moreover, by planting a new bed annually, we can keep a bed in bearing year after year continuously.

As to the best season for planting; although I would prefer a bed planted last spring rather than one set out this fall, still, I would much rather have one started this fall—unless where the winters are very severe—than one planted next spring; for, planting this fall, we get quite a crop next season, and a full crop the season thereafter, with no additional labor. In reference to varieties: The Wilson still heads the list for hardiness and productiveness, though inferior to many in quality. In this respect the Triomphe de Gand is excelled by none, and on a strong, heavy soil, it is very productive. Charles Downing succeeds well with me, and is a great favorite.

Delaware Co., N. Y.

STRAWBERRIES.

WILLIAM PARRY.

LARGE CROPS.

The season just past has been a beautiful one, and thousands of bushels of strawberries have been daily carried from the country to the large cities, sold at fair prices and the proceeds sent back to gladden the hearts of the growers and help to bridge over the dull times. The Delaware Railroad alone, carried from May 6 to June 13, last, 637 car-loads, averaging 267 crates, or 8,000 quarts of berries to each car, making a total of 5,096,000 quarts, equal to 159,250 bushels of strawberries. Some idea of the extent of the Vineland, N. J., berry crop may be gathered from the fact that at one cent per quart, the pickers, this season, have been paid more than $7,000. The strawberry and blackberry crop, up to July 20, had netted $50,000, and about $5,000 a week was still being received at that date from the last-named berry.

The Monarch of the West yielded here at Pomona Nursery, on June 15 and 18, two pickings, 2,992 quarts per acre. One woman picked sixty quarts in two hours, or at the rate of a quart every two minutes, being nearly a bushel per hour. One of my neighbors had ten acres in strawberries this year, from which he gathered, some days in June last, four shelving loads of berries per day, and in all, 39,800 quarts or 1,244 bushels, which, sold at eight cents per quart, brought $3,184. They consisted mainly of Albany, Jucunda, and Cumberland Triumph. Some of them yielded at the rate of $1,000 per acre. Another neighbor near-by had seven acres of strawberries, consisting of Monarch of the West, Turner's, Cumberland Triumph and Charles Downing, which yielded 35,000 quarts. Being all large varieties they may be safely put at ten cents per quart, which would give $500 per acre, or $3,500 for the lot.

IMPROVEMENTS.

Perhaps there is no branch of fruit culture in which there has been greater advance made in size and quality of fruit, than in the strawberry. If we were to compare the little berries grown a few years since with the Monarchs and Triumphs of the present day, we could hardly recognize them as belonging to the same species. Scientific hybridization, combining large size, best quality, firmness of flesh and great productiveness, has produced the most favorable results, and if some law could be passed to protect those who have given to the world new and valuable fruits, and place them on an equal footing with the authors of good books, it would be an act of justice.

NECESSITY FOR LOCAL SELECTION.

Strawberries are local in their habits, and those best adapted to one section may not do so well in another. Persons about to commence growing strawberries should try at least a dozen of the best varieties, so as to be sure and get those most suitable for their soils and locations, and any that do not succeed with them may be dropped from the list. By now procuring plants already established in pots, which can be transplanted with safety, they can see the fruit next June and form a better judgment what kinds to plant more largely, than without that knowledge.

GOOD VARIETIES.

I will name a few that have done well here, from which a selection can be made for trial:

BLACK DEFIANCE—Early, large and luscious.

DUCHESSE—Very early and large.

BEAUTY—Large and handsome.

CENTENNIAL—Very fine flavor.

CRESCENT SEEDLING—Wonderfully productive, more easily grown with less care than any other strawberry that I have seen. Fruit medium size, bright scarlet color, red all over, as soon as ripe.

CHARLES DOWNING—Good standard variety,

CUMBERLAND TRIUMPH—Very large, handsome and productive. Good for near market.

MONARCH OF THE WEST—Very large and showy.

MINER'S GREAT PROLIFIC—Large, productive and vigorous. The originator being recently deceased, has left a valuable berry to perpetuate his name; let every fruit-grower try to do as well.

CAPTAIN JACK—Is giving the old Wilson a close contest, being as productive and of better quality.

GREAT AMERICAN—Very large and productive, where soil and climate are suitable.

GOLDEN DEFIANCE—Large, late and productive.

KENTUCKY—One of the best very late berries.

PIONEER—Very large, firm and beautiful.

SHARPLESS' SEEDLING—Last but not least, and so far as tried in Pennsylvania, New York and New Jersey, it bids fair to surpass all others in size, quality and firmness of flesh. Being productive and hardy, it succeeds well on both light and heavy soils. It is reported that one specimen measuring twelve inches, or more, has been sent to Paris for exhibition there. Having fruited it two seasons, we esteem it worthy of the highest praise here, and think it will give general satisfaction elsewhere.

Cinnaminson, N. J.

THE STRAWBERRY'S CHIEF NEED

THE impression is still very prevalent that the strawberry prefers to all others, a light, sandy soil. As a rule, such soils are very dry, and plants growing thereon are quickly injured by drought. This erroneous impression, which has been brought to my attention several times of late, reminds me of a very enjoyable conversation that I had with the Hon. Marshall P. Wilder of Boston, not very long since. As I remember it, he said that some one had written to him asking what was the chief requirement for successful strawberry culture. He replied in substance:

"In the first place, the strawberry's chief need is a great deal of water.

"In the second place, it needs more water.

"In the third place, I think, I would give it a great deal more water."

According to my experience this piquant way of putting the truth is scarcely an exaggeration. Bear in mind, there must be thorough *underdrainage*. No water must stand and stagnate on the surface or just under it. This is always ruinous. But having secured proper drainage, then the moister the land the better.

Cornwall-on-Hudson. E. P. ROE.

CONDENSED EXPERIENCE WITH STRAWBERRIES.

THE GREAT AMERICAN and BEAUTY on Durand's place are truly wonderful; on mine, however, they have not amounted to much, for my whole crop, this year, is almost a total failure; yet this really affords no criterion of their merits. I have great hopes of the Beauty, if it gets the same high culture Durand gives it, but I have little hopes of either when given only the broad-cast field culture that berries generally get.

DUCHESSE I have not tried; but I saw it at Woolson & Co.'s last year, and was not favorably impressed with it. I again saw it at Hance & Son's this year, and it looks better.

CUMBERLAND TRIUMPH is of good size and color, of fair quality and tolerably productive.

SPRINGDALE is, however, of better quality than Cumberland Triumph and more productive, besides being large and handsome.

CAPTAIN JACK I saw at Hance & Son's. It was very late and did not seem to set much fruit.

PROUTY'S SEEDLING.—If the conduct of small fruit during this erratic season, will at all serve as a basis for an opinion, I should think favorably of this variety. It is very productive, and the berries are of good quality. It lies almost too close to the ground, however, but the use of fertilizers may push it up a little.

BELLE DE LYONS.—I saw this also at Hance's, and as he has it from B. M. Watson, it is unquestionably Boyden's No. 30.

DUNCAN.—This is earliest of all strawberries, and last year, on my grounds, was best of all in point of quality—so said scores of visitors. This year from three-quarters to seven-eighths of the crop is a total failure, caused by frost, rain, rot and blight. On the whole I think three-quarters of my entire crop, of all kinds, was a total loss. It has been the most disastrous season for strawberries I have ever known. Any varieties, to withstand such a season successfully, must be iron-clad. Durand claims that his Beauty is so protected. A FRIEND.

Essex Co., N. J.

NOTES FROM THE RURAL GROUNDS.

STRAWBERRY REPORT

THE attention and care which we have given to Strawberry culture, for the past two years, would probably have resulted in full crops from many different sorts during the season just past, had it not been for the severe frost which blighted many flowers, then either in full bloom or "gone to seed." That a given variety will do well here is not proof that it will do well in many other places. But the fact may be considered as one link in the chain of circumstantial evidence.

Of all the new sorts none has raised higher expectation than

DURAND'S GREAT AMERICAN.—Its high-sounding name, the great size it has been known to attain under circumstances which, in the light of general experience, must be deemed "peculiar;" the labor which, for years, its producer is known to have given to crossing varieties and to seedling cultivation, have created these "great expectations." With us the berries were not of extraordinary size; the flavor was inferior, and the vines were not unusually productive. Fig. 13 is a portrait of our largest berry.

DUCHESSE.—This proved with us the earliest to ripen of any variety under test; very productive. The average size is that of fig. 2 in our illustration. It promises to be one of the best early varieties. It is not so firm as Wilson, but superior in other respects.

CUMBERLAND TRIUMPH.—Rather soft berry; seeds small, resting upon the surface. Ripens in every part at the same time. Uniformly of large size—fig. 3 is a fair average. Our vines, June 4, were loaded with berries, though exposed to the same frost as all the others. The shape is perfect, the flavor is very good. The acute lobes of the calyx, from three to five, are so constant as to aid in determining this variety. Pale red, or pink. Too soft for market.

CAPTAIN JACK.—Fails here. The vines are not strong; fruit very small, acid. Not productive. Fig. 4, is above average size.

PROUTY'S SEEDLING.—Fig. 5, is a full average size. Very strong vines; very prolific. Bright red, of fine flavor; uniform in size and shape; often growing together. It is not very firm, but is valuable for home use, or a near market.

NEW DOMINION.—Is of no value here. Fig. 6.

STERLING.—Dark color, good flavor, poor growth, small. Fig. 7.

BELLE DE LYONS.—Thrifty vines, late. Good flavor, not productive. One of our correspondents, a gentleman of great experience with strawberries, is confident that this is Boyden 30 The variety sent to us is not Boyden 30, as will be seen by reference to fig. 8.

GOLDEN DEFIANCE.—This has done admirably with us this season. The plants grow tall and strong, and bear for a long time in great abundance. Our last berries were taken from Golden Defiance. They are plump, shapely, and high flavored. The plants are very vigorous growers and form large, healthy stools. We commend it to our friends for trial, see fig. 10. The color is light red, nearly that of Cumberland Triumph.

DONALDSON'S SEEDLING.—Late. Variable in shape. Bright red, medium flavor, not very firm. Fig. 9, is the outline, between fig's. 2 and 15.

KERR'S PROLIFIC.—Fig. 11. Too much injured by frost. Late. Rather small. Of fair flavor. Not firm.

BEAUTY.—Fig. 1, represents one of the largest berries picked from this seedling of Mr. Durand. More generally the size and outline are those shown by figs. 12 and 14. For our soil and situation we prefer Beauty, to G. American. The flower stems are strong, and grow erect, only falling over from the weight of the berries. In one instance they were so evenly balanced upon the spreading pedicels, that the stem remained upright until some were ripened. The color of Beauty is bright red. It ripens with Boyden 30, and bears handling well. The plants were vigorous, and bore tolerably well. Flavor ordinary.

SHARPLESS.—Not yet tested. We are indebted to Messrs. Ellwanger & Barry, for plants received a few weeks ago. Our engraving, fig. 15, is from a drawing loaned to us by a friend.

CRESCENT SEEDLING, AND FOREST ROSE.—We may say the same of the above two varieties, except that we owe our thanks for plants, to Rev. E. P. Roe.

REMARKS.—We have a number of other new varieties, which fruited during the past summer, but they were so injured by the frost, that, as we cannot speak well of them, we do not feel justified in speaking of them at all.

Bergen Co., N. J.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

A VIGOROUS TREE.

Every adjective must be used in a relative sense, at least, when applied to trees. When we speak of a tree as specially vigorous, it must be simply as compared with trees growing in the neighborhood. Soil and climate so modify nature that what is great for one section, may be quite moderate for another. The Weeping Slippery Elm is most emphatically a vigorous tree, considered in this light. We know, indeed, of hardly another tree that will so readily and frequently make a growth of six feet during one season, in the soil and climate of this section. It is, moreover, a valuable, ornamental tree in yet other ways. The vigorous growth it assumes, develops great sweeping branches which arch and weep in the most fantastic manner. Seen against a clear sky, either at rest or blown about by the wind, the foliage takes on shapes, the similitudes of which afford whimsical fancy most abundant material. This extravagant tendency produces, however, in time, evil results, by developing naked branches more or less sparsely clothed with foliage at the outer ends. The remedy for such bareness is a sharp pruning, yearly, back to the first strong curve of the last year's growth. In mentioning the Weeping Slippery Elm, its peculiar fall beauty should never be forgotten. Autumn retains the foliage of few trees in any degree of beauty. Hence, when we perceive the leaves of the Weeping Slippery Elm in full freshness and vigor, weeks after the foliage of other Elms is yellow and falling, we must needs deem it a valuable quality.

The value of this trait is, of course, quite distinct from the glow of decaying leaves, but, nevertheless, too little sought after. There are trees to be specially enjoyed in spring and early summer, and trees that belong to late summer

and fall. They each have their appointed time and place for sovereign man's enjoyment.

THE CHINESE CYPRESS.

Here we have a most remarkable instance of a tree of rare and exquisite foliage attained only in late summer and fall. Like the common Southern Cypress, a near relative, it is largely unfitted for street planting, because the foliage delays full appearance until July. To increase this unsuitability, it evinces a most decided antipathy to high, dry land, thriving best in low, moist places. It is such a lovely tree, as seen in fine specimens at the present date, that its likes and dislikes should have strenuous attention, to the end that its full beauty may appear. Erect and elegant, in the strictest sense of the words, its form, hardly pyramidal, resembles more the cone of a fir-tree. The color of its light foliage for delicate tender green, can be compared to that of no other tree, and is its greatest charm. Plant it, as a rule, in spring, rather than in fall, for its light peculiar wood is not exactly calculated for the early attacks of winter.

THE TAMARISK.

Few plants, the foliage of which at this season attracts the eye, have greater charms than the Tamarisk. There are several varieties in common use, T. Africana, Indica, Gallica, etc. Indica, at present, demands attention because it is in bloom; Africana flowers in late spring or early summer, and has consequently now lost much of its beauty, although its fresh green leaves can never be otherwise than pleasing. The feathery foliage of the several varieties is surmounted with plume-like, pink flowers, more or less alike, but in the season of blooming, differing enough to present a series of bloom throughout the summer. Beautiful as the almost tropical aspect of the Tamarisk is, a fatal defect is sure to develop with age, in the shape of long, naked, ungainly branches covered only at the outer ends with foliage. This unclothed condition need not appear, however, if a sharp pruning be resorted to yearly, leaving only six inches to a foot of the wood of the growing season just past. The vigorous habit of the plant will enable it to regain the original beauty which existed before the pruning was executed. While there are few amateurs wise enough to institute this sharp discipline, there are still fewer who understand that each variety of Tamarisk must be pruned differently. For instance, the Africana is properly pruned immediately after it flowers, as the blossoming wood is developed the year before the bloom appears. If this wood, therefore, were pruned in winter or early spring, no flowers could be expected that year. On the other hand, Indica, blooming now, late in the season, must be pruned early in the spring, as the flowers come on wood formed this season; that is, the same year. Query?—Do not all late-flowering plants, as a rule, bear their blossoms on wood grown during the same year? It may be readily seen from this, that shrub pruning is not so simple as might at first appear.

Floricultural.

THE HOLLYHOCK.

WM. C. L. DREW.

Years ago, while floriculture was yet in its infancy, the tall, red Hollyhock—Althæa rosea—was to be seen in every garden; its tall spike, eight to ten feet high, showing here and there a single blossom, generally of a dull red color. How wonderful has been the change in its appearance since it became the sole property of a few energetic and true flower lovers, after it had been left to take care of itself, or die out, as the taste for finer flowers grew among the masses. For many years it was unnoticed, and almost unknown by the great majority of florists and amateurs; but within a few years, it has again resumed its place in many gardens, a changed and marvelously improved plant.

No plant exemplifies the effects of cultivation and hybridization better than the Hollyhock of the present day, than which, there is no finer or more desirable ornamental perennial, or, more properly, biennial. The improved Hollyhock has been reduced from a tall, straggling grower, ten feet or more in hight, to a handsome plant, five or six feet high.

The sparse flowers from single, scattered specimens, have been transformed into balls of beauty, completely encircling and covering the spike for from two to four feet. Instead of a few dull shades of red, we now have them varying in color, from the purest white, and most delicate pink, to the most brilliant crimson; from the clearest sulphur, to a deep golden yellow; from clear rose, to a purple so deep as to be almost black, the flowers rivaling in doubleness, the finest Rose or choicest Dahlia.

The Hollyhock is properly a biennial, but by judicious treatment, it may be made of perennial duration. The seed for the very choicest varieties, are propagated in this way. They should be sown as soon as possible in the spring; when the plants appear, thin them out until they are about one foot apart, and then allow them to remain undisturbed until the following October, at which time they should be transplanted to the place where they are desired to bloom. When the best growth and the finest attainable results are desired, the plants should be set in strong rich soil, which should be well stirred, and mixed with well decayed stable manure, in liberal quantity. When the flower stem appears—usually in June or July—it should be fastened to a neat stake, to prevent its being blown around and spoiled. If it is desired to preserve the roots for further flowering, the old stems should be cut off one foot above the ground, in August. In September or October take up the root, divide it with a sharp knife, and reset it in fresh, rich soil. In this way the plants may be continued for many years.

In planting Hollyhocks, a great deal depends on the proper situation. As the flowers are large, and the stems erect, the plants produce the best effect when grown in rows at the back of the border, or an avenue of Hollyhocks, with a back-ground on each side of some foliage shrub with bright green leaves, is one of the finest sights to be desired. A circular bed in a lawn, in which are set from three to five plants, is, if no other flower beds are near, very unique and fine; the bed may be edged with Cannas, with pure green foliage.

One great advantage to the amateur is the close approach to certainty with which the choice double strains will come from seed, for at least fifty per cent of the seedlings from good seed, will be double. All semi-double and single-flowering plants should be removed as soon as noticed, to prevent the seed of the double roots being deteriorated by their proximity.

Chater's English Prize strain of Double Hollyhocks, is the most beautiful, and while the seed costs higher than other strains, it should be obtained, where possible.

El Dorado, Cal.

HYDRANGEA PANICULATA.

Three years ago I read the Rural's description of this fine shrub, and concluded that I must plant one. When received from the nursery, it was carefully planted, staked and mulched. A hole was dug two feet deep, and three and a half feet broad, and filled with good garden soil. Once a week during the growing season, it has had a pail of liquid manure from the barn yard.

The first season it made a large growth and produced three flowers; the second season I was rewarded for my care with fifty-six flowers, most of them large, grand and showy. I have just examined our shrub, and find that by this, the third year from planting, it is about five feet high and six feet across. It having been frequently cut back, seventy-eight cuttings and sixteen layers have been taken from it. Ninety-two pyramidal panicles drooping their beautiful white heads gracefully to mother earth, are the result of this season's bloom.

I am glad the Rural so freqnently urges its readers to plant one of these desirable shrubs. I am sure they will find it a source of pleasure to themselves, a great addition to the beauty of their homes, as well as another charm in rural life. RURALIST.

Walden, N. Y., Aug. 31, 1878.

Field Crops.

PREPARING GROUND FOR WHEAT.

W. J. FOWLER.

At this season farmers in wheat-growing sections are preparing for seeding. Some suggestions on the subject may prove of value to many. It is not enough that the ground be well plowed and in good tilth. There is such a thing as too much plowing. Once well done is better than more. What after cultivation is needed should be on or near the surface. It will be all the better if at the same time the ground is compacted as much as possible. One of the best wheat crops I ever knew was on a quack-covered field plowed in June and trampled on all summer by a large flock of sheep. Every vestige of quack was kept down, the sheep gnawing every green spear down to the roots and eating even these. The field was thoroughly cleaned, but the sheep were poorer in the fall than they were when put in the field in the spring. The field of ten acres yielded four hundred bushels of bright, plump wheat. The land was only lightly cultivated, and the wheat sown broad-cast on the furrow and dragged in. I do not instance this as an example to be implicitly followed; but as giving some valuable hints. The sheep droppings enriched the surface of the field, and the tramping compacted it so that the roots had a firm soil to hold against the winter. The luxuriant fall growth of top further protected the roots from the severest cold.

The chief difficulty with wheat on stubble ground, is in getting the soil compact enough. This year my barley was so badly "crinkled" that I cut it lower than ever before. The ground was rolled smooth, and free from stones so there was no trouble in cutting almost down to the ground. This stubble is now turning under so nicely that I shall never again leave long straw to be plowed in. It is of no value as manure, and it does make the soil dry out a great deal quicker than it should. This not only checks the growth of the wheat, but predisposes to attacks of the Hessian fly. On the other hand, a short stubble turned under, leaves the soil nearly as compact as if it were a fallow.

The seed-bed should be as rich as it can well be made. The ground need not be rich very deep for wheat, nor should it be manured with coarse manure. Either use some concentrated fertilizer, or leave the field for some spring grain, oats or barley. It is better to save the wheat-seed than to sow on soil too poor to bring a crop and finally have to plow it up at the last, as many have learned to their sorrow. Wheat is the king of grains and is correspondingly fastidious in its choice of food. A grain of concentrated fertilizer, like guano or superphosphate, will do a wheat-plant more good than a forkful of coarse manure buried in contact with its roots. Use the coarser and cruder manure for the corn ground and save the finer portions for wheat.

If every thing is right, the wheat should be well up in the drill-marks in five to seven days after sowing. I have known wheat sown just before a warm rain to come up in four days. At this time I like to have a sharp frost to check the fly and insure a healthy, fall growth. Wheat is no exception to the rule that plants are most prolific near the northern boundary of their growth. It needs frosts and cold to check its growth and make it tiller at the root. Hurtful as severe frosts sometimes are, we should yet regret them, so far as wheat was concerned, if they entirely ceased.

I find that many farmers are afraid of having their wheat-fields too compact, and so cultivate them up just when they are in right condition for seeding. If weeds abound this may be necessary; but weeds should not be allowed in a fallow intended for a seed-bed. The roller and drag are the only implements needed, and if used alternately once every three or four days, the soil will be kept clean and compacted at the same time. I do not think much of any green manure for wheat. Even clover is quite as good in most soils if plowed under after the first crop has been cut. The clover top makes the soil too light, enriching the ground for future crops, but insuring, with ordinary seasons, a failure of the wheat crop for the coming year.

Monroe Co., N. Y.

Horticultural.

THE FRUIT FAMILY.

PROFESSOR W. J. BEAL.

In all ages of the world we read that certain families of men have stood out boldly because of their great deeds.

Certain orders have contributed nearly all of our domestic animals. The Pachydermata give us the elephant, the hog, the horse, the ass; the Ruminantia give the reindeer, goat, sheep, ox, zebra, buffalo, camel, dromedary and llama. The Rasores, among birds, give us most of our valuable domestic birds, as doves, pigeons, pheasants, turkeys, peacocks, guinea-fowls, grouse, quail and fowls.

Among plants, certain families stand out in bold prominence for the useful products which they give to the support of the human race. To the Gramineæ, or grasses, belong all our cereals, wheat, rice, oats, barley, rye, maize, etc; also all of our true grasses found in meadows, pastures, lawns, and wild prairies. They are of immense value to the people and their domestic animals.

Several other families of plants contribute freely to our numerous wants. There is one which stands foremost in importance to the horticulturist, especially in the department of pomology. I refer to the Rosaceæ, usually known in popular language as the Rose-family; but it seems more suitable at the present time to speak of it as the Fruit-family. The Pomes belong to this family, and include apples, pears, quinces, medlars, and service-berries. The Drupes belong here also, and include peaches, almonds, apricots, nectarines, plums, and cherries. There are several others of great importance, including the strawberries, raspberries and blackberries.

In the north temperate zone, we have but few fruits left after taking out those belonging to the Rosaceæ. The best of those left are grapes. There are also currants, gooseberries, cranberries, and huckleberries.

Of the great value of fruits, I need say nothing. Some of them have probably arrived as near perfection as they ever will; others may be much improved, while some of them have scarcely begun to show their capabilities. We have no idea what may be done with a plant until it has had a fair trial in skillful hands for a long time in a great variety of soils and climates.

Very likely some insignificant shrubs, and vile weeds stand ready to change to useful plants with a little intelligent effort in the right direction. Right here I am again reminded of Emerson's definition of a weed, viz.: "A plant whose virtues have not yet been discovered." Last year I received some forty or more kinds of vegetable seeds from Japan. Among them were several called radishes. One of them, from the first, had a familiar look which I thought I recognized. The roots of this particular one were very long, white, tender, and of good size. They were rather strong, but no stronger than some genuine radishes which came from the same source. This year the plant in question has produced flowers and has turned out just what I expected—our common burdock improved.

The fruit family is a small one when compared with many others. It only contains somewhat over a thousand species which are mostly natives of the north temperate zone. Among plants for the florist, there are some choice species. Among these are the Spiræas, Potentillas, Hawthorns, Japan Quince, and the numerous kinds of Roses. The last genus, the Rose, has been styled the queen of flowering plants and, from the remotest ages, has stood without a rival for its delicate colors, perfection of form, and delightful perfume.

Agricultural College, Lansing, Mich.

Miscellaneous

THE TRUTH ABOUT IT.

[Under this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—Eds.]

FALLACIES ABOUT SHEEP.

There is a general impression, amongst those who do not know, that by means of sheep a great deal may be made out of nothing. We may frequently see absurd statements to the effect, that "the sheep's foot turns all to gold;" that there is no readier or surer way to fertilize a barren field, than to put a flock of sheep to pasture upon the briers and weeds in it: that, in effect, sheep will live upon the poorest food and make the richest manure, and are thus the very best stock a farmer can keep on his farm. But those "who have been there" know better. "Sheep are always an unhappy flock,"—*oves semper infelix pecus*—wrote the old author, Virgil, and many a man who has been deluded into keeping sheep in the vain hope of finding gold in their foot-tracks, has found out "the truth about it."

Now, having been through the mill and having turned defeat into victory by disabusing my mind of the common fallacies about sheep, I warn intending shepherds that there is no other domestic animal that needs better care or food, for profitable thrift, than sheep; that out of their finely-grinding manure mill, comes nothing that is not first put into the hopper; that yet with proper care and skill, a well selected flock of the the right kind of sheep, in the right place, can be made to pay 100 per cent on their cost every year. It is true that a flock will clear a field of weeds, briers and rubbish and will enrich it; but it will not live upon these alone. To relish this rough herbage, the sheep must be fed liberally upon supplementary food, such as bran, meal, cut clover, grass, or green-corn fodder and always a pint a day per head of linseed oil-cake meal, bran or other grain food. Then, with this alloy, the sheep's foot will take on a golden tinge, and will edge with gold the farmer's pocket, by making his poor lands rich; giving him at the same time a lamb or two, and a fleece every year. A field may be enriched, too, by sowing rape seed, this month, at the rate of a peck per acre, and when the crop is of thrifty growth, the sheep may be turned in to eat it down through the late fall and early spring; thus fitting it for a crop of corn, oats, or roots, next year. But the sheep must have their pint per day of bran or oil meal even then.

The fact is, sheep are manure spreaders, rather than manure makers. We feed them with the material; they take their pay out of it, and give us back the remainder, transformed into a substance of equal value—because it is more available—with that which they received, and they get fat meanwhile in doing it. Just as we give the mint a bag of gold dust and we get back exactly the same weight of gold dollars, while the coiners have fed upon it—but without the dust we get no dollars. So with sheep: if we don't feed them with the materials needed to make fat for themselves and rich manure for us, they will be as unprofitable as Pharaoh's lean kine. And this is "the truth about it," as proved by A Shepherd.

WHAT OTHERS SAY.

Prickly Comfrey, Half a Century Ago.—According to the Sydney Town and Country Journal, Mr. D. Grant wrote a letter to Lord Farnborough in 1830, telling that some years back, he happened to have two of the above plants growing near an open fence where his cattle passed daily. As soon as it sprung up so

that they could reach it, they fed on it with the greatest avidity. The following year they did the same. He then thought, if it should prove wholesome, it might be turned to good account as green food for cattle generally, and in consequence, he set about increasing it. He fed horses, cows, sheep, pigs, and geese with it, and they did well. As it was of such wonderful growth, and could be cut successively from April to October, it might, he thought, be cultivated to great advantage.

Mr. Grant then says, "My neighbor, Moorey, the veterinary surgeon, had a young mare last autumn very bad with the strangles, so much so that she had left off feeding. He thought of the Comfrey, and sent for me. She immediately began to feed on it, and she soon got well." He considers that, on account of its *oily nature*, it was of the greatest service.

He found that cows did not take it in the first instance so freely as the horse, but they all soon took to it, and then they were quite as eager for it. In 1827 he fed the worst cow he had, entirely upon it for some length of time; she did well, and milked better than she had done before. The cream was thicker and well flavored.

For sheep and lambs he found it very good; they took it freely, lambs would feed on it before they were a month old. For pigs it was very useful, they eat it freely and did well. He kept a sow chiefly on it, with twelve pigs; she brought them up well; they all fed on it before they were three weeks old. Geese did well on it, the young ones would feed on it as soon as hatched. He had no hesitation in pronouncing it a most valuable discovery, as it would grow in all soils and situations, better than any other plant; it might be planted by the sides of ditches in any waste corner of fields, orchards, gardens, etc., where useless rubbish grows; it was a plant that no one could lose by, as the only expense was the purchase of a few in the first instance, etc., etc.

Perhaps some of our readers from a perusal of the gist of Mr. Grant's letter, may be induced to make another effort to coax their live stock to eat Prickly Comfrey. If they could only coax them to "take" it *once*, their animals might forever after feed upon it with "the greatest avidity." The first dose has proven with us the rub!

DISAPPOINTED SCHOOL-HUNTER.—A school-hunter sums up, in the Nation, the result of his inquiries for a school from which his girls would be turned out simply with good health, a taste for knowledge, and a proper sense of their own ignorance (!) He finds that he cannot get such a school, "partly because it would cost more than most parents could afford to pay, and partly because most parents would not patronize it, if it were within their reach."

CATALOGUES, &c., RECEIVED.

ELLWANGER & BARRY, Descriptive Catalogue (No. 1) of Fruits. In this as compared with previous circulars, the principal additions are in Peaches, Grapes, Plums, Strawberries and Raspberries. Among foreign pears, special prominence is given to Petite Marguerite, Bonne du Puits Ansault, Andre Desportes and others. Among American varieties, one never before presented in any catalogue, viz., Frederick Clapp, is offered. Messrs. E. & B. have known this variety for five years past, and deem it worthy the high rank awarded it by the Massachusetts Horticultural Society. Among Peaches, Waterloo, a new, "large and beautiful variety," ripens in Western New York in *the middle of July*. Engravings of this peach, of a number of new Pears and a colored plate of the Sharpless Strawberry, will be found in this catalogue.

The third volume of the North American Ayrshire Register, containing a continuation of the list of animals of this excellent breed, whose descent is traced back to an imported ancestor. The work, of 174 pages, by its excellent arrangement, fine, clear typography, and handsome binding, reflects great credit on its editors and publishers, E. Lewis, and Jos. N. Sturtevant, South Framingham, Mass.

MR. JAMES H. RICKETTS sends us a bunch of a seedling black grape which he calls "The Welcome." Its parentage is Pope's Hamburgh crossed with Canon Hall Muscat. The bunch is compact and the berries of a richer flavor than that of either parent.

B. K. BLISS & SONS, 34 Barclay street, N. Y. Catalogue of small fruits. Potted strawberry plants for fall planting—the newer varieties—Raspberries, etc. Fruit and ornamental trees, winter plants, etc. This is free to applicants.

The Windham Co., (Vt.) fair, will be held at Newfane, Sept. 18, and 19; Bidport and Crown Point fair, at Crown Point, Sept. 4, and 5; Brandon Town Fair, October 1, and 2, including dedication of Sprague Agricultural Home.

BENSON, MAULE & Co., Philadelphia, Pa., Combined Catalogue of Thoroughbred Stock, fall seeds, bulbs, plants, etc. Illustrated. This is mailed free to all applicants, and is well worth sending for to those interested.

ELEVENTH ANNUAL REPORT of the Ohio State Hort. Society, M. B. Bateham, Secretary, Painesville, O. An instructive work of 95 pages.

E. B. RICHARDSON, New York, circular of Fruit and Ornamental Trees for the fall of 1878.

SAMUEL KINSEY, Dayton, O., Wholesale Price-list of small fruits.

Veterinary

VERTIGO OR MEGRIMS.

ANSWER BY D. E. SALMON, D. V. M.

William Hodges, Chickasaw Co., Miss., says: "I have a mule that seems to be affected with what my neighbors call 'fits.' There are no regular times for her spells; they are liable to come on at any time, but are more frequent in cold or damp weather. When she has one, she trembles all over, whirls around, and if possible, strikes her head against something. This last-named feat seems to be her object in turning around, for when it is done she soon becomes quiet. These spells only last a few minutes, then she is well and able to work. Please tell me what the disease is and the remedy, if any, for it."

ANS.—The disease is known as vertigo or megrims, and in many cases it is impossible to decide as to its real cause. It has been, under different circumstances, attributed to over-feeding, to disease of the heart and lungs, to pressure of the collar on the veins of the neck, and to different diseases of the brain; by others certain forms of vertigo have been considered as purely nervous affections without any organic changes whatever. It is obvious that it would require a very careful examination by an experienced person to decide as to the curative treatment that should be adopted in any particular case. Very often, too, this will fail in the most skilled hands. The only advice that we can give is to see that the harness does not interfere with the circulation of blood through the neck; if the animal is in high condition, reduce the feed; give a purgative (aloes 4 to 6 drachms, or Glauber salts one pound), and follow with diuretics or sedatives (nitrate of potassa or bromide of potassa in two to four-drachm doses twice a day;) when the attack comes on, it is best to loosen the collar, cover the eyes with a thick cloth, apply cold water or ice to the head, and, in obstinate cases, to bleed. A long run to grass, in some cases, causes marked improvement.

Industrial Implements.

FAIR NOTES.

THE SYRACUSE CHILLED PLOW COMPANY, SYRACUSE, N. Y.—The Syracuse Chilled Plow Company do not send their usual advertisement for this number of our paper, for the reason that they have outgrown their capacity to supply orders. They say that their experience shows our paper to be a most excellent advertising medium, and that if they give us an advertisement it would only add to their difficulties. But as they are erecting new works, which will be completed November first, which will give them the capacity for making forty thousand plows a year, they will then lay before our readers something worth reading in regard to their celebrated CHILLED PLOWS.

THE CIDER-PRESS SCREWS made by Rumsey & Co., have been very generally used for years. They may be seen on the fair grounds at Elmira, or a reference to the firm's announcement in this number will supply all needed information.

THE NOVELTY POCKET SCALE is a compact little scale, cylindrical in shape, and less than three inches in length. It will weigh matter from an ounce to fifteen pounds, the entire scale being graduated in fractions of pounds. Aside from its compactness and accuracy, the novelty consists in a sliding shell that may be moved up or down the weigh-beam, so as to give the exact weight of any article without a second operation to ascertain the weight of the receptacle in which it was weighed. A scale has been left at this office for examination. It will do what is claimed for it.

THE BILLINGS HORSE SHOE, which may probably be seen on the grounds at Elmira, is quite a new departure in the construction of horse shoes. A reference to the advertisement will show the shape and appearance of shoe when in use. It is claimed that the wide foundation offers a perfect support to the hoof, while the rim of the shoe offers a solid resistance to the road, preventing side-slipping, and giving the horse a confident motion, while it increases his locomotive powers by affording a secure foothold. We have seen commendatory letters from many capable of judging, who speak without reserve in its favor. It is said that it effectually cures "interfering." We are testing a set on the Rural Experimental farm, but the shoes have not been in use long enough to give decided results.

THE COATES RAKE, of which over 50,000 are now in use, will be efficiently represented at the New York and Pennsylvania State fairs, by the eastern agents, Messrs. Nash & Bro., of New York. Its special claims to the farmer's attention are enumerated in the advertisement.

FLORIDA HOMES FOR ALL have been proposed by the Florida Land Co., as may be seen by a reference to their prospectus in another column. These lands are situated on the line of the Transit Railroad, and are offered at $1.25 per acre. The agents, B. T. Smith & Co., are well-known business men in New York.

MONTGOMERY'S Improved Rockaway Fan-Mill, exclusively controlled by Dorsey, Moore & Co., Baltimore, Md., is a thoroughly-made, powerful fan. It has secured 210 premiums and 15 medals. It will do all kinds of work, and performs its task satisfactorily. We have carefully examined the implement and think it capable of cleaning sixty bushels of wheat per hour, as is claimed by its makers. The above firm will supply any further particulars needed.

THE CORN-SHELLERS and Grist Mills made by Livingston & Co., Pittsburgh, are well-known. Over twenty thousand are now in use. The corn-sheller now used on the RURAL Farm was supplied by this firm, and it has done its work satisfactorily without costing anything for repairs.

THE I X L FEED MILL made by the U. S. Wind Engine and Pump Co., Batavia, Ills., will be a prominent visitor to most of the State fairs. It is a superior mill. The grinding-plates are of white chilled metal, and reversible. The illustration, as shown in the advertisement, gives a good idea of the appearance of the mill.

LA DOW'S NEW WHEEL CORN CULTIVATOR will be on exhibition at the New York State fair. This cultivator has a series of discs (three or four) attached to a wrought-iron frame. The discs are arranged so as to be perfectly adjustable, and can be placed so as to throw the earth either to or away from the hill. The driver's seat is attached to the end of the pole. This implement should be seen by all of our readers visiting the fair.

HORACE WATERS & SONS, New York city, offer their mirror-top 12-stop organ, for only $85, which is selling it for a song. During the thirty years this firm has been in business, their aim has been to make the best goods possible for the least money, and they consider this last offer as another striking proof of their devotion to the interests of the music-loving public. All instruments are warranted for six years. Their illustrated catalogues will give those who think of taking an agency, a good idea of the attractive styles, low prices, and inducements to handle their wares.

BRADLEY'S AMERICAN HARVESTER, No. 2, will be displayed at the New York State fair. This implement is distinguished for satisfactory cut, superior reeling and delivery, easy tilt, adjustable track, controllable rake and balance. Its great features are its light weight and light draft, combined with its durability.

THE JOHNSTON HARVESTER CO., comes to the fairs this year with its Paris honors thick upon it. In addition to the usual display of its fine standard machines, it will show two new self-binders and a new, light mower, that was tested this season for the first time. Its weight will not exceed five hundred and forty pounds, and the draft is correspondingly easy.

THE DISPLAY OF MR. A. B. COHU, one of the leading New York dealers in farm tools will be one of the best on the fair grounds at Elmira. The exhibit will be specially strong in corn-shellers and feed-cutters.

THE ONEIDA IRON WORKS will have some fine specimens of farm engines at the New York State fair. The work turned out by this company is characterized by its strength, durability and fitness for the uses to which it is to be applied.

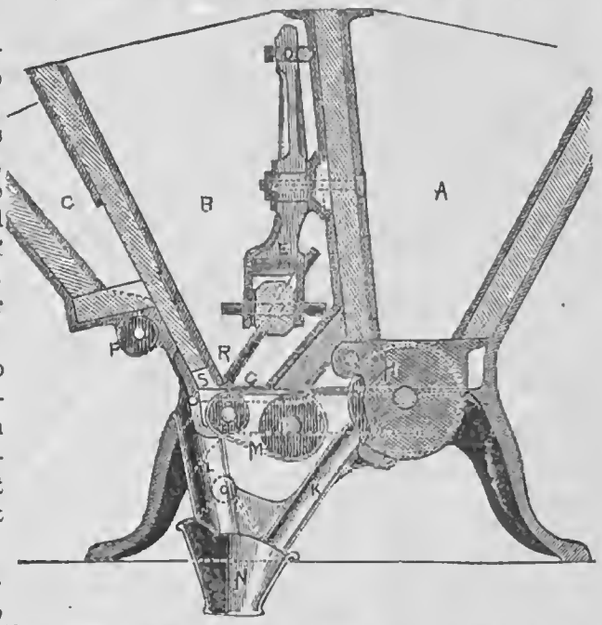
F. D. MOULTON & Co., New York city, have sole control of the sale of the Ashton Salt in this country. The salt itself is too widely known to need comment.

A NEW FERTILIZER ATTACHMENT
ADDED TO THE BUCKEYE DRILL.

IN the RURAL of June 29, the novel force-feed of the Buckeye grain drill was illustrated and explained, but as has been the practice of the energetic manufacturers, anything likely to increase the efficiency of the drill has been given a thorough trial, and improvements have been added until the latest seems to be about all that was wanting to perfect the implement. The drill now has three compartments, as may be seen by the accompanying diagram.

A, represents the wheat or grain hopper; B, the hopper for fertilizer; C, the grass-seed hopper; D, Pitman connection; E, the agitator arm; F, the agitator with pin moving over the belts; G, galvanized bottom with openings over the belt; H, wheat or grain feeder and cup; K, spout or conductor from wheat hopper; L, spout or conductor from fertilizer hopper; M, leather belt for feeding fertilizer; N, spout to which rubber tubes are attached; P, grass seed feeder; R, slide for regulating the quantity of fertilizers; S, is the point where the fertilizer is discharged from the belts.

The fertilizer and grain hoppers are combined in a double hopper, and while the front one is feeding out the grain the rear or fertilizer apartment is feeding out the fertilizer—both grain and fertilizer passing down through the hoes and being deposited together in the ground.



The fertilizer is brought in plain view of the operator before entering the hoes so that he can see just what is being done. The greatest difficulty hitherto found in constructing such a machine has been that it seemed impossible to prevent the fertilizer from being worked into a sticky paste and then packing. This method for feeding fertilizer is entirely novel. It consists of a series of endless belts carried by two shafts on which are a series of small pulleys—the whole being placed under the bottom of the hopper. The fertilizer coming in contact with these belts is carried back and dropped into the tubes, the quantity being regulated by a parallel slide so as to sow a large or small quantity as desired. There is also an agitator moving very slowly in the hopper which prevents any possibility of arching. This method of feeding has been used for five years successfully in Maryland, and known there as the "Thomas Guano Attachment."

The grass seeder to the rear of the fertilizer apartment, is a miniature copy of the large grain-feed, and does the work as carefully and accurately. The device for working the hoes in line or zigzag is easily worked by a boy, and in fact the entire mechanism is so nearly automatic and works so smoothly that the drill, during the twenty years it has been manufactured, has retained and added to its popularity constantly. Messrs. P. P. MAST & Co, Springfield, Ohio, are the manufacturers.

THE IRON TURBINE WIND-MILL.

THE Iron Turbine Wind-mill has, since its introduction two years ago, by MAST, FOOS & Co., been slightly modified by the addition of a mechanical device that increases its power. As at present offered to farmers, the mill is unique in construction, has but few parts and is solidly built. The working parts of the mill are entirely of iron. The power instead, of being accumulated as in the ordinary mills by means of slats and arms, is gathered by an iron wheel, modeled on the turbine principle, with a motion so unusual in this species of motor as to at once attract attention. But few parts enter into the construction, and these are well put together. The wheel is made of heavy sheet-iron, and the few joints are easily oiled. The turn-table works easily and freely. It has a tail-vane which holds the wheel facing the wind, except when operated upon by the governor, which works automatically.

The regulating vane stands upright over the wheel and is held in position by an adjustable weight upon the lever, and can be regulated according to the power required. A very strong wind turns the vane downward, and a gale throws the wheel entirely out of gear, until the danger is passed, when work is resumed.

This mill will be in working order at the fair grounds at Elmira, N. Y. where its peculiar excellencies may be seen.

THE CHADBORN & COLDWELL MFG. CO., of Newburgh, has just constructed a hand lawn-mower, which is very simple and easily run. It does not exceed fourteen pounds in weight, and will cut a ten-inch swath. The idea was suggested to Mr. Coldwell while in France. He there saw a French machine intended for use by ladies and children. He has improved on the foreign implement, and the company now have a mower that can be sold at a very low figure, and that can be handled by a mere child.

C. AULTMAN & Co., Canton, Ohio, have just filled an order for six Buckeye mowers and reapers to be shipped to Durban, Natal, South Africa. One of their Canton monitor engines has also been sold for shipment to Ireland.

AULTMANN, MILLER & Co. have put out five hundred of their wire binders this season, and could have added largely to this number had they had the machines for sale.

The Querist.

ANSWERS TO CORRESPONDENTS.

Cheap Roofing.

Robert C. Brown, Chautauqua Co., N. Y. asks whether there is not some roofing that is better than, and just as cheap as shingles, for barns, &c.

ANS.—With shingles at $3.50 per thousand, 100 sq. feet would cost $3.50, to which add for labor and nails according to rapidity of hands and amount of wages. This is the best roof known. Its quality and durability, however, depend almost entirely on the perfection of the work. No poor shingler can make a good roof even with the best material. In some parts of the country where a good carpenter is a rarity, roofs are often made of floor boards. Flooring at $30 per thousand, allowing one-sixth for waste, tongues and grooves, will cost the same as shingles at $3 50. And on this basis, the relative price of the articles in different sections, will determine their comparative cost. Prepare the rafters and shingling lath as for shingles, but use only one-third as many laths; let the boards be dry, to run up and down the roof. White lead should be in the joints, and the boards should be laid by means of floor pins, like a floor. The joints should be tight, and one coat of any cheap paint should be applied to bind the wood, and few men will live to see it worn out. A coat of paint should be laid on once in three years. The boards should not be spliced, but they should be bought of a length to suit the length of pitch. This roof sheds water like a duck's back.

Angora Goats.

J. Layne, Grayson Co., Texas, asks for some information with regard to the Angora goat; what has been the result of its importation into this country; can it be made profitable here; how would the climate of Texas suit it; where can pure-blood animals be bought; and where and at what price can their product be sold.

ANS.—The Angora goat is a native of the vilayet and town of Angora, in Asiatic Turkey, 220 miles east-south-east of Constantinople. It is situated on an elevated plain abounding in pasture and is famous for the breed of goats, whose soft, silky, white hair, about eight inches long, forms the chief article of export. In 1869 the number of these goats in and near the town of Angora was estimated at 1,000,000. They are shorn twice a year and the annual yield of wool is about 2,700,000 pounds. The fineness of the hair is by many ascribed to some peculiarity in the local atmosphere, for even the cats, dogs, and other animals of the country are, to a certain extent, affected in the same manner as the goats, and they all lose some of their distinctive beauty when taken to foreign countries. The first importation of these animals was made into this country in 1849, in South Carolina, and again in 1863 further importations were made. Since then, experiments have been made with them in several States, notably in Ohio, California, Tennessee and Maryland, but within the last five or six years little is known to the public of the results. About eight years ago a Mr. Euty cides imported about 240 of them into Maryland, where he held them for sale at $100 each, a price at which they sold very slowly. Afterwards he took a farm in Virginia where he was unfortunate with them, losing a number of them through their having eaten poison ivy. Should any of our readers be able to answer more fully our correspondent's inquiries, we shall be happy to publish the information in the RURAL.

Water-Lilies Wanted.

Mr. Robert Brewster, Houston, Texas.—Having a fondness for Water-lilies and having read in the RURAL a description of those grown by Mr. William Falconer, inquires where he could purchase the yellow and white varieties. They grow wild about thirty miles from Houston, but he considers it would be easier and cheaper to buy them than to search for them in their native retreats.

ANS.—We have seen them advertised, but cannot at this time recall the advertisers. We print the above so that parties having them for sale may answer the above question.

Miscellaneous.

J. F. S., Lewis Centre Ohio, asks, (1.) How to propagate Clematis Sophia; can he do it by layering; is it hardy in his latitude; had he better take it down and cover it on the approach of winter; is it considered a good variety. (2.) He also desires to learn why he fails to make cuttings of the single Petunia grow, for, although he is anxious to propagate from some very finely marked ones in his possession he cannot succeed for some reason.

ANS.—Clematis Sophia is perfectly hardy with us. If taken down carefully and covered lightly, no harm will follow. But our method is to cut back the Clematis severely every fall to within a few feet of the ground. Then they may be covered, if so desired, with very little trouble, and they bloom the more profusely for it. It is a splendid variety. You can propagate it from layers.

(2.) We cannot say, inasmuch as you do not state your method. If cuttings at this season be placed in sand and kept moderately moist, there will be no difficulty. A common box or large flower-pot, well drained and filled with four or five inches of sand, is all that is needed. It may be exposed to the sun, in which case more water will be required. It is best to cover at night or to remove the propagating box to a warm atmosphere.

B., Linn Co., Minn., asks: 1st. Are seeds of Gladioli and Dahlias formed in the flower or in the ground? 2d. Is it well for the bulbs to cut the flowers as fast as they grow old? 3d. I wish to remove my Crocuses—when shall I do it? 4th. Are *fresh* seeds of Salpiglossis slow to germinate?

ANS.—1. The fruit of all flowering plants is formed from the flowers. The ovules of the ovary form the seed. Hence there is no seed where there is no flower, except in the lower orders of plants which do not bear flowers. These latter produce spores in place of seeds. The corm (or bulb) of a Gladiolus and the tuberous "roots" of Dahlias are merely underground enlargements of the stem. Some fruits form under ground, as the peanut, for example. The flower unfolds above ground, then the stile elongates, makes its way into the ground, where the ovaries enlarge, forming the fruit and seeds. But they are no more *roots* than an apple is a root. 2. It *is* well to cut off the flowers as soon as they begin to lose their beauty, because the formation of the fruit which follows, exhausts the vigor of the plant. 3. Remove them now. 4. Not that we remember.

G. H. Babcock, Jefferson Co., N. Y. asks whether a Honey-Locust hedge set out this spring, the plants of which were then one year old, should be clipped at all this season, and if so, about how much.

ANS.—We should wait until next spring to cut back.

S. L. N., Pa., inquires where he can get the seeds of Trumpet-creeper—Tecoma radicans—lately spoken of in the RURAL.

ANS.—Wm. H. Carson, Thorburn & Co., B. K. Bliss & Sons, R. H. Allen & Co., all of this city. Landreth & Sons, Philadelphia.

V. Mexico, N. Y., asks 1, how to rid a barn of hen lice; 2, how to get them off a horse or cow.

ANS.—1, We know of no better way than a thorough clearing out and cleaning. Whitewash every part, or paint with dilute carbolic acid or kerosene. 2. Washing with carbolic acid soap.

F. M. Beers, Lima Co., Mo., inquires about the scope of Secretary Schurz's late decision with regard to the "entry" of railroad lands.

ANS.—See "News" department.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, AUGUST 31ST:

B. C. D.—G. G.—G. A.—C. H.—A. M. V. A.—C. C. B.—J. P. S.—W. C. L. D.—Cousin T.—J. F. D.—A. C.—A. B. G.—L. J. T.—J. B. J.—W. B.—S. M.—S. B.—J. A. Y.—R. B.—T. C. D.—G. E. M.—J. C. W.—H. S.—M. J.—S. B. P.—"Moore."—E. S.—Mrs. S. C.—H. H.—F. C. P.—J. C., thanks, we have them.—R. A. B., not received.—"Constance."—C. T., we answer questions in their turn.—B. C.—X.

Everywhere.

SOUTH-EASTERN MISSOURI NOTES.

ALTHOUGH, "as the crow flies," only some fifty miles from St. Louis, the "Future great city of the Mississippi valley," this region is rarely heard from through the public press. The great tides of immigration moving westward sweep into Minnesota, Dakota and Nebraska, north of us, while the abnormal flow from North to South, in the case of Texas, rushes over our own Iron Mountain Railroad, and while picking up and transporting to that promised land, occasionally, one of our citizens, rarely leaves "a new-comer." And yet, as compared with many much-sought and lauded regions, this section does not deserve such utter neglect.

It is a splendidly timbered and watered country, with pineries convenient, and soil and climate peculiarly adapted to the growth of winter wheat, helping, to a small degree, to give to St. Louis the raw material for the manufacture of that high grade of flour, that in days prior to the "New Process," gave her a world-wide reputation only equalled by that of the Richmond, Va. mills. And yet, comparatively little wheat has been grown here till within a few years past. Corn has been the staple crop, on drought ridges as well as river bottoms. But a change has taken place, and it is at once an indication and an act of progress. Last year at least 33⅓ per cent. larger acreage of wheat was sown than ever before in south-eastern Missouri.

The wheat harvest commenced this year from 1st to 10th June, at least ten days earlier than usual, and the weather was cool and pleasant. We had the heated term later on. The yield was not as good as hoped, scarcely exceeding ten bushels per acre; but the quality was generally excellent and the grain was saved in good order. It is now mostly thrashed, and marketed at the low price of 60 to 70 cents per bushel from first hands, which has hardly paid expenses when raised by hired labor. Lands are cheap here, ranging all the way from government price to 25 dollars per acre for unimproved, and from 10 to 50 dollars for improved lands, which means here, lands cleared and fenced.

Building material of all kinds, rock, clay for brick, sand, gravel, etc., can be had for the taking, as also fuel; and in the mining regions houses, *i.e.* cabins, free of rent. Anyone who will examine Horace Greeley's barn, or Prof. Fowler's octagon house, in Westchester Co., N. Y., and learn to build of rock and concreate, need not be without a cheap and substantial house in this region, where all the materials are at hand, free of cost, and only the man's own labor is needed to put them together.

[Name lost.]

RURAL SPECIAL REPORTS.

WATSONVILLE, Santa Cruz Co, Cal., Aug. 18.

THE crops hereabouts are in a somewhat mixed condition. The wheat crop in this section will not be much over half a crop, if indeed it will amount to that, owing to the rust, as the very wet winter and continued fogs have been severe during the past year. Barley will be about on an average with other seasons. There was not a large acreage of oats sown, and the yield of that sown will be light. No rye was sown in this neighborhood. Corn never looked better at this season of the year, though it is rather early yet to judge of the yield, as it will be fully two months before it will be ripe, and the cut-worms are very numerous this year on the early sweet-corn, and will be likely to injure the late corn to some extent. Potatoes are, so far as I can learn, light. The fruit crop also is light; apples half a crop; pears heavy; plums and cherries a full crop; peaches, but few raised here, as they do not succeed well in this section; but what we have are very good this season. Grapes are not raised at all here. Beans look well so far, except one or two varieties. Vegetables of all kinds are very abundant. Hay is the heaviest crop ever raised here, and I understand it is so all over the State. This account applies only to this section of the State, but the papers assert that the wheat crop of California will be heavier this year than ever before, and of a better quality generally. Money is very scarce here and times are very hard—harder than last season. A. C.

[We cannot tell how long ago the following communication was received. It was found among a mass of old unpublished communications, and may prove of interest to the present advocates of tea culture.—EDS.]

MCINTOSH P. O., Liberty Co., Georgia.

In your RURAL NEW YORKER of July 26th, (no year) you desire a sample of Southern grown tea sent you. I take pleasure in sending you some, which I prepared in April, from plants growing on my *father's farm in this county. The tea was not prepared with any special care, as it was intended only for family use; I would be glad to hear your opinion of it, in the columns of your interesting paper.

The tea plant grows luxuriantly here, and bears seeds every year, in great abundance. Thousands of plants are growing in this county, of various sizes, from ten to twelve feet high, down to plants that have just sprung from the seeds, this last spring. If some enterprising northern gentlemen would only interest themselves in tea culture, in a few years our country would be supplied with southern-grown tea.

MRS. R. I. S.

DAYTON, Montgomery Co., Ohio, Aug. 21.

Harvest is over, and most of it thrashed. Farmers generally are feeling good over their large yield of wheat, although one can find some men who complain, but I suppose it takes that kind to help make up this world. Oats have turned out a little above an average crop. Meadows did their part well towards making up the harvest. Corn is looking well. We never had better prospects as regards this crop. Unless we have early frosts we shall have the largest yield we have had for some years. Tobacco, although not so much planted as usual, is looking well. Apple and other fruit trees are loaded. Wheat is selling at 95 cents; oats, 23 to 25; corn, 45 to 50 cents; potatoes, 60 cents; apples, 30 cents; butter, 25 cents. Considering all, farmers will make more, for the prices of groceries are down. C. H.

FORT HOWARD, Brown Co., Wis., Aug. 20.

Our harvest is over, and we can report, wheat at half a crop; oats, two-thirds of a crop; barley, half a crop—and poor grain—rye, two-thirds of a crop; hay, a very large yield. I have private information from points in our own State, and from Dakota, Minnesota, Iowa, and Kansas, and from all points comes the complaint of "wheat is a failure."

This is not much of a corn county, and will not make much difference with the crop of the U. S.; but, while our corn has a fine growth of stalks, and looks well, it doesn't seem to ear out well at all. Prospect in the fruit line is good. VAN.

* Mr. Wm. Jones former editor and proprietor of the Southern Cultivator, Athens, Ga.

TOPEKA, Kansas, Aug. 22.

The corn crop in this State will be above the average of previous years. Statistics just published, show that we have under this crop an area of 2,563,112 acres, which will probably yield 42 bushels per acre. There are in this State under winter wheat, 857,125 acres; spring wheat, 206,868; oats, 310,226; rye, 119,972; millet, and Hungarian grass, 164,539; Timothy and meadow, 25,214; prairie meadow, 503,612; prairie pasture, 553,717 acres. A. C.

DAKOTA CITY, Dakota Co., Neb. Aug. 17.

The corn crop hereabouts was never better; this is an excellent county for corn. There was a good crop of wheat raised, but, just before harvesting, it was so damaged by rain and wind that not much over half of it was saved. The little thrashed averages about fifteen bushels to the acre. Apples few; currants, plums and grapes, destroyed by the cold snap in May. C. C. B.

BYHALIA, Marshall Co., Miss., Aug. 24.

The corn crop is very fine, and the acreage larger than any year since '62, when the whole county was planted in corn. The yield will average 25 bushels per acre. Wheat, a failure. Peach crop heavy, but fruit generally defective; few apples. Cotton promises better than any year since '55. In some localities I hear of worms, but do not credit it. H. C. S.

EL DORADO, El Dorado Co., Cal., Aug. 19.

IN El Dorado Co. there is no corn raised except sweet-corn for table use. Very little wheat, barley or oats is raised here, except for fodder. There is a considerable acreage of hay here, and this season the crop was extra fine. Fruit crop unusually good. D.

Dairy Husbandry.

SCALDING MILK FOR BUTTER.

T. H. HOSKINS, M. D.

As great as is the improvement in cream-raising, by the use of deep vessels set in ice-water, for large dairies, quite as great, in my judgment, is that of scalding the fresh milk before setting it in small pans, for dairies where only a moderate number of cows is kept.

METHOD OF SCALDING MILK.

Though it has long been known that scalding milk hastens the rising of the cream, while prolonging the period of sweetness in warm weather, it is only lately that this method has been reduced to a system, and to a considerable extent popularized, through the efforts of Mr. Ellsworth, of Massachusetts. By experiment he has ascertained the precise temperature—135 degrees—for securing the best and most uniform results. I have, myself, tested his practice, and find it excellent. The milk is strained into a brass or copper kettle, large enough to hold a single milking, and the temperature slowly and carefully raised to the proper degree. It is maintained there for about half an hour, and then poured into pans and set upon the racks of the milk-room which should always be well aired, so as to remove the vapor arising from the milk, and prevent its being deposited upon the walls and wood-work. The cream rises with astonishing rapidity, and is of a firm consistency, which admits of its removal in from 12 to 24 hours, leaving the residue quite sweet.

It is desirable *not* to have a skin form upon the milk. This "skin" is made of the coagulated albumen of the milk, and when the milk is scalded in the pans, in the way sometimes practised, it is entangled in the cream, removed with it to the churn, and remains in the butter. When the butter is sold for immediate use the evil thus caused is not noticed, but it seriously impairs the keeping, when the butter is put down for future use or sale. I think it best to strain out of, as well as into, the scalding kettle, to insure the removal of all coagulated matter.

BENEFITS OF SCALDING MILK.

This method of scalding secures perfect butter, not only during the hot months of summer, but also during the cold weather of winter when quite as much difficulty is experienced in making good butter, in the old way, as in the summer. It prevents alike the hasty souring, before the cream is up, in summer, and the bitterness so often developed by the long setting of winter. By its effect of hastening the rising of the cream, all the inevitable evils and losses of delay are avoided, and a uniform make secured at all seasons.

THE PHILOSOPHY OF IT.

I have been interested in studying into the philosophy of both this and the cold method of setting milk for cream, and think I have reached its rational explanation. It is well known that large-globuled milk throws up its cream quicker and more perfectly than that which holds its fat more finely divided. Now, the effect of scalding is simply to enlarge the globules by coalescence, or running together. At the temperature of the milk when drawn from the cow—about 98 degrees—the butter-globules are not perfectly fluid, but when it is heated to 135

degrees, the globules which come in contact will unite, forming larger globules. These enlarged globules not only rise quickly, but by their superior attractive power draw up, so to speak, the smaller globules, and thus hasten the rising of all the cream.

A FALLACY EXPLODED BY AN EXPERIMENT.

I will mention, in this connection, another matter which perhaps I ought to have treated in my article on "Dairying Fallacies." It was for a while asserted that, when the cream of large-globuled milk is churned with the cream of small-globuled milk, the former will "come" first, and that a second churning of the residue will give a second mess of butter. But careful experiment entirely disproves the assertion, and the reason is plain when we understand the attractive power of the large over the small globules. I recently, in a course of experiment upon this point, carried it a little further, as follows: After churning a quantity of cream, sufficient to about half fill the churn, until the united globules began to be visible to the naked eye—i. e., until the butter had begun to "come," I poured in several quarts more of cream, and in five minutes more, when the butter was "gathered," I had all the butter from both messes of cream. The attractive power of the pin-head masses of butter had, in that brief time, gathered in all the globules of the added cream. To insure the success of such an experiment, the temperature of the cream in the churn and of the added cream must be just right—from 60° to 65°—and the final churning rather slow than rapid.

Orleans Co., Vt.

The Herdsman.

FORAGE CROPS FOR STOCK.

In the North rye can be sown for a forage crop next spring, and by manuring highly and using an extra bushel or more of seed per acre, if mown about the middle of May, it would be very valuable for horses, cows and any kind of live stock when given to them so as to keep them off the pasture. Then, if corn were planted as soon as the rye is mowed, the ground being merely plowed the same as if it had been in grass, the manure which was put on in the preceding autumn would benefit the corn nearly as much as if the rye had not intervened, because the ripening process would not have commenced, and it is a well-known fact that green crops not matured are a benefit to the soil when plowed in, and extract from it comparatively little of its fertility, even when cut or browsed. In the South, rape might be sown on all grain stubbles where no grass-seeds are growing, and as the winters there are comparatively mild, the rape would make an excellent crop to be eaten by cattle and sheep.

As the grain is harvested so early in the South, it seems a pity to have the land lying idle for more than half a year when there are crops of several kinds which can be grown to feed a great deal of stock, and the pity of this is all the greater now that stock-raising will pay so well in consequence of the market for meat in Europe. Now, by growing numerous green crops, some for the latter part of the autumn, some for early and some for late winter, and likewise something for early spring, stock of all descriptions in the South can be kept in a thriving condition without any expense for attendance or for food of an expensive kind.

If turnips are drilled, the seed run thick and some fertilizer placed in the same channel, or if the fertilizer happens to be a very strong one, then if it is put about two inches right under the seed, the fly will not attack the turnips, or, if it should, they will outgrow the injury. Turnips should always be drilled, as they can then be cultivated and kept clean at much less expense, and, moreover, they can be thinned to a regular distance apart. It was with astonishment the writer saw in a journal of high standing, a statement from some fool of a writer, to the effect that twenty tons of small swedish turnips were better than forty tons of large ones. Such an assertion is altogether at variance with my practical experience, for a large swede, from eight up to twelve pounds' weight, is far preferable to little two-pounds roots, which are as troublesome again to get up and to cut for sheep or cattle.

It is extraordinary how little the growing of roots is understood in the United States, and how little their value for feeding to stock is known; but as there will most certainly be a regular, uninterrupted export of meat, and as mutton, before long, will be in great demand, swedes and turnips will be grown extensively, as they can be obtained very well after grain crops, the former after white peas have been harvested, and the latter after wheat, oats or barley.

G. G.

SALE OF JERSEY CATTLE.

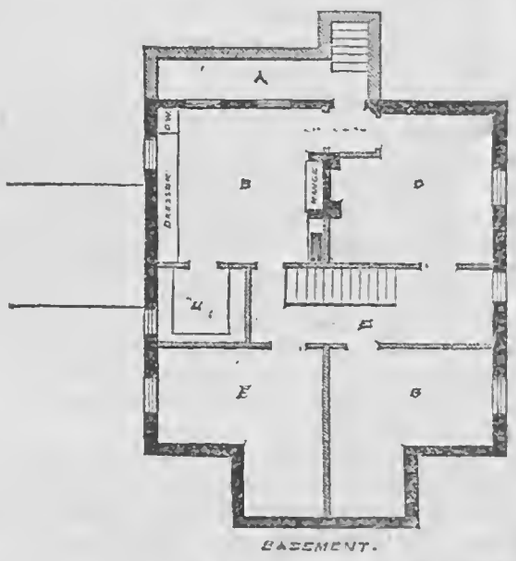
Messrs. A. M. Herkness & Co. of Philadelphia, sold at auction on August 27, Mr. P. H. Fowler's recent importation of Jersey cattle. Two of the consignment, Lovely and Light, died before the sale. The following memorandum of prices and purchasers has just been received: Mr. J. R. Way, Avondale, Pa., bought Belle, $500, and Favorite, $310. Mr. Chas. L. Sharpless paid $400 for Reindeer Second, and Mrs. W. N. Rogers, Wilmington, Del. secured Red Rose for $300. Col. Webster, Belair, Md., bought Queen for $360. Mr. Fred. Ward secured Snow, ($350), Young Bute ($340), and Janette ($280). D. Lippincott took Nankeen at $300. W. J. Clinn, Frankfort, Ky., paid $285 for Egypt Lass, $270 for Beauty, and $220 for Florence. He also paid $65 for Beauty's heifer calf. M. Wilcox, Ivy Mills, Pa. Duchess, $260. Pretty Maid, $270. Geo. Campbell, Manyunk, Pa., Mermaid, $335. J. M. Trainor, Linwood, Pa., Rosa, $275. J. E. Ridgway, of Philadelphia was the largest buyer, taking seven animals whose aggregate price amounted to $2,065.

Rural Architecture.

A MODERN SWISS COTTAGE.

L. F. GRAETHER, C. ENG.

The building represented in the attached cuts, is nearly square in plan, being 30 ft. 10 in. front by 36 feet in depth, exclusive of piazza, bay-window, &c. It consists of two stories and basement. It will be observed, that the elevation as well as the apartments on each story (see plans) are arranged symmetrically to the center line of the building. The house is supposed to front towards the south. The interior is laid out as follows:



Basement: A, area, with outside steps to the basement, at the rear; B, kitchen with pantry; D, kitchen containing dumb-waiter, range, &c., boiler, sink, &c.; C, wash-room; E, passage with stairs to first story; E and F, cellars for general storage.

First Story: A, porch; B, main hall, (7 ft. 2 in. by 15 ft. 4 in.), containing main flights of stairs to the upper story; C, parlor, (14 ft. 6 in. by 15 ft.) with bay-window, D; E, conservatory, (7 ft. 2 in. by 12 ft.); F, passage with wash-stand and closet, as shown; G, dining-room, (13 ft. by 14 ft. 6 in.) with dumb-waiter H to kitchen; J, open veranda communicating with dining-room; K, sitting-room, (13 ft. by 14 ft. 6 in.); L, veranda in rear of the building.

Second Story: A, hall; B, chamber, (14 ft. 6 in. by 15 ft.) in communication with the balconies D, and C and C; C, C, balconies; E, E, bedrooms, (7 ft. 2 in. by 10 ft.); G, G, bedrooms; F, bath-room; H, closet room which may also be used for a children's bed-room. Closets are plentifully provided, as will be seen by examining the plans.

ELEVATION.

The cost of the building will be, where materials and labor are about the same as in the neighborhood of New York city, from $3000 to $4500.

The Poultry Yard.

POULTRY BREEDING—No. 4.

A. M. VAN AUKEN.

NESTS FOR SITTING HENS.

I have now come to the period of setting hens; my process is neither new nor strange, but I consider it good. I have the nests in the central room of the layers' house. In each corner are twelve nests, made as shown in Fig. 1. The bottoms of the lower nests are two feet from the floor, and each nest is 12x12x18 inches.* The bottoms are of boards, and the backs, sides and partitions of wire netting, those where the line is dotted being fine and the other three partitions of coarse meshes, an inch or so in size. The backs and ends are of fine net, and there is to each nest a front that fastens in with buttons, and this also is made of fine net. In front of each nest is a strip, three inches high, to keep the eggs from rolling out, and level with each nest there is a sort of a step on which the fowls will fly and so step into the nests carefully, instead of flying right into them and breaking the eggs or killing the chickens. By having the sides and ends of the nests of wire net, a good circulation of air is obtained, and the fowls will not pant and show distress in hot weather as they must when forced to sit in close boxes, and, moreover, the eggs will hatch much better.

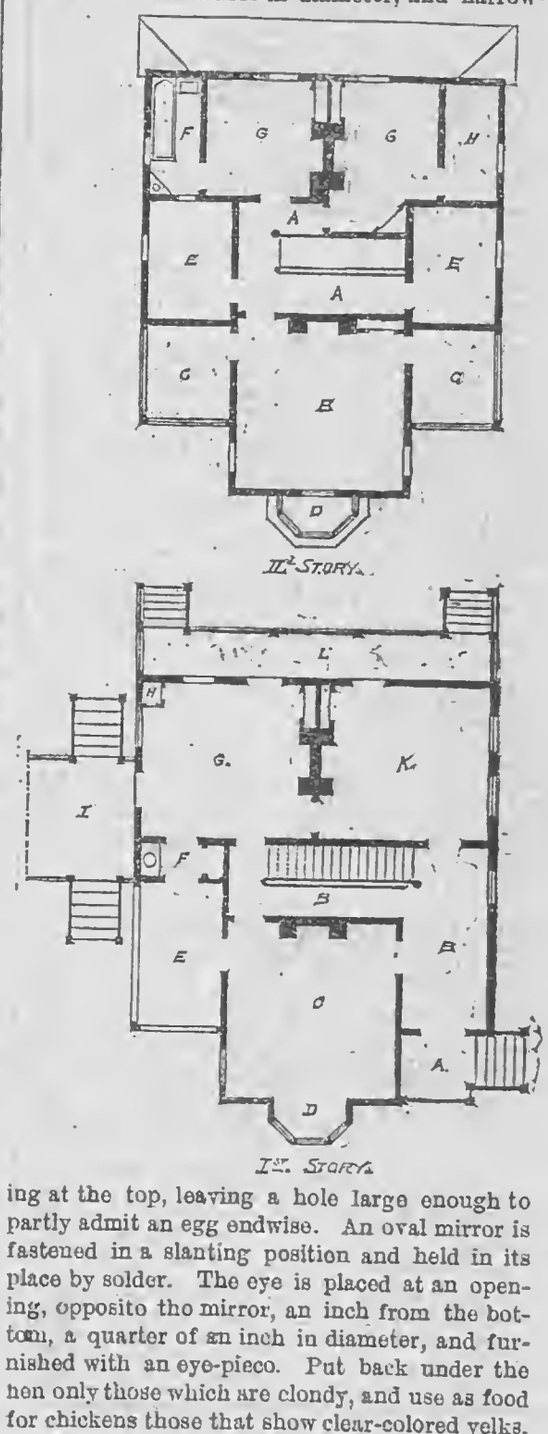
The nest for the sitter should be made of damp earth packed in a concave shape. The earth should be covered with straw bruised and broken short. It should not be cut with a machine, as in that case the sharp points will injure the tender skins of the hen and chickens. If the straw is left long, it will become tangled in the feet of the hen and cause her to break her eggs. In cold weather a folded newspaper should be placed next to the earth, or the nest be lined with feathers. Eggs in these nests need not be sprinkled, unless they are those of ducks or geese, as the moist earth will absorb no moisture from them, as does the straw generally used in nests.

TREATMENT OF SITTING HENS.

Always set two or more hens at the same time and set them in pairs, one on each of the adjacent nests separated by the coarse wire partitions, placing 13 or 15 eggs under each hen. The two hens separated only by the coarse meshes, grow very familiar, and when the chickens are hatched the two can be placed in one coop, as is described hereafter.

In each room are four sets of nests each containing 12 nests, or 48 in all. In order to enable each hen to distinguish her own place, put under one frame of nests the feeding hopper; under another the dust bath; under the third a box of gravel and charcoal, and leave the fourth without anything under it. Then the nests at one end of the frame may be painted red; those in the center white; and those at the other end black. With this arrangement the hens will be able to find their nests without trouble. Yet I prefer, as a further precaution against my hens making mistakes, when setting them, to put a daub of paint of the same color as the section where they sit; on the tail, if in No. 1, on the wing, if in No. 2; on the back, if in No. 3, and on the breast, if in No. 4. By this plan one can tell at a glance whether his sitter is on right or wrong. The nests should be closed at night by means of the wire door, in order to keep the rats away; then opened again in the morning, and left open all day.

When the hens begin to want to sit, put two in nests adjoining and separated by the coarse wire, as already directed; put five or six wooden nest-eggs under them and shut them in by fastening the wire doors. Do this after dark, and in a few days your hens will be "at home," and you may put the eggs under them. After ten days examine these by holding them between your hands and trying to look through them at a strong light. A better way is to use the "egg tester." This is a tin cup three inches high and two and a half inches in diameter, and narrowing at the top, leaving a hole large enough to partly admit an egg endwise. An oval mirror is fastened in a slanting position and held in its place by solder. The eye is placed at an opening, opposite the mirror, an inch from the bottom, a quarter of an inch in diameter, and furnished with an eye-piece. Put back under the hen only those which are cloudy, and use as food for chickens those that show clear-colored yelks. By this plan the hens do not waste their vitality on worthless eggs; for, if several are sitting at the same time, all the old eggs can be given to some, and fresh eggs placed under the others. While the hen is sitting, she should be fed entirely on whole corn. Ground feed will cause her to soil her nest, and no other whole grain that I have tried, has given satisfaction. Under the nest, with your feed-box, have a pail of water.



*For plans, see RURAL last week.

When the chickens begin to hatch, they should be visited once or twice a day, and all pieces of egg shell should be removed from the nest, else they might cover some of the other eggs and imprison the chicks. Let these stay in the nest from 24 to 36 hours after they are hatched, and then remove them to a coop.

Brown Co., Wis.

TO PRODUCE HEAVY FINE AND WHITE FLESH POULTRY.

We translate the following from a late German paper: "Use for their feed only flour of fresh grain and mix the paste with salt water, (3½ ozs. of salt to 1¾ pints of water.) Mix with the paste a small quantity of rough sand to assist digestion; feed your poultry at least twelve hours before you intend to kill. Poultry if killed during the progress of digestion, will keep, at the most, only eight days. Don't be in a hurry about pulling the feathers; if they are pulled before the blood is curdled, the duct on the end of the feather will fill itself with blood and the skin will consequently look stained. By observing this rule, poultry will keep, even in moderately mild weather, from two to three weeks, and a great deal longer in cold weather; the keeping quality of the meat may be increased yet more by filling the inside with small pieces of charcoal."

ANOTHER REMEDY FOR GAPES.

Mr. Hale's cure for gapes in chickens is a good one, so far as it goes. It is not at all difficult to perform it. I suggest dipping the feather in spirits of turpentine—one insertion will be sufficient—and the practitioner will never lose a chicken. A Blue-grass straw will answer the same purpose, and in some respects is better. The seeds should be stripped off and only a few branches left, and by inserting this, the same as the feather, and twisting it, the worms will be entangled with the straw, and when the latter is pulled out, the former must also come. The turpentine will not hurt the chicken but will most certainly kill the worms. The chicken should be operated on as soon as the disease shows itself. Don't wait until the chick is dead to doctor it.

Shelbyville, Ind.

J. A. Y.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Strawberries (Illustrated)..... 565
New Strawberries—Dr. F. M. Hexamer..... 566
Strawberry Culture—J. C. Williams..... 566
Strawberries—Notes on some of the New Varieties—J. T. Lovett..... 566
Strawberries for the Family—R. J. Brownell..... 567
Condensed Experience with Strawberries..... 567
Notes from the Rural Grounds..... 567
Every-day Notes—Samuel Parsons..... 567
Holyhock, The—Wm. C. L. Drew..... 568
Hydrangea Paniculata.—Ruralist..... 568
Preparing Ground for Wheat—W. J. Fowler..... 568
Fallacies About Sheep—A Shepherd..... 568
Fruit Family, The—Prof. W. J. Beal..... 568
What Others Say..... 568, 569
Catalogues, &c., Received..... 569
Fair Notes..... 569
A New Fertilizer Attachment..... 569
Iron Turbine Wind-Mill, The..... 569

Answers to Correspondents:

Cheap Roofing..... 570
Angora Goats..... 570
Water-Lilies Wanted..... 570
Miscellaneous..... 570
Communications Received..... 570

Everywhere:

South-Eastern Missouri Notes..... 570
Watsonville, Santa Cruz Co., Cal—A. C..... 570
McIntosh P. O., Liberty Co., Ga—Mrs. R. I. S... 570
Dayton, Montgomery Co., Ohio—C. A..... 570
Fort Howard, Brown Co., Wis—Van..... 570
Topeka, Kansas—A. C..... 570
Dakota City, Dakota Co., Neb—C. C. B..... 570
Byhalia, Marshall Co., Miss—M. C. S..... 570
El Dorado, El Dorado Co., Cal—D..... 570
Scalding Milk for Butter—T. H. Hoskins, M. D. 570, 571
Forage Crops for Stock—G. G..... 571
Sale of Jersey Cattle..... 571
A Modern Swiss Cottage (Illustrated)—L. F. Graether, C. Eng..... 571
Poultry Breeding—No. 4—A. M. Van Auken..... 571
To Produce Heavy, Fine and White-Flesh Poultry..... 571
Another Remedy for Gapes—J. A. Y..... 571

Domestic Economy:

Summer Siftings—Annie L. Jack..... 576
Domestic Recipes..... 576
Queries Answered..... 576

EDITORIAL PAGE:

Get Ready for the Fair..... 572
Southern Scourge, The..... 572
Small Fruit Festival, The..... 572
Early Autumn Leaves..... 572
Strawberries..... 572
Farm-yard Manures vs. Artificial Manures..... 572
Brevities..... 572

LITERARY:

Poetry..... 573, 575, 578
Story of a Letter, The—Julia Kavanagh..... 573
Sight-Seeing in Paris—E. F. Mosby..... 574
Agricultural Products of Cyprus..... 574
Clandestine Documents..... 574
Eggs As Food..... 574
Gladstone and Beaconsfield..... 574
Bric-a-Brac..... 575
About Clothes—Jacqueline..... 575
What a Woman Can Do—H. B. N..... 575
Woman As a Reformatory Element In Politics—Free Lance..... 575
"Club" Is Too "Fast."—Lillian Marsh..... 575
Did They "Give Themselves Away?"..... 575

Reading for the Young:

Pocket-Money for Young People—No. 16—Hector Bertram..... 578
The Tailor-Bird..... 578
What Is To Be Done?..... 578
The Puzzler..... 578

Sabbath Reading:

Newness of Life—W. S..... 578
News of the Week..... 576
Markets..... 577
Personals..... 577
Wit and Humor..... 580
Advertisements..... 577, 579, 580

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SATURDAY SEPT. 7, 1878.

GET READY FOR THE FAIR.

The season for agricultural fairs is fast approaching. While viewing the products, or after visiting an exhibition, we have often heard the expression, "I could have beaten that myself, and not half try." A farmer is hardly entitled to the name "enterprising" who does not show something, and help to sustain the fair which is held nearest his farm. He should take pride in raising something nice, and then have enough public spirit to show his success to the world.

For an exhibition it is of first importance to produce worthy articles. To help this along, all small and worthless specimens should be thinned early from trees or plants which are expected to produce the samples. The poor or small pears, apples, peaches, squashes, or other fruits or vegetables, tax the strength of plants nearly or quite as much as large, fine specimens.

The effort of any person to prepare objects nicely for the fair, is worth all it costs. Attention must be given to the best modes of exhibiting. This applies to almost anything, from a plate of potatoes to a half bushel of wheat, from a coop of chickens to a few cut asters. Victory is not always best for any one. He may receive more benefit from an honorable defeat, than from a just prize. The failure may not be quite so gratifying to think about, but it should only stimulate to greater effort.

In showing fruits, select perfect or nearly perfect specimens, or none at all. Make it a rule to select them of uniform size and color, with full stems, without bruises, and under *no circumstances* should a wormy specimen find its way to be fair.

We have seen men complaining and surprised that they did not receive the first premium, when their fruit was large and showy. They failed to consider that he specimen which capped all the rest, was badly worm-eaten, or had a large bruise on its side, or was in some way defective. He who will not learn from such lessons, must be subject to frequent defeats. The objects should be plainly labeled with cards which cannot be easily removed. Be on hand to show the viewing committee, and answer any of their questions. To secure space in a good position, be on the ground early, and apply beforehand.

Upon those who manage our fairs rests a great responsibility. They are anxious to draw a crowd and to make it pay. These are the two chief requisites. In too many cases the officers resort to giving high prizes for the trotting and running of fast horses. This is thought to be a sort of necessary evil. For the encouragement of those who would like to see this practice abandoned, we can say that we know of several State Associations and numerous smaller ones, which have drawn larger crowds and have made more money since they dropped the prizes for fast trotting.

For the success of fairs it is also very important to secure disinterested, competent and honest judges. Nothing gives better satisfaction. To assist the judges, articles must be ready in season. They must be placed near each other for careful comparison. Judges will have some rules or scale of points to help them in making a decision.

Let every one, whether he is an exhibitor or not, take a note-book and pencil, and make a careful record of anything which he considers valuable. In this way he can collect addresses of exhibitors; he can afterwards study over the fair, and will recall many things of interest.

We cannot close without calling the attention of farmers to one question. Who run the agricultural fairs of our States and counties?

As we glance over the long list of officers with whom we are acquainted, it is surprising to see how small a proportion are farmers. This ought not so to be. It does not sound well. It does not look well. There is something wrong somewhere. We think it does not lie very far from the farmers themselves, who have too little confidence in themselves, or too little ability to undertake responsible positions.

THE SOUTHERN SCOURGE.

According to the latest advices, Yellow Fever is spreading disastrously throughout the whole of the lower Mississippi Valley. Many small towns and villages that had hitherto escaped the plague, even throughout former epidemics, have been sorely afflicted by it during the past week, and fears are daily growing stronger that the greater part, if not the whole of the South, will, this year, suffer from it. Numerous prophecies that, in accordance with experiences during former visitations, the ravages of the pestilence would gradually diminish after the middle of August, have proved entirely fallacious, inasmuch as this morning's telegrams from all the large cities show a steady increase in the number of new cases as well as in the number of deaths. In New Orleans, for instance, the number of new cases, yesterday, (Sept. 1st) was 260, against 234 on Saturday, while the number of deaths ran up to 88 against 48 the previous day. In Memphis the fatality was still heavier, amounting to 89 within the twenty-four hours ending last night—a terrible list, in view of the fact that all of its 70,000 inhabitants that could get away from the stricken city, had already done so. In the little town of Vicksburg, 1,600 deaths are already reported, of which twenty-five occurred yesterday. Grenada has been depopulated, seven healthy persons alone remaining in the place yesterday, while the dead and dying lie side by side in some of the houses for hours before the few able to attend to the matter can bury the former or minister to the latter.

Of the nurses, who in yellow fever cases are more valuable even than doctors, a great number have already been worn out by their labors or prostrated by the disease, while others have either fled panic-stricken from the scenes of death and desolation, or been called home to the bedsides of their own afflicted families. The doctors, who from all parts of the country have responded nobly to the calls of humanity, have been suffering severely for their heroism, many of them having already died of the pestilence and still more lying now at death's door from the same cause. Yesterday there were ten physicians dangerously ill from the malady in Vicksburg alone. More heroic than the nurses who serve for money, or than the doctors whose professional instincts urge them to the bed of sickness, are the hundreds of noble men, who taking their lives in their hands, minister by day and by night to the plague-stricken strangers as well as to the poor and to all in need of their assistance in every town in which the pestilence has made its appearance. Quiet merchants, mechanics and business men are these in ordinary life, men in whose character to the common eye there is little that is heroic, but it requires as much courage, and perhaps more, and that of a nobler kind, to face a painful death hourly as these do, amid the discouragements of squalor, suffering and misery, than to risk one's life at the cannon's mouth amid the crash, glory and madness of battle.

Wherever this terrible epidemic afflicts society, want and misery intensify the misery of fear among those of the working classes who escape its attack; while the fate of the poor who are assailed by it, is generally sealed unless aid comes to them from the humane, the generous and the charitable. It is to the credit of many of those possessing means in the stricken localities that they not only give of them freely to their poorer neighbors, but also very frequently are foremost in all offices of personal service and attendance. In the midst of so widespread a calamity, however, the aid of the whole nation is urgently needed to alleviate the sufferings and lessen the fatality throughout the afflicted region, and it is sincerely to be hoped that the farming community will not be backward in generously responding to the call equally of humanity and Christianity.

THE SMALL FRUIT FESTIVAL.

There is probably no branch of horticulture that to-day excites a greater degree of popular interest than the small fruits. Strawberries are enjoying more than a full share and there is something of a mania among cultivators to produce varieties bearing larger berries than any so far known. But the mania is not a dangerous one and we shall all of us ere long be ready to acknowledge that an increase of size is a poor compensation for a loss of vigor, quality or productiveness.

But we are glad of the increasing interest in small fruits. We know of many village gardens, that, though tastefully arranged and planted with ornamental shrubs and trees, are yet destitute of small fruits, and we know of many other gardens in which weeds are the prominent plants, that could easily be made to produce enough of currants, gooseberries, strawberries, blackberries and raspberries to supply the tables of the improvident owners during the season. Farmers, too, if we may judge all by those of our neighborhood, are not alive to their best interests in this matter. Altogether there seems a wide margin for the growth of small fruit appreciation, and we certainly hope that those who have cultivated the best varieties for sale, will realize a long and remunerative compensation for their zeal, patience and industry.

We have spent days in the preparation and collection of the articles and illustrations presented this week, and we have placed before our readers, without the slightest regard to whose individual interests are harmed or helped, all the facts which we have, from personal observation and correspondence, been enabled to glean. It will be observed that in more than one instance the statement of one writer contradicts that of another. Such seeming contradiction will always occur among fruit culturists. No matter how high the authority, his personal experience can never be accepted as an unqualified guide to others who cultivate the same fruit under different circumstances of soil, climate, &c.

EARLY AUTUMN LEAVES.

It is not usual to see "Autumn leaves" as soon as the first of September. Yet upon Liquidambars, Sumacs, Swamp-Maples, Sour-gums and some others, they might have been seen hereabouts ten days ago, This was to have been anticipated. The leaves of many trees developed three weeks earlier than usual in the spring, and they may be expected to die earlier than usual.

The fall of the leaf is not dependent upon frosts or other vicissitudes of the weather, but is due to causes which begin with its very formation and culminate when it is of no further service. All have noticed the lime which is deposited in tea-kettles where what is termed "hard" water is used. Water, as it passes through the soil, dissolves a small quantity of earthy matter, and is absorbed by the roots of plants and thence carried to the leaves where as the water is exhaled pure, the silex, lime, potash, magnesia, &c., are left to incrust the cells, just as the sides of the tea-kettle become incrusted with lime after considerable use. This deposition of earthy matter finally clogs up the cells so that they can no longer perform their functions. First, therefore, they lose their green color—the color of health—assuming various hues, and then loosened by the wind, rain or by merely the pressure of the axillary bud that has been matured for another season's growth, they fall. We may, therefore look for autumn leaves earlier than usual and we may also look for an earlier fall of the leaf than usual irrespective of frosts. The leaf began its work early—has worked faithfully and will lie down to rest betimes.

STRAWBERRIES.

It will be seen that Crescent Seedling is generally praised; that Sharpless is praised by Mr. Parry, who also gives some interesting figures as to yield of other varieties. Mr. Brownell still thinks that Wilson "heads the list for hardiness and productiveness." Mr. Lovett says the Sharpless was the largest and handsomest berry he fruited last season, and the plant is of the most robust growth. He speaks in high terms of Miner's Great Prolific. Dr. Hexamer speaks a good word for Pres. Lincoln, and Crescent Seedling. Mr. J. C. Williams believes that the merits of the Champion have been overlooked. There seems to be a general concurrence in the belief that Durand's seedlings need special soil and cultivation."

Farm-yard Manures vs. Artificial Manures.—From a private letter received from Mr. J. B. Lawes we take the liberty to print the following:

"I have just been reading a discussion on manures in one of your Weeklies. I fear this discussion which, as I understand it, is between the value of farm-yard manure and artificial manures, is not ripe for settlement at present. We have more evidence at our command than any one else, but we find extreme difficulty in closing experiments where dung has been used, owing to the slow yield of the residue."

BREVITIES.

The meadows are yellow with Golden-Rods.

E. P. Roe thinks the great needs of the strawberry are good drainage and a little more water.

Mr. M. B. Bateham believes that on his soil at least, bone dust and ashes are the best fertilizers for the grape.

Mr. G. W. Campbell calls Mr. J. H. Ricketts, the "Champion hybridizer of grapes in America, if not in the world."

Growth of the American Weeping Willow. Five years ago a young Willow was planted in neighboring grounds in a high place. It is now fifty feet in hight.

Just as we go to press we have received a strawberry article from Pres. T. T. Lyon, written at our request. We wished to present it in this number but are glad nevertheless of the opportunity of presenting it next week.

Several of our patrons who knew that this number of the Rural would be given up largely to a consideration of the best varieties of Strawberries, have favored us with their advertisements, which will be found in their appropriate places.

We have been censured by a Western journal for giving the following advice, which we take from Mr. Parry's article on another page:

"Persons about to commence growing strawberries, should try at least a dozen of the best varieties, so as to be sure and get those most suitable for their soils and locations."

If we may judge from our own tastes and from those of others who have reported to us the "Beauty of Hebron" potato is destined to take the place of the "Early Rose." We say that, planted side by side with the Early Rose, it will prove more prolific—at least ten days earlier—and will be found of a better quality. Let us see.

At the social festival of the last meeting of the Ohio State Horticultural Society, the sentiment was given: "The Ladies—the joy of our homes—the ablest advocates of horticulture, and whatever refines and elevates mankind." Response was made by a reverend gentleman who got along nicely until he attempted to quote Tom Moore's poetry. Instead of likening the ladies to roses without thorns, he asserted that the fair ones were often sharp thorns. The uproar which followed, obliged him to resume his seat.

Professor Stockbridge says that American agriculture of the past and present, is little better than a studied system of land plunder and devastation.——Chemicals are better than manure, because they may be more cheaply transported, handled and carried to distant parts of the farm, and thoroughly mixed with the soil. They are better than yard manure, because they not only enable us to grow as abundant crops with less labor, but their supply can equal any demand. They also enable the farmer to continually crop his land—sell the crops, and yet maintain the fertility of his soil.——The entire amount of yard manure made in Massachusetts, gives but six-tenths of a cord to each acre of tilled land.——The want of the hour is the breaking down of all barriers between practical and scientific men.

Literary Miscellany.

SOMEHOW OR OTHER.

E. S. J.

Life has a burden on every one's shoulder—
None may escape from its trouble and care;
Miss it in youth, and 'twill come when we're older,
And fit us as close as the garments we wear.

Sorrow comes into our lives uninvited,
Robbing our heart of its treasure of song;
Lovers grow cold, and friendships are slighted.
Yet, somehow or other, we worry along.

Every-day toil is an every-day blessing,
Though poverty's cottage and crust we may share;
Weak is the back on which burdens are pressing,
But stout is the heart that is strengthened by prayer.

Somehow or other, the pathway grows brighter,
Just when we mourn there was one to befriend,
Hope in the heart makes the burden seem lighter,
And, somehow or other we get to the end.

THE STORY OF A LETTER.

JULIA KAVANAGH.

(Concluded from last week.)

"You have had a useless journey, Nelly," said Mrs. Dering, coming out to join the pair, "but we had to send for you to quiet the poor dear."

"And do you really think she is safe now, Mrs. Dering?"

"The doctor says he is almost sure of her, Nelly. And how do you like your place? Your mother says it is such a good one."

Nelly answered that it was a very good place indeed; but she sighed as she remembered Sir John's warning.

"You'll be saving lots of money, and coming back to marry Joseph," continued Mrs. Dering.

"I hope so," said Joseph, cordially.

This Joseph was a very good fellow, a steady workman, and he adored Nelly, but he was not very bright, and Nelly never told him her little secret. So, even after Mrs. Dering left them and entered the cottage, she said nothing about Sir John's warning. She knew what a shock it would be to her sick mother, and suppose Joseph should let it out? Joseph was so happy to see his mistress again that he was in the highest spirits. He could talk of nothing but the future, and he could not see that future unless under the rosiest aspect. His song had but one burden to it. Sir John's twenty pounds a year, Ellen's savings, and wedded bliss.

Nelly heard him, and said not a word. She was very glad to have found her mother alive and "safe," as she said, but a darkness had come over her joy. "Poor fellow! if he knew the truth," she thought, as she listened to him, "and if he knew that every word he utters is a stab to me!" But every one seemed bent on tormenting her. Mrs. Dering came out again and extolled Nelly's place and salary. Little Jane, hearing so much about money, wanted to know what Nelly was going to give her; and when the sick woman was able to speak, her first words were an injunction on her daughter not to exceed her leave of absence. Nelly must not vex Sir John on any account. She became so excitable on this head that, to pacify her, Ellen asked if she should go away by the night train.

"Yes, you had better, my dear," replied her mother, rather eagerly.

She was as anxious to see her daughter depart as she had been to make her come. Nelly herself was not so sorry to go. The burden of her secret was too much for her. As she left the cottage, Mrs. Dering followed her out mysteriously.

"Ellen," she said, "I have some money unknown to my husband, and I want poor William to have it. You just take it for me, and he will call for it in a day or two. I can't send it by the post."

She slipped a little silky packet in Nelly's hand. "And do take care of it," she whispered again, "for it is four five-pound notes, Nelly."

Ellen hesitated. William, Mrs. Dering's son by a first husband, had been so beaten and ill-used by his stepfather that he had run away to London years before. But misfortune had followed him, and he was now a sickly widower with three little children.

"You cannot refuse doing that for me," said Mrs. Dering.

"No, no, Mrs. Dering, I will do it with pleasure. But it is such a large sum—suppose I should lose it."

"You'll not lose it, Nelly; there, take it, and do not tell any one."

"Any one" meant Joseph, who now came up to escort Nelly to the station. They walked along the shady lane, arm in arm, and, as they had plenty of time, poor things, they lingered. Nelly felt much depressed when they parted at the station, and Joseph saw it.

"You are fretting about your mother," he said. "I am sure she'll do, Nelly; but I'll be sure to write."

"No," said Nelly nervously, "no news is good news—only write if she gets bad again."

Nelly had her reason for this. "How should I bear the suspense if Sir John was out?" she thought. But Joseph said, a little shortly, "Very well, when I write you will know it is bad news."

Nelly wanted to explain, but she had no time to do so. The train was going to start.

"Make haste," said Joseph, hurrying her away. "It is only writing him a line when I get to London," thought Nelly. "Poor Joe! he was hurt."

An accident which had taken place on the line delayed the train, so that it was nine in the morning when it reached the station. Sir John lived at the other end of the town, and it was ten by the time Ellen got to his house. James opened the door for her, and very cross James looked. The poor fellow had been kept on duty almost the whole time she was away.

"A pretty mess you made of it, ma'am," he said, with sarcastic politeness, "and a nice way poor Sir John and I have been in all the time."

"I have not been twenty-four hours away, James," answered Ellen, "and if you will just let me go up and change my dress, I shall be down directly. You can tell Sir John so."

"Sir John is out," was the short reply. "How's your mother," he added, more kindly.

"Much better, thank you."

If Nelly had said "Much worse," James would have been softened thoroughly, but "Much better" showed what a perverse, tormenting little creature she had been; so he roughly bade her not be long; and when Ellen came down he did not wait till she reached the bottom of the staircase to go out of the front door. Ellen entered the parlor, and went and sat down in her usual place. She felt giddy with fatigue, and her first feeling was to long for more complete rest than of waiting for Sir John's letters. Suddenly she remembered Mrs. Dering's twenty pounds. Ellen rushed up-stairs like a mad thing. She searched the clothes she had just taken off—no trace of Mrs. Dering's money did she find. It was lost; that money which the poor mother had taken years to put by for her sick son and his three children was utterly lost.

Ellen's first feeling was one of stupor; then she asked herself the usuual question: "What am I to do?"

Ellen had been ten years a servant. She had to help her mother and her little sister; she had not saved much money; fifteen pounds and ten shillings in all. That money she must now give up to Mrs. Dering, and yet it would not cover her debt. But could Mrs. Dering's money be really lost? It seemed impossible. She searched again with renewed ardor, but the money she had not. She could not imagine how or when it had left her possession—in the lane, on her way to the station, in the railway carriage, or in the cab that had brought her to Sir John's door; but one thing was sure, she had it, and she had not got it now. To the rich the loss of money is generally light; to the poor it is almost always calamitous. In a moment all the consequences of Ellen's loss rushed to her mind; Mrs. Dering's son must suffer, then Nelly herself. Adieu to many little comforts; adieu to love; adieu to hope itself. The poor girl could not bear these thoughts. She flung herself on her bed and burst into tears. But she was not even allowed to indulge her grief. The postman's knock at the door below reminded Nelly that in her own concerns she had forgotten her master's. She flew down-stairs, and she reached the door just as the maid was opening it. Mary looked anything but charmed at Ellen's hasty appearance, and, turning up her nose, she said scornfully, "Perhaps, ma'am, you'll be kind enough to let me have my letter." "There is none for you," replied Nelly, glancing over the letters which the postman had put in her hand; "but, oh, my goodness, there is one for me!"

It was a letter from Joseph, with the London postmark. With a trembling hand Ellen was going to break the seal, when Mary's mocking eye fastened upon her reminded her of her promise. She had forgotten all about it, but she remembered it now: she could not open that letter till she received it from Sir John's own hands. And Sir John was out; he would not come back till dinner-time.

Ellen entered the parlor and sat down, with the letter on her knees. She looked at it as surely letter was never looked at before. Within that square envelope lay Nelly's fate: Either Joseph had written to say that her mother had had a relapse — how she remembered his words. "When I write, you'l know it is bad news!"—or he had despatched this letter, following so close on her steps, to tell her that Mrs. Dering's money was safe: The very London postmark was a sign, only it could be read either way. It was plain that something had occurred just after her departure, and which Joseph, on reaching home, had wished to impart to her. He had evidently found some one going to London by the early morning train to whom he had given his letter that she might get it half a day sooner. Yes, all that was plain enough, but it helped her nowise to a solution of the mystery. Joseph knew nothing about Mrs. Dering's money, and, as the lane was dark when he went home after parting from her, he could not possibly find four five-pound notes. Moreover, Nelly searched her memory well, and she was sure that she had not once put her hand in her pocket whilst Joseph and she walked to the station. Then the letter could not refer to the money; it must be to tell her that her mother was worse, and that she, Nelly, must go back at once!

When this thought came to her, Nelly's hand was at once on the letter ready to break the seal, but she remembered her promise, and she paused. What if the letter only referred to the money? What if it was only being patient and doing her duty? For it was her duty. Sir John had given her warning, but she still was his servant, and she still owed him obedience. She had made a promise which she was free to withhold, but, having

A CITIZEN OF MEMPHIS.

made it, she was not free to break it. Poor Nelly! I have often wondered how she resisted such temptation. For do not suppose that Satan did not offer her many an outlet.

"Break the seal," he whispered, "read your letter, then go up-stairs, seal it again with red wax like this, and just tell me if Sir John will be any worse for it? It is your letter after all! Think of your long agony till he comes home, and do this: who will be the wiser?" This was cruelly plausible, and are there many men and women who could have resisted either that suggestion, or the bolder or more honest one of breaking her promise altogether, and not concealing from her master that she had done so? What had Nelly to lose? He had given her warning; this fine situation, with its twenty pounds a year, was gone; she had risked it to comply with her sick mother's wish, and she did not repent having done so. Why should she not win peace when all was lost and risk was gone?

Why are not conscience, integrity, and honor mere words, and not awful realities? Nelly could not do this thing. The sacredness of her word stood between her and Paradise. For, after all, her reading the letter would change nothing. It would not give her dying mother life, or restore Mrs Dering's lost money. "Well, then, I must and I will bear it," thought Ellen.

And she bore it. What tortures Nelly suffered, as she sat in that dull parlor on a sultry July day, with Joseph's letter on her lap, she never told—perhaps she could not. Great mental or physical pain can never be remembered in its intensity, for to remember it would be to go through it again, and Providence is too merciful to inflict the same pang twice over. Still, it must surely have been something terrible for the poor girl to let the slow hours go by and hear the kitchen clock ticking below. Cook and housemaid were very merry together that day. How cruel and how mocking sounded their loud laughter and their idle talk! If she could even have told them her trouble, it might have eased her. "But they hate me," thought Nelly, her heart swelling at the thought. They certainly did not love her, and, though Nelly was a good girl, she had little, short, precise ways which free, easy, unscrupulous natures must dislike. Not a soul came near her. She sat unheeded and forgotten, neither eating nor drinking nor stirring—but looking at Joseph's letter on her lap and feeling: "Will he ever come?"

When the hour of Sir John's return drew nigh, the suspense grew to be almost intolerable. There was nothing which poor Ellen did not imagine. Suppose he dined out: suppose he did not come back till the morning. Could she or ought she to bear it? Surely, in such a case, she must be freed of her promise. She had never pledged herself to an indefinite waiting.

Sir John was the most punctual of men. He dined at six exactly. Yet at five minutes past six he wasn't at home. "He is not coming home to-day" thought Ellen. Her hand was on the letter; but she paused. "I shall wait till the clock strikes the quarter," she thought, "then I shall see what I am to do."

She had not to wait so long. At ten minutes past six Sir John's knock was heard. Nelly ought to have flown and opened to him, but she did not. Now that deliverence had come, she shrank from it as if it had been a calamity. She never stirred till Sir John entered the room, and seeing her, rather shortly asked, "Any letters?"

Nelly placed all the letters in his hand. He saw hers, and gave it back to her without a word. Nelly took it and left the room. Sir John was a slow, deliberate man. When one of his letters was sealed, he never broke the seal, but cut the paper round it. He rang the bell to ask Nelly for a pair of scissors. She came in staggering, and before Sir John could utter his commands, Nelly was in a dead swoon at his feet. "Bless my soul! what is the matter with the girl?" cried poor Sir John, very much startled. He picked her up and, in so doing, saw a little bit of rumpled paper in her hand. I trust no one will think the worse of Sir John for looking at that paper. It was a short missive—and ran thus: "Money is all safe; mother is getting better and better. Yours truly.

"J. M."

So it was all right; but the sudden relief had been too much for Nelly. This, however, was Greek to her master. So he rang the bell, and, thanks to water, vinegar, and burnt feathers, Ellen was got round. But she was so weak by the bitter suspense of seven hours that it was some time before she could answer Sir John's questions and tell him her story. She related it very simply, but he heard it with the deepest amazement. "By Jove," he cried, "there was never anything like it—never! And so, not knowing but that the money was lost or your mother worse, you would not read the letter."

"No, sir," quietly answered "Nelly, "I could not break my word."

"You are a noble girl," cried Sir John, with a touch of Hotspur enthusiasm, "and I'll tell you what, Nelly, if I was ten years younger—I would marry you."

"But I would not marry you, Sir John," demurely answered Nelly.

"Of course you would not." he ruefully replied. "You would not jilt a man, and poison the rest of his life. You would not do that."

That absurd Sir John! with poisoning his life indeed! I wonder how much poison it takes to produce my worthy friend's—I will not say how many stone; or to give a man that bluff rosy face, or that hearty voice and jovial "Ha! ha!" Poison indeed!

There came another letter from Joseph the next morning, explaining everything.

Need I say that Sir John, rescinded the warning he had given Nelly, and that he authorized her to open her letters the moment the postman put them into her hand. So, though he was out, she read this one, which, as I said, explained everything. Ten minutes after Nelly had left her mother's cottage, Mrs Dering found the notes in the garden. As soon as Joseph returned she told him the whole story. At once he wrote, but it was too late for the post, so Joseph went to the station, and a friend whom he had there promised to find him a safe messenger in one of the guards, by whom his letter should be posted in London as soon as the first train came in.

"Oh, Joseph, Joseph!" thought Nelly, "if you had only written your letter outside instead of inside, what a world of misery you would have spared me."

"Why did he not send you a telegram?" indignantly asked Sir John. "But, sir," argued Nelly, "I should not have opened that either; besides the letter came as fast as myself—it was all the promise."

Yes, it was all the promise, and Sir John did his best to atone. Nelly and Joseph have been married years, and their prosperity is not the mere offspring of their labor and industry. A kind, helping hand has often been stretched out towards them. "But I owed Nelly more than I ever did for her," says Hotspur. "Would you believe it, sir, ever since that girl left my letters have gone wrong again!"

I have no doubt Sir John would like me to believe *that*. As if I could!

SIGHT-SEEING IN PARIS.

E. F. MOSBY.

NOTHING at the Paris Exposition attracts more attention than the Gobelin tapestries and the Sevres china. One is disappointed at first by the royal tapestries and hangings, for the colors, especially the scarlet or rose tint, have faded very much, but the fidelity with which line after line, touch after touch of the great artist in some matchless painting, is transferred to the web, grows ever more and more upon one's admiration. It is said the weaving of one of these pieces sometimes lasted six years, the silent workman having his model or pattern placed *behind* him, instead of before, and occasionally looking back to trace its image more accurately on his memory; and one fancies in the faded tints some resemblance to the slow-passing and colorless days of patient labor spent over them.

Far brighter is the beautiful work on the Sevres china, so called from the town of Sevres, which is situated a short distance from Paris, near the town and grounds of St. Cloud. The many revolutions of Paris, the pillaged palaces and consequent sales, have caused many specimens of this royal ware to be brought into the private households of other countries, so, many of my readers are doubtless familiar with the exquisite texture of this frail china, as delicate and as translucent as the shell of an egg.

The graceful designs in which it is wrought suit the material admirably, and so do also its rare devices of brilliant colors, its flowers and wreaths and trailing sprays of blossoms. The work on the painting and gilding is most elaborate, and the china is even decorated still more expensively by the setting of brilliants or precious stones, and flowers, statues, vases, urns, are all made of this frail porcelain, as well as the exquisite sets for tea and dinner services, with which our eyes are most familiar.

There are also tall jars of Rouen china, and ware from Limoges and Nevers. Much of the early French porcelain is wrought in grotesque and quaint shapes of animals and fish, and queer creatures of land and water, with plants and flowers, exquisitely colored in fresh, bright tints. For several years persons have been busy in collecting fine specimens of china, old furniture, delicate laces from different parts of France, and as you look at some of the old china you can imagine the interiors of the tall, dark houses in the old towns of Normandy, where these were ranged row over row on strong shelves, or placed on the tall *armoires* with many compartments and drawers.

There is one thing that strikes you pleasantly about the designs on the china, and the carvings of the tall chairs and chests and slender tables—all the plants seem to grow and the birds and butterflies to live, and peck at the wooden fruit, or poise above it. It shows the vigorous, warm enthusiasm of the artists who worked upon them, and loved their work.

If you have traveled in France enough to learn something of the life of the people, you will feel a much more intelligent interest in many of the articles exhibited in Paris. For instance, the delicate black laces of Caen and other provincial towns, will recall to you the women in their picturesque peasant dresses, weaving the fine threads into symmetrical figures, and you will remember vividly their beautiful, old-fashioned towns, with their narrow streets, and tall houses with projecting rooms, and the curious, overhanging balconies, shading the sidewalks.

If you have ever been to these, there are two places you will remember—the busy marketplace with the fresh, lively peasant women, selling and bargaining with so many compliments and smiles, and their pretty stalls with fruits and dewey flowers, and even vegetables arranged with exquisite taste and neatness; the bright crimson radishes and silvery-white onion, the crisp green leaves of lettuce forming a perfect study in color by themselves. Then, after leaving a little behind you all this busy merriment and good-natured din, you will come to a quiet green yard and tall gray church, its spire rising solemnly heavenward, and its sweet bells ringing matins, angelus and vespers over the heads of the crowd coming and going underneath. The church doors are always open, and looking in you see cool shadowy spaces, only cleft here and there by rays of richly-colored light from the stained windows.

In the great International Exhibition at Paris now, the work displayed is a fragment from just such sights and sounds in many lands, and the young visitors there should try to understand the people who produced these beautiful things, and their homes and lives, to gain the full interest and meaning of them.

AGRICULTURAL PRODUCTS OF CYPRUS.

THE following statistics as to the agricultural products of Cyprus, are taken from a report furnished to the Imperial Geographical Society of Vienna by an officer of the Austrian army. Although written as far back as 1873, the report will still be found interesting, owing to the great scarcity of information regarding the island. Of wheat, which is one of its chief products, Cyprus raises in a good year about one million five hundred thousand bushels. Of these about one million bushels are consumed in the island, leaving about five hundred thousand bushels for export. The shipments commence in the month of June, and in 1872 the average price of wheat, placed free on board ship, was about 4*s.* 2*d.* per bushel. Barley is also cultivated to a considerable extent, but the bulk of it is consumed in the island; and in some localities small quantities of maize, oats, and millet are raised. Carobs, or locust-beans, are largely cultivated. The annual harvest of these varies from eight thousand to twelve thousand tons, and the fruit is generally ready for export about the beginning of September. Its price varies from 70*s.* to 140*s.* per ton, and about three-fourths of the total export goes to Russia, Egypt taking the bulk of the remainder. Of raisins, Cyprus produces annually about one hundred and fifty tons. They are of medium quality, fetch about £11 per ton, and are mostly shipped to Alexandria, Beyrout, and Constantinople. Wine is still one of the chief products of the island. About one hundred and forty thousand gallons of the common red wine are produced yearly, the retail price being about 10*d.* a gallon. Somewhere about one-third of this quantity is consumed on the island.

Of the better wines, the annual product is about eighteen thousand gallons, and these are nearly all exported. They are bought up by speculators, who store them until matured; the price ultimately realized for Commandine, which is the kind most sought after, varying from 4*s.* 2*d.* a gallon when it is two years old, to twenty times that sum when it has been kept for twenty-five years. Brandy also is made from raisins and damaged grapes, and about thirty-four thousand gallons are sent each year to Alexandria. Nearly eight thousand bales of cotton of the average weight of two hundredweight each, are exported yearly, the home consumption absorbing an additional one thousand bales. Silk used to be an important article of export, but owing to the outbreak of a disease the production has been greatly curtailed. In good years about two hundred and twenty thousand gallons of olive oil, two hundred and fifty to three hundred and fifty tons of madder root, and one hundred tons of nuts are produced. Sumach grows without particular care, and from three hundred to four hundred tons are yearly exported to England and Syria. In 1873 the total value of the exports from Cyprus was £360,000, and of the imports, £88,000, In 1875, according to our consular reports, the exports amounted to £334,000, and the imports to £200,000. Two-thirds of the total tonnage of ships trading with Cyprus belong to Austria.—*Economist.*

CLANDESTINE DOCUMENTS.

APROPOS of the recently discovered theft of an important State document a copy of which was stolen by a clerk and sold to the press, the Pall Mall Gazette gives the following interesting account of similar offences:

Historical instances are numerous in which State documents of great importance have found their way into the hands of people who had no business with them; and sometimes the course of the world's affairs has been materially influenced by such accidents. But for a hazard which placed under Cromwell's eyes a letter in which Charles I. stated that he had no intention to fulfil the promises which he had made to secure peace, the negotiations between the king and the Parliament might have come to an issue; as it was, Cromwell refused to treat, and it may be said that Charles' unlucky letter cost him his head.

Similarly the breach between Louis XVI. and the French people was rendered irreparable when a blacksmith revealed the existence of the famous iron closet at the Tuileries, which having been broken open, was found to contain the damaging evidence of the king's negotiations with the Austrian Court in view of an invasion of France. In 1794 Tallien having read his name on a piece of paper which Robespierre let fall from his pocket in pulling out his handkerchief, concluded he was marked down for execution, and at the instigation of his high-spirited wife, immediately took measures which resulted in Robespierre's downfall on the 9th Thermidor. To come to more recent times, Louis Napoleon's *coup d'etat* was within an ace of failing, owing to the officiousness of a lady in communicating the plans to Prince Napoleon (the future emperor's cousin), who forthwith tried to put some of the Republican leaders on their guard.

Victor Hugo gives an account of this affair in his "History of a Crime," and he furnishes some details as to the minute precautions which were taken to insure secrecy at the National Printing Office, where Louis Napoleon's proclamations were printed. The place was guarded by soldiers and detectives, and not a workman was allowed to leave the building until all the copies were struck off and in the hands of the bill-stickers. M. Hugo might have added that the original manuscripts of these proclamations were all in the handwriting of Count de Morny, and that no one save that able conspirator and his master was permitted to see them before they were consigned to the printer. St. Arnaud, Maupas, Mocquard and Persigny had been favored with a sight of proclamations worded quite differently, and they grumbled by and by at not having been trusted. But De Morny trusted nobody. In 1870 on the outbreak of the Franco-German war, the world was startled by the publication in the Times of a draft treaty drawn up by M. Benedetti, and proposing the annexation of Belgium to France. M. Benedetti pretended that he had been entrapped into writing this draft under Count Bismarck's dictation: but anyhow, its disclosure had a marked effect in drawing away British sympathies from the French side, and it compelled the Gladstone Administration to sign a treaty binding England to protect Belgian independence. Three years later the fortunes of the Monarchist factions in France were terribly damaged by a confidential circular of M. Beule, the home minister, which somehow fell into the possession of M. Gambetta. In this document M. Beule suggested a plan for the wholesale corruption of the provincial press out of the public moneys; and when M. Gambetta had read this strangely cynical paper in the tribune such a storm of indignation arose, both in the Parliament and in the country, that the Broglie Cabinet became hopelessly discredited. Soon afterwards M. Beule was obliged to resign, and within a twelvemonth from his resignation he committed suicide.

EGGS AS FOOD.

EGGS of various kinds are largely used as food for man, and it is scarcely possible to exaggerate their value in this capacity, so simple and convenient are they in their form, and so manifold may be their transformations. They are exceedingly delicious, highly nutritious, and easy of digestion, and when the shell is included, they may be said to contain in themselves all that is required for the construction of the body. It has been claimed for them that they may be served in about six hundred ways, although it is generally found that the more simply they are prepared the more they are approved. Although other eggs than those of birds are eaten—for instance, turtles' eggs—it is generally conceded that the eggs of the common fowl and of the plover possess the richest and sweetest flavor. The eggs of ducks and geese are frequently used in cookery, but they are of too coarse a nature to be eaten alone. The eggs of the turkey and of the pea-hen are highly esteemed for some purposes.

The weight of an ordinary new-laid hen's egg is from one and a half to two and a half ounces avoirdupois, and the quantity of dry solid matter contained in it amounts to about two hundred grains. In one hundred parts, about ten parts consist of shell, sixty of white, and thirty of yolk. The white of the egg contains a larger proportion of water than the yelk. It contains no fatty matter, but consists chiefly of albumen in a dissolved state. All the fatty matter of the egg is accumulated in the yelk, which contains relatively a smaller proportion of nitrogenous matter, and a larger proportion of solid matter, than the white. Therefore, in an alimentary point of view, the white and the yelk differ considerably from each other, the former being mainly a simple solution of albumen, the latter being a solution of a modified form of albumen, together with a quantity of fat. . . . . Raw and lightly-boiled eggs are easy of digestion. It is said that raw eggs are more easily digested than cooked ones; but this may be doubted if the egg is not overcooked. A hard-boiled egg presents a decided resistance to gastric solution, and has a constipatory action on the bowels.—*Cassell's Domestic Dictionary.*

GLADSTONE AND BEACONSFIELD.

THE Springfield Republican, discussing "The Personal Element in English Politics," sketches neatly and accurately the two central figures of trans-atlantic politics. Gladstone is the man of moral ideas, and Beaconsfield is the very embodiment of cynical expediency. Gladstone can hardly crack a filbert without somehow connecting the fact with the moral order of the universe; Beaconsfield jests over Bulgarian atrocities as if he were cracking filberts. Beaconsfield's career is made up of anomalies. Of Jewish descent, he is the practical head of the Established Church; a conservative leader, he beat the liberals by offering a wider suffrage than they had ventured to propose; a thorough political adventurer, he is obediently followed by a proud and stiff aristocracy; he is the most adroit of courtiers, and the most absolute of party chiefs.

"But consistency still was a part of his plan
He's been true to one party—and that was himself,"

He has succeeded mainly by giving to a strong and stupid party the benefit of leadership as skillful as unscrupulous; and also through the sympathy of a class—which the Pall Mall Gazette represents—with the cynical indifference to anything but material success which the prime minister so jauntily avows. Nothing is more detestable to this class than the intense and serious temper of a man like Gladstone. Gladstone is deficient in the qualities in which Beaconsfield is strong—tact, coolness and self-control. But it is the best head and heart of England that listens and responds when Gladstone speaks. Beaconsfield is, after all, but the cleverest of charlatans. Gladstone is a statesman, of a lower order indeed than Bismarck and Cavour and Lincoln in shrewdness and particular force; an orator and scholar, rather than a man of affairs; but second to none in the purity of his aims and the generosity of his sympathies.

"I'VE bought you a nice Swiss clock, mother," said an old farmer to his aged wife. "Why, Jared!" she exclaimed, "why didn't you bring me an English or American one, so't I could understand it when it strikes?"

BRIC-A-BRAC.

DOT LEEDLE LOWEEZA.

How dear to dis heart vas mine grandshild,' Low-
eeza!
Dot ehveet leedle taughter off Yawcob mine son!
I nefer vas tired to hug and to shqueeze her
When I vas avay, oh, I know dot she miss me,
For vhen I come homevards she rushes bell-mell,
Und poots oup dot shveeet leedle mout' for to kiss
me—
Her "darling oldt gampa," dot she lofe so vell.

Katrina, mine frau, she could not do mitoudt her,
She vas sooch a gomfort to her day py day;
Dot shild she make efry von habby aboudt her,
Like sunshine she drife all dheir droubles avay;
She holdt her vool yarn vhile Katrina she vind it,
She pring her dot camfire bottle to shmell;
She fetch me mine bipe, too, vhen I don'd can find
it,
Dot plue-eyed Loweeza dot lofe me so vell.

How ehveet, vhen der toils off der week vas all
ofer,
Und Sunday vas come mit its quiet und rest.
To valk mit dot shild 'mong der daisies und clofer,
Und look at der leedle birds building dheir neet!
Her pright leedle eyes how dhey sparkle mit pleas-
ure—
Her laugh it rings oudt shust so clear as a bell;
I dink dhere vas nopody haf sooch a treasure
As dot ehmall Loweeza, dot lofe me so vell.

Vhen vinter vas come, mit ite coldt, ehtormy ved-
dher,
Katrina und I mue sit in der house
Und dalk off der blast, by de firesIde togedder,
Or blay mit dot taughter off our Yawcob Strauss.
Oldt age mit its wrinkles pegins to remind ue
Ve gannot shtay long mit our shildren to dwell;
But soon ve shall meet mit der poys left pehind us,
Und dot shveet Loweeza, dat lofe us so vell.

[Charles F. Adams in Detroit Free Press.

EVERY one remembers that when Flaxman told Sir Josbua Reynolds that he had espoused the amiable and accomplished Ann Dolman, the great painter replied: "Oh, then you are ruined for an artist." Mr. George Augustus Sala, touching upon the subject of marriage and art in his charming Chronique in the Illustrated London News, says: "In any case, dogmatism on the subject is dangerous; and Sir Joshua's ill-conditioned remark was possibly due to his having been jilted by Angelica Kauffmann. As for the expediency of matrimony in the case of authors, I hold that novelists and journalists should always be married men, but that poets should invariably be single. The true poet should be more or less unhappy; the more miserable he is the more sweetly he will sing; but there is no reason why, he should make others wretched."

IN THE PARLOR.

BETWEEN the dusk and the daylight,
When the shadows longest grow,
There comes a silence on all things—
'Tis the hour when one speaks low

We sit in the parlor together,
And heavily on the air
Floats the faint familiar fragrance
Of the heliotrope in your hair.

And in the kindly twilight
I see your dark eyes shine;
I feel the touch of your garments,
Of your soft white hand in mine.

And one might see in the parlor,
When the day is almost done,
On the wall two tremulous shadows
Of faces melt into one. *[New York World,*

A FEW months since a lady who is very well known in the French fashionable world happened to see in the streets of London a monkey begging pence from the public in the prettiest manner for the benefit of his master, an organ-grinder. The marquise took a fancy to it, bought it, dressed it in the gaudiest of raiment, and made it a pet. The lady the other day had in Paris a fashionable reception, and of course her pet was the wonder of the room. It the course of the evening a young lady sat down at the piano, and accompanying herself, sang with exquisite taste a little drawing-room song. As soon as the lady had finished, the monkey, who though now partially civilised, had not forgotten his former duties, seeing something near him that reminded him of his old occupation, seized it and transformed it into a temporary hat, and commenced a collection. The vocalist laughed, the marquise looked vexed, but to the amusement of everybody the animal went the rounds and collected a large sum. His task ended, he jumped upon the knee of the singer, midst shouts of laughter, and deposited the contents of his hat in the lady's lap. The collection was of course devoted to a charitable fund.

THE TABLES TURNED.

SPARE Mr. C. met stout John Ghea
Just entering the gate;
Said C., "How do you do, good sir?"
"Do? prime! Just guess my weight."
"Well, I should judge," said Mr. C.,
"You quite a weight must levy.
For, if the saying old is true,
"Sin always is most heavy.'"
"Ho, ho! ha, ha!" laughed stout John Ghea
"You're quite a joker, quite.
But you cannot weigh very much,
For vanity is light!'" L. J. B.

"Dora," said Albert to his sister, "as you are studying arithmetic, will you please tell me, if five and a half rods make a perch, how many will make a pickerel?" "I will," responded Dora; if you you will first tell me, if two hogsheads make a pipe, how many will make a meerschaum?"

How 14-8 the female I
Who has a man to love;
4 love is truly heav'n on earth,
As love is 7 above.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

HAY-MAKING.

I.

ACROSS the sunny field she went,
Who is our sovereign lady;
She said, "Such days were never meant
To waste in corners shady."
She would not take a single nay,
Excusing or denying,
"Come out," she said, "and turn the hay,
Because the sun is shining."

II.

Some pleaded letters: "Why, you see,
'Tis mail-day for Golconda!"
Another: "When I've read these three
Last pages of 'Deronda.'"
Two miscreants who had slyly fled
[Straw Hat and Dolly Varden)
Were captured, lips and fingers red,
Deep in the kitchen garden.

III.

No pleading was the least excuse,
She brooked no contradiction;
The best you cannot make excuse."
"Those letters are a fiction!"
You've played lawn tennis half the day,
Than which my work is cooler!"
And so, at last, she got her way,
Our most despotic ruler.

IV.

She set our stations row by row,
And marshalled us sedately;
"See, now, this is the way to go,
The swathes want turning straightly."
Don't seize your rakes like whips and oars,
Nor drag them limp and lazy."
The haymakers who drank their "fours"
In shadow, thought us crazy.

V.

But not five minutes' work was done,
'Ere defalcations tried her;
Dick's line and Kate's merged into one,
And Jack must taste the cider,
While some would loiter, some would play,
And some would rest already—
"Alas!" she sighed, "for all I say,
I cannot keep you steady."

VI.

Across the field there swept a tide
Of voices, songs and laughter;
She raked her line with honest pride.
I followed silent after.
We left the others far behind,
O'er-mastered by the weather;
And finished where the roses bind.
The further hedge together.

VII.

What made me bold? Some words we spoke
By chance; or silence sweeter;
While all the summer sounds awoke,
And sang in tender meter.
I only know, my fate assured,
I won her sweet resigning;
Nor did she blame me that I made
Hay while the sun was shining.

[The Argosy.

ABOUT CLOTHES.

I MAY as well say at the start, to prevent misappre ension, that this is *not* to be a fashion article. "Fashion and style," what a world of ill-health, discontent, envy and vain-glory does the combination symbolize!

I'm interested in the effort now being made to cultivate rational ideas on the subject of how women shall be clothed. I've looked in vain in the RURAL for the least hint of the approaching emancipation of women from the thralldom of clothes, but although our amiable editor has discoursed times without number about the fashion in garments, not a word has been said by her in behalf of this much-needed reform.

6321

A move in the right direction has been made in the matter of under-garments in the substitution of one or two pieces for the six or seven worn heretofore, and women have so generally adopted the reform garments and adaptations of them that, so far as underclothing is concerned, there is little fear but that the good work will go on until some gifted sister shall have evolved a single under-garment which will have all that is requisite for warmth and economy. But the outer clothes are my especial agony. To begin with: look at the head-gear that women affect. What is the modern bonnet? Does it shade the face in summer and protect it in winter? Oh! dear no. Under pain of not being fashionable it's prohibited from covering the ears. The face, head and ears are exposed to wind and sun—a style of head-garniture which looks passibly well (and even then not appropriate for street wear) on pretty, young fresh girls, but oh! what pitiable caricatures it makes of many women—ugly complexions, wrinkles, freckles, skin blemishes of every description; ill-shaped ears and faces are intensified in their ugliness by being thrust unshaded into the glare of sunlight. We laugh at the "poke" bonnets of other days, but they had at least the merit of hiding blemishes. Would I advocate a return to poke bonnets? Not exactly, but I would have women adopt some style of hat which will be of more service than the thing of lace, feathers and gewgaws now worn.

In lieu of something better, why can't a woman wear sensible a round hat—sparse front locks and wrinkled brow would then be hidden, and the tired, worn face with the disfiguring dark circles under the eyes, would be shaded.

6321

As to frocks, what can one say? The effort to popularize short skirts for the street has been partially successful, but many women are still to be seen burdened with several yards of skirt which, as it is no longer considered good form to allow to trail in the street, they are forced to carry in their hands. Then the absurdities in the way of making up gowns are enough to disgust any one who is not entirely bereft of common sense. But as this letter is already tolerably long, I'll content myself with touching only on the indelicate aspect of the way ladies costume themselves, and leave to other RURAL sisters the discussion of the idiocies in cut and trimming which spoil many a pretty dress pattern.

It seems almost incredible that modest, estimable women should array themselves so as to look rather like anatomical subjects than as though dressed for the street, and yet we everywhere meet respectable women whose clothes are so tight-fitting that their shape from neck to ankles is faithfully out-lined. Custom has long sanctioned women having the waists of their gowns fit them very snugly: that I always thought was indelicate in the extreme, but now that the "snug-fitting" has been extended to the ankle, I can only wonder that the ballet-girl style of dress is not adopted outright. It would certainly be most delightfully cool for summer wear, and not much more immodest than the pull-back.

I could say more, but I don't think it expedient.

JACQUELINA.

WHAT A WOMAN CAN DO.

EDS. RURAL:—Noticing your "New Move," I gladly avail myself of the opportunity for a little gossip. "Very like a woman," I think I hear you say. Well, never mind, perhaps some time we shall be better acquainted. Having (for the last ten or twelve years) led a sort of a wandering Gipsy life visiting many different places throughout the country, and, having, for the past two years, spent most of my time at our nation's capital, seeing the wealth and prodigality of to-day, and the wretchedness and poverty of to-morrow, I began to cast about me for some employment that a woman could engage in where she would have an opportunity to gain an honest living without the everlasting torture that hangs over those who drudge out their lives in the "Departments," expecting at any time that they may be sent out into the world destitute.

Remembering my early life, when we had an abundance, which had been drawn from the bosom of mother earth, and feeling that none need go hungry who is willing to till the soil, I decided to turn farmer myself and teach others what a woman could do.

Chance threw me one day in Herndon, a small town about 25 miles from Washington, and here I found a little place, rough, uncultivated and neglected, yet I felt that it was capable of being made into a home such as I had always coveted. I rented it for three months, planted my garden, and did what I could with a limited income to improve it. I was so pleased with it at the end of three months, that I decided to buy it. I found that the same money that would only have paid my board in fashionable society, had paid my rent, my help, planted my garden, bought my cow and chickens, besides many little articles necessary for housekeeping. I do my own housework, save when I have boarders, and then I keep only a little girl. I have a young lad who came out from town to stay a little time, and has been with me nearly five months. He seems contented and happy, and is learning quite a good deal about farming. I call my place "Bonnie Repose," because so many come out from the Departments to rest and enjoy the pure air. Herndon is one of the healthiest towns in Fairfax Co., contains about three hundred inhabitants, three churches, three stores, one school-house, a Lodge of Good Templars, a Grange, a Farmers' Club, and not a whisky saloon in the place. No chills or mosquitoes. The citizens are cordial, intelligent and hospitable, giving a kindly greeting to all who come among them.

I superintend my work both in-doors and out. When I get tired of house-work I go out into the garden and pull weeds, feed and count my chickens or, at this season, transplant strawberries. If perseverance insures success, *I* will *succeed*, for if there is one word in the English language that I detest, it is the word *failure*.

I had new potatoes and green peas two weeks in advance of my neighbors. We need but one thing to make this one of the most, if not the most desirable place in which to locate, and that is a reduction in the railroad fares. Many would come out here and make themselves homes were it not for this. The poor, weary Department clerk, who toils all through the heat of the day, could come and breathe God's pure air. Truly, God made the country, but man made the town.

Hoping that you will deem me worthy of a place among the members of the Club, I am, very truly,

Herndon, Va., Aug. 16, 1878. H. B. N.

WOMAN AS A REFORMATORY ELEMENT IN POLITICS.

GAIL HAMILTON'S peculiar course, of late, has led me to inquire whether she is a fair representative of the "emancipated" woman that is to be?

Those who advocate allowing women the right of suffrage, have always insisted that her advent into the political arena would be the signal for the abolition of bribery, personal abuse and corruption and coarseness of every sort. With this prophesy forever ringing in my ears, it's quite natural that I should be on the alert for straws which should indicate whether or not the political millenium is likely to result from women interesting themselves in public affairs, and as the fair Gail is a straw of uncommon proportions, she could not fail to attract my attention and I've watched her course with considerable interest. And what have I seen? A woman using her pen—so strong in adjectives and in vituperation—to heap scorn and contumely on the foibles and sins of the average politician holding up to honor those who represent morality, and encouraging any efforts made for the bettering of the life political? I saw nothing of the kind. Gail Hamilton who, it must be allowed, is superior to the ordinary run of women—for has not her genius been allowed free development, unhampered by the repressing influences of a husband? has she not written books? and to crown all, is not the honorable (?) gentleman from Maine an acquired relation?—— has employed all the wealth of invective at her command (and there is a whole mine of it,) to vilify and traduce the most honorable of men and of measures, and has glorified as demi-god a political trickster, some of whose practices will not bear the light of investigation.

No demagogue could possibly exceed her in distorting facts, and very few of the most debased of political hacks would so far forget themselves as to make so shameless and unprovoked an attack on a pure, Christian gentleman, as this woman treated Rev James Freeman Clark to, some months since.

If Gail Hamilton's contributions to contemporary political literature, are a fortaste of the "reform" and "milleniumism" which will dawn on us when women have a finger in the political pie, for myself I should prefer to take my politics in their present unregenerate state.

FREE LANCE.

"CLUB" IS TOO "FAST."

DEAR FAITH RIPLEY:—I like your idea of giving the women a chance to put in a word once a month, and I look forward with pleasurable anticipation to reading what the RURAL women will say.

It seems ungracious in my first letter to complain, but to be honest, I don't like the idea of calling this monthly interchange of ideas a "club." It may be an unreasonable prejudice on my part, but I always associate "clubs" with horse racing, betting, wine-drinking and fast men. Couldn't it be called the "Womens' Exchange?" This is only a suggestion, you know, and I'm half afraid now that I've made it.

LILLIAN MARSH.

DID THEY "GIVE THEMSELVES AWAY?"—When it came to tasting mustards at the Paris Exhibition, the jury was composed half of women, on the ground that the palates of the fair sex were not depraved and deadened by tobacco. The propriety of the resort to both sexes was obvious, but why is it denied in so many other relations of life? Is tobacco the only moral and physical stimulant which differentiates the sexes and necessitates the reliance on both to secure accuracy of sensibility? Does n't the mustard decision surrender the whole case for the superiority of man, and his monopoly of the learned professions, the government and even of what are supposed to be the principal agencies of moral progress? Are there no moral narcotics against which it would be profitable to guard, by calling in the aid of sensibilities less exposed and less vitiated and hardened?—[Springfield Republican.

Pattern (No. 6321) which we give in this number, is one of the novelties for fall wear. It is graceful and stylish in effect, and promises to be exceedingly popular. The pattern can be obtained at this office for 25 cents. Full printed directions accompany every pattern.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SUMMER SIFTINGS.

ANNIE L. JACK.

SEPTEMBER! It is the early autumn seen in every fleeting cloud and in every brilliant flower. The stillness of the trees is felt; the sunbeams have a cooler glow and the glints of light and shadow are "summer siftings" no more. Do we regret it? Ah, me! do we not! Other summers may come and go, but never again will one be *just* the same. Each year we advance or go back, and the same feelings cannot be reproduced.

It is a busy month. The garden is one mass of yellow squashes and ripening corn. Apples, apples everywhere drop from the trees, and the early fruit is marketed. The careful housewife gathers her plums to preserve, cans her peaches, secures her tomatoes in every available form, and prepares for the long and dreary winter. Happy is the woman who has laid by in the early spring some fresh, new garments and stockings for the children; for the frost comes unawares, and colds and many diseases follow. While beautiful, almost, as Juno—except for the wealth of roses—I deem September a treacherous month, delusive, with its soft and balmy air, for delicate people, though bracing for the strong and healthy. The grapes are purpling, the pears turn their russet cheeks to the sunshine, rich treasures of color are found among the flowers, but they lack the freshness of spring, the glow of summer, and we enjoy them with a quiet rapture that is tinged with pain. Summer siftings cannot return this year.

DOMESTIC RECIPES.

Care of Brooms, Recipes.

A friend of my early days used frequently to say, "Show me a housekeeper's broom, and I'll tell you what she is." I am reminded of the force of the saying, when I see the too common misuse of that very necessary article. There are housekeepers who never have any particular place for their brooms, but leave them where they were used last, while others use the same brooms for parlor and kitchen, and when worn out they are thrown into the cellar or back yard to remain indefinitely. Some are in the habit of resting heavily on the broom while stooping to pick up pins, thread, etc., which one finds while sweeping. The result of this is, that the splinters are bent upward and broken and the broom soon becomes worthless. When a new broom is purchased, provide a way for hanging it up in this wise: With a small gimblet bore a hole through the handle about an inch from the top; draw in a piece of strong, waxed twine, long enough when tied in a hard knot, to form a loop three or four inches long. If brooms be dipped in clean, hot suds once every week and dried quickly, they will last twice as long. When too much worn for the house, they will answer for a time at the barn. When too old to sweep with at all, take off the wire for future use; cut the handle into kindling material; pull apart the straws, and add gradually to the fire, and you are rid of a useless article for "good and all."

Pressed Chicken.

I have noticed when traveling on the cars, that many of the passengers who carry their lunch, generally have a liberal supply of chicken. Now, there is no objection to the fowl itself, but there is to the *shape* in which it is often taken. When there are so many good recipes for "pressed" and "jellied chicken," it seems as if the bones, need not be carried. I was once obliged to occupy a seat on the cars with a stranger, who entertained me for a half hour by gnawing the wings and legs of a fowl. At the same time another person who sat directly opposite, was engaged in the like occupation. If chicken be prepared according to the accompanying recipe, travelers need not be aware of the nature of each other's luncheon:

Cut up a young fowl and put it in a kettle, with one coffee-cupful of cold water. Sprinkle with salt and pepper, and cover closely. When tender, pick the meat off the bones, and chop into bits, the size of peas, and pack in a quart bowl. Thicken with flower the little juice that remains in the kettle, and pour over the chicken. Put a plate on it, while warm, and a heavy weight on the plate. It is necessary to cook the fowl, in but little water, otherwise it will not jelly. It is best not to cut pressed chicken until the day after it is made. Place thin layers of it between thin slices of bread, and press firmly together. To be eaten without separating, like sandwiches.

Crab-Apple Jelly, and Marmalade.

Wash the apples in hot water, then put in the preserving kettle, with not quite enough cold water to cover. Cook them slowly until soft, but not broken. Pour off the juice and strain it. To each pint of it, put one pound of granulated sugar, and boil twenty minutes; skim, pour into tumblers, and let it stand in the sun a few days to harden.

For marmalade: Take the same apples from which the jelly was made, add water, in the proportion of one half pint to each quart of apples; cook until very soft, and press through a sieve. To each pound of this pulp, put a half pound of sugar, and cook slowly for an hour, stirring often. Watch constantly, as it burns easily. Put in air-tight glass cans.

MRS. M. G. R.

To Dry Sweet Corn.

Why need housewives spoil their dried corn, by cutting the whole kernel off with one slice, when if they were to cut only the outer part, and scrape the rest, it would be so much more delicious! It should not be cooked longer than fifteen minutes before it is dried. The best method I know of to dry it, is to spread upon plates, and set in the oven, which is kept tolerably hot at first.

Not Scalding Tomatoes:

If one be provided with a sharp knife, and remove the skins from tomatoes without first scalding, they will have a fresh, lively taste, which they never have if scalded. Having so many smooth varieties now, it is not hard to follow the above: AUNT FLORA.

News of the Week.

Monday, Sept. 2, 1878.

POLITICAL.

The Potter Committee has finally concluded to adjourn until the chairman shall see fit to call them together again. Butler will have his hands full for some time in canvassing Massachusetts in his own behalf, having just accepted the nomination for Governor as an independent candidate in response to upwards of 40,000 voters whose signatures are said to have been attached to the petitions requesting him to do so, of which mention was made here last week. He says he will avoid as much as possible national politics and confine himself to State issues. Potter and the other members of the Committee will also find plenty to do in the coming canvass, so that it is not likly that there will be another session until shortly before the reassembling of Congress next December. It was said during the week that the original of the notorious Sherman letter was in possession of the Committee and that they would spring it as a surprise on the public, just before the elections. Ben Butler however, has published a card, denying the truth of this allegation.

Somebody has been overhauling Secretary Sherman's somewhat crooked financial record, and finds that in 1863 he used this language: "The man who would demand the payment of the five-twenty bonds in coin is an extortioner." Ex-Guerrilla Mosby wanted to be assistant attorney-general, but will take the Canton, China, consulate, though he says he shall come back to go into the campaign for Grant in 1880. Minister Stoughton was among his backers, the family having been good friends of Mosby ever since he captured a nephew of the minister's in the war and treated him well. Simon Cameron, of Pa., was another, and a host of prominent republicans also indorsed him. Col. McClure of the Philadelphia Times has been around in Pennsylvania a good deal this summer, and is very much impressed by the strength of the national movement. He reports that it has a great hold upon the farmers in many sections, who find it very hard work to pay their growing interest with the diminishing prices they receive for their produce, and easily embrace the opinion that printing a fresh lot of paper money will bring them relief.

MISCELLANEOUS.

THERE was a very pleasant meeting of gentlemen interested in the breeding of Small Yorkshire Swine, a few days ago (August 21) at Col. Hoe's office in this city. It resulted in the organization of the "American Small Yorkshire Swine-Breeders' Association." The ballot for officers resulted in the election of Richard M. Hoe, President; August Belmont, Jr., Treasurer; and Geo. W. Harris, Secretary, who also constitute the Executive Committee. The initiation or membership fee was fixed at five dollars. The entry fee was fixed at fifty cents a head for animals belonging to members of the club, and one dollar each for animals belonging to non-members. M. C. Weld, R. B. Duyckink and Wm. H. Cole were appointed a committee to prepare a Constitution and By-Laws, to be submitted to the members of the club at the next meeting.

It was resolved that previous to the adoption of the Constitution and By-Laws any applicant for membership may be received as a member on the unanimous recommendation of the Executive Committee. The entries of such an one may be recorded in the Herd Book, also those of persons not members, after the pedigrees of their animals shall be submitted to and approved by the Executive Committee.

The Secretary was directed to furnish entry blanks on application of members and other breeders desirous of having their animals recorded in the Herd Register, and was directed to send to every breeder of Small Yorkshires, to whom notice of meeting was sent, and any others suggested, a notice of the organization of the club and the action of the meeting.

The Association adjourned to meet at the office of R. Hoe & Co., No. 31 Gold Street, New York, at 11 A. M. on Wednesday, the 6th day of November, 1878, for the purpose of receiving the report of the Executive Committee, adopting Constitution and By-Laws, etc.

The late decision of Sec. Schurz, with regard to the pre-emption and entry of railroad lands relates exclusively to railroads that have received money aid from the government or a grant of land so large as to be a substitute for such aid. The unsold lands of the Union Pacific, Central Pacific, Denver Pacific and Sioux City roads are already embraced by this decision, because these roads have been completed three years. The lands of the Northern Pacific road will also be included when the road shall have been three years completed, unless the law on the matter shall be in the meanwhile repealed or this decision shall be reversed by the Supreme Court. There are a number of railroads that received grants of lands from the State legislatures, the same being donated by the general government to encourage local and State improvements, such as the Illinois Central and St. Louis, Iron Mountain and Southern railroad. These are excluded from the scope of the decision. All the lands included by the decision can be entered or pre-empted like any tract of unsettled government land, but the railroad companies have warned all such settlers that they will be summarily ejected, and a case will doubtless, ere long, be made up so that the Supreme Court may finally decide the question. The most important paragraph in Sec. Schurz's decision is as follows.

"By the terms of the grant by which said lands, or the proceeds which shall arise from the sale thereof, inured to said company, it is provided that lands remaining unsold at the expiration of three years from the time when the entire road was completed, shall be subject to settlement and pre-emption like other lands, at a price not exceeding $1.25 per acre; in other words, that said lands shall revert to the public domain for sale and disposal for said company under the pre-emption laws of the United States. And whether it be considered that said lands are public lands in a general or special sense cannot in my opinion affect the jurisdiction of your office (the land-agent's) in making sale and disposal of the same."

Mrs. Myra Clark Gaines gains possession of her New Orleans property, after her two or three centuries of litigation, only to find herself attacked by English claimants to seven-eighths of it, who offer to New Orleans lawyers half of their share to secure their rights. The principals and instructors of the deaf and dumb of the United States and Canada held their ninth annual convention at Columbus, O., last week, nearly 300 delegates attending, most of whom could converse in the sign language. It is a little over 60 years since the establishment of the American Asylum at Hartford, and now nearly every State in the Union has a school for the special instruction of this unfortunate class, while those that are without such a school provide for the education of their deaf-mute children in the schools of other States. During the past year over 6000 children and youths have been under instruction, at a cost of nearly a million and a half dollars. It is estimated that Delaware's peach export for the season will amount to 700,000 baskets, netting the shippers $575,000. They call it a small year for peaches and place the whole yield within 1,000,000 baskets.

Toledo lays claim to having become the great grain center of the country, producers and shippers having discovered that it is a better market for their grain than Chicago and Milwaukee, which have been the great receiving points. Between July 1 and August 20, Toledo's wheat receipts amounted to 3,515,000 bushels, Chicago's to 2,639,000 and Milwaukee's to 1,728,000. Toledo feels sure that she will continue this preeminence through the season, for she received 1,113,214 bushels of wheat last week, 179,914 more than Chicago and Milwaukee both reported. Jay Cooke & Co. have declared another dividend of five per cent.

FOREIGN.

Severe fighting still continues to mark the occupation of Bosnia and Herzegovina by the Austrians. Batoum is being dismantled previous to its surrender to the Russians. The latter are quitting the neighborhood of Constantinople in large numbers on their way home. The Bulgarians are still massacring and outraging the Mahommedans residing among them. All accounts from that region agree that these people are utterly unfit for freedom, cowardly, cruel, utterly unprincipled and a disgrace to humanity. The outrages committed by them since the close of the war, far transcend those perpetrated by the bashi-bazouks before the opening of hostilities. Lately a committee of officials appointed by the Powers that signed the treaty of Berlin, investigated these atrocities and they have officially denounced their enormity and declared that the Russians were culpably? responsible for them. During the week the latter have tried to prevent the Bulgarians from continuing their crimes, and a fight between the two has been the consequence.

There has been a terribly fatal storm near Miskolez, Hungary. The corpses of upwards of 400 victims to its fury have already been found and it is estimated that hundreds have been swept away by floods, whose bodies have not yet been recovered. Bismarck has prepared for the Reichstag a project for a code of laws against socialism, of a most arbitrary nature. If passed, the whole of Germany will be placed under his despotic sway. It is believed, however, that a compromise much milder in its effect, will be forced upon him. Contrary to telegrams last week, it is now announced that an agreement has been arrived at between Berlin and the Vatican. The Falk laws are to be considered a dead letter; all persecution of Roman Catholics to be discontinued, and, in return, the Government will receive the support of the majority of the ultramontanes.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Aug. 31, 1878.

BEANS AND PEAS.—There are now indications that the old stock of beans will go out more steadily than was supposed a week or so ago. A late harvest is admitted by all who have correspondence on the subject, and with a fair trade and no extremely restrictive limits, old crop will show little surplus by Oct. 1st. Many buyers have regarded the intimation of receivers as one of the "crop-scares" so often vented, while others have quietly secured a fair portion of the supply. Marrows show a fair exportation, 1,000 bbls. per week, with general receipts down to 2,000 bush. Mediums firm, with a fair business: other kinds nominal; red kidneys virtually out of market; Canadian peas scarce and something stronger.

We quote Canadian peas at 76@78c.; green peas 77c. @$1 20@1 25; medium beans, prime, $1 55; fair to good, $1 45@1 50; marrows, prime, free on board ship, 1 55; fair to good, $1 40@1 47; Pea, and white kidney, $1 35@1 50; turtle soup, $2 40@2 50.

BUTTER.—The best point and an unexpected one, to note in the butter market this week, is the welcome appearance of exporters. Heavy supplies in summer, with a limited local trade only to handle them, make sellers nervous, and dealers talk as though they have had enough of a conversationally strong market. Sales are the needful emphasis required when receipts are liberal and advices give assurance of plenty to come, and there is a general resolve to keep stock running even if the range has to be made favorable to wholesale buyers. The quality of much of the butter now arriving is not such as might encourage holding; marks that should show a grass tint are faulty in that respect, and buyers point to any natural defect of hot weather made stock, when comparison is made with the low, early rates, at which a large business was done. The fall is close at hand, and reports foretell a large yield. The churnings of autumn of late years has found great favor with the New York trade, and when they have been small the market has derived an upward movement from that fact. When those grades begin to come, there will be a large offering that must be handled by the foreign shipper, and it will better for all parties if he can be allowed to use it as butter instead of grease. The sales of Western butter for export have been mostly at 8@10c.; State and Western creamery, same use, at inside rates. Shippers seem to be anticipating exports of Canadian surplus, and as we have remarked, New York dealers should be permitted to manage the market without hindering suggestions and limits from the interior.

State dairy, pails, choice, 19@20c.; other, 14@18c.; half tubs and pails, choice, 18@19c.; other, 14@17c.; Welsh tubs, choice, 17@18c.; other, 14@16c.; poor State, 10@12c.; creamery, best, 22@23c.; good, 19@20c.; sweet cream, 19@21c.; Western creamery, best, 21@22c.; other, 14@20c.; Western dairy, selected, 18@14c.; fair to good, 10@11c.; factory, best, 10@12c.; fair to good, 8@9c.; very poor, 6½@7c.; grease, 4@5c.

Receipts for the week 29,900 pkgs.; Exports, 16,174 pkgs.

CHEESE.—Supplies have been piling in here again this week, and have accumulated largely in store, since shippers have been very indifferent. The chief demand has been for the choicest, or late made factories, and these have brought steady prices, at 8¼c, and on special lots 8½c. Good grades stand relatively low, and are hard to move.

Quotations are: Fancy at 8½@8¾c.; 7½@8¼c. for good and prime; 6¾@7¼c. for fair; 5½@6c. for half skimmed; 3@4½c. for skimmed. State, farm dairy at 7¼@7¾c. for good to choice, 6@7c. for fair to good, and 3@4½c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@8½c.; do. good to prime, 7@8c.; do. fair, to good, 6@7c.; Western factory, fine, full cream, cheddar, 7½@8c.; do. fine, full cream, flat, 7½@8c; do. slightly skimmed, flat, 6½@7c.; do. half skimmed, 5@6c.; do. full skimmed, 3@4c.

Receipts for week, 107,260 boxes.
Exports for week, 65,356 boxes.
Gold closes at 100¼.
Liverpool cable quotation, 44s.

COTTON.—There has been a good deal of excitement this week, based upon the close of the month and the short interest developing, and also upon the reports from the South of delayed movement of supplies in certain sections by the sickness prevailing there. Latest prices are for August, 12.03c.; for September, 11.01c.; for October, 11.23@11.30c.; for November, 11.10@11.11c.; for December, 11.04@11.14c.; for January, 11.06@11.07c.; for February, 11.12@11.14c.; for March, 11.18@11.20c.; for April, 11.25@11.27c.; for May, 11.32@11.35c.; June, 11.39@11.40.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	10¾	10¾	10⅞	10⅝
Strict ordinary	10⅞	10⅞	10¾	10⅝
Good ordinary	11⅜	11⅜	11⅜	11⅜
Strict good do	11 11-16	11 11-16	11 15-16	11 15-16
Low middling	11 15-16	11 15-16	12 3-16	12 3-16
Strict low middling	12 1-16	12 1-16	12 5-16	12 5-16
Middling	12 3-16	12 3-16	12 7-16	12 7-16
Good middling	12⅝	12⅝	12⅝	12⅝
Strict good middling	12 11-16	12 11-16	12 15-16	12 15-16
Middling fair	13 3-16	13 3-16	13 7-16	13 7-16
Fair	13 15-16	13 15-16	14 1-16	14 1-16

Stained.

Good ordinary.....10⅝; Strict good ordinary.....11
Low middling.....11⅛; Middling.....11⅜

But the main support to price was given by the reduced stocks on hand and the interruption to the movement of the new crop caused by the yellow fever epidemic in the Mississippi Valley. It was estimated that the receipts of cotton at the ports in August would reach 50,000 bales, but it is now apparent that they will scarcely exceed 30,000 bales. The improvement in the statistical position for last week was not so great as it was the previous week, the deficiency in the visible supply being 624,569 bales as compared with last year.

DRIED FRUITS.—Apples are having a little more attention, the new crop particularly, of which sales of handsome sliced as high as 6c.@7c. Blackberries and pitted cherries are doing better, as also peeled peaches, which have increased demands. New blackberries, are quoted at 5½@6c. Peaches—Peeled, new Georgia, 4@5c. for poor, 6@7c. for good and 7½@8c. for prime, and a choice lot selling at 8½c.; choice North Carolina at 10c., and some lots held higher; unpeeled old halves, 3@3½c.; quarters, 2½@3½c. Pitted cherries, 15c.; southern plums, new, at 9@10c. Apples—State quarters, 3@4c.; do. sliced, prime, 4½c.; do. good, 3½@4c. New apples at 2½@3½c. for southern quarters in bbls.; 1½@3½c. for prime sliced, and 6@7c. for fancy. New raspberries, 22c., and evaporated, 24@25c.

Exports past week 107 bbls. apples; since Jan. 1st 10,801 do.; this week, 1577, 23,400 do.

EGGS.—Receipts for week 6,162 bbls.; do. last week 5,135 do. Prices for western have been up to 18c., but the additional receipts proved enough to break the price, and 17c, is now extreme for fresh Western or Canadian, fair qualities 16@16½c. Near points, 18@18½c. State and Penn., 17@17½c.

FLOUR.—Supplies have been liberal, and although wheat has tended higher, prices have yielded a little more, especially for other than regular shipping extras.

Latest prices are $3.40@4.00 for very inferior to fancy superfine State, the latter an extreme; $4.00@4.20 for poor to good extra do. and lots and lines; $4.20@4.50 for good to very choice do.; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $3.90@4.20 for inferior to good shipping extra do. and $4.20@4.50 for good to very fancy extra do.; common to about choice white wheat extras, $4.50@5.40; choice to very fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.10@5.60; round hoop Ohio at $4.00@$4.30, and trade and family brands of do. at $4.35@5.65, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.10@5.00 (fancy brands at higher prices); Minnesota "straight," very inferior to very fancy, at $5.25@7.25, and patent poor to strictly fancy at $5.40@5.85; unsound stock at from $2.00@5.00; city mill extra at $5.10@5.20 for West Indies (the latter rate for fancy in new packages); do. for England, 4.05@4.10; do. trade and family extras, $5.50@6.10; do. for South America, $5.40@6.00 for fair to fancy; No. 2 $2.50@3.25 for inferior to very fancy.

CORN MEAL.—Is selling at $2.40@2.75 for yellow Western, and $2.90@2.95 for Brandywine.

FRESH FRUITS.—Apples are in fine variety and easy rates keep them fairly active. Porters and Orange pippins $1.25@1.50; Golden Sweet, ripe, $1; in good keeping condition, $1.50; Maidens Blush and twenty oz., $1.50@1.75; fancy, $2@2.50. Bartlett Pears, are not showing as fine as in some former seasons; N. J. stock turns out dark, and up river have to be selected to bring the extremes. Peaches have had a variable market. Some fancy yellow from the Cochran orchards, Del., have sold high; one lot of 25 straight baskets brought $100! Both

Southern and N. J. fruit is turning out poor and the good rates obtained for early morning trade are damaged by the irregular rates of the later part of the day. Delaware crates, extra, $2; common to prime, $1@1 75; choice baskets, $1 75@2; common to fair, 75c.@$1 25; N. J., good to extra baskets, $1 50@2, other, 50c.@$1 25. Plums are bringing stiff prices, helped by scarce and high peaches. Quackenbos, bbls., $8@10; egg, $6 50@8; blue and green gages, $5@7; common, $3@5. Grapes are not attractive and sales are generally at 5@6c., Concords and Hartfords. A few whortleberries remain quoted $1@2 per bush. Watermelons are lower, Virginia has a short crop, fancy per 100, $30; good, $15@18; fair, $8@12; cull, $5@7. With reports of a large crop to come, holders are anxious to sell, but trade is very quiet; Va. hand-picked, $1 45@1 50 bush; other, $1 25@1 35. Hot-house grapes, muscat and Black Hamburg, 40@50c. lb.; Sweet Water, 15@30c,

GRAIN.—Foreign markets have advanced for wheat, export and speculative demands have been brisk here, and prices are higher and closed strong. Corn shows but little improvement. Oats are active and firm in price.

Latest sales of wheat are of No. 1 white, near by delivery, $1 19@$1 20; do., deliveries in September, at $1 20@$1 21, closing with $1 21 bid; do., steamer grade, part to arrive, at $1 15@1 16½; No. 2 white, in lots, at $1 11@1 12; extra white at $1 20@1 21; do, early September delivery, at $1 21 bid; white State, near-by deliveries, at $1 20; do., steamer grade, at $1 16@$1 17; ungraded white at $1 07@$1 21; No. 1 red and amber Michigan at $1 12@1 13; do., early September deliveries, at $1 12½@$1 13; No. 2 red, early deliveries at $1 13½@1 11½, do., August option, part in settlement, at $1 09½@$1 11; do., September option at $1 11; do., October option, $1 11½@1 12; steamer grade, spot, at $1 07@1 08; No. 3 red, in lots, at $1 05½@1 06½, ungraded red, in lots at 90c.@$1 12; No. 2 amber, in lots at $1 10@1 10½; do., August option, at $1 10@1 10½; do., first half September, at $1 10½, do., September option, at $1 09@1 09½; do., steamer grade, spot, at $1 06½@1 07½; ungraded amber at $1 04@1 12; No. 2 Milwaukee spring, reported at $1 15@; new No. 2 spring, to arrive, at $1 05@1 06½; New York No. 2 spring, September option, at $1 06@1 06½; do., deliverable September 1 to 20, at $1 07; do. October option, at $1 06; No. 2 Northwest spring, September option, at $1 08. Rye at 62 for western, and 60@62 for State corn, at for ungraded mixed at 45@50c.; steamer mixed at 48½@49c.; New York No. 2 at 49½@50c.; No. 1 white at 56c.; New York No. 2 August option, at 49½c.; do., September option, 50c.; do., October option, at 52c.; steamer mixed, August option, at 49c.; do., September option, at 49½c; do., October option, at 51½c. Oats are for New York No. 1 at 33c.; New York No. 2 at 30½@31c.; New York No. 3 at 26c.; New York rejected at 25c.; No. 1 white at 38½c.; No. 2 white at 30@30½c.; No. 3 white at 27@27½c.; white western at 28@33c.; mixed western at 24½@33c.; white State at 30@30½c.; mixed State at 29@33c.; New York extra at 33½@34c.; No. 2 Chicago quoted at 32½@33c.

HAY AND STRAW.—Supplies of new crop continue liberal, and prices are easy on other than prime stock. Sales at 45@50c. for shipping and 60@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports of hay past week, 87 bales; since June 1st, 42,100 bales; same time, 1877, 32,825 bales.

HOPS—Has been very slow, pending the new crop. Emmet Wells says in his weekly circular:

"The season now closing has been anything but a satisfactory one in point of profit, particularly to the producer; few, if any, have realized prices for their hops sufficiently remunerative to pay the first cost of production. The low prices which have ruled are, however, only the result of an over production, and while the laws of trade continue to be governed by supply and demand, hops will be no exception to the rule. Our crop reports at the present writing continue favorable for a yield of one-half to two-thirds of last year's yield. The reports from England are for a full average yield, and of a good quality. From Germany the crop will be larger than was estimated earlier in the season. Although not growing quite as many as last year, they will have a surplus to spare for export."

Exports from this port for the year ending September 1, 1869, and the following eight years:

	Bales.		Bales.
1869	69,463	1874	1,638
1870	56,453	1875	15,995
1871	24,577	1876	46,116
1872	6,095	1877	44,493
1873	9,315		

Quotations are for New Yorks, good to prime, 10@12c.; do., low to fair, 7@9c.; Eastern, 7@10c.; Wisconsin, 7@10c.; Yearlings, 2@8c.; Olds, all growths, 1@2c.; Pacific Coast hops, 10@12c.

LEATHER.—Sales at 19½@20c. for light hemlock; 19½@21½c. for middle do.; 20@21c. for heavy do., and 17½@19c. for good damaged.

POULTRY AND GAME.—Live poultry rules low; still prices for fowls are satisfactory for the season. Spring chickens are decidedly lower.

Chickens, N. J. 13c. lb.; State and Penn., 12@13c.; Southern and Western, 10@12c. Fowls—N. J. 11@12c; State and Penn., 11c. S. & W., 10@10½c. Roosters, 5@6c. Turkeys, choice, 12@13c.; other, 10@11c. Ducks range at 40@50c pair, the highest price for spring. Geese, extra, $1 50@2; other, $1@1 25.

Dressed Poultry has arrived freely, and most sales may be quoted at inside figures. Turkeys, dry picked 15@16c; good N. J., 14@16c.; fair 13c; Pa. chickens, dry picked, 16@17c.; N. J., 14@15; State and Western, 12@14c.; Phila. fowls, 13@14c.; N. J., 12@13c.; irregular parcels of State and Western range at 9@12c.

Grouse and partridges will be in market this coming week; expected to open at 75c. Woodcock, Western, 70@75c. State, 75@85c. A few stall fed pigeons have brought $1 50. Snipe do not seem to be in quotable quantities.

PROVISIONS have been tending lower, with a slack trade. Mess pork quoted $10 00; $10 35 as to brand for spot lots. $9 80@9 85 for September; $9 90@9 95 for October. Bacon at 6½c. for long clear Lard—western steam in tierce at $7 25 for spot lots; and $7 30@7 32½ September and October deliveries. Stearine at 8@8¼. for choice western. Tallow at 7 for prime. Beef hams at $20@21. Beef—extra mess, $11 25@11 50; plain mess, $10@11; packet, $11 25@12 for bbls.; extra India mess, and Philadelphia, $17 75@$18.

SEEDS.—New crop of flax seed is selling at $1 47½, and timothy to arrive at $1 40.

TOBACCO.—Export demand has been very good, and desirable lots have sold at steady prices.

VEGETABLES.—Exports of potatoes, past week 13,780 bbls; a heavy quantity for the season, and has tended to keep prices steady. Green stuff has a fair sale. E. R. potatoes including Eastern, $1.62@1.87 in bulk per bu.; common, $1.37@1.50, Peerless, $1.25@$1.50; State, double heads, have run to poor for the market. Sweet potatoes, Va., $1.75@1.87; schooner or steamer, Md., $2@2.25. Green corn, per 100, 50@75c. Cabbages, flat Dutch, $2 50@3 50; Lima beans, bag, 75c.@$1; string beans, 50c.@1; cucumbers, per M., $3@4; do., pickling $1@1.50; tomatoes, early vine, 15c.@3 peck crate; late, do., 25c. Onions, white, $1@1.50; red and yellow, $1@1.25. Marrow Squash, $1 50@1.75; Egg Plants, 100, $2@3.50; R. turnips, $1.75@2. Peppers, Bullnose, bbl., $1@1.50; Beets, N. J., $1@1.25; Carrots, $1@1.25; Pumpkins, 100, $7@8; Lettuce, bbl, 50@75c.

WOOL.—Manufacturers have been buying sparingly. Medium fleeces, combing and delaine stock have had most attention, and they rule steady in price; otherwise the market is rather easy.

LIVE STOCK MARKETS.

Saturday, Aug. 31, 1878.

BEEVES.—Receipts for the week, 10,869 head; do., last week, 9,101 do. The market has been overstocked, especially with low quality of cattle. The demand has run upon ship, prime steers, but buyers insisted upon a shade off. Natives quoted 8@10c.; the latter for weighty Kentucky, to dress 55@57c. lbs. Texas and Cherokee 7@8¾c., to dress 55c. lbs.

In discussing some of the features of the recent settlement of live stock freight differences by the Grand Trunk and the Vanderbilt railroads, the Portland (Me.) Advertiser, says:

"It is well known that for over a year it has been a pet project of Mr. Vanderbilt's to see a first-class line of freight steamers running between some port in this country and England. The transportation of live cattle is a business still undeveloped. It will be remembered that a plan was talked of some time ago to make Portland a great cattle station, whence shipments could be made to England. Arrangements have already been made with the Ogdensburg by Mr. Vanderbilt, and arrangements are to be made with the Grand Trunk to carry all the freigh of this class furnished. Then, with the great advantage of a non-freezing harbor at Portland, accommodating steamers all the year round, and with excellent wharf facilities, free from port and wharf charges. Mr. Vanderbilt can put on a line of four to six large freight steamers of not less than 4,500 tons each. These steamers would have first-class accommodations for at least sixty cabin passengers, and would be fitted expressly to carry live cattle, with room, of course, for other kinds of freight. They would be fed by the two railroads."

COWS AND CALVES.—Our last report covered all that can be said this week.

VEAL CALVES.—Market firm for prime live. Buttermilk and grassers 3@3½c.; old, 5@7 for useful to choice.

SHEEP AND LAMBS.—Receipts for the week, 26,685 head; do. last week, 20,078 do. Sheep have sold out well, the closing prices are 4@5c. Lambs range 5@6c.

SWINE.—Receipts for the week, 22,533 head; do. last week, 22,999. State quoted $4 40@4 50 per 100, corn fed; Ohio 4½@4¾c.; N. J. dressed pigs, in a small way, bring 6½@7c.

SPECIAL NOTICES.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

ADVERTISING RATES:

Inside, 14th and 15th pages (Agate space)	40c.	per line
" 13th page	50	"
Outside or last page	60	"
Fifty per ct. extra for unusual display.		
Special Notices, leaded, by count	70	"
Business "	80	"
Reading "	1.00	"

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

New Advertisements.

CLARK'S PATENT

ROOT CUTTER

The above CUT is represented as broken in the frame for the purpose of showing the cutting apparatus.

This cutter is built with a heavy Oak Frame, well bolted together, is staunch and strong, neatly finished, handsomely striped and ornamented. The cutting apparatus consists of **Twenty-Five Steel Knives,** (gouge-shaped) so arranged on a wrought iron shaft that they are perfectly secure; no chance of becoming loose or breaking. The roots are neatly cut in pieces suitable for feeding. No coarse, ungainly pieces are left by this cutter. A boy can easily cut 35 to 40 bushels per hour so easily does it do its work. ☞ Don't fail to examine it.

Retail Price, - - $12.00.

HIGGANUM MANUF'G CORP.,

SOLE MANUFACTURERS,

HIGGANUM, CONN.

REAL WHITE GOOD SHIRTS

FOR 50 CENTS EACH.

From the Workman to the Wearer

TWO well-made, linen shield-bosom, French yoke, unlaundered shirts, all ready to wash and wear, mailed postpaid on receipt of ONE DOLLAR. Give size of collar worn, and write your name, post office, county and state plainly. Address

NEWARK SHIRT CO.,

104 Montclair av., Newark, N. J.

☞ One sample shirt sent on receipt of 60 cents in postage stamps or currency.

Strawberry Plants.

In Pots, or out of Pots, for Summer or Fall Planting. Price List free.

JOHN S. COLLINS, Moorestown, New Jersey.

20 Chromo Cards, (perfect beauties) with name, 10c. Outfit, 10c. **Turner Card Co.,** Ashland, Mass.

ANY LADY or Gent that sends us their address will receive something of great value free, by mail. Only about 200 left. M. YOUNG, 73 Greenwich Street, New York.

SELF - MILKER.

Satisfaction guaranteed. Address, with stamp,

J. W. GUERNSEY, General Agent.

CHAMPION MILKER DEPOT, 78 COURTLANDT ST., NEW YORK.

Trees, Seeds, Plants, &c.

THE most practical work on Gardening yet published. Contains a list of upward of 2500 varieties of **Garden, Field and Flower Seeds,** with explicit directions for culture, and much other useful matter. Mailed, post-paid, upon receipt of **35** cents.

Bliss's Illustrated Potato Catalogue contains a list of 500 Varieties, with a description of those recently introduced, with many other desirable sorts, beautifully illustrated. Also useful information upon the cultivation and chemistry of this valuable esculent. **10 cents.**

Bliss's Illustrated Gardener's Almanac for 1878, and **Abridged Catalogue.**—136 pages, with Monthly Calendar of Operations, **3** cents.

Bliss's Illustrated Autumn Catalogue of Dutch Bulbous Roots, Small Fruits and Seeds for Fall Sowing. Full descriptions and treatment of Fall Bulbs, etc. **10** cents.

Strawberry Plants (Pot-grown) if planted now will bear freely next season.

Send for Small Fruit List *free.*

P. O. Box No. 5712. **B. K. BLISS & SONS, 34 Barclay St., New York.**

NEW AND RARE

PLANTS and FRUIT TREES,

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Japanese Persimmon Varieties.

New Pears; New Peaches; New Cherries, &c., with a large stock of all kinds of Fruit Trees, Shrubs, &c. DUTCH BULBS—Large Importations, direct from the leading growers in Holland. First quality bulbs. Hot-house and Gardeners plants, a rich collection well grown. Roses, new and beautiful.

All at reasonable prices. Catalogues mailed to applicants.

JOHN SAUL, Washington, D. C.

RICKETTS' NEW SEEDLING GRAPE THE LADY WASHINGTON; the Best Hardy White Grape ever offered to the Public. Also my new EXOTIC SEEDLING GRAPE, WELCOME; the Best Grape in existence. Send for new Circular and Price List of Vines and Wood, with Stamp.

JAMES H. RICKETTS, Newburgh, N. Y.

WINTER WHEAT MANURE.

Geo. E. White's Climax Superphosphate, prepared with potash and an extra percentage of Nitrogen; for fall use. For sale at 159 Water St., N. Y.

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Wanted by **Florists, Market Gardeners and Amateurs in Horticulture.**

Our Greenhouses (covering 3 acres in glass) and our grounds of 20 acres, exclusively devoted to the cultivation of **Flower, Fruit and Vegetable Plants,** enable us to test not only the germinating qualities of all **Flower and Vegetable Seeds,** but to experiment with so as to test the merits of all Novelties in Small Fruits, Flowers or Vegetables.

Our Descriptive Catalogue of **"Everything for the Garden"** mailed free on application.

Peter Henderson & Co.

Market Gardeners and Seedsmen.

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BEAUTIFUL EVER-BLOOMING

ROSES

We deliver **STRONG POT ROSES** for Winter Bloom and Fall Planting, *safely by mail,* at all post-offices. Five Splendid Varieties, *your choice,* all labeled, for **$1; 13** for **$2; 19** for **$3; 26** for **$4; 35** for **$5; 75** for **$10; 100** for **$13.** Send for our **New Guide to Rose Culture,** and *choose from over* **500 Finest Sorts.** Our **Great Specialty** is growing and distributing Roses.

THE DINGEE & CONARD CO., Rose-Growers, WEST GROVE, CHESTER CO., PA.

SHARPLESS STRAWBERRY.

Of this fine, new variety I have a large stock of strong, well rooted plants. See advertisement in this paper July 27th or Aug. 3d. Circulars and Price List of this and other varieties free. Address,

J. L. DILLON, Florist, BLOOMSBURG, PA.

SHARPLESS' STRAWBERRY. The Largest and Best. Raspberries, Blackberries, Fruit trees, Vines and Plants. Send for Catalogues. WM. PARRY, Cinnaminson, N. J.

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One of our firm makes studies for picturesque lawn planting, in conjunction with J. WEIDERMANN, author of "Beautifying Country Homes." Planting maps free to purchasers.

PARSONS & SONS CO. (Limited,)

Flushing Nurseries, Flushing, N. Y.

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MOUNT HOPE NURSERIES

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The Largest and most Complete Stock of Fruit and Ornamental Trees in the U. S. Priced Catalogues sent as follows: No. **1,** Fruits, with colored plate (new edition), **15** cts.; plain, **10** cts. No. **2,** Ornamental Trees, etc., with plate, **25** cts.; plain, **15** cts. No. **3,** Greenhouse; No. **4,** Wholesale, and No. **5,** Catalogue of Roses, **Free.** Address—

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We shall be prepared to offer plants of this valuable New Strawberry in September. It has fruited upon our grounds during the past three years, and we consider it *one of the largest and best Strawberries now in cultivation.* Circulars giving description and price of this, as well as of other New and Valuable Strawberries, mailed free on application. Address

ELLWANGER & BARRY, Rochester, N.Y

THE COMING RASPBERRY.

E. P. ROE'S New Seedling

Pride of the Hudson

Awarded the "First Prize" by the Boston Horticultural Society.

"GOLD MEDAL"

Strawberry Plants,

Over 40 Varieties.

100,000 Forest Rose, also Crescent Seedling, Duchesse, Great American, Sharpless, &c., in large quantities. All the leading small fruits, true to name. Send for descriptive catalogue. Address,

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PEAR, PEACH and other trees. A large stock. New Price List free.

NEW BRUNSWICK (Nurseries), N. J.

EDWIN ALLEN.

A MILLION OF

STRAWBERRY PLANTS.

CRESCENT SEEDLING, SHARPLESS, Forest Rose, Miner's Great Prolific, Pres. Lincoln, Great American, Cinderella, and a host of other **NEW VARIETIES** and all the old ones in large supply, both POTGROWN and LAYERS, at Lowest Prices. *An 8 page pamphlet, giving cultural notes, varieties, with descriptions and prices, etc., FREE TO ALL.* **A. HANCE & SON,** Red Bank, N. J.

200,000 TWO-YEAR-OLD DWARF PEAR TREES.

Budded on best French Quince Stocks, and of prime quality. The largest and best stock in the United States. Assortment large and complete. Best market sorts. Prices low by hundred or thousand. "Dwarf Pears; their Culture and Management," mailed free to applicants. Address

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DUTCH BULBOUS ROOTS.

Priced Catalogues on Application for our Importations of

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HYACINTHS, TULIPS, LILIES, &c., &c.,

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GRAPE VINES.

Also **Trees, Small Fruits, etc. Wholesale rates very low to Nurserymen, Dealers and large Planters.** Send stamp for Descriptive List. Price List **Free. T. S. HUBBARD, Fredonia, N.Y.**

SEED WHEAT.

CLAWSON. *Graded* by the Osborn Grain Separator. Each berry the duplicate of the other. Price, $1.50 per bushel; stark bags 25 cents. Send Post Money Order.

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HAMBLETONIAN AND CLYDESDALE

STALLIONS and MARES;

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USE THE PERFECT BUTTER COLOR!

WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop'rs, Burlington, Vt.

Reading for the Young.

THE BABY FOR ME.

I HAVE heard about babies angelic,
With a heavenly look in their eyes,
And hair like the sunbeams of morning
When first they appear in the skies,
And smiles like the smiles of a cherub,
And mouth like the buds of a rose,
And themselves like the lilies and daisies
And every sweet flower that grows.

My baby's the jolliest baby
That any one ever did see;
There's nothing angelic about him
But he's just the right baby for me!
His smile's not at all like a cherub's
But rather a comical grin;
And his hair—well, it favors the sunbeams,
When sunbeams are wondrously thin.

His eyes, though they're blue like the heaven,
Are remarkably earthly with fun;
And his mouth's rather large for a rosebud,
Unless 'twere a half opened one.
His hands, don't resemble a fairy's.
In the least. They're a strong little pair,
As you'd think, I am sure, if he'd got you,
As oft he gets me—by the hair!

And he isn't a bit like a lily;
Or any sweet blossom that grows,
For no flower on earth, I am certain,
Has a dear little cunning pug nose.
He's himself—full of mischief, the darling,
And as naughty as naughty can be;
And I'm glad that he isn't angelic,
For he's just the right baby for me.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 16.

HECTOR BERTRAM.

IT is really essential that the young people, boys and girls, should have a little money they may call their own, to use in any manner that suits them best. And the apparent value of the amount is, to them, greatly increased by the knowledge that it is their own earnings, the result of the labor of their own little hands. The children of farmers possess much better facilities for obtaining a generous supply of pocket-money than are enjoyed by their city cousins. The different varieties of small fruits and vegetables from which large returns may be realized are really astonishing.

Some one suggests the use of tools for the boys; and to the boys I wish to talk a little, leaving the bright-eyed little lassies to the wise counsels and healthful advice of Mrs. Jack and others. Now, boys, if we contemplate constructing numbers of useful and ornamental trinkets for our mothers, sisters, and neighbors, how much nicer it would be to be possessed of a chest of tools of our own, and not be obliged to use father's heavier ones. By a little judicious saving, these can be easily obtained; and when obtained, let us get some one capable of instructing us in their care. Fine work is done much easier and quicker by the use of bright, sharp tools, than of dull and rusty ones; and the lesson of care learned now will not be forgotten when we are older, and have a larger assortment. But here we are, running ahead of our subject, giving advice about the care of something we do not possess. How shall we obtain them? Here is one way:

Every farmer's boy has, or *should* have, a plot of ground on which to raise such vegetables as his fancy may select. If you do not have such a piece, ask your father for a small section of fertile land, and lay your plans according to its size, taking care not to neglect work he has assigned you. You will have plenty of time for your own, after his tasks are finished. And here a word in regard to neatness. What we do, let us do well; in a manner which will reflect credit upon ourselves. Let us cultivate just what we can do thoroughly, no more. Always remember that one acre well worked is preferable to three hurried over. There is a vast amount of truth in the saying, "The boy is father of the man," and in this case as well as any, what the boy's garden is, the man's farm will be.

Next Fall—it is too late now to secure a crop this season—after your ground is selected, draw out and scatter over it all the barn-yard manure that your father or elder brother can turn under with the plow. The first of next May, or earlier if the weather will admit, give it another heavy dressing of manure, as fine as possible—the scoopings of the yard are best—and cross-plow lightly. After harrowing thoroughly, work both ways with the corn-marker, having the center tooth removed. This will give you rows seven feet apart, provided the marker is made to mark corn three and a half feet, as it should be. At the angles of the rows, drop a hoe-ful of fine manure—from the piggery, if possible—and cover two or three inches deep with earth. Then plant—what do you suppose, boys?—Hubbard Squash! Drop six or seven seeds in a hill, for they may not all sprout, and cover two inches deep. After they are up nicely, run through them with the cultivator to keep the weeds down, and thin to three plants in a hill. A good coating of plaster, and a sprinkling occasionaly of water, in which saltpeter has been dissolved, will assist in keeping off the bugs—for of all vines, bugs love Hubbard squashes the best. Keep the ground mellow, and perfectly free from weeds. Do not hill them too much. After the young squashes are set, pinch off the ends of the vines, and remove all inferior specimens. Boys, if you never raised squashes, you will be surprised at the result. When they are ready for market, pay a visit to your nearest village, and contract all you can, carrying a book along, and taking down the names of your customers, and the number each desires.

They sell rapidly here—Southern New York—at from ten to forty cents a piece, according to size and quality. Now for the profits. On an acre planting this distance, we would get about eight hundred and fifty hills. At a low estimate, we should raise three marketable squashes to the hill, or two thousand, five hundred and fifty in all. Calculated at ten cents a piece, the lowest price, we have as a result of our labor, two hundred and fifty-five dollars. I do not expect many of the boys to plant that amount of ground, but it shows the average profit. Now, boys, who will raise the largest crop of squashes another summer? Make a careful note of time of planting, amount of labor employed, and the net profit with amount of ground, and send it to the RURAL.

THE TAILOR-BIRD.

THE engraving of the Tailor-bird and its Nest pictures a peculiar style of architecture that excites admiration for the ingenuity of the little bird that can make its own thread, and selecting a pair of broad leaves, sew them together, thus manufacturing a safe, pleasant, "leafy bower."

The nidification of birds is not the least interesting subject for observation, and our young cousins might spend many a pleasant, profitable hour in studying the characteristics of the bird architecture in their neighborhood. I will venture to say that in predatory excursions whose object is the depletion of these same nests, it never occurs to the merry young robbers to pause a moment to observe the structure, beauty and adaptability of means to an end that are displayed in the building of the nests. In future let me ask you to do so. It would be pleasant to see this subject made a theme for your letters.

Many birds, like many people, take no very great pride in having a fine house. In fact, some think it quite as convenient to have no house at all. The Cuckoos of the Old World and the Cowbirds of the New merely keep a sharp look-out for some agreeable nest belonging to another bird, and when the family is not at home, quietly enter, take possession, and leave their card in the shape of an egg. The foolish owners remain oblivious to the visit until the foster-child is hatched, when he successfully counterfeits the real heirs, and causes his foster-brothers and sisters to fall victims to his canabalistic appetite. The Auk tribe have no particular fancy for building nests, either, but, on the other hand, they work no evil to their species. The female places its single egg on a bare ledge of rock, where it is in great danger of being rolled into the sea by the wind, on account of its peculiar conical shape. The Stone-Curlew, also, deposits its egg without the least preparation of the soil on which it rests; yet it is not done haphazard, as no birds are more constant in selecting, almost to an inch, the same spot year after year. In marked contrast to these Bohemian habits is the care bestowed upon its nest by our Tailor-bird, the Bottle-titmouse, or the Fantail-Warbler.

The Ostriches, females, are great women's-rights birds. They think it well for Darby to play Joan occasionally, hence, after scraping a hole in the sand, and depositing the eggs, they stroll over the sands of the desert, and leave the male to attend to the cares of incubation. But he thinks it incumbent on him to remain on duty only during the night, leaving the heat of the sun to complete his task during the day. The Megapodes, however, improve on the little device of the male ostrich. They raise a hot-bed of dead leaves, wherein they deposit their eggs, and the young are hatched without further care on the part of either parent. Agents for patent incubators could never make their salt in such an intelligent bird community, and an artificial mother, by a strange antithisis, is quite the most natural in select megapodesian society!

Very many birds bore holes in some sandy cliff, and at the end of their tunnel deposit their eggs, with or without bedding. Such bedding, too, is various in character; thus, while the Shadduck and the Sand-Martin supply the softest materials, the one of down from her own body, the other of feathers collected by diligent search, the Kingfisher uses undigested spiny fish-bones, which she ejects in pellets from her own stomach.

The edible bird's-nest confection, of which the Chinese are very fond, is made by the Swifts, from a secretion of the salivary glands,—a fluid which rapidly hardens, as it dries on exposure to the air, into a substance resembling isinglass.

Certain Warblers, for unknown reasons, invariably supply a piece of snake's slough as an indespensible adjunct to the household furniture. It has been suggested that this is done to repel lizards on marauding thoughts intent, who, seeing the slough, may have reason to suppose it is in reality their deadly enemy, and consequently beat a hasty retreat.

The most comical bird is the Flamingo. She erects, in marshes, a mound of earth some two feet in hight, with a cavity a-top, on which, having oviposited, she calmly sits with legs dangling, and in that remarkable backwoods-tavern attitude, is said to perform the duty of incubation. She only needs a pipe and the morning paper to make the picture harmonious and complete. I might consume space indefinitely telling you of the funny, and interesting habits of birds, but for the present I shall maintain the reserve of a

REFORMED NEST-ROBBER.

WHAT IS TO BE DONE?

FEW people, old or young, have any knowledge of what to do in emergencies, especially in cases of accidents. Such knowledge, however, is of the first importance, and not seldom instrumental in saving life. Now, I shall propose a series of questions, and wish my nieces and nephews to tell me what would be the best thing to do before the arrival of the doctor:

1. Child of two years old has an attack of croup at night. Doctor at a distance. What is to be done?

2. Hired girl sprains her ankle violently.

3. Bees swarm; and the man who hives them gets severely stung in the face.

4. Some one's nose bleeds, and cannot best opped.

5. Child eats a piece of bread on which arsenic has been placed for killing rats.

6. Young lady sits in a draught, and comes home with bad sore throat.

7. Nurse suffers from a whitlow on her finger.

8. Child falls backwards against a tub of boiling water and is much scalded.

9. Mower cuts driver's leg as he is thrown from seat.

10. Child has bad ear-ache.

11. Youth goes out to skate; falls through the ice; brought home insensible.

12. Child gets sand in his eye. UNCLE TRUE.

The Puzzler.

MISCELLANEOUS ENIGMA.

I AM composed of 91 letters:
My 40, 12, 38, 7, 6, 74, 14, 28, 16, 22, 36, 9 of a mixed-up nature.
My 13, 49, 18, 44, 2, 55, 27, 28, 10, 58, 73, 31, 3 vindication.
My 88, 29, 50, 33, 34, 42, 17, 84, 82, 9, 86, 64, 39 commander-in-chief.
My 2, 81, 62, 41, 11, 25, 26, 46, 68, 56, 87, 2, 63, 60 explanation.
My 52, 37, 59, 19, 79, 57, 90, 38, 76 finished with care.
My 44, 21, 30, 45, 48, 73, 4, 65, 43 relating to typhoid.
My 83, 6, 89, 21, 54, 20, 24, 85, 48, 3 a body with many sides.
My 8, 11, 63, 88, 69, 70, 53, 10 a town of Ireland.
My 15, 22, 6, 61, 26, 75, 79, 28, 66 an animal.
My 5, 27, 28, 1, 55, 51 means sinful.
My 32, 67, 77, 78, 73, 60, 74 a nuptial festival.
My 47, 72, 12, 91 a garden nuisance.
My whole is a proverb of Scott Downey.
☞ Answer in two weeks. LITTLE ONE.

GEOGRAPHICAL ENIGMA.

I AM composed of 20 letters:
My 10, 17, 1, 7, is a river of Asia.
My 17, 15, 4, 9, 12 is a city of Ohio.
My 2, 12, 4, 15, 18, 9 is a lake of N. A.
My 11, 4, 18, 16, 18, 7, 12 is a peninsula of Europe.
My 9, 3, 18, 12, 2, 6, 9 is a river of S. A.
My 4, 2, 14, 9, 12, 4, 2 is a city of Canada.
My 7, 3, 4, 18, 6 is an ocean.
My 12, 2, 14, 4, 20 is a sea on the coast of Europe.
My 15, 4, 2 13, 16, 18, 7 is a town of Ohio.
My 4, 13, 4, 2, 15 is a mountain of Europe.
My 13, 8, 18, 6, 15 is a bay of S. A.
My 5, 20, 18, 10 18, is a country of S. A.
My 6, 13, 3, 8, 2, 16, 10 is a county of Illinois.
My 12, 18, 10, 17 is a river of Africa.
My whole is a State and its capitol.
☞ Answer in two weeks. ROSA A. FROST.

HOUR-GLASS PUZZLE.

Sadly; One who carries on secret designs; A great actor; A tradesman; A color; A consonant; The first rudiments of spelling; Part of a knife; Wedded; Inaccurate; Not subject to control.
Centrals form a town of Pennsylvania.
☞ Answer in two weeks. L. O.

DROP-LETTER PUZZLE.

Wh - r - - r - n - w th - h - p - s l'v - ch - r - sh - d. Fill the blanks with vowels, and find a song from the Opera of Norma.
☞ Answer in two weeks. L. O.

PUZZLER ANSWERS.—August 31.

ANSWER TO HISTORICAL ENIGMA—
"Lives of great men all remind us,
We can make our lives sublime;
And, departing, leave behind us
Foot-prints on the sands of time."

ANSWER TO CENTRAL—
Preci P itate
Procr E ative
Perse C ution
Persu A sible
Perso N ality

ANSWER TO DOUBLE ACROSTIC—
T H E M
U N D O
R O T U N D O
K I D N A P P E R

Sabbath Reading.

FAITH.

RICHARD MC'CARTNEY.

FAITH in Jehovah's Lord.
In Christ—The Perfect Man!
Faith that his holy word
Reveals redemption's plan.
Faith in his body broken,
Faith in his life's blood shed,
Remember'd in the token
Of wine and broken bread.
Faith in The Searching Grace,
Who shows to me my sin,
Who re-creates a place
Where Christ may dwell within.
Faith in Abiding Love
Who will not let me stray;
Faith in a home above,
In bright eternal day.
Faith in a searching hour
That will all thoughts reveal;
Faith in a Judging Power
Whose word is woe or weal.
Faith in Creative Power
Unbounded by behest.
Eternal working hour
The true eternal rest!
Faith that tho' worms devour
My flesh—yet I shall stand,
By the Redeemer's power,
In flesh at his right hand.
Faith in The Coming King,
Who all the earth shall own—
While all earth's nations bring
Their tribute to his throne!
Faith that all power shall own
The Christ—and 'fore him fall,
Then he'll give up the throne
And God be all in all!

[*Chicago Standard.*

NEWNESS OF LIFE.

"We also should walk in newness of life."—Rom. vi.

THE newness here spoken of is a newness of notions, dispositions, desires, and conversation, which, when heavenly or godly, are deservedly styled new; because corrective of, and contrary to, those impure and worldly ones, to which we, as sinners, are all liable.

Let us see, then, how we *may walk in newness of life*. In St. Paul's Epistle to Titus, the second chapter and twelfth verse, we have given the three great duties which the Gospel requires of us, viz.: Sobriety, Righteousness, and Godliness. In this verse we are taught that the summary of Gospel doctrines is to oblige us Christians to renounce and forsake all impious practices, and to perform all sorts of duties reducible to three heads, viz.: towards ourselves, towards our brethren, and towards our God.

We should, therefore, if we wish to walk in newness of life, be—and Christianity would have all men so—1. Sober; 2. Righteous; and, 3. Godly, or Pious.

Let us consider each of these great duties in the order I have given them.

1. SOBRIETY is, as I have just said, a duty we all owe to ourselves. It consists in the regulation of our appetites, passions and desires. To be sober is to keep our bodies properly under self-control; to be temperate and pure in thought, word and deed. St. Paul says he that is impure sinneth against his own body, which is a temple of the Holy Ghost; and if any man destroy the temple of God, him shall God destroy.

2. RIGHTEOUSNESS comprehends in its two principal branches—Justice and Charity—truthfulness, sincerity, patience, forgiveness, gratitude and liberality. Both present and future rewards are promised by our Lord to those "which do hunger and thirst after righteousness," and, in the same Sermon on the Mount, He pronounced an awful sentence upon those who merely put on the outward garb of religion.

3. GODLINESS shows itself in love and faith, gratitude, pious fear and humility. It is, in one word, being like to God. The godly are assured by our Saviour that piety and virtue have a tendency to promote our temporal welfare and the Scriptures record many promises of eternal life. We have a beautiful example of godliness in the pious Enoch, who, we read, "walked with God;" that is, he was sincerely religious, and eminent for his attainments in holiness. It was the advice of a heathen, as the strongest inducement to virtue, always to imagine some good man present. But to be constantly mindful that God's eye is upon us, must surely make a deeper impression on our hearts, disperse all bad thoughts, and overcome all evil imaginations. We are defective here; and, in consequence, temptations easily overcome us.

Having now considered the ways and means to be able to walk in newness of life, both in this world, and the one hereafter, I will now try to apply the text. Let every reader ask himself the question: Am I studying to please God? Ah! dare I to affirm it; if inclination alone directs, are you not walking after the flesh? Some are forward to plead in their own excuse, "We would do otherwise but company seduces." What is this, but an acknowledgment that they walk according to the course of this world? We must then throw off all worldliness, that we may not walk in the oldness of life. In conclusion, let me beg of you to think of the gracious promises bestowed by God on all those who walk in newness of life. Good-will follow.

W. S. (Aged 17).

HAPPINESS lies not in those things that a man may enjoy, and yet be miserable for ever. True happiness is too big and too glorious a thing to be found in any thing below that God who is a Christian's chief good.

CHRIST has lost none of his affection to poor sinners by going to heaven.

PERSONAL ITEMS.

Hendricks is fifty-eight; Thurman is sixty-six.

Postmaster-General Key is the father of thirteen little Keys.

Miss Braddon acknowledges the authorship of thirty-three novels.

Queen Victoria is very fond of fine old port, and is said to take a pint of it daily—medicinally, of course.

Isaac Brown, an octogenarian of Jefferson county, Ala., has plowed the same field for sixty-two successive years.

Lord Beaconsfield is renewing his youth and becoming quite gay again. He is a regular attendant at the theatres and evening entertainments in London.

Johnny Steel (Coal Oil Johnny), who more than a dozen years ago insanely squandered the millions got for his adopted parents' oil lands, is now clerking in a grocery store in Dennison, Iowa. He is now but thirty years old.

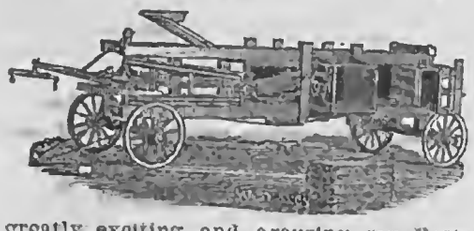
William Gilmore, of Poland, Pa., eighty-five years old, paid $10,000 cash and deeded a homestead worth $25,000 to secure Miss Lendale, his bride of twenty-four summers. Does wisdom go with gray hairs or a bald pat ?

Cardinal Nina, the new Pontifical Secretary of State, is sixty-six years old. From his earliest years he showed decided ability. He is tall in figure, of handsome presence and of somewhat florid complexion. In manner he is courteous and unaffected, mild in disposition, and frank in speech.

Victor Hugo has been working too hard, and has been obliged to retire for rest to his home in Guernsey. He has an unreasonable habit of working upon four or five subjects at once, rarely knowing which he shall finish first. In the morning he begins with whatever subject first takes his fancy, and after devoting himself for a few hours to verses, turns to his novel after luncheon, and finishes the day by writing on some theme utterly unlike that which he took up in the morning. He has now in preparation six prose works and four poems.

Implements and Machinery.

THE ECONOMY



Is greatly exciting and arousing my Eastern Friend, and so much so as to make a great speech, lately published in some Agricultural Papers, saying that nobody should buy the Economy *(rather an old tune)*, claiming it is infringing on his Press, is damaging the reputation of his (Perpetual) and the entire hay interest of the country, &c., &c., and by the way I see, is appealing to the public for a consideration, claiming to be entitled to it from the public—*rather a question to decide.* Right here I will ask you: is my friend entitled to such a claim because he is trying to force a Press upon you, for which he wants you to pay him from $500 to $900, and after you have it, requires the strength of a neighborhood to run it? No, not as long as you can get a Press doing just as good work with two men, one boy and one horse, for $285.00. The Economy is originated and patented by me in all of its parts and principles, of which I have copies on hand and will send them to anybody applying for them. Patented Sept. 25, 1877, No. 195,592 and Jan. 22, 1878, No. 199,360. Its power is far ahead of anything of the kind in existence. The bales are pressed into the baling chamber against the solid end of the Press and between the two doors, which are both opened for the purpose of tying and to discharge the bales, which can be done at either side—*No Perpetual part about it.*

My friend Dederick is telling you something which he don't believe himself. He has been trying to scare everybody for over a year not to use nor to buy the Economy. I have written to him February last, should he not stop such interference that I would come out and have him rectified through the papers, and in reply to the letter of Feb. 27, 1878, he says:

"MR. GEO. ERTEL, QUINCY, ILL.—Sir: Yours is at hand. I understand you have built some of the Perpetual or Continuous Presses, but I notice you have made some changes. Shall be West soon and will see you; also, any statement you will make through the Press will only call for a reply. I advise that you first see me and learn what kind of a man I am. Yours,

P. K. DEDERICK."

I have not, since the above was written, heard direct from my friend Dederick, neither have I seen him, but he still sends out his slanderous threats, and warning everybody handling or using the Economy that he would sue them. He still goes further than that, and has written last June to one of my western patrons, Mr. H. B. Clawson, of Salt Lake City, (who is getting the Economy by car load lots), that he (Dederick) would make him (Clawson) trouble for selling the Economy Press, and states in same letter to Clawson, that he (Dederick) has made a compromise with several parties at $350.00 for every Economy Press sold by them. Now, this I say, is utterly false and unfounded. Did not think that a man of any fairness could stoop as low as that. Will my friend Dederick please give the names of the several parties with whom he claims to have made a compromise for selling the Economy? Mr. P. K. D. surely knows that he has to come to me, and that I am the proper person to whom to make such claims that he may have or bring, if any, against the so-called Ertel Economy Hay Press; I think my friend Dederick may be well informed by the several eaves-droppers, being vouchers of the fact that I am perfectly responsible to defend the Economy, which will and shall be done by me, and I will earnestly request all parties who now or in the future may use or handle the *Economy Hay Press*, that no one of such shall be troubled nor molested, and that I will be strictly responsible for all claims and damages, should any of such caused to be made by any one against the *Economy Hay Press*, which is still alive, and is expected to meet with the Perpetual at several prominent Fairs, and, of course, the choicest Press will sell the best.

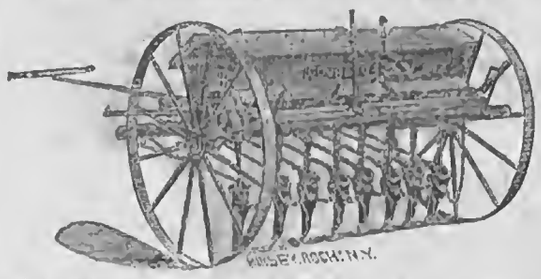
Respectfully, GEO. ERTEL.

☞ Send for Circulars.

Quincy, Ill., August, 1878.

Implements and Machinery.

FACTS FOR FARMERS.



1st.—The Centennial Commission MADE BUT FIVE AWARDS to Grain Drills and Fertilizer Attachments.

2d.—Of those five, TWO were given Bickford & Huffman. One on the FARMER'S FAVORITE and one on Fertilizer Attachment.

3d.—NO OTHER MANUFACTURERS RECEIVED AN AWARD ON A FERTILIZER ATTACHMENT!

4th.—The award to the "Champion," built by Johnson, Gere and Truman, was "for a machine with attachable manure distributer;" an implement they did *not* exhibit and *do not offer for sale*, as their "manure distributer" is neither "attachable" nor detachable. The report does *not* commend this drill or its "manure distributer," for a single quality of work.

5th.—The award to the Farmer's Friend pronounces it defective by saying *it is capable of further improvement, as regards delivery up and down hill*; and also to the McSherry drill in these words: "*Some further adjustment appears desirable to enable this drill to deliver with equal equality up and down hill.*"

6th.—The Empire, Buckeye Hoosier, Superior and Hagerstown drills were *refused* EITHER AWARD OR REPORT, because of great "irregularities" or "variations" in the tests.

7th.—The variation of our nearest competitior. The Champion, *from its own distribution*, was MORE THAN 237 PER CENT. of that shown by the FARMER'S FAVORITE.

8th.—The award to the FARMER'S FAVORITE, distinguished it by commending it for "ACCURACY OF DELIVERY, AND REGULARITY OF DISCHARGE UNDER DIFFERENT CONDITIONS," and "REGULARITY OF DELIVERY UNDER ALL CONDITIONS." Qualities conspicuously lacking in its competitors.

We challenge contradiction of a single feature of the above statements.

Fully 30 per cent. of all the Fertilizer drills in use on the American Continent are built under our patents,—a fact that largely and undisputably establishes superiority. For circulars, prices of information see our agents, or address **Buckford & Huffman, Macedon, N. Y.**

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Railway, Chain and Lever Horse Powers, Threshers and Cleaners, Threshers and Shakers, Clover Hullers, Feed Cutters, Wheel Horse Rakes, Horse Pitchforks, Shingle Machines, Straw Preserving Rye Threshers, Portable Steam-Engines, Cider and Wine Mills and Presses, Dog and Pony Powers, Etc., Etc.

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Send stamp for Circular and report of Centennial trial.

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THE OLD FAVORITE. No gun in the world has a better record for close, hard shooting, and none will stand more hard service. AN AMERICAN GUN FOR AMERICAN SPORTSMEN. Send stamp for circular to **PARKER BROS., Meriden, Conn., 97 Chambers Street, New York.**

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BUY THE

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No good Farmer can afford to market dirty grain.

A medium quality well cleaned brings a better price than the nicest grade in dirty condition.

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Nichols' Patent Double and Single Header Wind Mills, and Challenge Feed Mills, Horse Powers, Wood Saws, Pumps, Etc. For Circulars, address CHALLENGE MILL CO., Batavia, Kane Co., Ill.

Pat. Oct. 31, '76 & Apr. 3, '77

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Every Farmer should Have One. Simplest, most durable and perfect Sickle Grinder in the World. A boy can run it. Can be changed from an Oscillating to a stationary Stone in a moment. Is the best Grindstone in use for all purposes. For Sale by all dealers. Good Agents and canvassers wanted. POWELL, STEVENS & DOUGLAS, Waukegan, Illinois.

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the only Plowing Machine that has proved a perfect success in all kinds of soil. Any kind of plow can be attached. The plowman rides and handles the plow with ease, regulating the depth and width of furrow. The draft for the team is materially less, and the ordinary laborious mode of plowing is reduced to one of comfort and ease.

THE MEADOW KING MOWER,

and other Agricultural Implements.

GREGG & CO.,

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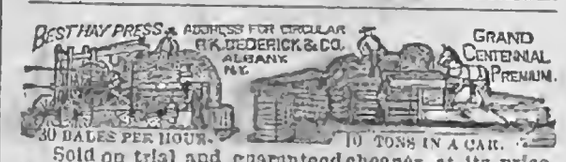

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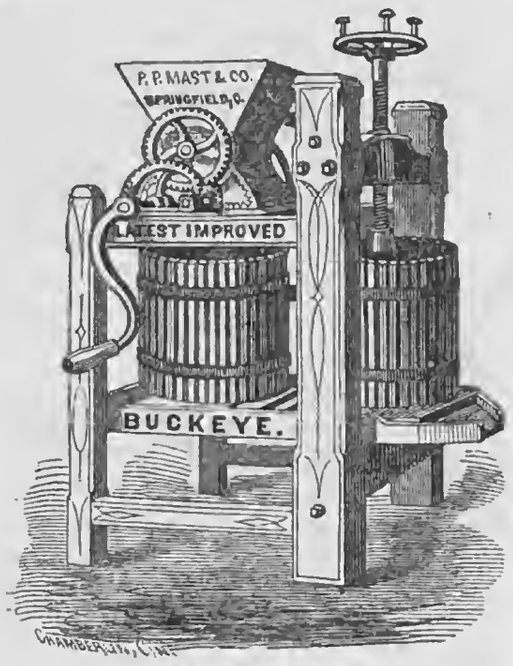

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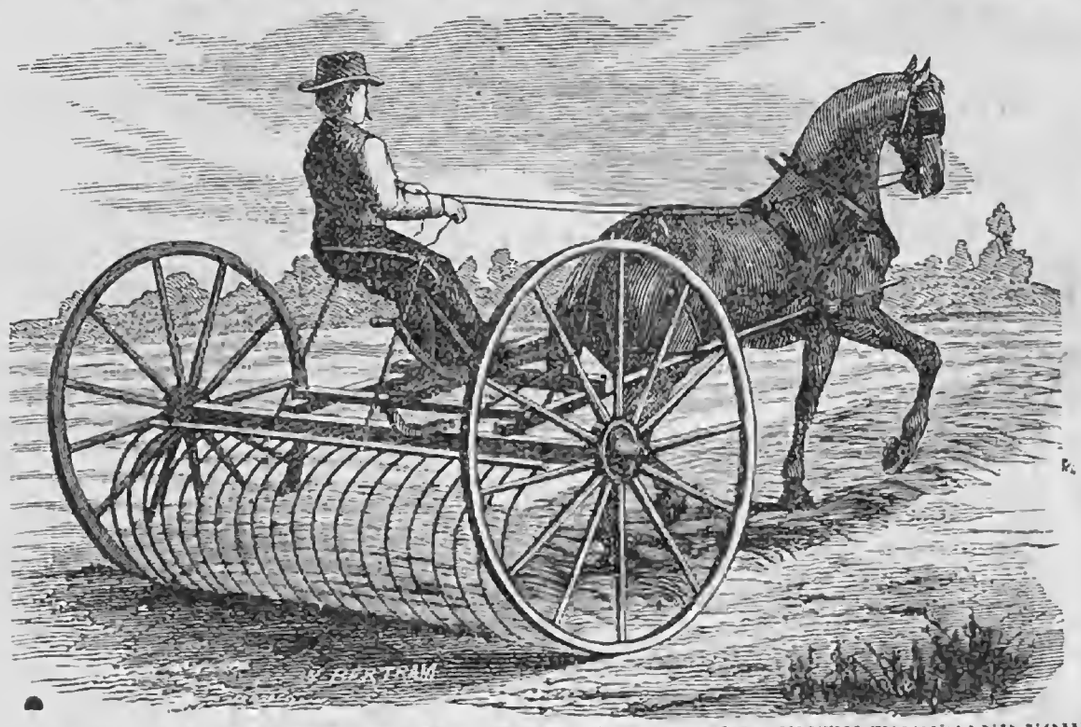

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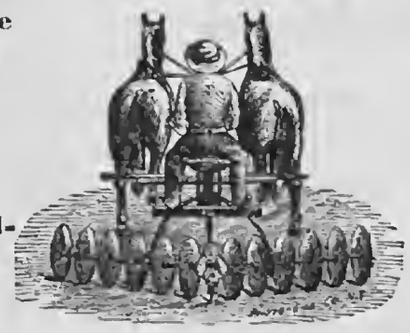

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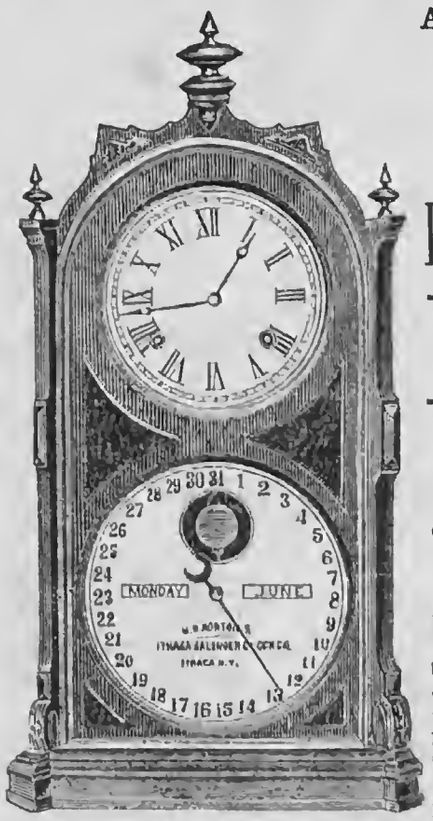

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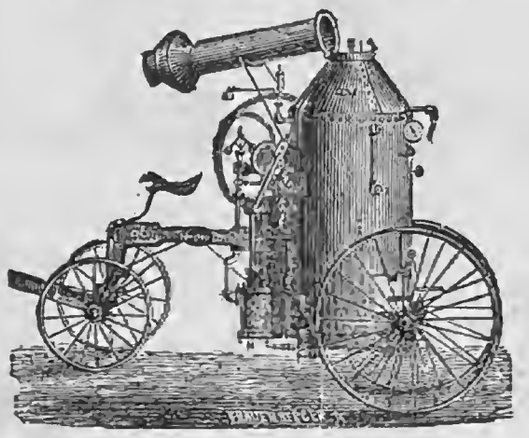

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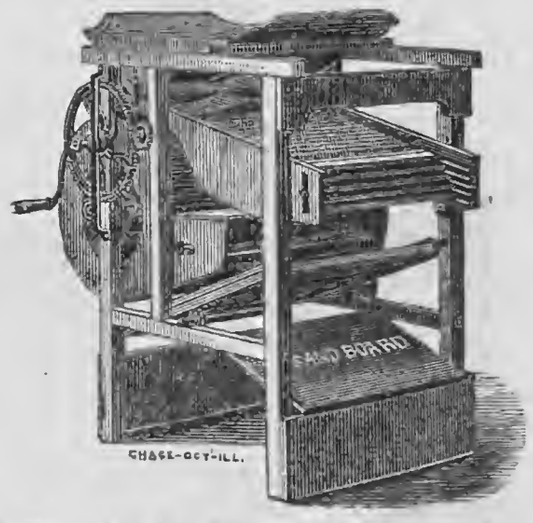

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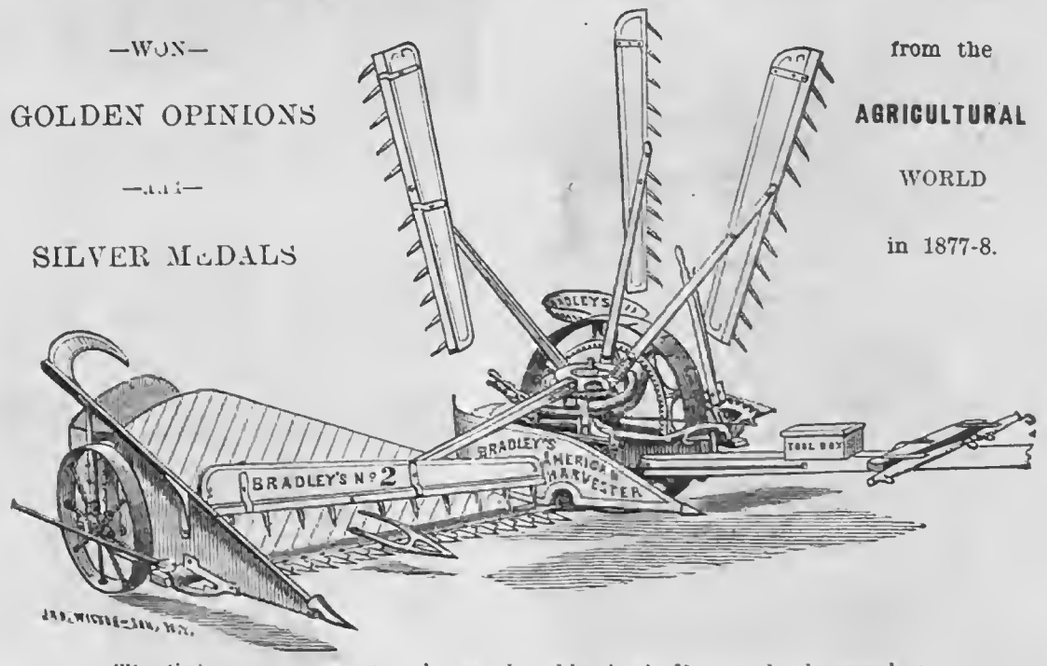

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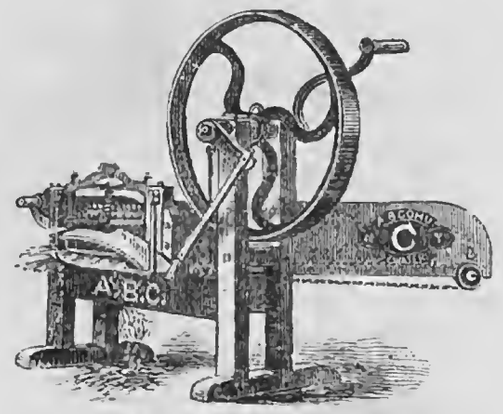

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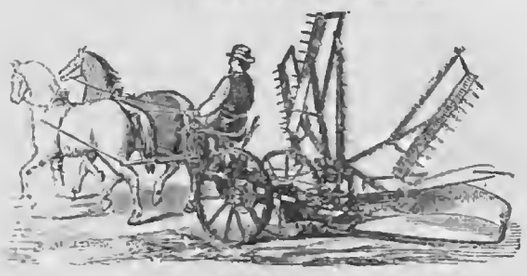
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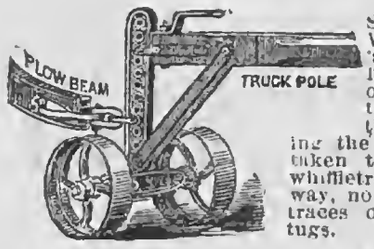

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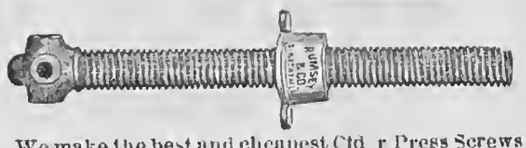

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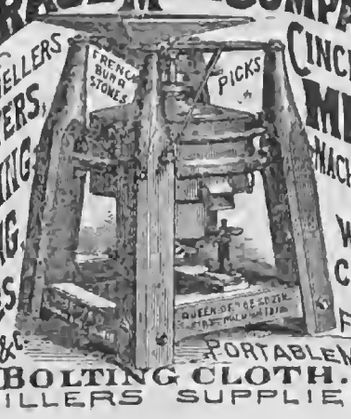

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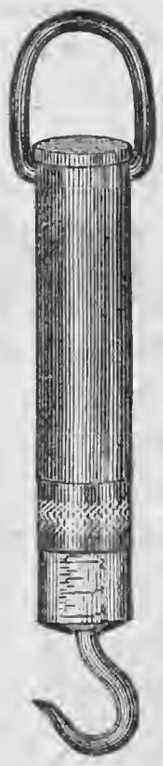

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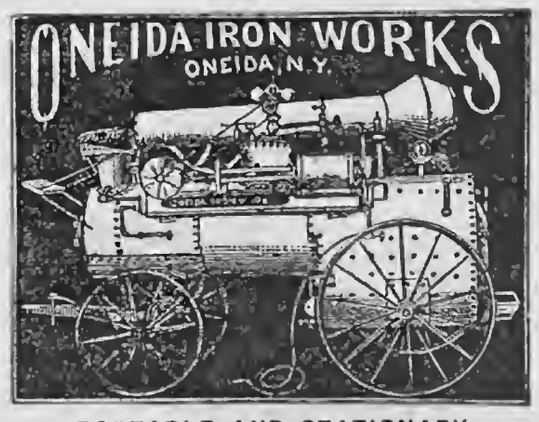

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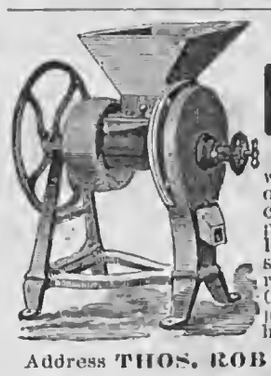

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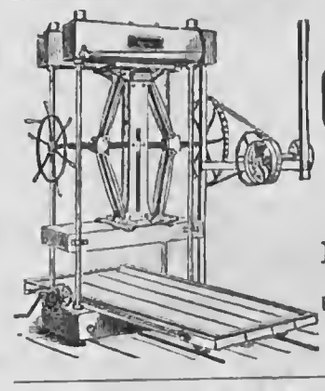

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 37.
WHOLE No. 1494.

NEW YORK CITY, SEPT. 14, 1878.

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SPRING WHEATS. TWO-THIRDS NATURAL SIZE. (See Page 582.)

Field Crops.

WHEAT.

DEFIANCE AND CHAMPLAIN.

FIRST REPORTS.

Comparative Tests of Spring Wheats Upon Small Areas.

EXPLANATION OF FIRST PAGE ENGRAVING.

THE several parts reduced to two-thirds natural size. Plot No. I. Spring Mediterranean, No. II. Spring Russian, No. III. China, No. IV. Defiance, No. V. Champlain, No. VI. Clawson. (Winter.)

NOTES FROM THE RURAL FARM.

Spring Wheats.

We have reason to feel much disappointed at the results of our spring wheat experiments. Five plots thirty-three feet square, were sown to different varieties April 19, and all were cut August 17. The varieties were:

Plot No. 1.....Mediterranean.
" " 2.....Russian.
" " 3.....China.
" " 4.....Defiance.
" " 5.....Champlain.

For two years previously, turnips were grown upon this land, manured with bone flour drilled in. Three years ago rye was sown with a light sprinkling of bone. Previous to this for ten years at least, the land had not been cultivated. For the spring wheat, Mapes' Complete manure alone, was sown broadcast upon the five plots, at the rate of 500 lbs. per acre. Up to the time when the heads began to set, the weather had been favorable, and the growth of straw and size of the heads were such as to promise a remarkable yield. We were the more hopeful of this, inasmuch as the farmers of this part of Long Island have from their own experience looked upon spring wheat as not worth sowing. About this time, however, showers were of almost daily occurrence, followed by a powerful sun. The humid atmosphere was scalding. The heads set imperfectly, and the yield, as will be seen, was not such as to change materially the prevailing opinion of the farmers about us.

Defiance and Champlain

We were most interested in the new wheats, Defiance and Champlain. These originated with Mr. Pringle, of Vermont, who is well-known as having devoted himself assiduously for years, to the improvement of various farm crops, by cross breeding. The firm of Messrs. B. K. Bliss & Son, offered these wheats for the first time last spring, after, as they state, a careful trial of six years, and to them we owe our thanks for the seed in the experiments of which we are speaking.

Champlain was produced in 1870, by Mr. Pringle, so Mr. Bliss informs us, in his endeavors to unite the remarkable hardiness of the Black Sea with the superior quality of the Golden Drop. Several varieties were the result of this cross, from which Champlain was chosen as realizing the end in view.

Defiance "was the result of experiments in 1871, to incorporate superior qualities upon the hardy stock of our common Club Wheat, by hybridizing it with one of the finest, whitest sorts of the Pacific coast." Of the five varieties, Defiance bore the heaviest straw, and broadest leaf. It would seem, as we have before remarked, that it is not at all liable to lodge, and, in fact, while others were lodged during several storms, this, and the same may be said of Champlain, remained as upright as before. It also tillers freely, and would no doubt prove an excellent variety to be sown in drills a foot apart, so as to admit of cultivation.

The plots as we have said, were 33 feet square or one-fortieth of an acre in area.

No. 1	Spring	Mediterranean, yielded	.....	12 lbs.
" 2	"	Russian,	"	15 "
" 3	"	Spring China,	"	28 "
" 4	"	Defiance,	"	27 "
" 5	"	Champlain	"	18 "

The yield of Defiance would have been greater, had it not been cut too early. It was the last to ripen, and we had intended to cut the others and allow this to remain awhile. But the instructions given were forgotten or disregarded. A medium-sized head of

Mediterranean matured	.....	34 grains.
Russian	"	27 "
China	"	33 "
Defiance	"	57 "
Champlain	"	45 "

while a medium-sized head of Clawson (fig. vi.) taken from a field which averaged at least 25 bushels per acre, bore but 32 grains. The large number of grains in the single head of Defiance as compared with the weight of the grain of the entire plot of this variety, will show the extent to which they were shriveled, and the same, though less forcibly, may be said of Champlain. Judging by the samples of Defiance which we have seen, the grains are fully as large as those of Clawson. Taking the average head of Clawson as a guide, it would appear that had the grains of Defiance fully matured, the yield would have been nearly twice as great. To state it exactly: If 32 grains of Clawson give 25 bushels to the acre—57 grains of Defiance would give 44.53 bushels, and as great a difference as this would have been conjectured by anybody comparing the one with the other, judging by appearance alone.

Our faith in Champlain and Defiance is *not* weakened by this failure, which we attribute entirely to an unfavorable season.

DEFIANCE WHEAT.

The head of Defiance Wheat presented on p. 583 represents one of a small bundle received by an acquaintance a day or so since. No letter explaining where, or by whom raised, has as yet arrived. Among the heads of this bundle there was scarcely any choice, the one from which our accurate sketch was made being as large perhaps as any. The grains were plump, light amber colored, and as large as the best specimens of Clawson.

CHAMPLAIN AND DEFIANCE WHEATS.

DEPARTMENT OF AGRICULTURE,
Washington, D. C., Aug. 22, 1878.

EDITOR RURAL NEW-YORKER—*My Dear Sir:* Reports thus far received of the "Defiance" and "Champlain" wheat are as follows: Miss E. L. Howard, top of Lookout Mountain, Walker Co., Ga.—"Rust and fly destroyed it. Not as much yield as sown and poor quality of grain." Mr. Ernst, of Iowa, reports, "Champlain yields at the rate of twelve bushels per acre, small, shrunken. Defiance yields at the rate of 14 bushels per acre." Mr. Plumb, Genesee Co., Michigan, reports, "Champlain grew well, but was destroyed by midge and rust." Mr. Stever, of Tama Co., Iowa, says, "both varieties grew well with long heads, looked fair, but matured no grain." He thinks they are winter wheats, particularly the "Defiance." These are all the reports thus far received of those spring grains.

The "Silver-Chaff" wheat distributed by the Department last year, has an unusually good record; but it is too early yet to make up a full account of the different varieties and their value. Very respectfully,

WM. G. LE DUC,
Commr. of Agriculture.

WHEAT SOWING.

L. J. TEMPLIN.

PREPARATION OF THE SOIL.

As one of the great staples of the United States, the wheat crop is worthy of every advantage that it can possibly have. The profit of wheat raising depends not so much on the area in cultivation, as on the yield per acre. In nearly all items of expense it costs about as much to raise 10 bushels as it does to raise 20 bushels per acre. A little difference in the preparation of the soil and seed, and in putting the latter in the ground, will often make all the difference between a profitable crop and one that does not pay expenses. It is important, therefore, to give strict heed to all the conditions essential to success in this business. Much depends on the condition of the soil. I shall not stop to consider the different kinds of soils or the manures by which they may be fertilized, but shall proceed to invite attention to some of the mechanical means to be employed to bring it into the best condition for the reception of the crop.

In the preparation of the soil by mechanical means, the object should be to stir it deeply and pulverize it thoroughly. It is impossible to get a soil too finely pulverized for a wheat crop. Indeed much of its vigor and healthfulness, and especially its productiveness, depends on this condition. The fine, feeding roots will not enter a hard clod any more than they will a stone; and hence in a soil that is largely composed of these, the growing crop will be unable to get the benefit of a considerable proportion of the plant-food stored up in it. The harrow and roller should be employed to reduce the soil to as fine a tilth as possible. The finer the soil is pulverized, the greater the amount that will be accessible to the roots of the growing crop. And where it is sufficiently fine, the roots will find their way to all parts; their number will be greatly increased, and the crop will derive the greatest possible benefit from the soil.

But depth of soil is of as much importance to a wheat crop as fineness. The roots of the wheat plant penetrate deeply when the circumstances are favorable. The average depth is about three to four feet, but in favorable soils they run considerably deeper. In one case the roots of wheat of only forty-five days' growth, were found to have penetrated a light soil to a depth of seven feet. From these examples we may see the importance of a deeply pulverized soil in order to get the most vigorous growth possible. This depth of soil becomes especially useful in seasons of drought. If by shallow plowing, and a compact subsoil, the roots of the wheat are confined to a few inches of the surface soil, a severe spell of dry weather will prove very damaging to the growth of the crop, and cannot fail to greatly reduce the product. A deeply stirred soil will admit the roots to a depth that will give them access to a constant supply of moisture, even during times of severe dry weather, and thus a good yield will be insured when otherwise it would probably be rather meager. A soil prepared as here suggested, seldom fails to give satisfactory returns.

ROTATION.

THE preceding crop often has a very important bearing on the fate of its successor, and it is well, even in the absence of a regular rotation, to have regard to the coming wheat crop when planning for other crops. Probably the very best crop to precede wheat is red clover. This, even when mown, leaves a large amount of organic matter in the soil, and this is composed largely of those substances most needed by the wheat plant. To get the most good from a clover crop, it should be turned under when the flowers are generally drying up. If the surface is well cultivated once or twice before the time to sow wheat, it will prove very beneficial. Flax is an excellent crop to precede wheat. It seems to leave the soil just in the best condition for the wheat to prosper. Buckwheat and the various root crops leave the ground in good condition for wheat, but they do not generally come off the ground as early as it is best to sow wheat. In the Eastern and Middle States it is not advisable to sow wheat after wheat, as the later crop seldom succeeds well under such circumstances. But in the wheat regions of the West, it is a common practice to keep the same ground in wheat for a considerable number of years. And the practice does not seem to have any injurious effect upon the crop.

MANNER OF SOWING.

Having the grain properly prepared, the manner of sowing becomes an important question. The advantages of drilling over broad-cast sowing are now so generally understood that it would hardly seem necessary to argue the point; yet there are some who still seem not to understand these advantages. It is certainly a matter of considerable importance to have a perfectly even distribution of the seed over the surface. This can be done only by the use of the drill. A matter of even greater interest is to have the seed placed at a uniform depth, and more especially to have it put in direct contact with the moist soil. The impossibility of accomplishing these ends by any other means than by the drill will be conceded by all. In broad-cast sowing the grain is generally thrown on the top of a dry surface, and, even if covered by the drag or harrow, it is just as likely to be in contact with dry soil as with moist. That which comes in contact with moist soil will probably germinate and grow at once, while that which is left in dry dirt, will have to wait for a rain or for a slow and tedious germination, owing to a deficiency of moisture. It is easy to see that, under such circumstances, the growth will be quite uneven.

Reno Co., Kansas.

SPRING WHEAT—PRINCIPLES OF CULTURE.

W. H. WHITE.

THE wheat plant was cultivated at as early a date as any plant on record. Its origin is unaccounted for, although many theories have been advanced therefor by different scientists. Whatever or wherever its origin, it is the most important of bread-plants or grains known, and is more generally used by civilized man than all other grains adapted to the purposes of food. It is cultivated in all climates adapted to its growth. Being so universally cultivated in so many varying climates and in such different soils, what wonder that there are so many varieties, differing in some important, or unimportant, particulars?

WINTER AND SPRING WHEAT.

Wheat is grown as a biennial or an annual; and that either may be produced from the same seed is proved by experience; for it is on record that winter wheat allowed to commence germination in fall, then frozen and kept frozen and sown in spring, ripened grain in fall, which sown the following spring, ripened its seed in summer, and thus became permanent summer wheat. Others have changed winter wheat to summer wheat and *vice versa* in two or three seasons, each way; so that it would appear from such experiments that winter and summer wheats are one and the same in nature. However they may differ in time of growth or composition, in chemical analysis there is scarcely more difference than is found in different varieties of winter grain. Why then is fall-sown wheat so much more generally preferred to spring by the great majority of cultivators? There may be several reasons adduced therefor; but I only name one or two. Of these the first is that winter wheat is sown at a season when there is more leisure, and the soil is generally more easily fitted for the seed than in spring. The plant also tillers more and produces more abundantly from the same amount of seed; and the grain makes a superior quality of flour, more sought for by consumers. Such reasons are sufficient to induce farmers to continue the practice; and they will keep on doing so, to a greater or less extent, whether with or without reason. Some of the arguments used in favor of winter wheat are well founded; others now have no valid support, owing to improved methods, such as improved systems of culture of spring wheat, and the introduction of the "New Process" for making flour from it.

CULTIVATION.

There are certain principles underlying and governing all culture and growth; and when those principles are understood and applied, culture will be less intricate and more remunerative

The first requisite in the cultivation of spring wheat, or indeed of any other crop, is to so prepare the soil as to fit it in the manner best adapted to carry out the natural demands of successful growth. Next, seed of the requisite quality is needed, such as is most suitable to the soil; and then the seed must be planted at the right time,—learned by observation and experience—and in the best manner conformable with the laws of germination and growth.

Where many other plants require a loose, yielding, mellow soil, particularly at or near the surface, wheat rather luxuriates in one less loose, yet still finely pulverized for the first inch or two below the surface, and at a lower depth more open, mellow, etc.; but its greatest store of plant food should be within an inch or two of the surface. To form grain, seed-wheat requires plant-food adapted to its support, just the same as all other varieties of plants do; and unless the soil holds all the ingredients of this in abundance in an available form, the deficiency must be made up by application of manures, or the crop will fail in proportion as they are deficient. The wheat plant must also have suitable moisture in the soil in which it grows, yet a wet foot-bed is death to the crop, so that natural or artificial drainage is essential. General laws governing culture must be adapted to individual cases, or crops, and, in this case, grain, not foliage, is the object aimed at, therefore culture should be directed to this object, by applying fertilizers which go farthest towards developing seed rather than stimulating growth of foliage.

EFFECTS OF FERTILIZING AND CULTIVATING.

Although we may not precisely understand how the plant elaborates its elements, prepares gluten, starch, etc. from these elements, we know that it is done, and that, unless these elements can be drawn from some source, earth or air, the grain is not formed at all. In order, therefore, that the plant may absorb into its growth any particular element from the soil, such element must be in excess of any fixed compounds of the same in that soil, or, in other words, be free. Among the reasons given above why winter wheat is grown in preference to spring, one is that winter wheat tillers more, or that a greater quantity is grown from the same amount of seed. The reason why it tillers more, or produces a larger number of seed stalks from a single seed, I will not here attempt to set forth; but I will rather say how spring wheat may be induced to tiller more than it does as a general rule.

In germinating, the seed first sends out seed-roots, which serve to take up nutriment for the young plant until it has grown sufficiently to form a crown, joint or knot, just below the surface. From this point the plant tillers, or sends out new roots, from which additional stems rise. Now, if the soil is right in all respects, filled with food and sufficiently comminuted, new plants will form freely; but if not thus well-conditioned, the tillering is proportionally less, or does not take place at all. This statement every observing farmer will or easily can corroborate. Now, in order that spring wheat may be induced to produce, tiller, more from the same seed, the soil needs to be put in a condition most conducive to this result.

PREPARATION FOR SPRING WHEAT.

As it can hardly be expected that early spring plowing can be done, to any considerable extent, thoroughly and properly in season for spring sowing; it is necessary to plow the ground thoroughly and deeply in fall or early winter. In the spring, work the surface, an inch or two deep, with a pulverizing harrow, thus forming a fine seed-bed, while the lower stratum will usually be in fine condition for the crop, provided it was properly worked in the fall, and the soil be loamy, not clayey. Phosphates, lime, ashes, charcoal, fine or in dust, furnish suitable pabulum for the production of superior quality as well as greater quantity of grain, and one or more of these fertilizers should be applied at the time of seeding—the quantity per acre must depend upon circumstances of soil, etc. A wheat soil ought to have been previously cultivated to some dissimilar crop, for which clean culture is requisite, and should not be used for the same crop oftener than once in a rotation of three to five years, unless special treatment is adopted.

THE BEST VARIETIES?

Soils vary so that there is little necessity of saying anything concerning best variety for growing, and even if one particular variety were recommended, the soil might be uncongenial, for it is well-known that a wheat which does finely on one man's farm or in his hands, if given to another farmer in some other locality, although

the soils may apparently be similar, may prove quite unsatisfactory; all of which may be owing to different or varying causes.

When we can grow "thorough-bred," "full-blooded" wheat, then we can recommend that variety; but so long as we can go into a field of wheat and gather many distinct varieties all growing from one named variety sown, there is little use in recommending particular varieties, as all such degenerate from careless culture, harvesting, threshing, etc. So long as our present hasty culture, etc., of wheat continues, just so long will change of locality of seed prove beneficial, if the change be made judiciously—that word *judicious* is a very convenient one here and elsewhere. When we can obtain and cultivate a "thorough-bred" wheat universally, and do it in the same careful way in which we propagate choice plants, blooded stock, etc., then we shall be able to rely upon the produce of the former coming as true to strain as that of the latter. In proof of this assertion, witness the culture of wheat on the banks of the Nile in Egypt, where the same seed has been cultivated for 3,000 or more years, yet change of seed there has not been found necessary.

My readers may feel disappointed that I have failed to go more into the details of culture, mode of improving seed, varieties, etc., but such information has been repeatedly given in our agricultural literature, so that I have thought it best to take a somewhat different course, and in preference, to advocate principles of careful, intelligent culture—though but imperfectly. Personal inspection and inquiry among observant, intelligent farmers, will teach more in a few hours than can be gathered in a much longer time devoted to reading details of culture, even if these are given by the most successful wheat-grower; for often many things are brought out in conversation that one would never think of while writing down his experience, or which, at least, he might think unimportant.

Worcester Co., Mass.

Farm Topics.

SELF-SUSTAINING FARMS.

Every farm ought to be self-sustaining in a monetary sense, and, if away from any supply of manure which could be had at a price to pay for hauling, it should be self-supporting in the matter of fertility, and this, of course, must depend on the system pursued. A farm managed upon a regular course of cropping, similar to any good system where every alternate crop or the disposal of the crop returns all that the two crops have taken from the soil, will be a remunerating one if the farmer understands his business sufficiently to keep the right kind of stock to pay for raising, fattening, &c.

In England, when farmers have what is called "the refusal" of a farm, that is, so many days to make up their minds whether they will rent it or not at the price asked, it is a common practice among them to take a friend or two, and then to make calculations, and these are often made simply by starting with the opinion that the whole produce sold should, to make the tenant safe, amount to three times the rent or, as the common expression is, "it ought to make three rents."

One rent is, of course, for the landlord, a second of a like amount is to pay for labor, taxes and bills for repairs of tools and replacing everything worn out or broken, while the third rent is for housekeeping, clothing, schooling for children, &c., and for interest of capital employed. The chief consideration is to keep the land in such a high state of fertility that the income from the sale of animals, wool, butter and wheat, malting barley and a few other things, will always be self-sustaining and so that in extra good seasons, it may give some over and above this.

There is no necessity for one exact and severe system to be adhered to, though, to save trouble on large estates in England, it is usual to keep to one course, as where there are so many tenants it saves so much inquiry and watching that the spirit of the agreement be not broken.

American farmers, even those who have money, cannot be made to see the advantages of fattening cattle and sheep. In managing the latter more especially, they keep them so long on hand through not feeding them well enough, or they send them to market in such a lean condition that they make less even than half what they might do. Now that there is a certain market for meat if only it is of good quality, and when even American horses sell well across the ocean, paying well for sending them there, every farm in the United States may be made self-supporting in every sense of the word.

When sheep husbandry was first found to help agriculture in England by combining with it root culture on the drill system, English farmers were so slow and obstinate, that the landlords had to send to Scotland for bailiffs and stewards to enforce the system. Then increase of sheep increased productiveness of the land in a surprising degree, and, here in the United States, the leading agriculturists must change their system and get rid of all the old-fogy ideas, or their farms will never be self-sustaining.

An Old Hand.

THOROUGH TILLAGE.

This is an art that every farmer and gardener should thoroughly understand and effectually practice, if he would grow good remunerative crops, either on the farm or in the garden. Soil well tilled is rendered productive, regardless of its particular class, provided it be not destitute of the elements of plant-food. This is done by plowing, harrowing, crushing, with all the other methods of stirring it. Old Jethro Tull claimed from the lessons of experience as a farmer, that thorough tillage would entirely obviate the necessity of using manure. Soils, he maintained, contain all the elements of plant-food, which are set free and ready for use by thorough tillage.

A SELECTED HEAD OF DEFIANCE SPRING WHEAT.

The plow turns up the soil and exposes it to the atmosphere which acts thereupon, rendering it soluble—the condition of plant-food. The first beneficent effect of plowing is to loosen and render the ground friable. Land that is firm and hard is not in a favorable condition for plant growth. If the attempt be made to grow a crop on soil thus conditioned, the farmer or gardener is doomed to disappointment. Exposure to sun and air increases fertility. The oxidation of soil refreshes it. Fertility is further increased by tillage in bringing up the silicates and exposing them to atmospheric air. Double silicates contain ammonia which, being liberated, promotes fertility and plant growth.

The roller should be used to crush lumpy ground with the harrow, thus fining the soil—an important condition of a seed-bed. If the soil be too light—porous—as is sometimes the case with sandy ground, the use of the roller renders it more compact, and therefore in a better condition for plant-growth. Fineness and moderate compactness are essential conditions of a good seed-bed.

Horse-hoeing and hand-hoeing are found necessary to promote the circulation of moisture and air in the soil, as well as for the destruction of weeds, unless it be decided that it is better economy to grow these than it is to pay laborers to remove them, which may be deemed scientific, but not economic by farmers generally.

Drainage is often found to be essential to thorough tillage. Soils that hold water must be mechanically assisted to discharge it before the best crops can be grown. Thus is removed, with the water discharged, the organic acid left by decaying vegetable substances. Drained land is warmer than when undrained. The improvement of soil for plant-growth makes it more healthful for animal life, this being due largely to the growth of sweeter and more nutritious herbage. The thorough drainage of land not only increases the productiveness thereof, but it also diminishes the cost of tillage. Drainage, thorough and deep, must go hand in hand with thorough tillage.

Suffolk Co., Mass. Leander Wetherell.

UNITED STATES' vs. ENGLISH AGRICULTURE.

Taxes are altogether much heavier in England, than in this country; implements are more numerous and more expensive and more labor has to be expended in harvesting the crops and in cleaning the land, because the climate is so much more showery. On the other hand, all kinds of tools and machinery are far stronger and will last much longer.

The United States' farmer can now send fresh meat and every kind of produce to England at a much higher price than they made formerly, yet the farmers complain of hard times. The farmer here, even if a gentleman with an abundant capital, does not keep his land in the high state of fertility to be found across the Atlantic, consequently his returns are less. Then, in addition to this drawback, the American has a great deal of waste land, and even that which is in cultivation, is not in use all the time. For instance, rye, wheat, oats, barley and peas are all ripe and hauled to the barns about the first of July or by the middle of that month at the latest, and where there are no grass seeds sown, the ground will often be idle till the next spring, whereas there would be ample time to grow turnips, rape, Hungarian-grass or several other crops.

Then, the American farmer does not sow his turnip seed in a way to produce the best crop and on some farms aspiring to be models, there are no beets for cows, no carrots for colts, no swedes, and the few common turnips growing are all in bunches intermingled with weeds, and presenting such a deplorable aspect that any tenant farmer in England having land in a similar condition, would be notified to quit the holding at the first opportunity.

In many of the Eastern States, the farms are so very much exhausted that customers cannot be found for them even at the original cost of the house, barns and fences, while in some instances, the land and buildings cannot be sold even for the present value of the latter. It ought, therefore, to be a consideration with any one going West, whether it would not be better to buy one of these poor farms and, instead of taking a new farm in the West and expending the money which would be required for building a homestead fences, lay it out in renovating the land in the East. There are the conveniences of a good market and the advantages of civilization in its broadest sense in favor of the latter place.

A Veteran.

NOTES FROM A BACKWOODS FARM.

CHEESE-MAKING ON A SMALL SCALE.

The weather being hot and butter very cheap—8 or 10 cents per pound—I decided to use my knowledge of cheese-making in manufacturing the milk from our half-a-dozen cows into cheese. A neighbor proposed to add the milk from his four, so that I have the milk from ten cows, weighing from 160 to 180 pounds daily. A tub in which to set the milk, a lever-press and other utensils were provided, and I went to work, making every day a cheese weighing from 18 to 20 pounds, when taken from the press. I have now been making them five or six weeks and the cheeses are pronounced good by those who have tried them. I hope to have plenty for home use during the fall and winter, besides some to sell, my neighbors supplying a home market for all the surplus at about the price of butter.

GARDEN NOTES.

I have had strawberries and raspberries in abundance. The Philadelphia raspberry has more than kept up its good reputation; we were picking the last of them about the first of August. They have been extra large and fine this year, and such quantities of them as we have picked! We have had fresh berries at almost every meal, canned berries, "jammed" berries and dried berries, besides berries to sell; and it was a real satisfaction to sell them, for I could set my own price on them and no grumbling. The only trouble was, they would not go around among my customers. I only raise the common, sour cherry, but of these I have had an abundance. Currants were fine, free from worms and blight. After trying the white-cherry, grape and other new varieties, I pronounce in favor of the old Red and White Dutch, especially the latter, as being the best for culture in the farmer's garden.

I shall have some apples, but of rather poor quality, and somewhat wormy. The Red Astracans are ripening now, and they are about the best and earliest summer apples we have. The Tetofsky, which was praised so highly some years ago, here at the West, does not meet my expectations. It makes a fine compact tree for the garden, but, in productiveness and quality of fruit, it is not nearly equal to the Duchess of Oldenburg or the Red Astrachan. The fruit is inferior to either of these varieties both in quality and size, and the tree much behind in productiveness, while in hardiness the trees are much the same. For a late fall apple, the Famouse is the best we have. The old Talman's Sweet takes the lead as a hardy and productive winter apple.

Grapes are about a failure this year. Pears and plums we do not raise to any extent; although one plum tree left, stands heavily loaded with fine, smooth fruit, free from curculio. I think it is of the Yellow Egg variety. Blackberries are beginning to ripen freely, and, although not a garden fruit with us, we expect to gather them in abundance from their native fields and woods. I have sometimes found plants bearing extra-choice berries and have tried transplanting them to our garden, but they do not seem to stand civilization well.

John Rusticus.

Outagamie Co., Wis., Aug. 15.

Horticultural.

NOTICES OF SOME OF THE NEWER STRAWBERRIES.

T. T. Lyon.

America is understood to have originated in the State of New York, although, for some unexplained reason, it seems to have been disseminated from Kalamazoo, Michigan, about the year 1874. It is early, the quality superior, and the size fully medium; but it lacks color and firmness, and is hence unfitted for the markets. In 1876, it was the most prolific variety I saw; but it can hardly be said to have since maintained that character.

Bidwell is the name conferred by the South Haven Pomological Society, upon a strawberry understood to have originated with Mr. Bidwell, formerly of this place, (South Haven,) and which was characterized, in the report of the Committee of the State Pomological Society, as the best and largest berry exhibited at the session of the Society held here, in June, 1877. The plant is very vigorous, even on light sand. Fruit very large, long, conical, bright crimson; but with less color at the tip. Firm, fine quality, productive. Season medium.

Black Defiance has fruited with me but one season, and that scarcely a favorable one; but it has favorably impressed me, and seems likely to assume a high position, as it possesses size, high quality, and attractive color.

Boyden's No. 30, (Seth Boyden).—I know no reason why this should not take high rank, both as to size and quality, save the fact of the excessive vigor of the plant; which, if permitted, will rapidly cover the entire ground with plants at the expense of fruit. If grown in hills, with the resolute cutting away of the runners, it will be found satisfactory both as to quality and size, although it may prove too soft for distant shipment.

Captain Jack ought certainly to have received a more creditable name. As attractive as the Wilson when at its best, it is nearly or quite as productive as that old favorite, and at the same time quite its superior in quality. I regard it as promising well for market, and good enough for the home plat.

Champion has now borne with me three years; the trial confined to light soils, where it has shown itself very productive, maintaining a fully medium size very evenly. Its color and firmness fit it well for the market. Its quality is also satisfactory.

Col. Cheney, as originally introduced here and claimed to have come direct from the original disseminator, proved to be Jucunda. The genuine variety, subsequently introduced, is but partially tested. So far, it promises to maintain its Eastern reputation.

Cowing's Seedling, on light soil proves very productive, of large size, bright color, and high quality. It is hardly firm enough for distant marketing. On heavy soils, and especially with irrigation, complaint is made that it frequently becomes overgrown and misshapen.

Cumberland Triumph has only shown us a single crop; hence I will only say that, in size, color, texture and flavor, it seems entitled to high praise. A little more firmness would doubtless improve its character as a market berry; still should it establish a reputation for productiveness, it would doubtless assume a high position in this respect.

Damask Beauty has shown us its fruit for a single season only, and has not, so far, developed any very strong points, as compared with several others on our lists. Farther experience is requisite to establish its comparative merits.

Duchesse, although but partially tested, seems destined to sustain its reputation at the East as one of the most desirable of the recent introductions. We await its performance in the future.

DUNCAN, upon a single year's trial, shows very useful qualities as an amateur variety, for which purpose its earliness, high quality and large size are more important than ability to withstand rough treatment.

EARLY HUDSON, with three years' trial, has shown fine qualities as a market variety. The plant is strong and healthy, bears the sun well, and is very productive. The fruit is large, even-sized, well colored, firm, and of fair quality.

EXCELSIOR, upon a single year's experience, gives evidence of value of no mean order. I doubt its adaptability to market uses; but for the home plat, I am impressed with the idea that it is worthy of a place at the front, since it combines mild, rich flavor with good size and fine appearance.

FRENCH is a vigorous and prolific variety of fair quality, of fine size and appearance, but lacking in firmness.

FRONTENAC is understood to be a descendant from Russell's Prolific, under the hand of the originator of that variety—the late Harvey Russell. The plant is vigorous, and the few specimens of fruit from plants of last spring's setting, give indications of good size and quality. The flowers are pistillate—a fact which militates against its prospective value. I am not aware whether or not it is yet offered for sale.

GOLDEN DEFIANCE is a fine late berry which, a few years since, would doubtless have attracted considerable attention; but the avalanche of new and wonderful sorts at the present time urged upon the attention of the public, seems likely to leave this in the background.

GRACE is clearly only an amateur variety. Although the quality is good, the plant lacks vigor. So far as I have been able to observe it, it shows but faint signs of being able to make its way to the popular favor.

GREAT AMERICAN has done almost nothing with me this season; but, as I hear the same complaint from localities in which it has heretofore proved successful, I await further experience, supposing that with me, as elsewhere, its ill-success may be due to an unfavorable season.

LATE PROLIFIC was received by me without any qualifying designation. There are so many *Prolifics* that I am in doubt whether or not it is identical with any one of those favored with a prefix. I suspect that it has too many competitors for popular favor to be able to win its way to a prominent position.

MAJOR MCMAHON, as grown in light soil, seems to lack vigor, and the stems are short, leaving the fruit directly upon the ground—a serious fault; but it is so productive, and the fruit is of such fine size and quality, and is so abundant, also, that I regard it as a variety of much promise. For a near market it seems to be firm enough to endure the requisite handling.

MATILDA is much after the style of Early Hudson, and, like it, possesses valuable qualities as a market variety.

MONARCH OF THE WEST has now been generally tested in this region, and has acquired extensive popularity. Although somewhat elongated in form, and liable to the charge of sometimes coloring imperfectly at the tip, its firmness, good quality and large size, together with the vigor and productiveness of the plant and its capacity to adapt itself to both light and heavy soils, supply an array of recommendations that seem quite likely to place it in the front rank as a variety suitable for both market and home use.

ROMEYN'S SEEDLING possesses qualities, both of plant and fruit, very similar to Champion, to which it is nearly or quite equal in productiveness. It is, however, considerably more acid than that variety and perhaps somewhat less firm.

RUSSELL'S ADVANCE is also said to be the result of a cross, under the hand of the late Harvey Russell, between the old Russell's Prolific and Triomphe de Gand. My plants were put out only last spring, and, allowing for this fact, the little fruit the plants have been allowed to bear, impress me favorably with the variety. It is hermaphrodite.

SENECA CHIEF was, so far as I am informed, first disseminated by parties at Kalamazoo, Michigan, jointly with the America, and is said to have originated from the same source. It is somewhat popular here as a late market sort; for which purpose the vigor of the plant, and its great productiveness, together with the size, color, quality and firmness of the fruit, especially adapt it. So far as I have observed, it is at home in both light and heavy soils, although the finest crops I have known have been grown upon the latter.

SENECA QUEEN is yet another result of Mr. RUSSELL'S cross of the Russell's Prolific with Triomphe de Gand, and is equally vigorous and promising. The quality of the fruit is good; but we need at least another year's experience with it, to warrant a conclusion from personal observation as to its probable value.

SPRINGDALE is, to my apprehension, promising as an amateur variety, for which purpose it possesses special qualities; but farther trial is requisite to determine its measure of success here.

STAR OF THE WEST is entitled to further trial. So far, my experience with it, in an unfavorable season, fails to warrant the commendations bestowed upon it in other localities.

STERLING, also, is yet too recent an introduction to have fully shown its qualities with me. Unless large allowance be made for the unfavorable character of the past season, I must assume that this, too, has been over-praised, or otherwise that our soils or climate are not to its liking.

MARVIN.—A few days since a gentleman of this name, residing in Clinton County, Michigan, called on me with specimens of several varieties of strawberries preserved in liquid. Among them was one originating with him, which was of such fine size, and even in its preserved state, gave such decided indications of valuable qualities that, at my request, he sent me a few plants for trial, together with a history of its origin, from which I extract as follows:

In the spring of 1874, this seedling, among others, came up where a box of berries—either Wilsons or Jucundas—had, the year before, been spilled. The parent plant fruited in 1875. The fruit was larger and finer in 1876, and proved to be *very late*. In 1877 and 1878 it produced well and attracted great attention. The berry combines the qualities of the two supposed parents above named, and is, in some respects, an improvement on both. It resembles the Wilson in its bearing and shipping qualities, and holds its size through the season better.

Mr. MARVIN says in conclusion: "It is: 1st, The largest in average size of any berry that grows; 2nd, It will bear more berries, in number, than any of the large varieties; 3d, It is the latest berry grown; 4th, It is as desirable for shipping as any known; 5th, It is very fine-flavored, and the plant is a luxuriant grower."

I suppress the full address of the originator to save him unnecessary correspondence, as I am given to understand that, at least at present, he has no plants to be disposed of. I am promised next year, specimens of the fruit in its season, when I may take occasion to speak of it from personal observation.

THE IDEAL STRAWBERRY.

FROM a private letter from Secretary GARFIELD, we take the liberty of extracting the following—forcible as it seems to us—remarks:

"I wish the men who are at work improving the strawberry would have an ideal berry in view, and work toward perfection in something better than mere size. For the home or family use we need not look very much to the firmness of the berry; but we want fair size and the best quality we can secure in the fruit, and to this should be added a comeliness of form and hight of color that will attract the eye of an artist. The newer berries are lauded principally for their size, as if this were the main consideration. I like size; but when quality is sacrificed, magnitude is below par. The strawberry is a luxury, and I believe in combining in it as many good qualities that please the senses as we can get. I get just as much eye satisfaction out of a fruit as out of a flower. The other day I found, in Mr. Parmelee's orchard at Old Mission, the most beautiful specimens of Red Astrachan apples that I ever saw. I brought them home and placed them on the mantle shelf. They were as delicious as they were beautiful, and I was laughed at by my family for leaving them until past prime for eating. But I had greater pleasure in the lengthened eye-satisfaction than I would have enjoyed in gratifying the taste. So in strawberries: it seems to me in many of the newer sorts we have neglected the real elements of beauty, in getting size simply, or flavor simply.

One point more is not thought enough about, and that is, "What constitutes the best flavor?" Almost all will hit upon the same form as the ideal, but just what gives the best flavor is not thought about so much. My own impression is that the acid of the strawberry is not given enough credit. People make wry faces and cry "sour berries!" when the sour in a well ripened berry gives it the tone. The fact is that the firm berries are those which are the longest ripening throughout the mass, and the market berries are decried as sour when they are simply green and not modified by perfect ripening.

Grand Rapids, Mich., Aug. 30, 1878.

Arboricultural.

ARRANGEMENTS OF SINGLE TREES.

SINGLE trees or shrubs are the great sources of variety in a garden or lawn where the surface is flat and without any other objects of note, and, moreover, they are, when judiciously disposed, valuable additions to a surface naturally varied by undulations. The great art in putting down single trees, is to dispose them so as to form groups when seen from a distance, and yet so as to produce variety on every change of position of the spectator when near. To plant them thus judiciously requires much thought and attention, and in cases where the finest results attainable are desired, an experienced landscape gardener should be consulted.

The kinds of trees and shrubs thus employed may be varied at pleasure, provided some attention be paid to the general effect intended to be produced, and to the prevalence of one general form or character or disposition of trees or shrubs in one place. Thus, if conical trees be distributed equally, or injudiciously, over the grounds, along with round headed trees, they will produce great sameness; but if conical trees prevail in one place, drooping or weeping trees in another, round-headed trees in a third, and low-spreading varieties occupy another site, many distinct characters will be produced, and this will be much more interesting to the beholder than one continuous group of mixed trees of various habits. The same general rules apply with equal force to ornamental shrubs.

In planting single trees, care should be had to the proper soil: they should always be planted in prepared soil raised in heaps, a foot or more above the general surface, so that after a year or two, when the earth has settled, as it will to a certain degree, the tree may stand on a little hillock. The trees, before planting, should be ten or twelve feet in hight, with trunks three or four inches in diameter at the surface of the ground.

W. C. L. DREW.

El Dorado, Cal.

The Poultry Yard.

POULTRY BREEDING—No. 5.

A. M. VAN AUKEN.

CHICKEN COOPS.

NEXT in order is a description of a chicken coop, and, since while describing only my own, some might accuse me of plagiarism, I will copy H. H. Stoddard's description and avoid all risk.

"A chicken coop must be adapted to warm and cold weather, and especially to rains, be easily cleaned and made rat-proof, nights. The old-fashioned triangular pattern secures all this, and also gives the small chickens a chance to escape under the eaves from the feet of the hens. The size proper to accommodate a double brood is 2½x3½ feet upon the ground, with roof three feet from eaves to peak. A bit of scantling is fastened to each roof for a handle. The door is hinged to open upwards. There is at the rear a small door that will allow chickens to pass but not grown fowls. An opening for ventilation is made near the peak, and covered with wire cloth. Take inch boards, nail them strongly, planed side up, to the cleats, and clinch. Let each end of both cleats project three inches, and the outside edge of each, two inches. This is the movable floor, and must be of such size that the coop shall rest entirely on the cleats. Then, when the doors are closed, all rain is shed outside of the floor. When the doors are closed at night, leave the large one ajar, half an inch to an inch according to the weather, for the admission of air, and fasten it with wooden pegs stuck in holes in cleats—a precaution that will make the coop rat-proof.

"Once a week, after opening the small door and letting the chickens out, slide the coop slowly, lengthwise of the cleats, out of the way; then scrape the floor thoroughly and give a shoveful of dry dirt, and replace it.

"When the hens are removed from the chickens, the latter huddle together on the floor for some weeks; but when old enough to perch, the box is placed upon the movable floor and the coop placed upon the top of the whole—the box being of such size that the sides and eaves of the coop overlap sufficiently to shed rain. The box has two perches permanently fastened to it. This roost is perfectly rat-proof, and a bushel or so of dry dirt keeps it clean."

I also prefer to have, in addition to Mr. Stoddard's "fixins," a small door near the peak of the coop, on the back side, for reasons shown hereafter. As to

FEEDING CHICKENS,

my plan is not so complete as others, but as it raises fine chickens, I am satisfied. When first taken from the nest, I feed the yelk of hard-boiled eggs, chopped fine, one egg for each ten chickens, at each of the three times they are fed every day. For four days this feed is kept up; then I feed scalded corn-meal or boiled potatoes, with corn and oatmeal mashed with them while hot.

For a drink, I give the chicks skim-milk, if I can get it, and if not, pure water. For the first week the chickens are fed in dishes on the floor of the coop; after that their feed is placed away from the coop, and on rainy days I use the box, with some loose boards over it, to feed in. The feed and water for the hens are put in cups hung to the coop, out of the reach of the chickens. I feed my chickens three times a day till they are ten or twelve weeks old, after that only twice.

I never separate the sexes, for I sell off the cockerels as soon as they are large enough to make broilers, and they do no harm before that; those I wish to keep I put somewhere by themselves as soon as they begin to make trouble.

For lice, I put a drop of oil on the head of each chicken when taken from the nest; and, when they are older, if one appears badly off or poor, I catch it and put some kerosene on its head and under its wings. To prevent gapes, I always give fresh water or skim-milk, and the ailment is unknown here. Cholera I never had a case of, for by keeping a few rusty nails in the water, I think it is kept off. The iron in the water also gives the Brahmas more strength of bone, which their large bodies require, and I have but few fowls going around on their second joints in the fall. By this plan of feeding and of shutting up my chickens at night, I do not lose one chick in twenty of those hatched.

POULTRY RECORD.—The following is my egg record from March 1st, 1878, to September 1st: Number of hens, 44; breed, White Leghorn, a few crossed with Light Brahma to sit. Their feed consisted of three quarts of buckwheat; corn, or oats, twice a day, from March 1st to May 1st. From that time on two quarts once a day, with old plaster and running water at hand, and an unlimited range for foraging, which they have taken advantage of. My fowls are not poor on this fare, but would make a presentable appearance if dressed for market. Probable cost of feed, $8. Eggs, sold 227 doz., eggs used in family, 74 dozen; eggs set, 7½ dozen, total, 308½ dozen. Proceeds of eggs at 11 cents per dozen, less feed, $25.94.

I have tried other breeds, but consider the Leghorn the model fowl for the farmer. I have hatched chicks from other breeds, the present season, but lost them all from disease, which the Leghorns only were able to withstand. Their only faults I have found are the requirement of warm quarters in winter, in order to produce eggs plentifully, and their liability to do damage in gardens, grain fields, etc. If any one can beat this on the same care and feed, let's hear from him.

ANON.

Ithaca, N. Y.

Miscellaneous

WHAT OTHERS SAY.

DIS-HORNED CATTLE.—In the London Agricultural Gazette, Mr. J. J. Mechi says that he purchased two lots of these animals, supposing them to be home-bred polled cattle, and every farmer who saw them concluded they were so; but one day an Aberdeen farmer of 800 acres, who fattens 260 cattle annually, said that they were Irish, and their horns had been removed, and that it was a common Irish practice to remove the horns from their well bred cattle intended for the English markets. He also said that as an extensive buyer of Irish cattle, if they came to him horned, he removed the horns, finding it advantageous to do so; and Mr. Mechi quite agrees with him; for, unlike the Irish cattle generally, he finds them quiet, good-tempered, and good doers. He saw that a dealer was heavily fined for cruelty in removing the horns, and asks would not this rule apply to castration and cropping of tails from sheep? The matter, he thinks, requires ventilation. The absence of horns is certainly a considerable advantage to agriculturists.

GARDENS AND GARDENING.—"I am extremely desirous," says the ex-Premier of England, Mr. Gladstone, in his recent speech, "that this pursuit should be propagated and extended among you. I love it for its own sake; it is delightful to see the country smiling with cottage gardens; it gladdens the eye and it gladdens the heart. Unfortunately, a great many of our modern pursuits tend to make this earth, which God has made so beautiful, abominable and ugly. Now, a garden, besides being beautiful itself, is a sign, a symbol of good habits; for example, in the first place, those who keep their gardens tidy and nice will try to have their houses tidy and nice; and if a house be poor, much depends upon those who inhabit it, for a poor house inhabited by a tidy woman is often more eligible than a superior one inhabited by one who is not tidy. You know how important it is that a house and everything about it should be tidy—how much it has to do with the peace and comfort of a family."

IN BEHALF OF HORSES.—Mr. Crandell says, in his department of the Weekly Tribune, that a horse-owner, favorably circumstanced, may save bushels of oats nowadays, and a goodly percentage on the blacksmith's bill, by making the stable dark so that the flies do not torment the horses. If the stable has blinds which can be readily closed in the daytime, well; if not, cloths hung up before the windows, which would shut out the sunlight, would answer as a substitute. Stamping to beat off flies is wearing to horses and loosens their shoes and often breaks their feet. It strains the cords and produces splints and puffs. A cheap blanket of cotton cloth will protect the body of a horse and pay for itself in a week, especially when horses are plowing or working at anything in the sun. Rubbing them over with smart-weed or walnut leaves or tansy or kerosene will keep flies off for a day; only a few drops of the oil must be used or the hair will be injured and the skin made sore. Blankets are the best.

Dis-horning Cattle.—In reference to articles on this subject, in the columns of the London Ag. Gazette, one of which we copied last week, a writer says that the quietness in demeanor of dis-horned cattle arises from fear of injury to the weakened defenses of the head. The gouge or the saw are the usual implements employed in this process—the former for youngsters, and the latter for adult cattle. The root of the horn is a most sensitive part, and any violent interference with it is a cause of intense pain, as is evident on witnessing the accidental wrenching off of a horn. If the operation of dis-horning is carelessly or unskillfully performed, the blood oozes and drips for several days, and not unfrequently the wound becomes fly-blown, and, unless promptly attended to, the animal is lost.

The man who saws off or gouges out an animal's horn deserves a somewhat similar experimental application to his own scalp.

Whitewash for Trees.—Mr. Meehan says that whitewash is frequently resorted to by farmers, but the great objection is its unsightly appearance—the result is otherwise good. The great opposition to washes formerly was, that the pores of the bark were closed by them—this was on the supposition that the bark was alive, but the external bark of most trees has been dead years before the time of application; and 'the breathing,' if so the operations of the pores can be called, is through the crevices formed in the old bark by the expansion of the growing tree, by which the living bark below has a chance of contact with the air. No matter what kind of coating is applied to the bark of a tree, it will soon crack sufficiently by the expansion of the trunk to permit all the 'breathing' necessary.

Respecting the unsightliness of whitewash upon trees, why not adopt the Rural's plan of adding red mineral powder and lamp-black to the whitewash? The color of the bark may in this way be so closely imitated that the wash will not be observed.

Seed Wheat.—"Any man," says J. B. Kellebrew, "who will establish in his garden an experimental plot, can select the best heads of the most prolific wheat, sowing the next year the best heads alone, and still selecting from this the best heads, using the balance for field use, and in this manner keeping always one year ahead. This will make good seed. A practice that has resulted in a largely increased production has prevailed in some sections, and merits special mention:

"Select a few bundles and strike them over the head of a barrel lightly. The heaviest, best matured grain will fall out, leaving those not fully ripe in the bundle. A few minutes will suffice to secure, in this manner, seed that will improve the ordinary yield very largely. This proves the necessity of seed wheat being allowed to get fully ripe before cutting."

Grass Dressing.—A writer in the London Farmers' Chronicle, who had just visited Mr. Lawes at Rothamsted, says that one plot of the experimental grass is heavily dressed with wheat straw cut into fine chaff. It was seven years before the slightest benefit was perceptible from the yearly application of this chaff. From that time to this a decided improvement has been manifested. This is consoling to common farmers. The great bulk of our farmyard manure is composed of straw in a more or less rotten state. Consequently it is many years before the whole value of a coat of farmyard manure is exhausted, whereas the nitrogen in the artificial fertilizers is gone in a single season—possibly some of it with the first heavy rains of spring.

Dr. E. Lewis Sturtevant, the able editor of the Scientific Farmer, holds that the farm is a manufactory as well as a farm, and after the normal capacity of the soil is attained by rendering available its real resources by good culture, he would buy the raw material of plant food at a low price, and convert it into farm products of a higher value, thus making a profit in the conversion, and the larger the quantity of material thus converted the greater the gain in the business.

Feeding Young Chicks.—But few are aware for what a length of time chicks just hatched out, may be left unfed without any detrimental effect. A writer in the Berlin *Presse* communicates to that journal a well-marked case in point. In the course of the summer a newly-hatched brood of his chicklings were accidentally overlooked for three days and nights, and yet at the end of that time were found well and active, and quite as large and strong as others of exactly the same age that had been fed, according to his usual practice, about thirty hours after leaving the shell.

Care of Fruit Trees.—Mr. Charles Downing tells the editor of the Weekly Tribune that it is quite surprising, to those who have not tried the experiment, what thinning out the top, scraping, and washing with potash, the trunk and large limbs, and digging up and manuring the soil, at least so far out as the branches extend, would do for even a very old apple tree—seemingly past help.

English Sparrow.—A writer in the Indiana Farmer says: "Your pestiferous English Sparrow has found its way into our cabbage patches and has cleaned out the more pestiferous cabbage worm."

A Good White Shirt, at the extremely low price of 60 cents, or two or more for 50 cents each by mail, post-paid, may seem so improbable as to suggest a fraud of some kind, but manufacturing in large quantities, of regular standard sizes and selling them directly to the wearer with no intermediate or middlemens' profits, will in a measure explain how such a thing can be done. The shirts advertised in our columns are really well-made, from good, substantial materials, and any one can convince himself of the genuineness of the offer and the full value of the article by remitting 60 cents for a sample shirt. To borrow an expressive Western phrase, no one need now be without a "biled shirt," when they can be had for this low price. The makers of these shirts, the Newark Shirt Co., are responsible, and will send goods fully equal to the value of the money, and one shirt will certainly make many new customers without further argument.

To Expel Foul Air.—The quickest way to expel foul air from a well is to heat a bar of iron red hot, and lower it down into the water; the sudden formation of steam is effectual.

Dodge Co., Neb., Aug. 21. S. R. M.

CATALOGUES, &c., RECEIVED.

J. C. Plumb & Son, Milton, Wis. Descriptive Price List of ornamental and fruit trees.

Catalogue and Price list of the Co-operative Nursery and Fruit Co., of Los Angelos County, Cal., Orange and Lemon Trees.

Premium List for the Second Annual Fair of Burlingame Union Ag. Soc. to be held at Burlingame, Kansas, Sept. 25-27. Max. Buek, Sec'y.

Lecture on Orange and Lemon culture, delivered by request before Raisina Grange, Central California Colony, by Thomas A. Garey, Fresco, Cal.

Premium List, &c., of the Sixth Annual Fair of the Colorado Industrial Association to be held at Denver, Colorado, Sept, 24-28. W. R. Thomas, Sec'y.

James Vick, Rochester, N. Y. Floral Guide for autumn. One of the best and most instructive autumn catalogues published. Everything needed for the garden with plain instructions. Accurately and fully illustrated.

Premium List and Regulations for the Thirty-seventh Annual Exhibition of the Queens County Agricultural Society to be held on the Society's Grounds at Mineola, L. I., Sept. 24–26. J. Howard Rushmore, Old Westbury, N. Hempstead, Sec'y.

John Saul, Washington, D. C. Descriptive Catalogue of Hyacinths, Tulips, Crocus, Narcissus, Lilies, and other bulbous flower roots with a choice selection of winter-blooming plants for autumn, 1878. This is sent gratis to all applicants.

House-plans for everybody for village and country residences costing from $250 to $8000, including full descriptions and estimates in detail of materials, labor, and cost, with practical suggestions and 175 illustrations, by S. B. Reed, architect, published by the Orange Judd Company, 245 Broadway, N. Y. This is chiefly a compilation of various house-plans which have appeared during the last three years in the American Agriculturist. They embrace almost every variety of arrangement and style, and to professional builders as well as to private parties intending to build, it will prove a valuable handbook of reference.

Biographical.

J. J. MECHI.

Probably there is not a farmer that reads an agricultural paper, or one who strives to improve his farm, or one who is in anywise really interested in his pursuit, that has not heard of the genial, enterprising owner of Tiptree-Hall Farm. From memoranda and journals which Mr. Mechi has kindly sent to us, we have compiled the following particulars of his life and farm, and we are confident that they will be read with a keen interest by American farmers.

J. J. MECHI.

Mr. John Joseph Mechi was born on May 26, 1802. In 1819, after two years' education in France and a further education upon his return to England, at the age of 17 he entered a merchant's office in London. After remaining there eleven years he commenced business for himself. Of this part of his life the Stock Journal remarks: "He soon saw that enterprise begets success. He lived in the early days of advertising, and his success was greatly due to the fact that he embraced all the facilities which the new movement offered. London woke up one fine morning, and found itself plastered all over with bills announcing the excellence of Mr. Mechi's wares. This brought many customers, and Mr. Mechi's personal care was that those customers should be perfectly satisfied. Not so very long ago he said to the present writer, "I always endeavored to satisfy every person that came to me for business. If a schoolboy came to me for a pocket-knife, I always did my best to help him to choose a good one, and I always told him that if it did not suit him or he did not like it, I would willingly change it. The result was that the majority of those casual customers, brought to me by advertisements, became regular customers, and continued so."

Mr. Mechi's agricultural life commenced in 1841, when he purchased Tiptree farm, at a cost of £25 per acre, as we have already told our readers. He at once set about improving it. He removed fences, adopted a complete system of drainage and irrigation, made good roads, and erected new and suitable buildings with steam-engines and new and improved machinery. In 1843 Mr. Mechi wrote his first letter on agricultural matters:—"I may be asked," said he, "what can you as a Londoner know about farming?" I will answer, "I always love the beauties of nature, the pure air of heaven, the sports of the field, and the hospitality of our honest yeomen. I have seen one farmer making a fortune, and his next neighbor losing one. I have seen one field all corn, and another nearly all weeds. I asked, 'How is this?' inquired into the causes, noted the results, obtained from all the best farmers and all the best agricultural books within my reach, every information bearing on agricultural pursuits, practised in my own little garden, on a small scale, a variety of experiments—and, after carefully weighing the evidence, I came to the conclusion that want of drainage, waste of manure, shallow plowing, and short leases, are among the greatest curses to this country; and I, as far as my individual means will permit, am resolved on remedying them."

Time has proven that the above was not a mere flourish of words. Mr. Mechi stuck to his programme. For nearly forty years he has been telling all who cared to listen to him that British agriculture requires more capital invested in it, in order to properly develop its resources, and in order to get that additional capital, greater security should be given for all the money invested.

"On Tiptree Heath," he says: "with soil much below the average for the United Kingdom, I grow crops much above the average of the United Kingdom. Here is a table of the percentage of the crops—which enable me to produce three times the quantity of food per acre that is generally the case in this country—on my poor farm of 175 acres, and of the 47,000,000 acres of the United Kingdom.

Percentage grown of	United Kingdom.	Tiptree.
Wheat	8¼	37
Barley	4½	12
Oats	8½	3½
Peas and beans	2	12
Root and green crops	11	8½
Clover and grasses	12½	20
Permanent pasture	50	4
Bare fallow	1	0
	98	97

"These results have been obtained in consequence of my having security for my capital, and by my having sufficient capital to farm profitably. We want liberty and security, if the most is to be made of our land."

We have read that Mr. Mechi's name has been received with hisses and groans in many an agricultural gathering, and yet he has gone on in the path he has marked out for himself without once losing his temper or saying an angry word. But if all his theories and practices had been wrong, one of his actions has brought many a blessing to reduced farmers. We allude to the founding by him of the Royal Agricultural Benevolent Institution, a charity which is this year distributing annuities amounting to nearly $55,000 to destitute farmers, farmers' widows, and farmers' orphans.

As a writer, Mr. Mechi has a style at once pleasant and forcible. His agricultural "Sayings and Doings" are recorded in three volumes, entitled, "How to farm Profitably," and another volume, the last, will shortly be added.

Our portrait of Mr. Mechi is an excellent representation of one which was published in the London Live Stock Journal of July 26, from a recent photograph.

Floricultural.

BLUE, WHITE, RED AND YELLOW POND LILIES.

Mr. Jas. H. Campbell of Toledo, Ohio, apropos of Mr. William Falconer's article on the above subject in Rural for August 17, page 521, says:—"I dispute the possibility of three primary colors existing in any one species of plants. Two colors and their combinations are seen in Roses, Verbenas and various others, but the complimentary color is always absent. Red and yellow Roses with their combinations, are common, but a blue Rose is an impossibility. A yellow Verbena, being complimentary to the red and blue, is also an impossibility."

And he says to Mr. Falconer, "Bring on your proofs of three primary colors in one species."

In reply to this challenge Mr. Falconer writes:

"Permit me to inform Mr. Campbell that what I stated as regards white, blue, red and yellow-colored pond Lilies (Nymphæa), I emphatically assert as truth, and I defy him to refute the existence of any of the species I mentioned. In fact, if he comes to Cambridge I will be pleased to show them to him; but if he finds that inconvenient, I refer him to the botanists of Harvard University,—Dr. Asa Gray, Prof. Sargent. Prof. Goodale, Sereno Watson and Dr. Farlow, gentlemen whose veracity is indisputable.

Mr. C. says:—"I dispute the possibility of the three primary colors existing in any one species of plants." Would readers of the Rural kindly refer to my article on "Pond Lilies," and see for themselves if I said the Pond Lilies in question were members of one species? No, I spoke of the blue, white and yellow-colored ones as distinct species, and the red one as a hybrid between two other species. Surely that is plain enough to the merest tyro? But they all pertain to one genus, namely, Nymphæa. Therefore I recommend that, if Mr. Campbell does not know the difference between a genus and a species, he should consult some "School Botany" before he dabbles in botanical challenges.

Nor is the genus Nymphæa alone in having so variously colored flowers; blue, red, yellow and white occur in Columbines, Anemones, &c.

Mr. Campbell concludes by—"Bring on your proofs of the three primary colors in one species." Yes, sir. Did you ever see red, blue, yellow and white-colored common garden Hyacinths? If you have not, I have, and so have millions of people besides me; and those variously colored Hyacinths all belonging to one species, namely, Hyacinthus orientalis.

William Falconer.

Botanic Garden, Cambridge, Mass.

Okra.—The Okra plant at this season assumes quite an odd and pretty appearance. The flowers are like the Hollyhock. This is one of the plants we should recommend to ornament the vegetable garden.

The Querist.

ANSWERS TO CORRESPONDENTS.

Results of a Small Capital on a Farm in the Far West.

E. F. N., Bucyrus, Ohio, asks what a man with a small capital can do, if he invests in Western lands with a view to farming?

ANSWER BY S. J. GILMORE.

The following figures, illustrating what an industrious, energetic man, with a cash capital of $700 to $1,000, can do in Central and Western Kansas. The lands of the Kansas Pacific Railway in this region are sold at from $2.00 to $6 00 an acre. Good average land can be bought at $3.50 per acre, and the net price on six years credit would be $3.15. The cost of 160 acres would be $504 and the payments would be as follows:

Payments.	When due.	Principal.	Interest.	Total.
1-5 cash down.	Nov. 1st, 1878	$100.80	.....	$100.80
First.....	" 1879	.....	$28.23	28.23
Second.....	" 1880	.....	28.23	28.23
Third.....	" 1881	100.80	28.23	129.03
Fourth.....	" 1882	100.80	21.17	121.97
Fifth.....	" 1883	100.80	14.11	114.91
Sixth.....	" 1884	100.80	7.05	107.85
Total.....		$504.00	$127.02	$631.02

The outlay would then be as follows:

Cash payment on land.....	$100.80
Cost of neat two-room house, well plastered and painted (this can be reduced to say $50.00 for a cabin).....	250.00
Furniture, stove, etc.....	35.00
Yoke of oxen.....	80.00
Wagon—new.....	70.00
Plow, harrow and other tools.....	40.00
Cow and chickens.....	50.00
If he comes in the early spring, the cost of living for family of three adults till he can get vegetables, potatoes, seed-corn, etc., for five months, would be about.....	75.00
Meanwhile he can break and sow, say 40 acres wheat, cost of seed.....	25.00
10 acres of rye, "	4.00
Add incidentals, interest, etc., till he can sell his crops of wheat and rye, say.....	125.00
Total.....	$834.80

And during the year he should be able to earn from $100 to $200, by breaking land, harvesting, etc., for his neighbors.

During the second year, he should realize, crop 40 acres wheat, 20 bushels to the acre, 800 bushels at 60c.....	$480.00
Do., 10 acres rye, 15 bushels per acre.....	36.00

(Both of the above are put at very low prices—wheat for several years having sold here for 80c. to $1.10 per bushel.)

During the months of May, June and July he can break with *two* teams, say 50 acres more of prairie, and in September sow 100 acres wheat, which should yield him, the third year, at least $1,200, with which he can pay in full for his land and have a balance left for a good house, stable, etc.; and his land would be worth at least double its cost. Everything seems to be favorable to a man of moderate means here and in the counties west. The climate is mild, the rainfall ample—but not enough to drown the crops; the soil a deep, rich limestone loam, very productive and enduring—wheat averaging 20 bushels to the acre—this year averaging 23½ bushels, and in one instance 60 bushels per acre. In addition, the markets for the sale of his crops are good, churches and schools are abundant, and society much better than in any other new country.

Seed Corn from Tips, Middle and Butts of Ears.

A. H. W., Mass., asks with regard to selecting seed-corn; should the top or bottom ears be taken, when two or more ears grow on the same stalk; should the corn be taken from the middle or ends of the ears, and, if from the ends which one is best.

ANS.—In answer to this inquiry, we find the following experiment with corn, on the University Farm, Wis., recorded in the "Transactions of the Wis. State Ag. Society" for 1871, "Seed from Tips, Middle and Butts of Ears. Three plots of equal area were planted on May 6, from seed grown in the same manner in 1870; distance apart three by four feet; three grains to the hill; of New England variety. Cultivation uniform in all. The results are shown in the following table:

Seed from	Time of ripening.	Yield pr acre.	Average length of 25 longest ears.	Average circ. at butts of 25 largest ears.
Butts.....	Aug. 21	62.66 bu.	9 inches	6½ inches
Middle.....	Aug. 21	60.95 bu.	9.1 inches	6 inches
Tips.....	Aug. 21	58.11 bu.	9.2 inches	5.8 inches

No difference was visible in time of ripening, but in the yield a perceptible difference was shown in favor of seed from the butts of the ear. The results of the measurements are quite curious, indicating that the average length of the ears was greatest in those raised from seed from the tips, while the average size around the butts, was greatest in the product of seed from the butts of the ear. In each case, as well as in the yield per acre, the product of seed from the middle of the ear was a mean between the other two.

This experiment seems to indicate that seed from the butt of the ear produces the greatest yield. It is not well, however, to establish this as a rule by the results of one, or even a few trials. If farmers in different localities, would repeat the experiment, with different varieties of corn, for a series of years, and compare results, then conclusions might be drawn that would be safe to follow.

Nephila Plumipes.

D. H. Elliott, Suwannee Co., Fla., sends specimen of insect found on his farm and asks for its name and history.

ANSWER BY DR. J. A. LINTNER.

The insect sent is the large and beautiful spider, known as Nephila plumipes (Koch). It is the one which a few years ago (in 1865), excited considerable interest, from observations and experiments made upon it by Prof. Wilder of Cornell University, who entertained the belief that the silk from it could be obtained in sufficient quantity to be utilized in the manufacture of silken fabrics.

The spider is one of the largest of its family, measuring, in lateral expanse of legs, two inches and three-fourths, and in longitudinal expanse, three and three-fourth inches. Its body is an inch and one-fourth in length, having a black thorax covered with silver-gray hairs, and an olive-brown cylindrical abdomen marked with white and yellow spots. Its first, second and fourth pairs of legs have on their second and third joints whorls of thick-set, stiff, black hairs.

Prof. Wilder first met with the spider on Folly Island, North Carolina. In a paper read by him before the Boston Society of Natural History, October 4th, 1865, he states: "As it stood quiet near the top of my tent, I wound off silk upon a quill for an hour and a quarter at the rate of six feet per minute, making four hundred and fifty feet in all." Subsequently, from an example taken upon Long Island, west of Folly Island, by means of a gear drill stock with cog wheels, Prof. Wilder succeeded in winding, directly from the abdomen, three thousand four hundred and eighty yards, or nearly *two miles of silk.* He states, during a two years' stay on the coast, and in the interior of South Carolina and Florida, he had not met with any trace of this spider elsewhere than near Long Island. The spiders are found in the forests, building their webs between trees and shrubs. The web is very large, from three to four feet in diameter, quite strong and very vivid. Its frame-work is composed of silver-colored silk, and the concentric circles of a bright yellow or golden-colored silk. In these webs large and vigorous insects are captured, as cicadas, etc., which the spider first envelops in a net by turning them over and over, before she proceeds to extract their juices.

Prof. Wilder was, subsequently, able to make additional experiments upon this insect, which were published, but the papers I have not at hand. From my recollection, a sufficient quantity of the silk was obtained to test its quality in the manufacture of some small article. But as there were found some insuperable difficulties in the way of rearing the spider extensively, the attempt to render it of economic value proved a failure.

The spider is figured in the Proceedings of the Boston Society of Natural History, vol. x, p. 210, where the male—quite a diminutive creature—is also represented.

N. Y. State Museum of Nat. History Albany.

Miscellaneous.

M. B. P., Brookston, N. C., sends for name, flower, leaf, twig and ripened seed of a shrubby tree, in that neighborhood called Bay-wood. It grows plentifully in wet places, along streams, etc., sometimes to the hight of 20 feet or more. Hitherto he has, with this exception, never noticed flowers on it at any time, except in early summer, and has never seen many fruit maturing.

ANS.—It is Magnolia glauca.

W. W. Peck, Colebrooke, Astabula Co., Ohio, asks where he could buy a pair of white mice, and how much they would cost.

ANS.—White mice can be bought of R. W. Zoller, 5 North William St., N. Y. City, for 50 cents per pair. Mr. *Z.,* however, states that he would not ship one pair at any price.

G. M. Bowman, McKeesport, Pa., asks the names of the plow manufacturers in New York State, who make the most popular plows?

ANS.—Syracuse Plow Co., Syracuse, N. Y.; New York Plow Co., N. Y. City; Wiard Plow Co., Batavia, N. Y.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, SEPTEMBER 7TH:

"Leonora."—C. L. T.—H. C. S.—T. H. H.—W. B. D.—M. W.—"A Rural Cousin."—T. T. L.—F. D. C.—F. D. C. No. 2.—Mrs. J. T., thanks—Mrs. M. G. R.—E. B. D.—J. A. L.—G. G. 1-2.—Mrs. M. O.—Anon.—J. S.—M. L. D.—W. H. N.—J. C. C.—"Mississippi."—C. B.—D. M. D.—J. E. M. C.—W. B. W.—E. E. R.—S. B.—W. F.—C. W., thanks.—M. E. P.—J. I. C.—J. E. L.—S. B. P.—D. F.—F. G. M. P.—M. J. C.—J. P. McA.—A. H. W.

Everywhere.

WESTERN NOTES.

OGLE Co., Ill., Aug. 27, 1878.

SINCE the harvest has closed "Ye Grangers" of the West have been busy threshing their crops, or preparing to do so, hauling manure, etc., and some few have commenced plowing. Thus the farm-work goes on without cessation, and there are many, many things not in the regular routine or programme that must be attended to when opportunity is offered.

ORDER—the first law of Nature,—should be the leading principle with every farmer. It pays to be methodical and keep things in good condition and proper shape. There has been more money lost in agriculture by wastage, slip-shod farming, and inattention to business, than would be required to pay off the public debt and release every mortgage in the land! This may seem a rather extravagant guess, but the facts in the case would no doubt sustain the assertion. Too much begun and too little done is the cause of many a misfortune and failure. Under a too heavy load but little progress can be made, and the carrier is soon broken down. Let no one undertake more than he can accomplish in due season and in a right manner, and success will crown his well-directed efforts.

ODD JOBS, and there are many of them, cannot be mapped out for set times, but must be transacted at the most opportune moments, and in a manner that seems the most feasible. The thoughtful farmer will be at no loss to know how to regulate these little irregularities, so as to bring order out of chaos, and make or save a little "honest money." Among the numerous odd jobs that present themselves when least expected, are repairs to fences and buildings; the mending of gate hinges that have been broken from "too muchee swingee;" the destruction of noxious weeds before they go to seed; the demolition of the nests of tent-caterpillars on fruit trees—"let no guilty one escape;" the removal of water sprouts; and many other things "too tedious to mention," will be found for industrious and willing hands to do.

HARVEST HOME pic-nics and recreations are highly appropriate at this time of year. After the hard, toilsome work of harvest, through the long, sultry summer days, the body needs relaxation and rest, and the mind some social enjoyment other than can be obtained in our daily avocations and in the seclusion of rural homes, however pleasant these may be. As seed-time follows the harvest, it is well to pause and contemplate the beauties of Nature, and the mysterious ways of an all-wise Providence in the productions of the earth. *Apropos* of this, allow me to quote a beautiful sonnet on "Life," from "Galileo and Other Poems," by J. P. Johnston, of Bennett, Pa., which I have no doubt will awaken an echoing strain in many a concordant heart:

"I stood amid the ripened field of corn,
Which covered all the bright and smiling land;
And saw the reapers come, a happy band,
With merry songs upon the breezes borne.
And glad and joyous shoutings, 'mid the bright
And balmy air, which seemed to bear no blight.
I said, 'All nature lives, shall man despair?
Shall fruitful seeds, which long had darkly lain
Beneath the sod, revive and bloom again,
And man be left to sleep forever there?
Beneath the sunshine of a future age;—
Who knows? perchance a brighter hour may come,
When storm shall pass, and tempest cease to rage,
And man arise to shout the world's great Harvest Home."

AGRICULTURAL FAIRS are now about to be held throughout the different States, and most of them give promise to be of unusual interest and unprecedented attraction. This season is auspicious for them, as the crops are bountiful, live stock in general good condition, and manufactures have attained an eminent state of improvement and perfection. Our Western fairs will be found of special interest and value. The Minnesota State Fair, at St. Paul, promises a useful novelty in the exhibition of the process of making sugar from corn-stalks. This will be a practical test, as it is proposed to manufacture and granulate sugar in the presence of the public, from corn-stalks. Stowell's Evergreen, and a species of Chinese sugar-cane have proved to be the richest in saccharine matter, so far as tested. The leading feature in the machinery department of Western fairs this year will again, most likely, be the various self-binders that will be exhibited. Some of these labor-saving machines now do their work automatically with astonishing neatness and dispatch. But all kinds of implements and machinery will be exhibited in bewildering profusion. The Exposition at Chicago, under the efficient management of Hon. John P. Reynolds, Secretary, will be open from Sept. 4 to Oct. 9, and will be a busy hive of industry. More applications for space, from the East, as well as from the West, have been made than could well be accommodated in the spacious Exposition building, but all will receive due attention.

I also learn that the managers of the Illinois State Fair (to be held at Freeport, Sept. 16-21,) are enlarging their accommodations, by the erection of additional booths and buildings, etc., as numerous applications for space and letters of inquiry are being received by Secretary S. D. Fisher, Springfield Ill., from all parts of the State and elsewhere, indicating a large attendance and fine show. Let IMPROVEMENT be the aim of all our fairs, and success, both present and prospective, will result therefrom.

Truly these are encouraging "signs of the times." W. B. DERRICK.

NORTH CAROLINA NOTES.

TRANSPLANTING TREES.

HAVING had some little experience in transplanting evergreens, I may be pardoned for telling the conclusions I have arrived at. But very few losses need be sustained where one not only plants his trees himself, but lifts them from the nursery rows also. Too often by far trees are in fit condition only to go on the brush heap when received, the death-blow having been dealt when Pat grasped the top and pulled with "might and main," while Mike thrust his spade in the earth, loosening the tree, and at the same time putting in practice to excess the theory of root-pruning. Again, in packing too little moss or other damp packing is used on the roots, and three or four days' exposure to dry winds results, in many cases, in the conclusion expressed by the amateur planter in the hopeless words: "It is useless to plant on my soil."

My practice has been to procure trees as nearby as possible, preferring an inferior specimen handled under my own eye, to better ones handled as above described. As to the time, I have never been successful in the fall, but would not hesitate to fill an order any time after the frost is sufficiently out of the ground in March until July. Unless the soil is quite wet, give each tree a bucketful of water about the roots, then with the spade cut around about a foot from the stem, more or less according to the size of the tree; have ready at hand a sufficient number of boxes, 18 to 24 inches square, the sides being only two or three inches high. If one side be left open it is more convenient. While one man lifts the plant carefully, another loosens with the spade the ball of earth which, if the soil be any way tenacious, the fibrous roots will hold together until it can be placed in the box. It is very easy to slide the mass into the hole prepared for it. If all be carefully done, the growth will not be retarded and no replanting is required When desiring to plant trees from the woods or fields, I have found it more satisfactory to cultivate in nursery rows one or two years before planting out singly.

TO DESTROY BURDOCKS.

Mr. Bertram's failure to destroy burdocks by cutting was no doubt attributable to too early cutting. Allow them to make a full growth, getting nearly ripe, then cut, gather together, before the seed is dry enough to shell out in handling, and burn. This plan followed, two years in succession, will leave but few, if any. The burdock is a biennial, producing no seed until the second summer, after which the plant dies. If cut before fully developed, cheated nature persistently exerts herself in the re-production of burdocks, throwing out shoots as often as destroyed, and well set with seed, until frost ends the struggle; whereas if allowed to mature the first crop they die easily.

M. B. PRINCE.

FARM NOTES FROM CENTRAL NEW YORK.

ITHACA, Tompkins Co., N. Y., Aug. 31, 1878.

CROP REPORT.—Corn will be fully up to the average. Early potatoes poor, those planted later, a fair crop. A large amount of hay gotten in, in poor condition on account of the unfavorable weather. Hay worth $6 to $7, per ton; white wheat, $1, per bushel; potatoes, 32 cents per bushel. Weather fine at present, with a good prospect for the buckwheat crop.

HEN MANURE ON CORN.—I think I have found the most profitable way to use hen manure on corn crops. My plan is as follows: Let one man go ahead of the planters, and drop a small handful in each hill; let the planter, before dropping the corn, cover the manure slightly with earth; then drop, and cover as usual. Try it once, and you will find your poultry pay in their droppings alone.

RURAL SPECIAL REPORTS.

PLYMOUTH, Wayne Co., Mich., Aug. 24.

WHEAT, on the whole, is an unusually heavy crop, yielding in some instances, forty-four bushels to the acre; where not injured by rust the average would be about twenty-five bushels. Quite a number report thirty and over. Some few complain of too much straw and very small heads.

OATS have been a source of trouble to the farmer all the season. The land intended for them was plowed one day, and then lay off nearly the whole of May, and, except on light land, very few were sown before the first week of June. The majority headed out when about eighteen inches high and are, on the whole, a light crop.

HAY was not an average crop, the May frosts having injured it considerably.

STRAWBERRIES considerably injured by frosts and finished off in a drought, very short season and light crop.

RASPBERRIES, full crop and fine fruit.

GRAPES nearly all cut down in May; a very light crop will be gathered from the second growth.

APPLES, various; some orchards in good bearing, others medium to very light. May frosts doing serious damage in some situations.

PEACHES, on the whole, are a light crop, but fruit is fine. The extra area sown will, in a measure, compensate for the lack of yield.

POTATOES will be a fair crop. They vary much both in quality and quantity and, at the present time, the average yield can scarcely be determined. I have Early Rose, Late Rose, Snow Flake, Brownell's Beauty and Peach Blow. The three first I have tried, and they are the best in quality of all I have tasted in North

America. I often regret I can't eat more. They are not only like balls of flour, but they have a delicious flavor indescribable.

This season has been a most remarkable one here. No severe winter weather; strawberries in blow the last week in March and half the crop destroyed by frost two months afterwards. Long, dry, hot spells followed by almost tropical rains, the wind invariably veering to the north for a day or two after rain. Vegetation has suffered more without rain for one week than it has some seasons without it two weeks. The sun has scorched the leaves of plants and dried them up as if actually burnt by fire. The colors of Geranium flowers were quite changed; salmons were nearly scarlet; scarlets, crimson Lucretia nearly rose-color, and I had to refer to the label to know which one I was looking at. Other plants I cannot coax to flower at all, while others almost refuse even to grow; but Hydrangea paniculata is bearing the largest flowers I have seen—they are immense.

J. H. J.

CHARLESTON, Kanawha Co., W. Va., Aug. 31.

AFTER reading the "Crop Reports" in the RURAL, and comparing the other States with W. Va., I find she is about on an average with the rest. There certainly cannot be any complaint about small crops, for the prospect was never better for an abundant harvest. If the production of an abundance of grain will in any way relieve the poor and hungry that are crowded in the large cities and towns, they will certainly get relief this winter.

We are having a good deal of rain here now. For the last month the ground has been too wet to plow, and consequently the weeds are taking possession of the farms and gardens, and about the only remedy is the scythe. Speaking of a scythe reminds me of mowing, I suppose on the same grounds on which the old woman said speaking of shooting reminded her of a gun. If the scythe and mowing machine were used more, the meadows would undoubtedly be better. After the grass is cut and stacked or handed into the barn—which is still better—the farmer, as a general thing, turns in his stock to pasture, and, of course, the cattle will eat the grass and keep it close to the ground, while the weeds have all the chance to grow, and in the fall they ripen and fall to the ground, completely covering it with seed, and in a few years the meadow is over-run with weeds and briers and the grass is not worth cutting. Now, this can be prevented if measures are taken in time. The reaper is the preventive, and if the weeds are mown down before they ripen, it will not only kill them but will be a good coating of manure for the meadow and pastures.

The potato bug has left for parts unknown, I suppose; for we are not bothered much more with it here. Potatoes were raised in good quantities last year, and consequently were very cheap, bringing only from twenty-five to fifty cents. As the price didn't pay for raising them last year, there were not so many raised this season. Strawberries were raised here in abundance this summer and brought, in the latter part of the season, only from five to eight cents a quart. The Champion was the best berry raised, some measuring from five and a half to six inches in circumference. E. B. D.

FREEDOM, Outagamie Co., Wis., Aug. 23.

WITH occasional heavy rains and warm weather, corn is making a big growth; it is earing out well now, although rather late. If the frost holds off long enough we shall have a large corn crop, as more than the usual area was planted last spring. Meadows and pastures are fresh and green. Clover is making a rank second growth, insuring plenty of fall feed for stock. Thashing is progressing rapidly now, and, in the aggregate, the wheat crop will be large owing to the large amount sown last spring. Spring wheat is yielding from ten to twelve bushels per acre; winter wheat about double that quantity. The quality of spring wheat is only second or third-rate. Oats will be about a medium crop; other crops, roots, &c., about as good as usual. Weather warm and wet. J. H.

BEWLEYVILLE, Breckenridge Co., Ky., Aug, 28.

THE corn crop in this county will hardly average half crop, caused by dry weather. In the last two months we have had scarcely any rain not enough to wet root crops. The night of the 2nd of this month a terrific hail storm passed through this section: doing great damage, to fruit, corn, and tobacco. Garden products were almost entirely ruined. Some have cut their tobacco off so that shoots will come out from the ground and will make trash. Wheat did not thrash out well, oats did well. Many, many thanks for the Willow slips; out of four I think I will save three. M. J. C.

NEOSHO Co., Kan., Aug, 24.

THE early corn is very good; late corn is injured by dry weather. Perhaps the average yield will be about 40 bushels to the acre. Wheat is good grain, but the yield will be small—15 bushels per acre. Oats good; 50 bushels per acre. Peaches, poor and wormy. Hay good. Wheat, 65 cents per bush.; corn, 20 cents per bush.; oats, 12 cents per bush.; butter, 10 cents per pound; eggs, 6 cents per doz.

WM. B.

The Herdsman.

WHAT CLASSES OF ANIMALS SHALL WE SELECT?

PROFESSOR G. E. MORROW.

IT is a generally recognized principle in breeding that it is exceedingly difficult, if not absolutely impossible, to combine, in any one animal or any one breed, the highest possible excellence in several directions. It is obvious that a horse best adapted for heavy draft is not best suited for fast trotting. Should one desire to purchase a horse possessing any one characteristic, whether of form, size, age, training, he could find what he desired with comparatively little difficulty, but to exactly mate a given horse is quite another matter, and supposing absolute agreement be insisted on, the effort would be in vain. It would be held absurd to ask for a horse capable of running a mile in 1:45, of trotting in 2:30, and of pacing in 2:25. This principle should be kept in mind by those attempting to improve a breed or class of animals. If the effort be made to develop a large number of desirable characteristics at the same time, the result will almost inevitably be failure.

But the recognition of this truth should not lead us to deny the equally evident one that a fair degree of excellence in two or more directions may be combined in one animal. A good driving horse may be a very fair horse for most ordinary kinds of work; a sheep giving a good fleece may also have a good carcass. There are certain characteristics which seem antagonistic, but there are many which, while having no special connection with each other, seem to have no antagonism. Thus most "fancy points" in our improved breeds are neither beneficial nor harmful in themselves. A bay horse is neither better nor worse, necessarily, than is a chestnut. A solid-colored Jersey cow is neither better nor worse because of this; a dark-nosed Short-Horn may fatten as readily and give as much milk as one with the fashionably-colored nose. It is harmful to make such points prominent in the objects for which we breed, as we probably will, in such case, neglect more important ones, but their possession is unimportant in itself. So, too, I can see no necessary antagonism between milk giving and flesh forming; between wool growing and ability to produce mutton in fair quality and quantity. Of course, I do not mean that these things can both be done to the fullest degree at one time.

I fully believe it possible, and not exceptionally difficult, to combine a fair degree of merit in two, three or more directions in the same animal and in the same breed. Not only so, but I equally firmly believe that such animals are best suited to the needs of the larger number of persons, and that their production or ownership is advisable for the great mass of farmers. This may be illustrated by referring to the effects of a minute division of labor. Undoubtedly this gives greater skill and efficiency. The man who has been thoroughly trained to do one thing, can do this better and more rapidly than can one who has given his attention to learning how to do a good number of things; but the latter is the more useful man in most communities. A skillful plowman is very desirable, but on most American farms one who only knows how to do this, would be an expensive luxury. In like manner, the average farmer or citizen does not need a horse, for instance, the best possible for any one purpose so much as one fairly adapted for quite a variety of work. On large farms teams may be kept for special work, but on the average farm of this country, the best horse is one fairly suited for the road and the plow, possibly for the saddle.

I grow more and more convinced that reasonable fitness for more than one purpose, should be insisted on in all breeds designed for general introduction among farmers. There are special localities, and special men in many localities, needing animals specially fitted for one special purpose, and fortunately such animals can be obtained. But nine farmers out of ten, taking the country as a whole, cannot afford to select any class of farm animals with reference only to any one characteristic. Activity and strength in the horse; beef and milk in the cow; wool and mutton in the sheep; early maturity and fair size in the hog—fair excellence in these combined qualities is a better recommendation for any breed, so far as adaptation to the wants of the mass of farmers is concerned, than is proof of remarkable merit in either one with confessed inferiority as to the others.

Accepting this view does not make it necessary to cast off the typical draft horse or the typical trotting horse; each of these has its place and meets a demand; but that place is not on the average farm. There are men who will find cows which "run all to milk," and neither in form nor size are well adapted to beef production, the most profitable; as there are many who only care to have their cows give enough milk to nourish their young; but by far the larger number of cattle-owners in this country will find those breeds and those families within these breeds, which can and do produce a good quantity and of good quality both in meat and milk, the most profitable. It is possible there may be localities in which the sheep-owner may properly feel that he does not care at all about either the quantity or the quality of mutton his flock can produce; and other localities in which the fleece of the flock may properly be ignored. But such are exceptional; not the rule. The hog is asked to do but one thing, as a rule, and so it is less easy to apply the rule to him; but certainly it will be admitted that it is not wise to bend all energies to producing the largest possible hogs; or those which have the greatest possible activity; or, even, the earliest possible maturity.

The class of animals best suited for the current needs, will vary greatly with the different conditions of our agriculture; there is room and need for many breeds combining, in different proportions, various characteristics, but the most useful will be found to be those which meet general rather than special needs, and the average farmer in selecting for his own use will do most wisely if he choose those which can do two or more things fairly well rather than those which have no fitness save for one purpose.

Illinois Industrial University.

Hygienic Information.

STOMACH AND LUNGS.

S. B. PECK.

IF I recollect aright, GRAHAM the great apostle of vegetarianism, held that bread made from unbolted flour was more healthy than that which we call "superfine," for the following reasons: First, because the bone-forming material of the grain was mostly or entirely in the skin; and to the lack of this in the food he imputed the early decay of the teeth. Second, because this skin or bran was a stimulant to the stomach, preventing constipation, and by increasing the labor of that organ, giving it tone and strength, just as the strength of all the other muscular parts of the body is increased by judicious exercise, while the eating of finely comminuted food did not give sufficient exercise to the coats of the stomach to keep that organ in the most perfect health.

Whether I am correct or not there is force in the latter reason at least. But whether GRAHAM succeeded in demonstrating in his own case the correctness of his vegetarian theory, I am not positively informed, but I think he did not. At any rate I have always believed that the cause of the early deaths of four of one family of my relatives, was their persistent practice of his vegetarian theory, and still I am inclined to think he was right in the advocacy of the bran diet. Now, the lungs as well as the stomach are operated by muscular force, and why should not these muscles as well as those in the other parts of the body, require vigorous exercise for the most perfect development and most perfect health? Not that this vigorous exercise of any of the muscles is required at all times, but in the natural condition of man they are all liable to be called upon to do extra duty in emergencies, and if they have been allowed to become feeble through inaction, they become unfitted for this extra work, and are liable to injury or to fail when called upon for it.

An aged friend afflicted with asthma dates the commencement of his complaint from a period long after he had ceased ordinary labor, and upon the occasion of his running to head off an unruly cow. Mortuary statistics show that disease of the lungs, or, in other words, consumption, is the most fruitful source of death from disease. In the present state of civilized society, the ordinary occupations of mankind, especially of the female portion, require but seldom any muscular speed that needs to call forth any extra exertions of the breathing apppartus, but in most occupations the head is naturally thrown forward, while the chest is compressed and with it the lungs, preventing, in a measure, that easy and full exercise of the muscles of the chest which nature designed they should have. It has long been my opinion that the great prevalence of consumption was caused by the lack of sufficient breathing to keep the lungs in full health and strength, and that a judicious use of these most important organs has more to do with our health and comfort than we are apt to think.

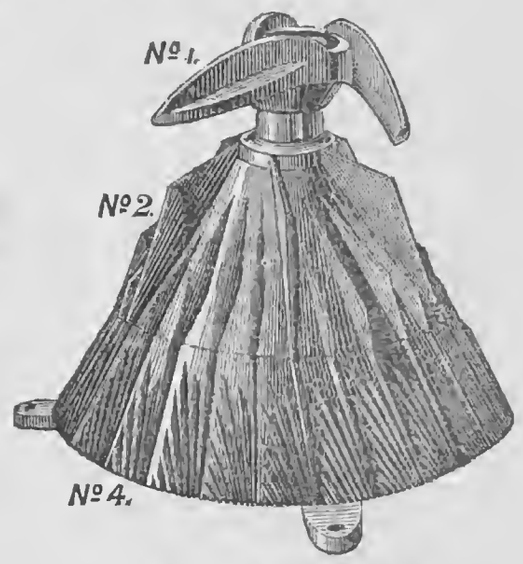
A friend is subject to repeated attacks of what is called sick headache, and tells me that he obtains greater relief from unnaturally full and heavy breathing than from any other remedy. Mrs WILLARD, principal of the late Troy Female Seminary, has related her successful treatment of a case of cholera in one of her pupils. The most that I now remember in this case, is that the pupil was made to move about in the open yard even with a supporter on each side, and take in full and heavy inspirations of cool air; and I have noticed, in my own case, that the most violent ague shakings were quieted, as long as I could hold my lungs completely full of air.

Muskegon Co. Mich.

Industrial Implements.

THE BIG GIANT CORN MILL.

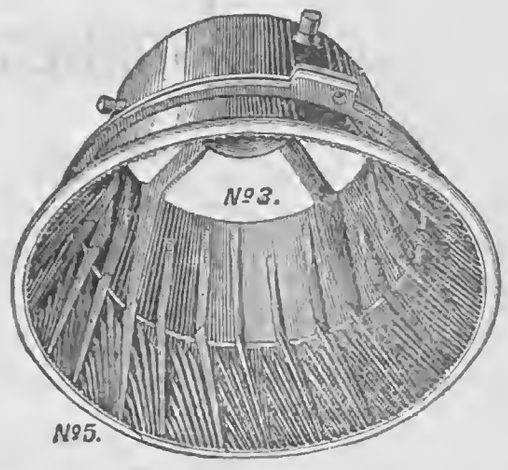
The uses of a good corn-mill are apparent in the improved condition of all kinds of stock to which the ground food is fed; besides, the judgment of those who make a practice of reducing food to a pulverized condition, is that it becomes more nutritious. In the case of corn that is ground just as it is plucked from the stalk—husks, cob, and grains—it is also claimed that the alkali contained in the cob, acts as a corrective, and is a sure destroyer of bots.



Commercially, when the price of grain rules low, it is wise economy to bring your corn-mill into active use, and by fattening stock more than secure an advance on the price of corn in addition to producing manurial deposits that, of themselves, represent cash.

Since our trade with England in cattle, has assumed the shape of a steady industry, it behooves us to keep and extend our advantage. One reason, it is said, why American beef is sought after, is because the fats are more solid, and less oily in character than native breeds that have been gorged on oil-cake: therefore, to avoid this defect and keep up our standard, we should feed our corn liberally. To do this profitably we must have a mill that will grind rapidly, without waste, and with the smallest expenditure of power.

The illustration of the Big Giant Corn Mill, which is given in this issue seems to fulfill the conditions of success. It is warmly commended by those who have used it, both as a feed grinder, and for general family purposes, inasmuch as it will, when necessary, grind fine enough to produce an excellent quality of meal.



The improved mill is shown in the two illustrations, and needs little description. The subjoined cut, shows the inside grinder with cone and breaker-arm. The breaker-arm (No. 1.) keeps the corn from riding on the arms of the mill, stirs it in the hopper, and secures a sure self-feed. The cone (No. 2.) is very steep, and contains crushing and cutting blades. The lower inside section (No. 4.) has blades similar in shape to the furrows in a burr stone, which secures fineness and rapidity of grinding. The second cut represents the outer grinding surface of the mill, and corresponds with the inner surface. Any wear may be taken up, or adjusted by means of set-screws, and the mill may be made to grind fine or large by the same appliances, a feature peculiar to this mill it is claimed. All parts subject to wear may be renewed at trifling cost and trouble, and the knives being self-sharpening, will work effectively until ground flat. Various sizes of the mills are made, varying in grinding capacity. All who have used it seem to be agreed that the mill does a large amount of work, proportionately to its size, and that it is an economical, durable mill, but details of this nature may be more satisfactorily acquired, by applying to the manufacturers, Messrs. J. A. Field, Son & Co., St. Louis, Mo.

OSBORN'S GRAIN AND SEED SEPARATOR, made by Denison Fredericks & Co., Syracuse, N. Y. has a very wide range of work. It is said to separate satisfactorily oats, clover, wild buckwheat and other impurities from spring wheat, rye, cheat, etc., from fall wheat; oats from barley (for seed;) wild mustard, lastard flax, pigeon grass-seed, and every other foul seed from flax seed. The separator will be in operation on the fair grounds at Elmira.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Wheat (Illustrated)..... 581
Notes from the Rural Farm..... 582
Defiance Wheat (Illustrated)..... 582
Champion and Defiance Wheat—W. G. Le Duc... 582
Wheat Sowing—L. J. Templin..... 582
Spring Wheat—Culture &c.—W. H. White..... 582
Self-Sustaining Farms—An Old Hand.. 583
Thorough Tillage—Leander Wetherell..... 583
United States vs. English Agriculture—A Veteran 583
Notes From a Backwoods Farm—John Rusticus.. 583
Notes of Some of the Newer Strawberries—T. T. Lyon..... 583
The Ideal Strawberry—C. W. Garfield..... 584
Arrangements of Single Trees—W. C. L. Drew... 584
What Others Say..... 584
Poultry Breeding—No. 5—A. M. Van Auken..... 584
Poultry Record—Anon..... 584
A Good White Shirt..... 585
To Expel Foul Air—S. R. M..... 585
Catalogues, &c., Received..... 585
J. J. Mechi..... 585
Blue, White, Red and Yellow Pond-Lilies—Wm. Falconer..... 585

Answers to Correspondents:

Small Capital on a Farm in the Far West..... 586
Seed Corn from Tips, Middle and Butt Ears.... 586
Nephila Plumipes..... 586
Miscellaneous 586
Communications Received..... 586

Everywhere:

Western Notes—W. B. Derrick..... 586
North Carolina Notes—M. B. Prince..... 586
Plymouth, Mich..... 586
Charleston, W. Va..... 586
Freedom, Wis..... 586
Bewleyville, Ky..... 586
Neosha, Kan..... 586
What Classes of Animals Shall We Select?—Prof. G. E. Morrow..... 587
Stomach and Lungs—S. B. Peck..... 577
Big Giant Corn Mill..... 587
Osborn's Grain and Seed Separator..... 587

Domestic Economy:

Mop-Handle Papers—No. 4—May Maple..... 592
Amendes ' Regalia"..... 592
Domestic Recipes..... 592
Queries Answered..... 592

EDITORIAL PAGE:

The Wheat Crop..... 588
One Hundred Bushels..... 588
By the Roadsides..... 588
Shirking..... 588
Coarse Manure..... 588
One of Many..... 588
The Old Folks' Stupidity..... 588
Brevities..... 588

LITERARY:

Poetry..... 589, 591, 594
How to Treat Plants for Winter Decoration—(Illustrated)—J. J. Heinrich..... 589
Two Important Papers..... 589
From a Gambler's Home to the Throne of the British Empire..... 590
Recent Literature..... 590
Scientific and Useful..... 590
Bric-a-Brac..... 590
Free Lance Needs Enlightenment—Miss Ellen Hunter..... 591
A Lucky Breakdown—J. E. McC..... 591
Ornamentation Without Money—Loretta E. K. Turner..... 591
Answer to Dame Durden—B. C. D..... 591

Reading for the Young:

Famous Printers..... 594
Phosphorescence of the Sea..... 594
Paddling on a Hot Day—Busy Brains..... 494

Sabbath Reading:

The First Prophecy 594
St. John and the Partridge..... 594

News of the Week—Herman..... 592
Markets..... 593
Personals..... 595
Wit and Humor..... 596
Advertisements..... 594, 595, 596

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THE WHEAT CROP.

THE several articles on wheat culture published in this as well as in late issues of the RURAL, from the pens of some of the most successful wheat-growers in different parts of the country, supplemented by the information on the subject contained in the multitude of crop reports which our friends everywhere have enabled us to place before our readers, have given them ample details, both with regard to the local yields of the last crop in nearly every section, and with regard to the best practical means of securing a remunerative measure of success for the next crop throughout the whole country. Connected with the latter point, however, it may not be wholly superfluous to call special attention here to the necessity of selecting good seed, to insure a satisfactory yield; and also to the advisability of sowing early, in order the better to avoid the ravages of the Hessian fly.

By far too little attention is generally given by farmers to the selection of the best attainable seed, yet in a crop, like wheat, in which the profit is rarely large, the difference between good and bad seed may make all the difference between a remunerative crop and one that does not pay expenses. Having decided upon the variety to be used, the best plan for selecting the seed is to take it from those parts of the field that ripen the earliest and produce the best grain; thrash this by itself, and be careful to prevent all intermixture with other sorts. Special attention should be bestowed on the last point, for mixed grains seldom ripen together, and never bring so high a price in the market as a pure kind. It is within the experience of most farmers that an inferior grade of wheat, when pure, commands a higher figure when sold, than better kinds where two or more varieties are mixed; yet rather than take a little extra trouble in selecting and thrashing seed wheat separately, the lessons of this experience are too often disregarded.

Next to a fertile well-tilled seed-bed, the best safeguard against the depredations of the Hessian fly lies in early sowing. The time for this will vary slightly in different parts of the country, but if winter wheat has not already been sown, no time should now be lost before doing so, in those districts where this pest is prevalent. The plant will then outgrow the insect, and if the first stalk is destroyed, a second will take its place.

Just now the prospects of a rise or fall in the price of the wheat is a matter of primary importance to all wheat-growers who have not already disposed of their crop. This, of course, is a question which rests mainly upon the proportion of supply to demand, upon the excess beyond domestic needs, produced in countries where this cereal is extensively cultivated, as in the United States, Russia, Egypt, and some parts of India, as compared with the deficiency in the supply of the grain throughout the rest of the world, and the consequent demand that will be made on the surplus stock.

A letter on this subject just received from the Department of Agriculture, gives us the very latest official estimates of the wheat harvest in this country. These differ but very little from those given in our issue of July 6th. The indications are that the total area of wheat for 1878, is about 17 per cent greater than in 1877; winter wheat having increased about twelve per cent, and spring wheat twenty-three per cent, the total area under the crop being probably 31,000,000 acres. Last year the average yield was estimated at 13.9 bushels per acre, and at that rate, the crop of 1878 will aggregate 430,900,000 bushels. This of course, is only an approximate estimate, as full returns will not be systematized before December next.

From other sources, we learn that out of the crop of 325,000,000 bushels for 1877, 216,000,000 bushels were needed for domestic seed and consumption, to the first of this month, leaving for export about 100,000,000 bushels. Assuming that our requirements for seed and consumption, during the coming year, will be as much as 220,000,000 bushels, we shall still have for export in the year ending Sept. 1, 1879, upwards of 200,000,000 bushels, or double the surplus product of last year. A large number of calculations made on the returns from the Department of Agriculture, checked or supplemented by those from different States, in no instance, reduces this estimate by more than 13,000,000 bushels. What, then, are the chances for a large demand and therefore a profitable market for this enormous surplusage?

In Great Britain there has been, during the past year, a trifling increase of 50,000 acres under wheat, and a proportionate increase in Ireland, making the total area under this crop in the United Kingdom, 3,400,000 acres. The yield of the new crop is fully up to the average, or indeed a little better than for some years. According to the latest reliable estimate, it will yield, at the usual average of 27 bushels to the acre, 92,000,000 bushels, leaving 104,000.000 bushels to be drawn from abroad. France usually exports a little wheat, but this year her crop is reported slightly below the average, so that the French will probably be buyers instead of sellers. Reports of this year's grain crops have not yet arrived from the remainder of Europe, and so soon as they reach us, our readers shall be promptly put in possession of them, so as to be able to form an intelligent opinion of the outlook. On the whole, the present prospect is that while prices will probably not depreciate much, it is highly improbable that they will permanently rise even a little.

ONE HUNDRED BUSHELS.

SOME physiologists and statisticians have, in time past, expressed doubts as to whether an authentic instance of human life prolonged beyond a century, could be adduced. But too many cases have now been brought forward, and centennarianism is becoming too common for any one to doubt of its reality.

Mr. FRANK MILLER, the editor of Millers' Weekly, published at Portsmouth, N. H., voices a wide-spread incredulity as to the fact of hundred-bushel crops of corn to the acre, by offering a handsome premium for a thoroughly authenticated instance of such a crop—not by estimate, but by actual measurement of the shelled corn in a merchantable condition. We have no doubt that Mr. MILLER will have an opportunity to draw his check for the amount of his offered gratuity. But he will, before doing it, insist on such perfect proof as forever to set at rest the doubts that prevail, not only with the public generally, but among a vast number of farmers as well.

There is certainly no *a-priori* reason to doubt the possibility of hundred-bushel yields. A very little inquiry will show that one perfect ear of corn to the stalk is enough to overrun that quantity. This, without regard to the variety of corn and the size of the ears, because there is a very close ratio between the size of the ear and the distances necessary to be observed in planting. In the South, six feet between rows is a moderate distance, while the Canada corns grow with less than half the space, and make up by count all that is lost on size in their respective ears. The average corn yield is less than 30 bushels per acre. But when one who travels much among the farmers, observes the hight and abundance of weeds in most of the corn fields he passes in the month of August, he will see an abundant reason why hundreds of good farmers honestly report average crops in excess of 50 bushels to the acre. Clean culture alone will insure this result with almost any variety of corn. Now, if we will but add to clean culture a careful selection of seed adapted to the locality, and well cured, so that all may be depended upon to grow, and to this superadd a careful preparation of the soil and an adequate fertilization, what is to hinder, not an average, but yet not unfrequent yields of 100 bushels of dry shelled corn to the measured acre? Steady efforts to reach such crops will soon have a perceptible effect upon the national averages of this peculiarly American cereal, until it may rise to 50 or 60 bushels to the acre. We do not doubt the possibility, by good farming alone, of doubling the corn crop without adding a rod to the acreage upon which it is grown.

BY THE ROADSIDES.

As one walks along the roads in the country, if he is an observant man, he may learn many lessons of value. The dwellers along the roadsides may not suspect that their characters may be read very plainly by the condition of the road in front of their homes, and the appearance of their surroundings. But it is so, and every man has a certificate of character exhibited at his door, or upon his fence, for the passers-by to read. For instance, just now we may see roadsides white with the wild carrot or other pestiferous weeds. This shows that the owner is careless and thriftless, because he is suffering injurious weeds to multiply, and lay up future trouble for him; that he is selfish and regardless of what is due to his neighbor, because he is actually injuring the latter's property by stocking it with weeds, and laying up trouble for him as well as for himself; also that he is not a law-abiding, or at least, that he is a thoughtless citizen, because he observes neither the written law which, in nearly every State, obliges every owner or occupier of property to destroy injurious weeds upon his premises; nor the unwritten law of justice and kindness to his neighbor, which would impel him to "do as he would be done by." So it is with everything about the house, the gardens, the yards, barns, stables, and fields. A man's character is set forth by these as plainly as if it were printed in the largest type, and hung up for public inspection upon his front fence. Actions speak louder than words, and by our works we shall be judged.

The moral of this little homily is so plain that nothing further need be said as to its application. Let every man judge himself by it, however, and not his neighbor. Then some good may result. And this is the very time when action in this regard will be most effective.

Shirking.—The poorest of all ways for a farmer (or anybody else,) to try to get rid of trouble, is to shirk it. The man who "faces the music" with the most promptness, who "takes Time by the forelock," who "never puts off till to-morrow, what ought to be done to-day," is the man who will be most successful, have the most leisure, the least worry, the most comfort, and make the most money. Those who see a "lion in the path" when a big job of work rises before them, and cower down, instead of springing up, are not those who will make farming pay. It is as important for the farmer as for the sailor, to keep a good look-out ahead. No man's plans should be more far-reaching than the farmer's. No man should more carefully consider the alternatives of the situation, or be more ready to "about ship," when suddenly-occurring changes take place, or to substitute one course for another, as circumstances demand.

COARSE MANURE.

What is the use of having any coarse manure, or "long manure," as the English call it? The manure itself, *i. e.*, the dung and urine, is not "long." The "long" comes from the corn-stalks, straw and other rubbish that are thrown into it, or used for absorbents and bedding. Why not cut up all such material, so that the manure will always be fine enough to plow in without trouble, or use for top-dressing? Then we should have no excuse for keeping great manure piles about to "rot down," and no need of "compost heaps." Manure does not improve in its fertilizing power by keeping. It is never any better than when it is first made. Why keep it merely to improve its mechanical condition? Why not have that right at first, and to begin with?

One of Many.—The New York Sun publishes as if from one of its own correspondents the interesting description of Tiptree-Hall Farm, sent from England to the RURAL by Professor ROBERTS, of Cornell University, and published in our issue of the 24th ult. With the exception of a slight alteration in the headlines, the entire article was published *verbatim* as original correspondence by our contemporary, in its Sunday edition of the 8th instant. The injustice done to us by such appropriation of our property, without the courtesy of an acknowledgment, we suppose we must bear with equanimity, since there is no alternative. Similar offences, committed by papers all over the country, have taught us to endure them with philosophic indulgence, but it is aggravating all the same, and a miserable sort of *reward* for the pains and expense which we are put to in obtaining such original matter.

The Old Folks' Stupidity.—It is related that when tea was first introduced from China into England, some great mistakes were made in the use of it. Some persons steeped the leaves in hot water as they were directed, but, instead of drinking the infusion, they threw this away, and tried to eat the leaves as a vegetable. Of course, there was great disappointment and the new vegetable was set down as an unmitigated fraud and humbug by those stupid old folks. Well, the stupid folks are not all dead yet. Some are still left that we may be amused by their mistakes. Suppose a farmer piles his manure up in his yard or leaves it soaking in the rain-water, while the strong, dark liquid is thrown away on the roadside, or flows away into some brook or pond; and the drained, dry, useless stuff left, is spread upon the fields in place of good manure; might not such a person be thought as stupid as our good old great-grandmothers who threw away the tea and tried to use the worthless leaves?

BREVITIES.

GEN. LE DUC favors us with all of the few reports he has thus far received of Defiance and Champlain. We trust later reports may prove more favorable.

COL. M. C. WELD has a female Dioscorea batatas (Chinese Yam) bearing fruit. It bears no axillary tubers as the male plants do, which might have been anticipated. Could this female plant have grown from the axillary tubers? There was no seed sown.

MR. TEMPLIN says on another page, speaking of wheat, and it is worthy of special emphasis: "As to the seed to be used, I will only say that a man should sow just such as he wishes to reap. If he desires pure wheat, he should sow pure wheat, but if he have a partiality for chess, cockle, or other foul weeds, he should sow seed in which these abound."

A LINE DRAWN.—The patent office at last draws the line at a chalk mark. It has refused a patent to J. G. Strong, and Kate M. Strong, of Talladega, Ala., for an "ant-guard;" said ant-guard being merely a chalk mark, which ants are supposed to be unable, or unwilling to pass over. This is well. Patents of late have been granted with such a perfect looseness, that we have sometimes thought it would not be long before somebody would get a monoply even on winking; and then we should have men around threatening all the young fellows with suits for infringement, unless they would pay a royalty to the "inventor." But it seems that a "thus far and no farther" has been reached in the Patent Office, at last. We offer our sincere congratulations to the commissioner, and his corps of "able examiners."

IT is well to bear the following in mind. 1. Every fully developed plant, whether of wheat, oats, or barley, etc., presents an ear superior in productive power to any of the rest of that plant. 2. Every such plant contains one grain which, upon trial, proves more productive than any other. 3. The superior vigor of the best grain is transmissible in different degrees to its progeny. 4. By repeated careful selection the superiority is accumulated. 5. The improvement, which is at first rapid, gradually, after a long series of years, is diminished in amount, and eventually so far arrested that, practically speaking, a limit to improvement in the desired quality is reached. 6. By still continuing to select, the improvement is maintained, and *practically* a fixed type is the result.

Literary Miscellany.

THEN, NOW AND HEREAFTER.

MARGARET B. HARVEY.

I.

Oh, precious heart!
Thou knewest when my spirit drooped in pain,
And gently thou didst bid me hope again.

My wearied soul,
Like gladdened lark, with sudden shrill, did rise
And soar to the blue heaven of thine eyes.

Their wondrous light
Seemed like the gold through azure poured at morn,—
And where the singer's lost, the song is born.

And soft the strain,
Or ringing jubilant, the humble bird
Cares only that the skies and sun have heard.

II.

Long years have passed.
And now my soul, like wounded lark, doth soar
To warm blue skies and golden sun no more.

Her notes are hushed,
And by her ruined nest, mid leaves and mold,
Alone she cowers in the damp and cold.

But still a song
Is faintly quivering, though her voice is dumb,
And some glad day a flood of joy will come.

For once again,
Like gladdened lark, my longing soul shall rise
And soar to the blue heaven of thine eyes.

January 20th, 1878.

HOW TO TREAT PLANTS FOR WINTER DECORATION.

JULIUS J. HEINRICH.

Supposing that some plants have been procured for winter decoration of the room or window, as recommended in Rural of Aug. 10th, the next thing to be done is to grow them in proper shape, and to prevent them from blooming, which is done in the following way:

They will need shifting or repotting from time to time, which can be judged by simply knocking them out of the pot and seeing if the roots are all matted together between the pot and the ball of soil; if they are, they require repotting; if not, wait a little longer. (By the term "knocking out" is not meant to break the pot all to pieces, as some have supposed, but simply to separate the pot from the ball of earth, which is done by taking hold of the pot with the right hand and spreading the fingers of the left hand over the surface of the soil in the pot, and allowing the plant to rest between the middle and first finger. Now invert pot and plant so that the latter hangs head down; give a gentle rap or two on the rim of the pot on the edge of some table or bench so as not to strike the plant, and it will slide out nicely into the left hand.)

In repotting, first put a handful or so of soil in the bottom of the new pot so as to get the top of the ball of earth just one inch lower than the upper edge of the pot; this will allow plenty of room for watering. Set the ball in the center of the pot and fill all around with fresh, rich soil; press well down with both thumbs and give a gentle rap on the bench to make the surface perfectly level. Then water well. If the roots are very much matted, loosen some of the soil from the top of the ball, outer edge first, and then repot. Always be careful to set the plant in the center and have it rest perfectly straight, as nothing looks worse than to see a fine plant spoilt by leaning to one side.

Fig. 5.

The best pots to grow plants in are the common clay pots (Fig. 5). After years of trial I have found plants to do better in them than in anything else, for the following reasons: If you have had plants, you will notice that the sides of the clay pots are moist and always covered with a greenish, slimy substance; and the cause of this is that the surplus water finds at the sides of the pot the quickest outlet, being porous. Water will sink to the bottom of the pot when there is too much for the sides, and run into the saucer, if one is underneath to catch it. If this surplus water is allowed to stand in the pot it will cause the soil to become sour, and the roots will rot and finally the plant perishes. It can therefore readily be seen that the side-drainage is of as much consequence as that in the bottom, and for this reason glazed or painted pots will be found inferior to the clay pots, as all the pores they have in the sides are closed up with paint, etc. I know quite well that they have holes in the bottom, but the millions of little holes in the sides are not there. Fancy pots may be used to advantage in this way only: For those wishing to raise plants in summer for winter's use and having no garden, they can grow them in the window, but they must not be allowed to bloom. Pot the plant in clay pots that may be fitted into the fancy ones. Pot and set them in the window. In this way the clay pot is hidden and the drainage is not interfered with. Those having no fancy pots and wishing to hide the clay, can use a pot-cover (Fig. 6). It will hide the pot and give it a very neat and ornamental appearance without interfering with the side drainage. These covers are made of Black-walnut or Whitewood painted green, red, blue, yellow, etc. Some are also gilded like picture-frames, and others have gilt and green bars.

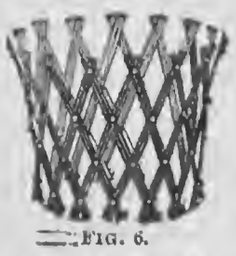

Fig. 6.

They can be obtained any size from four to eight inches high, and from $1 to $7 per doz.

The arrangement shown in Fig. 7 can be used on the outside of a window in summer, or inside in winter. It is simply a wooden board resting on two iron brackets with a Black-walnut pot-fence around it: it can be bought to fit any window. A, is an extension ivy trellis; B, is a pot trellis for any kind of climbing plants, and E, is the pot cover already spoken of.

Pruning will be required as the growth of the plants progresses, more or less. If the plant is too tall or spindling, and you wish it dwarf or bushy, cut the crown or center stalk off, as shown in Fig. 8, A, as low down as is desired. This will force the plant to start or send out new branches from the sides of the old stalk B.B.B.B. If, on the contrary, you wish it taller, cut the lower branches off at B.B.B.B., Fig. 8, and not at A.;

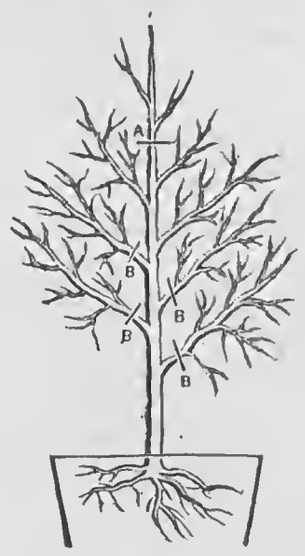

Fig. 8.

this will force it up. Cut away all dead or dried branches, that may by accident be broken off, and see that all the withered yellow leaves are removed. By cutting or pruning off all the buds as fast as they appear they will be prevented from blooming now, and will bloom in winter with more profusion. If allowed to bloom now they will not bloom in winter. Stop cutting off the buds about three weeks before bloom is desired. Those raising plants from seed will have little other care but watering, for three weeks to come; but see that they do not want for that, else one's labor will be of little avail.—To be continued.

TWO IMPORTANT PAPERS.

"I don't know what I shall dew with that 'ere boy," said Farmer Long to his wife, as they sat by the fire, that winter morning. "He's more harum-skarum than that State's reform-school boy was."

"Well, father, have patience with him for the sake of his folks. I think there's something in Jim that will surprise you, one of these days."

"I dunno whether he'll surprise me enny more'n he has or not. Last spring he made b'leve he knowed all 'bout biling down sap, 'nd surprised me by burnin the bottom uv the sap-pan eout, 'nd settin' the sap-house on fire. Last summer he broke more tools in haytn' time than all the rest uv us together. And dear me! Yeou'd orter seen him dig pertaters last fall! I'll venter he cut every third one in tew—struck at 'em ez ef he was splittin' rock-maple logs. 'Nd neow he's broke my best three-tined pitch-f rk, some way, a feedin' the cattel. He's on'y 16 y'r old. Ef he doos this in the green tree, what in nater 'll he do in the dry?"

After these remarks about the boy he had taken to keep until he was of age, the farmer started for the barn. He was bending over the great meal-chest, just inside the barn door as a tandem team was turning around the corner of the barn. This team consisted of a wild yearling steer and the boy, Jim Fowler. The "team" was on the "dead" run. The youth had hold of the steer's tail with his left hand, and held aloft a milking-stool in his right.

Mr. Long was unaware of danger; and when something struck him, and immediately he found himself on his back in the meal-chest, his first thought was of an earthquake or a tornado or other dread outbreak of forces. He emerged from the chest just in time to see his lime-backed steer pass on into the stable and Jim Fowler arise half stunned from the floor.

"Yeou young scamp!" he thundered, "Yeou'll murder somebody yet—er—er I shall, if yeou don't stop yer dumbed work."

The boy did not laugh at the miller-like appearance of the man. His own face was quite as white as the farmer's as he said:

"I'm awful sorry, Mr. Long."

"I dunno whether yer be er not," replied the latter. "But I'll tell yer neou 'nd here, Jim Fowler, what's what. When yer father died yeou haden't a relative left"

"No, sir, they wan't none left," broke in the youth; and the tears filled his eyes.

"I promised him a little afore he died, I'd take care on ye until yeou was old enough ter take care uv ye'self; 'nd do well by ye—give ye a common school eddication 'nd so on. 'Nd I mean ter dew it if yer conduct don't become onbarable. But yeou must be more stiddy 'nd man-like 'nd not plague me ter death by yer recklessness. D'ye hear?"

"Yes, I'm goin to try, Mr. Long."

"That's the sorter talk. I want ye ter go ter school 'an git ter be ez smart ez Jennie is, ef ye can. Yeou er tew years older'n she is nd y'aint nowhere side her."

"I know it. I aint nowhere side by her."

Jennie, the farmer's daughter, was a bright girl; and as pretty as a pink. Jim did not wonder that her father and mother were proud of her; or that they felt there was a vast difference between him and her. He thought there was himself; and he believed she did, for one day of the last summer, when he stumbled onto her flower-bed, she spoke sharply at him and, if he had not misunderstood her, called him a "beggar."

He was careless and stupid; if she had said as much, he would have thought it justifiable under the circumstances. But for her to speak in that way—as if his misfortune was his fault—made him almost hate her. He did not answer back, but the look he gave her kept her from ever repeating the taunt; and also from forgetting that she had once made it.

Yet he continued to be the same careless "Jim" up to this winter morning. But when Mr. Long had administered his reproof and returned to the house to brush the meal from his clothes, the youth fell into a profound meditation, out of which he came with this ejaculation:

"I'll do it!"

When the next term of school began, there were two scholars from Farmer Long's.

Jennie and Jim.

They went together; but separated when they got there, for Jennie was in a higher department than Jim could enter. This was the first term the latter had ever begun with a determination to learn. That he was now so determined is proved by the answer he gave to his teacher on the first day of school, when she asked him, among other things, what he wanted to do; it was this: "I want ter git ter know ez much ez Jennie Long does."

How did he come out? Well, he went to school every term for three years. He studied evenings, and all the time when not at work, during vacations. By incessant devotion to his books through those three years, he was able to master all the text-books used in that institution. For the last two terms of his course, he was a member of Jennie's classes. He graduated when she did; and, in most of their joint studies, was marked several points above her.

How did Jim think he came out? Going home with Jennie that last day, after school had closed, he repeated the words Mr. Long had spoken three years before: "Y'aint nowhere side uv her;" and thought they were truer now than ever.

Had the "want ter git ter know" with which he began, given place to a "want" less likely to be satisfied?

If Jennie had been aware that her own views concerning the result of their rivalry—if it was such—coincided with Jim's, she probably would not have expressed herself as she did to her mother, that evening, when they two were alone. "I suppose," said she, "he thinks he's done a wonderful thing; but I don't. If I had studied and studied and studied as he has, I should have been far ahead of the great—great—giant. But of course I don't care a fig about it, mamma."

Whether Jennie's remarks indicated a happy frame of mind or not, might be a question. But without question she used a very happy word when she spoke of Jim as a giant, for he was a mighty youth. Jennie was really petite. She knew it; but it did not trouble her that those girls who were familiar with her called her "Little Jennie Long."

Jim knew that he was of great stature for his age; and was a little sensitive on that point. I

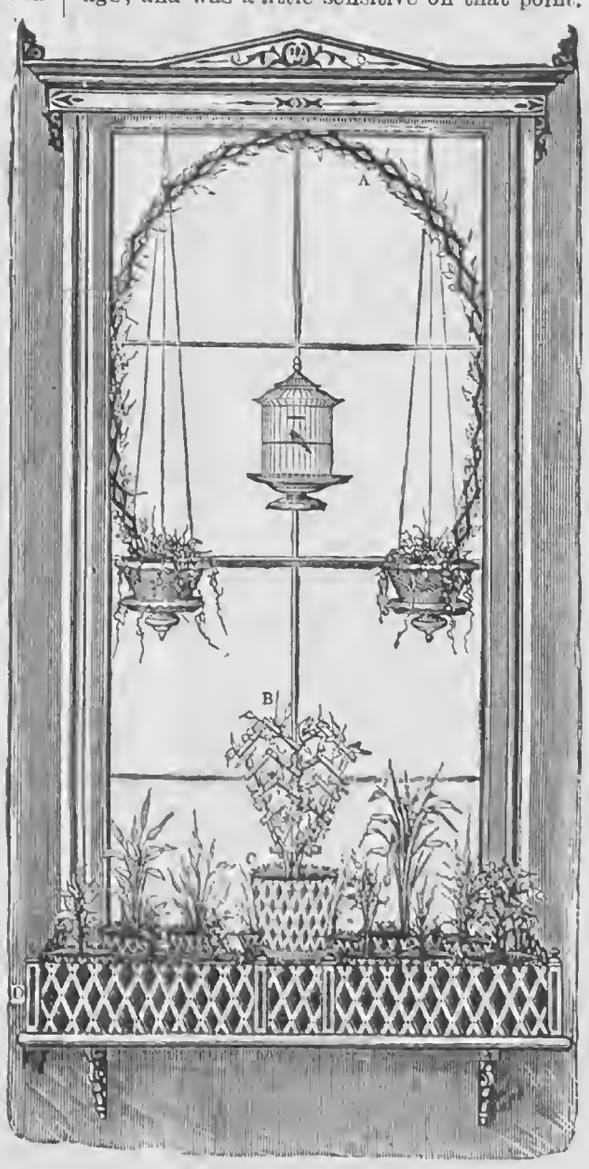

Fig. 7.

don't think he fancied being called "Big Jim." And it may have been his aversion to that name that accounted partly for his blushing so deeply one morning of his last term, when he had taken his seat at the opening of school. Some mischievous youth had written a stanza on the blackboard—which was on the wall that faced the seats—and written it in such a large hand that every scholar could read it from where he sat. This is a copy of the lofty verse that the teacher hastened to erase, as soon as she discovered what the scholars were laughing at:—

"But one dares write—what every one knows—
That several *little* fellers fret,
Because a chance they never get
To walk and talk with Jennie Long.
Who hinders them? *Big* Jim—the strong.
He comes with her; and with her goes;
And thinks she wants him to, I s'pose."

When Jim's eyes caught that, his face turned very red, as red as—Jennie's.

The youth that wrote that poem "dared" to write it; but he did not dare to make himself known.

Of course it was nothing but "boy's play," but Jim felt that he was near enough to being a man to look at it from a man's stand-point. And looking at it in that light, he thought it proper to tell Jennie that night when they went home that he was very sorry that some mean fellow had annoyed her in such a way; that he would find out the puppy who wrote the stuff and give him a sound thrashing.

But Jennie, to the surprise of Jim, could not see wherein she had been injured to an extent that demanded any such course as he proposed to take. And she dissuaded him from his sanguinary purpose. Not easily, however, but by arguments made in an earnest manner, and urged more and more strongly, until he was conquered.

Without meaning it, perhaps, Jennie said some things, before they reached her father's door, that were calculated to mislead Jim, as to the place he occupied in her thoughts. It was nothing positively encouraging; but something that came nearer to being that than anything she had ever before said to him. Of course it must have been unintentional, for nothing in that line was repeated during their walks to and from school the remainder of the term. And when the term closed, as was said before, Jim felt that she was farther from him than ever. He saw with the clearness of vision that is characteristic of young men in his state of mind, the hopelessness of any attempt to make himself her equal in any respect, and then acted as a youth in his circumstances usually does. He intended to remain with Mr. Long until he was of age, for he knew he could be of great service to the farmer in the two years that intervened between the present and that time. And he wished to repay the latter for his kindness to him.

For the first few months of those two years, he was apparently quite self-possessed in his association with Jennie. But that is all that can be said to his credit. He broke down—utterly succumbed—before six months had passed, proposed; and—told Jennie he did not blame her for not caring for him, and hoped she would forgive him for offering such a poor creature as himself to one like her; that he could not help it; that he felt he must know what he was to her, and now he did know.

Jim had discovered Jennie the evening when he asked that question, sitting on a bench under the great maple, back of the house. There she left him, and went into the house; and there for a long time he remained after she had gone, sitting in her place, with a sensation at his heart unlike anything he had ever before experienced. Not contented to let "well enough" alone he had gone from the negative comfort of conjecture, into the positive pain of certainty.

The next morning he entered upon his labors, with less encouragement than Jacob did upon his, after Laban's second promise. Less by as much as a refusal is less than a promise.

And Jennie? If her night's rest had been less sweet and refreshing than usual, she showed no signs of it. She appeared to be merrier than she had been for some time. Early in the day when she and her mother were engaged in the labors of the household, she surprised the latter very much by a "season" of laughing,—a season of very violent laughing.

"Jennie!" exclaimed Mrs. Long, at last, dropping into a chair, "What does ail you?"

"Why, mamma, it's the funniest thing—I've been proposed to."

"Proposed to? By whom?"

"By Jim."

"By *our* Jim, Jennie?"

"*Our* Jim, mamma."

"The foolish boy! Of course you told him, kindly, that you both were too young to think of marriage. Your father was twenty-six, and I was twenty-two when we were married. What did you tell him, Jennie?"

"I told him—no!"

"That was right; only I—I hope you did not hurt his feelings any more than was necessary. I trust he will forget all about it soon"—

"What, mamma?"

"I mean, Jennie, that I hope he will see how foolish he has been, and forget all about you before he goes away."

"O, certainly I—I hope he will—will forget—and—see how it is, before then. He's poor, you know—very. I—I told him so. I wanted to—help—him forget, as you say, and so I said in case I married, in the course of twenty or twenty-five years, I should probably wed a very rich man; then I shouldn't be any trouble to my—hus—husband; but that I shouldn't do for a *poor man* at all."

"Well, Jennie, I do sincerely wish that he may soon care as little for you as you do for him."

As the months passed away, Mrs. Long, watching Jim, concluded that he had not suffered much by the rejection he had received. The kind-hearted woman was glad to think it was so. Considering all things, the less attraction her daughter had for the young fellow, the better.

Jennie, also, hoping as we may suppose that Jim, for the sake of his peace of mind, would outgrow his affection for her, after a little while, decided that he had. She was very glad of it. And

yet there was a tinge of melancholy in the discovery. She was glad for his sake, because he had suffered so; but it was—abstractly considered—a very solemn thought that so strong an attachment was so short-lived. Not that she would have had it last longer in this particular case,—oh, no; but there might come a time when she should want to know that the one who had so great a regard for her was to have it forever. But what was she to expect? Was Jim a fair sample of mankind in this respect?

If Farmer Long had been an observing man, during these days he would have seen coming into Jim's face, something that could not have failed to remind him of the time when the youth's mother and Mrs. Long were girls, and the best-looking ones in the village. The father's strength had come into Jim's body and limbs, but he was getting his mother's face by installments. These were to be his possessions when he was of age.

As his 21st year drew toward its close, he could not tell whether to be glad or sorry for it. His reason told him to go and forget—he had not forgotten you see—in the excitement of business somewhere, his disappointment. But that heart of his kept forever answering "Stay another year." He was in this state of mind the day before he was twenty-one. After dinner that day he went and sat on the bench under the great maple. He went there that he might be alone to decide whether he would follow the dictates of his reason or give way to the longings of his heart. Reason at last carried the day. He arose from his seat, and said aloud, and decisively, "I shall go." It was settled. He had told the family all along that he should go away when he became of age. He was glad they knew it and had become reconciled to (perhaps wished) it. He was set upon looking straight ahead now, and determined not to look back.

And he did look straight ahead—Look? he stared, for just a second or two, and then went ahead, straight and fast. Up the slightly ascending meadow Jennie was running toward the house; and not far behind her was the four-year-old lime-back, pursuing. It was fortunate for Jennie Long then that Jim was near; and that he was "big" and strong and brave. Jim was bent on getting between Jennie and that mad brute and he could not stop to find weapons. He rushed past her and at that moment her strength gave way and she fell. If Jim had made a mismove—but he did not. With great dexterity he seized the animal by the horns as it came up, and putting forth all his strength drew its head with such force and suddenness to one side as to throw it down. Then springing to where Jennie had arisen and stood unable to move, from fright, he caught her in his arms and bore her to a place of safety over the wall.

When Jennie could speak, she turned to Jim and asked, "What if you had been killed?"

"O, there would have been a beggar less, that's all," said he, and he walked away.

An hour later Jim, in a deep reverie, was sitting under the old maple. He heard the rustling of a dress, the sound of approaching feet, and then Jennie's gentle call, "Jim?"

He arose and looked at her.

"Jim, do you—hate me?"

"No, worse than that—for me."

"Worse? Then you—don't—feel towards me as—as, you did once?"

"No, for I love you more."

"Truly, Jim?"

"Truly."

"Well, then you may read what I have written on this paper; but don't open it till I get a long way off."

She handed him the paper and turned and walked in the direction of the house. Jim was not long in opening that note, and reading:—

"DEAR JIM:—

Don't go away. JENNIE."

Nor did the writer of it get a "long way" off before he overtook her.

When Jim and Jennie entered the house together, a little later, Farmer Long looked at them sharply for a moment, and then, as if what he saw warranted him, he arose and also handed Jim a paper, saying as he did so:

"I s'hd like ter have yeou look this ere dockerment over'n see of it is kerrect. I don't want no mistake 'bout it. The place that jines mine was fur sale 'n I've bot it. This ere's the deed on't."

And so it was. And that "dockerment" was made to run to James Fowler and his heirs.—*Springfield Republican.*

FROM A GAMBLER'S HOME TO THE THRONE OF THE BRITISH EMPIRE.

JOHN DOBBINS.

THE most popular member of the royal family of England is, without doubt, the lovely Princess Alexandria. Her beauty, her charm of manner and her kindness of heart, have made her the idol of her adopted country, while the slights put upon her by her husband, have roused the chivalrous feelings of Englishmen for the insulted wife.

The splendor of Alexandria's surroundings as the wife of the heir-apparent to the English throne, presents a sharp contrast to the scenes amid which her childhood was passed.

Her father, Prince Christian of Schleswig-Holstein-Sonderburg-Glucksburg, of the royal blood of Denmark, was in 1850 not only a prince without possessions, but a man who found it a matter of very nice calculation, how to keep himself and his family supplied with the barest necessaries of life. He tried his luck at the gaming tables of Baden-Baden and Monaco, but without any very encouraging results. His royal relatives treated him with scorn, and were slow with offers of relief.

Perhaps no more pitiable object can be imagined than this princely adventurer, approaching middle life, burdened with wife and children, wandering from country to country, without resources of any kind, and without credit, seeking whom he might—not exactly devour—but who would be responsible for his expenses. It is not recorded that, beyond taking his chances at the gaming table, he ever made any attempt to work out his social salvation.

He was not, however, destined to forever beg his bread. The revolt of the duchies of Schleswig and Holstein made Prince Christian's fortune. These duchies, claimed that on the death of the then reigning king of Denmark, Frederick VII., who had no sons, they would be freed, from their dependence on Denmark, as the Salic law prevailed in their dominions. King Frederick, who had no idea of losing the duchies, enacted a decree abolishing the law. The duchies had recourse to arms, and after considerable bloodshed, the matter was referred to a Congress which met in London, May, 1852. The delegates sustained Denmark, and ignoring the rights of several princes, who were of near kin to King Frederick, chose the vagabond Prince Christian as heir to the Danish throne.

The appointment gave great dissatisfaction both to the duchies and to Denmark. Holstein continued to protest and finally besought the interference of Germany. In 1863, in the midst of these dissensions, the old king died, and Prince Christian became King of Denmark. He was hardly seated on his throne before his two powerful neighbors, Prussia and Austria, wrested from him Schleswig, Holstein and Lauenburg; so that of his reign the historian can record no brilliant military exploits, or astute political moves.

The most marked feature of his career since his accession has been his success in allying himself, through his children, with the most illustrious ruling families in Europe.

The year 1863 saw the beautiful Alexandria married to Albert Edward, heir to the British throne; and all England gave the lovely daughter of the adventurer, Christian, a glad welcome. In the following year King Christian's second daughter, Dagmar was betrothed to the heir of the Czar of Russia, Czarevitz Nicholas. The sudden death of this young man seemed to have lost the Princess Dagmar her chance of alliance with the royal family of Russia; but fate which for so many years showered misfortune on Christian seemed determined now to show him only a smiling front, for the new Czarevitz, brother to the dead heir, paid court to his brother's sweetheart and won her for his wife. The eldest son of the Danish king, in 1869, espoused the daughter of the King of Sweeden.

The same year in which King Christian ascended the throne, his second son George, 18 years of age, was appointed King of Greece. He was a handsome, amiable man, though not especially fitted either by nature or education for the position he was called upon to fill. He has on the whole made a fair ruler.

The seedy wanderer of 1852 has to-day for his grandsons, Albert Victor, son of the heir to the British Empire, Nicholas heir to the throne of all of the Russias, and the crown Prince Constantine the future king of Greece. The "managing mamma" of society, will, hereafter have to yield the palm to this prince of matchmakers, His Majesty of Denmark.

LOUIS KOSSUTH.—Louis Kossuth, who still lives in Turin, is described as quite feeble, and having aged materially within a few years. He is now sixty-six, and, though for sometime in delicate health, his mind is as vigorous as ever. The stories of his penury are said to have been somewhat exaggerated, albeit he is compelled to live very meagerly, which is no hardship, as he has very simple tastes. He does not complain; indeed, he makes no reference to his poverty, which has been relieved, it is thought, by contributions from admirers in England, France and America. His entire expenditures for several years past have not been more than 3,000 lire per annum (less than $600), which is certainly frugal for a man who was once dictator of his country. He has often been invited to return to Hungary, but he has steadily refused, believing that the Hungarians have not yet gained their rights. In Austria, Hungary is thought to have more than her share of political rights, more than the Austrians themselves, and Francis Joseph is accused of favoring the Hungarians to the exclusion of his own race. Kossuth is reported to have thought the formation of the German Empire as very unfortunate to the cause of freedom in Europe; but he thinks it cannot last if the German people be true to themselves.

RECENT LITERATURE.

Bluffton. A Story of To-day. By M. J. SAVAGE. Boston: Lee & Shepard. $1.50.

IN a prefatory note the author says: "The incidents of this story are chiefly facts. This is specially true of those things that may, to some readers, appear forced or exaggerated." This would seem a refutation of the old saw, that truth is stranger than fiction, for the incidents described are vapid and common-place enough to be studied inventions.

It is the story of a young minister who, lacking conviction, is called to the charge of an orthodox church, and the many trials and annoyances consequent on the false position his weakness and indecision have entailed upon him. Of course these include a rupture with his lady love, and the upshot is, he is obliged to abandon his orthodox flock for a more congenial and progressive field. The numerous long theological discussions are somewhat trite and a trifle monotonous, but it all comes right in the end. In a foreign land he meets his lost love, a reconciliation takes place, and they live happy ever after.

The Witchery of Archery. A complete Manual of Archery. By MAURICE THOMPSON. New York: Charles Scribner's Sons. $1.50.

To all lovers of out-door sports this book will prove an invaluable and timely companion. Mr. Thompson is an enthusiast on the subject of archery, as with his experiences he might well be. He says: "When a man shoots with a bow it is his own vigor of body that drives the arrow, and his own mind controls the missile's flight. When the archer hears his shaft hiss through the air with a force not to be equalled by those of his competitors, he feels justly proud of his superior manhood. His trained muscles and toughened thews have done the work. Not so with gun-shooting, etc." In short, he characterizes the modern shot-gun as barbarous and wantonly cruel, and the bow as classical and poetical—its use manly and healthful. Not only is the book replete with instruction in this fascinating sport to the tyro of either sex, but Mr. Thompson's adventures in search of game when he had become skilled in archery, form a sprightly and interesting narrative.

The Boy Traders, or The Sportsman's Club among the Boers. Phila.: Porter & Coates.

This is another of Harry Castleman's excellent tales for boys, and is one of the Sportsman's Club series. It is a story of perilous and exciting adventures by flood and field, and cannot fail to prove as fascinating to the young reader as any of this favorite author's many popular stories.

A CONTRACT has just been signed by Messrs. Claxton, Remsen & Haffelfinger, publishers, of Philadelphia, and a well-known editor and author, for the preparation and publication of a series of books suitable for counting-house libraries, to be known as the "Business Library Series." The leading object of this series is to collect together for the benefit of the young, the "learning touching negotiation or business" which Bacon deplored had not been reduced to writing, and consequently men must spend half their days in finding out what they should have known in the beginning.

These volumes will be of convenient size, of about 400 large 12mo. pages each, and though prepared by different authors, will be under one editorship. One of the volumes, entitled "Common Sense in Business," by Edwin T. Freedley, will be issued early in September; and this will be followed by another entitled "Home Comforts, or Things Worth Knowing in every Household," in which young wives are instructed how they may save, by good management, a portion of the money which the other teaches their husbands how to earn.

THE POPULAR SCIENCE MONTHLY for September commences with a brilliant article on "The Place of Conscience in Evolution," by Rev. T. W. Fowle. The author, though a clergyman, accepts, without qualification, the great doctrine of evolution, and says that it is taking its place "as a part of the furniture of the human mind." Prof. Du Bois-Reymond's masterly discussion of "Civilization and Science" is concluded in this number, with an examination of the subject of education in Germany. The Professor raises the question as to how the *Americanization* of German higher education is to be arrested, and points out that one of the ways of doing it is by the retrenchment of classical studies. There is a most curious and instructive article on the production of "Artificial Precious Stones," showing the immense strides that have been taken in this branch of chemical industry. Dr. Montgomery pursues the subject of "Monera, and the Problem of Life," treating of the physical phase of the problem with great originality and eloquence. Prof. Daniel Vaughan, the distinguished American astronomer, has a profound article on "The Astronomical History of Worlds," which will be appreciated by all students of the celestial science. Frederick Pollock follows the lead of Taine and Darwin, in tracing "An Infant's Progress in Language." There is a remarkable article by Prof. Grant Allen, on "The Origin of Fruits," which will be read by everybody with pleasure for the originality of its thought and the beauty of its style. There are, furthermore, articles on "Genealogy," "The Teredo and its Depredations," and "Science in the English Schools." The portrait for the present number is that of Prof. O. C. Marsh of Yale College, accompanied by an interesting sketch of his life. The various departments of the magazine, viz., Editor's Table, Literary Notices, Popular Miscellany and Notes, are, as usual, both instructive and entertaining. New York: D. Appleton & Co.

The Parallel and Meridian System of Map Drawing in connection with a Ruler. For making the Parallels and Meridians, whether Straight or Curved. By W. V. MARSHALL. Can be used with any Geography. New York: A. S. Barnes & Co. Price 20 cts.

THE author summarizes the distinguishing characteristics of this work as follows: 1. The parallels and meridians are used as the guiding lines in the construction of every map. This obviates the use of arbitrary lines that have no geographical value and only mar the appearance of a map. 2. It gives the operator more guiding lines than does any other system. 3. It teaches, without special study, latitude and longitude. The pupil gains this knowledge from the frequency of referring to these lines while drawing the map of a country. 4. It can be used with any series of geographies. Hence a change of system of drawing is not necessitated each time a change is made in the text-books of a school. 5. It reduces map drawing to the maximum of simplicity and ease. An appendix, giving some capital ideas on the subject of teaching geography, will be most useful to youthful teachers, and even experienced teachers will find it to contain not a few suggestions which will be of interest to them.

How to be Plump; or, Talk on Physiological Feeding. By T. C. DUNCAN, M. D., editor of the United States Medical Investigator, author of "Diseases of Infants and Children, with their Homœopathic Treatment," etc. Chicago: Duncan & Bros. Price 50 cts.

THE author recommends diet and rest as the only requisites for development. No medicine whatever is required in his course of treatment. He tells how he became fat, discourses on Leanness as a Disease; on the Healthy of Physiological Standard; the Importance of Water; the Value of Fat; the Necessity for Starchy Food and Sweets; and How to become Plump. Dr. Duncan writes in a popular style, and his little book will be a most useful addition to the family library.

SCIENTIFIC AND USEFUL.

NEW YORK AND LONDON TIME.—The difference in time between New York and London is a curious feature in ocean telegraphy. The London banker is in the full swell of traffic when the New York agent is first thinking of "getting up." At noon the London markets are cabled to this city, where they arrive at seven o'clock in the morning of the same day. The London agent of the New York Press telegraphs the most important news issued in the London Times at six o'clock in the morning. It reaches here at one o'clock the same morning, just in time to be inserted in the New York journals, whose readers have the same matter that the Londoner digests with his breakfast.

DISINFECTANT FOR THE SICK ROOM.—Ozone, the newest and the least stable of all gases, has recently been made to do good service in the sick room. It makes short work with those miasmata and organic impurities of vitiated air which the Italians describe by the impressive name of malaria, and which every physician knows to be among the most baneful influences with which the convalescent patient, whose tenure of life is not yet quite assured, has to contend. A mixture should be made of permanganate of potash, peroxide of manganese, and oxalic acid, in equal parts, and two large spoonfuls with some water put into a plate and placed on the floor of the sick-chamber. Care should be taken, however, to remove steel fenders and fire-irons, and to cover up brass door-handles, since ozone will rust all metals meaner than gold and silver.

AN attachment to the ordinary spring eye-glasses, by which they can at will be transformed into spectacles, and as quickly relieved from the attachment, is among the most recent and useful devices that have been brought forward. It was Dr. Cid, the well-known Paris surgeon, who found that the spring eye-glasses injuriously compressed the arteries by which the nose is nourished, making that organ long and thin. The effect of this improved mechanism is to remove all pressure from the spring, and at the same time to hold the glasses firmly in position, and thus is avoided the irritation caused by a continued use of ordinary spring glasses, as in reading, writing, etc. The advantage of being able to convert at once the same lenses into eye-glasses or spectacles is obvious.

THE CAT AS A SUBSTITUTE FOR THE CARRIER PIGEON.—It seems that the Belgians have formed a society for the mental and moral improvement of cats. Their first effort has been to train the cat to do the work of the carrier pigeons. The most astute and accomplished scientific person would have his ideas of locality totally confused by being tied up in a meal-bag and carried twenty miles from home and, let out in a strange neighborhood, in the middle of the night. This experiment has, however, been repeatedly tried upon cats of only average abilities, and the invariable result has been that the departed animal has reappeared at his native kitchen-door, the next morning, and calmly ignored the whole affair. This wonderful skill in traveling through unfamiliar regions, without a guide-book or a compass, has suggested the possibility of cats being used as special messengers. Recently, thirty-seven cats residing in the city of Liege, were taken in bags a long distance into the country. The animals were liberated at two o'clock in the afternoon. At 6:48 the same afternoon one of them reached his home. His feline companions arrived at Liege somewhat later; but it is understood that within twenty-four hours every one had reached his home. It is proposed to establish, at an early day, a regular system of cat communication between Liege and the neighboring villages.

ACTION OF TOBACCO ON THE SYSTEM.—Some years ago the French Government directed the Academy of Medicine to inquire into the influence of tobacco on the human system. The report of the commission appointed by the Academy, states that a large number of the diseases of the nervous system and of the heart, noticed in the cases of those affected with paralysis or insanity, are to be regarded as the sequences of excessive indulgence in the use of this article, and it is remarked that tobacco seems primarily to act upon the organic nervous system, depressing the faculties and influencing the nutrition of the body, the circulation of the blood, and the number of red corpuscles in the blood. Attention is also called to the bad digestion, benumbed intelligence, and clouded memory of those who use tobacco to excess.

SLEEPLESSNESS.—Those who suffer from sleeplessness—and the number is not small—might do well to notice their position at night. A German physiologist states that the heating of the earth by the sun causes magnetic currents from the equator to each pole. We should lie, therefore, in the direction of these currents; if we lie across these, the result is unpleasant, and want of sleep is the consequence. The head to the north is the best position—to the west, the worst. Physicians who have charge of hospitals attend to the directions in which the beds are placed, and with the best results.

A LUMINOUS PAINT.—A French chemist is said to have succeeded in producing a paint with which to illuminate the numbers of street doors at night. Figures traced with it shine so as to be read through the most profound darkness; and the preparation of the compound is said to be simple, inexpensive, and not injurious.

POPULATION OF THE EARTH.—The population of the earth is estimated at 1,423,917,000 souls, of whom no less than 409,000,000 are assumed to live in China proper. The whole of Europe has only a population of 309,178,300.

BRIC-A-BRAC.

IN SUMMER.

An Alliterative Sonnet.

BELLIGERENT, brusque, brown-belted bumble bees,
Singing sonorous, sinuous sailing soar,
Wild, wearless winging, waging wicked war,
Dancing diagonal, darting down degrees;
Triumphant trailing trumpeters trim trees;
Rills, raising riot, rushing, running roar;
Past peerless pines, pellucid pushing, pour,
Eddy elate, enlarged, enchanting ease,
Calls cheerily; content conquers cold care;
Gardens grow glorious, gladiules grandly glow;
Lazily landward lingers Luna's light;
Far floats fine fragrance, flung from flowers fair;
Men, matching might, maturing meadows mow;
Nefarious, noisy nocturnes narrow night.

[Thos. S. Collier in Puck.

THREE WEALTHY MEN.—The relative wealth and income of the most opulent men living—the Duke of Wostminster, Rothschild, and Mr. Mackey the Bonanza King—has been reduced to figures, as follows:

	Duke of Westminster.	Rothschild.	Mackey.
Capital.....	£16,000,000 00s.	£40,000,000	£55,000,000
Per year.....	800,000 00	2,000,000	2,750,000
Per month....	60,000 00	170,000	200,000
Per day.....	2,000 00	5,000	7,000
Per hour.....	90 00	200	300
Per minute....	1 10	4	5

GRANDPA'S SOLILOQUY.

It wasn't so when I was young,
We used plain language then
We didn't speak of "them galoots,"
When meaning boys and men.

When speaking of the nice hand-write
Of Joe, or Tom, or Bill,
We did it plain—we didn't say
"He slings a nasty quill."

Then when we met a good, old friend
We hadn't lately seen,
We greeted him—but didn't say,
"Hello, you old sardine."

The boys got mad sometimes and lit;
We spoke of kicks and blows;
But now they "whack him in the snoot,"
And "paste him on the nose."

Once, when a youth was turned away
From her he held most dear,
He walked off on his feet—but now
He "crawls off on his ear."

We used to dance when I was young,
And used to call it so;
But now they don't—they only "sling
The light fantastic toe."

Of death we spoke in language plain,
That no one did perplex,
But in these days one doesn't die—
He "passes in his checks."

We praised a man of common sense;
"His judgment's good," we said;
But now they say: "Well, that old plum
Has got a level head."

It's rather sad the children now
Are learning all such talk;
They've learned to "chin" instead of chat,
And "waltz" instead of walk.

To little Harry yesterday—
My grandchild, aged two—
I said, "You love grandpa?" said he:
"You bet your boots I do."

The children bowed to strangers once,
It is no longer so—
The little girls, as well as boys,
Now greet you with "hello!"

Oh, give me back the good old days
When both the old and young,
Conversed in plain, old-fashioned ways,
And slang was never slung.

LORD LYONS, as British Ambassador to France, has a salary of $50,000. The British Ambassadors to Germany and to Rome have each a salary of $35,000, and the latter receives an allowance for rent of $6,000. The Ambassador at Vienna gets $40,000, and the one at St. Petersburgh $39,000. Sir Henry Elliott had at Constantinople $40,000; and Sir Edward Thornton entertains pleasantly at Washington on a salary of $30,000.

THE MELANCHOLY DAYS.

The melancholy days have come, the saddest of the year!
When Jersey's most pernicious bug doth serenade our ear.
And with its apex slitteth down, so frequently at night,
Upon the baitsome parts that seem most tempting for to bite,
That when the morning comes, we find our countenance so "meller,"
We can't tell whether we're ourself or some other horrid "feller."

[*Yonkers Gazette.*

"IF the gentleman who keeps the shoe shop with the red head will return the umbrella of a young lady with whalebone ribs and an iron handle to the slate-roofed grocer's shop, he will hear of something to his advantage."

THE HOT BRIGADE.—(TWENTYSON.)

BLAZED fierce the sun on high,
Scorched breezes rustled by,
Up went the mercu-ry,
Up to 100.

Sweltered the Hot Brigade,
O, the wild howl they made,
When shall its echo fade?
Frightful 100!

Ice to the right of them,
Beer to the left of them,
Cold tea in front of them,
Barkeepers blundered.

Swift up the bulb did hie,
Singing "Sweet By-and-by,"
Fahrenheit's mercu-ry,
Up to 100.

WHICH is the longest word in the English language? Smiles, because there is a mile between the first and last letters.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

A JAPANESE LOVER'S SERENADE.

THERE is a maiden.
There is a little maiden whom I love,
Her name it is easy to utter;
The night winds are always breathing it in my ear.
Something has been telling it to me all the night.
But who shall convey the extent of her beauties,
Or of the graces of her mind?
To others she is frigid.
But to me she is as the moon-beam, radiant and warm.

She is exempt from the ordinary weaknesses of women,
Her piety is the theme of admiration among all classes,
Her virtues are so lofty that they reach the stars.
She reads all the sacred books and knows them by heart.
With strong moral principles she immingles a cheerful spirit.
And her rich, black hair is involved in unctuous gum.

Numbers of costly ornaments shine in her hair;
They shine like clusters of stars relieved by a jet-black sky.
Soft, silken scarfs encircle her throat;
Oh! enviable, soft silken scarfs.
A radiant satin *obi*, of princely dimensions and incalculable price, enfolds her waist.
Oh! enviable satin *obi* of princely dimensions and incalculable price.
Her countenance needs not the additional glow of paint:
And her neck scorns the inferior luster of powder.
Her form is enveloped in many-colored marvels of millinery;
And her petticoat is embroidered with a hundred butterflies fluttering among flowers.
Her feet are atoms of celestial origin,
And her *kedashi* is the pink cloud which protects them.

To many her heart is hard and cold;
To them it is very beautiful porcelain.
To me it is soft and warm;
To me it is fresh-cut velvet.
Her lips are sealed, and words proceed not therefrom,
But in their place come sighs of aromatic fragrance.
Her family are conspicuous for antiquity.
And her father is of the true blood Fujiwara.
He possesses a great number of tiger skins,
All brought from Chosen and very valuable.
Myriads of *kobans* glitter in the strong chests of his *kura*.
But for me the greatest treasure—
The treasure beyond all, for me,
Is the little maiden,
The little maiden whom I love.

[*Tokio Japan Times.*

"FREE LANCE" NEEDS ENLIGHTENMENT.

MRS. ELLEN HUNTER.

I do not understand why Free Lance should speak as though Gail Hamilton were a representative woman. Beyond the mere fact of sex she has nothing in common with women, and so far from having identified herself with the movement for the extension of the elective franchise to women, she has persistently opposed every measure having for its object the freeing of our sex from disabilities of any sort—commercial, social or political.

No one readier than she to point out and expatiate on the foibles and weaknesses of women, and as her pen is usually dipped in gall, she has done effective service in wounding the sensitive, and in deterring timid women from making an effort to free themselves from thralldom of different kinds. Her unkind jeers at the shortcomings of those who have been suddenly forced, without adequate preparation, to support themselves, should earn for her the scorn of all women who have any self-respect.

No fault in her sisters has been too obscure for her to ferret out and parade to the world. The object was not to reform women but to show how superior Gail Hamilton was to the rest of the sex and in what contempt she held her weaker (?) sisters.

She has recorded it as her opinion that a woman should never argue the question of money with her employer, but either take what he offers or starve, which is precisely what she herself did not do. For when she disagreed with her publishers about a matter of dollars and cents, not only did she expostulate with them, but she published an account of the transaction and inflicted on the country at large a history of her private grievance. Ah! that the physician could but be persuaded to take his (or her) own prescriptions! It may be though that between the poor shop-girl who complains that $5 00 per week will not board and clothe her, and the famous Abigail Dodge quarrelling about hundreds of dollars there is a wide difference. If there is, I think then the shop girl is entitled to a monopoly of the sympathy.

It is a source of no little congratulation to those of us who are ambitious to be something higher than mere housekeepers and nurses that this virulent woman is "on the other side." I would like to ask Free Lance when and where Gail Hamilton ever advocated equal laws, equal opportunities, equal pay or the ballot for women, that he should think her one of us? Imagine his putting this champion vituperator in the same category as Mrs. Livermore, Mrs. Cady-Stanton, Miss Francis Willard and the many other refined and true-hearted women who have identified themselves with the women's movement.

Free Lance speculates on the possibility of Gail Hamilton being a fair sample of the "emancipated woman" that is to be. No, my dear sir, the "woman of the future" will be totally unlike her, for Gail is one who believes implicitly in "woman's sphere" as defined by men. She is a product of the hearthstone not of the rostrum, and our conservative friends who so dread the result of the extension of privileges and rights to women, are cordially welcome to this choice flower of womankind, who on all occasions has avowed her disgust at this clamor after rights. Take her and cherish her, but spare us the humiliation of being classed with her. She is none of us.

A LUCKY BREAK-DOWN.

J. E. M'C.

MRS. ACKLEY'S tin-ware had been ailing a long time, and yet she could never get the men folks to go a half mile out of their regular beat, when they went to town, to get it mended. By baying time the tea kettle, too, had sprung a leak, and and then she was at her wits' end.

"Silas, I *must* have that tea-kettle soldered up, or I never can get the meals for such a family," she said despondently.

"Try and get along somehow," he replied, indifferently; "We are just at the busiest, and can't spare a hand to go to town just for a tin tea-kettle. Plenty of folks never had a tea-kettle in the house, and they lived just as long."

With which conclusive argument he proceeded with his men to the business of the day. As if those broad acres of ripening grain could wait and waste for a woman's tea kettle! It was about as much "calculation" as women generally had!

A man who was hung for a blow that killed his wife, said sadly on the gallows: "I never meant to kill my wife, but she was a dreadful aggravating woman." So a good many men are dreadfully aggravating in the way they dispose of and dismiss the matter of woman's difficulties and hardships in doing work. A little sympathy and appreciation will make a woman surpass herself in ingenuity and self-sacrifice in getting along with about the resources of Robinson Crusoe. But when such things are demanded as a reasonable service, they become intolerable burdens.

Mrs. Ackley went back to her kitchen with little heart for her duties. That tea-kettle was in requisition about every hour in the day. It seemed as if the family supplies were half cut off. She would have set the tin pail on the stove and got along with that, but it leaked more than the kettle. All the basins had a string or a rag drawn into several air-holes, and the washboiler had, in reality, given out long ago. She managed her washing the best she could with her iron kettles. Mrs. Ackley was an excellent woman, kind and peaceable, but too easy for her own good. A little more self-assertion would have been better all around. She allowed herself to be imposed upon, and Silas was no better for it, rather the worse, because he was nourishing a bad habit which grew like a weed, and Canada thistles are a great deal more profitable to raise than such habits.

Things did not work well for him that morning. The reaper got some kind of a "hitch" that put everything back. At last, when they had vainly tried to make it work, a dozen times, Farmer Silas's patience gave out. He threw down the lines, and told Jerry to unhitch the horses. He would take "the pesky thing to town and see what ailed it."

The men stood grinning around, and a young chap remarked: "You'd better take your wife's tea-kettle along, too. It is as easy for you to work with broken tools as for her."

Silas's face reddened a little to see that the men had noticed how slack he was about the house-fixings, and he told Jerry to gather up what things wanted mending and he would take them along, as he had to go right to the tinner's.

The wash-boiler was filled on the double-quick, and several things besides tied on the handles. Silas looked a little like a tin peddlar when he set out. The men stood smiling around to see him start, and then turned to the wood pile, as directed, with a hearty good-will. A woman who got up such good dinners, with such poor facilities, deserved well of them, and the wood was sawed, split fine, and piled up in quantities not known before for months in that wood-yard. In fact, all things considered, that break-down of the reaper was the luckiest thing that had happened in all summer for the women-folks, and lightened the labor more than could be computed by one who had not gone through the same difficulties.

ORNAMENTATION WITHOUT MONEY.

LORETTA E. KNAPP-TURNER.

A GREAT deal can be done by way of home adornment without using any money, and in these hard times that is quite an item with some of us.

I saw a handsome picture the other day, made of lichens and moss, sticks, and other things, which had been picked up in the fields and woods. The scene was a landscape, with trees, a house, fences, hills and valleys, all composed of these common articles, but put together with such artistic skill, that it was very charming. Another lady has a rustic scene arranged on a foundation two feet square. There is a house made of tiny logs and covered with tiny shingles, made from old ones. There are doors and glass windows, a carpet and chairs, while outside an old-fashioned well-sweep contains a bucket, and a doll, dressed like a boy, stands by it with a pail on his arm. A woman at the door with a broom in her hand seems sweeping the steps. There is a creek formed of looking-glass and pebbles; and moss serves for grass.

Ferns artistically arranged help very much in home adornment, both when growing and when pressed and skillfully used.

A friend showed me a beautiful bed of ferns which she transplanted from the woods this spring. They require a shady place and considerable water. They look well when pressed in a book or between blotting-papers, to border lambrequins, or arranged in dainty baskets, and for many similar uses. I use them for spatter-work pictures.

These can be made very cheaply, and look fully as nicely after they are formed as those that are made of more expensive material.

I use cheap, white paper, shoe blacking, a blacking brush, and a fine sieve, only using a very little blacking at a time, and brushing lightly on the sieve, being careful to have each spatter very small. A great amount of artistic skill may be shown in making these pictures, both in the arrangement of the design and in the shading. Mottoes in spatter-work are very handsome. One picture I have even had a cross, with trees and ferns around it; back of one of the trees was a deer, and above was a moon and stars. It was shaded to look like moonlight. The designs are, of course, innumerable.

A great many pretty things can be made of straws. Dainty, little picture frames, delicate baskets, and vases for artificial flowers. They are far more durable than one would suppose they would be, and for variety the straws may have a tiny spiral winding of gilt paper or some pretty color.

ANSWER TO DAME DURDEN.

B. C. D.

I HAVE seen no answer to Dame Durden's inquiry in the RURAL, asking what indoor games would amuse little folks, and I thought I would tell how our little folks of 5, 7, 9 and 12 amuse themselves on wet days.

With a box of building blocks they build miles of railroad and box-stalls in which they stanchion the cattle from a Noah's ark; they fence the railroad that they "play" crosses their premises, and opening the gates turn out and drive the whole motley crowd of animals from the ark across the track to the pasture, in imitation of what they have often helped to do.

They build barns, and underpin them, windmills with towers, door-yard fences, and with the help of two tin horses on wheels, draw loads of sand for building purposes, Noah's family figuring as drivers. An occasional collision only adds to the variety of the entertainment.

From attending school exhibitions and Sunday-school concerts, they have caught the idea of giving some of their own, and the costumes they have devised, and the pieces announced by the pompous little usher, have often produced more merriment for the spectators than more elaborate performances of the older children. The pieces have ranged from Jack and Gill, by the youngest, to the Indian Chief's lament, and other sentimental articles.

The music, which always accompanies these entertainments, partakes of the same original character. The hat is frequently passed around at the close of the "concert," and a few pennies make the actors rich for the time.

Playing sick and calling in the Doctor, as well as consulting him about the doll, passes many a dull hour away pleasantly. Dominoes help to brighten the winter evenings for all, from the youngest upward. This is the way our little people entertain themselves.

A PRIVATE letter from Saratoga gives some interesting gossip about Mrs. Thompson, the lady who, last winter, presented the nation with Carpenter's painting, "Signing the Emancipation Proclamation," valued at $25,000. Mrs. Thompson is a widow of fifty-eight, though she appears much younger. Her income is $55,000 a year, derived from a fortune of about a million dollars. She never accepts more than five per cent. on her investments. Mrs. Thompson gives to the extent of self-denial. Her personal expenses, exclusive of the actual necessities of life, do not exceed $250 per annum, yet she gives away all of her large income and sometimes pawns her jewelry to raise money for some object of charity, redeeming them when she receives the next installment of interest. Although troubled with a slight lameness, she does not keep a carriage or a maid, and is as simple in her manners as a child. When in Washington last winter, Mrs. Thompson was entertained by Mrs. Hayes at the White House. After her visit she sent Mrs. Hayes a diamond pin in the shape of an eagle. Mrs. Hayes wore it twice in honor of the giver, and sent it back, saying that while grateful for so handsome a gift, as the wife of the President she felt obliged to decline all presents.

CELLULOID COLLARS AND CUFFS. I have received several inquiries as to where these articles can be purchased. A firm in Paterson, (Messrs. Simon & Van Emburgh), offer celluloid collars at 40c., and cuffs of same material for fifty cents per pair. Mr. Jos. E. Crowell, editor of Daily Guardian, Paterson N. J., writes us that he is now wearing a set which has been in use for several weeks. He adds, "I like them very much. They are thin and pliable as linen and are not affected by water."

THE hygienic undergarments, including the dress-reform corset, which are made and sold by Alice Fletcher & Co., New York, are constructed on what seem to be correct principles, and women who have a care for their health should make themselves acquainted with the new shapes and styles. An illustrated catalogue is sent free to applicants.

THE "Flow" used in opaline painting is a flowing varnish and it ought to be obtainable at any store where artists' materials are sold. Messrs. Bonta & Curtis photographers, Syracuse, N. Y. sell it at 50c. per bottle.

ONE of the oldest lighthouse keepers on the Atlantic coast is a woman. Kathleen Andre Moore, of Black Rock Lighthouse, near Bridgeport Conn. She is sixty-five years old, has tended the lighthouse lamp for fifty years.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP-HANDLE PAPERS—NO. 4.

For a long time I have been anxious to obtain a washing machine that would require less physical strength to eradicate the dirt than the old-fashioned wash-board. But all that I had yet seen, required strong arms, strong stomachs, and plenty of back-bone; though all were recommended to be *easily* worked by a child of ten years.

Last winter my eyes rested upon an advertisement recommending the Little Washer, as the best machine ever offered to the public. The clothes were cleaned by the water passing through and through the fabric, and would require but little if any rubbing. I determined to have the labor-saving machine immediately; and forthwith it came promptly to order. According to direction, the clothes were to be soaked one night. In the morning the machine was put into a boiler nearly full of water, into which a spoonful of powdered borax was dissolved, and put over the fire. While the water was heating, the clothes were taken out of the soaking water, thoroughly soaped where soiled, with good home-made soap, and put into the boiler and boiled fifteen minutes. The water was drawn up through a tin pipe, poured over the clothes, then was drawn down again, and another jet spouted over.

Well, the little thing worked to a charm. All the clothes were taken out and put into the "sudsing" water, and the soiled parts were rubbed a little, and the dirty streaks disappeared almost immediately. Plenty of water was used in rinsing, and the washing was done two hours sooner, with less wear and tear of body and clothes.

Of course, I was exceedingly proud of my little machine, and was almost ready to fall down and worship the inventor.

But a few weeks ago my mother took the conceit out of me by following the directions for washing, only *leaving out the machine;* and behold the work was done equally well. Ever since, the little humbug has "lain upon the shelf." It has not been useless, however. It has taught me that clothes can be well cleansed with one-fourth the rubbing usually given them, thus saving the fabric and our own strength. And there are, no doubt, many hard-working RURAL sisters, who, having not an overplus of silver dollars, will be induced to try the plan, and thus save *their* money, clothes and strength for other services, where they are more necessary to the happiness of the human family.

MAY MAPLE.

"REGALIN."

We have seen and tasted samples of fruit preserved by Mr. C. Amende's "Regalin." It is a chemical salt, we should say from its taste, and is designed to preserve fruits, meat, vegetables, eggs and articles of like nature. It seems to do the work most satisfactorily. The fruit we inspected had been in a state of preservation during six months, and the pears we tasted had a fine flavor, and were in no wise affected injuriously by the preparation. We should think the powder (which is put up compactly in small boxes) would prove to be of great usefulness to housewives. The advertisement in another column furnishes details.

DOMESTIC RECIPES.

Sweet Corn Soup.

This is very nice when properly made and seasoned. The outer part only should be cut, and the rest scraped from the cobs, the same as for drying. Add as much water as there is corn, and boil slowly, fifteen minutes, pouring in a little more water should it boil dry. Then add three pints of rich milk to ten ears of corn; add salt; butter as much as you choose; let come to a boil and serve hot. I prefer the use of sweet cream to milk, in which case the butter may be omitted, or at least less used.

AUNT FLORA.

Pepper Chow-Chow.

Cut in half, and remove the seeds from twenty-five peppers; soak in salted water for three or four hours; chop fine and add twice as much chopped cabbage as peppers; one tablespoonful each of ground cloves, allspice, mustard seed, whole—and salt; mix thoroughly; cover with cold vinegar, and tie down.

Wild Plum Marmalade.

Wash, put into a porcelain kettle, with water enough just to cover; let boil until soft, pour into a colander and drain; then press the pulp through and add a pint of sugar to a pint of pulp. Boil from twenty to thirty minutes, stirring constantly.

Tomato Preserves.

With a sharp knife remove the skins from Green Gage tomatoes; prick each tomato several times; add an equal amount of sugar by weight; let stand over night; then pour off the juice into a preserving kettle; add two or three slices of lemon, and boil until it thickens; clarify the sirup; add the tomatoes, and boil gently until they look transparent.

E. M.

Apple Float

One pint of good, stewed apples, which are free from lumps, whites of three eggs, well beaten, four tablespoonfuls of powdered sugar. Beat the apple, eggs and sugar together until stiff enough to stand alone. Make a soft, boiled custard; flavor with vanilla; pour into a deep dish, and pile the float on top.

Tomato Catsup.

Wash and remove the stems from one peck of ripe tomatoes; crush, and put on to boil in a porcelain kettle until the pulp is dissolved; press through a fine sieve and boil five hours, adding two ounces of salt, one ounce of mace, one tablespoonful of black pepper, and one teaspoonful of red, one tablespoonful of cloves, seven tablespoonfuls of mustard, one of celery seed—tied in a bag; stir almost constantly. When done, turn into a crock to cool, and when cold, take out the bag of celery seed, add one teacupful of vinegar. Bottle, seal and keep in a cool, dark place.

MARY B.

Head-Ache.

Simple remedies are frequently the best for this distressing complaint. A curd of sour milk spread upon a thin cloth and applied to the head will many times give relief. Or, a mustard plaster on the back of the neck will often ease the pain.

R.

Corn Pone.

No. 1.—Two cups of wheat flour; one cup of corn meal; two heaping teaspoonfuls of baking powder; one even teaspoonful of salt; a cup, one-third full, of sugar; three eggs well beaten. Sweet milk added to the mixture sufficient to make it run nicely from the spoon. This makes two cakes in flat tin.

No. 2.—Beat one egg with a third of a cup of sugar; add one tablespoonful of melted butter; beat a little and add one pint of sweet milk; two and a half cups of meal; one-cup of flour; a small pinch of salt; one teaspoonful of soda and one of cream-of-tartar.

These are both good, well-tried recipes. No. 2, however, I think the nicest.

MRS. MARY OLIN.

Cottage Pudding.

By request we republish this recipe given in the RURAL of August 11, 1877, page 90. One cup of white sugar; one-half cup of butter; two eggs; two-thirds of a cup of milk; one teaspoonful of soda and two of cream-of-tartar; three cups of flour. Sauce for the above: one cup of sugar; one-half cup of butter; a tablespoonful of corn-starch. Mix together, add two cups of boiling water; boil two or three minutes, add wine, brandy or any flavoring you chose. The success of this pudding depends upon the sugar, butter and eggs being well beaten, and upon being served the instant it is done.

QUERIES ANSWERED.

Ice Cream.

"Subscriber" wishes a recipe for *eggless* ice cream; she finds it difficult to make it smooth. We append several from which choice may be made:

No. 1. Two quarts of rich sweet milk; one pound of granulated sugar, or a little more if liked very sweet; three heaping tablespoonfuls of corn starch; wet the starch in a little of the milk; scald the milk by putting it into a tin pail and setting it in a kettle of hot water; when it boils stir in the sugar and starch, and let boil for a few minutes longer; strain, let cool, flavor and freeze.

No. 2. One quart of milk; two quarts of cream; a pint and a half of powdered sugar; a tablespoonful of vanilla.

No. 3. Two quarts of new milk; a small teacupful of flour; put the milk on to boil in a tin pail in a kettle of boiling water, the same as above, reserving enough to mix the flour smoothly; when the milk boils stir in the flour, and boil ten minutes longer, adding a pound and a half of sugar just before taking from the fire; stir constantly after the sugar is added and only let remain long enough to dissolve it; strain through a towel, and when cool add a quart of cream, and flavor with lemon.

No. 4. Take one quart of sweet cream and make very sweet with the best sugar; flavor, whip to a light froth; skim off as fast as it is beaten, and put into the freezer. Continue beating until all is a light froth, and freeze at once.

If the cream be properly beaten and scraped from the sides while freezing, providing it was free from lumps at first, we see no reason why it should not be smooth.

WANTED.—A recipe for the preservation of pictures without glass, for I find it expensive to buy glass for large ones.

W. W. F.

ANS.—We take the following from our selected recipes: Dilute one-fourth pound of Venice turpentine, with a gill of spirits of wine. If too thick, a little more of the latter; if not enough a little more of the former. It should be of the consistence of milk. Lay one coat of this on the right side of the print, and when dry it will shine like glass. A second coat may be necessary.

News of the Week.

Monday, Sept. 9, 1878.

POLITICAL.

BEN. BUTLER having issued what his bitterest foes own to be a strong letter of acceptance of the curious nomination for governor lately tendered him, is vigorously canvassing Massachusetts in his own behalf. Most of the high-toned papers and people have always been bitter in their denunciation of him and his views, and now fear is adding to their bitterness. Ben., however, is case-hardened to vituperation, seems to be making good headway and is about to go West soon to support that "odious" greenback doctrine of his. The election up in Vermont has gone republican by about 17,000 majority, a decrease on last years'—but this is an "off" year, you should know.

Kearney—Dennis of that name—has been swinging wildly round the circle lately in the East here. He visited Hayes in Washington and thinks him a very good sort of man in a private capacity, but poor stuff for a president—some people who have never been thought crazy agitators have, so far as my memory serves, been guilty of a similar opinion. He saw most of the Cabinet and doesn't think much of any part of the article—and here, again, it's marvelous how the opinion of a lunatic sometimes coincides exactly with that of folks generally considered very sane indeed. He insisted on speaking from the steps of the Capitol, mainly because there was an antique law against such a proceeding. The Quaker City next was shocked with his profanity, and then Newark, N. J., and Jersey City—at least the roughs of those places—listened to his ravings. Next he addressed a large crowd on Union Square in this city, and several of the newspapers which he had been vilifying, took a fearful revenge upon him—they published a verbatim report of what he meant for a speech. Respectable papers, as a rule, omit all remarks objectionable on the score of scurrility and profanity, but had this rule been followed in Dennis' case, there wouldn't have been as many paragraphs as there actually were columns occupied by his lucubrations.

Lately he has got into the habit of having the hat passed round after his harangues, for the purpose of collecting enough to pay his way—and the newspapers are fond of poking fun and sarcasm at him there anent. But if the devil should get his due, surely there's no reason why one of his imps should not, and really there's nothing out-of-the-way in this mode of scooping in the "stamps." As a rule, all political speakers get paid—and well paid too—for their laudation of party men and measures. True, their pay is collected from the public by organized party management, but Kearney is his own party organization, and perforce must differ somewhat in his methods from mere complicated organizations.

MISCELLANEOUS.

What a rush into bankruptcy there was a week ago of "lame ducks" in this State anxious to get the benefit of the lenient bankrupt laws of the United States as a nation! The registrars in bankruptcy must have made a glorious haul of fees. Whole columns in the papers were crowded into small type with the names of defunct firms, though only the bare names of the most important concerns were given. In the last two days here there were 535 names. Chicago beat this, 375 having filed their names on the last day of grace, while in steady Boston 234 did the same. The United States' laws with regard to bankruptcy came to an end on the first of the month, and henceforth, for a while at least, the laws of each State must regulate bankruptcy proceedings. These differ considerably, some being lenient towards the debtor, especially in the South and West, others in favor of the creditor class, as in the Eastern States where capital most abounds. It hardly speaks well for the aggregate wisdom of our Congressional Solons that they confess themselves unable to devise a satisfactorily uniform system of legislation on this matter.

The other day Rarus, the celebrated flyer, trotted at Hartford, Conn., and was the innocent cause of much swindling. Besides the inevitable betting, and its concommitant black-legging, at least four open swindles were allowed on the ground; namely, the pool-box, the wheel of fortune, sweat-boards, and the pill-box trick. At the wheel several fools parted with over $100 apiece in less than an hour. The sweat-board was well patronized by green-horns, and gamblers were kept profitably busy selling their trade dollars, to bet with, for greenbacks. The pill-box man would show three or four empty boxes, pretend to put a $20 bill into one and offer to sell the boxes for $5. The dupe, seeing what he supposed a corner of the $20 bill sticking out of one of them, would invest his five, only to find a dollar instead of a twenty-dollar bill. As such tricks will be not uncommon at or near the approaching fairs, farmers and their children will save the price of many a RURAL by carefully giving them all the "go-by," however certain they may feel that their unsophisticated wits can get the better of the practiced trickery and knavery of the gentry who "run" such "institutions."

Yellow fever is still on the increase in severity in the South, while its ravages are spreading over a much larger extent of country. Even the telegraphic details of the destitution, misery and deaths throughout the infected districts are heart-rending—much more terrible, however, would be the sight of the woebegone scenes. In all the large and in most of the small towns and even villages throughout the North, societies have been organized for the purpose of collecting money to relieve the dire distress of our suffering brethren of the South, but despite the liberal donations hitherto given, upwards of a million dollars will be absolutely needed to prevent numbers from dying from want before the first black frost puts an end to the pestilence.

All work is at a standstill. No money is obtainable by the poor except in the shape of charity, and if ever charity was, not a matter of choice, but of absolute, imperative duty on every citizen as well as on every Christian, surely now is the hour. The Northern cities are doing nobly, shall the brave, honest, generous-hearted Northern farmers be backward in this hour of a kindred people's agony? Heaven and manliness forbid such a disgrace! Let every farmer and every farmer's family contribute their mite towards feeding the hungry, tending the sick and burying the dead throughout the now desolate regions of the once sunny South. Send on your contributions, separately or clubbed together from every neighborhood, to the Howard Association in each of the afflicted towns, and they will be nobly used. Then the thought can never afflict you in years to come, that you were craven enough to turn a deaf ear to the death cry of a noble people in the hour of their bitter agony.

On Wednesday last Sec. Schurz rendered an additional decision in the case affecting land grants to railroads. An appeal had been taken for a reversal or suspension, and this was peremptorily refused, so that the former decision, by which large tracts of excellent land were opened to settlement, must stand unless reversed by a decision of the courts. The land can be pre-empted through the regular government agents, who pay the price of it over to the railroad, and nothing except a previous *bona-fide* sale by the railroad company can prevent its pre-emption at $1.25 per acre. All information with regard to the lands thus thrown open to settlement can be obtained by means of a letter of inquiry to the Department of the Interior, Washington, D. C. Already an immense number of applications have been made to "enter" the lands, and the railroads are reported to be taking steps to appeal to the courts.

Diaz has virtually abolished the *zona libra* or free zone along the Rio Grande. This was a strip of Mexican territory, stretching along the frontier, into which goods could be carried free of duty. This immunity drew to it a large number of smugglers and other desperate characters who have been, in great part, the cause of our border troubles. A few towns only still retain this franchise. Now comes the report that Edison has mortgaged his inventive genius to the Western Union Telegraph Company for 34 years, for an annuity of $6,000 a year, in return for the exclusive ownership of all his possible inventions.

Some time back the Protestant Episcopal Bishop of Michigan, Dr. McCoskry, an old man of upwards of seventy years, was accused of immorality with a young girl he had adopted and whom a short time previously had been married by him to a young man in the neighborhood. Letters of his, it was said, were in existence that would fully convict him—oh those letters! Just before the accusation was made, he had resigned his See and was on the point of starting for Europe. When thus shamefully accused, he withdrew his resignation, denied the charge and demanded an investigation. Afterwards, however, he deemed it prudent to again tender his resignation and avoid investigation by promptly crossing the Atlantic. Last Tuesday, at a meeting of Episcopal Bishops, his resignation was not accepted, but he was deposed not only from his Episcopal office, but also from the ministry for having abandoned his diocese and left the country while grave allegations touching his moral character existed, thereby declining to permit any investigation into the truth of the allegations. 'Tis fortunate that the flood-gates of another monstrous scandal have not been opened on the community. So long as there was a hope of the innocence of the aged and hitherto blameless pastor, it was thought best not to speak of the matter here, now it is mentioned as a bit of news.

FOREIGN.

On Tuesday last the excursion steamer Princess Alice, returning from Gravesend to London with about 500 passengers, was run down off Barking by a screw steamer. In five minutes the vessel sank and the bosom of father Thames was a mass of struggling, shrieking humanity. There was a great number of children on board and of these nearly every one was lost. The scene was horrible. Already about 640 bodies of the victims have been recovered, more have been swept down by the current to the Channel, and altogether the victims of this pitiful calamity are estimated at fully 650.

Americans with antiquated claims to vast English estates, have hitherto had but slim chances of ever realizing a cent for every dollar they may have been foolish enough to pay lawyers for investigating and asserting their supposed rights. But now, even their slim chances are on the point of vanishing, owing to a new property limitation Act which goes into operation with the commencement of next year. This Act debars all claims older than a dozen years by giving absolute possession of land to tenants who have uninterruptedly occupied it for that period, without paying rent or in any other way acknowledging the title thereto of any other person. A law of this nature would be a boon in this country, also, where old musty claims to land are often sprung, by God alone knows whom, upon those who have honestly paid for it and held it peacefully for years or even generations.

The French harvest is very good in two departments; good in 12; fair in 13; poor in 46; and

bad in seven. The Austrians are still meeting with a stubborn resistance to their occupation of Bosnia, and despite heavy reinforcements are advancing but very slowly. Indeed the latest news seems to indicate a firm resolution on the part of the insurgents to die rather than suffer themselves to be handed over from one Power to another without the slightest regard to their wishes in the matter. About a week ago Mehemet Ali, formerly the famous commander-in-chief of the Turkish army on the Lom and quite recently one of the two chief representatives of the Porte at the Congress of Berlin, was sent from Constantinople into Albania to assert there the Turkish authority and prevent the inhabitants from aiding the Bosnians in their resistance to Austrian invasion. Last Thursday he was surrounded by a party of Albanians who urged him to organize resistence to the Austrians; the old veteran stoutly refused, whereupon the enraged peasantry fell upon him and massacred him together with twenty of his escort, and the next day, to cap the climax, they saturated, with petroleum, the house in which his corpse lay and burnt the building and its contents to the ground.

HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Sept. 7, 1878.

BEANS AND PEAS.—With confirmed information respecting late curing of new beans prices for mediums and marrows have ruled firm without showing an excited advance. Holders of the latter are not offering strictly prime freely, as they will be wanted even when new come in, as buyers are always more or less doubtful about the keeping qualities of earliest receipts. Pea beans and white kidney are quoted strong in sympathy with the standards. Shippers of red kidneys must not be deluded with the idea that closing prices will open new crop, or anything like them. Sellers will not assure $2.50 a month hence, notwithstanding $3.55 has been recently paid. Canadian peas have a light demand and the stock is moderate; quoted, in bulk and bond, '77s, 78c. Green peas, '77s, $1.38; new, $1.40. Four bags Southern B. E. peas arrived Friday and sold at $1.25 ₱ 2-bu. bag. Beans, medium, prime, $1.52½@1.55; fair to good, $1.40@1.47½. Marrow, prime, free on board vessel, $1.52½@1.55; fair to good, $1.40@1.47½. Pea, $1.35@1.55. White kidney, $1.35@1.50. Black (turtle soup), $2.40@2.50.

BEESWAX.—There is a very meager business but prices steady; Western and Southern quoted 27@28c.

Exports since Jan. 1st 115,607 lbs. Same time 1877, 89,859 do.

BUTTER.—There has been a steady demand and not much pressure of supplies. The latter circumstance is a fortunate one as foreign shippers have slackened their purchases. Dealers expect a good call from them when the weather will permit safe exportation without the use of refrigerators, and a consequent reduction in freight expenses. As before, nothing warrants stiff prices. The demand for July and August make will shrink as June packings are released and as buyers get a taste of fall receipts. In many of the lines of July and August hot weather has produced a cheesy summery flavor that will condemn them later on. A few State dairies have brought 20c. Western butter is running poor in quality. More dairy is selling at 13c. and under than in the upper ranges. In factory packed a good deal of milled, and the best of it cannot be quoted above 10c. Creameries, either State or Western, are not running evenly good, and under figures frequently represent the wholesale business in them.

State dairy, pails, choice, 19@20c.; other, 14@18c.; half tubs and pails, choice, 18@19c.; other, 14@17c.; Welsh tubs, choice, 17@18c.; other, 14@16c.; poor State, 10@12c.; creamery, best, 23@23c.; good, 19@20c.; sweet cream, 19@21c.; Western creamery, best, 21@22c.; other, 14@20c.; Western dairy, selected, 13@14c.; fair to good, 10@11c.; factory, best, 10@12c.; fair to good, 8@9c.; very poor, 6½@7c.; grease, 4@6c.

Receipts and exports past three years, from June 1st to date, were as follows:

	Receipts, pkgs.	Exports, firkins.
June 1st, '78 to September 1st, '78...	419,882	98,170
June 1st, '77 to September 1st, '77...	394,071	65,885
June 1st, '76 to September 1st, '76...	320,420	28,362

Receipts for the week 29,750 pkgs.; Exports, 11,634 pkgs.

COTTON has been feverish and irregular. The Liverpool market at the close is weak, and this operates against the Southern advices. Latest prices are for September, 11.48@11.49c.; for October, 11.18@11.18c.; for November, 11.02@11.03c.; for December, 10.97@10.98c.; for January, 10.98@10.99c.; for February, 11 04@11 05c.; for March, 11.11@11.12c.; for April, 11.19@11.21c.; for May, 11.27@11.28c.; June, 11.33@11.35.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	10¼	10¼	10⅜	10⅜
Strict ordinary	10 11-16	10 11-16	10 13-16	10 13-16
Good ordinary	11 3-16	11 3-16	11 5-16	11 5-16
Strict good do	11⅜	11⅜	11⅜	11⅜
Low middling	11⅞	11⅞	12	12
Strict low middling	12	12	12⅛	12⅛
Middling	12⅛	12⅛	12⅛	12⅛
Good middling	12 5-16	12 5-16	12 7-16	12 7-16
Strict good middling	12⅜	12⅜	12⅜	12⅜
Middling fair	13⅛	13⅛	13⅛	13⅛
Fair	13⅜	13⅜	13⅜	13⅜

Stained.

Good ordinary.....10⅜; Strict good ordinary.....10⅜
Low middling.....11⅜; Middling.....11¾

CHEESE.—Receipts have been much smaller this week and this indicates the strong feeling prevailing among factorymen on their current make. Meagre offerings of fancy stock have tended to rather a stronger range of prices, and 8¼@8¾, and in one or two cases 9 made. The good and lower grades are but little wanted, shippers neglecting them and they are unsettled in price.

Quotations are: Fancy at 8¼@8¾c.; 7¼@8¼c. for good and prime; 6@7¾c. for fair to good; 5½@7c. for half skimmed; 3@5c. for skimmed. State, farm dairy at 7¾@8c. for good to choice, 6@7c. for fair to good, and 3@4½c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@8¾c.; do. good to prime, 7@8c.; do. fair, to good, 6@7c.; Western factory, fine, full cream, cheddar, 7¼@8c.; do. fine, full cream, flat, 7¼@8c; do. slightly skimmed, flat, 6¼@7c.; do. half skimmed, 5@6c.; do. full skimmed, 3@4c.

Receipts for week, 67,290 boxes.
Exports for week, 50,453 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 44s.

COMPARATIVE RECEIPTS AND EXPORTS FOR THE LAST THREE YEARS.

	Receipts, boxs.	Exports, lbs
June 1, '78 to Sept. 1, '78.....	1,502,377	71,312,100
June 1, '77 to Sept. 1, '77.....	1,234,931	56,631,516
June 1, '76 to Sept. 1, '76.....	1,015,464	45,769,285

DRIED FRUITS.—In Apples the only grades that move at all satisfactorily are the upper qualities of sliced—these to the jobbing trade. Peeled Peaches hold firm in price, as also small fruits generally. New blackberries, are quoted at 5¼@6c. Peaches—Peeled, new Georgia, 5c. for poor, 7@8c. for fair to good and 8½@9c. for prime; choice North Carolina 10c@11c.; unpeeled old halves, 3@3½c.; quarters, 2½@3¼c. Pitted cherries, 15@16.; southern plums, new, 9@10c. Apples—Old State quarters, 3@4c, do, sliced prime, 4½c.; do. good, 3¼@4c. New apples 3@4c, for southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy. New raspberries, 23@24c., and evaporated, 5@26c.

Exports past week 106 bbls. apples; since Jan. 1st 10,961 do.; this week, 1877, 25,900 do.

EGGS.—Receipts for week, 5,527 bbls.; do. last week, 6,162 do. Weakness has been the prevailing feature of the week, but at the close there is some recovery. Near points, 17½@18c.; State and Penn., 17@17½c; Grouse, pair, 75c.; Partridges, 80@85c.; Woodcock; 75c.@85c. W. & S. stall-fed pigeons, doz., $1.25@1.50, flight, $1. Snipe scarce. Western wild Ducks begin to show, quoted 30@60c., the latter for Mallard.

FLOUR.—The receipts have been large and prices have ruled easy on other than shipping extras.

Latest prices are $3.85@3.90 for very inferior to fancy superfine State; $4.00@4.20 for poor to good extra do, odd lots and lines; $4.25@4.50 for good to choice do.; strictly choice lots above this; $3.35@3.90 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c., $3.90@4.20 for inferior to good shipping extra do. and $4.30@4.50 for good to shipping extra do.; common to about choice white wheat extras, $4.30@5.40; choice to about fancy do. at $5.50@6.50; red and amber winter wheat, inferior to very choice trade and family at $4.10@5.05; round hoop Ohio at $4.00@4.30, and trade and family brands of do. at $4.35@5.55, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.25@5.00 for very poor to good extra, and $5.00@6.25 for good to fancy; Minnesota clear, very inferior to very choice at $4.25@6.00 (fancy brands at higher prices); Minnesota "straight," inferior to very fancy, at $5.25@7.25, and patent fair to strictly fancy at $5.75@8.75; unsound stock at from $2.40@5.00; city mill extra at $5 05@5.25 for West Indies (the latter rate for fancy in new packages); do. for England, 4.10@4.15; do. trade and family extras, $5.50@6.10; do. for South America, $5.40@6.00 for fair to fancy; No. 2 $2.25@3.20 for inferior to very fancy, the latter an extreme.

CORN MEAL.—Sales at $2.90@2.95 for Brandywine and $2.40@2.75 for yellow Western.

FRESH FRUITS.—Apples are in large supply and lower; fancy were selling up to $2@2.50 early in the week; now, $1.75 is extreme. Windfalls of any kind have no market when prime are so low. We quote Porters and Orange Pippins, $1.25@1.50; good common and Golden Sweet, $1@1.50, open heads. Gravenstien Malden's Blush and Twenty Ounce, $1.50@1.75. Bartlett Pears arriving ripe, and buyers purchase cautiously. Good, clear green, ₱ bbl., $5.50@6; poor to fair, $3@5; Seckel, $4@6; other table pears, $3@4.50; cooking, $1.50@2. Plums will not prove a large crop, and prices are steady. Quackenbos, ₱ bbl. $8@10; Green Gages, Reine Claude, $2@7; Damson, $5@5; Blue Gages $4@4.50; common and Lumbard $3@4. Samples of State raised German Prunes have met with great favor from fancy retail buyers; sellers urge its cultivation. Grapes are low for the bulk of the offering. Fair to good Concords and Hartfords 3@5c., choice up-river Concords, 7@8c.; do. Delawares 9@10c. Whortleberries, ₱ bush. $1@2.—Peaches have run so poor in quality that buyers are leaving them for other items. Crates not wanted. Best lines now coming from N. J. Good to prime Del. ₱ basket, $1@1.25; common, including Smocks and White, 50@87c. Extra N. J., $1.75@2; good, $1@$1.25; common, 50@75c. Watermelons steady at $15@$20 ₱ 100, for selected; $10@15 for good grocery sizes; small, $8@10; culls as low as $5. Nutmeg melons, have declined. Hackensack or best, $1@1.25 ₱ bbl. Keyport, 25@75c. Peanuts are dull in view of a large Va. crop. Good to prime $1.15@1.25; fancy $1.25@1.30, Hank-picked, $1.45@1.50. Hot-house grapes, 8. Hamburg and Muscat ₱ bbl., 40@50c.; Sweet Water 20@25c. Exports of apples for week, 289 bbls.

GRAIN.—Wheat has been in large receipt, the export demand not as brisk, and prices lower.

Latest sales are of No. 2 red, steamer grade, at $1 05@$1 07; ungraded red, at 96c.@$1 11; red State, steamer grade, $1 07; No. 2 amber at $1 07¾@1 08¼; No. 2 amber, steamer quality, $1 06@$1 07; ungraded amber, in lots, at $1 03@1 11¼; extra white at $1 19; white State at $1 16@1 17; old No. 2 Milwaukee spring at $1 13¾@$1 14; new No. 2 Chicago spring at $1 09@$1 09½; do., old and new mixed, at $1 08; new No. 3 spring, part at @1; New York No. 2 spring, September option, at $1 04¼@$1 04¾; do., October option, at $1 02¾@1 03; No. 1 white, early deliveries, at $1 15@1 16; do., last half September, at $1 16; do., late September and early October, at $1 16@1 16½; No. 2 white, nearby delivery, at $1 11@1 12¼; No. 1 red and amber Michigan; early delivery, part at $1 11; No. 2 red, nearby deliveries, at $1 08¼@1 08¾; do., September option, at $1 07¾@1 08; do., deliveries in September, at $1 08¾, do., October option, at $1 03¾@1 08¾; No. 2 amber, September option, at $1 08; do., October option, at at $1 08@1 08¼. Rye at 61@62 for western, and 62@64 for State. Corn has been less active on export account and prices have been easy; latest sales are of New York No. 2, September option, at 49¾@50c.; do., October option, at 51¾c.; November option, at 53¾c.; steamer mixed, September option, at 49c.; do., October option, at 51@51¾c. The spot lots: Kansas at 50c.; steamer mixed, 49@49¾c; New York No. 2 at 49¾@50c.; New York No. 3 at 48¾@49c.; New York No. 2 white, at 53¼c.; western yellow at 52¾c.; and western white at 55¾@56c. Oats have been fairly active at steady prices; latest sales are of New York No. 1 33c.; New York No. 2 30¾@31c.; New York No. 3 at 28@27c.; rejected at 26c.; New York No. 1 white at 38¾c.; New York No. 2 do., 31c.; New York No. 3 do., at 27¾@28c.; New York extra quoted at 34c.; white western at 28@37c.; mixed do. at 25@33¾c.; White State at 31@37c.; mixed do. at 29@33c.

HAY AND STRAW.—Retailing qualities have a fairly active sale, and they hold steady in price. Shipping qualities are plenty and easy. Sales at 45@50c. for shipping and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports past week, 280 bales; since Jan. 1st, 42,380 bales; same time, 1877, 33,803 bales.

HOPS—Inactivity has been the ruling feature of the market the past week, and prices for '77s are entirely nominal. About 100 bales of the new growth have thus far been received here, from which sales have been made at prices ranging from 25c. down to 16c. The first bale sold at the former price. Nearly all the dealers have been receiving a few bales and prices have receded until now the best will not bring over 18c., while the low grades; such as have been poorly picked, overdried, there is no sale. We have not had as lively a demand for early hops as characterized our market a year ago.

Quotations are for New Yorks, new crop, 16@18; Eastern, new crop, none; Wisconsin, new crop, none; Yearlings, growth 1877 (nominal) 5 to 12; Pacific coast hops, growth 1877, 9 to 10.

PROVISIONS have tended lower on liberal supplies and a slow export demand. Mess pork on spot quoted at $9.60@9.75; do for September and October at $9.40@9 50, and November at $9.10@9.50. Bacon at 6¾c. for long clear. Lard at $7.05 for spot lots; $7.00 for Sept. and Oct.; $6.97@6.97½ for Nov. Stearine at 8c. for choice. Tallow at 7c. for prime. Beef hams fresh Western, 15@16½c.; do. Canadian, 16½c.; Inferior parcels, 15@15½c.

POULTRY AND GAME.—Both live chickens and fowls have favored buyers during the week. Ducks are slow, mostly arriving too young and thin. In former times Jewish buyers would take such stock and fatten it at home; this is no longer permitted by the authorities, so ducks and geese had better be made good on the farm.

Chickens, N. J., 12½@13c. lb.; State and Penn., 12@12½c.; Southern and Western, 11@11¾c. Fowls—N. J., 11@11¾c.; other, 10@11c. Roosters, 5c. Turkeys, choice, 12@14c.; other, 10@11c. Ducks, prime, pair, 50@75c; other, 40@45c. Geese, N. J., $1 50@2; W. & S., $1@1.25.

Dressed poultry is quoted easy, owing to the abundance and cheapness of live; and our outside quotations are extreme.

Dry picked and prime N. J. turkeys, 15@16c.; other, 13@14c; chickens, fancy, 14@16c; N. J., 13@14c.; other, 10@12c. Dry picked fowls, 13@14c.; good to prime, State & N. J., 11@13c.; poor to fair, odd lots, 9@10c.

Game has a fair list and prices are steady. Trapped at $20. Beef—Extra mess, $11.25@11.50; plain mess, $10@11; packet, $11.25@12 for bbls.; extra India mess, $18@20 for city brands; do. Philadelphia, $17.75@18.

TOBACCO.—Export trade has been fairly active, and the home demand brisk, and prices ruling firm.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	4 @ 4¼
Good lugs	3¼@ 4¼	4¾@ 5
Low leaf	4½@ 5¼	5¼@ 6¼
Medium leaf	5¾@ 6¼	6 @ 7
Good leaf	6¼@ 8	8 @ 9
Fine leaf	8¼@10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, fine	18	@35
do. do. selections	18	@35
do. seconds	10	@12
do. fillers	6	@ 7
Pennsylvania assorted lots, common	8	@ 9
do. do. fair	10	@12
do. do. fine	14	@17
do. wrappers	18	@35
do. fillers	6¼	@ 7
New York, ass'ted lots, common to medium	6¼	@ 8
Ohio assorted lots	8	@10
Wisconsin assorted lots	7	@10

SEEDS.—Grass are dull; new timothy in small lots selling at $1.35@1.40, but larger parcels to arrive offered lower. Rough flax at $1.45@1.50.

VEGETABLES.—Exports of potatoes, past week 2,016 bbl.: of Onions, 147 do. The shipping demand has subsided, but the recent free sales and moderate receipts allow firm prices. Sweet have an unusually early good demand. Celery has appeared of good size, quoted $1.25 doz.; Sweet corn, 100, 75c.@$1; Lima beans, bag, in pod, $1@1.25; shelled, $3.50@4 bush. String beans, bag, 75@80c.; Cucumbers, small to large, 1,000, $1@2.50; Tomatoes, ⅜ peck packages, 20@30c.; Onions, white, bbl., $1@1.50; red Chester and Conn., 75c.@$1.20; Marrow Squash, $1.50@1.75; Peppers, Bullnose, bbl., 75c.@$1; Beets, 75c.@$1; Lettuce, bbl., 75c.@$1; Cabbages, 100, $3@5; Egg Plants, bbl., $2; R. turnips, $1.75@2.; Carrots, bbl., $1@1.50; Okra, 100, 12@15c.; Pumpkins, 100, $4@6.

WOOL.—Manufacturers have been buying sparingly, and the temper of the market has been a little favoring buyers on the better grades of fleeces, but medium stock is held firm.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@43c.; XX, 36@38; X, 34@37; No. 1, 36@38c.; No. 2, 33@36c; coarse, 30@32c. combing, 40@45c.

New York, Michigan, and Wisconsin, XX, 30@35c.; X, 30@35c.; No. 1, 34@36c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 33@42c.

Indiana, Kentucky and Tennessee—XX, 32@35c; X, 33@35c.; No. 1, 34@36c.; No. 2, 32@34c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 34@35c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 29@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Sept. 7, 1878.

BEEVES.—Receipts for the week, 12,350 head; do., last week, 10,859 do. Unseasonably warm weather, heavy supplies on the hoof and an overstocked dressed meat market are not favorable contingencies for business at the yards, yet salesmen this week have had to contend against them all. Quality of stock also has run poor, and that always tends to make trade irregular. Ordinary to fair Texas and Cherokee cattle brought 6¾@7¼c., to dress, 55 lbs., but Colorado, to dress, 56 lbs., 8¼c. Poor to prime Native steers, 7¾@10c., to dress, 54@55 lbs. At the extreme close the market looked a little brighter.

COWS AND CALVES.—One of the profitable periods for butter is approaching, and it is not likely that many good milkers will find their way here for a time. Dealers give a wide range of $35@60, for common to good stock, with a fine milker occasionally at $65.

VEAL CALVES.—Receipts for the week, 3,273 head; do., last week, 3,622 do. The market is easy. Coarse to prime fed, 5@6¾c; buttermilk and grassers 3@3½c.

SHEEP AND LAMBS.—Receipts for the week, 28,688 head; do. last week, 26,635 do. With moderate receipts the demand has been fair. Ordinary to fair quality sheep, 4@4¼c.; good to prime, 4¼@5c. Lambs are low as a rule; general sales, 5@5¾c.; extra Jersey, 6@6¼c.

SWINE.—Receipts for the week, 18,853 head; do. last week, 22,233 do. Live hogs weak; closing prices, 4¾@6¾. A few N. J. dressed pigs quoted, 6¾@7¼c.; even fair receipts would not command these figures.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

Single Copy, per Year	$2 50
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Boyer & Bro.—Farm Grist Mill.
Burpee & Co., W. Atlee—Stock-Breeder's Manual.
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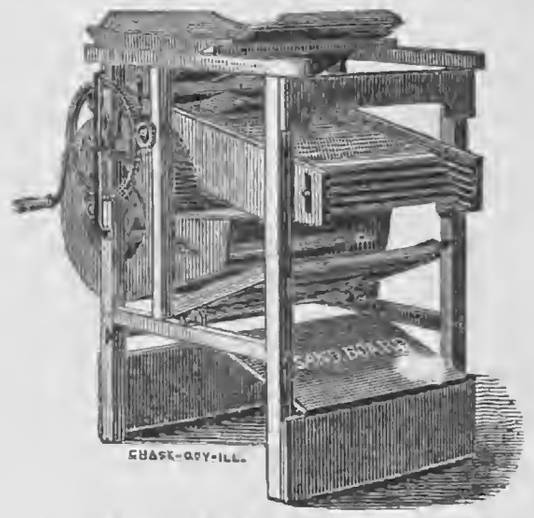

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Reading for the Young.

FAMOUS PRINTERS.

In early books the printer comes before us as an artist, and not as a craftsman. His work is often more interesting than his author. He became, in effect, a patron of literature. He had to make a good and wise selection, for the printing of a volume was no trifling investment. Thus printer and author go side by side, as publisher and author have gone in later days. Caxton and Chaucer are associated as indissolubly as Scott and Constable. Most of these old books were what we should call standard, and many of them were law books. Thus, William of Machlinia, is chiefly known as the printer of the first edition of "Littleton's Tenares." It is a small folio volume, printed in a coarse Gothic letter, without a date, but issued from his office.

But the most eminent of Caxton's successors was Wynkyn de Worde. He was probably an apprentice, certainly an assistant, of our printer, worked with him at Westminster, and issued books from the same office after his death. Like Caxton, he was a master in his craft, and introduced many improvements in the new invention. His works are admirable for their neatness and elegance. He designed and cut his own punches, sinking them into matrices and casting his own letters. He was a man of enterprise as well as of taste and education. The catalogue of his issues is known to have included at least five hundred and eight examples, of which the most notable is the "Polychronicon." As we have seen, William de Machlinia publishing the first edition of a law book, still quoted in our courts, so Wynkyn de Worde is associated with a school-book of which all scholars and students have at least heard. This is the famous "Lilye's Grammar." There is now no extant copy of the work with the printer's name to it, but a contemporary work of Whittington was repeatedly printed by him. Indeed, most of his books are what we should call educational. Books were then printed for scholars, not for the circulating library, and De Worde's catalogue is largely made of "Accidences," "Lucidaries," "Orchards of Words" and "Promptuaries for Little Children."

The men of letters in those days were the bishops and ecclesiastics, and soon all the great cities set up their printing-offices and published their issues. But it is notable how the master-printer was generally a foreigner. One of the most eminent of them was Peter de Triers, a native of the town now generally known as Treves, who started his office at the south side of the Thames, where he published Latin works of Cato and Erasmus. From this time presses began to be freely set up. The universities—Canterbury, Norwich, Tavistock—became great centers of this kind of trade, and it is recorded that in 1538, when Cardinal Wolsey visited his native town, he commemorated the visit by establishing a printing-office at Ipswich.

Scotland soon followed in the wake of England, and Ireland came last. Ireland was in fact the last European country—unless we call Russia a European country in the sixteenth century—which received the art of printing. A volume of the Book of Common Prayer, printed in Dublin so late as 1551, is the first Irish book, and this was followed by a liturgy for the use of the Scotch Highlanders printed in the Irish character. The interest of these publications has been chiefly their antiquity. They are curious and archæological. Clearness and beauty of type came afterwards. In that department our printers have certainly been surpassed by foreigners—Aldus, Elzevir, and even Didot being superior. One of our greatest names is John Baskerville, whose publications are still occasionally to be picked up cheap on the London bookstalls. He was no tradesman in his craft, but spared neither pains or money to make his work worthy of his name. Printing with him was in fact what Walter Shandy would have called his hobby-horse. He is said to have spent $3,000 before he could get a single letter which came up to his own standard of excellence, and he had invested thousands in the business before he could make it pay. In fact, with him it was not a business, but an art. He did not adopt it to make, but to spend money already made. His issues have very much the same kind of excellence as, compared with contemporary and subsequent prints, that Josiah Wedgwood's platos and vases have with reference to their modern rivals. He saw to everything himself. He manufactured his own printing-ink, presses and molds. Though he was a wealthy man he was not ashamed of the trade which he had adopted. In fact, it was not a trade for him, but an occupation. On the panels of his carriage he had caused to be painted a series of the different processes in printing. His chief excellence was in the construction of his Italic letters. They are thought by judges to stand unrivaled for freedom and symmetry. Many of his books were printed from silver types, and thus gained a delicacy which makes the paper appear almost like vellum. We shall scarcely again have such a printer. The man was an eccentric; found his reward, not in what he made by his books, but in what he made them. He died at the beginning of this century, and ordered that he should be buried in his own garden, and his dying wish was respected. Since his day science has been busy in invention and its application to art, but his work holds its place still. We have had greater printers, but we have scarcely had better-printed books.

THE PHOSPHORESCENCE OF THE SEA.

The Noctilucæ are little crystal balls of about the size of a pin's head. The transparence of their structure permits an easy investigation. Not a fiber is to be seen, unless, with De Blainvil, we consider the transverse markings of the tail in the light of muscular fibers, a supposition which is very questionable. In the neighborhood of this tail there is usually a mass of food or the indigestible remains of food. Not that we are to look for a stomach in this animal,—nothing of the kind exists; but in lieu thereof we find, as in Infusoria, a number of vacuolæ, or assimilating cavities, which appear and disappear, according to need, formed out of the contractile substance which is seen radiating in filaments all through the substance of the animal. In this curious animal, not a trace has been discovered of vessels, nerves, senses, or indeed of any "organs" whatever. It is a mass of animated jelly, with a mobile tail. Its mode of reproduction has been variously expounded, but the generally received theory is that they multiply by spontaneous sub-division. No one has yet observed anything like reproduction by means of ova.

To these Noctilucæ the sea owes much of that brilliant phosphorescence which at all times has been the marvel of travelers. Place your vase in a darkened room, and strike the glass, or agitate the water, and you will be delighted with the spectacle presented. From every part brilliant sparks appear and disappear, until at length no agitation of the water will produce more; their power is exhausted, as that of the electric eel is exhausted, after a few shocks. You want to know the cause of this phosphorescence? Unhappily the point is still in doubt. It is only since the beginning of this century that the attention of naturalists has been fixed upon the Noctilucæ as sources of the phosphorescence, in all times observed, and in former times attributed to the presence of decaying organic substance, to electricity, to an absorption of solar light disengaged in the dark.

There are two different kinds of phosphorescence observed in the sea. The first is of very brilliant but isolated sparks, and is due principally to Starfishes, Crustaceans, and Annelids. The second is of a general luminous tint, over which are strewed isolated sparks, and is due to the Noctilucæ. These Noctilucæ have no special organ which produces the phosphorescence as the other animals have; but the light emanates from the whole substance of their bodies. Every irritant, no matter of what nature, produces this phosphorescence in them. The phenomenon is not, as insects, one of combustion; but is intimately connected with the contraction, spontaneous or provoked, of their substance. It is independent of all secretion, and it is probable that the sparks are due to the rupture and sudden contraction of their sarcodic filaments; while the steady light they emit in dying, results from the permanent contraction of this sarcodic substance. L.

PADDLING ON A HOT DAY.

BUSY BRAINS.

This morning at ten o'clock, the mercury in the thermometer stood at ninety degrees in the shade. What it would reach before night was fearful to contemplate. The children, accustomed to out-of-door sports, were showing symptoms of restlessness, the boy was getting decidedly cross, lying on the lounge growling at the weather, teasing his sisters and making himself generally disagreeable, when one dear little philosopher unconsciously came to the rescue. Having gathered in my flock I was busy shutting up the house to keep as cool as possible. "Mamma, what shall we do to forget that it's hot?" said the little one. Kitty had just brought up a dish-pan of ice-cold water, the drippings from the refrigerator.

"Stop Kitty, do not throw that out. Now, children dip your hands in, way in. Does not that feel good? Floy seat the baby on the table and let her have a share."

The little pearly teeth gleamed out in merry laughter as the dimpled arms, up to the elbows, were immersed in the deliciously cool water and in less time than it takes to write it, my kitchen table was surrounded by a pleased, chattering group. All thoughts of the weather were forgotten in the novel delights of "paddling." Even mamma had to take a dip, and I did not wonder at the sudden change of countenances when I experienced the delicious coolness slowly creeping up my arms and imparting its cooling influence over my whole body. "Children, let us wipe our hands and undress ourselves. The little ones can put on only a slip and the older ones a gown and you can play that you are Indians to-day, for there will be no company."

The undressing was expeditiously performed and the troop that filed past me a few moments after was certainly a good-natured one. But I had more noise and company than I had calculated on, for the suggestion of Indians not only led to surprising embellishment but most hideous were the dances and whoops which followed as a natural consequence, and the little neighbors opposite, hearing the fun and catching a glimpse of bare legs (for now and then one of the tribe would make a raid upon a harvest apple-tree which stood near the house), could not resist the fascination and tripped over bare-legged to join the happy band of savages.

At four o'clock, as a slight shower had tempered the extreme heat, I had a tub brought into the kitchen and the little ones were allowed to splash in a little while before being dressed, the older ones running up to their rooms to resume their civilized dress, all declaring this had been a jolly day. So has passed our hottest day this summer. Idly, perhaps, but happily and not altogether unprofitably since we learned that troubles are, after all, pretty much as we take them, and that even a hot day can be made not only bearable but pleasant. We had no fire in the kitchen and made our dinner of cold roast-beef, bread and butter, blackberries and cream, and I am sure that Kitty welcomed the omission although she at first demurred about putting off "jist the tail end of the iron!"

Watching one's-self.—"When I was a boy," said an old man, "we had a schoolmaster who had an odd way of catching idle boys. One day he called out to us:

"'Boys, I must have closer attention to your books. The first one that sees another idle, I want him to inform me, and I will attend to the case.'

"Ah!" thought I to myself, there is "Joe Simmons that I don't like. I'll watch him, and if I see him look off his book, I'll tell." It was not long before I saw Joe look off his book, and immediately I informed the master.

"Indeed!" said he; "how do you know he was idle?"

"I saw him" I said.

"You did? and were your eyes on your book when you saw him?"

I was caught, and never watched for idle boys again.

If we are sufficiently watchful over our own conduct, we shall have no time to find fault with the conduct of others.

Sabbath Reading.

LIFE'S WEST WINDOW.

We stand at life's west windows,
And think of the days that are gone;
Remembering the coming sunset,
We too must remember the morn;
But the sun will set, the day will close,
And an end will come to all our woes.

As we watch from the western casements,
Reviewing our happy youth,
We mourn for its vanished promise
Of honor, ambition, and truth;
But hopes will fall and pride decay,
When we think how soon we must away.

We stand at life's west windows,
And turn not sadly away,
To watch our children's faces
The noontide of sparkling day;
But our sun must set, our lips grow dumb,
And to look from our windows our children come.

Still looking from life's west windows;
And we know we would not again
Look forth the eastern lattice,
And live over all life's pain;
Though life's sunlight be brilliant, its sunset is sweet,
Since it brings longed-for rest to our weary feet.

[*Household.*

THE FIRST PROPHECY.

"And I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shalt bruise his heel." Genesis iii. 15.

Such is the first prophecy which occurs in Scripture. Adam and Eve had transgressed the simple command of their Maker; they had hearkened to the suggestions of the tempter, and eaten the forbidden fruit. Summoned into the presence of God, each of the three parties is successively addressed; but the serpent, as having originated evil, receives first his sentence.

We have, of course, no power of ascertaining the external change which the curse brought upon the serpent. The terms, however, of the sentence, "Upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life," (Gen. iii. 14), seem to imply that the serpent had not been created a reptile, but became classed with creeping things, as a consequence of the curse. It is probable that heretofore the serpent had been remarkable for beauty and splendor, and that on this account the tempter chose it as the vehicle of his approaches. Eve, in all likelihood, was attracted towards the creature by its loveliness; and when she found it endowed, like herself, with the power of speech, she possibly concluded that it had itself eaten of the fruit, and acquired thereby a gift which she thought confined to herself and husband.

But we may be sure that, although, to mark his hatred of sin, God pronounced a curse on the serpent, it was against the devil, who had actuated the serpent, that the curse was chiefly directed. It may be said that the serpent itself must have been innocent in the matter, and that the curse should have fallen on none but the tempter. But you are to remember that the serpent suffered not alone: every living thing had share in the consequences of disobedience. And although the effect of man's apostasy on the serpent may have been more signal and marked than on other creatures, we have no right to conclude that there was entailed so much greater suffering on this reptile as to distinguish it in misery from the rest of the animal creation.

But undoubtedly it was the devil, more emphatically than the serpent, that God cursed for the seduction of man. The words, indeed, of our text have a primary application to the serpent. It is most strictly true, that, ever since the fall, there has been enmity between man and the serpent. Every man will instinctively recoil at the sight of a serpent. We have a natural and unconquerable aversion to this tribe of living things, which we feel not in respect to others, even fiercer and more noxious. Men, if they find a serpent, will always strive to destroy it, bruising the head in which the poison lies; whilst the serpent will often avenge itself, wounding its assailant, if not mortally, yet so as to make it true that it bruises his heel.

But whilst the words have thus, undoubtedly, a fulfillment in respect of the serpent, we cannot question that their reference is chiefly to the devil. It was the devil, and not the serpent, which had beguiled the woman; and it is only in a very limited sense that it could be said to the serpent, "Because thou hast done this," We are indeed so unacquainted with transactions in the world of spirits, that we cannot pretend to determine what, or whether any, immediate change passed on the condition of Satan and his associates. If the curse upon the serpent took effect upon the devil, it would seem probable, that, ever since the fall, the power of Satan has been specially limited to this earth and its inhabitants. We may gather from the denunciation, "Upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life," that, in place of being allowed, as he might beforetime have been, to range through the universe, machinating against the peace of many orders of intelligence, he was confined to the arena of humanity, and forced to concentrate his energies on the destruction of a solitary race. It would seem altogether possible, that, after his ejectment from heaven, Satan had liberty to traverse the vast area of creation; and that far-off stars and planets were accessible to his wanderings. It is to the full as possible, that, as soon as man apostatized, God confirmed in their allegiance other orders of beings, and shielded them from the assaults of the Evil One by chaining him to the earth on which he had just won a victory. And if, as the result of his having seduced our first parents, Satan were thus sentenced to confinement to this globe, we may readily understand how words, addressed to the serpent, dooming it to trail itself along the ground, had distinct reference to the tempter by whom that serpent had been actuated.

But, whatever be our opinion concerning this part of the curse, there can be no doubt that our text must be explained of the devil, though, as we have shown you, it has a partial fulfillment in respect of the serpent. We must here consider God as speaking to the tempter, and announcing war between Satan and man. We have called the words a prophecy; and, when considered as addressed to the devil, such is properly their designation. But when we remember that they were spoken in the hearing of Adam and Eve, we must regard them also in the light of a promise. And it is well worth remark, that, before God told the woman of her sorrow and her trouble, and before he told the man of the thorn, and the thistle, and the dust to which he should return, he caused them to hear words which must have inspired them with hope. Vanquished they were; and they might have thought that, with an undisputed supremacy, he who had prevailed to their overthrow would ever after hold them in vassalage. Must it not then have been cheering to them, whilst they stood as criminals before their God, expecting the sentence which disobedience had provoked, to hear that their conqueror should not enjoy unassaulted his conquest, but that there were yet undeveloped arrangements which would insure to humanity final mastery over the oppressor? And though, when God turned and spake to themselves, he gave no word of encouragement, but dwelt only on the toil and the death which they had wrought into their portion, still the prophecy to which they had listened must have sunk into their hearts as a promise; and when, with lingering steps, and the first tears ever wept, they departed from the glorious precincts of Eden, we may believe that one sustained the other by whispering the words, "Though thou shalt bruise his heel, it shall bruise thy head." H. M.

ST. JOHN AND THE PARTRIDGE.

Dean Stanley tells the children a tradition of St. John the Evangelist, in a very charming way. The Dean must certainly be a good talker to children.

It was whilst St. John was residing at Ephesus that various stories were told of him which we do not find in the Bible. We cannot be certain that these stories are quite correct, therefore, but they accord with all that was known of St. John, and they agree with the letters and epistles which he wrote at that time. One of these stories is:

There came one day to Ephesus a sportsman, who had heard so much of this wise old man that he went out of his way to see him, and his surprise was great when he found St. John engaged in gently stroking a partridge which he held in his hand.

The sportsman could not help saying how surprised he was to see so great a man employed on anything so small. Then St. John said, "What have you in your hand?"

"A bow," replied the sportsman.

St. John asked, "Why is it not bent?"

The sportsman replied, "Because, if always bent, it would lose its strength."

"That is just the reason," said St. John "why I play with the partridge. It is that my mind may be kept strong by not being always at work."

What do we learn from this story, my dear children? We learn from it that St. John, and great and good men like him, are glad now and then to see you at play, and to play with you. We learn that kindness to dumb animals is a thing that God expects of us.

There was an aged lady, very excellent, wise, and wonderfully learned, who lived to be nearly as old as St. John was when he died; she was the famous Mary Somerville, who died last year, in her ninety-second year. A very short time before her death she said, "I hope that the time may come when children shall be taught that mercy to birds and beasts is part of religion!"

Yes, it ought to be a part of our religion, and I trust that we shall make it so. Play, too, with your companions like St. John, remembering that all play and all holidays are given by God, like the unbending of the bow in the story, to help people to work better for the future.

When we consider that sin has slain our Lord Jesus Christ, O how should the thought provoke our hearts to be revenged on sin, for having murdered the Lord of Glory, and done more mischief than all the devils in hell could have done.

PERSONAL ITEMS.

A malicious paragrapher says Stanley Matthews will not sleep alone in a room with an inkstand in it.

Miss Fanny Washington Finch, the great-grand-niece of Washington, and supposed to be his nearest living relative, is keeping a boarding-house at Washington, and has recently had her furniture attached by a landlord for rent.

Matt. Carpenter got $1,000 from the Detroit liquor dealers to study up the constitutionality of the Michigan Liquor Law. He did study up and sent his opinion lately. It was very brief and to this effect, "You can't break the law."

The ex-Empress Eugenia is described by a correspondent at Ems as "sick and sadder than ever." She travels under the name of Countess of Pierrefonds, and has for her suite the Duchess of Mouchy and the Marquis of Piennes. She has some trouble with her legs (wicked tongues say it is the gout) and cannot walk without leaning on a heavy cane.

The late Cardinal Franchi was a charming table talker, and after keeping all the table in a roar while upon a visit to Cardinal Manning, scandalized his host by taking out his cigar-case and offering cigars all around. He was not enthusiastic about the conversion of England to Catholicism. "It will not come in our day," he said, "not till we canonize Saint Mammon."

Mrs. Mackay, wife of the Bonanza King, has a sapphire which was once the property of a Russian prince, and it cost her $150,000. It is an inch in diameter. Her pearl necklace cost $100,000, and her coral set cost $18,000. These few articles of jewelry—these trifling aids to woman's vanity—represent the work of 595 men for one whole year at the liberal wages of $1.50 a day each. Madame Mackay comes from California—and so does Kearney, the denouncer of bloated capitalists.

Prince Napoleon had a narrow escape while attending an agricultural exhibition in Sweden. In company with the King he was examining some machinery and had approached close to an engine, which unexpectedly was set in motion, and some parts of the engine caught the clothes of the Prince, who would undoubtedly have been drawn into the wheels if the King had not, with great presence of mind, instantly himself stopped the engine. As it was the Prince had his clothes torn to pieces.

An incident illustrating Gen. Grant's retentiveness of memory is told. Several years ago, when he was President, a letter was received at the White House from an Ohio florist, asking for a certain rare plant, for which the writer had sought in vain far and near. The President's private secretary returned a reply that it was not to be found in this country. Last winter the florist received a package from Europe containing the long-desired plant, "With the compliments of U. S. Grant."

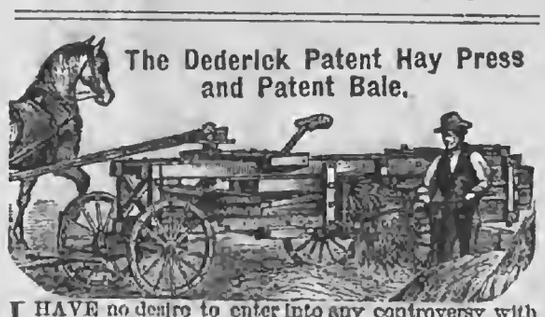
Senator Christiancy is elderly even for his years, neither winsome nor rich, as Senators go, and has many children; and some Washington people think that it was a doubtful rise for his wife when she forsook her brawny young lover and married him, with her dowry of youth and good looks and young love. To her credit it is said that she has not forgotten her old mates in the Bureau of Engraving and Printing. Those with whom she was intimate in her working days still visit her with the old confidence and intimacy.

Lord Acton, according to a curious rumor floating about in English circles, will succeed to the post of principal librarian and secretary of the British Museum. He is a peer of the realm, a liberal Roman Catholic, and connected by birth and marriage with several German and Italian noble families. His uncle was a cardinal; his mother—by her second marriage, the first wife of the present Lord Granville—was the only daughter and heiress of the late Duke of Dalberg, and his grandfather, Sir John Francis Acton, was commander-in-chief and prime minister at Naples. He himself married a daughter of the Bavarian Count Arco-Vallee. The salary is $6,000 a year, but the facilities for literary culture, which the position offers, will doubtless form the chief attraction for his lordship, should the rumor prove correct.

George Eliot (Mrs. Lewes) the greatest living novelist, the thoughtful perusal of one of whose works is a liberal education, has never had a photograph taken, so that the great majority of her admirers are compelled to view her only through pen-and-ink sketches. She is a woman who must have passed her fiftieth year. Her hair is dark brown, and has none of those silver threads one might expect where the burden of half a century of years is added to incessant labor, and experiences full of desolation. She is not at all handsome; her face is long and very pale, with a small sensitive mouth; eyes dreamy, introspective, and sad always. Her hair is worn low over her intellectual forehead, and her slender figure has no robust-energy about it. George Eliot's is the energy of mind, not of physical power. She is one of the greatest living conversationalists. She is one of the most accomplished amateur pianists in England, and a first-rate linguist, and seems to know as much about the healing art, history and philosophy. What the witty Mrs. French said of Madame de Staël—that she is consolingly ugly—applies to George Eliot: but her plain features are made beautiful by her expression. She composes slowly and methodically, not more than sixty lines a day; and report says that when she has completed a book her nervous exhaustion is such that her husband takes her abroad at once to recruit her failing health. While writing, she must be scrupulously arranged as to surroundings and person. She is not only a wonderful author, but a clever housewife, too; and her home-life is perfect in all its details.

Implements and Machinery.

The Dederick Patent Hay Press and Patent Bale.



I HAVE no desire to enter into any controversy with a man of the calibre of Mr. Ertel, except through the courts, but to the public I desire to say that he alludes to an article I published, warning all interested of the infringement and use of eight of my patents in the press he advertises, and that I should hold the purchaser liable, all of which I propose to do. I did this to prevent innocent persons becoming parties to a steal, and as both said Ertel and myself now offer to furnish copies of our patents, there is no occasion for further remark, except to request interested parties to send for them, and learn who lies and swindles, and I offer a premium of one of the best Hay Presses in the world to any man I cannot satisfy of the truth of all I assert. I will now state further, and will produce the letters to substantiate, that, at the request of said Ertel, I sent him copies of fifteen of my patents, which he kept about a month, and it was not until after this that he produced his new press, and which his letter, returning my patents, states he meant to try to make, and which should have been an easy thing, seeing that the entire press proper was illustrated and described in those letters patent of mine which he studied about a month. Now, if he will hoist the Communist flag again, appropriate and apply the balance of my improvements on that class of press, in order to do good work, he will then have one of my cheap presses, which I offer at less price than he does the imperfect machine. Of course his applications for patents were rejected on my prior patents, as the records will show, and he was compelled to confine his claims to a few little traps he attached, and which gives him no authority to use my patented press in applying them. I introduced this manner of pressing and bale against the opposition of all others, and have succeeded, to the great benefit of the entire hay interests of the country. I have patented the machine, the bale, and the entire process of making it, and a raid on all by such who opposed it is Communism with a vengeance. My redress is against either the maker, seller or user, as I choose. The user damages me most by the dirty, ragged, contraband bales of my patented form and construction, put upon the market. Judging from the reckless manner he warps the truth in his article, I should say that Ertel's promises of protection to his customers would need some further assurance in regard to his word and ability, even admitting the fact that his customers are few, and his citing me as reference to his responsibility is a mistake, as I have never received any such information on the subject. I notice that he does not deny infringement, which is singular, considering that his entire article is a tissue of falsehoods. I guarantee to furnish presses lower in price and cheaper at price than any other presses as a gift, or no sale. Address for descriptive circular

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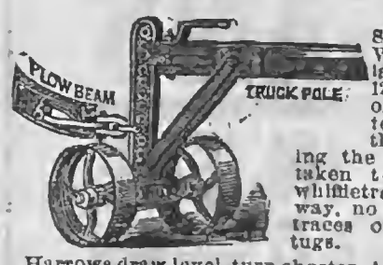

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A LECTURER, addressing a mechanics' institute, contended that "Art could not improve Nature," when one of the audience set the whole assembly in a roar by exclaiming, "How would you look without your wig?"—*Exchange.*

NORTH CAROLINA proposes to introduce the bell-punch for registering votes at elections. Then the popular song will be:

When he receives a vote the inspectare
Will punch in the presence of the electare,
A Dem. check slip for a white votare,
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All in the presence of the electare.
—*N. Y. World.*

When a man casually sits down on a large bumble bee's nest, reason urges him to sit there till he has squashed the animation out of the vindictive occupants, but instinct warns him to keep an important engagement elsewhere. This is one of those occasions when instinct invariably gets the better of reason.—*Kansas City Mail.*

A young man made his appearance at Deadwood last week in a pair of white pants. He was promptly escorted to the cars, put on board of them, and an injunction placed upon him never to revisit the place, "We can stand a biled shirt you know," explained a miner, "but when it comes to wearin' biled drawers, we just make them git up and git."

IN an ancient churchyard not far from Stirling the following inscription may be traced on one of the oldest tomb-stones:

"Here lies John Dunn,
He was shot with a gun;
His name was Prime,
But that wouldn't rhyme."

"THANK heaven," said a tormented passenger, "there are no newsboys in heaven." "No," replied the newsboy, "but what comfort do you find in that?" The man didn't say, and everybody else looked pleased.—*Hawkeye.*

MRS. PARTINGTON ON GINGER.—"How flagrant it is," said Mrs. Partington, as she sniffed the odor of a bottle of Jamaica ginger. "It is as pleasant to the oil factories as it is warming to the diagram, and so accelerating to the cistern, that it makes one forget all pain like the oxide gas that people take for the toothache. It should have a place in every home where people are subject to bucolics, and such like melodies; besides a spoonful is so salubrious when run down like a boot at the heel in walking, one feels like a new creature."

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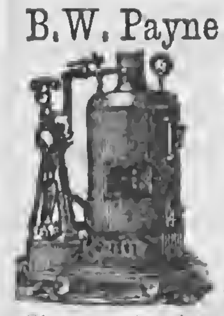

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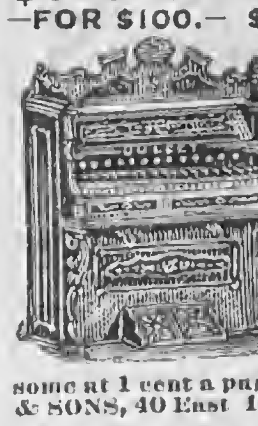

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VOL. XXXVII. No. 38.
WHOLE No. 1495.

NEW YORK CITY, SEPT. 21, 1878.

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The Naturalist.

ANTHROPOID APES.

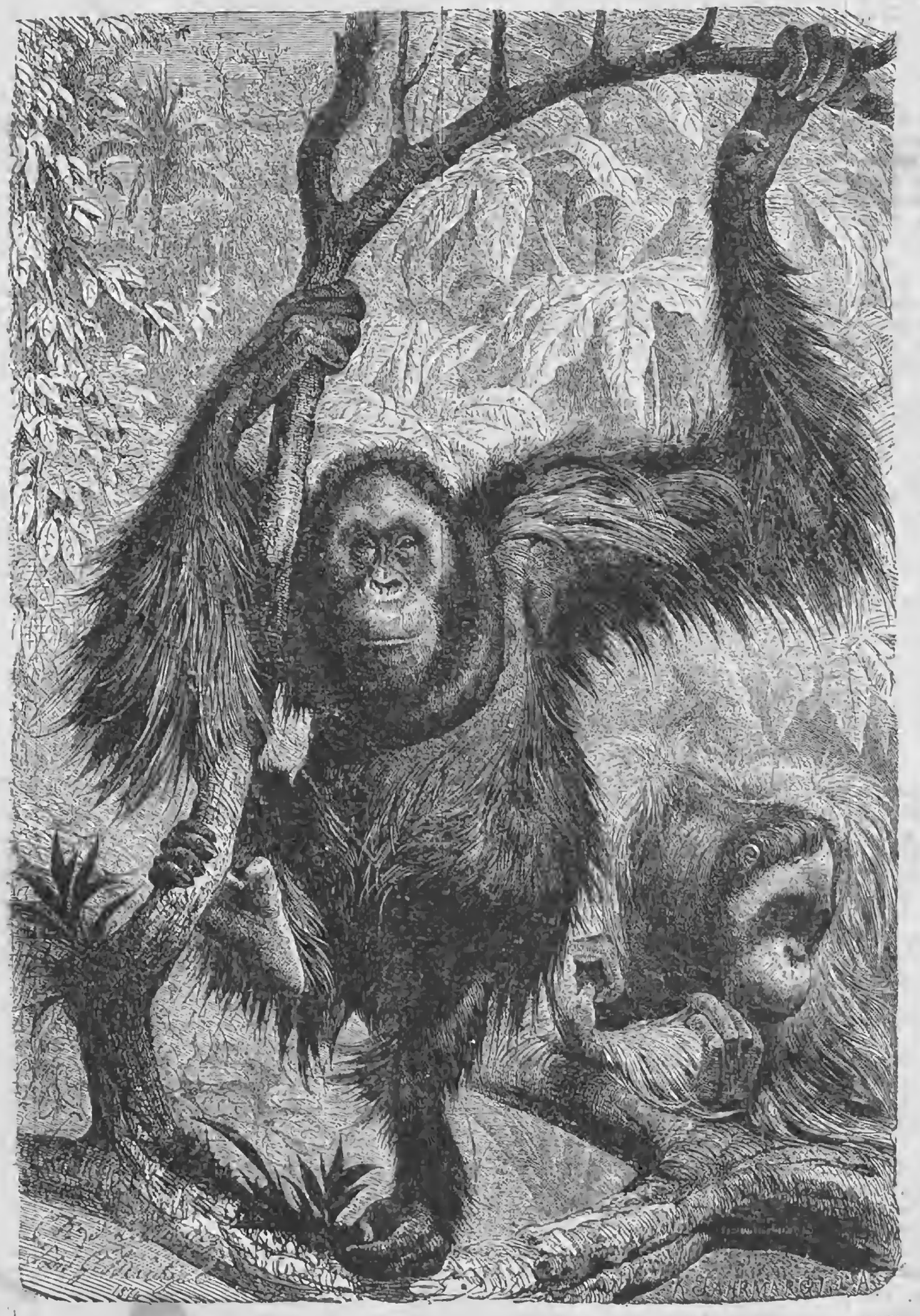
By universal consent the Quadrumana, or four-handed animals, occupy the highest rank in brute creation. It may, however, be questioned whether if Man never existed this place would be assigned them by any observing intelligence. Of the five divisions into which naturalists generally separate the Simiadæ, the apes both by their physical organization and habits, bear the closest resemblance to man. This analogy is so striking in the orang-outang, gorilla, chimpanzee and gibbon—hence called anthropoid apes—that not a few naturalists have concluded they are inferior varieties of the human race, while others maintain that man is either descended from the ape or that both have sprung from some common ancestor now extinct, and that the present differences between them are due to minute differentiations continued in divergent lines through countless ages. As yet, however, most naturalists are of the opinion of humanity at large, and, disdaining to acknowledge any connection between themselves and these grotesque or hideous caricatures of them, attribute the numerous points of resemblance to the fact that, in the vast multitude of different existing animals, a great number of close analogies may arise without the necessity for any consequent relationship between the groups in which they are manifested.

It must be owned, however, that the natural repugnance man feels for so degraded a counterpart, is not the least of the causes of this opinion; for in all other cases, a close resemblance between different animals is certainly suggestive of their relationship, and to the strictly scientific mind, which eschews prejudice, the inferences from the resemblance of the monkey to man, form no exception to this rule. Hence the illustrious Linnæus placed both in his Order of Primates, or first animals, and composed his genus Homo, Man, not only of humans, homo sapiens; but also of Chimpanzees, homo troglodytes; of gibbons, homo lar; and of orang-outangs, homo satyrus. And down to-day the Linnean name "Primates" has been retained for the ape order, not only by some of the foremost naturalists who, like Huxley, believe man should be retained in it; but also by many other scientists who, like Geoffroy St. Hilaire, believe that he should be excluded from it. It is to Cuvier that we owe the term Quadrumana, or four-handed, as applied to the order of monkeys in contradistinction to Bimana, or two-handed, bestowed on an order of which Man is the only representative.

Those among us who jocularly or scientifically claim a relationship of some sort with the monkey race, as well as those who lightly or indignantly repudiate all kinship of the kind, have both defensible grounds for their respective utterances. In favor of the former it cannot be denied that, from a purely anatomical point of view, the points of similitude between the man and the monkey are too many and close to be easily attributed to accident. The skeleton of anthropoid apes generally, consists of but few more bones than that of man. The proportions of its parts, if we except the relative length of the limb bones, are also much as in man, nor are their shapes, except as regards the jaws and haunch bones, greatly different. The same general resemblance likewise holds true of their minute structure, though the osseous tissue in the ape is generally denser than in the human, and the cavity for the marrow in the long bones, smaller.

On descending from generalities to particulars, however, the resemblance is less complete and the structure of the monkey shows a decided inferiority precisely in those organs which assure the superiority of the human being over the rest of creation. To the ordinary reader a detailed enumeration of the points of structural difference would be wearisome from its length and, without constant reference to a dictionary, incomprehensible from its technicality. To afford our readers, therefore, an intelligible idea of the relative appearance and formation of man and ape, it has been thought best to present to them, in this connection, carefully drawn illustrations of a human skeleton and of that of an orang-outang, one of the brutes whose structure bears the closest analogy to that of sovereign man. A careful comparison of the two will be equally interesting and instructive and obviate the necessity of more than a few explanatory remarks.

The absolute size of the brain never in any ape approaches that of the lowest type of rational human beings. Thus the cranial capacity is never less than 55 cubic inches in the latter, while in the ourang and chimpanzee it is but 26 and 27½ cubic inches respectively. In general form and structure, however, the brains of man and monkey closely resemble each other, though that of the latter is considerably less convoluted. With this exception, and its great inferiority in size, the brain of the orang is a counterpart of man's in all respects. In man the orifice through which the spinal marrow connects with the brain, is so situated as to render the head easily balanced; whereas in all monkeys it is so far back, that there is a constant tendency of the head to hang forwards—one of the structural causes which renders it a matter of great difficulty for all monkeys to move freely in an upright posture. The teeth of apes consist, as in man, of incisors, canines, premolars and molars, and generally the higher apes have the same number; but no ape has the teeth placed in an uninterrupted row in each jaw, and from the prolongation of the canines into opposite interspaces, they soon grow into tushes.



ORANG-OUTANG.

The comparative intelligence of different kinds of men is not uncommonly inferred from the relative size of the facial angle formed at the junction of two straight lines, one drawn from the middle of the exterior entrance of the ear to the base of the nose, and the other from the prominent center of the forehead to the most prominent part of the upper jaw. The more open this angle, the higher the estimation of the intelligence of the subject. Judged by this rule, the intelligence of the brightest species of monkeys, is far behind that of the lowest race of humanity. In the skulls of nearly every class of the former, the face slopes backward, so that this angle is always more or less acute, its size diminishing with the age of the animal; for in all the apes there is a gradual impairment of the faculties, and a gradual increase of all vicious qualities as they advance in years—phenomena that correspond with a growing depression in the anterior portion of the brain, an elongation of the face and a considerable diminution of the facial angle. However submissive and obedient in early life, a monkey invariably becomes malicious, quarrelsome, and unmistakably brutish in old age.

The monkey's larynx greatly resembles that of man, and his tongue is only a trifle longer, yet the power of speech is utterly denied to all the species, though it is not improbable that, like most other animals, they possess the faculty of communicating facts, to a limited extent, to each other. The neck of all apes is much shorter than that of the most apoplectic mortal, while in some cases the head rests almost directly on the shoulders. While the anterior limbs, or arms, though varying considerably in length, are always much longer in proportion to the trunk, than in the case of man, the posterior limbs, or legs of apes, are shorter, and generally proportionately weaker than those in the human body. It has been well said that human civilization is mainly due to the conformation of human hands and feet, and especially to the position of the thumb fronting the four other fingers. The shape of the foot enables man to stand firmly in an upright position, and after the lessons of childhood, to balance himself unconsciously, while moving about. On the other hand, the monkey's feet turn inwards, so as to enable him to grasp more easily and firmly, the branches of the trees among which he naturally lives; while it is only by great efforts he can walk erect on the ground. Though his hands have five fingers, the thumb is short and widely separated from the other fingers, and, moreover, the latter are mutually dependent and cannot act separately like the admirable instrument which has enabled man to accomplish so many marvels of industry and art.

The Orang-outang is a native of Sumatra and Borneo. He is from four to five feet high, tailless, like the other anthropoid apes, and intellectually generally is considered superior to all the monkey race. The adult male Gorilla is from five to six feet high and from seven to nine feet from the end of one outstretched hand to that of the other. He is an inhabitant of the equatorial regions of Western Africa, the same country which furnishes the Chimpanzee, which of all the race approaches nearest to man in its whole configuration. He is of about the same hight as the orang-outang, and his skull is represented at fig. c.—p. 599 The Gibbon is generally considered the connecting link between the ape and the baboon, rarely exceeds four feet in hight; is extremely active among the branches of trees, is an inhabitant of Siam and Malacca, and has a head shaped as at b. His arms reach the ground and when extended are twice the length of the body.

Farm Topics.

HINTS FOR THE SEASON.

EACH month and each week bring their own work. To the farmer there is no time for idling. Instead of allowing work to crowd, he always does what he can in advance, that he may be ready for bad weather, company, sickness or a holiday.

LUMPY GROUND.—One of the best things to do for lumps is to tile the land. Instead of spending so much time on the surface, begin at the foundation. It has always been found to pay to tile heavy land, especially if the soil was strong. Clods may be crushed by rolling and scraping and harrowing, but for the best results in seeding to wheat or any other crop, it is not best to crush all the lumps on the surface. After a rain, such soil will pack and bake hard if left too fine on top. Harrow thoroughly and pulverize below the surface and leave small lumps on the surface. Put in some furrows for surface drainage, running them obliquely down the hillsides to prevent washing by rapid currents.

LIVE STOCK.—Animals must not be without a liberal supply of good water. They will suffer for want of it, and will not thrive so well. Arrange for pasture in abundance for late feeding. Sow some rye for pasture late in autumn and early spring, when the ground may be plowed for other crops. Look especially after the poor animals. Those which are poor in autumn should be disposed of in some way. Feed them up, sell them, or knock them on the head. It is better to kill them now than to care for, and watch them with anxiety for the next six months, and then have them wither up and die. At this season of the year, an experienced eye will usually pick out most of the sheep which are not worth wintering. It is too late in the year to begin to feed up poor animals, and do it most profitably.

ROADS.—The easiest way to keep them in good repair is by frequent scraping. This fills all little holes, keeps the water off the surface and allows the travel to pack the ground hard. A quarter or more of the road-tax of any district should be used in buying a scraper, and in using it just at the right time. The best time for scraping is soon after a rain has nearly dried off. Every neighborhood which has never tried this method will be surprised to see how far a little work will go. Once tried they will not abandon the plan for any other.

FAIRS.—Attend the fairs, and not only attend, but help support them by taking something from your own farm. People cannot all be spectators on such occasions. Those who are most active in the support of fairs do the most good and are themselves the most benefited. They learn more by taking part than they would by merely looking on. Take a note-book and pencil and fill it with addresses of men you wish to visit or write to; also get numerous new and valuable ideas for future use on the farm, or the Grange, or Farmer's Club, or at a future fair. No farmer in these times can afford to stay away from the fair.

WEEDS.—True to their nature, all weeds are now hurrying on to produce flowers and seeds. It is astonishing with what rapidity they will mature at this time of year. It is their last chance—now or never. As soon as the crops are off in the garden, the land should be sown to some other crop, or cultivated every week so as to prevent weeds from maturing.

SAVING SEEDS.—Save a good supply of all sorts of good seeds of grain, vegetables, and flowers. It may cost more than to buy them, but even if it seems to cost five times as much as to buy of the seedsmen, it will pay to raise your own seed. There are many poor seeds in the market. Label them properly as collected, with the name, date, and peculiarities. Have a place where they may be well dried, and then put them away free from vermin.

PICK APPLES rather early if they are expected to keep well. Place them in barrels or in heaps under the tree, or in a shed, where they should remain till cold weather in November or December, when the cellar will have cooled off ready for fruit. Attend to assorting properly. If you have never attended to it, try this as an experiment. The same fruit, good and poor, will bring much more money when put up in separate packages. While picking, do not forget to search for a few of the finest of each variety to show at a winter meeting of your Pomological Society, your Club or Grange.

CELERY should be kept growing and hilled up for blanching. In treating this delicious vegetable, remember that it likes a liberal allowance of water. Plant on damp soil or irrigate occasionally.

BEETS should be topped and buried before a hard frost. Dig trenches in a dry place a foot and a-half wide, and place the beets in below the surface, cover them gradually. For daily use, keep beets and all vegetables which are liable to wilt, in a box of damp sphagnum, in the cellar.

SQUASHES should not be out in a frost. Cut the stems from the vines. Handle the squashes with great care and remove them to a shed where they should remain covered with litter till danger of freezing.

CURRANTS AND GOOSEBERRIES.—Now that currant worms and borers are so troublesome, people are likely to neglect or quit raising the fruits named above. Perhaps it may be best to increase the plants and take thorough measures to fight the insect pests. Cuttings should be made now—of young growth, six inches or more in length. Those should be set close together for two-thirds of their length in the soil in a sheltered place. By spring they will be nicely callused and most of them rooted.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE observe that the escutcheon theory has assumed the importance in Pennsylvania of a government commission. This was the case in France years ago, and they reported in favor of the Guenon system, which gave it a prominence which no doubt will be renewed by the gentlemen in Pennsylvania who are now guessing how many quarts of milk cows will give. According to the report of their investigations thus far, they have come pretty close to the statements made by the owners of the cows. Guenon wrote a book about the escutcheon, and claimed to be able to tell almost exactly how much milk a cow would give from the width of the upright hair belt behind and the shape and form of the curls alongside. A big, broad belt means, according to his theory, a big pail of milk. We bought a cow once just on account of her escutcheon, as it was the broadest and best defined we had ever seen, and four quarts of milk were the most we could squeeze out of her. We are incredulous enough to suspect that if Guenon and the Pennsylvania commissioners, did not look at the udder and milk veins, their escutcheon guesses would not be quite so accurate.

For seventy-five years our cellar has been an unprofitable place in which to make butter. It would get damp and moldy, and the cream would not rise, and the butter would not come. In our day the house has been raised and more windows put in to get more circulation of air. The walls have been cemented, as a last resort, but it was all the same. In despair, the milk in "dog days" was fed to the calves and pigs to get rid of it. Two years ago it occurred to us what was the matter. There was too much circulation. The hot air rushing in was carried against the cold walls and the moisture in it was condensed, and this action going on all day, caused the walls to drip with the accumulated dampness. The windows all having been shut and kept so, there was no more trouble. The cellar is uniformly cool and dry, ranging from 64° to 66°. We can make good, solid, sweet butter all summer, and it comes quickly. Neither milk nor cream breathes, hence there is no need of circulation. Clean the cellar thoroughly out and whitewash it, so that there will be no smells, and keep it shut up tight. It may be aired by opening the windows at night and closing them early in the morning. Mrs. Callaghan had the same difficulty with her cellar, but now, since she keeps it closed, there is no trouble about making excellent butter.

One of our horses had tender feet forward and was very lame. Mr. Van Guysling, who happened to be at the shop while we were getting him shod, advised having shoes put on without calks. "Get the foot as near the ground as possible, so that a horse can step on to nature's calks, the frog," he said, "and the horse will go all right." Old Jim has not been lame since this valuable advice was practically carried out. Another horse had been lame a year, one blacksmith after another had tried his skill, but all in vain. At last a shrewd fellow suggested that the animal had been shod too much. "These artists," he said, "have cut her feet all away." This was not literally true, but each one had pared and cut until the naturally large feet were reduced almost to the quick. By preventing any more cutting away of the feet, this animal was cured.

We are going to sow Clawson wheat on the damp land. This variety does well here, and now since the millers have learned how to grind it right, it makes good bread. On the drier portions of the field rye will be put, as rye does not do well on moist land.

The farmers are all busy now, cutting the weeds and bushes along the highways, as the law in New York State makes it obligatory upon them to do so, on their own lands along the roads.

Saratoga Co., N. Y.

HINTS BY THE ROADSIDE.—No. 1.

I AM very fond of seeking for motes in the eyes of my neighbor farmers; and thinking they cannot see their opportunities as well as an observer, I take this time to make suggestions.

WELL-HOUSES AND RUNNING WATER.

My neighbor Swift has a cool, clear brook running down past his house, fed from never-failing springs and with fall enough to turn a grindstone, do the churning, and, I think, saw up the winter's wood pile. Besides, nothing is more attractive than a running stream neatly cared for and directed into a confined channel of stony bed, and yet neighbor Swift is hiding that stream away in as blind a drain as possible, and does not know the advantage of it for irrigation or for laving his hot forehead on a haying day.

My neighbor Fisher has a spring, never-failing, and of a temperature of 48 degrees all summer, and giving a stream which will fill an inch pipe steadily, and yet there is neither a well-house upon his farm, nor a trout pool, both of which are luxuries to me, which I would not dispense with for half my farm.

LARGE AND SMALL FARMS.

My neighbor Wing has six hundred acres of land and ten laborers. Hay is worth from seven to nine dollars a ton when delivered six miles away at a cost of a man and a two-horse team nearly all day. Corn is a paying crop; that is, it would be if he had plenty of manure, but my neighbor, Wing, has a habit of letting the waste and refuse of the farm lie a waste around the buildings, and by the roadside, and wash into a stream passing by, and he has too little manure to keep up the fertility of his fields while he is obliged to sell so much to pay his hired workmen. He keeps a hundred sheep, which is a redeeming feature—although with stone walls for fences, it takes a man and a boy to tend them. They are enriching his hill-tops slowly, but surely.

My neighbor Butler has but sixty acres of land. Ten in woods, ten in swamp pasture, and ten more taken up by buildings, garden, pig pasture and roadway. So he has thirty acres of land which he and his son cultivate, and rotate the crops of oats, corn, potatoes, rye, and grass upon. Now, notwithstanding this small amount of land, it is increasing in capacity to produce each year, and I am satisfied that there is one-fourth more growing upon the same ground this year than grew there five years ago.

Neighbor Butler has time between hay and harvest, to carefully grub up every part of the farm, and has a fine compost heap each year, and his women folks are good-natured, and there is a little something coming in against a rainy day, besides the example of good order and taste, and neatness which the snug little farm affords.

HOUGH HANDEL.

Farm Economy.

COURAGE ON THE FARM, IN THE SWAMP AND PEAT-BED—No. 2.

GEN. WM. H. NOBLE, OF BRIDGEPORT, CONN.

"L'Homme propose, mais Dieu dispose."

IN my first article I claimed that our text, rightly applied to life and luck upon the farm, held out no shelter to the unthrift of blundering cowards, but was a call for courageous thought and deed; that it breathed no timid doubt of God's ample disposition of all essential to man's rightful doing, but pleaded for trust and trial. Among the things upon the farm divinely disposed for our needs and thrift, I claimed the deep, unheeded deposits of decay, stored up for land enrichment in the water-logged lowlands and peat beds. For their development some simple methods detailed, brought the system of such work within the wit of all. In that work I urged deep and large tiled drains, insuring the quick leach out of such lands through a century.

After the crowding crops are garnered there comes a dry time, when wages are down a trifle, and help is plentiful. Then is the season to strike into this work with your might, before the great fall rains come to flood your job, and load your muck with wetness. Having marked out your lines and depths with the simple implements and methods detailed, begin at the spot marked for the outflow of your drain and work up on grade along its stakes. As soon as you have mined well into its deep richness, push not your drain further towards its head till you have carted out and stored up a full year's supply. Pile your toil, time and resources into this work. Over your grass, plow-land, or orchard, dump in heaps or spread, just as suits you. Have no fear of piling on too much even of the raw stuff. If the sun and autumn rains do not drench out any astringency or acids charged against the peat, the winter's frosts and thaws will cure its hurt and powder it to ashes. Keep up this work thoroughly and largely at every stay of the other driving work upon the farm.

Cart into your barn-yard deep layers to be trodden and puddled into its litter and the ordure of your stock. Pile up, a few feet apart, great ridges of its unctious blackness to be composted with fish or flesh, or any material of land enrichment at your command. Make up stout heaps to be seasoned well and powdered by the frosts. With this, when dry and fine, litter your stalls and sties, and put it to absorb fatness from your household wastes. It is the grandest disinfectant of rottenness and decay, animal or vegetable. It takes kindly to, and hoards the offal, garbage, and manurial wastes of great towns and industries, and marks their allied disbursement by grander crops.

Take no heed of the wise saws and say-sos hummed into your ears about the sourness of your muck and peat, about how so-and-so tried it and it brought in sorrel. It is senseless lingo. If sorrel springs up where you dump your peat, it is because, before, your ground was too poor to grow it. All the sourness which such deposits average, will not hurt anything that ought to grow. The alchemy of the soil and elements will take care of all undue acidity. Words are wasted about the manurial value of peat, on half who till the soil. They hug "the dollar of the daddies" till it squeals, but will not see or covet the riches of the peat-bed. The least doubt about its quality or use, disheartens all trial, whereas faith and works in these water-logged areas would soon throughout the North, summon to life in crops, their buried layers of decay.

Two friends of mine mark the wisdom of such work, and the folly of its neglect. They were about equal in property, location, and general intelligence. But one believed in peat, and saw through it a way to bonntoous harvests. The other did not know; had heard people say it did not pay; it was sour, and it was this, and that.

It happened that the latter owned a deep salt-inlet peat-bed. Such are made out of ages of decayed reeds and salt grasses, and the washed-in scum and float of the sea. Out of their rich and compact blackness, the tide has drenched all the acidity. But no assurance that trial and analysis had proved his peat-bed about equal, load for load, to stable manure, started him to multiply thereby his crops. So, with borrowed money, he paid at the livery stable, four miles away, four dollars per cord for their fluffy, littered, fire-fanged manure. The like amount and better value of his peat the most slovenly management would have placed upon his land at one dollar per cord. With sharp skill, it could have been dug and dumped for fifty cents. But such talk to him was thrown away. His cash soon ran out. His land starves. His barns are half-filled. His interest lags. He drifts to ruin. The mortgage will eat up his farm and home. He is sorry now he had not gone West—wants to find some salaried employment. He and his like will never learn that this deep blackness stores God's promise and disposal of repair and thrift to our rock-ribbed and gravelly soil. So he wends his way, murmuring that muffled wail of our text, about God's disposal to veil the unluck of intense blundering.

But his brother farmer took straight into his head, and "inwardly digested," this providence of God in the peat-bed. The vegetable generations there entombed seemed to him awaiting a resurrection to life in the waving crops of hopeful toil. No salt muck, or other peat deposit, blessed his farm; but he soon found and bought one close by. By the simple methods before detailed, he struck his lines and grades, and began to open up his agricultural mine. The very first fall after his purchase, he drained deep and delved into its richness with might and main. With greed and toil and faith untiring, he spread and stored and piled hugely all that his means made possible. The nature of peat in all its phases and placers, the elements of its ash, and its best use in agriculture, he made a study, till it was all an open book.

Now mark the result: His crops were trebled. He is at no loss for manure. When the compost in the farm-yard or great field-pile gives out, raw peat, right out of the deposit or that which has ripened in the heap, is given the crops with generous hand. His pasture lands are green and full of feed. His stock are sleek and lusty. No wail comes from him about God's adverse disposal of events and things. He proposes to do, with his might, what God has disposed him to do. He does it and he thrives. He takes no stock in "Go West, young man,"—longs for no cattle ranch, gold mine or placer, and hankers for no deep rich prairie soil.

Now, the chance to do and dare just what has made my friend thrifty and well-to-do, on his worn-out farm, is present to nearly every New England homestead. Right around me are hundreds of acres of outcast peat swamps, of all sizes and depths. A little engineering tact and cheap appliances will carry you, in dry diggings, to their very depths. If draining through the deep and wide earth walls which enclose some, is costly, sink a shaft-well deep down, and set a high-class wind-mill to pump out the waters on to your plow or meadow land. Until these deep stores of enrichment along our coast and in the low and water-logged lands of the interior, are worked into crops, let's hear no more rural grumbling, about soils and their yields. Till that work is done, New England farming has not played out its chances.

But less hopeless drudgery on the farm and larger crops are not all the blessings waking from that peat-bed. Every shovelful prompted by its study and promise, lifts us nearer that mental wakefulness which the farm so lacks. The gain to its toiler, out of God's placers in the peat-bed, will quicken his slow faith in better methods and better stock. The neighborhood gossip, which visits such doings with a thousand questions and endless talk, is an unmeant bless-

ing. It stirs up and saves farm-life from its eternal sameness and dinginess. It helps it out of deep, old-time ruts, and gives its vision scope. It allies thought and toil in social contacts, out of which flash vigor and brightness.

I would not rob farm life of its rationally conservative, sober second-thoughts; but I would have it more closely leagued with real thinking, and not so case-hardened against new ways and ideas. There is no line of life that has more to hope from these, than his who tills the soil. On the fruition of that hope, not only the future of the farm, but that of the country is staked. Our national well-being rests on the stamina and command of those who man this great underlying industry. No people has yet fallen, no republic will ever fall, where a bright-minded race owns and tills the soil. Brain upon the farm means not only intelligent work, but thought commanding the situation. Knowing and feeling its sovereignty of ownership and its rights, it is armed in their defence.

The problem of our future has more to do with those who own and occupy the land, than how to deal with tramps, with the "dollar of the daddies," or unlimited greenbacks. Just now the iron hands that neither eat nor till, are driving muscle back to till the soil. East and West, the same fate awaits the toilers of the workshop. These must have a re-adjustment of abodes and business. The grand result must be, among the owners and workers on the farm, a re-enforcement of brains, brightened by the contact of human masses in factory life. God grant them the will to tarry on the lands, and own their homes! In this result there lives a hope of better days upon the farm, and a brighter country life.

Field Crops.

NOTES FROM NORTH-WESTERN ILLINOIS.

SPRING WHEAT.

I HEREWITH send the RURAL samples of four varieties of Spring Wheat, viz.:

1. PFIFE (or *Fife*).—An early, reliable, standard hard wheat; it has been cultivated here for many years, and is in much favor with both the farmer and miller.

2 MAMMOTH.—This is also a favorite old-established variety; produces well, but is not quite so early or as hard as the Pfife. The Mammoth and the Pfife mixed, it is claimed, will make better flour than either will, if ground separately.

3. EARLY SHERMAN.—This is an early wheat and promises well, but its cultivation is an experiment with us, as this is the first year it has been grown here. It proved a success last season in Butler county, Iowa, whence the seed was procured for five acres of this wheat.

4. LOST NATION.—This is another new variety here, never having been introduced into this locality until this season. The seed was procured from Franklin county, Iowa. Prior to the late "heated term" this wheat made a fine appearance, but the scorching sun and heavy rains, at a time when the grain was forming and was most tender, caused much of it to blight and injured it generally.

EXPERIMENTS WITH SEEDS FROM THE DEPARTMENT OF AGRICULTURE.

Besides those four varieties, there are some other kinds of spring wheat produced here, but I am unable at present to send samples or a description. I have, within the past six years, distributed among the farmers in this vicinity several varieties of spring wheat sent to me by the Department of Agriculture for experiment, but have failed to succeed in establishing any as a variety superior to those commonly grown here. The fault may not have been in the seed sent, but I have found it very difficult or impossible to get busy, practical farmers to give the special and scientific attention to the cultivation of a few quarts of different kinds of cereals, in order to test which is the best kind.

We have had better success in experimenting with garden seeds sent by the Department of Agriculture, some of which have proved of superior quality. Also, the eight quarts of Silver Chaff winter wheat, sent to me last fall, bid fair to prove a success; and some Tappahannock winter wheat, from second year's trial, is very satisfactory.

AREAS OF SPRING AND WINTER WHEAT.

This is a spring wheat region. Ogle County reports to our Illinois State Board of Agriculture, 40,427 acres in spring wheat, an increase of 9,329 acres over last year's. Only a small amount of winter wheat is grown in this county, as it usually winter-kills, but it has stood the test well the past two seasons, and the area of winter wheat will be largely increased this fall. In the central and southern sections of the State more winter than spring wheat is produced. The State Crop Report for June says: "The area of spring wheat is quite limited as compared with winter wheat; there being 291,912 acres of spring wheat to 2,032,843 acres of winter wheat in the State in 1878." The total acreage of spring wheat in this State, in 1877, was 248,458; and the acreage in 1878 is 291,912, showing an increase of 43,454 acres in favor of the present crop.

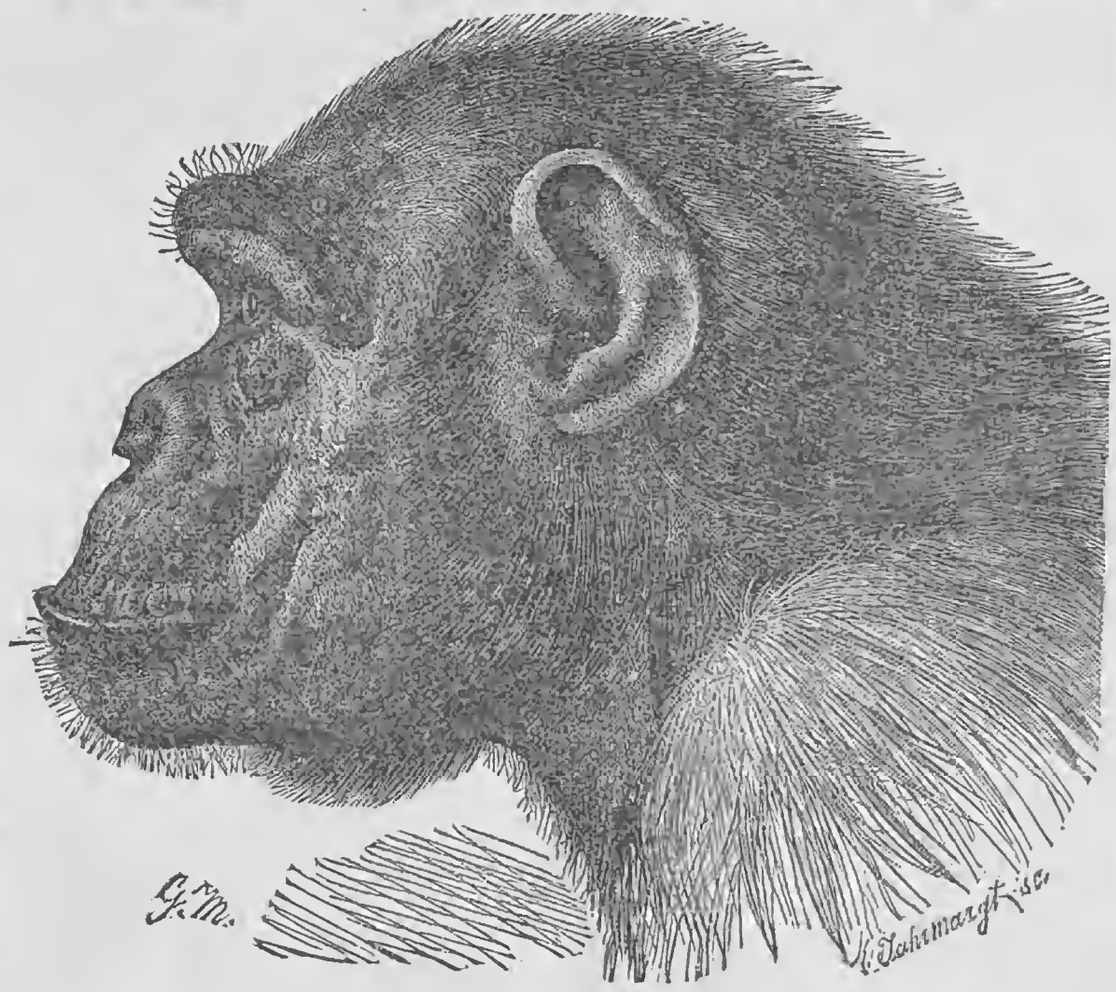
The United States Department of Agriculture in report of June, 1878, says, in regard to spring wheat: "The early opening of spring has given a long season for the sowing of spring grain, resulting in an extraordinary increase in acreage. Returns have been received from the larger portion of the spring wheat area, the result of which may be slightly modified by further data from the area now unreported. So far the comparison stands with last year as follows: Wisconsin, 117; Minnesota, 130; Iowa, 125; Nebraska, 140. The northern borders of Illinois, Missouri and Kansas, which have a small area of spring wheat, also make an increase, Kansas, of one-third; and Missouri, of one-half. This would indicate an increase approximating two million acres of spring wheat. The oldest reporters and earliest settlers of this district state that the past has been the mildest winter and earliest spring known in an experience ranging from 20 to 40 years."

PLANTING SPRING WHEAT.

In order to secure a good crop of spring wheat, the ground should be plowed in the fall and the seeding done as early in the spring as possible—as soon as the frost is out of the ground. The farmers commenced seeding here last spring about the 7th of March, and that which was first sown has proved the best. Two bushels per acre are the usual amount of seed sown. The early part of the season was highly favorable to the growth of this cereal, and the prospect for a large yield was never more favorable until about the middle of July, when there came heavy rain-storms, and the extraordinary "heated term" setting in just before the grain ripened, caused much of it to blight, and will reduce the yield from one-fourth to one-half of what it would otherwise have been. The damage to the crops in certain localities here is great, but it is reported to be still worse further north—in Wisconsin, Northern Iowa and Minnesota, where great losses have been sustained.

It is impossible at the present writing to estimate correctly "what will the harvest be" Winter wheat and rye are very good; oats heavy, but fallen badly; barley less than usual acreage, and colored. No buckwheat here. Corn doing well. Potatoes plenty.

Ogle Co., Ill., July 30, 1878.



HEAD OF GORILLA.

THE SUGAR BEET.

There are many reasons why the sugar beet is one of the most valuable crops the farmer can raise. Until factories are established for making the beet juice into sugar, the crop will need be fed out upon the farm, but in this the return from an acre of beets, is much greater than from any other crop which can be raised for feeding.

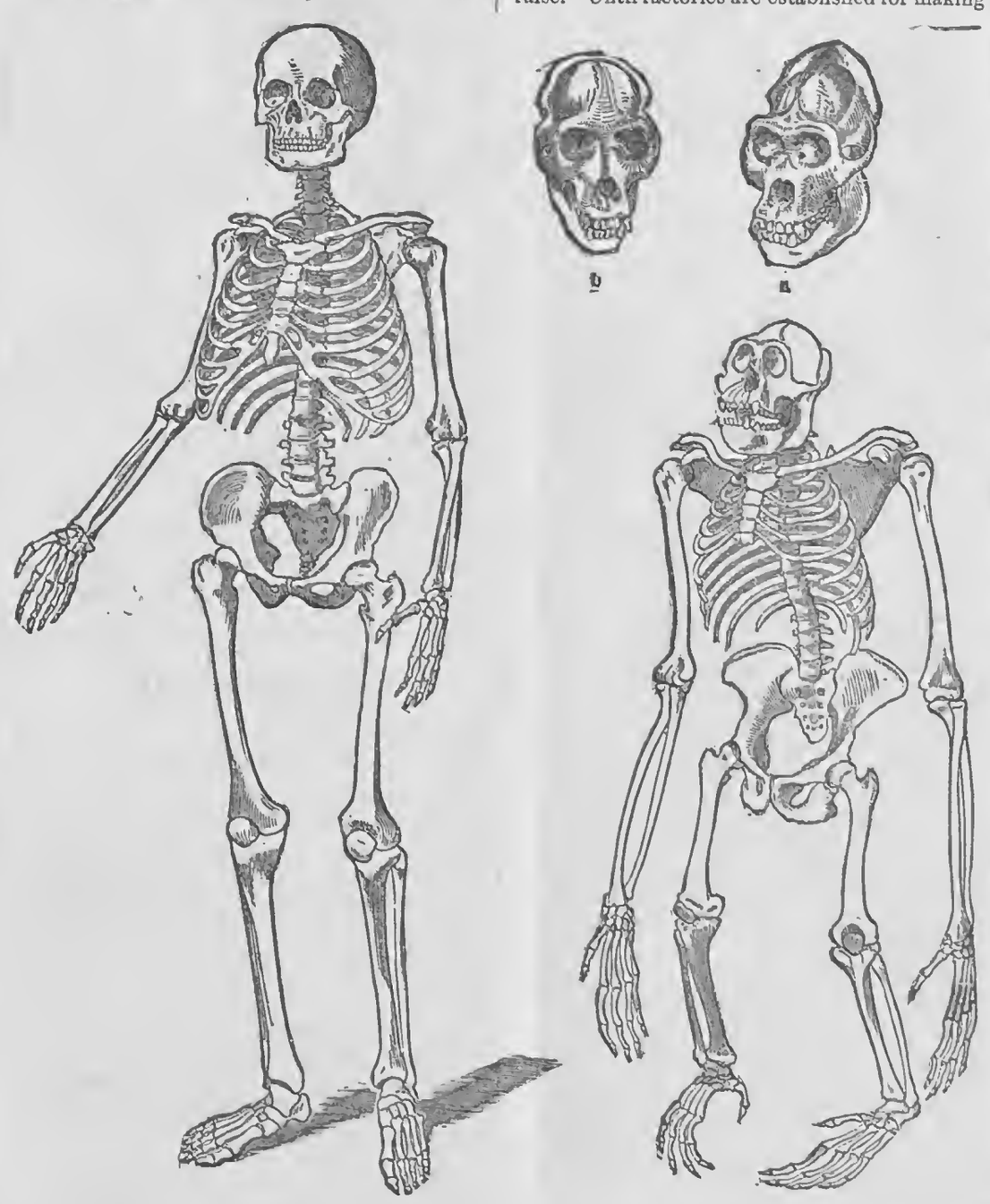
The cost to the farmer for an acre of beets is not a serious consideration, and cannot exceed $15; the planting comes before corn, and the cultivation between that of other crops. No other crop gives as large an amount of easily digestible food for cows, young stock, sheep or hogs, as the sugar beet, while the manure from feeding the beet is of much greater value than when animals are fed upon almost any other kind of roots.

France grows one-half more wheat upon an acre, fattens a much greater number of cattle than the same territory in America, from the fact that that country raises enormous quantities of sugar beets for making sugar, and has the rich manure from the refuse which is fed to the stock.

To have the full value of the raising of sugar beets, we should have the sugar manufactory as well, but until that comes, no more profitable crop can be raised and fed out upon the farm, than beets.

The ground for beets, like that for any other crop, should be mellow, tilled deeply, and rich. The seed should be sowed as early as possible, in rows from two and a-half to three feet apart, so as to allow the use of the cultivator between, and the seed should be sown at the rate of three to four pounds to the acre, and the plants thinned out, and, if need be, transplanted so as to stand from 12 to 15 inches apart; this will give large roots, and a crop of 25 to 35 tons to the acre.

We do not need to go into elaborate discussions of the advantages of this crop to the farmer, or of the beet sugar industry to the nation; the experiment of raising a few square rods of beets is easily made, and when once done, the farmer can satisfy himself as to their value for milch cows, breeding or fattening sheep, and for feeding and fattening swine. The establishment of the beet sugar industry in this country, must come sooner or later.



MAN. ORANG-OUTANG.

Horticultural.

TEACHING BOTANY.

PROFESSOR W. J. BEAL.

BOTANY, in the proper sense, is most intimately connected with floriculture, vegetable gardening, pomology and all departments of agriculture. For some time, year after year, with class after class, I have required my students to study books less and nature more. The results have been gratifying to teacher and pupils. For the encouragement of those who have not tried this method, I may say it is the easier method of the two for the teacher.

The first two weeks were occupied, every day, in the examination and comparison of the small limbs of eight species of trees before any leaves had appeared. Among these were limbs of apple trees and cherry trees. The examination was made during the usual time for preparing lessons *and not in the class-room*. The hour with the teacher was given to a report of the observations of the students, the specimens being out of their sight. In some cases, each student wrote out a careful description of what he had seen. In a similar manner, all other parts of plants were taken up and specimens studied. In nearly all cases they studied the objects before studying the text which referred to or illustrated them. An effort was made to keep them working after something which they had not yet discovered. Quite often members of the class disagreed in their views of the same objects. On the next day they were required to bring in all the proof they could for their belief. This led to interesting discussions. They were rarely ever told, for the first few weeks, anything which they could learn by examining the plants. They were often taught how, and were required to make experiments on growing seeds and plants, such as cutting away one or more cotyledons, the plumule, to see if buds would appear to continue the growth. They marked the radicle by pricking it at equal distances with ink, to see which part of it elongates most rapidly. They cut off buds of trees to induce dormant buds to start; they watched and worked with the tendrils of vines and twining plants to learn how they behaved. They germinated seeds in moss or between damp folds of paper. They studied the behavior of insects on certain flowers. How were they induced to do this extra work? By always making most of this kind of work in the class-room, and by giving them good marks for all such work which was well done. There is generally, though not always, time enough to give each student of the class a chance to put in a word or ask a question on some interesting point.

It is astonishing to notice how much is discovered by so many good eyes, and yet it is sometimes equally surprising to see that some simple, prominent points are overlooked by all.

For some weeks but little use is made of microscopes or text books. In nearly all cases, or in all important cases, specimens were examined and a need was felt for definitions and names before these names were given.

As we progress, a few hints are given, such as the following: It is often of importance to count the parts, to examine several similar specimens of all ages and stages of development

to observe the relative order, to compare the organs of one plant with those of a similar nature found in other species or orders of plants. Gradually the stage microscope was employed, and finally a review is taken, making use of a text book with lectures.

Some may wonder why this finds a place in a Journal of Agriculture. Good habits of observation and study are needed by every man who tends a greenhouse, raises vegetables, fruits or other farm crops. There is no better place for such a beginning than with plants, which are always to be found in abundance. For early forming the habit of experimenting I need not even say a good word. Every farmer knows it is valuable. Patience and accuracy need cultivating. The gardener and farmer deal largely with plants in some form or other from one year's end to the other. The more he studies them, and the better he understands their structure and peculiarities, the more likely will he be to attend to their wants and make them grow successfully.

The members of the class in Horticulture al[so] make experiments, some for their instructi[on] and some of their own account. Some of the[se] made this year were: crossing wheat, crossi[ng] corn, crossing crab-apples, lilacs, strawberri[es] tomatoes, raspberries, gooseberries, apples a[nd] cherries. They experiment on germinati[ng] seeds, layering apples; study the heads of whe[at] as they nod; dig to ascertain the depth to whi[ch] the roots of barley, oats, clover, etc., exten[d] They plant "buggy" peas beside those i[n] buggy for comparison; they dig up stools [of] chess to find the old kernel from which t[he] plants grew. They take a deep interest in t[he] work and they are benefited by it.

Agricultural College, Lansing, Mich.

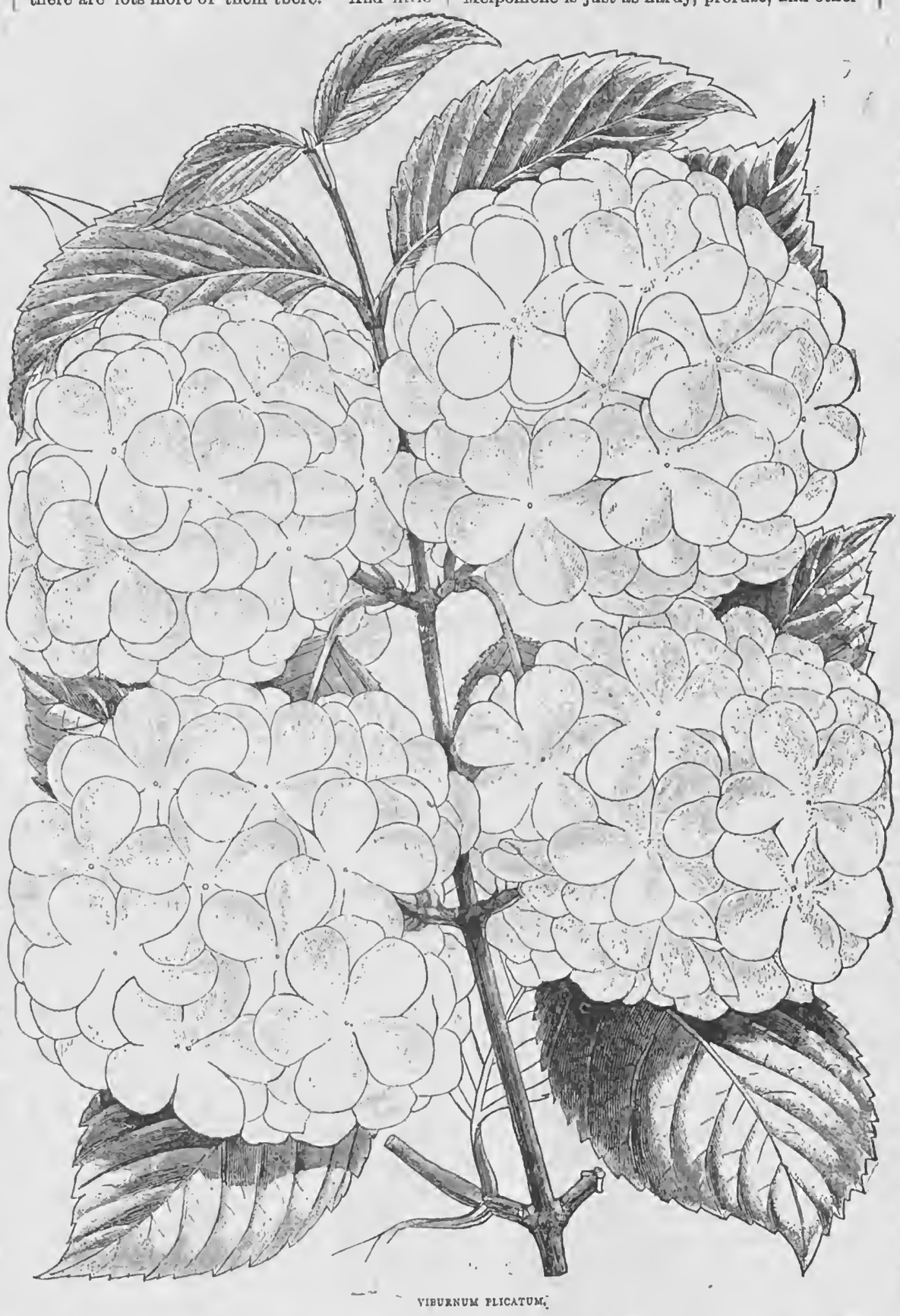
THE JAPANESE SNOWBALL.
VIBURNUM PLICATUM.

In a letter recently written us, we were ask[ed] to name the best flowering shrub. It was a[p]parently a simple question and therefore meri[ted] a simple, direct answer, but as we came t[o] think farther, we hesitated. What kind an[d] number of good qualities should this best shru[b] possess? Unlike the Rhododendron, must the general average of its attractions be of high quality; or, in other words, must it be neither very bad nor yet supremely excellent in any special way? No, not exactly that; and yet, as we pondered the question, we realized that great beauty or great hardiness would not alone make up the best shrub, any more than all excellences could meet in one species or variety. Our friend, therefore, received an answer that embodied the valuable attractions of several shrubs.

In the beginning, it must be confessed, we had intended to declare the Japanese Snowball the very best of flowering shrubs; but, recalling the above train of thought, we have decided that it would not be consistent. We will term it, however, very good, and give proof thereof by a brief statement of its main characteristics.

The Viburnum plicatum is a shrub of medium growth, consolidating its form as it increases in stature. While the leaf and general anatomy of the plant resemble somewhat those of the common Snowball—Viburnum Opulus—the entire shrub is more compact, piling its foliage in masses when properly pruned, and presenting altogether a most picturesque formation. Its special attraction, however, lies in the combined effect of flower and foliage. The flower, or ball of flowers, is as large as that of Opulus, if not larger; but it is more spherical and even in size. The mass of this ball is also more dense and the color of a purer, more milky white. The color may, indeed, be owing to the contrast it affords with the dark green foliage and brown stem. These Snowballs are remarkable for the tenacity with which they cling to the branches for five weeks or more, and even then they drop still undecayed, though some of their freshness has passed away. The foliage makes an equally remarkable feature, its form having suggested the name, plicatum, from its ridged or plaited character. Its texture is firm and tough, and the color a rich, dark, shining green, glossy, but not after the manner of the Laurel or Rhododendron.

The Viburnum plicatum transplants easily, but it does not propagate readily, or rather it is specially inclined to die during the first six months after it is has been planted out from the cutting bench. For this and other reasons, it is scarce as well as choice, few nurserymen offering it in quantities, although it has been introduced over thirty years. This, if nothing else, would account for its being less employed than scores of poorer shrubs. It is too choice and fine individually to be used in masses, but should be planted singly on the lawn, where, by systematic pruning in summer, its peculiar character will be greatly developed. Its origin and history are somewhat obscure. Thurnberg receives credit for having first brought it to Europe, but whether from Japan or Northern China, is not clear. Siebold pictures it well in his great work, Flora Japonica, tab. 38, and it is generally understood to be a well known shrub in Japan. For richness of foliage, both in color and form; for size and even quality, as well as color of flowers, the Viburnum plicatum far surpasses the Viburnum Opulus or Guelder Rose, our common Snowball of gardens. It will thus be seen that when we want a thoroughly good shrub for ornamental purposes, this may be in all respects depended on.



VIBURNUM PLICATUM.

GARDEN TALKS AND WALKS.

The Beeches, Mass., Sept. 9th, 1878.

WILD FLOWERS.

The other day a neighbor lady brought me a bouquet of wild flowers,—"I gathered them in the cow pasture at the back of our house, and there are lots more of them there." And little beauties they were too. Among them were the purple Gerardia (G. purpurea), a little, branchy plant of the Figwort family, and now bearing a profusion of pretty, bright, purple blossoms; the white-flowering form of Turtle-head or Shell-flower (Chelone glabra), which is common in low grounds at this season; and some Ladies' Tresses (Spiranthes cernua), a little orchid, with tall, slender stems, bearing white fragrant flowers.

The gems of spring are long past, the beauties of summer are disappearing, fall is at hand, and still wild flowers are in multiplicity. Golden-rods border every field, meadow and waste place; Marsh Rose-mallows, pink and white, are conspicuous in low grounds, and equally at home in gardens; the deep purple of the Iron-weeds is discernible all around; brilliant Cardinal Flowers glitter in the swamps, with their blue allies as neighbors; the Meadow Beauty is aglow; the handsome white flowers of Grass-of-Parnassus adorn wet banks; White Snake-root inhabits our woods, and Joe-pye-weeds our bogs; Blazing-stars, white and purple, and Partridge-peas, laden with gold, cheer our sandy soils; the white spikes of Burnet rise toweringly over the bushes in damp grounds; the Butterfly-weed or Pleurisy-root is scattered about in dryish places; Asters abound in every direction, and golden composites of many genera brighten the landscape, while Ground-nut, Virgin's-bower and climbing Hempweed run riot over bushes, banks and fences. And all, and hundreds more, are just as applicable for garden use as are the exotics that displaced them there.

A SUPERB GOLD-RAYED LILY.

A single flower stem of the Golden-rayed Lily (Lilium auratum) of Japan, with 140 flowers and flower buds on it, was exhibited by T. P. Symonds, of Salem, at the meeting of the Massachusetts Hort. Society at Boston, on the 24th of last month. It commanded great attention, and, for it, the Society awarded a silver medal to Mr. Symonds. In build it looked like a mammoth hyacinth spike.

LILIUM SPECIOSUM VAR. MELPOMENE.

This is a beautiful, distinct and permanent variety raised by Hovey & Co. of Boston, some twenty years ago. Its flowers are of a deeper rose-color than those of the species or of most of the varieties I have seen; have purple-madder, warty spots, and the flower-leaves are distinctly banded with white. Its leaves are shorter, less acuminate, and more upright in habit, than are those of the typical plant, compared with which Melpomene is just as hardy, profuse, and otherwise satisfactory. Between 1844 and 1860, Mr. C. M. Hovey—one of the most practical and talented horticulturists of the day—raised thousands of seedlings of this fine Japanese Lily (speciosum), and selecting nine of the best and most distinct, he named them after the Muses—Clio, Euterpe, Thalia, Melpomene, Terpsichore, Erato, Polybymnia, Urania and Calliope. All are beautiful, but I like Melpomene far the best. Beyond one or two, the remainder of these seedlings were all classed together and sold as L. s. var rubrum.

Pomological.

MAIDEN'S BLUSH.

This meets with a ready sale on the N. Y. market. It is one of the fairest of apples, having a fresh, red cheek upon a clear, wax-like, pale-yellow ground. It is of medium size, very smooth and even—oblate. The flesh is white, finely grained, tender, sub-acid and it ripens in early autumn, though there is at this time (Sep. 7.) an immense quantity being sold, which indicates an earlier ripening than usual. It is a beautiful fruit to look at and the quality is in keeping with its luscious appearance. The tree is spreading and vigorous and thrives in Michigan, Pa., N. J., Md., Va., O., Ind., Ky., Tenn., Ills., Iowa., Ks.

The Yellows.—In spite of all the legislating and working of our people to check the Yellows in the peach, I am fearful it is gaining in our State. I wonder if in Delaware and New Jersey where they have been harrassed with this disease, they cannot give some light upon its dis-establishment. We seem to know as little about it as about pear blight. G.

Grand Rapids, Mich.

Industrial Societies.

FIRST OF THE ANNUAL FAIRS.

A Fine Display marred by bad Weather.

MAGNIFICENT SHOW OF CATTLE.

ALL DEPARTMENTS WELL REPRESENTED.

THE NEW YORK STATE FAIR.

(*Staff Correspondence.*)

Elmira, N. Y., Sept. 13.

This, the last day of the fair, has been a veritable blue day. The rain and wind conspired to make things as uncomfortable as they can be made by the elements. Wednesday was also rainy, and the two together have made a most serious impression on the receipts, and it is probable that the society will have an uncomfortable deficit to make good without the assistance of the gate money that it was hoped the farmers of Chemung would contribute.

It is regrettable that the inclement weather kept many at home, as the thirty-eighth annual fair of the N. Y. State Agricultural Society, in point of interest to farmers, was well worthy their close attention. The entries were very large, but by no means as full as the catalogue promised, while on the other hand, many exhibitors were on the grounds who had no representation in the catalogue, and could not, therefore, compete for the liberal premiums offered.

An unintentional injustice was suffered by quite a number, who had entered in due form, and shipped their goods in what should have been ampletime for them to have reached their destination. Some of these shipments did not arrive until the last day of the fair, and were consequently returned without bulk having been broken.

These delays were due to bad management of the local roads, though the Erie delivered its freight promptly in good shape. The arrangements for transporting passengers to and from the fair, made by the Erie, were ample, well-ordered, and satisfactory. Fifteen-minute trains ran to and from Elmira, during the day, and the crowd was so cleverly managed, that grumblers were as scarce as fine weather. Since its reorganization the Erie has been baptized anew, becoming the N. Y., Lake Erie, & Western. A third rail is being laid, with a view to changing the guage from broad to narrow, (4 feet, 6½ in.) which will increase its connections, its business, and its prosperity. Under its present admirable management, trains and the time-table agree its cars are clean and commodious, and near New York its line is being rapidly and thickly settled by families who find it pleasanter, cheaper, and more convenient, to live "on the Erie" than on Manhattan Island.

Few things besides the weather marred the harmony of the arrangements. The officers of the society, with perhaps one exception, were scrupulously attentive to the wants of exhibitors and visitors. The accommodations for the various classes catalogued were ample, and the incidental expense for material and assistance supplied to those needing it, was reasonable. The awards of the judges in a few instances seemed to display a sad lack of the discriminative faculty, but in the main, their arduous duties were discharged to the satisfaction of those concerned. It is a duty to take note of one instance of the most abandoned cheating on the part of an exhibitor, but as the tricks were discovered, and premiums aggregating one hundred dollars forfeited, I think the fellow sufficiently punished, and forbear disclosing the name. He had entered largely in various classes, but in his grains, seeds, and dried fruits, he practiced such deceptions as filling the bottoms of his barrels with nail kegs, pouring in the grains on top of the same, then exhibiting this specious arrangement as the best *barrel* of beans, for instance, to the prejudice of his competitors who pitted honest measure against these shams. In dried fruits the deception was even more glaring, as the prime fruit was merely a thin layer, which served as a top-dressing for decayed and inferior stuff that occupied the bulk of the vessel. The exhibitor, I am told, is an old offender, and has received one warning. It is probable that his last exploit will close his career as an exhibitor in future shows held under the auspices of this society.

It seemed to the writer that the executive committee might improve their arrangements in several respects, and make future fairs even more attractive. The grounds, for instance, are planned on a scale quite too liberal for the comfort of sight-seers. If the articles that from their nature require shelter, were grouped in one quarter, and in an order that indicated some resemblance to an intelligent plan it would save miles of wearying travel. The common complaint was directed at the altogether too magnificent distances between points of interest. Conscientious investigators, by the time they reached the horse stalls, were more sensible of bodily fatigue than of the good points of the animals. It is difficult to imagine, also, why carriages, that are the products of machinery,

should be sandwiched between a collection of vegetables on one side, and organs and bed-quilts on the other, while the remainder of the class to which they naturally belong, is quartered in an opposite direction. I cannot understand, moreover, why organs, pianos, spatter-work, bed-quilts, stoves, and ironing-boards should have any reason for being in a purely agricultural display. In the English shows these wares are tabooed.

The society keeps well within its aims in organizing meetings during the fair for the discussion of topics interesting to farmers, but jeopardizes the success of such gatherings, by appointing them to take place during the evening, when it is manifestly inconvenient for those most interested to be present. The bulk of the attendance comes in the cars, or by road in private conveyances, to remain one day, and evening finds them on their way to, or arrived back at their homes. If these meetings were advertised to take place on the fair grounds, at some convenient hour in the afternoon, all could attend, and it would be a grateful relief, after seeing the display, to listen to practical papers on farming, by speakers who could address them to the purpose. As at present arranged, the evening meetings, usually held in the Court House of the city, are very meagerly attended, and are a very pronounced failure. The papers read this week, were, with two exceptions, mediocre, and those who came to learn, remained to scoff.

The show of

CATTLE,

as a whole, was large, varied and excellent. The four hundred and seven entries, which are printed in the catalogue, were more than enough to fill the permanent sheds, hence others were erected of a temporary character, and these were filled. The printed list calls for two interesting breeds of polled, or hornless cattle, the Red Norfolks and the Galloways, which are black, but neither of these was present.

The Shorthorns numbered sixty-seven entries, the Devons sixty-one, and a noble show they made; the Herefords only eight, but very fine. The Ayrshires came next on the list to the number of ninety-nine; Holsteins, under which absurd name dear old Holland, the motherland of so many New Yorkers, is robbed of the credit of her superb breed of milch cows,—the "Holland" cattle numbered forty-eight, and were the conspicuous feature of the display. Of Jerseys and Guernseys (Channel Island cattle), there were sixty-five entries. This comprises all the well-bred cattle entered as such, with the single exception of Mr. William Simpson's Brahmins, which it may be well to make a note of here.

The Brahmin cattle of India were represented by a cow and yearling heifer of great beauty, being of a light silver-gray color, with black points, and most deer-like and perfect limbs. They had, indeed, the awkwardly-set horns, pendulous ears, and deep-hanging, thin dewlap, with the hump above the shoulders characteristic of the breed, but these are beauties, if we only view them so—certainly they have been thus bred for centuries to which the record of man runneth not back. Deep-bodied, soft-hided, well-uddered, with well-shaped teats, the old cow gives, small as she is, nine quarts of milk a day, and when fresh, eight pounds of her milk make a pound of butter. This is as well as most Jerseys will do, and certainly indicates possibilities for this breed as butter cows, which may be worth developing. Besides it should not be forgotten that they are natural trotters and very pleasant saddle beasts.

It was a disappointment not to see more Shorthorns, forgetting for the moment, perhaps, that the glory of New York had departed in some measure in this particular breed. Many shown were, however, of great excellence. The notable exhibits in this division were those of F. C. Cornell, of Ithaca; Daniel B. Haight, of Down Plains; Carlos Prince & Son, of Catharine; Benjamin Fellows, of Clifton, and A. B. Benham, of Cortlandt. These all exhibited herds of one bull and five females. Besides, Miss O. M. Dering, of Utica, showed Baron Bates, 2d, a fine old bull; E. F. Cabon, of Owasco, one of the best shaped bulls on the ground; M. B. Ritter, of Waterloo, several, notably fine; and J. D. Chaffee, of Gilbertsville, a number of well-shaped animals.

Whenever the State Fair comes to Elmira, we feel as if the Devons, this most beautiful and useful breed, were gaining in public favor, and likely to take the position they really merit as the leading breed of the Eastern States. These cattle have every thing but size; and they are nearly twice as big as they look. They are beautifully formed, easily bred, are thoroughbred of their own true inwardness; they make better beef than Shorthorns, and will thrive where the larger breeds would starve. The cows are grand milkers, many of them (but the butter is pale), while as working cattle they are very docile, and as quick as horses. All this, while their rich, red color, without a fleck of white, and their superb slender, waxy, yet white horns, set them off in striking contrast to other breeds. The principal exhibitors were Messrs. Walton Cole, of Batavia; B. F. Peck, of East Bethany; Mrs. Wm. E. Arnold, of Otego; Joseph Hilton, of New Scotland, and D. & J. Banker, of Franklin Forks, Pa.

That admirable beef breed, the Herefords, was shown only of Mr. JOHN MERRIMAN of Haysfields, near Cockeyville, Md. His herd consists of one noble bull three years old, two cows, two two-year old, and two yearling heifers, and an excellent representation of the breed it was. Its characteristics are great length and depth of body, well-developed beef points throughout, red color with white head and extremities, the white frequently running back from the head upon the back and usually along under the belly. The horns are of medium hight and frequently curve downward. For quick fattening and ability to carry immense quantities of flesh and fat it contests the palm with the Short-Horn.

The Ayrshire breed has grown greatly in favor among the farmers of Central New York, keeping pace with the growth of the cheese interest. Their great yield of milk has led to this, as well as the fact that its quality particularly adapts it to cheese making. The shows comprised some of the best animals I have ever seen both in the matter of form and comeliness, and in milking qualities. MESSRS JARDINE & SONS of Hamilton, Canada, showed most excellent animals. As also did F. P. & A. M CORNELL of Sylvania Pa., JAMES MILLER & SON of Penn Yan, and CHARLES STILLMAN of Alfred Centre, N. Y.

The Holsteins, so-called, were the most interesting feature of the cattle exhibit. The principal exhibitors were Col. H. C. Hoffman, of Horse-heads, W. H. Gifford, and Smith & Powell of Syracuse, and the Unadilla Valley Breeder's Association of West Edmonston. Besides those who showed herds, W. H. Gifford of Syracuse, and James Black of Stanley, each exhibited a number of animals of marked excellence. The enormous quantities of milk produced by many of these cows, makes them great favorites wherever introduced. Those yielding more than 30 quarts daily are common, and there were several for whom a yield of over 40 quarts was claimed, we doubt not with entire fairness. They are pure black and white; amount and disposition of the color being entirely irregular, except, a preference is given for white switches, and, curiously enough, for black tips to the teats.

There were four Jersey herds exhibited of the five entered. They were shown by Wm. Crozier of Northport, John D. Wing of Millbrook, Wm. Simpson, jr., of New York (farm at New Hudson), and John P. Gulliver of Binghampton, besides some excellent animals were shown by Geo. Sidney Camp of Owego. The increase of butter factories (creameries) and a foreign demand for our butter, give an impetus to this pre-eminently butter breed, which is quite noticeable in the larger number of fine animals shown from the central part of the State. The cows shown by Messrs. Wing, Gulliver and Camp, are of remarkable excellence as butter producers, and bear the indications of it, in excellent escutcheons, good udders, rich skin, the wedge-shaped form of the entire animal, and in other points of the good milch cows.

The Guernseys were few in number and of only medium quality—still it is gratifying to see them at all. On the whole, an unprepossessing breed, and they certainly have great capacity for improvement in style, and long before this takes place their intrinsic excellencies will demand for them a place as high or higher than the Jerseys now occupy. They are of above medium size—often large; real good cows yield 18 to 20 quarts of milk, make 10 to 15 pounds of butter a week, which is extraordinarily rich in color. They fatten easily, make good beef, and bear large, quickly-fattened calves; are hardy, and good feeders. We shall see them better represented in future years. They were shown by Messrs. Geo. Sidney Camp of Owego, Wm. Crozier of Long Island, and Wm. M. Holmes & Son of Greenwich.

There was an unusually good display of sheep.

The Leicesters being in small numbers made little show. The only entries were made by Henry Hoffmann of Elba, and H. J. Kent of Palmyra.

There were forty entries of Cotswolds, the flocks of Joseph Harris of Rochester, George Ingersoll of Charlton, and Wm. Potter of Johnstown, being conspicuous. Mr. Harris made an especially instructive show not only with his pure sheep, but with his merino grades, showing the effects of the first, second and third crossings, which last might easily be palmed off upon a novice, and even upon some "judges," as full bloods.

Lincolns were shown by T. Walter & Son of Westchester, Pa.

There were thirty-eight entries of South-Downs. Those of John D. Wing of Millbrook being notably superior as a whole. Daniel B. Haight of Dover Plains showed a superb ram and excellent females and lambs; Wm. Simpson, Jr., showed good sheep also.

The Shropshires made quite a figure, and some even rivaled the long-wools in size. Berosus Cook of Otego, Mrs. L. C. Fish of the same place, Henry C. France of Wells, Pa., and G. L. Fletcher of Sidney Centre are the exhibitors whose stock was particularly noticed.

Five Hampshire Downs were shown by Henry Metcalf of Canandaigua. Merinos were in goodly number and many of them seemed of great excellence. I have never seen the Silesians of Wm. Chamberlain of Red Hook, and of his herdsman, Carl Heyne, look better.

There were some two hundred entries of Swine, and the animals exhibited must have nearly doubled this number. The prominent features of this class were the Durocs shown by Wm. M. Holmes & Son, the small Yorkshires shown by W. H. Cole of Clinton, N. J., H. H. Ingersoll of Owego, Henry Hoffman of Elba, and some others. The Chester Whites were shown in great numbers by T. Walter & Sons of Westchester. One of these pigs, a boar which had attained an enormous size, attracted great attention. There were, besides, other excellent exhibits of this breed. The Berkshires were numerous and excellent. Harris's Essex pigs were shown in fair numbers, and several others had good specimens.

Clydesdales, Percherons and their crosses, thoroughbreds, jacks, mules, etc., were in force. Smith & Powell of Syracuse made a noteworthy showing of Clydesdales.

POULTRY

was manufactured to order and sold for ten cents a piece, done up in a nice little box. This pleasing result was possible through the efforts of Mr. A. M. Halstead of Rye, N. Y., and Mr. Frank Rosebrook of Elmira, who each had an incubator in active operation. The births were numerous, the infants happy, and although orphans in a peculiarly impressive sense, they swallowed their grief and appropriate food with as much *sang froid* as if they had the address of their parents. Mr. Halstead secured first premium on his incubator. Not half of the entries in this department were represented, but considering the season, which is not the best in the year for showing poultry in perfection, the display was creditable. Geo. W. Chidsey of Elmira secured the largest number of premiums and a certificate of merit for the best collection. He was the largest exhibitor. D. C. Waterhouse of New Haven, Conn., came next. E. A. Scott of Elmira, had several coops of finely marked Plymouth Rocks. The birds of this so-called breed were large, uniform in color, and greatly resembled Leghorns gone into half-mourning. The usual breeds were very generally represented, and there were ducks turkeys, pigeons and rabbits galore. The points of greatest interest next to the incubators were coops of capons and Japanese pheasants. Capons comprised a cockerel and pullet. The male bird, caponized in July when three months old, now weighs seven pounds.

Caponizing is a very simple, easy operation and its result is to supply the table with a fowl whose flesh is most delicious. There is always a good demand for capons in city markets, and I should recommend farmers to try their skill at it in their own barnyards. The Japanese pheasants shown by WM. W. ALLEN of Elmira were the other attraction. They are interesting fowls, beautifully pencilled and with pleasing combination of colors. Their eyes are clear, mild and expressive—an unusual feature to compliment when speaking of poultry. There was a beggarly array of

FARM PRODUCE.

not a third of the entries filling. A number of barrels of stuff, for this department arrived on the last day of the fair in time to be sent home as they came. The premium for the best bale of hops was triumphantly carried off by the solitary bale exhibited. The dairy interest was very feebly represented and the potatoes though numerous, were small. O. J. Lewis of Schodack Centre showed fifty-six early and ninety-seven late varieties, but nothing new. Brownell's Centennial was the handsomest potato. The Beauty of Hebron was not nearly as fine as those raised on our Experimental Farm. Tillinghast Bros., of Factorville, Pa., had the most notable display of seed as regards variety, and the mammouth beets, etc seemed at great pains to support their lonely dignity. A stalk of white prolific corn grown by M. F. Wanamaker, Jackson, Pa., planted May 23rd, had attained a hight of 14 feet 3 inches, and consequently over-topped everything in the building.

FLORAL HALL

was a tent, and on Thursday night its northeast side blew down and demoralized everything within. Here again the entries exceeded the display, and the latter was nothing to speak of. In the professional list Ellwanger & Barry had a number of cut flowers that were not in the catalogue, and their full effect was lessened by their arriving more or less crumpled and damaged. The dahlias, phloxes, verbenas, bouquets and ornamental floral designs were neither impressive nor original in a marked degree, but the fruit was quite fine. More method in its arrangement would have enabled one the better to judge of its merit. Ellwanger & Barry, the Ithaca Farmers' Club, Mr. Van Dorn, and a nameless exhibitor, showed the best plates of apples. Mr. Ricketts has some twenty plates of his seedlings, prominent among which was the Lady Washington grape, but none of the bunches were as fine as this gentleman could, no doubt display, under more favorable circumstances. Next to the cattle,

IMPLEMENTS AND MACHINERY

were the strongest exhibit. Many of the well-known agricultural implement companies were finely represented, and there was an unusual number of new inventions of merit. The plows were out in great force, and the thrashers, run by steam and horse-power, went through the motions of threshing an immense volume of grain.

The engines of civilization were represented by the RURAL NEW-YORKER, the *Rural Home*, Elmira *Gazette* and *Advertiser* and the *Husbandman*. The two latter papers were printed on the grounds during the Fair by the *Advertiser's* new Campbell press.

There were mowing and reaping machines, horse-rakes, grain-drills and self-binders in bewildering variety, and among churns a new model, the "Monitor," is sure to gain the suffrages of the lazy people (and they are the largest class), because of its facility in making good butter quickly.

The fine wagons and carriages were monopolized by the Cortland Wagon, and the Watertown Spring Wagon Companies, while a new iron farm wagon was the newest thing on wheels. The grange wagons—wagons fitted up in artistic (?) representations of fruits, farm scenes, etc., had a tent unto themselves, and were the admiration of the ladies. A detailed mention of farm implements will be found in another part of this issue, which will fitly close this report of the fair. The writer wishes to express his obligations to the *Advertiser* and *Gazette* for courtesies rendered the RURAL, and to Col. M. C. Weld, for kindly supplying the facts embodied in the cattle report.

C. H. E. R.

IMPLEMENTS AT N. Y. STATE FAIR.

THE display of plows on the grounds was very generally commented upon. The competing companies were liberal in the number of implements, but the Syracuse Chilled Plow Co., of Syracuse, New York, was in advance of rivals in point of numbers, and in the taste evinced in the disposition of the exhibit. Visitors had no difficulty in seeking the class of plows in which they were interested, and could scarcely fail to note the good points of the implement, even when not attended by a salesman. The Syracuse Company are men who believe in the claims they make, and the officers of the corporation seem to think it a part of their business to represent their manufactures, hence, visitors are welcomed by the responsible heads of the concern, as well as by their energetic assistants.

There can be no question of the popularity of the Syracuse Chilled plow, if we may judge by the fact that their entire exhibit comprising over two hundred plows, had been sold out on the fourth day of the fair.

The Syracuse Chilled Plow has attained its great success and large sales within a little over two years. It is not only the character and quality of the metal, but the excellence of its model, that have been its strong points. The process of chilling the metal in use by this company is different from all others, and while they secure the wearing qualities of steel, they discount the prices of such plows. They scour in any soil, and from repeated tests, have established their lightness of draft. The land-side has an adjustable play of a half-inch, to suit different conditions of plowing, and the minor details such as adjusting the handles, and the working of the clevis, are characterized by a finish and ingenuity that are admirable. The plow is equipped with a perfect wheel, with four bearings that render it almost indestructible, while the mechanical ingenuity with which it is put together is admirable. Altogether the plows, the exhibit, and the crowds attracted by both, were one of the strong features of the fair.

THE "KING OF THE LAWN" Lawn-mower, Osborne's Sulky Plow, and the "Meadow King" mower were the chief features of the exhibit of GREGG & Co., Trumansburg, N. Y. The lawn-mower is quite new, and posesses some very fine points that have secured for it a wide popularity. The Osborne Sulky plow attachment is too well-known to need comment, and as to the Meadow King mower, it has been so long before the public, and has done such admirable work, that there are few who do not appreciate its merits

E. M. BIRDSALL & Co., Pen Yan, N. Y. made a fine display. Their large separator was in operation, driven by steam power. Although no grain was fed to the thrasher, its smooth, steady motion enabled judges to form an opinion of its merits. The engine attracted attention by reason of its compact, simple construction, and absence of unnecessary and cumbersome attachments. The firm is behind orders this year, and business is steadily increasing.

KEYSTONE MFG. CO., Sterling, Ill., showed through their general agents WM. H. CHAPMAN, of Utica, a full line of Cider Mill and Sheller, and also Perry's New Iron Frame New York Hay Tedder. These goods have only lately been introduced in the east and are already meeting with a large sale.

JONES of Binghampton made his usual display of good and cheap scales.—Continued on page 608, this number.

The Querist.

ANSWERS TO CORRESPONDENTS.

[Owing to our Reports of Fairs, we must beg indulgence of those whose questions are not yet answered.—EDS]

Treatment of Various Flowers.

Mrs. S. A. Morrell, Wright Co., Minn., asks: 1. Whether Golden Variegated Myrtle suits a fern-case, and whether the bloom is as pretty as the plant. 2. Will it do to leave Bridal Wreath Rose out-of-doors in a climate like that of Minn. 3. Will Lemon-scented Verbena bear the winter's cold with ordinary protection out-of-doors. 4. Her young Artillery Plant though looking healthy and thrifty, has no red spots on the leaves, and she inquires whether the latter should be watered. 5. Should Begonias be watered or allowed to be out in the rain.

ANS.- 1. By "Golden Variegated Myrtle" we presnme you mean a variegated form of Vinca minor, which, though commonly called so, is not a Myrtle at all, but a Periwinkle. It will live well in a freely ventilated fern-case, but as it will bear 20° or more below zero, Fahrenheit, with impunity, why treat it so tenderly? Its flowers appear in early spring, are blue or white —commonly blue, and, though pretty, are not showy.

2. "Bridal Wreath Rose."—If you mean the White Banksian, it is not reliably hardy. Being "a cousin to raspberry" is no criterion of its hardiness; Marechal Niel and Cherokee Roses, by the same license may be called brothers, and neither is hardy North.

3. LEMON-SCENTED VERBENA.—Winter's severity may kill the stems, and, if unprotected, the roots too; hut by cutting over the stems in November, and, before hard frost sets in, inverting a box over the roots, and putting some leaves, litter, coal-ashes or other mulching over the box, you may savo the roots. But the safest way is to dig up the roots and winter them in a cellar or cold-pit.

4. Artillery Plant (Pilea serpyllifolia); keep it in the sunniest window, in a moderately warm room. Occasioual sprinklings of water on its leaves will not hurt them. By next March your desire for "red spots" or flowers may be gratified. The finest specimen we remember having seen was grown in a lady's kitchen window.

5. BEGONIAS—Water lodging on the leaves would spoil them, hot sun will "burn" wet leaves, and a damp, stagnaut atmosphere may rot them, but judicious wettings will not hurt them

Queries about Fruit.

A. C. W., Hugo, Ill., asks: 1. What Bigarreau and what Heart Cherry are likely to do well in eastern Illinois. 2. Could not an analysis be made of the soil in which these fruits flourish best, so than anyone could "doctor" his ground to just suit them, adding any lacking ingredieuts, or even transporting soil from spots where their condition shows it to bo well adapted to their requirements. 3. Is the genuine Fultz wheat early or late. 4. What variety will succeed best on a wild crab-stock; 5. and when would be the proper time to bud it—bark rises now, but buds don't catch.

ANS.—1. Black Eagle, Tartarian, Early Purplo Guigne, Elton, Napoleon Bigarreau. No line can now be drawn between many of the Hearts and Bigarreaus, owing to hybridization.

2. Any good, mellow, dry soil will furnish all that the cherry needs so far as food is concerned. Climate must do the rest.

3. Intermediate.

4. Any variety will succeed upon it.

5. It is getting rather late now for this year.

To Exterminate Crab-Grass.

C. B., New Brunswick, N. J., asks how to exterminate Crab-Grass from his lawn.

ANS.—This blooms from now until cold weather. Frequent use of the lawn-mower is the only remedy, and this we have found but a partial one since a good part of the "fingers" spread out upon the lawn and elude the knives, thus maturing and sowing their seed for another yoar.

Miscellaneous.

M. W. F. Bryn Mawr, Pa. The plant is Plumbago capensis.

Anon, asks what kind of strawberry would be the best for family use where hardiness, productiveness, and good eatable qualities are required.

ANS: We must, in this case, refer our friend to the exhaustive articles on this subject, in RURAL of Sept. 7.

Moore, East Hampton, Mass., asks how to cover a roof properly with gravel.

ANS: First apply a layer of paper or felt, then melted tar, on which throw the gravel, and finally level it smoothly.

T. C. Denton, Daleville, Va., asks where he can get good iron water pipe at lowest rate.

ANS: Thos. C. Bashor & Co., Light St., Baltimore; Thompson & Co., (Alex. Shepherd,) Washington, D. C.; Morris, Tasker, & Co., Philadelphia, Pa.; McNamara & Smith, Lynchburg, Va.

C. L. T., Louisville, Ky., asks, 1. For the names of the best works on the cultivation of berries, such as strawberries and goosoberries. 2. Also on grape culture.

ANS: Roe's Manual on the Culture of Small Fruits, price 50 cents. 2. Phin's Open Air Grape Culture, $1; both to be had of the Orange Judd Co., N. Y. City.

C. J. S. Fowler, St. Lawrence, Co., N. Y., asks whether the RURAL acknowledgos communications which are not used?

ANS: Yes; every communication intended for publication, is acknowledged by the publication of the author's initials, under the appropriate heading, in the issue sent out next after its receipt.

L. M. Brown, Onondaga Co., N. Y.—The plants are Amaranthus tricolor, and Euphorbia marginata.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, SEPTEMBER 14TH:

D. V. D.—A. C. W.—H. T. J.—E. L. T.—A. J. M.—L. G.—C. C.—J. S.—M. B. H.—F. S. P.—M. B. D.—W. F.—M. W. F.—thanks.—C. W. G.—C. J. R.—N. W. B.—A. M. V. A.—M. F. B.—W. J. B.—"Madcap Mollie."—S. P.—"Starr Morris."—P. M. W.—E. W.—

Everywhere.

NOTES FROM ILLINOIS.

HUGO, Douglass Co., Ills. 1878.

RATHER than have an orchard distant from where I live, I put out trees in my garden several years ago, and the culture, together with the manure necessary to a good garden, pushed the young trees on rapidly, doubtless too rapidly for early bearing, yet I cut back, in the fall, and this season I headed them back severely for two reasons: first, to prevent them from making so much wood growth and forming fruit spurs, and second to make them ripen well an already excessive growth. Many leaders grew three and four feet this season. If I am any prophet, and as a rule I think I am not, next year you will hear of more fruit trees (young) damaged by the approaching arctic winter, than we have heard of for probably an entire decade. The excessive and long-continued heat is nearly sure to be followed, as it has been as a rule heretofore, by a severe winter, and the rather wet season, together with the high temperature has conduced not only to a prodigious growth in trees, but also to a late and continued growth, which, overtaken by severe cold, will either be damaged or killed outright. Mildew has made its *debut* in this vicinity, at last, in earnest. Among my vines, Clinton, Walter, Agawam, Worden, Salem, Goethe, Brighton, Champion, Diana, are all milldewed, and Concord standing near Clinton vines whose foliage is nearly all lost by mildew, has a few leaves here and there diseased. Croton, Delaware, Lady have escaped, and Martha partially.

I have given the Acme Tomato a pretty good trial this summer, and certainly it is the finest tomato in cultivatiou. It could not be nicer, in any respect. A. C. WILLIAMS.

RURAL SPECIAL REPORTS.

ROCHESTER, Monroe Co., N. Y., Sept. 5, 1878.

FOR the past few weeks the weather has been warm during the day, followed by cool nights, with frequent showers and heavy dews favoring the growth of trees and thorough ripening of wood previous to our usual September frosts.

Grain is pretty much all thrashed and the yield, though good, is not as large as was anticipated. Spring wheat and barley have been almost an entire failure, many farmers not getting their seed. Winter wheat is reported at an average of twenty-two bushels per acre, with here and there an unusual yield—some of my neighbors having forty-two, and as high as forty-six bushels per acre. Oats are light and a moderate yield—our crop will go forty bushels per acre—but they weigh only twenty-five pounds per bushel (the seed weighed thirty-six.)

Potatoes are a light crop, and will command good prices, 50c. per bushel being now offered.

Early apples have been a drug on the market at prices ranging from 75c. to $1.25 per bbl.—barrel included. The prospect for winter fruit looks but little better, but a determined effort will be made by producers generally to get $1.50 to $2 per bbl. for it.

The second crop of clover is unusually large, and the heads have filled well. Clover seed will be cheaper than for years.

Corn is of good color, and the ears are filling well.

Preparations are being made for a large seeding of fall wheat, two successive big crops giving farmers more confidence in it than before; then, too, wheat is readily turned into cash, and requires less summer working than almost any other crop. The time of sowing by the majority of farmers will be from the 15th to the 20th, they hoping by late sowing to escape the Hessian Fly. H. T. J.

WOODCOCK, Crawford Co., Pa. Sep. 1, 1878.

THE corn crop will be good in this section and is now being cut up. Oats are a medium crop, but only about two-thirds of that of last year. They suffered from rust and other causes. The wheat was a heavy crop, and was secured in good condition. Buckwheat promises well. Potatoes are almost a total failure—very small and few in the hill. A few pieces which were planted late and escaped the late frosts will give a fair yield, but nearly the entire acreage was planted early and suffered from the frost.

Pears are an entire failure and so are plums. Peaches are a light crop; apples a light crop; but sufficient for home use. Cider apples are in sufficient quantity to supply local demands. M. S.

SHEDD, Linn Co., Oregon, Aug. 31st, 1878.

WHEAT about all thrashed; yield, in this section, about twenty-two bushels per acre; and that of the finest quality. The weather is fine—all that could be desired for harvesting.

Blackberries, Wilson's Early, Evergreen, and Kittatinny are splendid; the Lawton not so good. Apples, plums, pears and peaches, are a heavy crop. I gathered three bushels of Italian prunes from a four-year-old tree and two and a half from a three-year-old German prune. Oats a fair crop. Potatoes light. Grapes good for Oregon; peaches a failure in western Oregon. Wheat, 75cts. per bushel; oats, 35; potatoes $1. P. M. W.

SHERMAN, Chautauqua Co., N. Y., Sept. 3d, 1878.

POTATOES are a very small crop in many parts of Chautauqua County this season. Fall apples are quite plenty and cheap; winter fruit scarce. The corn crop is coming on quite well. The weather, for several weeks, has been warm and dry, with cool nights. A fine shower to-day gives things a fresh look. Butter continues to sell at a low price, as usual. Blackberries have been plentiful. M. L. D.

LAMARTINE, Clarion Co., Pa., Sept. 3d, 1878.

THE fruit crop in this section is almost a failure. Corn only middling, owing to the long-continued drought. Potatoes poor and small. Oats a large crop and cheap; wheat a good average crop, of very good quality. Have had no rain to soak the ground since the 1st of July. D. M. D.

WHITNEY'S POINT, N. Y., Sep. 10th, 1878.

WEATHER pleasant. Corn is an average crop. Buckwheat, of which there is a large acreage sown in this section, is reported as filling well. Potatoes light. Butter, 15@18c.; cheese, 9@10c.; potatoes, 40@50c.; eggs, 15c. per doz.; hay, $6@6.50. M. B. D.

OKOLONA, Chickasaw Co., Miss.

WE are having too much rain for the well-being of the cotton crop. It rains every day, and that brings on the worm. J. B. B.

Miscellaneous

LIME BURNING.

IF lime could be bought cheap, and conveniently obtained, who can doubt that farmers would use far more of it than they now do? If they had it, not a month would pass without some use being made of it. Cellars and additions would be plastered, and where rock and gravel and sand were handy, concrete buildings would be put up, clover and wheat lands would be dressed with it to their great benefit, besides the many minor uses to which it would be put. That lime is not made and used more than it is by farmers, must be, I think, owing more to their want of knowledge of how to make it, than to their ignorance of the uses to which it is adapted.

I do not propose in this screed to detail the methods of the "perpetual," or even of the "periodical" limo-kilns, although I believe the last-named would be profitable to any large farm. I merely wish to give two practical methods of burning lime, in common use among those with whom lime burning is not a business.

Here, where timber is abundant and of little or no market value, we select a gentle slope where two trees stand some ten feet apart. On the ground we place two logs each 12 feet long, parallel with each other and 10 feet apart, each log stretching from the base of one of said trees up the slope. We have a lot of logs cut, 12 feet long, and we roll them on to these parallel logs, the first one against the two trees, the second against the first, and so on till a floor of logs 12 feet wide is made. We then "chunk" all the spaces as if we were making the wall of a log-house; then roll on another layer of logs, and "chunk" as before till the pile is from three to six layers high, according to size of logs, placing all the logs in the same direction, except the two on the ground which serve as andirons. On the top we then make a pyramid of the rock to be burned, 10 feet square at base and as high as you can heap the rock. No fragments should be left larger than a man's fist. Dry branches and kindling wood are placed between the andiron logs before the first logs are rolled, and these are now set on fire and in from six to eight hours, the immense, solid log-pile is burned away and a heap of quick-lime lies on the ground, which you can begin to haul away by noon of the day after firing, if you fire at dusk the night before.

By this method fuel is wasted, and the rock must be pounded fine, and even then many of the pieces will be imperfectly burned; but so little knowledge or skill is required that any one can make lime in this way. To know what rock to use, pieces can bo tried in the fire-place or stove.

Another method is in use and economizes fuel. This consists in making alternate layers of cord-wood and broken limestone in the form of a charcoal pit, covering the whole with leaves or straw and then with dirt. Fire in the center and draw to circumference in the same way a coal pit is managed. This method not only economizes fuel, but burns the lime more evenly and perfectly. N. W. BLISS.

Kingston Furnace, Mo.

THE GREAT AMERICAN DESERT.

R. H. CRANE.

TRANSFORMATION.

IN our early school days we were led to suppose the Great American Desert to be to America what the Sahara was to Africa. The earliest explorers who traveled the great plains, and fought their way over the "Rockies," described this eastern mountain slope as an arid waste. Its scanty vegetation scarcely afforded food for their mules; millions of acres of sand stretching all about them, created the impression that this was a God-forsaken country. The settler of to-day who sees before him hills and valleys covered with nutritious grasses, wonders whence the early delusion. I am inclined to believe it was not a delusion. These early adventurers simply described the country as they found it, with only the usual amount of traveler's paint. It is not their fault that a most wonderful change has come over the country within less than half a century. Prof. AGNEY, our scientific savan, says this loess formation is like the banks of the Rhine and cannot be exhausted until the particles of which it is composed shall be carried to the Gulf. With little or no rain there could be but little or no vegetation. With increased rain-fall the grass belts, found formerly skirting only the scanty streams, silently spread over the plain.

EARLY SETTLERS.

The settler, moved by the spirit of enterprise, mingled with love of adventure, staked his claim still farther toward the setting sun; and, though often grass-hoppered, run off by hostile Indians, and as often cut off by droughts, his prophetic ken was sharpened in this atmosphere, which was life-elixer, and as he remembered the "chills" and "shakes" of his father, he exclaimed, "I have faith that this country will come out all right, and I mean to stay." He has stayed to see the last red-skins chase the last herd of buffaloes over the western hills, neither ever to appear again. He has stayed to see the grass-hoppor scourge decrease and the rain-fall increase, the blessings of civilization spring up all around him, churches and school-houses dot the land. Ceres fills his graneries and Pomona pours into his lap her choicest fruits.

SCIENTIFIC DROUGHTS---ACTUAL RAIN-FALLS.

Fremont is credited with saying "It never rains in Nebraska." PROF. DANA has given us the reason why this unfortunate eastern slope of the Rocky Mountains can never have rain, and hence, can never be depended upon to bear any considerable portion of the earth's over-crowded population. His theory is that clouds arising from the Atlantic will be robbed of their moisture by the hungry fields of the Eastern States, (QUERY.—What is a cloud deprived of its moisture?), while on the other side, according to him, the Rocky Mountains cut off the clouds from the Pacific. DANA'S premises were pretty well taken, but his conclusion was a *non-sequitur!* My theory is that we get our rains from the Gulf of Mexico. Our prevailing summer winds are from the south or southeast. For a number of successive days the wind blows steadily from the Gulf; then, usually at night, the current changes, and from the west or northwest the condenser comes and the refreshing shower falls. Nine times out of ten our rains are in the night. Within the last decade our immigration documents have boasted that our rain all falls in the growing season. No writer to-day would venture to say that no rain falls in mid-winter.

RAPID SPREAD OF AGRICULTURE.

A few years since, a line seventy-five miles east of the place of writing this, was supposed to mark the outmost boundary of safe agriculture. To-day all around me, and for a hundred miles west, the earth is burdened with heavy crops. The rain-fall has been complete. During the last Congress a move was made to vacate forever the western counties of Nebraska in favor of the cattle raisers, under the impression that the rain-fall would forever be inadequate to successful agriculture. To this, in behalf of homeless thousands, a protest has gone up from all along the line; and, in confirmation of the wisdom of the protest, to-day an ample harvest is being gathered as far west as the

soil has heon cultivated. So rapid has heen the change, that men who, twenty years ago, settled in the valley of the "Big Muddy," (Missouri) believe theirs the only tillable portion of the State.

A PROBLEM FOR WISEACRES.

Whence this wonderful change is a problem for our wiscacres to solve. I am inclined to the opinion that it is a grand illustration of the power of mind over matter. I havo conferred with pioneers from Chicago westward, and learn that theso climatic changes havo ever occurred simultaneously with the wave of immigration. Each successive settlement has secured the partial conditions of the success for a settlement beyond, and eventually made its own conditions of success permanent. Persistent cultivation insures successful cultivation.

Harlem Co., Neb.

WHAT OTHERS SAY.

Depth to Sow Wheat.—Mr. Peffer says in the Trans. Wis. S. A. S.: "The sooner the kernel sprouts and gets above the ground the better and stronger the plant and the thicker it will stand. To illustrate: in my younger days, I made experiments with the depths of planting wheat; I planted the kernels of a whole head in this manner: in one of our garden beds (ground spaded twelve inches deep) 1st, kernel on the surface; 2d, one-fourth inch deep; 3d, one-half inch deep, and so on (a quarter of an inch deeper each time) until the kernels were planted. The results—the one on the surface lay nearly two weeks before it sprouted and made roots; the 2d, one-fourth inch deep, and up to three-fourths came up the 4th and 5th days, while the next were later; the last one up, was fourteen days in reaching the surface, and was three and one-half inches deep; none came up after that time; on examining, I found that the three next kernels were sprouted, but rotted before they got the sprout to the surface; the kernels planted from five to seven inches deep rotted without a sign of sprouting. We had the kernels planted six inches apart in two rows. At the end of six weeks, the plants stood thus: the first had three straws quite strong; the one-fourth, 21 straws; the half-inch, 17 straws, and so on; three and one-half inch, a very weak single straw; it never got strong, although it grew a small or short head, the few kernels it contained were plump and good; the one inch had eleven straws at six weeks, but only perfected seven good heads, while the one-fourth inch perfected twenty-one good heads. The one on the surface made three good heads, the same as the one planted two inches deep."

"Slates," says the Boston Journal of Chemistry, "are extensively used on roofs, and sometimes on walls. Unless of the very best quality and put on with extreme care they suffer much from breakage and leakage. Welsh slates used to be the best, but of late years they are cut so thin, when intended for the American market, as to be very weak. Good slates are quarried in this country, the strongest coming from Maine. In order to be sure that a given kind are all that is required for strength and durability and unchanging color, the best way is to buy of a well-known and reliable dealer; and as dealers, even, may be deceived, it is best to examine the lot thoroughly for one's-self, and apply all the well-known tests. Slates that are found near the surface are likely to be inferior to those obtained deep down in a quarry that has been some time worked. A clear metallic ring is evidence of hard, close grain. But perhaps the best test of all is immersion in water; the slate which absorbs the most water in a given time being the most porous, and consequently the worst. Porous slates, in addition to their tendency to soften and decay, retain moisture which rusts the nails and rots the roof boards. They are also, when wet, liable to be cracked by frost. Slating nails should have large heads. "Composition" nails are, of course, the best, but expensive; well-tinned iron ones are good enough; those of common iron are too liable to rust."

The American Dominique, says the Poultry Bulletin, is a valuable breed of Puritanic extraction, and wherever bred in purity, is acknowledged to be one combining as many desirable qualities as can well be found in one variety.

Its hardiness, symmetry and general utility are only the more appreciated by the addition of harmony of colors, being so blended as to be always pleasing to the eye. Like memories of bygone days, always growing in remembrance, the American Dominique, so justly entitled to the appellation, comes to the front, amidst the furore for something new, claiming our attention for long-established virtues, and for its present improved appearance.

The Dominique is an excellent layer of medium-sized eggs, supplying them with remarkable persistency the year through. Though not a rank sitter, it practices the truth of the adage "what is worth doing is worth doing well."

The young develop rapidly, and at maturity are second to none for the table. One very commendable quality is the ease and rapidity with which they molt, the new feathers following quickly the loss of the old ones, and they frequently continue their laying during this trying ordeal.

Sheep for Kansas.—In the Weekly Tribune, Dr. Challis asks the question, What sheep is best adapted to the wants and ability of the masses? and answers it thus: It is the common coarse or medium-wooled sheep—the "Missouri sheep." Cross these for two generations with the thoroughbred Merino, then throw in a cross of Cotswold, and you have a sheep producing a large clip of desirable quality, and a carcass big and well rounded for mutton. Such sheep can be found for from $1.50 to $3 per head, and an acre of ground—well stocked—will support eight or ten of them. For medium unwashed wool, for three years past, we have received at our door, respectively, 25 cents, 24 cents, and 23 cents per pound. This makes about $1 per head, or sufficient to pay the running expenses of the flock, leaving the increase and growth to the side of profit.

Machinery on the farm means a good deal, remarks the Scientific Farmer. It means that the farmer has invested much capital in a way that is saving him much hard work. It means short days for you and the hired man. It means going to bed later and getting up later. It means less weariness and more opportunity for mind-culture. Thus progress in agriculture not only means more and cheaper food and clothing, but it means greater opportunity for development of manhood. Let us welcome it, then, for the stomach's sake, the body's sake, and the mind's.

Manure a Specific for all Wheat Ills.—Manure, "Waldo" of the Ohio Practical Farmer says, seems to be a specific, a sovereign remedy for most if not all the ills that wheat is heir to. His early sown wheat, last fall, was as badly infested with the fly as he ever saw, but where it was manured a heavy crop grew in spite of it. A few years ago the chinch bug made its appearance, and much of the wheat was badly damaged, but where it was manured it escaped. In the years when wheat has rusted badly it has always been the weak, late wheat, on poor land, that has suffered most.

To keep Lice at bay, Mr. G. P. Burnham says, the fowls and their nests should be thoroughly clean, constantly. By using a little powdered sulphur on their bodies, and carbolic powder, also, rubbed into their feathers and through the hay of their nests, vermin will disappear. In warm weather, wash the roosts all over (and underneath) with kerosene, to destroy these parasites. Thus they may always be kept cleanly and comfortable, with but little labor, if this be *regularly* attended to.

W. J. F. tells the Country Gentleman that some of our best farmers intend to sow only four or five pecks of wheat per acre. Their idea is to grade the wheat, selecting all the large grains. This, they think, will give as good a seeding as two bushels sown in the usual way. Using some concentrated manure where the young plants can get it, will cause them to "stool" and cover the whole ground.

Ventilation of the Hen-Houses is an important thing to be observed by fowl growers, at all seasons of the year and especially in the months when the birds are limited to indoor confinement. Foul air in the houses will generate disease, rapidly. *Roup* is thus caused, and sickness will surely crop out among the flock, if they do not get fresh air, and plenty of it, at any time of the year.

Horse Shoes.—The London Farmers' Chronicle thinks that we require to protect the feet of our horses something after the manner we protect our own, and one would suppose that the matter of fitting a boot to the foot and leg of the cart horse ought not to be attended with any insuperable difficulty.

CATALOGUES, &c., RECEIVED.

The Grasses of Tennessee, including Cereals and Forage Plants, by J. B. Killebrew, A. M., R. D., Commissioner of Agriculture, Statistics and Mines. Published by the American Co.: Nashville, Tenn. On the first appearance of this work, a few weeks ago, we mentioned in the Rural the favorable impression made on our mind by a cursory inspection of its 500 pages. Since then we have had leisure to examine it more critically, to check its teachings by the lessons of our own experience and that of others, to test the accuracy of its statements and information on a multitude of points, and as a result, our original impression of its merits has been strongly confirmed. Its title, The Grasses of Tennessee, may possibly mislead some into the notion that its contents have reference only, or in a great measure, to that State, whereas its teachings are applicable wherever grasses, cereals and forage plants are cultivated. The information here laboriously condensed, has been culled from the best works on the subjects treated of, published not on this side of the Atlantic only, but also, to a considerable extent, on the other, and the utility of its lessons is as broad as the field from which they were gathered. In view of the vast and steadily increasing importance of the hay and fodder crops, as well as of the pastures of this country, it behooves every farmer to "post" himself thoroughly on the sorts best suited to his climate, soil and condition, as well as on their most profitable culture and management, and to this end we know of no work which we would more strongly recommend than the handsome volume before us.

Premium List and Rules for the 38th Annual Exhibition Orange County Agr'l Society, to be held at Washingtonville, Sept. 25, 26. D. A. Morrison, Montgomery, Secretary.

Regulations and Premiums for the Eighteenth Annual Exposition of the North Carolina Agricultural Society at Raleigh, Oct. 14, 19. Cap. C. B. Denson, Secretary.

Catalogue of the Seventh Annual Fair of the Piedmont Agr'l Society, to be held on the Fair Grounds at Culpepper, Va., on Oct. 15, 18. A. R. Alcocke, Secretary.

Monthly Crop Report of the North Carolina Department of Agriculture for August. L. L. Polk, Commissioner at Raleigh, N. C.

Gould Brothers, Wholesale Catalogue or Trade List of fruits and ornamental trees of all kinds. Rochester, N. Y.

Cuba, (N. Y.) Fair and Races Circular and Programme. Sept. 24, 27. Frank B. Sibley. Secretary.

Wholesale Trade List of fruit and ornamental trees. E. Moody & Sons, Lockport, N. Y.

Wm. S. Little. Circular of Wholsale Prices of Fruit and Ornamental Trees. Rochester, N. Y.

Young & Elliot, Autumn Bulb Catalogue, 12 Courtland Street, N. Y. Illustrated, free.

Entomological.

WHAT BECOMES OF THE INSECTS?

Of the seventeen-year locusts we have a biographical sketch. They make their appearance at regular times, and their hegira can be foretold like the eclipses; but of the many other noxious insects that come and go, without any regularity or any apparent cause, we—the laity—are left entirely to conjecture an explanation of the causes which move them.

This city—Muskegon, Mich.—has been called "The City of Sawdust," but a due regard to its merits would have given it the more historic and euphonious name of "The City of a Thousand Oaks." Some sixteen years ago, the White Oaks, the predominant variety, were infested by a measuring worm which entirely denuded every tree of that variety. I have never seen one of these worms since.

Some twenty years ago, when living in Ontario Co., N. Y., my own grape vines and those of my neighbors for miles around, failed to put forth leaves from their normal buds, and, when they should have dressed in a full suit of green, they showed scarcely a sign of life. This we found to be caused by a little steel-blue beetle that we had never before heard of. I have seen but a single specimen of the "varmint" since.

Well, good-bye to them. For the present we are more interested in the inevitable cut-worm that, for the past twenty years, has cut down our young garden and field plants, climbed our young trees and grape-vines and destroyed their first buds by eating out their tips, and which now threatens to desert us, there not being one this year where thousands were expected.

The disgusting larvæ of the codling-moth, too, is threatening to leave us, and we are once more blest with fair, sound apples in our market. Of both of the last-named pests there are some lingerers, and we are now rehearsing a requiem, to be performed when the rest pass away.

The industrious potato beetle has evidently come to stay, bringing his baggage and all his worldly goods with him. He even exceeds the old fabulous hydra that, where one of its many heads was cut off, produced nine others; for the destruction of one is followed by thousands. But, though we lose some of our entomological specimens, we need not slack up in our study of the science; for we have lice—I beg pardon, aphides—in the greatest profusion. They swarm on our fruit trees of every variety; they cover whole acres of cabbages and rutabagas, and slugs riddle the leaves of the Pear, Cherry, Quince and Mountain Ash. The lice are too many for us; but the slugs, if they are noticed in season, we can conquer by dusting them with lime, ashes, plaster, or even dry sand. Just now our attention is specially called to the little vine-hopper, or thrips, which swarms on our grape-vines, making them look as though scorched by fire. For their destruction or expulsion I have tried every remedy that I could hear or read of, and some more, with little success, though I think that sprinkling the vines with sulphur and lime has disgusted them somewhat, for they are not as plentiful as last year. Did we know positively how and where and in what condition they pass the winter, we should know better how to head them off. If anyone can give any information on this subject, or give any reliable remedy, I will be thankful in proportion to the benefit I may receive. S. B. Peck.

Veterinary.

CAUSES WHY HORSES BECOME BLIND.

A great many have noticed that among all domestic animals the horse is the one which suffers the most from ailments of the eye, and the one that gets blind most frequently. There are especially five causes of disease in the eyes of horses.

HIGH FODDER-RACKS.

The first lies in the high fodder-racks. These are in all ordinary stalls so fastened above the cribs, that the animal must pull the hay from the rack in a position which requires its neck to be stretched out, and with its head and eyes turned upwards. Thus it often happens that a beard of grain—which, as every one knows, is armed with little hooks—drops into the eye of the animal and fastens itself in such a secure way, that all the water flowing from the lachrymal duct is not able to remove it. An inflammation of the eye sets in, often causing the loss of that organ in consequence of the false or even cruel treatment to which it is often subjected.

AMMONIA IN STALLS.

A second cause is the sharp and biting vapor in the stable. The sharp ammoniacal gas produced in the stable, which even brings the tears from human eyes, must also do harm to those of horses. It is commonly believed that the latter are used to it, but that idea is totally wrong.

The biting vapor from the stalls, which some think impossible to remove, can very easily be destroyed by cleanliness and careful management. Fortunately there are numerous horse-stables in which there is not the least feeling of it. It is not necessary to use means of disinfection, such as gypsum, vitrol, etc.; cleanliness is a thorough remedy. The floor of the stalls, however, must not be so arranged that it absorbs the urine, etc., and so prepares a substratum of foul smells.

BADLY LIGHTED STABLES.

The horse, although it looks straight forward much more than most animals, yet does not do so nearly as much as man, and therefore requires in its habitation an arrangement of light quite different from that in its owner's dwelling. Give the horse the light from only one side, and it will direct only one of its eyes towards it, but the other eye will be in the shade; this inequality weakens both eyes. Put it in such a position that it looks into the dark, which is certainly unnatural, and when taken out of the stable the abrupt change from darkness to light will harm it. To place it straight against the light, gives the latter a blinding effect which is also injurious to the eyes. The horse-stable should therefore always receive its light from above, either through skylights or through windows placed near the ceiling in the wall to which the animal's head is turned as he stands in the stall. Moreover, the stable should be always bright, as bright indeed as day-light; for the horse is not a night or twilight animal, and is in no need of an artificial darkness, like fattening stock.

THE USE OF BLINKERS.

The fourth and principal cause of the evil is to be found in the use of the blinkers. The eyes of the horses, as it is well known, lie at an acute angle with the nose-bone. They look, therefore, straight out sideways, but command a far larger view than those of men. To prevent the animals from being startled by objects suddenly seen, blinkers are used, square shades which compel the eye to look only straight ahead. But the horse's eye is not constructed for this purpose and is therefore perpetually strained. The inventor of blinkers had certainly the human eye in mind when he hit upon his device. A shade always attached to the human eyes, would be almost harmless, and well fitted to put all objects on the sides of the road quickly out of sight. It is quite different, however, with the eye of a horse. Yet the blinkers forcibly compel him to direct his eye-balls towards the front, thus straining the superior oblique muscle and contracting the inferior muscle. Moreover, imagine the torture and the irritation of having a board, day after day, close before your eyes! Is it astonishing, then, that the horse gets dim-sighted, sick or completely blind? And all this evil is brought about by a device of no earthly use! For the blinkers actually tend to frighten a horse and thus increase the evil of timidity they were designed to diminish or prevent.

THE WHIP.

The fifth and last cause of the blindness of horses is the whip. How often does the fine end of the whip, even in playful whirls, strike the horse's eye and burst therein a blood-vessel or produce an inflammation, and consequently the loss of sight. Even drivers who treat their horses well often do this unwillingly, while only wishing to keep their animals lively and to cheer them up with an occasional touch. But far oftener does the evil occur at the hands of rough brutes who substitute lashes for oats, and, in doing so, are not content to confine their blows to the back and sides, but designedly lash the neck and head, so as to hurt the poor beast as much as possible.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Anthropoid Apes—(Illustrated)..... 597
Hints for the Season..... 598
Jottings at Kirby Homestead—Col. F. D. Curtis.. 598
Hints by the Roadside—Hough Handle..... 598
Courage on the Farm, &c.—Gen. W. H. Noble.... 598
Notes from Northwestern Illinois—W. B. D..... 599
The Sugar Beet..... 599
Teaching Botany—Prof. W. J. Beal..... 599
Japanese Snowball..... 600
Garden Talks and Walks—Renoclaf..... 600
Malden's Blush..... 600
Yellows, the..... 600
N. Y. State Fair..... 600
Implements at N. Y. State Fair..... 601
Lime Burning—N. W. Bliss..... 602
The Great American Desert—R. H. Crane..... 602
What Others Say..... 603
Catalogues, &c., Received..... 603
What Becomes of the Insects—S. B. Peck..... 603
Why Horses Become Blind..... 603
Notes from the Broome Co. N. Y. Fair..... 608

Answers to Correspondents:

Treatment of Various Flowers..... 602
Queries About Fruit..... 602
To Exterminate Crab Grass..... 602
Miscellaneous..... 602
Communications Received..... 602

Everywhere:

Hugo, Ill..... 602
Rochester, N. Y..... 602
Woodcock, Pa..... 602
Shedd, Oregon..... 602
Sherman, N. Y..... 602
Lamartine, Pa..... 602
Whitney's Point, N. Y..... 602
Okolona, Miss..... 602

EDITORIAL PAGE:

Hints to Correspondents..... 604
Skilled Dairying..... 604
Muck..... 604
Home Again..... 604
Ornamental Grounds..... 604
Versaillaise or Cherry?..... 604
Brevities..... 604

LITERARY:

Poetry..... 560, 607, 610
Story of a Locket..... 605
Vintage Time in Germany..... 605
Quiet People..... 606
How to Learn to Swim..... 605
Recent Literature..... 606
Bric-a-Brac..... 606
Letter to Young Mothers..... 607
Fashions—(Illustrated)..... 607
The Carpet Pest..... 607
A Woman's Plan for Making Hogs "Keepers at Home."..... 607
Married Women's Rights in the Eastern States.. 607

Reading for the Young:

Pocket Money—W. F. Alan..... 610
What is to be Done—Sairey Gamp..... 610
The Cockroach and its Enemy..... 610
Potato Beetles—S. H. R..... 610
Puzzler..... 610

Sabbath Reading:

Shall We Have a Sabbath?..... 610
"Would" Misused..... 610

News of the Week—Herman..... 608
Markets..... 609
Personals..... 611
Wit and Humor..... 612
Advertisements..... 609, 611, 612

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HINTS TO CORRESPONDENTS.

NOT the least interesting part of a live agricultural paper consists of the letters from different parts of the country telling of the condition of crops, the local markets and other particulars concerning the districts in which they are written. By this means each reader of the paper is put into communication with a host of correspondents in every State in the Union, all giving the latest account of the business which to him is the most interesting, because it is his own. Under its present management, the RURAL has been fortunate enough to secure a larger number of such correspondents than, perhaps, any other paper in the country; but it is those who are doing well who are always most anxious to do better, and, acting on this rule, the RURAL wishes to suggest a method by which such correspondence, while increasing its interest, would add greatly to the valuable information it furnishes.

This desirable object would be accomplished if our friendly correspondents in stating the condition of their different kinds of crops, would also particularize the varieties of wheat, grasses, fruit, etc., embraced in their reports as well as the comparative merits of each sort in their neighborhood. To do this would doubtless entail a trifle more trouble, but, entirely apart from the greater importance of their communications, they would soon find that this extra trouble would be amply rewarded by the additional information they would themselves acquire in the investigation. It would, also, be well to mention the nature of the soil which proves most suitable to each variety as well as any special treatment which might have produced exceptionally good results. Another point, which with the above would enable readers to form a clear conception of the conditions most favorable to each sort of crop, is the exposure of the land in which it is planted. If grown in a valley, does this valley stretch north and south or east and west, and if the latter, on which side of it are the crops planted?

Many farmers hesitate about sending to their favorite paper valuable information through distrust of their own powers of expression. They are afraid their communications may be rejected on account of grammatical errors, or lack of style. Such fears should never deter our friends from promptly sending us all items of interest, as it is such items we want regardless of the form in which they may be expressed, for it is part of an editor's duty to clothe in suitable verbal garb all information he may deem of sufficient importance to admit into the columns of his paper.

SKILLED DAIRYING.

DAIRYING is perhaps the greatest agricultural interest of New York. It transcends any other single agricultural industry. This State is credited with 1,500,000 cows and if we estimate the income per head at only $40—which is below the average of the last five years—it gives an aggregate of $60,000,000 annually. This represents about one-seventh of the dairy interest of the United States. We shall therefore be pardoned for frequent reference to this great industry. Dairy products are now depressed below any point reached since 1861. But this is also the fate of almost every other agricultural product with, perhaps, the exception of the best beef animals on foot. All mechanical industries are alike at the bottom prices. Shall all these industries, therefore, be abandoned or largely reduced? Certainly not. Dairy products stand at the head of household necessities. No housekeeping, worthy of the name, can be carried on without them. This is the time for the application of skill. Skill must win. When a certain class of products bring a high price, and are eagerly sought as soon as they reach market, the producers are apt to be careless of quality since remunerative sales are so easily made. But when the market becomes heavy and prices fall below remunerative rates, the producers having the requisite courage and determination to succeed, study how to improve the quality of the article, and thus give an exceptional value to it and an extended market. They well know that a superior quality has fewer competitors, and the grades below it are not in competition. The highest quality creates a market for itself.

Acting on this principle those shrewd Quakers, near Philadelphia, have made for many years the famous brand of Philadelphia butter, which has brought from one dollar to twelve shillings per pound. They now easily command four times the price of ordinary butter. And this all comes of *skill*—of regarding butter-making as a fine art, which appeals to our most refined sensibilities—the high art of living. The food that supports the human body is of the highest consideration to civilized and refined society. It is more and more sought for in the highest state of perfection. Cream contains the most refined and delicate oil used as human food. In its natural and best condition, it is more relished and easily digested than any other food oil. This shows what great opportunities nice manipulators of milk have for remuneration, even in these depressed times. The practice of this fine art in butter-making is not necessarily confined to locality, as was once supposed, for the milk, containing cream with all the delicate aroma and flavor of the Quaker butter, flows in many States. The milk exists in thousands of places, but the skilled operators are few.

It really costs no more to make this fine butter than the poorest that comes to market. The skill consists in a knowledge of the nature of milk, and in following very simple and easy rules in handling it. These rules, however, must be strictly followed, and cannot be set aside to suit the convenience of any body. It requires the milk to be kept at or below a certain temperature; the cream to be removed at just the right time, when the milk first turns sour; the cream to be kept at an even temperature, not above 60 degrees, till churned; the butter to be worked with great care and kept at a temperature below 60 degrees, till sent to market. The atmosphere of the milk-room must be absolutely pure, and the cows well kept, and in a cleanly condition. Milk is extremely sensitive to all odors, and easily tainted, after which, the best butter cannot be made. Any one of close observation could determine all these things by experiment in a few months. The dairyman has everything depending upon the skill he uses in the production and handling of his milk. Let him study his business with the same care bestowed by a skillful mechanic upon his, and he will find his remuneration ample and certain.

MUCK.

A GENTLEMAN living less than two miles from us, has bottomless sandy land. He would like at least two good rains every week. During severe droughts, his crops are next to worthless—his shrubs and trees die. He has used muck extensively and likes it not. It has never benefited his land that he knows of. Our own land is rather clayey than sandy. We suffer more from too much rain than from too little. Crops have seldom been injured by drought. We have used muck extensively, also, and we like it. It has been spread upon our garden land in large quantities. Our trees and shrubs have been planted in it—in muck pure and simple—hundreds of them in great variety, and their thrift is the remark of all who see them. At our farm, the upland is seemingly like the land of the neighbor above referred to—sandy and dry. We need rain there weekly, else the grass is burnt and the crops suffer. But we have used muck quite extensively and the land seems to have been benefited thereby. Upon the lowlands we have raised potatoes, corn, wheat, buckwheat, timothy, clover, melons, pumpkins, squashes, beets, mangels, beans, peas, turnips, &c., &c., and we have never yet failed of a good crop.

What does it all prove? That *our* muck contained plant-food which our soil needed. But all muck is not the same in manurial value, as has been shown time and again by chemical analyses. As soils also vary, it is not to be wondered at that different mucks will produce different effects on different soils. There is little sense in advocating its use just as if its manural value were in all cases known and invariable and, for the same reason, there is absolutely no sense in condemning its use *in toto*. It is well that the farmer should take for granted that muck, at least when easily accessible, might prove of great value to his land. Then he will be the more likely to ascertain its value from experiment, which is the only trustworthy test.

Meantime we call attention to the forcible article of Gen. W. H. NOBLE, on another page.

HOME AGAIN.

A private letter from Professor I. P. Roberts tells us he arrived from Europe, on the ship "P. Caland" from Rotterdam, Sept. 7, bringing with him for Howard G. White, of Syracuse, N. Y., seven Holstein cattle, selected in Friesland, and four Percheron horses—two stallions and two mares—selected in the ancient Province of La Perche. The animals were selected without any reference to price, the only instructions given him having been to bring the best that could be found. He tells us that Smith and Powell, of Syracuse, imported on the same steamer, twelve young Holsteins; and that James Nelson, of Brunswick, N. J., brought eight cows and heifers, and one bull.

While abroad, he visited not only the Exposition, but the Agr'l College of France, the great horse districts about Chartres, and Nogent le Rotron, and many other places of less note. He traveled all over Holland, and visited the great farm of Haarlem Mere, situated fifteen feet below the level of the sea. He also saw considerable of Belgian agriculture, though he did not spend much time there. He inspected personally about fifty of the best grain and stock farms of England, including a great sewage farm, Mechi's, Lawes', and the farm connected with the School of Agriculture.

Ornamental Grounds by Moonlight.—The effect of ornamental grounds as seen during bright moon-lit nights for the first time, is deceptive. It is particularly so if the trees are still young, and have not attained much size. The deeper shade which they cast, gives them the appearance of being double their actual size, and of forming vistas that do not exist. Seen again by daylight, one is surprised at his previous magnified impressions. There is this to be learnt, however, from viewing grounds by moonlight, viz., that plants may be so distributed or grouped as to imitate during the day, the deep shadows of the night.

Versaillaise or Cherry?—When the difference between two plants is so trifling that nobody can tell positively one from the other, what is the use of wasting words over it? The Versaillaise and Cherry Currant are in this category, and yet pomologists, as if there were no subject of greater importance to demand their attention, must, like little children, year after year, re-assert their several views. All agree that they are closely similar—a majority that they are identical. It is strange that sensible men can waste their time over such profitless, senseless discussions.

BREVITIES.

THE FAIRS—the fairs!

DR. WILLIAMS confirms our report of Acme tomato.

THE Michigan Agricultural College has had, for five years past, from fifty to one hundred and fifty species of grass and forage plants, all in plots and labeled.

CHARLES W. GARFIELD says that T. T. Lyon is the best Strawberry experimenter in "our State"—that is, Michigan. His strawberry article appeared last week.

THE farmer who bears in mind the oft-quoted words, "the true investigation of nature leads to God," should be moved to study and to observation in his chosen pursuit.

No doubt the present season will be favorable for transplanting trees. They will mature earlier; on account of the early spring, and will have a longer time, after transplantation, in which to become established in their new places before heavy frosts.

ANY honest, industrious man can earn not only a living, but enough to enable him to lay up money for a time of sickness or old age. Yet there are many honest, industrious men who do not. One reason is improvidence at home; another indulgence in strong drink.

DR. ZABRISKIE, a well-known physician of Westwood, Bergen Co., N. J., tells us that he has used with much success the fluid extract of Grindelia squarrosa for malarial fevers, in doses of twenty drops, administered every two hours during the intermission of the fever. As a preventive, twenty drops three times a day have proven effectual.

WE said that we could not find any animals that would eat our Prickly Comfrey. The editor of the Indiana Farmer meets with better success. "Our cow," he says, "will not touch it at present, while on good pasture; probably she might be starved into eating it after grass is gone. The grasshoppers like it so well that they have riddled the leaves with holes."

THERE is no doubt about it that Clawson is one of the most hardy and prolific varieties of wheat cultivated. We have raised this wheat for three years past, and have eaten bread made therefrom during that period. The bread is not so white as that made from some other wheats, and does not so tickle the pride of the bread-maker, but it tickles the palate of the bread-eater quite as well.

A. S. WILSON, an English scientist, has made an elaborate calculation to show the marvelous industry of bees. Starting with the ascertained fact that 125 heads of clover yield approximately 15.432 grains of sugar, and that the proportion of sugar in honey may be roughly estimated at seventy-five per cent., he finds that 2,500,000 clover flowers must be visited by bees to obtain one pound of honey from that source.

L. L. POLK, the Com'r. of Agriculture of N. C., says, and we hope it will be heeded: "Dr. D. E. Salmon, of Charlotte, N. C., is one of the commission appointed by the Government to investigate Hog Cholera, and I earnestly ask our corresponpents and other citizens to communicate to him their knowledge of any diseases, and their extent among swine. This is a gratuitous effort to secure our people against the heavy losses they sustain annually, if possible. Term of the Commission will expire Oct. 15th, and it is therefore important that early attention be given to the subject."

THE editor of the Germantown Telegraph has said from the beginning that Prickly Comfrey was a "fraud." So it has proven to be. But it was worth a trial to find this out. The editor may reply that that *was* found out many years ago. But people forget—then they must learn the lesson again. We are in hopes that those who have made money out of this fraud will—conscience-smitten—invest it for the good of the agricultural public in the dissemination of Pearl Millet, for instance, respecting which we should like to learn the opinion of the editor of the Germantown Telegraph.

SENATOR BLAINE says that the farmers of the republic will control its destiny. Agriculture furnishes the conservative element in society, and, in the end, is the guiding, restraining, controlling force in government. Against storms of popular fury: against frenzied madness that seeks collision with established order; against theories of administration that have drenched other lands in blood; against the spirit of anarchy that would sweep away the land-marks and safeguards of Christian society and republican government, the farmers of the United States will stand as the shield and the bulwark—themselves the willing subjects of the law, and therefore its safest and strongest administrators.

To get angry over trifles is childish; to rave furiously is brute-like; to cherish wrath is akin to the ways of devils. But to suppress an angry impulse is manly—it is wise and altogether lovely. Many of us entertain a sort of a notion that we approach more or less nearly to the character of angels; while angels, possibly, look at us as approaching more or less nearly to the character of devils and brutes. When a man kicks a good horse in the belly with his heavy boots, what shall we call him! When a man curses the laziness of his "hands" because they favor themselves during the heat of our hottest days, though the hay or the grain suffer, is he a devil, or a brute? When a man vents upon his good wife and children the anger which has been aroused by a combination of aggravating circumstances in the field, he is both. There are two grand errors which we revel in as if they were spring water in midsummer: One is our unwillingness to extend to others the consideration we demand from them; the other, that we are more interested in the faults of others, than in our own.

Literary Miscellany.

THE FORGET-ME-NOT.

Mark the forget-me-not by yon brookside,
Its roots the mud, its stem the waters hide;
Its blossoms seek the sky.
So, though thy feet be rooted in earth's slime,
Raise thou thy head above the waves of time—
Look up on high!

See how the blossoms, earthward bent awhile,
Turn as they ope to meet the sun's bright smile,
And, as they upward gaze,
First flush with pink, then mirrow heaven's own blue,
And every flow'ret bears, of sunny hue,
A crown of rays.

O thou whose thoughts are fixed on this world's toys,
Look up to Him from whom are all thy joys.
The beatific sight
Will change thee till the human grow divine,
And at the last upon thy brow shall shine
A crown of light. [*Sunday Magazine.*

THE STORY OF A LOCKET.

(A True Incident.)

CHRISTIAN BYRDE.

The well-known jeweler in B—— Street, at Versailles, sold, unwillingly, to me, a "Prussian," the lovely locket I am holding in my hand; but then why did he expose his antique treasures, which he generally kept so carefully under lock and key, to the experienced eyes of a foreign connoisseur?

Everybody wanted to buy the pretty thing, and at last it was sold for Prussian gold, which is really as good as French. And now the little work of art belongs to me, and is daily admired. It would be difficult to meet with anything prettier or more tasteful. It is oval, and about the size of a walnut, surrounded by a row of pearls, inside which there is a very narrow black enamel border with brilliants; the surface of the locket is of pink enamel, and upon it is painted a charming little Cupid, who, with sly looks and great delight, is blowing into a silver trumpet, as if he were hastening to inform the world of one of his fresh victories. The reverse of the locket is covered b a strong glass surrounded by gold, and inside it could be seen a rose-leaf, broken up into many little bits, the whole hung on to a pretty interlaced pearl bow. With the help of a few dates given me by the jeweler, and a piece of paper upon which was printed, in half-effaced characters, some very old French, which he had found in the case containing the locket, I discovered who painted the small Cupid, and what interesting woman had once worn the locket in years gone by.

Many tears were shed on a bright spring day of the year 1701, in the ante-chamber of the renowned painter and poetess, Sophie Cheron, in Paris. The little god-daughter and maid of the lovely lady, the pretty Cadette, was crying bitterly, for she had met with a great misfortune. A locket, with an angel's head, which her mistress called a "charm," had, as the little one in fun tried it on, slipped out of her hand, and the pink enamel had broken into a thousand pieces upon the hearth. What a fright she had had! Mdlle. Cheron had for years worn the locket whenever she went to a party or entertained guests: she said, half in fun, half seriously, "that it protected her heart." And now? On the following Saturday there was to be a garden fete in honor of mademoiselle's birthday, and she would want to wear the locket, that was quite certain. Sophie Cheron would rather have given up the fete than not wear her charm. And when she asked for the little locket, what should Cadette say? Her thoughts were confused at the idea; her heart beat loudly with fear. Her godmother would, when she heard of the accident, send her away, without pity, that she was sure of. And to leave this happy home and kind mistress, would be a very great trouble, even for the sake of a certain somebody, who was only waiting till they had saved enough, to say, "Cadette, I want you to marry me." Ah! how long this saving up took; it even seemed more difficult for a young man to save, than for a young woman, and for a painter most of all. Indeed, cousin Gillot declared that her husband's pupil, Antoine Watteau, was the laziest fellow alive, and thought himself a great gentleman, and stared at every noble lady, instead of attending to his work, and that he never did and never would do any good. But the cousin was known to have rather a sharp tongue, And this consideration comforted the young girl. Cadette could not blame Antoine Watteau, because he did not admire the jovial figures which Claude Gillot always painted, for she could not bear the stiff, ugly pictures of soldier and peasant life, which he made his pupils do.

She only wished she could have persuaded Antoine, whom she admired on account of his beautiful, melancholy eyes, to paint Saints and Madonnas. But he only laughed at her when she proposed it, and said he would rather paint, from morning till evening, beautiful women in handsome dresses covered with lace.

Antoine Watteau was the first she thought of in her great trouble about the broken locket. He must and would help her, and paint quickly a new charm before her godmother discovered the misfortune. That would surely not be difficult, and surely Claude Gillot would give her a piece of enamel for it; she remembered having seen plenty in his studio; he himself used formerly to paint snuff-box lids on enamel. It was only necessary for her to run across and arrange everything. There was plenty of time as Mdlle Cheron would not wake for a couple of hours, at least.

Somebody was busy in Gillot's studio. Antoine Watteau sat there before his easel; the master and the other pupils had not yet come; the young painter was not, however, working, he was staring before him sadly at the soldiers upon the canvas; even at the appearance of the fresh rosy girl's face, he smiled. This, however, she did not notice; her thoughts were full of only one thing, the broken charm. She related breathlessly all to her young friend, and concluded with the request that he would paint her as quickly as possible a new angel, rose-colored enamel, and put it in.

"But what was the broken angel like?" asked Watteau, laughing; "that is what I must know first."

Cadette started. She had never looked at it closely, and only knew that it had little wings.

"Well, like all other angels!" was the hesitating answer. "Paint an angel according to your own fancy, then it will certainly be beautiful. If you will arrange it all, and bring it to me in good time, then . . ." she stopped, smiling and blushing.

"Well, what then?"

"You may then ask me for a reward. What should you like to have."

"What should I like? To be allowed to look on quite undisturbed whilst your godmother entertains her guests, and to see what they do at these brilliant fetes of which you have told me so much. It will be easy for you to hide me in some corner. Will you grant me that, Cadette?"

She nodded acquiescence, but a cloud was on her brow. So that was what he wished for, only that?

"Bring me the charm, and I will allow you to look on," she said at last, in a low tone, and prepared to go. She suddenly felt in her pocket and took out a little silk purse. "Then I have brought you something to take care of for me; I had almost forgotten it! My godmother gave it to me yesterday. She is so good; I should be very sorry to annoy her. It will be hard for me to leave her, Antoine."

"Dear little one, you should not trouble yourself about that so long beforehand," answered Gillot's young pupil, putting the little purse carelessly into his pocket, without looking at its contents, "the large wooden box is unfortunately far from full, and until the money comes up to the lid, we cannot marry, Cadette."

"Is not the box too large?"

"Oh! no; do you think that I would let my wife wear shabby clothes and work like a common burgher's wife? Never! I intend to have a beautiful studio with large carved chairs in it, and my wife shall wear silk and velvet and carry a fan in her hand, and everybody must admire her as much as myself."

Cadette burst out laughing. "Well, then, you will marry a wife with grey hair, and without teeth, if we must wait until we are rich enough for such things!" she exclaimed.

"Child, your godmother is a proof of how quickly people can make money. Formerly she painted jewel-boxes and fans, and now she gives the most brilliant fetes in Paris. How happy she is!"

"Do not say that; in spite of all her riches, I have often seen her cry; she cannot forget her first lover whom she sent away because he was of too high rank."

"What nonsense you are talking, little Cadette; to send any one away because they are too grand!"

"But it is quite true. When Sophie Cheron was still young, and when she painted ladies' fans, she did one very beautifully for the Duchess de Richelieu, who was so delighted with it that she sent for her, a thing she had often done before, for the duchess was fond of my godmother, and liked having her to talk to. This time, however, she was not alone; a handsome page of the queen's, Robert de la Haye, was laughing and joking with her. He duly admired the lovely painting, but the maiden still more. The next day he called upon the young girl in her father's studio and ordered ten fans of her. He thought it necessary to come almost every day to see how the work progressed, and he always had many suggestions to make; he asked her to add a tendril or a flower, and he liked the butterflies such as Sophie painted. And as old Cheron had sharp eyes, but was very deaf, and his daughter worked in the deep recess by a window which was in itself like a small studio, the young page could sit on a low stool near her, and looked less at her hands than at her face. My godmother must, in her youth, have been very lovely, for even now she is like a picture; and I must say, Antoine Watteau, when she walks through the room in her costly yellow silk dress with her powdered locks which fall on her shoulders, when the large pomegranate flower hangs behind her left ear, with her white neck and throat bare, around which is fastened the black velvet ribbon to which the charm is attached, she seems to float by so lightly and yet so proudly as if in a cloud, I always think that amongst the youngest and prettiest women, she looks the youngest and prettiest of all. Therefore it was no wonder that in the days gone by, the young page (he was a marquis' son) stopped off his seat at her small feet and whispered to her about love and truth (old Claude was scolding a scholar behind his curtain), and begged the mistress of his thoughts to accept his heart and life.

"Can you guess what Sophie Cheron answered, with a merry laugh? 'Not until you have remained faithful to me for thirty years will I believe your words and accept your offer.' My godmother has told me that pages are not noted for their constancy," added Cadette, very seriously. "But fancy, the handsome Robert de la Haye disappeared, after her answer, out of Paris, and sent her as a farewell, the charm which I have broken, and a small piece of paper upon which was written, 'Au revoir in thirty years.' And from that time until now, she has heard nothing of him. I believe the thirty years are over, but I do not like to ask my godmother. I know full well," added the girl very seriously, "that she is sorry she sent him away, and that she has never cared for anyone else."

"The page was wise; it would have been difficult for him to remain faithful in Paris, but abroad it is different; does not Sophie Cheron understand that?" remarked Antoine, smiling.

"I shall only forgive such a nasty speech from you, if you make haste and paint the charm, detestable joker. And, now, farewell; if you keep your word, I shall keep mine."

He held the little hand which she gave him a moment in his and whispered, "Cadette, you do not know how happy you make me, when you are so kind to me." Blushing, and her heart beating violently, she escaped. It was high time, Mdlle. Cheron had already rung her bell. But how quickly the time had passed away!

The artist was ranked, in fact, amongst the richest and most renowned women in Paris. People treated her like a princess, and her former noble patronesses now visited her willingly as her guests. The flower of renown and wealth had sprung up quickly in her case. Her delicate and original painting had become the fashion after Henrietta, Duchess of Orleans, shortly before her death, had used a fan painted by Sophie Cheron. The ladies of the Court and of the aristocracy, as well as their admirers, ordered for presents, paintings on enamel from her, and her father's studio was never free from visitors. It also sometimes happened that somebody wished for a motto, or a well-turned compliment to be put upon his present. Sophie could write verses. About the same time she tried her hand at miniature painting, and succeeded so well, that she soon had more orders than she could attend to. In her twenty-sixth year, she was elected (at the suggestion of the celebrated Charles Lebrun) a member of the Academie des Beaux Arts in Paris—an honor never before bestowed upon so young a lady. Cheron then bought a large house and began to live in grand style. She could now afford to enjoy the "dolce far niente," and only executed such orders as pleased her, and enjoyed life like all the other women at that time. Her reputation remained spotless and her heart untouched. Her poetry and prose soon excited as much interest as her painting, and her fame as a poetess had spread far and wide. Some years before, the Academy at Padua had elected her a member under the name of Erato. She refused all offers of marriage, and said she would never leave her father.

She was no longer young when the old painter closed his eyes forever on the things of this world; but there are some who in heart and feelings remain ever young, and to this number belonged Sophie Cheron.

She was surrounded and feted by the elite of Parisian society; her house was the rendezvous of the learned and the talented; poets and musicians met there, as well as the nobility, and her garden parties were much sought after. But not only did the rich and happy crowd to Sophie Cheron's, the poor and unfortunate turned to her, sure of receiving aid and consolation. No one ever gave help more joyfully, or advised better than she did. The amiable Abbe Bosquillon had called her "the angel," and that remained her nickname.

Antoine Watteau brought back the locket only about an hour before the garden party was to begin. Cadette was trembling with fear and anxiety, lest he should bring it too late. She could scarcely look at it, there was no time; she fastened it with trembling hands on to the velvet ribbon, and tied it around her godmother's neck. Antoine Watteau, after having been regaled with plenty of good things, was hidden in the bushes not far from the large lime tree. At last his long-cherished and secret wish was realized. How anxiously he had dreamed of such a treat. What a charming place, in the blooming thicket, had Cadette directed him to, behind the yew-tree hedge. There he remained quite motionless, and the whole world disappeared; only one thing absorbed his thought—a large shady garden, with splashing fountains, old trees and dark green grass plots and charming forms that enlivened the garden and the lawns. It was not till long after dark, and when the gardens had been lighted up, that Antoine Watteau slipped, enchanted, out of his hiding place, and went into the house; he had forgotten to eat or drink. Cadette ran towards him in the dimly lighted hall, carrying a dish of fruit. He seized her hand absently and excitedly. "Thanks, thanks," she heard him whisper, and then he was gone, "How foolish to be in such a hurry," murmured the young girl half sad and half angry, "I could have spared him plenty of time. . . ." It was long after midnight when Cadette, with sleepy eyes, undid her mistress's hair. Sophie Cheron sat in her dressing-gown, and leant back fatigued in her arm chair. She drew dreamily the ribbon of her locket off her neck. Cadette had not thought of unfastening the bow, the locket slipped into Sophie's hand. Her beautiful eyes, gazed for a moment at her favorite jewel—she cried out with astonishment, then she burst out laughing, and at last exclaimed, hurriedly, "but where is the enchanter who has painted this wonderful cherub for me? What has happened to my charm? tell me all Cadette!" The locket shone in the candle-light; the trembling Cadette stared at it. Such then were Antoine Watteau's angels! A lovely little Cupid sat in all his irresistible, roguish beauty upon a cloud, and held a silver trumpet to his mouth. Whom did he intend to summon?

The young girl, sobbing, confessed all to her godmother. But wonderful to relate Mdlle. Cheron was not angry. She kissed the weeping maiden, and sent her to bed, telling her that she must bring the Cupid-painter to her on the following day. That little Cupid decided Watteau's fate. The renowned and admired Sophie Cheron took the young painter under her protection, and introduced him into society, where he soon became a general favorite.

He painted the fashionable world of Paris of that time in all its beauty and thoughtlessness, and was present at all the parties of pleasure there given to while away the time.

But was the painter of all these fetes happy? He was the son of a poor lace-seller in Valenciennes, who, since his childhood, had longed to be amidst such pleasures. Did he ever find love and truth equal to what had shone upon him during his residence as scholar with Claude Gillot, and which he had thrown aside so lightly in the days of his prosperity? Watteau's biographers relate that he left Paris sick and tired to go to England, and when there he was tormented by a longing to return to his enchantress, Paris. But when he went back he became possessed with a still greater longing to visit Italy. That wish remained unfulfilled. Whatteau died at thirty years of age in Negent. No heavy silk dresses appeared at his bedside, no joyful voices, no waving of fans struck upon his ear, but a soft hand smoothed his pillow, gentle, faithful eyes looked at him forgivingly, a soft voice prayed for him in his last moments, a sister of mercy, once the joyful little Cadette, nursed the dying man.

And as regards the charm!

The little Cupid's silver trumpet seemed to have wrought wonders. The former page who had disappeared so mysteriously came back again suddenly (after all sorts of adventures, and a long imprisonment), as a great hero, and still more wonderful to relate, as a true lover. Sophie Cheron became in her fifty-ninth year Madame de la Haye, and no one seemed astonished at it.

Where the rococo locket went after the death of Sophie Cheron, in 1711, perhaps might be revealed to us by the little Cupid upon the rose-colored enamel if he had the gift of speech.

The novel union of two exquisite talents will always make Cheron an ornament to France. The charms of her brush equalled the excellence of her pen.

VINTAGE TIME IN GERMANY.

BERTHA A. WINKLER.

It was on the first day of October when our travels brought us into the famous wine regions of Germany where we intended to sojourn for a few days in order to witness, what our portly landlord called, the "Kelter opening," which, judging from the lively gesticulation accompanying his description of that important event, must certainly be a rousing and curious sight. It was therefore not strange that I rose the next morning with more alacrity than usual at the call of the maid and took a peep, full of expectation, up and down the village road which, in spite of the early hour, was already groaning under the heavy wheels of clumsy carts.

An unusual bustle, a strange, subdued noise pervaded the misty air about me. The whole village was astir and active, yet in such a quiet, mysterious manner that it reminded me more of an army preparing for a sudden attack upon the unsuspecting enemy, than a quiet, peaceful village about to gather its annual harvest of grapes. Women, in short gingham petticoats, were passing to and fro with all sizes of tubs and buckets on their heads. The younger folks were standing in groups, conversing and flourishing their grape-cutters or "habbe" (a short knife bent in the shape of a sickle). While others stood impatiently, cracking their whips over the backs of their ox-teams who were yoked and ready for service. Evidently something was being waited for, and I was about to turn to the inn-keeper and ascertain the reason of the delay when my attention was attracted by the tinkling of a bell, and looking again I saw a man wearing a cocked-hat and a blue coat ornamented with immense brass buttons, striding up the road in all the dignity of his office. Halting at the inn, while he gave his bell a few more vigorous shakes, which soon collected a goodly crowd, he issued the following proclamation: "The inhabitants of E—— are hereby notified that the Kelter will be opened this morning at six o'clock. All those whose tanks are secured there will report at once. By order of the Herr Schult-heis."

This was the signal for starting. He had scarcely finished when a suppressed "Vivat!" burst from the lips of the laughing, noisy standers. The whole village rushed now in the direction of the Kelter, and in less than five minutes the hollow rumbling of empty tanks sounded like thunder on my ears. This roused my sleeping traveling-companion, who hastily dressed herself and joined me just in time to see the first and largest tank, which measured about eight feet in diameter, drawn past the inn, followed by a long train of smaller ones, all decorated with gay ribbons, flowers, and wreaths of evergreens, amidst the lusty shouts of "Hue! Hott!" from the brawny drivers, and songs and laughter from the villagers, as their happy, smiling faces were turned to us with a look of curiosity not unmixed with conscious pride at their own festive appearance. The novelty of the scene, the gay tumult and excitement were contagious, and we, unable to resist the influences of the general excitement, waved our handkerchiefs to the passing caravan. A double "Vivat!" greeted this unexpected salute from the strangers, and one handsome young German, not to be out-done in courtesy, gathered a handful of flowers which decorated his tank and threw it up to our window, amidst the shouts and clappings of his comrades.

In the afternoon we made our way up to the "wein-bergs," from whence we had a good view of the quiet and now almost deserted village, nestling below amidst a miniature forest of fruit trees between the vine-clad hills which stretched themselves in a small mountain chain around the rear of the valley, while further away the white stubble-fields, dotted here and there with patches of green clover and yellow corn, made the checkered landscape look like an immense patch-work in the far distance. Below, we saw peace and tranquility in the quiet village, with

its quaint, old-fashioned dwellings and the sleeping valley with its murmuring brook lazily gliding through its everchanging labyrinth with falling autumn leaves dancing noiselessly on its surface. Above and around all was life and bustle. The whole region swarmed with busy vintagers whose brightly-colored costumes formed a lively contrast to the somber, autumnal aspect of the surrounding country as they darted to and fro among the now half-dismantled vines, filling the air with merry words and happy laughter while their nimble fingers were deftly cutting the purple clusters of grapes from the vines. Lusty shouts, gay carols and snatches of popular ballads rose through the vapor of the autumnal landscape while, from the opposite hills, the air came freighted with the echo of a chorus of sonorous voices, singing a national song with such strength and harmony that it thrilled our hearts with emotion and pleasure and caused a momentary hush of chatter among the busy workers around us.

We could not help but notice the sweet, harmonious blending of labor and pleasure, the cheerful industry in the midst of song and laughter. Little eight-year-old children stood cutting the grapes with the practical, business-like air of a grown person. Young, rosy-cheeked girls balanced the heavy tubs full of the luscious berry upon their heads with an ease and grace worthy of a finished gymnast, while the male portion carried their indispensable "Buddens"—(a deep wooden vessel in the shape of a half barrel cut apart lengthwise and secured to the shoulders with leather straps or twisted willows).

It is strange that, in this secluded village where the cruel, exacting customs of the outside world are usually so little observed, it should be considered vulgar and unwomanly for any female to carry one of these "Buddons,"—which are handled with so much more ease and comfort than the heavy, unwieldy tubs,—while at the same time it is nothing unusual to see a woman plow the field or push a wheel-barrow!

When the sun began to decline in the west and the vintagers, with their tanks and barrels full of half-pressed grapes, formed themselves again into a long train down to the village, we descended the hills, which were still ringing with the cheers of a few stragglers, and preceded the long caravan of carts to take a view of the Kelter, before the busy harvesters arrived. The Kelter is a large, square, wooden building, similar to an American market-house in style of architecture. The stalls or apartments containing the tanks are numbered and ranged on either side; in the center is a large wine press, where each of the villagers takes his turn. The Kelter is opened on the first or second day of October and closed for the rest of the year at the end of the month. The season of grape-gathering seldom lasts longer than three weeks, at the end of which time there is a grand festival, called "Kirby," where the wine-merchants from the city, after closing their bargains, are feasted with new wine and the young folks have a grand hop at the inn.

QUIET PEOPLE.

THE misgovernment of the world is carried on with such an amount of talk that one has seldom time to think how little would suffice. Half-a-dozen well-chosen words would generally be better than whole conferences and debates. Both wise and foolish people have broken much silence in praising it. The silent man is often enabled, by the value attached to his rare utterances, to say more by his silence than a voluble talker by a string of phrases. There is a kind of silence which is the reverse of talk, and is in itself eloquent. A prisoner who reserves his defence, a witness who refuses to answer a question, a man who holds his tongue when his character is assailed—in short, all the cases in which "silence gives consent" are rather silence as the negation of speech than as a positive quantity. It is quite easy to imagine loquacity in a deaf mute. He may not have power to utter a sound, yet, in the strict sense, he is not perhaps a silent person. And silence kept on purpose to express, by its very existence, an emotion of the mind, is only a substitution of signs for speech. Such is the reticence displayed by the well-known epitaph on a tombstone in Fulham churchyard, where, after the name, age and date of death of the lady buried below, three words only are added by way of epitaph—"Silence is best." The estimation of the deceased by her surviving relations could not be more fully expressed had the whole stone been covered. When a character is to be given to a drunken or dishonest servant, the omission of the words honest and sober is sufficient. But this is not the silence of quiet people. Too often they resemble rather the chimpanzee than the parrot, and are not talkative because talk may involve them in further exertion. But it is not easy to pry into their motives of action, or rather of inaction. The Ulster folk have a proverb, "Nobody can tell what is in the pot when the lid is on." It is not the most unselfish people who talk least about themselves. To some the facts which relate to their personal history are too serious for words.

Unspeakable are the emotions of silent people; a sense of personal dignity or shame keeps them quiet; but to most of them is vouchsafed a single confidential friend, into whose ear all the pent-up feelings are poured from time to time.

This is especially the case with quiet girls. What they say in their moments of confidence we cannot pretend to know. Whether they are really quiet or only shy is equally beyond the superficial observer. That they are not found to impede the pleasant flow of soul in ordinary society is because they are eminently good listeners, and do not yawn at the utmost commonplaces. That another should commit himself to speech, with or without anything to say, is enough to interest them. They are thought sympathetic, and often draw forth the tale of woe long hidden. Men begin by telling them of other loves, and often end by loving them for themselves. In this they have advantage over the more gushing sister. They take no notice of a foolish speech, and a man imagines he is safe in their hands. He can say things to them which, said to any one else, might have serious consequences. A quiet cousin is thus often a great blessing to a man. He can talk a matter out as if with himself, and imagine afterwards that he has had counsel upon it. The quiet girl hears him with outward sympathy, agrees with all his views, and, when asked to help him to a decision, gives her casting vote in favor of the course he already prefers. He finds after a time that her quiet receptiveness is grateful to him; and, when she has seen him safe through an engagement or two, and half-a-dozen flirtations more or less serious, he suddenly finds out, or at least tells her, that he has really been in love with her only all the time. Sometimes this happy result is brought about by scheming, and it is the great drawback of quietness that duplicity is so often attributed to it. The quiet girl of the family regulates the autumn tour; she silently directs its goings to the place where her bosom friend, male or female, is to be met with, and she will bury her sisters in a northern moor or bake them at Brighton with equal and unruffled composure. True, she never asks to go anywhere in particular; but at odd intervals she hazards a remark which suggests the place, and now and then reads out a paragraph from a letter or newspaper in which its advantages are set forth. What she does say is listened to by the family, for she is always sure of an audience for her rare utterances, and gets a reputation for good sense which she does not always deserve. She is never in scrapes, or, if she is, keeps them to herself. Her allowance is never overdrawn, or, if it is, no one hears her grumble that she cannot make ends meet. There seems to be a method in her doings to which people instinctively yield, and she gets her own way, not so much because she tries to get it, as because nobody thinks of opposing her. Like the flies whose feet are provided with soft pads, so that you do not feel them when they alight on you, her influence works unnoticed, and everything seems ordered for her rather than by her. She almost monopolizes the attention of the lady's-maid she is supposed to share with her sisters, and can always manage a cup of tea in her room or breakfast in bed. She can flirt, on occasion, in a way no frivolous girl dares to attempt, but she never writes a compromising letter, and has a most convenient want of memory. She accepts presents which her sisters would have to refuse, and keeps them laid by in cotton wool to look at during the hour she is doing her back hair and saying her prayers. She retires gracefully in favor of the other girls, as if willing to let them shine, and gets her reward by the approbation of the old people of the party.

Quiet men find her agreeable, and wonder why she is said to be silent, but this is chiefly because she does not bore them by insisting on answers to her questions. When she develops into a wife, for she always marries at least once, she gets her own way in everything. Her husband probably chose her because he thought it would turn out differently, and finds when too late that he could not possibly have made a more complete mistake. Children are always fond of her; sons respect, if they do not greatly love quiet mothers, for they have never heard them talk nonsense. Servants never give them short answers, as their words are few and decisive, and the poor people think them dignified and mines of hidden wisdom. In fact, they go through the world under a kind of false pretense; they get credit for great depth of feeling, and it is for some reason thought well worth while to win their love. Only the experienced man estimates them at their right value, and admires the merry little sister with the sharp tongue, the pleasant smile, and as he knows well, a warmer heart and truer character than underlie the staid demeanor of the quiet girl.

Quietness is sometimes a sign of bodily health. The nervous man who is always stirring is seldom strong. But when a man is thoroughly wrapped up in himself and his own importance, perfectly satisfied with his position and prospects, the cut of his clothes, the length of his whiskers, the attenuation of his umbrella, and luster of his hat, the chances are that he is very quiet. Such men are habitually well dressed; but as they get on in life they cling to old fashions. They are not considerate for others, yet they give very little trouble. They exact the utmost service, but make no fuss about it. They are painfully regular and punctual, but never seem put out by other people's want of order. They are bores at a dinner party, wet blankets at a picnic, mere sticks at a ball; but excellent as officers, admirable parsons, and much sought after by match-making mothers. It is they who carry off the heiresses; who always save money; who are never in debt or difficulty, as other men are; who are regular in their devotions, and invaluable on committee, where they always get their own way without trouble or fuss. They habitually wait till every one else has spoken, and then make the single remark which concludes the matter, and which seems as if it had risen to the surface, like cream, of itself.—*Fortnightly Review.*

HOW TO LEARN TO SWIM.

MAN, for the most part, must learn to swim; and here is the recipe. It must be understood that we are teaching a man come to years of discretion. First, work up theoretically and practically (as far as may be out of the water) the position of the body in swimming, and the rhythmical extension and adduction of the legs and arms. Then boldly walk into the sea, when it is rather calm, up to the chin, turn to the shore, and fall forward on the chest, letting the arms cut the water before the body, and practice the motions, now familiar to the mind from the treatise. Never mind swallowing a little water! Persevere in this for several days in succession, and then, if possible, get a swimmer to support your chest for a minute or two. Or, better still, as man is nearly of the same specific gravity as water, the addition of a very few pounds of cork will make him float. Get several pieces of cork, therefore, and fasten them to loops in which the arms can be inserted, and with the addition of these you will find, when the "stroke" is once familiar, that you will easily float, and what is more, make progression through the water. Stick to this plan for a few more days, and then try your own unaided powers again, and you will be astonished to find that you can swim. In this way, without any swimming-master or parade of any kind, swimming (we speak from personal experience) is easily learnt, and then what a treat, and what a charming mode of gaining exercise, does a bath in the sea become!

Instead of being a shivering duty, looked forward to as a necessary part of the *poojah* due to a watering-place, as an Anglo-Indian would say, the daily bath is eagerly welcomed, and the whole system invigorated and braced up by it. For the swimmer leaves the water with every muscle and limb aching with his exertions, and the whole body pervaded by a healthy glow of which he will feel the beneficial effects throughout the day. When once the stroke is familiar to a man—comes, as it were, by instinct to him (as it surely will if the above *modus discendi* be persevered in), all that is needful is to set one's self daily the task of a stroke or two more, and soon the learner will find himself able to swim any reasonable distance, not now near the side, but boldly dashing out among the waves. Thus, if he finds he can only struggle on for six strokes to-day before his face sinks and he gets a ducking, to-morrow let him set himself the duty of struggling on through seven strokes, eight strokes next day, and so on, never being satisfied with his efforts until he has succeeded in performing his daily number of strokes. In this way a visit to the sea becomes a happiness to be looked back upon ever after in a man's life with pleasure. How much better is it thus to have acquired the mastery over a strange element than to have lounged up and down the beach for many mornings, listening to Italian organ-grinders and smoking innumerable cigars.—*Cassell's Family Magazine.*

RECENT LITERATURE.

His Dear Little Wife. Philadelphia, Pa.: J. M. Stoddart & Co. Price 25 cents.

A tale more sad, tender and true, we have never read. It almost passes belief that a man is the author of it, for it would seem as though only a woman who had suffered could so faithfully portray the misery of the "Dear Little Wife." So long as a man provides for his family and refrains from using any actual violence towards his wife, he is esteemed a good husband; and yet all the while he may be crucifying his wife by his self-assertion and his thoughtlessness. The fatal doctrine that the wife is to lose her identity in, and to be absorbed by the husband, develops selfishness and tyranny in the man, and is the occasion of bitter unhappiness to woman. The author has taken the "subjection" theory for his text, and his treatment of the subject shows him to be a keen observer, and to be possessed of a deep knowledge of womanhood, its nature and needs. If the average man could but be induced to read the book, and profit by the lessons it teaches, many a wife would have reason to bless the author for having written it.

Savell's Expiation. Translated from the French of Henry Greville, by MARY NEAL SHERWOOD. Phila.: T. B. Peterson & Bros. Paper, 50 cents; cloth, $1.

THE author's reputation as a powerful and original writer is rapidly becoming an accomplished fact with American readers. And we have now under notice the book which has done more towards establishing her reputation abroad than any other. For strength, variety and a marked dramatic interest, it takes precedence of all her other works, and ranks among the first of modern novels. The characters are boldly and powerfully drawn, and the incidents are varied and intensely interesting, while the underlying strata of pathos and tenderness soften the effect of the rugged individuality of the characters upon whom the plot rests. It is a story of the time of Russian serfdom, and though there are scenes of painful interest vividly depicted, there is nothing of the sensational and nothing overdrawn. The author's forte is in her appreciation, analysis and delineation of character and remarkably realistic descriptions. The language is always refined and elegant—the translator having done the author justice, and altogether the book is thoroughly enjoyable.

Six to One. A Nantucket Idyl. New York: G. P. Putnam's Sons. Cloth, 75 cts; Paper, 40 cts.

THIS is a pleasant little story of an editor's summer vacation at Nantucket where he is lionized by six young ladies of whom he enjoys complete monopoly. The peculiar circumstances render everything like a plot out of the question and there is even a dearth of adventure until the hero of the "Idyl" wrests his favorite naiad from the clammy embrace of Neptune who sought to win her for his own. After this the two become satisfied the other five girls are not absolutely necessary to their existence, and poetic justice is accomplished.

LITTELL'S LIVING AGE.—Littell's Living Age for the week ending September 14th, contains a very interesting article, entitled The Four Last Sultans, translated and abridged for the magazine, from advanced sheets of a work by Count E. de Keratry, ex-diplomatist at Constantinople. The number also contains the Baptismal Creed of the Early Roman Church, Contemporary Review; The Trial of Two Quakers in the Time of Oliver Cromwell, from original documents by A. H. A. Hamilton, Frazer's Magazine; The First Edinburgh Reviewers, Cornhill Magazine; The Bewilderments of Science, Spectator; Thibet, Nature; The Drawbacks of the Intellectual Life, Spectator; instalments of two serials, one by Miss Keary, author of Castle Daly, Oldbury, etc.; the other by Mrs. Oliphant, and both published from the authors' advance sheets; together with the usual choice poetry, etc.

BRIC-A-BRAC.

THE TALE OF TEN THERMOMETERS.

Ten little 'mometers roosting on the "Line,"
One fell and broke its "neck"—then there were nine.

Nine little 'mometers scoring hundred 'n eight.
One "its biler bust"—in passing old "Death Rate."

Eight little 'mometers sending folks to heaven,
One had a sunstroke—counted out by eight to seven.

Seven little 'mometers all as light as bricks,
One took too much frigid ice—leaving only six.

Six little 'mometers trying hard to thrive,
One turned up his tiny toes—you couldn't count but five.

Five little 'mometers, oh, to hear 'em roar!
One broke its vitrous case—now hung only four.

Four little 'mometers seeking shady spa,
One its "innards" did congest—thermometric cholera.

Three little 'mometers looking deuced blue,
One it swallowed mercury—and "shook" the other two.

Two little 'mometers warming up the sun,
Both started for St. Louis—I've only heard of one.

One little 'mometer dressed en dishabille,
It's got a fan and tub of ice—but is very, very ill.

[*Cincinnati Commercial.*

NOTHING LIKE TRUST.—Spurgeon says: "There is nothing in the world that impresses a man so much as trust. Some years ago I was mastered by a dog in that way. I own, in fact, that I was beaten hollow, and he was a conqueror over me. He came into my garden, and he had no business there. Thinking that he would not improve my flower-bed, I walked along quietly and threw my stick at him, and thus advised him to go somewhere else. What did that dog do? He stopped, picked up the stick, wagged his tail, and came running to me with it, and laid the stick down at my feet. I felt ashamed of having thrown my stick, and the dog was told he might come round the garden when he liked. How could I do otherwise?"

THE LIFE OF THE ROSE.

[From the French of M. J. Resseguir.]

Rose
Fair
There
Grows,
To whose
Lot
What
Close?
Sweet;
Fleet;
Chill
Breeze
Will
Seize!

THE poet Southey mentions that in days gone by, the Mayors of Leicester used to be chosen by a sow. The candidates sat in a semi-circle, each with his hat full of beans in his lap, and he was elected Mayor from whose hat the sow ate first.

A CALCULATION has been made and confirmed by several distinguished engineers, to whom it was submitted, showing that the population of the whole world, fourteen hundred millions, could find standing room on the Isle of Wight.

"The sandal wood perfumes, when riven,
The axe that laid it low.
Let him who hopes to be forgiven
Forgive and bless his foe."

A DISTINCTION WITH AN INDIFFERENCE.—"Why," asks the Scientific American, "should not a child be taught to write with both hands indifferently?" We don't know, unless it be that indifferent writing is hardly looked upon as a desirable accomplishment. We could point out quite a number of people who write so indifferently with one hand that it is a matter for gratulation that they cannot use both.

"DON'T GIVE IT AWAY."

From the simplest flowers by the wayside,
Fair wisdom may cull a bouquet;
A street-phrase may oft point a moral;
There's sense in—"Don't Give it Away."

If you hear of a choice bit of scandal,
Be it "spicy" or true as it may,
Don't eagerly hurry to spread it,
Do better—"Don't Give it Away."

When a gossip persistently bores you,
Your fellows or friends to betray,
Be polite as you can, but remember
Be firm, and—"Don't Give it Away."

When a confidence rests in your keeping—
When a friend to your ear doth convey
Some secret he trusts to your honor,
Take care you—"Don't Give it Away."

[*Stamford Advocate.*

THE old-fashioned custom, still existing in some parts of the country, of crying out "God bless you!" when any one sneezes, is not confined to England. In Russia, if the emperor happens to sneeze in any public place, the whole assembly cries out to wish him good luck. The origin of the custom is lost in obscurity, although it has been attributed to Pope Gregory the Great, who died in 604; but numerous allusions in classical authors, and the prevalence of similar salutations among savage tribes, prove that this idea is without foundation. There is also a tale which may possess some truth, that in the days when the plague was common, a violent sneeze marked the crisis of the disease, to which the bystanders then wished a happy termination. Among the Highlanders and Irish, it was believed that any one sneezing thrice without being thus saluted, became subject to the power of the fairies.

FATHER TAYLOR, while lecturing on temperance, was hissed by one of his hearers, a notorious drunkard. Taylor stopped, pointed to the offender, and said, "There's a red nose got into hot writer, don't you hear it hiss?"

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

OLD GRANLEY.

OLD GRANLEY swore by all the leaves
That were upon the tree—tree—
He'd do more work in one short day
Than his wife could do in three—three—
Mrs. Granley she came in, she says,
"You shall have trouble now—now—
For you shall do the work in the house,
And I'll go follow the plow—plow—
But you must milk the mooley cow
For fear she will go dry—dry,
And you must feed the little pig
Which is within the sty—sty,
And you must put the cream in the churn
Which is within the frame—frame,
And you must see to the fat in the pot
That it don't all go in the flame—flame;
And you must feed the speckled hen
For fear she'll lay astray—stray,
And you must reel the spool of yarn
That I spun yesterday—day."
Mrs. Granley took the whip in her hand
To go and follow the plow—plow.
Old Granley took the pail in his hand
To milk the mooley cow—cow.
The mooley cow—she kicked—she raved,
She rumbled with her nose—nose,
She kicked Old Granley on the shin
Till the blood ran down to his toes—toes.
He went to feed the little pig
Which was within the sty—sty,
He hit his head against a beam
And his hair began to fly—fly.
He went to watch the speckled hen
For fear she'd lay astray—stray;
And he forgot the spool of yarn
His wife spun yesterday—day.
He went to put the cream in the churn
Which was within the frame—frame,
But he forgot the fat in the pot,
And it all went into the flame—flame;
He looked east—he looked west,
He looked to the sun—sun.
He thought it was the longest day,
And his wife would never come—come.
Mrs. Granley, she came in,
And she looked sad—sad,
She wheeled herself around about,
And said she was glad—glad.
And then he swore by all the leaves
That were upon the tree—tree
His wife could do more work in a day
Than he could do in three—three.

[Boston Woman's Journal.

A LETTER TO YOUNG MOTHERS.

MRS. ELIZABETH BOYNTON HARBERT.

"EXPERIENCE is the best teacher," we are told, hence this morning I present you with a leaf from the letter of a friend, written on her first anniversary: a short recital of her own experience:

When we were first married I was not altogether perfectly, ecstatically happy. Of course you know that George could not be other than thoughtful and kind, and when I could have his society I was contented and happy; but, alas, I scarcely saw him. Previous to our marriage we always passed two evenings of each week together. We learned new music, read new books, and I thought had laid the foundation for friendship as well as love. But scarcely were we settled in our cottage when that great anaconda of business, money, business, came coiling in, and every hour for reading, every moment for music, were swallowed up, and one morning, after George had almost strangled himself with a hot cup of coffee, had flashed his mustache across my cheek and called it a good-by kiss, and then reopened the front door to call back, "Don't wait dinner for me, pet—I have a business engagement that will detain me," it flashed through my mind that my life-work was keeping a boarding-house for one, and that boarder too busy to even take time to compliment his landlady. The honest fact is, I do not believe I was a very fascinating landlady, either. Why? Unfortunately household work was very distasteful to me; in vain did I try, and try earnestly, to overcome it, and ignore the fact, but three times each day I was brought face to face with the stubborn, unyielding fact that washing greasy dishes was an abomination to me.

The atmosphere of the kitchen when vegetables were boiling was almost unendurable. I was awkward and extravagant. I soiled my clothes, burned my fingers, worked from morning till night, accomplishing little, and was often untidy and cross when my husband returned at night. Added to this, although I worked hard, my husband did not realize that I earned anything. He never gave me a dollar unless I asked for it. I felt like a beggar, and he never dreamed that I felt so.

What was the trouble? I was endeavoring to perform work that was not only especially distasteful to me, but work for which I had never been prepared by instruction or experience. Taking a view of the situation, I soliloquized as follows: "Caroline, you are certainly good for something in the world, but you are certainly not a success as a housekeeper; what are you good for? What have you been trained to do?"

Immediately there flashed before me the money and time expended upon my musical education. Evidently if I was fitted to fill any niche it was that of a music teacher. Music I enjoyed. As a result, when George returned that night he received the announcement that I had secured several music scholars; that I had engaged a poor girl that was killing herself sewing to do my dish-washing. She disliked sewing, and was living in a garret. I could give her a good home, thus rendering two people comfortable.

My husband at first seriously opposed my plan. He insisted that it would be very humiliating to him to have his wife give music lessons. "What will people think if I am not able to take care of my wife?"

"My dear, you are not able to take care of me now, and I am as strong and as able to assist in earning our home as you. As our business is now arranged you have no time for reading for culture, for home life, while I am compelled to devote almost all of my time to very distasteful labor.

By this new arrangement I will be obliged to give but twenty-four hours per week to business, and the family purse will be helped and the home better managed, and we shall have more hours together.' Of course I carried my point, and we have been happier than ever before."

And this letter is only typical of many others from which I might quote.

From babyhood girls are wronged in the suppression of their natural tastes and preferences. The evident restlessness of American women to-day is the natural recoil from this despotism of repression.

The fond father, watching for the first faint indication of genius in his boy, observes that he has a preference for machinery, and the house is filled with boxes of tools, toy engines, and wind-mills; while speculation as to his fortune is one of the most interesting subjects of family conversation—but what if his tiny sister evinces a special talent for millinery? Do we hear any fond anticipations of the time when she is to become an artistic milliner? And yet is it n t just as honorable to combine flowers, fruits, feathers, laces, in pleasing effects as to combine paints?

Or what if the daughter should evince skill in designing; if her artistic soul harrowed by the frightful blending of colors in the carpet, the grotesque figure of the wall-paper, should design something better? Would she receive the same encouragement as her brother? Oh! mothers, seated by your sweet girl children, watching with tenderest mother love the first faint indications of genius, taste, or individuality, as you value the possibilities of life, hesitate ere you attempt to crowd that little soul into the straight-jacket of custom and prejudice: God, with infinite wisdom, bestows upon your child a genius for practical art, and the world needs art—but custom produces the straight-jacket and says: "God has made a mistake; you are to wash dishes and sweep and dust."

God sends the gift of song, and bids this girl-child write. Write earnest, pleading, womanly words, mother words for the great sin-sick world. But custom hints, "God mistook you for a boy. He meant you should only live for love; touch literature, and being a woman, you may fail of love; bury your talent, buy a broom, let not an inkstand mar your feminine hand; so shall you win a husband."

Yet again, there comes surging through another soul messages of love and hope and peace for humanity. "Think what the Christ hath done for you, will ye not confess Him?" The woman's heart beats back a responsive, "Yea, Lord," but the Christian Church writes over her pulpits, "Sacred to men."

Because of these things, little mothers, because of these tyrannies of custom, I plead with you to diligently seek for the light.—*Inter-Ocean.*

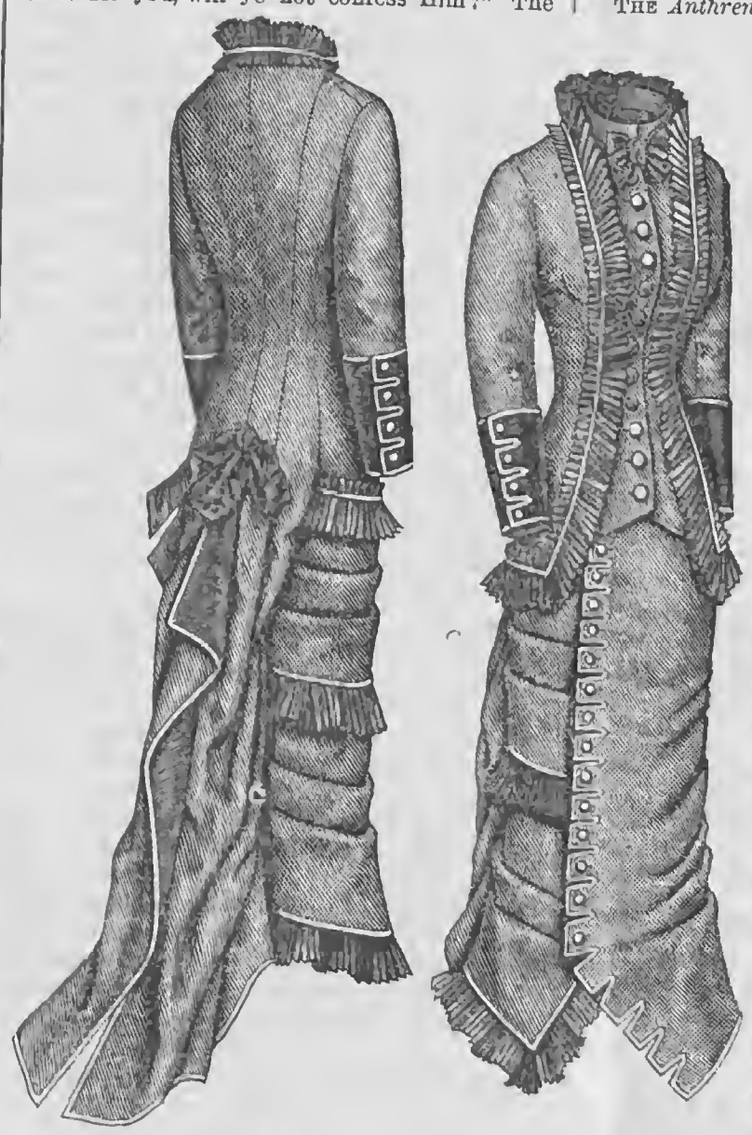
6340

6340

DESCRIPTION OF CUTS.

IN reply to a number of inquiries for the latest designs for overskirts or dresses, we give two models 6340 and 6341. The first named is a suitable pattern for a second best dress. Made of woolen goods and trimmed with braid or pipings, nothing could possibly be devised which would be neater. No 6041 on the contrary is rather too dressy for common wear. The front of this polonaise falls in a neat outline over the skirt, the center of which is formed of an extension left upon the front edge of the left side front, from the waist line to the bottom of the garment. At its side-edge the extension is cut in square blocks that are piped with silk and buttoned to the adjoining edge of the right side front to a short distance above the lower edge, while at its top it is confined to a band by means of which it is properly adjusted. The printed directions which accompany this (as every other pattern) give full details as to how the pattern is to be put together and the polonaise made. The price of either of these patterns is 30c. If any ladies desire patterns of any special garment either for themselves or their children, if they will drop me a postal card stating what they would like, I will either publish a cut of same or write them describing it.

FAITH RIPLEY.



6341

6341

EUROPE'S RETURN FOR THE AMERICAN POTATO BUG.

THE CARPET PEST.

THE *Anthrenus Scorphulariæ*, an insect well-known in Europe for its destructiveness, made its first appearance in this country about two years ago, to the consternation of the few house-keepers whose possessions it preyed upon, and now that it threatens to extend the sphere of its operations and become a national nuisance, it may not be amiss to acquaint the RURAL readers with a few of the methods employed for destroying it.

The ordinary moth-remedies—camphor, turpentine, tobacco—are utterly without effect when used against these creatures. They show a special liking for carpets, furs and woolen and cloth goods of every description, and the question has been how to destroy the insect without injury to the fabric. Prof. Lintner recommends (in the case of carpets) that kerosene oil be poured in the crevices of the floor and that all places of retreat be filled with cotton saturated with oil. Prof. Hazen, Professor of Zoology at Cambridge says: I would recommend carbolic soap as a preventive.

It should be cut up in thin slices and put in between the carpet and the paper-wadding. It smells so badly that even the honest carpet-bug cannot stand it, and is forced to put distance between itself and the soap. Carbolic soap does not destroy them, but drives them away. Then, every morning the windows should be carefully inspected, and every beetle be destroyed. After the carpets have been taken up and carefully beaten, the floor should be washed with hot water and very strong soft soap. That is something they cannot stand. It kills them. It would be better if the washing is repeated two days after the first application of soap and water. It is unnecessary to add that the carpet should not be subjected to washing, as it would be spoiled by the operation. The cracks in the floor should be carefully filled with some destructive and preventive agent. Kerosene will kill them if you can make it convenient to camp out until the odor arising from it has died out. In the use of kerosene, benzine or kindred liquids, the insurance companies would have something to say. I would never counsel anyone to adopt any of these remedies."

The Boston Journal mentions another remedy: "From the description given of this bug or insect, it is the same that invaded this city some two years since, and from whose ravages among the costly furniture, choice carpets, valuable furs, and fine fabrics of many of our most opulent citizens, many thousands of dollars were lost. No effort on the part of our people could drive them from our households, until the introduction of the victorious Hemiptera Powders, which at once exterminated the pest.

"These powders were imported by one of our citizens, who, while on a visit to London, learned that this antidote had been prepared by Mr. C. S. Derby, an eminent chemist, for the especial extermination of this pest, which for several years had ravaged almost every prominent town throughout England, successfully baffling every attempt at extermination until the introduction of this effective antidote. These powders, which are sure death to all household vermin of every kind of species which infest our houses, are perfectly harmless to furs, woollens, flannels or fabrics of every kind, as well as to carpets or choice furniture."

A WOMAN'S PLAN FOR MAKING HOGS "KEEPERS AT HOME."

My neighbor's hogs!
Dod rot their bones.—

EDITOR OF RURAL:—I would like to shake hands with the author of Old Grimes, be it man or woman. If a person can get up in the morning and quietly view the destruction done by a dozen hogs he has more patience than JOB, for among all his tribulations there is not one word said in regard to hogs. I, being a woman, was simply furious, when I saw at least a half acre of my best corn utterly ruined. I had already notified the owner of the hogs several times. So I sent a polite note asking him to call at my house. He called; he took me into his confidence and told me that farming was up-hill work for a woman. Advised me to build better fences, said if I had done so before instead of raising a flag pole, it would have been better for me and for him, as then his hogs would not have got demoralized. I listened very quietly until he attacked my flag, (that is my tender point). I do believe I have more eloquence (some people would'nt call it that) than any ten women I ever knew, when my tongue once gets started. I said, "Sir, when I want your advice, I'll ask for it. Demoralize your hogs, indeed! Why they are the very herd of swine that the devil was cast into, for a lady saw them leap a five rail fence with corn in their mouths, and as to my flag pole, that is indicative of my character and independence.

I will give you till night to take care of your hogs, for to-day I shall put up a public notice, that I wish to protect my seed corn from crows and other destructive creatures and in order to do it, shall place strychnine about the hills; now sir, you may let your hogs run wild if you choose."

Another thing I wish to speak of, is Our Farmers' Club. I belong to it, and of course, 'tis first-class. Our officers are prompt and efficient, deeply interested in the coming Fair, and with so large a number working for the benefit of the community, it is strange that we are compelled to be always on the defensive, instead of having good laws to protect us from the invasion of our neighbors' cattle. Very Respectfully,

A woman who believes in justice and demands the same that she is willing to give.

Herndon, Va., Sep 9 1878.

MARRIED WOMEN'S RIGHTS IN THE EASTERN STATES.

IN Maine, a married woman may become possessed of real or personal property by bequest, demise, gift or purchase in her own name, and as her own property.

After marriage she still retains the custody of the property owned by her before marriage, and the same is exempt from liability for the debts of her husband.

She may sue in her own name to recover back her separate property.

In the event of her death without a will, her property, real and personal descends to her heirs.

She has full power to make a will, which requires three witnesses.

In New Hampshire, a married woman can hold property in her own name, may make contracts, sue and be sued, and can dispose of her property by will, and in case of her death without a will, her husband is excluded from any share in her estate.

It will require three witnesses.

In Vermont, a married woman is entitled to the same rights of property as in New Hampshire. Wills require three subscribing witnesses.

In Massachusetts, a married woman may hold property separate from her husband without the intervention of a trustee. A deed conveying land to a married woman must be recorded within ninety days of its delivery, or the land will be liable for the husband's debts.

Any married woman over twenty-one years of age may dispose of her property by will, provided her husband's consent is endorsed on the will in writing. If the devise is to her husband, his consent is not necessary.

Wills must be signed in the presence of three subscribing witnesses.

In Rhode Island, a married woman is entitled to her separate estate, which is not liable for her husband's debts, nor can he control the use of it. She may dispose of it by will in presence of three subscribing witnesses.

In Connecticut, the wife is entitled to her separate estate, which she owned before marriage. The proceeds of any property granted to her after marriage is held by the husband as trustee for her and her children, and his executors must account for the same. With the consent of her husband she may dispose of her property by will, which must be signed in the presence of three witnesses

NEW YORK STATE FAIR.

(Continued from page 601.)

HAY-LOADING by machinery is becoming yearly more popular as its convenience is more fully appreciated. The well-known Foust's Hay Loader, STRATTON & CULLUM, Moadville, Pa., was on the grounds, and it required little explanation. The Loader is easily and quickly attached to the wagon, it requires no extra men or horse to work it, and when in operation it adds but slightly to the draft. It can build a load, under favorable circumstances, in from six to eight minutes. Indeed, so rapid are its operations that at the recent trial at the Paris Exposition it attracted great attention on account of its novelty. The firm now have, besides their Centennial honors, a gold medal from Paris, to hang among their trophies.

WILBER'S EUREKA MOWER was conspicuous among the mowers on account of its construction, which differs widely from the well-known models. This machine secures a direct draft, and an unusually wide cut, six feet, by running the cutter-bar in front of and between the wheels. Light iron rods within the cover act as clearers, leaving the grass raised up, light and in fine condition for curing. The team works entirely clear of the cut grass, and while one horse walks in the grass, that portion trampled is cut by the return of the machine, and thrown up light by the device above mentioned.

The Eureka is made by the Towanda Eureka Mower Co., Towanda, Pa. a company which has complete facilities for doing the best work, and which, by its recent reorganization, has been placed under the direction of capitalists, who appreciating the value of the invention, will push the mower as its merits deserve, and increase its already wide popularity.

ONE of the principal attractions of Machinery Hall was the Boomer & Boschert Wine and Cider Press in full operation—supplying cider to the thirsty crowds.

This press, which is made by the Boomer & Boschert Press Co. of Syracuse, N. Y., is meeting with a large sale among cider-makers and also makers of Apple Jelly. The making of Apple Jelly is now receiving a great deal of attention, as it averages better prices for the product than cider, and this press is well calculated to assist in its manufacture.

G. B. OLIN & Co., Perry, N. Y., exhibited a Spring Tooth Harrow that is a complete departure in construction from implements of this class. The crucible steel, oil-tempered, pointed teeth, are semi-circular in shape, with a strong spring; when in use the points are self-sharpening, and as they become worn, the tooth, by a simple device, may be moved up to line. It is claimed that it will do the work of cultivator and harrow, thoroughly pulverizing the sod. It adjusts itself to uneven ground, overcomes obstructions, is effectual in quack-grass and in packed, dense soil, and as the teeth constantly vibrate they never clog.

B. W. PAYNE & SON, of Corning, N. Y., had the Eureka engine at work among the other steam engines, and their representative was fully occupied in explaining its points to interested spectators, while the exhibitors in Mechanic's Hall depended for their power on the excellent 40-horse stationary engine furnished by this house. It drove the shafting for the heavy machinery in this building with ease, working with a steady, even motion, that was the surest index to its superior construction.

SAXTON & AMIDON, of Buffalo, besides making a full display of the Harris Farm Truck, had a line of Amidon's patent bit-braces and brace-wrenches. These are tools that should receive the attention of farmers, as nothing more convenient could be added to the tool-chest. They are eminently labor-saving, being adjustable to various-sized bits, and exert a power not to be secured in the ordinary brace. They are sold, also, at very reasonable prices.

C. AULTMAN & Co., Canton, Ohio, were represented by their Canton Monitor Engine, Sweepstakes Thrasher, and Cary Horse-Power. These admirable machines are favorably known to readers of the RURAL, and during the fair many of our friends had an opportunity to see them in operation.

The company are beginning to introduce their products in the East, and we have no doubt they will meet with the success that has crowned their efforts in other localities.

ONE of the most attractive machines among the mowers was the "New Warrior," made by the Warrior Mower Co., Little Falls, N. Y. The numerous friends of the old "Warrior" will recognize in the new all the valuable features of the old implement with many others not heretofore shown in any mower. The "New Warrior" is light, neat and attractive, and received many commendations even from its competitors. We predict for this mower great popularity and extensive sales. This company also exhibit one of their improved jointed Randall Harrows. This harrow has become one of the standard implements for soil cultivation, and meets with extensive and largely increasing sales.

WE notice The Farmers' Favorite Fertilizer Drill improved for 1879. This champion of the Field Trials, winning two awards at Philadelphia in 1876, has been crowned with the medal in its class at Paris in 1878. Messrs. Bickford & Huffman may well feel proud of these flattering tributes to the "Favorite," which has for years maintained a prominent position in its department of agricultural machinery. Adopting right principles for performance of work, they have persistently advanced its mechanical construction and finish, keeping in advance of competitors whose struggle to win a prominence over them has been marked by constant and numberless changes of construction and principle. This drill is represented by their general agent, S. N. Gallup, a veteran whose face has become a familiar land-mark, and who as successfully plants the fact of its excellence in the minds of farmers, as does the Favorite its work in the field.

THE exhibit of Heebner & Sons, Lansdale, Pa., arrived too late for entry as a competitor for premiums, owing to the pressure of business. Indeed, it was with difficulty that Mr. Heebner could secure a Separator and Power to show at all. The level-tread power made by this firm is fast attaining a wide popularity. It possesses some distinctive features: chief among which are its level-tread and speed regulator. The tread-planks are so arranged that the horse stands in a natural position, and walks easily without straining himself, knocking his knees to pieces, or wearing out the tread-planks unnecessarily. The horse cannot step on the cross-rods and throw the track-wheels out of line, and the wheels themselves, not being bored through, prevent the cross-rods from wearing and working through the wheels. It was remarked that the power developed by the Little Giant Thrasher and Cleaner seemed out of proportion to the slow pace of the horse, who moved in the power at a very slow walk, as if too lazy to put one foot before the other; and yet the speed regulator had to be set slow to prevent acceleration of power. The speed-regulator is a governor consisting of two iron-hinged balls set inside an iron rim that fits in the band-wheel. It is a perfect governor, and in case of accident, will check the speed to a uniform motion. The power by this regulator can be adjusted to any desired rate. It is one of the most noteworthy improvements we have noticed on the grounds. The Little Giant Thresher has been greatly improved this season to suit the requirements of special localities. Its construction is as good as the best.

A FIVE-TON HAY SCALE for twenty-five dollars, exhibited by Osgood & Co., Binghampton, N. Y., attracted a great deal of attention. The irons complete, with brass beam, points and weights, sealed to United States standard weights are furnished for the above money. A large number of these scales were sold on the ground—and they have given universal satisfaction wherever used.

THE OLIVER CHILLED PLOW WORKS, South Bend, Ind., make a grand display of their celebrated Chilled Plows. These plows have met, and continue to meet with great success wherever introduced, and the manufacturers have now appointed a general agent for New York (Mr. I. M. Adams, Rochester, N. Y.), who will make, for the first time, a thorough and systematic canvass and see that these Oliver chilled plows are brought to the attention of every one. The Oliver plow has a host of friends throughout the country, and they are already being numbered by thousands in this State.

G. VAN SICKLE, Shortsville, N. Y., exhibited his Champion Hay and Grain Unloader. This implement differs from the ordinary elevator in one important respect. It uses no fork or grapple. The work is done by means of rope slings that are placed in position during the loading. The inventor is a practical farmer and claims that his device will successfully handle everything in the shape of hay and straw, loose, bound, short or long. It can be adjusted to unload in but four drafts, if desired, and always does clean, neat work. Not the least interesting part of the mechanism is the turn-table, which permits of instant adjustment, so that unloading may be done in any direction.

A NEW FORK, made by E. V. R. Gardner & Co., Johnson's, N. Y., claims the following good points: It is a grappler, and pitches equally well loose or in the bundle, long or short, barley, beans, cornstalks, hay, and any material for which a fork may be used. The four tines, which work like harpoons, may be lengthened or shortened to suit the work, and in tripping the tines drop straight down, which clears them entirely of the load. The Car also has new features that render it an important improvement.

JOHNSON, GERE & TRUMAN, Owego, N. Y., exhibit their new model Champion Grain and Fertilizer Drill. This drill, which is a perfect force-feed, is adapted to sowing all kinds of grain, large or small, and its force-feed distribution is so perfect that it sows evenly in any position without variation. It sows perfectly all kinds of fertilizers that can be drilled in or sown broadcast. The gear that drives the distributor is now placed under the grain box, where sand or dirt cannot interfere with it.

M. WILLIAMS & Co., of St. Johnsville, New York, made a very fine show. Their Thrasher possesses some very striking features that commanded the attention of visitors that were interested in this branch of farm machinery. Their new thirty-six inch cylinder thrasher and separator was in operation in connection with their three horse tread-power, which runs it with ease. This new thrasher is an eight or ten horse machine, and can be arranged for either horse or steam power. The firm have attained an enviable reputation for turning out first-class work, and this year have sold all the machinery they could manufacture.

THE JOHNSTON HARVESTER Co., Brookport, N. Y., made one of the finest displays on the ground, both as regarded the number of machines exhibited and the quality and finish of the implements. The new automatic sheaf-binding reaper was in operation and commanded an uncommon share of visitors' attention. The binder was the attraction. Its mechanism is simple, and its work effectual. The grain always falls inside the twine, which passes through a needle having two motions. This needle carries the cord twice around the sheaf and descends through the table, bringing the cord together. Then by the combined action of a finger, hook and claw, a firm knot is made which completes the bundle after the string is severed. The knot is an over-hand with double cord twisted in itself and pulled through, capable of standing a test strain of 150 pounds—a greater pressure than it will ever be compelled to stand. This reaper has been very successful both here and in Europe. The six other machines were the wrought-iron harvester which secured the highest honors at the field trials held under the auspices of the Paris Exposition, the old favorite, No. 1, combined reaper and mower; the No. 2 combined machine, the Continental light reaper, and the new changeable speed mower. The "Continental" is a light reaper, designed to work to the best advantage on side hills and uplands, where its light weight, only six hundred and twenty-five pounds, and adaptability make it one of the best machines for the purpose.

The new changeable speed mower is especially distinguished for its light weight, tipping the beam at five hundred and forty-seven pounds, when fully equipped for the field. This mower has during the brief time it has been before the farming public made a handsome record for thorough work and is a model of strength, lightness and durability. It is certain to render a brilliant account of itself next season. The Johnston Harvester Co. are noted for the completeness of their exhibits, and the display at Elmira was no exception to their usual practice.

THE Wheeler & Mellick Co., Albany, N. Y., made the most varied display, perhaps, of any one exhibitor on the fair grounds, comprising thrashers, horse-powers, harrows, cultivators, horse hay-rakes, hay forks, etc. A new implement, La Dow's two-horse riding cultivator, has been recently introduced, and is destined to attract wide attention. Superior excellence is claimed for it in the cultivation of corn, or any hoed crop. Its revolving cutting-plate wheels lift, turn, and leave the sod in fine condition to promote the quick growth of plants. Weeds and rubbish are cut up and gotten out of the way by burying or separation. The teeth, or discs, are self-cleaning, and may be adjusted to run close to the young plants without injuring the roots, while the weeds are demolished. The earth may be turned either towards or from the rows, and the gangs of discs can be set to cut deep in the center between the rows, and shallow near the plants. It is easily operated, and the draft is controlled by whiffle-trees and hangers, so as to remove any strain from the horses' necks.

The other implements made by the company are very generally known, and need no further praise than that which they compel by their performances in the crops for which they are severally designed.

THE DAIRY SUPPLY Co., New York devoted their entire space to Jno. Campbell's Monitor Churn. The churn is a cylinder with conical ends, devoid of dasher, paddles, or inside work of any kind. In operation it is swung like a pendulum from ropes that depend from the ceiling, or other covenient place, and when the churning is finished the churn can be swung out of the way. It is claimed that it combines the most perfect aeration with the greatest desirable rapidity of churning; that it is cleansed and kept pure with ease and that it washes the butter so quickly and perfectly that no working is required except for salting, and finally that the butter made is very superior.

NOTES FROM THE BROOME CO., N. Y., FAIR.

THE Broome County Agricultural Society held its eighth annual fair at Whitney's Point, September 3-7. The first two days were rainy. Still, in spite of rain and mud, the people came. The show in Floral and Agricultural Hall was large. The exhibit of wheat was larger than ever before. Corn, potatoes and apples were not as well represented as heretofore owing to the early date of the fair. The exhibit of thoroughbred and grade cattle was large; so was that of horses, which showed that the farmers own, admire and know how to raise good animals. Among swine the most admired were the Essex and Poland-China. The display of farm implements was excellent, and among the exhibits was the Syracuse Chilled Plow, which took the premium at the plowing match, being just thirty minutes in turning the first six furrows. Taking all into consideration, the fair was a success in spite of the rain. The crowd was immense on the two last days, and the trotting good. The Society's grounds are as fine as any in the State. They contain a large maple grove, covering nearly one-half of the area. The surface is dry and, with the new buildings recently erected, well suited for the use intended. W. B. D.

News of the Week.

Monday, Sept. 16, 1878.

POLITICAL.

Until last Monday's election the republican party has held Maine since the repeal of the Missouri Compromise under poor Pierce. The late election, however, contrary to general expectation, has proved a victory for the greenback party which holds the second place as a formidable rival of the republicans. As neither the republican, greenback nor democratic candidate for governor secured a majority of votes, the election now goes to the legislature, which consists of 65 republicans, 2 democrats elected by republicans, 27 democrats and 57 greenbackers. The house, which is thus placed in the hands of the greenbackers and democrats, chooses two candidates, one of whom the senate must elect. Three of the five congressional districts have been carried by the republicans; in the fourth district an extremely unpopular republican candidate was forced by the caucus on the party, many of whom bolted and elected a greenback-democrat. The greatest humiliation, however, was suffered in the fifth district, where Eugene Hale, the present well-known representative, was defeated by a stonemason named Murch a violent, ignorant demagogue of the Kearney type, whose great merit lies in his strong greenback principles. The democrats seem to have been thoroughly demoralized, having lost half their strength to the new party, while the republicans only lost about one-sixth of theirs. The total vote for governor in 1877 was 101,821, of which the republicans had 53,631; democrats, 42,114; greenbackers, 5,265. This year the total vote was 124,000, of which the republicans got 58,000; greenbackers, 37,000; democrats, 29,000. The news from Maine, Maine, Maine, has been waited for anxiously as a sign of the drift of public opinion ever since 1840, when the State broke away from the democrats and "went hellbent for Governor Kent," the whig, by a majority of only a trifle over 400, and so served not a little to swell the tide of popularity on which, later on in the fall, "Tippecanoe and Tyler too" were borne into office. There is no doubt but that now the issue of the late contest will have a great effect on the approaching elections, everywhere encouraging the greenbackers, whether known by the name of Nationals or Labor party. Butler's chances in Massachusetts have already risen fully 25 per cent., and all over the country there's a shaking up among the dry bones and fossils of the political world. Butler has received the nomination of the greenback-labor party, and is making a vigorous effort to secure that of the democrats. A few of the leaders of this party having declared that Butler delegates would not be admitted to the democratic convention to be held at Worcester to-morrow, Butler insists that the members of the convention are the sole judges of the eligibility of the delegates, and that this ukase is a mere bit of nonsense. He will be present in Worcester and if his men are not admitted, they will probably hold a separate convention and nominate him unanimously. If he gets the democratic nomination, his election is not improbable; if he does not, he'll break up the democratic party worse than it was shattered in Maine.

MISCELLANEOUS.

With a view of getting public opinion on the side of the revenue authorities in Ga., good sound democrats have lately been appointed as revenue officers there, but the bullets of the moonshiners at Hancock Co., in a recent collison, paid them no more respect than if they had been republicans. On Thursday the country was startled by the announcement that Gen. Miles, and a party of tourists had been surrounded by the Bannock Indians in Yellowstone Park, and twenty-seven of them killed. On the following day the public anxiety was relieved by the announcement, that instead of being killed, Miles, with 27 soldiers and 34 friendly Crow Indians, had attacked a party of Bannocks, killed 13 and captured the rest, 34 in all, with the loss of Capt. Bennett and two of his men.

Gen. Howard has had an interview with Chief Moses out at Priest's Rapids, Wy. Ter., and received from him assurances that his people are anxious to maintain peace and to go on a reservation, so soon as one is assigned them.

A match has been made between the pedestrians O'Leary and Hughes for a six days' contest for $1,000, the belt the former lately won in England, and the championship of the world. Test to begin at Gillmore's Garden in this city Sept. 30 and to end Oct. 5, both parties to get over the most ground they can, either by walking or running. A match has been made between the celebrated oarsmen Hanlon of Toronto and Courtney of New York, for a five-mile race for the championship of America.

On Friday last a severe wind and rain storm, in

some places amounting to a cyclone, extended from about Goldsboro, North Carolina, through Va., West Va., Ohio, Pa., New York, and parts of Ontario, Canada. Many of the rivers throughout this vast region rose with extraordinary rapidity, flooding the surrounding country, and causing a great loss of all kinds of farm property, mills and stock. In many places the railroad bed was washed out, and consequently several railroad accidents have happened, delaying travel and causing a number of deaths.

Gen. Badeau, Grant's biographer and friend was, some months since, stricken from the army list, during a spasmodic fit of Civil Service Reform, on the ground that, being consul-general at London, he could not hold two offices at the same time. He has just been restored to the retired list, however, whereat many independent republicans, whose independence consists in opposition to Grant, are disposed to howl; nor is it pleasing to them them that Mosby, another adherent of the ex-President, should have been appointed to a consulship in China, or that Longstreet, a friend and connection of his by marriage, should be appointed revenue agent in Georgia and Florida.

The increase in the export of live stock from the United States to England in the year ending June 30 was 30,800 head of cattle, and 4,000 head of sheep. The actual numbers exported were 80,040 cattle and 183,995 sheep. In addition thereto, 54,000,000 pounds of beef went over, an increase of 5,000,000 pounds.

FOREIGN.

The German Reichstag has been opened, and the emperor's speech urges the adoption of strong measures for suppressing the pernicious doctrines of socialism. The Liberals are displeased at the tone of the speech and still more at the stringent laws introduced to carry its suggestion into effect. The government is in a very decided minority in the new Reichstag, and its forces combined cannot carry any measure to which the Liberals are opposed, without the aid of the Ultramontanes. This Bismarck cannot get at present, as the trouble with the Pope has not yet been removed, each party strenuously trying to get the best of the bargain. Quick upon the execution of Hoedel, the would-be assassin of the emperor, follows the death of Nobeling, the other would-be regicide. He died last Tuesday, from the effects of the wounds he inflicted on himself immediately after he shot the emperor. Now the Socialists claim that his doctors designedly killed him by rough treatment, in order to avoid the evil effects that might be produced on the public mind by the pleadings during his trial. He has made no confession, nor did he during the whole of his illness implicate any accomplice.

The heavy loan the Russian government lately threw on the money market is reported to be a failure. The impotency of Austria against Bosnia, having shown Russia that she had little to fear from that quarter in her quarrel with Turkey, Count Schouvaloff, who was the chief agent in bringing about the Congress of Berlin by exaggerating to the Czar the danger of an Anglo-Austrian alliance, has fallen into disfavor, been released from office at his own request, and will devote his time and talents to the settlement of the Bessarabian and Dobrudscha question. Roumania hesitates about occupying the latter territory, as the inhabitants are reported to be intensely hostile to such a measure, and with the example of Austria's difficulties in Bosnia, before her eyes, the petty kingdom is afraid to risk a similar resistance. There has been a kind of Nihilist rebellion at Odessa in the Crimea, and after its suppression stringent laws against that party have been promulgated throughout the Empire. The present emperor, some years ago, introduced trial by jury in nearly every case, but owing to late political disturbances, all political offences in future will be excluded from such a mode of trial and be decided exclusively by the judges appointed by government.

The English find Cyprus a very unhealthy spot, 307 of their 2,540 troops there being already in hospital on account of fever. On Wednesday last a terrible explosion of coal gas occurred in the Elbow Vale colliery in Monmouthshire, Wales, killing 281 miners out of the 371 in the mine at the time. Already 632 bodies have been recovered from the wreck of the excursion steamer Princess Alice which was sunk in the Thames last week. Such fearful losses of life occurring so close together, have justly produced a widespread sensation. Advices received this morning say that a new treaty has been made with Turkey, by which Great Britain assumes a protectorate over Egypt, with the consent of France, who will join her in trying to set to rights the muddled finances of that country.

Germany has sent a circular to the Powers that signed the Berlin treaty, urging them to press Turkey to fulfill the terms of the treaty at once. All have agreed to do so but England and Italy. Greece is still clamoring for more territory. All the powers, except England, are willing to bring pressure to bear on Turkey so as to compel her to accede to the demands of the petty kingdom, but in the absence of England's consent, nothing is likely to be done for some time at least. When urged to set about making the promised reforms in Asia Minor, the Porte insists that money is needed to undertake the task, and no money is now in the treasury. En land has already detailed Lieut. Cameron, the African explorer, to investigate the best route for a railroad from the Mediterranean to the Persian Gulf.

France is to have a new deep-sea harbor at Boulogne-sur-mer, $3,400,000 having been voted towards its construction. To the fourth of this month the receipts for entrance to the Great Exposition amounted to $1,482,444. The Austrians have completed the occupation of Herzegovina by taking possession of Trebinye, and the retirement of the Turkish regulars who forced the inhabitants to surrender by threatening o fire on them from the citadel unless they gave up their arms. Many of the insurgents, however, have taken refuge in the mountain fastnesses, whence he will keep up the unequal contest, while others have joined the Bosnians who are resolutely holding out. The campaign for the present season will be over in from three to four weeks more, and it is highly improbable that the occupation will be completed in that time. Some deadly fighting takes place every day, and by this time the number of dead on both sides equals that in a couple of severe pitched battles, the Austrians having suffered a loss of upwards of 3,000 in a recent engagement. Their numbers in the field now are estimated at upwards of 200,000 men, while the detached bands of Bosnians and their allies from Albania and other sources, are computed at upwards of half that number. The country, however, being extremely mountainous and thoroughly known to them, affords them admirable opportunities for defence. Moreover, owing to their guerrilla system of warfare, a large force is required to keep open the Austrian lines of communication. Russia is said to be urging Austria to annex instead of occupying the rebellious provinces, but for the present, Austria modestly declines doing so. HERMAN.

VARIOUS.

A Mrs. Cassidy of Blandensburg, Md., gave birth Aug. 30, to three girls and two boys, who were all living at last accounts.

Mr. Gordon, Inspector of Live Stock in Queensland, Northern Australia, computes the loss in sheep there last year, by drought, at 1,718,199 head.

The Great Eastern, it is said, has been bought by a company for use as a cattle boat to carry Texas meat to England. Her capacity will be 2,200 head of cattle and 3,600 sheep.

The first weeping willow in England is said to have been planted by Alexander Pope. He received a present of figs from Turkey, and, observing a twig in the basket ready to bud, planted it. From his stock all the millions in England and America are believed to have sprung.

A miller in England, who had beaten his wife and threatened his children because summoned for not sending the latter to school, was last month seized by forty women, who flogged him and then dragged him to a pond, where, while drenched with water, he implored pardon for his misdeeds.

Five tramps recklessly resolved to capture Kenton, Ohio. They marched into the village flourishing clubs, terrified a few women, and began to pillage a store. Their triumph was short. The villagers gathered in force, stripped them, dipped them into a barrel of tar, rolled them in sand, and drove them out of town.

Quinine has advanced in price, until it is now higher than it has been seen in this country since the rebellion. This is attributable not only to the spread of malarial disease, but to the falling off of the supply of bark, owing to troubles among the South American tribes of Indians who are the principal gatherers. They have shipped no bark for eight or nine months.

Mgr. Dupanloup is a life Senator of France. In spite of his age he takes an active part in the labors of the Upper Chamber. The frequenters of Versailles daily see him passing along the street, clad as a simple priest, and carrying an old, worn-out portfolio. This article has a history. It was given to the bishop of Orleans, then simply Abbe, by Talleyrand. That portfolio has contained the treaty of Vienna, and other diplomatic documents which passed through the hands of the great diplomatist from the time of Napoleon I, to that of Louis Philippe.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Sept. 14, 1878.

BEANS AND PEAS.—A few straggling lots of new beans have appeared, quality showing hurry to send in first receipts. They have sold above quotations for old, but these uncured samples are not wanted by the general trade. An instance of ridiculous haste is shown by some new red kidneys that had to be unbarrelled and dried before they could be sent away. Old mediums are not plenty, and prices are steady. Marrows are weak, though there has been a good export purchase. Pea beans and white kidneys quoted stiffer. Southern H. P. peas in a small way, 2 bush. bags, $4; new green offered rather freely at $1.35; Canadian peas nominal, 78@79c. Beans, medium prime, $1.50@1.52; fair to good, $1.40@1.45; marrow, prime, free on board, $1.60@1.52½; fair to good, $1.40@1.45; pea, $1.35@1.55; white kidney, $1.40@1.55; new red kidney, $3.25; black beans, old crop, about gone; new expected to open low.

Receipts of beans, for week, 6,113 bush. Exports, 1,297 bbls.

BEESWAX.—There is a very meager business but prices steady; Western and Southern quoted 27@28c. Exports, past week, 2,243 lbs.

BUTTER.—Receipts for week 32,319 pkgs.; exports past week 13,521 pkgs. Fine grades of butter have improved, but it is not an improvement for wholesale quantities. Receipts are generally lacking in straight or evenly good lines, and it looks as if some low bulk prices will eventually offset any good rules now obtained for tops of present supply. It is likely that best buyers will piece along until fine full is a regular commodity; and a large yield is counted upon. Welsh tubs are wanted by all classes of buyers, but they will have to wait for fresh. Welsh butter districts have been making cheese most of the season. A few firkin dairies have sold at 17@18c. Trade to the South very much restricted by the calamity there. Western butter has a good demand when up in grade, but as with State there is nothing to favor is in a general quality way.

State dairy, pails, choice, 21@22c.; other, 16@18c.; half tubs and pails, choice, 20@21c.; other, 16@18c.; Welsh tubs, choice, 18@19c.; other, 12@17c.; poor State, 11@13c.; creamery, best, 23@24c.; good, 19@20c.; sweet cream, 20@22c.; Western creamery, best, 21@23c.; other, 15@21c.; Western dairy, selected, 15@16c.; fair to good, 10@12c.; factory, best, 10@12c.; fair to good, 8@9c.; very poor, 6½@7c.; grease, 4@5½c.

CIDER.—Offered at 7c. to arrive at wharf.

COTTON.—The new crop is coming forward more freely, offering full assortments, and prices have declined. Latest prices are; September, 11.31@11.32c.; October, 11.06@11.07c.; November, 10.92@10.93c.; December, 10.91c.; January, 10.93c.; February, 11.99@11c.; March, 11.07@11.08c.; April, 11.15@11.16c.; May, 11.22@11.23c.; June, 11.28@11.30c.; July, 11.34@11.36.

Quotations for new on spot are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¾	9¾	9¾	9¾
Strict ordinary	10 1-16	10 1-16	10 3-16	10 3-16
Good ordinary	10 9-16	10 9-16	10 11-16	10 11-16
Strict good do.	11	11	11⅛	11⅛
Low. middling	11¼	11¼	11⅜	11⅜
Strict low middling	11⅜	11⅜	11⅝	11⅝
Middling	11⅝	11⅝	11⅞	11⅞
Good middling	11⅞	11⅞	11⅞	11⅞
Strict good middling	12	12	12⅛	12⅛
Middling fair	12⅛	12⅛	12⅜	12⅜
Fair	13⅛	13⅛	13¼	13¼

Stained.

Good ordinary 9¾; Strict good ordinary 10¼
Low middling 11¾; Middling 11¾

CHEESE.—This has been a very unsatisfactory week in this market. Shippers have been very indifferent, and although receipts ordinarily would be considered moderate, yet they have accumulated; this applies to the general grades, and an exception made for fancy lots. Strictly choice, late made, have been held with a fair show of strength, and have reached 9; but 8¾@8¾ have been more general figures.

Quotations are: Fancy at 8¾@8¾c.; 7@8c. for good and prime; 6@7c. for fair to good; 5@6¼c. for half skimmed; 3@5c. for skimmed. State, farm dairy at 7¾@8c. for good to choice, 6@7c. for fair to good, and 3@4¾c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@8¾c.; do. good to prime, 6¾@7¾c.; do. fair, to good, 5¾@6¾c.; Western factory fine, full cream, cheddar, 7¾@7¾c.; do. fine, full cream, flat, 7¼c.; do. good to prime, flat, 6¾@7c.; do. half skimmed, 5@6c.; do. full skimmed, 3@4¾c.

Receipts for week, 69,694 boxes.
Exports for week, 33,317 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 43s.

DRIED FRUITS.—In Apples the only grade is in small lots of choice sliced, which bring firm prices. Peeled peaches have eased off a little with diminished trade. Blackberries are very slow. Cherries are in better supply and easier.

New blackberries, quoted at 5¾@6c. Peaches—Peeled, new Georgia, 6c. for poor, 7½@8c. for fair to good, and 8¾@9c. for prime; choice North Carolina 11½@12½c.; good do., 9@10c.; unpeeled old halves, 3@3½c.; quarters, 2¾@3¼c. Pitted cherries, 15@15¾c.; southern plums, new, 10@11c. Apples—Old State quarters, 3@4c.; do., sliced prime, 4½c.; do., good, 3¾@4c. New apples 3@4c. for southern quarters in bbls.; 4¾@5½c. for prime sliced, and 6@7c. for fancy. New raspberries, 23@24c., and evaporated, 26@27c.

Exports past week 215 bbls. dried apples.

EGGS.—Receipts for the week 5,730 bbls.; do. last week, 5,527 do. The market has improved and closes strong; near points, 20c.; State and Penn., 19@19¾c.; fresh Western and Canadian, 18@18¾c.; inferior, 17½c.; Western marks are not turning out as finely as at our last; some lots bear evidence of long holding. This fact may tend to vary the rates for Western compared with Canadian.

FRESH FRUITS.—Export past week, 1,150 bbls. apples. Supplies of apples are largely in excess of the demands and prices have broken under them. Fine table lots have sold in loads at $1@1 12 ₱ bbl. Western N. Y. choice, $1.25@1.37; poor to fair including near by, 75@$1.00. Bartlett pears scarce and higher, ice-house stock comes out poor this season; has a wide range, $2.50@7 ₱ bbl.; prime, $8@9; fair, $5@6; Seckel, $3@4 for common, $6@7, prime. Duchess not wanted yet. A line of Beurre d' Anjou offered at $2.50@3.50 ₱ bbl. Flemish Beauty, B. Clairgeau and Louis Bonne all go within the range of $4@$6, as they are green for use. Plums have ruled high but the rates have checked sales; prices now irregular. German Prunes ₱ bbl. $2@10; Green Gage, $8@10; Damson, $5@6; Blue Gage, $4@5; common plums, $3@4.50. Grapes are low, most of the pickings have been badly affected by the late damp weather. N. J. are hard to sell, quoted 1½@3c. for Concords; up-river do. 3@4c.; Delawares 6@8c. Peaches are winding up especially from Delaware. Good to prime Del. baskets $1.25@1.75; poor 75c.@$1.00; N. J. selected, $2.50@3; common to prime, $1@2. Watermelons steady at $20@30 ₱ 100, selected; $14@18, prime; $5@6, culls. Nutmeg melons $1@1.25. California Tokay Grapes $5@6 ₱ 40 ₱ case; Muscat, $5@5½, all prime. Hot-house grapes B. Hamburg Muscat, ₱ ₱, 35@40c. Sweetwater, 30@25c. Peanuts dull; sellers willing to accept inside figures. Hand-picked Va. $1.45@1.50 ₱ bush.; fancy, $1.25@1.30; good to prime, $1.15@1.20.

FLOUR.—The arrivals have been large, especially of the new crop winter wheat, and the trade has found it necessary to shade prices to impart any activity.

Latest prices are $3.25@3.85 for very inferior to fancy superfine State, and occasionally $4; $3.30@4.10 for poor to good extra do. odd lots and lines; $4.15@4.45 for good to choice do., strictly choice lots above this; $3.25@3.85 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c.; $3.90@4.15 for inferior to good shipping extra do. and $4.15@4.40 for good to choice extra do.; common to about choice white wheat extras, $4.15@5.25; choice to about fancy do. at $5.30@6.25; red and amber winter wheat, inferior to choice trade and family at $4.00@5.50; round hoop Ohio at $3.90@4.25, and trade and family brands of do. at $4.25@5.50, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.10@4.90 for very poor to good extra, and $4.90@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.15@6.00 (fancy brands at higher prices); Minnesota "straight," inferior to very fancy at $5@7.50 (few brands of even fancy going above $7), and patent fair to strictly fancy at $6 25@8.75; unsound stock at from $2.00@5.00; city mill extra at $5 00@5.25 for West Indies (the latter rate for fancy in new packages); do. for England, 4.00@$4.10; do. trade and family extras, $5.50@6.50; do. for South America, $5.30@5.90 for fair to fancy; No. 2 at $2 25@3.15 for inferior to very fancy, the latter an extreme.

CORN MEAL.—Sales at $2.90@2.95 for Brandywine and $2 40@$2.65 for yellow Western.

GRAIN.—Wheat has been in large receipt, and has been offered lower, leading to a fair export movement.

Latest sales are of ungraded amber at $1 01@1 09; No. 2 amber, steamer grade, at $1 05¾@1 06½; No. 2 amber, in lots, at $1 07@1 07¾; No. 3 red, in lots, at $1 04@1 04¾; do. steamer grade, at $1 02@1 03; ungraded red, at 95c.@$1 08; No. 2 red, steamer grade, at $1 03¾@1 06¾; No. 2 red at $1 07¾@1 08; No. 1 red at $1 07¾@1 08¾; ungraded white $1 06@1 16; No. 2 white lot $1 11¾; white State at $1 15@1 18; No. 1 white at $1 14¾@1 15¾; No. 1 white, steamer grade at $1 12@1 13; extra white, near-by deliveries at $1 16; No. 1 white, deliveries last half September, quoted at $1 15¾; New York No. 2 spring, September option, reported at $1 05¾; No. 2 amber, September option, at $1 07@1 07¾; do., October option, at $1 07¾; do., delivery last ten days in September, at $1 07¾@1 07¾; No. 2 red, delivery by September 25, at $1 08; do. September option, at $1 07¾@1 08; do. October option, at $1 08@1 08¾; No. 1 red, delivery by September 25, at $1 08¾. Rye at 60@61 for State, and 59¾@61 for western. Corn is in moderate receipt and firm in price; latest sales are of ungraded mixed, western, at 42@45c.; ungraded white at 53c.; New York No. 2 at 50¾@51¾c.; steamer mixed at 49¾@50¾c; New York No. 2, September option, at 50¾c.; do., October option, at 51¾@51¾c.; do., for November, at 53@53½c.; steamer mixed, September option, 50@50¾c.; do., October option, at 51¾@51¾c. Oats are in liberal receipt and easy in prices; sales are of New York No. 2 white at 29½c.; New York No. 3 white at 27c.; New York No. 1 at 31¾@32c.; New York No. 2 at 29@29½c.; New York No. 3 at 25@25½c.; New York rejected at 24@24¾c.; New York unmerchantable at 24½c.; white western at 28¾@31¾c.; mixed do. at 24¾@31¾c.; white State at 30@30½c.; mixed do. 27@33c.; No. 2 Milwaukee at 31c.; No 2 Chicago new, quoted at 30¾@31c.; and old at 32@33c.; New York No. 1 white, quoted at 36@37c.; New York extra, quoted at 33@33¾c.

HAY AND STRAW.—There are pretty full receipts, and although demand is increasing, prices of other than prime stock are weak.

Sales at 45@50c. for shipping and 65@80c. for retail qualities. Straw quoted at 35@45c. for long rye; 25@30c. for short rye.
Exports past week, 2,750 bales.

HOPS.—Shipping demand is still slack. Supplies increase, but are largely of grades under prime, showing premature picking. Prices show a wider range to cover the various qualities.

Quotations are for New Yorks, new crop, 16@18; New Yorks, new crop, good and prime, 14@15; New Yorks, new crop, poor, 11@13; Eastern, new crop, none; Wisconsin, new crop, none; Yearlings, growth 1877 (nominal) 5 to 10; Pacific coast hops, growth 1877, 5 to 10.

HONEY.—Quoted with a few sales at 14@16c. for white clover; 10@12c. for buckwheat. No permanent demand.

OIL-CAKE—Is selling at $31 per ton.

PROVISIONS.—Hog products have shown a better export demand but have been variable in price, closing easy. Mess pork quoted $9 25@9 50 for spot lots; $9 20 for October; and $9 30 for November. Bacon at 6¼c. for long clear and 6⅛ for short clear. Lard at $7 05 for spot lots; $7@7 02½ for September and October; $6 97½ for November; and $6 90 for December. Stearine at 7¼@7⅜c. for western. Tallow at 7@7 1-16c. for prime. Beef hams at $12@19 50. Beef—extra mess, $11 25@11 50; plain mess, $10@11; packet, $11@11 50 for bbls.; extra India mess, $18@20 for city brand; do., Philadelphia, $17 75@$18.

POULTRY AND GAME.—Live fowls have ruled weak and low prices brought out quite a large Cuban trade. About 5,000 selected go to Santiago by next steamer. Chickens easy. Turkeys dull as dressed begin to come. Ducks and geese dull; the former are poor in quality and, as we have before remarked, should be fattened at home. The demand for geese is expected to revive with the approaching Jewish holiday.

Chickens, N. J., 12½@13c. lb.; State and Penn., 12@12½c.; Southern and Western, 10½@11c. Fowls—N. J., 11@11½c.; other, 10@11c. Roosters, 5c. Turkeys, choice, 12@13c.; other, 10@11c. Ducks, prime, pair, 50@75c.; other, 40@45c. Geese, N. J., $1.25@1.75; W. & S., $1.00@1.25.

The market is firm for dressed turkeys and prime fowls at our prices. Chickens doing a shade better.

Dry picked and prime N. J. turkeys, 14@15c.; other, 12@13c; chickens, fancy, 17@18c.; N. J., 14@15c.; other, 12@13c. Dry picked fowls, 14@15c.; good to prime, State & N. J., 10@12c.; poor to fair, odd lots, 9@10c.

Game is active and prices fair. Trapped grouse, 65@75c. ₱ pair, State partridges, 90c.@$1; Western, 80c. Woodcock, 75@85c., the latter for near points. Wild pigeons, still-fed, $1 50@1.75 ₱ doz.; flight, $1. Wild ducks, common to Mallard, 30@60c. ₱ pair.

SALT.—Sales at $2.50 for Ashton's; $1.05@1.30 for other brands.

SEEDS.—New timothy is plenty and easy, quoted $1.30. Rough flax is strong at $1.52½, and wanted.

TOBACCO.—A liberal business is noted in seedleaf on home account, and the export trade in Kentucky leaf is fair, with prices strong. Latest prices are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	4 @ 4½
Good lugs	3½@ 4¼	4¾@ 5
Low leaf	4½@ 5¼	5¾@ 6¼
Medium leaf	5½@ 6¼	6 @ 7
Good leaf	6½@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	—@—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, fine	18	@35
do. do. selections	18	@35
do. seconds	10	@12
do. fillers	6	@ 7
Pennsylvania assorted lots, common	8	@ 9
do. do. fair	10	@12
do. do. fine	14	@17
do. wrappers	18	@35
do. fillers	6½	@ 7
New York, ass'ted lots, common to medium	6½	@ 9
Ohio assorted lots	8	@10
Wisconsin assorted lots	7	@10

VEGETABLES.—Exports of potatoes, past week 7,815 bbl.; of Onions, 445 do. Potatoes are bringing good prices. States still objectionable in quality. Choice cabbage higher, Onions dull. Prime E. Rose potatoes in bulk, bbl. $2@2 25; fair to good, $1 62@1 87; Peerless, $1 50@1 75; Md. Sweet, $1 62@1 75; Va. yellow, $1 50@1 75. Sweet Corn, 100, 75c.@$1; Lima beans, bag, 75c.@$1, shelled, bushel, $3@3 50; String Beans, L. I., 50@75c.; Cucumber pickles, 1,000, $1@1.25; Tomatoes, bushel, 30@45c.; Onions, white and red, $1@1 25; Chester, $1@1 12; Marrow Squash, $1 75@2; Peppers, Bullnose, 100, $1@1 50; Beets, bbl., 75c.; Lettuce, 55@75c.; R. turnips, $1.75@2.; Carrots, $1 50; Cabbages, Flat Dutch, 100, $2 50@5; Okra, 12@15c.; Egg plants, $1@2.50.

WOOL.—The demand from manufacturers runs moderate, and confined to small lots. There is more confident temper among holders as to prices, however, more thorough advices from other points noting increased distribution.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 36@38; X, 35@37; No. 1, 33@33c.; No. 2, 33@35c; coarse, 30@32c, combing, 40@45c.

New York, Michigan, and Wisconsin, XX, 32@35c.; X, 32@35c.; No. 1, 34@36c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 38@43c.

Indiana, Kentucky and Tennessee—XX, 33@35c.; X, 33@35c.; No. 1, 34@36c.; No. 2, 32@34c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 34@35c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Sept. 14, 1878.

BEEVES.—Receipts for the week, 11,836 head; do., last week, 12,350 do. The dressed beef market has been dull, and sales on the hoof have not been brisk. The offerings have been largely composed of thin, Texas, Colorado and Cherokee stock. A few fancy Ohio brought 10c., to dress, 57 lbs., but 10c. was the general best price for prime steers, to dress, 57 lbs.; common to good, natives, to dress, 55 lbs., ranged at 7¾@9¾c. Texas, Colorado, Cherokees and half-breeds, to dress, 55 lbs., 6¾@8¾c.

COWS AND CALVES.—New York is growing to be less and less a place of sale for milch cows. Parties who require any regular supply, deal direct with dairy districts. Quotations nominally as before.

VEAL CALVES.—The supply is liberal and prices are tame; ordinary to prime, milk, 5¾@6¾; a few extra N. J. 7c.; buttermilk and grassers, 3@3¾c.; "fed" calves, 4@4½c.

SHEEP AND LAMBS.—Receipts for the week, 28,705 head; do. last week, 28,688 do. A large unsold surplus of dressed mutton has kept the market at the yards dull. Sheep sold at the low prices of 3@4½c., and lambs, 4½@5¾c.

SWINE.—Receipts for the week, 20,783 head; do. last week, 18,353 do. Western, live, 4¾@4¾c.; N. J. dressed arrived in bad order, had the wide range of 4@6½c.

INDEX TO NEW ADVERTISEMENTS.

Benson, Maule & Co.—Pig Breeder's Manual.
Bickford & Huffman—Farmer's Favorite Grain and Fertilizer Drill.
Boomer & Boschert Press Co.—Power Cider and Wine Press.
Brewer, H. & J.—Cider Preservative.
Carpenter & Son, W. S.—The New Rochelle Raspberry.
Childester, W. H.—Agents wanted.
Dederick, P. K.—Perpetual Hay Press.
Dingee & Conard Co.—Beautiful Ever-blooming Roses.
Fletcher & Co., Alice—Hygienic Undergarments.
Gifford, W. C.—Gifford's Swinging Stanchions.
Gilmore, S. J.—Kansas Farms and Free Homes.
Gregg & Co.—Sulky Plows.
Hanford & Son, R. G.—Dwarf Pear Trees.
Herkness & Co., Alfred M.—Sale of Guernsey and Jersey Heifers.
Hubbard, T. S.—Grape Vines, Small Fruits, &c.
John D. Billings Patent Horse Shoe Co.—A New and Perfect Horse Shoe.
Josselyn, Geo. S.—High-class Poultry.
Lewis Bros.—The "Boss" Scroll Saw.
Marvin, D. S. Grape Vines.
Parry, Wm.—Sharpless' Strawberry.
Reversible Collar Co.—Reversible "Linene" Collars.
Saul, John—New and Rare Plants and Fruit Trees.
Thorburn & Co., J. M.—Imported Dutch Bulbous Roots.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.
Wells, Richardson & Co.—Perfect Butter Color.
Wheeler & Melick Co.—Medal Machines.

SPECIAL NOTICES.

Pulvermacher Galvanic Co.—Electric Belts.

Reading for the Young.

LINES FOR BOYS TO REMEMBER.

"What shall I do?" My boy don't stand asking:
Take hold of something—whatever you can.
Don't turn aside for the toiling or tasking;
Idle, soft hands never yet made a man.

Grasp with a will whatever needs doing;
Still stand ready, when one work is done,
Another to seize, then still pursuing
In duty your course, find the victory won.

Do your best for to-day, trust God for to-morrow;
Don't be afraid of a jest or a sneer;
Be cheerful and hopeful, and no trouble borrow;
Keep the heart true, and the head cool and clear.

If you can climb to the top without falling,
Do it. If not, go as high as you can.
Man is not honored by business or calling;
Business and calling are honored by man.

Mrs. Gage.

"POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 17.

W. T. ALAN.

I have a new idea for the young folks for earning pocket-money, which will bring prices according to the quality of workmanship. It is a window-bracket for pots—something that everyone who keeps a pot for plants needs, and which many think is too expensive when purchased at stores. This one of wood is very simple, and can be made according to the strength of the wood and the weight it will have to bear. After the strips are made, they should be put together with a square, that they may be perfect. Mark the ends of the brace by laying them on a square and sawing them accordingly. Where the brace connects

Window-Bracket for Pots.

with the arm at A, fasten with a screw: at B and C, long screws are needed, a couple of inches or more: cut off the heads, and heat and bend to form hooks; then get small eyes at the hardware store, and screw to the window-casing where the hooks come; let there be room for plenty of play so that the bracket will swing around well. At E set a spool or turned piece of wood, and on this put the top or bottom of a tin fruit can; put a screw down through the tin and spool into the arm; use glue where the braces are joined. Give the whole a coat of black paint, and dust with a little bronze after varnishing, and it will resemble bronzed iron-work, or with bronze and varnish run a fine vine along the arm.

At the point D on the brace, any sawed ornament may be added to make the work look more finished. If a number of brackets are to be made, it will pay best to have the stuff sawed out by machinery, and the screws bent and cut at a blacksmith's—a scroll-saw will be found convenient for any ornaments to be attached to the brace.

WHAT IS TO BE DONE.

1. Child two years old has an attack of croup at night. Doctor at a distance. What is to be done?

The child should be immediately undressed, and put in a warm bath. Then give an emetic, composed of one part of antimony wine to two of ipecac. The dose is a teaspoonful. If the antimony is not at hand, give warm water, mustard and water, or any other simple emetic; dry the child, and wrap it carefully in a warm blanket.

2. Hired girl sprains her ankle violently.

First bathe in cold water, then put the white of an egg in a saucer, stir with a piece of alum, the size of a walnut, until it is a thick jelly; place a portion of it on a piece of lint or tow large enough to cover the sprain, changing it as often as it feels warm or dry; the limb is to be kept in a horizontal position by placing it on a chair.

3. Bees swarm, and the man who hives them gets severely stung in the face.

The sting of a bee is hollow and barbed, and as it contains the poison the first thing to be done is to remove it. The parts stung should then be bathed in warm water, and a little ammonia be rubbed on them.

4. Some one's nose bleeds, and cannot be stopped.

Take a plug of lint, moisten, dip in equal parts of powdered alum and gum arabic, and insert in the nose. Bathe the forehead in cold water.

5. Child eats a piece of bread on which arsenic has been placed for killing rats.

Give plenty of warm water, new milk in large quantities, gruel, linseed tea; foment the bowels. Scrape iron rust off anything, mix with warm water, and give in large draughts frequently. Never give large draughts of fluid until those given before have been vomited, because the stomach will not contract properly if filled, and the object is to get rid of the poison as quickly as possible.

6. Young lady sits in a draught, and comes home with a bad sore throat.

Wrap flannel around the throat, keep out of draughts and sudden changes of atmosphere, and every half hour take a pinch of chloride of potash, place it on the tongue, and allow it to dissolve in the mouth.

7. Nurse suffers from a whitlow on her finger.

Place the whitlow in water as hot as can be borne, then poultice with linseed meal, taking care to mix a little grease with the poultice, to prevent it from growing hard. Bathe and poultice morning and evening.

8. Child falls backwards against a tub of boiling water, and is much scalded.

Carefully undress the child, lay it on a bed, on its breast, as the back is scalded, be sure all draughts are excluded, then dust over the parts scalded bi-carbonate of soda, lay muslin over it, then make a tent, by placing two boxes with a board over them in the bed, to prevent the covering from pressing on the scald; cover up warmly.

9. Mower cuts driver's leg as he is thrown from seat.

Put a tight bandage around the limb, above the cut, slip a cork under it, in the direction of a line drawn from the inner part of the knee to a little outside of the groin. Draw the edges of the cut together with sticking plaster.

10. Child has a bad earache.

Dip a plug of cotton wool in olive oil, warm it, and place in the ear. Wrap up the head and keep out of draughts.

11. Youth goes to skate; falls through the ice; brought home insensible.

Strip the body, and rub it dry; then rub it with a warm blanket, and place it in a warm bed, in a warm room. Cleanse away froth and mucus from the nose and mouth. Apply warm bottles, bricks, &c., to the arm-pits, between the thighs, and to the soles of the feet. Rub the surface of the body with the hand encased in a warm dry worsted sock. To restore breathing, close the nostrils and breathe steadily into the mouth; inflate the lungs till the breast be raised a little, then set the nostrils free, and press gently on the chest until signs of life appear. Then give a warm drink, and put to bed. Do not give up hope for at least three hours after the accident.

12. Child gets sand in his eye.

Place your forefinger on the cheek bone having the child before you. Then draw up your finger, and you will probably be able to remove it; but if you cannot get at the sand this way, repeat the operation while you have a knitting needle laid against the eyelids, this will turn the lid inside out, and then the sand may be removed with a silk handkerchief. Bathe in cold water, and exclude the light for a day.

Sairey Gamp.

THE COCKROACH AND ITS ENEMY.

G. A. PERKINS, M. D.

The instinctive habits of insects furnish no small proportion of the interest which attaches to the study of that class of the animal kingdom. The wasps furnish their full share, and the student of nature never tires of investigating the different methods by which they arrive at the same end,—each species following out the law impressed upon it by the Creator with its very being.

Various species of Vespa deposit their eggs in a paper cell, and feed their young, in a larval stage, with insects, which they chew, and partially digest for this purpose. Another genus (Pompilus) excavates a hole in the sand in which she deposits numbers of flies, spiders, etc., and with them an egg, and, burying them, leaves the larva to select its own food from these materials. Others, such as Pelopæus, the Mud-dauber, place the same materials in curiously constructed cells of clay, and closes them up with the same masonry. Others still, not content with such small game, select the body of one of the larger insects, and deposit in it the germ of their future offspring.

Of this latter class is a beautiful trig little species (Ampulex Sibirica Fabr.), very common in Western Africa, and whose polished metallic body, shining like burnished steel, is familiar to all dwellers on that coast. The Ampulex selects the body of the gigantic Cockroach as the receptacle of its egg, and it is not a little amusing to see in what a business-like and determined manner she sets herself to the task of capturing her victim, and serving her writ of *habeas corpus* upon the doomed roach, full a dozen times her size.

The wasp enters the apartment, and instantly a great commotion takes place among the cockroaches (and their name is legion in the tropics); frantic with fear, they seek a place of greater security, and, in their haste, often rush into the very danger they seek to avoid; for, should the keen eye of the wasp light upon them, the case is a hopeless one. (It is a matter of wonder in what manner the roach should know of the presence of the wasp, and we can only conjecture that its keen perception may distinguish a peculiar sound in the vibrations of the wings of its enemy, as the larger animals are said to in the roaring of the lion.) The wasp flies like fury at the roach, and a severe struggle takes place; both using legs and wings in the fight, the contest is usually a short one, for the wasp, seizing its victim by the head, or front of the thorax, bends its body short round and plunges its sting into the nearest part, and the roach, who a moment before was fighting for dear life, becomes as quiet as a sleeping infant,—not a leg moves. The victorious wasp draws off a few inches, seeming to survey her vanquished foe with pride, then proceeds to brush off the dust from its brilliant coat and wings, and, after pluming its antennæ, prepares to place its prize in a secluded spot. Taking the roach by the head, she leads him away a few feet, and, leaving him, examines the vicinity for this purpose. In one instance, the cockroach was dragged with considerable trouble between the leaden lining of a tea-chest and the outer box; in another, an open-backed book answered her purpose; but the most singular spot was the inside of a door-lock. The cockroach walked slowly up the door to the key-hole, led by the wasp, and, after much pulling on the part of the wasp, was forced into the interior.

After being out of sight a few minutes, the wasp returned, took several nails from a paper which lay on the floor near by, and carried them, one by one, into the key-hole. I could not but admire the perseverance manifested in this effort. The wasp was obliged to walk backwards up the door to the key-hole: the nail could not be turned by the wasp into a proper position to enter endwise, and, consequently, fell to the floor several times before being successfully drawn in, and each time the wasp descended immediately to renew the attempt. The lock was taken off carefully, and *six four-penny nails* found covering the body of the roach.

Not the least singular feature in the case is, that the sting of the wasp does not kill the cockroach, but only stupefies him, so that the roach, when he walks to his final resting-place, may certainly be said to *go to his own funeral as chief mourner!*

The bodies of this species of cockroach are often found with the empty cocoon of the wasp occupying the cavity of the abdomen; the young wasp, having been hatched there, and, after completing its larval stage, spinning this cocoon, still remains there to complete its development, when it comes forth a perfect insect, in all respects like its parent.

To show with what tenacity the wasp sticks to her prey when once within her grasp, we once put a cockroach, which had been paralyzed, with the wasp, in a glazed earthen pitcher, and watched the result. The wasp attempted to lead the roach out of the pitcher, to which move the cockroach made no objections, and walked up the inclined side of the pitcher as far as his feet would permit him, but not being furnished with the little pads or suckers with which our common fly and many other insects are provided, he found it out of his power to comply with the requirements of his master, and on attempting to continue his walk, fell to the bottom. The wasp again led him up, and again he fell. This was repeated for the space of three hours, the wasp, in some of her attempts, nearly sustaining the whole weight of the roach. After being convinced of the impossibility of her accomplishing the feat, I liberated the pair, the wasp soon storing her prize away under a bookcase.

Potato Beetles.

Dear Rural:—"Render honor to whom honor is due," is an old saying, and I think it just and right to give you my experience with the Colorado beetle, or potato bug, this season, as it may be a benefit to others. My neighbors have been using Paris-green to kill theirs. I watched the effects of the stuff and made up my mind that none would go on my potato vines. Seeing an advertisement of the Pest Killer, made at Kearney's Chemical Works in New York City, I sent for a trial box, tested it to my full satisfaction and found it was just what was represented. I then sent for more and have dosed my potato fields effectually, according to directions with the packages. The results are, the bugs are vanquished, my potato vines are bright and green and present quite a contrast to the sorry-looking Paris-green dosed fields, where the bugs still riot on the remains of the vines. S. H. R.

The Puzzler.

HIDDEN TREES.

1. See the cat, Alpa, on the fence.
2. Did you ever pop large ears of corn?
3. Sarah, Em locks her door every night.
4. Pap, awfully blows the wind.
5. I can spell b, a; O, Bob, can you do it?
6. Sew on the button, Woodworth.
7. After churning butter, nuts were cracked.
8. In the arbor Vitaela waited for her lover.
9. Why, Rose; wood stoves are much the best.
10. Jenny Lind entranced her hearers.
11. Mamma gave me a watch.
12. Cal derived benefit from tar drops.
13. Hal, Monday is the day appointed.
14. The moon is in a haze, Lily.
15. Hiram Eir chased the geese.
16. 'Twas a Tobam-book of the Jews.
17. I took Mistle to Elmira.
18. Urban, I angrily denounce you.

☞ Answer in two weeks. Little One.

ENIGMA.

There is a noun of plural number,
Foe to sleep and quiet slumber;
Now, any other noun you take,
By adding "s" you plural make;
But if an "s" you add to this,
Strange is the metamorphosis;
Plural is plural now no more,
And sweet what bitter was before.

Chipmonk Hollow. Rosa A. Frost.

☞ Answer in two weeks.

TRANSPOSITION.

Raft Nual vatlers tion wivo,
Flingsfudi naym a relvis yar;
Nad glintwink trass ear nimcog oto,
Ni soport sarcos het likmy yaw.

☞ Answer in two weeks. Mary Waley.

PUZZLER ANSWERS.—Sept. 7.

Miscellaneous Enigma.—Kind words are jewels beyond price, powerful to heal the wounded heart and to make the weighed-down spirit glad.

Geographical Enigma.—State, North Carolina; capital, Raleigh.

Hour-glass Puzzle.—

SORROWFULLY
INTRIGUER
WALLACK
BAKER
RED
S
ARS
BLADE
MARRIED
INCORRECT
INDEPENDENT

Drop-letter Puzzle.—Where are now the hopes I've cherished?

Sabbath Reading.

SHALL WE HAVE A SABBATH?

The season now drawing to a close has been remarkable for the increased disregard of the sacredness of the Lord's Day. Sunday excursions by steamboats, Sunday trains on railroads, Sunday amusements of all kinds, have abounded. Much of this is in an open and apparent contempt of the law, but nobody moves to enforce the law. Appeals are sometimes made for the interposition of the executive authorities to see that this, among other laws, be faithfully executed, but no one regards them. It would be better just to say that the law is a dead letter. An attempt to prosecute ordinary labor through seven days of the week, robbing the employed classes of their rest-day, would be quickly animadverted upon, and, if persisted in, would be held in check by the unquestioned force of the statute. But where amusements are concerned, though they involve a great amount of servile labor on the part of those who provide them, and the means of enjoying them, they are viewed with an indulgence that nothing seems likely to disturb. In the present state of public opinion, the law of the Sabbath is relaxed beyond any known precedent in the United States.

As the cause of a relaxed practice is undoubtedly a relaxation of principle, little can be gained by agitating in favor of a strict enforcement of the law. Agitation alone changes no opinions. It merely brings to the surface sentiments that lay dormant, and puts them in action. But if the desired sentiments have ceased to exist, have given place to other sentiments, or to a feeling of careless indifference, the only effect of agitation will be to expose the vacuum that might otherwise escape notice.

It is a fact of no small importance that the opinions and the habits of religious people have undergone a change for the worse. It is not merely that the opinion formerly held has been reconsidered and modified, for that was inevitable; but that many, having discovered that the Puritan doctrine and discipline concerning the Sabbath were overstrict, having gained no substitute for what they reject. Feeling that they are not bound to keep the day with Judaical restraints, they throw off all restraints except the easy limits of decorous respectability. Now we are not likely to have a legal Sabbath if we have no Christian Sabbath. Every one who has, or means to have, a conscience in the matter should define to himself, in the light of Scripture and good sense, what is a proper use of the Lord's Day, and for himself and his household, if he be a householder, resolve firmly to abide by that. Let Christians set a proper example of keeping the day holy, and then they may, with some hope of success, insist on the protection which the law provides for its observance as a day of rest from toil.—*Watchman.*

"WOULD" MISUSED.

In prayer we often hear such expressions as the following: "We would thank Thee," "We would bless Thee," "We would praise Thee," "We would ask Thee," etc. Some may fall into this habit by hearing others use such forms of speech without reflecting that they thereby reduce their thanksgiving and supplications to almost meaningless expressions. Others may have adopted it because it appears to them to savor of humility; as if it were almost presumption in them to bless or entreat God at all. But surely this is no honor to Him who has taken such pains to open the way to sinners to His throne, and invites them to come so freely. If any are so suspicious of the state of their own hearts as this seems to imply, it were far better to ask God to give them a devotional spirit than to use a form of words which implies that they do not at all what they profess to do. The expressions, "We would bless Thee," "We would confess to Thee," mean simply, "We should be glad to do this, but somehow or other, we can't or don't." And I often felt, while hearing such addresses to God, that he might say to offerers, "If you wish to praise Me, and ask favors, *why don't you do it?*" I pray you, dear brethren lay aside these unsuitable and harmful forms of expressions. If we have only such would-be worship to offer to God, we are miserable Christians and undevout ministers, for this habit sometimes invades the desk. Christ did not say, "I would thank Thee, O Father, Lord of heaven and earth;" but, "I thank Thee." Let Him be our pattern.—*Interior*

If a tree do not bud, blossom and bring forth fruit in the spring, it generally is dead all the year after; so if in the spring and morning of your days you do not bring forth fruit to God, it is a hundred to one that you bring not forth fruit to him when the evil days of old age shall overtake you, wherein you shall say you have no pleasure; for, as the son of Sirach observes, "If thou hast gathered nothing in thy youth, what canst thou find in thine old age?"

Cold prayers are like arrows without heads, swords without edges, birds without wings; they pierce not, they cut not, they fly not up to heaven. Those prayers that have no heavenly fire in them always freeze before they reach as high as heaven; but fervent prayer is very prevalent with God.

Many take unfit seasons for private prayer, which more obstruct the importunity of the soul in prayer than do all the suggestions and importunities of Satan.

PERSONAL ITEMS.

Henry M. Stanley still suffers from his African fevers, and at times despairs of ever getting rid of them.

Sir Charles Dilke was recently asked how his house had fared during a storm. "Oh, badly," was the reply; "my cistern is the only dry place in it."

The next batch of English peers, they say, will include Mr. Beresford Hope, Mr. Baillie Cochrane, Mr. H. Chaplin and Mr. John Walter, of the Times.

Mr. Murat Halstead, of the Cincinnati Commercial, is the happy father of a round dozen of children. His youngest heir was born a few weeks since in Paris.

The monument to Liebig to be erected at Munich, Bavaria, will consist of a bronze statue on a handsome pedestal. About $20,000 have been subscribed toward it.

The longest funeral Memphis has had since the epidemic broke out was that of Mr. N. D. Menken, a Hebrew philanthropist, who died a day or two since. There were "one hack and three buggies."

Taglioni is a fine-looking and graceful old lady of 70. Until very lately she gave lessons in dancing and deportment in London to the daughters of "the nobility and gentry," but this is now beyond her reach.

The father of Tom Thumb is a pauper in the Chicago Poor House. Tom quarreled with him when a boy, and has never visited him since. He has fourteen sons and daughters in all, several of whom are wealthy.

Wilkie Collins is almost an invalid, and suffers a great deal with rheumatic gout. He speaks of the gout with stern disapprobation, but, despite the pain it almost continually inflicts upon him, he talks admirably upon nearly all topics.

Prof. Charles Crandall of Cornell University, was married to a blind lady, Miss Jemima Robbins, at Bridgwater, N. Y., lately. They had been playmates and schoolmates through early life. Miss Robbins lost her sight through excessive study.

The house in which John Knox, the Scotch Reformer, lived and died is yet standing in that part of Edinburgh known as the Old Town. Extending over the entire front is this inscription in large Roman letters: "Lufe God abufe all, and yi nychtbour as yi self."

The Rev. Augustus Toplady, author of the favorite hymn, "Rock of Ages," was rector of Broadhembury, in Devonshire. Often, instead of going to bed, he would put on his surplice, go out of doors, and thus attired, walk for hours in the night singing hymns.

The Prince of Wales' eyes are gradually becoming bulbous or crow's-footed. This is not caused, as is supposed, by violent dissipation; it is simply an heirloom of the Guelph family. Albert Edward is in every way a reformed man, which is only right for one blessed with five nice children.

Richard Grant White is at least in perfect harmony with the rest of the English-speaking world on one solitary phrase. In common with the most cultured and most illiterate of the land, he says, "My baby is teething," and in triumphant disdain asks for the man or woman who would dare say, "My baby is being toothed."

Mr. Edison's peculiarities were strikingly illustrated recently as a plaster cast of his head was being taken. While the work was in progress he employed his time in experimenting as to the sound conductivity of the wet and drying plaster, and in communicating with those about him by a telegraphic instrument which he could not see.

Congressman Hale and Mayor Boardman of Belfast, Me., went out the other day to attend a hard-money meeting. Not being sure of their way, they applied to Captain Baker, a Greenbacker, for information, and Captain Baker gave them such directions that they were unable to reach the ground till long after the meeting was over. When they returned with all their speeches in them, Mayor Boardman sought out Captain Baker and smote him upon the nose.

Post Master-General Key stands over six feet high, and is broad-shouldered, muscular, and solidly built. He would, at a rough guess, turn the scales at 250. His face is of rather a leonine order, and his large head is surmounted by a plentiful growth of bushy hair. Gray whiskers and a pair of keen brown eyes, a kindly expression of countenance, a hearty voice, large hands that give a cordial, vigorous Western "shake," and a manner unaffected and genial, complete the picture.

It has been said that the ex-Empress Eugenie is poor. Such is not the case. Her large fortune is invested in English consols, and the interest she derives amounts to $500,000 per annum. During the Emperor's life-time all the money he could scrape together was forwarded either to Poole, the tailor, or to the Bank of England. Camden House, Chiselhurst, was given rent free to her ex-Majesty by its liberal owner, and there she lives in good style, with a retinue of some fifty persons, and carriage and saddle horses numbering over twenty.

Editor Labouchere of the London Journal, Truth, should be a happy man. He is defendant in five libel suits—one brought by a man whom he called a swindler and card sharper; one by Manager Robertson of the Royal Aquarium, whom he called a thief, liar and defrauder of the Aquarium Company; another by a director of that company, whom he accused of abetting Robertson's frauds; still another by Miss Lytton, alleged wife of Robertson, who he asserts is no actress; and the fifth by an oriental correspondent of the Telegraph, whom he attacks as a rascal. To one and all he opposes the defense that he tells the truth.

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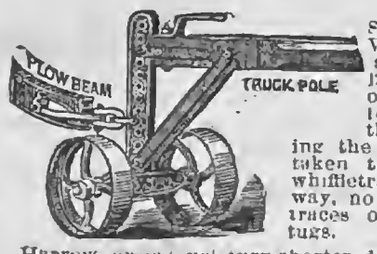

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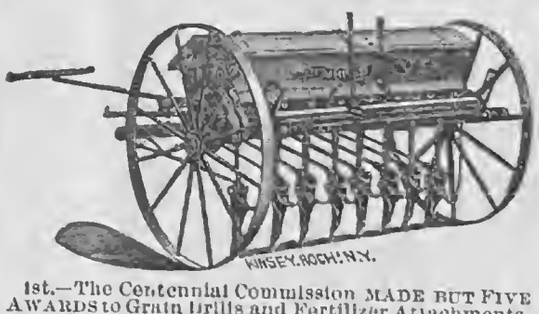

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2d.—Of these five, TWO were given Buckford & Huffman. One on the FARMER'S FAVORITE and one on Fertilizer Attachment.
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5th.—The award to the Farmer's Friend pronounces it defective by saying *it is capable of further improvement, as regards delivery up and down hill*; and also to the McSherry drill in these words: "*Some further adjustment appears desirable to enable this drill to deliver with equal equality up and down hill.*"
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'Gothamites!' said the frate bard,
'I leave thy halls forever:
My musical steed I have ridden upon,
But you would not stand and deliver.'"
[*N. Y. Commercial Advertiser.*

THE musquito, like charity begins to hum.

A STANDING choler—that of Gale Hamilton.—*Rockland Courier.*

"CAN storied urn or animated bust" exceed in eloquence, "No Trust?"

DENNIS KEARNEY is rapidly becoming the horny jaw-boned son of chin.—*Baltimore Gazette.*

THE worst thing about a mosquito is its long soliloquy as to where and when it had better settle down and bite.—*New Haven Register.*

Mary had a little lamp,
'Twas filled with kerosene,
She blew right down the chimney
And vanished from the scene.

WHAT straits are the most perilous? asked the Sunday school superintendent, and a little boy spoke up promptly, "whisky straights!" And the boy was right.—*Cin. Sat. Night.*

A CORRESPONDENT of a New York daily suggests the use of donkeys in polo playing instead of ponies. We had supposed that donkeys took part in the game all along—*Turner's Falls Reporter.*

SUBSCRIBER wrote to a journal to make some inquiries about the next world's fair, whereupon the wicked editor replied that he was under the impression that the next world wouldn't have any fair.

"SPEAKING of bathing," says Mrs. Partington, "some can bathe with perfect impurity in water as cold as Greenland's icy mountains and India's coral strands; but, for my part, I prefer to have the water a little torpid."

THE sun rises in the east," explained the teacher. "Yes, an' there's southin rises in the west, too," chimed in one of the smaller boys. "Well, what is it?" asked the school-ma'am. "Injuns!" shouted the urchin.

SAID an Irishman, in the course of an eloquent speech, "Mr. Chairman, the gals is the boys to do it."

There is no picnic ant, however lowly,
That for a livelihood must toil and beg.
But lifts the largest man up, grandly, slowly,
When it goes browsing up his trouser's leg.

There is no little bee, however humble,
That gathers summer's sweets for winter's store,
But has, by prodding with his tiny bumble,
Made great men writhe and howl, and groan and swore.

WE met a farmer, a day or two ago, who was so hard pushed that he was on his way to pawn his hoe. We told him we were sorry to see his case so hopeless. "Hopeless!" he exclaimed; "far from it! You know the old motto, 'hoe-pawn, hope ever.'"—*Yonkers Gazette.*

A magazine writer says there is a language of the hair. Don't doubt it in the least. At any rate, we have heard of tolerably well authenticated cases where a single auburn hair on a dark coat-collar, could talk plainer than a gnide-board, and furnish the material for a whole course of lectures.—*The Nation.*

AN irascible old gentleman who formerly held the position of Justice of the Peace, was recently accosted in the street in a manner that did not come up to his honor's idea of the respect due to him. "Young man," said he, "I fine you twenty shillings for contempt of court." "Why, Judge," said the offender "you are not in session. "This court," replied the Judge, "is always in session, and consequently always an object of contempt."

LIKE all Rome urchins, a Liberty-street youth, just ready for his first trousers, is familiar with Bible history and careful of his playthings. The other day he asked his mother whether David, who killed Goliath, had taken good care of his playthings. "Oh, certainly," responded the encouraging parent. "Well, said the ambitions youth, "the reason why I asked was, I would like to borrow David's sling, if his folks are willing."—*Rome Sentinel.*

Prompt Reform of Bodily Evils.

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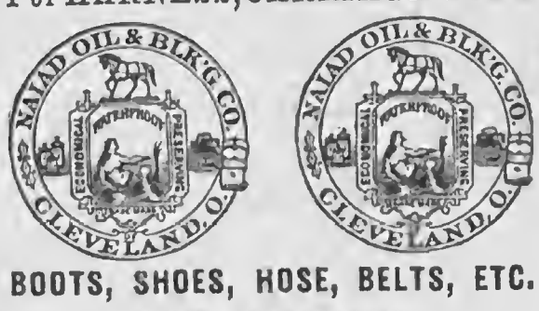

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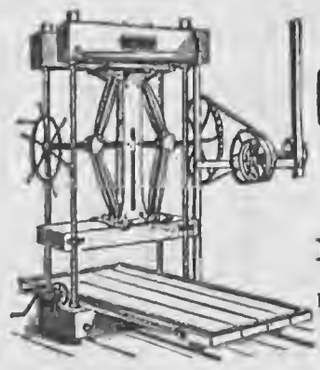

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Rural Architecture.

A THOUSAND-DOLLAR SUBURBAN HOME.

PALLISER, PALLISER & CO., ARCHITECTS, BRIDGEPORT, CONN.

THE Cottage here illustrated was designed with special reference to meeting the requirements of a family of moderate means, and gives them, for an outlay of one thousand dollars, the necessary rooms and conveniences as well as the comforts of a real home.

The designing of small houses as suited to the masses of the country at the present time, has been very much neglected by the well trained and capable members of the architectural profession; and those requiring cheap homes have been obliged to call in the services of the builder to assist them in their planning, hence the unsightly and meaningless architecture that abounds in our suburban and country districts. But the time is past when people thought that tasteful designs and convenient plans must necessarily be expensive, and the best architects have waked up to a realization of the fact that the planning of a workman's cottage is not unworthy of their skill, and that there is a constantly improving and popular artistic taste to be catered to; hence we may naturally expect better principles both in construction and external appearance, for truth and beauty, good taste and artistic excellence, are not the exclusive possesions of the rich, and the modest suburban home of the mechanic or business-man may as well be neat and attractive externally and convenient in its internal arrangements as ungainly and comfortless.

In the accompanying design we have three rooms on the first floor, together with front hall, pantry and large closet; the stairs to the cellar are accessible from the kitchen, and the open fireplace in the living-room is an important feature. On the second floor are three spacious chambers, each having a good closet; also, there is a small closet in the hall. There is a cellar under the whole house; the hight of cellar in the clear is six feet six inches; first story nine feet; second story eight feet. Roofs are shingled with fine shingles laid five inches to weather, the frame is sheathed with tongued and grooved boards, and inclosed with narrow clap-boards three inches to weather. The whole is built in a thoroughly substantial and complete manner for price named above.

The painting of exterior is in tints, the exterior body-color being Venetian red with trimmings of Indian red, and chamfers and incised work picked out in black, blinds dark-green.

It costs little to have an artistic building if one begins aright, and while a square box may suit the taste of some, the fact is certainly to be deplored. A neat artistic building for a rural home, is a pretty certain indication of comfort and self-respect in its inmates. The house will be furnished neatly if not expensively, to accord with its external appearance; the grounds surrounding it will be pleasantly laid out, and the whole farm bear evidence of care and thrift.

Farm Economy.

REQUIREMENTS TO BECOME A GOOD FARMER?

L. J. TEMPLIN.

A CLEAR CONCEPTION OF MODERN FARMING.

How may I become a good farmer? is a question that many young men are asking themselves at the present time; and for the want of a satisfactory answer to it, many are hesitating about engaging in farming pursuits at all. It is a question, the importance of which is not appreciated by a great number of those already in the business. Too many farmers are content with the old, humdrum routine of farm work pursued in the same manner it has been for generations past. Such was probably good farming in the days of our fathers or grandfathers; but such is not good farming to-day, any more than the old-fashioned stage would be a method of fast traveling at the

A THOUSAND-DOLLAR SUBURBAN HOME.—[See page 615.]

present time. The methods of farming in vogue at prosent aro based upon and demand a much higher degree of intelligence than was demanded in former times. Farming is no longer simple muscular drudgery as it was in the days of our fathers. The first thing, therefore, for a young man who contemplates engaging in agricultural pursuits, is to rise to a proper conception of the true nature and dignity of his calling.

PRACTICAL KNOWLEDGE.

It is true, however, that in farming there is more or less hard manual labor that cannot be dispensed with. Many things pertaining to the minutiæ of farm work, and that must be known in order to win success in the business, can be learned only by observation and experience. Reading and study are important, indeed indispensable, to the highest success, but neither of these will take the place of actual contact with the active duties of farm life.

Apprenticeship is what is needed to qualify young men for this work. In the mechanic arts no one thinks of entering upon a successful career without having first served a protracted apprenticeship under a competent and skillful workman. Now, there is as much to be learnt about farming as there is about any of the mechanical trades. The better plan is for the young man who would excel as a farmer, to place himself for a few years under the instruction of a first-class, practical farmer. In this way he will be able to learn just how every operation on the farm is, or should be, performed. At the same time he will acquire skill to perform these operations himself.

Our agricultural colleges are, or should be, the best places in the country for obtaining both a practical and theoretical knowledge of agriculture. Whether these institutions are doing all that the people have a right to expect of them, is a question that I do not intend to discuss at this time, but there is no doubt that any one of them will be a great assistance to anyone who is seeking to qualify himself for the business of farming. Where a young man can avail himself of the opportunity to attend one of these institutions, he should do so by all means. But if this may not be done, the next best thing is, as I have stated, to serve under some first-class, practical farmer till the practical farm work is thoroughly understood.

KNOWLEDGE OF THE PRINCIPLES OF CORRECT FARMING.

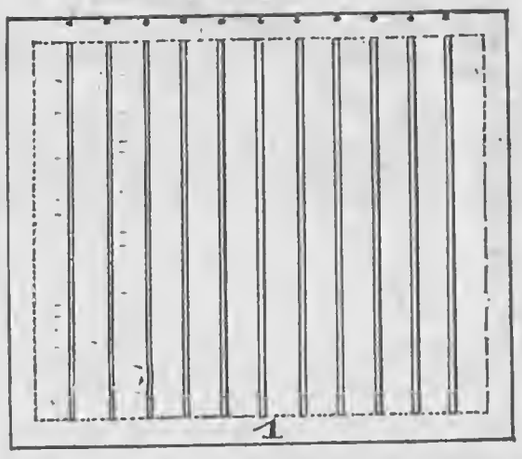
But practice without a knowledge of principles leads to a one-sided, unsatisfactory course. Provision should, therefore, be made for a thorough study of the principles on which correct farm practice is based. The young man who wishes to qualify himself for taking a high rank as a farmer, will find a great assistance in the agricultural periodicals of the country. These are largely made up of the writings of practical farmers, and hence contain the ripest thoughts and latest results of the most successful farmers of the country. Every young farmer should take and read, with care and close attention, one or more—I would say two or three—of these publications. Besides these, a small library of choice agricultural books should be procured and thoroughly studied. These should embrace works on soils, crops, fruit raising, entomology, agricultural chemistry, the breeding, raising and fattening of stock, meteorology and other kindred subjects. Inasmuch as a large portion of farm work is now done with machinery, the study of mechanics is an essential part of a good farm education.

Let any young man who is asking the question that heads this article, pursue faithfully and persistently the course here recommended, and, if he is a man of even mediocre ability, he will, in a few years, be able to take rank with the most intelligent and successful farmers of the country.

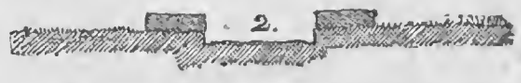
THE SCIENCE AND PRACTICE OF PLOWING

BY A JERSEY FARMER.

The object of plowing is to prepare a fit bed to receive the seed and for the proper growth of the roots. These include every purpose for which a farmer uses a plow. As has been explained in a former article upon the culture of wheat, a proper condition of the seed-bed is very important and absolutely necessary for safety and thrift of the young plants. This condition should be such as to secure a certain mellowness and looseness of texture, and yet a certain compactness of the soil in every portion a field. If it is necessary anywhere, it is as needful everywhere. Upon this evenness of preparation, more depends than is generally supposed. It is precisely here that failure is most frequent. Perhaps there is no other country where agriculture is practised as an art, where less attention is given to perfection in plowing or where there is less system in the mechanical preparation of the soil for the seed. One very rarely sees a straight, even furrow; or a plowed field in which a stick can easily be thrust to the depth of the furrow all over the field. When tested in this way, there will usually be found, at least once out of three times, a place where the stick will not penetrate more than an inch or two instead of five or six inches. These hard spots have not been plowed. The ground has there been passed over by baulks, or by crooks in the furrow; or the plow has merely skimmed over the surface; or the furrow slice has been lapped over too much; or it has not been cut off below the surface by permitting the plow to take too much land. Plowing is an art that requires both study and practice for its proper performance; and many old farmers, all the young ones, and those who are not "to the manner born," who have taken to the farm either as an escape or a relief from other employments; all these may well and profitably study the principles, and practice the methods of the art carefully and patiently.



There are plows and plows, some good, some indifferent, and some actually bad; with the last of which an expert plowman must needs exert all his skill to make passable work. There are plows also which are intended for certain uses and which can only be made effective for those uses; as, for instance, plows for lap furrows and for flat furrows in sod; for stubble ground, for side-hill plowing, for broad, narrow, deep and shallow plowing, so that few farmers can do all their work with one plow. There are plows which in the hands of a good workman can be made to do all the different kinds of plowing in a passable manner, but just as an expert cutler or barber could make a jackknife fit to shave a beard with, so with such a plow there are needed the thorough knowledge of what should be done and the skill to do it: of this, however, there is not time to speak: the present object is to refer to the different kinds of plowing and the methods of managing the plow to perform these.



Plowing sod is the most important, because the ground must not only be turned over, but the sod must be covered, the slice must also be turned over evenly, of an even thickness and width. This cannot be done unless the first furrows are made straight and the succeeding furrows are kept straight. The first furrows, too, must not be simply turned over, as is usual, upon the untouched sod, else there will be a ridge left there with a hard bottom under it and much ground will be left in bad condition for the crop. In laying out the lands for plowing, the first furrows should be made straight by the use of sighting poles; experts may do without these, but no young plowman can or should. These are placed about 20 feet apart. The first land should be laid out parallel with one side of the field and the others should be measured from this. The field would then be laid out for plowing as shown at fig. 1. The dots represent the sighting poles with the back furrows, 44 feet apart, plowed across the field.

Those are placed at measured distances; two being placed at the beginning, 44 feet apart, to make 22 pace lands, and each being moved alternately to save labor. Those at the farther end of the furrow are moved before the returning bout is made in readiness for the next furrow.

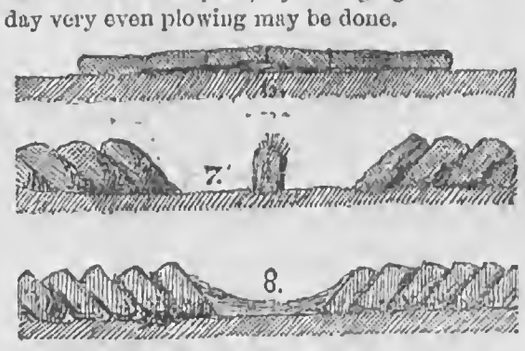
The back furrows for each land are all made before the lands are plowed. They are made as follows: a thin furrow slice is first turned outwards, and in coming back, another is thrown from that also outwards, as shown at fig. 2. Then a deeper furrow is made, which not only replaces the first sod turned, but throws a slice upon it, leaving it as shown at fig. 3. The back furrow then consists of two thin sods face to face, with the earth broken, loosened, and pulverized.

The plowing then continues, leaving the furrows as shown at fig. 4.* The way in which the earth is loosened in the process of turning the sod is shown at fig. 5. First the slice is cut off by the plow-share; it is then raised, and as the mold-board turns it, it is curved and bent, and the loose side, being the outer curve, is spread and broken up, so that when it falls over, it is loose and mellow. There are plows made with long, spreading mold-boards, which turn the furrow-slice slowly and press it hard up against the preceding one and pack it closely; others with short, sharply-curved mold-boards, turn the furrow quickly, and break up the soil more thoroughly. The former are preferred by English and Scotch plowmen; the latter are favored in America and for our dryer climate are preferable, giving a loose, open surface with a compact bottom under it. This kind of plowing is known as lap-furrows, and is suitable for fall crops or for fall plowing for spring crops.

For spring plowing, especially for corn, flat furrows are generally made.† These flat furrows are cut of such a thickness and width that they are not left standing partly upon edge as the lap-furrows, but one is reversed in the furrow left by the plowing of the former one. To do this perfectly, or indeed at all well, the slices must be of even width and, unless the furrows are kept straight, it is obvious that this cannot be done. In short, it is clearly seen that if the plow is not carried at an even depth and the furrows are not kept straight, the work cannot be well done, as there must be places left unplowed; furrow slices not turned completely; gaps left between them into which the seed falls and is lost, being covered too deeply; and that when the ground is harrowed, the sods, being loose, and not properly laid and held down by the succeeding slices, are torn up and left upon the surface. In finishing the open furrows between the lands, the plow should be run back and forth to mellow the soil, and no part of it should be left unplowed. These are frequently left as shown at fig. 7, when they should be finished as at fig. 8.

To make a straight furrow, the plow should be firmly held, the plowman standing well up to the handles, and the handles kept level. The plowman should also keep his eye ahead of the team occasionally, and watch the furrow-slice as it is cut by the coulter or the fin of the share. The moment any divergence from a straight line is seen, the young plowman should stop the team, unless he can rectify the error without, and start again properly, backing his plow if needed. If the plow cuts too wide or too narrow, this may be remedied by changing the draft-point to the left or right, as the case may be. The most convenient way of doing this is by using a clevis in which there are adjusting holes for this purpose as well as for regulating the depth. But for temporary adjustment, the plow may be made to cut wider by carrying the handles to the right hand, and narrower, by carrying them to the left from an even position. This may do to correct a little divergence from a straight line in the former furrow, but should be done only by practiced plowmen. If a furrow will get crooked in spite of all that can be done by a beginner, it will be better for him to go through the last furrow once more and straighten it; and then go on afresh. But it is much easier to get the furrows more crooked with every bout than to get them straight, once the line is departed from.

The depth of the furrow may be changed by altering the position of the clevis up or down in the notches at the plow beam; by changing the length of the trace chains or, temporarily only, by raising or bearing upon the plow handles. The shorter the traces the shallower the plow will run, and as they are lengthened the plow will run deeper. If the point of the share is worn round on the under side, the tendency is for the plow to run shallow, or even out of the ground. The point should be kept sharp for this reason. Movable and reversible points are made, for one plow at least, which are very useful in this respect; by changing them each day very even plowing may be done.



To become an adept in plowing, as every young farmer should aim to be, practice is required. When the writer began to plow, he began in a stubble field, with the sighting poles, until he could turn a straight furrow across the field. It was only a few days until a straight furrow could be made with the use of one pole. Some distant object, a tree or a fence post, answering the purpose of the other. In less than a week's practice it was perfectly easy to manage the plow so as to make a furrow so straight that a rabbit or a crow could be seen from one end to the other, and that will do for all practical purposes. It is to be regretted that we cannot have plowing matches in which farmers' boys could show their skill with their plows and teams. It would tend to very much better plowing, to the growing of better crops than are now produced, with less labor in cultivating them. That nobody can deny.

* It is a good practice to leave a strip—shown by dotted lines, fig. 1—entirely round the field unplowed, until the lands are finished. The width of the strip is such as will give headlands wide enough to turn upon. This is about 10 to 12 feet. When the lands are all plowed, this strip is then plowed by going around the field finishing at the gate, where the last land should have been completed.

† The first furrows are made, as before described, by first plowing shallow slices outwards, then reversing them with a deeper furrow and then proceeding. This is shown at fig. 6. The lands are laid out as before described.

BURNED EARTH AND PEAT.

The simple process of burning a thing in the usual way, is the readiest and most complete destruction of every valuable or injurious ingredient in any article, and when it is desirable to get rid of a thing with the least possible trouble, or to derive the least benefit from it, the quickest and most effectual way of doing so is to bury or burn it. In burning, the good and the bad are etherealized and sent off into the atmosphere to gather in clouds and vapors, and return to the earth in snow and rain as ammonia or other life-giving ingredients of vegetation.

But when all these ingredients which are thus thrown off in open burning, can be retained or stored up, the best fertilizing elements are still retained, and although the residue is not as valuable as if the same article had been properly decomposed and all its ingredients saved, still for many purposes the closed burning process is the most desirable. Such is the case with burned peat or muck and earth, when wanted as absorbents or deodorizers. The great value of these when burned is that, besides retaining nearly all their value as fertilizers, they have added to them the ingredients of the other materials used in burning, and are the best deodorizers for cess-pools, stables, hen-houses, and also the best absorbents of liquids, which the farmer can easily obtain.

But the burning process must be carefully attended to, and consists in covering any convenient refuse matter completely, after the manner of a charcoal heap, with peat or dirt, and letting it burn slowly. Brush, weeds, old decayed timber, corn stalks, or any other material that can be easily obtained, and which, from its coarse character, cannot conveniently be composted in the manure-heap, may be thus profitably treated. In the operation, the earthy covering will absorb the fertilizing ingredients of the smoke and ashes of the refuse heap. No smoke should, therefore, be allowed to escape, except that passing through the muck or earth, and these should be thoroughly pulverized and kept dry, as they are then most effective, and can be most conveniently applied. The muck, peat, or earth is not entirely reduced to ashes, nor is it desirable that it should be, but it is thoroughly dried, while all its sourness is removed and enough potash added to render it more valuable in the compost heap. In this condition it is an excellent absorbent of liquid manure in the stable or cess-pool, and a first-class deodorizer in water-closets, hog-pens, or poultry-houses; and, in fact, is useful wherever any bad odors arise, or where liquid manures would otherwise be wasted. A barn-yard having a water-tight basin in the center, will, if this burned dirt is regularly added to the manure-heap, and removed as often as saturated, furnish an immense supply of the best manure.

LAY IN YOUR WOOD.

[The following article was received from Mr. Miner a few months previous to his death, and held over that it might be more timely.—Eds.]

No good farmer will neglect to cut wood the coming winter, to be used a year hence, as it is poor management to burn green wood; and it is always best to have your wood for your family's use to be under cover, and so connected with the house that it can be got at from the kitchen without going out of doors. If your wood-house is of ample size, it will afford you a place to do many little jobs in rainy weather, and your boys can split the wood under it, and pile it up on wet days. When I see a farmer's wood pile at his kitchen door—a lot of logs to be cut as the wood is wanted, and *green* at that, I know his entire character; and I might write it out thus: This man was brought up from boyhood to be slack in his farm duties, doing nothing but what he could not well omit. He has no idea of there being any benefit in "*driving things*," and he takes the world "easy." He denies that there has been any progress made in farming since he was a boy; consequently, his farm, buildings, and general surroundings have an ancient look, just as farms had fifty years ago; and his children are growing up to be "chips of the old block," and his boys will, probably, die as their father will, with a *pile of green wood at their doors*.

If a farmer has no other reason why he should provide dry wood for his family, except that it is cheaper than green wood, as regards the heat given out, that alone ought to be sufficient inducement for him to provide it; but the comfort of sitting by a dry-wood fire in winter of itself ought to stimulate every farmer to have an ample-sized wood-house, filled with a year's supply of wood, and cut of the size suitable for use, as having to cut and split wood daily, as it is used, is a way of managing fuel that no good farmer should tolerate.

Field Crops.

THE CULTIVATION OF SORGHUM.

THE continued high price of sugar coupled with the fact that the United States import $75,000,000 worth annually, gives importance to any effort which may, in part or whole, tend to supply this deficiency. One of the means of increasing the supply of syrup, if not of sugar, is the cultivation of the sorghum plant, Sorghum saccharatum, now extensively introduced all through the central Western States. Two species of this cane have been introduced, the true sorghum from China, and another from Africa, called Imphee; but this is of less value for cultivation.

Sorghum was first introduced into France in 1851 and into the United States in 1856, since which time its use has extended quite rapidly; machinery for grinding it has been provided, and the process of cultivation and evaporation has become well understood. Sorghum grows on any ground suitable for corn, but well repays high fertility. The plant resembles Indian corn before its seed-clusters come out, and grows to a hight of from eight to eighteen feet. The cultivation is the same as for corn; the stalks are cut just before frost, the leaves stripped off for fodder, and the stalks pressed.

Well-ripened stalks yield half their weight in juice, and from five to ten gallons of juice are required for one gallon of syrup. The yield of syrup averages from 150 to 175 gallons per acre, though in exceptional cases, the yield is much larger. The product is chiefly in the syrup or a glucose used as a substitute for sugar in candies, wines, and for similar purposes. The product varies much with the cultivation and care in manufacture. The syrup carefully made from ripe stalks has a clear, bright, amber color, and is preferable to common molasses. The total amount of sorghum molasses produced in the United States in 1860, was 6,749,123 gallons, and in 1870, 16,050,089, since which time the product has probably further increased in the same proportion.

Some growers recommend cutting off two to three feet of the top before the seeds are fully ripe, which gives a fuller ripeness to the stalk, and the part cut off makes better fodder. This fodder is of about three-fourths the value of the same weight of hay. The cane may be crushed between horizontal rollers as with sugar-cane, but where only small fields are raised, an upright mill, run by horse-power, is usually employed. The total cost of an outfit should not exceed $200.

The fresh juice has a greenish-yellow appearance, and an unpleasant odor or flavor, which is remedied by the use of slacked lime and constant skimming during evaporation. When evaporated to a density of 18° Baume, it is settled and again boiled to 35 or 40 degrees. If the herbaceous flavor has not entirely disappeared, fresh additions of slacked lime are made and it is again boiled. Experiments are now being made to perfect the crystallization of sugar from this source, and it is hoped the cultivation of sorghum may become much more widespread than at present, and that the production of sugar may in this way be profitably transferred from the tropics to the temperate zones, and from slave to free labor. Certainly the inhabitants of the United States should make every effort to extend the production of sugar within their own territory and save the annual expenditure of $75,000,000 now paid to other nations for sugar.

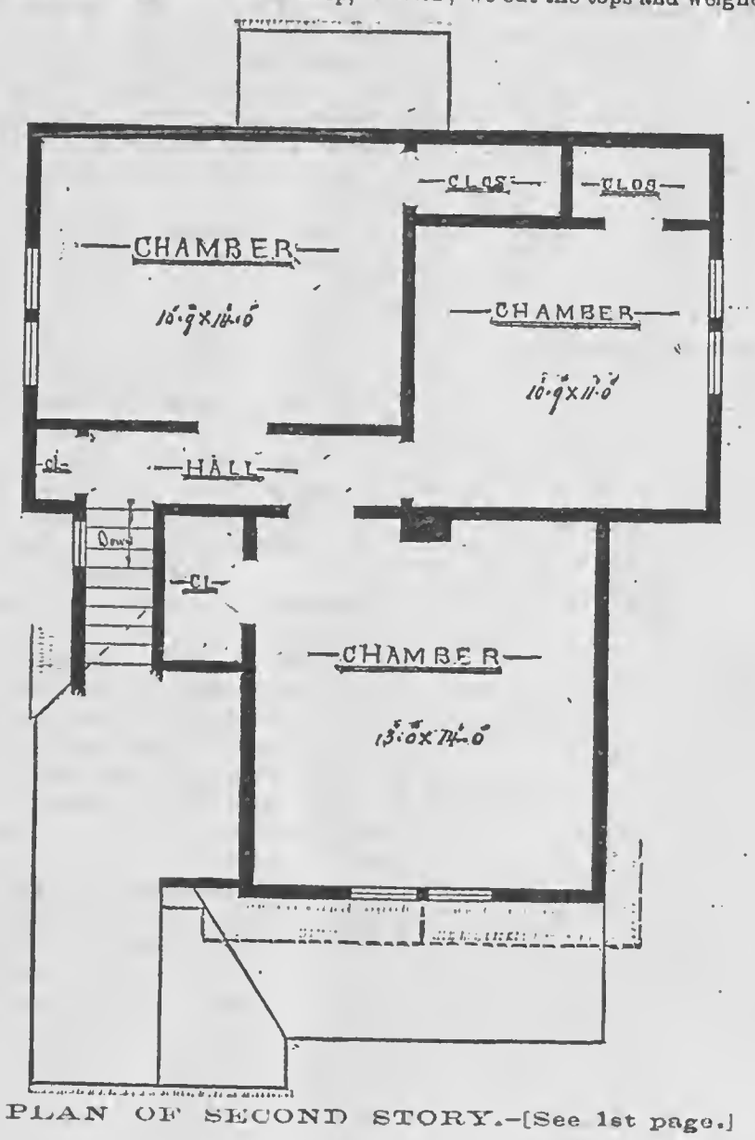
S. S. B.

HARVESTING BEANS.

THE work of harvesting beans is slow, tedious and laborious. If bad weather comes while the crop is exposed, there is the additional danger of its making the beans unsalable. A dry time is important, but at this season we cannot always be sure of dry weather. Beans left on the ground after pulling are easily injured by wet. It is not so much the water as the mixture of earth with it which rots the pods and discolors the beans.

TO KEEP THE BEANS FROM THE GROUND is therefore the first requisite to success. I know nothing better for this than to take a couple of fence boards or rails, place them side by side with just enough room between them to drive a row of stakes. Let the boards or rails lie north and south; place the pulled beans on the boards, piling them up and twining the vines among the stakes which should be twenty inches or two feet apart. With stakes about four feet high and boards or rails fourteen feet long, from eight to twelve such heaps will clear an acre of heavy beans. When once put up, they will stand a great deal of bad weather without injury. The bean leaves shed the rain like so many shingles, while the long, narrow heaps afford a thorough circulation of air, so that if wet gets in the heap, it dries out before injury is done. This method is recommended wherever beans have to be left out some time, but it is also advisable whenever the weather is unsettled. By this method the beans may be gathered up while green, and their loss by shelling be avoided.

BEAN STRAW is excellent feed for sheep, and should be carefully saved for that purpose. When fed with beans or other grain, it makes a very rich warm manure, quite as good as, if not better than clover. I know a farmer who every winter fattens a considerable number of sheep,



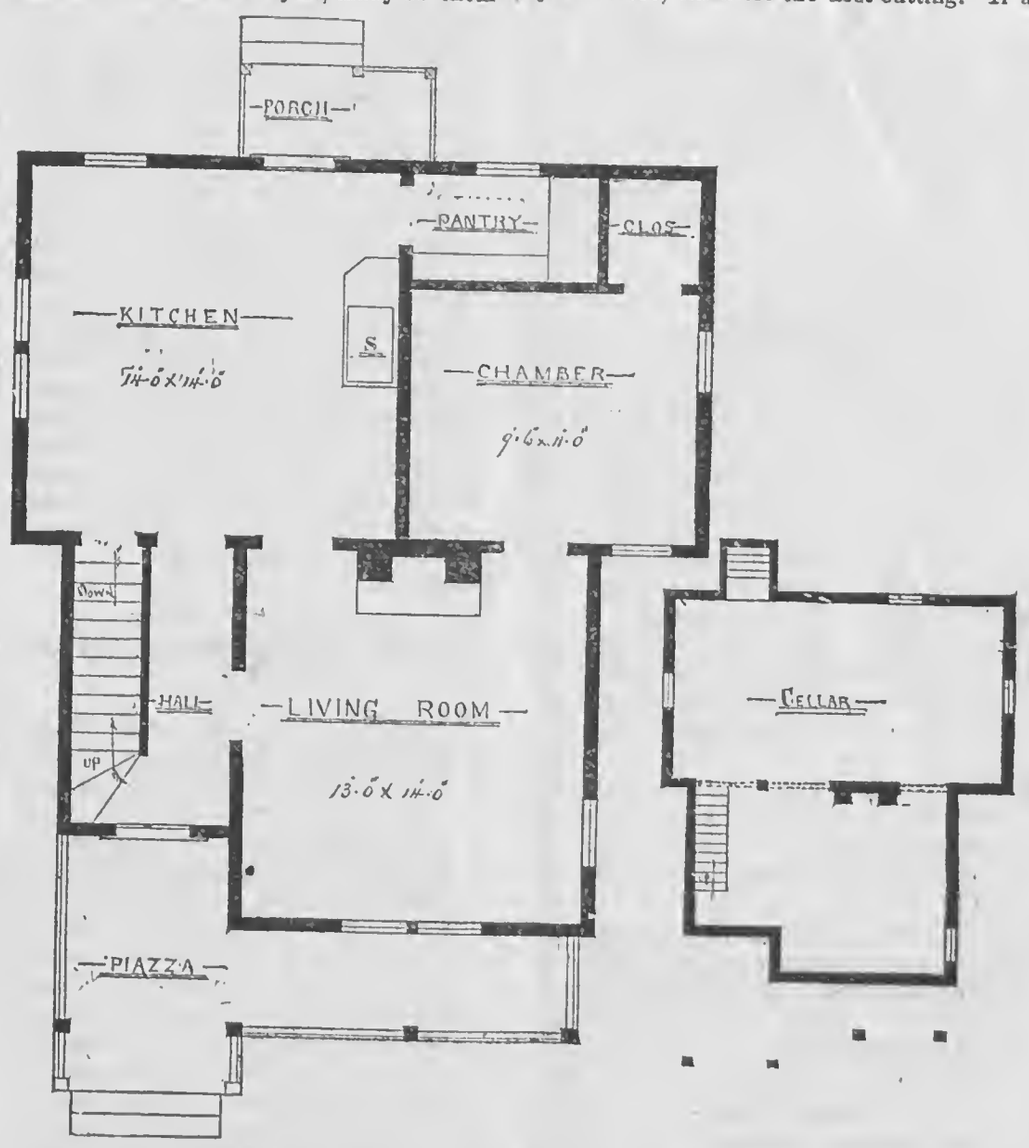
PLAN OF SECOND STORY.—[See 1st page.]

who finds profit in feeding not only his own bean straw, but as much more as he can buy at low rates from farmers who grow beans but, keeping no sheep, have no use for the straw.

Monroe Co., N. Y. W. J. FOWLER.

A CHAMPION OF PRICKLY COMFREY.

Our readers already know our opinion of the merits of Prickly Comfrey, and our reasons therefor, but as our only interest in the question is to discover the truth and to guard our readers against a possible imposition, we deem it only just that they should be placed in possession of both sides of the question, so as to be in a position to form an intelligent opinion upon it. Accordingly we readily place before them the following communication from Mr. Wilcox, whose first letter on the same subject, many of them



PLAN OF FIRST STORY.—[See 1st page.]

will probably remember having seen in the RURAL last spring.

EDITOR RURAL NEW-YORKER:—Some time since, I saw an editorial in your paper, saying nothing would eat the Prickly Comfrey. I wished to answer it at the time, but was ill, and could not. Last spring I gave in the RURAL my experience with this plant, afterwards advertised with you, and sold plants to a number of your readers. To allay any suspicion which they may possibly have, let me give the following testimonial from Chas. V. Mesler, and A. J. Smith, which is affirmed to, before a notary.

"By request of Mr. Wilson, on the 17th day of May, we selected three plants of Comfrey in his field; we cut the tops and weighed them. Again on the first day of July, 1878, we cut the same plants and weighed them. The total amount of the two cuttings of the three plants was 61½ pounds. We believe there were many other plants fully as large. We witnessed stock eating the plants with apparent relish, and Mr. J. Craine, president of the Niagara Farmers Club, was present at the second cutting, and thinks the plant a valuable one for its intended purposes."

At 3 feet apart there are 4820 plants on an acre. There were 20½ lbs. for each plant, for the two cuttings, which would make at the rate of 49 810-2000 tons to the acre, to July 1st. Both cuttings should have been cut one week earlier. Five weeks will mature a growth. As it grows early and late in the season, six cuttings may be made in this latitude. My plants had no fertilizer from the time they were put out, a year before, till after the first cutting. If any reader of the RURAL, who has Comfrey and can get no animal to eat it, and is suspicious that he has an elephant on his hands—just as I felt about a year ago—will follow directions, before winter he will agree with me that, taking everything into consideration, there is no plant known that is one-fourth as valuable as a forage plant. It affords a daily supply of nutritious food that will fatten any animal, while it costs little trouble to grow it. Few animals will voluntarily eat it at first, as it has what is to them a disagreeable odor. Before feeding them to stock, the leaves should be run through a cutting machine, or cut with a knife, wetted and mixed with bran or meal, with a little salt added. The animal to be initiated into their use, should be confined after fasting one night; then after breakfasting on Comfrey, hay should be fed at noon, and at night more Comfrey, and when this has been eaten, more hay, gradually decreasing hay and ground food, and increasing Comfrey. In three or four days the trouble is over, and your stock will grow to like it better daily, I have demonstrated to my satisfaction that it increases the flow of milk in cows, and improves the flavor greatly. Pigs will thrive nicely on Comfrey and plenty of water. I have several thousand plants growing under large apple trees. Those that the sun has never shone on, thrive as well as those exposed to his rays. I think they will do well in a wood where the growth is not too dense. There are readers of the RURAL who have plants enough to make a fair test, will they make it and give the result before winter? G. A. W.

Niagara Co., N. Y.

CHAMPLAIN AND DEFIANCE.

CRITTENDEN CO., Vt., Sept, 18.

EXCESSIVE wet during seed-time, a drought of a severity never before experienced in our Champlain Valley when wheat was filling its heads, and at harvest frequent, almost daily rains, combined to make the past season very trying here for wheat, yet with our growers the Champlain and Defiance hold their reputation for superiority. To sow cereals thinly in detached plots and fertilize the crop liberally is to invite the attacks of rust, midge, &c. When the weather became bad, I expected I should hear reports of many failures with my new varieties; but I still hope their dissemination will do agriculture some good. C. G. PRINGLE.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

IN regard to escutcheons, we are willing to admit that a good cow generally has a large or well developed escutcheon, but that the theory is without exceptions is a mistake. A nicely developed escutcheon is a handsome feature in a cow, and also in a bull, and with stock-breeders it is considered a valuable point, and in the scale of points of the Jersey Cattle Club it is considered important. It is, however, more fanciful than a well developed and well shaped udder, or prominent milk veins. The shape of the body we should consider a more important feature, and we should prefer a cow with a poor escutcheon, and properly formed in the body, to one with ever so much width and outline of escutcheon, and a beefy and unmilk-like form. It may be urged that a cow with a fine escutcheon would not have such an inconsistent form; but, nevertheless, such is frequently the case, and all cows of this style are poor milkers.

A patch of orchard-grass in the door-yard is now being mowed for the third time this season. The blades will average 16 inches in length. Now and then a tussock has sent up a few stalks, which have headed out. The young pigs get a feeding twice a day of this green grass or the stalks of the sweet corn, after the ears have been plucked off for cooking. This green feed keeps the pigs healthy, and helps out where there are more pigs than cows. The old rule, "a pig to a cow," we never could live up to, as we invariably have several pigs to a cow, and so the orchard-grass and all the weeds about the garden help very much to keep the pigs growing.

We never ate better bread than at Nathaniel Mann's, a few days ago. It was made from Clawson wheat. Miss Mann, who made the bread, said, at first the flour was so poor she could not make good bread out of it, but the miller had learned how to grind it, and now there was no difficulty in making nice bread. We suspect it will not bear too close grinding and sifting. In other words, canaille, the coarser part, must be kept out of the flour.

To-day the thermometer, hanging in the shade on the north side of the house, marked 80 degrees. An hour afterwards the same instrument, having been removed to the cellar, indicated 65 degrees, a difference of 15 degrees between the outside and inside of the cellar. This was at 11 o'clock. At 65 deg., the butter comes firm and solid in a half-hour. This was the natural cellar temperature, caused by keeping it closed. We do not open the windows any more nights, as sufficient change of air comes in through one of the outside doors, which is left open all the time. This door does not open out-of-doors but into on outer room where there is a screen door, through which the air can pass at

all times. Where the cellar doors open into the open air they should be kept closed, and the cellar ventilated by the windows at night. If the cellar is kept perfectly clean, but little ventilation is necessary. If any milk is spilled it should be wiped up at once and all vegetables be kept away from the milk or butter. Milk and butter do not breathe but they can smell, and bad odors are very offensive and injurious to them.

A few handfuls of gypsum (plaster), sprinkled around the back door or privy, will absorb all of the bad odors and perhaps keep sickness away. We always save a half barrel of it and have a dishful on hand in the wood-house for use. Five minutes after it is spread around, all offensive and sickening smells will cease. A farmer had better go hungry than leave these things unattended to. Whenever he does do it he is running up an account with the doctor and very likely will soon be in debt to the undertaker, and if he doesn't, a nasty cess-pool is not desirable about one's dwelling.

Next week the fairs begin. We shall put the sheep and cattle designed for exhibition in the stables a few days before and give them hay and a little meal to *dry* the bowels. They will drive better and will not shrink so badly while on exhibition. We do not give cattle green feed at the fairs.

HINTS BY THE ROADSIDE.—No. 2.

WHAT KIND OF MANURES.

My neighbor Harris purchased a few bags of Mapes' commercial fertilizer, last Spring, to eke out his scanty supply of barnyard manure, and I see that he applied it in the hill, by the small quantity, for corn, beans, potatoes, cucumbers, melons, etc., and now in midsummer, he has very small vines, poor corn, and only fair beans, and potatoes. The difficulty is, that however valuable the commercial manures may be, they need to be composted as much as any other green manure. They are too hearty, too hot for the young roots, and the plants are apt to become congested. If my neighbor Harris had purchased his commercial fertilizer six months or a year before he wished to apply it, and had composted it with two or three times its bulk of moist earth, or had mixed it lightly but evenly through his compost heap, he would have had a good result. He will find a good crop upon the ground where this fertilizer was applied, late this fall, or next season, as the bone and superphosphate will then have become decomposed in the soil.

If my neighbor Harris would scrape his yard, and the surroundings of his buildings, and pile up a neat compost heap under cover, and turn it over two or three times during the summer, he would have no need of experiments with the commercial fertilizers. The crop of weeds is too large in quite a number of places.

WORKING ROADS.

I was road-master one year, a few years since, and warned all the district out with picks and crowbars; not a plow or yoke of oxen was allowed. No scrapers, or idle carts, only picks and crowbars. Our district was three miles long, and much of it up hill and down dale, and everybody said it was the worst, stoniest piece of road in the county. I set three gangs of men at work, one to each mile, and we worked eight hours a day, for three days, and I credited each man six days. When we got through, there were stones enough upon the sides of that three mile district of road, to make a stone wall. Now those three miles are the best and the hardest, and smoothest three miles of road in the county.

If my neighboring road-masters would take the hint to dig out the stones, instead of covering them up each year, my wagon tires and axles would last as long again as they now do.

ROAD FRONTS.

While I am giving my neighbors hints about roads, I wish to hint that a neatly improved road-front to a farm, will add ten dollars an acre to the value of any farm in the country. Building a neat bank wall, and grading off the sides of the road, will give each farmer the name of a man of taste, will raise him in his own and his neighbors' estimation wonderfully, besides educating his children, as well as every visitor or passer-by. It should be a matter of pride with each farmer to make his road-front an example of neatness.

HOUGH HANDEL.

Horticultural.

TESTING VEGETABLE SEEDS.

SECOND SERIES.

PROFESSOR W. J. BEAL.

THE striking results reached in testing seeds last year, encouraged me to continue the work this spring. I purchased in Lansing and in Battle Creek, seeds of the following vegetables. These were sold on commission at the groceries. They were tested in about the same way as last year, in the greenhouse, in folds of thick paper kept damp, and nearly of an even temperature of about 60 degrees. We have found no other way by which so large a proportion of seeds will germinate. In nearly every case the variety of any vegetable was the same, no matter by what firm it was sent out. For example, all the papers of beets were labeled "Blood beet" all onions "Yellow Danvers," all squashes, "Hubbard."

DETROIT SEED COMPANY.

	Seeds tested.	Seeds germinated.	Per cent.
Carrot	50—50	42—40	82
Lettuce	50—50	43—43	86
Cabbage	50—50	28—31	59
Parsnip	50—50	19—14	33
Cucumber	25—25	23—20	86
Squash	10—10	9—8	85
Turnip	50—50	48—49	97
Tomato	50—50	41—44	85
Salsify	25—25	25—24	98
Onion	50—50	34—36	70
Radish	25—25	23—20	84
Peas	25—25	21—20	82
Corn	25—25	18—14	64
Beans	25—25	20—19	78
Beets	25—25 pieces	19—23	85

BRIGGS AND BROTHERS.

Carrot	50—50	16—18	34
Lettuce	50—50	44—41	85
Cabbage	50—50	34—36	70
Parsnip	50—50	28—26	54
Cucumber	50—50	46—48	94
Squash	25—25	21—20	82
Turnip	50—50	27—31	58
Tomato	50—50	43—37	80
Salsify	25—25	14—18	66
Onions	50—50	40—37	77
Radish	50—50	29—34	63
Corn	25—25	destroyed	—
Beans	25—25	23—24	94
Beets	25—25 pieces	13—14	54
Cauliflower	50—50	42—44	86
Turnip	50—50	43—45	88
Squash	12—12	11—10	87

D. M. FERRY & CO.

Onion, Red Wethersfield	50—50	34—41	79
" Yellow Danvers	50—50	26—39	65
Carrot	50—50	38—44	82

LYMAN SEED CO.

Lettuce	50—50	11—15	26
Cabbage	30—30	9—21	50
Parsnip	25—25	19—18	74
Cucumber	25—25	20—20	80
Squash	12—12	11—11	91
Turnip	50—50	45—43	88
Tomato	50—50	38—40	78
Salsify	50—50	4—9	13
Onion	50—50	19—24	43
Radish	50—50	38—41	79
Peas	25—25	24—25	98
Corn	25—25	19—23	84
Beans	25—25	23—24	94
Beets	25—25 pieces	23—21	88

SHAKER SEED CO., LEBANON, N. Y.

Cabbage	50—50	41—47	88
Squash	12—12	12—12	100
Onion	50—50	47—43	90
Radish	50—50	38—39	77
Beet	25—25 pieces	23—23	96

COLLEGE SEED.

Cabbage	50—50	44—43	87
Parsnip	50—50	19—26	45
Salsify	50—50	37—44	81
Onion	50—50	47—48	95
Corn	25—25	25—24	98
Beans	25—25	23—21	88

The above lots average as follows:

		Per cent.
Detroit Seed Company	15 varieties	78
Briggs & Brothers	16 "	73
D. M. Ferry & Co.	3 "	75
Lyman Seed Co.	14 "	70
Shaker Seed Co.	5 "	90
College Seed Co.	6 "	82

The above is hardly a fair comparison, as each firm was not represented with the same kind of seeds. From Detroit Seed Co. we select the six varieties which are contained in the College list, and they average 67 per cent. BRIGGS BRO'S. average 72 per cent. In the latter case we are obliged to omit the corn. Lyman Seed Co. averaged 59 per cent.; College Seeds. 82 per cent.

	Per cent
The five sorts of Shaker Seed Co. averaged	90
The same five sorts of Detroit Seed Co. "	76
" " " " Briggs & Bro's. "	70
" " " " Lyman Seed Co. "	70

Yellow Danver Onions are found in each lot and will be seen to average as follows:

	Per cent.
Lyman Seed Co.	43
D. M. Ferry & Co.	65
Detroit Seed Co.	70
Briggs & Brothers	77
Shaker Seed Co.	90
Agricultural College	95

Cabbage germinated as follows:

	Per cent.
Lyman Seed Co.	50
Detroit Seed Co.	59
Briggs & Brothers	70
Shaker Seed Co.	88
Agricultural College	87

In case of the College seeds, those of cabbage, parsnip and salsify came up from a single plant grown in an isolated place. It is believed by many that such plants will not produce so many or so good seeds as those grown on plants where there are several of a kind together. In case of beans and peas, we know the above suspicion is founded on fact. I shall be glad if either of the above firms can find as good an explanation for the poor quality of some of their seeds.

Seeds which average, as many of the above average, cannot be considered good seeds. No firm which will send out such seeds can be considered *reliable* in the sense in which this word should be taken.

Seedsmen generally claim to have recently tested their seeds and to send out none but good seeds. I still think there is great need of reform in this seed business, especially where seeds are sold on commission.

Agricultural College, Lansing, Mich.

EVERY-DAY NOTES.

SAMUEL PARSONS.

BUSHY RHODODENDRONS.

ONE of the strong arguments employed for imported Rhododendrons is that they are more bushy than those propagated in this country. This is undoubtedly the case, with limitations, the whys and wherefores of which I cannot at present fully discuss. The solid, practical fact is that a Rhododendron, when first taken from the box received from England, shows a bushier habit as well as a brighter green than anything of the kind grown in America. At first, this seems a very heavy count to set against the other superior qualities of American-grown Rhododendrons and is so used by interested parties. But let us look closer and follow the after career of this English-grown Rhododendron. What do we actually find? The first summer, the leaves barely retain their beautiful English green. After that, the influences of both summer and winter begin to destroy the lower leaves and dim the green; so that in two or three years a hundred such Rhododendrons might be mixed indiscriminately with an equal number of American-grown, and found utterly undistinguishable. Certain kinds will always remain bushy whether English or American, and others, the contrary, like Album, Elegans, etc. English Rhododendrons can no more resist American suns and changes than English complexions; but toughness and beauty belong to certain kinds alike whether born in America or Europe. It is well to do justice in this matter, for misrepresentation has occurred both unintentionally and otherwise.

A LATE MAGNOLIA.

Magnolia hypoleuca has been mentioned and commended more than once, for many noteworthy qualities. It is late, blooming in mid-June, creamy-white like conspicua, and moreover, of a scent so sweet that for the want of a truer comparison, I will liken it to the combined odor of strawberries and bananas. I know of no Magnolia so delicious, unless it be the tender M. fuscata. Now all this is a great deal for a single species to possess in the way of delightful qualities. But Nature seems disposed to give even more, for the foliage of M. hypoleuca is simply exquisite. I refer more especially to the young leaves, although the older leaves have fine red stems and glossy green on their broad surfaces. But the young leaves with thinner, more delicate texture, show this red in the veinings and even farther throughout the general green to the extent of a faint tint or tone. The result is a suffusion of most delicate purples lined out with red veins. Held up against strong sunlight the effect is greatly enhanced by the translucent character of the leaf. Portions of the foliage in ordinary lights thus assume a curious bronze color, as a result of the mingling of shades, and the distinct white of the under side makes the appearance still more remarkable. I dwell particularly on the foliage of this new and rare Magnolia that I may enter a plea for the beauty of leaves generally. Flowers are so valued and set above mere foliage, that the latter, though in many cases quite as exquisite, receives scant justice.

PTEROSTYRAX HISPIDUM.

In the London Garden for April 20th, 1878, a fine illustration is given of this extremely rare and noteworthy shrub. Under another name, Styrax obassia, we received many plants direct from Japan, through Mr. Thomas Hogg. The appearance of its clusters of white flowers, as shown in the Garden, is very pleasing, and it certainy bids fair to prove valuable. Whether it will turn out hardy remains to be tested rather more thoroughly before it is proved an established fact. Two winters' trial in Flushing has failed to injure it, but I have an idea that, like Halesia diptera, also a native of the East, it will be killed down occasionally. With its flowers and large, light-colored, roundish leaves, it is very attractive nevertheless, and if we discarded all shrubs that occasionally suffered from the winter, our list of enjoyable plants would be much diminished. All suspicions of its hardiness may, moreover, be quite unfounded. Special note of the fact should be taken that Styrax obassia (Pterostyrax hispidum) and Styrax Japonica are two entirely distinct plants. Of the latter, I may hope to speak at a future day.

Flushing, L. I.

BEAUTY, AND USEFULNESS OF AUTUMN LEAVES.

I WAS out a few evenings ago for a drive, and I saw a lady retrace her steps to gather a few Autumn leaves;—evidently, she enjoyed their beauty! A little farther on, I saw a lady sweeping the ripe leaves out of her yard into the street, to be lost. I said to myself, "She cares neither for the *beauty* nor for the *utility* of Autumn leaves." Why is it that people keep up such destruction from the falling of the first ripe leaf until the trees are bare? We cannot afford such a loss; for loss it is. Leaves should be carefully gathered, even those from the street, if they fall from the trees belonging to us, in front of our homes. There is nothing nicer for covering tender plants that are to be left in the ground, or to protect the lawn in winter. "Leaves are Nature's covering," and they are far more sightly than much of the material used in their place to protect the garden from frost. All that are not needed to cover plants, can be piled in an out-of-the-way corner, and covered with sods, to keep them in place. Suds should be turned over the pile on washing-day, and the mass should, occasionally, be stirred from the bottom. Leaves treated in this way, will decay gradually, forming a rich mold that any florist will prize.

Pressed Autumn leaves, tastefully arranged with dried ferns, are fine for decorating the house; but in our admiration for the *beautiful*, let us not forget the *useful*.

M. G. R.

Lyons, Iowa.

Arboricultural.

EVERGREENS.

E. R. C.

WE WANT MORE EVERGREENS.

IN looking over the "places" of my friends and neighbors it seemed to me that the useful and ornamental qualities of these trees are not half appreciated. A belt of Pines and Firs in the right place, forms a sort of land break-water that effectually screens house and grounds from cold winds and driving storms, protecting tender plants and trees, and making their growth possible in bleak, unkindly regions where they could not possibly flourish without this sturdy shield.

Evergreens are objects of beauty at all seasons. In the spring they give a southern and verdant character to the landscape on the first sunny day, when not even the earliest Poplar or Willow has burst its bonds. As summer dies, they form the richest background to the kaleidoscopic coloring of the changing autumn leaves; and in winter, they rob the chilly frost-king of his sternest terrors.

Many fine Evergreens are indigenous to our own country, and certainly within the reach of all who have to do with the planting of trees. The most desirable of these are the Hemlock, the White Pine, the Norway Spruce, and the Balsam Fir.

THE HEMLOCK

is particularly graceful and delicate; and although its natural haunts are the sides of steep mountains or wild northern forests, where it is found in gloomy masses, imparting a particularly somber aspect to the scenery. A single tree on a well-kept lawn is an object of striking beauty, its branches spreading out and sweeping the ground with the grace of a trailing robe, while the delicate, feathery foliage seems to float freely in the air, and the well-proportioned outline is like a strain of harmony. It is a favorite of mine, this picturesque Hemlock; and its airy gracefulness is a pleasant exception to the almost inevitable stiffness of Evergreens. With its Christmas frosting of snow, it is the perfection of beauty; and the March rains love it, too, and deck its tresses with jewels.

The Hemlock is said to be a difficult tree to transplant satisfactorily, and is charged with general delicacy of constitution; but all evergreen trees have more tender roots than deciduous ones, as they cannot bear the same exposure to sun and air; and, once dried and shriveled, the plant is pretty sure to die. The Hemlock is like a good many other things, not difficult to manage if managed rightly; and a frozen ball of earth at the roots in winter, or a damp ball in the spring, is all that is necessary.

The magnificent

CEDAR OF LEBANON

is the patriarch among trees, as it requires age to perfect its beauty and is, even at forty years, but an infant. Its trunk will sometimes reach a circumference of from thirty to forty feet; and though exceeded in hight by some Oregon Pines, in breadth and massiveness it is the greatest of all Evergreens, and in a perfect state is not equaled by any sylvan tree of temperate regions. A peculiarity of the Cedar of Lebanon is the horizontal disposition of its wide-spreading branches. This is not apparent in very young trees, but shows itself as soon as they begin to develop large heads. One such tree in the middle of an extensive lawn, with all other trees at a respectful distance, is a perfect monarch of verdure. Grand, magnificent, stately, are its proper epithets; and it requires room to develop properly and be appreciated. An "elbowed" Cedar of Lebanon is like a church in a row of houses. It condescends, however, to overlook the matter of soil, and will do equally well in poor gravel or rich loam; but near the margin of a pond or spring, where its roots can reach the water, it makes rapid progress. Under ordinary circumstances, it will advance, in this country, about a foot a year; but if deeply trenched before planting, and if the roots have abundant moisture, this average will be doubled.

THE NORWAY SPRUCE,

although of foreign origin, has become so naturalized that it is perfectly hardy; and it forms a valuable protection to tender young trees in exposed situations. It is accommodating enough to grow anywhere and in any soil; and is decidedly picturesque when advanced in years, towering up from a base of thick branches which droop and fall to the very lawn, and hang off in those depending curves which make it such a favorite with artists. Another of its good qualities is that it grows rapidly, and hence is particularly available for hedges. It will bear clipping to any extent, and can be made to form an almost impenetrable wall of foliage, proving quite invaluable in the cold north-eastern regions of our country, where some barrier against the wind and weather seems necessary at all seasons.

THE CHINESE MAGNOLIA,

which is hardy in our climate, flowers without leaves. During the month of April and the early part of May, its white and purple blossoms are the most conspicuous floral objects to be seen. The numerous branches are thickly studded with large, tulip-shaped flowers that have thick, kid-like petals and breathe forth a rich, spicy odor. The white variety is charming; and the creamy flowers are produced in such abundance that a good-sized tree can be seen at a great distance. The Chinese name, Yulan—literally lily-tree—is an apt and expressive one, as the blossoms are not much unlike those of the White Lily in size and shape, when fully expanded. Among the Chinese poets, they are considered emblems of candor and beauty.

Among Pines,

THE WHITE PINE

is the most desirable. The soft and agreeable hue of its pliant foliage, the excellent form of the tree, and its adaptation to a great variety of soils and sites, are all recommendations. It is always the same bright green, too, whatever the temperature may be; and it bears transplanting admirably. Other Evergreens, with the exception perhaps, of the Hemlock, are dullest just when their brightness is most needed; and the thin summer growth of the White Pine is as delicate and freshly pretty as the Juno dress of any deciduous tree in the full tide of its boasted beauty.

The most beautiful of Evergreens is the

MAGNOLIA GRANDIFLORA

of the Southern States. It grows to the hight of seventy or eighty feet; and its thick, deep-green, glossy leaves are like those of a gigantic Laurel. The great, creamy blossom tinged with the palest olive on the outer petals, is a bouquet of itself; and a tree-ful of these censers will waft perfume through the whole woods about them. This gem among Evergreens will not bear the winters north of New York, nor there either, I should imagine; but it can be made quite hardy in the milder Middle States.

THE BALSAM FIR,

also known as Balm of Gilead Fir, is particularly neat in its growth, and of a dark-green hue. It is sometimes thirty or forty feet high, but is more ornamental when much lower. It is a rather formal-looking Evergreen; and gets decidedly stiff and ugly with age. It is quite popular, though, as it retains its color well and is easily transplanted and is considerably in demand for shrubberies, small gardens and courtyards.

THE CHILI PINE

is very peculiar, having five circles or tiers of branches growing at equal distances, and producing the effect of a magnificent pyramid. The stem, branches, and shoots are entirely covered with leaves of a fine deep green; those leaves are very regularly and symmetrically disposed, and being bent backward at the ends, give to the tree the form and effect of an antique girandole.

THE CALIFORNIA SILVER FIR

is two hundred feet high, and has beautiful silvery foliage. The grand Pines of that region are the largest and loftiest in the world.

Among

EVERGREEN SHRUBS,

the Holly and the Arbor-vitæ are particularly ornamental; while as a vine, the lovely clinging, English Ivy never wearies of its kind office of draping ugliness and decay with perennial beauty.

RETINOSPORA FILIFERA.

RETINOSPORA FILIFERA.

There are many Retinosporas. One firm exhibited twenty-three distinct varieties at the summer exhibition of the N. Y. Horticultural Society, and endless forms might be distinguished among curious variations of well-known kinds. Whether they would be worth such perpetuation is another question. Nearly all varieties now known have existed in Japan for unknown periods, although introduced so recently to America. They all seem to be remarkably hardy, perhaps more so than any other species of evergreen. But their distinguishing characteristic is extreme diversity of color and form. Erect, weeping, thread-like and almost broad-leaved, they seem to delight in showing what diverse forms Nature can succeed in producing in one species. The Retinosporas resemble somewhat the Arbor-Vitæ of America, and evince affinities with that species in the way of grafting on them as stocks, &c, R. pisifera and obtusa are the two most distinct varieties, and the variations come more especially from them. The subject of our illustration, R. filifera, seems to be related to pisifera rather than to obtusa. It is a remarkable form, and has been known at least a dozen years in Europe. In Japan it appears to be a common tree, as Gordon remarks that it is much planted in the gardens about Yeddo on account of its elegant appearance.

The same author says, referring to R. filifera, "This kind forms a beautiful tree, fifty feet high, pyramidal in outline, and peculiarly graceful on account of its drooping branches and long, pendulous spray."

As we know R. filifera in America, it is quite dwarf in habit, which, of course may be the case with trees that attain in time very considerable size. The name, filifera, thread-bearing, well describes its appearance, which is that of a dishevcled head of coarse hair. How it looks in mature age is quite unknown to us, but the name, filifera, will doubtless continue to describe it quite accurately. In general employment in groups or singly it behaves very much like other Retinosporas. The curious and dwarf form it assumes, also fits it for planting in small interesting groups near the house, where all obstructions to the view are to be avoided. For the same reason, it finds suitable employment in small grounds, where, as one of a group of evergreens of similar character, it retains a low form which should be sought more by those who plant such places.

The specimen illustrated is about 18 or 20 inches high and some eight years old. It has, however, been transplanted several times, which partly accounts for its dwarfness. It was sketched by our artist in the grounds of S. B. Parsons, of Flushing, L. I.

Floricultural.

FLOWERS FOR THE HOUSE.

M. G. R.

There are many common garden flowers that are desirable for house culture, but we are apt to overlook them in our desire for something *rare*. Garden plants may be lifted at any time before frost, but the best time is previous to the middle of September. They should be kept in the shade a few days, and watered moderately. At this season we can find small seedlings that will not mature, if left out of doors, but if removed to the house, will give abundant bloom, during winter. Among these are Petunias, Verbenas, Pansies, Sweet Alyssum, etc. Perhaps none of these grows with less care than the Petunia.

Two or more varieties growing in the same pot, and trained on a small wire trellis, have a pretty effect. Verbenas need light and warmth and an occasional washing, to keep them from the attacks of insects. Pansies must have a cool atmosphere and moisture, but should not be kept too moist, lest the stalk "damp off." The fragrant little Sweet Alyssum makes a neat edging for tree-shaped plants, like the Orange, or Oleander. Set the small seedlings around the edge of the pot, or sow the seeds. If old Geraniums are to be kept for the house, it is best to cut them down to within a few inches of the pot. Fuchsias need about the same treatment, but good, strong plants of either may be had by setting slips in summer.

Mignonette is difficult to transplant, but we can have it all winter by sowing the seeds in small pots, at intervals of a week. Late-blooming Asters may be potted for the house, for early winter-blooming; they are very easily transplanted. The Dicentra spectabilis, known as Bleeding Heart, is a fine plant for the house. A good clump of it, taken up in autumn, will bloom beautifully in winter and early spring. Its graceful racemes of delicate, yet showy flowers, make it a most attractive window plant. As a center plant, for a large collection, there is nothing better. When it stops blooming, and the foliage becomes yellow, put it in the cellar, and keep it there until the frost is out of the ground, when it may again be set in the open border.

SOIL FOR HOUSE PLANTS.

The soil for house plants should be prepared a day or two before wanted, and left lying on the ground, where a few chickens can have access to it. They will soon free it from the earth-worms that might otherwise be troublesome in winter.

To prepare the soil: Take one peck of good earth from the garden; if not sandy enough, add sand or road-dust; next, add a half peck each of black leaf mold and fine chip dirt. Mix thoroughly, and sift if lumpy. After the chickens have worked in it to their "hearts' content," add again a quart of soot or finely powdered charcoal; mix again, and it is ready for use. A keg of this soil will be found very useful, if stored in the cellar, as we sometimes wish to sow seed, or re-pot a plant in winter, when the ground is frozen. Some florists scald, or bake the earth for pot plants, but I find the *chicken process* the easiest and most effectual for destroying earth-worms. It is true that fowls scatter the soil in all directions, but it can be gathered.

VINES FOR THE HOUSE.

The English Ivy is beautiful wherever we see it; but for decorating the house, it seems a little superior to any other vine. When trained over doors, windows and pictures, the rich, dark leaves show to advantage, especially if the walls and wood-work of the rooms are white. If Madeira Vines are trained near Ivies, so that the leaves mingle: the contrast is very pleasing. The Maurandia Vine, is a very pretty climber; it is a neat plant, with good-sized flowers; there are several colors, but I always found the white variety most satisfactory. The White Jasmine blooms well in winter, and the small flowers are fragrant. For hanging vases, the Tradescantia, or Wandering Jew, is a general favorite. It grows freely in earth or water, and though it does not bear the sun, it needs light. If grown in pots, it must be kept wet. The three varieties that I know, all grow equally well. The striped varieties are quite pretty, but the plain green is very rich in color if kept partially shaded. Ice Plant and Kenilworth Ivy are both useful for brackets. The Smilax is a delicate vine of great beauty, and, by proper training, it can be made to *climb* or *droop*. The old-fashioned Myrtle should not be overlooked. The glossy leaves make it useful for trimming purposes. A root of Myrtle, transplanted from the garden to the house in autumn, will thrive with very little care.

Pomology

PEACHES IN NEBRASKA.

Probably one of the finest peach orchards in the West is at Brownville, Neb., under the control of ex-Governor R. W. Furnas. The orchard was planted nine years ago, on freshly-broken land. Part is budded and part seedling fruit.

In a small part of the orchard apple and peach trees were planted alternately. The former now look starved and crowded, while the latter are uniformly healthy and enormous bearers. The overburdened limbs seem ready to break with the luscious fruit. We are told the peach crop rarely fails in this locality. The yield from this orchard, this year, will be over 10,000 bushels. Budded fruit is picked in baskets, each holding about a peck and a quarter, and they brought one dollar at wholesale Sept. 1. For shipment, each peach is carefully wrapped in paper. Mr. Furnas considers Early Newington one of his most profitable sorts. Blood Cling seemed quite a favorite, not to mention the old standard varieties. Seedling peaches are very plentiful, and bring from 35 to 70c. per bushel. Mr. F. has raised a number of very promising seedlings. Part of the peach crop is dried by a new system

Plums are raised here to some extent and with good success. Cotton is bound around the trunks of the trees to prevent the ravages of the curculio. Mr. F. says this is very effective.

Xineohp.

The Apiarian.

A COUPLE OF SUCCESSFUL BEE-KEEPERS.

For the encouragement of beginners in bee-keeping, I wish to relate the success of two gentlemen of Carson City, Montcalm Co., Mich., who began keeping bees, for the first time, this season. One of them, Mr. O. R. Goodno, started in the spring with thirteen hives. From this stock, although this year has not been very favorable for bee-keepers, he has during the summer sold 1000 pounds of honey, one-half of which was sold in the comb, the rest extracted, and, moreover, he has increased his stock to thirty-three colonies. The increase of colonies alone, gives him a margin of, at least, 150 per cent on the investment, besides the 1000 pounds of honey.

The other gentleman, Mr. C. Cross, invested last spring $500 in 47 colonies. He has not only sold honey enough to regain the investment, but has increased his apiary to 81 strong colonies, which altogether shows a margin of about 300 per cent on the investment. I doubt if the most sagacious speculators of Wall St., can show returns that equal these. I must add that these gentlemen have not reached such results by a mere hit of "good luck" Both studied the subject carefully, and applied that intelligent management which is the basis of success in everything. C. C. Georgeson.

State Agricultural College, Lansing.

The Querist.

ANSWERS TO CORRESPONDENTS.

Wheat Bran as a Fertilizer.

A Subscriber, Marietta, Ga., asks for information in regard to wheat bran as a fertilizer for corn or cotton. Price of corn, 60c; cotton, 10c.; bran, $15 per ton; cash price of commercial fertilizers, $40 to $50.

ANS.—Wheat bran has been used as a fertilizer in the Connecticut Valley for tobacco with much success. It has been used by market gardeners in growing sweet corn and melons also very successfully. There is no doubt that it would answer equally well for corn or cotton. Rye bran is richer in fertilizing matters than wheat bran, and the following table gives the comparative values of both wheat and rye bran, barn-yard manure, Peruvian guano and ordinary raw-bone superphosphate, both intrinsically as fertilizers, and also commercially in money.

In 2,000 lbs. there are contained in

	Nitrogen.	Potash.	Phosphoric Acid.	Money value.
Wheat bran..... .....per ℔	41.8	28.6	54.6	$18.10
Rye bran..... ..... " "	46.4	38.6	68.6	20.60
Barn-yard Manure..... " "	9.0	10.4	4.2	3.05
Peruvian Guano. ..... " "	200 0	46.0	260.0	78.70
Raw bone Superphosphate..... ..... " "	40.0	2.0	320.0	42.12

The values are made up at the estimate of 25 cents a pound for nitrogen; 6 cents for potash; and 10 cents for phosphoric acid. In practical use the materials in the bran would be more available than in any others, because they are in an organic form, readily decomposed, and more easily dissolved and assimilated by plants.

It follows, then, that wheat bran (and more especially rye bran), is cheaper as a fertilizer at $15 per ton than Peruvian guano at $70, or superphosphate of lime at $40 per ton.

It might be proper to state that bran contains, in addition to those matters given above, much oil and fat, which would be usefully applied in feeding animals. Nearly the whole of the fertilizing properties would remain in the droppings, liquid and solid, of the animals fed; and, moreover, they would be in more available condition in the dung than in the raw bran, so that it would be a great economy to feed the bran, and save and use the manure made from it. Used in this way, bran possesses a much higher value as a fertilizer than any of the mineral manures, and the manure made from it may reasonably be considered as equal in value to the bran itself, notwithstanding a portion of it has been utilized as nutriment for feeding animals. To feed bran, then, and make manure from it, is the most useful and economical method of utilizing it as a fertilizer.

Tingis Arcuata.

Alexander Moore, Chickasaw Co., Miss., sends some specimens of a minute insect, and asks the name, history, and how best to get rid of it. Its kindred attack the hedge plant, Pyracanth, and often destroy it when young.

ANSWERED BY J. STAUFFER.

ANS.—This is a very singular and remarkable creature, and can hardly be described as seen under the microscope. It belongs to Westwood's Family 6 (or 8) Tingidæ, which embraces nine genera, and many species. The old genus Tingis is now divided into the following four genera:—

1. Monanthia, sides of prothorax scarcely dilated; antennæ piloso, last joint clavate.

2. Galeatus, prothorax much dilated at the sides, with a large hood in front; antennæ long, slender, pilose; areolæ of the thorax and hemelytra very large.

3 Dictyonota, sides of thorax dilated, and areolate; the antennæ scabrous; terminal joint thinner than the third; prothorax with a frontal hood.

4. Acalypta Prothorax, with the sides slightly dilated, 3-carinated; antennæ long, clavate, hemelytra meeting in a straight suture; wings wanting.

These generally have the thorax furnished with a membranous dilation on each side, and posteriorly produced in the place of a scutellum, and being, as well as the large hemelytra, (which lie over and cover the abdomen) formed with greater or less sized cell-like reticulations. Their habit is much the same. The Tingis Pyri attacks the leaves of the Pear, and is known by the French gardeners under the name of "*le tigre.*" It belongs to the "Bug-Tribe," order Heteroptera, or Hemiptera Heteroptera. In Say's Entomology, vol. 1, page 348-9, he describes five species—gives the specific character for Tingis ciliata; this specimen accords, in many respects with this common species as described by Say. The T. arcuata, is very much like the ciliata, distinguished mainly by the brown bands and the arcuated exterior edge of the hemelytra. Fitch's Noxious Insects, Reports 3, 4 and 5, p. 148, give a full description of the Butternut tingis, (Tingis Inglandis, new species,) which punctures the leaves and sucks the juices. Found also on various other trees and shrubs. He adds, that this corresponds with Say's T. arcuata, except that the outer margin of the wing covers is rectilinear and not arcuated or concavely excavated, as the specimen is which was sent by Mr. Moore, and shows the brown bands also. Therefore we may call this Tingis arcuata, for the present. Charles H. Peck, Albany, N. Y., found a similar leaf-bug on the Basswood, named by Mr. Walsh as Tingis (monanthia) tiliæ. The T. ciliata of Say is found on the Sycamore, and is called Sycamore-leaf bug.

The effects of all are much the same—causing the small, dead, dark-brown spots by the punctures made in sucking the juices. We can find no remedy—Harris is silent, and others fail to give a remedy. Fumigation is mentioned by one writer incidentally.

"Big Worms," Caterpillers.

Mr. Geo. Washington Lee, of Columbiana Co., Ohio, sends us per mail, two "worms" that he found on one of his young apple trees; he states that they are new in that region, he noticed that there was something wrong with the tree, but before the culprit was detected, it was found that they worked very fast, eating leaf, and stem close to the bud, or hard wood; he desires to have our opinion.

ANS. The "worms" are really very large and thick caterpillars, 2½ inches long, and one inch in circumference, that have minute warts on each ring, with a single fine hair; the prolegs are hairy, or beset with very short bristles, the spiracles yellowish, as also a lateral line on each ring, sloping across the spiracles, or breathing pores.

It has much the general aspect of the larva of the Cecropia moths, the largest of our butterfly moth tribe of Lepidoptera. But it does not accord with any known to us, in the details. We submitted one of these larvæ to an experienced entomologist, who at first sight pronounced it the larva of the Cecropia Luna, which he had raised on several occasions, as well as numerous other species from their larval state. Yet, after carefully comparing it with accurate figures and descriptions of his own, and examining the researches of Fitch, Harris, and others, carefully, he could not determine the imago or perfect moth resulting from said caterpillar.

We would advise Mr. Lee to follow them up to their transformation, by finding the cocoon, and keeping it until it develops into a moth. A good plan is to have a box with the lower portion filled with common garden soil, say six inches deep, the upper portion covered with netting, and a lid so as to feed the catterpillar, if not fully matured, until he spins up into a cocoon, or enters the soil to undergo the change. In this way one can prove what insect will be developed from a certain caterpillar. A box set on end, 12 inches high, and six inches square, will answer the purpose very well, and may prove of interest to any desirous to study insect life.

It may be that these larvæ, or these worms, are a new phase in a feeder on other trees, or a new importation of a species not yet known to science, but changes occur in the same genera both as regards their food and consequent color and development.

Choice Grapes.

W. H. E., East Setauket, Suffolk Co., L. I., asks—1. Which are the most hardy and profitable, first-quality, market grapes. He has been thinking of the Salem; Rogers No. 53; Wilder No. 4; Goethe No. 1; Agawam No. 15; Delaware and Maxatawney and wishes to know which, if any, of them would answer best: 2, the name of an approved work on wine-making and where it can be purchased.

ANS.—1. There is no grape that does equally well everywhere. The best plan for a man who intends to set out grape vines, is to go among those who have vines in his own neighborhood and find out which kinds succeed best either near his own home or not far off, under the same climatic conditions. Quality and hardiness do not always go hand-in-hand. Of the above list, Delaware and Maxatawney will doubtless do well and probably Salem, Wilder and Agawam. Concord succeeds well generally, while Worden is as good, or better, and ten days earlier. Whitehall, Northern Muscadine, Merrimack, Martha, Israella, Eumelan, Creveling and Adirondack would probably also succeed in the above locality. As to quality, Delaware, Salem, Wilder, Agawam, Whitehall, Merrimack, Eumelan and Adirondack are of the best quality. Champion, Worden and Eumelan are the earliest.

2. Husmann's Grapes and Wine. $1. The Orange Judd Co., 245 Broadway, N. Y. City.

Miscellaneous.

E. D. B., Seneca Falls, N. Y., asks whether salt would be any preventive against the Hessian-fly, and if it is so considered what is the best time and way to apply it.

ANS.—Salt is no preventive against the Hessian-fly. There are two broods of this pest, one in the fall and one in the spring. Although many advocate sowing early to avoid the ravages of this pest, still, on the whole, the best method of avoiding its depredations, is to sow the wheat late, both in the fall and in the spring. The Fly begins to deposit her eggs, in both cases, at about the same time that the wheat appears above ground, and continues to lay eggs from two to three weeks. By sowing 10 to 14 days later than ordinary seed time, the period of egg-laying will be nearly over before the wheat comes up and the pest thus, to a great extent, avoided. It is also recommended to burn the stubble in the fall.

W. Norfolk, Va. asks for the name of a manufacturer of stencil plates for marking clothing.

ANS.—Stafford Mfg., Co., 66 Fulton St. N. Y.

M. L Dorman, Chautauqua Co., N. Y., ask if raising poultry and eggs for market can be made profitable when eggs are worth only from 10@12½ cts. per dozen and chickens six cents per pound live weight, and corn and other grain sell at prices about as heretofore?

ANS.—The margin of profit under such circumstances must be so narrow as to be perceptible only to those who have been fortunate enough to realize it.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, SEPTEMBER 21ST:

S. B.—N. A. W.—L.—E. F. M.—A. L. J.—D. S. M.—H. H. — J. W. K., thanks — I. P. R.—W. J. F.—M. A. L. — G. M.—S. B. P. — A. M. V. A. — G. G.—C. C. G.—G. H. F.—G. D.—N. R.—H. S.—H. H. B.—J. S. — W. J. B. — G. A. W. — W. C. B. —J. S. — H. B. N.—L. A. R.—W. G. L. D.—C. C. G.—J. W. E. B. D. H.—F. H. D.—W. C. J.

Everywhere.

RURAL SPECIAL REPORTS.

COLUMBIA CO., Pa., Sept. 18, 1878.

WE have had a peculiar sort of a season thus far. The spring was summer-like; then, in May, came a week of cold weather. June and July and August were very hot and dry. In some parts of the county plenty of rain fell all the season, but along the Susquehanna River no rain of any account fell for eight weeks until the 13th, when we had a day's down-pour which has set the farmers to plowing again. The hay crop was the best in several years. Wheat and rye were very good in most parts of the county; but in some parts the Fly injured the crops very much. Oats thrash well in the bushel, but light in weight. Corn will not be more than two-thirds of a crop on account of the drought. Buckwheat, where they had rain, will be good, but where there was no rain it is not one-third of a crop. The honey crop is about the same as buckwheat runs—and but very few swarms.

H. H. BROWN.

ANDERSON CO., S. C.

LAST year I planted half an acre for corn fodder; one half in common corn and the other half in "pop corn." The latter yielded, I think, twice as much as the former. Every stalk had from one to five "shoots" and nearly all the stalks had from one to two fair-sized ears, while not more than one-fourth of the common corn had a "nubbin." When cured my cows would eat the pop-corn in preference to the common corn, and were in better condition while fed on it. If any RURAL reader has ever tried pop-corn, I should like to hear of his experience with it.

G. A. MCGEE.

DEER LODGE, Montana, Sept. 3, 1878.

HERE in Montana the season is so short that corn does not mature, so we raise only enough for table use during summer when it is tender. As for fruit, we can raise only the small fruits. In our valley which is much lower than usual, a few apples have been ripened. We hope at no distant period to be able to raise successfully the hardier kinds of fruit. We have to continue to experiment until we find what is suited to this climate.

M. A. L.

BROWN CO., WIS., Sept. 14, 1878.

FROM being very warm the weather at once dropped with the beginning of this week. On Tuesday night there was a severe frost in the low-lands back from the river, in some places forming ice, but on high ground and near the water nothing was hurt. Farmers are doing their fall plowing and sowing rye of which grain a large area promises to be sown, the failure of wheat this year causing farmers to turn their attention to raising a greater variety of grain.

VAN.

CHAUTAUQUA CO., N. Y. Sept. 17, 1878.

THE heavy rain of last week did much damage in some parts of this county by sweeping away a large number of highway bridges, &c. Corn-cutting and potato-digging are now in full blast. Corn is a pretty good crop, while potatoes are small and but few in the hill. Green apples are worth 40 cents per bushel; tomatoes, 3c. per lb; sweet potatoes, 3c. per lb.; grapes, 4@5c. per lb.; oats, 40c. per bushel; corn, 60c. per bushel; table butter, 20c. per lb.; eggs, 10c. per dozen. Trade dollars, 90 cents each.

M. L. D.

RURAL GROUNDS, Bergen Co., Sept. 21, 1878.

FOR a few days past the weather has been as warm as during the hottest of the summer. Pearl Millet is now in bloom and we hope that frost may be delayed long enough to enable it to form seed. The plants have grown to an immense size and we hope to send you a sketch in a few days.

The Poultry Yard.

POULTRY RECORD.

THE RURAL's correspondent "Anon," page 584, Sept. 14th, gives the record of his White Leghorn hens for six months—March 1st to Sept. 1st. I regret that he did not give the number of eggs for each month. A correspondent of the Poultry Yard, some time since, gave a table showing the number of eggs an ordinary hen would lay during each month of the year, viz.: Jan., 4; Feb., 9; Mar., 20; Apl., 17; May, 15; June, 12; July, 9; Aug., 7; Sept., 6; Oct., 3; Nov., 5; Dec. 3. According to this table, "Anon's" 44 Leghorns would have given him 3,520 eggs; the actual number, as reported, being 3,702, or about five per cent. in excess. I give the result from my Plymouth Rocks for three months:—

June,	19 hens,	251 eggs,	averaging	13-4.19
July,	20 "	230 "	"	11½
Aug.,	19 "	221 "	"	11-12.19

This shows an excess of about thirty per cent., or about twenty-five per cent. better than the Leghorns.

The fowls are all last year's chicks; are confined in a large run, with plenty of shade and grass. Their feed consisted of whole corn, cracked corn, oats and ground feed; with scraps from the house, and broken clam-shells. My experience does not accord with that of "Anon," in regard to the value of the Leghorn. After a trial of two years, I discarded them, as being the poorest of any breed among the many tried. Unless the Plymouth Rocks have faults not yet discovered, I place them at the head of the list, as I find many others have done—having the quality of being good layers, sitters and mothers; and, last, but not least, good table fowls—the latter quality will not be claimed, I think, for the Leghorn. For two years previous to the Leghorns, I had the Dominiques, and I regard them next to the Plymouth Rocks—lacking only one point—weight.

G. D. B.

NAPLES, N. Y.

FOR the benefit of RURAL readers who keep breeds of fowls much inclined to sit, I give my way of breaking, in a very short time, a hen obstinately determined to sit. I simply tie her legs together and put her on the floor of the hen-house. Twenty-four, or at most thirty-six hours, in this uncomfortable position, will invariably cure the most obstinate case.

F. G.

TO RID A HEN-HOUSE OF VERMIN.—Clean out all loose rubbish; sweep out all dust and filth; then rub the whole length of the roosts, and the door through which the fowls come in, with gas tar, and lice will trouble your poultry no more.

J. E. S.

The Herdsman.

POLLED CATTLE, &c.

FOR several years I have always said a good word for hornless cattle, contending that horns are not only useless appendages but dangerous and really a nuisance and the cause of many accidents, including abortion, etc.

Now I see that at the Paris Exposition the polled Aberdeen breed carried off the principal premiums from all others, consequently there can be nothing henceforth advanced in favor of these offensive weapons. According to the London Agricultural Gazette, Mr. Mechi prefers hornless animals, and the Irish drovers actually remove the horns, because it answers their purpose to do so. I have been on this continent twenty-two years and first advocated cutting grass when it was in bloom instead of making hay from it when it had seeded. This was nearly twenty years ago, and among others a Mr. Rice of New Jersey attacked me with bitterness and intimated that I knew nothing about hay or hay-making. Next I argued against plowing fine natural-grass land and stuck to it for years. Then I combatted the opinions of a great many to the effect that half the grass grown ought to be left to rot on the ground, contending that by grazing with a variety of stock of which sheep should be a proportion, it was best to keep it evenly grazed and once in the year barely eaten, which would bring in all the best natural grasses and discourage the coarse and worst herbage. Then I tried all possible means of showing how foolish the hollow-horn and tail-evil ideas were and how ridiculous was the notion often entertained of the influence of the moon on so many subjects, but in this I have been only partially successful.

Before their merits are generally recognized, polled cattle must patiently wait till a few more men are gored to death, a great many more cows hooked and inwardly bruised so as to kill the expected offspring and cause miscarriages, besides cruelly injuring the udders of good milch cows, by which bloody milk and inflammation are brought on, so that the teats are lost, one after the other. Then it will begin to be said what silly men there are in the world to go

on breeding horned cattle, plowing up good grass, making hay from dried, ripe herbage, losing half the grass by allowing it to rot on the ground, boring horns with gimlets, cutting tails for imaginary ailment, and throwing seed about in bunches and leaving half the ground bare instead of using a drill. AN OLD HAND.

Industrial Societies.

NEW JERSEY STATE FAIR.

WE know not of any grounds whose situation is better adapted for a fair than that of the fair grounds at Waverly. It is a central point, within easy distance of New York and other large cities, and yet as purely rural as if it were a hundred miles away. The grounds are hilly in one part and level in another, a diversity which is pleasing to the visitor, while it gives prominence to all departments of the exhibition—to those on the hills as seen from the plain, and to those of the plain as seen from the hills.

And yet there is a sad lack of enterprise on the part of the directors of this fair. Year after year we see the self-same arrangement, as if the same articles were carefully preserved in the same places to be exhibited forevermore. Even a change of place for the several classes of articles—a rearrangement of the vegetables, fruits and flowers of the Horticultural tent—would reawaken some interest in the crowds of people who walk about as if they were in a park or cemetery. We saw very few examining the articles displayed. A glance at everything sufficed to satisfy the curiosity, while nothing in particular seemed to offer lessons which were deemed worthy of being studied, if, indeed, we except horse-racing, which certainly did enlist a fair share of attention. It was the *life* of this fair. It is not our purpose to condemn or approve this feature of so-called agricultural and horticultural exhibitions—but this we may say, that when, as at Waverly, it is made to engross more attention from the beginning until the end of the fair than all the other departments put together, we think another qualifying name instead of "Agricultural" should be adopted to express the aims and scope of such exhibitions.

After looking through the agricultural implements and observing that there was nothing new and fewer entries than usual, we passed to the horticultural tent. Here, among grapes, Mr. Ricketts made his usual fine display. Concord No. 1 is a hybrid between Black Muscat of Alexandria and Concord. It is larger and sweeter than Concord. Golden Gem is a cross between Clinton and Delaware, small, of a golden yellow, and very sweet. No. 250—the parentage is Ives and Catawba. Compact bunch, medium to large—large berry, flesh soft, juicy, sweet and vinous; black, with a dark-gray bloom; carries splendidly. Vine hardy and vigorous. Fine bunches of the Lady Washington, which, Mr. Ricketts now offers for sale, were exhibited. In all there were fifty-two varieties.

Among Mr. H. Goldsmith's grapes was a section of a Concord vine, two feet long, eighteen inches wide, bearing fourteen good-sized bunches.

Among pears, Sheldon, Seckel, Beurre Bosc and Beurre Clairgeau were the best.

Very large and perfect specimens of the Maiden's Blush apple, to which we alluded last week, were on exhibition. Orange Pippin, Baldwin, Porter, Gravenstein, Gloria Mundi, were the best of the apples. There were less than one dozen quinces shown, and those might better have been made into jelly.

The potato exhibit was, as usual, very good. Among other vegetables there was really nothing which seemed to us worthy of special mention.

The floricultural display was quite inferior to that of other years, there being fewer plants and no attempt at a tasteful arrangement.

We were told that the Cattle show was excellent—a statement we preferred to accept as a fact without personal verification, at the expense of longer enduring the stifling clouds of dust, all the while drifting from the dusty race-track and enveloping the listless, yawning crowd.

Miscellaneous

GRANGE AGENCY—IS IT EXCEPTIONAL?

ANSWER TO PERLE PERDU.

THE Mississippi correspondent, in RURAL of June 1st, starts out with the idea of "blowing up" the Patrons of Husbandry or rather the Grange Agency at Memphis, and goes on to show the fictitious nature of the advantages offered by said agency, how it carried on business etc. In doing this, the writer relates how a farmer friend purchased his goods of some middleman not particularly favorable to farmers as such, at a few cents better rates than he could have done from the agency with its ramshackle, greasy apartments and discourteous old manager doing business on the rowdy plan.

The manner in which this honest old farmer got his goods, has its counterpart in every town in which a grange store exists. Baits are held out all the time to those likely to deal at the grange store. From the description given, it is evident that the writer has no proper notion of what a genuine grange agency is. The firm described as such, consisted of nothing more or less than a man or two hired by the merchants of Memphis to take the grange custom and turn it over to them. While it is a fact that wagons can be bought at grange agencies for $10 to $20 less than at retail, it is foolish to suppose sewing machines can be had there for less than the cost of manufacture. No shrewd farmer will bite at such greasy bait as the Memphis agency presents. As to middlemen, I would refer the RURAL readers to issue of March 9th, page 156, "Remedy for Unjust Weights" to learn the exactions and peculations to which they are in the habit of subjecting the farming community. As to whether the Memphis agency is an exceptional one, that it is so can be learned by comparing it with a grange agency proper, one of which we have at St. Louis, Mo. The officers of such an institution are appointed and paid by the State grange of the State in which it does business. All parties patronizing it, get their purchasing done for nothing. There is no commission charged, no bummer fee, such as that received in Memphis. The agent buys for cash and at wholesale any thing a patron may want, from a case of needles to a steam engine, and secures for the purchaser a discount on regular wholesale price, nearly or quite sufficient to pay freight. Instead of buying, as was formerly done, on a small scale for granges, the farmers are organizing co-operative stores, each one taking so much stock as times will admit. Ten per cent per annum is paid on the stock, and the patrons get a dividend out of profits, according to the amount of their purchases.

Every man has a right to protect himself against any invasion of his rights. The farmer has been in the hands of the middleman for scores of years, nay, for ages. He has taken what he could get for his products, often at short weights, and paid the merchant his own price for goods, by the same weight or measure. This kind of traffic has had its day, and must cease. The farmer has learned that he can ship produce as well as dealers, and does so when city prices will pay expenses and leave a small margin over home trade. The most intolerable thing connected with the grange movement is that the farmer, the feeder of the nation, the man that supports all manner of manufacturing industries in this great country, as well as nearly all its foreign and most of its domestic commerce, should have the impudence and audacity to set up a store of his own, solely for his own benefit in buying and selling. This outrage in the eyes of grumblers, is beyond all precedent, and ought not for a moment be tolerated. The farmer outside the grange, has the power to do business through proper organizations, without using middlemen; but will he use this power? For these grange facilities are open to all farmers as far as selling and wholesale purchasing are concerned, and are not limited, as many suppose, to patrons.

FARMER.

Kirksville, Adair Co., Mo., Aug. 10, 1878.

NOTES FROM THE RURAL GROUNDS.

THE OTHER SIDE OF HYDRANGEA PANICULATA GRANDIFLORA.

ONE would suppose that this plant would be happy in England, for it loves a weeping atmosphere and abominates a fervent sun; yet more is said of it here than there. The RURAL has praised this shrub from the beginning; praised it while yet it had few friends. Now that it has many friends and bids fair to find a place in every garden, we think we may venture to speak of its faults. First of all, it is heartless. It is false. Its flowers are odorless and sterile. The great panicles which they form have scarcely one of the qualities or attributes which one admires in flowers. They are great unbalanced, conical heads of color, first of a greenish tint, then nearly white, then, as they fade, a faded, tissuey rose color. Every stem bears one of these half-capsized panicles which, in suitable soils, will measure at least two feet in circumference.* As the pliable stems are not strong enough to support them, the panicles bend over upon the grass or earth, forming disordered masses of white or rose that, after a season or so, quite fail to excite any sense of pleasure. The leaves too are thin, papery, coarse, weedy and they droop upon the stem during hot sunshine, giving to the plants a more than over top-heavy, undressed, overburdened appearance.

This Hydrangea in seasons of drought or in sandy soils is an out-and-out failure. The leaves wilt and droop as we have described, and the panicles dwindle to the size of a teacup. These are its faults.

We have been sincere in all we have said in its praise. The new and half-mysterious is looked upon with partial eyes. Hydrangea paniculata is perfectly hardy—a rank grower. It blooms at a season when shrub-flowers are rare and its banks of bloom are showy though not pretty. It is readily propagated from cuttings of the roots or of the half-ripened stems. These are its merits. To those to whom this Hydrangea has become commonplace, we think the above is a fair estimate of its bad and good qualities.

* We have just measured one 31 inches in circumference at base.

PLUMBAGO LARPENTÆ.

One rarely hears this spoken of. It is not quite hardy in this climate, though it has lived with us during the two years past without protection. Still, protection of the roots would be needed during severe winters. It grows about a foot high. The leaves are thickly set, about the size of hardy Phlox though more obovate. The flowers which resemble those of Phlox, are borne in spicate heads and of an indigo-blue color, finally becoming violet. It is fall-blooming, herbaceous and desirable for the color of the flowers, if for no other reason.

TO THOSE WHO ARE LOOKING ABOUT FOR HOMES.

IF we were again to select a home, it would never be in a narrow valley running north and south. All plants hardy enough to endure the climate, thrive here luxuriantly, it is true, and this has served to lessen our discontent in the face of many serious drawbacks. After nightfall the air is laden with moisture so that from this time until the sun gets well up in the morning, the grass is as wet with dew as if a shower were falling.

Our neighbors told us six years ago, when we were about to purchase the land, that chills and fever was unknown in this neighborhood. We knew of families that had lived here for eight years. We saw their children running about with uncovered heads late at night and early in the morning, and they seemed healthy. A venerable resident explained to us that he and his father had occupied the same house for upwards of a century, and, said he, "a case of chills and fever has never been known in our family." We believed these statements, purchased the land, erected our buildings, laid out and planted the grounds. For three years there was no reason to doubt the statements of our neighbors. With entire unconcern we enjoyed the night and morning air freely. No neighbor uttered a warning word. We heard of "malarial fevers" near us on the right and on the left; but still confidently believed that *here*—within a little charmed space—the air was proof against malarial taint. Since that time three of our family have been prostrated with this most insidious, most unrelenting and deceptive disease.

"It is everywhere," is our consolation from the neighbors. We are aware that malarial fevers have prevailed during the past season to an almost unparalleled extent, and that, too, in districts to which the disease is an entire or comparative stranger. But we are also aware that it cannot be truthfully said that *this* locality is, as a rule, free from the scourge.

We have written the above, not to condemn our beautiful home, surely; not to condemn those of our neighbors who assured us of what, no doubt, they must have known to be false—but for the purpose of impressing upon such of our readers as contemplate selecting new homes, the necessity of exceeding diligence in ascertaining the healthfulness of the proposed district. There are locations which are exempt from malarial air and though there are few exempt from all objectionable characteristics, yet the prevalence of this disease would, in our estimation, at once condemn any place, no matter what might be its other advantages.

Bergen Co., N. J.

WHAT OTHERS SAY.

HOW AGRICULTURAL PAPERS BENEFIT THE FARMER.—The following is a part of an admirable address by Conrad Wilson, before the Farmers' Club of this city:

So clearly and palpably have the journals of this class demonstrated their value that it is often possible in passing through a rural district to discover, by unmistakable signs, the farms at which such papers are taken and where they have found a welcome home, and it is easy to see that in the presence of these sheets of useful knowledge the whole aspect of the farm is changed and all the results improved. Manures and fertilizers are more efficient, as well as more abundant, the latest and best methods are adopted, a new impulse is given to vegetation, the very roots of the crop strike deeper and spread wider than before, and even the meadows assume a brighter shade of green and the cereal grains a deeper tinge of gold. And finally, as a crowning evidence of what is here claimed for the influence of the press, along with this new vigor of vegetation and more abundant yield, we find also a reduction of cost that is even more important than all the rest.

It would be easy to refer by name, if it were not invidious, to a score of such papers, in either of which a single number could be pointed out which for intrinsic value is worth to a shrewd farmer the subscription of a lifetime. Even single passages could be referred to in various journals, in which the facts comprised in a few lines are worth more to an intelligent, practical man than a ton of guano or an acre of land, for the acre of land is confined to one unchanging spot and the ton of guano admits of only one application. But the great facts of experience in farming are not bounded by an acre and do not expire in one application. On the contrary, they are developed by use and grow by repetition. They spread and multiply from farm to farm and from year to year, until a continent is made richer by them and posterity hails them as a treasure.

The timidity shown by many in applying a sum so ridiculous as $2 or $3 to obtain the priceless knowledge on which depend the whole value and final profit of their business is more than surprising. The trifling sums often lavished without a thought on objects of comparatively no value, if applied to such a purpose as this, would be sufficient to supply a variety of journals and valuable books that would at once create a new atmosphere of thought in the house, and while thus rounding out the education of the family, would also enlarge the yield and the profit of harvests to come.

PROTECTION TO ROSE BUSHES.—Speaking of this, H. S. says, in Country Gentleman, that evergreen boughs or corn-stalks make an excellent covering, which should be loose and open, admitting air but preventing alternate thawing and freezing. Peter Henderson's advice, to cover with sods, has destroyed the hopes of hundreds of Rose-growers by killing their plants. He knows of many who regret following this advice. Air must be given or the plants will die.

[It seems that many do not understand that the object of what is termed "protection" to plants, is not to keep them warm. It is rather to keep them cold, though not for that either. It is to protect against the wind, the sun, and sudden changes of temperature. There is nothing better than evergreen boughs; but when these are not easily obtainable, long manure thrown lightly over the beds and held there by sticks stuck diagonally, or any light substance, will answer just as well.—EDS.]

SOCIAL LIFE ON THE FARM.—The population of the hill-towns and by-places is concentrating in the marts of business, not because the soil of the farms is exhausted, or because farming does not pay, but mainly because the craving for social life is not satisfied. Even our Patricks and Bridgets are refusing to live in the country because they have no society there, no Catholic church at which they can meet and have a "nate" social time, no bar-room in which they can "trate their frinds," and no balls at which they can show off their "ilegant" figures and fixtures. This is not the style of social life which is the most desirable for city or country, but it shows that more society is the want of the farm.—*Alex. Hyde, in N. Y. Times.*

[Strange reasoning this! We do not want any "Bridgets" on the farm, or "Patricks" either, who are dissatisfied because there is "no society." The time is not far distant when Americans will deem it no disgrace to do Patricks' and Bridgets' work, and be glad of the opportunity. There is as much "society" on the farm as there has ever been, and as much as is compatible with health, industry, and morality.—EDS.]

A NEW WORLD.—It is not surprising says the conscientious editor of the Weekly Tribune that a thoughtful man—like, for example, Mr. Alfred Smith, our venerable correspondent at Monmouth Me—should be able to say (as he does in a private note just now opportunely at hand) that since giving special attention (after his sixtieth year) to the study of Nature and her wonderful ways and works, he "seems to be in a new world." He wishes others to "taste and see," and declares that if farmers generally would take time for such delightful recreation, it would show the universe to be a wonderland indeed, and "lead the thought from Nature up to Nature's God."

SEED POTATOES.—J. Rhodes remarked, at a late meeting of the Elmira Farmers' Club, that he planted pieces and whole potatoes last spring in rows, side by side, and when the tops were up six inches, he could see a great difference in favor of those growing from the whole potatoes. The difference could be seen plainly by an observer, thirty rods distant. At the digging, he found he had to go as far to get a bushel in the rows planted with pieces as to get a bushel and a half in the others.

WHEN TO SELL POTATOES.—Charles Heller thinks if he had a crop of potatoes to sell, and could get fifty cents from the field, he would never hesitate about selling. Supposing potatoes to keep without wasting, he thinks fifty cents as good in the fall as seventy-five cents in the spring.—*Elmira Farmers' Club.*

WHEAT SEEDING.—The London Agricultural Gazette says that upon clay lands we can scarcely be too early and on light soils we may easily be too late. The first week in September is a favorite time with some heavy-land farmers, and the present month may even be employed in sowing this important crop on clay lands where the previous cropping renders such a course possible. By early sowing, a strongly-rooted plant is insured before winter, and even less than six pecks of seeds per acre will prove a full seeding.

HARMONY IN THE COUNTRY HOME.—"A wise man, when he plans a country residence, will so apportion his means that his house may not be out of keeping with his grounds. The same style—the same feeling should pervade both and be reflected from one to the other."—*A. J. Downing.*

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Thousand-Dollar Suburban Home—Pallasier Pallasier & Co.—(Illustrated) ... 613
Requirements to Become a Good Farmer—L. J. Templin ... 613
Science and Practice of Plowing—Jersey Farmer—(Illustrated) ... 614
Burned Earth and Peat ... 614
Lay In Your Wood—T. B. Miner ... 614
Cultivation of Sorghum—S. S. B ... 615
Harvesting Beans—W. J. Fowler ... 615
Prickley Comfrey—G. A. W ... 615
Jottings at Kirby Homestead—Col. F. D. Curtis ... 615
Hints by the Roadside—Hough Handle ... 616
Testing Vegetable Seeds—Prof. W. J. Beal ... 616
Everyday Notes—Samuel Parsons ... 616
Beauty and Usefulness of Autumn Leaves—M. G. K ... 616
Evergreens—E. R. C ... 616
Retinosphora Filifera ... 617
Flowers for the House ... 617
Peaches in Nebraska—Xineoph ... 617
Bee-Keepers, a couple of successful ... 617
Poultry Record—G. D. B ... 618
Polled Cattle, etc.—An Old Hand ... 618
New Jersey State Fair ... 619
Grange Agency—Is it Exceptional?—A Farmer ... 619
Notes from the Rural Grounds ... 619
What Others Say ... 619

Answers to Correspondents:

Wheat Bran as a Fertilizer ... 618
Tingis Arcuata ... 618
"Big Worms"—Catterpillars ... 618
Choice Grapes ... 618
Miscellaneous ... 618
Communications Received ... 618

Everywhere:

Columbia Co., Pa ... 618
Anderson Co., S. C ... 618
Deer Lodge, Montana ... 618
Brown Co., Wis ... 618
Chautauqua Co., N. Y ... 619
Rural Grounds, Bergen Co., N. J ... 618

EDITORIAL PAGE:

Value of the Corn Crop to the Small Farmer ... 620
Social Culture ... 620
Honest Fruit Packing ... 620
Our Inventive Genius ... 620
Themselves, Not Their Subject ... 620
A Transatlantic Moan ... 620
Brevities ... 620

Domestic Economy:

After the Summer—What?—Annie L. Jack ... 624
Trouble With Cucumber Pickles—Mrs. S. C ... 624
Domestic Recipes ... 624

LITERARY:

Poetry ... 623, 626
Surprise of a Giraffe by a Lion—(Illustrated) ... 621
Russia after the Treaty ... 621
My Cousin Adelaide ... 622
Bobtail Tait Joe ... 622
The Late Mehemet Ali ... 622
Magazines ... 623
Bric-a-Brac ... 623
To the Ladies ... 623
Maggie's Philosophy—Mrs. J. E. McC ... 623
Statistics of Woman's Labor ... 623
Man and Woman ... 623
British Medical Association ... 623
Woman President for Vassar College ... 623

Reading for the Young:

Pocket-Money for the Young—No. 18 ... 626
A Tale of Many Tails—Katharine B. Foote ... 626
Answers to Questions in Rural, Sept., 7 ... 626

Sabbath Reading:

Shall We Pray in Concert ... 626
Denying Self ... 626
News of the Week—Herman ... 624
Markets ... 625
Personals ... 627
Wit and Humor ... 628
Advertisements ... 625, 627, 628

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IN a few weeks we shall issue the RURAL with a new design for a heading, more in keeping with its present widened columns as well as with the modern aspect of the departments of rural life, the interests of which THE RURAL NEW-YORKER is earnestly striving to advance

WE call attention to the second series of seed tests by Professor W. J. BEAL, the first of which, published last spring, excited a deal of interest all over the country. A third series will follow next week.

THE original architectural designs presented this week will, we trust, prove of special value to those intending to build tasteful dwellings at a small expense.

VALUE OF THE CORN CROP TO THE SMALL FARMER.

A LARGE number of farms, especially in the North and East, are under fifty acres. If we exclude woodland and land not arable, more than half the farms in New England are under twenty-five acres in extent. It is singular that it should have been taught by many agricultural writers, and still more singular that farmers themselves should hold the belief, that corn is not a crop for small farmers to grow.

Without saying that no man should follow a specialty in agriculture, we are firmly convinced that mixed farming is the most profitable for the greater number of American farmers, whether their holdings are large or small; and among the crops that no farmer can afford to dispense with is the corn crop. We may make the "exception which proves the rule" in behalf of farmers on heavy clays, where grass and small grains—unhoed crops—are in a great degree necessitated. The farming of that kind of land is a specialty by the fiat of nature. But on all loamy and sandy farms corn-growing is practicable; and, when followed with skill, it is eminently a profitable crop.

There is no way in which so much live-stock can be kept from so small an area of land as by making corn the main feeding crop. If a man is to feed ten cows from ten acres, the year around, he must depend upon the corn crop as his main reliance to do it. This, and rye as an early soiling crop, with a field of clover and orchard-grass to bridge the time between the rye and the early fodder-corn, make a complete round of feeding material—the rye to be turned under as soon as the clover field is ready to cut, and the land to be then planted to roots. Three-fourths of an acre of corn will keep a cow a year, and keep her well; but we would not recommend it as the best way to keep a number of cows, or even one cow. We would make corn the main crop, but not the only one, for various obvious reasons—the principal one being that we should have no green feed early in the season. Rye and clover—with orchard-grass—and from 50 to 100 bushels of roots to each cow, ought to be grown.

The chief objection to corn-growing among most farmers is that there is too much work about it. But, rightly handled, there is no crop more easily grown, for its value, than corn. There is no need of using any hand implement in its cultivation. The corn-planter, the smoothing harrow and the horse-hoe will do all the work better than it can be done by hand. Husking and shelling are dreaded jobs, and the curing and handling of a large crop of fodder-corn is a heavy task in the eyes of many; but knowledge and skill lighten labor, and it is worth while for every farmer to master the art of handling corn, either for grain or fodder, in the quickest and cheapest manner It is the great American crop. When we make the right and full use of it, it throws out of agricultural competition with us any country where it can not be grown, no matter how otherwise it may be favored in soil, climate or productions.

SOCIAL CULTURE.

IT has been the fashion to complain of the dreary isolation of dwellers in rural localities. But the complaints have been made most frequently by those who are entire strangers to the matters upon which they write so freely. Country folks are in general so fully occupied with affairs that they have no time to discover how lonesome they really are. So far as this is concerned we think it a misfortune. We are too busy. We work too hard. We take few or no holidays. We read and think too little, and do not spend sufficient time in social culture. There is no reason why those who plow the soil, or "whose talk is of bullocks," should not experience the refinements which are the result of formal social life. In business, at bargains, in pursuit of dollars, no man is seen at his best. He is thorny, spiny, with his back up as a porcupine might be at *his* business. Let one doff his working clothes and enter a room full of his neighbors—men, women, young men and maidens—and he is a man of another kind. He naturally falls into the ways of an intuitive kindness, which is really the truest politeness; the doing to his companion what he would that he should do to him. He "lets himself out" to please, and, after an evening spent in social converse, he retires with many rough corners and asperities toned down. For a few days the influence remains. It would be permanent if it could be reinforced now and then, and the good results would be most agreeable and useful. There is no difficulty in bringing these good influences to bear. Two or three persons, with energy and some magnetism about them, can put them in motion with ease. Now is the time to begin the effort. A book club is one excellent means to effect it. A mutual improvement association is another. These two naturally grow out of, and belong to each other. They are quite enough for a beginning. Let a dozen persons, or less or more, each name a book or a magazine and subscribe the money to purchase them. Each of these books is made to go the rounds of the members; so that for the price of one book each member has the reading of several, and, at the end, may possess this book permanently; or, the books may be sold and the money applied to the purchase of new ones. Every week let these people meet, and talk over and discuss some question of interest to them all, which one has made a special study of for the purpose of introducing it. Or let those who have a taste for it, entertain the others with a reading of selections, poems, or a well chosen drama or play. The book club and the improvement association are then started, and once the ice is broken, will float along smoothly and pleasantly.

OUR INVENTIVE GENIUS.

Necessity *was* the mother of invention. It is now no more so. The genius of America is an inventive one, and is not now stimulated into action by necessity, whatever may once have been the case. We have changed all that. Now, we invent something, and then seek a use for it. The use is generally found very soon. It is something to cause us to feel very complacent, that a whole army of inventors are engaged in puzzling their brains to find out some new thing. This is an old business. The ancient Athenians spent their time in the same pursuit, but not nearly so successfully as we do now. They had no patent office that we ever heard of; and ours is a great help to us; if only to store up the ideas that are waiting for the necessity. It is now that the old adage is reversed. Invention is the mother of necessity; and we discover a device first, and then seek a use for it. It is only a poor week's work for the patent office, to issue about 300 patents. That is 15,000 in a year. The last patent issued is numbered somewhere about 205,000. If these owed their origin to necessity, we should be the most necessitous people in the world. But it is otherwise. In every country, Americans are known as the most prolific inventors; and American devices enter into almost every house that boasts a window-fastening or a door-latch. But a thing or two are yet needful. We want a good potato harvester; a machine that will harvest corn; one that will pick cotton; another to pick up turnips; one to cut fodder, and elevate it above the feed rooms; and several other handy affairs that we can tell of when those are furnished. Let inventors note these wants.

HONEST FRUIT PACKING.

DIOGENES went hunting about the streets, seeking for an honest man in the middle of the day, with a lantern. If we were looking for an honest fruit-grower, we should seek for him in the middle of his peach-baskets and apple barrels. Notwithstanding the vast amount of preaching on this subject, hardly one fruit-grower in ten has yet found out the money profit of honest packing, because they have never tried it.

Men expect to be cheated when they buy fruit in the original packages. But the astonishment and delight they experience on emptying a basket or barrel and finding it of equal quality all through—and especially when, after buying again and again of the same grower, they meet the same experience every time—is such that they will submit to very high rates to get that man's fruit. It is true that there may be a loss on the first shipments of honestly-packed fruit, but just as soon as the reputation of a brand is established—and it does not take long—the reward of such honesty—or let us call it good business sense—begins to come in abundantly.

The rule of honest assortment should hold good even if, as in some years, not one package in ten can be branded "No. 1." The scarcer such packages are, the bigger the price they will bring. This kind of packing also has a direct tendency to make better fruit-growers. A man who has had the pleasure of receiving an account of sales, in which his No. 1 apples are figured at $5 and his No. 2's at $2, will try and increase the quantity of No. 1's by manuring his orchard, pruning his trees, and keeping down the insects that weaken the trees and disfigure the fruit. It is most emphatically true in the fruit business, that honesty is the best policy, every way.

THEMSELVES, NOT THEIR SUBJECT.

If any man is working with the single object of advancing the best interests of any branch of industry or science, he is the first to recognize efforts in the same direction, made by others. Light shed upon that department of industry or science, is in his eyes glowing, let it come from whatsoever source it may.

Dr. Sturtevant says: "One of the discouraging features of agricultural progress is the disinclination among our prominent men to speak favorably of others working in the same field." The reason is, as it appears to us, that where there is one "prominent" man who places the good of agriculture above self, there are at least a dozen who use agriculture as a sort of dung-hill, upon which they are to perch themselves and crow, and they jealously imagine that any praise bestowed on other toilers in the same field, will detract from the applause they hope to receive from their own labors. They had rather rule in hell, than serve in heaven, and a misgiving may be entertained that many of them will have the opportunity, one day, of a surfeit of their preference.

A Transatlantic Moan.—The 13,000,000 quarters or 104,000,000 bushels of wheat, which the Pall Mall Gazette now acknowledges to be a low estimate for the deficiency which Great Britain will have to supply this year from foreign sources, will cost at current market prices, £30,000,000 or in the close neighborhood of $150,000,000. Thus for one article of food alone our transatlantic cousins will have to pay at the rate of nearly five dollars per head to foreign growers. Yet it is conceded that they will in this way obtain the supply far cheaper than if they attempted to grow it at home, even if so large an amount could be profitably grown on the small area of the British Isles. It is a fruitful ground of complaint with them, however, that the two principal sources of supply—America and Russia—should both show an increasing disinclination to be paid for their exports of food in manufactured articles. The vast improvements lately made in our various manufactures—or as the English prefer to say, our protective policy—have almost destroyed their trade with this country in iron-ware and cotton fabrics and seriously injured other branches of traffic, and it extorts a moan from the neighborhood of John Bull's pocket that henceforth he must pay for the food imported from this country, out of the profits made in other directions instead of by an interchange of productions.

BREVITIES.

WE call the intending bee-keeper's attention to the little statement of Mr. C. C. Georgeson, of Michigan.

WE have just (Sept. 22,) cut off a flowering spike of Pearl Millet, that measures 13½ inches in length, and four inches in circumference.

THE ETERNAL FITNESS OF THINGS.—There is nothing more appropriately neat and natty than a pretty little cap on a pretty little French *bonne*. Put the same cap on a coarse, overgrown pug-nosed Irish nurse and see how it looks!

THE careful, thoughtful prudent man is sure to be rewarded in the long run, while recklessness and want of prudence, although missing disaster again, and again are tolerably certain to come to grief in time.

THE season of planting tulips, hyacinths, etc., is now at hand, and we advise those of our readers who can afford to do so, to buy a goodly assortment of each. Nothing is more beautiful in spring, than their varied and brilliant flowers.

IT would seem that there are few people who need quite so much instruction as the farmer; few who accept it more complacently—and it would further seem there are few who do not think themselves capable of instructing him. Ought we not to consider whether there is not some danger of farmers becoming "mad" from "too much learning?"

THE New Jersey State Horticultural Society will hold its first Annual Exhibition at Mount Holly, Burlington Co., in connection with the Burt Co. Agricultural Society, Oct. 8th, 9th and 10th. Our New Jersey readers should exert themselves to make this first exhibit of this Society a complete success. For premium lists, etc., address the Secretary, E. Williams, Mount Clair, N. J.

THE large importations of cattle and meat into Great Britain from the United States and Canada have not hitherto interfered in the least with the cattle trade carried on by Spain with that country. A late report by the British Consul at Cornuna shows that 20,730 fat oxen were shipped last year from that port alone for Portsmouth, Plymouth and Falmouth. Steam power is not used for the conveyance of these beasts, but small sailing vessels which are continually employed in the service, and it is seldom that any animals are lost on the voyage. A large quantity of eggs are also shipped at the same time.

ALL builders agree in this: The most economical form in which a dwelling can be erected is a cube, for the reason that it contains more space within a given area of wall and roof than any other. The irregular form has advantages in affording variety in the appearance both external and internal, while the different sizes of the rooms are better adapted to the needs of the family. The first or cubical form is best adapted when economy is a first consideration; the second when convenience and effect are first considered. Broad, projecting roofs protect against both beating storms and summer heat.

"It is not always easy" wrote A. J. Downing "even with very straightforward questions, to ascertain the character of a fever and ague district, though it is well known to the inhabitants. They strive to disguise it from others, and perhaps impose on themselves, very much for the same reason that a man strives to conceal his faults from himself, although they may be notorious to his neighbors. Besides this, old residents in districts slightly affected by malaria get acclimated, so that they are in a great measure insensible to its effects. But they are none the less dangerous to the new-comer, and frequently undermine a slender constitution that would otherwise have endured many years."

Literary Miscellany.

SURPRISE OF A GIRAFFE BY A LION.

In the hot, low countries of tropical Central Africa which are covered with the luxuriant growth of thorny Acacias, are found in small herds or families those peculiar ruminating animals whose wonderful appearance astonished the ancients.

Horace called them, not unjustly, a mixture of Camel and Leopard, whence the Romans have given them the name of Camelopardus or Camelopardalis. The animal appeared for the first time in Rome in the triumphal procession of victorious proconsuls returning home from Africa. Then it was placed in the menageries of the rich, and later it took part in the bloody contests of the arena, where the Romans took great delight in exposing him to the attacks of lions and other wild beasts.

In regard to his habits of life the Romans concerned themselves but little. On the other hand he Arabs, the later conquerors and settlers of Africa, paid great attention to this beautiful and most peculiar animal, and learned to know its gentleness and harmlessness. They named the animal "Dscheraf" the "loveable," the "gentle," and from this comes our Giraffe.

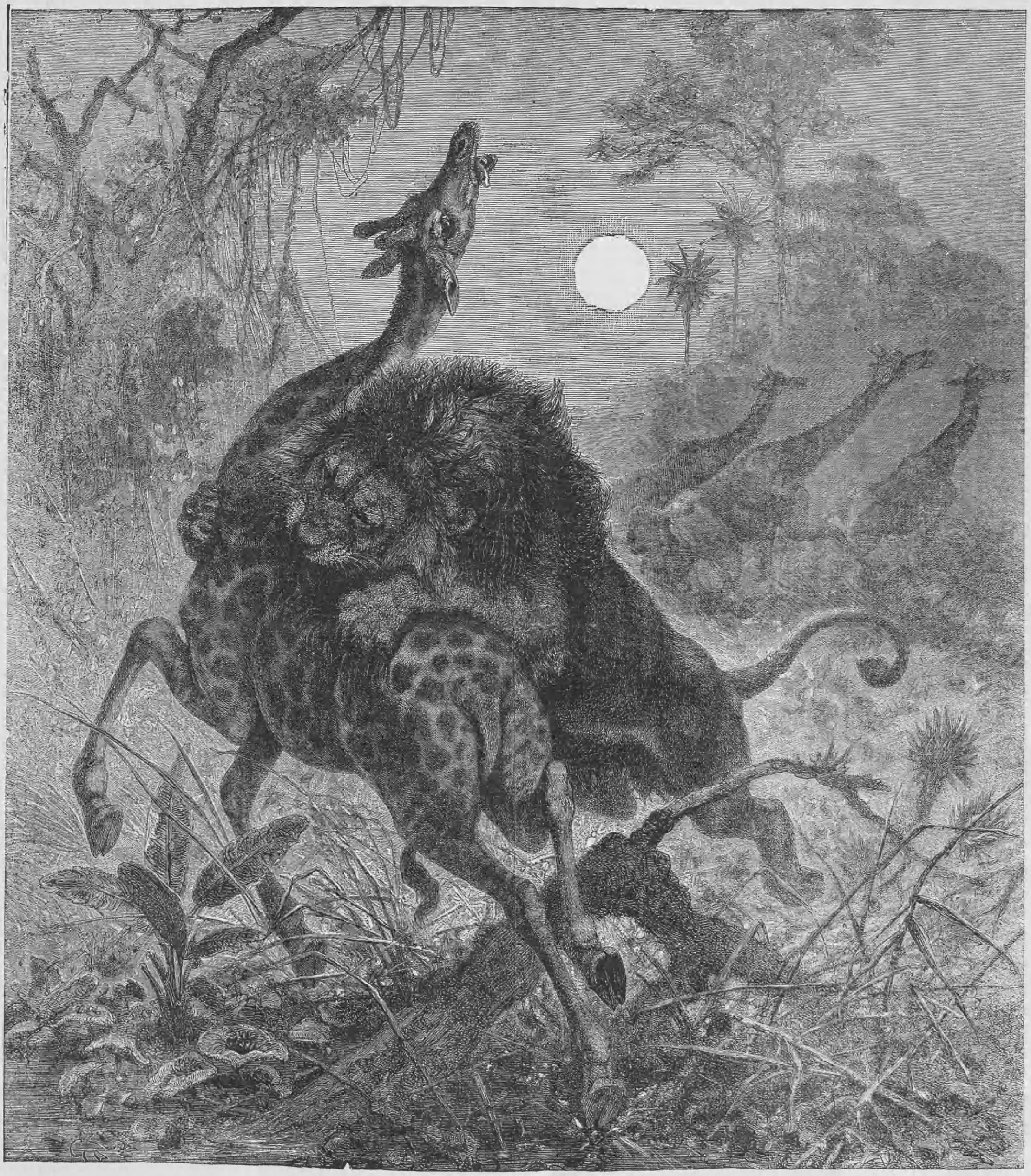
The Giraffe is essentially a forest animal, as in consequence of its hight and its peculiar form it is not able to feed on grasses, but lives principally on the leaves of trees, and especially those of the thorny Acacia.

In the Cape countries one kind of Acacia is called the Camel-thorn because the Giraffe, the Camel of the Boers, loves best to feed on it.

In the unexplored portions of the Acacian forests the giraffe lives in herds of from 8 to 10, and often more, and knows well how to protect itself against most of its foes, for it overlooks everything with its high head, and guards a large circle with its acute senses of sight and smell.

Its only dreaded enemy is the lion, the king of the forest who, when in his wanderings he discovers a herd of giraffes, calls into action all his craft, cunning and perseverance, in order to make a prey of some of the herd. The lion succeeds in this by aid of the shelter afforded him by the thickets and from concealment, springs upon the doomed beast, strikes his powerful claws into its shoulders, seizes its neck, and tries to pull it down. The poor giraffe collects its whole power now and endeavors, with desperate springs, to release itself from the persecutor on its back, as shown in our illustration. The other giraffes of the herd fly in terror, and the victim of the lion, after fruitless jumping and heavy loss of blood, yields, and is devoured by the lion and his whelps, who are as eager for the fine, delicate flesh of the giraffe as are the native tribes of Africa.

The English hunters also kill them in great numbers for the simple gratification of their love of sport, and the animal which used to be in herds of 40 or 50 is now rapidly disappearing.



A GIRAFFE SURPRISED BY A LYON.

RUSSIA AFTER THE TREATY.

It is felt that Russia has not attained her object, that she has been deceived by her friends, and that she has foolishly helped her enemies with her victories. * * * What is the reason of our failure? One-half per cent. of our population have perished in the war, hundreds of millions have been expended, and yet the Eastern question is not solved and the treaty of Berlin is merely a truce. The last war has clearly shown our national peculiarities as well as our moral and material strength. * * *. All the military requirements which depended on the inbred qualities of the Russian soldier were brilliantly carried out; but where knowledge and preparation were demanded we were not equal to the task. It was probably for this reason that we felt so much hurt on reading of the boldness of Lord Beaconsfield, who doubtless reckoned on the superior culture of Englishmen to that of Russians.

"All classes of Russian society are responsible for this; we do not estimate culture and knowledge at their true value. Most of us say that mental work does not bring money, and that culture is a means of corruption. * * * In Western Europe, on the other hand, people have arrived by hard experience at the conviction that intelligence, capacity, culture and energy bring men to the front, and give them peace at home and power abroad. It is the knowledge of how to make the best possible use of their energy and abilities that has enabled the English to derive success from our victories and sacrifices. May this be a warning to us!"—*The Golos.*

The Moscow correspondent of the Cologne Gazette says that it is the general opinion in Russia, that under present circumstances a reduction of the army would not be desirable, as such a

course would strengthen the belief prevailing in Europe that Russia has made concessions because she is weak; besides which, the expense of a disarmament, to be perhaps even followed by a mobilization, would be greater than if the army remained on a war footing.

MY COUSIN ADELAIDE.

"MAB, Mab, when will you be ready?" cried Nellie, bursting into my room one afternoon, attired for riding.

"Ready? I am ready now," I answered from my station before the looking-glass; and having given a finishing touch to the natty red bow at my collar, I caught up my skirt in one hand and my gloves in another, and ran down after her.

Mamma was in the drawing-room with Sir Percy Barton, and as we entered was asking him to return to dinner.

"I expect my niece, Miss Graham, to arrive while you are out. We have not seen her for many years, but I hear that she is exceedingly beautiful."

"Indeed!" he rejoined; carelessly adding, "I shall be very pleased to accept your kind invitation."

During the ride papa and Nellie kept together and Sir Percy maintained his usual position at my side.

"Has Miss Graham come?" I inquired, as I dismounted, and ran up the steps into the hall.

"Yes, miss," answered solemn Beale; "she is in her room now."

The dressing-bell had rung some time, so Nellie and I hastened away to array ourselves in our simple muslins.

My toilet was speedily completed, and I hurried off to make acquaintance with my cousin.

"Come in," said a musical voice, in response to my impatient knock.

An eager welcome was on my lips, but at sight of the face and form that moved slowly from the dressing-table, my previous ideas of a good hug and a hearty kiss suddenly vanished, and instead I stammered out a few words of polite commonplace greeting.

No wonder that I was amazed and bewildered at first beholding Adelaide Graham. A figure faultless in its proportions and undulating curves; a face without one blemishing feature to mar its perfection, and hair like threads of living gold, arranged in a fashion unique, but marvellously becoming. Such was the *tout ensemble* of my lovely cousin; and as I blundered through a few questions relative to her journey and fatigue, a pang shot through me at the contrast of my own plain appearance and the surpassing attractiveness of the fair vision before me—a vision radiant in sea-green silk and ornaments of pearls.

It was with a quickly-repressed and almost imperceptable start of surprised admiration that Sir Percy bowed in acknowledgment of mamma's brief introduction, for even as Adelaide, stately and self-possessed, swept into the drawing-room the gong sounded.

After dinner, while the gentlemen lingered over their wine, she amused us by an account of a visit to Egypt, from which country she had but lately returned.

"Your descriptive powers are worthy of their grand subject," observed Sir Percy, who had joined us unperceived in the twilight, as Adelaide paused. "I can pay you no higher compliment, Miss Graham."

"And I desire none," she returned, slightly moving her dress, so as to leave vacant a place on the lounge. "You have been in Africa, then?"

"Yes," he replied, seating himself. "It is the correct thing, is it not, now-a-days, to extend one's travels beyond the Continent?"

"I should not have imagined you so rigidly obedient to the decrees of society as to travel merely for the sake of being in the fashion."

"Should you not? But I did not say that that was my reason for going. I only remarked, I think that it was proper to do so."

Both possessed quick, ready wit, and the gay ball of badinage was tossed merrily from one to the other.

Unnoticed I stole away to the piano, and began softly playing over some old-fashioned airs.

Presently there was a rustle of silken garments, and two jewelled hands fell lightly on my shoulders, and turning, I saw my cousin standing behind me.

Instantly I sprang up.

"No, no; go on, dear."

"I don't care to play any more. Will you sing now, please? You do sing, I know."

She hesitated; but Sir Percy joining his entreaties to mine, with a half-smile she sat down.

Her fingers touched the keys lingeringly in the minor chords of a short prelude, then there burst forth a very flood of sweet sounds, and the air seemed instinct with the subtle power of a wondrous melody. Looking out on to the moonlit garden, I trembled at the fantastic visions my excited imagination conjured up as the wild, weird harmony rose and fell on the breathless stillness of the room.

"Are you cold?" whispered Sir Percy, coming to my side.

"No," I answered, for it seemed almost a profanation to speak.

He said nothing further, only stood by me quietly listening till the player rose.

He thanked her with evident pleasure, and they were soon engrossed in an animated discussion as to the relative merits of various musical celebrities.

My first act when I reached my chamber that night was to walk up to the long mirror and take a deliberate survey of myself therein.

The result was not altogether satisfactory.

"A small figure, dark hair and eyes, a brown skin, and shapely hands and feet. That's about a truthful inventory of my personal possessions,' I ejaculated, with a sigh.

The summer days passed on, but the joy that had grown with the June roses waned with the coming of the July lilies. The spell of enchantment that had rested on all the verdant, blossoming earth was broken, the hours dragged by wearily and slowly.

The reason of the change I did not, I would not own, even to myself. It was the sultry weather, I declared, when mamma commented on my pale cheeks, and this same assurance I applied as a salve to my own aching heart and wounded pride, reiterating it afresh every time I saw Sir Percy's tawny moustache and Adelaide's blonde head in their frequent close proximity.

When he addressed me I answered with easy unconcern; when he looked at me, looked back with unflinching steadfastness, smiled with never a twitch or tremble, and responded with frosty coldness when he endeavored to engage me in arguments which had made me burn with excited interest only a month before.

"Miss Mabel, I think you said you wished to read this book. Will you honor me by accepting it?"

Adelaide, papa, and I were going to visit some place of note in the neighborhood that Adelaide wanted to see, and Sir Percy had asked to be of the party.

I was waiting alone in the dining-room while the horses were being brought round.

"Thanks. You are very kind. What is it?" I inquired, nonchalantly, languidly holding out my hand.

"Tennyson's 'King Harold.' I understood you to say that you were anxious to see it."

"Did I? I really forget."

"I ordered it some time back, but there was a delay in getting it from London."

"I am sorry you took so much trouble. It is really very kind of you," and I carelessly laid the neatly tied-up package on a side-table without even attempting to open it, though I remembered well enough the enthusiastic desire I had expressed to read the work.

"Trouble! Kind!" he echoed with an impatient gesture. "Surely you must know"——

> "Men were deceivers ever,
> One foot on sea and one on shore,
> To one thing constant never."

sang a clear contralto voice, and the next instant Adelaide entered the room, smiling and radiant.

Our way lay between fields of ripening corn, past orchards in which the fruit was already beginning to blush beneath the sun's amorous kisses, and through a wood where the springy moss formed a pleasant contrast to the blinding dust of the high-road.

"Is it settled between them yet, do you know, my dear?" asked papa, who had been my companion from the commencement of the ride.

"Is what settled?" I inquired, not understanding the meaning of his question.

His answer was a sagacious nod in the direction of the couple in front, whose constant laughter showed they were proving each other good company.

"Oh!" I replied; "I have not heard."

My horse slipped on the moist sward, essayed to recover himself, and slipped again. The reins were jerked from my hands, and I was only conscious of a terrible sensation of falling, and of a sudden stinging pain.

When I awoke from what appeared to me a long sleep, I found myself supported in Sir Percy's arms, Adelaide bathing my face with water, and my father standing by, a look of helpless agony blanching his ruddy countenance.

"What has happened? Did I fall?" I stammered, attempting to stand.

"Don't move," commanded Adelaide. "We have sent Dickson to the nearest village for a conveyance, and he will be back directly. Here he comes too. Good Dickson!"

As soon as we reached home, in spite of my assertion that beyond a little headache and giddiness I was none the worse for the accident, mamma insisted on my at once retiring to my room, and with her own hands undressed me, forbidding me even to get up again. Dinner and a cup of fragrant hot tea being sent up to me.

At night, she had scarcely left me, with the last injunction to remain in bed the following morning till after breakfast, when the door was noiselessly opened and Adelaide appeared. Her bright fleecy hair was unbound, and fell in a silken shower to her waist, and she looked as beautiful in her *deshabille* and dressing-gown as ever she had done in the full luster of a ball-room.

"Mabel, I want a few minutes' quiet talk with you," she said, seating herself.

"What is it?" I faintly demanded, wondering whether I was to be made the recipient of any sentimental confidences on the subject to which papa had alluded in the morning.

"Why, I want to know what you mean by treating Sir Percy so badly?"

"Treating Sir Percy badly!" I echoed, in open-eyed astonishment.

"Yes," she rejoined, decisively, "treating Sir Percy badly. What do you mean by it, you naughty, cruel child?"

"Really I do not understand you," I rejoined, pride coming to my aid, and helping me to hide any further signs of surprise.

"Do you not? Then I will speak more plainly. Why are you so cold and disagreeable to him?"

Well, to be sure, this was too much. Did she think that because he was her admirer I was to treat him with fervid *empressement*. I turned my head on the pillow, and vouchsafed no reply.

She rose and bent over me.

"*Cherie*," she said, laying her fingers caressingly on my head, "did you think that there was anything between us? That he and I liked each other?"

"Yes," I faltered.

"My poor little coz, I was afraid that was it. But you are quite wrong, dear. I could whisper a very different story, but I doubt not he would prefer telling it himself. What, crying? Why what would aunt say if she knew? How she would scold me for exciting you; and I thought I would set your mistaken little mind at rest."

"So you have," I sobbed, throwing my arms round her neck; "only I am weak and foolish."

The next day I yielded a meek obedience to mamma's wishes, and allowed myself to be treated as an invalid till dinner-time. Then I affirmed my perfect convalescence, and my intention of spending the evening downstairs.

Accordingly, donning my simplest dress, and twisting my hair into one large, loose coil, I descended to the drawing-room. There I had scarcely finished declining my mother's offers of pillows, and cushions, and hassocks, when Sir Percy, who had come over to inquire after me, and had stayed to dinner, came into the room.

"I am glad to see that you are quite recovered," he said, approaching the window where I sat.

"Thank you."

"It is very nice out of doors; will you come for a stroll on the terrace?"

Mamma was going to interpose an objection, but Adelaide hastily answered for me.

"Certainly she will; it will do her good. Wait while I fetch a shawl."

In a moment she was back again with a wrap of her own, which she deftly twisted round my shoulders.

We walked the length of the terrace without speaking. When we reached the end I paused and leant against the stone balustrade over which clustered the purple-passion flowers. Above the shining stars gazed down with watchful light; the air was heavy with the rich perfume of the clematis; the trees swayed fitfully in the evening breeze, and the hum of countless insects sounded noisy and distinct in the sweet silence of the summer night.

I turned at last, but with a quick movement my companion stayed me.

"No, I cannot let you go till you have answered me a question."

"What question?" I summoned courage to ask, endeavoring to steady my shaking voice.

"My little Mab—my little love, can you not guess?"

"But—but I would rather be told," I murmured shyly.

* * * * * * *

"Good folks, do you know that you have been out more than half an hour, and that aunt is nearly frantic at the thought of the illness she is sure Mabel will have?"

A strong hand closed round my trembling fingers.

"Miss Graham, allow me to present to you the future Lady Barton.

"Sir Percy, allow me to offer you my sincere congratulations. Mab, dear, I will not increase the natural conceit of mankind by supposing that you have any cause for felicitations."

"There is but one way in which I can thank you for your good wishes," retorted my lover; and before Adelaide could even guess at his intention, he had stooped and kissed her cheeck.

With a blush and a laugh she threatened to defer her revenge till matrimony had properly subdued his sprit.

I have been married just two years, and am the proud mother of one bonny son whose strength of limb, power of lung, and beauty of person, form an unfailing source of rejoicing to his doting parents.

Next month Barton Court will be *en fete* in honor of a visit from that brilliant leader of society, the universally admired Countess of Feltdal, who, in spite of her riches and title, is, and always will be to me, simply dear Cousin Adelaide.

F. G.

BOBTAIL JOE.

CHRIS. AMMAN, JR.

THE subject of this sketch was a warhorse of the rebellion. Just when he entered the service is not known, but at the breaking out of the war he and his mate were already veterans in the service of Uncle Sam. He was attached to Gibbons Battery, which was assigned to our brigade at the reorganization of the army after the first Bull Run battle. Our acquaintance was more particularly with the battery, though in the drills of camp we were often brought in close proximity to the battery in supporting it in a brigade charge of the enemy. On these occasions we noticed the fire of these veteran battery horses, whose eyes flashed and nostrils dilated and quivered from the excitement aroused by the quick changes of positions and the belching of the cannon in rapid succession to sustain a position or hew away the columns of the the advancing imaginary enemy, usually some companion brigade of infantry.

At the second battle of Bull Run this battery was called into some close work in holding important positions. On the last day it got in between a cross-fire and suffered a great loss in horses. Bob-tail Joe on that day got his name by having his tail cut neatly off and at the same time losing a part of his haunches, all being done in one fell swoop by a large piece of a shell, which had exploded over the battery and had caused death and destruction from its fragments. After withdrawing from position and taking up march for Washington, the wounded horse was allowed to wander at will. He would hunt up grazing grounds, feed all day, but return regularly every evening for his oats, which he partook of with his veteran mate, who came out of the battle unscathed. The battery boys would wash his wounds and the boys of the brigade would show him every attention until "Bobtail Joe" became a hero of the war, and was noticed in the letters which were written in camp to the folks at home. There was just lacking the power of speech to express his affection for the battery and brigade boys, for in every other way Bobtail Joe evinced it, and for his mate, who had now a new companion on the caisson, he would show an attachment that was touching in its tenderness and loyalty.

After the army of the Potamac was put in shape, commenced the march to intercept Lee's advance into Maryland. At South Mountains the battle in the mountains fired up Joe's war spirit; but he could not get up to the front, and all through the battle of Antietam he was not permitted to come near the field of action. His wounds were not healed, and being left to himself on the march he was not chafed by the harness or irritated by the heavy battery works.

The fierce, sanguinary Battle of Antietam was over, and the many brigades and batteries had gone into camp. The dead and wounded were being looked after by squads detailed for that purpose. The work was being continued into the night, which was lit up by a strong light from the moon. Joe wandered over the fields listening for the bugler's call, by which he could always find his battery, and in his perambulations came upon the very spot held by the battery during the fight. Squads were digging holes for the burial of the dead, but this was an old scene to the veteran horse. Perhaps he might have moved off unconcerned but for a plaintive neigh from a wounded horse. Joe listened with ears pricked up. It came again feebly. He was now all excitement, and moving up to the prostrate animal, Joe recognized his veteran mate, badly wounded and disabled for further service. The meeting was affecting and the grave-diggers who witnessed the scene, and who knew Joe and his battery, were moved to tears. Joe would put his head lovingly up to that of his mate and by soft neighs express his sorrow. It was not long when a couple of carbineers came along from patrol duty, and moved also by the piteous action of the wounded beast ended its sufferings. For days after this Joe wandered around expressing his sorrow by his indifference to food and the caresses of the battery men. He lost his wonted regularity and would be gone for some days and would be seen lying in the shade of some tree, indifferent to to the animation of the camps or the call of the bugle. When orders were at last received for renewal of the march to Richmond there was a stirring bustle in camp and the echoes were awakened by the shrill bugle and loud drum. Joe heard it and walked into camp. To honor this extreme loyalty to duty, the captain of the battery honored Joe by using him as "the captain's horse." Of course Joe felt deeply the honor of the position as he pranced at the head of the battery in the onward march, and though he had no tail to erect, he proudly arched his neck and tossed his head in the full measure of his pride, and that ends this tale.—*Detroit Free Press.*

THE LATE MEHEMET ALI.

MEHEMET ALI PACHA, whose assassination is announced in the cable dispatches, was, says the New York World, the ablest of the Turkish generals during the recent war. By birth he was a Prussian of French descent, his father being a staff trumpeter of the Nicholas Regiment of Cuirassiers of Brandenburg. Young Julius Detroy was placed in a business house at Magdeburg. But he was of an imaginative disposition, and soon tiring of business routine he ran away to Rostock, where he found a Mecklenburg brig getting ready for sea. The captain took him on board in the capacity of a ship-boy, and after a long voyage, of which young Detroy became heartily sick, the vessel anchored in the Bosphorus. He had had enough of the sea, and watching his opportunity he one day jumped overboard, and swam to a caique which was passing. Its occupant, who proved to be Ali Pacha, afterwards so famous, and grand vizier for many years, ordered the boy to be taken in, and was so pleased with him on a further acquaintance that he took him under his protection and even into his own family. Detroy, a year later, adopted the Mussulman religion and took the name of Mehemet Ali. His patron sent him to a military school, where he distinguished himself by his intelligence and good conduct. He received his commission in 1853 and made the campaign of the Danube against the Russians. He was first under fire at Silistria, and it was said that he did not seem very courageous. It has been even alleged by enemies that at the beginning of the bombardment he sought shelter in a cellar. But he soon gave proofs of intrepidity and even of daring, winning universal commendation. He once spent a whole night alone in a captured earthwork. Omar Pacha noticed the conduct of the young officer and placed him on his staff, and in this capacity he went through the Russian war, and, later, the campaigns in Montenegro, Arabia and Bosnia. He became a colonel in 1868, and in 1865 was made a pacha or general. He was employed with distinction during the insurrection in Crete and again on the Montenegrin frontier.

In 1873 he was given the chief command of the forces in Thessaly, in order to put an end to the excesses of the banditti, which had become intolerable. Mehemet Ali acquitted himself of this difficult task with great ability. Partly by artifice and partly by persuasion, by employing remorseless severity where "examples" were required, by daring attacks and by skillful operations in combination with the Greek detachments assigned for frontier duty, he was able in a short time to re-establish order in Thessaly. Toward the close of 1875 he was intrusted with the chief command at Novi-Bazar, a post of great strategic importance, and was afterwards engaged in various military duties in connection with the operations against the Servian insurgents.

At the outbreak of the recent war with Russia he was assigned to the command of one of the armies operating against the Montenegrins, Suleiman Pacha being at the head of the other. These two officers pressed the heroic mountaineers

hard, relieved Nicsic, and were said to be even threatening Prince Nicholas' capital when they were recalled to oppose the Russians, who were crossing the Danube. Mehemet Ali succeeded AbdulKerim, the former incompetent commander in-chief at the head of the Eastern Army, but was given no control over Suleiman in the west and Osman at Plevna. Mehemet Ali's battles with the army of the czarowitch generally proved inconclusive, and it is said that the jealousy between himself and Suleiman was due to the slaughter of the latter's troops in the desperate Shipka Pass struggle. Mehemet Ali afterwards attempted the relief of Plevna, but found it impossible at the late date of his effort to force his way through the Russian lines. In spite of his ill success, Mehemet came out of the war in better favor with his sovereign and people than when he entered it, while his rival, Suleiman, when last heard of, was in disgrace and chains

MAGAZINES.

DEMOREST'S MAGAZINE for October contains some very attractive designs for house and street costumes, besides much interesting information about fashions in general. The front page is adorned with an illustration in oil, entitled Unexpected Familiarity. There are, besides, two full-page steel engravings—one, Autumn Musings, the other, Fishing Boats; a Coast Scene; a showy tinted group of Autumn Leaves, and a fashion cut, illustrating a street costume and a riding habit. Country Kettle-drums is, as usual, a most attractive paper. What Women are Doing, Domestic Science, The Kitchen Correspondent Class, each and all of these departments are admirably conducted. Women, in all classes of society, whatever their occupations, will find in every number of this magazine many valuable hints.

ST. NICHOLAS FOR OCTOBER.—The October number of St. Nicholas opens with a very interesting story, The Violin Village, which carries us away to the mountains of the Tyrol, and tells the varied adventures of a bright young goat-boy of that region. The two serials, Under the Lilacs and Dab Kinzer, are brought to a happy close and there are several good, short stories, one of which, Mrs. Prinkins's Surprise, contains some additional exploits of Nimpo, whose Troubles interested the readers of St. Nicholas some years ago. The long-promised paper on Parlor Magic is given in this number, and the boys who wish to get up lively evening entertainments will be glad to see it. It contains plain and simple directions for the performance of many curious experiments. The French Alphabet, with twenty-six original pictures, also appears, and among other useful papers is one entitled How to Keep a Journal. Cutting the Pie, a humorous poem by Rossiter Johnson, will amuse the older boys and girls, while Happy Little Froggy will make everybody laugh. A Tale of Many Tails, and Prince Cucurbita are lively sketches, with pictures of novel design; and there are several very funny cuts scattered through the number. The Very Little Folks have a bright poem, Hare and Hounds, with a fine picture by Sheppard; and the departments are, as usual, well filled with good things.

SCRIBNER FOR OCTOBER.—The October Scribner opens with a twenty-page paper on the Art-Schools of New York, by W. C. Brownell, the art-editor of the New York World. A Company of Actors, by J. Brander Matthews, is an account of the leading theater of the world, the Comedie Francaise, with much anecdote and personal gossip. A Trip with Lincoln, Chase and Stanton, in 1862, is described by Gen. Egbert L. Viele. Artemus Ward at Cleveland, by C. C. Ruthrauff, shows the kindly as well as the eccentric side of the humorist, who was also a good deal of a practical joker. A laughable sketch of A. Ward and his Grate Show, and a view of him at work (both by George Hoyt in 1859), and his portrait and autograph are given with the paper. Leo Marinus, the Sea-King, by Henry W. Elliott, is an account of the sea-lion of Alaska. How Uncle Gabe Saved The Levee is a story of the Mississippi river by Wm. L. Murfree, Sr. Miss Calderon's German, a society story by W. H. Bishop, has drawings by the author. The serials are illustrated: Boyesen's Falconberg, by Mr. Dielman, who (the author says) has cleverly caught the Norse physiognomy; and Roxy (which comes to a conclusion in this number), by Mr. Shirlaw.

The unillustrated material comprises a second posthumous paper by Robert Dale Owen, on Texas and the Treaty of Guadalupe Hidalgo; a paper on Neophonography, by the inventor of the system, James Richardson, a short-hand writer of long experience; a sketch of College Journalism in America, by Charles F. Thwing, and an essay on Socialism, by Prof. W. G. Sumner of Yale College, who considers the historic origin and aims, fallacies and methods of the new movement. The poetry is contributed by Bret Harte, James T. McKay, Minnie Hay, Susan M. Spalding, Andrew B. Saxton, Henry S. Cornwell and Dora Road Goodale.

HARPER'S MAGAZINE FOR OCTOBER.—The two serial novels, by those great masters of fiction—Black and Hardy—will take the first place in the minds of the thousands of readers who are following these stories from month to month with intense interest. An equally numerous class of readers, turn to John Russell Young's terse and thrilling story of Stanley's journey through The Dark Continent, one of the illustrated articles in this Number.

A novelty in the way of illustration, is a reproduction of an old-time poem, Ye Bellman, by Robert Herrick, making a page-picture in Abbey's most characteristic style.

Three Thunderbolts is a humorous Southern character-sketch, by Lizzie W. Champney, with two powerful illustrations by Reinhart. The Western Ginevra is by Everett Hale. Little Miss Mouse and her Marvelous Scholar is by the author of Colonel Dunwoddie, Millionaire.

Adonais, by Will Wallace Harney, is an illustrated poem worthy of especial notice. Opening the Number, is a graphic description of a scientifically conducted stock and butter farm in New England. Another, contributed by S. M. Byers, our consul at Zurich describes a tunnel, now in process of construction beneath the Alps. Still another describes, with quaint illustrations, a Japanese mission-school. Of a more distinctively summer character are the articles on New York in Summer and Around the Peconics.

Butter Stores in Paris, by Marie Howland, is an interesting sketch, fitly supplementing the article on Echo Farm; and In a Jewish Book-store, by M. L. Marks, introduces the reader to some unfamiliar characters, as well as some very novel information.

Of the unillustrated poems, Meeting is a happy rendering from the Spanish, by Helen S. Conant; and Discord is a strong sonnet, from the pen of Richard Realf.

The Editor's Easy Chair treats of some especially timely topics, and the other editorial summaries are, as usual, well sustained.

LIPPINCOTT'S MAGAZINE for October contains two illustrated articles, one, The Paris Exposition of 1878, being a continuation of Mr. E. H. Knight's account of the fair. The two interesting serials are supplemented by a very charming short story by Robt. C. Meyers, and Lady Barker commences what promises to be a delightful correspondence in Letters From Mauritius. An Adventure In Cyprus, by Mr. Ker, is very filmy, but the poetry is fair, and the editorial departments sprightly.

BRIC-A-BRAC.

BRAINS.

An Epigram.

You argued in your lecture with persistence
Brains were not necessary to existence.
It may be so; and yet 'twas bold of you
To be the teacher and example too.

[*George Birdseye.*

HIS FIRST LOVE.

I remember
Meeting you
In September,
Sixty-two.
We were eating,
Both of us;
And the meeting
Happened thus:
Accidental,
On the road,
(Sentimental
Episode)
I wss gushing,
You were shy;
You were blushing—
So was I;
I was smitten,
So were you;
(All that's written
Here is true.)
Any money?
Not a bit.
Rather funny,
Wasn't it?
Vows we plighted—
Happy pair!
How delighted
People were!
But your father—
To be sure—
Thought it rather
Premature:
And your mother
Strange to say—
Was another
In the way.
What a heaven
Vanished then!
(You were seven,
I was ten,)
That was many
Years ago—
Don't let any-
Body know.

[*Balto. Every Saturday.*

A BEAUTIFUL SIMILE.

THIS rhyme
Is like the fair pearl necklace of the queen,
That burst in dancing, and the pearls were spilt;
Some lost, some stolen, some as relics kept.
But never more the same two sister pearls
Ran down the silken thread to caten each other
On her white neck. So is it with this rhyme.
It lives dispersedly in many hands,
And every minstrel sings it differently:
Yet is there one true line, the pearl of pearls:
"Man dreams of Fame, while woman wakes to love."

[*Tennyson.*

MOSKEET-HA!

By Ralph Alldough.

(Elmir's Son.)

If the mad slayer thinks he slays,
Or if he scrate'n to ease his pain,
He knows not well my subtle ways,—
I sting, and sing, and sting again.

I fill all places far and near,
Indoors and outdoors are the same·
The vanished wrigglers in me appear,
And in the dark I hunt my game.

They reckon ill who bar me out,
When me they fly I use my wings,
There is no peace when I'm about.—
Blood is the hymn the skeeter sings.

O rare and dainty is my food,
I sleep by day. I wake at even;
But thou, meek lover of the good,
Grease well thy nose and dream of heaven!

J. A. T., Transcript.

"DU BIST WIE EINE BLUME."

THOU art even as a flower is,
So gentle, and pure, and fair;
I gaze on thee, and sadness
Comes over my heart unaware.

I feel as though I should lay, sweet,
My hands on thy head, with a prayer
That God may keep thee alway, sweet,
As gentle, and pure, and fair!

[*Blackwood's Magazine.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

SOUVENIRS.

BY JOHN MORAN.

A FADED rosette, a band
That gathered the gloss of her hair,
A glove from her flower-soft hand
And three written words: "*Mon plus cher.*"

A pansy she dropped in the dance,
A flutter of floss from her fan,
A programme she laid down by chance
When the foot-moving measure began!

All that is left for me: you please!
To smile at such trifles; to me
They waft a sad, fragrant breeze
From the isles of some outland sea.

She is here, even now, at my side,
My queen with the voice like a bird's,
In her lissome, unconscious pride
With her kiss that made pulses words.

She *was* here. Hush! If she be dead
Or false, what matter to you?
The old dews in the old days shed,
Fed roses, if also rue.

Rosette and ribbon lose sheen;
What worth is a worn, soiled glove?
The tenderest words oft mean
Betrayal and death to love.

The pansy no thought can save!
For those who forget its bloom:
The floss is as light as the wave
Of her sweet hand sealing hope's doom.

The programme! 'Tis true my name
Was frequently there, and yet
I have no hard words of blame;
It is well that she *could* forget.

But for some fleet, eminent hours
She said that she loved me best,
And that is the grace that dowers
The life of this—fool confessed.

TO THE LADIES.

IN the next number of the RURAL, "The Woman's Club," will have its second representation. I cordially invite contributions from all on any subject which can be of the least possible interest to women. I hope in time to induce a goodly number of our readers to send to the "Club" items from their personal experiences whether in the kitchen, parlor, store, schoolhouse or church.

It is desirable that this monthly interchange of ideas should be made of practical use to all, but without the hearty co-operation of the matrons and maids of the RURAL circle I can hardly hope to realize this desire. May I count on your aid?

FAITH RIPLEY.

MAGGIE'S PHILOSOPHY.

MRS. J. E. MC'C.

"THE hatefulest work a woman ever did," said Rose, as she plumped down the clothes-basket, filled to the brim, and commenced, rather peevishly, to assort the goods.

"I know of worse things to do than washing," said Cousin Maggie, who was helping her that day.

"I should like to know what?"

"Well, for one thing, sitting in the parlor with your Sunday clothes on, entertaining disagreeable people with sharp eyes, that look you over critically from head to foot and take an inventory of everything in their range of vision. If there is anything you particularly want to hide, they are sure to ferrit it out. You know, too, from the way they "dish up" their acquaintances to you, that they are preparing to serve you out in the same way when they leave. I know you would gladly plunge into the wash-tub to escape such an infliction."

"I guess Mrs. Trotter has been over to your house," said Rose, with a sly glance. "She was here last week to tea. I guess I would prefer washing;" and she set out a big tub under the shaded porch and filled it with clear water.

"Just see how beautifully that woodbine shadow is reflected in the water," said Maggie, looking down with real pleasure. "What a pretty picture it makes."

"If you can poetize over a washtub, you can over anything," said Rose.

"I like to pick up all the crumbs of happiness I can as I go along," said Maggie, "that is a part of my philosophy. "Beauty always gives me a thrill of pleasure, whenever I meet it, and you do find it sometimes in most unexpected places. Now just look for yourself, Rosy, at that picture which the sun has made on your mother's white counterpane on the line. Was there ever anything more perfectly drawn than those pear tree branches which are shadowed on it?"

"It is pretty," said Rose with some surprise. "I have seen clothes hung on that line all my life and never noticed the shadows before."

The two girls were soon bravely at work "in the thick of the fight."

"Let me pin back your sleeves, Rose, it is so provoking to have to stop every other minute and shove them up. It is just fun to have your arms in this nice, clean suds:" and she played with the foam a moment. It did not hinder her any.

"Speaking of disagreeable work," she continued, "washing is not half so dirty work as oil painting. I have tried both. Indeed, I think nice washing and ironing is quite among the fine arts, and the finished result adds ten times as much to the family good and comfort as the finest oil painting that ever was made. I always did love to sprinkle and fold down a basket of fresh, sweet, sun-dried clothes ready for ironing next day. The sight of them is a recompense for all the labor it cost. I am apt to cheer myself with this reflection as I go along."

"I think you are a philosopher, Maggie, but I think you try to cheat yourself a great deal and make work look pleasanter than it is."

"It is a very innocent kind of cheating, and makes me happier over my work, so I think there is no harm done. Just try it awhile and see how you like it."

"I guess it must be catching for I have got along with this washing with much less grumbling than common. To-morrow I would like to see what pleasure you can take in ironing and baking."

STATISTICS OF WOMAN'S LABOR.

THE Massachusetts report of statistics of labor, in many respects a valuable and interesting volume, makes one extraordinary mistake. In summing up the non-productive or dependent classes in Massachusetts, it counts up, together with 1787 persons "retired from business," 6,961 "infirm" and 505,905 children under fifteen years of age, the item extraordinary of 328,198 housewives. Apropos to this fiction, that the housekeepers are a "supported" class, comes the journal of one day's work by a farmer's wife, who believed in the seventeen-hour law, and who never struck for higher wages than her board and clothes. "Rose at 4.40, skimmed the milk, fed chickens, got breakfast ready at six. Dressed the baby, washed dishes, made the beds, killed the chickens, baked, ironed, got the dinner. After dinner went to the field and dropped corn till it was time to get tea. After tea "put away" the milk, washed the dishes, fed the chickens, sewed buttons on the husband's shirts, mended the stockings, watered the house plants, crimped the ruffles, in baby's Sunday frock, and left off at 9.30, having forgotten nothing that ought to have been done except patching the hole in the mitten."

MAN AND WOMAN.

Mrs. Roberts, in the Washington Capital, very truthfully remarks: Marrying a man to reform him is like being measured for an umbrella. It may or may not be satisfactory; but you might as well try to make a politician honest as to talk to a woman who loves a man. No matter how worthless he may be, she will brave everything, for him; and I would not give a snap for her if she did'nt. Not long since on the avenue I saw a man, respectable looking, in a helpless state of intoxication, a policeman on each side of him taking him to the station-house; behind him was his wife, a young, nice-looking, well-dressed woman. She paid no attention to the rabble following or the wondering looks of the passers-by, but stuck by him, trying to pacify and quiet him. I could not help thinking how little a man would stand by a woman. Man is of the "nobler" sex and a superior being; but he will get a woman in trouble, and then leave her to get out of it the best she can.

THE MOTHER'S LIFE.

THE mother's life is full of prose,
From early dawn till daylight's close,
But oft, amid her household cares,
Some little poem unawares
Is written down within her heart,
And of her life becomes a part.

Some loving words a child may say,
A golden curl long put away,
A half-worn shoe upon the floor,
An outgrown dress the baby wore,
A broken toy or faded flower,
May touch the heart-strings any hour.

THE British medical association have made consummate asses of themselves in a recent vote excluding women from their membership. Their old articles permitted the election by branches of "all duly qualified medical practitioners" recommended by a certain number of members, and under them Mrs. Garrett-Anderson and Mrs. Hoggan have been chosen. A by-law was presented by a Birmingham doctor, making "females" ineligible, and, to the shame of the English doctors, it was passed. The solo argument was that men, because of their sensitive modesty, were not disposed to discuss medical or surgical cases in the presence of women. Mrs. Anderson made a wholly unanswerable plea for the equality of women in medicine, on strictly scientific grounds, without a vestige of what might be called sentimental appeal on grounds of mere equality of rights; but the sexual prejudice was too strong. In a discussion of this matter locally, some time ago, we believe it was confessed by some of the doctors that they couldn't tell their customary stories if women were to be present at their meetings. Can this be the trouble in the great British association?—*Springfield Republican.*

THE fitness of having a woman-president for Vassar is more widely recognized than we had dared to hope. Before Vassar existed it would have been difficult to find so many believers in the capacity of women to hold professorships as now seem ready to concede that a woman may be found competent to a college presidency. The suggestion of Miss Anna C. Brackett receives, as as it deserves, the most deference, for she is by all odds the most distinguished of American women in the theory and practice of education. Good work as Vassar has done, we should expect from Miss Brackett's mind and methods an original and quickening impulse that would throw its past into the shade. Vassar needs a new inspiration.

L. M. B. of Elbridge, N. Y., wants to know how to arrange skeleton leaves into a wreath for framing. Will some RURAL reader please send the desired information to RURAL Office?

Domestic Economy.

CONDUCTED BY EMILY MAPLE

AFTER THE SUMMER—WHAT?

THE summer is over. September with its cool breath has warned the summer residents of every sea and river-side resort that it is "not always May," and the city once more resumes its wonted aspect. The months of picnic and bathing, of flirting and flowers, moonlight rambles and idle excursions, are among the past. The girls who have gained health and strength with the freckles and sunburn amid the mountain paths and in the valleys, are now saying to themselves and to each other—what?

True, there *are* many busy workers who return to their labor with renewed vigor, but ah me! what can the butterflies do? Will music or painting or any of the natural sciences become a winter's study? Is the proposed cooking school about to be established in Montreal likely to be patronized, till the art of cooking is perfectly learned, and its medal of honor proudly worn by our young ladies? Or will the winter months be spent in a round of calls, a worship of fashion, and the long, dull evenings be frittered away in inane and idle conversation that, too often, degenerates into gossip? Pity it is that so few people are interested in societies of art and literature in our cities, that the worship of Mammon or the struggle for position fills the thought and fires the ambition of the men of this age, while their wives, sisters or daughters are proud to remain at home helpless instead of helpmates, as they should be, with a scorn for labor of every kind that should be vouchsafed to nothing in this world but to sin or meanness.

After the summer—what?

ANNIE L. JACK.

TROUBLE WITH CUCUMBER PICKLES

FOR two or three years after I commenced housekeeping, I had a great deal of trouble with cucumber pickles. They would turn black or have black spots on them soon after they were put in vinegar, although they were as nice and bright as could be before. At first, I thought the fault must be in the vinegar, but I soon found that was a mistake; then, that it was because I freshened them in a pan that had some of the tin worn off, so I used a stone jar for that purpose, but the pickles did not improve. At last I found that the keg they were salted in had the hoops nailed on, and that the nails reached through to the inside, and believing this the first cause of the trouble, I bought a new half-barrel without a nail in it. Afterwards the pickles were all right till I was sick for several weeks when they were black again. By inquiring into the subject, I found that the girl had put a rusty tin lid over them while freshening, instead of the stone cover belonging to the jar, and I knew that as they had been warm some of the time, steam had risen to the lid and then fallen back on the pickles. Since then I have had no such trouble and have concluded that the brine or pickles must not come in contact with iron in any shape if we would not have them black. And yet I think that if health is to be taken into consideration, they might better be of that color than of the beautiful green which many make them with brass.

MRS. S. C.

DOMESTIC RECIPES.

Soda Cookies.

Three-fourths of a teacup of butter; two cupfuls of sugar; two eggs; a little grated nutmeg; one small teaspoonful of soda, dissolved in a tablespoonful of sweet milk; two teaspoonfuls of cream-of-tartar, in flour enough to make a soft dough. To make: Rub the butter and sugar together, until light; add the eggs, without beating, then the spice and soda. Beat a few minutes before putting in the flour; then handle as little as possible. Do not knead. Roll rather thin; cut into shape; bake in a hot oven. If liked soft, take the cookies from the tins as soon as baked, put in a jar, and cover closely.

Ginger Snaps (Excellent).

One teacupful of melted butter; one teacupful of brown sugar; one teacupful of dark molasses; one teaspoonful of ginger; one teaspoonful of soda in a large spoon of hot water. Flour, to make a stiff dough. Roll thin, cut into small cakes, and bake in a quick oven. Table sirup is not as good as common molasses, for ginger snaps. This recipe was taken from the RURAL NEW-YORKER, several years ago, and is the only one I ever use.

M. G. R.

Brown Bread.

Excellent bread can be made from coarse flour or "middling," and in our family it is relished much better than white bread for a change. Too much of it, however, should not be made at once, as it does not keep fresh long, and is very easily made. For three loaves, take as much hop yeast and water as for the same quantity of white bread, one spoonful of salt and enough coarse flour to make as stiff as pancakes. Set this at night and in the morning put in a cupful of sugar, a pint of white flour and nearly as much coarse flour as can be stirred in with a strong spoon. Put in deep pans or basins and, when light, bake. Graham bread is good, if made in the same way, but it is not necessary to put in the white flour.

MRS. S. C.

German Pickles.

Take sound, ripe cucumbers, peel and remove the seeds, cut lengthwise into strips an inch wide. To three quarts of the parts add three cups of vinegar and four of water; soak twenty-four hours, stirring once or twice. Put one quart of vinegar on the fire, add one pint of sugar, a little stick cinnamon and a teaspoonful of pimento tied in a bit of cloth; scald all together; add the cucumber and boil till soft.

Tomato Omlet.

Take three large tomatoes, peel and cut fine; stew till soft, adding salt and pepper to taste, a small piece of butter, and stir in three eggs just as you take it from the fire.

B. F. S.

News of the Week.

Monday, Sept. 23, 1878.

POLITICAL.

Its a good sign of the times that the Democratic Convention, held at Philadelphia, nominated four prominent republicans for judgeships. Last year the republicans voted solidly for a democratic judge, so that both parties recognize the fact that the judicial office should be filled by the most upright and competent men regardless of party affiliations. Out in Oregon J. H. Slater has been elected senator instead of Hipple-Mitchell, and is against inflation and in favor of a coin basis. Ex-senator Matt. Carpenter is receiving numerous petitions to become a candidate for United States Senator from Wisconsin, and, of course, "Barkis is willin'." Up in Vermont Judge Poland has formally offered himself as candidate for the seat in the senate, held at present by Senator Morrill. The struggle for the governorship of Massachusetts is this year attracting more general interest than any political movement at present taking place in any other State. There Butler's candidacy has, apparently, greatly disorganized the old parties, stimulated the activity of the Greenback-labor party, and caused great uncertainty as to the result of the present contest. On Tuesday last, the Democratic Convention for nominating a governor and other State officers met at Worcester. The State Committee had intimated that delegates instructed to nominate Butler would stand a slim chance of admission, as in nearly all such cases there were contesting delegations, and decisions would be rendered in favor of enough anti-Butlerites to secure a large majority in opposition to him. As stated here last week, Butler insisted that the Convention should decide the eligibility of its members.

The fear was that the Butlerites would not admitted to the floor of the convention, and to remove this danger, early on the morning a large body of them took possession of Mechanics' Hall in which the meeting was to be held, and proceeded to organize in their own favor. When their opponents learned of this move, they tried to have the forestallers ejected, or to hire another hall; but could do neither, as the mayor declared that an attempt to do the former would cause bloodshed, and all the other suitable halls in the city had been pre-engaged by Butler. Finally the Central Committee declared the convention adjourned till next Wednesday, when their adherents are to meet at Faneuil Hall in Boston. On their withdrawal, to the number of some 500 odd, there remained 973 delegates from 309 towns and cities, and these gave the nomination to Butler by acclamation. The bolters will name an anti-Butler ticket and thus divide the democratic party, many of whom will doubtless vote the republican ticket rather than see Butler triumphant. On the following day the republican convention met at the same place, presented a marked contrast to its turbulent predecessor, and nominated Thomas Talbot for governor. Butler has now at his back all the greenbackers, a large number of discontented republicans, and probably the majority of the democratic party, and has a fair chance of beating his highly respectable republican rival.

Gen. Beauregard was nominated for State treasurer by a coalition of republicans and greenbackers of Louisiana, but declines the nomination. Mr. Gotham, Secretary of the Senate and likewise of the congressional campaign committee, has been making a speech extolling the greenback doctrine. He thinks the republican party should favor it more, and intends to print and circulate as a campaign document a large number of Senator Thurman's late speech in favor of this movement.

In Connecticut the democrats, against the known opposition of Senators Eaton and Barnum, have adopted a platform in which they affirm gold and silver coin to be "the most stable basis for the commercial necessities of the world," but denounce the whole financial policy of the government which is slowly bringing us to that basis; they denounce especially the Resumption Act, but they leave all legislation upon it to the wisdom of Congress without a suggestion as to its character, and they condemn repudiation but declare that "whatever currency is issued should be for the benefit of the whole people." These resolutions were passed "as a whole" with neatness and despatch, neither Senator Eaton nor Senator Barnum being on hand to discuss or denounce them.

Secretary Sherman has been interviewed by a greenback editor, and the report, which Mr. Sherman is said to have revised, is sufficiently remarkable. He laid it down that it was a mistake to suppose that a man could not be a republican and a greenbacker at the same time; that the two positions are perfectly compatible; that the greenbackers have left the republican party simply because "his financial policy has been misrepresented;" but "the misrepresentations will be cleared up" and then they will come back to the old party. He considers a currency issued by government "superior and more economical" than national-bank notes, and the reason why he has been preparing to redeem the government notes is, that he found a law on the statute-book when he took office commanding him to do so. But when "resumption is an accomplished fact" and "the country has settled down to a specie standard," there being no longer any occasion for the national banks, "they will be legislated out of existence." He owns no bonds, and, so far from "working in the interest of the bondholders," he has been from the very first trying to cut down their interest. "He has been abused pretty generally, but having laid down for his guidance the interests of the whole country, he does not permit harsh criticisms to keep him from sleeping." There is one point in his estimable character as a politician and financier to which the Secretary modestly refrains from calling attention, and that is his eminently catholic and progressive spirit.

Sec'y Sherman has one good defence against any misrepresentation of "his policy" regarding silver, viz., the difficulty of knowing what it is. He has just issued an order rescinding the previous one directing the payment of silver for greenbacks. This makes the fifth order he has issued in attempting to be "friendly to silver" since July 19. The first directed certain banks to be furnished with silver dollars on their application; but they were to distribute it as currency, and not let importers have it for customs' duties. The second (Sept. 3) directed silver to be paid out in sums under $10,000 in exchange for silver certificates; but it was still to be used as currency, and the importers were not to have any of it. The third (Sept. 7) directed it to be issued at the sub-treasuries to anybody for greenbacks. The fourth (Sept. 13) forbade such payment, on account of doubt of its legality. The fifth (Sept. 14) directs silver to be furnished free of expense to 120 national banks, on their application, for general use, and directs United States' disbursing agents and paymasters to use silver dollars in their payments as far as possible, and Government employes who desire them in payment of their salaries, may also have them.

The trade-dollar imbroglio thickens. Letters continue to pour into the Treasury Department inquiring why they are not redeemed by the Government, why the bankers do not take them on deposit, and why, seeing that they contain more silver than the "buzzard dollar" (the designation applied by indignant holders of the trade-dollar to the new standard dollar), they are not universally current. The New York Central Railroad now refuses to take trade-dollars for tickets or freight, but they are still current in some departments of trade, so that their quotable price is considerably above their bullion value. Consequently there is money to be made by bringing them from California, or even from China, and putting them into circulation. It is estimated that about three millions are now afloat, and an agitation has been started in the West to have them redeemed at par by act of Congress. This would be equivalent to buying silver bullion on Government account at about 58*d.* per ounce, its market value being below 52*d.* per ounce. As the Government makes no profit on the issue of trade-dollars, but merely stamps them and certifies their weight and fineness, it would be a promising speculation to the holders of silver bullion to have a law passed for their redemption at par, and to have the mints kept open for the coinage of new ones.

MISCELLANEOUS.

The Rev. Dr. Samuel Caldwell has been elected as the new president of Vassar College. He was born at Newburyport, Mass., in 1820, graduated at Waterville, Me., College and at Newton Theological Seminary, and became a professor in the latter in 1873, after a pastorate of 27 years at Bangor, Me., and Providence, R. I. He belongs to the Baptist denomination.

Senator Davis of West Virginia has frequently charged that there was a deficiency of several millions in the Treasury accounts, but the experts he has had at work investigating them all summer, declare they can find no trace of such a deficiency. The Chinese of San Francisco have contributed $1,200 toward the relief of yellow fever sufferers.

Edison's latest invention will, according to him, replace gas in streets and houses by electric light, at a cost from 46 to 95 times less, according as the electric machine which generates the electricity producing the light, is run by steam or water power. The wires which convey the light are to be insulated and laid in the ground the same as gas pipes. The present gas burners can be utilized for the new light, and the same wires that bring this will also bring into every house power and heat. By means of the former, a sewing machine or any other mechanical contrivance that requires a motor, can be run, while the latter will cook food or serve nearly all the purposes of ordinary fires by means of suitable stoves. Edison says he has completed the invention and will give a public exhibition of it so soon as he has properly protected it by putting in claims for home and foreign patents.

FOREIGN.

The present Liberal government of Canada, under Premier Mackenzie has been heavily defeated at the elections just held, and a conservative house of representatives chosen under the leadership of Sir John McDonald. The issue upon which the electoral contest mainly depended was the promise of McDonald and his supporters, if elected, to enforce a system of thorough protection for home manufactures by the imposition of increased duties on all imports, and in retaliation for our heavy duties on Canadian goods, to levy prohibitory taxes on all importations from the United States. England, the great apostle of free trade, does not seem to have been successful in impressing her teachings on her Canadian offspring.

The debate in the Reichstag on the Anti-Socialist Bill began on Monday, and was opened by Herr Bebel in a manner sufficiently trying to the government, for he enlarged upon its relations with the socialists in former years when in need of an ally, and brought forward the evidence. He was replied to by Count Eulenburg, who had reason to know all the facts in the case and on that account was disabled from making an effective denial. This was reserved for Bismarck himself the next day, and his denial was emphatic and categorical, and included any connection whatsoever with Lassalle, the socialist leader. He denounced the socialists as a gang of bandits, for which he was in vain called to order by Bebel. The bill was finally referred to a committee of twenty-one.

A turn has taken place in the Afghan affairs favorable to England, and probably unfavorable to Russia, through the death of Shir Ali's younger son, Abdullah Jan, and the one whom he had selected as his heir, to the exclusion of his eldest, Yakub Khan, who had, through his military talents, won the throne for him in 1869, but whom his father has since kept shut up in close prison. Abdullah Jan was a youth of no character, and his death will probably lead to Yakub's release and reappearance on the scene. He is a very able man and a friend of the English. The Russian embassey has, however, it is said, reached Cabul, while the English mission is waiting at the frontier to hear from Shir Ali. The latest Russian story about the expedition to Balkh is, that it was ordered when war with England was thought likely, but has been countermanded since then; but this does not receive the credit its authors would like.

The United States Consul at Lyons has forwarded to the Department of State a report concerning the grain crops of the present season in the following departments: The Rhone, Isere, Haute-Loire, Haute-Alpes, Drome, Saone-et-Loire, Ain, Loire, Haute-Savoie and Ardeche, embracing an area of about 22,000 square miles and containing a population of over 4,000,000. The whole cereal crop only averages middling in the Rhone, Isere, Ain, Loire, Ardeche, Savoie, Haute-Alpes and Saone-et-Loire. Oats very good in the Rhone, Isere and Haute-Loire; good in the Hautes-Alpes, Drome, Loire, Saone-et-Loire, and fair in the Ain. Corn good in the Isere, Loire, Saone-et-Loire, and fair in the Drome and Haute-Loire. Rye good in the Hautes-Alpes, Loire, Haute-Savoie and the Rhone; fair in the Saone-et-Loire; passable in the Ain; middling in the Drome and Isere; and bad in the Savoie. Barley very good in the Isere, Haute-Loire, Haute-Alpes, Ardeche, Loire, Saone-et-Loire, Haute-Savoie and the Rhone; fair in the Ain, and middling in the Drome. During the year 1877 France exported 54,013,532 bushels of grain and flour, and imported 42,531,548 bushels, showing an excess of imports of more than 8,500,000 bushels.

An extraordinary and unlooked-for change has been made in the government of Egypt by the complete surrender to the state by the Khedive of his vast private landed property, amounting directly to 1,000,000 acres, or directly and indirectly to one-fifth of the soil, and all cultivated by forced labor, and largely acquired by outrageous oppression of individuals. Besides farming on a great scale, he manufactured on a scale still greater, owning numerous sugar, cotton, and tobacco factories. He began in 1863 with a debt of $20,000,000, but he has worked so well as a borrower that he now owes $535,000,000, and the population only amounts to 5,000,000. It is needless to say, too, that he has lost money in all his industrial enterprises; so that in surrendering his private property, and appointing a Constitutional Ministry, with Nubar Pasha at the head of it, and Mr. Rivers Wilson the English financier, as Minister of Finance, he is virtually going into bankruptcy. In the language of our time, having suffered enormously from "shrinkage," he has "gone into liquidation." He accompanied his surrender with a little speech in which he said that Egypt was to be African no longer; it was hereafter to be administered as a European state.

Italy has established a quarantine against the whole United States. An unusually high rise is taking place in the Nile and a disastrous inundation is apprehended. In Spain a conspiracy to establish a federal republic has been discovered at Seville. Recent elections there for Provincial Councils, however, give a large government majority, 200 adherents of it having been elected against 60 belonging to the opposition.

The Russian troops in front of Constantinople, which it is now ascertained mustered full 80,000, have begun to retire. Half have already embarked, and the remainder are to withdraw into Eastern Rumelia, which they are to occupy for some months, while the government of the province is being organized. In the meantime the negotiations between Sir Austin Layard and the Porte about the reforms in Asia have been going on swimmingly, but have a comic side. The Porte has been found not only ready but eager for reform, and the reforms suggested by the British Minister are luckily the very ones the Turks were themselves thinking of, namely, police, decent roads, and tolerable courts of justice, or, in other words, a fair amount of protection for life and property. These little changes will, however, they say, cost $30,000,000 merely to begin, and they propose that England should advance this sum on the surplus of the Cyprus revenues. This seems to have been too much even for the English minister, and he returned a peremptory refusal. There is probably now no one left who would entrust the Turks with any sum, however

small, for the purposes of "reform," and it remains to be seen how the difficulty will be got over. No progress has been made in the settlement of the Greek question. Germany and France are disposed to interfere, but England is opposed. HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Sept. 21, 1878.

BEANS AND PEAS.—Old mediums and marrows are steady, supplies of new forming no competing feature. A few of 78's crop sell in a struggling way at $1 60 for mediums and $1 60@1 70 for marrows. New red kidneys are weaker and likely to decline as recent pressing orders have been filled. New black beans open where they left off at $2.50. Beans are curing slowly and many will have to be hand-picked to make them suitable for shipment. Canadian peas uncertain in price, but the stock is light, quoted 78@80c.; green peas, new, steady at $1 35. Southern B. E. peas firmer, receipts not liberal, $1@4.25 per 2 bush. bag. Medium beans, old, prime $1.50@1.55; fair to good, $1 40@1 45. Marrow, prime, free on board, $1 50@1 52½; fair to good, $1 40@1 45. The remnant of pea and white kidney, $1 40@1 60.

Receipts of beans, for week, 2,528 bush. Exports, 730 bbls.

BUTTER.—A strong feeling prevails in the high grades of butter, both State and western. Trade is moderate and light supplies of desirable quality is the only mainstay of prices. Export trade is of little account, and buyers have to be humored. The weather has been as bad, if not worse, than the hottest part of summer, for handling stock. Many lines and lots have tired out under the merits they would have held had the weather been favorably cool. There is a better offering of Welsh, but more could be placed. State dairy tubs average poor in quality, and 16@18c. have been regarded as good figures, for sound useful stock. Summer made western is running poor; worse than the same grade of State. Perfect western dairies sell readily at the extreme. Receipts for week 29,553 pkgs.; export, 12,853 do.

State dairy, pails, choice, 21@22c.; other, 16@18c.; half tubs and pails, choice, 20@21c.; other, 16@18c.; Welsh tubs, choice, 20@21c.; other, 14@18c.; poor State, 11@13c.; creamery, best, 24@25c.; good, 20@22c.; sweet cream, 21@22c.; Western creamery, best, 23@24c.; other, 16@21c.; Western dairy, selected, 15@16c.; fair to good, 10@13c.; factory, best, 12@13c.; fair to good, 8@9c.; very poor, 6½@7c.; grease, 4@5½c.; single dairies, firkins, State, 18@20c.

COTTON.—Shippers have been buying sparingly, the foreign advices tame, and with a freer movement forward of the new crop, prices have declined. Latest prices are: for September, 11.13@11.11c.; October, 10.95c.; November, 10.79@10.80c.; December, 10.76@10.77c. January, 10.79@10.80c.; February, 10 88c.; March, 10.94@10.95c.; April, 11.03@11.04c.; May, 11.10@11.11c.; June, 11.15@11.17c.; July, 11.21@11.23.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9¼	9¼	9⅜	9⅜
Strict ordinary	10 15-16	9 15-16	10 1-16	10 1-16
Good ordinary	10 7-16	10 7-16	10 9-16	10 9-16
Strict good do	10⅜	10⅜	11	11
Low middling	11⅜	11⅜	11¼	11¼
Strict low middling	11⅜	11⅜	11⅜	11⅜
Middling	11⅜	11⅜	11⅝	11⅝
Good middling	11⅜	11⅜	11⅜	11⅜
Strict good middling	11⅜	11⅜	12	12
Middling fair	12⅜	12⅜	13⅛	12⅝
Fair	13	13	13⅜	13⅜

Stained.

Good ordinary....9⅝; Strict good ordinary....10⅛
Low middling....10⅝; Middling....11⅛

CHEESE.—The exports for the week have been 42,000 boxes; the receipts have only slightly exceeded these figures, but it must be remembered that supplies have previously, for two or three weeks, been steadily accumulating, and that there are excessive amounts of certain grades in store. The only class of stock that has sold well this week has been the choicest of the late made; these have ranged at 8¾@9, and the offerings have been pretty well absorbed; parcels that have shown early make have dragged, and of these and good grades generally the assortments are chiefly.

Quotations are: Fancy at 8¼@9c.; 7@8c. for good and prime; 6@7c. for fair to good; 5@6½c. for half skimmed; 3@4c. for skimmed. State, farm dairy at 7½@8c. for good to choice, 6@7c. for fair to good, and 3@4½c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@8½c.; do. good to prime, 6¾@7½c.; do. fair, to good, 5½@6¾c.; Western factory fine, full cream, cheddar, 8@8¼c.; do. fine, full cream, flat, 8@8½c.; do. good to prime, flat, 6½@7c.; do. half skimmed, 5@6c.; do. full skimmed, 3@4½c.

Receipts for week, 51,052 boxes.
Exports for week, 41,790 boxes.
Gold closes at 100¾.
Liverpool cable quotation, 42s., which is lower.

DRIED FRUITS.—New Apples show freer assortments; the business in them is slack, and confined to choice sliced; prices are unsettled and easy. Peeled Peaches have not varied in price, with fair supplies, however. Blackberries are easy. Cherries are steadily held.

New blackberries, quoted at 5½c. Peaches—Peeled, new Georgia, 6c. for poor, 7½@8c. for fair to good, and 8½@9c. for prime; choice North Carolina 11½@12½c.; good do., 9@10c.; unpeeled new halves, 5½@6c.; quarters, 3½@3½c. Pitted cherries, 15@16c.; southern plums, new, 10@11c. Apples—Old State quarters, 3@5½c.; do., sliced prime, 4½c.; do., good, 3½@4c. New apples 3@4c. for southern quarters in bbls.; 4½@5c. for prime sliced, and 6@7c. for fancy. New raspberries, 24@25c., and evaporated, 2@25c.

Exports past week 207 bbls. dried apples.

EGGS.—Receipts for the week 5,461 bbls.; do. last week, 5,750 do. Western and Canadian have been ½@1c. higher during the week than we quote, but dealers do not look for a further material decline, while supplies arrive at the present rate: near points, 20@21c.; State and Penn., 20c.; Canadian fresh 19c.; Western do, 18@18½c.

FRESH FRUITS.—The Peach trade now depends upon N. J. and up-river orchards for supplies. The latter are furnishing very elegant stock which is complimented by remunerative rates. Up-river fancy baskets $3@4; good, $2@2.50; N. J. Extra, $2.50@3; fair to good, $1.50@2; common, $1. Apples have ruled extremely low with very prime qualities offering. A few fancy Western have touched $1.50; sales mainly 50c.@$1.25 for double heads, 50@75c. for open do. Pears are improving. Bartletts nearly gone. Boston bushel boxes $1@1.50; extra bbls. $12@15; other $3@10.; ice-house lots not coming out satisfactorily; too ripe when housed. Other items of pears quoted as follows: Seckel, choice, $7@9; common, $4@5; B. Clairgeau, Sheldon and Buerre d' Anjou $5@6; B. Bell, Duchesse, Swan's Orange $4@4.50; Cooking $2@3. Quinces are showing nominally $5 ₱ bbl. Plums run up so high that buying was checked Copper, bbl., $10@11; Reine Claude, $12@14; Damsons, $6@7. Grapes have a steady demand; State catawba, 8@9c. ₱; Delawares, 7@10c.; up-river concords, 3@5c.; N. J., 2@3c.; Cal. Tokay, in order, $6 crate of 40 lbs.; muscat, $4; hot-house, 20@40c. ₱. Peanuts have an improved tone without enlarged business: Hand-picked Va., $1.45@1.50; fancy, $1.30; other, $1.20@1.25. The Producers' Price Current says: "The Wisconsin crop has been frost-damaged to the extent of one-quarter to one-half the crop; while prolonged warm weather has produced serious rot-ravages in the N. J. crop." Watermelons, selected, $20@25 ₱ 100; good, $12@16. cuts, $3@8; nutmegs, 50c.@$1.75.

Exports of apples past week, 2,178 bbls.

FLOUR.—Large supplies and easy prices for wheat have exerted a pressure to sell, more especially the winter wheats, prices for which are a trifle lower.

Latest prices are $3.30@4.00 for very inferior to fancy superfine State; $3.40@4.15 for common to good extra do. odd lots and lines; $4.15@4.45 for good to choice do., strictly choice and fancy lots above this; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c.; $3.90@4.15 for inferior to good shipping extra do. and $4.15@4.40 for good to choice extra do.; common to about choice white wheat extras, $4.15@5.25; choice to about fancy do. at $5.30@6.25; red and amber winter wheat, inferior to choice trade and family at $4.00@5.50; round hoop Ohio at $3.90@$4.25, and trade and family brands of do. at $4.25@$5.50, the latter rate for choice, (very choice to fancy lots quoted higher); St. Louis, $4.10@4.90 for very poor to good extra, and $4.90@6.25 for good to very fancy; Minnesota clear, very inferior to very choice at $4.15@5.00 (fancy brands at higher prices); Minnesota "straight," inferior to very fancy at $5.@7.50 (few brands of even fancy going above $7), and patent fair to strictly fancy at $6.25@8.75; unsound stock at from $2.00@5.00; city mill extra at $5 00@5.25 for West Indies (the latter rate for fancy in new packages); do. for England, 4.90@$4.10; do. trade and family extras, $5.30@5.50; do. for South America, $5.30@5.20 for fair to fancy; No. 2 at $3.40@3.40 for inferior to very fancy, the latter an extreme.

CORN MEAL.—Sales at $2.90@2.95 for Brandywine and $2.40@$2.65 for yellow Western.

GRAIN.—Wheat has been in very large receipt, but the continent demand for the winter grades is unprecedentedly large and the English markets are also buying freely. As an instance of this movement, there have been taken in this market, within a fortnight, something over 5,000,000 bushels, all of which goes to the other side.

Latest sales are of ungraded white at $1.05@1.14½; new No. 2 Chicago spring $1.01½; No. 3 spring at 96@97½c.; ungraded amber at $1.01@1.08; No. 2 amber at $1.05@1.05½; do. steamer grade at $1.04@1.01½; ungraded red at 96c.@$1.07½; No. 1 red at $1.07½; No. 3 red at $1.00½@1.04; do. steamer grade at $1.02@1.03; No. 2 red at $1.06½@1.07; do. steamer grade at $1.04½@1.05½; white State at $1.12@1.14½; No. 1 white at $1.12@1.13; do. steamer grade at $1.11@1.12; No. 2 white at $1.11@1.11½; do. steamer grade at $1.08½@1.09½; No. 3 white at $1.06@1.06½; New York No. 2 spring, September option, at $1.01¾; do. October option, at $1.01½; No. 2 amber, September option, at $1.05½; do. delivery Sept. 25 to Oct. 15, at $1.05½; do. October at $1.06½; do. November, reported at $1.0 : No. 3 red, September option, at 1.06¾; do. Sept. 25 to Oct. 15, at $1.07; do. October option, at $1.0⅞@1.06¾; do. November option, at $1.08; No. 1 white, Oct. 1 to 10th, at $1.13¾; do. first half Oct., $1 13½; do. Oct. 1 to 20th, at $1.13½; do last half Oct., at $1.13@1.13½; do. Oct. option, at $1.13. No. 1 red, Oct. 1 to 20th, at $1.07¾. Rye is active for export; sales at 60¼c. for Western and 63@64c. for State. Corn is plenty and rather slow, with prices easy; latest sales are of New York No. 2, Sept option, at 50¾@50½c.; do. Oct. option, at 50¾@51c; do Nov. option, at 51¾@52c.; steamer mixed, Sept. option, at 49¾c; do. Oct. option, at 50¾@50½c.; do. Nov. option, 51¾@51½c. Spot lots included New York No. 2 at 50¼c.; steamer mixed at 49½@50c, chiefly at 49¾@50c, and ungraded mixed at 47½@50¼c. Oats are active and higher; sales of New York No. 1 at 32@33¼c.; New York No. 2 at 30c.; New York No. 3 at 26½c.; New York rejected at 25½c.; New York No. 1 white at 37c.; New York No. 2 do. at 30½c.; New York No. 3 do. at 28¾c. No. 2 Chicago quoted at 32@32½c.; white Western at 28@37½c.; mixed do at 26@35c.; white State at 29@39c.; mixed do. at 28@34½c.

HAY AND STRAW.—Common grades of hay are in excessive supply; prime lots are wanted and rule as before.

Sales at 45@50c. for shipping and 65@80c. for retail qualities. Straw quoted at 35@45c. for long rye; 25@30c. for short rye.

Exports past week, 833 bales.

HOPS.—Prices have eased off and closed unsettled. Export trade is still in obeyance, and brewers buy sparingly. Receipts for the week have been about 700 bales, while only about 90 bales have been shipped.

Emmet Wells says, in his circular, "The American crop is now secured. The yield, in our opinion, is 150,000 bales, which is 60 per cent. below that of last year. The yield last year was 250,000 bales, disposed as follows:

	Bales.
Shipped to foreign ports	100,000
Used at home	110,000
In hands of brewers	30,000
In hands of dealers and growers	10,000
Total	250,000

If our consumption is the same this year as last, we shall have a surplus of 40,000 bales; but it is not likely we ship as many as 40,000 bales unless foreigners will take in a few rusty and moldy hops. The proportion of choice hops will be very small, probably not over an eighth of the crop; or, say 18,000 to 20,000 bales. The price to-day in this market is 10 to 15 cents; a very choice hop, if here, might bring a little more money."

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 10@12; New Yorks, new crop, poor, 9@10; Eastern, new crop, none; Wisconsin, new crop, none; Yearlings, growth 1877 (nominal) 5 to 8; Pacific coast hops, growth 1877, 5 to 10.

LEATHER.—Sales at 19½@20c. for light; 20@21½c. for middle; 20@22½c. for heavy, and 18@19c. for good damaged.

OIL-CAKE—Western is offered at $31 per ton, being in larger supply.

PROVISIONS.—Export demand has been better, and prices have been steadier. Mess pork quoted at $9 25@9 37½ for spot lots; $9 10@9 15 for October; and $9 20 for November delivery. Bacon at 6¼c. for long clear and 6½ for short clear. Lard, western steam, at $7 02½ for spot lots; and $6 95 for October and November delivery. Stearine at 7¾ for western. Tallow at 7 1-16c. for prime. Beef hams at $17.50@18. Beef—extra mess, $10 50@11; plain mess, $10@10.50; packet, $11@12 for bbls.; extra India mess, $19@21 for city brands; do., Philadelphia, $18@19.

POULTRY AND GAME.—A moderate supply of live has kept prices firm. The Jewish holidays of next week are expected to give activity to trade.

Chickens, N. J., 13@14c. lb.; State and Penn., 12@13c.; Southern and Western, 11@12c. Fowls—N. J., 12½@13c.; State and Penn., 11½@12c.; Western, 11@11½c.; Southern, 10@11c. Roosters, 5@6c. Prime turkeys, 13@14c.; poor to fair, 11@12c. Ducks, ₱ pair, $1@1.13; poor to good, 40@80c. Geese, N. J., $1.25@1.75; W. & S., $ 1.00@1.25.

Dressed poultry includes more scalded stock, but it anticipates the demand as the weather is warm and risky for remote shipped parcels.

Turkeys, dry picked, 15@17c.; other, 13@16c. Pa. chickens, 17@18c.; N. J., 15@16c.; State, 15@16c.; Western, 14@15c. Dry pricked fowls, 14@15c.; N. J., 13@14c.; State, 12@13c.; other, 10@11c. Phila. ducks, 18@19c.; State, 12@14c.; Western, 10@12c.

The game market is higher; demand fair, with a good list of items.

Grouse, trapped, pair, $1@1.12; Partridges, $1@$.25; Woodcock, $1@1,12; stall-fed pigeons, doz., $1.75@2; Hight, $1.12@1.25. Wild ducks, Mallard, 65@75c. pair; Teal, 50@60c.; common, 30@40c. Tame squab, $2@2.25 doz.

SEEDS.—Timothy is plenty and much lower, quoted at $1.20 for prime. Flaxseed holds to $1.52½@.

TOBACCO.—The supplies continue liberal, but the outlet for supplies is fair and prices rule very regular. On most grades quotations are for Western Leaf.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2⅝@ 3¼	4 @ 4¼
Good lugs	3½@ 4¾	4¾@ 5
Low leaf	4¾@ 5¼	5¼@ 6¼
Medium leaf	5¼@ 6¼	6¾@ 7
Good leaf	6¼@ 8	8 @ 9
Fine leaf	8¼@10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, common	—	@—
do. do. medium	—	@—
do. do. fine	18	@35
do. do. selections	18	@35
do. seconds	10	@12
do. fillers	6	@ 7
Pennsylvania assorted lots, common	8	@ 9
do. do. fair	10	@12
do. do. fine	14	@17
do. wrappers	18	@35
do. fillers	6¼	@ 7
New York assorted lots, common to medium	6½	@ 8
Good	—	@—
Ohio assorted lots	8	@10
Ohio wrappers	—	@—
Wisconsin assorted lots	7	@10

VEGETABLES.—Exports of potatoes, past week 7,118 bbl.; of Onions, 382 do. Potatoes are firm, but not quite so high as early in the week. Stock includes Nova Scotia and Maine. E. Rose prime $3@2 25 per bbl.; poor to good do., $1 25@1 75; Peerless, $1 75@1 87, choice, and $1.50 for fair, all bulk rates; Sweet, potatoes low, $1 50@1 75. Va. and Md. Other items not specially changed. Sweet Corn, 100, 50@75c.; Lima beans, in good bag, $@1 75c.; shelled, $2 50@2 75; String Beans, 50c.; Cucumber pickles, 1,000, $1 50@2; Tomatoes, bushel, 20@35c.; Onions, red and white Eastern, $1@1 25; Chester, red, 75c.@1 12; Marrow Squash, $1 50@2, bbl.; Bullnose Peppers, bbl., 75c.@$1 25; Beets, 75c.; Cabbages, 100, $2 50@5; Egg Plants, 100, $1@2.; R. turnips, $2.; Carrots, $1 25.

WOOL.—Supplies are full, but manufacturers buy very sparingly, and prices are sustained with difficulty: the medium grades have most demand.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 36@38; X, 35@37; No. 1, 30@33c.; No. 2, 32@35c; coarse, 30@32c. combing, 40@45c.

New York, Michigan, and Wisconsin, XX, 32@35c.; X, 32@35c.; No. 1, 34@36c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 38@43c.

Indiana, Kentucky and Tennessee—XX, 33@35c.; X, 23@35c.; No. 1, 34@36c.; No. 2, 32@34c.; coarse, 27@30c.; combing, 38@43c.; unwashed combing, 28@32c.

Illinois, Iowa and Minnesota—XX, 34@35c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 29@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Sept. 21, 1878.

BEEVES.—Receipts for the week, 11,805 head; do. last week, 11,836 do. The trade has been a sluggish one throughout the week. Detained stock, which made receipts uncertain, and the apathy of butchers, owing to hot, business-depressing weather, rendered prices weak. The offerings were of mixed quality; the few best droves were from Kentucky. The latter brought 10¼c., to dress 57 lbs. The range for natives was 7¾@10¼c., the lower rate for cattle to dress 55 lbs. Texas and Cherokee, to dress 55 lbs., 7¼@8c. Grass-fed bulls, $2.45@2.50 ₱ 100; fair to good native steers, 8¾@9¼c., to dress 56 lbs. The highest rate, 10¼c., was paid by exporters.

COWS AND CALVES.—The offering was quite large for the season; old ranges realized.

VEAL CALVES.—The demand is good and choice calves are higher. Common to choice at 6@7¼c.; grassers, 3@3¾c.; buttermilk, 4@4¼c.

SHEEP AND LAMBS.—Receipts for the week, 30,864 head; do. last week, 28,705 do. Trade is dull at the close; the extreme range is 3¾@5¼c. for sheep and 4¾@5¾c. for lambs. Exporters have paid 5¾@5¾c. for choice sheep

SWINE.—Receipts for the week, 18,024 head; do. last week, 20,793 do. The market for live hogs was steady at $4.40@4.70 for good to prime corn-fed; extra heavy rejected or taken at low figures. Choice dressed N. J. brought 7c. The weather has damaged much of toe late supply.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

Single Copy, per Year	$2 50
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Five Copies or more, per Year	2 00
" " " Six Months	1 00
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France, " "	3 54 (18f.)
French Colonies, " "	4 58 (23f.)

Any one sending a club of ten is entitled to one copy, one year, free.

Agents will be supplied with canvassing outfit on application.

INDEX TO NEW ADVERTISEMENTS.

Baird, W. F.—Trees.
Bakoff, Mercy N.—Woman's Medical College.
Boomer & Boschert Press Co.—Cider Presses and Graters.
Brockway, E. F.—Red Brazilian and White French Artichokes.
Gilmore, S. J.—Cheap Farms and Homes in the West.
Hafner, Jno. A.—Eureka Coil Spring.
Hanford, R. G. & Son—Pear Trees.
Hnested, J. B.—25 Styles of Cards.
Loring & Blake Organ Co.—Palace Organs.
Miller, A.—Cumberland Triumph Strawberry.
Minkler & Co., J.—30 Mixed Cards.
Payne & Sons, B. W.—Eureka Safety Power.
Phelps, N. B.—Norwegian Balm for Catarrh.
Pulvermacher Galvanic Co.—Electric Belts.
Reversible Collar Co.—Reversible "Linene" Collars.
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Taylor, Bros. & Co.—Rubber Printing Stamps.
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Wells, Richardson & Co.—Perfect Butter Color.

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It soon allays all Soreness and Inflammation; softens the dry, hard flakes of offensive matter, and causes their discharge without difficulty or pain.

It Contains No Poisonous Drugs.

Can be taken into the Stomach without harm; is an excellent Wash for Sore Mouth; Cleanses the Teeth, Hardens the Gums, and purifies the Breath. All its properties are Soothing, Cleansing, and Healing. ☞ It never fails to give relief in the most obstinate cases of *Dry Catarrh*. *One bottle is sufficient for Two Months' use.* PRICE, $1.

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ESTABLISHED 1844.
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MILLS MILLING MACHINERY & N.W. CORNER MILLERS SUPPLIES. FRONT & JOHN- CINCINNATI.

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ELECTRIC BELTS AND BANDS,

For self-application to any part of the body, meet every requirement.

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and wish to recover the same degree of health, strength, and energy as experienced in former years? Do any of the following symptoms or class of symptoms meet your diseased condition? Are you suffering from ill-health in any of its many and multifarious forms, consequent upon a lingering, nervous, chronic or functional disease? Do you feel nervous, debilitated, fretful, timid, and lack the power of will and action? Are you subject to loss of memory, have spells of fainting, fullness of blood in the head, feel listless, moping, unfit for business or pleasure, and subject to fits of melancholy? Are your kidneys, stomach, or blood, in a disordered condition? Do you suffer from rheumatism, neuralgia or aches and pains? Have you been indiscreet in early years and find yourself harassed with a multitude of gloomy symptoms? Are you timid, nervous, and forgetful, and your mind continually dwelling on the subject? Have you lost confidence in yourself and energy for business pursuits? Are you subject to any of the following symptoms: Restless nights, broken sleep, nightmare, dreams, palpitation of the heart, bashfulness, confusion of ideas, aversion to society, dizziness in the head, dimness of sight, pimples and blotches on the face and back, and other despondent symptoms? Thousands of young men, the middle-aged, and even the old, suffer from nervous and physical debility. Thousands of females, too, are broken down in health and spirits from disorders peculiar to their sex, and who, from false modesty or neglect prolong their sufferings. Why, then, further neglect a subject so productive of health and happiness when there is at hand a means of restoration?

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cure these various diseased conditions, after all other means fail, and we offer the most convincing testimony direct from the afflicted themselves, who have been restored to

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☞ *Avoid bogus appliances claiming electric qualities. Our Pamphlet explains how to distinguish the genuine from the spurious.*

Reading for the Young.

POCKET-MONEY FOR THE YOUNG PEOPLE."—No. 18.

APPENDED is a letter from a RURAL Cousin who coms to feel that the case of those situated as he is, has been overlooked by writers in this department,—but wo will let him tell his own story:

WASHINGTON, Sept. 12, 1878.

DEAR UNCLE TRUE:—I have been reading all the articles in your paper telling what young people can do to get a little spending money for themselves, but they don't seem to fit my case exactly, but are for those who live near large towns or cities where folks have plenty of money to spend, and it is easy to get at them to sell things. I live in the country thirty-six miles from any railroad, and there is no town with more than a thousand people within a good ways, and there are lots of boys all over the West who are no better off than I am. We don't need a great deal of spending money, but what little we do want is mighty hard to get, and if you can just tell how you think it can be done, there are enough to give it a trial, you bet!

RALPH WILKINSON.

We wish Ralph were sitting in this chair beside us where we could have a good talk with him, for we have an idea he is just the style of boy we like. We have printed the letter just as it was written that we might call his attention to its two extremes—the beginning and the end. There are twenty-eight post-offices in the United States named Washington. How are we to know at which one he resides? He will probably never write another letter without giving the name of his State, we will warrant. We would also suggest that the use of slang words and phrases is not commendable in conversation even. They are apt to slip away from a wide-awake boy sometimes without his knowing it, but when he writes them we are obliged to think he does it on purpose.

If Ralph were here we should say to him, "The best advice we can give you, and all others like you, is to *think*." Those men have made the greatest successes who have thought for themselves and not gone on doing as others have done before them. Ask yourself "What can I do that has not been done by anybody else? What is needed by the people about me?" If you can originate something it will pay you more than you will need for pocket-money. In the meantime we will give you a hint or two.

Send a letter addressed "Smithsonian Institute, Washington, D. C.," asking for a pamphlet containing directions for preserving birds and animals. It will be sent without cost. The process is easy to learn, and a little experience will enable you to do it nicely. Do you think you would have any difficulty in selling a hundred quails, squirrels, prairie chickens or any other variety of birds or animals to your acquaintances, if they were nicely prepared? We think not. And if you become proficient as a taxidermist you would doubtless find sale for your preparations in towns more than thirty-six miles away.

We are very glad this question was asked, and, while we give only this one suggestion now, the subject shall not be forgotten or neglected.

We omitted to say that taxidermy is a work in which girls as well as boys can engage, and with equal promise of good results. While Ralph is awaiting his directions from Washington, getting the practice necessary for doing good work, he might canvass for subscribers for the RURAL. We have no doubt he could get quite a club by a little exertion. This is just the time to do it. The evenings are getting longer and people in the country will want something to read, and what can be better than the RURAL? This may not be an original idea, but it is nevertheless true that hundreds of country boys and girls could in this way easily fill their purses with pocket-money.

A TALE OF MANY TAILS.

BY KATHARINE B. FOOTE.

CARRY stood in the door-way with her dolly on one arm and her kitten hanging over the other. Kitty didn't look comfortable, but she bore up bravely, only once in a while giving a plaintive mow. Carry gazed into the bright white sunshine.

"It's melting hot," she said. "I guess, grandma, I'll take my doll and Friskarina out to the wash-house and have a party."

"Well," said grandma, looking over her spectacles, "I've no objection; only there's a black cloud coming up, and you may get caught out there in a thunder storm."

"If I do, can Jake come for me with an umbrella, and can I take off my shoes and stockings and come home barefoot?"

"Yes; I don't believe it would hurt you."

"Then I'll go;" and Carry picked up a box with a little tea-set in it, and started off saying; "Do you believe it'll rain cats and dogs and pitchforks, grandma? That's what Jake says."

"No, my dear. You'd better ask him if he ever saw such a rain."

"So I will," and away went Carry through the sunshine. And she said to herself: "Wouldn't it be funny if it did rain so? I guess grandma wouldn't like it much if cats rained down, 'cause she says five cats are too many now."

The tea-party on an old chair without a back wasn't much of an affair after all; for, although the doll—Miss Rose de Lorme—was propped up against a starch-box more than half a dozen times, she would keep on sliding feet first until she came down flat on her back and thumped her head.

The kitten went to sleep in the corner just as soon as Carry put her down.

"Oh, dear!" sighed the little girl. "It's so lonely with cats and dolls and things that can't talk!" And then she sat down in a corner by the old wash-boiler, where she could see out of the open door, and took Kitty into her lap.

The great fluffy clouds banked up higher and higher, and from being white and dazzling they began to grow black at the edges; and the black masses rolled up and up, until the sun was all hidden and the sky was dark. Then came the rain, gently at first, in drops far apart, but soon it fell faster and faster, and the little leaves on the currant-bushes jumped up and down and seemed to enjoy the shower-bath. To Carry's great delight, little streams began to creep over the path, now in separate little trickles, and and presently with sudden little darts into one another, as they came to uneven places in the walk. She watched it all with great wide eyes, and felt quiet and cool just to smell the damp earth.

But soon the drops grew bigger, and all at once they were n't drops of rain at all!

"Good gracious!" cried Carry. "Kittens,—little blind kittens! It'll rain dogs next, I suppose!"

That's exactly what did happen; for down came puppies along with the kittens. They squirmed and mewed and hissed and yelped, and all the time kept growing bigger and bigger. Some came head first pawing and mewing the air as they fell; some tail first, looking scared to death; but most miserable of all were those that came down tumbling over and over.

It made them so dizzy to come down in that whirligig fashion, that they staggered about when they tried to stand. Carry felt truly sorry for them, and yet she couldn't help laughing. And the cats and dogs who had come first laughed too.

"Dear me! That's sort of funny, is n't it?" she thought; but the surprise did n't last long, for, in the midst of a tremendous shower, down came two most remarkable figures, and, with them, what at first sight appeared to be several long sticks; but, on looking again, Carry saw these were pitchforks!

"Oh!" said she, "I thought they'd come."

Then she stared for a minute at the two odd figures, and cried: "Why! it's Mother Hubbard's dog and Puss in Boots!" And sure enough, so it was!

Puss had a blue velvet cloak on his shoulders, large boots, and a velvet cap with a long plume. He turned toward Carry and made her a low bow, gracefully doffing his hat.

"You are right, Mademoiselle," said he. "I am that renowned personage, and your humble servant. Permit me to add, Mademoiselle, that my eyes have not beheld a fairer damsel than they now rest upon, since last I saw my beloved mistress, the charming Marquise de Carabas."

Mother Hubbard's dog was dressed in a suit of fine old-fashioned clothes, and held tightly between his teeth a very short-stemmed pipe from which he puffed great clouds of smoke.

He came up beside puss, and said, without removing his pipe: "Stuff and nonsense! We don't talk so stupidly in our village. Don't waste your time in silly yarns, but let's settle this fight at once."

Puss turned away and, addressing Carry, said: "Mademoiselle, this plebeian does not understand the language of court circles, to which I have been used for many years. Mademoiselle will pardon his ignorance." And here Puss rolled up his eyes and placed his hand upon his heart and bowed so low that he was actually standing on his head before he had finished. But he turned a graceful somersault and came right side up again in half a second, without looking at all disturbed.

"Sir!" said the dog, with dignity, "this matter should be settled at once, or the sun will be out, and then——" he stopped short and winked at Puss in a very knowing manner.

"Ah! that is true," replied the cat, "I had forgotten. Shall it be a general or a single combat?"

"Well," said the dog, gravely, sitting down on a large flower-pot near by, "I think, as we have been wanting to fight this out for some time,—indeed, I may say, almost since time began,—we had better allow every one to have a tooth and a claw in it. Then, perhaps, this matter will be settled forever."

"Quite my opinion," responded Puss. "But first the ladies, infants, and weak and wounded, must be removed from the field."

"All right!" said the dog. "But look here. You first stop that, will you?" and he pointed to a fine gray cat that was rubbing herself against a large, comfortable-looking Newfoundland.

"Immediately," said Puss, and he bawled in a loud voice, "There is to be no friendly intercourse between soldiers of the two armies. It is in the highest degree detrimental to military discipline."

And the dog shouted, "Stop being pleasant to each other, right off. I can't have it. You always have fought, and you've got to fight now."

The big Newfoundland at once made a snap at the gray cat, and she put up her back, spit and clawed at him, and ran off as fast as she could.

Then Puss waved his handkerchief, as a flag of truce, and said in a loud voice, "There will be a cessation of hostilities for five minutes, until the non-combatants are removed."

The able-bodied cats arranged themselves in rows, and the dogs did the same. The two generals stepped grandly in front of the lines, and the battle seemed about to begin, when a young and frisky cat, at the far end of the front rank, took advantage of a dog opposite who had turned his head, and jumped upon his back, clawing him in so cruel a way that he howled dreadfully.

At this Mother Hubbard's dog advanced angrily, and taking the cat by the nape of the neck, threw her among the cat army, saying: "The trumpet hasn't sounded, and we haven't begun yet. That was a real sneaky trick, just like a cat."

"Sir!" cried Puss in Boots, loftily, "Do you mean to insinuate that I am a sneak?"

"I didn't say so, precisely," returned the dog. "But if you want me to, I will." Then he added, in a taunting tone, "you are a sneak!"

Puss trembled with rage at this insult, and drew the little sword he wore at his side.

"Prove it!" he cried, brandishing his blade.

"Didn't you sneak yourself and your master into a castle and fine clothes that you had no right to?"

"Didn't you pretend to be dead once and frighten your poor mistress nearly out of her wits? Take *that*, sir!" and he made a furious cut at him.

But the dog dodged the weapon, and, with a cutlass suddenly pulled from behind him, made a fierce blow at the cat. Puss leaped nimbly away, with a scream of triumph and defiance. Then they set to with all their skill and hate and cunning.

Presently Puss fell, apparently dead, and Sir John Hubbard, the victor, was leaning on his cutlass, looking sorry, when suddenly Puss jumped up, grasped his sword and made a savage lunge at the dog. "That was only one of *my* lives!" he screamed. "I have eight left. Cats have nine lives, but you — you miserable dog — have only one."

Then they fought worse than ever, and neither seemed willing to yield.

But the fight ended in a strange way. Just as the dog again laid Puss low, a tremendous shower of pitchforks fell, beating on everything with dreadful effect. Sir John saved himself by getting under a tree, but poor Puss couldn't move to a shelter, and his remaining seven lives were being rapidly knocked out of him. when the brave dog rushed out into the storm and proved himself a generous foe by shielding Puss from the pitchforks with his own body.

"You are a dear good dog!" cried Carry. "I always loved you the best!" But even as she was speaking there came a terrific clap of thunder, and her own cat, who had been trembling with fear, sprang to her shoulder and buried her claws there, and as Carry shrieked with fright and pain, Jake was holding her in his arms.

"Were you frightened, out here all alone?" said he. "I was busy and I didn't think you'd mind the rain; but when the thunder began I came out quick."

"Rain?" said Carry. "I don't mind rain, Jake; but I don't like it to rain cats and dogs when they fight. Why, where are they?" She lifted her face from Jake's shoulder, and looked about her amazed, for not a cat was to be seen nor a dog, but only the steady rain, pouring straight down.

"Cats and dogs!" said Jake, laughing.

"And pitchforks, too, Jake,—yes, really!"

"Well," said Jake; "if you aint the most *curious* little gal!"—*St. Nicholas.*

ANSWERS TO QUESTIONS IN RURAL, SEPT. 7.

No. 1. Put cold, wet cloths upon the throat and chest, and cover warmly with flannel; change often; keep on until inflammation subsides.

No. 2. As soon as possible after accidents, get a bandage one yard or more in length, and half as wide; wet in cold water, then roll smoothly and tightly around injured part; give complete rest and constantly damp with cold water.

No. 3. Apply spirits ammonia, or common whiting, moistened with water, and relief will soon follow.

No. 4. Raise both arms above the head, holding them there a few minutes; or sponge head and face with ice water, and place a towel wet in cold water, between shoulders.

No. 5. Emetics of ipecac, mustard seed, whites of eggs, oil and lime-water or flax seed tea.

No. 6. Pour a pint of boiling water on a handful of sage leaves; let it stand a half-hour to cool; add vinegar to make it acid, and honey to sweeten to taste. Gargle throat often.

No. 7. Insert the finger in a whole lemon; wear thus twenty-four hours, and it will be cured without further trouble.

No. 8. Pour milk over the burned part, then sprinkle flour over; let it remain until cured. Or, take one drachm alum, whites of two eggs, one teacupful lard: mix and spread on a cloth and apply twice a day.

No. 9. First stop the bleeding by bringing edges of the cut together, and holding with the finger till a tight ligature is arranged above the cut. If the blood still flows, tighten the bandage. If no surgeon can be procured, wash the wound in warm water, take a silk thread and a pair of pincers, have the bandage slightly loosened and you can then see the mouth of the artery. Seize at once, draw it out a little while an assistant ties it with a double knot. In this manner take up all the several arteries you can see.

No. 10. Drop some warm glycerine into the ear by means of a quill, then introduce a piece of wool.

No. 11. Rub the body dry, then roll in warm blankets and put in a warm bed, in a warm room. Apply warm water to arm-pits, thighs, and soles of the feet.

To restore breathing, lay the body face downwards; place one arm under forehead. If there be no breathing, turn the patient on the side and excite the nostrils with snuff or ammonia, and tickle the throat with a feather.

Rub face and chest well and dash cold and warm water alternately on them. If there is still no success, imitate breathing by laying the body first on the chest, and then on the side, as by laying it on the chest the weight of the body forces the air from the lungs, while fresh rushes in, as the body is placed on the side. When the patient is able to swallow, give small quantities of wine or coffee. Give all the sleep possible.

No. 12. Take a lead pencil in the right hand, and with the thumb and forefinger of the left, seize the lashes of the upper lid, and drawing the lid out from the ball, press the point of the pencil downward upon the upper surface of the lid about one-fourth inch from margin, and at the same time carry the margin upward over the point by the lashes, when the lid will roll over the pencil, so as to show a little groove close to the margin where all foreign bodies lodge, and can be easily removed with a pencil or the finger covered by a handkerchief. The person operated on, must look down while the operation is performed, and while the lid is restored. Bathe in cold water and exclude light.

Sabbath Reading.

MOUNTAINEER'S PRAYER.

GIRD me with the strength of Thy steadfast hills!
The speed of Thy streams give me!
In the spirit that calms, with the life that thrills,
I would stand or run for Thee.
Let me be Thy voice, or Thy silent power,—
As the cataract or the peak,—
An eternal thought in my earthly hour,
Of the living God to speak.

Clothe me in the rose-tints of Thy skies
Upon morning summits laid;
Robe me in the purple and gold that flies
Through Thy shuttles of light and shade;
Let me rise and rejoice in Thy smile aright,
As mountains and forests do;
Let me welcome Thy twilight and Thy night,
And wait for Thy dawn anew!

Give me of the brook's faith, joyously sung!
Under clank of its icy chain!
Give me of the patience that hides among
Thy hill-tops in mist and rain!
Lift me up from the clod: let me breathe Thy breath:
Thy beauty and strength give me!
Let me lose both the name and the meaning of death
In the life that I share with Thee!

[*Lucy Larcom.*

SHALL WE PRAY IN CONCERT?

And now comes a proposition to impose a list of uniform topics upon all the prayer-meetings of the land. As the Sunday-schools are all studying the same lesson, it is urged that all the prayer-meetings would find it profitable to consider the same subject and unite in the same petitions. The Evangelical Alliance submits topics for the week of prayer; "why not," it is asked, "do the same work for all the year? Then all denominations will feel perfectly free to join in the uniformity; the number of particular churches using such a list would increase every year, and before long it would cause another turn to be taken in the chord that binds all the Lord's people together." Sure enough! And why not have the prayers all printed, too, and recited in concert, beginning at the same moment. It would be easy to have the clocks in the prayer-meeting room connected by telegraphic wires with the clock in the Observatory at Cambridge or at Washington; and then, by simply following the ticking of the clock, it would be possible to intone the prayers and all the other exercises in all the prayer-meetings simultaneously. What an inspiring thought it would be, that at the very second when the leader in your prayer-meeting opened his mouth and said "O!"—forty or fifty thousand other leaders, in forty or fifty thousand other prayer-meetings, were all opening their mouths and saying "O!" If there is so much value and inspiration in uniformity and simultaneousness, we might as well have the thing thoroughly organized and efficiently carried out.

There is an instance of something like this on record—Dr. Holmes is our authority—when all the people in the world determined with one accord to lift up their voices and shout, in the hope that the noise would be heard in the moon. The result of this experiment, however, was not encouraging to those who put their trust in the efficacy of simultaneousness. "When the time came, everybody had their ears so wide open to hear the universal ejaculation of 'Boo'—the word agreed upon—that nobody spoke except a deaf man in one of the Feejee Islands, and a woman in Pekin, so that the world was never so still since the creation." It has once or twice occured to us that something of this sort may happen when we get this "cord that binds all the world's people" to simultaneous observances, twisted a little tighter. Everybody will be thinking so much of the fact that everybody else is praying that nobody will pray at all. Clearly this uniform topic and concert business may be carried a little too far. Some degree of spontaneity is necessary in religion, and while there are diversities of gifts we may as well tolerate some diversities of operation.

DENYING SELF.

IT is important not to confound the "self" of personality with the "self" of selfishness; the one simply distinguishes me from all other beings, the other elevates me above them all. Without selfishness a man would be a saint; without personality he would not even be a man. Each of us, then, has a distinct life and character; he is meant to be himself and not another; but was never meant to live for himself. When not tempted to self-righteousness, we may be inclined to self-reliance, to self-seeking, or to self-glorying, under some subtle form. If there is a worldly self, there is also a Christian self, a pious self, a new old man, as it were, and even a self-denying self, having "a show of wisdom in will worship and humility," a superfine spirituality which the Apostle suddenly brings down from its lofty flight with the unexpected rebuke that it is "vainly puffed up by its fleshy mind." Another danger is to carry the putting aside of self to the point of losing one's own personality, so as practically to replace the Apostle's words, "I can do all things through Christ which strengtheneth me," by a statement such as the following: "I have nothing to do, for it is Christ who does all things for me." Now Christ has said, indeed, "Without me ye can do nothing," but He has never said, "With me, there is nothing for you to do." The Apostle has summed up the whole subject in this one verse, "I labor, striving according to His working, which worketh in me mightily." The mighty working is the Lord's, but it is effected in the Apostle, and sets him to labor and to strive.—*From a Tract on Denying Self, by Theodore Monod.*

PERSONAL ITEMS.

Gen. Joe Johnston is 71 years of age.

Queen Victoria has received some Cyprus wine 300 years old.

The poet Longfellow's local tax is $2,230, but one poem squares the account.

No. 26 in the list of Queen Victoria's grandchildren is the girl-baby just born to the Princess of Edinburgh.

Representative Alexander H. Stephens of Ga. is again in very bad health, owing to the labors of his Congressional canvass.

Mrs. Millard Fillmore, the widow of President Fillmore, heads a subscription list at Buffalo for Yellow Fever sufferers, with $100.

Canon Bagot, rector of Athy, a well-known English agriculturist, is doing his harvesting this year by the aid of an electric light.

Beecher's first four lectures in San Francisco brought him $2,300, $2,150, $2,500 and $2,500 again. The East puts no such sums in the drayman's hat.

Apostle Taylor says that Mormonism is stronger than ever since Brigham Young's death. If this is so, the prophet's loss was a profit to the Mormons.

Butler's sixtieth birthday occurs November 5, the day of the State election, and it would not be strange if the General felt like sixty about that time.

William Shakespeare is running for constable in a Michigan village. Yet this is the man who said: "Fling away ambition; by that sin fell the angels."

"Decidedly aristocratic," they say, is Oscar de Lafayette the present marquis, and grandson of his grandfather, though he supports the Republic, of course.

The body of the late Queen Christina was buried in the Escurial at Madrid with very little pomp or fuss. There was a military escort, but very little public regret.

Joaquin Miller arrived home in the City of Berlin on Saturday. Walk-in sang no songs of the Sierras on his way over—not a song, but lay in his berth, sick, silent and sad.

Tennyson is an incessant smoker. He uses a clay pipe of the old fashion, with a stem a yard long, and smokes common Virginia pigtail tobacco. He never uses a pipe the second time.

Constantine, heir to the throne of all the Russias, snubs his little big brother Alexis, our late visitor, and the two do not lodge together in Paris, where they are on a visit to the great Exhibition.

Gen. Butler is a sound sleeper. No uneasy conscience keeps his brain from repose. That's the reason why the old man can do so much work. "I never fret or worry, and go to sleep inside of three minutes every time," says old, active uncle Benjamin.

The recent report that the father of Gen. Tom Thumb is an inmate of a Chicago almshouse, is denied by the diminutive son, who says that the old gentleman died fifteen years ago, leaving an estate worth $70,000.

The Emperor of Germany has left Gastein, cured of his wounds, and has gone to Wilhelmshoe. He was enthusiastically cheered on his way. The Kaiser is desirous of resuming the reins of government next month.

The Hon. B. H. Bristow, ex-Secretary of the Treasury, has formed a law partnership with Messrs. Opdyke & Peete and Gen. H. L. Burnett, of New York city, and will remove to New York as soon as his business in Louisville can be closed up—probably in October.

Lucretia Mott, at the age of 85, weighs less than eighty pounds, but enjoys better health during the last two years than for the previous ten. She sets off every Wednesday alone, from her home near Shoemakertown, and goes to Philadelphia to attend the Race Street Friends' Meeting.

Colonel Mosby will not set out for Hong Kong until December. He has several cases to try before the Richmond Court of Appeals, and these cases will delay him. In putting his girdle round about the earth, Grant, too, may strike Hong Kong about the time his Confederate admirer gets there.

Some recently discovered inscriptions on burned bricks are reported to have brought to light the astonishing revelation that King Ahasuerus hanged Haman because he invented the accordeon and put the price down to one dollar and seventy-five cents, so that every young man might have one.

Friends of General Grant say that for several years his brother Orvil—who has lately been sent to an insane asylum, but is reported to be getting better—has been the cause of great mental suffering to him, and that Orvil has frequently compromised the ex-President by his indiscretions, his wild talk and his eccentricities.

Although Mr. Thomas Carlyle is now past 83, he is so well and strong that he has been making a summer visit to Scotland. His pleasant but simple home in Chelsea—a house nearly 200 years old—is presided over by his niece, an amiable lady of middle age. In the bright gardens the sage comfortably smokes, and twice each day he walks abroad among the quaint and narrow streets of Chelsea, one of the oldest and most interesting parts of London.

Mrs. Van Cott, the preacher, was born in New York city, and is nearly fifty years of age. Her father was Major Newton, manager of John Jacob Astor's estate. He became insane. Marrying and soon becoming a widow, she attended to her husband's business of drug broker. She was converted on a Fulton ferry-boat while thinking about religion. Becoming a preacher she traveled through the country, and she counts more than 27,000 conversions as the result of her labors. She weighs 225 pounds.

A German paper describes Prince Henry of the Netherlands as one of the richest princes in the world. A silver mine in America brings him a princely income, and he has many Dutch, Russian, and other bonds, with ninety-nine properties in Holland—the maximum number, for the King alone can own 100—and some in other countries.

Dr. Elliott Coues, the ornithologist, recommends "abolishing the penalty for killing sparrows, so that they may be trapped and used for shooting matches instead of pigeons or even of glass balls." On the other hand, Dr. Hagen, of the Museum of Comparative Zoology at Harvard, says he considers the sparrow "to be a valuable addition to the native birds and most certainly for both horticulturists and farmers."

"This country," remarked a traveler in Northwestern Iowa, "settles up very rapidly." "Ya-as," replied B. J. Robinson-Smith, the native, nervously watching the movements of a constable dodging along the other side of the field, "country settles up a darn sight faster than the people do." And before the traveler could ask him to explain, he was making a mile a minute across the trackless prairie with the constable a bad second.

Matilda, Queen of the Gypsies, whose funeral at Dayton, Ohio, on Monday, the 16th inst, was attended by 25,000 Gypsies, had in her character as well as appearance a touch of Meg Merrilies She came to this country in 1856, settling with her husband, King Levi Stantley, at Dayton. Her mother, Queen-mother Stantley-Smith, still lives—a Gypsy centenarian, consoling herself in her second century with the pipe that she is too feeble to fix for herself.

Unlike his father, Victor Emanuel, King Humbert delights in royal display and ceremony. He enjoys entering and leaving the large cities of his kingdom in rigid official form, with outriders, aids, and guards, troops in line, and majors in waiting. Last month he enjoyed several fetes of this kind. In Venice a grand illumination and magnificent festivities were given in honor of his arrival, and his departure was after the style of an old-time king.

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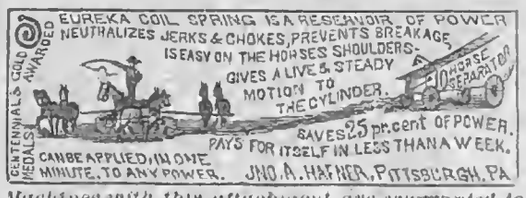

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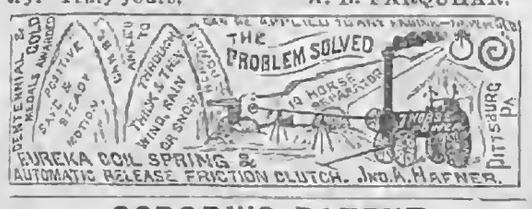

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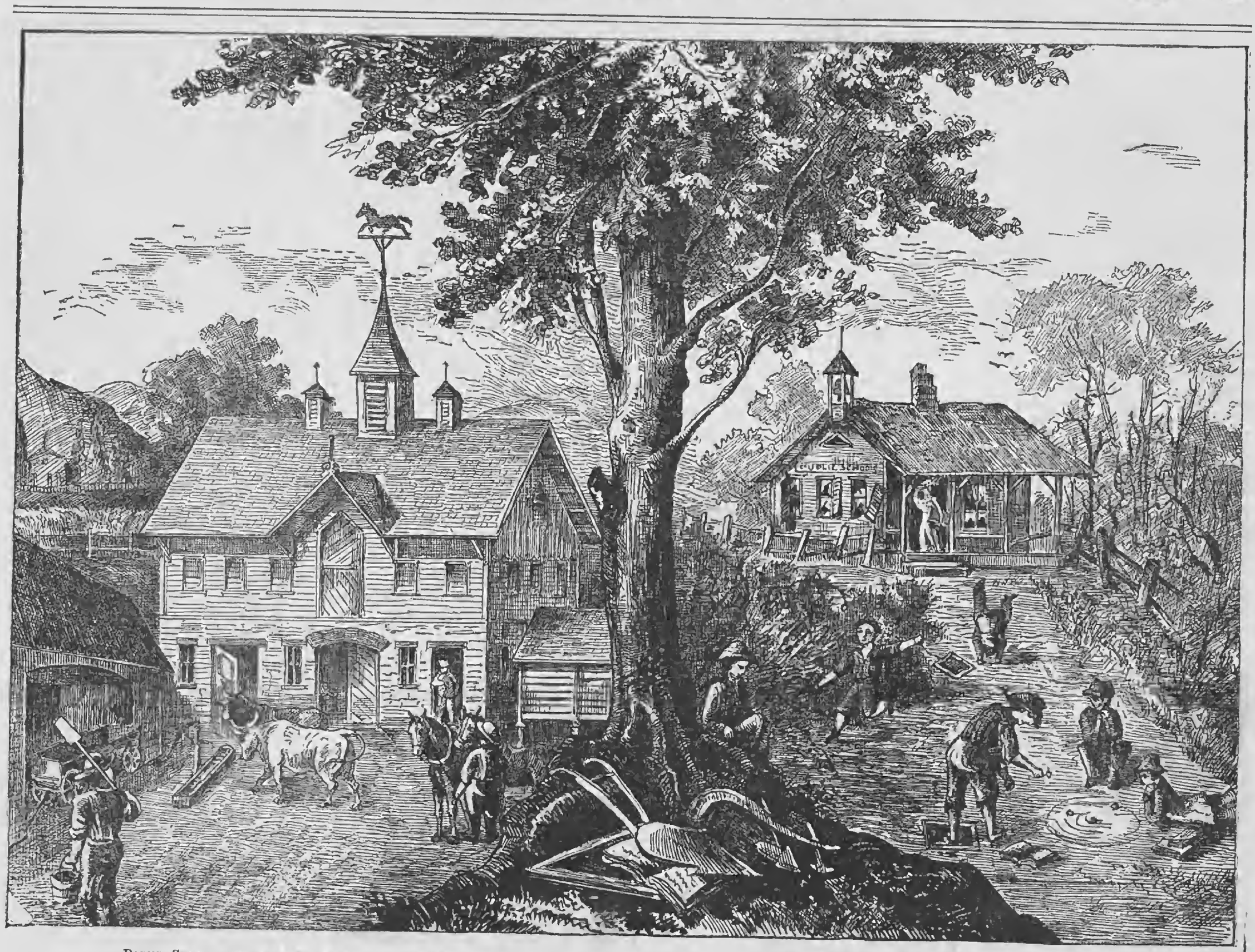

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SCHOOL-HOUSES IN SOME PARTS OF THE COUNTRY.

Wit and Humor.

A ST. LOUIS clerk is named Gassbill. Unhappy man! Everybody disputes him.—*Keokuk Constitution.*

NEITHER the lightning nor the blind mule respects distinctions of worldly rank.—*Stillwater Lumberman.*

THE song of the baker: "I Knead Thee Every Hour." The first note of the song is dough.—*San Francisco Post.*

WHEN an irate parent applies the hickory to his offspring, we suppose he is "poling his issues."—*Bridgeport Standard.*

WHEN Tennyson said, "Forward, the light brigade!" was he addressing the petroleum producers?—*Oil City Derrick.*

'Tis sweet to be remembered—
But there's one thing sweeter still
'Tis sweet to be forgotten,
When you owe a man a bill—
Don't it, eh? [*Elmira Gazette.*

MRS. SHINN, of Camden, tried to commit suicide by chopping her own legs with a hatchet, one day last week. The reports say that it was quite a shin-dig.—*Jesey City Journal.*

EVIDENCE in a breach of promise suit contained the following sentence: "Dearest love—I swallowed the postage stamp on your letter, because I knew your lips had touched it."

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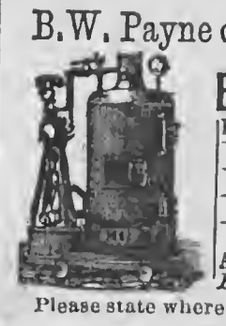

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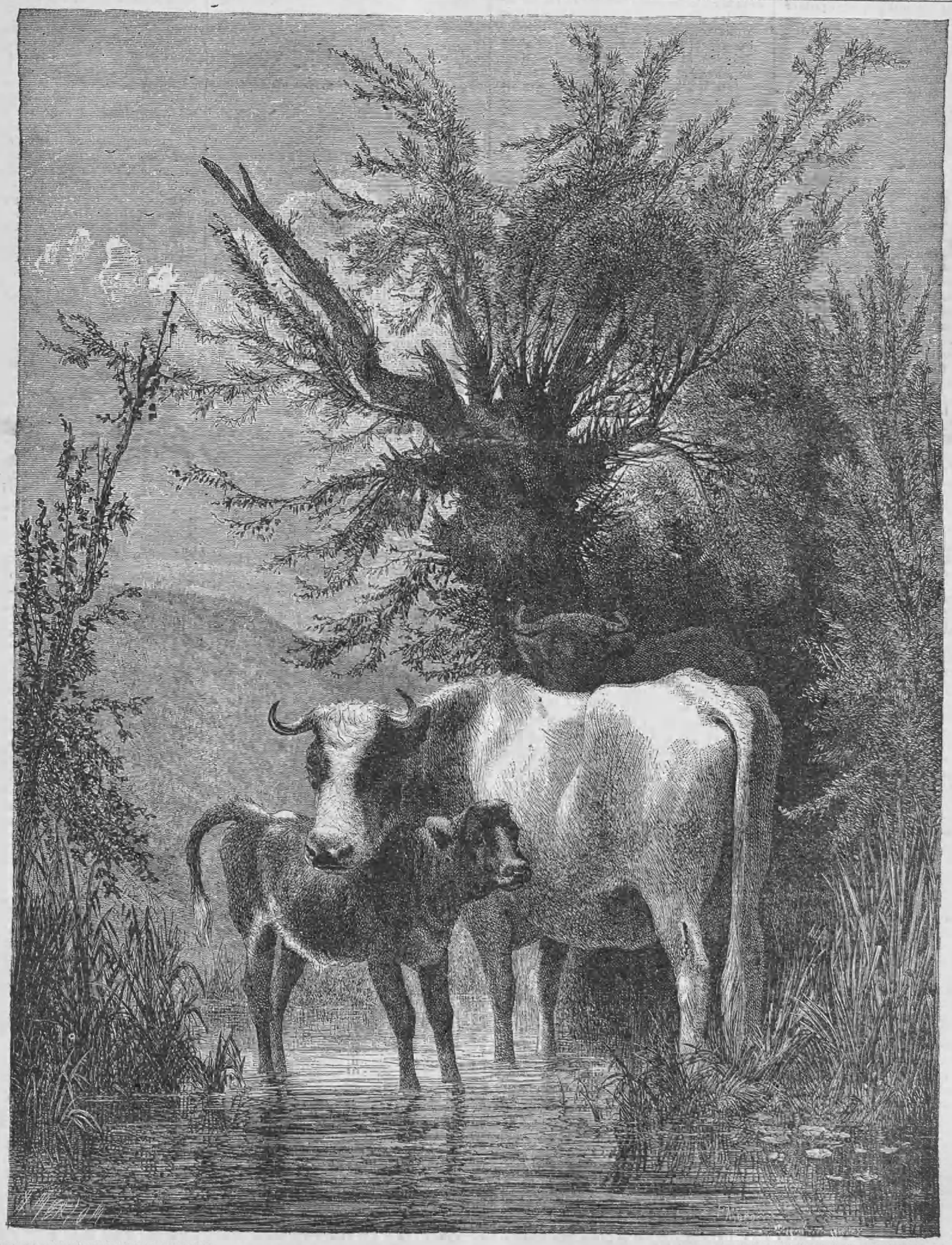

FARM SCENES No. 1.—CONTENTMENT.

"Some place the bliss in action, some in ease;
Those call it pleasure, and contentment these."—POPE.

Farm Topics.

ADDRESS OF THE FARMERS' ALLIANCE.

To the Farmers of New York:

The Farmers' Alliance of this State was organized in Rochester, March 21st, 1877, to unite farmers for the protection of their interests, and to remedy evils of which we justly complain. First of these is the unequal assessment of taxation, whereby most personal property escapes taxes, and the burden of supporting the State and local governments is borne mainly by real estate. This inequality yearly grows greater. In 1871, the real estate of New York was assessed at $1,599,930,666, and its personal property at $422,607,732. As the personal property of the State equals, if it does not exceed the value of the real estate, these figures show that six years ago, nearly or quite three-fourths of the personal property of the State was untaxed. In 1877, despite the heavy depreciation of real estate, it had swollen on the assessment rolls to $2,376,252,758, while the assessed value of personal property had declined to $379,488,148. Taking the same rule as before, that personal property equals or exceeds the value of real estate, it shows that six-sevenths of such property is untaxed, Real estate is increasing its assessable value more than one hundred millions of dollars a year. Personal property is decreasing ten millions of dollars a year. While the burden on real estate is thus increasing, it is notorious that it is the least productive kind of property, and costs least for its protection. Personal property, six-sevenths of which is untaxed, costs most for its protection and is best able to pay taxes. We demand laws which shall reach the untaxed personal property of the State and which will apply the same rule, in exemption for debts, to personal property and real estate,—either allow real estate owners to deduct their indebtedness, as owners of personal property now do, or require the latter to pay taxes on all property held by them without regard to indebtedness. Under the present law, only real estate owners are required to pay taxes on their debts. Justice demands that the same rule be applied to both kinds of property.

A second cause of complaint is the discrimination against local freights by the through lines of railroads. The products of the great West are carried through our State for lower rates than are charged to our own people. The corporations which do this owe their existence to the people of this State. This discrimination largely decreases the value of farming lands, and paralyzes not only agriculture, but every form of productive industry in this State. We demand just rates for local freight, and in this demand we have the earnest and active support of nearly all classes of business men.

The third grievance which our Alliance seeks to remove is the monopoly in the Insurance business, whereby farmers are compelled to pay exorbitant rates for insuring their property. We demand a law for legalizing such insurance companies as the Grangers have organized in some counties in this State. With such a law the insurance monopoly will be broken, three-fifths of the cost of insurance of farm property will be saved, and the security will be at least as good as now.

Farmers of New York, these are the measures which your Alliance was organized to secure. If the evils which we would remedy affected any other class of citizens, a general uprising of that class would demand and secure their removal. Unfortunately farmers have been too isolated to combine and protect their interests. With the organization of Granges, local Alliances, Farmers' Clubs, and other local agricultural societies, united effort becomes possible. In the measures above outlined we can certainly unite. Their adoption will add several hundred millions of dollars to the value of farm property in the State without doing injustice to any.

The numbers and natural political influence of New York farmers insure success in any measures which we unitedly demand. All that farmers need do to secure their rights, is to so far forego party prejudices that they will not vote for candidates for legislative offices who are not identified with our interests, and fully pledged to secure the reforms which we ask. If this is done now, the next Legislature will contain a majority favorable to the interests of farmers. We ask nothing save what is just and commends itself to every sensible mind. If farmers will not forego party to protect themselves, the dominance of rings adverse to the agricultural class, will be more decided than ever before.

What we wish is this:

First: That every farmer shall urge the nomination of legislative candidates who are fully identified with the interests of farmers. Failing this in their own party, farmers should vote for good and true men nominated by the other parties.

Second: We need some money—not much. All that is required is to arouse the attention of farmers of this State to the effort now being made. When this is done the organization of local Alliances to promote these reforms will follow as a matter of course. If this Address and the Platform of the State Alliance, can be placed in the hands of every farmer of the State, all after work will do itself. To distribute these documents and furnish money to perfect our work through the State, we rely upon existing organizations. By a resolution adopted at the late meeting of the State Alliance at Syracuse, Sept. 4-5, the Secretary was instructed to issue an Address, and to call upon every Grange, Farmers' Club, local Alliance or other Agricultural Society, for the sum of *three dollars* to be sent to the Treasurer of the Alliance, Mr. Jesse Dewey, Churchville, Monroe Co., N. Y.

This appeal is issued in accordance with instructions of the State Alliance. Let us add an earnest personal request that the small sum of money asked for be promptly forthcoming. Three dollars is not much to pay for each of the six hundred or more agricultural organizations; but it will furnish a fund which will insure success to the reforms which we propose. Besides, we are very sure that when any body of farmers take enough interest in this cause to help it forward three dollars' worth, they will follow up their work and do whatever else is needed to make it entirely successful. But if they will not do so much as to send three dollars for this reform, it will be absurd to expect them to take any further interest in the matter.

To distribute this address so as to place a copy in the hands of each of the four hundred thousand farmers of New York, is an arduous work. Any help thereto will be regarded as a great favor. Agricultural and other journals in sympathy with this movement are requested to publish this address. Copies will be sent to every Grange, Farmers' Club, Farmers' Alliance, and other agricultural organization in the State. As many additional copies as are needed will be sent on application.

Harris Lewis,
President, Frankfort, N. Y.

Wm. J. Fowler,
Secretary, Pittsford, N. Y.

HINTS BY THE ROADSIDE.—No. 3.

THE DISTRICT SCHOOL.

I am afraid the good influence of the schoolmaster is fast departing from the land, so far as the rural part of the nation is concerned. Is it possible that all the intelligence as well as the enterprise of our country is to be driven to the villages and the cities? In a ride of ten miles, which I frequently take, I pass by four schoolhouses. One of these is upon the border of a village of six or eight hundred inhabitants. The house stands about half in the road, dusty, with not a shade tree; while the windows are small, and the out-houses only passable. This is by far the best of the four.

Number two is also half in the street, and has not a shade tree; its out-buildings are broken, the doors are off, and there is no privacy whatever. The steps to the house are broken and uncouth, the windows small and roughly boarded, while a glance inside shows less taste than in the log school-house where I learned my A. B. C.'s, forty years ago.

Number three is at the fork of three roads, is roughly boarded, with free ingress and egress for the winds and elements. Not a shade tree, and not an inviting feature.

Number four has even less to attract the attention or set an example of taste or education for either teacher or scholar.

Are these the places in which we farmers expect our children to learn to love rural life? Are these the examples of taste and culture which are to elevate the next generation to the rank of intelligent beings? Is it not possible for the more affluent, well-to-do farming communities to set an example of taste and intelligence in the location, construction and surroundings of a neat house for schools and occasional lectures and meetings? But as these are only "hints" I will not make them into a lecture.

A TRAMPS' HOME.

While speaking of educating our children, there is another class of persons I meet along the roadside besides our children; I mean the tramps. These mostly walk at night, and possess themselves of whatever they can wherever found. These, too, must be sent to school and educated. Any being, tramp, insane, idiot, or criminal, is a child, and must have the educating care of the community. They must be taken to homes provided for them and educated, restored to manhood, and again prepared for caring for themselves. The farmers cannot do it alone, but they can ask the people of the State to establish a farm and workshops, where every man acknowledging himself unable to take care of himself, shall be set to work, fed, clothed and educated.

HOME MANUFACTURES.

In this era of machinery and inflation, I fear that our farmers are losing very many of the little sources of industry and employment which rightfully belong to farm life. My neighbor Underhill has five boys, and I see that each of them has two nice straw hats, one with a wide brim for the farm, and one with a narrower brim, and more nicely made, for Sundays. These hats they braided and sewed themselves from oat and rye straw. These straws are the first joint from the head downwards, cut and stripped of the outer husk, wetted and braided, some in five, some in six and others in seven strands together, in a great variety of ornamental styles. These hats are just as good as those costing $1 each at the village, while the making of them teaches the boys mechanical ingenuity.

As butter-making has been very unsatisfactory this season, some of my neighbors have thought of making a few cheeses, as a variety in diet, but wherever the effort has been made we have sadly found that we must learn over again the nack of doing this business in a successful way. Our home industries, alas! are among the lost arts, I fear.

FARM PROFITS.

I hear many of my neighbors expressing doubts about the profitableness of farm life, and wondering if it would not be better to go to the government lands and begin anew. If the boys want to begin there, it may answer; but for us farmers over fifty years of age, who have a homestead and a family, associations and society, we had best stay where we are, husband our strength, look carefully to the ins and outs, and bear the little ills we have rather than fly to those we know not of.

The profits of farming are fully equal to the profits of any honest legitimate business at the present time, while the care is much less, and there is little danger that what we have will take wings and fly away. If there is but little to sell, we must have but little to buy. A carefully cared for vegetable garden, early planted and well tended, and a well kept poultry yard, with milk, butter and corn, rye and wheat bread, will prevent having to purchase much.

And this reminds me that my neighbor Smith has never purchased a barrel of flour in all his farming life of thirty years. His father raised good crops of wheat, and he raises all his family need and some to sell. He takes care to buy up all the ashes, and to compost all the straw he can, and to return to the soil as much as he takes away from it. Our boys would have less "heart-burn" and better digestions if they ate more corn bread with their pork, more beans and less of some other things. The celebrated "Hog and hominy" diet, so often referred to in the Gulf States, has much more of health than is usually attributed to it, from the fact that one so perfectly supplements the other in ingredients.

Hough Handel.

Farm Economy.

RAISING NEW PRODUCTS.

There are many things which are profitable for the farmer to raise which are not now generally produced in his locality, and some not in the United States; and if farmers more readily changed to new products, or sought out the special needs of their localities, more profit would result. The first purpose should be to raise everything wanted on the farm which it is practicable so to do, so as to prevent, if possible, the necessity for purchasing anything. The next effort should be to raise something which will be the most readily marketable at the nearest point. If near any considerable town, fruits and market gardening may be desirable, and so are fine butter, fresh eggs, early fat lambs, fat poultry, fat calves; but never produce any second-quality stuff. Let your products be the best or have none.

If farther removed from large towns, the more staple articles of grain, cattle and vegetables, may be the most profitable. Sheep-raising is an employment sadly neglected in the rougher, hillier regions, where they should be oftenest found, and where they are most easily raised. Raising beets for sugar, is one of the most necessary industries which should be established in the United States, and it is to be hoped that small factories for making beet-root sugar may be established in many localities at an early day. Barley is always in demand in the United States beyond the home production. Flax fiber carefully prepared, is one of the best paying crops. Oils of mint, camomile, poppy, wormwood, mustard, and a great number of other plants can be profitably produced in many parts of the country. Chicory grows wild by the roadsides from New England to Ohio, is raised as easily as parsnips, and enters largely into the preparation of coffee, to which it is said to give strength while it is believed to be otherwise valuable. It is now chiefly imported.

In climates where they will grow, hemp and jute offer valuble additions to farm crops; there is also a market at 75 cents to $1 per pound for the wool of the Angora goat, and in rough, hilly locations, they may be kept at a profit. Large quantities of rye and oat straw, cut from the upper joint to the head, are in demand for hat and bonnet makers.

Starting tomatoes and cucumbers in the house, or with cabbages and lettuce in a cold-frame; sowing radishes and peas early and at successive intervals, and a great number of similar operation, give a better supply of food at home and often enable the farmer to pay quite a little store bill for necessaries.

BETTER CULTIVATION.

There is no doubt that the only way out of hard times for the farmers is a better cultivation—to expend on ten or twenty acres the same amount of labor and of manures that has heretofore been expended upon one hundred. The gross receipts may not be as large, but the net profit will be greater. The force of the farm is now expended in getting over a great deal of ground, while not half tilling the land or half economizing either that, the material or the labor. The farm should not be simply a place requiring a great deal of walking, digging and harvesting to return a little cash. Like any other business, it should be immediately under the eye and hand of the master and his workmen, and we do not hesitate to say that twenty-five acres of land are all that any one organization, consisting of the farmer and his family and one or two hired men, can attend to profitably. There is no profit, no leisure, no time for recreation or books, in the present farm system.

The ambition to own a great number of acres, and the belief that the land will bear forever without manure, have brought the farm system of the United States to a state in which there is neither profit nor pleasure to anybody. If nine farmers out of ten, in the eastern part of the United States, would carefully attend to the best twenty-five acres of their farms and let the rest grow up to weeds and bushes, they would be better off in ten years than they will be if they follow their present plan, trying to skin over one hundred or two hundred acres. It is only perfect tillage and consequent good crops that bring any profit; only the fat cattle and hogs, fat sheep and poultry, and fine horses that pay for their keep. All the poor crops, the poor butter and cheese, and poor stuff of any kind, actually cost the farmer more than he gets for them, besides wearing out in drudgery the lives of his wife, his boys and his girls, disgusting them with farm life, and causing his own death in poverty before old age has come near him.

But the farmer says, "Preaching is easier than practice," and "It is hard to teach an old dog new tricks; what our fathers taught us we must follow until a new system begins at the root and extends over the country."

But such a system must have a beginning and beginnings are always small, and, moreover, this is not all preaching. Let the farmer who has ten acres under the plow begin this fall by leaving five of those ten acres idle, untouched; let him plow the other five thoroughly twice, turn every furrow smoothly, take off every species of rubbish not covered, put all the manure intended for the ten acres upon the five, and, if sowing this fall, see to it that the grain is thick enough, yet not too much so, and that it is harrowed thoroughly and as smooth as the house floor. In the spring, plow again the portion of the five acres not sown carefully with a modern steel plow, harrow, and if not in perfect tilth, plow again and harrow, and then plant and sow, and use the hoes and cultivator twice in the corn field where heretofore used but once, pay double attention to the garden, double attention to keeping the tools under cover, double attention to raking up, piling up and turning over a compost heap, double attention to the fences and the care of stock; give one hog all the feed that two had before, one calf all the milk that two had formerly; in short, spend just as much labor, time and care upon one-half of all you had before, and no one need doubt the result.

The farmer continuing in this way for a few years, will find he has time to think, to rest, to read and inquire a little further how to increase the profits of his labor by new crops, or better systems of care and cultivation. Remember that plowing three or four times and loosening the soil very deep is not labor wasted; that fifty tons of finely-rotted manure to the acre are none too much, and that the cultivator can hardly be run too often.

Major.

IRRIGATION.

In many places there are large tracts of land to which it is difficult to get water, and which, especially in dry seasons, are practically valueless for grass or cultivation. There is hardly a farm in the eastern half of the United States without such plots, large or small, which it is desirable to restore to usefulness

Where the soil is not too thin to allow of deep cultivation, the remedy is an easy one, but where the rocky formation comes up to near the surface, or where such cultivation is impracticable, some other remedy must be sought for. If the outlay needed to carry a stream of water to the location, either by the use of a hydraulic ram, a wind-mill or a water-wheel, cannot be made, then places should be provided to catch the rainfall, either by damming across a depression or the sloping sides of an elevation, or by excavating one or more basins for holding the water. In a dike or dam, an overflow-pipe of wood or drain tile, is needed to prevent the walls from washing away. This is best made by having the end of the pipe elbow-shaped and rising just as high as it is desired that the water should rise, while the pipe itself runs out under the embankment, rather than by

letting the water run in a sluice over the dam. The water from a few basins excavated in a suitable place, with shade tress or elder bushes planted around them, and some rushes and water-grass on or near their banks, will hold, upon an almost barren hill, a supply of water sufficient to render a very large tract valuable as pasture or meadow. Furrows, terraces or other slight obstructions to prevent the rapid running off of the water, are also valuable.

A nursery of shade trees, Chestnut, Oak, Hickory or Maple, can be grown very easily and add materially to the value of these treeless pastures and otherwise barren places. Pasturing with sheep, to be yarded at night in an inclosure so as to prevent dogs from killing them, has restored many such wastes. A pasture is no doubt increased in value in every way by the presence of a growth of timber, if growing fifty feet apart each way.

Upon sloping land there are very few crops that are not increased from one-fourth to one-third by the trickling of a stream of water along the upper edge of the field; and the outlay for a wind-mill or a hydraulic ram and the pipes and basins necessary to convey and hold the water, is one of the best investments as a fertilizer, which the farmer can make. The most practical means of conveying water is by the hydraulic ram, but if there is a sufficient stream to carry a water-wheel so as to give a much larger supply, the increased expense is well paid out.

WEEDS.

THERE cannot be any good farming where weeds are allowed to run riot among the growing crops, and any farmer who permits quantities of foul herbage to grow around the outside of his fields, in the corners or on any parts of his farm, is no patriot, no man worthy of admiration or to be influenced by in any way. Yet in many neighborhoods there are men wishing to take the lead, whose farms are so covered with weeds that for the life of them, they could not cross any of their fields without treading on weeds at every step. Let any rational man think for a moment of the vast extent of injury such a farmer causes to his neighbors for many miles on every side. For, to say nothing of the action of the wind in scattering the seeds of many weeds, great quantities of them are eaten by birds which afterwards visit farms whose careful, tidy owners take much trouble to keep them free from weedy pests. But it is well known that seeds grow after passing through the bodies of birds, so that these clean fields are sown with weed seeds from the droppings of these birds, and soon either become as foul as those of the negligent, pestiferous neighbor or cause their owners a world of trouble to prevent such a calamity. Indignant public opinion should be brought to bear sharply on any land-owner whose weedy lands are a disgrace to himself and an injury and nuisance to the neighborhood. G. G.

Horticultural.

PAPYRUS.

ALL the interest of history is not confined to *things*, for the words that designate them also sometimes have a history at once interesting and instructive. Some of these, which from their vernacular form, familiar use, and the comparatively recent introduction of the objects they indicate, one might readily suppose to be of modern and domestic origin, have, nevertheless, a history extending back to ages so remote that history in them is lost in fable, and to lands which knew not even of the existence of the countries in which these words which they originated, have found so congenial a home. Of these, the word paper, is an excellent instance. In using it how seldom is it ever associated with antiquity! Yet when the youthful Moses was learning all the wisdom of the Egyptians, the word he used in speaking of the substance on which much of that wisdom was written, was almost identical in sound with that employed by the school-boy of to-day in speaking of the substance on which his lessons are printed; for the youthful Moses called it *papu*, while the school-boy of to-day calls it paper. And long before Moses was taken out from among the bulrushes, long before Joseph was taken down into Egypt, the same word was in familiar use among the dusky sages who, in that land of mystery, were the chief possessors of the wisdom of the world its youth. Later on, the Egyptian word was corrupted by the Greeks into papyrus, and this in its turn has been corrupted into paper by the English-speaking people. Another name given to it by Herodotus was byblus, whence the Greek word biblion, a book, and our word Bible. But while among us the word has no reference to the substance of which the material it designates is composed, the ancient word was applied not only to the manufactured article, but also to the plant of which it was made.

This was a kind of reed, belonging to the family of Cyperaceæ, or sedges, and growing to the hight of from eight to ten feet. It had very strong, woody, aromatic roots; long, sharp-keeled leaves, and a naked, triangular, soft and cellular stem, as thick as a man's arm at the lower part, and at the upper extremity bearing, in the form of a large, compound umbel, a multitude of drooping spikelets, each containing from six to thirteen florets. It was grown very extensively as a government monopoly, in pools of still water, and along the river bank, in the districts of Sais and Sebennytus, in the delta of the Nile, and there only. It was used for a great variety

A PAPYRUS PLANT.

of purposes besides paper. Its plumes crowned the statues of gods and decorated their temples; its pith was boiled and eaten as food, wicker-work boxes, baskets and boats were woven of its stalks; while sails, cordage, cloths, mats and sandals for the priests, were made of its bark. It furnished material for candles and torches, was used as medicine for the cure of ulcers and fistulas, and its roots were used for fuel and manufactured into household utensils. So rare is the plant in the present day in Egypt that many suppose it never to have been indigenous there, but to have been introduced either from Syria or Abyssinia, in both of which places it is now found, here and there, growing wild. As its cultivation was confined exclusively to northern Egypt, if introduced at all, it must probably have been from some country to the north of the Delta, and therefore most likely from Syria.

The upper portion of the stem was internally much like a rush and entirely unfit for making paper. This was manufactured exclusively from the lower part which had been immersed in water and mud. This portion was whiter and more compact than the upper and, instead of cellular pith, it consisted, inside the outer coarse skin, of a number of concentric layers lying one over the other. These were removed and laid on a smooth, flat surface, side by side, with the edges overlapping each other; and crosswise upon them were placed, at right angles, one or more similar layers until the sheet was sufficiently thick. Pressure was then applied so as to cause the different slips and layers to adhere to each other and form a single sheet, which was then dried in the sun. The sheets were finally beaten smooth with a mallet and polished with a piece of ivory or shell. The width of the sheets depended, of course, on the length of the papyrus stems taken; but their length could be extended indefinitely by joining a number of square slips together by glue or any adhesive matter. When finished, the papyrus was rolled upon a wooden cylinder, called scalpus, the ends of which projecting beyond the edges, were handsomely ornamented. The length of each roll was generally formed of twenty square slips, and its width varied from about four to eighteen inches. When newly prepared, the paper was white or brownish-white and pliant, but in process of time, the papyri which have reached the present day, have become of a dark-brown or nearly black color, legible only in a favorable light, and so exceedingly brittle that they are apt to break at a touch.

As the various layers of papyrus, usually twenty in number, decreased in thickness as they approached the center of the stem, the manufacturers were enabled to produce paper of different qualities. The finest was made from the innermost membranes and was called Hieratica, or paper for the priests, who interdicted its sale until covered with sacred writing. In this state, however, it was largely exported, the hieroglyphics skillfully removed, and the paper used for any desirable purpose. Inferior to this were seven more grades, the poorest of which was only used for wrapping paper.

The papyri taken in late years from tombs in the pyramids and elsewhere in Egypt, are generally written in black and red, but some are ornamented with other colors and with gilding, while others are adorned with vignettes many of which are remarkable for the delicacy and beauty of their execution. They may be divided into three classes, written respectively in the hieroglyphic, hieratic and demotic characters. The first are mostly books of religious or moral character, the writing is readable generally from right to left, sometimes from left to right and occasionally from top to bottom. In the last case the lines are inclosed in ruled spaces, while in the first and second they are to be read in the direction opposite to that towards which the figures which chiefly form the writing, are turned. The oldest specimen of these, and probably the oldest writing in the world, is a treatise on good manners, 10 inches wide and 150 feet long, now in the National Library of France, and written by Prince Ptah-hotep in the reign of his kinsman, King Assa-Tatkera, of the fifth dynasty, 5,378 years ago, or 1,520 years before Abraham visited Egypt, according to Bishop Usher's chronolgy. Hieratic manuscripts contain the great body of Egyptian literature, and from extant specimens of that running mode of writing, it must have been largely used as long ago as 2000 years before Christ. The oldest specimen of demotic manuscript now known is of the date 620 years B. C. and may therefore be regarded as quite modern according to Egyptian chronology.

FURTHER TRIAL OF SEEDS IN 1878.

PROFESSOR W. J. BEAL.

THE articles written last year, and first published in the RURAL have since been extensively copied. They have received many hearty comments of approval from editors, granges, farmers' clubs, seedsmen and others.

I wished to test the vitality and purity of the seeds sold by some of the seedsmen who make extensive sales and who have a good reputation. As I feared I might not get fair average samples of seed if they were ordered directly over my own name, seeds were ordered for me by a friend in a distant county of this State. They were tested in the greenhouse.

B. K. BLISS & SONS.

	Seeds tested.	Seeds germinated.	Per cent.
Beet	50—50 pieces	40—39	79
Carrot	50—50 seeds.	28—31	59
Corn	50—50	47—47	94
Cucumber	50—50	45—48	93
Cauliflower	50—50	31—27	58
Cabbage	50—50	37—38	75
Lettuce	50—50	41—34	75
Onion	50—50	20—23	43
Parsnip	50—50	38—40	78
Peas	25—25	25—25	100
Radish	50—50	31—40	74
Tomato	50—50	26—25	51

D. M. FERRY & CO.

Beets	50—50 pieces	39—43	82
Carrot	50—50 seeds.	21—43	62
Cucumber	10—	9—	90
Cabbage	50—50	28—34	62
Lettuce	50—50	1— 2	3
Onions	50—50	39—39	78
Parsnip	50—50	11—44	85
Radish	50—50	30—27	57
Squash	10—10	9—10	95
Tomato	50—50	6—14	20

J. J. H. GREGORY.

Beet	50—50 pieces	44—39	83
Carrot	50—50 seeds.	33—41	80
Cauliflower	50—50	36—37	73
Cucumber	50—50	41—41	82
Cabbage	50—50	44—47	91
Corn	50—50	39—40	79
Lettuce	50—50	2— 0	2
Onion	50—50	25—20	46
Parsnip	50—50	38—41	79
Squash	10—10	10—10	100
Salsify	50—50	44—44	88
Tomato	50—50	47—49	96

PETER HENDERSON.

Beet	50—50 pieces	36—37	73
Carrot	50—50 seeds.	34—31	65
Cucumber	50—50	34—41	75
Cauliflower	50—50	27—34	61
Cabbage	50—50	32—39	71
Lettuce	50—50	37—31	68
Onion	50—50	44—41	85
Parsnip	50—50	31—40	71
Radish	50—50	45—40	85
Salsify	50—50	40—43	83
Tomato	50—50	31—38	69

J. M. THORBURN & CO.

Beet	50—50 pieces.	39—43	82
Carrot	50—50 seeds.	48—49	95
Cucumber	50—50	19—26	45
Cauliflower	50—50	46—43	89
Cabbage	50—50	34—31	65
Lettuce	50—50	43—39	82
Onion	50—50	47—48	95
Parsnip	50—50	44—45	89
Radish	50—50	45—45	90
Salsify	50—50	38—41	79
Squash	10—10	10—10	100
Tomato	50—50	41—10	51

JAMES VICK.

Beet	50—50 pieces.	34—34	68
Carrot	50—50 seeds.	29—30	59
Corn	50—0	38—41	77
Cucumber	50—50	40—37	77
Cauliflower	50—60	28—30	56
Cabbage	50—50	46—43	89
Lettuce	50—50	40—29	69
Onion	50—50	41—43	84
Parsnip	50—50	29—32	61
Radish	50—50	46—44	90
Salsify	50—50	43—47	90
Tomato	50—50	25—36	61

A COMPARISON.

Below I give a table comparing the same varieties of seeds of each firm, the seeds of which were tested. I give the per cent. of seeds which germinated in each case, then the average for the eight varieties:

	Bliss.	Ferry.	Gregory.	Henderson.	Thorburn.	Vick
Beet	79	82	83	73	82	68
Carrot	59	67	80	65	97	59
Cucum'r	93	90	82	75	45	77
Cabbage	75	62	91	71	65	89
Lettuce	75	3	2	68	82	69
Onion	43	78	46	85	95	84
Parsnip	78	85	79	71	89	61
Tomato	51	20	96	69	51	61
Average	69	61	70	65	76	71

The average is not exact, but very near in each case. The above seeds were tested together in the same room of the greenhouse. Perhaps the most striking thing in the last table or in all of them, is the uneven size of the figures. THORBURN sent out some poor seeds of cucumber and cabbage. VICK, some poor seeds of beets and parsnips. GREGORY, poor seeds of onions, and very poor lettuce; BLISS, poor seeds of onions, carrots, etc.; HENDERSON, some poor seeds of cucumber and a low average of everything; FERRY, poor seeds of tomato, and very poor seeds of lettuce.

I believe all of the above firms refuse to guarantee that their seeds will grow, but claim to exercise all diligence in testing their seeds before sending them out. The best I can say for the above seedsmen, to those who prefer t buy vegetable seeds rather than raise them—is this: *buy early* and then test them for yourselves before sowing for the main crop.

SEEDS TESTED IN THE GARDEN.

Some persons may think it the fairest kind of a test to plant seeds at the proper time in good garden soil in the open air. In such a place it is next to impossible to protect them from damage from various sources, such as moles, mice and numerous kinds of insects. In the open air, so far as testing the germinating power is concerned, the results are more unsatisfactory than when tested in the greenhouse, especially if the test is made on a small scale. On an even spot of sandy loam, on May 18th, we planted most of the varieties named of each of the firms above. The seeds of BLISS averaged 53 per cent. GREGORY, 48; BRIGGS BROTHERS 31; VICK, 51; THORBURN, 44; HENDERSON, 43, FERRY, 34. It will be seen that the results are not so favorable for the seeds as when tested in the greenhouse.

Agricultural College, Lansing, Mich.

SEEDS.

FREQUENT complaints are made that seeds do not germinate, and dealers in them are found fault with, when, very generally, the fault lies in the improper manner in which people plant them. Many take no heed of the condition of the soil or of the depth at which the seed should be planted. The temperature and moisture also have a controlling influence: the temperature of germination of the following seeds is:

	Lowest.	Highest.	Most rapid.
Wheat	41° F.	104° F.	84° F.
Barley	41°	104°	84°
Pea	44°	102°	84°
Corn	48°	115°	93°
Bean	49°	111°	79°
Squash	54°	115°	93°

Air-dried seeds will imbibe water of absorption completely in from 48 to 72 hours, in the following percentage.

Mustard,	8	Buckwh't,	17	Oats	60	Pea 107
Millet,	25	Barley	49	Hemp	60	Clover 118
Corn	44	Turnip	51	Kid'y beans	96	Beet 121
Wheat	45	Rye	58	Horse "	104	W. clover 127

The great difference in the amount of water absorbed by mustard and clover seed is worthy of notice. The failure of clover seed to catch, frequently arises from sowing it at a time of insufficient moisture, and can be obviated by first soaking the seed, to supply the necessary humidity. Millet generally seems a good catch even in dry, hot weather, as a small amount of moisture answers for that seed.

Soaking seed in plain water, however, entails certain disadvantages. If we examine the water in which the seed is soaking, we find that it soon becomes brown. It has, therefore, dissolved some substance from the seeds; has actually macerated them. If we pour off this brown water and let it stand exposed to heat, it soon gives off the smell of ammonia, proving that it has soaked out nitrogenous matter, which nature has evidently stored in the seed for the nourishment of the young germ.

This seems to prove at least that this substance is readily soluble. Moreover, the young plant from seed that has been soaked in water will be correspondingly weaker and of a paler color than that from seed not subjected to this ordeal, and the longer the action of the water has continued, the more evidently will this be the case. Another objection lies in the fact that

seeds soaked in water very quickly dry, and the evaporation of the water leaves them drier than before. Such seeds, therefore, frequently perish in dry soil or during a continuation of warm weather.

The evils that result from soaking seeds in pure water may, however, be easily avoided by soaking them in a solution of some chemical salts of a fertilizing nature. In consequence of the quantity of salts the solution contains, it can dissolve but little from the seeds, while on the contrary it completely impregnates them with its fertilizing ingredients, so that the young plants from seeds so treated appear decidedly stronger and darker in color. Moreover, the seeds are not liable to dry up after having been steeped in this way, but in consequence of the hygrometric properties of the saline substances which they contain, they always continue moist. Manuring the seed by means of steeping is of great importance. That it produces a decidedly quicker and stronger growth of the young plant in the first fourteen days is certain, as it supplies it directly with the nutritive substances which are required for its vigorous development at the time it is just beginning to grow, and while its organs are yet unfit to seek nutriment over a wide range of soil. The vigorous development of the plant while young is, moreover, a sure guarantee of its full perfection and ultimate ripening. To apply manure directly to the seeds in this way is a quicker, cheaper, more efficacious and less laborious method of fertilizing them than to place compost in the hills or drills, and moreover the weed seeds then get none of the fertilizers which they share with the good seeds when composts are used.

Manure for the land, except coarse barnyard manure, should be spread broadcast and harrowed in, thus enriching all the soil. The roots then have a larger area on which to feed, as they will spread themselves out if properly started, and the soil all around them is in proper condition to nourish them. The Chinese are adepts in the art of agriculture, and their seeds are manured before planting them.

It is hoped that this brief article will call the attention of RURAL readers to the subject of which it treats; and if it effects only this object, good will grow out of it. The adoption of the plan it advocates will largely increase the crops of the country at a trifling increase of expense for fertilizers, and the saving in seed will more than counterbalance this increased outlay; for, when seeds are steeped in the manner here recommended, a bushel of wheat will be sufficient where a bushel and a half are required when not subjected to such treatment. This opinion is not a mere matter of theory, but the result of actual experiments conducted on a large and small scale, and confirmed by the experience of many others.

Plymouth Co., Mass. ANDREW H. WARD.

[We do not wish to pit our judgment which is *not* based upon experience against Mr. WARD'S that is. But it seems to us that the albumen in seeds that are albuminous and the cotyledons in seeds that are not, furnish all the "manure" that the tender embryo needs.—EDS]

Floricultural.

THE OXALIS.

OF this fine house-blooming plant I find some twenty different varieties described, varying in color and size of blossom, size, etc. of foliage and habit of plants. Some of the varieties remain in foliage an indefinite time, and are constant bloomers. These have white or pink blossoms; but both foliage and blossoms are small, the root is tuberous, scaly, or jointed. Planted in pots of good soil I have had them growing and keeping in blossom for months at a time, summer and winter, when cared for. They will not, however, bear drying off like some of the choicer varieties with bulbous roots. At present there is in my bay-window a small, six-inch hanging-basket of a pink Oxalis, the blossoms of which measure an inch and a quarter in diameter; each average foliage leaf measures 2½x2½ inches. The leaves are heart-shaped, and not as deeply lobed as those of the smaller varieties. The leaf-stems are from ten to twelve inches long, the leaves hanging pendant. The seed-stalk is about the same length, about twice as thick, and the size of a large rye stem near the root. These are surmounted by six or eight blossoms and buds, the terminal strongest bud opening first, others following at intervals of two or three days. They continue in blossom for several weeks, not all of the stems showing blossoms on them at the same time. A yellow-blossomed variety, the blossoms of which are a little more than half as large, and whose foliage is smaller, is a fine aid to variety. I have this growing, but it does not seem to blossom as freely as it has done in past seasons, owing in part, I suppose, to overcrowding in the pot.

The culture of these varieties is quite simple, as they only require the ordinary care given to pot plants. They should be potted in fair soil the same as common house plants; should have a sunny position in the window, and not be suffered to want for water, although they will thrive in a somewhat dry soil. They have their season of rest and of growth, the latter during our winter, although I suppose this may be changed. My mode of caring for the bulbs, when at rest, is to shake them out of the potting soil some weeks after the foliage has entirely disappeared, put them away in boxes in a dry closet in the house, and there let them remain till they begin to send out fine, white shoots, when they are ready for repotting. Five or six bulbs are sufficient for an ordinary six-inch pot. Usually they are ready for potting in September or October, going past in April or later.

If one wishes for an abundance of blossoms without reference to size, the pink and the white Oxalises referred to above, will give satisfaction. One or two pieces of the roots, planted in a six-inch pot, will in a little while fill the pot with foliage, which will throw up in succession blossom stems with several buds to each, opening in clear, sunny weather and closing at night, each blossom going through this same routine for several days. Where more variety is desired, and only for a season, the larger kinds with bulbs for roots, will give more satisfaction. These increase something after the manner of potatoes, only very much less rapidly, the small bulbs requiring a season or more of growth before coming to the blossoming stage.

Worcester Co., Mass. W. H. WHITE.

OLLA PODRIDA LETTER.

MARY WAGER-FISHER.

Fairmount Park and its influences; Coleus; Perilla Nankinensis; Pyrethrum; Cypress Vine; Queen Margaret Asters; Vincas; Ferns; Bouquets; English Walnuts and Black-walnuts; Communism vs. *Individual Ownership.*

I HAVE lately been spending a portion of two or three days at Fairmount Park, where one might spend a week without exhausting its beauties. Although the entrance to it is but a few miles' drive from my door, I never extend my drives into it without thinking how wonderful it is, how incomparably finer than any other park in the world—its old trees, its rivers, its bridges, gardens, architectural beauties; in brief, everything pertaining to it is so magnificent, so large, so free! But what was in my mind to mention as of possible interest to RURAL readers who were here at the Centennial and saw the sights about Horticultural Hall, was, that the floral display grows finer year by year, while the interior of Horticultural Hall is so incomparably superior now to what it was then, as hardly to be recognized as the same place. Will the eyes that saw the foliage beds, and the flower beds, in front of the Hall, as seen from the veranda on the top, ever forget the view? I opine not, and wherever one journeys now in the environs of the city, he is reminded, by the attempt at imitation everywhere seen, of what may be called the carpet-gardening of Fairmount. The influence exerted by the Park in floriculture, while all over the country undoubtedly very great, is naturally more pronounced in the neighborhood, where residents have frequent access to the grounds and pattern after the designs. The immense beds of Pelargoniums and of Coleus convert one at once to the doctrine of massing flowers, at least until he comes upon great plots where Cannas, Castor Beans, Petunias, Ageratums, Globe Amaranths, Gladioli, Vincas, Nasturtiums and other perpetual bloomers, form a kaleidoscope of color,—and then he hardly knows which style he best likes, and finally wisely concludes to adopt both.

Unless one has a conservatory, it is very difficult to winter through enough Coleus to plant a sizable bed of it in the spring; at least that is my experience. Bugs attack the plants sooner than anything else, and in a short time the vermin appear on every live thing about them. So I have discarded Coleus almost entirely, and rely upon Perilla Nankinensis and Pyrethrum (Golden Feather) for foliage effects. The Perilla is of very easy culture, as well as the Pyrethrum, and, as both grow from the seed, I recommend them to RURAL readers for special culture.

For indoor decoration for September and October, I know of nothing prettier than Cypress-vine—Quamoclit. As one knows, it grows from fifteen to twenty feet high, so that on cutting it off at the bottom, string and all,—and if two or three vines have twined about the same string, all the better—one has a lovely wreath, several yards long, to loop about window and picture frames. The ends out off should, of course, be placed in a vase which is daily filled with fresh water. The vines will continue to grow and blossom, and remain fresh for a long time.

Just now my bed of Queen Margaret Asters is at the hight of its splendor—a mass of purple and red of all shades, of white and tinted colors: then I have them in pots and boxes, for indoor ornament, so soon as in full bloom. I sink the pots in the earth in the early summer, where they are left until the Asters bloom. When taken out, fold a white paper neatly around the pot, and it is presentable for any place in the house. A shelf or mantel filled with them, is by no means an unpleasant sight to behold. As a background for bouquets that are set against the wall, the leaf of Ricinus (Castor Bean) is quite effective. Of course, for small bouquets, a small leaf should be chosen; for large and striking bouquets, I know of nothing just now more effective and simple than stalks of Perilla and Golden-rod together—gold on a dark-red background.

I went into the woods this morning to take a look at the Ferns. I found them only beginning to take on a golden hue. Within the coming fortnight, the harvest of Ferns for pressing should be made, and they are too pretty to be neglected by any woman. It is none too early to secure dry sand for filling baskets and vases in which to arrange grasses, autumn leaves, etc., for winter bouquets. These things can be far more artistically arranged by being stuck in sand than if tied in bunches. A made-up bouquet, the skeleton of which is made up of sticks and wires and string, is to me detestable. I want *honesty* in a bouquet as well as in furniture. I never like to snip off simply the head of a flower—I want it stalk and all.

I have been amused at Col. Curtis' concern over his English Walnuts. We have a tree in the lawn, planted by my father-in-law twenty years ago, which yields a peck or more of walnuts every year. It stands on a southern slope, and is protected at the north by a group of trees, and at a little distance away is the dwelling house. As a matter of taste, I much prefer the Black-walnut, and a few rods from my window stands one, fully forty feet in diameter—a magnificent tree, loaded with nuts. It is a good plan to encourage children to plant nut orchards.

The spirit of communism so abounds in Philadelphia, that land-owners will be obliged to hedge their possessions about with high stone walls, as they do in Italy, in order to enjoy gathering their own nuts and fruits. There is great pleasure in giving, but not a bit in having the results of your toil taken from you by vandals and vagabonds, without your leave or liking.

Bryn Mawr, Pa., 2d week in September.

VARYING THE APPEARANCE OF FLOWER GARDENS.

As soon as the frost has put a stop to vegetation, the flower garden demands attention, for many of the strong shrubs and herbaceous plants that spread from their roots, as well as other kinds that increase freely by seed, are very apt to overrun the more valuable plants which do not increase of themselves, and if unchecked would soon destroy that variety which is so desirable to have in small gardens. Much of the beauty and order of the flower garden depends on the preparations and disposals made at or soon after this time. Accordingly, measures should now be taken to improve the quality of the soil; the shape of the beds, too, may be altered, shrubs and herbaceous plants removed, and many other improvements made. These alterations are very necessary, for gardens that wear the same unvaried aspect, year after year, become wearisome.

A little trouble in interchanging the flower plants among the different beds, enlarging some and curtailing others, will accomplish all that is necessary. Those beds occupied this season with bedders may be filled with herbaceous or perennial shrubs and plants for the coming year. In this yearly change of the aspect of the garden lies half the pleasure of it to the cultivator. WM. C. L. DREW.

El Dorado Co., Cal.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

CLEMATIS APIFOLIA.

WHY is this charming climber so little known and employed? There is hardly anything blooming in the fall, as well adapted for covering piles of rock, old stumps or even for shutting up completely a wire or wooden lattice. Just now it is in its glory and will remain so until frost. It is astonishingly prolific of flowers and foliage, somewhat after the manner of Clematis Flammula only with different leaves and bloom. The former are of good size for a Clematis and curiously and deeply divided, a little like those of the Ampelopsis bipinnata. Their color is a bright green. The latter, that is, the flowers, are peculiar and very attractive. Covering the surface of the vine very thoroughly, the clusters consist of little white flowers with four small petals set at right angles with each other and surmounted by numerous anthers and a stigma, the greenish hue of which diffuses itself roundabout. Indeed the entire flower has a very slightly greenish hue which gives it an unusal appearance.

This Clematis is very vigorous and hardy, and merits better recognition. It comes from Japan and is not especially rare, though so little employed.

CLEMATIS GLOIRE-DE-ST-JULIEN.

This is another Clematis that shows finely in September. It belongs to the Lanuginosa type and flowered first two months since. Now, however, it is bearing a second set of flowers, almost, if not entirely, equal in size and number to those of the first crop. The white silk-like texture of the flower of this Clematis and its great size, six or seven inches in diamter, as well as this prolific season of second blooming, all combine to make it a most valuable climber for the fall. In growth, also, it shows more vigor than many of its near relatives. The extreme beauty and variety of this genus, or group, of climbers have yet to be properly appreciated in America. All who do learn their qualities express the greatest delight in their charms.

THE SUN-RAY PINE.

I like this name, suggested some time since by the RURAL NEW-YORKER. It is terse, Saxon, and expresses well the heart of gold possessed by the Pinus Massoniana variegata, as if abundant sunlight had suddenly taken up its abode in the greenest of Pines. Earlier in the season, the gold was more slightly and generally mingled with the green, sometimes even in a way that gave the impression of defective health. There is a marked limit of color fixed later in the season, that concentrates the green and gold, each within its own boundaries, by a well defined line. This distinct contrast intensifies the soft, rich glow which, coming as it does during the fall of the year, is specially charming. Pinus Massoniana variegata is from Japan and extremely rare, a prize that is eagerly sought for wherever it is known. The Japanese have a high regard for Pinus Massoniana and for all its varieties, which they have selected in myriads, and distorted and dwarfed in the peculiar manner by which their patient ingenuity evinces their regard. The Sun-ray Pine is, perhaps, the most favored variety of Pinus Massoniana with Japanese and Europeans alike. I know of no large specimens, but doubtless its habit is at least as fine as that of its parent, Massoniana, which is one of the very best species we have in cultivation.

THE GOLDEN-LEAVED CATALPA.

Catalpas are always fine in fall with their large, shadowy foliage, the nearest approach to the tropical size of palm leaves that we have, if we except Magnolia macrophylla. The leaves last well in autumn, retaining their normal coloring, which is, of course, finer on the new growth. Certain brighter changes of occasional young leaves have been perpetuated by grafting with a resultant new variety, Catalpa Syringæfolia aurea, which is never brighter than in September. It is bright gold, suffusing the green of the leaf and becoming conspicuous at some distance. There are other varieties of trees possessing much the same peculiarities, but none of more marked appearance at this season.

Flushing, L. I.

AMERICAN ARBOR-VITÆ.

Thuja occidentalis.

THE American Arbor-vitæ is one of our most valuable native trees for cultivation, for timber, ornament or protection. It is a species peculiar to this continent, having no counterpart in other parts of the known world. The Siberian Arbor-vitæ is but a dwarfed sport of the American, and is not found native in Siboria, or in any other part of the world, as one would suppose by its name.

The Arbor-vitæ is rarely seen native east of the great lakes, but abounds in the forests and swamps about Lake Superior and the northern portions of Lakes Huron and Michigan. It is usually a small tree, from four inches to one foot in diameter, but rising in the thick, native forests to a great hight. I have seen trees not more than eight inches at the base, rising sixty to eighty feet, one-half the hight a clean trunk, free from branches, and as straight as an arrow. It is not always a small tree, for forests in which trees are found two to three feet in diameter are common. Its timber is the most durable of any we have. Large quantities are annually exported from our northern forests, for fence posts, telegraph poles, and railroad ties; and these are called "cedar posts, cedar ties and cedar poles."

Although growing so tall and slim when thickly clustered, it forms a very dense beautiful tree when growing singly. Its side branches are numerous, short and stocky, gradually diminishing toward the top, forming a beautiful cone. Many suppose it to be identical with the White Cedar of the Eastern States, hence the name "cedar posts, &c." and the custom of calling its wild haunts "cedar swamps." Its principal peculiarity lies in the cones, which are composed of a great number of small scales imbricated, or overlaying each other, in a flat, fan-like form, looking as though they had been pressed into position. In the hands of a skilled gardener, it is one of the most useful trees for ornamental planting. As hardy and easily transplanted as a Willow, very patient under the shears, it can be easily trained into dense screens or barriers to ward off cold winds and storms, or for evergreen hedges for ornament and dividing off pleasure-grounds. For single trees, it is very beautiful and desirable, being easily molded by the shears into a variety of fanciful and fantastic forms. As it is so easily cultivated, so hardy, and so common, besides being so valuable, it is a wonder it is not more generally planted.

Door Co., Wis. GEORGE PINNEY.

Miscellaneous.

A NOTE FROM THE RURAL GROUNDS.

THE extensive preparations which we are making for our free seed distribution as well as sickness in the RURAL family, have prevented us from attending, as we had desired, to the promised Pelargonium present to our lady subscribers to whom alone the offer was made. It was our intention to require them to send stamps for the prepayment of postage. This will not now be required. We will send a few cuttings to applicants upon the receipt of their address plainly written. All applications *must* be received previous to Oct. 7.

A NEW PROCESS FOR SUGAR-MAKING.

WE are always anxious to give our readers the earliest information on all subjects likely to affect their welfare. There have been very few inventions, of recent date, more likely to do this than a new process for crystalizing sugar from corn-stalks and serghum, the discovery of which is claimed by F. L. Stewart, a chemist of Pennsylvania, and which has recently been successfully tested on a small scale by Professor Collier, chemist of the Agricultural Department at Washington. Professor Stewart claims to have discovered certain chemical preparations, by the use of which every farmer will be enabled to undertake the manufacture of sugar from his own corn-stalks and sorghum, without the large outlay necessary to produce sugar from sugar-cane. The nature of these chemicals, and the method in which they operate, are as yet secrets, and the inventor expects to derive his profits from the use of these articles, of which he has the monopoly.

The following is a condensed account of the process of making sugar by this new method:—

First—So soon as the juice has been pressed out of the corn-stalks or sorghum, heat it in a copper or tin-lined vessel to a temperature of 185° Fah., as shown by a thermometer, the bulb of which is immersed in the juice.

Second—When the juice has attained this temperature, stir into it a fluid ounce of lime to each gallon of juice, or from five to seven pints of the former to each hundred gallons of the latter.

Third—Then heat the whole rapidly to the boiling point.

Fourth—So soon as it begins to boil, if heated by steam, shut off the steam, or otherwise remove the juice from the fire, and when the sediment begins to settle, draw off with a siphon the clear liquid from the top until nine-tenths of the whole quantity of juice has been removed, leaving a thick, muddy sediment at the bottom.

Fifth—Place this sediment in a bag and add the liquid that filters from it through the bag to the clean liquid which has been siphoned off.

Sixth—The clear liquid which has been obtained by siphoning and filtering should be allowed to cool to 150° Fah. and then there should be added to it Solution B,—one of Professor Stewart's preparations—at the rate of one fluid ounce to a gallon of juice, or from five to seven pints to a hundred gallons. Enough of the solution should be added to neutralize the lime in the juice, and this point can be determined by dipping a piece of blue litmus paper into the juice, when if enough of the solution has been added, the color of the paper will change to red.

Seventh—The juice must be rapidly evaporated and skimmed frequently to remove any scum from the surface, while small quantities of Solution B. must be added, if the boiling juice will not turn the blue litmus paper red.

Eighth—When the boiling syrup has attained a temperature of 235° Fah., as shown by a thermometer immersed in it, it must be removed from the fire, and kept to crystallize in a room whose temperature should be about 80 Fah. To promote crystallization a few grains of granulated sugar may be added to the cooling syrup when it has reached a temperature of 100° Fah.

Should this discovery prove as efficacious on a large scale as it is reported to have done on a small one, it will be of vast importance to the agricultural community, and consequently to the nation at large. The subject is, therefore, one in regard to which the RURAL will keep its readers constantly informed of the latest developments.

TEA CULTURE.

VIEWS FROM AN ADEPT IN BRITISH INDIA.

WE have just received from Gen. Le Duc, Commissioner of Agriculture, a copy of a letter treating on the prospects of tea culture in this country and written to him, on July 14, by Mr. James L. Forbes, an extensive tea grower of Burlate Luckipere, Bengal. From it we make the following extracts for the benefit of those interested in this prospective branch of industry, and for the satisfaction of those numerous newspaper scribes who have been contemptously sconting the idea of the possibility of tea culture in the United States.

"As regards Tea cultivation in America, I believe from what I know of the country, and my experience as a tea planter that it only requires capital and enterprise to make tea manufacture one of the industries of America. There is no difficulty about the mere growing of tea. You have the climate, soil, rain-fall, and every thing favorable for the growth of the tea plant. The question is, can the produce be manufactured at a cost that will give profitable results? America has a great advantage over India and China in the possession of skilled labor and mechanical appliances. Machinery can be applied to all departments of the manufacture and is working here with success. My rolling machine is worked by a twelve-horse-power engine and rolls off from 600 to 800 pounds of green-leaf per hour. We also have curing and sorting machines, but the great difficulty is the want of skilled labor and intelligence on the part of the natives. There is also a vast field for improvement in the mechanical appliances we have; and I have no doubt but that the inventive genius of the Americans would soon perfect a machine that would solve the labor question of tea manufacture.

The only difficulty that remains is the one of cultivation and plucking. As regards the former, the plants could be planted in rows four by four that would give sixteen square feet for every plant and would admit of using the hand cultivators so common in the States. During my late visit to America I purchased one of Rue's hand cultivators and, with a slight alteration, I find that it works admirably As regards the plucking, I do not see my way quite so clear; every one hundred acres of full-bearing plants require fifty women or boys and girls, and that number would have to be employed during the months of June, July, August and September; half that number would do for April, May, October and November. We pay half a cent a pound for green leaf and the Coolies average from 35 to 40 pounds a day and a good plucker will bring in as much as eighty pounds in a day. This applies to large plantations, Burlate having six hundred acres under the plant. Two hundred of this is quite young: the yearly product is about 240,000 lbs. per week. I think as you suggest in your circular on the China Tea Plant (page 12) that small patches of tea cultivated by the farmers throughout the district with large central factories to purchase the leaf and prepare it for the markets, would solve the problem. As regards tea seed, we have the China, Assam, Indigenous and Hybrid. The China variety is much more prolific in seed than the other kinds, and, as seed checks leaf, the China is inferior in this as in other respects. The China is by far the hardier plant; it is much easier to rear and it will grow in widely differing climates, which the Indigenous will not do. The plants between China and Indigenous are called Hybrid and are acknowleged by all to be the best class of plants for tea manufacture both as regards yield and strength; six to eight hundred pounds of tea is the yield per acre from Hybrid plants, whereas the China yield only from three to four hundred pounds per acre. The infusion of tea from the Hybrid species is far more rasping and pungent than that of the China plant and the tea commands a much higher price and is used in the English market for mixing with the weak China teas to give them strength and flavor.

Had China never been introduced into India a very different state of things would have existed now. The cultivation would not have been so large, but far more valuable; all persons interested in the introduction of tea cultivation into the States, should profit by our experience and avoid the mistakes we made, and above all things select only the best class of Hybrid seed for the plantations. No one thinks of putting out China seed now, and in many cases planters have abandoned their China gardens for Hybrid ones.

WHAT OTHERS SAY.

A NORTH RIVER APPLE ORCHARD.—We have recently had an opportunity, says a writer in the N. Y. Times, of inspecting an orchard of about 30,000 trees, which is managed on business principles, is kept healthy, free from vermin, disease, and any approach even to those defects which detract so much from the appearance and usefulness of the orchard as generally seen. This orchard is situated on the banks of the Hudson River, between Hudson and Catskill, in Columbia County, and is owned by Mr. Richard McKinstry, who has been engaged for 21 years in bringing it to perfection. * * * * It is a business orchard, run on business principles, and by no means for show. Indeed, any one visiting the place in the expectation of seeing anything but a wealth of fruit, borne upon healthy, vigorous trees, brilliant in depth and warmth of color, and of unusual fairness in quality, will be disappointed. * * * A line over four miles long, or more than 2,600 apple trees, standing each ten feet apart, mark the boundaries; and within this there are vistas checkered by golden yellow, bright crimson, and emerald green along the sides, and lengthening out as one passes them, until closed in by a pyramid of beautiful color from the laden, drooping branches of a King, a Wagener, or a Baldwin. There are about 100 varieties of apples grown; but, like all wise and experienced pomologists, the owner is gradually reducing these varieties to not more than ten of the most profitable and popular ones.

There are 7,000 Greenings, 6,000 Baldwins, 4,000 Kings, nearly as many Wageners, (this apple has the merit of bearing every year,) 600 Northern Spy, 800 Red Astrachan, 700 of a choice native variety known as "Derrick's Graft" or "Richard's Graft," and almost as luscious at this season as a peach, and often measuring 13 inches around each specimen, with hundreds of Newtown Pippins and other favorite kinds. There are Pound Sweets that bear seven barrels to a tree, and Kings, of which only 60 can be packed into a barrel.

A great many of these apples are shipped to English markets, and are very popular there. It is hardly known to us as yet what a vast opening is there for our best fruits. A small export business has been done for many years, and American apples, chiefly Newtown Pippins, could be recognized in the fruit shops and markets by American travelers for thirty years or more; but since 1865 the shipments have greatly increased. In 1875, 70,000 barrels were sent abroad; the next year nearly 500,000 barrels were exported, and last year, which was a poor year, the exports reached nearly 100,000. But this market is the most exacting in the world; only the best quality of the best varieties, free from blemish, and put up and packed by skillful hands, are wanted or can be sold there; so that this opening can only be supplied by those who grow their fruit in the very best manner.

In addition to all these apples, there are 1,700 pear trees, of which 500 are Bartletts, some thousands of Cherries, among which are 1,000 Black Tartarian, 500 Governor Wood, and hundreds each of other valuable kinds. There are Peaches enough to make a decently large orchard of themselves, and, modestly hiding beneath the taller trees, are an immense number of red-currant bushes. The ground is plowed several times in the year, and when the wood growth promises to be excessive, the land is laid down to clover. That this management is successful is shown by the condition of the trees. It must not be supposed that the owner is free from the usual cares and troubles which beset mankind of the industrious sort; on the contrary, many men would have made firewood of their orchards had they less perseverance than Mr. McKinstry. One year over 8,000 trees, large and small, fell victims to the mice, and the disagreeable effect is still apparent in a large gap in the orchard not yet filled out. There are borers to pursue with wire, knife, gouge, and chisel; there are sun-scald and fungus to watch against; many trees are borne down with their loads, and crash into sad ruins. Storms may scatter the half-ripened harvest, and on the whole, "a heart bowed down with weight of woe" may very easily be found in a prosperous orchard as upon a farm where the bugs devour the potatoes and the sparrows carry off one's seed corn. The virtues of perseverance and patience, and a hopeful way of doing the best with things as they come to us, are certainly necessary to make a fruit-grower a happy man, if they are needed by any one.

SODA AND MILK.—"Jack reminded his mother that she had given him some tea instead of his usual allowance of bread and milk, and she explained that the milk was just on the turn from the hot weather, and so he could not have it. On Mr. Nicholson's suggestion, a few grains of carbonate of soda were added to some milk before it was boiled, and Jack's bread and milk was soon brought in as good as usual, much to the surprise of all.

'Well, Mrs. Forbes, that scores one for chemistry, anyhow.'

'Yes,' replied Mrs. Forbes, 'I must admit it does; so now, Mr. Nicholson, do please explain the matter.'

He did so by showing that fresh milk always contained some soda, but as the milk became changed some milk acid was formed, and this made a sort of flirtation with the soda, so that the soda could no longer do her proper work; but by putting some more soda into the milk, there was some one else provided to attend to the work, and thus the milk did not curdle.

'Very good,' said Mr. Forbes, 'but why cannot they do the same sort of thing with milk which is going to be sent away by railway.'

'So they do,' said Mr. Nicholson, 'and it saves a good deal of milk from being spoilt."—London Ag. Gazette.

BONE MEAL FOR SWINE.—The Indiana Farmer says that most farmers have noticed that in fattening swine, especially when they are crowded rapidly, they always appear weak in their hind legs, and sometimes lose the use of them entirely. An intelligent farmer says that he and his neighbors have made a practice of feeding bone meal in such cases, and find that a small quantity mixed with the daily feed will prevent any weakness, and strengthen the animals so as to admit of the most rapid forcing. As bone meal is known to be a preventive of crippled ail, and weakness in cows, it looks reasonable that it should also be a benefit to hogs, which are often confined to a diet containing but little or no bone-making material.

COAGULATION OF MILK.—The *Italia Agricola*, writing on the effect of thunderstorms on milk, states that it is a generally accepted belief that it is the lightning and electrical phenomena that accompany a thunderstorm, which cause the spontaneous coagulation of milk. Dr. Malhoern wished to test the idea, and for the purpose he filled a cylinder with freshly skimmed milk, and introduced into the same 100 centimeters cubes of pure oxygen, then allowing electrical sparks to pass into the apparatus for the space of 10 minutes, by means of the Rhumkorff machine, the effect being that the milk quickly coagulated, clearly proving that an acid reation had taken place, and after 20 minutes a firm cheese was produced.

CORN FODDER.—Where is the necessity of allowing corn to remain in shocks until the middle or end of November? asks the Germantown Telegraph. Corn should not be cut down until the stalks are dying and the grain is pretty hard, and then it should remain no longer in the field than is absolutely necessary for the drying of the grain. It should be husked as early as possible, and the fodder tied up in bundles, and either carefully stacked near the cattle stables or put under shelter in sheds.

SEEDLING SMALL FRUIT.—The Fruit Recorder says: To raise gooseberries, currants, or any other of the small fruit family from seed, make a low frame like a hot-bed frame, fill it up with rich earth to within a few inches of the top, and on this put about one inch of clear sand, and sow seed on this. Sprinkle sand over the seed, and keep it watered sufficiently to keep the surface just moist—*but not too wet.* In a few days the seed will germinate, and when plants get so large as to crowd, they may be transplanted.

CHERRIES.—The following is the list of cherries adopted by the editor of the Germantown Telegraph:—1. May Bigarreau; 2. Belle de Choisy; 3. Black Tartarian; 4. Black Eagle; 5. Black Hawk; 6. Elton; 7. Downer's Late; 8. Early Richmond; 9. Early Purple Guigne; 10. Del. Bleeding Heart. The ripening of the list will range from the earliest to the latest, thus carrying one through the whole cherry season. No one can go amiss in adopting this list.

ONLY TWO.—Professor H. Tanner, says: "The truth should be boldly acknowledged that for the attainment of a full success in agriculture there are two essentials—a thoroughly practical acquaintance with the business, and a previously cultivated mind, which shall enable the practice of farming to be more accurately and perfectly learnt."

NO YELLOW FEVER IN FLORIDA.—The Florida Agriculturist says, that in answer to several inquiries, it can assure those who wish to go there, that there has not been a case of yellow fever in Florida, and that the State has never been healthier than it is now. [We happen to know that this statement is correct.—EDS.]

MR. JOSIAH HOOPES, writing in the Weekly Tribune of "Hide-bound trees, says: "Like every other gardening operation, this too is liable to be overdone, but a slight cut merely through the outer layer of bark, when the tree is suffering, will bring relief, and so far as I have observed, does no evil.

CURRANT CUTTINGS.—Mr. Purdy says that currant cuttings should be taken off as soon as the leaf drops and burried a foot below the soil, in a sandy or dry place, with earth mixed all through them, and left there until early spring, when they can be taken up and set out in nursery rows.

Veterinary.

QUERIES ABOUT MALADIES OF STOCK.

ANSWERED BY D. E. SALMON, D. V. M.

Anon asks for some safe plan for removing from his horse's leg, just below the stifle, a hard bunch on the bone, caused by a kick.

ANS.—If the enlargement has been changed into bone, it will be impossible to remove it. If it still appears soft to the touch, a blister, consisting of one part cantharides to four of lard, may be applied with a probability of improvement.

J. C. Campbell, Licking Co., Ohio, says, I have a valuable cow; at intervals of two or three weeks one-quarter of her udder becomes swollen and it is with difficulty she can be milked. In twenty-four or thirty-six hours the swelling has disappeared, but at irregular intervals some other quarter will be affected. She is to all appearance healthy, has good pasture of timothy and clover, on dry, gravelly loam. What is the cause, and what will cure.

ANS.—The trouble is probably of a rheumatic nature. Would advise you to give one-half ounce of potassa and thirty drops tincture of aconite root, three times a day, commencing with the first appearance of an attack and continuing a week. If this is unsuccessful, you may add two drachms of chinoidine, or one ounce of tincture muriate of iron at a dose; or you may replace the nitrate of potassa with one drachm of colchicum. This disease sometimes readily yields to treatment, while in other cases it is very obstinate.

Industrial Societies.

QUEENS CO. (L. I.) FAIR.

The Queens Co. Agricultural Society should invest a part of its surplus funds in a brace of sprinkling-carts, abolish the trotting-track and extend its carriage accommodations. The fair would then be a model County Fair. As it is, it far surpasses in point of attendance and number of interesting exhibits, many State fairs. I had almost forgotten to animadvert on the execrable quality of the music; next to the dust, that brass-band was the most annoying feature of the fair.

There was a full representation in all departments, but the poultry was especially noteworthy as regards quality and numbers, surpassing in all respects the show at the New York and the New Jersey State fairs. The geese and ducks were excellent. Space precludes a detailed account of the birds, but we cannot forbear complimenting Messrs. Magrane & Fairservice, Newark, N. J.; Barr Bros, Bayshore; J. H. Perkins, Flushing, and N. W. Shutt, Brentwood, for their poultry.

The cattle were numerous and excellent, as was to be expected, considering the number of wealthy gentlemen on the Island who ride this hobby with increasing enthusiasm. Mr. Crozier was conspicuous by the absence of his usual fine herd, but Beacon Farm was represented by a herd of Holsteins,—a new departure in that quarter. One cow, Katenka, averaged 30 pounds of milk per day for 359 days. Certainly a handsome record. I noticed a number of fine grade cows—T. Treadwell, of Mineola, and Joseph L. Townsend, of Old Westbury, taking honors in this class. B. S. Swan, Oyster Bay, had his usual high-class Jerseys, and W. P. Douglass, Little Neck, competed on even terms with the same breed. W. Willetts, Roslyn, seems to be the only breeder of Devons—more's the pity, as these serviceable animals do not seem to be held in proper estimation.

Wm. Kloenne, of Hicksville, had expended no end of trouble and soap on his Angora goats, and they repaid the trouble by appropriating a large share of the visitors' attention. Thos. Mott, Port Washington, and D. Brinkerhoff & Son, Manhasset, were strong in Southdowns, while S. L. Albertson, Roslyn, and W. A. Willis, Mineola, monopolized the long-wools. W. H. Bowker & Co., and the Mapes' Formula & Guano Co. had the fertilizers all to themselves. The former had their samples tastefully arranged in glass jars and bottles, and the latter had a crescent-shaped exhibit. One side showed their complete manures in bags, just as they leave the factory, and the opposite row of sacks contained the crude materials from which the manures are compounded, thus showing at a glance just how the ingredients are combined.

R. H. Allen & Co., and A. B. Cohu, had agricultural implements in great variety. Philips's Spiral Corn-husker was in operation, worked by Minard Hardor's, "Fearless," horse-power. The Eureka Mower, Foust's Hay Loader, Noyes' Hay Carrier, the Champion and Centennial Drills, Deere's Gang Plow, and Corn Cultivator, as well as other implements of established reputation, were represented. The Dairy Supply Co. had their Monitor Churn, Cooley's Apparatus, and a new Milk Pail on exhibition, and, to make things interesting, entered into a churning contest.

The floricultural display was very generally confined to cut flowers, and horticulture ranged from apples to hot-house lemons and pine-apples. The grapes and apples were noteworthy. The mammoth pumpkins, turnips and beets were out in force, flanked by an appetizing collection of bread and cake, the pride of premium housewives. A tether, shown by Mr. Rook of Glen's Head, was one of the novelties of the Fair, and well worthy the attention it received.

The arrangements of the exhibits, and the thorough way in which the officers of the Society discharged their onerous duties, lent a completeness to the occasion that all will remember with pleasure. R.

THE MONTREAL HORTICULTURAL SHOW.

The "Montreal Horticultural Society and Fruit Growers' Association of the Province of Quebec"—a pretty long title!—held their annual exhibition at the Victoria Skating Rink in Montreal, Sept. 17, 18 and 19. Your correspondent had the pleasure of being present during each day of the show, and can testify to its entire success, both as an exposition of fruit, vegetables, flowers and ornamental plants, and also financially, the attendance being very full, both day and evening. This society is an example of what can be done by energy and skill on the part of its managers, and especially of its Secretary, Henry S. Evans, Esq., whose untiring zeal has been effective in placing the Montreal Society in the front rank among American societies of its class. The membership is, I believe, over 700, and all classes, from the cottage gardener to the wealthiest citizen, take active part and deep personal interest in the success of its meetings and exhibitions.

The display of floral treasures, both pot-plants and cut flowers, was simply immense, the great building being transformed into an enormous conservatory, in which every person's best was collected together to constitute a sight rarely to be seen. The labor and skill thus represented can hardly be estimated. Montreal and its outlying villages contain a great number of wealthy people, who themselves, as amateurs, and whose skilled gardeners, together, are able to present as great attractions in this line as any city on the continent. There were, in addition, many fine contributions from Quebec and other places within the province at a distance from Montreal, which, altogether, produced such a *tout ensemble* as is rarely equaled and still more rarely, if ever, surpassed.

The show of hot-house grapes was especially fair and extensive. Peaches, Nectarines, and other orchard-house products were shown, while plums and pears were in abundance and the show of apples profuse.

This latter portion of the exhibition was the one most interesting to the writer, as displaying the degree of success that may be reached in orcharding, even in so cold a climate as that of Lower Canada. This is obtained, and is being developed and advanced in a most gratifying degree, by the diffusion of varieties of which almost nothing is known elsewhere. Excepting the Fameuse, itself a Canadian apple, hardly a variety exhibited at this great show of apples, is cultivated or known outside of the province. I am convinced that this is a great loss to our fruit-growers, especially to amateurs, for many of these Canadian apples excel, both in beauty and spicy piquancy of flavor and aroma, any sorts in common cultivation in the States. It may be that they would not preserve all their excellence when transferred to a warmer climate, but at least they would prove treasures in those colder sections of the Union, such as northern Maine, New Hampshire and Vermont, Wisconsin and Minnesota, where good apples are scarce and all the standard varieties refuse to grow.

The county exhibits of apples were especially interesting, as showing the relative hardiness of different varieties, displayed by their presence or absence from the tables of each county. The county of Huntingdon, lying at the extreme western corner of the province, between New York and the St. Lawrence River, showed its milder climate by the exhibition of apples like the Baldwin and Rhode Island Greening; while the show of the Abbottsford Fruit-growers' Association from the County of Trowville (which took the second prize, Huntingdon getting the first), demonstrated what can be done by skill in the choice of the right varieties where even the Fameuse is not entirely hardy.

I will close this brief notice of a most noteworthy exhibition by naming the varieties of apples exhibited which have proved the hardiest, most productive, and of the highest quality. For summer apples there were the Blinkbonny, the Peach of Montreal, and the Roseau. For autumn, the Alexander, the Cellini, the Hawthornden, the King of the Pippins, the St. Lawrence, the Fameuse Sucre, the Mountain Beet, the Autumn Strawberry, the Bourassa and the Docarie. For winter, the Famense, Canada Baldwin, White Winter Calville, Pomme Grise.

It should be noted that though the names of some of these, as the Cellini, the King of the Pippins and the White Winter Calville, are found in our works on pomology, yet competent authorities, Mr. Downing among them, decide that the Canada apples thus named are not the same. Of others, and these among the choicest, and only lately brought to notice through the efforts of this society—the Fameuse Sucre, Mountain Beet and Decarie—it should also be said that they have not yet been propagated by nurserymen to any great extent. The Pomme Grise and Alexander, named above, are the same as grown elsewhere.

T. H. Hoskins, M. D.

Orleans Co., Vt., Sept. 21.

NOTES AT THE N. Y. HORT. SOCIETY.

Mr. Thomas Hogg sent a Chestnut from Japan, some years ago, which is now being propagated by the Kissena Nurseries of Flushing, L. I. One specimen is here exhibited, five feet high, bearing a dozen burs or cupules. The leaf is much smaller than our Chestnut and narrower. It is not more than six years old—is perfectly hardy. The seed is much larger than our Chestnut, though we know not as to the flavor. But the size of the Chestnut, and its early coming in fruit, must render it a valuable acquisition.

The vegetable and fruit display of this well-conducted exhibition is alone worth a visit.

Ellwanger & Barry take a silver medal for Grapes beside the exhibit of Mr. Ricketts—while Mr. Ricketts takes a gold medal for pears, beside the display of E. & B., which is somewhat reversing the usual order. Peter Henderson takes a silver medal for best collection of cut flowers.

In a large glass case we find bundles of Champlain and Defiance Wheat—the size and beauty of which make one envious of those who raised it. Whatever these varieties may ultimately prove to the spring wheat cultivator at large, these specimens are at least remarkable.

The floricultural display is arranged with exceeding taste—the plants are choice, and the entire exhibition, to say in a word what we should like to devote a page to, is of rare merit.

Rochester, N. Y., Sept. 26, 1878.

At our recent western New York Fair, which by-the-by has been a great success, I was interested more particularly in Floral Hall than in other departments. Here the display of exotic plants was unusually fine. Messrs. Ellwanger & Barry, J. Charlton, and J. B. Keller, deserve great credit for their large and varied collections. The display of fruits, though good, was not superior to that of other years. Among the novelties exhibited I noted the Early Dawn, a new early, black grape, being propagated by H. E. Hooker, but which is not yet put on the market. The bunches were medium in size, handsome, berry small and of excellent quality.

The Monroe, a new grape exhibited by Ellwanger & Barry; very compact bunch, handsome appearance and fine quality.

The Pocklington, a green grape from Sandy Hill, N. Y.; the finest of its class exhibited, and if we may believe of it one-half that is claimed, it is certainly the greatest acquisition that horticulture has had for years. In other departments the entries were full—there being some 3,500 entries, all told.

Stock was fairly represented; some very fine animals being present. Among farm implements worthy of notice I would mention the new harness for plowing orchards, which does away with traces and whiffletrees; and by the use of which the most careless person is competent to plow in young orchards without danger of barking the trees. Of other time and labor-saving machines, time will not permit an account.

H. T. J.

The Somerset County Fair at Somerville, N. J. will be held on Tuesday, Wednesday and Thursday, Oct. 1st, 2d and 3d. This old-established institution is yearly growing more and more popular, and this year the inducements are greater than ever. Excursion tickets will be sold by the railroads at reduced rates. W. S. Potter, Secretary.

The Poultry Yard.

PROFIT COMBINED WITH AMUSEMENT

In a poultry establishment the ornamental can be adopted with the useful, and profit can accompany the pleasure and recreation of attending to fowls, but silly people imagine, because some gentle-people have fine poultry houses with compartments for various kinds all under one roof and have yards attached to prevent the fowls roaming in their ill-fenced gardens or their exposed pleasure-grounds, &c., that they can shut up fowls and continue to keep them in confinement so as to make them pay for feeding and attendance. By having unlimited range, fowls can easily be made profitable; for they will pick up at least half a living, and they do not then require one-tenth as much attention as those kept in a yard which always has a bad oder, however often it is cleaned.

It is extraordinary to find there are men so weak as to attempt to keep great numbers of fowls together with limited range when, time after time, the folly of all attempts of the kind has been demonstrated. But although no sensible business man will again confine hundreds of fowls in any inadequate space, yet great numbers can be kept on one farm and profit be combined with amusement by making tasty ornamental little roosts, and placing them at such distances apart as to prevent any intermixing. These roosts might be made and painted so as to have the appearance of miniature cottages, and so placed about an estate as to be exceedingly picturesque.

I have in mind at the present moment an island, the property of one proprietor, whose residence stands on an elevated position commanding a view of the whole, with the exception of portions hidden by trees. What a very pretty effect some of these poultry houses would have if interspersed among laborers' cottages and other buildings used as shelter for farm stock, and these also could be made to have such an appearance as would be in unison with the erections all over the island. Imagine a farm neither round nor square but tolerably compact, with a hundred or more roosts, sheds for cattle and for sheep to resort to in stormy weather, and here and there interminglod with these, a cottage prettily adorned with vines, and a handsomely laid-out garden. Then suppose the whole painted alike and, as near as usefulness combined with the ornamental and uniformity will permit, all showing doors and windows and all having ivy or vines of some kind running about or trained around them, so as to give the best effect. If an island, all the outside poultry houses might be for water-fowls and, sweeping down from the mansion, might be a well kept beautiful carriage road which could take a circuit of the farm so arranged that it would be a delightful pleasure drive, and at the same time it could be used to go round to the different buildings which would be on the right and left all the way along.

Profit could all the while be combined with the ornamental and the useful, and good fine square fields could be arranged so that they would not interfere with the buildings or any of these structures or impede cultivation. If wealthy people, when they retire from cities to the country, would first of all lay out their farms so as to have them one beautiful scene of variety with perfect utility, how ornamental would not the arrangement be to the country!

An Old Hand.

The Vineyard.

GRAPE LEAVES.—No. 1.

W. C. BELLAMY.

Omitting, in this communication, any reference to the undeveloped resources of the South, in mines, minerals, water power, and other natural advantages, I give here a few practical hints on Grape Culture.

It is a lamentable fact that, although a large proportion of the South is as well adapted to the growth of the Grape as the sunny slopes of the vine-clad hills of France and Spain, there are but few localities south of the Ohio River, except in California, where grape culture has been conducted to any extent and with any degree of success or profit. Hundreds of vineyards have been planted in the South, and, after several years, plowed up, the land planted in cotton, and the "ipse dixit" of the ruined owners added to confirm the generally received, but grossly erroneous verdict, that Grapes can not be successfully raised in the South. But because some—yea, even most who have tried it—have failed, it does not follow necessarily that all will fail. We must take into account those who *have* succeeded as well as those who *have not*—and "*quod homo fecit, homo faciat*,"—"What a man has done, a man may do"—and if a man can have fifty vines bearing good fruit, why may he not have fifty thousand? The failure has not been from defects in climate or soil, nor perhaps, in most cases, for want of proper care, but from errors in selecting the varieties, and also, to a great extent, from the lack of a proper study of the wants and habits of the vine.

The varieties of the Grape are almost innumerable, and, while one might do well in a certain locality, another would as certainly fail. Experience alone can teach what particular Grape will suit a given locality. Longworth's success with the Catawba, in his singularly fortunate locality on the Ohio, created, some years ago, a perfect furor in the South, and many—believing if Longworth could succeed with the Catawba they could—planted large vineyards, and waited anxiously and patiently several years to gather, instead of a rich vintage of generous wine, only their utter pecuniary ruin. I instance one man who planted thirty thousand Catawba vines, who, after waiting several years for his profits, was sold out of house and home and vineyard by the sheriff, while his vine-dresser, who had received but small wages, is now possessed of a portion of the same land—has it planted in a variety suited to the locality, and is realizing handsome profits from the sale of grapes and wine.

It is a matter of wonder that our people should be so blind to the munificent gifts of a benevolent Creator, and waste their time and substance in pursuit of what they can never attain. I refer to the fact that the South abounds in native Grapes, some of which can not be excelled either for table use or for wine. Perhaps our very best is the Scuppernong, first discovered, growing wild, on Scuppernong River, North Carolina—whence its name—and it is not known to exist much north of that locality. Both the fruit and its peculiar flavor are truly *sui generis*—but it is so universally distributed over the entire South, I will not (unless your *Northern* readers desire it) describe it, except to remark that aside from its color—a brownish yellow—and its fine wine-making properties, it possesses a peculiar and most delightful fragrance—delicate and yet so diffusible that a pint of the fruit will emit a delicious perfume throughout the whole of a large apartment, and a basket in which they have been gathered will retain their odor for weeks afterwards, like Moore's "Vase in which roses have once been distilled."

The seedling of the Scuppernong is invariably a perfectly black grape, and a *coarser edition* of its parent in every thing except in that peculiar, lasting odor and wine-making properties—and is known by the several names of "Bullace," "Muscadine," etc.—the origin of which I can not give. In this last respect, it makes a wine in every respect equal to the parent grape, and by many considered far superior. Its wine is a deep purple, while that of the Scuppernong is a rich clear amber. This seedling has been so disseminated that, except in the pine barrens, one can hardly ride a mile in any direction without seeing them in every jungle, on every hillside, gracefully festooning the forest trees,

and, in favorable situations, climbing to, and taking entire possession of the tops of the tallest trees, producing in their rich luxuriance a wild, weird and picturesque effect.

Fruiting in three or four years from a layer, it increases in fecundity with its age—is wonderfully prolific and subject to no disaster, never failing to bear good crops annually, blooms late, and consequently is not liable to injury by late frosts, and ripens its fruit in September, rendering the whole atmosphere around fragrant.

Catherine Co., Ala.

The Querist.

ANSWERS TO CORRESPONDENTS.

Sorghum Sugar Making.

C. J. Reynolds, Steuben Co., N. Y., asks how to manufacture sugar from the hybrid sorghum cane. He planted some at the same time he planted field corn, and both ripened nearly together. He wishes to learn the percentage of sugar it contains, etc.

ANS.—Sorghum saccharatum thrives best on rich land deeply plowed. Calcarious soils furnish the best syrup. It does not flourish on soils abounding in black muck, on soils standing over cold, wet sub-soils, upon undrained lands, or in soils rich in soluble saline matters. Well ripened stalks yield about half their weight in juice, of which from five to ten gallons are required for a gallon of syrup. The saccharine matter, after being evaporated, is mainly in the form of glucose, and produces only a very small percentage of crystalized sugar, so that the plant is cultivated chiefly for the syrup. A fair average yield is about 150 gallons to the acre. The syrup varies greatly in quality, according to the care and skill bestowed upon its manufacture, from a dark greenish-brown fluid, with an unpleasant, weedy flavor, to an amber-colored saccharine syrup, destitute of any characteristic flavor.

The process of manufacture is very simple. Before the seeds are fully ripe, the leaves of the plant are stripped off, from two and a half to three feet cut off the top, the stems cut six or eight inches above the ground, and brought to mill where the juice is extracted. The juice may be extracted by several methods; it is generally effected by pressure, for which purpose machinery may be used similar to that used in the South for the pressure of the sugar-cane.

This consists of three horizontal rollers, two below and the third above. The cane is carried by an endless feeder, and passes downward between the upper roller and the first lower, then upward between the upper and second side-roller, thus being squeezed twice.

The cost of an outfit, for the manufacture of syrup from the plants of 40 acres, is about as follows:

1.2-horse vertical mill	$100
3 Evaporators	80
Brick, etc., for furnaces	30
Skimmers, etc	30
Total	$240

The stalks yield about 65 to 70 per cent. of juice. According to Dr. C. A. Goessmann (*Trans. N. Y. State Ag. Soc.* 1861), the fresh cane has the following composition:

Water	78.94
Sugar	9.25
Gum, salts and other soluble matter	0.97
Albuminous matter	1.40
Cerosine (wax) and insoluble earthy compounds	1.24
Cellulose	8.20
Total	100.00

The leaves contain of dry matter, 73 per cent., water, 27 per cent.; 100 pounds of fresh leaves are equivalent as food for cattle to 80 or 85 pounds of hay.

The albuminous compounds have the power of converting the cane sugar into glucose, which is uncrystallizable, and again to resolve the glucose into alcohol and carbonic anhydride.

The fresh juice is greenish-yellow, and exhibits a slight acid reaction. On standing, it deposits a voluminous, slimy sediment, consisting of torn cells, chlorophyl, wax, etc.

According to Goessmann, the composition of the juice is as follows:

Cane-sugar	9.950
Gum, albumen, etc	1.510
Acids	Not determined.
Ash	0.309
Water	88.231
Total	100.000

The juice is neutralized by slacked lime, and boiled in evaporators with constant skimming to a density of 18° Baume. It is then drawn off into a tank and allowed to deposit suspended impurities, and then introduced into a second evaporator and boiled down to from 35° to 40° B.

If the herbaceous flavor has not disappeared, a fresh addition of slacked lime is made and boiling repeated. The yield of syrup may vary from 60 to 180 gallons per acre.

[In our answer to *H. C. Smith*, on page 442, we said that his specimen of the gigantic Rhinoceros Beetle—Dynastes tityus—if sound, might bring five cents. We should have said that, in its damaged condition, it might bring that price. A perfect specimen is worth considerably more to a collector of beetles who has none.—EDS.]

Choice Roses.

C. J. S., Fowler, St. Lawrence Co., N. Y., asks, 1, whether there is a white Rose or one of any color that will stand the winter there and blossom monthly during the summer; 2, also which two varieties of Roses are the most desirable for winter-blooming.

ANS.—The only winter-blooming Rose that is hardy here is La France. Whether it would be equally hardy in St. Lawrence Co. is doubtful. The best white Rose, Madame Plantin, blooms only in June. A good Remontant, blooming two or three times in the season, is Madame Gustave Bonnett.

Miscellaneous.

T. G., Naples, N. Y., asks (1). Whether there are in this country any establishments for dying silk skeins, and if so, is the operation performed by hand or machine. (2). How will apple and pear tree cuttings have to be handled to insure success in making them strike root? (3). When should these cuttings be made? (4). Have they to be preserved in dry sand wholly, or partly? (5). Which variety of pear brings the highest market price.

ANS.—(1). It is the practice of some dyers in this country to dye silk skeins by hand and wring them out by machine. We would refer to Jacob New, 448 Broome St., of this city, for full particulars of his practice, and that of the large factories in Paterson, N. J.

(2). Make cuttings the same as from any other plants and strike them in sand.

(3). Now, if you have bottom heat—in the spring if you have not.

(4). The cuttings may be made in the spring.

(5). Bartlett, in its season.

G. P., Sturgeon Bay, Wis., asks (1.) Will Jerusalem Artichoke succeed as far north as Green Bay, Wis., latitude 45°? Our winters are usually very severe, but the ground is well covered with snow. We do not raise corn, except the earlier varieties. Our seasons are too short and cool. (2). Would the tubers of the Artichoke winter safely in the ground? (3). When and (4). how should they be planted? (5). Where can seed be obtained?

ANS.—(1). Yes. (2). Yes. (3). As early as the ground can be worked. (4). Plant in rows three or four feet apart and two feet apart in the row. (5). Of any prominent seedsmen of Chicago or New York.

G. N. P., Akron, O., asks how and at what season he can straighten the leader of a young Weeping Spruce which is bent over towards the ground.

ANS.—It ought to have been straightened in the summer of the first year of its growth. We know of no other way than by placing a stake behind it and, by a thick cord, drawing it up gradually. Or, the buds of this leader may be rubbed off so as to induce another to start, leaving the first to form a part of the body of the tree.

A. L. S., Queens Co., L. I., says:—"You have said that the Thwack Raspberry is among the promising new varieties. In a late RURAL you say that Mr. Ree denounces it as a weed. I should like to know which to believe.

ANS.—The RURAL of next week will have much to say respecting Raspberries. We shall tell all we know of the Thwack.

D. Foote, Geneva, Ohio, asks for the names of the best works on the care and culture of fruit both large and small.

ANS.—Barry's Fruit Garden, $2 50; Thomas' Amer. Fruit Culturist, $3.75. For small fruit, Fuller's, $1.50. All to be had at this office.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, SEPTEMBER 28TH:

"Farmers' Wife"—W. E. B.—P. H. R.—A. H. M.—J. C. N.—G. P.—E. L. T.—T. H. H.—B. P. M.—L. A. R. — D. E. S.—A. L. J.—E. W.— M. B.— K.—L. R., (Clinton) many thanks—M. B. B.—"Hector Bertram"—An Old Subscriber — G. H. F.—W. S., thanks for all such information. — B. C. D. — M. E. A.—"May Maple—L. G.—S. H. B.—N. W. B. K. D. A.—H. T. J.—E. P. R.—F. D. C.—G. M.

Everywhere.

RURAL SPECIAL REPORTS.

Alachua Co., Fla., Sept. 20, 1878.

WHY do not some of the well-to-do, yet consumptive, asthmatic, or bronchitic readers come to this section of Florida—South and West Alachua County—and engage in sheep-raising? Why go to the wilds of the far West, upon barren wastes lacking water and fuel, braving the wintry cold, the wolves and Indians, when here, only a few miles from a railroad, are extensive prairies covered with rich grasses, well watered, plenty of timber, cheap labor, and in a climate unapproachable in America or elsewhere. With but little expense, sheep may be kept here. They need no shelter, and, doubling in numbers frequently every second year, they soon become a source of revenue. One gentleman in twelve years raised 1,400 from the small beginning of ten, and that with very slight attention, and he told me that he has never seen the least sign of scab, rot or other disease.

Let us compare our climate, 29° north, and that of Australia, 28° South, and all will admit that Australia is the greatest sheep country of the world. I would refer the reader to Department of Agriculture's Report for 1864, pp. 204-223. In Australia we find: Price of land, $5 to $50 per acre. Cost of herder $200 per annum. Cost of rations, $130 per annum. Yield of wool, three to five pounds per sheep. Nine months of dry season, and range of temperature, 100° to 120°. The land an arid, treeless plain, brackish water, often only obtainable by expensive wells, costing over $1,000 each, and so little grass that "the piny barrens of the North are gardens in comparison," and "sheep are compelled to subsist for weeks and months on the remains of the parched up grass."

Land here rates from $1.25 to $2.50 per acre. Herders $150 per annum. Rations $50 per annum. Yield of wool, two shearings, four to ten pounds per sheep. Lands heavily timbered, well-watered, and permanent grasses. All the facts and reasons for sheep-raising so ably given by the Commissioner of Agriculture of Georgia, apply with equal or even greater force to Florida, as our climate is superior. If a permanent pasture is wanted, Bermuda-grass, at a trifling cost, will soon supply it, and so will peas. Florida clover and turnips make an agreeable change. If fat sheep are required, a few bushels of cotton-seed can be used. No expensive sheds, racks or barns are ever needed. We are only a few days from the metropolis, and freights by rail and water are quite low.

Medical and ailing readers are interested in the healthfulness of this region, and when I say that I can conceive of no place where medication is less needed, they may perhaps understand its salubrity. The winters are dry, the temperature from 45° to 70°. The summers, during June, July, August and September, have almost daily showers, and the day temperature ranges from 75° to 95°; night temperature from 65° to 75°, and there is a constant sea or Gulf breeze. The barometric pressure is peculiarly stable. There are often days or even weeks during which the variation will not reach 3-10 inch of mercury. This fact renders this region particularly suitable for asthmatic, bronchitic or hemorrhagic invalids. Let the invalid try the sheep industry on some of our beautiful prairies, living mostly out-of-doors, enjoying the 240 clear days of our year, inhaling the warm sea-breeze, and the pure air. These, together with sunlight, even temperature and air-pressure, will bring the boon of health and a certain income from his flock.

The wonder is, how sadly neglected this pleasant branch of industry has been.

JAS. C. NEAL, M. D.

MIDDLEBURY, Vt., Sept. 23, 1878.

ALTOGETHER we have had a singular season. First, the spring was cold and dry and backward; then, extremely wet, till the hay crop was assured; then, severe drought till the eclipse of the sun; then, rain and thunder almost incessantly, till within a short time back; and now, as delightfully dry weather as any one could ask for. Hay crop heavy; potatoes almost a failure, early ones rotting badly on moist land; corn a medium crop, and is ripening off nicely; wheat and oats pretty fair, especially winter wheat; fall feed never better. Apples plentiful; in short, we have much cause for gratitude for a bountiful harvest; and while many places have been devastated by severe storms, we have been spared—not even a hail-storm of any severity having visited us just here. Severe frost this morning—the first one here this fall. M. H. A.

DOOR CO., WIS., Sept. 21, 1878.

THE season has been unusually dry until recently. Wheat, oats and barley are not yielding more than half the usual crop. Potatoes are almost a failure. They are worth now 85c. in market. Corn was never better. Fruit is grown only on a small scale, but the crop of apples is good. Winter wheat was much better this season than usual, and in consequence, a larger breadth than usual is being sown. A very wet spring gave us a good hay crop, and recent rains give promise of an abundance of fall feed.

G. P.

ATHENS CO., Ohio, Sept. 24th, 1878.

THE hay crop in this county is good and has been saved in fine condition. Of peaches and plums there is an immense crop. Apples are falling and rotting badly. Wheat is above an average in quality. Corn will be a short crop, especially in hills. It was badly injured by the storm of the 12th and the previous night. At least six inches of water fell within twenty-four hours. DAVID PUTNAM.

ARGYLE, Washington Co., N. Y., Sept. 18.

I FEAR that the failure of the potato crop in this section will cause a scarcity of money during the coming winter, as farmers now are poorer hereabouts than I have ever seen them. The white worms have done more damage than the potato bug. J. J. McN.

NAPLES, Scott Co., Ill., Sept. 27, 1878.

OUR crops here were very good with the exception of corn and late potatoes. Wheat averaged about 25 bushels per acre and hay about two and a half to three tons. Whoat-sowing is progressing rapidly, some sown the first of this month, is already looking green. E. M.

Industrial Implements.

THE PACIFIC RURAL PRESS has been piqued by the inefficient buzz of a puny railroad journal, the Railway Age, that assumes to shed a glimmering light on the subject of plows. The Age says: "The largest plow in the world, singularly enough, is one just built, not for a "large farmer" but for the granger's *bete noir*, a railway company. The Chicago, Milwaukee and St. Paul has ordered it to use in ditching for railway construction in Iowa, and it is to be drawn neither by horse, ox nor mule, but by a locomotive. The dimensions of this steam-pulled ditcher are given as follows: The share weighs 382 pounds, the mold-board, 180 pounds; the beam, 900 pounds; the coulter and clasp, 180 pounds; the clevis, 60 pounds; the standard, 134 pounds. The sizes of the principal parts are: Beam, 16½ feet long, 10 inches wide, and 19 inches thick; land slide, 9 feet by 5x2 inches, standard, 40 inches by 7x1½ inches; mold board, 8 feet by 26 inches; share, 5½ feet by 12 inches. It will cut a furrow 37 inches wide.

And is handsomely taken up by the Press as follows:

"This puny, one locomotive implement is then put forth as "the largest plow in the world," and the agriculture of the country seems to have kneeled in silent acquiescence in the railroad's claim! We have waited in the hope that California prowess would not be needed to crush such a tiny upstart, but if the rest of the country holds its peace, California does not. The fact is that California agriculture can so far overlie this mooted monster in the plow line, that if the Iowa plow should fall into the California furrow, they would have to get a lantern to find it with.

A few years ago a plow was built on the Livermore ranch in Kern County, according to the design and under the supervision of Mr. W. H. Souther, which, if it should meet this Iowa plow, it would serve it as a locomotive might a handcar. It is called the "Great Western," and these are its weights and measurements: Beam, 18 feet long, 18 inches deep, and 10 inches thick; landslide, 17 feet long, 5 inches wide, and 1 and 1½ inches thick; standard, 3 feet high; mold board, 12 feet long, and 3 feet high. This plow weighs one ton, and is swung by a heavily ironed wooden arch, between two wheels eight feet in diameter, and with tires six inches wide. The attaching of the body of the plow to this arched axle of the wheels is accomplished by running two heavy fenders back from the arch, and fastening them to the back ends of the beam and mold board. A 14-foot lever runs from the mold board across the back end of the beam, and on this a man stands to adjust the plow as to depth of cut, etc. The "Great Western" cuts a furrow four feet wide, and three feet deep, and is drawn by 80 oxen, yoked to a wire cable one inch thick. This cable weighs 1,140 pounds.

There follows the plow an A shaped scraper, drawn by a chain from its apex by 80 mules. It is 12 feet wide, and 3 feet high at the open end. The sides are heavy iron. This, following the plow, shoves the furrow out 10 feet from the place where it is left by the plow.

With the 'Great Western' and its scraping follower, the Kern Island canal and many of its branches or sub-canals were built in one quarter the time in which it could be done with any other machine now in use, and for a much less sum of money.

Such are the facts in brief, for we have not aimed to describe the machinery in full. The lesson which our Chicago contemporary should draw, is the beauty of speaking with becoming modesty, and when an Iowa railroad constructs a little cultivator to scratch along the sides of its tracks, do not again call it "the largest plow in the world."

A WORKSHOP is as indispensable on a farm as a repair shop is to a railroad. Tools and farm machinery are constantly breaking and getting out of repair. How often do we hear the farmer say, as he hitches up his team to go to town, perhaps some five or ten miles distant, for some trifling job either to the carpenter or more likely to the blacksmith, "If I only had the tools, I could fix this myself in a few minutes."

The Empire Portable Forge Co., Cohoes, N.Y., has perfected a forge designed especially for farm use. It is guaranteed to weld three-inch iron, and as it has no belts or bellows, and is made of iron and brass entirely, it must be very durable. This company now offers the farmer, at small cost, just the "kit of tools" he most needs to keep up his repairs. The illustrated catalogue is sent free to applicants.

THE Towanda Eureka Mower Co. has sold to Knapp, Stout & Co., Menominee, Wis., thirty-one of their six-foot Eureka mowers for use on their farm. This firm is one of the largest farmers of the north-west, and this sale is a solid recognition of the merits of the Eureka, and a pleasant introduction to north-western territory.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Address of the Farmer's Alliance..... 630
Hints by the Roadside—Hough Handel..... 630
Raising New Products..... 630
Better Cultivation—Major..... 630
Irrigation..... 630
Weeds—G. G..... 631
Papyrus—(Illustrated)..... 631
Seeds, Further Trial of in 1878—Prof. W. J. Beal. 631
Seeds—Andrew H. Ward..... 631
Oxalis, The—W. H. White..... 632
Olla Podrida Letter—Mary Wager-Fisher..... 632
Varying the Appearance of the Flower Gardens—W. C. L. Drew..... 632
Everyday Notes—Samuel Parsons..... 632
American Arbor-vitæ—George Pinney..... 632
A Note from the Rural Grounds..... 633
Sugar-Making, A New Process for..... 633
Tea Culture..... 633
What Others Say..... 633
Maladies of Stock—D. E. Salmon, D. V. M..... 633
Queens Co. (L. I.) Fair..... 634
Montreal Horticultural Show—T. H. Hoskins, M. D..... 634
Western N. Y. Fair—H. F. J..... 634
Profit Combined with Amusement—An Old Hand 634
Grape Leaves—No. 1—W. C. Bellamy..... 634
Industrial Implements..... 635

Answers to Correspondents:

Sorghum Sugar Making..... 635
Choice Roses..... 635
Miscellaneous..... 635
Communications Received..... 635

Everywhere:

Alachua Co., Fla.—J. C. Neal, M. D..... 635
Middlebury, Vt.—M. H. A..... 635
Door Co., Wis.—G. P..... 635
Athens Co., Ohio—David Putnam..... 635
Argyle, N. Y.—J. J. McN..... 635
Naples, Ill.—E. M..... 635

EDITORIAL PAGE:

After Culture of Wheat..... 636
Future of Cattle Feeding..... 636
Saving by Handfuls..... 636
Beauty of Hebron..... 636
Protection against Mice..... 636
Brevities..... 636

Domestic Economy:

Some Dining-Table Talk—Mary Wager-Fisher, 640
Choice Tomatoes and Fancy Beets—Annie L. Jack..... 640
Domestic Recipes..... 640

LITERARY:

Poetry..... 637, 639, 642
Communists and Capitalists—Octave Thanet..... 637
Suttee..... 638
Tallyrand..... 638
Magazine Notes..... 638
Bric-a-Brac..... 639
Talks With Children—M. J. F..... 639
Dress Reform and Tomato Catsup—H. B. N..... 639
Must Wives Confine Themselves to Housekeeping?—Helen Hunter..... 639
Some Objections to a "Letter to Young Mothers"—Sallie Gamp..... 639
Protest against Dish-Washing—A Sufferer..... 639
An Educational Suggestion—Julia B. A..... 639
Wanted to Exchange—M. M. B..... 639

Reading for the Young:

Small Courtesies at Home—Margaret B. Harvey.. 642
The Puzzler..... 642

Sabbath Reading:

The Trial of Jesus..... 642
News of the Week—Herman..... 640
Markets..... 641
Personals..... 643
Wit and Humor..... 644
Advertisements..... 641, 643, 644

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

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RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY OCT. 5, 1878.

NEXT week's RURAL will give much space to the Raspberry; in a week or so thereafter we shall give special consideration to hardy Grapes: then in a week or so to the Apple, Pear etc. Original engravings will be presented in each issue. We mention it so that any of our readers may communicate the results of their experience, if so disposed. We are also preparing several articles upon Millet in general and upon "Pearl Millet" in particular, which we believe will prove, as forage plants, of great value to the farmer.

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

AFTER-CULTURE OF WHEAT.

The practice of using the drill and the cultivator in growing the wheat crop, is evidently and rapidly winning the approval of practical men, as it may with good reason, for it has all the previous presumptions clearly in its favor, as well as the analogy of other crops, and is also sustained by the conclusions of science, and the testimony of advanced farmers. There is so much to be said in favor of this plan, that every wheat grower in the country ought at least to give it a fair trial.

It is recommended not merely by the saving of seed, and the uniform depth of planting secured by the drill, (which is a great security against freezing out,) but equally by the trifling cost of cultivation, as compared with the result, and by the surprising increase of yield, when the process is rightly managed.

In all the trials of this plan that have come to our knowledge, we have heard of but one that did not succeed, and in that case a better result is confidently expected at the next trial. In truth, the only surprise is, that a mode of culture so evidently sound, and so decidedly profitable as this has thus far proved to be, should have been so long neglected. If the extermination of weeds, and the development of latent fertility by pulverizing and aerating the soil are found, as a general rule, both useful and necessary in promoting the yield of crops, then so much the more are they needed in the case of this cereal, not only on account of its vast importance, but from the fact of its serious decline in recent years over large areas of country.

Here then we have, within easy reach, one of the most reliable means of reviving and restoring to its ancient affluence, a crop which though of great value and national importance, is, in some sections of the country, gradually disappearing from our husbandry, in consequence of inexcusable neglect. A process that is found to increase the yield of a great national food staple from fifty to one hundred per cent, at a cost of five or six dollars per acre, is not a matter to be overlooked by intelligent farmers, and there is no reason why this method of treatment for wheat, should not be universally adopted before the close of another decade, if not even at the beginning. This method is largely practiced in England, and their average yearly product is more than double our own. In this country some enterprising farmers have already reached results quite equal to those of our English cousins, and which, when compared with our general average, are simply amazing, and quite sufficient to prove the necessity of abandoning the old method.

Mr. J. M. Heiges, of York County, Pa., who was a successful wheat grower, even by the ordinary method, found by repeated trials that the yield could be increased by hoeing from twenty-three bushels per acre, to fifty-five bushels, and in one case, by judicious manuring, he reached a product of seventy-one bushels.

L. W. Groff, of Lancaster Co., Pa., has lately given much study and attention to this subject. He finds that a drill of six feet between the wheels, and with four tubes, instead of eight, gives space sufficient for the horse-hoe in cultivating, and has produced by this method sixty-one bushels per acre, which is more than double the normal yield of his land.

Mr. A. E. Blunt, of the Tennessee Agricultural Station, finds sixteen inches between the drills the best distance for after-culture, and obtained in 1877 (with a top dressing of salt and ashes,) a yield of sixty-seven bushels per acre. Though it is true that these figures are exceptional, yet they can nearly always be approximated by intelligent farmers, and the contrast they present to the current average yield is something more than remarkable, it is positively startling.

May we not then confidently expect to see this mode of culture very promptly and generally adopted by our farmers? If it is not, the fault and the loss will be their own. If, on the other hand, this reformed culture should be at once accepted as the general rule of our practice, the effect would be to nearly double the capacity of production for every acre of this cereal in the country, and the wheat crop of the new decade, now near at hand, would probably show a yield of over seven hundred million bushels.

THE FUTURE OF CATTLE FEEDING.

IT takes time to perfect any industry. The progress made in the manufacture of cotton prints has been very remarkable during the last twenty years in this country. We are able now to compete with the English print manufacturer at his own door. The difference between the cost and quality of our lean steers of thirty years ago and the average of those we now send to market, is nearly as great as between our prints then and now. Then little attention was paid to breeding, four or more years were taken to mature steers for market, and their weight only averaged about 1,100 pounds. Now a large class of the cattle sent to market are Short-horn grades, about three years is their average age, and from twelve to fourteen hundred pounds their average weight. Here is an increase of 25 per cent. in weight and a saving of 25 per cent. in time of feeding. This amounts to a reduction of fifty per cent. in the amount of food required to grow and fatten a steer. This is a long stride to make in thirty years, and we expect the improvement to be still greater in the next thirty.

As the fertility of the soil in the older States lost its virgin freshness, cattle-feeding receded to the new lands of the West where corn grew almost spontaneously, and cattle were produced in millions. But these western cattle were grown under most unfavorable circumstances during winter, exposed to all the inclemency of the weather, and consequently they made much slower progress than if the corn had been fed under shelter. Yet the improved blood—mostly from Short-horn crosses,—the fine summer pasture and the abundance of corn in cold weather, made a very rapid improvement. The calves had also a long period of suckling—milk there being of little value—which assisted much in shortening the period of maturity. The finest class of cattle coming from the West to the Eastern markets stimulated a desire for better feeding in the older States, and this is now gradually changing the system of grain raising in those States into a mixed husbandry, with a great increase in cattle raising. They are just beginning fairly to understand that the more cattle they raise the greater their capacity for grain and other crops. The Eastern and Middle States, thirty years ago, seemed to regard cattle and grain raising as antagonistic, instead of as complimentary to each other.

But this view of the matter is now rapidly changing, and the time is probably not far distant when New York will carry as many cattle to the hundred cultivated acres as England does now. This State now carries about 2,200,000 cattle of all kinds, dairy cows being about two-thirds of this number, whilst the United Kingdom of Great Britain and Ireland is credited, in 1877, with only 5,844,141 cattle of all kinds. The cattle disease has reduced the number nearly 2,000,000 within the last six or eight years. The farmers of the Eastern and Middle States have, to some extent, purchased cattle raised at the West, and sometimes from Kansas and Texas, thin animals two and one-half to three years old, denominated "stockers," and fattened them on grass and grain. But this system has not proved very profitable; for the difficulty that confronts the feeder is the general unthrifty condition of these steers. They have, in a great proportion of cases, been kept in such a state of suspended growth as to lessen the normal capacity of the digestive system and the powers of assimilation. It requires from one to three months before these animals enter upon a stage of thrifty growth, and this time and the food consumed are practically sacrificed, as compared with animals that have been kept in a thrifty condition.

The most experienced feeders prefer, therefore, to purchase only those animals whose digestive organs are all in an active state, and capable of assimilating large amounts of food. Such animals, having been constantly growing since calfhood, will continue this growth and rapidly increase in weight and quality under good feeding. The difficulty of finding such feeding steers in market has led the best farmers to raise their own stock, having thus the control of the animal from calfhood till ripened for market. Here food may be turned to the best account, as the intelligent feeder selects good blood in his breeding male animals, such as have been bred to early maturity, and he is able to grow steers of 1300 to 1500 pounds, when 30 months old. This grade of stock will sell for $80 to $90 per head on any average of ten years. The future of cattle feeding will show a constant increase in the number and quality of beef cattle raised in all the older States, as well as in the great West.

SAVING BY HANDFULS.

ONE handful of hay is not much, nor, for the matter of that, are twenty handfuls; the saving or wasting of so much would neither make nor break a man. But with twenty head of cattle to feed twice or thrice a day, the saving of a handful apiece, every time, would amount to something before the pastures are green again upon our frost-bitten hills. Do you ever think of it? We are not hinting at stinting the cattle. But how many of us allow animals to waste a handful each at every feed, for want of a little attention to feeding arrangements? How many head of stock on our northern farms require a handful more of hay at every feed to keep up the animal heat, than they would require if their stables had all the cracks stopped, that let in the cold winds of winter?

A handful of manure is but a trifle; yet the addition of a single handful in a hill of corn may make the difference between long, full ears and stinted nubbins, when the harvest comes. How many handfuls of manure are going to waste every day about our yards and buildings? Could you not save half a bushel a day, by being careful? And the liquid manure—is there not enough lost every day to make a good many long ears where we shall probably find only nubbins next fall?

Handfuls of hay; handfuls of manure!—these are small matters, say you? Yet upon just such small matters depends many a man's success or failure in life. Here is one man that attends to them carefully, and at the end of twenty or thirty years he has a competency for old age; another neglects them as beneath his notice, and is always behind hand; he lives and dies short in pocket and short in comfort. We do not preach niggardliness; it is by saving when we may that we prepare ourselves to be liberal when we will. Save the handfuls!

Beauty of Hebron.—The Weekly Tribune says that the RURAL NEW-YORKER has dropped into prophecy in a friendly way to the extent of venturing the opinion that the Beauty of Hebron potato, planted side by side with Early Rose, will prove more prolific, at least ten days earlier and be found of better quality. We did so prophesy and we are as confident as one well can be in such matters. But to prove the correctness of our faith and enable our subscribers to judge for themselves, we propose to include this variety in our free seed distribution, the particulars of which as has been before stated, we shall announce some time in November.

Protection against Mice.—Many fine fruit-trees are destroyed in the winter by mice, perhaps just as they are coming to yield something to repay years of care. Let us tell our friends that at the cost of one cent a tree they may rest easy about the mice every night in the winter. Cut common plasterer's laths just long enough to reach the lowest limb, and tie around each tree enough to protect the trunk. Common cotton twine is sufficient; one tie near the top and one near the bottom.

BREVITIES.

CLEAN your cider barrels.

RURAL Grounds, Sept. 28. First frost—a light one.

ATTEND to your poultry houses before cold weather.

OUR readers may look for a raspberry paper next week.

THE FROST OF MAY 14.—Dr. Hexamer tells us that this has been a hard year for him. He lost half of his Strawberries, nearly all of his Raspberries, nearly all of his Grapes, and half of his Apples, all owing to the frost of May 14.

WE publish by request of the distinguished Secretary an address of the Farmers' Alliance, to the farmers of New York. The RURAL NEW-YORKER is no more interested in the farmers of N. Y. State than in those of any other. We hope all may read it with profit.

ICE HOUSES.—We need not again give detailed descriptions of how to build ice-houses. Those intending to build them this fall need only to bear in mind, 1, Perfect drainage; 2, Ample ventilation; 3, A good non-conducting substance between the ice and the air. An ice-house costing $50, that meets the above requirements, will keep ice as long as if ten times that amount were expended.

MUCH has been said of late years by quasi-scientists about the dire impoverishment of land caused by the waste of sewage, but among practical experimenters there has been a good deal of doubt as to the value of this species of fertilizer. Dr. Voelcker, in a recent publication says that in his opinion the most economical treatment of sewage, is to carry it bodily far enough to the open sea to destroy any chance of its ever being brought back to land by the tide.

THE INTERNATIONAL DAIRY FAIR.—A meeting of the Executive Committee of the International Dairy Fair, was lately held in this city. From the treasurer's report it appears, that the total subscriptions thus far amount to $2,800. Hitherto no single subscription had been received for less than $100, and it was proposed henceforth, to start a list of smaller donations. Arrangements have been made with the proprietors of Gilmore's Garden here, for leasing that building on favorable terms, and it is intended to open the Fair on December the 4th, the earliest date at which the place could be hired. It is proposed to charge two dollars for every entry made, and it is expected that there will be at least 1,000 of them.

THE Vermont Watchman and State Journal has for its agricultural editor our occasional contributor, Dr. T. H. Hoskins. We know him only as the agricultural and horticultural world have long known him—through his able and versatile pen. We take occasion to speak of him as an exception to the rule of which Dr. Sturtevant complains, viz., that prominent agriculturists are too chary of their praise of others who are laboring in the same field. Dr. Sturtevant, who, generously consistent with his complaint, seems to derive much pleasure in recognizing worthy efforts wherever he sees them, bestows very emphatic words of praise in the September number of his Scientific Farmer, upon an agricultural contemporary. Dr. Hoskins quotes this in *his* journal, and adds: "But the Scientific Farmer can afford to be appreciative of the work of others, having so much merit of its own. We are glad that it, too, finds its field of usefulness widening, through the appreciation it receives from the more studious and progressive farmers of the nation."

Literary Miscellany.

THE STORY OF THE TILES.

Before a quaint old fire-place
Full fifty years ago,
Dear grandma and I, a child,
With locks of gold and snow,
Looked, our two heads together,—
She sitting in her chair
And I erect beside her,—
A comfortable pair.
For while within the fire-light our eyes were lit with smiles,
She told her little grandson the story of the tiles.

Here was a knight in armor,
A brave old lord was he!
He won full toilsome battles
In many a far countree;
And here, his lute, with ribbons
Trimmed bravely, fond and true,
Beneath his lady's casement,
Sang a troubadour in blue.
Now with pure fact or fancy dear grandma time beguiles,
Now fairy lore she weaveth in her stories of the tiles.

The stork with leg uplifted;
The windmill on the plain;
The sun with rays of azure;
The sheaf of ripened grain,
Were each a theme for story,
For song or comic verse,
And merrily and often
Did grandma these rehearse!
For quips and quirks were grandma's, and cranks and wanton wiles,
When once she got a-telling her stories of the tiles.

The fire-place stands unshaken;
The milkmaid trips so gay,
To meet the fat old beadle,
Who always looks her way;
The frog who went a-wooing
Still peeps out at the crane,
But grandma with her stories
Will never come again.
From that old English fire-place I've wandered many miles,
But still my heart remembers the stories of the tiles.

Like that old knight in armor
Brave must I be, she said,
And courteous as the singer
To every wife and maid;
Industrious and cheerful
As the milkmaid on the lea,
And prayerful and religious
As the beadle ought to be.
Alas! such spotless record how many a fault defiles!
I've proved a sorry hero for her stories of the tiles.

But still when night is falling,
And children's voices call
Across the pleasant play-room
And down the echoing hall,
I find myself while waiting
To catch them in my arms,
Thinking the stories over
With all their varied charms;
And then, when grouped around me, their lips are wreathed with smiles,
I tell their great-grandmother's sweet stories of the tiles.

[*Golden Age.*

COMMUNISTS AND CAPITALISTS.

A SKETCH FROM LIFE.

OCTAVE THANET.

The Countess von Arno was Mr. Seleigman's confidential clerk. Not that M—— smiled over any such paradox: the countess called herself simply Mrs. von Arno.

M—— is a picturesque town on the Mississippi, devoted in general to the manufacture of agricultural implements. The largest plow-factory is Seleigman's: he does business all over the world. A clerk who wrote French, German and Italian fluently was a godsend. This clerk, moreover, had an eminently concise and effective style, and displayed a business capacity which the old German admired immensely. As much because of her usefulness as the modest sum she was able to invest in the business, he offered her a small share in it four years after she first came to M——. She had come to M—— because Mrs. Greymer lived there. Therese Greymer had known the countess from her school-days. When Therese's husband died she came back to her father's house, but spent her summers in Germany. Then old Mr. Dare died suddenly, leaving Therese with her little brother to be cared for, and only a few thousand dollars in the world. About this time the countess separated from her husband. "So I am poor," said she, "but it will go hard if I can't take care of you, Therese." Thus she became Mr. Seleigman's clerk. M—— forgave her even her undoubted success in making money, on account of Mrs. Greymer. It had watched Therese grow from a slim girl, with black braids hanging down her white neck as she sat in the "minister's pew" of the old brick church, into a beautiful woman in a widow's bonnet. Therese went now every Sunday to the same church where her father used to preach. The countess accompanied her most decorously.

The countess had a day-dream: the dreams which most women have had long ago had been rudely broken for her, and the hopes which she cherished now had little romance about them. She knew her own powers and how necessary she was to Seleigman: some day she saw the firm becoming Seleigman & Von Arno, the business widening, and the plows, with the yellow eagle on them, in every great city of Europe. "Then," said the countess to herself, standing one March morning, four years after she had first come to M——, by the little dining-room window —" then we can perhaps persuade the workmen to buy stock in the concern and have a few gleams of sense about profits and wages."

She lifted one arm above her head and rested her cheek against it. She was of the goddess type, tall, fair-faced and stately, with thick, pale gold hair, and brown lashes lifted in level lines from steady, deep-gray eyes, "Pretty" seemed too small a word for such a woman yet "beautiful" conveys a hint of tenderness; and Mrs. von Arno's face—it might be because of those steady eyes—was rather a hard face, notwithstanding the soft pink and white of her skin, and even the dimples that dented her cheek when she smiled.

Now she was smiling. The air was heavy with the damp chill of early spring; and as the countess absently surveyed a gravel-walk bordered by limp brown grasses and a line of trees dripping last night's frost through the fog, she saw a woman's figure emerge from the shadows and come slowly up the walk. She was poorly dressed, and walked to the kitchen-door, where the countess could see her carefully wipe her feet before rapping.

"That must be Bailey's wife," she thought; "I saw her waiting for him yesterday when he came round to the shops for work. William, my friend, you are a nuisance."

With this comment she went to the kitchen. Lettice, the maid-of-all-work, was frying cakes in solitude. "Mrs. Greymer had taken Mrs. Bailey into the library," she told the countess with significant inflections.

The latter went to the library. It was a tiny, red-frescoed room fitted up in black-walnut. There were plants in the bay-window: Mrs. Greymer stood among them, her soft gray wrapper falling in straight and ample folds about her slender figure. Her face was turned toward the countess; a loosened lock of black hair brushed the blue vein on her cheek; she held some lilies-of-the-valley in her hand, and the gold of her wedding-ring shone against the dark green leaves.

"She looks like one of Fra Angelico's saints," thought the countess: "the crimson lights are good, too."

She stood unnoticed in the doorway, leisurely admiring the picture. Mrs. Bailey sat in the writing-chair on her right. Once, probably, she had been a pretty woman, and she still had abundant wavy brown hair and large dark-blue eyes with curling lashes; but she was too thin and faded and narrow-chested for any prettiness now. Her calico gown was unstarched, though scrupulously clean: she wore a thin blue-and-white summer shawl, and her old straw bonnet was trimmed with a narrow blue ribbon pieced in two places. Her voice was slightly monotonous, but low-keyed; as she spoke her hands clasped and unclasped each other. The veins stood out and the knuckles were enlarged, but they were rather white than otherwise.

She went on with her story: "The children are so good, Mrs. Greymer; but six of them, and me not over strong—makes it hard. We hain't had anything but corn meal in the house all this week, and the second-hand woman says our things ain't worth the carting. The children have got so shabby they hate to go to school, and the boys laugh at Willie 'cause his hat's his pa's old one and ain't got no brim, though I bound it with the best of the old braid, for I thought maybe they'd think it was a cap. And the worst was this morning, when there was nothin' but just mush: we hadn't even 'lasses, and the children cried. Oh, I didn't go to tell you all this: you know I ain't a beggar. I've tried to live decent. Oh dear! oh dear!" She tried to wipe away the tears which were running down her thin cheeks with the tips of her thin fingers, but they came too fast. Mechanically, she put her hand in her pocket, only to take it out empty.

Mrs. Greymer slipped her own dainty handkerchief, which the countess had embroidered, into the other's hand. "You ought to have come to me before, Martha," she said reproachfully—"such an old friend as I am!"

"'Tain't easy to have them as has known you when you lived like other folks see you without even a handkerchief to cry on," said Mrs. Bailey. "If I'd known where to turn for a loaf of bread, I'd not ha' come now; but I can't see my children starve. And I ain't come to beg now. All we want is honest work. William has been everywhere since they sent him away from Dorsey's just because the men talked about striking, though they didn't strike. He's been to all the machine shops, but they won't take him; they say he has too long a tongue for them, though he's as sober and steady a man as lives, and there ain't a better workman in M——, or D—— either. William is willing to do anything: he tried to get work on the streets, but the street commissioner said he'd more men he'd employed for years asking for work than he knew what to do with. And I thought—I thought, Mrs. Greymer, if you would only speak to Mrs. von Arno—"

"Good morning, Mrs. Bailey," said the countess, advancing. She had a musical voice, clear and full, with a vibrating quality like the notes of a violin—a very pleasant voice to hear, yet it hardly seemed reassuring to the visitor. Unconsciously, she sat up straighter in her chair, her nervous fingers plaiting the fringe of her shawl.

"I heard you mention my name," the countess continued: "is there anything you wish of me?"

Therese came to Mrs Bailey's assistance: "Her husband is out of work: can't you do something with Mr. Seleigman, Helen? Bally is a good workman."

"He is indeed, ma'am," added Bailey's wife eagerly, "and as sober and faithful to his work; he never slights one bit."

"I don't doubt it," said the countess gravely; "but, Mrs Bally, if we were to take your husband on, and the union were to order a strike, even though he were perfectly satisfied with his own wages, would'nt he strike himself, and do all he could to make the others strike?" Mrs. Bailey was silent.

"A strike might cost us thousands of dollars. Naturally, we don't want to risk one; so we have no union-men. If Bailey will leave the union he may go to hammering ploughshares for us to morrow, and earn with his skill, twenty dollars a week."

Mrs. Bailey's face worked. "'Tain't no use ma'am," she said desperately: "he won't go back on his principles. He says it's the cause of Labor and he'll stick to it till he dies. You can't blame him, ma'am, for doing what he thinks is right."

"Perhaps not. But you see that it is impossible for us to employ your husband. Isn't there something I can do for you yourself, though? Mrs. Greymer tells me you sew very neatly."

"Yes, I sew," said Mrs. Bailey in a dull tone. "but I'd be obliged to you, ma'am, if you'd give me the work soon; I've a machine now, and I'll likely not have it next week. There's ten dollars due on it, and the agent says he'll have to take it back. I've paid fifty dollars on it, but this month and last times was so hard I could'nt pay."

The countess put a ten-dollar bill in her hand. "Let me lend you this, then," she said, unheeding the half shrinking of Mrs. Bailey's face and attitude; and then she avoided all thanks by answering Lettice's summons at the door.

"Poor little woman!" she said to Mrs. Greymer at breakfast—"she did'nt half like to take it. She looked nearly starved too, though she ate so little breakfast. How did you manage to persuade her to take that bundle?"

"She is a very brave little woman, Helen. I should like to tell you about her," said Mrs. Greymer.

"Until a quarter of eight my time is yours, and my sympathy, as usual, is boundless."

Mrs. Greymer smiled slightly. "I have known her for a great many years," she said, disregarding the countess's last speech: "she went to school with me, in fact. She was such a pretty girl then! Somehow, she took a fancy to me, and used to help me with my Practical Arithmetic—"

"So called because it is written in the most unpractical and incomprehensible style; yes, I know it," interrupted the countess.

"Martha was much brighter than I at it, anyhow, and used to do my examples. I remember I cried when her people moved to Chicago and she left school. I did'nt see her for almost ten years; then I met her accidentally on Randolph street in Chicago. She knew me, and insisted on my going out with her to see her home. It was in the suburbs, and was a very pretty, tidy little place, with a garden in front, where Martha raised vegetables, and a little plot for flowers. She was so proud of it all and of her two pretty babies, and showed me her chickens and her furniture and a picture of her husband. They had bought the house, and were to pay for it in six years, but William was getting high wages, and she had no fears. Poor Martha!"

"Their Arcadia did'nt last?"

"No. William got interested in trades-union; there was a strike, and he was very prominent. He was out of work a long time, and Martha supported the family by taking in sewing and selling the vegetables. Then her third child was born, and she was sick for a long time afterward; she had been working too hard, poor thing! His old employers took William on with the rest of the men when the strike ended, but very soon found a pretext for discharging him; and in short they used up all their little savings, and the house went. William thought he had been ill-used, and became more violent in his opinions."

"A Communist, is'nt he?"

"I believe so. Martha with her three children could'nt go out to work, but she is a model housekeeper, and she opened a little laundry with the money she got from the sale of some of their furniture. William got work, but lost it again, but Martha managed in a humble way to support the family until William had an offer to come here; so they sold out the laundry to get money to move."

"Very idiotic of them,"

"After they came here they at first lived on Front street, which is near the river, and Martha caught the chills and fever. William soon lost his place, and they moved across the river to D——. He became known as a speaker and things have been going from bad to worse; the children have come fast, and Martha has never really recovered from her fever; and they have had simply an awfully hard time. I have'nt seen Martha for three months, and have tried in vain to find out where she lived. Poor Martha! she has never complained, but it has been a hard life for her."

"Yes, a hard life," repeated the countess, rising and putting on her jacket; "but it seems to me she has chiefly her own husband to thank for it. And six children! I have my opinion of Mr. William Bailey."

"You are hardly just to Bailey, Helen; he has sacrificed his own interests to his principles. He is as honest—as honest as the Christian martyrs, though he *is* an infidel."

"Helen, you and the people like you laugh at Communism and the complaints of the laboring classes, but it's like Samson, blind though he is, the communist will one day, unless we do something beside laugh, pull the pillars down on his head—and on ours."

"He will *try*," said the countess; "if we are wise, we shall be ready and shoot him dead." She kissed Mrs. Greymer smilingly, and went away. Her friend, watching her from the window, saw her stop to pat a great dog on the head and give a little boy a nickel piece.

One Sunday afternoon, two weeks later, the two friends crossed the bridge to D——to visit the Baileys. When they reached the end of the bridge they paused a moment to rest.

The countess drew a long breath; she had a keen feeling for beauty. "Yes, it is a lovely place," she said. "The hills are not high enough but the river makes amends for everything. But what are those hideous shanties, Therese?"

Are they not hideous?" said Mrs. Greymer. "They are all pine, and it gets such an ugly dirt-black when it isn't painted. The glass is broken out of the windows and the shingles have peeled off the roofs. When it rains the water drips through. In spring, when the river rises, it comes up to their very doors; one spring it came in. It is not a nice place to live in."

"Not exactly: still, I suppose people do live there,"

"Yes, the Baileys live there. You see, the rent is low."

The countess lifted her eyebrows and followed Mrs. Greymer without answering. Some sulky-looking men were smoking pipes on the door-steps, and a few women, whose only Sunday adorning seemed to have been plastering their hair down over their cheeks with a great deal of water, gossiped at the corner. Half-a-dozen children were playing on the river-bank.

"They fall in every little while," Therese explained, "they are so small, and most of the mothers here go out washing. This is the Bailey's."

William Bailey answered the knock. He was a tall man, who carried his large frame with a kind of muscular ease. He had a square, gray-whiskered face with firm jaws and mild light-blue eyes. The hair being worn away from his forehead made it seem higher than it really was. He wore his working clothes and a pair of very old boots cut down into slippers. The only stocking he had was in his hand, and he appeared to have been darning it. Close behind him came his wife, holding the baby. The bright look of recognition on her face at the sight of Mrs. Greymer faded when she perceived the countess. Rather stiffly she invited them to enter.

The room was small and most meanly furnished, but it was clean. The walls were dingy beyond the power of soap and water to change, but the floor had been scrubbed, and what glass there was in the windows had been washed. There were occasional holes in the ceiling and walls where the plaster had given way: out of one of these peered the pointed nose and gleaming eyes of a rat. Judging from sundry noises she heard, the countess concluded there were many of these animals under the house, though what they found to live on was a puzzle; but they ate a little of the children now and then, and perhaps the hope of more sustained them. A pale little boy was lying on a mattress in the corner covered with a faded blue-and-white shawl.

Therese had mysteriously managed to dispose of the basket she had brought before she went up to him and kissed him, saying, "I am sorry to see Willie is so sick."

"Yes," said Bailey, smiling bitterly. "The doctor says he needs dry air and exercise: it's damp here."

"Tommy More has promised to lend us his cart, and Susie will take him on the island," Mrs. Bailey said hastily; "it's real country there."

"But you have to have a pass," answered Bailey in a low tone.

"Anyone can get a pass," said the countess, "but if you prefer I will ask the colonel to-day, and he will send you one to-morrow."

For the first time Bailey looked the countess in the face: his brows contracted, he opened his lips to speak.

"Oh, papa," cried the boy in a weak voice trembling with eagerness, "the island is splendid! Tommy's father works there, and they's cannon and a foundry and a live eagle!"

"Yes, Willie dear," said his father as he laid his brown hand gently on the boy's curls. He inclined his head toward the countess. "I'll thank you," he said gravely.

The countess picked up a pamphlet from the table, more to break the uncomfortable pause which followed than for any other reason. "Do you like this?" she said, hardly reading the title.

"I believe it," said Bailey; "I am a Communist myself." He drew himself up to his full hight as he spoke; there was a certain suppressed defiance in his attitude and expression.

"Are you?" said the countess. "Why?"

"Why?" cried Bailey. "Look at me! I'm a strong man, and willing to do any kind of work. I've worked hard for sixteen years; I've been sober and steady and saving. Look what all that work and saving has brought me! This is a nice place for a decent man and his family to live in, ain't it? Them walls ain't clean? No, because scrubbing can't make 'em. The grime's in the plaster; yes, and worse than grime—vermin and disease sech as 'tain't right for me to mention even to ladies like you, but it's right enough for sech as us to live in. Yes, by G——! to *die* in!" He was a man who spoke habitually in a low voice, and it had not grown louder, but the veins on his forehead swelled and his eyes began to glow.

"It is hard, truly," said the countess. "Whose fault is it?"

"Whose fault?" Bailey repeated her words vehemently, yet with something of bewilderment. "Society's fault, which grinds a poor man to powder, so as to make a rich man richer. But the people won't stand this sort of thing for ever."

"You would have a general division of property, then?"

"Indirectly, yes. Power must be taken from bloated corporations and given to the people; the railroads must be taken by government; the accumulation of capital over a limited amount must be forbidden; men must work for Humanity, and not for their selfish interests."

"Do you know any men who are working so?"

"I know a few."

"Mostly workingmen?"

"All workingmen."

"Don't you think a general division of property would be for *their* selfish interests?"

"I don't call it selfish to ask for just a decent living."

"I fancy the chiefs of your party would demand a great deal more than a decent living. Mr. Bailey, the rights of property rest on just this fact in human nature: A man will work better for himself than he will for somebody else. And you can't get him to work unless he is guaranteed the

fruits of his labor. Capital is brain, and Labor is muscle, but the brain has as much to do with the creation of wealth as muscle; more, for it can invent machines and do without muscle, while muscle cannot do without brain. You can't alter human nature, Mr. Bailey. If you had a Commune, every man would be for himself there as he is here; the weak would have less protection than even now, for all the restraints of morality, which are bound up inseperably with rights of property, would have been thrown aside. Marx and Lasalles and Bradlaugh, clever as they are, can't prevent the survival of the fittest. You knock your head against a stone wall, Mr. Bailey, when you fight society. You have been knocking it all your life, and now you are angry because your head is hurt. If you had never tried to strip other men of their earnings because you fancied you ought to have more, as skillful a blacksmith as you would have saved money and been a capitalist himself. Supposing you give it up? Our firm will give you a chance to make ploughshares and earn twenty dollars a week if you will only promise not to to strike us in return the first chance you get."

The workingman had listened with a curling lip. "Do you mean that for an offer?" he said, in a smothered voice.

"I mean it for an offer, certainly."

"Oh, William!" cried his wife, turning appealing eyes up to his face.

He grew suddenly white, and brought his clenched hand heavily down on the table. The dishes rattled with the jar, and the baby, scared at the noise, began to scream. "Then," said Bailey, "you may just understand that a man ain't always a sneak if he *is* poor; and you can be glad you ain't a man that's tempting me to turn traitor."

"I am sure my friend didn't mean to hurt your feelings," Mrs. Greymer explained quickly, giving the countess that expressive side-glance which much more plainly than words says, "Now you *have* done it!" Mrs. Bailey was walking up and down soothing the baby: the little boy looked on open-eyed.

"I am sorry if I have said anything which has seemed like an insult," said the countess: "I certainly didn't intend one. Perhaps after you have thought it all over you will feel differently. You know where to find me. Good-evening."

She held out her hand, which Bailey did not seem to see, smiled on the little boy and went out, leaving Mrs. Greymer behind.

A little girl with pretty brown curls and deep-blue eyes was making sand-caves on the shore. The countess spoke to her in passing, and left her staring at her two hands, which were full of silver coin. At the bridge the countess paused to wait for her friend. She saw her come out, attended by Mrs. Bailey: she saw Mrs. Bailey watch her, saw the little girl give her mother the money, and then saw the woman, still carrying her baby in her arms, walk slowly down the river-bank to where a boat lay keel uppermost like a great black arrowhead on the sand. Here she sat down, and, clasping the child closer, hid her face in its white hair.

On Monday, Mrs. Greymer proposed asking little Willie Bailey to spend a week with them. The countess assented, merely saying, "You must take the little fellow to drive every day, and send the livery-bills to me."

"Then I shall drive over this afternoon if Freddy's sore throat is better," said Mrs. Greymer.

But she did not go: Freddy's sore throat was worse instead of better, and his sister had enough to do for some days fighting off diphtheria. So it happened that it was a week before she was able to go to D——. She found the Baileys' door swinging on its hinges, and a high-stepping hen of inquisitive disposition investigating the front room: the Baileys had gone.

"They went to Chicago four days ago," an amiable neighbor explained: "they didn't say what for. The little boy he cried 'cause he wanted to go on the island fust. Guess *he* ain't like to live long: he's a weak, pinin' little chap."

Only once did Therese hear from Mrs. Bailey. The letter came a few days after her useless drive to D——. It was dated Chicago, and expressed simply but fervently her gratitude for all Mrs Greymer's kindness. Inclosed were three one-dollar bills, part payment, the writer said, "of my debt to Mrs. von Arno, and I hope she won't think I meant to run away from it because I can't just now send more." There was no allusion to her present condition or her prospects for the future. Mrs. Greymer read the letter aloud, then held out the bills to the countess.

She pushed them aside as if they stung her. "What does the woman think I am made of?" she exclaimed. "Why, it's hideous, Therese! Write and tell her I never meant her to pay me."

"I am afraid the letter won't reach her," said Mrs. Greymer.

Nor did it: in due course of time Therese received her own letter back from the Dead-Letter Office. The words of interest and sympathy, the plans and encouragement, sounded very oddly to her then, for, as far as they were concerned, Martha Bailey's history was ended. It was in July the countess had met them again. She was in Chicago. Otto Von Arno was dead. He had given back to his wife by his will the property which had come to him through her; whether because of a late sense of justice or a dislike to his heir, a distant cousin who wrote theological works and ate with his knife, the countess never ventured to decide. The condition of part of this property, which was in Chicago, had obliged her to go there. She arrived on the evening of the fifteenth of July—a day Chicago people remember because the great railroad strike of 1877 reached the city that day.

The countess found the air full of wild rumors. Stories of shops closed by armed men, of vast gatherings of Communists on the North Side, of robbery, bloodshed and to a Chicago ear most blood-curdling whisper of all—of a contemplated second burning of the city, flew like prairie-fire through the streets.

The countess' lawyer, whom she had visited very early on Thursday morning, insisted on accompanying her from his office to her friend's house on the North Side. On Halsted street their carriage suddenly stopped. Putting her head out of the window, the countess perceived that the coachman had drawn up close to the curbstone to avoid the onset of a yelling mob of boys and men armed with every description of weapon, from laths and brickbats to old muskets. The boys appeared to regard the whole affair as merely a gigantic "spree," and shouted "Bread or Blood!" with the heartiest enthusiasm; but the men marched closer, in silence and with set faces. The gleaming black eyes, sharp features and tangled black hair of half of them showed their Polish or Bohemian blood. The others were Norwegians and Germans, with a sprinkling of Irish and Americans. Their leader was a tall man whom the countess knew. He had turned to give an order when she saw him. At that same instant a shabby woman ran swiftly from a side street and tried to throw her arms about the man's neck. He pushed her aside, and the crowd swept them both out of sight.

"I think I have seen a woman I know," said the countess composedly; "and do you know, Mr. Wilder, that our horses have gone? Our Communist friends prefer riding to walking, it seems." They were obliged to get out of the carriage. The countess looked up and down the street, but saw no trace of the woman. Apparently, she had followed the mob.

By this time some small boys, inspired by the occasion, had begun to show their sympathy with oppressed labor by pelting the two well-dressed strangers with potatoes and radishes, which they confiscated from a bloated capitalist of a grocer on the corner. The shower was so thick that Mr. Wilder was relieved when they reached the Halsted street police-station, where they sought refuge. Here they passed a sufficiently exciting hour. They could hear plainly the sharp crack of revolvers and the yells and shouts of the angry mob blending in one indistinguishable roar. Once a barefooted boy ran by, screaming that the police were driven back and the Communists were coming. Then a troop of cavalry rode up the street on a sharp trot, their bridles jingling and horses' hoofs clattering. The roar grew louder, ebbed, swelled again, then broke into a multitude of sounds—screams, shouts and the tumultuous rush of many feet.

A police sergeant opened the door of the little room where the countess was sitting to inform her the riot was over. They were just bringing in some prisoners: he was very sorry, but one of them would have to come in there. He was a prominent rioter whom they had captured trying to bring off the body of his wife, who had been killed by a chance shot. It would be only for a short time: the gentleman had gone for a carriage. He hoped the lady wouldn't mind.

The lady, who had changed color slightly, said she should not mind. The sergeant held the door back, and some men brought in something over which had been flung an old blue-and-white shawl. They carried it on a shutter, and the folds of a calico dress, torn and trampled, hung down over the side.

Then came two policemen, pushing, after the official manner, a man covered with dust and blood.

"Bailey!" exclaimed the countess. Their eyes met.

Bailey bent his head toward the table where the men had laid their burden. "Lift that," he said hoarsely.

The countess lifted the shawl with a steady hand. There was an old white straw bonnet flattened down over the forehead; a wisp of blue ribbon string was blown across the face and over the red smear between the eyebrow and the hair; the eyes stared wide and glassy. But it was the same soft brown hair. The countess knew Martha Bailey.

"There was women and children on the sidewalk, but they fired right into us," said Bailey. He spoke in a monotonous, dragging voice, as though every word were an effort. "They killed her. I asked you to give me work in your shop, and you wouldn't do it. Here's the end of it. Now you can go home and say your prayers."

"Ain't you satisfied with what you have done already?" continued Bailey. "Leave me alone: you'd better."

"Gently now!" said one of the policemen.

"Whatever you may think of me," said the countess, quietly, "you know Mrs. Greymer was always your wife's friend. We only wanted to help her."

Bailey shook off the grasp of the policemen as though it had been a feather: with one great stride he reached the countess and caught her roughly by the wrist. "Look at *her*, will you?" he cried: "you and the likes of you, with your smooth cant, have killed her! You crush us and starve us till we turn, and then you shoot us down like dogs. Leave my children alone."

"None of that, my man!" said the sergeant.

The two policemen would have pulled Bailey away, but the countess stopped them. She had turned pale even to her lips, but she did not wince.

"Curse you!" groaned the Communist, flinging his arms above his head; "curse a society which lets such things be! curse a religion——"

The policemen dragged him back. "You'd better go, I think, ma'am," said the sergeant; "the man's half crazy with the sun and fighting and grief."

"You are right," said the countess. She stopped at the station-door to put a bill in the policeman's hands: "You will find out about the children and let me know, please."

Mr. Wilder, who had been standing in the doorway, an amazed witness of the whole scene, led her out to the carriage. "He's a bad fellow, that rioter," he said, as they drove along.

The countess pulled her cuff over a black mark on her wrist. "No, he is not half a bad fellow," she answered, "but for all that he has murdered his wife."

Nor has she ever changed her opinion on that point; neither, so far as is known, has William Bailey changed his.—*Lippincott's for October.*

SUTTEE.

THE position of widows among the Hindoos is one which, even at the present day, and with all the modifications introduced by European influence, is far from being a pleasant one. When the early age at which children are married in India is remembered, it will be seen that it is quite possible for a little girl seven or eight years old to be a widow. Until a very recent period a poor child, upon whom this affliction had fallen, had not the remotest chance of ever, during her life, leading anything but the most uncomfortable kind of existence. Re-marriage was quite out of the question; and the poor creature, during her whole life, could neither enjoy nor look forward to any of the pleasures or consideration accorded to a Hindoo woman. The barest subsistence was accorded to her, she was expected during her whole life to "efface" herself, and, when she was ill, was left to die alone and untended. That such a state of things is now only too prevalent in Hindoostan is unfortunately true, for the few re-marriages of widows of which we hear, take place in families that have much modified their religious beliefs, and that may be said to have outgrown in a great measure the power of old prejudice. Custom, which was so severe in the case of children left widows, was and is no less so in the case of women who have, as adults, been wives for many years. To them, the fall from the position of wife to that of widow was more painful than even that of the child, who had scarcely known what it was not to be in the widowed condition.

The old practice was—the hair of widows was cut off; they were not allowed to touch betel, to wear precious stones, or to marry again; they were incapacitated from enjoying even the smallest trifle; they were not allowed to have even the least honor paid to them; they inherited nothing of their husband's property, but were at the mercy of their eldest son (if they had one), or at that of their husband's brother, who was only obliged to afford them a bare maintenance. Is it to be wondered at that, while suttee was allowed in Hindoostan, a very large number of Hindoo women should avail themselves of what was a painful, but at least a rapid mode of getting rid of their miseries? or that every now and then we hear of an instance in which, even at the present day, suttee is attempted or perhaps carried out? The practice of suttee was formally abolished in the year 1829 in all those parts of Hindoostan over which England has power; and, as that is so great an area, people have almost begun to look upon the institution as a thing of the past.

It, therefore, comes upon the ordinary reader with something of a shock to read of the suttee of three ladies, at the time of the burning of the body of the late Sir Jung Bahadoor. A warm friend and staunch ally of England, a Knight of the Order of the Star of India, a man in many ways far above the prejudices of his nation, the real head of the Nepaulese State, which still jealously maintains its independence, Jung Bahadoor had been made much of in England and by English people. Nothing can give a more vivid idea of the vast differences that separate Hindoos from English people than the fact that at the performance of the last rites of such a man, suttee should have been made a part.

The whole account is just like that which we have read over and over again. The three principal ranees, his brother and son, arrived, and the ranees expressed their desire to sacrifice themselves. The brother tried to dissuade them, but he failed, and the funeral pyre was prepared with sandal-wood, resin and a large quantity of ghee. When the arrangements had been made, the ladies bathed, performed poojah, and made presents to the Brahmins. The next step was, they took measures for the government of the country and to maintain peace; then general directions were given to the brother-in-law. Their last act was to release some prisoners. They then entered the funeral pyre quite unconcernedly, muttering prayers. The corpse was then laid on its back, and the eldest ranee took its head in her lap, and the two others took the feet. They were then surrounded by odorous combustibles, and the ranees gazed upon the features of their husband, as if forgetful of every other consideration. The fire was then applied by the son, and, in a few minutes, all was over. To these poor ladies life must have had a dreary outlook, and the sense of fulfilling a high duty, both in expressing love for their deceased husband, and in performing what they had been taught to consider a religious act, doubtless sustained them to the end.

May the time be not far distant when the advent of a higher faith may direct the strong sense of duty and noble courage evinced by these Hindoo women to a better cause!

EUROPEAN TRADE NOTES.

THE French finance minister is about to refund a portion of the French debt at 3 per cent, less than $100,000,000 however. It is difficult to find employment for capital, and a reduction in the current rates of interest is inevitable. At the present moment the commercial situation is quite as favorable in Germany as in France. The German commercial spirit, so greatly developed in the last quarter of a century, has built up a great foreign market for German goods. The trade of Berlin in fine manufactures rivals that of Paris and London. The Berlin worsteds and hosiery are now matched with collars and cuffs and entire suits of dress goods. Says one letter, "retail shops in the west end of London are buying largely in Berlin and neglecting Paris." The German fine leathers have a steady sale, although the superiority of American goods of a certain class is acknowledged. The Germans are prospecting actively for petroleum and laboring to utilize their Westphalian coal deposits, so they will cease to be dependent in some measure on England for coal. The French and Spanish shipping interests are low. These countries are protected by a tariff, while the marine of Germany, which only touches the ocean on one side, has vastly expanded under free trade, and now carries her manufactures and products to every clime. The foreign commerce of Germany probably does not approach in magnitude that of France, because the natural recources of the former country do not command the homage of those of France. Sweden, also, another free-trade country, is growing vastly in her shipping and commercial interests. The extension of railways in France, which is about to be undertaken under the supervision of the state, is to be conducted with a prudent regard to the character of the roads as feeders and not main lines. They are to be of light structure, especially adapted to a small train service.—*Springfield Rep.*

IT is now said that the memoirs which Talleyrand left behind him, to be published 30 years after his death, will probably appear in Paris the coming winter, as it was determined in 1868 that the period should be extended 10 years, in consequence of certain persons nearly related to the events still surviving at that time. This work has been anxiously expected, and it can hardly fail to be of extraordinary interest, not to the French alone, but to Europe generally, and to America also. The limping devil, as the author has been called, lived through so many years—he was over 84 when he died—and played so active a part in the memorable things that happened, that his observations and recollections will pique, while they gratify, intellectual curiosity. He had, too, such a cool, deliberate, brilliant, bitter way of saying things that his recital must be materially enhanced. Nearly all French memoirs are more or less alluring, and Talleyrand's ought to be particularly so. An ecclesiastic, a rake, a diplomat, a wit, a financier, a statesman, a Prince of the oldest blood, a brilliant conversationalist, and always a man of the world in the largest and worst sense, living under Louis XVI. through the revolution, under the Empire, under Louis XVIII., his mind became a storehouse of important facts and reflections. He was on intimate terms with the Napoleon, with Voltaire, Rousseau, Mirabeau, Diderot, D'Alembert, Grimm, Mmes. Chatelet, Epinay, Stael, Recamier, all the celebrated men and women, indeed, of the eighteenth and the early part of the nineteenth century.

MAGAZINE NOTES.

SUNDAY AFTERNOON for October opens with A Workingman's Story. It is both a graphic account of personal experience as a tramp, and a forcible statement by an unemployed workingman of that problem which stares so many of his fellow laborers in the face now, viz: how to keep starvation from their families. It is timely and suggestive, and also *true*. In the form of a sketch about Mrs. Barnard's Church, Mary Wager-Fisher states the reason for and against women as ministers. Will or Environment? by Rev. Dr. J. T. Tucker of Boston, discusses in a readable way whether a person's will or his surroundings have most influence in shaping his character. The English Reformation is treated by the competent pen of Rev. Lyman Abbott. Mrs. Clara B. Martin of Boston, in Modecai Cohen and Emanuel Deutsch, sketches the original of the well-known Modecai in Daniel Deronda. He was a noble character. E. E. Hale's serial, the Chips from a North-western Log, and Fishers of Men are continued. Judith and Judiah, by the author of Tom's Heathen, is concluded. Mary A. P. Stansbury has a story, and there is another, 'Tramps and Agents.

The poets of the number are Paul H. Hayne, Lucy Larcom, Caroline Leslie, and M. E. Bennett.

In Preaching Honesty the editor urges the need that Thou shalt not Steal should be translated into the terms of modern commercial life. He also talks about Work for the Unemployed, and Expounding Providences, and has the usual Notes on Current Events.

THE DOMESTIC MONTHLY contains a large array of designs for costumes and individual garments, while an abundance of useful information is supplied in the articles on Seasonable Fabrics, Trimmings, Jewelry, Fashions, Domestic Art, etc. The colored plate is, as usual, very handsome, and represents several stylish street and house costumes.

The literary contents are an installment of Mary Cecil Hay's charming serial, Her Three Lovers; a clever sketch, entitled Dr. Carnigie's Inheritance; a second paper on household art by Mrs. Merighi, which is instructive, and No. 1 in a new series of Flower Talks, by Eben E. Rexford. In addition there is some choice poetry, the usual enjoyable Miscellany, engaging small Talk, instructive Household Department, Critiques o New Books, and the always entertaining contributions of the Mosaics Man.

APPLETONS' JOURNAL for October leads off with an illustrated paper under the Shakespearean title of The Multitudinous Seas. A new American novelette is begun in this number, written by Christian Reid, and bearing the title of A Hidden Treasure. A Leap-Year Romance is concluded. A story by Mrs. Stoddard, entitled The Swanstream Match, and one by Mrs. Amelia E. Barr, are given complete. There is a graphic paper, entitled A Motley University; the Azores are described; so is the Czardas, a Hungarian dance; American and English housekeeping are compared by Mrs. Sheldon; and Dr. George M. Beard's discourses on Consolation for the Nervous; Junius Henri Browne discusses French Memoirs; lastly, there are poems by Nora Perry, Constance Feni-

more Woolson, Edgar Fawcett, and others. The editorial departments are as full as usual.

THE ECLECTIC MAGAZINE for October contains fourteen well-selected articles, besides the editorial departments. Mr. Edmund Guerney has the first paper on Music and Musical Criticism; Anthony Trollope talks about Iceland; Prof. Proctor has an astronomical paper, and Sainte-Beuve's Critical Method is discussed by an appreciative writer. The Effects of Light on Plants is a paper that will be of interest to all engaged in horticulture; and the RURAL readers number many such. The Races of Asiatic Turkey is a timely contribution, and altogether the Eclectic is an interesting magazine.

BRIC-A-BRAC.

MARY'S LITTLE CORN.

MARY had a little corn
Upon her little toe,
And everywhere that Mary went
The corn was sure to go.
[*Camden Post.*

And to the cooling ocean's shore
It followed her one day:
But the little ache corn was so sore
She couldn't play croquet.
[*Island Review.*

"What makes the corn hurt Mary so?"
The other players cried.
"Because she wears her boots so tight,"
A looker-on replied.
[*Seaside Press.*

"And you a little lump upon
Your toe can grow to suit,
By putting on a 'five' sized foot
A number two sized boot."
[*Boston Traveller.*

And so the doctor dug it out,
Which made poor Mary sob;
And now no corn she knows about
Except what's on the cob.
[*N. Y. Graphic.*

A SINGULAR VENGEANCE UPON AN EXTORTIONATE LANDLORD was recently wreaked by an Englishman who, when traveling in Switzerland, had been charged by an innkeeper ten francs for a basin of *bouillon*. A few days after the landlord received an unpaid letter from another country, simply containing these ways:—"Dear Sir,—Your *bouillon* was good, but somewhat dear." In about a month came a hamper, with every appearance of being filled with unlimited *pates*, but in reality only containing a similar letter, the carriage of course not being defrayed. Then ensued a box, which arrived from the West Indies, labeled "Best Coffee." The landlord, delighted, pays the carriage, but only finds the inevitable epistle. Finally the joke became known, and was repeated at length in the journals, and the unfortunate landlord was compelled to sell out the hotel and to leave, to practice his wiles "in fields and pastures new." It is needless to say that the purchaser at once changed the name of the unfortunate inn.

TWO TRUTHS.

"DARLING," he said, "I never meant
To hurt you," and his eyes grew wet,
I would not hurt you for the world!
Am I to blame if I forget?"

Forgive my selfish tears," she cried,
"Forgive. I knew that it was not
That you would mean to hurt me, love;
I knew it was that you forgot!"

But all the same, deep in her heart
Rankled this thought, and rankles yet;
When love is at its best, one loves
So much that he cannot forget!

ONE Mrs. Van Auken installed a Chinaman in her kitchen. The following conversation took place:

"What is your name, sir?" asked Mrs. Van Auken.

"Oh, my name Ah Sin Foo."

"But I can't remember all that lingo, my man. I'll call you Jimmy."

"Velley welle. Now whachee namee I calle you?" asked Ah Sin, looking up in sweet simplicity.

"Well, my name is Mrs. Van Auken; call me that."

"Oh, me can no 'membel Misso Yanne Auken. Too big piecee namee. I calle you Tommy—Misse-Tommy."

KINKELY, winkely, kangeree,
Jujibi, jujubo, jujjburee,
Yawfully, yofull, yigo yum,
Florium, zorium, buckerabum,
Mufti, pufti, quilty seo,
Jiggelty, wiggelly, parchum pea,
You can't compare with a kalamazoo
Or an agilatorium kangaroo.

NOT ENGLAND'S QUEEN, BUT MINE.

God save my darling one,
Fairest beneath the sun,
God save my queen;
Vainly may ills molest,
Peace reign within her breast;
Ever by heaven blest,
God save my queen.

Beam on her, gentle skies,
Happiness be her prize,
God save my queen;
If clouds about her lower,
Harmless may prove their power
Joy gild each passing hour,
God save my queen.

When time is past and gone,
On angel pinions borne,
God save my queen;
There in yon heaven above,
Home of eternal love,
God bless my cherished dove,
God save my queen.

A CORRESPONDENT writes us as follows:

DEAR RURAL:—You say in your last issue that the word "smile" is the longest in the language, because there is a *mile* between the first and last letters; but here is a longer one, "incontinently." See the area between the first and last syllables.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

OLD LOVES.

TRANSLATION FROM HENRY MURGER.

LOUISE, have you forgotten yet
The corner of the flowery land,
The ancient garden where we met,
My hand that trembled in your hand?
Our lips found words scarce sweet enough,
As low beneath the willow trees
We sat. Have you forgotten, love?
Do you remember, love Louise?

Marie, have you forgotten yet
The loving barter that we made?
The rings we changed, the sun that set,
The woods full filled with sun and shade?
The fountains that were musical
By many an ancient trysting-tree—
Marie, have you forgotten all?
Do you remember, love Marie!

Christine, do you remember yet
Your room with scents and roses gay?
My garret—near the sky 'twas set—
The April hours, the nights of May?
The clear, calm nights, the stars above
That whispered? They were fairest seen
Through no cloud-veil. Remember, love!
Do you remember, love Christine?

Louise is dead, and—well-a-day!
Marie a sadder path has ta'en;
And pale Christine has passed away,
In southern suns to bloom again.
Alas! for one and all of us—
Marie, Louise, Christine forget!
Our bower of love is ruinous,
And I alone remember yet.

THE WOMAN'S CLUB.

TALKS WITH CHILDREN.

As I expect to gain useful information from the "Women's Club," I should like to be of some service, too, but feel diffident about my own ability.

I have noticed that writers in family papers for some time past, have been advising mothers in the country to adopt the Kindergarten system in their families. No one can doubt the benefit of the system, if properly carried out; but in many working families I believe this is simply impossible, for the mother cannot give the proper amount of time to it. There is a plan I followed many years in my own family, and I found it so pleasant and beneficial, that I thought I would suggest it to those who may not have thought of anything of the kind. The idea was suggested to me from noting the pleasure it gave the children at an infant school. I call them "Object Lessons." At home I gave one lesson each week, and often found myself better and brighter at the end of the half hour than when I sat down.

Select any object with which the children are familiar—Bread—Fruit—Iron—Tin—Horse-Hair—Wool—in fact, anything convenient. Have your slate in readiness, and having written the name of the article or object, upon it, ask the children its uses and various qualities—after a little practice I have often had the children find ten or twelve qualities in one object—each quality is set down upon the slate as soon as found, the children helping, as far as they are able, to spell the words. When no more qualities can be found, I question the children as to the meaning of the words written down, explaining what they do not understand. It is a very simple affair when once started, and sometimes the children would find articles and ask me to keep them for the next lesson.

It brings about many pleasant talks between mother and the children, and with the help of one or two of the good, yet cheap illustrated papers that are now so well adapted for family use, the time will pass pleasantly, and the children will learn to prefer instructive books to trashy literature.

M. J. T.

DRESS REFORM, AND TOMATO CATSUP.

EDS. RURAL: I agree with Lillian in regard to "Club" sounding fast, and as we wish to represent a quiet, practical class of women, would it not be well to change the name? "Corner," I think would be appropriate—it is suggestive of a cozy nook where we women get together and compare notes. I have no desire to advocate "Woman's Rights," though I do believe in independent womanhood, a womanhood that enables us to be self-supporting and as unlike a man as possible; and that brings up the question of costumes. I agree with Jacquelina that a change should be made, but where can we find a woman in society brave enough to adopt a sensible costume and wear it on all occasions. I don't wish it to be *a la* Dr. Mary Walker, for she tried to look like a man, but I think there might be a happy medium arrived at between her costume and the fashionable trailing skirts. As for me, I rejoice in calico and I don't think I was ever so comfortable or happy before.

As so many of the sisters are giving recipes, I would like to tell them how I made tomato catsup. I was out transplanting strawberries when I made the discovery that my tomatoes needed attending to. I gathered them (about a half bushel) and decided to make them into catsup. I cut them up, put them on the stove to cook, and as my life has been one that has never taken me into the mysteries of canning and preserving, I put on my hat and wended my way across lots to my nearest neighbor (who by the way is very obliging and saves me the expense of a cook-book), and asked her what I should do next. She very kindly stopped her work and gave directions: first strain, then add sugar, spices, mustard no salt but a little celery seed. I came home feeling that I was fully competent to make catsup. I strained the tomatoes when lo! I had forgotten to ask what quantity of spices to use. So back I went to my very amiable neighbor and succeeded in getting the correct quantity. I came home, finished my catsup, and decided then and there to own a cook-book, for if it was no advantage to me, I would at least be less of a nuisance to my neighbors. I don't like to cook anyhow, I think it is a nuisance. If food would only grow like fruit and berries, I would'nt object to cultivating it from morning 'till night. Truly, I never tire of out-door exercise. I can work among the fruits and flowers all day, and every weed that I pull I feel as though I had conquered an enemy.

The weather is just now delightful. Our lovely harvest moon is just beginning to wane, and the sighing of the winds among the pines reminds us that autumn is here. The other farmers are rejoicing in full crops, but I have reaped a full harvest of experience which I'm sure will be an advantage to me the coming season. The time for our fair is drawing near and if the ladies have to do all the work this year, I'll see to it that the gentleman don't get all the credit

H. B. N.

MUST WIVES CONFINE THEMSELVES TO HOUSEKEEPING?

THE letter in RURAL of 21st Sept., addressed to mothers, is full of excellent suggestions, and it is beside a timely contribution. I notice that the much-discussed question of the proper education for girls, has received a fresh impetus from an article published in the Nation a few weeks ago. The writer of the article in question wants women to be educated to be wives and mothers, and he rehearses all the old arguments; but one of his suggestions is quite novel and somewhat droll. He thinks it should be a part of a girl's educational course to be trained "to receive with equanimity in a faded calico gown, to a dinner of corned-beef and cabbage, the stranger whom a thoughtless husband has brought home unexpectedly to dinner." How delightful it would be to attend a calico—corned-beef rehearsal at a girls' college! I should suggest that the husband be educated to exercise some thought in the matter and not bring home guests at inopportune times; but it is noticeable that, while girls are always recommended to adapt themselves to the supposed wants of their prospective husbands, it is never so much as hinted that tastes and habits likely to add to the comfort or pleasure of the future wife should be developed in the boy.

How many houses would be more comfortable, how many husbands and wives happier, if women would only take a lesson from the young wife Mrs. Harbert writes about. Poetize over it as one will, the ugly fact remains that drudgery about the house tends to impair a woman's health, to diminish her attractiveness, to make her narrow and given to gossiping about the petty cares of her everyday life. If a woman is simply a servant the wear and tear is much less, but when beside housemaid, one has to be nurse, dressmaker, mother and hostess, it is little marvel that the average woman is old and faded at 40. All married women cannot of course teach, but there is usually some one thing they can do well: why not turn that one talent to account and make it the means of adding to the family fund and give over the dull routine of heavy housework to some one who has no ability to do anything else?

I know of a little woman in this city who is a tasteful, rapid sewer, and who, previous to her marriage, was an excellent dressmaker. She was married to a poor man, whose salary was then, and is now, less than twenty dollars a week. Seven children in all have been born to them, three of whom (all boys) are now living—of the folly and criminality of their having a family when so poorly off I shall have nothing to say. As may be imagined, they are not comfortably housed, or clothed, neither can they afford nutritious food. A friend suggested a few years ago, that as the children were all older than seven years, and attended school, the mother might "hang out her shingle" and establish herself as a dressmaker. The husband was outraged at the idea of his wife working "for her living," and so she continues to this day at the dreary round of housework, working beyond her strength, wearing shabby clothes, eating the poorest quality of food, and living in a pestilential neighborhood—because they are really too poor to afford to breathe pure air—and, worse than all, her eldest son a youth of eighteen, has been compelled to leave college, and is wasting his young life in the sub-cellar of a large wholesale dry-goods house for the merest pittance. Has this woman done the best that she could for herself, her children and her husband?

ELLEN HUNTER.

SOME OBJECTIONS TO "A LETTER TO YOUNG MOTHERS."

IN the RURAL of the 21st inst. there appeared an article addressed to mothers. I do not think it will have a good effect at all on young women. The lady whose letter was quoted says that housework was distasteful to her. Very few women do like to wash greasy dishes or cook in a hot kitchen, but they have to do it, nevertheless. I do not like it myself, but I believe it is woman's duty to be a good housekeeper. I do not mean she should know nothing beyond how to keep house. A good wife and mother needs the best education in the world. By all means let the women receive a good education, but let them be accomplished housewives as well.

The writer referred to tells how she engaged a girl to work for her, and gave music lessons herself. So far, well and good; but how many women are really competent to teach music? Not one in a dozen, perhaps.

Mrs. Harbert says that if a girl shows talent for designing, art or literature, no encouragement is given her. I think that is a mistake. Look at the number of women artists, poets and authors there are. As for women in the pulpit, I will only quote from the Bible—the highest authority on the question. St. Paul says: "Let your women keep silence in the churches."

As we have in the United States to-day women doctors, lawyers, telegraph operators, engravers, artists, poets, authors, editors and lecturers, I think women cannot complain of being kept down by those "tyrannies of custom" Mrs. Harbert so pathetically alludes to.

SAIREY GAMP.

THE WAIL OF A COUNTRY BOARDER.

I DON'T know that I am justly entitled to share in the benefits of the Club. I am, at present, one of that large class known as country boarders, and I have not the most overwhelming respect for my entertainers (for which entertainment I pay a round sum). I suppose myself and my class are the legitimate objects of extortion, but I do not know that because one is in sore need of leeching, leeches themselves are any the pleasanter. We were decoyed into the land of Goshen by fair promises. We panted for shady bowers, milk, chickens, fruit, eggs, and pastoral loveliness generally. But we got only the latter. I suppose I should warn the "Club" that I join merely for the luxury of a social grumble. I must tell somebody how I have been put upon, or expire! The idea! We pay twenty dollars per week for a fine prospect, and semi-starvation. When strawberries were ripe and plentiful, and we were counting on a feast of this luscious fruit, we barely had a taste, but were graciously allowed to *look at* the boxes upon boxes that were sent to market. I hope they sold for a song! And pork! I have had to eat enough to become possessed of an evil spirit,—and I'm in no hurry to have it cast out, at least not until I have relieved my feelings before the Club.

I think I could have submitted to all this, bad as it is, but to have one's new hat (a real love!) copied by the village Amaryllis, and then to have this frightful caricature appear in church contemporaneously with its prototype, is too much for feminine good nature. Altogether I hate the country; but I shall take the RURAL with me back to the city, as it was the only good thing, excepting the scenery, I enjoyed.

MRS. JAMES PRICE.

A PROTEST AGAINST DISH-WASHING.

YES, decidedly I shall join the Club, and indulge in a real good howl. Wonder why some one did not think of such a perfectly splendid escape-valve before. I have often wanted to "talk back," but never until now had just the opportunity I coveted.

My grievance is simple. I hate dish-washing. It is beyond everything repugnant to me after I have eaten a satisfactory dinner to rush i' th' imminent breach, grapple with a slimy, finger-eluding, dish-cloth, and proceed to demonstrate that tiresome fact that grease has an affinity for soap. Why cannot a patent dish-washer be invented, or why cannot the men be inducted into the business? If any one thing is calculated to make me regret that Herod confined his attentions to the male children of one feeble race, it is the picture of contentment in trowsers sitting behind an interesting book, and smoking a fragrant cigar while I am bending over the repuguant task. I become quite cannibalistic in feeling, and I'm sure the crockery suffers, else why should the lord and master look up with the mild-eyed wonder of a contented bovine and lazily drawl, "My dear, is it really necessary to make quite so much noise?" Heavens! I feel in a frame of mind equal to an atrocity. My only consolation is in the thought that Horatio will have to make the fire in the morning!

I am ready to make one of a society for the encouragement of a plan to abolish dish-washing, by the substitution of fig-leaves, bark, or paper dishes, or any other make-shift for crockery that can be sent to smash after having been once used, so that we may always use new material, and never have to wash a dish! Pots I will *not* wash: Horatio has to do them!

A SUFFERER.

AN "EDUCATIONAL" SUGGESTION.

I THINK the Club is a good idea, and it will be our fault if we do not make it our chief delight during the long winter evenings. I think it should be more or less educational in its scope, and Miss Ripley could aid us in shaping it to that end by suggesting some instructive topic, say a course of reading. Is a course of reading a topic, though? I know about what I would like to have, but am not sure I am ready enough with the pen to state it clearly. In fact, I am not good at writing at all; I can make butter, however, with the next one, and it is just because I am too familiar with the churn, that I want to churn up my ideas, and feel that there is something in life besides the mere satisfaction of material wants. Let us see if by discussion we cannot improve the social aspects of farm life.

JULIA B. A.

WANTED, TO EXCHANGE.

I HAVE for exchange designs and directions for fretwork in perforated card, worth $1; also fine garden flowers—Chrysanthemums, Phlox, blue and white Myrtles, herbaceous Spiræas, Physostegia, &c., &c.—beside many of our splendid wild plants,—Ferns, white and blue Violets, Burning Bush. My wants are: a pair of neatly-worked pillow shams, a tasteful cotton chair tidy, the poems of L. E. L. or the works of Dickens—in a readable condition. Will guarantee the senders full satisfaction. Address, for a few weeks,

M. M. B——,
Sycamore Dale, W. Va.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

SOME DINING TABLE TALK.

MARY WAGER-FISHER.

"Smothering" Chicken.

THERE are ways and ways of cooking chicken, but for simplicity and deliciousness, I know of no method so good as the "smothering" mode. This, of course, for a tender fowl not over five or six months old.

First, catch your chicken. This should be done the night before; put it in a coop or barrel, and the morning will find it with an empty crop. The more fastidious way of cooping the fowl several days for cleansing purposes, is not always expedient; while to catch, kill, pluck, and have a chicken in the pot within an hour's time, is a haste that is both unseemly and disgusting. After the chicken is picked, singed and the entrails removed through an opening only large enough for so doing, wash clean, and place in a cool room until within one hour and a half to two hours prior to the dinner hour, as it requires that length of time to cook it. The exact time depends upon the size of the fowl and the heat of the oven. Lay out, on a board or dish, a tablespoonful of salt, with which rub the outside and inside of the chicken; add a little pepper. Butter two large soda crackers, put butter sides together, and place them inside the chicken; joint the legs and wings by cutting the joints on the top; press the chicken snugly together, lay on one side, put the gizzard, heart and liver with it in the dish (which should be a bake-pan or basin, having a close-fitting cover), add some hot water—half a coffee-cupful say—put in the oven tightly covered, and bake for half an hour; then remove the cover, return to the oven until one side of the chicken is nicely browned, then turn it over and brown the other side likewise; add more hot water, replace the cover, and leave it in the oven until done. Then place the fowl on a platter and thicken the gravy in the bake-pan with a little flour and cream; season to taste.

A poor substitute for the soda crackers, are water crackers, or bread. For a hasty luncheon, a small and tender chicken may be so prepared in an hour's time—if the oven is hot enough—and be so delicious, that the happy devourer of it will think it the most palatable dish in the world, and return thanks at the close of the meal, which would appear to be the most fitting time at all times for grace-saying.

Breakfast Dishes.

OAT-MEAL we are very fond of at "our house," and latterly have been using the Ohio oat-meal, with complete satisfaction. It costs but five cents a pound, in five-pound packages, and a package will last a long time. It is clean, very sweet, and when cooked, is free from the "stringiness" that frequently affects Irish oat-meal, especially if it is undercooked. It is easily prepared for breakfast, is so nutritious and healthful—all children ought to have it—that I urge its use upon all country housewives who are yet strangers to it. It is made precisely like any "mush," is better hot than cold, and may be eaten with a little sugar and milk, if one prefers the addition. Irish cooks, who have learned how to prepare it in Ireland, have always cooked it for me very nicely. I find that while these simple breakfast dishes are, and have been for years, constant dishes on the tables of city homes, very many farmers do not use them, but depend, as of yore, upon fried meat, fried potatoes, and griddle cakes. To such let me say, "try oat-meal! A little careful practice in cooking it, will readily lead to perfection, and you will soon wonder how you ever breakfasted so long without it."

BOILED CRACKED WHEAT is an unsurpassed breakfast dish, if *rightly cooked.* Every thing depends upon that. It is more economical for farmerines to use their own wheat, than to buy the prepared article. After the wheat is cleaned and dried, it may be coarsely ground in a coffee-mill. This also is made like a "mush," but should be cooked fully as long as corn mush—from two to four hours. It requires frequent stirring to be kept from burning. When done, fill a dozen—or less—tea-cups rather more than half full of the "mush;" let stand until cold; turn out of the molds, carefully, into dessert plates, or arrange all on a platter, which may be placed on the table, and served from that as desired. Eat with a sauce of sugar and cream. Delicious! Of course, all mushes require a seasoning of salt, while being cooked. Wheat, so prepared, forms also a nice dessert for dinner. A slice of jelly, served with it, adds to its delicacy, for some palates.

THE IMPORTANCE OF BREAKFAST is so great that of all the meals or the day I think it should receive special attention. It is, in a way, the key of the day. If it is fresh, wholesome, nicely cooked and served, it gives one a "push-off" for the day, that is full of vigor and good cheer. If it is dowdy, mussy and indigestible, it spoils the day, and one goes about work much as if a weight were tied to his heels. If one has fruit, it should always be on the breakfast table. You know the old Spanish proverb:

"FRUIT is gold in the morning, silver at noon and lead at night."

A plate of fine apples always exhales a fresh and wholesome atmosphere, and baked, stewed or uncooked, they are capital to begin a breakfast on.

CHOICE TOMATOES AND FANCY BEETS.

WE never had such fine and smooth tomatoes as this season affords from seed received last spring from the editor of the "Rural."

The Golden Trophy and Little Gem are greatly valued, while the Acme is indeed as near perfection as it is possible for a tomato to be. No matter how they are cooked, the usual remark among our friends at table is, "What a fine flavor your tomatoes have!"

I copy my recipe for catsup, which has been a success in the family for 16 years, and which, if faithfully followed, cannot possibly fail: For one gallon peeled tomatoes, one quart of vinegar, three tablespoonfuls of salt, three of ground pepper, half an ounce of ground allspice, three tablespoonfuls ground mustard, four red pepper-pods. Simmer slowly three or four hours, being careful not to scorch it; stir constantly; strain through a wire sieve. Put into common bottles; cork and seal.

Beets.

Our fancy beets are very much admired, and for them we have to thank the RURAL. They are quite an addition to a "foliage" bed, and we often smile as visitors pause and, after admiring the beautiful veined stems, say,—"They look a little like *beets*." The tender stems, stripped to the mid-rib and cooked like asparagus, are quite palatable. But we value them most for being a new sort of ornamental plant that is as yet rarely seen. ANNIE L. JACK.

DOMESTIC RECIPES.

To Make French Rolls.

After the dough has risen it may be made into many ways. By taking off a part and beating up an egg, and working it in with a little butter, you may have nice French rolls; just use flour enough to handle them well, dip your hand in the flour, and flour round the sides to make them break apart nicely; make off quickly, put close together and allow no room for them, or any other rolls, to run and get out of shape. When nearly done, wipe the tops over with milk without taking them from the stove.

ANOTHER WAY: Take a piece of dough the size of a loaf, beat two eggs light, half cup of milk, small spoonful of butter, and with the hand work altogether in a stiff batter; grease a pan (a round one is best), pour in an inch and a half thick, and bake in moderate oven till well done; split and butter; send to table hot. It should rise twice its original thickness. By adding a little more of the above ingredients, with a cup of sugar, and giving it a second rise before baking, you have a very good plain cake, especially for children.

Very Nice Fritters

may be made by simply rolling the plain dough (after it has risen, of course) and cutting and frying as doughnuts, to be eaten with syrup or sauce. By putting a lump of risen dough into a pudding-bag, tying, leaving room to swell, putting into a pot of boiling water, and boiling an hour or more, according to size, you have an excellent plain pudding, but it should be eaten with rich sauce.

News of the Week.

Monday, Sept. 30, 1878.

POLITICAL.

Indications all over the country show that there is a powerful disintegrating force at work breaking up the old political parties. It is widely felt that the issues on which they were founded are things of the past, and that they must either take vigorously in hand the live questions of the day or give place to other organizations specially formed to decide upon these issues. Of these, by far the most urgent and important is the financial question. This will not brook delay. The great strength the new greenback-labor party has unexpectedly displayed forces the old parties to take a decided stand in the matter. This is by no means an easy task, for prominent members of each of these old parties are directly at variance on the question. This difference of opinion is far more marked in the democratic camp than among the republicans, and, however pertinaciously the former may desire to cling to their time-honored name, it is hard to see how it can include men so diametrically opposed on this all-important matter as are such leaders as Tilden, Hewitt, Bayard and Lamar on on one side, and Thurman, Ewing, Voorhees and Bland on the other. These are so broadly at variance that it seems impossible they should work together. On secondary questions, of course, a compromise might be effected, but this is scarcely possible in the present instance. Hence the necessity for a distinctive greenback party to carry out a greenback platform and draw from each of the old parties those who favor "soft" money. Of these, most come from the democrats, while daily it is becoming more evident that to preserve its very existence the republican party must take the other side of the question and become the "hard"-money party.

On Wednesday last the Democratic Convention of this State met at Syracuse. The two chief factions were the Tilden-Robinson-anti-Tammany and the Tammany. The fight between them was bitter, and at one time the former withdrew from the Hall, and there was a prospect of a "bolt." John Kelly, the successor of Tweed as Tammany "boss," had secured the preliminary organization of the meeting in his own interests, and accordingly through the rulings of Laning, temporary chairman, Tammany won a solid triumph. Gov. Robinson was indorsed, a "hard" money platform adopted, and the republican party vigorously arraigned. Much discontent was expressed at the wholly partisan nature of many of the rulings made by Laning.

On Thursday the New York State Republican Convention met at Saratoga. The Conklingites were so vastly in the majority that their opponents thought it prudent to venture no opposition. Conkling made a vigorous hard-money speech, recapitulating in a forcible manner the arguments which have already been often urged in support of such views. The platform strongly supported "hard" money, a speedy return to a specie basis, and free elections—South as well as North. The democrats were, of course, bitterly arraigned; and while the action of the Electoral Commission was endorsed, not a word for or against the present administration was said. G. W. Curtis, while stoutly proclaiming himself an adherent of President Hayes, strongly approved of the platform, and made a very eloquent speech in favor of that and of the harmony Conkling had already advocated. On the whole, the meeting was a dignified, courteous, and harmonious gathering. Geo. F. Danforth, of Monroe, was nominated for Judge of the Court of Appeals, the chief office for which elections are to be held this year.

The anti-Butler democrats of Massachusetts met on Wednesday at Faneuil Hall, Boston, as per agreement. The assembly did not consist merely of the 500 bolters from Worcester, but of between 1,200 and 1,300 delegates, most of whom had been elected to supply the places of the supporters of Butler at Worcester, who, of course, did not put in an appearance at Boston. Judge Abbott was nominated for Governor by acclamation, and the whole ticket is strong and highly respectable. There is no prospect—no possibility indeed—of the election of the ticket, but it is hoped that the democratic organization in the State may thus be kept up, and that this action may help materially to defeat Butler. The latter, meanwhile, expresses himself confident, and is working like a Trojan to secure success.

MISCELLANEOUS.

President Hayes got back to Washington last Wednesday from his western tour. He was well received pretty nearly everywhere on the road. The new democratic Senator from Oregon, James H. Slater, is a native of Illinois, 52 years old, a lawyer, of course, and an ex-Congressman. Heavy frosts are reported from Eastern Massachusetts, Western and Southern Vermont, and portions of Connecticut, New Hampshire, Maine and New York. Vegetation has suffered but little. That permanent exhibition at Philadelphia has, within the year, reduced its debt from $273,500 to $43,900, with improving prospects for the future. Addison H. Laflin, Congressman in the 39th, 40th and 41st Congress, and Naval Officer at this port under Gen. Grant, committed suicide at Pittsfield, Mass., on Tuesday last; poor health and a morbid fear of poverty are assigned as motives for the deed. The Treasury authorities expect that a million and a half silver dollars will be placed in circulation monthly by the present system of transmitting them free of charge to points where there is a demand for them. Once more we are assured from all sides that business is recovering and prospects brightening—but the story is becoming a trifle stale and perhaps untrustworthy.

The' Allen, a greenback-labor leader of this city, a notorious gambler, member of a family every one of whom is a jail-bird, last week shot and killed an associate named Malloy. No one was present at the event except the principals. Allen surrendered himself, claimed that it was an accident and expressed much sorrow. A coroner's jury believed his statement and all except one brought in a verdict of accidental death. Allen was put under $1000 bail, furnished by the notorious Harry Hill. On Thursday the Nationals of this district held a meeting to vindicate the gambler, and received him back joyfully as their leader.

The Mexican government is sending 5,000 regular troops to the Rio Grande frontier to put an end to the raiding of "greasers" into Texas. There was a report that the movement was designed to check the pursuit, by U. S. troops, of cattle thieves who might cross into Mexico; but Diaz emphatically contradicts this rumor. Although recent attempts to upset the present Mexican government have all failed, it is said there is much discontent across the border, as money is so very scarce that the troops have not been paid for months, and discontent among the troops in Mexico means a revolution. On Monday evening last, while testimony was being taken at Marquette Michigan in the income tax suit of the United States against Mr. Tilden, a number of books relating to the accounts of mines in that neighborhood in which the defendant was interested, were taken from the court-room. Mr. Harlan, one of Tilden's lawyers placed the books on a chair near the door, when suddenly a man entered picked up the books, rushed out with them, jumped into a vehicle a confederate had ready, and disappeared. It is said the books showed that the Great Reformer's income from the mines was much heavier than was thought possible, and despite the theft of the inculpating books, the goverment officers say they expect a verdict On last Thursday Harlan, Tilden's lawyer, was arrested at Detroit on the charge of being an accomplice in the robbery, but was released on $10,000 bail. Ill-natured people—and perhaps a few others—hint that Uncle Samuel knows more about the rascality than it would be wise to tell—but then you know how people *will* talk, especially as the crime tends to benefit the statesman of Gramarcy Park—not a little.

The boat race between Courtney and Hanlan for the championship of America and a purse of $5,000 raised in Toronto, comes off next Wednesday. Both men are reported in excellent condition, confident of success, but discontented with the race course at Lachine, near Montreal, on account of its eddies. In his farewell speech, Lord Dufferin has very forcibly urged upon the Canadians the heinousness of religious faction fights and the absolute necessity for the future prosperity of the country, that Old-Country animosities should be buried in the Atlantic by those crossing over to this continent. The advice is timely and excellent—but the fanatics who in the name of religion violate the commands of the Saviour, are not very likely to be influenced by the words even of so popular a governor-general as Lord Dufferin. During the week there have been serious labor troubles at Washington. A Jewish demagogue named Cohen, at the head of a riotous rabble visited various places where men were at work in the city; forced those getting less than $1.50 a day to strike, and threatened to attack the government buildings. The police, however, vigorously attacked the mob and dispersed it. The government, nevertheless, as a precaution has armed the treasury clerks with revolvers of the heaviest caliber, to be kept at hand in their desks, so as to be prepared to aid in defending the building in case of emergency.

The ravages of yellow fever still continue in the South, the number of deaths being nearly as heavy as at any time during the continuance of the pestilence. In New Orleans there were yesterday 468 new cases against 410 on Saturday. The number of deaths was 52, a decrease of three from the previous day. In Memphis 32 deaths were officially reported for yesterday; nine in Vicksburgh, and a large number of others in smaller towns.

Condon and Melody, two Fenians, for the last eleven years held as prisoners in England, and recently released at the request of Mr. Welsh, our Minister to Great Britain, arrived in this city yesterday morning, and were enthusiastically greeted by a multitude of their compatriots. They are both, but especially the younger man, Melody, prematurely aged by the hardships they have undergone, herded together along with the vilest criminals, though their offense was certainly of a political nature.

FOREIGN.

San Domingo has just had another revolution. President Gonzalez has capitulated and left for the island of Curacoa; the triumphant revolutionists have entered the city of San Domingo and organized a provisional government, with Jacinto de Castro for temporary president. They have yellow fever raging over there also. Crops are said to be fair in Russia and Italy, good in Holland, England and Spain, and very fine in parts of Turkey. Dr. Petermann, the celebrated German geographer, died on Friday of apoplexy. The result of the late elections in Canada show a complete victory for the "outs." The government had a majority of sixty in the last Parliament, the opposition will have more than that number in the present. Besides the cry for protection of home manufactures, a great deal of effect was also produced by the general commercial depression, which everywhere seems to beget a desire for a change.

It is not at all unlikely that England will soon have on her hands a war with Afghanistan. Some time ago Lord Lytton, Governor-general of British India, wrote to Sher Ali, Ameer of Cabul, a couple of friendly letters which that potentate contemptuously neglected to answer. Later still Sir Neville Chamberlain was appointed envoy to the court of Cabul, but the Ameer refused him permission to advance, and sent a heavy force to block up the Sujah Pass, the route by which the embassy would have to travel. This is an insult which neither the home government of Great Britain nor that of India can put up with. Accordingly, unless the Ameer soon apologizes war will be declared by the Indian government. Already 10,000 water-proof sheets and 5,000 blankets have been sent towards the frontier, and troops are moving from all sides in the same direction. The Ameer was some time ago greatly encouraged in his present course by Russia, which has an ambassador at his court, and was anxious to embroil him with England in view of the war which was then imminent between the Lion and the Bear. The Czar, however, disclaims any agency in the present complications.

Afghanistan is probably the most powerful Mahommedan Power in Asia, next to Asiatic Turkey. It has an area of about 215,000 square miles, and a population estimated at from 5,000,000 to 9,000,000. HERMAN.

VARIOUS.

Grasshoppers in some parts of Nebraska destroyed the vegetables.

Nearly all the British East Indian troops have been sent home from Cyprus.

An unusually large amount of apple brandy will be made in Indiana this year.

Cattle dealers along the line of the Kansas Pacific are not anxious to ship their cattle at present prices.

Turkish refugees in the Rhodope Mountains live principally on soup made of refuse bones and watermelon rind.

A Nebraska farmer reports 600 pounds of bright sugar and 153 gallons of nice syrup from two acres of early sorghum.

A new phase of the hog cholera has broken out in portions of Sangamon county, Ill. The afflicted animals first become blind without any premonitory symptons.

Peaches in the South Haven region are only about half an average crop, but the quality is superior, and prices twice as large. In western Allegan, also, the same state of facts is reported.

Twenty-five thousand Russian medals have been sent to Bucharest for the Roumanian troops who were around Plevna. This figure, therefore, represents the number of survivors of the campaign in the Roumanian army which crossed the Danube.

The Ohio State Fair in Cleveland was kept open on Sunday for the benefit of the yellow fever sufferers, and the preachers of the city generally denounced the action. The relief committee in Chicago declined money taken in at a spiritualistic seance.

A Georgian returned to his home after an absence of two weeks. His eight-year old son loudly welcomed him. "Is everybody well, Willie?" the father asked. "The wellest kind," the boy replied. "And nothing has happened?" "Nothing at all. I've been good, Jennie's all right, and I never saw ma behave as well as she has this time."

A Georgia farmer bought a grand piano for his daughter. His house is small, and, to economize room, the lower part of the partition between the kitchen and the parlor was cut out, and the long end of the piano stuck through. Priscilla now sits at the keyboard, singing, "Who will care for mother now?" and the mother rolls out doughnuts on the other end of the piano in the kitchen.

Mexico has gone into the cattle exporting business. Four hundred and fifty-two head of cattle were landed at Havana on Aug. 9, from Alvarado, Mexico. Meanwhile the export trade between Florida and Cuba is flourishing. There are now five American and two Spanish schooners, and one American and one Spanish steamship constantly engaged in the cattle trade between south Florida and Havana.

The horses on the Philadelphia railways are not fed with oats, chopped corn and hay being found to be more desirable fodder. They fatten more rapidly on this food, which it is said gives them greater strength and endurance than any other. The cost, too, of corn is much less than oats. Fifty years ago the principal food for work horses was cut straw and bran, mixed and moistened, with the addition of corn in the ear.

Life is rather too cheap for comfort out in Illinois. The records show that within the last twenty years 314 murderers have been sent to the State prison—90 of them for life and the remainder for from one to twenty-five years. One hundred have been pardoned, 62 have been released in other ways, 21 have died or gone to asylums for the insane, and 131 are still in prison. Three years and six months, it is estimated, is the average term for a convicted murderer in Illinois.

The Mexican government has contracted with a capitalist for the colonization of government lands by immigrants from the Canaries. The government pays eighty dollars for every immigrant of twelve years and more, and forty dollars for children under twelve years. As soon as the immigrants are established on the lands assigned them, the said amounts will be paid by the Vera Cruz custom house, being the nearest to the settlement. Another contract has been concluded for the colonization of European immigrants on the government lands of "Mesa de Coroneles," fifty dollars being paid for each immigrant over four years of age, the contracts to last for ten years.

A Virginian writes in praise of corn not only as the best food for laboring men but for domestic animals of all kinds. He states that the usual rations for a negro laborer, for a week, is one and a half pecks of corn, three pounds of bacon, and a little molasses. They thrive on it and are healthy and strong. Southern horses and mules, as a rule, have only corn for grain, but they live longer and do more work than northern horses that feed on oats. In his part of the country dogs are fed almost exclusively on corn-meal, and they not unfrequently eat corn in the ear, while wandering curs devour it on the stalk. Even cats eat corn-meal stirred up with water, as is done in the case of chicken feed.

BEST THREAD FOR SEWING MACHINES.

The Jurors at the Paris Exposition agree with the Judges at the Centennial, and decide that it is the "Willimantic."

It appears from the Associated Press dispatches and from the lists of awards published in the Paris newspapers, that the jury on cotton textiles, yarns and thread at the Universal Exposition, have singled out the WILLIMANTIC COMPANY of Hartford, Conn., for a special distinction. They have decreed to that Company a *gold medal and the grand prize* for "*Spool Cotton especially adapted for use on Sewing Machines.*" Out of more than 50,000 medals and awards, there were only 100 grand prizes, and, although all the great thread manufacturers of the world competed, the WILLIMANTIC COMPANY alone receives the grand prize for Spool Cotton. This action of the Paris jury agrees with the opinion of the Judges at our Centennial Exposition, who decreed a medal, and strongly commended the Willimantic thread for its surpassing excellence. But perhaps the most significant indorsement of this Spool Cotton is that by the sewing-machine manufacturers and operators themselves. More than fifty of them, after having used the Willimantic thread on their machines during the Philadelphia and Paris Expositions, on all kinds of work, have signed certificates declaring that the WILLIMANTIC is the "*best thread they have ever used on sewing machines, on account of its strength, evenness, elasticity, finish and beautiful shades of color.*" The concurrent opinion of so many experts ought no longer to leave any room for doubt as to which thread is the best for sewing machines. It is not of British or foreign manufacture, but an American product, and made at the Willimantic Mills.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Sept. 23, 1878

BEANS AND PEAS.—With a light present stock of all kinds of beans, quotations are unsettled. New mediums, $1 65@1 70; old $1 55@1 60; new marrows, $1 70@1 75; old, $1 52½@1 55; new peas, $1 70@1 75; white kidney, $1 70@1 75; red kidneys have declined to a range of $2@2 50; black beans, $2 named. Green peas, $1 35; Southern B. E. peas, $3 per 2 bush. bag; Canadian peas in bulk and bond, 78@80c.

Receipts of beans, for week, 5,416 bush. Exports, 1,050 bbls.

BUTTER.—There has been quite a buoyant feeling since our last and prices have worked up to a comparatively strong scale. The demand as before is for fine to fancy table, and the deliveries include more attractive grades than for some time past. Much depends upon the amount of fall stock to come as to whether the new prices will be supported for State. Western is steady, and the average of prices is more satisfactory than they have been for several weeks. A few dairies with tubs in are showing; but most of these lines are firkins or Welsh as yet.

Dairy, pails, choice, 23@24c.; fair to prime, 17@22c. poor, 13@14c.; State, half-tubs, choice, 23@23c.; fair to prime, 17@21c.; poor, 13@14c.; entire dairies, 20@21c.; firkins, 18@20c.; Welsh, tubs, choice, 20@22c.; good to prime, 17@19c.; poor, 13@14c.; creamery, selected, 26@27c.; other, 23@25c.; Ohio and State, sweet, cream, 22@24c.; Western creamery, choice, 25@25c.; poor to prime, 19@22c.; Western dairy, choice, 17@18c.; other, 11@15c.; Western factory, ladle packed, 10@13c.; milled and common, 7@10c.

Receipts for the week, 38,030 pkgs.; exports, 3,908 pkgs.

BEESWAX.—There has been a meager business but prices steady; Western and Southern quoted 27@28c. Exports past week, 2,291 lbs.

CHEESE.—There have been taken 43,900 boxes this week by shippers. The demand has been almost entirely for fancy lots, and an advance of about ½c. has been made for these. The limited quantity of September make received had been pretty well engaged, and up to 9¾c. made for them. The late made August have gone at 9@9¼c. Leaving these lots there has been an irregular market. Good and lower grades are especially plenty, and shippers disinclined to take them materially.

Quotations are: 9¾c. for Fancy September, and 9@9½c. for August make; 7½@8¼c. for good and prime; 6@7c. for fair to good; 5@6¼c. for half-skimmed; 3@5c. for skimmed. State, farm dairy at 7½@8¼c. for good to choice, 6@7½c. for fair to good, and 3@5c. for poor skimmed. Wisconsin factory fine to fancy, 8½@8¾c.; do. good to prime, 7@8c.; do. fair to good, 6@7c.; Western factory fine, full cream, cheddar, 8½@8¾c.; do. fine, full cream, flat, 8½@8¾c.; do. good to prime, 6½@7½c.; do. half skimmed, 5@6c.; do. full skimmed, 3@5c.

Receipts for week, 91,135 boxes.

Gold closes at 100¾.

Liverpool cable quotation, 43s.

COTTON.—Large arrivals, a heavy movement forward at Southern points, lower English markets, and a tame export and spinning demand have caused lower prices. Latest prices are: for September, 10.82@10.83c.; October, 10.84@10.85c.; November, 10.75@10.76c.; December, 10.75c.; January, 10.79c.; February, 10.86@10.87c.; March, 10.95@10.96c.; April, 11.03@11.05c.; May, 11.13@11.15c.; June, 11.18@11.20c.; July, 11.23@11.26.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	9 1-16	9 1-16	9 3-16	9 3-16
Strict ordinary	9¼	9¼	9⅜	9⅜
Good ordinary	10	10	10¼	10⅜
Strict good do	10 7-16	10 7-16	10 9-16	10 9-16
Low middling	10 11-16	10 11-16	10 13-16	10 13-16
Strict low middling	10 13-16	10 13-16	10 15-16	10 15-16
Middling	10 15-16	10 15-16	11 1-16	11 1-16
Good middling	11 3-16	11 3-16	11 5-16	11 5-16
Strict good middling	11 7-16	11 7-16	11 9-16	11 9-16
Middling fair	11 15-16	11 15-16	12 1-16	12 1-16
Fair	12 9-16	12 9-16	12 11-16	23 1t-16

Stained.

Good ordinary...9 3-16; Strict good ordinary...9 11-16
Low middling..10 3-16; Middling.....10 9.16

CORN MEAL.—Is selling at $2.90@2.95 for Brandywine, and $2 50@2.75 for yellow Western.

BUCKWHEAT FLOUR.—Small lots of new arriving are being placed at $2.10@2.50.

FEED.—Sales of 40 lbs. at $13.50@14.50; 50 lbs. at $14@15; 60 lbs. at $14.50@15.50; 80 lbs. at $15.50@17; 100 lbs. at $18@20.

FLOUR.—Winter wheat grades of the new crop continue to arrive largely in excess of trade wants, and they are freely offered at concessions. Spring wheat stock has scarcely varied, having but little attention.

Latest sales are $3.60@4.00 for inferior to fancy superfine State; $4@4.20 for poor to good extra do., odd lots and lines; $4.20@4.45 for good to choice do., strictly choice and fancy lots above this; $3.35@4.00 for very poor to fancy superfine Indiana, Iowa, Michigan, Ohio, &c.; $4.00@4.20 for inferior to good shipping extra do. and $4.20@4.45 for good to choice extra do.; common to about choice white wheat extras, $4.15@5.25; choice to about fancy do. at $5.30@6.00; red and amber winter wheat, inferior to choice trade and family at $4.00@5.40; round hoop Ohio at $4.00@4.25, and trade and family brands of do. at $4.25@5.00, the latter rate for very choice. St. Louis, $4.10@4.90 for very poor to good extra, and $4.90@6 for good to very fancy; Minnesota clear, very inferior to very choice at $4@5.75. Minnesota "straight," inferior to very fancy at $5@6.75 and patent fair to strictly fancy at $6 25@8.25; unsound stock at from $2.00@5.00; city mill extra at $5 00@5.15 for West Indies (the latter rate for strictly choice in new packages); do. for England, 4@$4.10; do. trade and family extras, $5.50@6 50; do. for South America, $5.25@5 85 for fair to fancy; No. 2 at $2.60@3.50 for inferior to very fancy.

DRIED FRUITS.—In apples there are small lots of choice taken at full prices, but quarters accumulate and are hard to sell. Peeled peaches are in fair supply and the lower grades are easy in price. Small fruits hold steady.

New blackberries are quoted at 5½c. Peaches—Peeled, new Georgia, 5c. for poor, 7½@9c. for fair to good, and 9@9½c. for prime; choice North Carolina, 11@12c.; good do., 9@10c.; unpeeled new halves, 4c.; quarters, 3½c. Pitted cherries, 15@15½c.; southern plums, new, 11@12c. Apples—Old State quarters, 2½@3c.; do., sliced, prime, 4½c.; do., good, 3½@4c. New apples 3@3½c. for Southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy. New raspberries, 23@24c., and evaporated, 25@26c.

Exports past week 164 bbls. dried apples.

EGGS.—Receipts for week, 4,839 bbls.; do. last week, 6,461 do. Light receipts and cool weather have advanced prices and the market is pretty clear of stock. Near points, 22@23c.; State and Penn., 21½@22c.; Western and Canadian, 20½@21c. Limed have some inquiry at 16@17c. for stock strictly choice; other has no sale.

ESSENTIAL OILS.—Price for peppermint uncertain; crop heavy and much carried over from last year.

FRESH FRUITS.—Notwithstanding the cheapness of apples the exports are far below last year. There is a decided improvement in quality, and prices are better than for several weeks past. Selected and high-colored table stock, $1.75@2 bbl.; good, $1.50; mixed, $1.25@1.50; common, 75c.@$1 00; seckle pears, choice, $9@10; common sickles, B. Diel, Louise bonne, Duchess and Buffum, $4@5; Virgalieu have a wide range, $3@7; B. Bosc and Sheldon, $5@7; cooking, $2.50@3.50. Plums are scarce. Damson's $8 bbl.; Copper plums, half bush. crate, $2@2.50. Grapes are selling well. State Delawares, small boxes, $4@4.75 per case; Up-River Concords do., $2@2.50; State do., $1.50@3.25. Loose Del., 7@9c.; do. Concords, 4@7c. California pears expected next week. Boston Bartletts, $3.50@5.50 box. Peaches make a small showing, fancy Up-river, $3@4 basket; poor to good, $1.25@2.50. Cranberries are in stock. Eastern bbls., choice, $8; other, $5.50@7.50; N. J., bbl., $6@7; crates, $1.50@2.25 Watermelons, prime, $15@25 per 100; common, $8@10; nutmegs, $1.50@2.25. New hickory nuts quoted at $2 bush; do. chestnuts, $10@12. Peanuts, prime, at $1.50@1.75; hand-picked, good to fancy, $1.20@1.35.

Exports of apples, past week, 4,293 bbls.; since Jan. 1st, 19,300 do.; same time last year, 64,500.

GRAIN.—For wheat there has been a feverish and irregular market, fluctuating as the advices from abroad were favorable or otherwise, but closing firm. That the business has been active is shown in the export statement, which covers fully 2 100,000 bushels for continent and English markets.

Latest sales are of white State at $1.13@1.13¼; extra white, $1.14; No. 2 white at $1.08½@1.09; No. 3 white at $1.06; No. 1 white at $1.11½@1.12; ungraded white at $1 05@1.13½; No. 1 red at $1.07½; No. 2 red at $1.07@1.07½; do. steamer grade at $1.05½@1.05½; No. 3 red at $1.03; do. steamer grade at $1.03; ungraded red at 95c. @$1.07; No. 2 amber, at $1.05½@1.06; do. steamer grade at $1.03@1.03½; ungraded amber at $1.02@1.07½; No. 2 spring, at $1.02½@1.02½; No. 3 spring at 90c.; ungraded spring at 95c.; No. 1 white, deliveries in October, at $1.11½c.; do. delivery Oct. 25 to Nov. 15, at $1.12; No. 2 red, September option, at 1.03¾; do October option, at $1.07@1.07½; do. November option, at $1.06@1.06¾; No 2 amber, September option, at $1.05½@1.05¾; do. October option, at $1 05½@1.05¾; do. delivery by Oct 20, at $1.05¾; red Canada, in bond, to arrive, $1 03 New York No. 2 spring, September option, at $1.02½; do. October option, at $1.01½; do. November option, at $1.02¾. Rye at 58c. for No. 2 Western and 60@61½c. for State. Barley at $1.19@1.23 for six-rowed State. Corn has been active, but variable in price; latest sales are at steamer mixed, at 49@49½c; ungraded mixed at 48¾@50c.; New York No. 2 at 49½@50c.; No. 2 white at 53¾c.; New York No. 2, Sept. option, at 49¾@50c.; do. Oct. option, at 49¾@50c.; do. Nov. option, at 50¼@50¾c.; steamer mixed, Sept. option, at 49¾c.; do. Oct. option, at 49¼@49¾c.; do. Nov. option, at 50@50¼c. Oats have been active but in large supply and lower; latest sales are of New York No. 1 at 31c.; New York No. 2 at 29c.; New York No. 3 at 26c; white Western at 26½@35c.; mixed do. at 25@32½c.; white State at 28@35½c.; mixed State at 26½@32c; New York No. 1 white at 35c.; New York No. 2 do. at 29@29½c.; New York No. 3 do. at 27c.; New York rejected at 25½c.

HAY AND STRAW.—Prime hay is wanted, and brings very regular prices but common stock is in large supply and difficult to sell, except at easy prices. Sales at 45@85c. for shipping, and 65@80c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports for the week, 1,499 bales.

HONEY—Quiet at 16@18c., for single comb; 14@15c. for double do.; Buckwheat 10@12c.

HOPS.—Mr. Emmet Wells says: "Many bales of hops have changed hands this week. The arrivals continue small as compared with last year, which is pretty good evidence that growers are not satisfied with the present ruling figures, and are holding back their hops under the hope of better prices later on. Values here are now well established and more business on export account will be done as soon as the quality of the arrivals improves. We notice that some of our exchanges advise growers to keep their hops at home and wait for buyers to come round. A good many growers acted upon this advice last year and the year before and lost money by it. We would advise growers to use their own judgment in regard to holding or consigning, and not allow themselves to be influenced by anybody. There is a market here for good export hops at more money than buyers are offering in the country, and the grower who consigns early and takes advantage of a bare market will, in our opinion, do better than those who wait for buyers to come round.

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, poor, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8; Olds, all growth, 2@4.

PROVISIONS have been active at lower prices Mess pork quoted at $8 95@9 12½ for spot lots; $8 85 for September and October; $8 85@8.95 for November. Bacon at 6¾c. for long clear and 6¾ for short clear. Lard, western steam, at $6 85 for spot lots; $6 80 for October; $6.80 for November, and $6 80@6 82½ for December. Stearine at 7½@7¾ for prime. Tallow at 7¼@7¾ for prime. Beef hams at $18. Beef—extra mess, $10 50@11; plain mess, $10@10.50; packet, $11@12 for bbls.; extra India mess, $19@20 for city brands; do., Philadelphia, $18@19.

POULTRY AND GAME.—Supplies of live poultry have been large, but the demand for Jewish New Year has kept trade very active. There are nearly 100,000 Hebrews in New York city, and a national feast makes quite an item for the poultry trade.

Chickens, N. J., 12@12½c. lb; State and Penn., 11½@12c.; Southern and Western, 11@11½c. Fowls—N. J., 12@12½c.; State and Penn., 11½@12c.; Western, 11@11½c.; Southern, 10½@11c. Roosters, 5@6c. Turkeys, 9@12½c.: Ducks, fat, ₱ pair, poor to fair, $1@$1.12 as they run 10@80c. Geese, N. J., $1.25@1.75; W. & S., $1@1.25.

Dressed poultry is in full supply for the season; demand gradually increasing.

Turkeys, dry picked, 14@15c.; other, 11@13c. Pa. chickens, 15@17c.; N. J., 13@15c.; State, 13@14c.; Western, 12@13c. Pa. dry picked fowls, 14@15c.; N. J., 13@14c.; poor to fair other, 10@12c. Ducks, extra, 15@20c.; State, 13@15c.; poor, 8@11c. Geese, 6@10c.

Game is in larger supply, and holders meet the demand with easier rates. Venison has appeared: quoted whole deer, 15c.; short saddles, 20@22c.; long do., 18@20c.

Grouse, trapped, pair, 90c.@$1; Partridges 80c.@$1; Woodcock, 90c.@$1 doz.; pigeons, scarce. Mallards pair, 70@75c.; Teal, 40@50c.; common, 25@35c.

SEEDS.—New timothy is at $1.20@1.22½ for prime and freely offered. Clover at 8¼c. held for new western. Rough flax at $1.47½@1.52½.

TOBACCO.—Shippers have been taking fair quantities, and the home demand continues good with prices firm on most grades. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	4 @ 4¼
Good lugs	3½@ 4¼	4¾@ 5
Low leaf	4¾@ 5¾	5¾@ 6¼
Medium leaf	5¾@ 6¾	6¾@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8¼@10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers	— @—
do. do. fine	18 @35
do. do. selections	18 @35
do. seconds	10 @12
do. fillers	6 @ 7
Pennsylvania assorted lots, common	8 @ 9
do. do. fair	10 @12
do. do. fine	14 @17
do. wrappers	18 @35
do. fillers	6¾@ 7
New York assorted lots, common to medium	6¾@ 8
Good	— @—
Ohio assorted lots	8 @10
Wisconsin assorted lots	7 @10

VEGETABLES.—Exports of potatoes, past week 5,000 bbl.; of Onions, 450 do. Potatoes are firm with some advance. Sweets in smaller supply and prices are hardening. Garden stuff firm with the advancing season. Cauliflower, $2@5 per bbl; Celery, 80@90c. per 100; Early Rose, extra choice, per bbl., $2 25@2 50; do., L. I., $2@2 50; do., State, good to prime, $1 75@2 12; do., poor to good, $1 25@1 75; Prerless, prime in bulk, $1 75@1 87; do., fair, $1 50@1 75; Sweet potatoes, Md. and Del., $1 50@1 75; do., Va. yellow, $1 25@1 75. Onions, eastern white, per bbl., $1@1 50; yellow, $1@1 37; red, $1@1 25; Chester, 75c.@1 12. Squash marrow, per bbl., $1 25@1 50; Cabbages, per 100, $2 50@4; Egg plants, per 100, $1@2 50; Turnips, Russia, per bbl., $1 50@1 75; Beets, Jersey, per bbl., 75c.; Carrots, per bbl., $1@1 25; Peppers, bullnose, per b. l.; 75c.@$1; Cucumber pickles, 100, $1@1 50; Tomatoes, per crate, 20@25c. Lima beans, per bag, $1; shelled, per bush., $2 50@3 50; Sweet Corn, Muckensack, per 100, 50c.@$1 37; Pumpkins, per 100, $5@8.

WOOL.—There has been a very moderate sale, manufacturers buying close to actual needs, but holders views are firm, and prices are not disturbed.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 38@38; X, 35@37; No. 1, 33@35c.; No. 2, 33@35c; coarse, 30@32c. combing, 40@45c.

New York, Michigan, and Wisconsin, XX, 32@35c.; X, 32@38 c.; No. 1, 34@36c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 39@43c.

Indiana, Kentucky and Tennessee—XX, 33@35c; X, 33@35c.; No. 1, 34@36c.; No. 2, 32@34c.; course, 27@30c.; combing, 38@42c.; unwashed combing, 28@32c.

Illinois, Iowa and Minnesota—XX, 34@35c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 29@31c.; course, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Sept. 23, 1878.

BEEVES.—Receipts for the week, 11,739 head; do. last week, 11,805 do. The market opened with supplies detained. After a few sales equal to last Wednesday's rates, the yards at Jersey City were suddenly filled, and prices ruled very weak. At 60th Street the offering was moderate, and sold out early at ready prices. Prime to extra Kentucky steers, to dress, 56 lbs., 10@10¾c.; under grades, 8½@9¼c.; selected Ohio, 9½@10c.; common to good, natives, 8@8¾; a few at 9c; a few good Colorado, 9¼c.; other, 7¾@8½c. Texas and Cherokee, 7@7¾c. Buyers were favored in weight. Receipts largely of low grade stock, the latter part of the market handling many Texas, Coloradas and Cherokees

COWS AND CALVES.—The nominal range is 35@65 for common to good milkers, with calves by their sides.

VEAL CALVES.—Choice milk calves have been scarce, and prices have advanced to 7@7½c.; for grassers, 5c. Fed calves sold readily at 4c, owing to the light supply of choice. Fair to good, milk, 6@6½c.

SHEEP AND LAMBS.—Receipts for the week, 29,815 head; do. last week, 36,864 do. Market slow; low prices for sheep obtained with difficulty, quoted, 4@4¾c.; choice wethers for export will not exceed 5c Lambs, 4¾@5¾c.

SWINE.—Receipts for the week, 25,218 head; do last week, 18,024 do. Cool weather improves the demand, and prices are a trifle better; quoted 4¾c. lb. to $4.40 per 100, the latter for Ohio. N. J. dressed, 5¾@6¾c.

INDEX TO NEW ADVERTISEMENTS.

Barrows Savery Co.—Prindle Food Steamer.
Benson, Maule & Co.—Pig Breeder's Manual.
Bickford & Huffman—Farmer's Favorite Grain and Fertilizer Drill.
Boomer & Boschert Press Co.—Power Cider and Wine Press.
Carpenter & Son, W. S.—The New Rochelle Raspberry.
Dederick, P. K.—Perpetual Hay Press.
Dingee & Conard Co.—Beautiful Ever-blooming Roses.
Fletcher & Co., Alice—Hygienic Undergarments.
Gifford, W. C.—Gifford's Swinging Stanchions.
Gilmore, S. J.—Kansas Farms and Free Homes.
Hale, C. H. & J. H.—New Red Raspberry.
Hanford & Son, R. G.—Dwarf Pear Trees.
Hubbard, T. S.—Grape Vines, Small Fruits, &c.
Lewis Bros.—The "Boss" Scroll Saw.
Miller, L. J.—Nonpareil Farm Feed Mills.
Relph & Co., F. H.—To Exporters of Apples to Europe.
Reversible Collar Co.—Reversible "Linene" Collars.
Roe, E. P.—Raspberry, Currant, Gooseberry and Blackberry Plants.
Saul, John—New and Rare Plants and Fruit Trees.
Sheldon, John—Genesee Valley Farms for Sale.
Straub Mill Co.—Gladiator Corn Sheller and Cleaner.
Thorburn & Co., J. M.—Imported Dutch Bulbous Roots.
U. S. Wind Engine & Pump Co.—Halladay Standard Wind Mill.
Ziegler & Co., P. W.—How to be your own Lawyer.

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Pulvermacher Galvanic Co.—Electric Belts.

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Halladay Standard.

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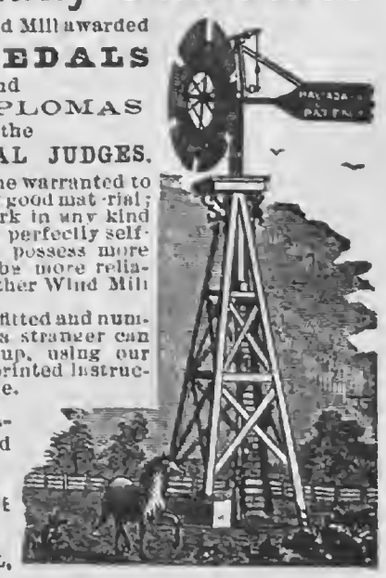

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Reading for the Young.

MAKE CHILDHOOD SWEET.

WAIT not till the little hands are at rest
Ere you fill them full of flowers;
Wait not for the crowning tuberose
To make sweet the last sad hours;
But while in the busy household band,
Your darlings still need your guiding hand,
Oh, fill their lives with sweetness.

Wait not till the little hearts are still,
For the loving look and phrase;
But while you gently chide a fault
The good deed kindly praise.
The word you would speak beside the bier
Falls sweeter far on the living ear;
Oh, fill young lives with sweetness.

Ah! what are kisses on clay cold lips
To the rosy mouth we press,
When our wee ones fly to their mother's arms,
For love's tenderest caress!
Let never a worldly bauble keep
Your heart from the joy each day should reap,
Circling young lives with sweetness.

Give thanks each morn for the sturdy boys,
Give thanks for the fairy girls;
With a dower of wealth like this at home,
Would you rifle the earth for pearls?
Wait not for death to gem love's crown,
But daily shower life's blessings down,
And fill young hearts with sweetness.

Remember the home where the light has fled,
Where the rose has faded away;
And the love that glows in youthful hearts,
Oh! cherish it while you may!
And make your home a garden of flowers,
Where joy shall bloom through childhood's hours,
And fill young hearts with sweetness.

[*Christian Register.*

SMALL COURTESIES AT HOME.

MARGARET B. HARVEY.

THERE is a great lack of minor refined habits in some places—especially in the arrangement of the table. Setting a table is pre-eminently a lady's work. It should not be left to any frowsy Gretchen, or blundering Biddy, or shiftless Dinah. A woman, with any of the instincts of a lady, however dormant, ought to want to see her table beautiful, and attend to it herself, or give her girl special training in this department.

Country housekeepers, alas! while too solicitous of the substance, often completely ignore the symbol. In most cases their cloths are clean,—usually in some districts, that is all. They are often wrinkled, frequently there are no napkins, the glass is dingy, the knives unpolished, the food arrayed more as regards quantity than appearance, and altogether, to sit at such a board long, would effectually check any attempt to rise above the gross materiality of the subject.

There is scarcely a woman who in her secret heart would not desire better. But the thought of a set of hungry, impatient, dusty, sweaty, farm hands hangs upon her like a millstone. Perhaps she has read Mrs. Diaz's excellent little book, "The School-master's Trunk," and from it has learned,—or perhaps not, and some one has told her,—that rich cakes and pies and hot bread are abominations; in despair, she remembers that she still has this famishing crowd to feed. She may herself believe that plain bread, light cakes, uncooked fruit, and simpler meals, would be wholesome;—but, oh, the "men-folks!" Above all, to imagine *them* brushing their hair and putting on their coats and sitting down to smooth, snowy linen, glittering glass, sparkling silver, shining steel and fresh flowers,—no more!

I might tell you to determine to have plain white dishes, uniform if not priceless; glass like crystal; silver reduced to absolutely solid spoons, forks and butter-knives (more if you can afford it), and the money saved from the shams of plated pitchers and sugar-bowls, going to enrich your damask and then your china,—but I know I should frighten you, were I to add, "Use them every day, arrange them with exquisite care, and embellish them with fragrant flowers."

I know, I am familiar with every difficulty which can beset the mistress of a farm-house. Yet think what cause you have to hope. Your men and boys all go to the pump and splash themselves plentifully with water as though by instinct. If they knew that you sincerely desired it, they would soon form the habit of taking just a minute or two more to arrange their toilets. It is pretty safe to say that if the table invariably presented an exquisite appearance for two weeks, they would be sorry to see a relapse the third. You may not be able to reform the food itself,—but the accessories, with patience, you may.

There is no use in talking. Hard labor, *as* hard labor, in itself is degrading. It is constantly encroaching upon and threatening previous qualities of mind and heart. It is false morality to try and teach otherwise, and it is well for all, especially the greatest toilers, to look this matter squarely in the face. Once warned of the danger, they can study intelligently to avoid it. The end of living is not to labor, but labor is the means of living. High above it and beyond it and jealously guarded from its spoiling influences must be kept *life itself*. Not until we comprehend, as we should in this enlightened age, that since the days of our ancestors the world has wakened to the grand truth that we, ourselves, and our souls, are our true inheritance, to which all external things are to be subordinated, will we understand the real mission of labor,—that is, it is a useful machine, which we must rule and which must not be permitted to rule us. In order to derive permanent benefit from it, we must believe that we owe to ourselves as much rest and recreation, and refinement and culture, as possible. What folly to work so hard for temporal riches that may never come, and neglect daily opportunities to live intelligently in the present!

Would it not be a constant delight, a favorable occasion for the steady conquest of coarseness, this simple matter of the family meal? With carefully arranged appointments, agreeably disposed viands, presentable toilets, combined with seemly leisure, as though a company of Christians (not a herd of famished animals), gathered, and afterwards lingered for the sprightly jest and pleasant chat, what other influences could follow than good ones?

I know a family whose man-of-the-house hearing the dinner-bell as he works among his cabbage plants and tomato vines in the exposed garden, the perspiration pouring down under his broad straw hat and drenching his shirt sleeves, while the broiling sun glows fiercely overhead, places his hoes and rakes under the pear-tree, wipes his streaming face with a snowy handkerchief, and as he leisurely saunters towards the house to give himself an opportunity to cool off somewhat, he frees his hands and nails from temporary lodgments, now and then shaking from his clothes loose particles of dirt. On a bench at the kitchen door is a basin and a blacking-brush, while overhead hang a light coat, a whisk and his cuffs. In a very few minutes the transformation is complete,—hair, boots, nails, necktie, and all are just right. You are soon aware that he changes often enough and is careful enough to keep his shirt-bosom, with his gold studs, immaculate, and the rest is easy. He presents himself in the dining-room,—whether his mother and sister only are with him, or whether there is a large company gathered—the perfect gentleman, whose appearance, except for a little flush of face and hands, perhaps these unmarked, indicates nothing different than it might if he had passed the morning on the piazza with his favorite books. It is the same in the winter,—only then he goes from the chicken-house and corn-crib to his room for a little while. I will add, lest some may whisper, "fancy chap," that he is accounted one of the most successful managers in that place. His vegetables and his poultry are his pride and they might be known anywhere.

Begin, mother, with the little boys, if the big ones are beyond you. Teach them the small proprieties, such as coming to the table neat, eating with their forks, using their napkins properly, etc. The older may make all these things habits, but the younger will grow with them so. I have heard of farmers' boys who have said and felt that they are not treated and considered as gentlemen, because they had to work hard. They were wrong. It was not the work, but because they did not hold themselves above the work. To them I would say, "*Be* gentlemen, and the reputation will follow." There is no reason whatever why you should not. You are, or will be, your own masters. Kings of your own domain. Your position is secure, adorn it. Work, and receive its benefits, but religiously efface its deleterious effects, both in your minds and bodies. Read, study, think, observe, travel, be considerate of women, respect yourselves and your vocation, seek to improve your manners, tastes and habits, and by the time you reach the State or National Legislature, you will find that in the world's great arena you are worth as much as the best of men.

The Puzzler.

CROSS-WORD ENIGMA.

My first is in Robert but not in Abel,
My second is in Homer but not in Mabel;
My third is in Cyrus but not in Mary,
My fourth is in Oscar and also in Sarah;
My fifth is in Alfred but not in Bert,
My sixth is in Cora and also in Gert;
My seventh is in Horace and also in Nora,
My eighth is in Esther but not in Flora;
My ninth is in Tommie but not in Fannie.
My whole is my own name,
If you do not guess it I'll not be to blame.

☞ Answer in two weeks.

HOUR-GLASS PUZZLE.

1. A CHURCH of New York. 2. A State of New England. 3. A city of Louisiana. 4. A town of Maryland. 5. A Southern sound. 6. A county of Kentucky. 7. The goddess of evil. 8. A consonant. 9. A city of Asia. 10. A city of China. 11. A river of Hindoostan. 12. A city of Greenland. 13. A city of Greece. 14. A native of a Middle State. 15. A stream of water in New York. Centrals form a city of Virginia.

☞ Answer in two weeks. LITTLE ONE.

CHARADE.

A MAN came to my first
When at the county fair,
And lounging around and in the dirt
He saw my second there.
"Now water from my whole," he said,
"To quench my second's thirst,"
And this he got without delay,
And brought it to my first.

☞ Answer in two weeks. MERMAID.

PUZZLER ANSWERS.—Sept. 21.

HIDDEN TREES.—1, Catalpa; 2, Poplar; 3, Hemlock; 4, Papaw; 5, Baobob; 6, Buttonwood; 7, Butternut; 8, Arbor-vitæ; 9, Rosewood; 10, Linden; 11, Agave; 12, Alder; 13, Almond; 14, Hazel; 15, Birch; 16, Bamboo; 17, Mistletoe; 18, Banian.

ENIGMA.—
Cares is a noun of plural number,
Foe to sleep and quiet slumber;
Now, any other name you take,
By adding "s" you plural make.
But if to this you add an "s,"
'Tis *cares* no more, but now *caress*;
Plural is plural now no more,
And sweet what bitter was before.

TRANSPOSITION.—
Fair Luna travels into view,
Diffusing many a silver ray,
And twinkling stars are coming too,
In troops across the milky-way.

Sabbath Reading.

THE TRIAL OF JESUS CHRIST.

MEN have too much forgotten that the central event in history assumed the form of a judicial trial. The prodigious influence of the life and personality of Jesus of Nazareth is admitted by all. And his tragical death, early and passionately accepted by Christianity as the significant fact of his career, has become more than any other incident the starting-point of modern history—his tomb, as Lamartine put it, was the grave of the old world and the cradle of the new. But that memorable transaction was the execution of a capital sentence, proceeding upon a two-fold criminal trial—upon one process conducted according to Hebrew and one according to Roman law.

In its judicial aspect, as some others, it is peculiar—perhaps unique. There have been many judicial tragedies recorded in history. Capital trials, like those of Socrates, of King Charles and of Mary of Scotland, have always had a fascination for men. And this trial has impressed and attracted the world more than any or all of these. But I wish to point out that it has in addition a purely legal interest which no one of them possesses.

The questions, for example, are at once raised, Were there two trials or only one? What was the crime for which the accused died? Was the decision in either case right in form, and attained by steps in conformity with the process binding or observed at the time?

These questions of law proceed of course upon an assumed history of fact. This history is abundantly familiar; and, fortunately, there is no special necessity that we should commence this inquiry by an examination of the sources. Men are not agreed how far back they can exactly trace the three earlier Gospels on the one hand, or the later Gospel of John on the other. But the detail, verisimilitude, and authorative calm of these documents impress the reader with a sense of the closest proximity to the life whose course is narrated. And they have no competitors. To some readers it will appear a singular advantage that in the documents on this special subject there is no reference to a miracle. In none of the four records of the trial is there (after the first arrest) any touch of the supernatural in *that* sense of the word. The whole narrative of external fact might have been told of any morning's work of the Sanhedrim, of any forenoon condemnation by the procurator. In truth the incidents of the trial are most natural and probable, and in so far as the four traditions agree there seems no excuse for doubting the history.

All readers know that the Hebrew commonwealth, and the institutions which regulated it, were pervaded by a deep sentiment of justice, righteousness, and law. But all are not aware of the extent to which that sentiment was developed in the later history of the people. In the more ancient part of the traditions of the fathers we read, "When a judge decides not according to truth, he makes the majesty of God to depart from Israel. But if he judges according to truth, were it only for one hour, it is as if he established the whole world, for it is in judgment that the divine presence in Israel has its habitation." It has recently been pointed out that that whole vast later literature of the Jews which we call the Talmud is "emphatically a cyclopædia of all law," which may best be judged by analogy and comparison with other legal codes, more especially with that of Rome and its commentaries. It contains many other things, but this is its basis. And what is more important for us to notice is that this legal basis is the older part.

Accordingly, while portions of the general Talmud commentary did not come into existence for centuries after the introduction of Christianity, the Mishna or central portion is generally admitted to have been compiled by Rabbi Judah, somewhere about A.D. 200. But it was compiled as an oral law which had been growing in use and authority ever since the return of the nation from Babylon—as a "brief extract of about eight hundred years' legal production." Hence, modern Jewish writers refer to it without hesitation as including the code of criminal law which was in existence at the date of the high-priestship of Annas and Caiaphas.

What have been called the four great rules of their criminal jurisprudence—"strictness in the accusation, publicity in the discussion, full freedom granted to the accused, and assurance against all dangers or errors of testimony"—are carried out even in the Mishna in minute and scrupulous rules, leaning almost ostentatiously in every point to the side of the accused, and having force most of all in the case of a trial for life. Indeed, so far does this go, that modern Jews have been disposed to represent capital punishment as abhorrent to the whole genius of Hebrew jurisprudence.

The question whether the Hebrew trial was according to their own rules of law has perhaps not been exhaustively considered by any one writer, though it has been touched upon by many.

On a Thursday night in that month of March, the Thursday towards the end of the passover week, unquestionably took place the *arrest*—the first step before most modern trials. The question has been raised whether the arrest was legal. There is no reason to doubt that it was by authority of the high priest; and the addition of a Roman *speira* to the officers of the temple must have been procured by Jewish authority, and thus tends rather to favor legality. But was arrest before trial at all lawful by Jewish law? It seems not to have been so unless resistance or escape was apprehended. In this case no escape was intended, but resistance, though not intended, was looked for; and the lawfulness of the arrest really turns on the question whether it was to be the preface to a regular trial or not. If so the legal course after it was that followed a little later by the captors of Peter and John, who "put them in ward until the next day, because it was eventide." It was to be otherwise here.

An examination by night followed the arrest. Jesus was first led by his armed escort to the presence of Annas, by far the most influential member of the Sanhedrim.

By Annas Jesus was sent bound to Caiaphas, perhaps only to another department of the sacerdotal palace. But before one or other of these princes of the Church the accused was certainly subjected to a preliminary investigation before any witnesses were called. It is extremely difficult to decide whether this examination by "the high priest," recorded by John alone, was made by Annas or Caiaphas—so difficult that it is fortunate that scarcely any legal question turns upon the point.

But the main point with regard to the high priest's examination is independent of the question who the examiner was. It appears in any case to have been wholly illegal. It was there the right of the accused to be free from all such personal investigation until he was brought for trial before his congregated brethren. This rule of publicity seems to have been derived from principles both as to judges and witnesses. "Be not a sole judge," was one of the most famous aphorisms, "for there is no sole judge but One." Still more clear was it, not from the Mishna only, but from the Pentateuch, that there was to be no such thing as a sole witness; and that the "two or three witnesses" at whose mouth every matter must be established must appear publicly to give their testimony. Their deposition was the beginning of every proceeding; and until it was publicly given against a man, he was held to be in the judgment of law not merely innocent, but scarcely accused. It is this principle which gives the fullest explanation of the answers of Jesus of Nazareth to the midnight questions of the high priest. The ecclesiastical magistrate, probably sitting privately, and certainly before witnesses were called, asked Jesus of his disciples and of his doctrine.

"Jesus answered him, "I spake openly to the world; I ever taught in the synagogue, and in the temple, whither the Jews always resort; and in secret have I said nothing. Why askest thou me? ask them which heard me, what I have said unto them: behold, they know what I said."

It was in every word the voice of pure Hebrew justice, founded upon the broad principle of their judicial procedure, and recalling an unjust judge to the first duty of his great office. But, as one who studied that nation in older times observed, "When a vile man is exalted, the wicked walk on every side" around him; and when the accused had thus claimed his rights, one of the officers of court—a class usually especially alive to the observance of form and of that alone—struck Jesus with the palm of his hand, saying, "Answerest thou the high priest so?" The reply of Jesus is exceedingly striking. In it he again resolutely took his stand on the platform of the legal rights of a Hebrew—a ground from which he afterwards no doubt rose to a higher, but which he certainly never abandoned: "If I have spoken evil, bear witness of the evil: but if well, why smitest thou me?"

The words are no doubt a protest for freedom of speech and liberty to the accused. But they appeal again to the same principle of the Hebrew law—that by which *witnesses* took upon themselves the whole burden of responsibility, and especially the whole initiative of every accusation, even as they were obliged to appear at the close, and with their own hands to hurl the stones. And the renewed protest was so far effectual. For now the witnesses came forward, or, at least, they were summoned to bear their testimony; and only when they came forward can a formal trial be said to have commenced.

But did all this not take place by night? And was a trial by night legal?

On the question of fact, it is well known that the four Evangelists give a confused account of what took place. Matthew and Mark, omitting the seemingly private interrogation of which we have already spoken, distinctly narrate a double and very striking trial by night—first by witnesses, and then by an attempt to obtain a confession; but all before the high priest, the scribes, and the elders, to whom Mark adds, "all the chief priests." Their narrative reads as if the first part of this trial might have taken place almost as soon as the prisoner was brought from the Mount of Olives. At all events, in their narrative it took place by night, while in the morning there was a second and separate "consultation" of a similar, but seemingly larger and more authoritative meeting. John, on the other hand, narrates the interrogation by the high priest, the transfer from Annas to Caiaphas, and the delivery to Pilate in the morning, but does not allude to any trial before the council. These two representations, though not contradictory, are unsatisfactory and inconsistent; and the tradition of Luke which differs from both, completes the confusion, but helps us to a result. He omits the earlier part of the alleged trial—the interrogation of witnesses; but narrates the confession and condemnation as at one meeting of the council, which took place "as soon as it was day," and after which the whole multitude "led him to Pilate." Putting all these representations together, there was no difficulty in arriving at the order of the historical transactions, though there will always be insuperable difficulty to those who insist on their legal validity and regularity. The visit to Annas and the transfer to Caiaphas came first, with the interrogation of the accused by one or other of the high priests. About this earlier hour certainly took place the denial of Peter related by all the Evangelists, while some time must have been consumed in sending for witnesses and summoning either the whole council or its members.—[To be continued.

PERSONAL ITEMS.

James Gorden Bennett is forty-two.

Senator Bayard of Delaware has originated a new peach.

Potter, the wheelbarrow lunatic, has reached San Francisco.

The widow of Daniel Webster, now in feeble health, is at New Rochelle.

Marshal P. Wilder, the veteran Boston pomologist, has reached his eightieth year.

The Countess of Ariosto, the last descendant of the poet, has just died at Ravenna, aged ninety.

Marshal and Mme. McMahon lately sent to Minister Noyes 6,000 francs for the yellow fever sufferers.

Thomas Carlyle has begun his autobiography, which he intends to be his last work, and which is to be published after his death.

Garibaldi is in excellent health and spends most of his leisure hours in stimulating the "Unredeemed Italy" movement. He is soon to receive a visit from Victor Hugo.

Mrs. Dennis Kearney, wife of the California agitator, while en route East the other day, was the victim of an assault by a party of roughs, who broke into the second-class coach where she was sleeping.

Maria Grace Washburn, of New Haven, though younger than many who will read this—being in fact only nine years of age—has read the Bible through eight times and not skipped any of the tough names.

The Hon. Caleb Cushing, lately nominated candidate for State Attorney-general of Mass. on the Butler ticket, has been suffering from erysipelas in the head for two months past. It has compelled him to suspend all literary work.

People blessed with fine voices generally take great delight in sweet sounds. This trait accounts for the fact that the great Prima Donna, Patti, is said by a Cardiff paper to have purchased Craig-y-nos Castle, near Istradynglais.

There are four candidates for the Bulgarian throne—the Prince von Battenberg of the family of Hesse, who is the Russian candidate; General Ignatieff, the Panslavic candidate; Prince Emmanuel Vogorides and Prince Karageorgevitch.

"The Claimant," Orton, alias Sir Roger Tichborne, is now employed at Portsmouth Dockyard, sawing timber. He is much thinner than he was. At first they set him to brick making, but he attracted too much attention from the curious visitors.

Some memoirs, about to be published in Paris, state that Thiers was so small a baby that he could have been put into a wooden shoe. He was baptized in a cellar, since the reign of terror had but just come to a close, and the priests were all afraid to perform the ceremony in a church.

The Pope is, they say, a most indefatigable letter writer. He has taken it in hand to reform the regular clergy, beginning at Rome, and has had furnished to him a list of all the priests resident, with particulars as to their private lives and the manner in which they discharge their duties.

The Duke of Devonshire, by two successive flukes, though born a simple squire, became first an Earl, and then what he now is. His Grace is the possessor of an enormous fortune, has six country seats distributed in the three kingdoms, and the historical mansion known as Devonshire House.

Butler is worth three millions; Butler is worth two millions; Old Ben Butler is worth fully a million and a half; Cross-eyed Ben, the representative of labor, is worth at least a million of dollars. Infallible newspaper scribes make these statements. You pay no money, but you take your choice.

Mr. Tennyson has obtained an injunction against the Christian Signal, an English weekly, restraining it from interfering with his productions. Notice had been given in the paper that it would shortly print an unpublished poem of 200 lines by Mr. Tennyson, entitled "Confessions of a Scientific Mind."

The death of millionaire Reese, according to the San Francisco Argonaut, came about in the meanest kind of a manner. He was trying to steal out of a Paris cemetery without paying the fee, and when caught by the irate sexton the blood rushed to his head, causing death. He lived to save $10,000,000, and died to save a silver groschen.

Congressman-elect Murch, the greenback-labor representative of Maine, is a tall, good-looking and well-proportioned man of forty, a blonde, with blue eyes and light-brown mustache and hair sprinkled with gray. He has been a sailor, lumberman, dairy-farmer, rigger, stone-mason and granite-cutter, has never saved a dollar and is proud of his improvidence.

Queen Victoria travels in a railway carriage which cost $30,000. A correspondent of the Chicago Times says that its windows are shaded with green silk curtains, trimmed with costly white lace. Its ottomans are covered with cream-colored silk, embroidered with the royal arms and monogram in purple and gold, and a carpet which cost over $500 covers the floor.

Sir Garnet Wolsely, the ruler of Cyprus, has a good hand at description. He was in this country during the Civil War, and thus wrote of Stonewall Jackson: "A broad, open forehead, from which the hair is well brushed back; his shapely nose, straight and long; thin, colorless cheeks, with only a very small allowance of whisker; cleanly shaved upper lip and chin; a pair of fine grayish blue eyes, rather sunken, with overhanging brows, which intensify the keenness of his gaze, but without imparting any fierceness to it, * * * and a smile that seems always lurking about his mouth when he speaks."

Ex-Queen Isabella of Spain, though she has not kept all the commandments, is represented as very kind-hearted. In Paris, where she generally lives, her name is associated with many acts of generosity. She does good whenever opportunity offers, and always, if possible, in a purely private way. When money is needed, she is one of the first called upon, and she never refuses to give—and give liberally. Her gross figure hides, but does not interfere with, a very sympathetic and tender heart. The late sale of her jewels brought some $400,000 more than it was thought they would bring, and she intends to devote the whole of this sum to a tomb for the young Queen Mercedes, her daughter-in-law, of whom she was very fond.

Of Prince Bismarck at home, a correspondent of the London Times writes:—"Nothing is more simple and touching than the respectful and silent enthusiasm with which his wife and children surround him, and the devotedness they show to him. In his family circle he lets himself be governed by their anxious tenderness. When he leaves the table his wife or son brings him his long clay pipe and lights it for him. This first pipe smoked, a second, all ready, is handed to him, and this is afterward gently taken from him without a third being brought. The prince yields to this silent tyranny, which relieves him of a portion of his personal cares. His son Herbert told me, 'I have put my father to bed, for he, too, you see, ends by being tired.' He is treated, indeed, by his family as a demi-god, and cared for as an infant. On hearing him chat with his family one is struck by the clearness with which he stoops to familiarity, and also by the feeling of irresistible force which he inspires, so that when once he has said anything it becomes law."

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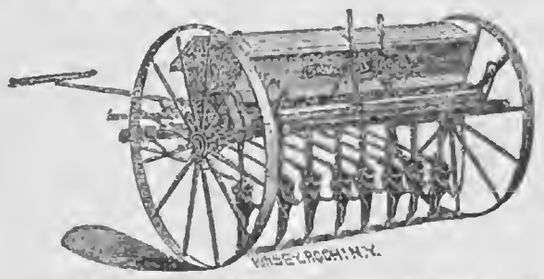
1st.—The Centennial Commission MADE BUT FIVE AWARDS to Grain Drills and Fertilizer Attachments.
2d.—Of these five, TWO were given Bickford & Huffman. One on the FARMER'S FAVORITE and one on Fertilizer Attachment.
3d.—NO OTHER MANUFACTURERS RECEIVED AN AWARD ON A FERTILIZER ATTACHMENT!
4th.—The award to the "Champion," built by Johnson, Gere and Truman, was "for a machine with attachable manure distributer;" an implement they did *not* exhibit and *do not offer for sale*, as their "manure distributer" is neither "attachable" nor detachable. The report does *not* commend this drill or its "manure distributer," for a single quality of work.
5th.—The award to the Farmer's Friend pronounces it defective by saying *it is capable of further improvement, as regards delivery up and down hill*; and also to the McSherry drill in these words: "*Some further adjustment appears desirable to enable this drill to deliver with equal equality up and down hill.*"
6th.—The Empire, Buckeye Hoosier, Superior and Hagerstown drills were *refused* EITHER AWARD OR REPORT, because of great "irregularities" or "variations" in the tests.
7th.—The variation of our nearest competitor, The Champion, *from its own distribution*, was MORE THAN 237 PER CENT. of that shown by the FARMER'S FAVORITE.
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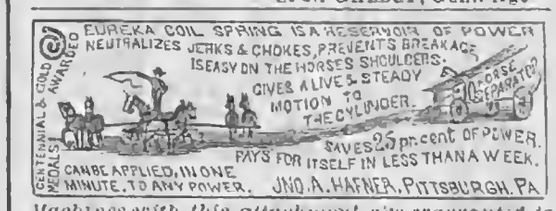

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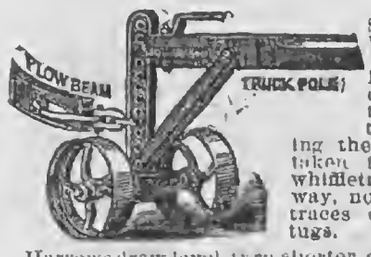

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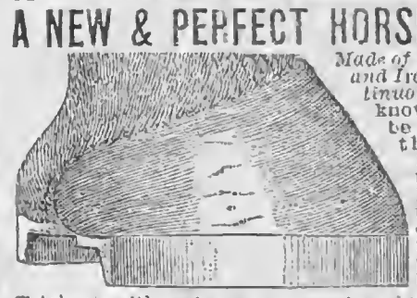
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Wit and Humor.

"Don't give it a whey" is a parallel expression to "cheese it."—*Reynolds Herald.*

You never see a dark-complexioned dumb man, because a dumb man can't tan, sir.

When Mr. Thomas hears the squeak of a young porker, he remarks, kindly, "A good voice, but needs cultivation; we'll fix all that."—*N. Y. Commercial Advertiser.*

"Oh, why should the spirit of mortal be proud?" is often asked. Well, really, we don't know, unless it is because he can climb a tree and a mule can't.—*Philadelphia Chronicle-Herald.*

This country is terribly demoralized, and soon the greatest crimes will excite no wonder. We should not be surprised to hear of a young man we know of sleighing his girl before the year is out.—*Fond du Lac Reporter.*

Oh the corn, the horrible corn,
Burning at night and aching at morn;
Under somebody's foot half of the time,
Throbbing with misery almost sublime,
Paining,
Inflaming,
Big as your fist—
Show me the sign of the chi-rop-o-dist!

Some one has at last discovered the tendency of the average milkman to water his milk. His instinctive desire that his milk shall be pure, impels him to wash it carefully before delivering it to his customers, and some of the water is apt to get left in.

"Beaconsfield wears his garter on the left breast," an English paper says. His stockings haven't been sent from the wash, we suppose; or is the old boy's left leg like a Dutch churn, bigger at the bottom than the top.—*Cincinnati Breakfast Table.*

Said an aristocratic little Miss "Ma, if I were to die and go to heaven, should I wear my moire-antique dress?" "No, dear, in the next world we shall not wear the attire of this." "Then, ma, how will the Lord know I belonged to the best society?"

A member of a church being particular about the new minister, is said to have prayed alond at the late meeting of the kirk elders, "Send us not an old man in his dotage, nor a young man in his goslinghood, but a man with all the modern improvements."

In England, correspondents are dismissed by editors but with scanty courtesy. A shrinking maiden forwards some verses upon a "Bunch of Violets." The composition is thus acknowledged: "Your poem has seen the light. We lit our cigar with it."—*Exchange.*

"Of all the poets, darling one,
Who've rhapsodized of love,
Which one evokes your ardent praise
All other bards above?"
And as he took her in his arms
And kissed her o'er and o'er,
She spake, in tones of ecstasy,
"O, Tommy, give me Moore!"

[*Yonkers Gazette.*

Dog-seller: "That 'ere hanimal's the real stock, mum, and dog cheap at five pounds." Young widow: "It's a sweet, pretty darling, black and white; but in my present state of bereavement you procure me one entirely black. This will do very well for half-mourning in about six months."

The Rev. Henry Ward Beecher, a while ago went to a hotel in a city of New Jersey for a night's stay. He ordered supper, and after taking a few sips of coffee, called the colored waiter and said: "Can you give me your service this evening?" "Yes, sah," said the waiter briskly. "The matter is one of importance," said Mr Beecher, solemnly. "Perhaps I had better speak to the landlord myself about it." "Oh, no, sah," said the sable attendant, fearful of losing the thumping fee that the preacher's earnestness foreshadowed. "I can give you all the time you need." "Well then," said Mr. Beecher, with added solemnity, "I want you to sit up to-night with this coffee. It is so weak it is going to die before morning." There was a moment of pathetic silence, and the waiter withdrew.

The Irrepressible.—They were all out at the springs—father, mother, and the five-year old boy. After an invigorating bath they went up on to the hill to the "chicken-soup" spring, and while regaling themselves with the delightful drink, the little one looked at the bubbling, steaming water a moment, and then asked:

"Mamma, what makes that water boil so?"

"God does, my son."

"How does he do it?"

"Oh! he builds a big fire under it."

"Does he build the fire his own self?"

"Yes, I suppose so."

The little one reflected a moment, then asked:

"Mamma, does God kick over the chairs and swear at Mrs. God when he has to get up and build the fire?"

The wife glanced suggestively at her husband, but his eyes were fixed intently upon some object away down the river. The silence for a minute was absolutely painful, and then the man softly remarked,

"I never before knew the Humboldt to be so low at this time o' year."—*Elko Post.*

IN FASHION JOURNALS.

IN REALITY.

Nothing but a steady dye-it will preserve the reputation of a moustache on the face of a red-haired man.—*Danielsonville Sentinel.*

A writer mentions the fact that "it is a general custom not to use napkins at luncheon in England." If John Bull thinks he is ahead of Uncle Sam in such matters of etiquette, he is sadly mistaken. Tramps, in this country use neither napkins nor forks at either breakfast, dinner or luncheon. But we don't deem it worth bragging about.—*Norristown Herald.*

A clever youth, according to the Hartford Times, is a little five-year-old boy, residing with his parents in the Cheney block. He was asked by a lady, a few days since, for a kiss, and immediately complied; but the lady, noticing that the little fellow drew his hand across his lips, remarked: "Ah, but you are rubbing it off." "No, I ain't," was the quick rejoinder; "I'm rubbing it in!"

"Let me look at your dictionary a minute," a polite, well-dressed stranger asked, bowing into the sanctum in some haste yesterday morning. "Certainly," and we shoved Noah W.'s charming novelette, unexpunged edition, over to his side of the table. Long and earnestly looked the man. Then a dark frown settled down on his brow like a winter cloud. He banged the book down on the floor and kicked it. "Blame such a dictionary!" he roared, "I would n't give a cent a thousand for such a book! It 's got Independence and Homestead and Crescent and Pilot and Sandwich and a whole host of them little towns in it, and never a mention of Burlington or Keokuk or Des Moines or Chicago or any big town in the whole book!" And he gave it a parting kick and was gone.—*Burlington Hawkeye.*

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The wide-spread fame of Hostetter's Stomach Bitters causes a necessity on our part to remind, from time to time, whom it may concern, of the fact that imitating said article is a punishable offence, and we now give this word of caution, that we will most assuredly have all those persons engaged in re-filling our second-hand bottles, selling by the gallon or barrel, or in any manner whatsoever palming off on the public a spurious article purporting to be our preparation, punished to the full extent of the law. Penalty for counterfeiting, or dealing in counterfeit trade-mark goods, as set forth in a law recently passed by Congress:—"Fine not exceeding $1,000, or imprisonment not more than two years, or both such fine and imprisonment." We never fail to convict.

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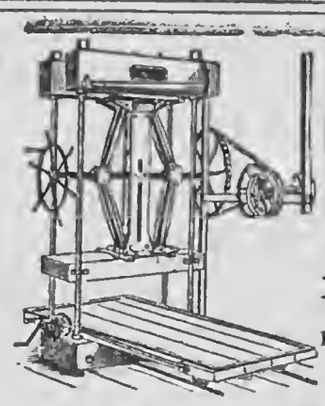

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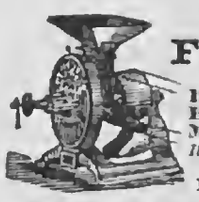

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LADY CAREW 3d.

THE London Agricultural Gazette is doing good service to the cause of animal portraiture, to say nothing of the pleasure it gives its readers, and sometimes *ours*, in that it is accustoming them to see and value good portraits made by first photographing the animal and then having the picture sketched with an accurate hand, yet with artistic freedom.

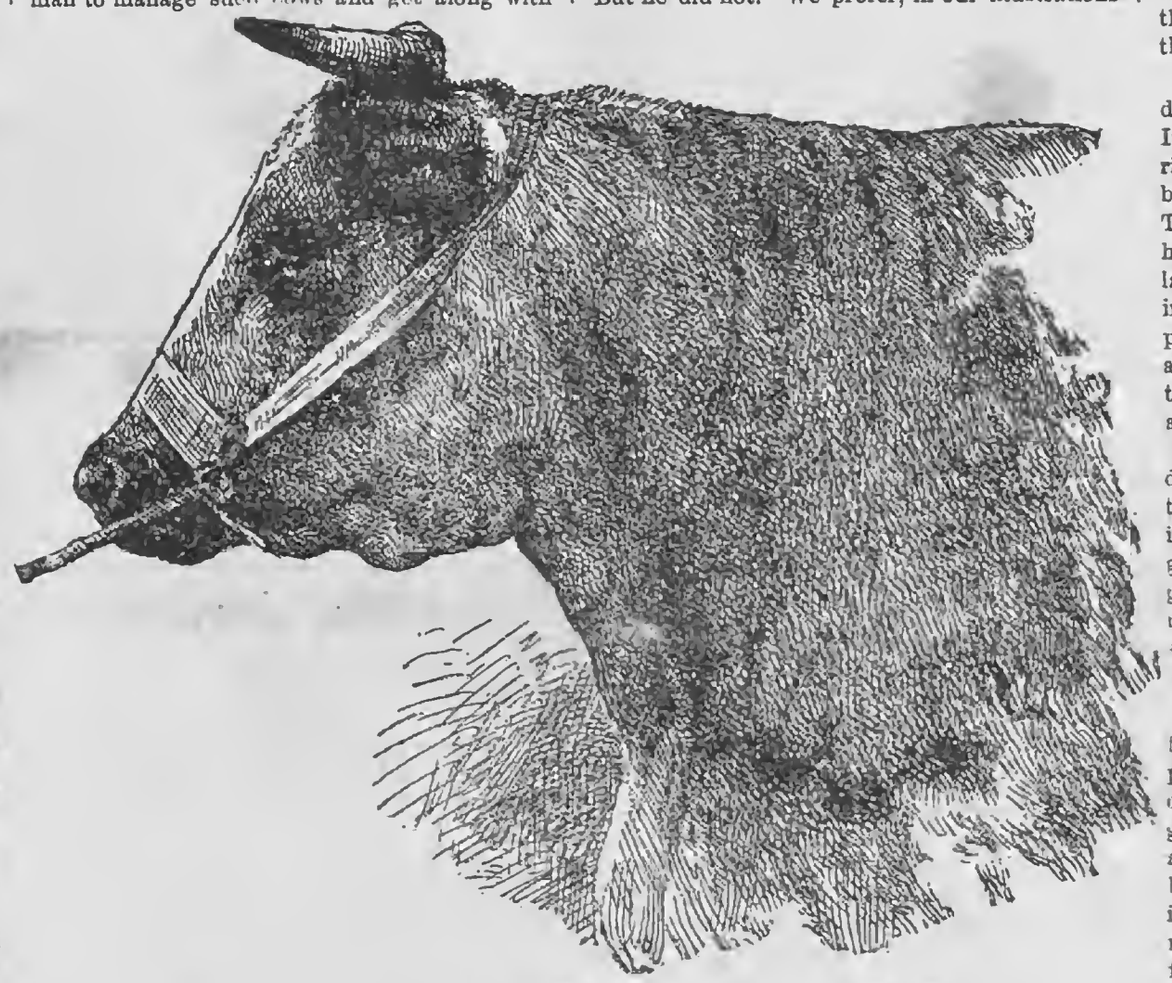
The Ladies Carew 1st, 2d and 3d are sisters and all prize-winners at the English shows. They are described as having been as heifers "somewhat small, with very fine bone and on very short legs" with the silkiest of hair, long and even in carcass, "somewhat unduly weighted with flesh, and fat at both ends." The one pictured has a bosom "wonderful to see," and inherits the blood of several leading fashionable strains, not the least notable of which is that received from her sire, which is "the purest Warlaby." Now these wonderfully perfect Shorthorns are discussed editorially as if they exhibited the results of deep-laid plans made when their great-great-grand-dam was bred; for the editor says: "Say not that an experiment in breeding has failed until you see the second and third generations." Now we take it the breeding of these heifers was somewhat in this wise:

Farewell was a rather famous cow of the Warlaby herd, and after she had, to all appearance, nearly passed her usefulness (being, however, in calf to Rubens, a justly famous bull) she was brought to the hammer. Her daughter, *Fanny*, was also sold in her old age "for a song," and a daughter of hers, *Heather Bell*, by a Bates bull, when a very old cow and supposed to be past breeding, dropped a calf, by a Booth bull, so little expected that it was called "*Miracle*." One of her numerous daughters, a blood-red cow called *Lady Jane*, by a Bracelet bull, "was one of the cheapest lots at the famous Beeston sale in 1872." She, in the hands of Mr. St. John Ackers, has produced these three heifers by *County Member*, a bull of the Christon tribe, of the Warlaby Herd.

Here we have breeding entirely without system, so far as we can see, except the system of all breeders of fair observation, namely, that of matching animals by external form, style and character. The ancestors of these heifers, in the dam's line for generations, were all cheap cows, hardly worth the consideration of breeders except for the good they had done perhaps—"knocked down for a song," one after the other, simply because they were of no particular strain, though the blood was good. They presented with rather growing intensity, one after the other, the results of such breeding. Now, in these beautiful creatures, rolling in fat, smooth, fine, delicate in form and bone, *touchingly* good handlers and walking off with medals and ribbons, we have the legitimate result of putting a bull of strong blood upon a cow from whose breeding we should expect no *strength* (prepotency) but only excellence. Of course, his good qualities tell as surely upon such a pedigree as if he were bred to a good grade cow, and this indicates clearly the way to breed prize-winners, and a possible fault in the way we award prizes without reference to breeding, except so far as to assure purity of blood.

NERVOUS COWS.

No observing person can have the care of a herd of cows long, without noting a great variance in the character and disposition of the different animals. The famous Mrs. Partington once remarked, that "there is as much difference in folks as there is in anybody,"—and it is just so with cows. The feminine peculiarities that we are apt to note in our own kind may, many of them, be detected among the domestic animals. Some cows are so phlegmatic and good-natured that a moderate amount of ill-treatment does not seem to disturb their equanimity. Others are naturally vicious, and will kick and hook without provocation. There is another class that, while not vicious, are so nervous that they may easily be made to appear ugly, and in time really become so, in consequence of rough handling or carelessness. It requires a considerate and good dispositioned man to manage such cows and get along with them. They must be humored, spoken kindly to, and gently handled in milking. Swearing at them, or beating them, demoralizes them fearfully, and makes them almost useless in a short time. It is often among the very best milkers and butter-makers that these nervous animals occur, and we cannot afford to have their value thus impaired. No violence should be allowed among the cows at any time; but if you have impatient help, or are quick-tempered yourself, let some person who doesn't get mad so easily, milk the nervous cows. A cruel man ought never to have charge of any stock whatever.



MR. ST. JOHN ACKER'S LADY CAREW 3d.

OUR RASPBERRY FESTIVAL.

MONTCLAIR RASPBERRY.

OUR engraving of the Montclair Raspberry is an accurate portrait of a branch brought to this office by Mr. Williams, not with any view to having it engraved. Many of the berries had been shaken off which our artist *might* have replaced. But he did not. We prefer, in our illustrations whenever we feel at liberty to do so, to present our readers with illustrations which the plants, if purchased and cultivated, will more than verify.

THE MONTCLAIR AND OTHER RASPBERRIES.

J. C. WILLIAMS.

THE Montclair Raspberry is doubtless an accidental seedling. We found it growing and fruiting well in a neglected corner of our vineyard. A casual taste of the fruit awakened us to the fact that it was far better than the Philadelphia and indnced us to take up the dozen or 20 plants which were struggling for existence in the grass and weeds, and to put them out under more favorable conditions. This was in '72. The fruit has continned to grow in favor yearly since then, but has never attained the size it did in '73. That year the berries were enormous, exceeding in size any we ever saw before or since, and we have always regretted we did not take some measurements. Had we done so they might have been questioned, so I will leave this point for the future.

We suppose it to be a seedling of the Philadelphia, which it resembles in wood and foliage. It is fully as hardy and productive as that variety, while the fruit is larger, firmer and much better in quality, with no tendency to crumble. The color is rather dark when fully ripe. It has always stood exposed without injury till last winter or spring; then, but few canes were injured more than was necessary to remove at pruning time. It usually commences to ripen about the 4th of July and is in season about three weeks. It is a strong, vigorous grower and multiplies rather sparingly from the roots.

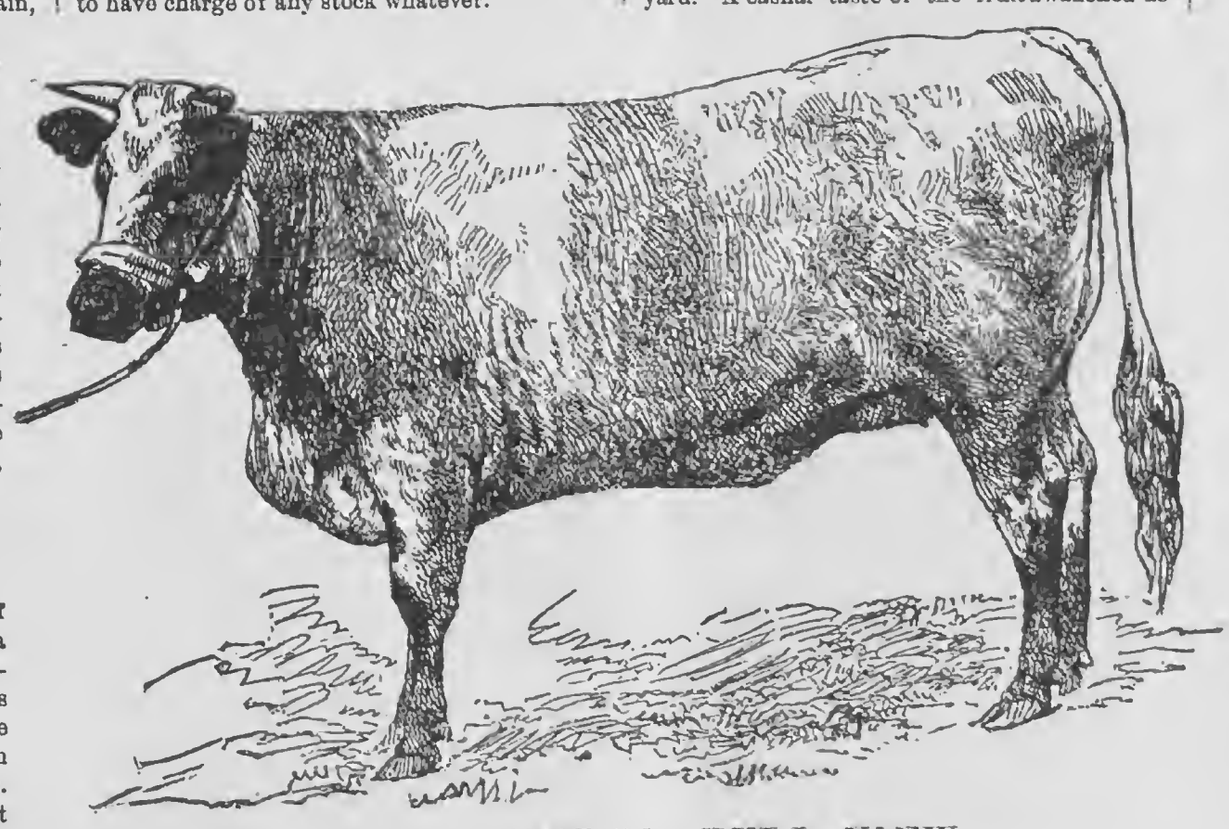
With regard to its quality, people will and do differ, I do not hesitate to say I have eaten better berries. We have never claimed superiority in this respect for it, but if its habits can be regarded as fixed, we do claim, in brief, that in point of hardiness, productiveness, size, firmness and quality combined, it is for us, on our soil,—a stiff red clay loam—head and shoulders above any other variety we have ever cultivated.

THE HIGHLAND HARDY, growing in the same field under like conditions we commenced to pick this season on June 26th, before the close of the strawberry season. The fruit is of a good quality, very abundant, but rather small, and valuable for its earliness. This is said to be the old Kirtland under a new name, but, if it is so, is it not strange our fruit-growers and nurserymen have not discovered this fact before? We grew the Kirtland nearly 20 years ago, but my recollection will not allow me to judge intelligently on the question of identity. The nurseryman and fruit-growers of Western New York, who still retain the Kirtland, could easily determine this matter.

THE BRANDYWINE, in the same field with the above, proves more productive of suckers than of fruit, and, to my taste, it is below medium. I can fully indorse the remark with regard to it, made by Mr. Collins at the last meeting of the N. J. Hort. Soc'y "It is of poor quality, firm and bears transportation well; but it is the color of the fruit that sells it." The suckering propensity of the Highland Hardy is objectionable but in this the Brandywine will exceed it three to one, while its fruitfulness as compared with our seedling, it is about as one to five.

We have grown Arnold's Red and Yellow, Allen's, Belle De Fontenay, Elm City, Philadelphia, Clarke, Hudson River Antwerp, Franconia, Naomi, Brinckle's Orange and others, and though the last five named are fine in size and quality, they lack hardiness, an indispensable quality with us. We have a number of more recent introductions, on trial. If among them we shall find the Raspberry, *par excellence*, we are all looking for, we shall cheerfully and unhesitatingly say so; but at this date Montclair is ahead. We await the returns from other districts, with no small degree of interest. Another season they will be forthcoming, meanwhile the future destiny of the "Montclair" rests on the verdict of a discriminating public.

As an illustration of the difference of people's views on the raspberry question, as well as on others, I record the following: Two or three years ago, a friend said he had a hardy Orange Raspberry, a seedling of Brinckle's Orange, fully as good and large. In fact, one could not tell the difference in the fruit, and it was perfectly hardy, and as we were in the business he would let us have a few plants for trial and dissemination. We accepted



LADY CAREW 3d.—FULL VIEW.
After a Drawing from Life.

the offer, not, however, with implicit confidence that a "big bonanza" was in store for us, but a hardy Brinckle's Orange was a desirable thing. We have grown and fruited the "foundling" for two seasons. The plant in foliage resembles its parent, but it is more vigorous and nearly hardy; but, alas! the fruit no more resembles it than does the old White Antwerp. In fact, it is a dull white berry, with no orange color about it. Now, we have no reason to doubt that our friend thought his representation correct. He is probably afflicted with what is known as color blindness, and his taste may also be at fault, for naturally there is a wide difference in tastes, and when tastes are educated this difference is none the less apparent.

A gentlemen visiting us during the last raspberry season, after tasting the different kinds, asked me if I could tell any difference in the red ones save in color? On replying that I would name each of the three or four kinds just shown him by tasting without seeing them, he was surprised. He could see and taste a difference between the red and black ones, but all the red ones were alike in taste to him. And thus it is with some people; yes, with a great many. A raspberry is only a raspberry and a strawberry a strawberry, no matter how high or low its position in point of quality.

In conclusion, I would remind the reader that the above convictions are founded on our experience on our own soil. This is an important consideration for many people. New Jersey is regarded as nothing but a sandy loam or drift, which is far from the truth. Under different conditions these views would be subject to modification and change.

Montclair, N. J. July 20 1878.

HERSTINE—(See Illustration, next page.)

This now well-known variety, as will be seen, has become popular in many parts of the country. It is generally considered hardy in this climate, though from our reports it seems not to be so in even warmer sections. The Herstine is one of several seedlings, which, when first introduced, were considered promising, but which time and trial have driven into disgrace. The illustration is from life, though it is but fair to add that so fruitful a branch and one bearing berries of so large a size is of rare occurrence.

THE CUTHBERT AND BELLE DE FONTENAY.

J. T. LOVETT.

THE CUTHBERT RASPBERRY.

The writer, in the RURAL of August 18th, 1877, states this Raspberry to be the best new variety, all things considered, that he fruited in 1877. I now esteem it, after a thorough trial, the best Raspberry, new or old, that I have ever seen. Turner is hardy and productive enough and of good quality, but it is too small and not sufficiently firm to bear shipment. Brandywine is of a bright and attractive color, and firm enough to be transported almost any desired distance. It is comparatively hardy—although not entirely so—but it is not productive enough, while it is of too feeble a growth of cane. Philadelphia is abundantly productive, but decidedly too soft, lacking in brightness of color and too tender to be relied upon. Antwerps will succeed in certain localities only, and are unreliable even there—and so it goes. Cuthbert is absolutely hardy—the only red Raspberry I am acquainted with that is so, except Turner—is a strong, vigorous grower, has never been known to be affected by disease or mildew, or to lose its foliage during summer. The plant is very productive, the berries exceedingly large, of bright attractive color, very firm, and of superb quality. What more can be desired? In this I believe we have the ideal Raspberry which has long been wished for, one that combines nearly or quite all the qualities desired in a Raspberry, and one equally valuable to the amateur and to the professional fruit-grower.

Yet the Cuthbert is not without a fault—it suckers too freely. While this may be an advantage to the nurseryman, it is not to the fruit-grower, as all surplus suckers have to be treated as so many weeds. This is not a serious objection, however, and the Cuthbert in this respect is not so bad as Brandywine, and not nearly so bad as Turner. All things considered, it is not only the best, but by far the best Raspberry I have yet seen, and is unmistakably destined to become the Raspberry for the million.

Under favorable circumstances, what a fine Raspberry is

BELLE DE FONTENAY;

that is, where soil is congenial and suckers are kept down. It has long been known to fruit-rowers as a precarious variety, but wherever planted, unless diligently attended to, it soon becomes a troublesome weed, from its tenacity to life and its habit of overproducing suckers in infinite numbers Where soil and situation are just right, with its very large, aromatic berries, it is not surprising that those who have never seen it and find it growing under such circumstances, at once conclude they are the happy discoverers of a new seedling of wondrous merit. A few years ago we heard of this berry, from the shores of Maryland, under the cognomen of Amazon—a most appropriate name—at fifty cents a plant; now we have it from Connecticut as Henrietta—a name equally appropriate—at a dollar a plant; although I cannot account for the increase in price unless it is owing to its being nearer the "Hub." I would not here allude to Henrietta as being a synonym of Belle de Fontenay, had I any doubts of its identity, supposing, as I do, that its disseminators are ignorant of its being an old variety under a new name. Being "sold" myself, however, when the proprietors of the Henrietta sold me the plants, I desire that my loss may be the gain of the readers of the RURAL, hence note the above.

I will also state that the belief expressed in the RURAL, a year ago, that Norwalk seedling was identical with Naomi (Franconia) and Early Andrews with Highland Hardy, has been proved conclusively the past season.

THE NEWER RASPBERRIES IN OHIO.

M. B. BATEHAM.

The culture and use of Raspberries have increased largely in Ohio and in most other States, I believe, during the past few years. There has also been a noticeable improvement in the quality as well as in the quantity of this fruit in most of our city markets; and as more skill and system have been applied to its culture the price has been reduced in the markets, so that all classes can afford to use them, and raspberries are now counted among the fruits for the million, and indispensable as following strawberries, and preceding the larger fruits of summer.

In the south-western quarter of Ohio the culture of Raspberries, especially of the Black-cap class, is most extensively carried on. From Cincinnati, Dayton, and other points, many thousands of bushels are shipped each season to places north and east, where the soil and climate are less favorable. The crops of this fruit are more reliable, and the prices more uniform and more remunerative, as a rule, than those of strawberries.

Several of the improved varieties of

BLACK-CAP RASPBERRIES

had their origin in southern Ohio. Among these, the Ohio Everbearing, and the McCormick, or Mammoth Cluster, are the most noted. Both are chance seedlings of the native variety, Rubus occidentalis; as are also the older improved sorts, Doolittle, Davison's Thornless, Seneca, etc.

The Mammoth Cluster all of our market raspberry-growers have come to regard as the best of all varieties for their purpose; though some of them grow a few of the others on account of their ripening a little earlier. For home use, also, they are preferred by some people, and they seem to succeed better in some localities.

The Gregg is the newest of this class of Raspberries and, within a year or two, has created quite a sensation among our large growers, as promising to eclipse and supersede the Mammoth Cluster—the berries being of larger size, while the plant is equally hardy, vigorous and productive. It was first discovered growing wild, in Indiana, by a man named Gregg, who commenced its propagation and growing the fruit for market, where it was observed by our wide-awake fruit grower, Nick Ohmer, of Dayton. Noticing that the berries on sale were of larger size than his well-grown Mammoth Clusters, he at once set about finding where they grew and, on visiting the grower, he engaged a supply of the plants to be sent to him. On fruiting in his own grounds, he found the variety more distinct and valuable than he had expected, so that he extended his plantation of it as rapidly as possible, to the extent of about ten acres. Several other Ohio fruit-growers also planted it so as to test its fruiting the past season, and all agree in placing it at the head of the list of Black-caps, and count it a decided acquisition for market berry-growers. It resembles the Mammoth Cluster in growth and habits of plant and in appearance and quality of fruit, excepting that the berries are one-third larger; and as the number and size of seeds are the same, there is an increase of pulp and juiciness.

Of the

RED OR ANTWERP

class of Raspberries there is also some increase of culture and demand around our cities; but as yet there has not appeared any variety that is sufficiently hardy and productive with fruit of fine quality and firm enough to bear distant transportation, though several of the newer kinds are recommended as meeting these requirements.

On the score of hardiness, it is known that the native species, Rubus strigosus, from which many, if not most of our improved kinds have sprung, belongs to our most northern States; abounding in northern Michigan, and the adjacent parts of Canada, and seldom seen as far south as Central Ohio and Indiana. The European sorts are counted by botanists as varieties of Rubus Idæus; and this differs so little from our R. strigosus, as hardly to deserve a separate specific name. Seedlings of each are found to produce varieties so closely resembling those of the other, that no one can say with certainty to which species they belong, and hybrids or crosses between them, are believed to have been often produced. The growth and habits of the plants, and the size and quality of the fruit are so greatly affected by climate, soil and culture, as often to mislead observers in regard to their identity and real character. Hence it is not safe for any one to invest largely in a new variety, until it has been tested on his own soil, or at least in his neighborhood.

It needs also to be borne in mind that a number of the leading varieties found quite hardy in northern localities, as in Western New York, and Northern Ohio, Michigan, etc., will not endure the winters in central and southern Ohio, Indiana, and Illinois. This is owing to the fact that this species belongs to the north, as before stated; and when grown too far south, the leaves fail, and fall off during the heat of summer, so that the canes are not properly matured in the autumn, and hence the wood is unable to endure the oft-repeated freezings and thawings of a south-western winter. Persevering efforts, however, have partly overcome this difficulty, and one or two varieties of some merit are said to possess such vigor of growth and foliage as to withstand both the summers and winters of the southwest.

Clarke, I think, was the first real step in this direction; but it soon proved unreliable as to productiveness, in most localities, and the fruit was too soft for transportation, while the plants multiplied so profusely by suckers as to become a pest to the growers.

Turner is an improvement on the Clarke. It is equally hardy and more reliable, and productive, with firmer fruit, rendering it a profitable market sort, even in southern Illinois. It has not, however, succeeded as well in Ohio, and its profuse suckering is a serious fault.

Thwack comes next, with its jaw-twisting name—originating as far south as Missouri, and promising to stand all sorts of hardship of climate, with the fruit abundant, of large size, good quality, fine color, and so firm as to bear transportation from St. Louis to Boston. What more can we desire! Perhaps this is the "coming" Raspberry; but still it is best to move slowly. Some of our Ohio men, who test every new thing, have fruited the Thwack, and do not care to plant largely of it. The plant is seemingly hardy and vigorous, as recommended, and the fruit is of good size and color. It is also quite firm, so as to bear transportation better than any of its class—but its quality is also poorer than that of any other, its firmness being simply owing to its lack of juiciness. If fruit of this character is forced upon the markets, the effect will be to disgust the people, so that they will refuse to buy any kind of red raspberries.

Highland Hardy has been tested in Ohio, and does not appear to differ from our old variety known as Kirtland, and sold as Red Antwerp in most of our markets. This, and another not as good, called Allen, are improved varieties of the native red. They are hardy in northern Ohio, and, with right soil and culture, prove very satisfactory for home use. They have also been grown for market considerably around Cleveland, but have mostly been superseded by the next, which is much their superior, and equally hardy.

Naomi is claimed to have originated near Cleveland, from seed of the Franconia, which is the hardiest of foreign varieties. Its resemblance to the parent variety is so close, that many pomologists regard it as identical with it. But our Cleveland growers insist that it is distinct, and more hardy and reliable. Be this as it may, for this Lake-Shore region, it is certainly the best of all the red Raspberries that we have as yet fairly tested—especially for near market and home use. A little more firmness of the berry, without any loss of size or quality, would render it almost perfect.

Herstine, and Hornet, are distinctly of the foreign class, of fine size and quality, but needing winter protection at the North, and unable to endure the hot sun at the South.

Brandywine, has been highly praised as a market berry, by our Eastern friends. It has been tested the past two seasons by several Ohio growers, and thus far they report favorably of it. The plant is hardy, and stands hot sun moderately well. Its growth is fair, and stocky, but not quite tall enough, except on rich soil, and the fruit, though fair in quantity, is not quite as large as is desirable. It is of good color and quality, and so firm as to bear carriage better than most others of its class.

Delaware, I have not yet seen fruited; plants were set last spring by several Ohio men, and another season will give us fruit.

Pride of The Hudson is too long a name, but we will excuse that if its character proves what is promised. Specimens of the fruit sent to me by mail last summer, were handsome and good, but not more so than some of the older sorts.

Lake Co., Ohio.

PLANT RASPBERRIES IN THE FALL.

REV. E. P. ROE.

I have always had much better success with Raspberries set out in October and November than with those planted in spring, and with good reason, I think. In the first place, there is leisure in the fall to thoroughly prepare and enrich the ground, and when this is done properly, one of the most important conditions of success is secured in advance. In the second place, although the plants do not grow in the fall, the *roots do*. The rains settle the earth around them; they take hold of the soil at once, and thus the plants are ready to start with great vigor as soon as spring opens.

In the third place, the buds just above the roots, which make the new and bearing canes for the following season, are small and dormant in the fall, but they start very early in the spring. In spring planting, therefore, these buds are often broken off, even under the best of care. The plants thus, in many cases, receive a serious check and there is much delay in securing a fine stand of bearing canes.

My method is to deeply plow and cross-plow my raspberry ground in the fall, enriching the land according to the requirements of the variety planted. Some of the best kinds tend to fruit rather than to sucker, and need high stimulation, as for instance the Pride of the Hudson, which will load itself like a Bartlett pear tree. Other excellent kinds, like the Cuthbert and Herstine, will do well with less manure, but all kinds require deep, mellow soil for the best results. I next set out my plants four feet apart each way, putting two or three roots in a place, according to the vigor of the kind. The tendency of raspberry hills is to rise too much above the surface, so I set the plants about three inches deeper than they grow naturally in the propagating bed or patch. After treading the ground firmly down over the roots, I direct that one or two shovelfuls of the oldest and finest manure I have be thrown on and immediately around the hill. The fall and early spring rains carry the richness of this manure down to the roots, and thus the plants at the start are given a vigorous "send-off" on a successful career. Many a plantation is feeble for two or three years for the lack of good, generous treatment in the beginning. Just before the ground begins to freeze, I mound the earth over the hills and early in spring, after hard frosts are over, level it down again. In large plantations this could be done, in the main, by plowing a furrow against the row on either side. I have never lost any plants thus protected against the frost, and have always found that plants thus planted in the fall made almost double the growth of those set out in spring.

SMALL FRUITS IN CALIFORNIA.

W. C. L. DREW.

RASPBERRIES.

Raspberries are less extensively cultivated in California than any of the other small fruits. The supply is never equal to the demand, and, accordingly, they always bring a remunerative price. No fruit succeeds better in our immediate section than the Raspberry. They are always pretty sure to produce a crop. The only objection to them is the short period of their duration. Our growers do not care to grow anything, unless it is in season for several months. On this account the Raspberry has been much neglected.

The Herstine is by odds the best. It combines the most desirable qualities requisite in a family, or first-class market berry for shipping, while its superior flavor, brilliant scarlet color, large size, firmness and great productiveness make it a most desirable fruit.

Doolittle is a favorite variety. It bears very early and is remarkably productive. The fruit is large and firm and of fine flavor. It is our earliest bearer, being quite over before the other varieties ripen.

Mammoth Cluster is a good variety frequently cultivated. It is a fair family berry, but not much adapted for shipping.

Other varieties are not as yet sufficiently well acclimated for me to give a satisfactory report, as a variety which proves desirable this season may be entirely worthless after a few seasons' growth, and *vice versa*.

BLACKBERRIES.

The Blackberry is extensively grown in California. It is justly a general favorite. It requires thorough irrigation from the time the fruit sets, about the close of our rainy season. It may be continued in bearing for several months by proper irrigation. No fruit is more injured by ill treatment, for, if kept for two or more weeks without its accustomed irrigation, from one-half to two-thirds of the crop will be ruined. The varieties in general culture are the Kittatinny, Lawton, and Wilson's Early.

The Kittatinny is the best. It is extremely hardy, the fruit is of a most luscious quality, large size and fine form. It is very productive. It is a general favorite with growers, both for family and market purposes.

The Lawton is grown very extensively. It is a good bearer, is hardy and of good fruiting qualities. It was, at one time, the standard variety in California, but it is gradually giving away to its rival, the Kittatinny.

WILSON'S EARLY is a good variety, but it is not as popular as the other two sorts.

CURRANTS.

The Currant is a popular fruit. Until recently, however, it was not in general cultivation here, but every season sees it more extensively planted.

THE CHERRY is our best and most popular Currant. It has many good qualities; it is notable for its productiveness and large size. In flavor it is very tart. In some sections it is raised extensively for making jelly, for which purpose it is unrivaled. The large size and fine red color of the fruit make it very attractive in the show windows, in the market or on the table.

BLACK CURRANT AND BLACK NAPLES CURRANT are seldom raised by our growers, as their peculiar musky flavor is relished by few. Not many years ago they were quite popular for jellies, but they have given way to the favorite "Cherry."

THE WHITE GRAPE CURRANT is grown in considerable quantities, being highly appreciated for the table and hand eating, having a pleasant and not very acid flavor. It is not a great or prolific bearer.

Where well grown, cultivated and manured, the Currant is a profitable and valuable crop and always quite certain.

Eldorado Co., Cal.

NOTES FROM RURAL GROUNDS.

RASPBERRIES.

THE flavor of raspberries is of less importance than that of most other fruits small or large. The characteristic raspberry flavor is neither very sweet nor very sour. Those who do not like the fruit, call it insipid. Indeed, if we were to take a plate of each of the popular red sorts and sprinkle over them the same quantity of pulverized sugar, there are few who, after the first spoonful or so, could determine one variety from another. In selecting varieties, therefore, hardiness and fruitfulness are to be borne in mind before flavor, and, if raised for market, of course, firmness must be added.

THWACK.—We have already referred to this new variety as one of much promise. Mr. Roe, whose opinion respecting small fruits, is entitled to respect, tells us, as the RURAL has already stated, that he considers it "a weed." But if we were to accept the opinions of others respecting the value of varieties, there would be little need of testing them ourselves. On those grounds this variety must be placed among the most valuable of Raspberries, judging it by our two years' experience. One dozen plants were sent to us by A. Hance & Son, of Red Bank, N. J., with the usual request that we would test and report. All lived and produced a considerable crop the first season. This year the plants have made a rank growth. The canes are strong, upright, and nearly thornless. The bushes are compact, the leaves large and healthy, and they are retained long after most others have fallen. The berries are as firm as those of any variety we have ever seen. The flavor, however, verges so closely upon insipid that, though fond of this fruit, we should not trouble ourselves to pick and eat them from the bushes, even though they were laden before our eyes. Nevertheless, as we have said, prepared in the usual way upon the table, one does not stop to make invidious comparisons. The color is red, the berry of medium size, borne less in clusters than distributed with some regularity over the entire bush.

MONTCLAIR.—The Messrs. Williams, of Montclair, N. J., sent us, this spring, plants of their new seedling Raspberry, "Montclair." Half of these are planted here—half at the Rural Farm. Both lots have borne so well as to give, both there and here, a quart or more of berries. The berries are firmer than those of the Philadelphia, of which it is a seedling, and of the same or rather better quality. Further than this we have no right to speak from one season's trial. The trustworthiness and horticultural experience of the gentlemen upon whose grounds the "Montclair" originated, are, in our estimation, good evidence that it will prove worthy of general trial.

PRIDE OF THE HUDSON.—We received plants of this variety not until last spring. The canes have made a tolerable growth and bore berries of goodly size and excellent flavor.

HIGHLAND HARDY—Is with us, as in most other places, one of the earliest. It is also hardy and productive. But the fruit is rather small and of low flavor.

BRINCKLE'S ORANGE does well here. It was not protected last winter, and though most of our Raspberries were harmed by the frost, this yielded a fair crop.

REMARKS.—We have not less than forty varieties of Raspberries, old and new. Of the latter all has been said that we can say at present. Of the former we commend to our friends the following list:

BLACK-CAPS: Doolittle—Mammoth Cluster.

NATIVE RED: Herstine—Kirtland—Philadelphia—Brandywine.

FOREIGN: Franconia or Naomi—Clarke.

BERRY CULTURE IN TEXAS.

THE Raspberry is not cultivated to a great extent in Texas. The Antwerp varieties cannot stand the hot summer. The Black-caps are hardier, but they are much inferior in quantity, size and lusciousness, to the wild Dew-berries and Blackberries. They ripen almost at the same time, and nobody thinks of planting them, except that an amateur may, perhaps, set out a bush or two for variety's sake only. Moreover, blackberries are selling at five cents per quart, or even for less, in their season; and at that price there could not be any margin of profit for one that would embark in the cultivation of Raspberries. Gooseberries and Currants may, if special care is taken, live through one summer, but only to succumb to the next, without ever showing a fruit. Strawberries do tolerably well, if their culture is modified to suit the peculiarity of this climate. But it is astonishing how little this is understood, even by otherwise well-experienced gardeners. A plantation is generally made from suckers picked out from the old patch during the late fall or winter months. These suckers will bear a few berries the following spring, and these are considered their full crop. This same operation is repeated year after year, and nobody has an idea of improving upon it.

The best method I know of for cultivating the Strawberry successfully in this latitude is the following: In order to get strawberries, we have to raise plants that will produce them. To this end, in the month of May, when the plants have done bearing and their suckering period begins, the first well-established suckers should be picked out and at once planted in a nursery-bed about eight inches apart each way. This bed ought to be dug deeply and well-enriched with rotten manure or compost. Good drainage is essential, for the hot sun will scald and kill them, if on soggy ground. They ought to be watered in dry spells and the ground kept clean and loose. A little shade, when first planted, is beneficial; but, once established, it will be better to give them full exposure. They ought not to be allowed to throw out any suckers, which they will not do except in a very favorable season, since they have to expend all their vitality to endure the hot days of summer, which will be upon them as soon as fairly established.

Along in October and November there will be a set of fine, robust and well rooted plants, instead of those half-starved, tiny, long-for-life suckers, newly picked out of a grassy old strawberry-plot. At this time, they may be carefully lifted with a transplanting trowel, retaining balls of earth around their roots, and at once transferred to the place destined for them. It must be remembered that the Strawberry has to be raised here strictly on an annual plan, as old plants hardly ever live through the summer. Of varieties, the old Wilson is—everything considered—as yet the best of all. G. MARTI.

Harris Co., Texas.

RASPBERRY ITEMS.

In Rhode Island, Naomi (probably Franconia) Clarke, Brinckle's Orange, and McCormick, are especially prized.

The Turner has already many friends. Iowa makes favorable reports of it, as well as of the Doolittle, Mammoth Cluster, (McCormick), and Philadelphia.

HERSTINE RASPBERRY.

In Mississippi, the Antwerps are said to do only moderately well. The Black-caps are the most reliable. So they are everywhere, for that matter.

In Arkansas the Cap varieties do very well—and those only.

In Ohio, the Gregg Raspberry is said to be in every way better than Mammoth Cluster (McCormick). "Olds" a variety originating in the State, is also promising. The Thwack, is reported as of strong growth, and the fruit of good size, but poor quality. That's just what the RURAL has said for two years.

In Massachusetts the sorts mostly grown are Doolittle, Davison's Thornless, Mammoth Cluster, among the blacks, and the Franconia, Herstine, and Clarke, among the reds. John W. Adams says: Why raspberry culture has not kept pace in this State, with other fruits, is a mystery to many horticulturists.

Mr. Berckman's says, that Raspberries for Georgia, are restricted to three kinds, viz:—Doolittle, Imperial Red, and a nameless variety of the Purple Cane family. Somebody ought to give that variety a name.

Charles Downing says that the Henrietta is a very promising new variety, with most magnificent foliage. "Most magnificent," even applied to the foliage of a plant, is strong language for Mr. Downing. Mr. Lovett says that the Henrietta is Belle de Fontenay.

At the Rural Grounds, we regard Cuthbert, as one of the most promising of new sorts.

BLACKBERRIES.

M. OAKEY.

I ONCE overheard a back-country farmer remark: "Of all long-legged horses I ever see, he was the long-leggedest." So I remark of my Blackberries. Of all my experience in Blackberries, this year with me was the "blackberriest." Our last table supply was consumed Sept. 15th, but on Sept. 22d I had the pleasure of regaling the "angel of the household" with a heaping saucer of delicious and perfect fruit. On Sept. 1st I plucked a cluster of seven Kittatinny berries, three having already been taken off the same bunch, the smallest of which measured two inches in circumference. For nearly nine weeks I enjoyed an unlimited supply.

I have three varieties, the Kittatinny, Lawton and Wilson. The Lawton comes on the latest and the Kittatinny is the earliest and bears the longest. I picked three or four of them Sept. 22d. The Wilsons have not done so well with me and are not yet quite established. They promise well for next season, judging from present appearance. I have thirty-four hills of each variety and when they bloomed, last spring, they resembled cotton plants, and at dusk appeared as though paper had been thrown over them. The Kittatinny and Lawton varieties bore crops that I have never before seen equaled. The yield was seemingly too heavy for perfect ripening, but both matured an immense amount of fruit.

My method of culture is very simple. The plants were set out in inverted sod in 1876. This is, consequently, their third year. After they were set a shovelful of rich compost was thrown around each plant, and this was dug under a few weeks afterwards when the weeds began to grow. They were then cultivated two or three times during the rest of the summer. The next year, nothing more was done than to keep the weeds down and gather a very fair crop. Last spring (1878) a load of coarse manure was spread through them and afterwards dug under. They were cultivated twice until the fruit set, after which I never disturb the roots, believing it to be an injury both to the fruit and to the growing shoots. If the weeds get thick, sometimes I pull them out. As soon as the fruit is done with, the old canes are removed and the young shoots tied to the stakes which are set in each hill. I pinch back, when five feet high, but I very seldom restrain the side branches. Two or three canes only are left to the hill. These hills are six by four feet apart. Three days' labor stretched through the year at odd times when otherwise unemployed, and a load of manure are the cost of all the blackberries a large family can consume, winter and summer. It always seems to me to show great negligence on the part of farmers not to provide so cheap a luxury for their ofttimes scantily-supplied tables.

CULTIVATION OF THE BLACKBERRY.

One of the reasons why we see so little fruit on blackberry plants, is that they are not properly treated in the summer. As soon as the canes reach four feet in hight, the ends should be pinched off. This induces a strong lateral growth, which should also be pinched when a foot long. Care of this kind, will make compact, productive bushes.

Set the plants three to four feet apart, in the row, and the rows four feet apart. For field culture the rows should be seven to eight feet apart, It is often stated that rich soil is neither requisite nor desirable for the Blackberry. But the largest crop and the largest berries we have ever seen, were raised upon land that had been heavily enriched with barn-yard manure. In any event, the soil should be deeply plowed. The plants may be set now or in the spring. We prefer fall planting for both Raspberries and Blackberries.

BLACKBERRIES.

IN Arkansas Kittatinny is best. The Kittatinny and Lawton, are both cultivated in Florida with success. The Barnard is spoken of as very hardy and productive, in Iowa. In Kansas the Kittatinny is most reliable—the Lawton is more liable to be winter-killed. In Mississippi wild Blackberries are so abundant that the cultivated varieties are not much grown Lawton does well. In Oregon, Lawton is the favorite.

The Kittatinny is preferred in Mass., N. Y., Pa., N. J., Del., Ohio, Iowa, Nebraska. The Wilson's Early, thrives in Delaware, Kentucky, Nebraska, California.

GARDEN TALKS AND WALKS.

RENOCLAF.

THE BEECHES, Mass., Sept. 24, 1878.

A PRETTY IDEA—WATER-LILIES.

WHEN walking around the observatory at Harvard University the other day, I came upon two little pools of water in the grass. Water-lilies were growing in them, and around the margin the German Ivy (Senecio scandens) was in wild luxuriance, sending its vines covered with deep green glossy leaves, hither and thither among the grass. On closer observance I found the pools to be tubs plunged to their brims in the ground and filled with water. These lily pads in the lawn were part of Mrs. Pickering's brilliant, little flower garden; and Mrs. P. tells me the Lilies do splendidly, and from them, this summer, she has cut some dozens of blossoms. As Water-lilies thrive well under such circumstances, who loving them, need be without them?

SCARLET FLOWERS AMONG THE GRASS.

A novel but pretty way of using Tropæolum Lobbianum is in common practice around Boston. A tiny flower-bed, twelve or fourteen

inches in diameter, is made at the top of a bank or on the sunny slope of a lawn, and planted with these fiery Nasturtiums. As they advance in growth, the vines clad in scarlet blossoms, reach forth in all directions among the grass. The grass is not mowed, but merely switched over with the sickle, when it overtops the Nasturtiums. Such brilliantly studded banks attract considerable attention.

PROPAGATING THE VARIEGATED COBÆA SCANDENS.

Mr. Farquahar, gardener of Forest Hills Cemetery, called here the other day. "I put in a lot of cuttings of the variegated Cobæa scandens in heat, and after waiting some weeks, found no appearance of any of them rooting, but in a cool greenhouse, where I made the cuttings, a few pieces had fallen on the sand on the side bench, and there, uncared for, they were rooting nicely. I changed my tactics at once and put in a lot in a cold house, and they all rooted right-away." Just my own experience exactly, Mr. F.

SPRING BULBS GROWING IN FALL.

Iris Anglica, Susiana, Hispanica, and others of their class, are often considered tender and unsatisfactory generally; they do well enough the first season after being imported, and the following winter they die. And this is why: After they have blossomed and the flower-stems die down and disappear, we should see no more of them till they start afresh the following spring; but, alas! our fall rains affect them sadly, and they begin to grow in the fall, and thus succumb to our winters. To avoid this evil, I lift my bulbs in August, keep them cool, dry, and out of the ground till October or November, when I replant, and all is well; they survive the winter and blossom out beautifully in spring and early summer.

My neighbor, Dr. Walcott, learned this lesson by experience, and taught it to me. Owing to so much rains recently, I find my Jonquils and some other Narcissi are starting to grow; I have shaken out a few, for I cannot afford to lose them all. I appreciate them too highly.

THE BEST NEW FERN AT BOSTON,

Adiantum cuneatum, is the commonest greenhouse Fern in existence! A fact. The judges at the last annual exhibition of the Massachusetts Horticultural Society, said so! The plant was a very ordinary-looking one at best, but it belonged to the President of the Society, and he didn't deny its species either. Of course, Boston people would not submit to such an erroneous decision, so the judges were compelled to reconsider their award and give the first prize to him who before had got the second. It would, however, have been more Com(e)ly if rectified S(p)eoner.

THE BOSTON BABY SHOW

is in session just now. "One hundred proud mothers with their infant progeny, are platformed for the criticism of a generous public." Among the babies are five pairs of white twins and two pairs of colored ones. One pitiable infant, two months old, is thirteen inches long, and weighs only one pound! The children are of different ages—four weeks to two years or so. There are some nice, clean-looking and healthy children among them, but altogether, I could not see anything particularly attractive about them; in fact, though I dearly love children and made quite a fuss with several of these little ones, I must say that neither of the babes nor of their mothers was I specially enamored. I am strennously opposed to baby-shows. Curiosity took me there; so now I am convinced that the baby-carriages rolling along our streets and commons contain sweeter darlings—to non-relatives, at least—than are this week exposed to the public gaze in the Boston Music Hall. At agricultural shows we usually find superior specimens of the better breeds of cattle, horses, and other domesticated animals; but if you want to find babies you can kiss and love,—children, sweet, clean and bright, visit your neighbors' houses, and not the baby-shows. And if you want to see in woman that honorable pride, rivetting sweetness, delicacy and refinement so becoming in the cultured mother, I say again, visit your neighbors.

Entomological.

THE CABBAGE PLUSIA.

Besides the European Cabbage Worm that is so rapidly spreading over the northern United States, there is another caterpillar that is nearly as destructive. Like the one first-named, it is green, and about an inch in length when full-grown, but it may be readily known from the Rape-worm by the following characteristics: The Rape-worm has sixteen legs and moves along when it crawls with nearly a gliding motion, while the Plusia has only fourteen legs, and as a result, it loops up the back as it crawls, something like the Measuring-worm. Besides this, the Plusia has pale greenish-white stripes down the back, while as regards the Rape-worm, if it has any stripes that are perceptible without the use of a magnifying glass, they are yellowish with fine black dots.

This worm eats round holes in the leaves, beginning with the outer leaves, or those away from the head; but as there are usually quite a number of worms on a plant, these outer leaves are soon made to look as though a shower of hail-stones had passed through them, and, thus the outer layer of leaves that form the head, is encroached upon. Unlike the Rape-worm, these pests do not bore into the heart of the head, and as a consequence, they are not so destructive, but the injury they do consists more in eating the outer leaves, thereby limiting the growth of the plant, and making the outer portion of the heads unfit for use, owing to the presence of their excrementitious droppings. From observing both the Rape and the Plusia worms in my garden this season, I infer that they do not work well together; I could find great numbers of both kinds, but they were always on separate plants.

When full-grown, this caterpillar retires to some sheltered place, either between the leaves or elsewhere, and weaves a very thin, loose, white cocoon, within which it changes to a chrysalis, which is at first yellowish-green, afterward usually becoming brown. This is soft and tender to the touch, and has several curled bristles at the small end. In about ten days these produce moths that are of a dark-gray color, tinged with brown, with a bright silvery mark in the middle of the fore-wings, resembling an oblique interrogation point. The male differs from the female in having on each side of the abdomen, towards the tips, a tuft of golden hairs.

These moths, after pairing, deposit eggs at night on the cabbages, from which another brood of the worms is produced.

Remedies.—If the cabbage patch be small, or the infected plants few in number, to hunt the worms and kill them is a good remedy. As they usually fall to the ground when the plant is jarred, shaking the plant will be of assistance in finding them. Chickens, if allowed the range of infected cabbage patches, will destroy a great many of these pests as well as other insects. The use of any chemical preparation, unless it be a drenching of the plants with a solution of cresylic soap, is not advisable.

Carbondale, Ill. G. H. French.

Floricultural.

OUT-DOOR FERNERY.

ELLA RODMAN CHURCH.

An out-door fernery is a rare possession—a great bank of lovely green fronds that can be drawn upon at pleasure, and that diffuses an atmosphere of perennial greenness around its own particular corner, which may be the ugliest and shadiest in all the garden; for Ferns will flourish where nothing else will.

Exquisite Ferns of various kinds, called by the country people "brakes," are to be found in almost every moist woodland place, and are invaluable for pressing or arranging with cut flowers; but who wants always to go to the woods or brook for them, and who, unless armed with a botany-box, or great sheets of paper, can hope to bring them home without withering? Why not, then, have them close at hand, when the thing can so easily be done? And yet few people ever think of going deliberately to work to make an out-door fernery. If a rockery is erected, some few tufts of Maiden-hair and other wild fronds must, of course, be used to give it character; but gardeners rarely plant a fernery as they do an asparagus-bed, for the express purpose of cutting.

Some dismal, neglected spot in garden or grounds, some place where rubbish may hitherto have been dumped and where the dominion of noxious weeds has never been interfered with, may prove the most promising site that could be found for a plantation of Ferns. They are not at all difficult to raise and they thrive where no flowers would condescend to prosper; but certain requisites they must have, and one of these is moisture. They also like a corner underneath a wall and will smile in the face of a northern aspect; great, branching trees, too, to which flowers are always antagonistic, do not disturb them in the least.

Ferneries may be made of all sizes; but if a good generous one is wanted, a hank of earth three or four feet high should first be thrown up both as a dividing line and as a sort of breastwork against the roughest winds. A pathway should carefully be left leading directly into it from any point of the compass, that may be most convenient. Shrubs that develop well in the shade, may be planted on the top of this bank with quite an ornamental effect; while the Ferns will do better on the sides. The outline of the bank must not be straight, but furnish points and hollows for the better distribution of the Ferns, and the inside must be furnished with a generous supply of burned bricks or blocks of stone. If there is a wall at the back or on one side of the structure, either masses of burrs (bricks that have run together in the burning) or pockets and brackets of cement may be fastened upon it at intervals to great advantage, as Ferns of a creeping nature, as well as other plants not strictly classified under this head, will grow there and daintily clothe and hide the naked stones, besides giving an additional element of beauty to the whole arrangement. For even if the fernery is just planted for cutting, it may as well be beautiful.

The central portion, if large, can be divided into several beds; but if small, one will answer. This can be done by making divisions with mounds of earth and bricks; striving, not for evenness of outline, but for the utmost irregularity, as this produces the most picturesque effect and also affords the most space for Ferns. The stones or bricks must not be too thick, or the fernery will subside into a rockery. A few small rough logs or branches can be mixed in with a very pretty rustic effect; and small Ferns, or creepers, will appreciate this provision for their comfort. Holes should be sunk in the crevices between for the benefit of those that are accustomed to a liberal supply of moisture. Their own native soil is undoubtedly the best; but Ferns will do well in a made soil composed of loam, peat, or leaf mold, and river sand in equal parts.

Great care should be taken not to wedge the plants into small crevices; and in planting, to consider their various needs. Tall, upright Ferns require depth of earth to flourish in; those that have surface creeping rhizomas want something to cling to; and those with underground, spreading rhizomas demand room and space to develop their individuality. Proper drainage also must be provided for, as superabundant water will injure the roots.

Ivies are never out of place anywhere; and the fern pasture may be beautified by rough arches of burrs covered with these climbers, or a column of stones may rise here and there with the trail of the Ivy over them all, and the dainty perennial green of its fresh shoots gleaming out like lingering touches of spring.

THE NATIVE FLOWERS AND FERNS OF THE U. S.

Parts IX, X, XI, XII, which we believe complete vol. 1st, have been received from the publishers, L Prang & Co., of Boston. The general excellence of this fine work is fully maintained. Indeed from the cursory examination which we have given the present parts, the colored plates are even better executed than those of the preceding numbers. Those of Part IX, are Viola sagittata; Gerardia pedicularis; Calochortus lutens, and Iris versicolor. Of Part X, they are Pogonia ophioglossoides; Cleome pungens, of which, it will be remembered we offered seeds in our last year's seed distribution; Actinomeris squarrosa, and Claytonia Virginica. Those of Part XI, are Asplenium Trichomanes: Anemone Caroliniana; Rosa Carolina, and Pachystima Canbyi.

Mr. Meehan has thus far accomplished the difficult task of rendering this work interesting to both the amateur and botanist.

Miscellaneous.

ABOUT INDEXES.

B. PICKMAN MANN.

When I sent to the Rural New-Yorker my criticism upon its indexes, which is printed on page 457, I was not mistaken in relying upon the candor of the editor for a hearing, and when I turned over two pages I was gratified to read that the editor was in accord with me in his estimation of former indexes and had already announced his intention to give the index more care and elaboration in the future than it had had in the past. While this intention is undoubtedly to be carried out in the excellent manner which characterizes the rest of the present volume, it may be well that the readers, generally, should be shown at least a part of the internal anatomy of an index, in order that they, too, may be in a situation to make, in the best manner, their own indexes of works which have no index, or which have an insufficient one.

In the first place, the index should be arranged by the *significant* words, not by articles, prepositions or subordinate adjectives. Taking as example the references quoted in my former article, page 457, the arrangement should be as follows:

Grasshoppers, to drive away..... 384
Hennery, pest of the..... 41
Hickory scolytus, the..... 174
Potato beetle, fighting the..... 32
Potato bug, exterminate the..... 384
Potato enemy, new.....48, 64
Power, wonderful, of an insect..... 318
Tomatoes, ten-liners on..... 174
Vines, American, in France..... 332

Here I have attempted no other reform than the transposition of the words and the arrangement of the lines in accordance with that change. I doubt not it will be admitted that in this manner articles upon given subjects are made more accessible than if the references were arranged as on page 457. It will be noticed that some of the references on page 457 have not been repeated in the above list. This is because there was no meaning in them. To get at the gist of the article which had for its title "'A little learning' not always 'a dangerous thing,'" we must amend the title to read in some way like the following:

Apple trees, borers in, means against..... 70
Borers in apple trees, means against..... 70
Saperda bivittata, means against..... 70

It is the duty of the editor, as an artist, to embellish the articles with graceful titles, but the indexer must be an anatomist and call things by their strict names.

A further improvement in an index is to reduce the number of unmeaning variations as far as possible, thus, for instance, to use one form of expression for the extermination of insects, somewhat as follows:

Grasshoppers, means against..... 384
Potato beetles, means against. 32, 384
Potato, insects injurious to.....48, 64
Tomato, potato beetles injurious to..... 174

The same things should not be called by different names. Grasshoppers and locusts are really distinct families of insects, but in common talk their names are mixed. Everything which is said about "grasshoppers" on page 457, refers to locusts. It may not be thought best, however, to ignore the word "grasshopper," and the indexer may choose to take the words as they come. In this case a line should be added to the index where each of these words appears, directing attention to the other word, thus:

Grasshoppers, a visit from..... 235
" Congress and the..... 249
" [See Locusts.]
Locusts, Rocky Mountain..... 156
" Western.....202, 203
" [See Grasshoppers.]

This rule is of general application. Wherever different words are used for the same thing, reduce the variation as much as possible, and wherever two subjects approach so closely as to overlap on their boundaries usually, send the reader to the other subjects by a note like that given above.

Next in importance to the rule that only significant words should be used as a guide in the index, is the rule that there should be only one alphabetical series. It may seem as if a person, turning to the index, would be saved a great deal of trouble by finding all the articles in which he is interested grouped under one head. Thus a poultry-raiser would look under the heading Poultry-yard, and need not trouble himself to look through the other columns. This field of search would be one easy to scan. But in fact, by no arrangement except by frequent repetition could all in which he is interested be brought together in this column without being taken away from some other place where it properly belonged. Take for an example the index before me. The first words in each reference below are the headings, of which there are thirty in the present index, each with its separate alphabetical series of references.

Dairy husbandry. Butter and Egg Ass'n..... 263
Domestic economy. Eggs, packing for winter use. 235
preserved by silicate of soda..... 267
to test..... 235
Industrial implements. Corn-sheller, home hand. 360
The Centennial. Poultry [etc.] 197, 310

Perhaps no one of these references is generally important, but if the searcher happens to want one of them, it becomes to him very important. Were all the references in one alphabet, he would make out a list of the words to be looked for, say chickens, corn, ducks, eggs, fowls, geese, hens, poultry, turkeys, etc., and look for these nine words or for such others like them as he might think of, and be satisfied with a short examination of the index, that he had found all that was to be found; but were the index divided into chapters, he must look for these words over and over again in the different chapters, thus making his examination ten-fold or twenty-fold more laborious.

To sum up the few points treated above I repeat: Make the index in *one* alphabetically arranged series, using as the leading words those which will be most likely to be looked for by any person who is seeking an article upon the given subject, and say the same thing every time in the same way.

WHAT OTHERS SAY.

Mr. Parry says, in an address to which reference is made elsewhere, that

RASPBERRIES

commence to ripen before strawberries are gone, and it is usual to send some of each to market at the same time. They come with harvest, when it is not entirely convenient for grain farmers to be bothered with small things, hence they are not grown so plentifully as strawberries and consequently sell better in market.

One farmer, near where he resides, sent to market a one-horse wagon load of raspberries and received $220 for the lot. One lady near-by, rented out her farming land, while her husband was from home, reserving a patch of Raspberries and Blackberries, from which she sold this year, 43,000 quarts, or 1 343 bushels of berries, worth several times more than all other crops on the farm. He once visited a farmer who paid attention to small fruits as well as to the more important staple crops of grain and grass. The day he was there they gathered for market 200 bushels of raspberries and some days did more.

His firm raised and marketed this year at Pomona Nursery, of

Raspberries	34,306	quarts.
Strawberries	25,509	"
Blackberries	11,016	"
Total	70,825	"

Of Black-Caps, Doolittle's Improved and Mammoth Cluster have given good satisfaction, but are now likely to be superseded by the Gregg, a new Raspberry, lately introduced, and a decided acquisition, being the largest, best and most productive black Raspberry known, fully fifty per cent. larger than the Mammoth Cluster, and one of the most valuable to plant wherever black Raspberries are desired.

Yellow Raspberries have not been popular, owing to the fact that hardy varieties have not been of good quality, and those of good quality, like Brinckle's Orange and Col. Wilder, were not hardy.

Caroline, claimed to be a cross between Brinckle's Orange and the Catawissa, is a large, luscious berry, of orange color, good quality, and it appears so far to be perfectly hardy, propagates both from suckers and tips, though sparingly from either. It promises to be the most valuable Raspberry of a light orange color yet introduced.

Red Raspberries are more desirable for the section about Cinnaminson, N. J., and the most prominent among them since the old Purple-Cane of fifty years ago, are the Philadelphia, an accidental seedling found growing in Pennsylvania about the year 1840, and seedlings grown from it, such as Herstine, Early Prolific and Reliance, all berries of merit. The Pearl, Turner, Bristol and Brandywine have been and still are largely grown. The above-named varieties have probably produced more red raspberries for market in his section than all others. The Pride of the Hudson, Henrietta and Norwalk Seedling are all very large handsome fruits in their native soils where they originated, in New York and Connecticut, but it does not follow that they will stand the hot, dry summers of New Jersey. As many other varieties that did well at the North would not succeed further South, the success of these there can only be determined by further trial.

BLACKBERRIES

commence soon after raspberries and give continued employment for the same pickers, crates and baskets that were required for strawberries and raspberries, so that all three may properly be grown on the same farm, and thus divide the cost of crates, baskets and other fixtures among them.

At the average price at which blackberries have been sold in market for twelve years past, a field with ordinary treatment will yield from $200 to $300 per acre annually. Double those figures have been realized some years. He has known 150 bushels of blackberries to be grown acre, which, sold at an average of 12½ cts. per quart, yielded $600 per acre. One of his neighbors planted 75 acres of Blackberries, which yielded, one year, 6,500 bushels of fruit and sold for $22,000. The blackberry crop of Vineland, N. J., this year, as reported by the railroad officials who carried the fruit to market, was about 500,000 quarts, equal to 15,625 bushels, and at 1½ cts. per quart for picking, the laborers who gathered the fruit received $7,500.

He has grown more than fifty varieties of Blackberries, and those that have proven most profitable are the Lawton, Dorchester, Kittatinny and Wilson's Early. Recently several new ones have been planted which promise well, such as the Snyder, Taylor and Wallace.

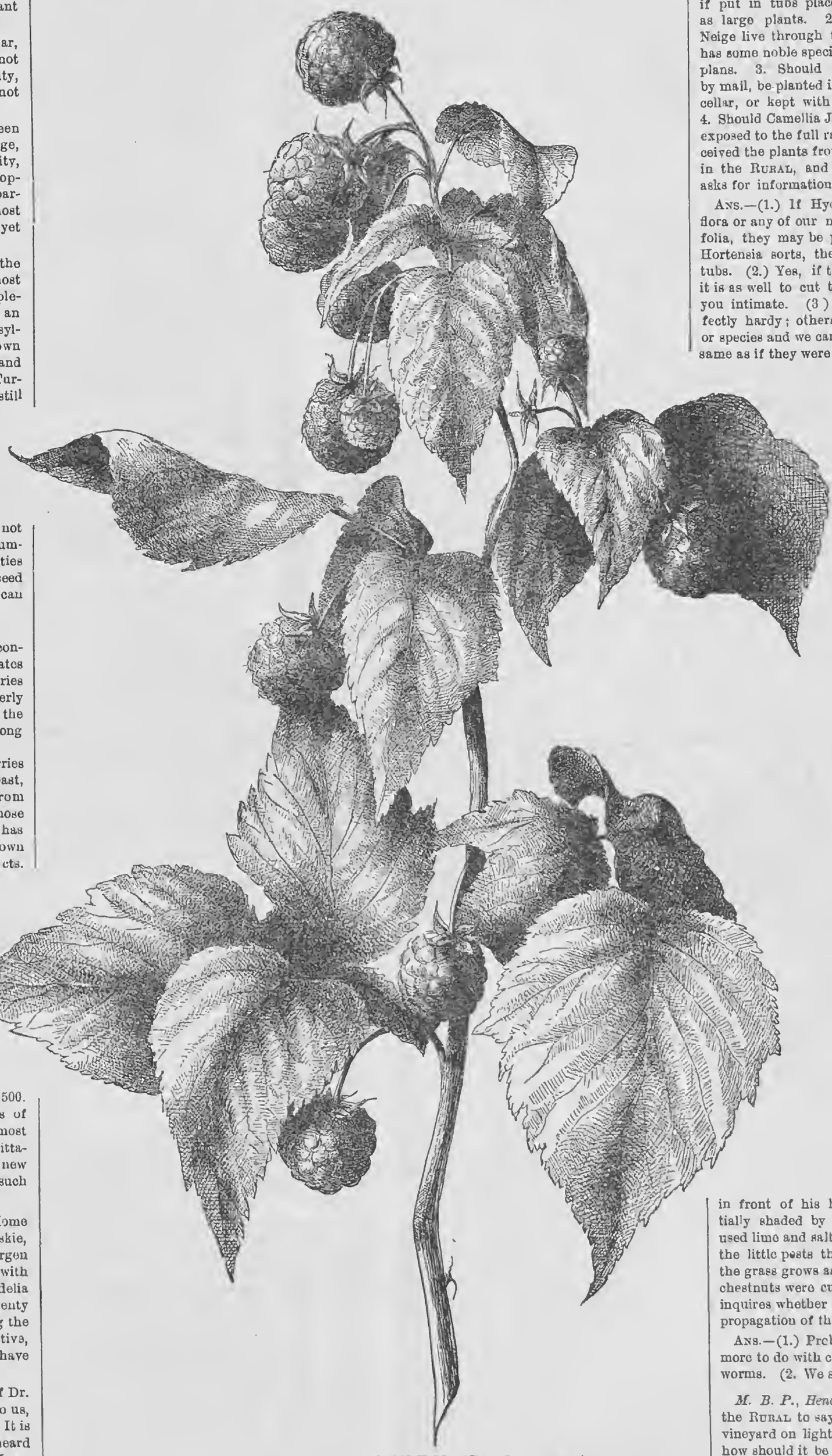
Grindelia Squarrosa.—The Farmers' Home Journal (Louisville, Ky.,) says: "Dr. Zabriskie, a well known physician of Westwood, Bergen county, N. J., tells us that he has used with much success the fluid extract of Grindelia squarrosa for malarial fevers, in doses of twenty drops, administered every two hours during the intermission of the fever. As a preventive, twenty drops, taken three times a day, have proved effectual."

[We ask the editor of the Home Journal if Dr. Zabriskie *did* tell him that? He told it to us, and the Rural New-Yorker published it. It is one of the strangest coincidences we ever heard of that he should have told it to the Home Journal in precisely our language. It must be considered, too, that Dr. Zabriskie was not aware that that excellent journal or its enterprising editor had any existence. Besides the febrifugal properties of the roots of Grindelia squarrosa, the plant bears a very pretty flower, for both of which reasons we are trying to save seeds enough from a small plot in the Rural Grounds to make it one of the dozen or more varieties of seeds to be offered in the Rural's free seed distribution.—Eds.]

Turner Raspberry.—Mr. S. Miller, of Missouri, says of the Turner: "It is this day worth more than all the rest put together. It just fills the bill—large size, brilliant color, immensely productive, firm as any, with a sweet spicy flavor, unequaled by any other we know of, and perfectly hardy."

We endorse all of it. Why pay from $1 to $1.50 for one plant of new, untried kinds, when you can get all you wish in the Turner at a reasonable rate? We think it will be the standard red variety for the South and West. The fruit brought this year 20 cents a quart, average, while Black-caps only averaged five cents.—*Farmers' Home Journal.*

Raspberries.—Thus speaks the experienced Col. Freas, of the Germantown Telegraph:



MONTCLAIR RASPBERRY.—(See 1st page.)

1. Hornet; 2. Herstine; 3. Philadelphia; 4. Brandywine. The Herstine has proved itself to stand in the front rank among Raspberries in quality and productiveness, but requires winter protection. In other respects it is not to be preferred to the Hornet, which is larger and the quality quite as good, with the additional advantage of keeping in bearing *nearly three times* as long as the Herstine. The Brandywine, as a market fruit, is coming into much notice.

Blackberries.—The following is his list of Blackberries:

1. New-Rochelle; 2. Missouri Cluster; 3. Wilson's Early. The Snyder, a new Western Blackberry, is highly spoken of at distant points, but we prefer to wait another year before recommending it.

The distinguished pomologist, J. J. Thomas, gives the following rules for the culture of Raspberries:

1. Any good strong soil that will raise good corn, and which has been deeply pulverized, will raise good Raspberries.

2. Set the plants in rows that will admit of free cultivating, say five or six feet one way and two or three feet the other.

3 For Black-caps, pinch back early or when the young canes are about two feet high, to keep the bushes snug and compact and to obviate staking.

4. As the canes grow in one season and bear the next, cut the bearing canes away as soon as they drop their leaves, or never defer the work later than early the succeeding spring.

5. Suckering sorts, to bear well, must have the suckers hoed away when they first appear above the ground or be treated like weeds.

6. Increase the crop by clean mellow culture, and, if practicable, by mulching for winter as well as for summer.

Relative Importance of Some of the Small Fruits:—1st, Strawberries; 2nd, Raspberries; 3rd, Currants; 4th, Blackberries; 5th, Gooseberries.

The Querist.

ANSWERS TO CORRESPONDENTS.

[Owing to the considerable space given to the Raspberry, we ask the indulgence of those who have asked questions not yet answered.—Eds.]

Queries about Flowers.

John J. Watson, Newport Co., R. I., asks, 1. Whether Hydrangeas, mailed by florists this fall, will be better and larger plants next season, if kept with house-plants during the winter, than if put in tubs placed in the cellar, the same as large plants. 2. Will Abutilon Boule de Neige live through the winter in a cellar. He has some noble specimens, too large for house-plans. 3. Should Clematis plants, received by mail, be planted in the open ground, put in a cellar, or kept with house-plants until spring. 4. Should Camellia Japonicas that are budded, be exposed to the full rays of the sun. He has received the plants from two florists who advertise in the Rural, and as they are new to him he asks for information.

Ans.—(1.) If Hydrangea paniculata grandiflora or any of our native sorts, like H. quercifolia, they may be planted out now. If of the Hortensia sorts, they will do as well if kept in tubs. (2.) Yes, if the cellar is frost-proof; but it is as well to cut them back when as large as you intimate. (3) Some Clematises are perfectly hardy; others not. Name the varieties or species and we can reply. (4) Precisely the same as if they were not budded.

A Novel Strawberry Bed

Mrs. Robert C. Kerr, Cobb Co., Ga., says that the yard to her town house is not large enough for cultivating fruits *and* flowers, so that the lot is set out with the latter; but as she is anxious to enjoy home-raised strawberries, she asks the Rural's advice about raising them in the following way: she is thinking of getting two or more barrels, filling them with good rich soil, boring holes all around the sides, and planting strawberry roots in these holes as well as on the top of the earth in the barrels, which would then be placed in her greenhouse. She asks whether this plan would be likely to be successful; what kind of roots would be the best; how many would be required for each barrel, and what would be the best time for planting them.

Ans.—We do not think the plan would work. More berries could be raised in pots or in an earth bed of the greenhouse in the same space which the barrel would occupy.

Miscellaneous.

An old Subscriber, Onondaga Co., N. Y., asks: (1.) How can he exterminate angle-worms from the lawn in front of his house—north side—and partially shaded by two chestnut trees. He has used lime and salt, scdded and seeded, and still the little pests throw up their earth-works and the grass grows as thin as ever. (2) Two Horse-chestnuts were cut down two years ago, and he inquires whether their decaying roots favor the propagation of this insect nuisance.

Ans.—(1.) Probably the Horse-chestnuts have more to do with causing slender grass than the worms. (2. We should say not.

M. B. P., Henderson, N. C., asks, What has the Rural to say of applying chip manure to a vineyard on light, sandy soil; and, if advisable, how should it be done—broadcast or as a mulch about the vines?

Ans.—We should not use chips either as manure or mulch for vines or any other plants, unless thoroughly rotted.

Communications received for the week ending Saturday, October 5th:

W. B. D—T. H. H.—A. D.—R. W. D.—W. H. W.—W. F.—G. W. P.—D. H. C., Jr.—R. C. K.—R. T.—J. B. D.—W. C. B.—H. F. S.—W. B.—T. H. H.—Est. M. S., thanks—J. J. W.—M. A. K—E. R. C.—W. B. D.—W. F.—R. H. K.—J. T. L—T. S. H.—C. C.—V. F. K.—D. B. E.—W. A. H.—W. H. Y.—L. A. R.—K. M. M.—A. H. W.—S. D.—M. W.—N. E. F.—M. M. R.—E. B. S.—J. T.—F. D. S.—T. H. H.—L. A. R.—D. S. M.—M. O.—W. C. G—J. J. D.—J. H. S.—W. B.

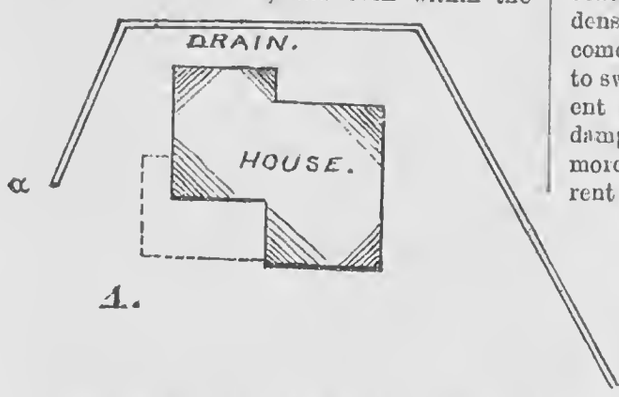
Farm Topics.

SANITARY ARRANGEMENTS FOR THE HOMESTEAD.

A JERSEY FARMER.

NO. 1. THE CELLAR.

In many cases, the deadliest foes to our comfort and health are permitted to lurk within our dwellings or in the closest proximity to them. Just as there are few people who are perfect in every way, so there are few houses that are perfectly clean. In front, and even within the

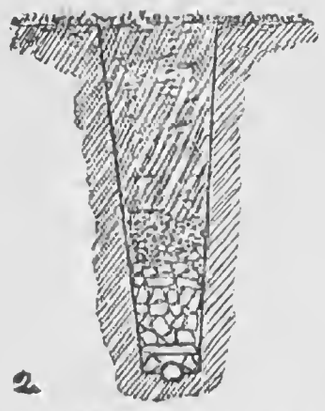


1.

house, it may be scrupulously neat and clean, but the back yard or some attachment thereto may be in a very objectionable condition. The weak spots about country houses are the cellars and the back yards. From the nature of things, it is difficult to keep these in a satisfactory condition. There are good housekeepers who are discouraged about their cellars, especially the present season, which has been unusually warm and damp. Nearly every cellar is damp and moldy, else it is close and has a smell of the earth, earthy; and to begin at the bottom of the question of sanitary arrangements of the homestead, the cellar naturally comes first. Without any preaching about what cellars ought to be, and what they are, let us consider how a cellar may be made dry, cool and airy; for a dry, cool and airy cellar is what every housekeeper knows to be perfection in the cellar way.

IS DAMP CELLAR

is damp either for want of drainage or of sufficient or proper ventilation. Ventilation is easily provided for by due attention to the laws which regulate the condition of the atmosphere, but to effect complete drainage is sometimes very difficult. When the house is situated upon a hillside with a clay subsoil, water often comes from the ground above, and rises from the bottom of the cellar. It is an easy matter to prevent this. A deep drain carried at least two feet below the level of the cellar, so as to cut off the water flowing from above, will cure the evil at once.


2.

But the drain should be carried at least twenty feet upon each side of the house to prevent a lateral inflow of water. The drain should be dug about twelve feet from the house. A plan of a drain properly laid out for this purpose is given at figure 1. The drain should be begun at the point *a* and carried in the direction indicated to *b*, which is the outlet. Obviously the direction may be changed to suit the character of the ground without detriment, if the house is cut off from the soakage of the water from the high ground.

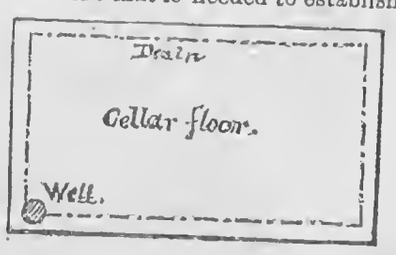
The drain should be made narrow at the bottom and scooped out to fit the tile which should be at least two inches in diameter. A three-inch, or even a four-inch tile would be better because this drain may be made the key to a complete system of drainage, not only for the cellar, but for the overflow from the roof and from the kitchen. The benefit of such a thorough system will be apparent to every thoughtful owner of a house. The drain should then be partly filled with stone for two or three feet, and with gravel for another foot; then filled in with earth. This will effectually cut off the flow of water. (See fig. 2) Where it is impossible to make such a drain, a wet cellar may be dried by sinking a well in it, and laying a feeding-drain all around the cellar to conduct the water to it as shown at fig. 3. The drain should be at least 18 inches deep and the well six or eight feet. This well should be bricked or stoned up, and covered with a flat stone or arched over. If a pump is fitted into it, it may be made very useful in the kitchen above, if only for washing and cleaning purposes. If a force pump and 100 feet of hose with a nozzle are provided, the washing of the windows, with some watering of the garden, may be done very convoniently. It may be very useful when the water is only occasionally present in the cellar, to carry the well down to a permanent spring, and so have a constant supply. By covering the well, the cellar will remain quite dry; but if it is left open, dampness will be certain to proceed from it. But dampness may, and does, very frequently result from

IMPROPER VENTILATION.

Consider a case. The cellar must of necessity be the coldest part of the house. The walls being of stone or brick, are non-conductors of heat. In the summer time the outside air is much warmer than that of the cellar. The warmer the air, the more moisture it contains. The cellar windows are opened. The warm air flows into the cellar carrying in the moisture contained in it. The cool floor and walls condense this moisture as soon as the warm air comes in contact with them, and they soon begin to sweat; that is, the moisture becomes apparent upon them. The housewife seeing the dampness, fears the cellar is close and needs air; more windows are opened and a stronger current is drawn in, perhaps at noonday, when the air is warmest, so that the cellar may be dried most effectively. The moisture is then greatly increased and streams pour down the walls and flow upon the floor, until mops are brought into requisition and the wondering housewife is at her wits' ends. This is a very common mistake. But the trouble might have been avoided by knowing

HOW TO VENTILATE A CELLAR.

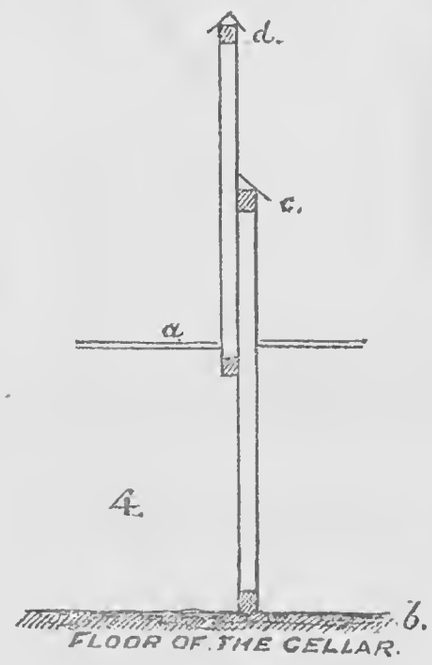
For all ventilation there must be a current inwards and one outwards. Wherever air is still, the coldest air is at the bottom and the warmest air at the top. The tendency of cold air, which is heavy, is to sink, and of warm air, which is light, to rise. All that is needed to establish an



3.

air current, is to make an opening near the bottom and another at the top. The warm air rising flows out at the top, and the cold air of necessity flows in at the bottom, or, if cold air flows in, it forces the warm air out. Now we want cool, dry air in the cellar. The cooler the air, the drier it is, because as the air cools the moisture in it is condensed and becomes visible as dew or water. The air is cooler at night than in the day time, and it is also drier then as the moisture is mostly deposited as dew. In the early morning, as the air has cooled during the night, the moisture has been condensed and it is drier than at any other time. So that the best time to air the cellar, or indeed the whole house, is early in the morning. But the air should not be permitted to flow into a cellar from the surface of the ground because there it is saturated with moisture and is at what is known as the dew point. If it is taken about 12 feet above the surface it will be drier and will be free from many injurious germs which are carried about by air saturated with moisture

To admit the air at this point, and also to afford an outlet for the warm and fouled air of the cellar to escape, a double pipe may be used. This may be a common spout of wood with two sections, each four inches in diameter. One of these reaches to the bottom of the cellar and one opens at the ceiling. The outlet of the first is from six to eight feet from the ground, and the other should be carried up to the eaves of the house. The spout may be fastened to the wall, in the rear of the house, and enter the cellar at the ground level or at a window. The openings are covered with wire gauze, to prevent access of flies or vermin of any kind, and the outside ones are protected by caps to shed the rain. The whole is shown at fig. 4; the ceiling of the cellar is at *a*; the floor at *b*; the lowest opening is the inlet for cool air, which enters at the opening *c*; and that above it is



the outlet for warm air, which escapes at *d*. Many mistakes are made in ventilating cellars for want of an accurate knowledge of the behavior of the atmosphere under different conditions.

A cellar was once ventilated by making a flue from the floor into the chimney, but the effort was a failure. The consequence was that the draft of the chimney drew the air chiefly by day, when the fire was burning, from the cellar floor, where it was cool, and its place was occupied by the warmer air from above, which entered through the numerous openings of the windows and the upper floor; thus, instead of being cooled, the cellar was warmed. If the flue had been made from the ceiling of the cellar and had been closed during the day, but opened at night, and a window had been partly opened at night when the flue was open, there would have been thorough ventilation, and the air would have been cooled as much as possible. When a cellar has become damp, it may be dried very rapidly by putting a bushel of freshly burned lime in it in a box. The lime will absorb sufficient moisture to dry the air of the cellar thoroughly, and when the lime becomes damp from saturation, it may be removed and spread upon the grass around the house or in the poultry yard for the fowls to peck at. The lime will also completely absorb any carbonic acid which may have been evolved from decaying vegetables; and, in short, it will be a very good substitute for ventilation, as it will both purify and dry the air. In this way it will pay very well to keep a box *half full* of lime in the cellar, at all times; the lime will always be worth its cost to use for making compost for the garden. The box should be only half full, because as the lime absorbs moisture it swells and falls to powder.

VAN'S VIEWS.

A week out with a thrashing-machine has shown that, while grain is not as bad as was at first reported, still it is a discouraging year. Yesterday we thrashed the grain from a twelve-acre field, on which were sown twelve bushels of Fife and six bushels of Club wheat; there was *no* Club at all, and just thirty-four bushels of Fife. This is an extreme; the average is about nine bushels to one sown, or twelve bushels per acre.

Oats are about an average crop and so is barley, but our rye, about which our farmers have been bragging so much, doesn't turn out very well, giving only about twenty bushels per acre.

One thing was brought to my mind the other morning, which I had almost forgotten, namely, that there is danger around a thrashing-machine. We were running on oats, and there had been a heavy fog during the night; straw, or rather loose oats, were scattered around the feeding-table, as is usually the case, and, of course, all were wet. The men took their places, the horses started, the machine began to hum, when, all at once, there was a cry near the door. The driver began to cry "whoa," the man who was feeding rushed in front of one of the teams and caught the horses by the bits, stopping the machine quicker than it was ever stopped before. We all rushed to see what was up, and found the bandcutter lying on his side with his leg twisted around the tumbling-rod. The wet straw had caught around the rod and twisted his pants up to where a few more turns of the rod must have either killed or badly maimed the man. I have seen men and boys step over the tumbling-rod at all points, over the knuckles as well as any where else, and I saw a girl walk over one of the knuckles one day, and though she escaped death, her danger was very great. Now, with folks thus careless, is it any wonder that there are, now and then, terrible accidents?

It is the same with mowers and reapers—how many drivers are there who always throw their machine out of gear before getting off the seat? I make it a rule to do so, but last summer in haying time I once got off in a hurry to free the sickle of dirt, and left it in gear: while pulling out the dirt and glass, one of the horses kicked at a fly; quick as a flash the knife shot up and back, almost catching my fingers. But this hurting one's-self is not all. Suppose the team starts while the driver is out of his seat; if they run, they carry destruction with them, and it is all one's life is worth to try to stop them.

RASPBERRIES.

We are in a region where the thermometer occasionally gets to "forty below" and our raspberry list must include only the hardy kinds, such as Philadelphia, Davison's Thornless, McCormick, and Doolittle. For this market I should plant three-fourths of the first and one-eighth each of the next two.

Every family should have some of Fastolif and Brinckle's Orange, which can be bent down in the fall and pegged slightly, so as to be covered with snow, and then they will do well. The above are all that are worth cultivation here.

Brown Co., Wis.

NOTES FROM THE RURAL FARM.

We have to-day (Oct. 1) been preparing a small field for wheat on the after-culture plan. The ground after thorough plowing, harrowing, manuring and raking, was marked off eighteen by twelve inches. Three grains were planted (by hand, of course,) at the intersections, all but one plant of which will be removed later. This will make the plants one foot apart in the rows—the rows one foot and a half apart. Our object is to ascertain, at any cost of time and labor, *how much* wheat can be raised per acre by this system of culture. The amount of seed wheat thus planted was at the rate of four quarts per acre.

We have sown many varieties of winter wheat upon measured areas so as to test their relative values.

The earth is dry even at the bottom of the plow-furrows, and many for this reason are not able to prepare their land for wheat.

No frost yet.

Queens Co., L. I.

Industrial Societies.

PENNSYLVANIA STATE FAIR.

Erie, Pa., Sept. 28, 1878.

The point selected for the Fair cannot be called a good one, as it is not sufficiently central. In fact it is not central at all. It is said that the State Agricultural Society will combine with the Pittsburgh Association and hold the Fair in Pittsburgh next year. The plan includes making that city the permanent fair ground if, on trial, it is found a satisfactory arrangement. The attendance was good, running up to ten thousand on Wednesday, but bad weather on Thursday cut down the receipts. The total number of visitors was not as large as last year, which is to be regretted, as all departments were well filled, especially the live stock.

The cattle exhibited embraced Short-horns, Ayrshires, Holsteins, Devons, numerous Alderneys and grades. A. J. Wilson, Grafton, Ohio, D. D. Tracy, Erie, Walter Cole, Batavia, C. B. Moore, Christiana, and Chas. Lincoln, Lewisburgh, secured the herd prizes. There were forty-six entries of Short-horns, mainly represented by Messrs. Dunn, Lincoln and Jas. Miles of Miles' Grove. There were four exhibitors of Ayrshires, whose combined strength made the thirty-three entries in that class. D. D. Tracy practically monopolized the Holsteins, which were fine, especially the four-year-old bull Hector. Mr. W. Cole, whose Devons were a feature at Elmira, exhibited here also. The Jerseys comprised only thirteen entries, of which Mr. C. B Moore contributed nine. This gentleman also exhibited largely in swine, showing imported Berkshires and Yorkshires.

E. B. Aldridge was strong in Suffolks, Chester Whites and Essex pigs. Walter & Sons of West Chester might have been expected to have a strong representation of Chester Whites, and they did not disappoint expectation.

The sheep were so feebly represented as to compel an expression of regret from the judges.

There were only sixty coops of poultry, and no premium awarded exceeded two dollars.

The departments comprising implements, etc. were well-stocked by goods of the leading manufacturers. H. M. Reid & Co. of Erie, as manufacturers' agents, made the largest and most varied display on the grounds.

The Cortland Wagon and Watertown Wagon Companies, New York State concerns, were fully represented, as were the Dudley Tortion Spring Co. The Harrisburg Car Co., having turned their attention to agriculture, in a small way, showed several of the products of their shops. A new Adjustable Harrow of novel design was shown by Levi Brown of Angola, N. Y.

A. L. Haskell, Lake Pleasant, Pa., exhibited the Haskell Sulky Hay Rake—the only successful sulky revolving rake made—it is the old revolving rake attached to wheels. This implement can be operated by a boy ten years old; it is well made and has been in successful operation (eight hundred being in use in Erie Co.) for the past ten years. Its weight is only 275 lbs.

John Dodds, Dayton, Ohio, took first premium on the Reindeer Self-dump Rake—this rake took the same premium at this fair last year and also a special award of merit at the New Jersey State Fair—in competition with most of the principal rakes.

The judges confessed to an inability to make discriminating awards to the implements, because of the general excellence of the display. Space forbids the mention of many names familiar to Rural readers.

The Apples, Grapes, Farm Products, Flowers, etc., were very good and the Domestic Economy departments were replete with the newest and most convenient appliances for advancing the comfort of the family. All departments "drew" well until about two o'clock each day, when there was a general stampede to the race track to witness "agricultural horse trots."

Your correspondent begs to thank Secretary D. W. Seiler, and Wm. Chandler, Supt. of live-stock, for courtesies rendered. K.

ILLINOIS STATE FAIR.

The Twenty-sixth Annual State Fair of Illinois opened at Freeport, in the northern part of the State, on the 16th Sept., under favorable auspices; as the day was bright and pleasant,

and the very large number of entries of live stock, agricultural machinery, and farm products of every kind, gave promise of a fine show and success in every respect. The attendance of visitors on Monday and Tuesday was not large, but, like the large drops that precede a heavy rainfall, those that came indicated the great outpouring of people that would follow during the rest of the week if the weather would only please be good!

Wednesday, 18th, was the grand gala-day. The weather was propitious and everybody was happy. From country and city, and seemingly from *everywhere* the people came pouring in, and then distributed themselves all over the grounds, with eager eyes and ears open, to see and hear whatever was to be seen and heard.

The biennial election of members of the State Board of Agriculture was held in the afternoon of the 18th. Each county is entitled to three delegates, and the representation was very creditable. As the new Board has the power of locating the State Fair for the next two years—the duration of their office—considerable interest was manifested. The officers consist of a President, ex-President, Secretary, Treasurer, and one Vice-President from each district. The delegates elect the President and Vice-Presidents, at their first meeting in January ensuing, choose a Secretary and Treasurer, and the retiring President is designated as ex-President. The election on Wednesday resulted as follows: President, James R. Scott, of Champaign, *vice* D. B. Gillham, of Upper Alton, who now becomes ex-President. Secretary S. D. Fisher, of Springfield, and Treasurer J. W. Bunn, of Springfield, will continue in office until the new Board meets, on the first Tuesday of January next, when they will most likely be re-elected.

Chicago, a somewhat noted "Village by the Lake," modestly asked for the Fair for the next two years or longer, and will probably get it, as there is no "getting around Chicago" in Illinois. That city now has a great Exhibition in full blast, and from the second to the seventh of next December promises one of the fattest of fat-stock shows that have ever been attempted, and yet she isn't happy unless she gets the State Fair in the near future!

On Thursday, 19th, immense numbers came flocking in from every quarter; but the weather was threatening, and at one o'clock, P. M., a heavy rain and wind storm set in, which lasted for about an hour, and did much damage. Tents were blown down, many got drenched, and the fair prospects of the Fair, for the rest of the week, were completely spoiled. Thus, the happy beginning had a sorry ending. After the storm the weather was tolerably good, but the air was so chilly and disagreeable on Friday that the visitors were few and the interest flagged. Exhibitors commenced removing their goods on Friday evening, and by Saturday evening the great Fair was closed out. It was a success in the large number and fine quality of its exhibits; but the gate receipts amounted to only $10,000, which fell short of paying all expenses, premiums, etc. Had it not been for the storm coming just at the high tide of success, and when the people were becoming deeply interested, there would have been no failure in any particular. W. B. DERRICK.

Ogle Co., Ill.

TOLLAND CO., (CONN.) FAIR.

THE twenty-sixth annual exhibition of the Tolland Co., Agricultural Society was held at Hyde Park, near Rockville on the 25th and 26th days of September. The first day was devoted to the exhibition of cattle and called out some of the best animals owned in the county. The principal breeds exhibited were Devon and Jersey, although there was a good sprinkling of other breeds. Grade and native stock of good appearance was present in large numbers. The chief—and a very fine one too—exhibition of Devon stock was by Hon. E. H. HYDE of Stafford, who turned out with a herd of handsome animals. In the line of Jerseys, N. B. and Leroy G. Perkins, of Mansfield, were considerable exhibitors, as was also Normal L. Babcock of South Coventry. C. H. Owen of Manchester also put in a good collection of animals in the same class.

The Jersey breeders are not as old in the business as Gov. Hyde, having commenced recently; but they have been happily successful. In this county there are probably more milch cows of the Jersey blood than of any other. The improvement in neat stock within a comparatively short period of time, has been very marked and very much is due to the influence exerted by those men who have labored for the production of the most approved animals.

The show of sheep and swine was very limited. That this should be so in the case of sheep is easily accounted for by the fact that the alarming increase in the number of dogs in the State and especially in this county, has very nearly exterminated the sheep; but in view of a marked improvement in the breeding of hogs, and of the fact that Berkshires, and Poland Chinas are common, it is a mystery why so few choice specimens of swine were put upon exhibition. There was an unusually full display of poultry, as many farmers are turning their attention to the more extensive raising of poultry both for chicks and eggs as a source of profit. The chief exhibitors were W. H. Hott of Willington and Norman B. Perkins of Mansfield.

As might have been expected, the show of fruit was magnificent, not only on account of the number of specimens, but also because of their size and the beauty of their coloring. In apples, Samuel F. West of Columbia led off, having fifty-one varieties. He was followed by Mrs. Porter Walbridge of Tolland with twenty-nine, E. H. Lathrop of Vernon with twenty-five, Gov. H. Goodwin of Burnside with twenty-one, while the exhibits of many others though smaller in number were of very fine quality. C. H. Owen of Manchester and H. Nash of Ellington each had fine collections of pears. Some of the most luscious peaches that I have seen for many a day were brought in by Judge G. W. West of Rockville. There was an unusually large display of this fruit, the largest number of varieties being presented by E. S. Henry of Rockville, who also exhibited some beautiful specimens of the Kittatinny blackberries. The exhibition of vegetables was much below that of former years, both in the number of exhibits and in the size and general appearance of specimens. A very noticeable feature was an exhibit of grains of all kinds from Nebraska, which were very fine and served an excellent purpose in advertising the cereal capacity of Nebraska soils. The ladies were prompt in furnishing specimens of butter, cheese, bread honey, canned fruits, dried apples, etc., besides many specimens of useful and ornamental handiwork.

There was a good show of horses, perhaps too good, as the second day was largely devoted to trotting, which does not seem particularly advantageous to agricultural fairs or promotive of the interests of the farmer. Another objectionable feature, common also at other farmers' exhibitions, was the petty gambling allowed by the managers of the ground, to tempt the unwary and the young. If everything of this kind could be abolished from fair grounds, so that young people, (and older ones too) could come without the danger of being drawn into immoral practices, the attendance at fairs would be greatly increased. The receipts were unexpectedly small, owing chiefly to unpleasant weather at the opening of the second day.

W. H. YEOMANS.

Everywhere.

RURAL SPECIAL REPORTS.

WAUKESHA Co., Wis., Sept. 23.

How to class the changes of weather between early spring and the present time would be no easy task. Spring opened early—we sowed spring wheat between the 18th and the end of March, and oats and barley from the 1st to the 8th of April. During the whole of the sowing time the weather was changeable, as may be seen from the following memoranda: March 18, 19, 20, very fine; 21, rain; 22, pleasant; 23, warm in the morning, changing to a severe cold later in the day; 24, 25, 26, severe cold; 27, rain; 28, dry and cold, but pleasant; 29, sharp freezing night with a pleasant day; 30, cloudy with occasional showers; 31, fine.

April opened with fine days which lasted during the greater part of the month. May was a favorable month for farm work—corn and potatoes were all planted in fine condition. June opened with heavy rains washing the corn ground badly. July entered very warm—the corn fairly jumped and continued so to do until the middle of the month when the extremely hot weather and the drought put upon it a check which it never recovered from; consequently it did not fill out and we have only about half a crop. Potatoes suffered badly from the same cause, so that our early potatoes are like marbles, yielding about 20 bushels to the acre. The drought continued until Thursday, the 19th of Sept., when rain set in, continuing down to the present time, thoroughly saturating the ground and making it too wet for working on it.

The wheat crop in this section was good. I thrashed 404 bushels, of the Clawson variety of winter wheat from 12 acres. My Russian Fife yielded 18 bushels per acre; Scotch Fife, about 12 bushels; oats 45 bushels. I sold my wheat and barley for one dollar per bushel. Rye yielded 28 bushels per acre, and is worth 45 cents per bushel. No. 2 wheat is now worth 82 cents per bushel in Oconomowoc, our nearest market, situated 30 miles west of Milwaukee, on the Chicago, St. Paul & Milwaukee R. R. Our hay crop was good. We have a fine breed of hogs, both white and black, worth about $3.00 per cwt.

We enjoy a very healthy climate. Our soil is well adapted for wheat. We feel indebted to the RURAL for its many hints on the best methods of fertilizing our land. Our town owes much of its thrift to those timely hints. Our verdant fields—despite the drought—speak volumes of thanks to the writer on clover and its value as a ferilizer. Our sleek cattle and sheep send a friendly greeting to their generous benefactor. I endorse heartily the article on clover; it possesses the qualities of enriching and loosening heavy land; it also produces an excellent hay for sheep and cattle, and will keep green when other grasses are dried up. It should be sown as early in the spring as possible in order to enable it to root deep before fall.

H. F. S.

VAN BUREN, Crawford Co., Ark., Sept. 22.

OUR most strange and remarkable summer has passed and, instead of almost daily rains of from one to two hours' duration, each shower followed by clear skies, blazing heat and steam hot enough to almost scald exposed animals, man included, we now have clear, cool and pleasant autumn weather. The thermometer registers about 50° at sunrise; maximum, 75°.

The fruit crop is almost a total failure. Peaches and apples have all, or very nearly all, been destroyed by either the canker-worm or the curculio. It is almost impossible to find a single specimen unaffected by these depredators. Nothing of the kind ever occurred in this country before. In all the valley lands the fruit crop, except a few very early varieties of peaches, apples, apricots, pears, &c., have rotted in mass. On the high, rolling Ozark Mountains, nothing of the kind has occured and there fruit of all kinds has been and is very fine. Pear trees have blighted badly throughout the valley of the Arkansas River. The disease has affected many varieties never before touched by it. The Seckel, Duchesse d'Angouleme and others which up to this year have been supposed to be exempt from the disease, have, in places, blighted badly. R. T.

SOUTHERN MINNESOTA, Sept. 30.

THE past year has been a remarkable one in this country. We plowed till the first of January. There was but very little frost in the ground, and we had no snow to speak of through the winter, something unprecedented since the first settlement of the country. The prospect of the wheat crop—the great crop of this country—never was so flattering as in the early part of the season. It bade fair to far excel the great crop of forty million bushels in 1877, up to within a short time before harvest, when the weather became excessively hot and wet, which seemed to ripen the grain up suddenly and prematurely. A great deal was not cut at all. What was harvested yields, when thrashed, much better than was expected, often twenty bushels or more per acre, but it is light in weight. That which was sowed very early—and a good deal was sowed in February—is much the best. In the northern part of the State, wheat is very good, and, as it is, Minnesota has a big surplus, though most of it is of poor quality. The wet weather spoiled a great deal of hay. Since then, till the past week or two, it has been dry—excellent weather for stacking and thrashing. Oats, a good crop; never before so cheap—18 and 20 cents per bushel. Corn, the best ever raised here. We grow the Ohio Dent exclusively. D. B. E.

CHATHAM Co., Ga., Sep. 28.

WE have the best section of the United States for a poor man. If some of the New England small farmers would settle here, in Southern Georgia, where lands are cheap and the climate perfectly healthy, and where they could combine truck or market gardening for the early Northern markets with the cultivation of cotton, rice, and tobacco, there is no doubt but that they would succeed and soon grow rich. Several Northern men, however, came here immediately after the war and lost all they had brought; but it was clearly their own fault. They thought they knew all about the cultivation of cotton, and they would neither ask nor take advice with regard to it, from the natives. This was a sad mistake, for there are many points a Northern man must learn before he can successfully raise cotton and other strictly Southern crops. But if they come here and start in the pine belt close to a railroad, planting the crops they are accustomed to, such as wheat, oats, rye, Irish potatoes—of which they can make a spring and fall crop on the same land—watermelons, pears and peaches for market, their superior skill and energy will undoubtedly win them an ample reward, and then after a while they can plant cotton successfully. CHAS. COLLINS.

LINCOLN, Logan Co., Ill., Sept. 30, 1878.

IT is very dry and has been so for two months or more; true, we get a little rain now and then, but not enough for grass or stock. Our pastures are very short; but stock eat hay readily. Corn is a light crop about here, on account of the dry weather. Wheat was a good crop. Some raise Mediterranean, others different kinds of smooth-headed wheat. There has been a large area of wheat sown this fall, the rains have helped the young growth and it looks well. Some slack farmers have not finished sowing, and, as a matter of course, such men don't get good crops. Our hay crop was good. The Acme tomato was the best of several varieties grown on my grounds.

WARREN Co., N. C., Sept. 29th, 1878.

WITH regard to Raspberries, there is not enough of them planted hereabouts to enable one to give an opinion as to the best varieties. I am told there are no plantations of any importance south of Washington, D. C. The few beds I have seen in bearing were some variety of Black-cap, and gave fair crops of fruit. Raspberries grow wild here, to some extent, especially a straw-colored variety. I see no reason why they should not be as profitably grown in this State as any other kind of fruit. M. B. P.

HOUSTON, Texas, Sept. 10.

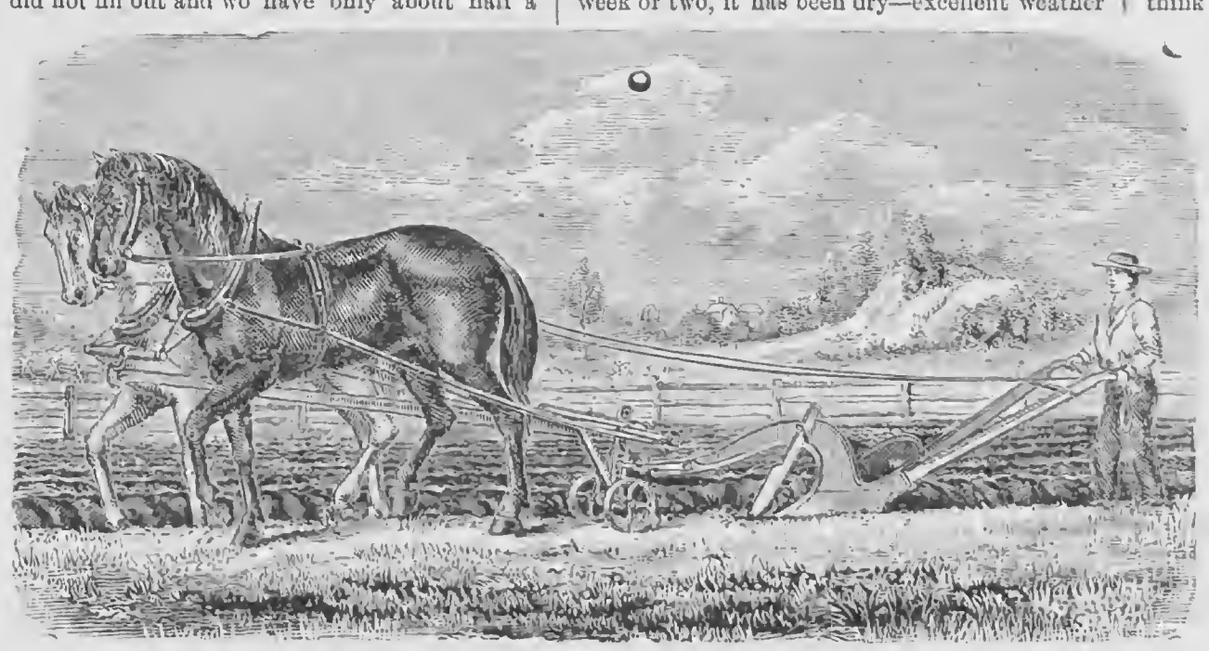
COTTON is fast arriving from the interior of the State; there is every where complaint about want of hands for picking. The weather continues showery, alternating with piercing glances of the sun. Health in general is excellent; no visits from Yellow-Jack as yet. The State is vigilantly guarded against the introduction of this most unwelcome guest. G. M.

MR. LOVETT writes us that the floral exhibit of the N. J. H. Society to be held at Mt. Holly, promises to be not only a success but something grand.

Industrial Implements.

HARRIS' FARM TRUCK.

THIS is a new invention, the outcome of the experience of Mr. Milo Harris, who, previous to making arrangements for its general introduction, has had it thoroughly tested by his neighboring farmers. By the courtesy of the manufacturers, Messrs. Saxton & Amidon, Buffalo, N. Y., we have had an opportunity to test the truck on the RURAL Experimental Farm, and we think so well of it that we take occasion, in this issue, to present an illustration of the truck to our readers, showing its method of working before the plow. This truck is simply constructed, being nothing more than a pole braced to an iron upright that rests on an axle of the same material. The upright is pierced with holes along almost its entire length, through which are fastened, at appropriate hights, whatever implement it is desired to use.



HARRIS' FARM TRUCK.

We had no idea, until using it, that so simple an attachment could be made such a valuable adjunct on the farm. Its various uses lead us to heartily recommend it to farmers as something that cannot be dispensed with to advantage. It is especially valuable before the plow, doing away with the necessity for a gauge wheel, lessening the labor of holding and steadying the tool, which it keeps well down to its work, obviating beam-riding. Not only in plowing, but in dragging the harrow, cultivator, road-scraper, horse-fork and, in short, in almost any operation that calls for the services of the team, the truck "works like a charm." There is nodragging of the whiffletrees or entangling of the horses' legs in the traces. The team pulls more steadily and does a greater amount of work with less strain. The horses are much more easily handled and, in short, it is the most generally useful implement about the farm. Its low price puts it within the reach of moderate purses.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Lady Carew, 3d—(Illustrated)..... 645
Montclair Raspberry—(Illustrated)..... 645
Montclair and other Raspberries—J. C. Williams. 645
Herstine—(Illustrated)..... 646
Cuthbert and Belle de Fontenay—J. T. Lovett.. 646
Newer Raspberries in Ohio—M. B. Bateham... .. 646
Plant Raspberries in the Fall—Rev. E. P. Roe.... 646
Small Fruits in California—W. C. L. Drew..... 646
Raspberry Notes from the Rural Grounds..... 647
Berry Culture in Texas—G. Marti..... 647
Raspberry Items..... 647
Blackberries—M. Oakey..... 647
Cultivation of the Blackberry..... 647
Blackberries in Arkansas, &c..... 647
Garden Talks and Walks—Renoclat..... 647
Cabbage Plusia—G. H. French..... 648
Outdoor Fernery—Ella Rodman Church..... 648
Native Flowers and Ferns of the United States.. 648
About Indexes—B. Pickman Mann..... 648
What Others Say..... 648
Sanitary Arrangements for the Homestead—A Jersey Farmer..... 650
Van's Views..... 650
Notes from the Rural Farm..... 650
Pennsylvania State Fair—K..... 650
Illinois State Fair—W.B. Derrick..... 650
Tolland Co. (Conn.) Fair—W. H. Yeomans..... 651

Answers to Correspondents:

Queries About Flowers..... 649
A Novel Strawberry Bed..... 649
Miscellaneous..... 649
Communications Received..... 649

Everywhere:

Waukesha Co., Wis.—H. F. S..... 651
Van Buren, Ark.—R. G..... 651
Southern Minnesota—D. B. E.. 651
Chatham Co., Ga.—Chas. Collins..... 651
Lincoln, Ill.—W.. 651
Warren Co., N. C.—M. B. P.... 651
Houston, Tex.—G. M 651
Harris Farm Truck, (Illustrated)..... 651

EDITORIAL PAGE:

What is the Matter?..... 652
Responsibility for Advertisements..... 652
Insufficient Proofs..... 652
Covered Yards..... 652
Horns..... 652
Cheap Bone-dust..... 652
Brevities..... 652

Domestic Economy:

Mop-Handle Papers—No. 5—May Maple..... 656
Housekeeper's Dreamings—Anie L. Jack..... 656
Domestic Recipes..... 656

LITERARY:

Poetry..... .653, 655, 658
Room Decorations—How to Prepare Dried Grasses for—J. J. Heinrich—(Illustrated)... ... 653
Discarded Daughter—Ellen Hunter..... 653, 654
Hygienic Hints..... 655
Breaking Ground—B. C. D..... 655
Our Daughters—Shall They be Protestant or Catholic..... 655
Items for Correspondents—The Editor.... 655

Reading for the Young:

The Cat and the Mouse in Partnership..... 658
Three Bunnies' Queer Mamma..... 658
New Game for Children..... 658

Sabbath Reading:

The Trial of Jesus..... 658
News of the Week—Herman..... 656
Markets..... 657
Personals..... 659
Wit and Humor..... 660
Advertisements.. ....657, 659, 660

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY OCT. 12, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

WHAT IS THE MATTER?

THERE is a reason for everything, and there is doubtless a reason why more than 500,000 (it looks more formidable in figures) working men are unable to procure work, and at the same time so much money is lying idle in the banks that it is loaned out at the rate of one or two percent. per annum. Why cannot these laborers, and this idle capital, which is the mainspring of the machinery by which labor is made active and profitable, be brought together? What hinders it? This seems to be a question which no one can solve, for of all the attempted solutions offered, not one finds that general acceptance which would at once be given to a plain truth. The trouble seems to be based more upon a general restlessness and dissatisfaction amongst the working people themselves, than upon any actual condition of things which could account for it. Strikes and threatened strikes and murmurings deep if not loud, exist on every hand. The present low compensation for labor, and the hours of labor—which, in fact, are really the same thing as the question of wages—on the one hand, and the absence of profit or of a certainty of profit from the use of the labor by the employment of capital at any higher rate, on the other hand, seem to keep the two elements of social prosperity apart.

It is certain that working people are dissatisfied with the present scale of wages; and equally certain that those who have money to use in supplying labor, fear to embark in any enterprise, lest as soon as they begin they may be met with demands they cannot satisfy. And so they hold aloof. Half a million working people represent, perhaps, a sixteenth part of the whole population. With sixteen per cent of the nation idle, and unable to purchase the necessaries of life, a large inroad is made upon the condition of all the remainder; and the purchasing and consumptive, as well as the employing power of these, is seriously curtailed. Consumption being reduced, production of course must be decreased in proportion, and prices fall with it. Thus our present condition seems to be far from unaccountable, if we take into consideration the large unstable and dissatisfied element which has appeared among the working classes. It seems that the prevalent uncertainty of what may happen is the principal cause of our trouble, rather than any real adverse condition of things. The misfortnue at the bottom of it all may be that there is much ignorance and unreason existing among the laboring people, which is inflamed by self-seeking agitators who turn a popular misunderstanding into a general grievance, causing bitter feelings, and false hopes of something better to arise from changes, that would effectually destroy any possibility of escape from the present difficulty. An employer cannot fix, permanently, the rate of wages; if he could, why was it that during the war laborers were paid two-and-a-half or three dollars per day, and the wages gradually increased up to that point without strikes or demands on the part of the laborers. Farmers could as easily fix the price of their produce. But this they cannot do. They take what they can get, and are fain to be content; although they may grumble about it. If only a similar disposition were exhibited by working men, and patience be exercised under adversity of business, confidence would be restored; and with that the wheels would hum, and business be active once more.

RESPONSIBILITY FOR ADVERTISEMENTS.

NEVER in the history of the RURAL NEW-YORKER has there been, in the judgment of its present proprietors, so much care bestowed on the exclusion from its columns of all advertisements of articles which are not in reality what they are represented to be. We hold ourselves just as much responsible for a truthful presentation of what appears in our advertising columns as we do for the general accuracy of the matter published in the rest of the paper. Just as we are always ready to correct mistakes or controvert erroneous statements inadvertently admitted into other departments of the RURAL, so we are always ready to reject any advertisements just as soon as we may learn that they are calculated to mislead or defraud our readers. While a trustworthy advertising department is a desirable feature in any journal, it is especially important in a rural paper, because its readers have fewer facilities than city folks for examining personally the articles they may feel inclined to purchase, and are therefore disposed or forced to place more reliance on the representations made in advertisements. In our opinion they have a right to expect that the conductors of the papers which solicit their patronage should see to it that these papers should not be made the vehicles for fraud upon them or misrepresentation. In full view of this opinion, if we admitted advertisements which we knew to be deceptive, we should consider ourselves guilty of being voluntarily instrumental in *defrauding our own friends*. Despite our scrutiny, however, it may happen that a false representation of an article may rarely find its way into our columns, and, in such an event, we would thank any of our readers who would notify us promptly on discovering the cheat. A trustworthy advertising department is a twofold benefit—a benefit to the intending purchaser who can confidently rely on the genuineness of the articles advertised, and a benefit to the honest advertiser, because the very fact of his advertisement having been inserted is a fair evidence of the excellence of the article thus brought to the notice of the public.

INSUFFICIENT PROOFS.

If we apply protection to rose-bushes, to grape-vines, to the wheat field; and the bush, vine or wheat survive the winter, we give credit to the "protection" for saving the plant. If we manure our corn with bone and a fine crop ensue, the bone did it. If we cut potatoes to single eyes and a larger crop than usual follow, it was because we cut the "seed" to single eyes. If we scrape the "trunks" of our apple trees this fall and a better crop than usual be harvested next season, it is because the "trunks" were scraped. How prone are we to attribute any improvement in our crops to whatever we happen to do to them a little out of the usual way! How do we know the protection saved the bush, vine or wheat? Were there others beside them *not* protected—and did they die? How do we know the bone benefited our corn? Was there beside it an unmanured plot that did not yield half so much? Did we plant whole or half potatoes beside those cut to single eyes, and did they not yield as well? How do we know that scraping the bark increased the crop of fruit? Were there other trees not scraped of the same age, growing under precisely the same conditions, that did not do half as well?

Probably we made none of these comparative tests, but we write out our "experience" as if we had done so, and, after consciously or unconsciously coloring our account a little for the good of the public, the statement appears in print, and, if told in a "taking" way, the story goes "the rounds." Thus it is that errors are propagated and the "truth about it" is hard to find out.

Covered Yards.—Few farmers in America have yet considered the value and use of a covered cattle yard. In England such are not uncommon, and they are coming daily more into use, both there and upon the Continent. In this country, where building material, especially wood, is more abundant and cheaper, we feel convinced that their adoption would, in many cases, be found to pay. Properly constructed, they protect the cattle from the inclement weather, and allow of their being turned out many more days in the year than would be otherwise prudent. They also make the yard more comfortable and cleanly for the cattle to lie down; and they protect the manure from leaching or washing by rains. In this way alone a roof would often pay a good percentage on its cost. If to the roof we add also a pavement, with a covered cistern in the center, into which all surplus moisture is conducted, we shall then have completed one of the most valuable improvements that a dairy or stock farm can possess.

Horns.—High breeding of neat stock is almost universally accompanied by a decrease in the size and strength of the horns. In the Short-horn and Jersey breeds they have become very insignificant, and might easily be made to disappear by taking a cross from one of the polled breeds most nearly allied in desirable qualities to each. We believe that an effort in this direction will pay, and pay well. It would be far better if these offensive weapons were made to disappear, now that our cattle no longer need them as a protection against wild beasts. For want of such legitimate use they are too often turned into instruments of mutual annoyance and injury by the more vigorous members of a herd. We have no doubt that a "tunk" in the flank from the horn of another cow is more often the cause of abortion than many think.

Cheap Bone-Dust.—Nearly every farmer has surplus apples, or some other fruit, that the boys of the neighborhood, and especially of the neighboring village, long for. Tell them you will give them a peck of apples for a bushel of bones, and you will have plenty of customers. Then, late in the fall, take a little waste wood, pile it with the bones in a heap, and burn them until they are white and can be pulverized with the back of a shovel. This gives you what is called bone-ash, a powerful fertilizer, and just what is wanted as an ingredient of the compost heap. It is the cheapest way both to get and utilize the waste bones, thousands of bushels of which lie around in every community.

BREVITIES.

THE Hornet is not to be trusted.

MUCK is excellent for Raspberries.

DELAWARE is fond of the Brandywine.

THE only shares that yield a certain dividend—plow-shares.

A good raspberry plantation should yield sixty bushels per acre.

THE more you cut it, the better it likes it—Couch-grass, Triticum repens.

THE Western Triumph Blackberry is a favorite in Indiana. It is useless with us.

A PLANTATION of Raspberries should be renewed, as a rule, every five years.

THE best way to exterminate rats is, like weeds, to prevent their germination.

CARROTS or potatoes may be grown between the rows of Raspberries for the first year.

WE may call this our Raspberry and Blackberry number for 1878. We hope to live to give another about this time in 1879, and to be able to tell that many varieties (of Raspberries at least) now under test, are improvements upon the well-known sorts.

SECRETARIES of fairs over the country will accept our best thanks for their invitations to attend.

THE Beauty of Hebron potato took the first premium at the Fair of the Fairfield Co., N. J., Ag'l Society.

THE safest way for this climate, with all the foreign sorts of Raspberries or their seedlings, is to bend down the canes and cover them with earth.

MR. E. P. ROE says: One of the evils of the day is the extravagant praise or sweeping censure of the various fruits before the public at the present time.

RASPBERRIES are easily raised from seed. Wash the pulp from the seed and preserve in rather damp sand. Sow half an inch deep in fine soil. They will begin to bear in two or three years.

THACKERAY advises the choosing of disagreeable friends. "Though it is a hard and cruel thing to say, I would urge you to beware of taking pleasant fellows for your friends. Choose a good, disagreeable friend, if you are wise,—a surly, steady, economical, rigid fellow."

SPEAKING of *hardy* Raspberries, there is really no such thing. Some will endure cold, some heat, some drought. But there is not one that will stand all. Hence it is that in some years what we believe to be the hardiest varieties are harmed or even cut down to the ground.

A FRIEND of ours wrote to another friend living in a "malarial neighborhood:" "I hope you are all over the painful effects of drawing in poison with every breath and that you have resolved to move before you have to be moved." We repeat this advice to those similarly situated.

WHO was it that asked, "Ought not the people who say they cannot afford the time and money required to supply their tables with small fruits, and in consequence pay ten times the amount in doctors' bills, to be placed in lunatic asylums?" Pray tell us who said that. There is something in it we believe.

A FRIEND sends us from Lawrence, Kansas, a head of Pearl Millet as a sample of what Kansas can do in that line. He gathered over a bushel of well ripened heads from a row about two rods long. The specimen received by us measures seventeen and a quarter inches in length and three and a half in circumference.

IT should always be borne in mind that it is only that part of the soil that can be dissolved by water that is available as plant food. The soil may contain an abundance of plant food, but if it is not ready for use, it might as well not be there. Plants can not live on promise and the future fertility of the soil is naught to them. When they want their dinners the dinners should be ready.

WE agree with a well-known gentleman who is also, rather strangely a minister, a novelist and a small-fruit culturist, when he says: "If the men are incorrigible" (about small-fruit culture) "let the ladies of the household take the matter in hand. A tithe of the attention bestowed upon their bonnets would enable them to master the science of small-fruit raising for all practical purposes." But the trouble seems to be with many ladies that they think more of that "tithe" than they do of small fruits!

EXTRAORDINARY LONGEVITY.—The list of deaths published in the Hartford (Ct) Weekly Courant, Sept. 19, 1878, shows an average longevity greater, we presume, than that of any other ordinary death record ever printed. The aggregate amount of the ages of the forty persons, whose deaths are there recorded, is 2,701 years—the average being over 67 years. The youngest was 21, and the oldest "more than 100."—Classified, we find those whose ages were between 20 and 30, 3; 30 and 40, 7; 40 and 50, 2; 50 and 60, 3; 60 and 70, 1; 70 and 80, 6; 80 and 90, 10; 90 and 100, 7; "more than 100," 1. This last was an old negro man, supposed to be 105 or 106 years old.

THE proposition that an abundance in the supply of one portion of the food for plants does not compensate for a short supply of another equally important portion of the food, is aptly illustrated by Mr. Tanner. "A builder," he says, "may have plenty of stone for the construction he intends to erect, but if he has little mortar his progress is soon stopped for want of a further supply. It would not assist him if he increased his supply of stone. He wants something else, and unless this is ready for his use, he can make no progress." It is the supply of plant-food, which exists in the smallest quantity, that determines the crop. If, therefore, your soil wants potash, all the "phosphates" in the land are not going to add a head of wheat.

IT is well for all to know that most of the cultivated Raspberries are derived from three species. Rubus Idæus, is the European garden Raspberry. The stems are tall and erect, and the prickles straight and slender. This species increases by suckers. Brinckle's Orange, Clarke, Franconia, etc., are examples. The Black-cap varieties, like Davison's Thornless, Catawissa, Mammoth Cluster, etc., have recurving stems, the tips of which take root in the ground. These are from Rubus occidentalis, the wild black Raspberry. The stems are armed with hooked prickles. The Philadelphia, Brandywine, Kirtland, Herstine etc., are varieties of Rubus strigosus, the wild red Raspberry. This has upright stems, which are beset with bristles. The canes are increased by suckers.

YOU who have trees, shrubs, Lilies, Tulips Hyacinths to buy this fall—buy them now and plant them—the sooner the better. Pelargoniums (Geraniums) will stand light frosts without any serious harm. If cuttings were made and rooted a month or two ago, the old plants might better be given away to appreciative neighbors who cannot afford to buy them. Dahlias, Tube-roses, Gladioli, etc., may now be taken up, dried and stored away—a dry, frost-proof cellar for the first; a warm place for the second, and a cool, dry room for the last. Remove the bulblets from the Gladioli bulbs or corms, and place them in thin muslin bags. To those who have more plants than they have room for, we would say: Dig a square hole in well-drained ground six or seven feet deep. Line the sides with hemlock boards, and put the plants in this. They will winter nicely. Sashes will be needed, of course, to cover the top, upon which mats or carpets may be thrown in very cold weather.

Literary Miscellany.

"THE STROLLING PLAYERS."

E. STUART PHELPS.

Running away from mother,
Bareheaded up the street,
Kicking the dust into yellow smoke
With little roguish feet.

Tossing it over his clean white dress,
Into his stocking heels,
Choking the little wooden horse
That trundles along on wheels;

Dreaming away with wide blue eyes,
And speculating why
God won't give him the golden ball
That drops in the quivering sky.

What's the use of that pretty pink cloud,
Sailing away so high,
If you can't have a ride in it,
And it's just no use to try!

If that woman grew with glasses on;
If this house is papa's:
Why that nice red cow won't talk to him,
Looking across the bars.

Into the neighbors' gates and doors!
Under the cherry trees!
Into mischief and out again,
Whenever he may please;

Wandering at last to the old church steps,
Little horse and all;
Climbing up laboriously—
Too bad if he should fall!

Pushing in, with dimpled hands,
The great door strong and tall,
Letting the sweet warm summer light
Slide down the shadowed wall;

Standing there in the solemn hush
Of chancel, nave and dome;
Thinking it is prettier
Than the sitting-room at home;

Standing still in the broken lights
That shimmer through the place,
Mellowing down through painted glass
Like rainbows on his face.

Not a bit afraid—ah, no, indeed!
Of the shadows vast and dim;
Quite at home! and sure it was made
All on purpose for him!

* * * * *

The old, old words come up to me,
Spoken so long ago,
About the heavenly temple
Where you and I would go—

The beautiful waiting temple
Which has no room for sin;
Something about a little child,
And the way of entering in. [*Alliance.*

HOW TO PREPARE DRIED GRASSES FOR ROOM DECORATION.

JULIUS J. HEINRICH.

FIRST PAPER.

Those readers of the Rural who may desire to decorate parlor or sitting-room mantels, or picture-frames with dried grasses, ferns, flowers, autumn leaves, etc., will find the following suggestions very useful, as they are the result of many years of experience.

The varieties of grasses found in the Northern States are not as plentiful as those that can be gathered farther south; those collected here will be mostly composed of Red Top Grass (Agrostis vulgaris), Creeping Bent Grass (Agrostis stolonifera), Kentucky Blue Grass (Poa pratensis), Wood Meadow Grass (Poa nemoralis), Hungarian Grass (Panicum Germanicum), Tall Meadow Grass (Avena elatior), Yellow Oat Grass (Avena flavescens), Orchard Grass (Dactylis glomerata), and Timothy or Herd Grass (Phleum pratense.) There are a few more, but these are the principal ones.

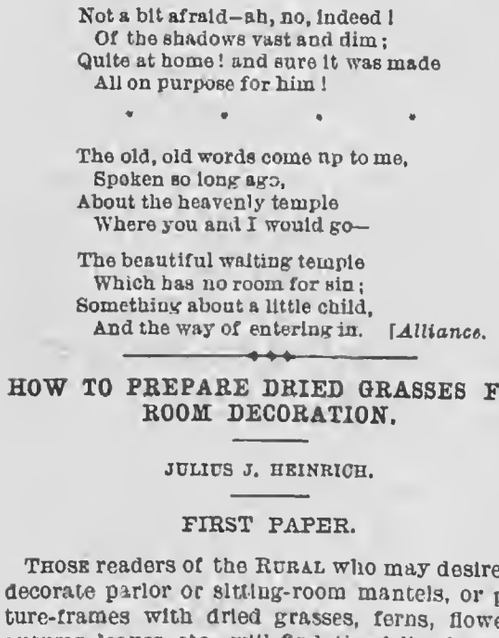


Fig. 1.

In gathering them, select such as are in full bloom but not ripe with seed; spread them on a paper in the shade to dry, and when thoroughly dry they will be ready for dyeing, if it is not desirable to use them in their natural state.

Those wishing to dye them in any bright color, will have to dip them five or six times in boiling, hot water, spread them thinly on paper in the sun and let them get thoroughly dry; when dry, repeat the dipping in hot water and place them in the sun again; this must be repeated until they become bleached, or of a yellowish-white color, when they are ready for the dye. Do not allow them to lie out of doors over night; either take them in or cover them up.

As it would take up too much space to give here full directions for coloring or dyeing and as some of the ingredients are not easily obtained, I will give any reador of the Rural who may desire it full particulars if they will address me at P. O. Box 899, New York. It is close attention to these details which makes success possible in the matter of coloring, for one grain too much or too little will spoil the effect.

In gathering ferns, do not select the largest, the smaller ones are much better. Press them between layers of blotting-paper for from six to eight days, when they will be ready for use.

Fig. 2.

Fig. 3.

Autumn leaves if too dry when you are ready to wax and varnish them, can be softened by soaking them an hour in water, then covering them with a thin coating of wax in the following way: Take a small flat-iron and warm it on the stove; run the iron over a piece of wax and then over the leaf until well covered; let this become dry, and give the leaf a thin coating of white copal varnish with a brush, and it will then be ready for use.

Fig. 4.

The flowers used for mixing with dried grasses and ferns are Acroclinium album and roseum, fig. 1, Ammobium alatum, fig. 2. Immortelles (Gnaphalium), fig. 3. Helichrysum compositum, fig. 4. Rhodanthe maculata, fig. 5. Xeranthemum and Statice incana, fig. 6. S. hybrida, fig. 7.

In arranging domestic grasses, it is advisable to use some of the imported grasses with them, such as Agrostis pulcella, fig 8; Bromus brizæformis fig. 9; Lagurus ovatus, fig 10. and Stipa pennata or Feather Grass, fig. 11. also some of the grasses gathered in the Southern States, such as Sea Oats fig. 12. Plume Grass and also the California Pampas Plumes.

Fig. 5.

Designs showing how to arrange grasses will be given in the Rural of Oct. 19. Messrs. August Rolker & Sons, N. Y., have kindly loaned the cuts used in this article.

THE DISCARDED DAUGHTER.

IN FOUR CHAPTERS.

BY ELLEN HUNTER.

CHAPTER I.

Over the scrags and the long, black, desolate beach the wind and rain went driving pitilessly. It had stormed all day,—it was storming still at nightfall, harder, fiercer than ever.

Down in that little fishing hamlet, nestling close to the lonely shore, a few lights were shining in the cottage windows, and the red, lurid eye of the lighthouse glared ominously across the bar. It was a dreary night, and a dreary coast.

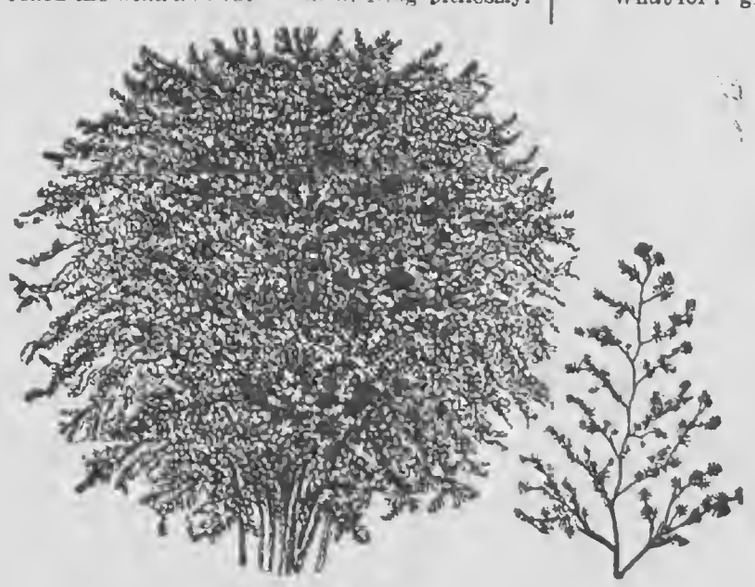


Fig. 7.

In that same fishing hamlet, old Hans Eckhart, sitting by a fire that leaped and roared up the wide chimney, in defiance of wind and rain, took his stumpy black pipe from his mouth, and looked about him, with a sort of dull surprise on his broad, brown face,

"Bless me! Hagar, do you hear it storm?"

"Yes, father."

She raised her head from the low window ledge where it had been resting, and the fire-light struck full upon her.

Hagar Eckhart was scarcely seventeen. It was a strange, beautiful face that the girl had. As she crouched there in the fierce firelight, with her head thrown back, and her small brown hands wreathed listlessly above it, you would have said it was a face for which another Mark Antony might fling a world away.

"If any ship goes to sailing up the Channel to-night, I pity 'um," said old Hans. "I've lived on this coast, man and boy, for fifty years, but I never heard it blow harder than this afore."

Fig. 6.

Hagar's dark, passionate eyes turned slowly from the cheerful coals back towards the night beyond the window. She shuddered; how black and thick it was! She could see nothing beyond the pane but the red beacon-fire of the light-house, and a few lamps in the low fishing village. Nothing? Yes; farther away towards the town, among clumps of dwarfed cedars and stunted pines, rose up the square, gray walls of Earnscliffe, and its broad casements were glaring

Fig. 9.

through the darkness, all ablaze with light. Earnscliffe was the gayest and the haughtiest house for miles and miles arounnd.

Old Hans laid down his pipe, looking the while at the still young figure in the window, and wondering what made her such an oddity.

"Hagar," he said, "where's Stephen gone?"

She did not turn her head.

"To the tavern, probably. I don't know,"

Old Hans cast a sober glance at the coals. Stephen was falling into bad ways; and his only boy, too,

The old-fashioned clock in the corner ticked loudly; the cat purred around Hagar's drooping hand; but still the royal face was pressed close against the dripping pane, the wide black eyes looked steadily out into the night.

"Hark!" said Hans, suddenly.

Some one was coming round the hut, whistling shrilly.

"That is Steve now," he said.

Hagar started back with a cry as the hard, sunburned face of Stephen Eckhart looked into her own from the other side of the pane. He flung up the window with a low laugh.

"Did I frighten you, Pussie?"

"Stephen!"

"Get the lantern, and come out here, will you, father?"

"What for?" growled Hans.

"If you're a mind to bear a hand"—began Stephen doggedly.

Hagar leaned forward and grasped his arm.

"Where are the men?"

Stephen placed his elbows on the window-ledge and looked indifferently in at the fire.

Fig. 8.

"Washed up out here. We've jest found 'em."

"Dead?" cried Hans, aghast.

"Dead as herrin's," said Steve, laconically.

The old fisherman came hurrying to the door, his tarpaulin crushed down over his brow, and with lantern in hand.

"A bad house—a bad race!" he muttered, under his teeth.

"The squire 'll take it kind of us to bring the bodies away," shouted Stephen. "Good heavens, how it blows!"

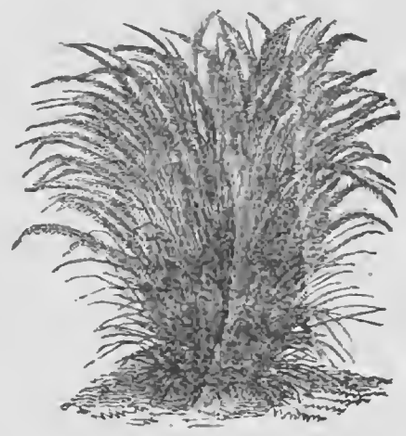


Fig. 11.

They went out through the darkness together; then the wind and rain came between, and silenced them.

Hagar stood alone in the hut.

The storm beat against the window. She pushed back her wet black hair, and strained her eyes to see the glimmer of the lights among the dwarfed pines. And why? She had never cared for Earnscliffe or its grandeur before. It was a gay, proud house—that she knew, and that only: The haughty old squire had passed her sometimes on the beach in his glittering carriage. Sometimes, of summer mornings, she had seen a pale, high-bred girl, with a score of gay ladies and gallants in attendance, gallop by the door, and old Hans had told her it was the squire's daughter, but that was all. There was a great gulf fixed between the fisherman's daughter and Earnscliffe.

Hark! A faint murmur of voices rose upon the wind. One stormy sweep of white rain across the window, on over the marshes: then a sudden lull, and Hagar heard them coming.

Fig. 10.

She stood in the low doorway shading the light with her hand, its red blaze showing full in her eyes and slipping down her damp, wild hair. First, the hale, hearty face of old Hans; then Stephen.

They came in, and she closed the door behind them, keeping her glance fixedly away from the burden they bore.

It was the body of a man, with wet garments, rich and fine, clinging to him. They laid him down on the old fisherman's bed, in the firelight.

"He's got a breath of life in him, he has," said Hans, crossing his arms behind him, and gazing at the still white face; "but the other chap was a goner."

Stephen lifted up the handsome, drooping head.

"There's wine in the closet; bring it, Hagar."

She obeyed, silent and pale.

"Now, chafe the hands, can't you?"

What handsome hands they were! how much whiter than her own! There was a broad diamond signet-ring on the left one that was worth a prince's ransom! Regular, high-bred with loose, gold-brown curls falling over the white forehead, and an aristocratic clearness and finish of outline. She dropped the hands with the first current of warmth that thrilled them.

"It's the same gentleman that was riding on the beach with Miss Earnscliffe yesterday," said Stephen.

Fig. 12

Stephen shook himself like a great water dog.

"That yacht that pushed off from Shipping Point a half hour ago with some young fellows from Earnscliffe aboard, has struck on the rocks and gone down."

"Bless me!" cried Hans.

Old Hans jogged his elbow. The stranger's eyes were unclosing slowly.

He looked around. First at the brown, unfamiliar wall, at the ruddy fire, at the two kindly fishermen, and from thence to the face of Hagar. Their eyes met; it was a strange, fateful look. Hagar sank back slowly. John Romaine's eyes followed her face with a mixture of bewildered pleasure and surprise.

"Where am I?" he said, feebly.

"With friends," answered old Hans cheerily.

He raised himself up, and pressed his hand to his forehead in a bewildered way.

"And the yacht?"

"It's gone under, sir."

Romaine sank back, remembering then.

"Poor fellows!" he said faintly.

"We laid their bodies in the boat-house," said old Hans. "Steve shall go to Earnscliffe and tell the squire. Here's a drop of wine for you, sir."

Rough hearts, but kind ones. An hour after, and John Romaine was leaning back in his chair before the old fisherman's fire, idly talking with Hans of the disaster, and glancing admiringly at the still, slender figure which sat apart in the shadow, with her gorgeous Southern face bowed listlessly on her hand. Did he guess that she was a listener to every word that fell from his lips? It was a brief story, related politely, graciously, yet with something in the young aristocrat's manner that showed how unused he was to such an audience and such surroundings. He was a guest at Earnscliffe. The men who had perished with the yacht were the squire's servants, and the pushing out of the frail craft from Shipping Point in the night-storm had been a freak of desperate boldness—that was all.

And the still figure in the shadow? With her burning cheek pressed to the pane, and the dark eyes watching one pale, watery star just broken out from the windy clouds, she sat listening to the voice that was the deepest and the sweetest she had ever heard from mortal lips. No one spoke to her, no one heeded her, except, perhaps, Romaine: and presently he arose to say "good-night." She heard him, but did not turn her head.

"What shall I call you?" he said, beside her chair.

"Hagar Eckhart."

He looked down at her with puzzled blue eyes.

"Then, good-night, Miss Hagar."

"Good-night."

The storm passed. With the morning there was sunshine, and wide streaks of blue sky tangled in with the gray clouds overhead, and the wind blew strong and steady from the west.

John Romaine astonished himself by rising in time to see from the window of his low room the fierce, crimson daybreak stream over the lighthouse on the Point, and the high gray walls of Earnscliffe proudly and sullenly facing the sea. He shrugged his broad, handsome shoulders.

"I wonder if Miss Edith has thought of me since yesterday. Whew! what a night it was, though!"

He went down. Old Hans met him with a cheery "good-morning" in the little dark kitchen.

"I've sent Steve to Earnscliffe to let them know where you are," he said; whereupon Romaine sat down to breakfast.

It was a neat, well-spread board—even the young patrician's fastidious taste could find no fault with it. He sipped his coffee, toyed with a cluster of water-lilies that some one had placed in a glass at his right hand, and wondered where the graceful girl-figure was that he had seen in that room the night before. She was gone, certainly.

"A spirit of the surf, perhaps," he said to himself. "Faith! she was handsome enough for one."

He knew that the Earnscliffe carriage would be sent for him at once, and rising from the table he went to the window and looked off down the beach.

"She fanned my life out with her soft little sighs;
She hushed me to death with her face so fair,"

sang a full, clear voice just outside the window. Romaine caught up the words:

"I was drunk with the light of her wild blue eyes,
I was strangled dumb in her long gold hair."

He leaped out and stood by the singer. She was sitting in the low porch, in the shadow of a silver-leaved poplar, with needle and mesh-block, and a pile of nets at her side. Her shining head was bowed; her graceful brown fingers were flying through her work like mad.

"Little beauty!" muttered Romaine, under his breath.

She looked up.

"Do you read Owen Meredith?" he said, leaning, handsome and smiling, against the framework of the porch.

"Sometimes."

Romaine lifted his eyebrows.

"You are not," he began—"that is—Hans is not——"

She understood him. Her voice had a touch of bitterness in it.

"Hans is my father; Stephen my brother."

"Jove! what a freak of fortune!" he exclaimed to himself.

She went on with her work silently. Romaine was gravely looking down the beach to the sea.

"Are you never lonely?" he said. "This is the dreariest place in the world, I think."

"Is it? I never knew any other place."

"And are you always alone here?" asked Romaine.

She made a quick, slight gesture.

"Always."

He watched her intently. There was a carriage rolling swiftly across the beach in the morning sun, and he knew it.

"I must thank you, Miss Hagar, for your kindness to me last night. I shall never forget that I owe my life to your father and brother."

Her wide, black eyes opened.

"There is no need of thanks: they would have done the same for any one."

Romaine bit his lip, half-smiling beneath his heavy mustache.

"Say good-by to me, Miss Hagar."

Hagar looked up. A light open carriage, drawn by a pair of superb gray horses, had stopped at the very door. It had two occupants—one, a tall, gray-haired man of fifty, perhaps, with a cold, aristocratic face; the other a young girl—Squire Earnscliffe and his daughter, Hagar knew.

Romaine leaped down from the porch. One moment of quick, gay greeting, and he had Edith Earnscliffe's exquisitely-gloved hand in his own; he was looking into her smiling, pearly face. It was clear-cut, beautiful, with hair the color of ash and gold, eyes blue, and bright, and scornful, and thin lips, scarlet red. She leaned forward, with the long white plumes of her hat dancing about it enviously.

"We were martyrs at Earnscliffe last night—one and all. I shall never forgive you."

"Never," said Romaine, gallantly raising the slight hand to his lips. "Then I had better have drowned."

"Come into the carriage!" she commanded, smiling.

Squire Earnscliffe turned the gray horses, and made room for Romaine among the crimson carriage cushions.

"How have these people treated you," he said.

Romaine paused with his foot on the step.

"With all due hospitality. Here is my host: let me make my adieu."

Earnscliffe looked around him for the first time with something like interest. The first object that met his sight was Hagar, mending her nets in the old porch as composed as if the figures in that glittering carriage were so many crabs from the sands below; the next, old Hans, standing in the door watching him.

It might have been the dark, wonderful beauty of the girl, it might have been the keen, merciless gaze of the old fisherman, but Squire Earnscliffe's thin, haughty face crimsoned and paled; he clutched at one side of the carriage a moment, then grew suddenly calm. They looked straight in each other's eyes, Hans and the rich purse-proud squire. The face of the fisherman was grave and stolid, unreadable, too, as hieroglyphics; but a faint line of tremulous whiteness came out on Squire Earnscliffe's lips. He bowed stiffly. Hans' upright head gave him no answering salutation; there was something in his face that made it for a moment as stately as a king's. He stood and watched him.

Romaine leaped into the carriage. It dashed off madly down the beach.

"Is that man's name Eckhart?" said the squire.

"Yes," carelessly from Romaine.

"And that girl?"

"His daughter."

Edith tapped his shoulder lightly, whispering behind her finger-tips:

"What a lovely face! Were you making love to her?"

He laughed.

"*Non, mademoiselle.*"

He did not know that Hagar Eckhart had dropped her work in the old porch, and was watching the retreating carriage with large, restless eyes. The shadow of the silver poplar tree stretched at her feet dark and heavy, and another smaller shadow.

"Hagar!" said old Hans.

She started as if she had been dreaming. Hans was looking down at her with knitted brow.

"My girl," he said, sternly, "I hate Squire Earnscliffe, I hate his house, and he hates mine. Will you remember it?"

Her eyes dilated.

"And, Hagar——"

"Father?"

"That boy must never come here again; his hands are too white, his face too handsome. Do you hear?"

"Yes, father."

"Then go in."

She turned like an empress, with a bright spot on either cheek, and obeyed him; and old Hans stood outside in her place, sullen and silent, looking darkly off towards Earnscliffe.

CHAPTER II.

SEPTEMBER on the shore. The blank day was dying out in a fiery sunset of tan and scarlet. Hagar Eckhart, crouching on a point of rocks a half mile down the sands, saw the windows of Earnscliffe flaming weirdly in the light which shot off at last into the pine-tops nodding above them like a brotherhood of cowled friars. The surf was creeping up the sands. It was with a tinkle of sparkling crystals, a splash of black, wind-swept waves, a roar. Stephen's great dog bounded from it up the rocks, dripping, and crouched down with wistful eyes at Hagar's feet.

The spot had become very dear to Hagar. Sheltered in among the hollows of the brown rocks, she passed hours in watching sea and clouds, and thinking her own wild thoughts. Stephen had the inn: Hans, his pipe and boon companions;—who knew or cared!

A sound of voices and low laughter rose suddenly from the sands below. Hagar held the growling dog with both hands and looked down.

A pretty, brightly-painted row-boat had just grated against the shore, and its occupants, two or three stylish masculine figures, and a group of ladies in a gleam of rich Indian shawls, plumed caps, and shining dresses—were landing gaily on the wet, slippery shingles—ladies and gentlemen from Earnscliffe, of course. Such a gay picture as they made on that dark desolate beach! It was like a glimpse of fairy-land; and foremost among them, in the clear sunset light, stood the tall, dashing form of Romaine, helping some one up the rocks—a fair blonde, with a bunch of wild flags in her hand.

It was Edith Earnscliffe. The long golden hair, streaming in loose curls on the wind, the exquisite figure, the slow grace of movement, could belong to no other.

A moment, and Romaine had drawn the boat up the sands, secured it, and was sauntering off towards Earnscliffe with the fair blonde on his arm. The rocks were alone once more with their pet children, Hagar Eckhart and the sea-gulls.

She dropped her face against the rough rock, and sank motionless—a Sybarite, with her starved life stinging her like a scorpion. At Earnscliffe there were luxury, refinement, beauty—that she knew. At home, were bare walls, Hans and Stephen. Was the heiress of Earnscliffee better than she that such a gulf of difference should lie between them? But the pain passed in a moment. There was good blue blood in Hagar's veins—proud blood, too. She lifted her head, and stroked Stephen's great dog with her graceful brown hands.

"I don't care!" she said stolcally.

He growled. At the same moment a bright, glancing object fell from the rocks above into her lap. It was a cluster of gorgeous, velvety cardinal-flowers—the last of the year.

"I thought nothing but sea-gulls ever came here," said John Romaine, springing down to her side. "Miss Eckhart, you look like Undine herself sitting among the foam-bells."

"Do I?" said Hagar, dryly. "I never saw Undine."

She rose up as he spoke, fairer than a half-dozen Undines. That pure Greek face, with its dark, drooping eyes, and raven braids, and scarlet lips. Romaine's intent gaze brought no flush to it, but the mouth curved haughtily, and he understood and looked away.

"I saw you from the boat," he said. "I have haunted this shore for weeks just to see you once."

Frank, at least. She answered in the same dry tone:

"I am sorry."

"You need not be—my reward has come at last."

Her eyes looked wicked as she glanced up at the cold, gray clouds.

"It is going to rain. Boatswain, you and I must go home."

Boatswain poked his cold nose into her hand, ready and willing. Romaine was not.

"Wait!" he pleaded. "May I not see you sometimes, Miss Hagar? Let me be your friend."

She drew back proudly.

"You are very kind, but——".

"What?"

"Never try to see me. Your place is at Earnscliffe—mine, in that humble fishing-hut over the marshes."

She turned imperiously, and calling to the dog, leaped down from her perch and ran away up the beach, leaving John Romaine standing half-angry, yet admiring old Hans Eckhart's daughter more profoundly than he had ever admired mortal woman before.

"Jove!" he muttered, starting off towards Earnscliffe, "she ought to have been born a queen."

Hagar went on her way, swinging her sun-bonnet in her hand, her black eyes cast down, and her red lips pressed tightly together. It was growing dark, and the tide was coming rapidly in behind her, and the wind whistled shrilly across the sands. She looked back once, but the tall, handsome figure had disappeared.

"Hagar!" called a voice. Stephen came across the shingles, hurried and pale. "I've been hunting for you, Hagar. Come home."

She grasped his arm, pale to the lips, his voice was so strange and ominous.

"What is it, Stephen?"

He rubbed his jacket-sleeve across his eyes. It was a warm heart.

"Father," began Stephen, jerking the words out laboriously,—"he's in a bad way—he is, Hagar."

She stared at him dumbly.

"He started for the harbor with Skipper Gale just arter noon," Stephen went on; "and the skipper rowed back afore sunset with him in the bottom of the boat face up'ards, and he ha'n't spoke or stirred since."

One low, pained cry, and Hagar was rushing up the path, panting hoarsely through white lips. Lone, dark shore, and lonelier, darker sea, danced before her. She loved her old father in spite of all.

The door of the little low dwelling was open. She went in noiselessly. Hans lay on his bed with closed eyes, and his worn old face upturned in the dying light. She threw herself down beside him.

"Father!"

A low groan. Stephen came in and stood at the foot of the bed with the old hamlet doctor. The latter shook his head vaguely.

"He's got a fit—bad. Folks die in 'em sometimes."

Hagar crouched low at the bedside, and took up the hard, cold hand of the old fisherman, caressing it mutely. Three weeks before, in that very room, Romaine had lain, one dreadful night, senseless and half-drowned. Did she remember it?

The dark crept in thickly. An ominous woeful dark it seemed to Hagar. The dull, red firelight flickered feebly on the wall, a gust of wind bowled through the poplars; then the old man's lips moved—it was only a whisper, but Hagar heard it—

"*Earnscliffe!*"

She touched his rough hand with her lips.

He groaned out the word again.

"Father!" cried Hagar.

The glazed eyes opened slowly and turned on her face.

"Hagar—little girl!" in a faint whisper.

She bent down to him. His old face grew so strained and wild in his effort to speak.

"Can you go to Earnscliffe, Hagar?"

"Yes, father."

He gasped: "Tell the squire I want him."

"Yes, father."

"He will know."

The gray head fell back. Hagar leaned over and kissed him madly, despairingly—the next moment she was out in the night.

A wild way—a long, dark, desolate way. It was raining, too. Hagar started from the door like a hunted wild creature. The mist came driving in from seaward, the waves dashed fiercely across the bar, and down on the shore, the red, unwinking eye of the lighthouse was watching sleeplessly. She ran on across the marshes, along the sandy beach-road, through the dwarfed black pines, till she reached the arched gateway that led to the Earnscliffe grounds.

From the windows opening upon it a broad patch of light was streaming across the veranda which shaded the front of the house. Some one was pacing to and fro there, smoking a cigar whose subtle Cuban odor filled the misty air with fragrance. Hagar sprang upon the veranda in the broad patch of light, and stood face to face with John Romaine.

Such a picture as she made! Romaine uttered an exclamation, and dashed his cigar into the shrubbery.

"Miss Eckhart! Is it possible?"

The great wild eyes looked up to his.

"Where is Squire Earnscliffe?"

Romaine drew her into the hall.

"Do you want to see him?"

"Yes."

He flung open a door at the foot of the staircase.

"Come in."

It was a room, long and low, and paneled with carved oak. The floor was hidden in a soft, thick carpet, green as swamp-mosses, and across the tall windows amber satin curtains were sweeping in heavy shimmering folds. There were low, easy-chairs of polished scented Indian wood, upholstered with deep green leather, standing here and there, and sofas, piled with amber satin pillows that looked like sunshine sleeping on some green June hill. A fire burned in the grate, and on the mantel of Egyptian marble a cluster of waxen camellias stood in an exquisite Indian vase. Over them, half in light, half in shadow, hung the only picture in the room—a purple, tropic sea, sleeping in misty moonlight, with two milk-white sea-gulls perched on a gray, wrinkled reef.

Two figures there. Squire Earnscliffe, pacing to and fro before the fire, with his hands crossed behind him; and his daughter, sitting near in an evening dress of violet silk, with its wide sleeves falling away from her bare white arms, and her golden hair gathered into a knot of shining curls at the back of the lovely head.

Squire Earnscliffe stopped short in his promenade as the door opened. Romaine held it for Hagar to pass through.

"Miss Eckhart!"

He knew her. His thin nostrils dilated. Hagar stood, still and pallid, on the threshold.

"I came to ask you to go to my father, Squire Earnscliffe. He is ill—he sent me to tell you."

A flush shot across Squire Earnscliffe's face. He repeated the word mechanically.

"Ill?"

"Yes," catching her breath.

He looked at her strangely.

"Did you come all the way for me alone?"

"Yes."

"You are a brave girl!"

Hagar felt herself drawn forward into a chair. A moment afterwards Squire Earnscliffe was standing beside her with his cloak on and his hat over his brow.

"Remain here till I return," he said; "it will not be long."

She comprehended, and tried to rise up, but he held her back.

"I am going alone. Stay here and rest!"

Something in his manner cowed and frightened her. Miss Earnscliffe was looking at them both with wide-open eyes.

"Papa, it is raining."

"I know."

"Then I would not go."

He looked at her darkly. The jewelled hand, holding his cloak together at the throat, trembled.

"You would not? There are some voices I must follow if they call me to perdition."

"Papa?"

"Be quiet. I will come back in an hour."

His heavy-booted foot stirred the echoes in the hall a moment, then the door clanged sullenly behind him. He was gone. Hagar sat alone with the heiress of Earnscliffe.

The blue, scornful eyes surveyed her from head to foot with a sort of latent wonder that was half admiration. In the fire-light, Hagar's face had taken a feverish beauty that was almost painful. Miss Earnscliffe's clear, contemptuous voice broke the silence.

"What has that—that person to do with Squire Earnscliffe? Do you know?"

"How should I know?"

"Has he told you nothing more?"

"Nothing."

Miss Earnscliffe settled back in her chair, with half-closed eyes, the golden lashes drooping, and band and bracelet flashing in the light. She was mystified, annoyed; and she was hoping John Romaine would not come in to play chess with her while Hagar sat there. He did not. His quick step echoed in the hall, passed the door, and went on up the stairs till it was lost in silence.

An hour passed so,—a dreadful, silent hour. It seemed an eternity to Hagar. Would the squire never come? Why was she sitting quietly under the roof of the man her father hated, while down on the desolate shore he lay dying, perhaps? She started up.

The door was flung open, and Squire Earnscliffe came in. Rain was dripping from his cloak,—

his set face was dripping with it. Hagar strangled the cry that rose to her lips.

"Papa!" cried Edith,

He passed her to Hagar. The fire-light, the low, sumptuous room danced before the girl's eyes as he stood looking down upon her.

"You will not go back to-night,—this is your home now," said the strained, hard voice.

She stared at him dumbly.

"Yours as long as mine—remember it."

She flung up her arms.

"Is he dead?" she cried out.

"He is dead."

She fell a dead weight on his breast. Tired heart and tired frame could bear no more,—Hagar had fainted quite away.—To be continued.

HYGIENIC HINTS.

A simple and effectual remedy for dyspepia is to abstain from drinking immediately before and during meals, and for an hour afterwards.

The Sleep of Children.—The Herald of Health cautions parents not to allow their children to be waked up in the morning. Let Nature wake them; she will not do it prematurely. Take care that they go to bed at an early hour—let it be earlier and earlier, until it is found that they wake up themselves in full time to dress for breakfast.

How to Cure Swelled Feet and Ankles.—Take plantain leaves (which can be found in almost any grass plot, and in our public parks;) wilt them by putting separately between the hands; cover the swollen parts with them, and keep in place by wrapping the limb with rags or a towel on going to bed at night, or keep them on during the day if not obliged to be upon the feet. A cure will be speedily effected.

Scalding of the Throat from Swallowing Boiling Water.—This accident occurs not uncommonly among children left by themselves, and is very dangerous, as the throat swells, and the sufferer is in danger of being suffocated. Send for the medical man immediately. Meanwhile, if it can be procured, let the patient suck ice constantly, and apply a strong mustard poultice to the outside of the front of the throat.

To Remove Warts.—The best application is said to be that of monohydrated nitric acid. The ordinary acid should not be used because its caustic effects extend much farther than the points touched, while the action of the stronger acid here recommended is limited to the parts to which it is actually applied. Nitrate of silver is also frequently used with advantage, and of late a concentrated solution of chloral has been spoken of as efficient in destroying warts.

Sprains.—If the sprain is nothing more than a sprain—that is, if no bones are broken or put out—wrap the part in several folds of flannel which has been wrung out of hot water, and cover it with a dry bandage, and rest it for some days or even weeks. Entire rest at first, and moderate rest afterwards, are absolutely necessary after a sprain. If it is in the ankle, the foot should be raised as high as may be comfortable; if in the wrist, it should be carried in a sling.

To Relieve Children When They Get Beans Or Buttons, etc., In Their Noses.—Parents are often puzzled to help their children when they get beans, buttons, etc., in their noses. The Medical Record says, "Blow the patient's nose for him, by closing the empty nostril with your finger and blowing suddenly and strongly into the mouth—an efficient method which has often succeeded when instruments have failed. The glottis closes spasmodically and the whole force of your breath goes to expel the button or bean, which commonly flies out at the first effort."

Importance of a Clean Skin.—Most of our invalids are such, and millions of more healthy people will become invalids, for the want of paying the most ordinary attention to the requirements of the skin. The membrane is too often regarded as a covering only instead of a complicated piece of machinery, scarcely second in its texture and sensitiveness to the ear and eye. Many treat it with as little reference to its proper functions as if it were nothing better than a bag for their bones. It is this inconsideration for the skin that is the cause of a very large proportion of the diseases of the world. It as claimed by some scientists, four-fifths, in the bulk, of all we eat and drink, must either pass off through the skin or be turned back upon the system as a poison, and that life depends as much upon these exhalations through the skin as upon inhaling pure air through the lungs, it must be of the most vital importance to keep the channel free.—*Hartford Times.*

Pitting in Small Pox.—Mr. Gregory, of Merchants' College, Blackpool, England, believes that "pitting," the sad and permanent results of small-pox, ought rarely to be seen in any civilized community. He starts with these facts, that poor people are pitted least, rich people are pitted most, and no class of people are pitted under their dress. Poor people have less light in their homes, the rich plenty of light, and under the dress there is less light than in either case. The explanation is a scientific one. The sunlight consists of three primary colors. The red, the blue and the yellow rays, have distinct and characteristic properties. The yellow gives us light and red gives us heat, and the blue actinism. It is the actinic influence of the blue rays which, in Mr. Gregory's theory, causes "pitting." No seed will germinate and the young plants will soon perish if the chemically active rays—that is, the actinic rays—are filtered from the sunlight. A yellow blind drawn over a window will absorb all the actinic rays. The pus of variolar pustules absorbs, by its yellow medium, the actinic rays, which results in corrosion of the tender flesh at the base, and thus leaves the dreaded permanent "pitting."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

LIGHTNING AND KISSES.

The storm is coming on apace;
The trees begin to shiver;
Big drops of rain drum on the pane,
And set me all a-quiver;
The clouds are black as ink, Oh—oh!
How vividly it lightened!
And this promontory bush:—
Joe, I am sadly frightened.
"No wonder, darling you're afraid
In such a storm as this is;
But never fear the lightning, dear,
I'll blind your eyes with kisses."

It's driving down upon us now:
The very house is rocking;
Wind-currents roar, rain-torrents pour—
Oh, how my knees are knocking;
The thunders crash and roll as though
The sky had split asunder;
Joe, I shall surely faint away
I'm so afraid of thunder.
"Darling, you well might faint away
In such a storm as this is;
But never fear the thunder, dear,
I'll silence bring with kisses."

It's such a catching season, Joe,
I'm in a constant panic;
There's that about a thunder-cloud
Which seems almost satanic.
What did you say, Joe—that you wish
'Twould come on every day so?
You cruel fellow—let me go—
How do you dare to say so?
"Of such a cruel wish, my dear,
The explanation this is:
The grass and grain need frequent rain,
And I—need frequent kisses.

[*Springfield Republican.*

BREAKING GROUND.

B. C. D.

If Aunt Susan, whose talk at the quilting-bee about flower gardens was reported in the Rural of 4th May, could have known the meditations of Mrs. Morse as she started homeward from the quilting, she would surely have thought that she had not spent that day in vain. Little as it seemed, this had been quite an eventful day with the busy farmer's wife. It was rarely that she could leave her children—of five and two years—in as good hands as those of Mother Morse, who was making them a brief visit, and to-night, as she started home on foot, it was with the pleasant thought that she need not hurry this time, for all the evening work would be done before she reached home. She had one accomplishment that she prized, she was a good pedestrian and when she could shake off her household cares, she enjoyed a walk. Therefore, on this charming May evening she took the longer route home, as that way led past Aunt Susan's door again. "How lovely everything looks," she thought, as she went along. "How well the place and mistress seem in accord; well they may, when all this order and beauty is the result of her patient efforts." "How nice it looks to see the yard and garden all in one inclosure: most yards have too many trees to be cheerful, but if Aunt Susan has a weakness, it is for plenty of air and sunlight. There is plenty of evergreens and other shade trees, but they are not so near the house as to make it gloomy.

Thus musing, our farmer's wife reached home and viewed her own neglected premises with more favor than usual, for she thought she had now an intelligent idea how to improve them. She, however, warned by past experience, kept her plans to herself, for fear that busy, tired John would chill her enthusiasm by discouraging words.

But the quilting had done her good in more ways than this one. The little excitement of meeting near and distant neighbors whom she did not often see, had quickened her stagnant pulses and made her feel as if she was really one of the world after all. She had begun to get morbid for lack of society, and even heedless. John now remarked her unusual vivacity, and laughing, advised her to turn out to quiltings oftener, as it seemed to have a good effect on her.

The next morning, before her work was well out of the way, a boy came to the door, who proved to be a motherless grandson of Mrs. Brown's (Aunt Susan), who had brought her some pink roots which his grandmother had sent, and said he was told to stay if he could be of any use, and help her fix a place to set them.

Her favorite flowers! Happy tears filled the little woman's eyes, as she went out with her spade to break ground for future operations.

"There are some hollyhock roots, too," said the boy, as he emptied the basket; "Grandmother thought maybe you might like old-fashioned flowers, too; and besides, here are some sunflower seeds, that are nice and healthy to plant around drains at the back of the house. The hollyhocks are best in some corner, out of the way."

After some time and effort, the roots were all safely set out, and even guarded by a row of little stakes driven in around them to protect them from the fowls, or any other trespassers on the domain. Then thanking the boy for his kindness, and casting a threatening glance at the weeds that grew about the door, Mrs. Morse went into the house well pleased with her beginning. As she hung up her sun-bonnet, Mother Morse said, "Sarah, I was in hopes that you did not care for having flowers or anything else in the door-yard. They all seemed to think their premises were an agricultural museum, in which to exhibit every old, worn-out machine they ever had. The drag and the corn-marker have often hung all summer on the fence in front of the house, and I see that John is not a bit better than his father about that. I've shed tears many times when my plants have been run over or destroyed by the cattle breaking in," and Mrs. Morse heaved a deep sigh at the recollection.

This was sympathy from an unexpected quarter, but like a wise daughter-in-law, Sarah Morse made no comments. What Mother Morse said voluntarily was all very well, but she would probably have resented the same freedom of criticism from any one else. When John came into his dinner she said to him: "If you would take the rail fence away between the garden and door-yard, and put the rails on the outside fence, it would be high enough to keep the cattle out then, and we don't need any fence where that stands."

"Well, maybe I will after planting," said easy John, who was remarkably amiable in the way of promises.

"No time like *now*," remarked his mother.

To the surprise of both women he did, after dinner, fix the fence as they suggested, around the outside of the garden; but with true masculine egotism he took all the credit of the idea to himself.

OUR DAUGHTERS.

Shall they be Protestants or Catholics?

We commend the following article which appeared in the Christian Union of 3d July, to the careful attention of those parents who have any idea of sending their daughters to Roman Catholic schools or institutions. It is estimated that there are in this country some thirty-five thousand girls from Protestant families in attendance upon Roman Catholic schools, and it is claimed by the managers of these schools that one of every ten girls in these schools is converted to the Roman Catholic faith; that three of every ten learn to hate Protestantism for life, and that the large proportion of the whole become indifferent for the rest of their lives to all Protestantism. Parents would do well to count the cost before taking any chances in a matter of such vital importance. In the following the difference between the systems of the two classes of schools. Protestant and Roman Catholic, is set forth.

America now has three colleges for women well worthy of the name—Smith, Wellesley and Vassar. We place them here in the inverse order of their establishment: Vassar alone is old enough to send forth a graduating class; Wellesley will do this for the first time next year. Each has its peculiar advantages; either can and does give to the daughters an education, if not fully equal to that which is given by Yale or Harvard or Amherst to the sons, one as nearly equal as can be afforded by a system that has not yet had the full ripening effect of age. As we sat in the chapel of Vassar College last week, we could not but think of the labor and toil, the disheartening repression from father and friend and husband, in the face of which Mary Somerville gained her education; and we wondered what her father, who feared for her brains if she studied mathematics, would have said to the mathematical address delivered by one of the graduates that beautiful June day. There were, if we remember aright—we are writing without the programme before us—one song, two piano pieces, and ten orations. We advisedly call them orations. With one exception they were delivered without notes; with no exception they were delivered with graceful action; and in at least two instances with all the fire and warmth of genuine oratory. We do not know what Dr. Craven and the Presbyterian General Assembly would say to Vassar College. The best possible answer to the declaration of that august body that women cannot preach, for it is contrary to their nature, is such an address as that of Miss Stanton and Miss Wilkinson. They each did preach; without the fear of St. Paul before their eyes.

As we sat there, we also called to mind another graduating scene which we attended some fifteen years ago at St. Mary's in the Woods, in Indiana. It was, and we believe still is, one of the foremost Roman Catholic colleges in the West. We went by invitation. There was a long hall full of the elegant specimens of the young ladies' embroideries and fancy needle-work; there was some music—mainly instrumental; there was some beautiful herbaria of dried flowers, that had been gathered in the woods; but there was not an essay read, or a paper of any description; and with a class that must have numbered a score or more, there was in geometry one pupil. Rome does not change; and apparently her conventual education is now what it was fifteen years ago. We judge this from reading the newspaper report of the graduating exercises of the senior class of the Convent of the Sacred Heart of this city, attended by his excellency Cardinal McCloskey and the Roman Catholic clergy in large numbers. Here is the account:

"The exercises were begun with a piano solo, 'Quis est homo,' and 'Cujus animam,' selections from Rossini's Stabat Mater. Then followed an original operetta by ten young ladies, one of whom represented the Queen of May. Under an arbor of evergreens, where was placed the Queen's throne, the little plot was unfolded. It was particularly designed to display the clever training which the students receive. Plaintive and pathetic airs sung by a band of youthful gypsies, dressed in fantastic colors, were mingled with the bright and happy melodies of the May party. A soprano and contralto duet called forth much applause from the visitors. The play occupied a half hour. Miss Marie Willard, who amused the assemblage last year with 'Why the dog's nose is always cold' obtained an encore this year by humorously relating her experience with cats. All the young ladies were then crowned with wreaths by the Cardinal. Many of them received books as a mark of excellence in their studies."

We suppose that there are still some Protestant mothers who are insane enough to imagine that there are no schools like those of th convents. It depends, Madam, upon what you want to give your daughter. If you want to make her docile and obedient and subservient, ready to take without questioning her knowledge from her husband at home or her clergyman at church, by all means send her to the convent school. But if you believe that God made woman as well as man in his own image, if you believe that she has an independent right to exist, that the answer of the catechism is as appropriate for her as for him, that her chief object in life is "to glorify God and enjoy Him forever," if you repudiate the philosophy that would substitute "husband" or "society" for that august word "God" in this admirable reply, if you want her to learn to think for herself, if you are willing to risk the possible evils of some crude thinking in her first efforts after a reasonable independence—if, in short, you want to make a woman of her—then you will give her a Protestant education. For graceful appendages to man and ornamental adjuncts to society, the Convent of the Sacred Heart; for a true womanhood and motherhood, a character that will command the respect, and, therefore, the permanent love of husband and children, then Wellesley, or Smith, or Vassar, or some one of the many institutions smaller in numbers but similar in spirit.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

Sarah L. B.—For a reply to your inquiry about face powders, I refer you to the following extract from Druggists' Circular:

Face Powders are made of many different substances, and used for a variety of purposes. Some are nothing else than plain dry paint; of that kind the finest and best is probably the subnitrate of bismuth, obtained very light by certain processes. Bismuth as a cosmetic cannot be called a new discovery, since it is said that the face paint used by Jezebel was a compound of that metal, but it is still unequaled by any other. It is without deleterious effect on the economy, and nearly harmless to the skin, but has the disadvantages of being expensive and of becoming black when exposed to sulphurous vapors. Next in order comes oxide of zinc, or zinc white; the finest qualities produce very good face paints. Oxide of zinc is generally considered innocuous, is not expensive, and is not affected by sulphurous exhalations; but, if long employed, it causes the skin to become rough and coarse-grained. Of carbonate of lead, or white lead, only this needs be said, that it is poisonous, and should never be used at all. This ends the list of metallic pigments and brings us to the more common earthy compounds. Among these may be mentioned talc, or French chalk, baryta white, Paris white, and ordinary chalk. They are harmless in every respect, and quite inexpensive, but eminently inartistic, as they can be detected on the face at first sight, even at a distance; yet they are used in considerable quantities. Generally they are formed into cakes, or tablets, by means of a little kaolin, or white clay, and sold in fancy boxes. Now we come to the vegetable powders; these are properly cosmetics, and are used more for their soothing and cooling effects on the skin than for the artificial improvement of the complexion. They are also more commonly known under the name of *Toilet Powders*. The two following receipts will give an idea of their general character:

Violet Toilet Powder.—Wheat starch, 10 pounds; Orris root, 1 pound; Extract of cassia, 2 ounces; Tincture of musk, ½ ounce.

Rose Toilet Powder.—Corn starch, 12 pounds; Powdered orris root, ½ pound; Oil of rose, 1 drachm; Tincture of civet, 1 drachm; Tincture of musk, 2 drachms.

The various blooms and creams, more or less advertised everywhere, are said to be bismuth or zinc white simply suspended in rose water. Some of them, on being analyzed, have been found to contain large quantities of white lead, a very dangerous application to the epidermis.

Mrs. Ella Thompson, Venango Co., Pa.—It is claimed the Parisian method of cleaning black silk is superior to any other. The *modus operandi* is as follows: The silk must be thoroughly brushed and wiped with a cloth, then laid flat on a board or table and well sponged with hot coffee, thoroughly freed from sediment by being strained through muslin. The silk is sponged on the side intended to show; it is allowed to become partially dry, and then ironed on the wrong side. The coffee is said to remove every particle of grease, and restore the brilliancy of silk without imparting to it either the shiny appearance or crackly and papery stiffness obtained by beer or indeed, any other liquid. Experiment on a silk apron, cravat or tie, and you can then judge whether too much is claimed for it.

Farmer's Wife.—Paisley shawls range in price from $10 to $50. A good quality is purchasable for $30. This is the genuine article. Your brown cashmere would look well, trimmed either with silk or velvet. The latter is especially popular this season for woolen goods.

A plain, short skirt, ornamented with a box-plaited flounce, set on so as to form its own heading (or if you prefer it kilt-plaiting, makes a pretty finish), with basque and "washerwoman" overskirt, would be suitable for your goods. If you would rather have a polonaise, some one of the models published in Rural, will be very appropriate.

Mrs. Jas. B. D., Marquette, Kansas.—I sent pattern 6,341, as ordered. Satin and brocade are the fashionable trimmings for black silk dresses The piping can be of either one of these materials. Crochet or embroidered buttons would be most suitable.

To make the polonaise it will require 10½ yards of material, twenty-two inches wide. A kilt-plaiting would be a pretty finish for underskirt. Cannot say how many yards will be required for suit, as I do not know whether you intend to make all of the skirt of silk. In a week or two I shall publish several models of out-door garments for ladies, and among them the Ulster.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP-HANDLE PAPERS.—No. 5.

MAY MAPLE.

Self-imposed Duties.

"Oh, dear! I'm nearly tired to death," said Mrs. Busy, as she dropped into her easy chair which stood invitingly near an open window that looked out upon a perfect mass of fragrant blossoms; "and yet," she continued, "I ought not to sit down here for a single minute; for it is almost ten o'clock and there must be some pies or a pudding made for dinner, the bread is almost ready to mold out, and the vegetables are to be brought from the garden and cleaned. And I declare this yard looks as though it was deserted; the weeds are getting such a start again, and the garden is worse still. I ought to finish May's dress to-day, and I *must* do that, so she can have it to wear to the picnic to-morrow. If it wasn't for the ruffles it wouldn't seem like such a job. And there's a whole basketful of clothes waiting to be ironed; the mercy knows there's no end to the work in this house! I believe it will make me crazy yet. I *mustn't* sit here another minute; though how I can ever get one-half of the work done that *ought to* be done this very day, is more than I can tell."

And she arose, not hastily, but as though many tons' weight were pressing upon her shoulders. And I wondered how many thousands were burdening themselves in the same manner; growing old, faded and worn-out long before their appointed time.

Now I am going to enter my protest against such a wholesale waste of strength, beauty and talent. In the first place, there is no *actual* must about doing or trying to do six days' work in one. The good Lord set us an example of taking an abundance of time wherein to do our work. I admit there are some things that need a housekeeper's daily attention. There are but few farmers who are willing to accept of cold victuals for breakfast, dinner or tea, no matter how highly various cooks may recommend the fashion. But it is all nonsense to think one *must* wash, bake, iron and churn, do the family sewing, patching and gardening all in one day.

If the bread is getting "beautifully less," it is one's duty to see that more is provided. And when one's strength is ebbing it is just as much a duty to sit or lie down till it is in some degree restored. It is not necessary that both the ironing and baking be done on the same day, when there is but one pair of hands to perform the labor and one pair of feet to take all the steps. Neither is it necessary that May's dress should be finished to wear to that picnic; she has another dress she can wear that will answer quite as well; if she has not, better dispense with the ruffles and overskirts that are such a bother to make, and a worse one to iron, and give her two plain ones, so that she will not be distressed for an extra robe, especially if she is not old enough to make her own dresses or do some of the work about the house.

Rest, if only for a few minutes, when you have finished hurrying through the morning's work For one does feel in a hurry from the time one gets out of bed in the morning, till the breakfast is over, bread put to sponge, the milk skimmed, calves fed, churning done, dishes all washed, beds made, rooms swept and furniture dusted and put in order. After all this exercise of mind and body it is certainly time to rest and insist upon taking rest. While you are sitting down, if you are a reading woman—and I hope you are—don't be afraid of wasting the minutes if you take up the last paper or magazine that John has thrown upon the table half opened, and read a paragraph or perchance an article. It may give you a pleasant thought, or many of them; and pleasant thoughts relieve one greatly from weariness. If possible, do something in the course of the day that you *love* to do, if only for fifteen minutes, just as you did in your girlhood. Slip quietly out of the treadmill to your own sanctum, perhaps to knot a ribbon, rearrange a loop on your hat or crimp a ruffle, when no one knows your whereabouts. You, no doubt, remember what a rest there was in the perfect quiet, when only the chirp of the robin in the orchard was heard, or perchance some wildwood bird broke the silence with its sweet carol. At all events, *rest*

It is just as much a religious duty to rest before you have exhausted all your powers, as it is to pray for strength and guidance in all your life-work.

A HOUSEKEEPER'S DREAMINGS.

I am looking away to the sunset,
The day-dreams are hushed and still,
And the twilight falls gently around me
With a thought that my heart doth chill:
Is the daylight of life now fading?
Are the shadows of even at hand?
Is the sunshine so soon to leave us
For another and brighter land?

My eyes strayed from the paper where I had carelessly scribbled these lines to the book beside me, and I read: "Great things are not accomplished by idle dreams, but by years of patient study;" and I said to myself, "Nowhere does that sentence apply better than to the routine of housekeeping, where day-dreams are often so rudely dispelled, and the practical part of living is ever before our eyes. Breakfast, dinner and tea—it is one steady routine, as spring is followed by summer with its different needs, then autumn and the long winter for which so much preparation is made." I look at city ladies, and think sometimes how little they know of the cares and responsibility of country housekeeping; but I do not envy them the freedom which is bought at the expense of so much we can enjoy; though we value it so little until perhaps by some chance we miss it. So farmers' boys who go to learn city trades, still recall longingly the luxuries that were to be had in the old home without money and without price.

And speaking of this, who that thinks of these things has failed to be impressed with the fact that the best and smartest boys of a household are thought too good for farm life. "What a pity!" I say, when I hear of some wide-awake boy who leaves his home for the new ways and work of a town. For, in agricultural science, *brains* are much needed, and the labor-saving implements now in use, require skill and efficiency to manage them to advantage. Physical strength and muscular force are not so much needed in the management of a farm as they were twenty years ago, and it would be a good thing for the country if parents would consider this when guiding the destinies of their children. And you, my readers, who are mothers and indulge at times in dreamings like mine, know well this to be true. Annie L Jack.

DOMESTIC RECIPES.

Grape Catsup.

The following is a reliable recipe for Grape Catsup. I can safely promise those that try it. a delicious relish for cold meats. We like it on our bread and butter. Four pounds of stewed grapes, boil and rub through a coarse sieve; one scant quart of vinegar; one tablespoonful each of ground cloves, allspice, cinnamon, nutmeg and pepper; one-half tablespoonful of salt. Add the grape pulp and boil until thick.

Can any of the Rural ladies furnish a good, reliable recipe for Boston Brown Bread?

Oil City, Pa. Mrs. V. F. K.

News of the Week.

Monday, Oct. 7, 1878.

POLITICAL.

The Butlerites of Massachusetts are busily organizing Butler Clubs and Ben himself is delivering campaign speeches at the rate of about one a day. Talbot, the republican candidate, has written a very handsome letter of acceptance of his nomination and the accompanying platform. In it he forcibly denounces soft money and its advocates. Abbott, the nominee of the straight-out democrats, seems to be on a still hunt—at any rate whatever noise he makes is not heard outside the State. Butler is losing large numbers of his followers and is pretty certain of being disgracefully defeated—at any rate all his enemies say so. President Hayes said lately, out West, that the worst of the greenback craze was over, and that the public were rapidly returning to their senses and to a preference for specie over paper money—and in these opinions he finds agreeing with him a multitude of stalwart republicans who agree with him in little else.

On Sept. 28th Secretary Schurz delivered an elegant speech at Cincinnati in favor of "hard money," national banks and preserving the good faith of the government by paying the national debt and its interest, in gold. 'Twas a fine effort; but it seems hardly to have been appreciated by Secretary Gorham, of the republican campaign committee at Washington. Gorham concedes that it was a fine speech, just as the letters of Junius and Addison's articles in the Spectator were fine productions, but he says that it is not, in his opinion, adapted to campaign purposes, and accordingly he declines to print it for circulation among other documents intended to influence the coming elections. Gorham is more than suspected of being a greenback republican,—a kind of republican much more numerous among the hard-fisted toilers of the West than among the kid-gloved capitalists of the East.

MISCELLANEOUS.

It having been charged that the government misses a quarter of the taxes on imports through our inefficient system of collecting them, the Treasury makes, in short, the following statement. The customs revenue service employs 3565 persons and collects $132,024,000 at a cost of $5,525,767, or 4.1 per cent. This is against a cost of 4.8 per cent in Great Britian where the coast line to be watched is very much shorter, the number of dutiable articles very much less, the rates very much less, but the total collections very much larger. Now would it not be well if a like increase in the cost of collecting our import duties were attended with a similar increase in the total amount collected? Cyrille Dion, the celebrated billiard expert, died last Wednesday, at the age of 35, of congestion of the lungs, while traveling to witness the Hanlan-Courtney boat race, near Montreal. This affair came off last Thursday afternoon, having been deferred from the previous day on account of unfavorable weather. For some days before the race there was a multitude of ugly rumors that Courtney had sold the race for $4000. The betting which up to that time had been pretty even, suddenly veered around to $100 to $35, and in some cases $100 to $20 against Courtney, and it is claimed that his own relatives and friends backed his opponent. Harlan won the race by a length and a half. Both the Canadian and the American, of course, deny any underhand dealing, a denial indorsed by nearly all the backers of the former and by a few of those of the latter. Courtney's umpire, in a published statement, throws a good deal of doubt on the good faith of his man, and the issue of the race has undoubtedly greatly injured the reputation of the American champion.

A decision of interest to all who buy or sell real estate has just been rendered in the Municipal Court of Rochester in this State. In February, 1877, a Mr. Rockfellow, of that city, went to the office of the County Clerk and ordered a search to made for any liabilities upon property he was about to purchase. He received a statement of the result of the search and paid the usual fee Relying upon the truth of the statement he made the purchase of the land—a farm at Perrinton. Subsequently it appeared that the record of a mortgage of about $500 had been omitted by the clerk or deputy in his search. Mr. Rockfellow brought suit against the clerk, claiming $500 damages by reason of the neglect. The case was sharply contested. The issue depended on the liability of the clerk based upon the question as to whether his act in making the search was judicial or ministerial—if he acted ministerially, it was conceded he would be liable. The decision of Judge Sill gave judgment against the County Clerk for $514.80. The case will undoubtedly be appealed, and as it is said to be the first reported case of the kind in this State, the final decision will settle the law on the question.

The National Association of Wool Manufacturers held its fourteenth annual meeting in this city last Wednesday. Its policy is to develop to the greatest extent, the production and manufacture of wool in this country. With this object it has held close intimacy with the wool-growers' associations in the West and South and has endeavored to reconcile the antagonism which has long existed between the wool-growers and the wool manufacturers—the former being desirous of getting the largest possible duties on wool, and the latter endeavoring to place the largest possible duties on cloths, with no duty on wool. The result the Association claims to have been a development of the wool-growing interests without a parallel in any other part of the world, and if the same policy is pursued for five or ten years more, it is thought that both wool and woolen goods will be exported from this country. This is by no means improbable, but certainly this association is inclined to take to itself an undue proportion of the credit for such a desirable object.

Gov. Bishop, of Ohio, who lately failed, has effected a settlement with his creditors and again resumed business. A sad proof of the spasmodic nature of the temperance movement in Ohio, a few years ago, is afforded by the statement that Columbus has now 127 more liquor saloons than it had seven years ago—an increase of over one-third. The Indian Commission have resolved on the removal of 2,500 Utes from their present position in southwestern Colorado, 200 miles from railroad facilities, to a reservation at the headwaters of the Navajo and Branch rivers, removed from white settlements but accessible to supplies, and the Utes are, for the present, satisfied. Last Tuesday a band of runaway Cheyennes crossed the Kansas Pacific track 60 miles east of Hayes City, Kansas, and when eight or ten miles north of the station, came upon a lot of cattle men, and in a hand-to-hand fight, slew 18 of them and wounded five more. They were pursued by a party of United States troops, and in a skirmish, six soldiers were killed. The Indian loss is not reported. There is a startling rumor of a widespread Indian war along the frontier. Red Cloud and Spotted Tail are reported to have started with their braves on the war path. These chiefs have long been good friends of the whites, and lately moved peaceably to new reservations, but it is said that they have been so atrociously swindled and starved by government agents that they have finally decided to avenge their injuries. If they did so by hanging or even scalping half a dozen rascally agents, the general verdict would be, "served them right;" but, unfortunately, the innocent frontier settlers are the chief sufferers from every Indian outbreak. Yellow fever is still ravaging the South, with little or no abatement. Many of the small country towns and sea-side resorts that had hitherto escaped the visitation, have been stricken during the past week, and from the whole afflicted region the cry for help is still borne northwards.

FOREIGN.

From across the Atlantic comes the intelligence of the death, by typhoid fever, of Thomas C. Booth, the celebrated breeder of Short-horns at Warlaby. The Warlaby estate, with its famous herd of Short-horns, came into his possession in 1864, on the death of his Uncle Richard Booth. He was not only among the foremost breeders of cattle, but also a capital farmer, an admirer of good agricultural horses, a ready speaker, and a highly intelligent, amiable and popular gentleman. His death will be a loss not only to the farmers of Great Britain but to those of the world. In the German Reichstag, or Parliament, a fierce struggle has lately been in progress between the adherents of the administration and the Opposition, including Liberals, Ultramontanes and Socialists. Bismarck, at the head of the former, introduced a measure for stamping out Socialism in the Fatherland. The scope of this was so wide and tyrannical that every publication, newspaper, magazine and book, would be placed directly under government supervision for an indefinite length of time. If any of them tended to favor the obnoxious party, it would be at once suppressed and its publisher and author severely punished, while the police were constituted the judges of such a tendency. All meetings about which there might be a suspicion of Socialism, were to be ruthlessly dispersed, while the participants were liable to severe penalties. On the first reading, the bill was considerably modified by the votes of the Opposition, and the time during which its provisions were to continue in operation was limited to two years and a half. This limitation was as objectionable to Bismarck as the other modifications, and he has threatened again to dissolve the Reichstag in the hope of being able to secure a more subservient assembly. The parliamentary committee, however, has read the bill a second time in all essential points the same as after the first reading. Negotiations with the Vatican which have lately fallen to the ground through the refusal of the ecclesiastical authorities to submit to the Falck laws, may probably now be resumed with a view to secure the support of a majority of the Ultramontanes.

Mr. Gladstone has lately greatly increased his unpopularity in England by publishing, in the North American Review, an article called "Kin Beyond Sea." All the Conservative press and not a few Liberal papers accuse him of glorifying in it the American Republic to the disparagement of his own country. He prophesies a glorious career for the United States, and for Great Britain a very subordinate place among the English-speaking races of the future. Some time back the Russians appointed a commission to investigate army frauds. It has just reported that corruption is widespread and implicated 500 officers, 40 of them colonels, in the misapplication of funds during the late war. It is reported from Paris that the difficulties between France, England and the United States relative to the Newfoundland fisheries are in a fair way of being satisfactorily arranged. The three Cabinets, it is said, are now drawing up a convention which will obviate any further disagreement. Meanwhile Secretary Evarts has only lately protested to the English government against the award of $5,000,000 damages given, some months ago, by the Fisheries Commission against this country and in favor of Canada, and this dilatoriness irritates Blaine and other opponents of the payment of the award.

The death of Dr. Petermann, the foremost geographer of the world, reported here last week, turns out to have been the result of suicide. A couple of years ago he obtained a divorce from his first wife, said to be a she-devil, and some months ago married another. The s. d. straightway commenced a system of persecution by letter and otherwise, which so worried him, in conjunction with a painful illness, that, at the age of 56, he stepped down and out with his neck in a halter. They have just had a phenomenal bankruptcy in Scotland by the collapse of the City of Glasgow Bank, with its fifty branches scattered throughout the country. The institution was one of the oldest in Scotland, had a capital of $5,000,000 and failed for $50,000,000. The suddenness of the calamity is shown by the statement that the shares of the bank, originally worth £100, sold on the day of the failure for £200 and within the week for £237. The failure is due to the grossest kind of rashness on the part of the directors in making advances to mercantile firms doing business chiefly in India and South America. Upwards of $30,000,000 were in this way advanced to four firms, the reputation of two of whom was anything but good. The general verdict is that a more reckless course of gambling with other people's money by any body of directors was never known. The shareholders of the bank are responsible for its debts, and thousands of these are women, orphans, and old people, who invested what money they had in this kind of security, and lived on its income. These will not only lose the sum thus invested, but they are also liable to have every dollar of their other property taken from them until the bank's indebtedness is liquidated. Not only will upwards of 750 employes be brought to distress by the failure, therefore, but thousands of shareholders, who in the eyes of the law, are partners in the business, will be brought to absolute poverty. Yet, up to the last, the management paid heavy dividends which they took out of the capital, instead of the interest of the business. It has long been the custom of our trans-atlantic cousins to point with scorn at our numerous dishonest bank officials—and unfortunately they have been far too numerous—yet among us there has been no instance of so gigantic a rascality, and few of such atrocious dishonesty.

Advices from Cassablanca, Morocco, report 377 deaths from cholera out of a population of 700 between the 17th and 19th of last month, and from 60 to 70 deaths daily from the same cause at Fez and Mequinez. The rinder-pest has made its appearance in Northumberland, north of England, despite the stringent measures adopted by Government to guard against it. The famine in Brazil, owing to protracted drought, has become terribly severe; and hundreds are dying of starvation in spite of the best efforts of the government to relieve the distress. The lack of railroads and canals in the country adds to the suffering as transportation of relief to distant districts is slow and uncertain War has actually commenced between Great Britian and Afghanistan. Cablegrams received this morning says that Ali Musjid has been taken by the storm by the British troops. Several of the independent tribes on the frontier have expressed a desire to join the British. Shere Ali, the hostile Amer has a force of 150,000 men. He has released from imprisonment his eldest son, Yakoob Khan, who is a celebrated general. There is great enthusiasm among the Indian native troops of the British army. England will not be satisfied with an apology, however, abject; she will demand solid guarantees—more territory.

Von Moltke is reported to have tendered his resignation as chief of staff. The matter will be decided when the Emperor resumes control of the government; this he will do after the passage of

Socialist bill. Austria has nearly completed the occupation of Bosnia and Herzegovina. Most of insurgents have been either killed, captured or they have fled into Servia, where they have been disarmed and interned. Now that it has taken Austria so long a time to suppress the insurrection of a part of the population of these pretty districts, people are more sensible of the difficulties which Turkey had to encounter in ruling these turbulent mountaineers. HERMAN.

The Queen of Italy is called the handsomest woman in Europe. The glories of a throne add wonderfully to the charms of a woman rightfully seated thereon!

INDUSTRIAL NOTES.

THE NEW CHALLENGE RAKE.

MESSRS. CLEGG, WOOD & CO. of Dayton, Ohio, in addition to their standard Archer Rake, exhibited at the New York State Fair a new Self-Dump, known as the Challenge Self-Operating Sulky Hay Rake, which attracted a great deal of attention. This Rake is made without either springs or ratchets; it has a divided axle with a gear wheel on each end at the center, which, being thrown up by a lever, engages a segmental gear hung excentrically, by which the rake head is turned and the load discharged automatically. In this Rake all springs, flat or spiral, are dispensed with. The wheels act independently, dumping from either or both. The teeth are independent, and can be held down while raking with scarcely a perceptible pressure of the foot. There have been a few of these Rakes made and operated this season, and as far as used they have met with an unparalleled success. It is the only geared Dump-Rake that we know of that dispenses with all springs and ratchets, and it is an implement that can be commended to the attention of our readers.

A CORRESPONDENT, writing from the Paris Exposition, says:—"The Jury on Musical Instruments, composed of many of the most celebrated European experts, and of which Dr. Franz Liszt is the Honorary President, were especially pleased with the magnificent display of the ESTEY ORGAN COMPANY. They repeatedly visited and tested their instruments, and made them the standard of excellence by which all others of their class were judged. The jury regretted that ESTEY & Co., who are by far the largest American exporters of Cabinet Organs, were *hors concours*, but it is the well-known policy of this house never to compete for prizes. Had they done so, there can be little doubt that another grand prize, or at least a gold medal, would have been added to the list of awards to the United States."—*N. Y. Tribune.*

THE HIGGANUM MFG. Co. of Hartford, Conn., have just made a new Cider Mill that is to be known as the Farmer's Favorite No. 3 It may be operated by two men or by power. Worked by hand it is said that it will grind forty-five bushels of apples per hour, while with power it will consume sixty bushels. Combined with the Mill is a press that will express seventy-five gallons at a pressing.

THE U. S. Wind Engine and Pump Co., Batavia, Ill., makers of the widely-known Halliday Windmill, have been the recipient of high honors at Paris, receiving the only medal given to windmills. We congratulate the Company on its honors.

THE MARKETS.

PRODUCE AND PROVISIONS

NEW YORK, Saturday, Oct. 5, 1878.

BEANS AND PEAS.—New mediums and marrows have sold upon arrival, and the market for old is steady with good rates for prime. Red kidney have fallen rapidly in price, and close weak. Black beans dull. White kidney in light supply as yet; would bring quotations. New mediums, $1 60@1 75; old, $1 65@1 67½; new marrows, $1 75@1 80; old pea, $1 55½@1 60. new pea, $1 70@1 75; white kidney, $1 70@1 75; red kidneys have declined to a range of $1 75@$2 25; black beans, $2 nam'd. Green peas, $1 35; Southern B. E. peas, $2 50@2 75 per 2 bush. bag; Canadian peas in bulk and bond, 78@80c.

Receipts of beans, for week, 4,500 bush. Exports, 1,685 bbls.

BEESWAX.—Small lots have been taken at 27@27½c for Western and Southern.

BROOM CORN.—There are only moderate lots in stock. Sales of choice green hurl, 6@7c.; medium hurl, 5@6c.; choice short green, 5½@6½c.; medium short green, 5@6c.; red stubby and crooked, 5c.

BUTTER.—The market has ruled quiet and quotations have been tame during most of the week. A number of farmers here with dairies are quite surprised at the toneless condition of trade. If anybody expects a high range of prices this season he will be disappointed. Supplies are likely to exceed current wants, and, as the times are not apt to improve with cold weather, consumers will not support rates any more against them than the present. This, of course, refers to the bulk of the State crop; but even the vision of 30c. and upwards for fancy is daily growing dimmer.

Diminished export trade is a depressing feature of the market. Western dairy has a good market demand, that is, for the line of trade that makes butter a specialty. A larger business would follow Western if quality were more evenly good.

Comparative receipts and exports for past three years;

	Receipts, pkgs.	Exports firkins.
June 1st, '78 to October 1st, '78.....	554,675	130,866
June 1st, '77 to October 1st, '77.....	541,620	105,257
June 1st, '76 to October 1st, '76.....	482,600	61,785

Dairy, pails, choice, 22@23c.; fair to prime, 15@20c. poor, 1 @13c.; State, half tubs, choice, 21@3 c.; fair to prime, 17@21c.; poor, 13@14c.; entire dairies, 18@20c.; firkins, 16@18c.; Welsh, tubs, choice, 20@22c.; good to prime, 17@19c.; poor, 10@11c.; creamery, selected, 26c.; other, 23@25c.; Ohio and State, sweet, cream, 22@24c.; Western creamery, choice, 2c.; poor to prime, 19@22c.; Western dairy, choice, 17@18c.; other, 13@15c.; Western factory, ladle packed, 10@13c.; milled and common, 7@10c.

Receipts for week, 37,695 Exports, 7,326 pkgs.

CHEESE.—The stronger feeling which developed immediately, subsequent to the country sales, has been held well through the week. The feature again this week has been the almost exclusive inquiry for fancy lots; the late made lots closed with sales at 9¾@10. Early August and good and lower grades move off steady. Shipments for the week have been 52,659 boxes.

Quotations are 9¾@10c. for fancy late made; 7¾@8¾c. for good and prime; 6¾@7¾c. for fair to good; 5½@7c. for half-skimmed; 4@5¾c. for skimmed. State, farm dairy at 8@9c. for good to choice, 6½@8c for fair to good, and 3½@5½c. for poor skimmed. Wisconsin factory, fine to fancy, 9@9¾c.; do. good to prime, 7¾@8¾c.; do. fair to good, 6½@7¾c. Western factory firmer, and fancy, 8¾@9½c.; good and prime, 7¾@8¾c.; fair, 6@7c.; half skimmed, 5@6c.

Receipts for week, 92,561 boxes.
Gold closes at 100¼.
Liverpool cable quotation, 45s.

COMPARATIVE STATEMENT FOR THE LAST THREE YEARS.

	Receipts, boxs.	Exports, lbs.
June1, '78 to Oct. 1, '78.....1,851,900		80,237 293
June 1, '77 to Oct. 1, '77.....1,478,917		69,345 430
Jnue 1, '76 to Oct. 1, '76.....1,287,476		57,226,203

COTTON.—The crop movement has been way beyond expectations, and prices have had a pretty sharp set back, and closed weak. Latest prices are: for October, 10.35@10.36c.; November, 10.32c.; December, 10 32@10.33c.; January, 10.37@10.38c.; February, 10.40@10.45c.; March, 10.52@10.53c.; April, 10.61@10.62c.; May, 10.70@10.72c.; June, 10.77@10.78c.; July, 10.83@10.85c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary.....	8¾	8¾	8¾	8¾
Stict ordinary.....9 1-16	9 1-16	9 5-16	9 5-16	
Good ordinary.....9 9-16	9 9-16	9 13-16	9 13-16	
Strict good do ... 10	10	10¼	10¼	
Low middling..... 10¼	10¼	10¼	10⅜	
Strict low middling... 10⅜	10⅜	10⅜	10⅜	
Middling..... 10½	10½	10¾	10¾	
Good middling..... 10¾	10¾	11	11	
Strict good middling. 11	11	11⅛	11⅛	
Middling fair..... 11 ⅛	11⅛	11⅛	11⅛	
Fair..... 12⅛	12⅛	12⅛	12⅛	

Stained.

Good ordinary.....8¾; Strict good ordinary... 9¼
Low middling.. 9¾; Middling.....10⅜

CIDER offered freely on wharf at 6@7c., large packages; small packages, pure sweet, 9@10c.

DOMESTIC FRUITS.—During the week apples took a rising movement, but the market has relapsed into weakness. Selected, red, $1.75@1.87, bbl.; mixed, western N. Y., $1.62@1.75; other, $1@1.37; open heads rejected. Cranberries in fair demand for prime ripe stock, Cape Cod, choice, $3@3.25, bbl.; other, $6@7; N. J., $6@7; do., crates, $1.50@2.25; L. I., sends some fine samples this season, selling above Capes. Pears are firm, and not in overstock. Seckels, choice, $10@12 bbl.; common, $6@9; Virgalieu, $3@7; other, fancy, $4@7; cooking, $2.50@3.50. Quinces, apple, $5@8.00, bbl; pear, $3@6.50. Grapes sell steadily; few Delawares this year. State Del., in 3 lb. boxes; $4@4.75 per case; loose, 8@9c. lb. Concord, State, cases, 3 lb. boxes, $2.75@3.25. Catawbas, lb., 6@7c.; Concord, 3@4½c.; Isabella, 4@5c. Watermelons closing at $15@25 per 100, for best remnants. California pears, $4@4 50 box; varieties, B. Clairgeau; Doyenne du Comice; B. d' Anjou. Muscat grapes, $4@5, per 40 lb. case; Tokay, $5@6. The crop prospect of peanuts is 800,000 bush. for Va.; 450,000 Tenn.; 90,000 N. C. Market fairly clear of old stock; hand-picked Va., $1.55@1.60; fancy, $1.45; other, $1.35@1 40. Chestnuts, for the moment, $8@9 bush. Shellbarks, $2@2.50.

Exports of apples, 9,250 bbls.

DRIED FRUITS.—In apples the business is still limited to the better grades of sliced, which bring full unchanged prices; quarters are not settled in price. Peeled peaches have eased off a little and closed steady. Small fruits are not changed.

New blackberries are quoted at 5½c. Peaches—Peeled, new Georgia, 6c. for poor, 7¾@8½c. for fair to good, and 9c. for prime; choice North Carolina, 10@11c.; good do., 8@9c.; unpeeled new halves, 3½c.; quarters, 3½@3¾c. Pitted cherries, 15@15½c.; southern plums, 11@12c. Apples—Old State quarters, 2¼@2¾c.; do., sliced, prime, 4c.; do., good, 3@3½c. New apples 2¾@3¼c. for Southern quarters in bbls.; 4½@5¼c. for prime sliced, and 6@7c. for fancy. New raspberries, 24@25c., and evaporated, 25@27c.

Exports past week 238 bbls. dried apples.

EGGS.—Receipts for week, 5,700 bbls.; do. last week, 4,839 do. Stock has sold out well with rather stiff prices. Choice limed have sold at better rates. N. J. and near points, 24c.; State and Penn., 22½@23c.; Western fresh, 21¾@22c.; Canadian, 21½@22c.; poor stock, 20c.; limed State, 17@18c.; Western, 16@17c.

HONEY.—Quiet at 15@17c., single-comb boxes; 13@14c., two do.; buckwheat, 10@12c.

FLOUR.—Prices have dropped further on large supplies, and the lower tendency of wheat.

Latest Sales are: $3.50@3.90 for poor to choice superfine State: $3.90@4.15 for poor to good extra do., odd lots and lines; $4.15@4.45 for good to choice do., strictly choice and fancy lots above this; $3.50@3.90 for very poor to fancy superfine Indiana, Iowa, Michigan, &c.; $3.90@4.15 for inferior to good shipping extra do. and $4.15@4.45 for good to choice extra do.; common to about choice white wheat extras, $4.40@5.15; choice to about fancy do. at $5.15@6.00; red and amber winter wheat, inferior to very choice trade and family at $4@5.50; round hoop Ohio at $4.00@4.25, and trade and family brands of do. at $4.25@5.50, the latter rate for very choice, (fancy lots quoted higher); St. Louis, $4.10@4.75 for very poor to good extra, and $4 75@6.00 for good to very fancy; Minnesota clear, very inferior to fancy at $4@5.75; Minnesota "straight," inferior to very choice at $5.@6 25 (some very fancy, including old, quoted above these figures, and patent fair to very fancy at $6.25@8 40; unsound stock at from $3@5 00; city mill extra at $5 00@5 15 for West Indies (the latter rate for strictly choice in new packages); do. for England, $3.90@4.00; do. trade and family extras, $5.50@6.00; do. for South America, $5.25@5 75 for fair to fancy; No. 2 at $2 70@3.85 for very inferior to very fancy, the latter an extreme.

CORN MEAL—Sales at $2 90@$2.95 for Brandywine, and $2.35@2.71 for yellow Western.

BUCKWHEAT FLOUR—Is offered lower. Sales at $1.75@2.10.

GRAIN.—Wheat has been in large receipt, the condition of the foreign markets generally unfavorable, and prices have been lower and closed easy.

Latest sales are of No. 1 red at $1.05½@1.06; ungraded white at $1.01½@1 08½; No 1 white, steamer grade, at $1.07; No 1 white, $1.08@1.08½; white State at $1.09; extra white at $1.10½; No. 2 white at $1.0 @1.08½; No. 3 white at $1 04½@1.05; No. 2 red at $1.05@1.05½; do. steamer grade at $1.03½@1.04; No. 2 amber, at $1.03½@1 04; ungraded amber at $1@1.05½; red Canada, in bond, at $1 01½@1 02; No. 2 Chicago spring at 85c.; No. 3 spring at 88@90c; New York No 2 spring, October option, at 96@96½c; do. November option, at 97½c.; No. 2 amber, October option, at $1 03½@1.04; do. delivery Oct 15 to 25th, at $1.01; do. November option, at $1.04½; No. 2 red, October option, at $1.05@1.05½; do. November option, at $1.06@1.06½; do. December option, at $1.07½; No. 1 white, deliveries in October, at $1 08@1.08½; do. first half of November; $1.08½; ungraded white, October delivery, at $1.07; and No. 1 red, delivery last half October, at $1 05½. Rye at 58c. for No. 2 Western and 61@64c. for State. Corn has been fairly active at easier prices; latest sales are of steamer mixed, at 48c; New York No. 3 at 47½c.; New York No 2 at 48½@48¾c.; ungraded mixed Western at 47½@49¼c; No. 2, October, at 48½@48¾c.; do. November, at 49½c.; do. December, at 50@50½c.; steamer mixed, October, at 48@48¼c.; do. November at 48½c Oats have been active and closed firm, including New York No. 2 white at 29½ 29¾c.; New York No. 3 white at 27½c.; New York No. 1 at 31½c.; New York No. 2 at 29@29½c.; New York No. 3 at 26½@26½c.; New York rejected at 25@25½c.; white Western at 27½@35c.; mixed Western at 25@32c.; white State at 28@35c.; mixed State at 27@32½c; New York extra white quoted at 37½@38c.; New York No. 1 white quoted at 35@36c.; No. 2 Chicago, October delivery, at 30½c.

HAY AND STRAW.—Prime lots of hay are wanted at steady prices; shipping grades are easier on full receipts.

Sales at 40@45c. for shipping, and 65@70c. for retail qualities. Straw quoted at 35@45c. for long rye; 50@35c. for short rye.

Exports for the week, 690 bales.

HOPS.—Mr. Emmet Wells says in his circular: "With more liberal receipts and a better assortment to choose from, exporters have been able to pick up some 400 bales of choice hops, and for these they have paid our highest quoted price. Brewers have also bought more freely, making a demand, on the whole, sufficient to take up nearly all of the floating stock of new. Business, no doubt, could be largely increased with more liberal arrivals, and without forcing it, for orders are here from abroad for choice hops. At Cooperstown and Waterville trade is reported very dull, 10 to 12 cents being all that buyers are willing to pay for a prime article.

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, poor, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8; Olds, all growth, 2@4.

POULTRY AND GAME.—Live chickens are easy; fowls, not in large supply, have brought fair rates. Roosters temporarily higher, owing to a Jewish ritual. Turkeys low. Ducks and geese unchanged.

Chickens, N. J. 13c. lb; State, 12½@13c.; Southern and Western, 12@13½c. Fowls—N. J., 13c.; State, 12½@13c.; Western, 12@12½c. Ducks, fat, ₱ pair, $1; poor to fair, 40@50. Geese, N. J. and Penn., $1.25@1.75; Southern and Western, $1@1.25.

Dressed poultry quoted about as before. Some lots turn out common and sell slowly.

Turkeys, dry picked, 14@15c.; other, 11@12c. Pa. chickens, 15@17c; N. J., 13@15c. State, 13@14c.; Western, 12@13c. Pa. dry picked fowls, 14@15c.; N. J., 13@14c.; poor to fair other, 10@12c. Ducks, extra, 1 @18c.; State, 13@14c.; poor, 10@12c. Geese, choice, 14@16c.; other, 8@ 2c.

The weather has been very unlike fall and game has ruled weak; most items lower.

Grouse, trapped, pair, 85@90c.; State partridges 70@75c.; Western, 50c. Woodcock, State, 60@65c.; Western, 45@50c.; English snipe $1.50 doz.; plover, $1.50; flight pigeons, $1.75@2; Mallard ducks, 50c. ₱ pair, common, 25@35c.

PROVISIONS have been unsettled and generally lower: Mess pork quoted at $870@8 90 for spot lots; $8 50@8 70 for October and November deliveries. Bacon at 6c. for long clear and 6¾ for short clear. Lard, western steam, at $6 70 for spot lots; $6 67½ for October; $6 65 for November, and $6 62½@6 65 for December. Tallow at 7c. for prime. Stearine at 7½ for Western. Beef Hams at $17@18. Beef—extra mess at $10 50@11; plain mess, $10@10.50; packet, $11@12 for bbls.; extra India $19@20 for city brands; do., Philadelphia, $18@19.

SEEDS.—Timothy is lower, and selling at $1.15. Clover at 7¾@7¾c. Flaxseed is lower; sales at $1.45@1.46.

TOBACCO.—Export demand continues brisk, and the market is in good shape. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs.....	2¾@ 3¾	4 @ 4¾
Good lugs.....	3¾@ 4¾	4¾@ 5
Low leaf.....	4½@ 5¾	5¾@ 6¾
Medium leaf.....	5¾@ 6¾	6¾@ 7
Good leaf	6¾@ 8	8 @ 9
Fine leaf.....	9 @10	10 @12
Selections	— @—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, fine.....	18	@35
do. do. selections.....	18	@35
do. seconds	10	@12
do. fillers.....	6	@ 7
Pennsylvania assorted lots, common..	8	@ 9
do. do. fair.....	10	@12
do. do. fine.....	14	@17
do. wrappers	18	@35
do. fillers	6½	@ 7
New York assorted lots, common to medium	6¾	@ 8
Ohio assorted lots.....	8	@10
Wisconsin assorted lots.....	7	@10

VEGETABLES.—Exports of potatoes, past week 2,005 bbl.; of Onions, 95 do. Potatoes continue to rule strong, present stock well under control. Early Rose, choice, $2 25@2 50; other, $1 75@2; Peerless, $1 75@2 12; Sweets are cheap but quiet, range $1 50@1 75. Onions, white, $1@1 50; red, $1@1 25 bbl.; Yellow, $1@1 25. Marrow squash, bbl.; $1 25; Hubbard, do., $1 50@1 75. Cabbages, per 100, $2 50@5; Cauliflower, $2@5 per bbl; Egg Plants, 100. $1@2 50; R. Turnips, $1 25@1 50, Beets, 75c.@$1; Carrots, $1 25; Bell or Pepper 75c.@$1; Cucumber pickles, 1000, $1 50@2 50; Tomatoes, crate, 20@25c.; String beans, bag, 25@50c.; Lima beans, bag, 75c.@$1 25; shelled, $2 50@3; Sweet Corn, per 100, 50c.@$1 50; Pumpkins, per 100, $3@6.

WOOL.—There has been a little more to trade, manufacturers buying more freely, and their wants met promptly at the following prices.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@44c.; XX, 35@37; X, 35@37; No. 1, 33@38c.; No. 2, 33@35c; coarse, 30@32c. combing, 38@43c.

New York, Michigan, and Wisconsin, XX, 32@34c.; X, 32@34c; No. 1, 34@38c.; No. 2, 31@33c.; coarse, 28@31c.; combing, 37@42c.

Indiana, Kentucky and Tennessee—XX, 32@34c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 33@34c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Oct 5 1878.

BEEVES.—Receipts for the week, 11,739 head; do last week, 13,372 do. Heavy supplies caused an irregular market; 10c. was the top for best native steers to dress 57 lbs.; others ranged at 7¾@9¾c to dress 55@56 lbs. Texas, Colorado and Cherokee 6c. to dress 54 lbs., and 7¼c. to dress 55 lbs. Export demand very light, a few late sales 9½@10c.

COWS AND CALVES.—Three car-loads have reported sold at $40@65 per head, or old prices.

VEAL CALVES.—Prime, easy handling sizes of milk have sold well at 6½@7½c. Choice heavy 6½@7c. Other, heavy, 4½@6¾c.; Fed calves 8½@4½c. Grass and butter milk, 2½@3½c. Some Western 224 lb calves brought 6¾c.

SHEEP AND LAMBS.—Receipts for the week, 23,469 head; do, last week, 29,815 do. Sheep slow and prices easy, 3½@4½c.; lambs in fair demand at 4¾@5¾c.

SWINE.—Receipts for the week, 33,084 head; do last week, 25,216 do. Ohio live, 3¾@4c; one load a fraction above. N. J. dressed hogs, 5¾@6¾c Weather against them.

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Inside, 14th and 15th pages (Agate space)..40c. per line
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Business " ..... 80 "
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It is combined with a large PRESS that will press 75 gallons at a pressing. Retail price $50.

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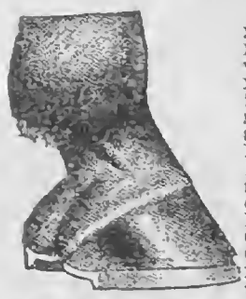

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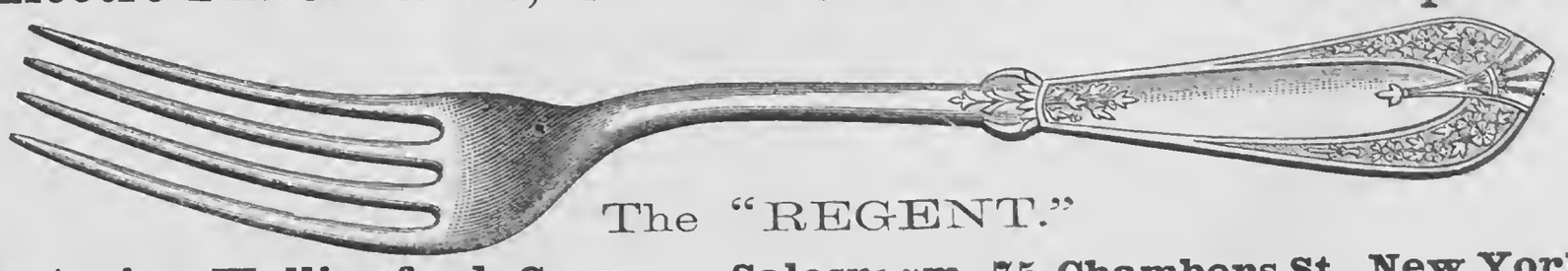

The "REGENT."

Factories, Wallingford, Conn. **Salesroom, 75 Chambers St., New York.**

Reading for the Young.

WHO DID IT?

Who tracked the mud across the floor,
And through the hall and up the stair?
And left it clinging to the chair?
Whose finger-prints deface the door?

Whose crumbs beneath the table lie?
Who smeared the butter on the cloth?
Who spilled the gravy, slopped the broth,
And dropped a pickle in the pie?

Who pulled the curtain with a jerk,
And left it hanging all askew,
And broke the cord?—'twas nearly new;
I wonder if 'twas mother's work?

Whose knife is this, with handle stained,
And open blade with rust so marred?
'Twas found this morning in the yard,
Upon the grass—last night it rained.

Just now I slipped and nearly fell—
A marble rolled a rod or more,
And then I crushed an apple-core—
Whose was it, mother? Can you tell?

Face downward on the slab, a book
Lies open, leaves dog-eared and thumbed.
And near, a handkerchief, begummed
And stiff with tally—only look!

Upon a door-knob hangs a hat—
'Tis passing strange it hangs at all;
And in the corner is a ball,
And on the sofa rests a bat.

I missed the hammer yesterday;
The hatchet vanished long ago;
All winter, underneath the snow,
Behind the house the shovel lay.

Are things bewitched? Do genii hide
Within my closets and my drawers,
And skulk behind the chamber doors,
And through the darkened attics glide?

I often go from room to room,
And sweep the floating cobwebs down,
And wonder when the spiders brown
Departed with their dainty loom—

But then—who knows?—those films so fine
May once have lain upon my shelf
Beneath the little bowl of delf;
'Twas there I used to keep my twine,

The tiny tacks I lost last spring—
A paper full, with polished heads
As black as jet and round as beads,
But deader than a mummie king—

What do you think they did to-day?
My sugar-bucket's sides they stormed,
And in the sugar-bucket fairly swarmed—
Who turned tacks into ants, tell me, pray?

The elves are in the house, 'tis clear;
I'd like to catch that one who took
The clothes-brush down from off the hook
And left it on the etagere.

Who was it, little Johnny Bell?
Why do you stand so shame-faced there,
And blush from chin to forehead fair?
I think you know the culprit well-
[*Mrs. E. D. Kendall, in August Wide Awake.*

THE CAT AND THE MOUSE IN PARTNERSHIP.

A CAT having made the acquaintance of a Mouse, told her so much of the great love and affection that he had for her, that the Mouse at last consented to live in the same house with the Cat, and to have their domestic affairs in common. "But we must provide for the winter," said the Cat, "or we shall be starved: you, little Mouse, cannot go anywhere, or you will meet with an accident." This advice was followed, and a pot was brought with some grease in it. However, when they had got it, they could not imagine where it should be put; at last, after a long consideration, the Cat said, "I know no better place to put it than in the church, for there no one dares to steal anything: we will set it beneath the organ, and not touch it till we really want it."

So the pot was put away in safety; but not a long while afterwards the Cat began to wish for it again, so he spoke to the Mouse, and said, "I have to tell you that I am asked by my aunt to stand godfather to a little son, white with brown marks, whom she has just brought into the world, and so I must go to the christening. Let me go out to-day, and do you stop at home and keep house."

"Certainly," answered the Mouse; "pray go; and if you eat anything nice, think of me. I would also willingly drink a little of the sweet red christening wine."

But it was all a story; for the Cat had no aunt, and had not been asked to stand godfather. He went straight to the church, crept up to the grease-pot, and licked it till he had eaten off the top; then he took a walk on the roofs of the houses in the town, thinking over his situation, and now and then stretching himself in the sun and stroking his whiskers as often as he thought of the pot of fat. When it was evening he went home again, and the Mouse said, "So you have come home at last: what a charming day you must have had!"

"Yes," answered the Cat; "it went off very well."

"What have you named the kitten?" asked the Mouse.

"*Top-off!*" said the Cat, very quickly.

"*Top-off!*" replied the Mouse: "that is a curious and remarkable name. Is it common in your family?"

"What does that matter?" said the Cat; "it is not worse than Crumb-stealer, as your children are called."

Not long afterwards the Cat felt the same longing as before, and said to the Mouse, "You must oblige me by taking care of the house once more by yourself; I am again asked to stand godfather, and, since the youngster has a white ring round his neck, I cannot get off the invitation." So the good little Mouse consented, and the Cat crept away behind the wall to the church again, and ate half the contents of the grease-pot. "Nothing tastes better than what one eats by one's-self," said he, quite contented with his day's work; and when he came home, the Mouse asked how this child was named.

"*Half-out*," answered the Cat.

"*Half-out!*" What do you mean? I never heard such a name before in my life: I will wager anything it is not in the calendar."

The Cat's mouth now began to water again at the recollection of the feasting. "All good things come in threes," said he to the Mouse. "I am again required to be godfather: this child is quite black, and has little white claws, but not a single white hair on his body; such a thing only happens once in two years, so pray excuse me this time."

"*Top-off! Half-out!*" answered the Mouse; "these are such curious names, they make me a bit suspicious."

"Ah!" replied the Cat, "there you sit in your gray coat and long tail, thinking nonsense. That comes of never going out."

The Mouse busied herself during the Cat's absence in putting the house in order, but meanwhile greedy Puss licked the grease-pot clean out. "When it is all done, one will rest in peace," thought he to himself, and as soon as night came he went home fat and tired. The Mouse, however, again asked what name the third child had received. "It will not please you any better," answered the Cat, "for he is called *All-out*."

"*All-out!*" exclaimed the Mouse; "well, that is certainly the most curious name by far. I have never yet seen it in print. *All-out!* What can that mean?" And, shaking her head, she rolled herself up and went to sleep.

After that nobody else asked the Cat to stand godfather; but the winter had arrived, and nothing more was to be picked up out-of-doors; so the Mouse bethought herself of their store of provision, and said, "Come, friend Cat, we will go to our grease-pot which we laid by; it will taste well now."

"Yes, indeed," said the Cat; "it will taste as well as if you stroked your tongue against the window."

So they set out on their journey; and when they arrived at the church the pot stood in its old place—but it was empty!

"Ah!" said the Mouse, "I see what has happened; now I know you are indeed a faithful friend. You have eaten the whole as you stood godfather; first *Top-off*, then *Half-out*, then——"

"Will you be quiet?" cried the Cat. "Not a word, or I'll eat you."

But the poor Mouse had "*All-out*" at her tongue's end, and had scarcely uttered it, when the Cat made a spring, seized her in his mouth, and swallowed her.

This happens every day in the world. GRIMM.

THREE BUNNIES' QUEER MAMMA.

A CURIOUS instance of the affection which the female of one species of animal sometimes exhibits for the young of a different species is reported by Mr. John Sinnott, of Lafayette, on the Norristown Railroad, as having come under his own observation. In his household is a cat, to which a week before a number of kittens were born. All the youngsters, except one that was to be kept, were drowned, in consequence of which Madame Pussy appeared sad, mewing and purring her bereavement and displaying increased love for her only living child. The couch of pussy and the little ones was in the cellar, where, at noon, on the day after the drowning, Mrs. Sinnott was surprised to find three tiny animals lying close together. They were all about the same size, but two of them differed somewhat in shape from the third, having ears considerably longer—much too long to be those of a kitten. Pussy was not about, but while the lady was examining the little creatures the old cat came in, carrying by the nape of its neck, between her teeth, another tiny quadruped with long ears. Pussy deposited her burden with the three other little things, lay down beside them, and tenderly caressed them, one at a time. In the evening, when Mr. Sinnott came home, he saw the quartette vigorously drawing the staff of their life from the breast of patient Pussy, who seemed no less a mother to one than to any other. He soon ascertained that the three new additions to the feline family were baby rabbits. In order to give them more agreeable quarters he removed the five to an out-house. But thenceforward Madame Pussy seemed to be without affection for her adopted children. Evidently she discovered that she had made a mistake and was doing wrong. She no more gave them suck nor caressed them, but devoted undivided attention to her natural offspring. Mr. Sinnott's family then took charge of the deserted bunnies, giving them sweet milk and keeping them warm, but despite the best of human care, they lived but a day or two afterward.

A NEW GAME FOR CHILDREN.

THE juveniles have a new game called "Blind Man's Mockery," out of which they are getting lots of amusement. One of the party is blindfolded, and while he is counting twenty-five the others range themselves as miscellaneously as possible in a row, and hold out their hands. The "blind man" slaps somebody's hands, at the same time inquiring, "Who are you?" The youngster slapped rather impolitely replies, "None of your business," and the "blind man" is obliged to guess his name from the sound of his voice. He can guess but once, and, if he fails, must try some one else until he guesses right, when the one whom he detects becomes "the man." The game depends upon quickness of ear, as well as upon the ability to disguise the voice, and it shows a wonderful difference in children in both respects.

Sabbath Reading.

THE TRIAL OF JESUS CHRIST.

That the whole council did not meet at night is unquestionable: that a certain number of them were present by night with Caiaphas is equally clear. Assuming that there was a final and formal meeting of the whole Sanhedrim at its usual morning hour, it is barely possible that the vivid scene of the adjuration, confession, and sentence took place before it. But it is much more likely on the evidence that it took place earlier, when a considerable number, quite enough to be popularly called a council, were already assembled. And, in any case, it is certain that that still earlier transaction—the examination of witnesses and the deliberation on their evidence—must have taken place some time during the night. The confusion of representation is quite natural. For, according to all the rules of Hebrew law, such a transaction in the night was absolutely illegal, incapable of being validly transacted in either form, and incapable of being reported so as to produce an impression of justice upon the minds of the people.

The law is laid down in a passage of the Mishna, which contrasts capital trials with questions of money.

The former (money trials) are commenced only in the daytime, but may be concluded after nightfall: the latter (capital trials) are commenced only in the daytime, and must also be concluded during the day. The former may be concluded by acquittal or condemnation on the day on which they have begun: the latter may be concluded on that day if there is a sentence of acquittal, but must be postponed to a second day if there is to be a condemnation. And for this reason capital trials are not held on the day before a Sabbath or a feast day.

The crucifixion of Jesus took place, as has scarcely ever been doubted, on the Friday, the day before a Sabbath which was also "an high day;" and the meeting of the council took place on the same Friday morning. Such a meeting on such a day was forbidden. If indeed it only met to register an acquittal, it was lawful. But if the court was unable at once to acquit, it was bound to adjourn for at least four-and-twenty hours before meeting for final judgment, and such a final meeting could not be on the Sabbath. The necessity of the adjournment of a capital trial to secure the rights of the accused is shown very clearly by the detailed regulations of the Mishna:

"If a man is found innocent, the court absolves him. But if not, his judgment is put off to the following day. Meantime the judges meet together, and eating little meat, and drinking no wine during that whole day, they confer upon the cause. On the following morning they return into court [and vote over again, with the like precaution as before]. If judgment is at last pronounced, they bring out the man sentenced, to stone him."

These regulations, taken not from the commentary on the oral law, but from the Mishna itself, probably existed in full detail during the high-priesthood of Caiaphas. There is no reason to doubt that at least the general rule, which prescribes adjourning the trial from one day to another, bound the judges of Jesus of Nazareth. In no case was such a rule so absolutely necessary to justice, as where the accused, arrested after nightfall, had been put upon his trial by daybreak, without the least opportunity of summoning witnesses for his defence. But what the Gemara describes as the *atrocity* of thus anticipating the day of death of the accused, was exceeded in open injustice by the earlier outrage of commencing, and probably substantially concluding, the real trial under cloud of night. That would have been an intolerable scandal even in the case of an ordinary civil suit.

Yet there can be no doubt that at some untimely hour, between Thursday night and Friday morning, the form and somewhat more than the form, of a trial by Hebrew law did take place. The judges, unjust as they were, were men trained in that law of minute scruples and mighty sanctions; and they would have felt it impossible to dispense with process and form altogether. Meantime much was going on. The members of the council present sought for witnesses against Jesus. Matthew says they sought for false witnesses. But even the former was a scandalous indecorum. Hebrew judges, as we have seen, were eminently counsel for the accused. And one of the strangest sights the world has ever seen must have been the adjuration or solemn address to the witnesses who came to speak against the life of Jesus, by the magistrate who had—no doubt with perfect sincerity—held it expedient that one man should die for the people. That form of adjuration or solemn appeal still exists in the body of the law. It was the duty of the high priest to pronounce it to each witness in a capital case, and so to put them on oath. Who can measure the effect of its utterance by the sacred judge of Israel upon men who while the words were uttered, were forced to gaze into the face of him whose life it guarded?

"Forget not, O witness, that it is one thing to give evidence in a trial as to money, and another in a trial for life. In a money suit, if thy witness-bearing shall do wrong, money may repair that wrong. But in this trial for life, if thou sinnest, the blood of the accused, and the blood of his seed to the end of time, shall be imputed unto thee. Therefore was Adam created one man and alone, to teach thee, that if any witness shall destroy one soul out of Israel, he is held by the Scripture to be as if he had destroyed the world; and he who saves one such soul to be as if he had saved the world."

The Son of Man whose life was surrounded by the law with this tremendous sanction stood silent before those witnesses; and, whatever was the reason, their testimony was found ineffectual. What was the Hebrew law of evidence? The Talmud divides all oral evidence into—

1. A vain testimony.
2. A standing testimony.
3. An adequate testimony; or (perhaps) the testimony of them that agree together.

The evidence of the earlier witnesses who on that night were examined seems to have been set aside as belonging to the first class; for a "vain testimony" was not even accepted provisionally, or retained until afterwards confirmed. A "standing testimony" on the other hand, was admitted in the meantime and provisionally, but not held valid until confirmed by others. To this intermediate rank attained the evidence of that witness who at length came forward to speak to the early utterance of Jesus about the destruction and rebuilding of the temple. And when following him another came, the question was at once raised whether the testimony of both did not amount to the third and complete order of evidence, known as "the testimony of them that agree together." "But neither so," says Mark, using the exact technical term, "neither so did their witnesses agree together." This may undoubtedly have been a mere discrepancy in their narration of facts. That discrepancy cannot have been great, according to our modern ideas. For Mark gives the evidence of both in one indiscriminate sentence. And Matthew does the same in another sentence, slightly different. Neither of them makes any explicit distinction between what the two witnesses said. Let us suppose that the discrepancy between the two (alleged by Mark) amounted only to this, that the one said, in Matthew's phrase, "I am able to destroy the temple of God," and the other, "I *will* destroy this temple." It is by no means clear that even such a difference as this might not have been sufficient to nullify their testimony. For in a Hebrew criminal trial "the least discordance between the evidence of the witnesses was held to destroy its value;" and this rule, like others, was pushed to that childish extreme which we now call Judaical. A mere verbal distinction may have sometimes been a fatal objection in the mind of even such a judge as Caiaphas. But the evidence of men who are not reported to have said anything extreme, but whom the Evangelists, departing from their usual reserve, distinctly call "false witnesses," was probably reckless and inaccurate. And it is just possible that the variation between the reports of the two Evangelists covers not a mere verbal distinction, but a substantial and serious difficulty, of great importance for the conduct of the case.

For at this point we are confronted by one of the most important questions in the whole inquiry, What was the crime for which Jesus was all this time being tried? What was the charge, what the indictment, upon which he stood before the council? Up to this point we have had no intimation on that subject. In modern times that would be an extraordinary state of matters. But we must not judge Jewish law, or indeed early law of any nation, by our modern rules. Hebrew law, as we have seen, gave a peculiarly important position to the witnesses. I believe we shall not fully realize that position unless we remember that, at least in the earlier days of that law, the evidence of the leading witnesses constituted the charge. There was no other charge: no more formal indictment. Until they spoke, and spoke in the public assembly, the prisoner was scarcely an accused man. When they spoke, and the evidence of the two agreed together, it formed the legal charge, libel or indictment, as well as the evidence for its truth. This, to us paradoxical, but really simple and natural origin of a Hebrew criminal process, is nowhere better illustrated than in that ancient *cause celebre* of Naboth the Jezreelite. "They proclaimed a fast, and set Naboth on high among the people. And there came in two men, children of Belial, and sat before him; and the men of Belial witnessed against him, even against Naboth, in the presence of the people, saying, Naboth did blaspheme God and the king. Then they carried him forth out of the city, and stoned him with stones that he died."

The essential points of a Hebrew trial for life are here given with admirable terseness. But in the case of Naboth the false witnesses suborned by the Sidonian queen are represented as using the technical word, of blasphemy. In the trial of Jesus, the only witnesses distinctly spoken to reported a particular utterance of the accused. What crime was this utterance intended by the accusers, or the judges, to infer? There are two distinct meanings which may have been innuendoed. According to one of them, the words "I will destroy this temple that is made with hands, and within three days I will build another made without hands," may have been represented as the voice of one come to attack the existing institutions—to "destroy the law and the prophets." We have a most important commentary on this in the parallel accusation of Stephen a few months later: "We have heard him say, that this Jesus of Nazareth shall destroy this place, and shall change the customs which Moses delivered us." But according to another view, the same reported utterance—especially in the modified form of Matthew, "I am able to destroy the temple of God"—may have been intended as a charge of arrogating superhuman power. So his original auditors felt it. "Forty-and-six years was this temple in building, and wilt thou rear it again in three days?" The two charges, it will be observed, though very distinct, are not inconsistent. May he not have been charged both with attempting to change the national institutions and with pretensions to miraculous power? The difficulty in this supposition is that we have been seeking in these charges for the one crime upon which Jesus was finally condemned. But if we look more narrowly at the supposed difficulty, we may find what we have been seeking.—[Concluded next week.

PERSONAL ITEMS.

Wendell Phillips' recollections of his childhood are said to be very vivid. He is still thinking of the lost (t)arts.

Tennyson and Victor Hugo lickle each other about their poetry. Their love letters are frequent—another Mutual Admiration Society!

Senator Thurman has accepted the invitation to visit the State Fair at Macon, Ga., and will speak there October 18th, if sufficiently recovered from his present illness.

Captain Eads has declined the invitation of Dom Pedro to superintend the river improvements in Brazil, and has recommended a prominent American engineer in his stead.

One guillotine executioner, Roch, called "Monseigneur de Paris," suffices, with his assistants, for all Franco. He gets 8,000 francs a year and 100 francs for each head cut off.

THEODORE TILTON who has just returned from Europe, left his daughters, Alice and Florence, to finish their studies in Germany, the one being devoted to painting and the other to music.

Stanley, the heroic African explorer, is to deliver a hundred lectures in the large provincial towns of England. Past experience shows him to be a much better explorer than lecturer.

Ouray, the Ute Indian Chief in Colorado, cultivates a farm of sixty acres, has a house built and furnished in civilized fashion, drives one of the best teams in the West, and lives in a good style generally.

Captain Henry Allen, of Salem, Mass., has a pear tree 239 years old in his garden. Next to the Endicott pear tree it is probably the oldest in the country. It has borne several bushels of fruit this year.

Alexander Stephens is out of bed and the guest of Robert Toombs of Washington, Ga., so that the newspaper folks have to pigeon-hole, for the two-hundreth time, their obituary notices of the little Georgian statesman.

Mr. Joseph Taylor and his wife, the father and mother of our Minister to Berlin, will celebrate their diamond wedding on the 18th of October at Cedarcroft. Now where's Cedarcroft? The P. O. Guide says nothing about it.

Mr. and Mrs. Robinson of Mountain City, Texas, have lived together eighty-two years. He is 103 and she 102. It is the Browns, Joneses and Robinsons, not forgetting the Smiths, who have given the most praiseworthy lessons to the English-speaking people.

Senator Thos. A. Bayard lives in the country, near Wilmington, in the house where Mrs. Myra Clark, now Mrs. Gen. Gaines, the celebrated litigant, was brought up. Not unlikely she'll lay claim to that when she has secured all New Orleans, St. Louis, Cincinnati, and half-a-dozen other towns.

Mrs. Stillman Alden has just died in Ludlow, Mass., at the age of 82 years. During her married life of sixty-six years she and her husband were not under different roofs for a single night. A model wife that, who could make home so pleasant in the evenings!

Florence, the actor, has a scrap-book to which he is much attached. He says: "This book saved my life once. There was a railway accident out in Ohio. I might have been killed if I had gone on that train. I didn't go. I stayed at home reading this scrap-book." There's a puff gratis!

Some suppose that Cronin, Tilden's purchased Elector from Oregon, has been entirely burnt out by his unfortunate nose; others fancy that he has hired himself to the government as a cheap lighthouse, but all such surmise is wrong, for Mr. Cronin is living the life of a bloated bondholder and a lop-eared pelican, at Astoria, in the Far Northwest.

Dom Pedro, Emperor of Brazil, was a student and friend of the poet Coleridge, and holds his memory in tender recollection. When last in England he visited Coleridge's tomb one morning as early as 9 o'clock. He has lately sent a silver vase, as a tribute of regard, to Mr. Thomas Allsop, the oldest living personal companion of the great master.

Miss Florence Nightingale, who first gained celebrity as a nurse of wounded soldiers during the Crimean war, is now sixty years old, and lives in London almost a prisoner in her room, so ill is she. Once a year she takes her widowed mother to Derbyshire. She wrote lately in a letter to a friend: "Overworked as I am, my health is necessarily bad. Thank God, who still gives me work to do for Him."

Maryland has a sensation. Rear Admiral Worden, hero of the fight between the Monitor and Merrimac, and late Superintendent of the Naval Academy, finds himself acting the part of defendant in a suit for damages for defamation. Professor Bernard Maurice, who wants the $20,000, says that he has been maligned by Admiral Worden. There is a young woman in the case. Particulars to be guessed at.

IN view of the recent death of the Imperial Prince and the failure of the direct line of succession, the Emperor of Japan has adopted Prince Sawe-no-miya, a fine intelligent boy of twelve, eldest son of H. I. H. Azisugawa no-miya, as his son and heir, and presented him with the ceremonial robe at the Imperial Palace, in the presence of the Empress, Empress Dowager and others of the Imperial family.

Victor Emanuel was a man extremely careless in dress. When about to visit Berlin, his chamberlain reminded him that he must have some new clothes. "Order them," said the king. "But your Majesty must give your measure, because they are very elegant at the Court of Berlin." "What a nuisance!" said sturdy royalty. "Count B—— is just my size. Ask him to do me the pleasure to give his measure."

Mr. Spurgeon has changed greatly in the past twenty years, having become broad and thickset. His heavy brown hair, with beard and whiskers surrounding his face, gives him the appearance of an English sea-captain rather than that of one of the most noted clergyman of England. He never had much of a clerical look, and has less now than over. When he comes on the rostrum—for he has no pulpit—he looks more like the sexton arranging the books for the pastor than like the great preacher himself.

Senator Butler of South Carolina, who is traveling with the Presidential party, unconsciously perpetrated a good joke during his visit to Minnesota. On one occasion a person on introduction inquired: "Are you the man who killed so many people in South Carolina?" Mr. Butler, without betraying annoyance, pleasantly replied: "I presume you have killed more men than I have." He was unaware that he had got ahead of his questioner, until a hearty laugh from the by-standers suggested an inquiry as to the cause, when he was informed that the man was a doctor.

Prince Albert Victor, the eldest son of the Prince of Wales, a boy with an erect figure and a heavy face, is to enter a military academy by-and-by. When he is seventeen he will go into the army, and, it is said, is not unlikely to emulate the example of his soldier-like uncle, the Duke of Connaught, and undertake at first the most subordinate duties. Prince George of Wales is to adopt the naval profession. Highly interesting to learn how these dear children are to earn their bread!

Laura Bridgman, who has been before the public for more than forty years, and whom Dr. Howe introduced to general notice by teaching her, though a blind, deaf-mute, to spell and read in a few months, and afterward to write and play skillfully on the piano, is now nearly 50, and has redeemed all the expectations formed of her childhood. She has a good general education, including many advanced studies; she writes well, and has many mental resources. She sews exeellently; is acquainted with domestic duties; communicates freely with her friends, and enjoys life keenly.

The man who, but for revolution, would now be Tycoon of Japan, is a student in Paris, living quietly as M. Tokugawa. He is small, lithe and well-dressed. His income is $200,000 a year, of which he spends a little on himself and sends the remainder to his followers who were ruined by the revolution. Very few of his fellow students know who he is. He will learn all he can at the University of Paris, and will then go to London to continue his studies. Eleven years ago, when the Japanese Embassy went to London, he, then a little boy, headed it, as brother of the Tycoon, and the Prince of Wales went to Dover to welcome him.

Dean Stanley, the celebrated English leader of the "Broad Church" party and Dean of Westminster, now on a visit to this country, stands perfectly still when he preaches, making no gestures, though he speaks impressively. One Sunday after returning from church he asked his wife why people looked so intently at him during the service. She replied: "How could they help it, dear, when one of your gloves was on the top of your head all the time?" It had dropped from his hat. He is a rather magnificent-looking person with a slightly built and stooping figure, neatly cut gray hair and whiskers of the old English style, a face expressively full of pleasant intelligence and dignity, and a voice not powerful, but distinct.

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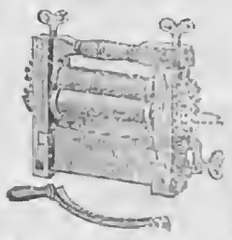

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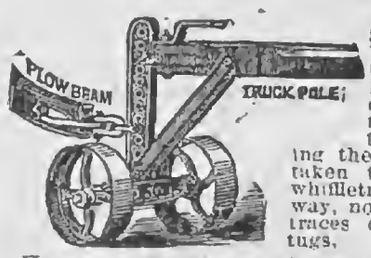

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BAY windows are safe harbors at night for little smacks.

"THE Afghan" is not exactly "all the rage" in England, but it is the cause of a good deal of it.—*N. Y. Mail.*

NOTHING tries the patience of a man more than to be sitting on a sofa in a dark room with a pretty girl, and be compelled to listen to her brother giving the history of a base-ball club.—*Puck.*

A LITTLE girl asked a minister, "Do you think my father will go to heaven?" "Why, yes, my child. Why do you ask?" "Well, because, if he don't have his own way there he won't stay long."

HERE'S the way a New Hampshire exchange tells it: Ex-Governor Miller of Minnesota is delivering a lecture in that State which is entitled "All Men Are Liars." His tickets read, "All Men Are Liars—admit one." [*N. Y. Commercial Advertiser.*

"Do you call that clothes?" said sternly a British customs official to the woman who had sworn that there was nothing in her trunk but clothes for herself and husband; and as he spoke he pointed to six bottles of brandy. "Yes," said she softly, "those are night-caps."

THE French actor who was taking the part of Major-General in a play, slipped and fell the very moment he was supposed to be leading his troops to battle. With ready wit he avoided the ridicule of his audience by exclaiming, "Soldiers, I am mortally wounded, but do not stay to aid me. Pass over my prostrate body to victory."

"Now, then, madame, please look steadily at this place on the wall," said a photographer to an old lady, when he had put her in position and the plate in the camera. The old lady looked hard at the spot indicated, then got up and walked across the floor and minutely inspected it, and then, turning to the photographer, gently remarked, "I don't see anything there."

LITTLE Gracie was dressed one day in the whitest of dresses, when, being left alone, she began to investigate a coal hod, getting inside and as black as possible. When her mother came back, she, seeing her look of amazement, dropped on her knees, put her little chubby black hands together before her face and said, "O, Lord, give us patience"—and he did. At least Gracie got off easily that time.

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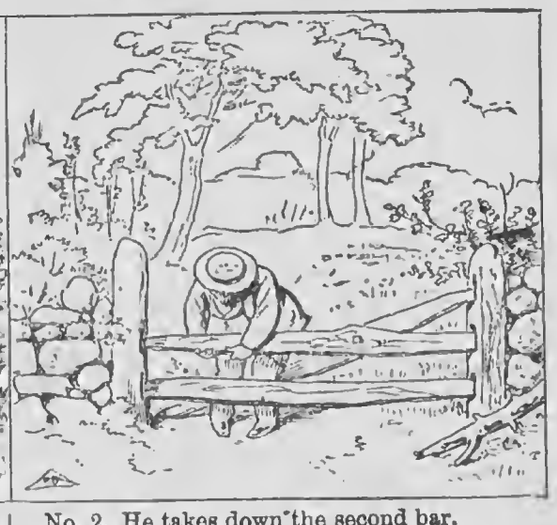
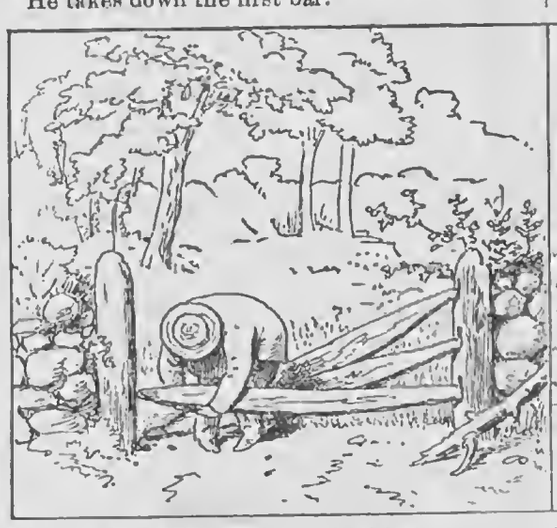
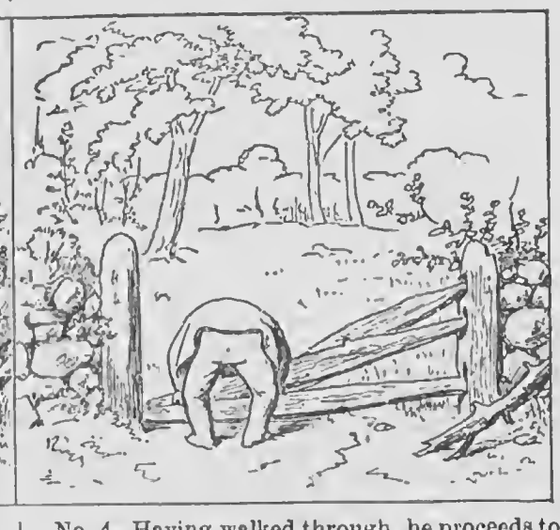


No. 2. He takes down the second bar.



No. 3. He takes down the third bar.



No. 4 Having walked through, he proceeds to put up the bars again as any good neighbor would do. He puts up number three.

No. 5. He puts up number two.

No. 6. And just as he has put up number three, a sudden gust of wind carries off his hat.

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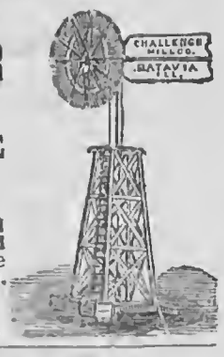

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 42.
WHOLE No. 1499.

NEW YORK CITY, OCT. 19, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

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Farm Topics.

AN EASY METHOD OF IMPROVING THE VALUE OF SOME FARMS.

Farm life is prosaic. Yes, in spite of all graceful allusions to Arcadia and its employments, made by poets of bucolic fancies, this is a fact. The women of the house have their bit of color in a few flowers about the porch or in the garden, but life is supposed to be too practical and money too hard to get, to permit much expenditure on mere delights of the eye. Of course, notable exceptions to this rule exist, but it remains true, nevertheless, that a farmer will buy books of all sorts, on poetry and art even, before he will do landscape gardening of any sort beyond planting street trees. Nor is it to be wondered at; for, in the eyes of the inexperienced, the outlay must bear but a poor relation to the returns. Let us see how far this is true.

The graceful grouping of woods and water, in the accompanying picture, has suggested to us one way, at least, in which the farmer may profitably indulge in landscape gardening. In the picture we present a beautiful feature of a country seat in England, reproduced from the London Gardeners' Chronicle; but did it ever occur to any one that a similar effect might be produced with moderate expense, on very many farms throughout America. Given a low spot and a spring in an ordinary pasture lot, a small dam, and a few trees and shrubs, easily purchased or procured from the woods, and in a few years the scene of the picture will be ours. No digging or grading would, as a general thing, be necessary, for all inequalities disappear beneath the water, and above on the shores, the more irregular the surface, the more picturesque the appearance of the planting. As in the picture, reeds, yuccas and certain appropriate grasses may be naturally and effectively disposed along the margin and, here and there, flowering shrubs may be clustered on some prominent curve of the shore. The peculiarity of such plantations is that they increase the apparent size of the pond or lake. The eye wanders from one pleasing object to another, and thus fails to realize the smallness of the sheet of water they surround. Ordinarily the monotony of an expanse of water creates a false impression of its area, but well managed planting on its shores will keep opening up to the eye little bays and unexpected reaches of water, suggestive of increased size.

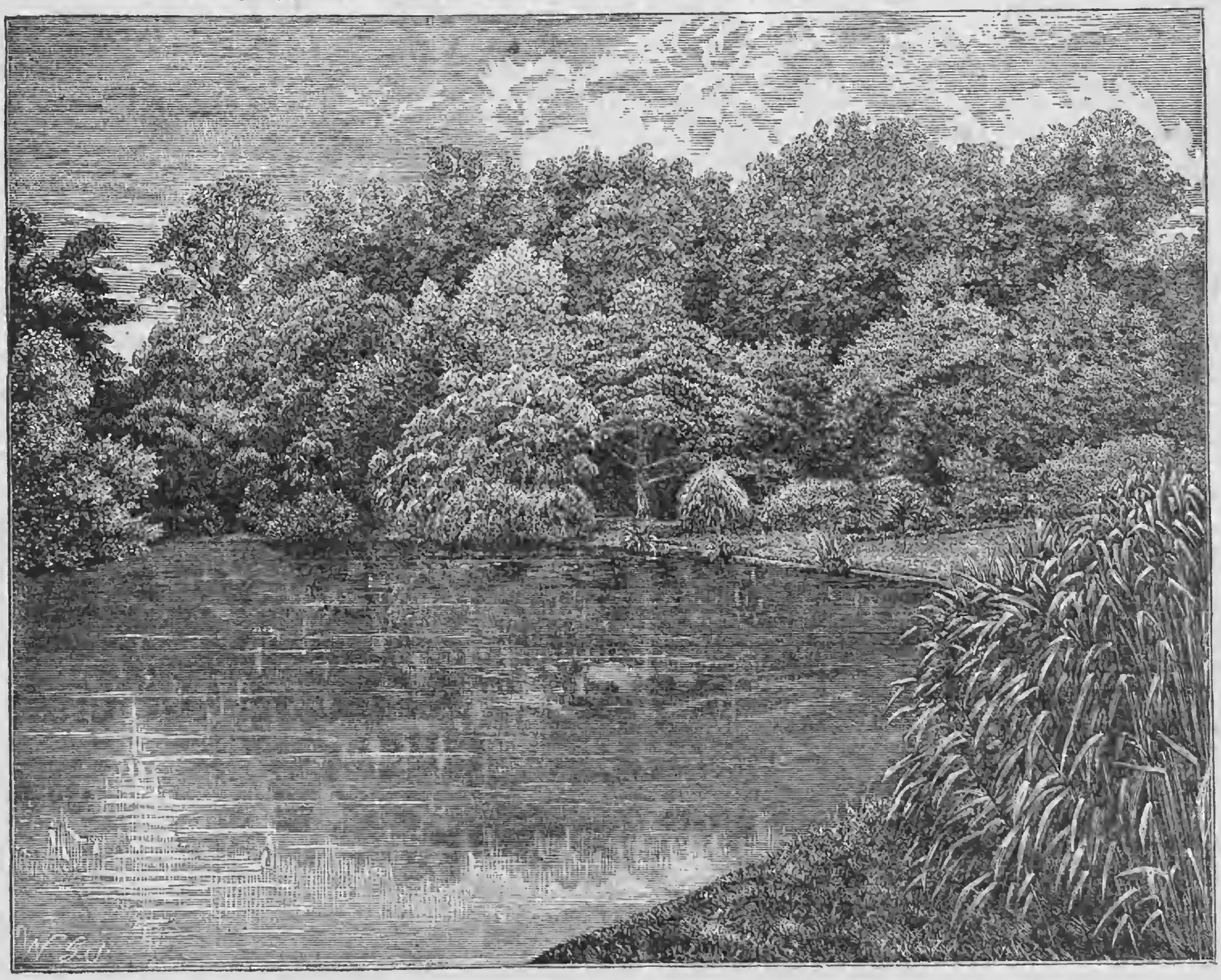
It is customary to plant Willows on the edge of streams or ponds, but though they are picturesque and appropriate, the tree itself is not long-lived, and should therefore be used sparingly. In our picture we find a mass of foliage clustered entirely on one side of the pond which may occupy two acres in extent. This arrangement is well advised, for it leaves plenty of shore open for effect, and at the same time gives solid masses of foliage for shade, etc. As a rule, plenty of foliage should also be clustered about both sides of the dam. The most picturesque effect can be produced at this point, and here, therefore, we may use the choicest trees. A Weeping Beech may droop over the water, relieved by a dark-purple Beech in the immediate neighborhood. Here also may be planted the Salix laurifolia (or pentandra), with shining green leaves and yellow twigs. This Willow, as we have said, is too little known; for it not only lasts long and does well in low places, but is equally thrifty on light, sandy soils. The value of its foliage, as a contrast with that of other trees, cannot be overestimated. Deciduous trees thrive better than evergreens in low places, and in the picture we have before us, it will be seen that this fact is kept in view.

Space will not permit us to study properly the special trees and shrubs that should make up the grouping about a pond, but no better example can be followed than may be found any day on some natural pool in a woodland glade. We find here and there, on curves of shore, shrubs and low-growing trees, backed up by larger growths of Liquidambar, Scarlet Maple, Pepperidge, and sundry Oaks and Dogwoods. Such a plantation will make a truly natural bit of scenery in the midst of pasture land, and here also cattle may drink or repose themselves in the grateful shade. Wild flowers may be planted under the trees; that is, if they do not come spontaneously, and thus with flowers, and the tints of summer and fall leaves, the picture will be always pleasing. Nor should climbing vines be forgotten, to give the finishing touch to the natural effect of the scene. A little care of the trees and the margins of the pond will suffice to keep the place in good shape.

In return for this outlay and care, the farmer has in his field a beautiful object which is more pleasing in a dozen ways than the unattractive, muddy puddle that originally occupied the spot. Moreover, ducks and geese can disport themselves in such bodies of water, and successful attempts be made to breed fish in their secluded recesses. The entire cost of the construction of such a lakelet—trees, planting and all—will scarcely amount to two hundred dollars, if proper taste and ingenuity be exerted; and if it cost five hundred or a thousand dollars, who would begrudge the expenditure? If we would only develop the enjoyable features of farm life, no one could term it dull or prosaic.

VALUE OF A SPRING.

We know of a farm in which a single spring, which for many years seemed only to make a [illegible]dy, unhealthy area of half an acre, was converted into a body of pure water at an expense of less than $250. The banks are now planted with various trees and the improvement is thought by unprejudiced persons to add several thousands of dollars to the value of the farm.



FARM LAKES.

NOTES FROM THE RURAL GROUNDS.

MOISTURE-RETAINING POWER OF SOILS.

Facts which seem to Controvert the long-cherished Theories of Agricultural Philosophers.

"Stir the Soil"—"Scarify it"—"Loosen it"—"Pulverize it"—"The capillary tubes are thus disconnected, and the moisture of the soil beneath the stirred surface, is preserved"—"It acts as a mulch"—"It is the farmer's best method of protecting his crops during seasons of drought," etc., etc.

Such teachings on the part of the agricultural press have been universal, and the advice has been deemed of such importance that it could not be too often or too firmly impressed upon the minds of all whom it was supposed to concern.

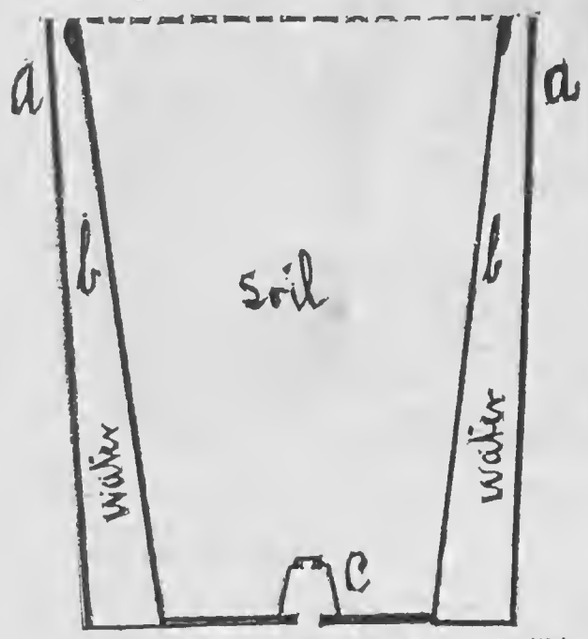
From experiments which we have been conducting for the past three years, we have been forced to the conclusion that this advice is entirely erroneous—wrong in theory—wrong in practice. Stirring the soil *does not* disconnect the capillary tubes—does *not* act as a mulch; does not preserve the moisture either in seasons of droughts or in any other seasons, and that consequently, in so far as *this* principle is concerned, the incalculable amount of labor performed to this end, has not only been performed to no purpose, but to the accomplishment of results precisely the reverse of those intended.

Three years ago we made our first experiments in this matter. But they were made to ascertain the different capillary powers of soils of different degrees of compactness—not with a view to test whether there was or was not the supposed advantage to be derived from loosening—pulverizing the soil. That was taken for granted. No suspicion of its entire soundness was entertained. An inkling of what we now believe to be the truth was, however, first obtained at that time, and it has been upon this clew that, as occasion has permitted, we have since endeavored to trace out the conclusions to which it might legitimately lead.

Supposing that our main conclusion be true, we have to regret that we have not as yet been able to work out the corollaries derivable therefrom. But another year at least, as the writer is situated, would be required for this purpose; and, as we have already stated the upshot of our main conclusion to a number of friends,* we have thought it advis-

* We may mention Professor Beal, of the Mich. Ag. College; Mr. Libby, of the American Agriculturist, and Mr. Lyons, of the N. Y. Atlas.

able to publish all that we have thus far ascertained, so that other and wiser experimenters may give the subject the consideration it may be thought to deserve.



The diagram represents an earthen pot within a wooden pail, both of which are cut in two, perpendicularly;—*a*, *a*, are the sides of the pail, which are nearly perpendicular;—*b*, *b*, the space between the pail and the pot;—*c* is a thumb-pot which covers the drain-hole, while the drain-hole of the thumb-pot is covered by a small piece of crock, as shown.

Three, sometimes four, of these contrivances were used in the experiments. It answers the present purpose, however, to speak of but three. A sufficient quantity of *loam* (we mean a soil composed of about half clay and half sand,) was sifted through a fine sieve, and then thoroughly dried in the oven. Pot No. 1, was filled with this loam, and packed as hard as it well could be packed with the hand, up to one-and-a-half inch of the top of the pot. This space was filled with the same earth, as loosely as possible; that is, it was simply sifted in, and the surface smoothed off to a level with the rim of the pot.

Pot No. 2 was filled and the loam pressed down as hard as possible with the hand, up to the top and smoothed off as in No. 1.

Pot No. 3 was filled in as loosely as possible from the bottom to the top, a very *slight* pressure being made, as a certain degree of compactness was found necessary to prevent the loam from separating or falling, when saturated with water. The pots therefore are filled as follows:

No. 1. Loam hard-packed up to within 1½ inch of surface; the loam then sifted in, and made level with the rim of the pot.

No. 2. Loam pressed down as hard as possible, and leveled as in No. 1.

No. 3. Loam merely sifted in the pot and leveled as in Nos. 1 and 2.

We may now consider that pot No. 1 represents a compact loam-soil, with the surface stirred, scarified or pulverized; pot No. 2, a compact loam-soil, without any surface pulverization; and pot No. 3, a loose, well-pulverized loam-soil. Now according to the teachings of the agricultural press, and, indeed, of all agricultural writers, so far as we are aware, No. 3, or the loose well-worked soil, should *longest* preserve the moisture. No. 1, on account of the surface pulverization, should retain moisture longer than No. 2, and No. 2 should, of the three, part with its moisture first.

As our experiments, with variations depending upon the heat of the sun, the moisture and movement of the atmosphere, have all pointed to the same conclusion, we will at this time detail only our last experiment. It is as follows: September 29, 10.30 o'clock A. M., the buckets were so far filled with water as that it should overflow the sides of the buckets upon the introduction of the pots of loam. This insured the same quantity of water in each bucket. At 12 o'clock noon, the water in No. 3 (loose loam) wet the surface. Time 1 hour 30 minutes. At 12.45 the water in No. 2 (compact) had just begun to wet the surface. Time 2 hours 15 minutes. At 2 30 the surface of No. 1 was as wet as either of the others. Time (it may have been less), 4 hours.

We have now to observe in which buckets the water soonest disappeared—that is we are to observe the relative power of capillary attraction and the rapidity of surface evaporation in each of the three pots of loam. Oct. 5—6 o'clock A. M. Bucket No. 3, (loose) was dry. Time 6 days, 7 hours, 30 minutes. Oct. 8—1 o'clock, bucket No. 1, (compact, surface pulverized) was dry. Time, 9 days, 2 hours, 30 minutes. Oct. 9—7 o'clock P. M. bucket No. 2 (compact) was dry. Time, 10 days, 8 hours, 30 minutes.

To state it in another way—the same amount of water carried to the surface by capillary attraction, was evaporated from the surface of a loose (mellow) soil in 6 days, 7 hours and 30 minutes; from the surface of a compact soil which had been pulverized an inch and a half in depth, in 9 days, 2 hours and 30 minutes; from the surface of a compact soil in 10 days, 8 hours and 30 minutes.

There is no question as to the fact that with a given rain-fall, more rain will pass down through the loose than through the compact soil because there is less opposition to gravity. But according to our experiments, more of it will return by capillary attraction and more of it, consequently will be evaporated from the surface unless the sub-soil is sand or gravel in which case the amount returning would largely depend upon the depth of the stratum of sand or gravel and the amount of rain-fall. There is no doubt either that hard, clayey soils are better conductors of heat than sandy loams for the reason that the latter imprison more air about their particles. While, therefore, the heavy soil would become heated sooner and cool sooner—the loose soil would require a longer time to heat and a longer time to cool. Again we do not take into consideration at all the amount of moisture a loose soil may take from the air more than the compact soil. These are different questions and do not invalidate the point we desire to make, viz., that stirring, pulverizing, scarifying, working, breaking up the surface soil instead of retarding the evaporation of moisture in the soil beneath, greatly facilitate it. If our reasoning or experiments are defective and our conclusion invalid, it will be easy for those who have studied such questions more than we have, to make their defects apparent. Even in that case, we shall take the credit, by a series of experiments in which some little patience was required, of having *endeavored* to throw new light upon "the most healthful, most useful and most noble employment of man."

River Edge, Bergen Co., N. J.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

The Rural, in a recent article, says butter, to be first-class, must be made and kept at a temperature of 60°. Not one cellar in a hundred is as cool as this, but, on the contrary, the vast majority of them will show a temperature as high as 68 to 70°. This is too warm for cream to rise good or for butter to keep well. The worst difficulty is in the making at such a high temperature,—as the cream is liable to get rancid while in the pans waiting for it to rise thick enough to skim, and while standing before being churned. If the butter is not made rancid by the putrid condition of the cream, it can be kept sweet by submerging it in brine, which will lower the temperature several degrees. Most cellars can be made from ten to fifteen degrees cooler than the air outside by shutting them up *tight*, and allowing no hot air to get in.

Our cellar is made fifteen degrees cooler by being kept closed day and night, and the thermometer stands at 64° to 66°, rising to 66° in the middle of the day, when it will mark upwards of 80° in the shade out of doors. First-class butter can be made at a temperature of 66°, provided the milk is set in shallow vessels (we strain the pans half full), and then skimmed *just as soon as the cream rises*, and the cream churned before putrefaction begins. In warm weather cream should not stand more than two days; that is, it should be churned the second day after skimming. At a temperature of 60°, the cream will keep better, and so will the butter, and this temperature is most desirable, but how are the majority of farmers to get it? The patent coolers with ice will produce it, or a lower degree if required, but the great majority cannot afford them, so that they must get as near to 60° as possible by shutting out the heat and by being prompt and vigilant in the care of the milk and cream, remembering that a putrescent taint in the cream will poison—yes, that is the word—the whole batch of butter, and in a short time it will become rancid, and must be sold at a reduced rate.

We do not feed the cows any pumpkins, preferring to give them to the hogs. They are a fine feed to give the fattening pigs a start, and excellent to put the store hogs in condition for winter. Boiled and mixed with meal they are nutritious and fattening, and help to keep up the appetite and the stomach in a healthy condition. We draw the pumpkins and throw them in heaps alongside the field where the pigs run, and twice a day crack them into pieces and scatter them around on the sward. We select a new place for every load, and this makes it cleaner for the pigs and prevents the grass from being trodden out on the feeding spots. When cows are fed pumpkins it makes them uneasy, and they will stop feeding in the middle of the afternoon, and be waiting and looking for them, and thus lose as much as they gain. The quieter cows are kept in the field the better; hence, it is a good idea to give them extra messes in the morning and then they will feed in the pasture until night.

We castrated four large pigs during the hottest weather, and they did well. They were not troubled with flies or worms, and the wounds healed in a very short time. We applied gas coal tar, and this is the reason why the pigs, although operated upon at a time of the year forbidden by the "signs" and the experience of "old times," did just as well as if the work had been done in cool weather. Dr. Stuart had a horse badly cut in the knee, making a deep and ragged wound. He bound it with gas coal tar, and left home, being gone a fortnight. When he returned the sore was healed, and this was all the treatment it received. We state these facts to convince farmers what a simple and effective remedy they can use for similar cases.

Farmers are still sowing wheat, and double the area will be put in this year as compared to many years before. The soil by rest seems to have replenished itself in the constituents requisite for producing wheat, and good crops are now had by those who have sown it on soils of different kinds, without heavy extra manuring. For twenty-five years past this has not been the case.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

THE BEST KIND OF FRUIT-PACKING.

It is about time apples were gathered, and much care should be exercised in doing this. Well graded, carefully picked fruit will always find a ready market at remunerative prices. The sale of a fine crop is often materially injured by a lack of care in assorting. If apples are graded in two or three classes, they will sell for better prices and much more readily than when all but the cider apples are packed together. But, to say nothing about the pecuniary advantage, the satisfaction of having fruit that is first-class to offer in the market is ample compensation for the time and labor employed in grading it.

Another thought—each variety should be kept separate. If a person buys a barrel of apples labeled Belle Fleur, he is not wholly satisfied if upon opening the barrel he finds, on top, a half-bushel of the variety he supposed he was buying, and the balance a varied assortment of Russets, Greenings and a dozen other varieties, all inferior fruits, and among the rest windfalls, that should have been fed to the hogs long before. I am ashamed to say it, yet there are farmers of my acquaintance who pack apples in just this manner. They do not realize the injustice done in this way to purchasers, nor the damage done to themselves. To label a package of fruit with the name of some standard variety, and then to place within it a nondescript collection of fruit, inferior in every way, is certainly a fraud, and no insignificant one either; and yet men do this who would stand aghast or indignant at the insinuation that they were dishonest. A producer who deals fairly with the consumer, who gives him the equivalent of his money, will soon become known as an honest dealer and will experience no difficulty in disposing of his surplus products at first-rate prices.

BENEFITS OF SEEDING WITH CLOVER.

It pays to seed with clover after every crop of winter grain. The ground from which the wheat was cut this season has afforded an abundance of pasture for two months, and this when no seed was applied save that in the manure with which the field was covered last fall. Were clean seed sown, the pasturage would more than pay the extra expense of seeding, not to mention the benefit the soil would derive from the penetrating and fertilizing qualities of the roots. Clover roots run deeply, and serve to conduct the ammonia from the air to the soil, thus enriching it to no inconsiderable extent. It is pleasing to see how generally clover is coming into favor among agriculturists. They see in it a sure and economical method of fertilizing their impoverished land, which has been cropped without mercy and then given a death-blow by seeding it with Timothy. Last year, with clover seed selling at ten or twelve dollars per bushel, farmers of limited means considered it too expensive; now, when it can be bought for four or five dollars a bushel, they are more willing to recognize its merits. Still, I contend that at the higher prices it can be sown profitably, even on ground where a crop is to be raised the succeeding season.

THE BEST SOIL FOR BUCKWHEAT.

While cutting buckwheat I noticed that the grain was much better on a narrow strip plowed early last spring, than on soil of the same quality which remained unplowed until just before seeding time. Three different plots were sown, one consisting of stubble after oats; another, a piece of new land from which the bushes had but recently been cut; and the third, an old meadow sod. From the results obtained, I am led to believe that sod ground is most congenial to the satisfactory growth of buckwheat, and that the sooner in spring the sod is turned, the better for the crop. Even a second plowing would, in my mind, prove advisable. Many farmers abuse this crop more than any other. They only pretend to cultivate it, but a little extra exertion on their parts would give them larger returns than could be obtained from most grains, everything considered.

PRESERVING POTATOES.

Many of my neighbors are leaving their potatoes in the ground, claiming that they will rot just as badly if dug and housed as though left, and that by leaving them undug until late, they avoid handling the decayed tubers. Now, I think, that when potatoes are rotting badly, as they are this season, they should be removed from the ground as soon as ripe and stored in some cool, dry place until cold weather. I have tried both plans, and am satisfied that the tubers are much more liable to decay when left in the ground in contact with those diseased. Assort carefully when they are gathered, and again before storing in a cellar, and but few decayed tubers will have to be carried out next spring.

MAKING TEA WITH COLD WATER.

Did any one of the Rural's many readers ever try making tea with cold water? If you never have, just do so the next warm day, when a cool refreshing beverage is desired. Place the tea in a pitcher in the morning, with just enough cold water to cover it. At dinner-time, fill the pitcher with cold water from the well, and you will have the best cup of tea you ever drank—that is for warm weather. The finer qualities of tea are much more fully retained than when steeped upon the fire. And who wishes a cup of scalding tea on coming in straight from the hot harvest field and the scorching glare of our August sun?

BLANKETING HORSES.

A pair of horse-blankets should be found on the premises of every man who owns a horse. It is a barbarous practice to allow dumb animals to stand uncovered in the streets, chilled to the marrow by the piercing winds of fall and winter.

NOTES FROM RURAL FARM.

Our wheat, both of the experimental plots and the main field, is well up. The shower of last night was much needed. The hot, moist weather which was believed to have shriveled the spring wheat, also harmed our winter wheat and oats. The yield of Clawson, instead of rather more than 25 bushels to the acre, has fallen somewhat short of that amount.

It is "a bad sign" that apple and pear trees are thus late pushing buds. We see fresh shoots of from one inch to one foot in length, while some of the trees are blossoming freely. The pushing buds and young shoots will of course be killed by the winter, while the fruit buds which open now to no purpose, might have formed fruit next spring.

Queens Co., L. I., Oct. 6.

Field Crops.

RYE—ITS CULTURE, ETC.

W. H. WHITE.

GROWTH OF CULTURE AND USE OF RYE.

At the present day, and for many years past, rye has been more generally grown in some portions of New England, than wheat. When wheat was a more sure crop, and when the inhabitants were less dense, there was less inducement than now to grow rye for its flour as a partial substitute for wheat; but in those days it gradually came into favor, in some localities, as a merchantable crop, to be transformed into "liquid fire," or for some other less objectionable use. Time passed on; wheat began to decline in ageable product; insect enemies and diseases increased, and as necessity or economy required, rye flour was introduced into domestic use for the more general purpose of making common bread; also, for mixing with corn-meal for brown bread, etc., some using it for gingerbread and the coarser sort of pastry. The common objection to its use in bread lies in its color being darker than that of fine wheat flour. It certainly is no less sweet than much superfine wheat flour, and I have grown it so that when floured and made into bread, a loaf made of it and another made of wheat flour could not by the color be distinguished one from the other. Here is an opportunity for the enterprising farmer to largely benefit his fellows, and also distinguish his own name, by improving and introducing a better quality of rye than is generally found in culture. That the grain is susceptible of improvement is a proved fact from the variations found in culture, some varieties being much superior to others. Winter rye is our most hardy and healthy winter grain, and can be successfully grown in all the States and Territories of our Union. With a little care and attention in culture, etc., it is capable of being decidedly improved in quality and production.

SUITABLE SOILS AND METHOD OF SOWING.

Rye does not require soil where clay abounds, or one best adapted to wheat, but one which is of a sandy or gravelly nature. The soil need not be excessively rich, yet should be in good heart from a mixture of mineral and decayed organic matter, producing a medium growth of straw, instead of an excessive one. Dry, high and airy situations are adapted for growing the best quality of rye. Sandy fields and "old plain" lands usually produce a fine quality, although the yield per acre is small. Such fields should be well and thoroughly plowed in August, lie some days, be then thoroughly harrowed, to destroy weeds, etc., have a dressing of four to six cords of well rotted compost, or its equivalent of good commercial fertilizer adapted to the purpose, spread evenly and worked into the surface with a cultivator or harrow. The seed should be evenly sown, broadcast or with a drill, any time during September. Although it

may be sown and do well any time before the ground freezes up for winter, yet the plant tillers better and yields more if the seed is sown earlier. Previous to September 20 is the better time here in New England. The seed should be well and evenly covered.

The quantity of seed per acre required for sowing, depends largely on the state of culture of the soil—the better the culture, etc., the less seed is required—the average quantity being one bushel per acre. On soil in fair heart, tilth and culture, that amount will give better satisfaction than any larger quantity.

If too much fall growth is likely to be made, milch cows, calves or light stock may be turned on and partially feed it off, and no injury will be done to the grain, while a gain is made in the stock and their products.

SELECTING SEED.

The seed should be pure, clean and of the very best quality of "White Rye." Unless perfectly clean and even, it should be screened through a sieve which will allow small and imperfect seeds to pass, or else be thrown, against the wind, across the barn floor, to allow the poorer seed to fall short while only that which reaches farthest should be used for seeding. In growing seed, it will pay to save the earliest, ripest and most perfect ears, tie all these in bundles, and keep them by themselves, and then only "top thrash," the bundles by hand flail; then screen as above. Rye which is one year old is preferable for seed to that grown the same year the seed is used. The rye crop, like any other farm product, is not entirely free from accidents, yet it is as little or even less liable to mishaps than any other grain. Rust sometimes affects the straw, causing shrinkage of grain; sometimes, yet seldom, is there blight in the ear; generally there is little of either, nor has it any insect enemies like these that are so injurious to the wheat crop.

PRODUCT PER ACRE.

The yield per acre varies with the soil, culture, etc., from eight or ten bushels on sandy fields with no fertilizers or culture, to forty and upwards, on better soil fertilized and well cultivated. But the grain is not the only product; the straw usually commands as high a price in the market as the best hay of the farm. Large demands are made for it by paper manufacturers, harness and horse-collar makers; livery stable men pay more for it, and prefer it above all other kinds of straw, as it wears much better. From three-fourths of a ton to two tons of straw are produced from an acre. Taking the above as a starting point, any one can calculate the cost of production as also the gross products and profits from rye culture.

ALFALFA—ON THE EAST OF THE ROCKY MOUNTAINS.

N. W. BLISS.

Some four years ago, I determined to look up and introduce here some kind of grass that would stand drought. For the five previous years this region had experienced an almost total loss of, or great annual damage to, all forage crops, by reason of drought. I therefore "read up" on grass everything I could find in my library, and by correspondence "posted" myself as well as I could. I came to the conclusion that, all things considered, the French Lucern, introduced into California from Chili, and known as Chili Clover, or better, by its single Spanish name of "Alfalfa," held out the best promise of being the grass I desired. I therefore ordered 100 lbs. of seed from a dealer in California. It cost then (1874) 19 cents per pound in gold. The premium, exchange and freight made it cost here about 30 cents per pound in currency. The St. Louis seed stores were, at that time, sending out small quantities of the seed by mail—prepaid—at about 75 cents per pound.

I sowed the seed in April, 1875—sowing eight pounds per acre on eight acres, and about twelve pounds per acre on three acres—I should have sown at least twenty pounds per acre. During the summer following, the eight-acre field was flooded by the creek, and Smart-weed grew very thick and high, and I had to mow it and haul it off. I feared the Alfalfa, which is quite delicate during the first year, was dead, as the slim tops shaded by the Smart-weed, were black and dead, but a close examination showed fresh, green leaves of Alfalfa close to the ground, so I was satisfied all hope of it was not yet lost.

I cut no crop, save Smart-weed, that season. The next year, 1876, I cut two good crops of Alfalfa hay, and a third crop was ready for cutting late in the season, when severe freezing took place. The third season, 1877, I cut two crops on the eight-acre piece and three crops on the three acres. I then turned under the eight-acre piece and sowed winter wheat, hoping thereby to thicken up the grass and to test, by actual experiment, whether it would grow again from the roots. A friend in California wrote that I would see which I had the most of, wheat or Alfalfa, when I came to harvest the wheat; and I did—the crops of both were about equal; the Alfalfa and wheat each being about six feet high. Cutting and thrashing were rendered exceedingly difficult by the tangled nature of the mass, as was plowing the fall before, on account of the tough roots. Some thirty-five days after cutting wheat, I went into that field with a mower and cut a good crop of grass. Of course, I had to cut the wheat-stubble with that crop. About forty days afterwards, I cut another excellent crop of Alfalfa hay. I consider that field as having done very fairly this year, in thus yielding a crop of wheat and two crops of hay.

The three-acre piece I cut first during the first week in May; again, the first week in June; a third time, the third week in July; and a fourth time, the first week in September. The weather was so cool at date of cutting the first and fourth crops, that extra time was required for curing the hay. For soiling, it could have been cut nearly a month sooner, and the cutting repeated every two weeks up to date.

When the Alfalfa had been down about ten months, I took advantage of the ground being soft and loose, owing to the frost coming out, and pulled up a root over two feet long. This fall, wishing to send a root to the St. Louis Fair, I sank a shaft around one to the depth of thirty-two inches, into very hard subsoil, and could not then pull the root up, and, a shower just then occurring, I cut the root off at that point. I have thoroughly accomplished my object, and obtained a forage plant that will not only stand drought, but which, on our bottoms, pays no attention whatever to an abundance of rain or the want of it. All this, however, would be of little use were the product—as some say Prickly Comfrey is—unpalatable to stock after one gets it. On the contrary, Alfalfa is greedily sought and eaten by stock of all kinds, the hogs even fighting away cattle to eat the dry hay made of it. The man who feeds the dozen mules which haul heavy loads over the rough roads of this region every day in the year, says that when the first Alfalfa is fed in the early summer or late spring, the mules do not seem to care for their grain.

I feel confident, from my experience with it, that this grass, by reason of its rapid growth, its independence of droughts, its many crops of large yield, its abundance of saccharine matter, and its adaptability to soiling, grazing and cutting for hay, is the most important recent addition to our forage plants. I say recent, because it is only within a few years that its value, or even name, has been generally known to the farmers of this country.

In Germany it is used as a soiling crop for swine, being mown and run through a cutting-box, sprinkled with meal, bran, etc., and fed to hogs, which fatten rapidly upon it. It must certainly prove the best soiling plant for dairies. Sowing it in the spring, so that it will not have third leaf till danger of heavy frosts is over, it will, I doubt not, flourish in any of our Northern States. I have heard of a field of it in some part of New York State, said to have been sown fifty years ago. Its roots will subsoil any kind of ground and open it up, aerate and drain it. I think no farmer should be without a field of Alfalfa.

Washington Co., Mo.

TOBACCO.

No crop which a farmer can put upon his land is more exhausting than tobacco. It takes all the virtue of the best soils to supply its peculiar nature and the large proportion of mineral elements and nitrogenous matter in its stalk and leaves. The following table will show the inorganic elements in 1000 lbs of the stem and leaf:

Phosphoric Acid	8.60
Sulphuric Acid	9.30
Lime	88.80
Magnesia	25.00
Potash	73.70
Silica	23.00
Total	228.40 lbs.

making nearly twenty-three per cent. To supply this is absolutely necessary for those who wish to raise good tobacco, and there is no profit in any but good. Other crops will not follow in rotation, as they will follow almost any other crop; for wheat would also require a large supply of phosphoric acid, lime, potash and silica. Indian corn also requires these ingredients in large supply, and so do rye, barley, buckwheat and oats as well as potatoes and all root crops. Hence, to raise tobacco, the crop may as well be taken from the same ground each year, and the grower must see that this amount of manure is annually returned in some form; he must return, besides nitrogen in nitrates or ammonia, at least 10 lbs of phosphoric acid, 100 lbs. of lime, 25 lbs of smagnesia, 75 lbs. of silica for each 1000 lbs. of tobacco he wishes to raise. Ground cannot well be too rich for this crop, but the manure must be of the character to return the same ingredients which the crop has taken away, and 1000 lbs per acre is a good yield.

The tobacco crop is, nevertheless, a profitable crop to raise, where the climate will allow it to be planted early enough, so as to obtain its full growth before frost sets in. The seed is sown very thickly in protected beds in March and transplanted as early as practicable in April and May, in rows two or three feet apart so as to allow of cultivating by horse plow one way. The ground must be fertile, and cultivation must be thorough to obtain good results. The plant grows from three to six feet high, and the flower-stem is topped off at half its natural hight to throw all the strength of the plant into from eight to twelve of its lower leaves which are the most valuable. Any broken stems or injured leaves are removed, as are all lateral shoots, and the closest attention must be given to the destruction of insects, the tobacco worm especially. In August or September the stalk is cut close to the ground and cured—sometimes by hanging upon poles, sometimes by first throwing into heaps to sweat. The leaves are then stripped and dried for packing.

The curing is an important operation and much depends upon this being successfully done. Accordingly artificial heat is necessary when the weather is cold and wet. As fancy runs to light or dark wrappers, the effort of the grower is to supply that particular kind. A few years since light wrappers were the rage, now public taste has turned to dark, and beside the natural dark leaf many processes of coloring have been introduced. The wrapper leaves are the most valuable part of the crops, but with the introduction of fine-cut tobacco and scrap cigars, everything is used in their manufacture.

When the crop is cured, it is packed in hogsheads, bales and boxes for shipment. The hogsheads range from 600 pounds, in Maryland, up to 1,500 pounds in Ohio. Three things are indispensable in growing tobacco: a rich soil, regularly supplied with ample manure; thorough cultivation, and great care in properly curing it. Oftentimes the crop in the same locality will vary one-half in value from neglecting these requirements.

S. B. B.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

THE CONCAVE-LEAVED ASH—FRAXINUS CUNCAVÆFOLIA.

An old saying has dubbed the Ash, "The fool of the forest." Why I cannot say. There are doubtless weak points appertaining to Ashes as well as to other trees, diseases that attack them and peculiarities that mar their appearance. It must be acknowledged, however, that prejudice does exist in the case of the Ash, and possibly not always without justice. But there are Ashes and Ashes. They have certainly diverse colors, forms and habits to a degree realized by few, and are frequently very ornamental and desirable. The borer is accused of making occasional and deadly attacks on Ashes, but many kinds are generally healthy, *vide* fine specimens on lawns all over the country.

The concave-leaved Ash is one of these very curious Ashes that add so much variety to collections of lawn trees. The general character of the leaf is a rich, deep green, with curious outlines, but a young growth put forth from time to time, during summer and even autumn, constitutes its great peculiarity and charm. This young growth begins at the very tip to present a delicate white color flushed with pink, which changes farther down into white, then into white mottled or flecked with green, and finally comes the natural green itself. At a distance, these curious tufts of white foliage are very striking and picturesque, especially in fall, when other foliage is dull and yellow.

THE CUT-LEAVED SUMACH—RHUS GLABRA LACINIATA.

I have actually seen people select this Sumach in preference to the Hydrangea paniculata grandiflora. It showed great want of taste, I know, but then what can be said to convert such misguided persons! There are no strict canons of taste relating to plants, by which these persons can be convinced of their error, and consequently they will select what pleases them. Moreover, what can we say to unenlightened expressions indicating contempt for the coarseness of the great-flowered Hydrangea, and its unsightly leaves? Certainly no answer need be given seriously to the person who laments that he sees relatively so many Hydrangeas everywhere he goes, and wishes for a larger variety of old and new flowering shrubs. If a plant is good, why not use it everywhere singly and in masses, over and over again? Can we tire of a good thing? Does anyone regret the almost universal use of the Coleus and Centauria? Unfortunately we notice that the Rural is also a little hard on the Hydrangea paniculata grandiflora. However, be that as it may, people who admire exceedingly this cut-leaved Sumach, credit it with beautiful green leaves, like very coarse lace, and with a delicate young growth in June, unsurpassed in the way of fine dissections. In the fall, when they meet it in the somewhat obscure positions it often occupies, they are very apt to become enthusiastic over its rich colors, and also over the red seed-vessels erect on the stem in compact clusters. I know that the cut-leaved Sumach is difficult to propagate, and choice, but is it not a popular favorite? and to undertake to condemn popular taste, even on the score of a lack of general knowledge and ability to weigh the merits of various plants, is a responsibility I respectfully decline.

JAPANESE MAPLES, IN AUTUMN.

Among the notable qualities of Japanese Maples, is the beautiful fall coloring they present in certain varieties. An impression seems to exist that their rich colors, to do them credit, should be at their brightest throughout the summer. We see a highly wrought picture or unique specimen in early June, and consequently establish an ideal that most Japanese Maples will hardly equal. Immediately the conclusion is formed that Japanese Maples are unsatisfactory. But let such objectors pause and consider whether they know of any other tree that retains its variegation in the highest perfection throughout the season. I seriously doubt whether any variegated tree does better in this respect than the Japanese Maples, when the latter are well grown and in full vigor. But to sum up the perfections of Japanese Maples without including their fall beauties, would be a gross injustice. Strange to say, the parent, Acer polymorphum, excels all its varieties in the exquisite delicacy of its autumn colors. Several varieties such as roseum (a very scarce kind), rosenmmarginatum and dissectum, all color charmingly in fall, but scarcely equal the parent. This fall characteristic of a choice small tree or shrub, will afford additional means of introducing bits of bright color near the house where only dwarf and choice plants are desired. No tree of the forest can present more delicate and exquisite hues in autumn, than the little polymorphum Maple.

Flushing, L. I.

Miscellaneous.

THE TRUTH ABOUT IT.

[Under this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—Eds.]

SUPERSTITIONS.

Many people believe it to be a "bad sign" to kill a cat, and so they get rid of all their surplus cats by leaving them along the roadside in lonely places, or at night they drop them near some dwelling. Little kittens are often left by their weak-minded and cruel owners to perish by starvation or to be tortured to death by wicked boys or strange dogs. Many is the time we have seen poor wailing, starving specimens of this outrageous practice, and we hate the foolish superstition and the heartless fools who are governed by it. It is an easy thing to cut a cat's head off, (?) or to drown a lot of kittens in a pailful of water. It is not a pleasant thing to do, but it is not so cowardly and mean and wicked as to drop them at a neighbor's door, or to let them die by inches.

We saw, the other day, while crossing a bridge, in the midst of the Mohawk river, a poor kitten trying to swim for the shore. We asked two boys in a boat near by to take it to the bank They would not do it. Probably they had thrown it in, in obedience to the command of their parents, who took this way to get rid of a kitten which was not to blame for being born, and which was entitled to die without needless torture. What kind of Christianity, yea, humanity, must exist in a household where such unfeeling acts could be directed or in any way countenanced! Boys brought up in such an atmosphere and under such influences will make mean men, and very likely ripen into criminals, and finish up in a prison. A superstition which begets any such cruelty had better be rooted out at once before its natural outgrowth shall have sown seeds of crime and punishment for the children, and sorrow and misery for the parents.

F. D. Curtis.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

Rosselle, N. J., Sept. 23.

We have the finest double Balsams I ever saw, but I supposed the seed would be single next year, and therefore of no use. I have some Egyptian Sweet Corn, but cannot see that it is any sweeter or better than many other varieties.

J. R.

Newport, Vt., Oct. 2, 1878.

I know all about the glorious army of axe-grinders. There are no men I like better to snub. They are universally men lacking the best characteristics of manhood. They will try to use you, and if they find they cannot, they will try to harm you.

M.

Union City, Mich., July 25.

Having read the Rural's offer of Willow cuttings to subscribers, I wish to get some. I wish also to return thanks for the seeds sent. I should have done so before, but I have waited to see them in blossom, that I could tell of my success. The Pelargoniums, six in number, are now lovely with their crimson and scarlet. They are all single, but the foliage is beautiful. The

Shell-Flowers, Cleome and Ricinus are also in blossom, and I am well pleased with them; as they are quite new to me. I had five plants of Yucca and one of hardy Phlox, the latter was at least three months in coming up. Tomatoes, Green Gage, proved rather watery, perhaps owing to the soil in which they were planted, which is hard clay. You cannot know how much I appreciate these presents of seeds. It is so hard for poor farmers' wives to get spare change to purchase high-priced plants. A. M. C.

HOWARD LAKE, Minn., July 23d, 1878.

MANY thanks for favors which the managers of the RURAL bestow on us. I have only to look in my flower-garden to be reminded of the donation of seeds last year. Here I see the fine Pelargoninms, Godetia, Cleome and others, in their beauty. I often wish I could find something new for them; I would most cheerfully send it. MRS. S. A. M.

WEST JERSEY, Stark Co., Ill.

THANKS to the RURAL for Willow cuttings received. Now just a word with regard to myself. I own a good farm of 80 acres; rent it for two-fifths; support myself and five children from the rent; also pay taxes, and hire hedge trimming, yet manage to live comfortably. What corn is raised on the farm I feed to hogs. Our nearest railroad station is seven miles away, but we have six different railroad markets within ten miles of us. MRS. H. E. M'C.

JAMESTOWN, N. Y., July 30.

WILL the RURAL allow me to claim a cutting of the Willow? I have plants of Glaucium, Eryngium and Shell-Flower, from seeds you kindly sent me. The two former are not in bloom, but the Glaucium has sufficient beauty without a flower. The Shell-Flower is very curious. A lady in our neighborhood has some which she preserves for winter bouquets. It is very ornamental for this purpose. Success to you in your benevolent distribution. MRS. W. C. G.

LINCOLN, Mich., July 26th, 1878.

MY house stands on a dry, sandy knoll, where it is difficult to get trees to live, and as Willows are recommended as growing in such situations, I wish to get some of the RURAL's cuttings. I am anxious to try them. Of the six packets of flower seeds sent last fall, I have been able to raise plants of four. Two failed to come through carelessness. I have lost the labels, but have been able to recognize two of them from descriptions in the RURAL; of the other two, one has leaves that resemble those of Columbine; the leaves of the other are light-green, long, with curled edges. Neither of them has blossomed as yet. I raised but one plant of the Cleome, but that is flourishing nicely. I received and potted my Geraniums last evening; thank you for them; I shall do my best with them, I anticipate a great deal of enjoyment when they get to flowering.

M. W.

SAN ANTONIO, Texas, July 29, 1878.

I HAVE had the reading of your precious paper for 22 years. I have taken it myself ever since marriage, and my parents did so before that. I have tried very hard to get subscribers, but we have "put our tent" among non-reading people, who take no interest in education, and are, like ourselves, very poor. This is a lovely climate, neither so warm nor so cold as in New York or Pennsylvania, and here one is always enjoying a lovely breeze. I have greatly improved in health myself since we came here, and we are slowly and surely establishing a home for our little ones, by hard labor. I often wonder what my lady friends in the North would think if they had to work as I do, sixteen hours a day, year in and year out, and get along with two little log rooms and call it home, getting wet every time it rains, although better off than our neighbors. I have but just succeeded in getting my yard inclosed, so as to have a few flowers.

J. M M.

POQUONOCK BRIDGE, Conn.

I AM entirely satisfied with my bed of single Portulacas; they are in seven different colors, including striped; some measure two and a half inches across, one, an orange color, coming double. I removed and set them in a bed alone, and the next time I visited it, I found it covered with pure white single flowers. Yams were a long time coming; they are up now and growing finely, but not in blossom yet. The Chinese Yams are splendid: Phlox grandiflora is—Phlox grandiflora. What curious flowers the Cleomes have! They look like long-legged spiders. I do not know what ails my Zinnias Darwinii; their soil is rich, yet they do not give flowers so large as the old kinds do. The wind seemed to have particular spite against my new Snapdragons—the beautiful toothed variety—twisting and breaking them off to the ground. I have set out the tops; one or two may grow, but cannot be of much account, it is so late in the season. Perhaps I have beat everybody with my Cockscombs. Among mine is one three feet seven inches tall, with a flat stem over three and a half inches wide, and there are seven monster combs on it, besides innnmerable small ones; the widest comb is over 16 inches broad, and nine and a half inches through the thickest part. Who can beat this? All these plants are from seeds sent by the RURAL. Thanks, thanks every day; I do not forget. M. W.

P. S.—Striped and blotched Petunias, seed sent by RURAL, are true to name, and a bed of beauty, I assure you.

WHAT OTHERS SAY.

SILICA.—Mr. Lawes, of Rothamsted, in a communication to the Scientific Farmer, says that Professor Caldwell is perfectly correct in advising farmers to disregard silicated fertilizers. Silica constitutes the greater bulk of our soils, and is certain to be present in sufficient quantities for all agricultural requirements. He has supplied solnble silica, with alkalies, phosphates and ammonia, to pasture-land for more than twenty years, removing three tons of hay per acre per annum. The same manures without the silica have produced an equal amount of produce, and the amount of silica removed in the crop has been nearly the same in both cases. The straw of our continuous wheat crops contains the lowest percentage of silica in the most productive years. He mentions as an instance the year 1863. The plot manured with alkalies, phosphates and ammonia, gave the highest produce of any of the thirty-five years,—fifty-four bushels per acre and five thousand eight hundred and seventy-five pounds of straw, the percentage of silica in the straw of this crop, is lower than that of any other year. While, therefore, the strength of the straw and its consequent power to carry a heavy yield of grain are dependent upon climatic circumstances and not upon silica, we must not suppose the silica does not perform an important function in the plant. It is quite true that by water culture, maize and other silica plants have been grown without silica; but it is probable that growth under these conditions is attained with a wasteful expenditure of force. He is disposed to think that the cereal green crops and the grasses which take up silica in large quantities, possess an advantage, or, to use a common although not a very elegant expression, have a "pull" over those crops which take up lime instead of silica. Silica exists much more abundantly in the soil than any other substance; the roots, therefore, of silica plants are always in contact with one element of their food. Silica is also an acid ready formed, and the greater part of the potash existing in soil is combined with silica. Root crops, clover, and other leguminous crops, take up lime instead of silica. Except upon a very fine soil this substance is much more sparingly distributed, and the roots have to travel farther to find it; they have also to manufacture a vegetable acid in order to dissolve it. If they take potash from the soil as a silicate, they must decompose it and restore the silica to the soil. May we not, therefore, attribute some of the special properties of the graminaceous plants, their universal distribution and rapid growth, to the property of taking up silica? It is silica weeds (Couch-grass) which are the great enemies to the farmer. He knows that growing roots or clover is impossible unless the land is free from these pests; and if land is left undisturbed these soon attain possession of the soil. An analysis of the ash of the grasses only of a pasture gave Mr. Lawes thirty-three per cent. of silica, and comparatively small quantities of lime and carbonic acid. The ash of leguminous plants growing among these grasses gave thirty-three per cent. of lime and the same quantity of carbonic acid, but not more than one or two per cent. of silica. The leguminous plant having to form an organic acid and to take lime instead of silica, is clearly in a disadvantageous position compared with the graminaceous plants, and where food is abundantly supplied the grasses are capable of entirely destroying the leguminous herbage.

A VALUABLE HEDGE PLANT.—Mr. W. R. Smith, of the Botanic Gardens, Washington, says in the Star of that city, that he ventures to say that nothing in any list of hedge plants is equal to Zizyphus vulgaris or Jujube tree. It is a much hardier tree than the Osage Orange; smaller in growth, and not requiring the interminable labor to trim of that rampant-growing hedge tree. Our mutual friend, Thomas Meehan, informs him that an old tree grows near his nurseries in Germantown. Another tree, perhaps thirty years of age or more, grew near to the Senate wing of the National Capitol. It should be said rather, existed,—because it was robbed by large Sycamores and Silver Poplars till about two years ago, when it was moved to the Botanic Gardens, where it is now doing well, having borne 100 seeds this season. Six seeds, obtained from this small tree five years ago, produced the plants, now six feet high, the careful examination of which induces him to write thus earnestly of the Zizyphus as a hedge plant. Mr Brackenridge, Dr. Warder, author of the Essay on Hedge Plants, and others well informed on the subject, have made personal inspection with him, and pronounce in favor of its eminent adaptability to the purpose recommended.

MAKE GOOD BUTTER.—X. A. Willard says that with the present outlook, the prospect is that there will be a good home and foreign demand for choice grades of butter, while for the lower grades the market never looked more unfavorable, since oleomargarine enters into competition with these sorts, and can be produced more cheaply, and will be preferred by that class of consumers with whom a low price is a necessity. Again, as oleomargarine can be substituted for butter by bakers and pastry cooks, the demand for inferior butter is likely to be affected in this direction.

EXPORTS OF CATTLE PRODUCTS.—The National Live Stock Journal gives a list of the exports of cattle products for 1877 and 1878, and to it adds the annual aggregate showing the progress for ten years, from 1869 to 1878 inclusive.

CATTLE PRODUCTS.	1877.	1878.
Live cattle	$1,593,080	$3,896,818
Fresh beef	4,552,523	5,009,856
Salted beef	2,950,952	2,973,234
Butter	4,424,616	3,930,340
Cheese	12,700,627	14,103,529
Condensed Milk	123,801	128,118
Preserved meats	3,939,977	5,099,918
Hides	2,480,427	1,285,840
Leather	6,017,373	6,199,052
Tallow	7,883 619	6,695,377
Neat's-foot oil	19,720	17,447
Total	$46,686,715	$49,338,029

The expert of fresh beef does not go back beyond 1877; but, under all the other items, the aggregate is as follows:

1876	$36,852,556
1875	38,028,367
1874	32,662,325
1873	30,302,827
1872	23,755,327
1871	18,141,311
1870	16,594,169
1869	12,303,371

Here is a most satisfactory growth of an important export—that of 1878 is more than four times that of 1869. Preserved meats did not reach a million before 1877, yet in 1878 they exceed five millions; fresh beef also reaching five millions the second year. The export of live cattle only reached about one-half million before 1875, and increased $2,303,738 in 1878. Cheese alone, in 1878, is about two millions more than all the cattle products exported in 1869.

RECKLESS HUNTERS.—A writer in the Herald complains that they needlessly break down fences and shake the best apple and peach trees. This people do not like. There is plenty of game and loads of fish up in the country. Let them take all belonging to them in a fair way, but let them not waste good fruit or break fences.

ONE CONSOLATION.—The Mass. Ploughman says that farmers have one consolation in a season like this, and that is, they have the prospect of enough to live on, at any rate, which is more than many engaged in other pursuits have.

CRUELTY is not only wicked but most improvident, and the cruel man, boy or woman, should find no place on the farm, even if he offered his services for nothing. So says the London Ag. Gazette.

CLUB-ROOT.—Mr. Vick says the best preventive is lime and phosphate manures.

FARM NOTES.

WHY has it never occurred to farmers and grain-growers that they can breed in-and-in with grain as well as with stock; or, in other words, may we not decrease the vigor of grain by continuing to sow seed from our own bins? Farmers should think of this, and if they find they are in-and-in breeders of grain, let them try a change and see the result. I have sown wheat after oats this fall, instead of corn, as I have formerly done. Corn cannot be removed in time to get the wheat in early enough. I sowed with a drill, and used the Clawson variety instead of Kentucky White. A heap of barn-yard manure was drawn out last spring, and, being thoroughly rotted, was applied without any danger of its containing weed-seed capable of germination. In former years the land had been cleared of stones enough to admit of clean culture, but, to make it a thorough job, I set men at work with bars to follow the plow and dig out all the stones that still remained, to be removed by the boat. Next, I hired a layer to put them into a wall as they were drawn, thus turning what was useless and troublesome into a good fence.

The slow, heavy horse is no horse for the farmer in these times. A medium-sized, active animal that can go from eight to ten miles per hour on the road, and haul two tons per pair on the farm, is the farmer's horse.

Cows should not be allowed to fall off in condition now. I am feeding mine all they can eat, both night and day, by filling their racks as full as I can at night and pasturing on the meadows through the day. I think their droppings repay the soil for the grass taken until the fall rains come on, when they should not be allowed to run there. My yearlings are kept in the best of pasture, to urge on their growth before winter. Calves are fed a mess of middlings every day.

Col. Curtis says farmers should keep more sheep. I agree with him. No farm should be without at least a few of this most useful and profitable stock. They will put money in the pocket from lambs and wool, to say nothing of the assistance they give in destroying weeds and briers. If there is a field overrun with that nuisance, the Daisy, turn in your sheep before it is ripe, and that is the end of the pest. Then, their manure is very excellent and well distributed. They also furnish us both food and clothing. Now, that prices are low, is a good time to purchase enough of them to start with.

In the fall of 1875, I purchased a trio of Berkshire pigs of a noted breeder, and, feeling rather proud of them, I gave them the best of care and did not breed in-and-in. I obtained but three pigs from one sow, when both of the sows went farrow twice. Will some one point out the cause of such ill-luck? The boar was all right.

Galway, N. Y., Oct. 2, 1878. W. A. H.

SETTING EXAMPLES OF ART AND TASTE.

WE see a paragraph reporting that CYRUS W. FIELD has given the sum of $10,000 to the village of Williamstown, Mass., to be used in beautifying the main street upon which Williams College is situated. Could such an example be followed, if only to the extent of a few hundred dollars, in removing unsightly objects, filling up and grading and sloping the side-walks, planting trees etc., in every village in the land, what would be the effect upon the inhabitants and the public spirit of those places? The work would of course be done, after obtaining the advice of a landscape gardener, by the laborers of the village, and not a dollar would be sent away, while the example would become epidemic through the whole town and every cross-street and every man's homestead would feel the effects—in increasing enterprise, civilization, intelligence and the industrial interest of the land.

BOOKS RECEIVED.

"Talks on Manures," by Joseph Harris, M. S. author of "Walks and Talks on the Farm," "Harris on the Pig," etc., published by the Orange Judd Company, 245 Broadway, N. Y. We have read this work of 356 pages, with great care, and not a little profit. Its scope embraces the whole subject of manures and fertilizers, their composition, effects, best mode of management, and application, records of various experiments with different kinds, both in this country and in Europe, together with suggestions as to the sorts most suitable for nearly every kind of crop, and on every kind of soil. Nor is it limited to manures only, for incidentally nearly every branch of farm economy is instructively handled. It is a storehouse of valuable information on farm topics, derived from large personal experience, and from a wide acquaintance with the experiments, researches, and best practices of the great lights of agricultural science, and agricultural art. The form in which the work is written, is well adapted for the lucid discussion of all sides of disputable questions. It is in the form of a dialogue between the author, the Deacon, the Doctor, Charley, and the Squire, the author, as is proper, doing most of the talking, while occasionally one of the others starts objections to the views propounded, and sometimes supports these objections by at least plausible reasoning, as well as by the results of actual practice. In this way many of the subjects treated of, are viewed from different standpoints, and if we do not always agree with the conclusions arrived at, we must invariably derive instruction and pleasure from the discussion.

Starting out with the declaration that on his own farm he is aiming to get 35 bushels of wheat per acre; 80 bushels of shelled corn; 50 bushels of barley; and 90 bushels of oats; 300 bushels of potatoes, and 1200 bushels of mangel-wurzel on an average, the author gives full information throughout the book, of how other farmers may accomplish equally desirable results. In addition to a full table of contents; there is attached to the work a complete alphabetical index of all the subjects mentioned in the text—the value of which as a means of ready reference, can hardly be over-estimated. The work is clearly printed on tinted paper; and neatly bound in cloth, and should find an oft-visited place in every farmer's library or book-shelf.

CATALOGUES, &c., RECEIVED.

CIRCULAR AND PRICE-LIST of Small Fruit Plants, offered by Gibson & Bennett, Woodbury, N. J.

CIRCULAR. Rickett's New Seedling Grape, "Lady Washington." James H. Ricketts, Newburg, N. Y.

JONES & SONS' Lake View Nurseries, Rochester, N. Y. Wholesale price-list of fruit and ornamental trees, small fruit, plants, &c.

BRIDGMAN'S Descriptive Catalogue of Bulbous and Tuberous Roots, with directions for management. Alfred Bridgman, 878 Broadway.

MONTHLY REPORTS of the Kansas State Board of Agriculture for May, June, July and Augnst. By Alfred Gray, Secretary, Topeka, Kansas.

"FRUIT-GROWING AND FARMING." An address before the Solebnry Farmers' Club of Bucks Co., Pa., by William Parry, of Cinnaminson, N. J.

PREMIUM LIST for the Fourth Annual Fair of the Dickinson Co. Agricultural Society, to be held at Abilene, Kansas, Oct. 9, 12. J. B. Edwards, Secretary.

ANNUAL CATALOGUE of Thoroughbred Dutch-Friesian Cattle of the Unadilla Valley Herd, for 1878. Address Irwin Langworthy, Secretary, South Brookfield, N. Y.

VICK'S Illustrated monthly, Rochester, N. Y. Tulips, Hyacinths, Crocus, Colchicum, and

Snow-drops, are the subjects of the colored plate of this number. It is full of lively and interesting floral articles.

Rural Architecture.

A CONTRAST.

HERE are two pictures, one representing a comfortable suburban home as it ought to be in summer time, and the other unveiling, too truthfully, what we frequently find in city and suburban districts, especially in tenement quarters. What miserable enjoyment such backyards afford the weary workmen who toil hard all day long and need rest and relaxation in the evening! And what a play-ground for their children! A first-class place, perhaps, for earth castles and mud pies; but where is the father who would associate his children with the rubbish of such a place, rather than with the purity of a beautified, vine-bedraped and flower-bedecked inclosure. In a moral or sanitary point of view, the yard of Wistarias, Virginia Creepers, Honeysuckles, Pipe Vines, Akebias, Japanese Ampelopsis, Yuccas, and orderly tidiness, surely far surpasses in goodness that of the accumulated conglomeration of old barrels and boxes, tin kettles and other disorderly rubbish.

Nor is it immediate so much as future ill effects such surroundings rivet on our children. Soloman says, "Train up a child in the way he should go, and when he is old he will not depart from it." Therefore are we to understand that children nursed in such unbecoming wretchedness, will, in after life, prove indifferent to greater refinement. It becomes us to do our best in the external decoration of our homes, because our attachment to them is thereby cemented and our dispositions purified, and the refining influences exercised on our own families as well as our neighbors' are surely a reward worth working for. A bad man and a pretty garden are seldom associated; but, on the other hand, the external adornment of our domiciles is a commendable reference to ourselves.

In rural districts, too, where there is no excuse whatever, we not unfrequently find a parallel to the worst kind of city backyard negligence. But we are pleased to note that both in city and country, great strides are being made in the right direction, and that a healthy rivalry in garden precedence prevails. Therefore we hope that before long, the tardiest may be shamed out of their indifference, and compelled, if for no other reason than fashion's sake, to travel the paths of education and intelligence, and beautify their homes with ornamental trees and flowers.

A SLIGHT MISTAKE.(?)

THE RURAL of September 23d says: "All builders agree in this: The most economical form in which a dwelling can be erected is a cube, for the reason that it contains more space within a given area of wall and roof than any other."

An old Judge said to one recently appointed: "Never give reasons for your decisions unless you feel obliged to. For while your decisions may be in the main correct, when you undertake to give reasons therefor, you will be very likely to get things confused and make erroneous statements."

So, in the case of the above extract, it is probable that, all things considered, a cube is the most economical form for a dwelling But the reason given is not the true one. A circumference measuring 100 feet incloses an area of 796 square feet; 100 feet in form of square, with sides 25 feet each, incloses but 625 feet. The nearer the circular form, the greater the area.

The advocates of the octagon form of houses, who wrote considerably on the subject a few years ago, made this their principal argument. That form never became popular, however. What was saved in building the walls was usually lost when the area was divided into rooms, by the irregularity of form, or if regularity was obtained, then by the waste of room sacrificed to obtain it. L. A. B.

[We should still say that the most economical form in which a building can be erected is a cube. We think "all things considered" is understood.—EDS.]

The Apiarian.

BEE HINTS FOR OCTOBER.

ABOUT this time in October preparations should be made for wintering bees. For this purpose I have found the following precautions successful in my case, and although others may prefer a different course of action, I have had no ambition to abandon a good practice to search for a better: All good stocks should be wintered. From 25 to 30 pounds of honey should be left in every hive. To ascertain the quantity in the hive, weigh it and its contents, subtracting, from the result, the weight of an empty hive of similar size, thickness of boards, etc., together with, say, six pounds for weight of bees, wax bees'-bread. Call the balance of the w t honey, and unless the combs are very old, the calculation will be about right. It is important that just the right amount should be left, as too much is almost as hurtful as too little. If any combs in movable frame-hives are filled throughout with honey, they should be alternated with such as are empty. Any stock that is too weak and without combs enough to hold a sufficiency of honey, should be taken up at once. If there are combs enough, but not enough bees and there is no condemned colony to reinforce them, they should be treated in the same way.

At the risk of repeating an oft-told lesson to every reader, it is well to urge the necessity of strengthening one weak colony by uniting to it another of the same kind, and supplying them with honey enough, so that all the stocks will be strong and well supplied against winter. Hives from which condemned colonies have been removed, should have the dead bees taken from between the combs and be set away for use next year. They should be set right side up, kept dry, and have all holes that would admit a bee, stopped up. If a colony has bees and combs enough, but lacks honey, this may be fed up to the required weight just about this time or so soon as the brood is all hatched. The feeding should be done as quickly as possible or the bees may use too much in rearing broods. The extra supply may be fed conveniently, in box hives, in a shallow dish placed on top of the hive with cut straw or shavings in it to keep the bees from drowning. The sides of the dish should be rough enough to make it easy for the bees to creep up and down. Two or three holes should be bored in the top of the hive, and the whole covered with a close-fitting box to keep away robbers. In case of movable frames, the combs may be taken out and held at an angle of 45°, and the honey or syrup poured into the cells through a flat-bottomed, tinned dish, having twenty or more small holes punched in the bottom. When one side is filled, the combs can be turned, and the process repeated with the other side. A good but cheap honey, like West Indian, may be fed with profit, but in such a case, in order to be safe from disease, add a quart of water to ten pounds of honey, or proportionally, scald thoroughly and skim. If honey in the comb is preferred, the caps of sealed combs, should be shaved off with a knife.

As bees might starve in cold weather with plenty of honey in the hive, all winter stores should be in the same compartment with the bees. All stocks one year old that have not been examined with regard to foul brood, should be at once attended to On no account should an honest man allow a hive with foul brood to be robbed. It would be an injustice to his neighbors to allow it to stand exposed to be robbed by their bees. Honey from such hives should always be scalded before it is permitted to go into healthy stocks. Look out for queenless stocks or barren queens, and either combine stocks or furnish good, healthy queens.

W. L. M.

AS WE TOO OFTEN SEE.

PROFITABLE BEE-KEEPING.

I NOTICE in the Apiarian Department of the RURAL an account of some large yields of honey. I am interested in bees, and can show a larger yield than those. I commenced with 26 swarm in the spring. I have increased them to 57 good swarms with honey to winter them, and have obtained 1,800 lbs. of basswood honey, 2,100 lbs. of buckwheat honey, and over 100 lbs. of comb honey in frames and boxes. This is all extracted except the 100 lbs of comb honey. I keep bees for profit as well as for pleasure.

WEST GROTEN, N. Y. D. H. C.

Sheep Husbandry.

RAISING ANGORA GOATS.

FOR several years our farmers have heard varying reports of the results of an effort to introduce the raising of the alpaca sheep and the Thibet, Cashmere and Angora goats into the United States. Some of these reports have wholly scouted the practicability of the business, largely because the writers had no reliable data upon which to base their convictions, and largely from the fact that until the manufacture of the wool, or rather the hair, of these animals, was established, there was no market for the product. Other reports have been quite extravagant in their estimates of the value of these animals.

As we now have a considerable number of manufacturers using this hair, and there is as ready a market for it as for wool, it will be well for farmers having rough, hilly, rocky and mountainous pastures or other high land covered with bushes, to understand the value of these goats as an additional feature in farming pursuits.

The number of goats, sheep, llamas and similar animals existing in North and South America and Europe is quite large, but as yet no great value has been attached to many of the species. Europe and America raise the common goat for milk, while in Asia the Cashmere goat, the Thibet goat and the varieties of the Angora goat are raised for cashmere and mohair. Cashmere is the undercoat of a species of the Thibet goat produced at Cashmere. Mohair is the fleece of the Angora goat. Beside these, the Rocky Mountain sheep is found in our far West, and as the range of mountains is followed Southward, we meet the Mexican goat, and still further south, the llama and alpaca of the Andes.

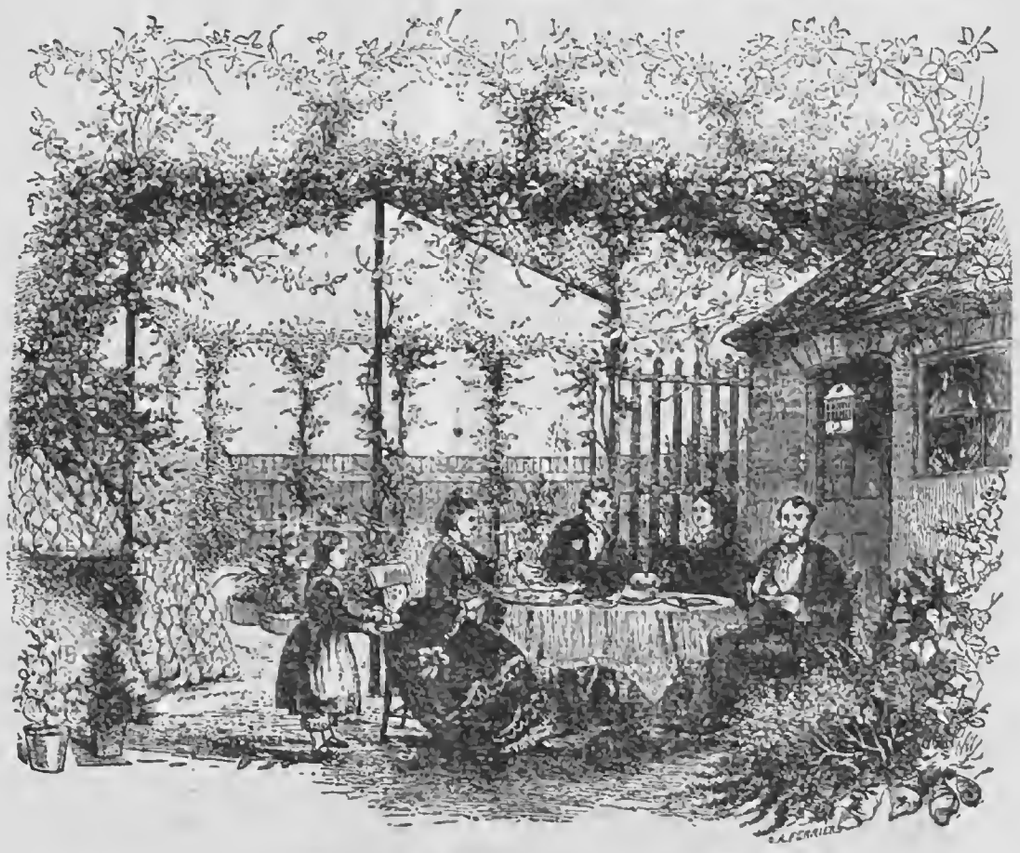
The only animal of this character yet found valuable in the United States, besides the common sheep and its improved breeds, is the Angora goat, imported originally from Asia Minor. This animal, the Capra Angorensis, was introduced into the United States in 1848, by Dr. Davis, of South Carolina, who brought to this country nine goats, a present from the Sultan of Turkey. Since that time, various importations have been made by other parties in the Northern, Southern and Pacific States.

Mr. Peters, of Atlanta, Georgia, has been very successful in breeding these goats, and many of his fine animals have gone to the Pacific coast, while there are now in California, Oregon and Washington Territory probably over one million goats. There are several flocks in the vicinity of San Antonio, Texas, crossed with the Mexican goat, and the raising of goats is there found a source of great profit. Several small flocks have, from time to time, been reported in the Northern and Eastern States, but we know of no extensive effort to breed and acclimate them.

In the Pacific States the Angora goat is chiefly raised for the purpose of increasing and supplying the demand for new flocks, and also to furnish the skin, which is tanned with the hair on for a great variety of purposes. The hair is all used in home manufacture, being shipped to the Eastern States for manufacture into the various kinds of ladies' dress goods. The product averages from five to eight pounds to a clip, and is worth 75 cts. to $1 per pound.

The object several farmers of Oregon have had in purchasing the goats, was to have them open their large tracts of "brush land" to kill out the brush, which the animals do thoroughly in two or three years. Like the common goat, the Angora thrives best unconfined, summer or winter, and upon a rough, hilly, and rocky pasture where his food can be varied from coarse browsing to the finer grass.

The alpaca (Camelus paco,) was introduced into the United States several years since from Peru, by ex-Gov. Thomas of Maryland; but was only partially successful with him, and the flock of fourteen originally imported, did not increase to any extent in numbers, and was afterwards sold to other parties, some of whom report a belief in the practicability of their growth in the United States. The alpaca wool is far more valuable than the wool of our best breeds of sheep, being longer and finer and of a beautiful, glossy appearance—either black, white or gray. The fleece weighs about seven pounds to a shearing, and the wool is worth from 75 cts. to $1 per pound. England imports 3,000,000 pounds annually besides what she obtains from her Australian colonies.



AS WE TOO SELDOM SEE.

Industrial Implements.

FRENCH BUHR-STONE GRIST-MILL.

WE have recently seen a compact little mill well adapted for farmers' use. The driving pulley is twelve inches in diameter, and the mill may be run up to six hundred revolutions per minute with from three to six horse-power, grinding ten to twenty bushels of corn, or fifteen to thirty of feed. The main points of its construction are strong iron and steel frame, inclosing selected French buhr stones, eighteen inches in diameter. The stones are banded, faced, furrowed and in what seems to be perfect balance. They are held in an iron hoop, the back half of which is bolted to the feed-plate and front pedestal in a way to bring the face of the bed stone in train with the spindle. The bed stone is cemented and held in position by bolts passing through rubber springs, which yield when any foreign substance passes in with the grain, preventing breakage. The construction of the mill is scientific, simple, strong, and likely to be very durable. It requires no fitting after leaving the manufacturers. Bolt it to the floor, and it is ready for work. The mill weighs only seven hundred pounds, and is guaranteed. Those interested will be more particularly supplied with information by addressing the makers, Richmond City Mill Works, Richmond, Indiana.

Dairy Husbandry.

THE BEST COWS FOR THE DAIRY.

A JERSEY FARMER.

A PROPER fitness of things is most important in dairying. Doubtless there is no other branch of rural industry in which so much is lost by want of the consistent application of the best means to the ends desired. This is seen everywhere, and it is only very rarely that we can find a dairy so managed that everything is of the right kind and everything is in its right place. The few dairies that are so managed are widely talked of and written about, but it is one thing to see what ought to be done and quite another to know how to go about doing it. It is not much that dairymen can afford to give to their neighbors, but they can and do give advice; for advice is cheap and everybody has plenty of it to give away. But like most cheap things, it is generally worth very little, for the reason that advice is given from the giver's own stand-point and the beneficiary is unable to avail himself of it for many good reasons. In Dairymens' Conventions for years past, and in published articles and books upon dairy topics, there have been floods of advice given as to the best stock to keep in dairies. This breed has been advocated and proved to be the most profitable; and, on the instant, another has as clearly proved that breed to surpass all others. The Jersey, the Ayrshire, the Short-horn, the Dutch—misnamed Holstein—all have been shown to be the best. And pure-bred animals have been recommended, too.

Now, here is a fatal mistake at the start. Not one man in ten thousand is situated so that he can avail himself of the advice given, although he may have desired to do so. It is not what a man might or should do; it is what he can do, that is the great point. It may be said very truly that no pure-bred herd of cows, bought at high prices, has ever satisfied the expectations of its owner who has looked for profit from milk, cheese or butter as his object; and, if any advantage has ever been gained from pure-bred animals, it has only been through the slow building up of a herd of grades by their use. This happens very fortunately, because there are very few who can sink so much money as would be required for the purchase of a herd of thoroughbred cows of any breed; but almost any dairyman or farmer can procure a choice pure-bred bull of whatever race he may desire or fancy, and with patience and skill he can, in a few years, build up a herd that will equal the pure-bred cows, if they don't greatly surpass them. And the cost of the herd may, by good management, be so little that, without strict accounting, it may never be traced. Now, such a herd will furnish the best cows for the dairy.

Every dairyman knows what he wants. He wants the largest possible supply of the richest milk. This is the end for which he works. He has the materials in his hands, or, if not, he can easily procure them. All he has to do is to use them in the best manner for the end desired, and, if he does not yet know how to do it, that has to be learned the first. If he will free his mind from all hankerings after the impossible possession of some fancy stock, which would only disappoint him, perhaps ruinously, and do the best with what he has, laying out a plan for at least ten years ahead, then he will surely succeed in getting what he wants. One extra good cow, with a well selected *pure-bred* bull, will be enough to start with; and, if only the best are picked to breed from, and the heifer calves from these are carefully raised, so as to give them a healthful and complete development from their birth, then full success will be but a question of time. He will, in a few years, have the best cows for *his* dairy.

In the meantime it would be well that those writers and speakers who are so enthusiastically advocating their choice breeds, and riding their own particular hobbies so furiously, should give us a rest. It would be better that they should turn their talents to the study of general principles of breeding and rearing dairy cows, so that whatever breed a man may have, he may be taught how to make that the best for himself, rather than be induced, by wildly exaggerated estimates of what this cow or that might do, to choose such animals for his use that must of necessity be a failure from the outset. We should not then see a big-paunched, heavy-feeding, Dutch cow, of a race reared in the most luxuriant meadows of North Holland, trying to pick a living upon a pasture where a small cow and a light feeder might thrive, but where the money spent in purchasing anything else might as well have been cast to the winds. There are places and circumstances suited for each of every kind; but to avoid failure, the kind must be accurately fitted to place and circumstance. Where a dairyman possesses abundant capital for his business, and can choose what he pleases, he will yet find it more profitable to select grades or cross-bred cows than any of the pure breeds, if milk and butter of the best quality, at the cheapest rate, are desired.

The Jersey is, without doubt, the richest butter cow, but of ten of these cows one, perhaps, may make more in quantity than a good native cow, while the rest will fall below. The Ayrshire is a copious milker upon fair pasturage. The Dutch cow is a heavy milker upon such a luxuriant pasture as is rarely found in America, but the milk is not rich, excepting in very rare cases. A cross of the Ayrshire or the Dutch, by a Jersey bull of excellent quality, would produce a cow that would yield a large quantity of rich milk, and that is what is required by every one who keeps cows, whether for milk or butter or cheese. Money will do in a year what labor will require many years to do, because it represents and can command the accumulations of labor. But unless the labor or energy has been at work to produce what is required, all the money in existence could not command it. So money cannot procure a herd of the *best* dairy cows, because we have not yet created that kind of cow. The possibility is still in the future, and it looks towards the cross of the breeds referred to.

Industrial Societies.

TOWN FAIR AT MANCHESTER, VERMONT.

MR. E. L. TAYLOR sends us an interesting account of a local fair held in the above town on the 3d and 4th inst., and of the energetic efforts of the gentlemen by whose labor the custom of holding such fairs has been restored after a lapse of many years. Contrary to the experience of many large fairs, the weather during the continuance of this, was delightful and the attendance accordingly excellent. Floral Hall was crowded with fancy work and articles of domestic manufacture in addition to a rather slim display of the odoriferous treasures from which it derived its name. Machinery and vegetables had to go nearly unsheltered, but there was a fair show of horses, although the stallions were noticeable by their absence. There was a good display of full-blooded Jersey cattle, although most of the cattle exhibited were grade Holsteins. The presence of these animals conveys a valuable lesson to farmers elsewhere. Until a few years back there was little interest taken in pure-bred or even good grade cattle in that neighborhood,—the old scrub stock seemed to give entire satisfaction. A few years ago, however, a pure bred Holstein bull was brought to the place, when straightway a lively interest soon arose on the subject of cattle breeding, much to the betterment of most of the horned stock in that section.

Everywhere.

RURAL SPECIAL REPORTS.

CHARLES W. GARFIELD, the capable Secretary sends us the following letter. We hope our friends who have valuable suggestions to make, will communicate them to him:

MICHIGAN STATE POMOLOGICAL SOC'Y.,
Secy's. Office, Grand Rapids, } Oct. 7, '78.

I would like to receive any suggestions that may occur to RURAL readers in connection with a revision of the Pomological Department of our State Fair Premium List, as we are about to arrange it for another year. Let them please write me their views as soon as convenient, for we desire to make our work better every year, and need the aid of all our friends. Our annual meeting will occur in Paw Paw, Dec. 3, 4 and 5. Will RURAL readers kindly suggest for discussion, any questions that they would like to have brought up at that meeting, and will they not plan to be with us if practicable? I should be pleased if they write me fully and freely concerning these matters.

CHAPEL HILL, N. C., Oct. 7, 1878.

ONE week of October gone, and no frost in this part of the State. Now that the crop is harvested or fully decided, it is practicable to make a final report. All considered, there is great cause for profound gratitude to the Giver of all good, for His beneficent providence during the year. Though the wheat harvest disappointed the farmers, there is evidence of a good supply, as the price of flour ranges from $5 to $6.50 per barrel, and wheat from 80 cents to, perhaps, $1.20 per bushel. This is very low for N. C. Oats, also, are lower than usual, I think. Corn is plentiful; probably much more so than was anticipated by some during the growing season. The fodder, though some was injured by the rains, is more generally saved, and in better condition than last year.

The tobacco crop is not very full, and was cured with difficulty during the rain-storms in September. This plant, which was, till recently, mainly restricted to a few counties in the northern center of the State, is now cultivated extensively in more western districts—some even in the mountains—and is, also, gradually working its way into the cotton territory. But that which is raised in the tier of counties lying between Raleigh and the Richmond and Danville Railroad, is considered the best in quality.

Cotton, though it has suffered injuries in some places, from several causes, appears to be maturing well. In conversation with an intelligent planter, recently, I was informed that a close calculation had proved conclusively that it is cheaper for the cotton raiser to restrict himself to that staple and to buy all his supplies of other products. The policy is certainly in harmony with the principle of Division of Labor, and hence seems to be judicious; but when the staple fails or falls to a very low price in market, the planter is in a very pitiable condition. There seems to be little, if any, disposition to abandon or diminish the production. In the cotton districts, Cotton is still King.

The abundant warm rains in August and September have brought out an extraordinary crop of grass. I do not remember ever to have seen more grass in the country than I have seen this autumn. Millet is raised in many parts of the State and the reports are favorable. Chufas are gaining in reputation, decidedly; the plant being in favor for forage and the "nuts" for the hogs. Sorghum is still raised in considerable quantities. I observe that a steam mill, for the manufacture of the syrup, is working in Salisbury, turning out a large quantity daily. Many do not like the Sorghum because, perhaps, it reminds them too forcibly of the dreary days of the war, when it was almost the only substitute for sugar and molasses.

The sweet potatoes, as well as the Irish, are yielding most abundantly. I planted but few, and they of a variety called the "Shipwreck." The seed, I have heard, were found on a wrecked vessel on our coast, years ago. They grow large, have but few in a hill, but have the desirable quality of coming early and being good for use as soon as they are large enough to eat. I prefer them to any other variety. The Western counties have quite an abundance of fine apples, but the center has but few. Grapes, garden products, etc., have done remarkably well. There is some interest in bee-culture, but not as much as there should be. The best honey in the State is what we call the "Mountain honey." It is very much superior to that made in the Center or East. The appearance and taste of the mountain article are quite different from those that mark the product of other parts of the State. Some of the best of this—pure honey—is selling in our market at 15 cents per pound.

There is an effort to get up a crusade against dogs, in defence of sheep-husbandry. I hope it will succeed. We have every requisite for profitable wool-growing, except immunity from the miserable, thriftless curs. There is a strong movement in favor of "no fence," but it will be years before intelligence can rule ignorance or enlighten it on that subject. As far as tried, the law has given much satisfaction. The Commissioner of Agriculture has been stumping the State, making many speeches on the general idea of progress in industrial pursuits. The effect of his commendable campaign is gratifying. He is a fine speaker, an enthusiastic friend of honest industry, and an indefatigable worker.

The Experimental Station here has received a valuable addition in the person of Mr. Warnecke, who is well known to Profs. Atwater and Johnson as a man of extra accomplishments for his peculiar work. He is an admirable assistant to the chemist, Dr. Ledoux. Next week the State Fair comes off at Raleigh. The indications promise a highly successful occasion. Old Rip Van Winkle is advancing. A. W. MANGUM.

ITHACA, N. Y., Oct. 2nd 1878

Farmers are busy hereabouts thrashing buckwheat and digging potatoes. Buckwheat, of which quite a large amount is raised in this locality, is a fair crop. Early Rose potatoes are very small, and a poor yield; late potatoes planted at the same time (May 1st) are much better, but not nearly up to the average. A larger acreage of wheat has been sown here this season than usual, mostly of the Clawson variety.

Splendid weather, a heavy frost Sep't. 28. Although prices are low, farmers are cheerful. Prices are about as follows: Wheat, $1; rye, 60c; oats, 27c; potatoes, 50 to 55 cts. per bushel; apples, 25c. per bushel; butter, 15 to 17c. per lb; eggs, 15 cts doz; hay, $6 to $7 per ton; straw $4. Apples a drug in the market. Good-sized potatoes hard to be obtained.

"ANON

BLUFFTON, Allen Co., Ohio, Oct. 7th, 1878.

THIS part of the great State of Ohio has been favored with the finest growing weather any country could be blessed with—all crops being above the average—during the whole season the rains seemed to come just when needed. Farmers are getting the following prices for their products: Wheat, 86c.; clover seed, $4; potatoes, 50c. per bushel; butter, 10 and 12½c. per pound; corn, 40c. per bushel; oats, 17c. per bushel; wool, 32c.; flaxseed, $1; rye, 45c.; and even at these prices, owing to the large surplus they have to market, they can lay up considerable money—even more than for several years. There is a large crop of apples in the county. Two jelly factories have started up to make fine apple jelly, by evaporating cider as it is expressed from apples. It is then shipped at a profit. DR. J. A. T.

LITTLE ROCK, Ark., Oct. 2.

WITH us, at the present time, every available hand is engaged picking cotton; the amount already picked and sent to market is greater than usual at this date, but the crop is light, not more than two-thirds of an average yield. Corn is good, one-fifth greater than any crop for five years. Wheat, owing to excessively wet weather, and heavy storms in the spring, was a total failure. Sweet potatoes have been injured by dry weather, and are light. Peaches rotted badly, and those which matured were injured by worms. Pears and apples did very well, but there are only a few of them in this vicinity. Grapes rotted badly, and those which matured were of inferior quality. Raspberries, where cultivated on soils suited to them, did well. C. C. B.

OXFORD Co., Ontario, Canada, Oct. 5, 1878.

THE month of September was noted, in this part of the country, for very heavy rain storms, doing considerable damage to roads and bridges and putting a sudden stop to fall seeding, the ground being too wet to work. Grain is yielding badly. Fall wheat averages about 20 bushels per acre. Spring wheat is a complete failure; it will yield scarcely eight bushels per acre. Barley is very poor. Oats are fair and so are peas. Potatoes are very poor; crop selling at 75 to 80 cts. per bushel. Hay is good. Fruit abundant and good; apples are selling at $1.05 to $1.25 per barrel; pears are good, worth $1 per bushel; grapes were badly injured by spring frosts. W. R. V.

BROOME Co., N. Y., Oct. 5.

THE winter wheat crop around here was a fair one, but considerably lighter than that of last year, on account of the Hessian fly and hot weather. Of spring wheat there was no crop at all—many did not get their seed back. Oats are good, but worth only 20 cents per bushel. Potatoes are a very light crop. Corn is good, better than usual. Apples are a very heavy crop on the hills, but light in the valleys; but the best grafted fruit will only bring 25 cents per bushel. Peaches are a very good crop. All kinds of roots are light. Wheat is being sown very late this fall around here, except mine, which was sown Sept. 8, and looks well now. W. H. B.

BROWN Co., WIS., Oct. 7th, 1878.

WEATHER has been very wet for some time and farmers cannot plow except in favored spots. As it is useless to try to grow wheat hereabouts, except on fall plowing, we are getting a little anxious. Many are not yet through thrashing, and the grain is so wet that it is slow and awfully nasty work. Corn husking and potato digging are now the order of the day. Corn is a fair crop but potatoes are nearly a failure. In our local markets spring wheat sells for from 85c. to $1; red winter wheat, 88c.; rye, 45c.; peas, 50c.; Oats, 28c.; barley, $1.05; corn, 55c.; and potatoes, 60c. VAN.

ITHACA, N. Y., Oct. 8th, 1878.

APPLES are very fine and abundant, but prices are low, ranging from 15c. to 35c. per bushel, for No. 1 Kings. Wheat is looking well, but needs rain. The Hessian Fly does not appear to be doing any damage as yet. All the wheat in this locality was sowed late, and most fields have received extra preparation and extra manures — much superphosphate being used. All appear to be trying to get strong, healthy plants in the least possible time. One man sowed, last year, Oct. 5th, and cut 84 bushels from two acres. J. P. R.

JEFFERSON Co., N. Y., Sept. 27, 1878.

CORN here is a heavy crop and is well ripened. Early potatoes are nearly a failure; late potatoes fair, selling at 50 cts. per bushel. The hay crop was good; fall feed is abundant. Oats and spring wheat are rather below an average; winter wheat was heavy, yielding, in many cases, 40 bushels per acre and, in one instance, over 60 bushels per acre. This fall there is a much larger amount of winter wheat sown than usual; the Clawson appears to be the favorite variety. We have not yet had sufficient frost to kill tomato vines. G. B. P.

A CORRECTION.—In our issue of the 5th inst. a crop report from Argyle, Washington Co., N. Y., states that the potato crop thereabouts was nearly a failure, and that the *farmers* were poorer than our correspondent had ever seen them. He has just written us that, instead of the word farmers, potatoes should be substituted. We are glad that circumstances justify this correction, for, although it is unfortunate that the potatoes should be in a bad condition, it would be much more unfortunate were farmers in the same plight.

CRAWFORDSVILLE, Washington, Co., Ia., Oct. 7th.

TIMES hereabouts are hard, and money hard to raise. Wheat was a medium crop of fair quality. Oats are extra good; but of not more than an average yield—perhaps 40 bushels. Corn is badly blown down, partly caused by

grubs eating the roots. Hay is a large crop, and it was saved in good order. Potatoes are a poor crop. J. H. M.

BURR OAK, Ia., Oct. 5th, 1878.

THE wheat crop over a large section of northern Iowa and southern Minnesota is nearly a total failure. There are thousands of acres not cut, and a great deal of what was cut does not pay for harvesting and thrashing. Oats are rather a light crop; corn a trifle extra good. Cattle and hogs are cheap; farmers all feel poor. H. O. B.

POQUONOCK BRIDGE, Conn., Oct. 2, 1878.

CORN was largely planted hereabouts, and a good crop is nearly ready for the harvest. Potatoes are a fair crop. Apples are middling, both in quantity and quality; the majority of orchards are badly infested with the codling moth, causing the fruit to fall prematurely. M. W.

LAWRENCE, Van Buren Co., Mich., Sept. 25.

SEEDING hereabouts is almost over. Corn is from fair to good; wheat was a good crop, averaging 20 bushels per acre. Potatoes are poor in this section, owing to bugs and blight. F. E, C.

The Querist.

ANSWERS TO CORRESPONDENTS.

Ground Bone, Phosphate of Lime and Superphosphate.

R. C. Ellington, Henry Co., Ohio, inquires, 1. What are the fertilizing ingredients in bones, phosphate of lime and superphosphate? 2. What is the difference between the three? 3. How is superphosphate prepared? 4. What are the chief sources of phosphate of lime?

ANS.—1. The chief fertilizing ingredient in bones, phosphate of lime and superphosphate, is the phosphoric acid they contain; of considerable, though of less importance, are: 1. The nitrogen contained in the organic matter of bones, which is preserved in bone superphosphate made from raw bones. 2. The lime in the phosphate and carbonate of lime which, in both cases, is converted into sulphate of lime or gypsum in the process of making superphosphate. 3. The small proportion of magnesia which serves as a base in the phosphate of magnesia.

2. The difference between the three may, perhaps, best be shown by giving an analysis of each. The composition of bones varies somewhat according to the kind of animal from which they are taken, its age and their exposure to the weather; but raw, ground bones, such as are ordinarily employed for manure, contain about the following ingredients:

Phosphate of lime and magnesia	50	per cent.
Organic matter, gelatine and fat	30	" "
Water	10	" "
Carbonate of lime	6	" "
Sand and impurities	4	" "
	100	

Phosphate of lime contains:

Phosphoric acid	45 81	" "
Lime	54.19	" "
	100	

Superphosphate of lime contains:

Phosphoric acid	71⅓	" "
Lime	28⅔	" "
	100	

The superphosphate of commerce, however, contains several other ingredients, the proportion of which varies considerably in the product of different manufacturers, but, according to Pusey, the unadulterated article should contain about:

Soluble phosphate and superphosphate of lime	40	per cent.
Sulphate of lime or gypsum	20	" "
Animal matter	20	" "
Water	20	" "
	100	

Of this, according to Ville, from 15 to 18 per cent. should be phosphoric acid, while Prof. Johnson puts the amount at 24 per cent.

It will be seen, therefore, that bones contain, in addition to phosphate of lime, a small proportion of phosphate of magnesia—a valuable fertilizer—a considerable quantity (from 2 to 4 per cent.) of nitrogen—for most crops the most valuable of all fertilizers—and six per cent. of carbonate of soda—which is insoluble in water, and therefore of no use to plants unless decomposed by the other ingredients in the soil. The phosphate of lime in the bones is very slowly soluble in water, but the more finely the bones are ground, the more accessible are the particles to the decomposing action of the other ingredients of the soil, and consequently the more quickly is the phosphate rendered soluble, and thus made available as plant food.

3. Superphosphate is made by treating either raw, steamed or burnt bones finely comminuted, with diluted sulphuric acid. The proportion of acid most desirable to employ depends on the state of the bones and the strength of the acid. Steamed and burnt bones require less than those that are raw and the more finely all kinds are ground and the purer the acid, the less of it will be needed. The pure concentrated acid has a specific gravity of 1.830 to 1.850 and from this standpoint the relative strength of the article to be used can be ascertained. Of the kind generally sold it would require at the rate of 52 pounds of the acid to convert 100 pounds of phosphate into superphosphate; or, in other words, a trifle over one-half the weight of bone is the proportion of acid required to accomplish the desired end. The quantity of water with which the acid should be diluted varies with the method of manufacturing, but it is a safe rule to add to it twice its bulk of water before mixing it with the bone. The sulphuric acid at once attacks the carbonate of lime, decomposes it, liberating the carbonic acid and uniting with the lime, in proportion of 46.51 parts of acid to 32 56 of lime, takes into chemical combination 20.93 parts of water and all together form sulphate of lime or gypsum.

Having thus got rid of the small proportion of carbonate of lime in the bone, the acid attacks the phosphate of lime, having a greater affinity for the lime combined with the carbonic acid than for that combined with the phosphoric acid. Taking away from the phosphate of lime two-thirds of its lime, it combines with the latter in the same proportion as with the lime from the carbonate of lime, and, in the same way, forms gypsum, while the one-third of the lime still remaining combined with the orginal proportion of phosphoric acid, forms a new combination known by the name of biphosphate or superphosphate which is readily soluble in water, and which, united with the gypsum from the carbonate and phosphate of lime, the organic matter, water etc. which were in the bones, constitutes the bone superphosphate of commerce. The methods of preparing it at the different factories vary somewhat, but the principles and processes are here briefly condensed.

4. Until recently all the phosphate of lime used for agricultural purposes was of organic origin, derived from bones; but of late the use of phosphate from mineral sources has been rapidly increasing until it is not improbable that in the world to-day more of the latter is used than of the former. The chief sources of mineral phosphate of lime are: 1. Apatite, or phosphorite, which was first discovered in Cornwall, Cumberland, and many other parts of England, but later has been found abundantly in Germany, and in many other parts of Europe. It usually has the form of six-sided prisms of a greenish color, and contains a varied proportion of phosphoric acid, from 7.2 to 26 92 per cent. according to Prof. Way, and Dr. Gilbert. 2. Coprolite, the petrified dung of extinct animals, chiefly carniverous reptiles, first found in Suffolk and Norfolk, England, and since then in many other parts of the world. Some of this analyzed by Prof. Henslow, contained from 40 to 60 per cent. of phosphate of lime; while Prof. Way found in other specimens 29.87 per cent of phosphoric acid, equal to 81.30 per cent. of bone earth phosphate. 3. Phosphoric rock found very extensively in South Carolina, also in the chalk formation in the south of England, and probably elsewhere. A good deal of this contains about the same proportion of phosphate of lime as bones do, but like all the other phosphoric minerals, it is, of course, destitute of any nitrogen. 4. Mineral bone earth found in Estramadura, Spain, in pure specimens of which Dr. Daubeny and Capt. Waddington found as much as 37 per cent of phosphoric acid. 5. Many phosphoric marls also yield phosphate of lime in different proportions.

Before these substances are used, they are, as a rule, either reduced to powder and used as ground bones; or, better still, treated with sulphuric acid, so as to form superphosphate of lime. The resultant preparation is reported to be generally as valuable a fertilizer as commercial superphosphates, the influence of the nitrogenous ingredients of the latter on certain soils having been deducted. This mineral superphosphate is also used in combination with bone superphosphate and the resultant preparation is highly spoken of. The following is an analysis of a good mixture of the kind.

Soluble phoshate of lime	22 to 25	per cent.
Insoluble phosphate	8 " 10	" "
Water	16 " 13	" "
Sulphate of lime	35 " 45	" "
Organic matter	12 " 15	" "
Nitrogen	0.75 " 1.5	" "

The Cabbage Fly.

W. B., Heart's Content, Newfoundland, says: "During the present summer in nearly all the gardens round about here, the cabbage and cauliflowers have been destroyed in large numbers by a white maggot that eats away the roots. The maggot appears to be of the same species seen in putrid meat etc. Lime and soot don't seem to have any effect upon it. It can hardly be the manure that has conveyed the pest into the land, as I have used guano only this year on one plot; and they appear as bad there as in other parts of the garden where stable manure was used. Is there any remedy, or if not, how can I prevent it from doing mischief next season?"

ANS.—The white maggot is evidently the larva of the European Cabbage Fly, an insect now widely distributed in this country, and well known in many localities from the amount of damage it has done.

This Cabbage Fly (Anthomyia brassicæ) is an ash-gray, two-winged fly, resembling the common house fly, but a little smaller. The body is covered, though not very thicky, with coarse, black bristles. Besides these the body has several black marks which are arranged as follows: one on the head; three stripes on the thorax, running lengthwise along the body; and one longitudinal stripe on the abdomen, with black transverse stripes between the joints. There are two other closely related species in this country, the Onion Fly (A. ceparum) and the Radish Fly (A. raphani) that are injurious insects very closely resembling this one, besides a number of other species of whose early history but little is known.

The female fly deposits, on the plant, eggs which produce maggots that resemble those seen in putrid meat, save that the large end of the body is flattened and somewhat fringed or margined along the sides with minute teeth. These bore into and erode the roots of cabbages and cauliflowers from the time they are set out as young plants till the time to harvest them in the fall, if they do not appear in such numbers as to kill the plants earlier. Successive broods follow each other as the older reach maturity, and consequently they are not carried to the ground in the manure. A comparison of these maggots with those found in stable manure would have shown that they were different. When the maggot reaches maturity it changes to a chestnut-brown chrysalis in the old maggot skin. After remaining dormant in this state about two weeks, the fly, or perfect insect, emerges.

Where these flies have become so thick as to do considerable damage in a large community, extermination cannot be well attained without a concert of action on the part of all in the community, which it is presumed is next to impossible. Sifting fine tobacco on the leaves has been recommended as a preventive remedy, the dust being so distasteful to the fly that she will not alight on the plant to deposit her eggs. This may be in the form of Scotch snuff, and should be repeated as often as the wind or rain removes it. It is possible that a solution of carbolic acid in water, weak enough not to kill the plants, if poured round the roots, may destroy the pests.

How to Register.

W. C., Jr., Trappe, Talbot Co., Md., inquires how to get a bull out of an imported cow and by a registered bull, registered.

ANS.—We presume he has Jersey stock which is usually spoken of as registered; breeders of other kinds of cattle say recorded in the Herd-book or, recorded, simply. Now, it may be that the progeny of a registered bull, though out of an imported cow, cannot be registered in the Herd Register of the American Jersey Cattle Club, but that is hardly probable. The dam must, however, first be registered, and to do this there must be documentary evidence of her importation, naming the importer, the ship she came in, the port she landed at, and the date of importation. Blanks are given to be filled out and verified. After this, her progeny by registered bulls may also be registered, provided they can be described, the date when dropped given, the breeder named, and the present or last owner named. It costs $3 each to register living animals, $1 each to register dead ancestry. Application for blanks may be made to Col. GEO. E. WARING, Secretary of the Jersey Cattle Club, at Newport, R. I.

Club-root in Cabbages.

L. N. R., Petersville, Pa., asks for a remedy or preventive of Club-foot in Cabbages.

ANS.—This evil is due to the Anthomyia brassicæ or Cabbage Fly, treated of in another part of this department. In addition to the remedy there suggested, Dr. Harris recommends that boiling water should be thrown on the infested plants, a treatment which, according to him, will kill the larvæ without injuring the plants. This, however, has not proved a satisfactory remedy. Another preventive is never to grow Cabbages two years in succession in ground on which this disease is liable to occur. It is found that plants raised in soils rich in lime are but little affected by Club-root, and on this account, as well as from actual experiments with the use of lime on other soils, there is little doubt that lime acts as a check on the insect. The most effective way of using it, according to some, is to apply about a tablespoonful of caustic shell-lime to each plant, by removing a little earth from around the stem, putting on the lime and then replacing the soil. If a little bone-dust is scattered over the plant it will add to its chances of freedom from the pest.

Miscellaneous.

Z. B. Wheeler, Bibb Co., Ga., inquires where he can purchase oil-cake for his cows.

ANS.—Cotton seed-cake can be bought, by the ton, of pressers in New Orleans, Memphis, Atlanta, and almost all large Southern cities. In many of the smaller towns, too, there are makers of cotton-seed oil and cake. Linseed cake can be had of pressers in Louisville and St. Louis and in other places. Both are usually for sale in the feed stores of large towns, and if these haven't them on hand, they will procure them to order or refer an inquirer to the next dealer of whom they can be had. It is always best to purchase such goods as near home as possible, to save freight, and we do not know any dealers in them in the neighborhood of our correspondent. The decorticated (hulled) seed cake is the best for cows. Feed from half a pint to a pint of the cake (ground) in a quart of corn-meal twice a day to each cow.

A Subscriber, Norfolk, Va., says that he has lost his entire crop of Swedes by the ravages of ants that gnawed the roots as soon as the leaf had attained much size, and he asks whether there is any remedy or preventive.

ANS.—The details given here are not sufficient to enable us to come to a satisfactory conclusion as to the insect enemy that has destroyed this crop. It is not likely that the loss of the turnips was due to ants; but their presence indicated that other insect enemies were there at work. Some dipterous insects, as the flower flies (Anthomyiadæ), in the larval state, infest the roots of turnips, etc., eating also the pulpy parts of the leaves and stems.

P. H. R., Clarence Center, N. Y., asks where can dynamite be purchased; how is it sold, and if it is sent by mail.

ANS.—Dealers in this explosive, here in New York, will not retail it to people in the country, owing to the difficulty in sending it to them. The U. S. Mails do not carry explosives, and even express companies do not care to carry small occasional packages of this one. The best way in which those living in the country can procure it, is through the nearest dealer in guns and gunpowder. If these haven't it on hand, and they rarely have, they can in most cases procure it much more easily than those not in the trade.

Van, Brown Co., Wis., asks what is the best grass or grasses for a wet pasture, where much of the natural growth of timber is still standing—soil, a black loam on clay subsoil.

ANS.—June-grass (Poa pratensis) and Red Top (Agrostis vulgaris) are best suited for such situations; but if "much of the natural growth of timber is still standing," a large or even a good crop cannot be expected.

Mrs. H. E. Faulkner, Waukesha Co., Wis., Asks whether Glaucium luteum is an annual or perennial; hardy or not.

ANS: Glaucium luteum is a hardy perennial.

Mrs. Geo. B., Chula, Va., says she has two plants of Eryngium Leavenworthii grown from seed sent her by the RURAL last spring, and she does not know whether they will bear winter out-of-doors in that locality or whether it would be necessary to remove them into the house. They show no signs yet of blossoming.

ANS.—Eryngium Leavenworthii is an annual. Its leaves and inflorescence turn at this time a bright purple of striking beauty and they may be preserved for winter bouquets for a long time. Our friend must refer to some other plant.

Walter Severly, sends a small piece of a plant given to him as "Egyptian Corn" but which he knows to be some sort of Sorghum, and he wishes to learn whether it is a common variety.

ANS.—The specimen, is without any doubt, a variety of Sorghum vulgare. There are several varieties of this, however, so closely resembling each other that it is impossible for us to tell to which sort so small a specimen belongs.

Allen and Voice, East New York, L. I.—The plant is Fucus vesiculosus, belonging to the Algæ family. It is sometimes called "Bladder-weed," "Sea-weed," "Sea-wrack. It is easily known by its olive color when fresh and its strap-shaped, branching parts, bearing air-bladders, here and there, by which it is floated in the water. It is used for manure and also for the manufacture of kelp and as a source of iodine. It is tough and leathery, somewhat like India-rubber.

A. M. C., Savannah, Ga., asks: (1.) Why are the holes of flower-pots covered with a shell or piece of pottery?

ANS.—The hole in the pot without which the water would become stagnant, is for drainage. The piece of crock is to prevent the soil from clogging it.

(2.) Will wooden kegs in which paint has been contained, injure plants?

ANS.—No; not if dry.

K. D. A., Tecumseh, Mich., asks how to treat Verbenas when taken from the garden and placed in the cellar, and what care should be given them through the winter.

ANS.—If placed in soil and kept moderately dry in a cold cellar—though not so cold as to freeze—they will winter very well.

W. H. Mann, Camden Co., N. J., asks how he can rid his Cauliflowers of worms.

ANS.—By pouring upon them nearly boiling water. Or see other answers.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, OCTOBER 12TH:

"Rose Geranium"—M. C. W.—T. H. H.—W. V. —C. C. B.—L. J. T.—W. M. H.—C. C. G.—Dr. I. A. T. —N. P. C.—E. Y. T.—H. B. N.—A. M. Y.—A.—R. H. C.—M. O., in time—L. E. J.—E. L. T.—"Jennie Joy"—I. J. W.—An Old Subscriber—J. P. R.—J. W. L.—J. B. McK.—W. and C.—E. M.—"A Tired House-keeper"—M. W.—A. W. M.—Eva Edgerton —J. E. McC.—"Giantess"—"Fern Leaf"—Emily —P. H. F.—S. S., grapes received—J. H. M.—J. S. H. C. H.—F. D. C.—G. L. S.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Easy Method of Improving the Value of Some Farms—(Illustrated) ... 661
Moisture-Retaining Power of Soils—Notes from the Rural Grounds—(Illustrated) ... 661
Jottings at Kirby Homestead—Col. F. D. Curtis. 662
Notes from Maplewood Farm—Hector Bertram. 662
Notes from Rural Farm ... 662
Rye, Its Culture, &c.—W. H. White ... 662
Alfalfa on the East of the Rocky Mountains—N. W. Bliss ... 663
Tobacco—S. E. B ... 663
Everyday Notes—Samuel Parsons ... 663
The Truth About It—Superstitions—F. D. Curtis. 663
Extracts from Correspondents' Letters ... 663
What Others Say ... 664
Farm Notes—W. A. H ... 664
Setting Examples of Art and Taste ... 664
Books Received ... 664
Catalogues Received ... 674
A Contrast—(Illustrated) ... 665
A Slight Mistake (?)—L. A. R ... 665
Bee Hints for October—W. L. M ... 665
Profitable Bee-Keeping—D. H. C ... 665
Raising Angora Goats ... 665
French Buhr-Stone Grist-Mill ... 665
The Best Cows for the Dairy—A Jersey Farmer. 666
Town Fair at Manchester, Vt ... 666

Everywhere:

Michigan State Pomological Society ... 666
Chapel Hill, N. C ... 666
Ithaca, N. Y ... 666
Bluffton, Ohio ... 666
Little Rock, Ark ... 666
Oxford Co., Canada ... 666
Broome Co., N. Y ... 966
Brown Co., Wis ... 666
Tompkins Co., N. Y ... 666
Jefferson Co., N. Y ... 666
Correction—Washington Co., N. Y ... 666
Crawfordville, Iowa ... 666
Burr Oak, Iowa ... 667
Poquonock Bridge, Ct ... 667
Lawrence, Mich ... 967

Answers to Correspondents:

Ground Bone, &c ... 667
Cabbage Fly ... 667
How to Register ... 667
Club Root in Cabbages ... 667
Miscellaneous ... 667
Communications Received ... 667

EDITORIAL PAGE:

The Pig in Agriculture ... 668
Growing Mutton ... 668
Chance for Fame and Fortune ... 668
Milk and Water ... 668
Brevities ... 668

Domestic Economy:

Mop-Handle Papers—No. 6—May Maple ... 672
A Question of Facts—Annie L. Jack ... 672
Domestic Recipes ... 672

LITERARY:

Poetry ... 669, 672, 679
Autumn Fashions for Children—(Illustrated) ... 669
A Few Announcements ... 669
Social Position of Women in Germany ... 661
Home Study ... 670
Discarded Daughter—Ellen Hunter ... 670
Recent Literature ... 671
Magazines ... 671
Scientific and Useful ... 671

Reading for the Young:

The Cattle Train—(Illustrated) ... 674
Puzzler ... 674

Sabbath Reading:

The Trial of Jesus ... 674
News of the Week—Herman ... 674
Markets ... 673
Personals ... 675
Wit and Humor ... 656
Advertisements ... 673, 675, 676

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY OCT. 19, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

THE PIG IN AGRICULTURE.

The pig has recently been spoken of in contempt when compared with our other domestic animals. But if we examine his good qualities at all critically, we must award him a high place in our agriculture. The American people are thought to consume more pork, bacon and ham per capita, than any other people. The products of the pig are a household necessity, and enter into almost universal consumption. If we suppose 75 lbs. per capita to be used by our people of pig products, including lard, then our home consumption amounts to at least 3,000,000,000 pounds, worth $150,000,000. The pig then holds a conspicuous place in the food supply of the nation. But when we examine it as a factor in our exports, we find it to stand at the head of all our domestic animals. A few years ago we did not put up our hams and bacon to suit English taste, and our average export of these articles amounted in money to only $6,000,000 annually. But after studying the taste of our principal customer, and getting the assistance of some English houses in putting up the goods, our exports of hog products rose in 1872 to $21,000,000. During the fiscal year 1876 these exports were as follows:

Live Hogs	$679,042
Bacon and Hams	59,664,456
Pork	5,744,022
Lard	22,429,485
Lard oil	149,156
Total	$68,666,161

In 1877 these products reached the sum of $82,352,222, an increase of over thirteen millions in a single year. But the items of the last fiscal year, ending June 30, 1878, were the following:

Live Hogs	$267,259
Bacon and hams	51,750,205
Lard	20,014,023
Pork	4,913,646
Lard oil	994,440
Total	$87,939,573

Now, the entire cattle products exported the same year amounted to $49,338,029; and this includes all our meat trade and dairy products, the latter being $18,162,487; so that the exports of our dairy products, amount to but little more than one-fifth as much as those of our pig products, and the whole cattle exports only amount to 56-100 of the pig exports. These export figures of pig products show what we may do in a few years more. They have doubled in less than ten years, and we may reasonably expect them to reach $125,000,000 during the next ten years. We have ample resources for growing and fattening pigs in unlimited numbers and can supply the demand however much it may increase. And since we can produce pork, bacon and hams cheaper than any other country, we are likely to have the command of the markets.

The pig is found to produce a pound of product from less food than either cattle or sheep, and therefore is the most economical machine to manufacture our great corn crop into marketable meat. Our people are becoming wiser every year, and exporting less, proportionately, of the raw material and more of condensed product. If it takes seven pounds of corn, on an average, to make a pound of pork, as is no doubt the case, the farmer begins to see the great economy of exporting one pound of pork, bacon or ham, instead of seven pounds of corn. The difference in cost of freight makes a fine profit, of itself; besides the pound of meat is usually worth more than seven pounds of corn in the foreign market.

The production of pork should be encouraged on the further consideration that it carries off less of the valuable constituents of the soil than beef. The fat pig contains only three-fourths as much mineral matter per cwt. as the fat steer, and only two-fifths as much nitrogen per cwt. And therefore the production of a ton of pork on the farm will carry off only a little more than half the fertility carried off by a ton of beef; besides a ton of beef will require nearly fifty per cent. more food to produce it. This gives, in round numbers, the comparative effect of producing pork and beef.

It is thus evident that the pig should have a high place in our agriculture; should be fostered in every way—his capabilities studied and pushed—his diseases carefully noted and prevented, for he is the most profitable meat-producing animal on the farm. The pig is an excellent adjunct to the dairy, turning all the refuse milk, and even whey into cash. As he is king of our meat exports, so let us treat him with great consideration.

GROWING MUTTON.

Agriculture in the United States seems to be developing, growing in all its departments. No country has equal resources for the expansion of its agriculture, and none more urgent inducements. With immense tracts of land well adapted to the growth of wool and mutton, we imported, for the ten years including 1870, an average of fifty million pounds of wool per year, at an average cost of $7,959,546 per annum; and for the next five years, including 1875, 74,000,000 pounds per year, at a cost of $15,146,716; but for the past three years, the importations of wool have fallen to 45,037,702 pounds, at an annual cost of $7,922,525; and this notwithstanding our increase in population.

Our importations of woolen goods for the five years ending with 1875, average $47,595,397; and during the past three years the average has fallen to $28,047,293. The statistician of the Department of Agriculture makes the whole importation for 55 years, from 1820 to 1875, of woolen goods, amount in the aggregate, to $1,165,542,084, or $21,191,674 per year. Thus it will be seen that the value of the yearly imports of these goods for the past three years has been but little more than that of the average annual imports for the whole period, which shows that our sheep industry is getting into a healthy state.

On our broad plains, sheep must be kept almost wholly for their wool. Here the capital invested in land is exceedingly small, and the cost of the business consists in the cost of the initiatory flock and the wages of herders. And as it needs but one herder to 500 or even 1,000 sheep, the expense is not large, and a low price of wool will afford ample margin for profit. In this way we produce many millions of pounds of cheap wool in Colorado, Nebraska, California and Texas. This is all needed, and its growth should be encouraged as long as these conditions continue; but we require a large increase in the production of wool in the older States, in order to supply our manufactories, and it has become a well settled fact that sheep husbandry cannot be made profitable on high-priced lands, if kept simply for the wool. This is undertaking to carry on an industry and throw away half of its legitimate earnings. Under favorable conditions the mutton will produce as much income as the wool. England, on a territory only about equal to the State of New York, carries eighteen millions of sheep, and the United Kingdom, with 122,000 square miles, carries a few more sheep than all the United States. But upon her expensive lands sheep husbandry is developed in all its branches. Nothing goes to waste. Bakewell and those who have followed him, have developed several breeds of mutton sheep, that mature early and produce mutton of the highest quality, heavy weight, and lambs that bring $10 or more each, when six months old. The wool, as an item of profit, is secondary to the mutton. But a heavy, fat carcass, is always accompanied with a heavy fleece. To obtain the mutton there is no curtailment of the wool.

The older States must now renew their sheep farming on similar principles to those adopted in England. We may not, at once, put into operation her admirable system of turnip culture, but we have large amounts of surplus grain of the best quality, for feeding sheep. We export annually about three hundred million pounds of oil-cake which Great Britain uses to perfect her mutton and beef, and enrich her soil. This should all be used at home, and will produce more value to export in meat, besides adding largely to the fertility of our depleted soil. Our great crop—Indian corn—is almost too rich in carbonaceous food, too heating to the animal system to be fed alone, but when mingled with a small proportion of oil-cake, it produces rapid fattening of sheep, and keeps them in excellent health. Then, we have a great resource in decorticated cotton seed-cake. This may be produced in very large quantities. These oil-cakes should be used chiefly for the increase of oil and albuminoid elements in food. The grasses are our great reliance for growing mutton as well as beef, and a proper system of farming will produce these in all our early settled States.

A CHANCE FOR FAME AND FORTUNE.

What a blessing it would be if some means were devised by which the farmers of the country might learn beforehand the area devoted in every district to each particular kind of crop! It is among the possibilities of the enlightened and systematized agriculture of the future that information of this kind will be within the reach of every inquirer. In those days it will, as a rule, be due to one's own folly if he finds any particular product a drug on his hands on account of an overstocked market. Now-a-days, however, a loss of this kind is often an inevitable misfortune even to the most prudent and far-sighted farmer or horticulturist. Last year potatoes were unprofitably superabundant in many sections, and this year again tomatoes are too plentiful for profit in not a few places. In the neighborhood of this city the crop has been so heavy and the prices consequently so low that, in many instances, it has not paid to pick and market them and they have been allowed to rot on the vines. This excessive supply is the more disastrous owing to the perishable nature of the fruit and its unfitness for exportation. Our surplus stock of potatoes and of most other farm products, can be sent to a profitable market in other countries, but all our tomatoes must be used or wasted at home.

A large demand for this kind of produce has arisen of late years across the Atlantic, and the demand is yearly increasing very disproportionately to the supply. There are very few articles that could be more profitably shipped to London than a consignment of tomatoes, if such a consignment could be made with safety. In view of the great popularity which this product has attained among us within the last half century, it is fair to suppose that a wider acquaintance with its merits among our trans-atlantic cousins and other Europeans, would be attended with a similar result, and consequently that American-grown tomatoes would there constantly find a highly profitable market. To insure this very desirable end, all that is needed is a variety that can be safely exported. One of the straightest roads to fortune is to find out some unsatisfied need of society, and then to devise the means of supplying what is lacking. Here we point out to our friends just such a need, and invite the skillful and enterprising horticulturists among them to compete for the fame and fortune that must come from satisfying it. In view of the vast improvements which have of late years been made in the tomato, surely it will not be unsurmountably difficult to produce a variety suitable for shipment.

MILK AND WATER.

The frequent exposures of the petty cheating practiced by milk dealers who are detected in watering milk, give a very low, miserable exhibition of human weakness. That the paltry gains made in this way should be sufficient to induce a man to commit so mean an act, is sad to contemplate. It is true that the supposed difficulty of detection adds greatly to the temptation; but when the delinquent milk-dealer or dairyman supposes detection of his mean dishonesty to be difficult, he makes a serious mistake. The truth is, there is nothing easier to detect than adulteration of milk. Milk is a standard substance of so regular a composition that the addition of a small portion of water to it or the subtraction of a small quantity of cream from it, can be detected as easily as the addition of water to oil. If this were well known, as it should be, by all who handle milk, the inducement to become rogues by the false security hitherto felt, would no longer operate; and there would be less of this cheating.

It is a stigma upon farmers generally, who are supposed to be honest by breeding, and to be unused to the ways that are dark, which are looked for more in the city streets than in rural and sylvan abodes, that some of them should fall into the evil ways of the city dealers and practice knavery upon the factorymen. "Patrons" the factorymen call them! but from such patronage as that, one would wish to be delivered. In a country paper there was recently published a list of "patrons" who were fined for watering milk. One of these men was fined last year and on this occasion was glad to pay $150 to be released. Wise man! he immediately sold his cows and retired from the business of "patronizing" the "Swiss Creek" factory. The whole farming community suffer from these delinquencies. "An honest farmer" is now coming to be used as a sarcasm; in irony, rather, for what the words purport. Are there no honest farmers any more? Verily the milk business, the fruit business, and the baled hay business in which "watering," and "veneering," and "padding" with cordwood, are so frequently practiced, would lead one to suppose that honesty has become an old-time and forgotten virtue. But we don't believe it yet.

BREVITIES.

Bank up the celery.

"Gather your Rose-buds while you may."

Of all the breeds of chickens we have raised this season, the Plymouth Rocks mature and lay the earliest.

"The brown leaves rustle in the wind,
And golden is the oak tree's crown;
The red beech drops her ripened mast,
And chestnut's husks come showering down."

If you want a vigorous, quick-growing, hardy, handsome shrub that will flourish in almost any soil or situation, for twenty-five cents each, buy the California Privet, Ligustrum ovalifolium.

Col. Weld tells us that his Dioscorea batatas, which has matured seed, also bears bulblets in the axils, like the male vine, so that nature is not so economical in this instance as we gave her credit for being.

A number of our friends have sent us plants this season by mail, and have then informed us of the fact by postal-card. Sometimes we cannot tell which plants and postal-cards go together. It is the same with specimens sent for name.

Mr. Basset (France) has been studying for "more than a quarter of a century" to discover a means of obtaining ammonia, at a low price, from the nitrogen of the air. Mr. Basset announces that he has arrived at complete success. We congratulate Mr. Basset (!)

Pelargonium Distribution.—We would say to our lady readers that the last of these orders are now being filled and mailed as we go to press. Not one was omitted. Those therefore who do not receive them will look to the P. O. or to imperfect directions. Of all the applications, one had no name, ten defective addresses, and several we *could not* make out.

Not until too late to rectify the oversight, did we discover that the sectional drawing explanatory of the article under Notes from the Rural Grounds, was incorrect in one particular, viz.: the drainage-hole of the inner pot is made to extend through the bucket. It would have been rather a difficult thing to have made the buckets hold water with that hole in the bottom

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

DAISIES.

BY ALICE J. ROBERTS.

I

Not ever by the wayside,
Where a common world has trod,
Soiled by taint of earthly contact,
Looks the daisy up to God.

Far away in fragrant meadows,
Where the cooling breezes pass,
Sighing with a dreamy music,
Through the tremulous, wavy grass,—

Where the rose and gold of morning
And the pearly twilights fall,
Radiant in her dewy splendor,
Grows the daisy fair and tall.

II.

Not alone where toil and conflict
Show the prints of busy feet,
And the great heart-tide unceasing
Ebbs and flows with restless beat.—

Far away where lonely beauty
Starlight pale is shining through,
In a holy revelation,
Hearts grow swiftest toward the blue.

Many a thought is born of silence
And the gloom of weary hours,
Reaching up to God and heaven,
Like the whiteness of the flowers.

[*The Watchman.*

HOLLYHOCKS.

BY ADA IDDINGS GALE.

In a garden wide and pleasant,
Where doth blossom all things sweet;
Lillies, pansies, sweet rosemary.
Springing up to meet your feet,—
Grows a wondrous stately flower,
Princess of that garden bower.

O'er it wild bees kiss and linger,
Lady-bugs go strolling there;
Tall it stands in stately splendor,
Swaying blossoms in the air;
A dozen blooms upon its stock,
Sweet old-fashioned hollyhock.

Blooms as bright-hued as the fire,
Side by side with blooms of snow;
Crimson like the sunset sky,
Pink to match some cheeks I know;
Thy blooms might kingly splendor mock,
Sweet old-fashioned hollyhock.

[*Inter-Ocean.*

AUTUMN FASHIONS FOR CHILDREN.

Materials and Trimmings.

A NUMBER of ladies have written requesting me to publish models of coats, polonaises and costumes for little girls, and, in response, I give this week the latest styles for misses and children.

The older girls will wear velours and other rich fabrics worn by ladies, but for misses less expensive goods are used. Most mothers will rejoice that plaids are again in vogue. Those in all-wool materials are the best of investments. They do not become "shiny" or "show dirt," they wear for a fabulously long time, and after being discarded for costumes, they can be utilized as linings for cloaks and circulars and for many other purposes.

6303 6303

The greatest possible variety is shown in plaided goods, from the most gorgeous combinations to those so extremely subdued, as to be best described by "dingy." The popular fancy seems to incline to the dark plaids. Checks and partial or imperfect checks share the popularity of plaids. The checks come in dark-blue, gray and garnet, striped with white wool or silk. Basket cloths are again included among the seasonable fabrics approved by fashion, the most prominent shades being bronze, olive, bottle-green, prune, iron-gray, and dust-brown. Some of the clear blue shades among basket woolens make handsome costumes for girls. French merino and India cashmere make serviceable dresses for the little folks. Camel's-hair cloths are also to be included in the list of materials for children. Any ladies who may desire samples of dress goods with prices, can be supplied by addressing me, care of RURAL NEW-YORKER. Be careful to state what line of goods you want. The trimming for children's garments consists for the most part of bands, pipings, pleatings, or folds of silk, or satin velvet, and galoons, disposed according to the taste of the dressmaker.

DESCRIPTION OF CUTS.

Fig. I is a "washerwoman" costume, composed of plain and plaided materials. The combination as shown in the cut is very pretty, but some ladies may, perhaps, prefer less of the plaided goods; if so, the overskirt may be made all of the dark fabric and trimmed with folds of plaid. At the back, the overskirt consists of a back breadth, at each side laid in backward — turning plaits over the lower portion of which is arranged a *revers*. This cut is published to please those ladies who wanted to know how to use plaids in this style of costume.

6304 6304

At Nos. 6306, 6353 and 6355 are shown polonaises suitable for girls from eight to fifteen. Camel's-hair or basket-cloths, merino, cashmere, lady's cloth or plaided goods may be used with these models. Price each, 25 cents. Nos. 6300 and 6308 are costumes for girls under nine years. In 6300, the body of the dress can be made of silk and the kilt of cashmere; or the whole may be made of cashmere, and the sleeves, cuffs and Carrick collar of silk.

The skirt of 6308 is slashed from the bottom of the garment to the termination of the dart seam, and the back edges of the back are faced with the goods and closed with buttons and buttonholes from the neck to a point corresponding with the top of the opening. The edges of the opening and the remaining edges of the back, are piped with a light color, the back then falling in modish tabs over a narrow breadth of darker goods. The vest should be of dark goods piped with the light color and ornamented with bows. Silk, cashmere, and camel's-hair are suitable for this pattern. The garment needs but little decoration. Lace, folds, braids, galloon bands, or plaitings make pretty trimming for it.

No. 6307 is a girl's polonaise, which would look admirably with a kilt-pleated skirt. Any material may be used in its construction. Price of either 6300 6307 or 6308, 25 cents. A misses' kilt skirt and scarf are shown at No. 6337. A pleated blouse with a yoke or a cutaway coat would be handsome to wear with this skirt, as would also any style of over-skirt or paloaise, for which addition the scarf would need to be omitted. Any of the dress goods in vogue may be employed for the formation of the skirt, and the scarf may be of the same fabric in a uniform or contrasting shade, or of silk, velvet, satin, brocade. Pleatings, folds, ruffles, lace or galloon-band will form appropriate garniture for the scarf. Price of pattern, 25 cents.

Fig. 1.—"WASHERWOMANS" COSTUME.

The girls' sailor costume (No. 6361) is charming for little girls. Blue flannel or cashmere combined with some of the new plaids will make a jaunty-looking costume of this. If preferred embroidery, lace, braid or galloon may be used.

No. 6303 Misses' double-breasted cloak and No 6320 is Misses' coat with *revers*. The different styles are sufficiently indicated by the cuts.

These cloaks can be made of suit goods or cloth, cashmere, silk or velvet, and trimmed with buttons, and velvet, braid, bands, folds passementerie or fringe as taste may dictate. Price of each of these patterns 25c. Nos. 6356, 6304, 6319 are models of out-door wraps for little girls. The patterns may be made up in flannel, suit goods or cloths, (diagonal cloths are especially pretty) and ornamented with bindings, braid folds or machine stitching and buttons. Price of either of these patterns 20 cents.

6319 6319

In ordering patterns, please state age of child (in case of an adult, give bust measure). Much trouble and annoyance results from ladies not stating exactly what they want. All patterns sent from this office are accompanied by printed slips giving full directions for making the garment.

FAITH RIPLEY.

A FEW ANNOUNCEMENTS,

BY THE EDITOR.

ABOUT the 16th or 23d of November, I shall publish cuts of fall styles in out-door garments and hats for ladies, and a little later will give the newest designs in street and house costumes, with an account of the most fashionable fabrics for fall and winter wear.

A number of answers to correspondents have been crowded out this week for want of space. If the ladies will have patience for a week, I shall take pleasure in answering their queries in RURAL of 26th October.

IN next week's issue I will publish some new designs in fancy articles—hair-pin receivers, pen-wipers, wall-pockets, pin-cushions, etc.—suitable for gifts or for fairs, and this will necessitate the postponement of the paper by Mr. Heinrich on ornamental grasses announced for that issue—An illustrated article on feather flowers, and butterflies, with explicit directions how to produce the novel and beautiful "feather bouquets" will appear in RURAL of Nov. 9.

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All communications intended for the November Women's Club, must be received by me before the 25th of Oct. to insure their being in time.

SOCIAL POSITION OF WOMEN IN GERMANY.

BERTHA A. WINKLER.

THE social life of women in Germany is so complicated and varied among the different classes that it requires years of close observation and familiar intercourse to become thoroughly acquainted with those minute but important details which often escape the observation of travelers, who think that a flying trip through the country and a night in a ball-room are sufficient for a thorough knowledge of German life and society. Hence the vague and indefinite ideas of Americans regarding the women of Germany.

6307 6307

Among that class of aristocrats whose names are distinguished with the word "von" (denoting nobility) the women are perhaps the most enlightened and refined, though by no means the most useful or influential in society. Their lack of influence is undoubtedly owing to their natural shrinking from public gaze in any other capacity than ther feminine characteristics of weakness and clinging dependency; and their queer notions of birth and blood, those strong barriers, which keep them aloof from all social intercourse with those beneath them.

The halo of romance thrown around th eir noble ancestors in the days of chivalry still seems to envelop these women in the misty clouds of an ideal life and invests them with that mystery of romance which though peoulisrly fascinating to the ardent, soaring imagination of the poet, makes it difficult to associate them with the rest of the earnest practical world. This idea of German noblewomen seems to be universally entertained by the peasantry who, notwithstanding their bitter experience of cruel oppression and extortion from the arrogant nobility, regard these women with feelings of reverential awe little short of adoration. The deep respect and admiration which we are wont to entertain for the wives of our Presidents or for any other great lady is nothing compared to the enthusiasm manifested, and homage paid by a peasant o the wife of even the poorest nobleman.

6308 6308

A little incident which I witnessed may serve to illustrate the above: The Graefin von (Countess of) L—— was passing through E—— on her way to the castle. Upon being saluted by the peasantry with demonstrations of enthusiastic veneration, she stopped the carriage and making a few pleasant remarks to the bystanders, offered a silver coin to one of the little girls who, upon seeing the nature of the gift, shook her head with a decisive "Nein, nein, ich danke,"

The countess then offered her a cluster of finely-colored autumn leaves, remarking that she had gathered them herself. These the girl eagerly accepted, though she evidently had no use for them. And to this day, though the girl has merged into a full-grown woman, nothing is preserved more tenderly, or held more sacred, than the relic of withered, faded autumn leaves.

6306 6300

These tokens of revential deference are the more remarkable coming from a people with whom a titled lady has nothing whatever in common and who have little to hope for from the nobility, and because among her equals the lady is treated with no such marks of respect. There the veil of mystery is torn aside, and she stands among them an educated and refined but weak woman. As her social position depends entirely upon the rank and power of her nearest male relative, she has no individual authority. Society does not value a woman according to her individual merit, but according to the position of her husband. No matter how important and superior her talents may be, she cannot gain influence until he rises in power. In short, feminine worth and talent is swallowed up in masculine rank and wealth.

Quite a different picture of social life is presented by the commercial and professional classes. Here everybody lives as near on a footing of equality as the most liberal notions of propriety will allow. The cold formalities, and strict distinction between the sexes, observed among the nobility, is entirely dispensed with. The women, unhampered by the reigning frivolities of fashion; free from the haughty air of superiority which characterizes every lady of rank, possess that strength of character, that quick, natural intelligence and facility of expression which at once commands attention and respect. By her generous impulses, her natural warm-heartedness and genial good humor, she softens and humanizes the hard lot of the peasantry, and throws

6320 6320

even a ray of warmth into the frigidly cold circles of the aristocracy. Considering her large mental capacities, and her vigorous character no other woman in Europe is capable of exercising a more unlimited and wholesome influence over society. Her social intercourse is with the most intelligent and learned, and strangers who are apt to judge her social position by that of the titled ladies, will be agreeably surprised to see a learned Professor in deep and animated discussion with a lady on some scientific subject, or a prominent merchant listening to a lady's views on commerce with an earnestness and attention, otherwise only to be met with in a counting-room council of merchants. These facts are the more remarkable when we consider that in spite of her influence in society and the respect shown to her by the most profound thinkers of the day, she would not dare to utter the word "Emancipation" without risking her influence and reputation in society. Her talents and abilities are only recognized as long as she limits the exercise of these to her domestic and social affairs. But the moment she evinces any undue ambition for a wider sphere of activity, the Professor would take his hat and depart with the gentle hint that he hoped the next time he had a conversation with the madam, it would be upon the philosophy of cooking.

It may be added, however, that within the last few years very visible and encouraging changes have taken place in their social position. Whether it is owing to the late war with France which has occasioned a greater influx of travel and more intercourse with the people of the now powerful empire, or to our Centennial Exhibition, in which women took a conspicuous part, I do not know, but judging from several new events which occurred immediately after the Exhibition, including the publication of a woman's paper in Germany and its frequent allusions to the freedom and independence of American women, I am inclined to favor the latter supposition. At any rate, they seem to have imbibed some of the love of freedom and equality characteristic of American women and are anxious to break the iron yoke of custom. In this they have the hearty co-operation of men who, since having caught a glimpse of the high social position of American women, and the purifying, elevating influence they exercise over all classes, have changed their stern opposition to woman's advancement into an earnest desire to elevate the sex. The old spirit of German pride is roused, they are vexed to see a nation of such late growth eclipse them in enlightenment and progress. Society no longer sneers at the word "Emancipation." And we need but look at the increasing list of German female authors, to be convinced of the rapid intellectual development and the powerful hold women are gaining, as individuals in society.

Evidently a brighter future is dawning for our German sisters. Although in a country governed by the iron sceptre of hereditary monarchy, they can never hope for the unlimited opportunities and grand privileges offered among the free, self-governed people of America, they can, by degrees, elevate the tone of society.

HOME STUDY.

The Chautauqua Literary and Scientific Circle.

For the benefit of many inquirers who have addressed us in regard to "Home Study," we publish the following about the newly-formed enterprise designated the "Chautauqua Literary and Scientific Circle:" For a year back a few days of each session have been given to scientific and

6337 6337

literary subjects. But this year has seen the inauguration of the most important enterprise that the association has undertaken—the Chautauqua Literary and Scientific Circle for the Promotion of Home Study. It is a gigantic undertaking, as it aims to assist anybody desiring it, anywhere in the United States. It has the machinery and means with which to push forward the work, and it will give a powerful impetus to study and investigation. Annexed is a specific plan of work,

1. *Name.*—Chautauqua Literary and Scientific Circle.

2. *Objects.*—It is the aim of the C. L. S. C. to promote habits of reading and study in nature, art, science, and in secular and sacred literature, in connection with the routine of daily life, especially among those whose educational advantages have been limited, to secure to them the college student's general outlook upon the world and life.

3. *Plan.*—This end shall be promoted by individual study in the lines and text-books which shall be indicated, by local circles for mutual help and encouragement in such studies, by summer courses of lectures and "Students' Sessions" at Chautauqua, and by written reports and examinations.

4. *Membership.*—Members shall be received on application and registration, and continued on condition of success in examination. Forms of application will be provided.

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5. *Course of Study.*—The course of study, to be hereafter announced, shall cover a period of four years. A tentative course for the first year has been arranged as follows:

1. Studies in English history and literature.
2. Studies in Greek history and literature.
3. Studies in Biblical history and literature.
4. Studies in astronomy.
5. Studies in the science of everyday life.

The following are the questions candidates for membership in the class of 1882 are required to sign:

1. Give your name in full.
2. Your post-office address.
3. Are you married or single?
4. What is your age? Are you between twenty and thirty, or thirty and forty, or forty and fifty, or fifty and sixty, etc.?

6356 6356

5. If married, how many children living, under the age of 16 years?
6. What is your occupation.
7. With what religious denomination are you connected?
8. Do you, after mature deliberation resolve to prosecute the four years' course presented by the C. L. S. C.?
9. Do you promise to give at least four hours per week, from October 1 to July 1, to the reading and study required by this course?
10. How much more than the time specified do you hope to give to this course of study?

Persons answering the above questions and forwarding them to the Rev. J. H. Vincent, D. D., Plainfield, N. J., by or before Nov. 1, 1878, will be enrolled on the first class of the C. L. S. C.—the class of 1882."

Literary Miscellany.

THE DISCARDED DAUGHTER.

IN FOUR CHAPTERS.

BY ELLEN HUNTER.

CHAPTER III.

"Thomas!"

The old servant touched his cap.

"Take my horse. I shall want him at nine."

John Romaine went up the path under the aromatic pines, dashing and handsome, whistling an air from "Travatore," and carelessly clipping at the dead flower-stalks with his silver-mounted riding-whip. It had been a blue, hazy Indian summer's day; the clouds hung dreamily over the sea,—the air was heavy with a slumbering sweetness.

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A figure stood in the low window as he came along the veranda. He heard the soft coo of a dove. It was fluttering on the sill,—a snow-white fan-tail, looking with round eyes at the little jewelled hand which the figure held out to it. She called to it softly.

Edith Earnscliffe, in a dinner-dress of sweeping silk,—the hue of May lilacs. There were falls of misty lace here and there about it, and a white shining line of pearls round the lovely arm and throat, and in the wan, golden hair. The proud young face, with its pansy-colored eyes and damask cheeks was very fair to see. The dove balanced itself daintily on her finger-tip, picked at the pearls on her wrist, and fluttered away at the tread of Romaine.

He doffed his cap.

"Am I *de trop*?"

She laughed, and gave him her hand.

"No." Her eyes said a great deal more. Romaine looked down the gilded length of the crimson drawing-rooms.

"First in the field," he said.

"No; papa has taken Miss Eckhart and his other guests into the picture-gallery. Shall we join them?"

His knowing dark eyes laughed at her.

"Oh, I am quite content to remain here,"

"But——" blushing.

He threw himself down near her, half-gallantly, half lazily.

"I have ridden from the harbor to say good-bye to you. Don't quarrel with me."

"Good-bye?"

Edith plucked so nervously at the pearls on her wrist that he expected to see them go rolling away over the floor.

"I return to town to-morrow."

"Indeed!"

"Are you sorry?" mischievously.

She colored again.

"Yes. It will be so dull here, and we are to remain a month longer."

Her sandal-wood fan was lying on the window-sill. He took it up.

"Does Miss Eckhart accompany you to town?"

"Yes."

"For the winter, I suppose?"

She looked at him suspiciously, but the careless, handsome face reassured her. He toyed idly with the fan.

"Papa has decided so."

Romaine laid down the fan satisfied. Wise Romaine! There was another secret looking out from Edith Earnscliffe's eyes which he might have learned more easily still. She loved him.

Dinner came. The Earnscliffe dining-room was long, and wide, and sumptuous, with its rich tables and glittering sideboards. Squire Earnscliffe sat in state amongst his guests. Miss Eckhart was at his right hand.

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She was in complete black, pale and statuesque. Her rich hair was brushed away from the blue-veined temples; the eyes beneath looked larger and blacker than ever, and the lids had a white droop. They flashed up involuntarily at Romaine's earnest gaze. Both bowed.

"A marble Juno," he said to Edith.

Down on the shore, in the little wind-swept graveyard of the hamlet, there was a new mound. Old Hans lay there. Hagar had been at Earnscliffe a month. It was the squire's work. He treated her as daintily as if she had been born a princess. A thousand little favors laid at her feet daily; a studied regard for her ease at all times; a quiet, unobtrusive watch of her slightest movements, and his cold, proud manner that always grew so humble before her,—Hagar could but notice these things.

She had quick instincts. They held her aloof from every member of the household; they froze the thanks on her lips. She grew cold, grave, and reticent.

Romaine and some of the younger gentlemen left the table with the ladies. Presently Edith came sweeping past him towards the music-room on the arm of a bearded artist. The arrowy, side-long glance shot from under her long lashes at his cool handsome face, was quite unheeded. He was watching Hagar Eckhart.

"A penny for your thoughts, Monsieur," said Edith.

"They are too precious for barter," he answered, smiling.

She went on.

Hagar was standing at the marble table, with a cluster of flowers and a slender Etruscan vase before her.

He went to her side.

"What have I done, Miss Eckhart?"

She turned.

"Done?"

"Yes; you have ceased speaking to me altogether."

The flowers were put quietly into the vase.

"Pardon me." His dark eyes watched her, half-tender, half-laughing.

"If you will talk with me now."

"Well?" in a little annoyed tone.

"Tell me how you like Earnscliffe."

She was looking over his shoulder at the autumn moon in the purple southwest.

"I like it."

She stood so dim, and fair, and still in the uncertain light, with her long black dress sweeping around her, that Romaine half held his breath.

"Do you know the place is haunted," he asked.

"Yes," smiling; "hear it!"

It was the low sigh of pines, and the sea on the rocks.

"No," said Romaine, "that is not it,—haunted by a legend."

She lifted her eyes, as wondering as a child's.

"Have you never heard it?"

"No."

"The old servants or the hamlet fishermen would tell it to you with a better grace than mine; it is as familiar to them as the sea itself."

There was something in Romaine's face that

held Hagar's eyes like a spell. He looked down the long vacant drawing-room, back again to her.

"You remind me of it standing here; —it—are you brave? It is somewhat ghostly."

"I think I can bear it."

The room was dark and echoing; the carved chairs and cabinets sat up against the wall, like so many specters eager to listen, and Romaine began, half-lightly, half gravely:

"Once upon a time, as the fairy stories say, there was a certain Earnscliffe, master in this old place, young and handsome, and very much inclined, as all the Earnscliffes have hitherto been, to a fast life and dissipated companions. The hamlet people saw but little of him. It was at this time that the young prodigal came home, a matter of pure necessity it seems to have been, and he sat himself down, if not in repentance, at least in peace, to pass the year on his neglected estate"

Romaine looked at Hagar's upturned, listening face, and his own grew grave.

"By and by news came that Earnscliffe was betrothed to a high-born heiress; he was to build up his fallen fortunes with her wealth. The old house would keep its old name after all. The hamlet people heard, and shook their heads vaguely. Earnscliffe had taken to sunset walks of late under the pines, to wild gallops along the shore, to rows in the white moonlight, and he was never alone. It was a lady, they said—something like this lady beside me—that is, she had a Southern face, with midnight eyes and raven hair. Sometimes they would hear her voice in these old rooms, sweet as the white symbols of the sea-foam when they clash on the pebbles. They would see her standing in these windows in the rare silks and old jewels of the house, watching the rise of moons and the set of suns, or, more likely, the coming of Earnscliffe through purple summer twilights. They tell me, if one should come here and listen of still midnights he might hear the dead echoes of her old love-songs stirring the dusk, or the rustle of her dress over the silent floors, or the sound of her sighs in the dim recesses."

Hagar's hand touched his arm in a startled, terrified way. A quivering streak of moonlight had cloven the shadows of the damask curtain and fallen ghastfully across the floor. She heard something behind it, in the darkness, that sounded like a footstep.

Romaine took the little hand upon his arm and held it firmly in his own.

"Well, as I was saying——"

Something rattled beside Romaine, like a hard breath quickly drawn. He turned, and Squire Earnscliffe stood there, his eyes shining through the shadows like live coals.

"Let me close the window," he said, sharply. "Miss Eckhart is shivering. Curse this barren place!"

Hagar recoiled to Romaine's side with a tear on her black lashes.

"I have another tale to tell you," he whispered.

"Of Earnscliffe?" shivering.

"No; of myself."

The squire turned on them sharply.

"Come into the music-room. This is the dreariest place in the house. Ugh!"

He flung the door wide open. A flood of light streamed through. Hagar felt herself drawn back; her hand was carried to a moustachioed lip, and the passionate voice of Romaine breathed in her ear:

"I love you! I want you to know it for your own sake and mine, Hagar."

The hand was dropped softly. Hagar stood in the music-room with the gay crowd and the lights around her, and Edith at the piano—stood there with her life, and the night and its darkness burst suddenly into bloom!

It was yet early when Thomas came to the door with Romaine's horse. Hagar was standing in a dim recess with a fall of drapery around her. He went to her side.

"You gave me no answer to my last story, Hagar."

She crimsoned from brow to throat. He bent over her, his daring lips touched hers, kissed hers passionately, and she kissed back.

"Good-night. I shall come again for your sake, Hagar."

A month after she knew what he meant, but not then; but Squire Earnscliffe, standing just outside the recess, turned suddenly, and his look encountered Romaine's. Neither ever forgot the moment. To Romaine it was a revelation—a seal of certainty on what he half guessed; to Earnscliffe, a mortal despair. The cruel eyes of Romaine seemed searching him through. His thin, aristocratic face whitened; he caught at the drapery behind him, like a man who feels the quicksand under his feet; then Romaine bowed himself out.

CHAPTER IV.

QUIET and solitude at Earnscliffe for the next week. The sky was growing gray and cold,—it was drawing towards winter, and visitors there were like summer birds. Hagar came up from the barren shore one afternoon. The marshes were bleak and dreary; the mournful clouds hung dark and low over the sea. She went on, treading over the fallen pine needles, to Earnscliffe gate. A man stood there waiting, with his hands thrust into the pockets of his pea-jacket, and a great water-dog at his feet. She stopped; it was Stephen Eckhart.

The tears leaped up thick to Hagar's eyes. She went up to him. The broad, brown face lighted; he looked at her from head to foot in a sort of pleased amaze, then drew back, while the dog yawned and licked her hand.

"Stephen!"

"Miss—that is, Hagar, you see I've shipped aboard a whaler for a three-year voyage, and I wanted to come and bid ye good-by."

She clung to his arm.

"Oh! Stephen!"

"Yes, home a'n't home now. You won't take it hard of me if I say I'd like to be remembered kindly by you, Hagar?"

"What do you mean?"

She pressed close up to him, and looked into his honest eyes. Stephen's composure came near breaking down at the sight of that pale, beautiful face.

"You and I was brought up together, anyhow, Hagar, and I love you better now than I ever did afore."

"My dear brother!" she said tearfully.

He held her off at arm's length, with a strange, timid look in his face.

"Let folks talk that want to; but if I make a good voyage, Hagar, and if you think you could like me well enough by-and-by, I'd like to be more to you than a brother."

She stood thunderstruck—uncomprehending. Was the man mad?

He read the thought in her face.

"Don't you know, Hagar?" he cried out fearfully.

"Know?"

"Don't you know what folks are talking about down there in the village?"

"No, Stephen," in a whisper.

He started back from her as if shot.

"I thought you knew, Hagar. I—I—that is I'm sorry; I didn't mean to say anything."

She leaned back against the gate, feeling faint and sick.

"What is it, Stephen?"

The poor fellow was utterly frightened and discomfited.

"Don't ask me. I'm going down to the harbor now. Good-bye."

He went away down the path reluctantly, looking back at her over his shoulder. Hagar stood numb and stupefied till it was too late to recall him, and then she sank down by the gate and dropped her cheek on its hewn stone.

Twilight gathered. The pines moaned hoarsely overhead. It was growing dark; Hagar shivered with the cold and damp,—she had sat there an hour, certainly. She rose up. A groom stood holding a saddled horse inside the gate—a fiery bay—Romaine's. He had come, then, as he promised,

She opened the hall door. Edith's waiting-maid met her on the stair.

"Squire Earnscliffe was waiting to see Miss. Eckhart at the earliest possible moment."

Hagar brushed out her damp, disorded hair, smoothed the sweeping folds of her dress, and went down, wondering vaguely.

They sat in the low, green parlor, which she had first entered on the night of her father's death,—Squire Earnscliffe, Edith, and Romaine. Edith's haughty face was deathly pale. Her hands lay in her lap, locked fast, but still tremulous; her eyes were bent down towards them. Squire Earnscliffe placed a chair for Hagar. Mocking and weird the red firelight danced on the hearth, and the shadows in the corners huddled together, dark and frightened,—she had never seen the room so lonely before.

Romaine arose and stood beside Hagar's chair. The squire's face was working convulsively.

"Hagar," he began, "John Romaine wants you for his wife, and I have given you to him."

Brief and to the point. Hagar's eyebrows arched.

"That is not all," said Romaine, looking calmly at the squire. Edith's lily face went down into her hands. It was the bitterest moment of the squire's life, and of hers.

"No, not all," he answered, catching at the mantel for support. "Hagar, what I *must* tell you now has been noised about in every nook of the hamlet; you might have learned it weeks ago."

Romaine silently took Hagar's cold hand, and held it firmly.

"You remember," said the squire, facing them both with a pale, sorrowful face, "the story that you heard one night of a certain wild master of Earnscliffe, child? It was down in the fishing-hamlet below, that a young Gorman sailor named Hans Eckhart had just found a home for himself and young orphan sister when Earnscliffe first came home. She had a face like yours, and a passionate, willful heart. Earnscliffe saw her and loved. She came to live in this old place for one long, happy year. It was a secret marriage, known to no one but the brother. Earnscliffe forgot his fast companions—the betrothed bride, waiting for him far away—his debts—all—everything, but his beautiful Hagar; but his fast companions sought him out, after a time, and his debts began to press hard and heavy upon him, had to accumulate. Tired of his new life and of the dark-eyed hamlet-girl, he went away! My child, he went away, and left her to wear her sweet young life out in this lonely place; and one dreadful night she opened Hans Eckhart's door and stood in his cottage, with the cruel rain dripping from her hair, and cursed Earnscliffe, and sank down there like one dead. That night a babe was born in Hans Eckhart's home—that night a spirit went out from it,—Hagar died."

He stopped, with great drops of perspiration standing out on his forehead, and clung to the marble again.

"Earnscliffe returned to his estate, bringing his wealthy, high-born bride with him. The child in Hans Eckhart's cottage he did not dare to call his own. Hans was bribed to adopt it—to keep the secret of its birth sacred till his death, and he did."

Hagar cried out sharply. He lifted her to his breast, his hot tears rained down on her cheek.

"My child—my child!"

The room reeled before her; she clung to Romaine's hand; even then she knew and felt it was he who had righted her wrongs.

Edith came and kissed her with cold, white lips, then went away, and Squire Earnscliffe knelt at her feet, and moaned from the depths of a dark remorse: "Forgive for *her* sake!"

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Stephen Eckhart sailed away on his voyage to the wild South seas. The night he left the little fishing-hamlet Earnscliffe House was filled with light and revelry from garret to foundation—it was Hagar Earnscliffe's bridal eve,

Long after that same revelry had died away the pallid face of Edith Earnscliffe remained pressed to the window-pane in her still, dark chamber, gazing blankly out into the night. She had found a sister she never knew,—she had lost the first and last great passion of her life. Years after she married—well, the world said—a stately, purse-proud banker. Romaine and Hagar were far away under the skies of Italy. Edith and they rarely meet, but the blue-eyed boy who stands at Edith's knee to-day, and lifts to hers eyes as blue and bright as those she used to worship, is named Romaine.

RECENT LITERATURE.

Friendship. By OUIDA. Phila.: J. B. Lippincott & Co.

There is so much space given in this Book to describing the social exploits and the idiosyncracies of the Lady Joan that it is impossible to consider it apart from the light of that character. It is as if the author, to combat the difficulty of making her readers realize such an enormity, felt it necessary to dilate upon it.

Whether driving a friend's ponies through the fashionable promenades or driving a bargain for articles of bric-a-brac, or smoking a cigar at Fiordilisa (of which place, together with the body and soul of the owner, Prince Ioris, she takes absolute possession) the Lady Joan is always mean, dishonest, unscrupulous, bold and intriguing. The prince, her victim, is good-hearted, weak and indolent. Her husband, whom she cordially detests, is a passive figure-head.

The heroine, an artist of genius and renown, is the sole character to be admired; and even she, within limits; for, sacrificing her ambition and her fame she finally succumbs to the influence of a blind and unreasoning passion. The scene is laid in Italy, and the story, such as it is, is of the desperate schemes of the Lady Joan, to maintain a position in "Society" and to retain the mastery of the person and property of the prince, and on the other hand of the absorbing love of the heroine for him, and her futile efforts to effect his liberation from the baneful influence of Lady Joan. Of the minor characters introduced is that of Mrs. Henry V. Clams, a type of American women English satirists delight to present as representative, but of which, as in the present case, they generally succeed in making a vulgar burlesque.

Ouida is accredited with having said she wrote books for the army, not for society. It may be well to bear this in mind for a lenient criticism, and yet it is the reverse of complimentary to the soldiers to fancy her standard of morals can find among them any practical adherents or any admirers of the phase of society she so vividly portrays. Most of the stories by this author are marked by an intensely dramatic vein, a sharp individualization, and a certain raciness of style which fascinate while the characters and sentiment revolt. "Friendship" differs from these only in degree, and is therefore less pernicious in its influence than many of the others.

His Inheritance. By ADELINE TRAFTON. Boston: Lee & Shepard. $1.50.

THIS book is interesting from the very satisfactory and entertaining portrayal of miniature society life at Fort Atchison, a military station on the plains, as well as of its garrison life. The characters are well drawn, the plot ingeniously developed, and the incidents naturally and vividly described. But it is the characters comprised in the *dramatis personæ* we cannot like and cannot sympathize with, however faithfully they may be delineated and however entertaining the story may be. The heroine has a pretty face and a capacity to be loved, which, though a negative, is her sole attribute. One regrets that Capt. Ellyot does not marry Miss Laud, by far the most lovable character in the book, but he does not—he marries the heroine, the Sutler's daughter, and the interest of the story centers on his heroic sufferings in his efforts to return to her after an escapade with the Indians in which he is supposed to have been killed, and her quiescent grief, submission to her mother, and unresisted decline and death. The hero, perfect in other respects, betrays a small mental calibre in loving so inane an object. He must be mentally and morally deficient and one cannot respect him, while in the heroine there are none of the attributes of a woman to entitle her to respect. One cannot comprehend the freak of nature which inspires so active and mighty a love in the breast of a strong man for an object so passive and insignificant. It is unnatural and incongruous. Hercules would be imbecile to entertain for a fairy a high order of affection.

A Quiet Life and The Tide on the Moaning Bar. By Mrs. F. H. BURNETT. Philadelphia: T. B. Peterson & Bro. Price 50c.

THESE are two pathetic and simple tales as different from "Theo" and her longer stories as if they were by another author. There is little scope in either story for an elaborate plot, and yet both will be found complete and satisfactory. The first is a touching little story of an artless maiden—the Rector's daughter to whom her love proves her life, and who in losing one loses both. The theme of the second is the same—the character and incidents only widely differing—the too readily given love—the betrayal and despair and death following.

German Without Grammar or Dictionary. By Dr. ZUR BRUCKE. Chicago: S. C. Griggs & Co. Price 50 cents.

THIS little manual ought to be very generally used, as it puts German into a comprehensible shape for those who wish to acquire the language for practical purposes. It has been Dr. Zur Brucke's aim to model his book on the Pestatozzian or object method, and to make his lessons so simple that the most immature intellect can comprehend what is being taught, and in a short time acquire a knowledge of the tongue, that will give him the same freedom of speech that he enjoys in the vernacular. The method is in successful use by the doctor in the Chicago public schools and by others; so that its merit is proved by its success. We recommend it to schools and teachers generally; also to those who wish to acquire German mainly by their own efforts, as it will only be necessary to acquire the pronunciation and then "go at it alone."

MAGAZINES.

THE POPULAR SCIENCE MONTHLY FOR OCTOBER. The number opens with a finely illustrated paper by Prof. J. S. Newberry, of Columbia College, on the "Geological History of New York Island and Harbor." This is a fascinating story of the great natural changes that have taken place since ancient geological times in the land and water areas about New York, and the probable character of those changes that may be expected in the future.

The second article is the fifth of Prof. Alexander Bain's series on "Education as a Science," and deals with the subject of "The Emotions in Education."

Prof. Huxley's address on "The Progress of Anthropology," delivered at the last meeting of the British Association, comes next. Then follows Dr. Montgomery's third and concluding paper on "Monera, and the Problem of Life," in which the "Physical Phase of the Problem" is further considered.

"Electricity and Thunder-Storms," by Elisha Foote, is a short but instructive article, in which the author aims to show that the production of atmospheric electricity is due to the process of condensation. The next paper, by Mr. Herbert Spencer, on "Consciousness under Chloroform," contains a curious and graphic account, by a correspondent, of his mental experiences while inhaling chloroform for the purpose of having a tooth extracted.

"Hallucinations of the Senses," by Dr. Henry Maudsley, is a readable, and, at the same time, very useful paper, showing our constant liability to be deceived by the operations of our senses, and how these operations are disturbed and their results vitiated by surrounding influences. The next article is on "Yellow Fever," by Dr. R. S. Tracy, and, though short, is one of the clearest and most intelligible accounts of the characteristics of that terrible disease that we have anywhere seen. "Bird or Reptile—which?" by Henry O. Forbes; "The Planet Vulcan," by Prof. Daniel Kirkwood: and "The Genesis of Disinterested Benevolence," by Paul Friedmann, make up, with a portrait and sketch of the late Prof. Claude Bernard, the body of the magazine—one hundred and four pages of valuable and entertaining reading.

ART INDUSTRY is a new trade-journal that replaces and absorbs the Jeweler, Silversmith and Watchmaker. Aside from its main object, which is to foster the art-industrial trades, it is a medium for bringing the general public into closer sympathy with a class of workers who possess high intelligence, and whose contributions to the journal will always be interesting reading to those who seek to extend their culture by an acquaintance with all art.

The initial number of this Monthly is a fine specimen of what is being done for trade-journalism, or rather what the publisher, Mr. Howard Lockwood, proposes shall be done in this field. It is finely illustrated, printed on toned-paper, and is altogether so handsome in appearance that we have no doubt of its meeting with the warmest welcome among those to whose interests it appeals. Its aims are epitomized in its appearance. It is published at 74 Duane St.

THE FARM AND FIRESIDE, Springfield, Ohio, published by P. P. Mast & Co., and edited by Mr. T. J. Kirkpatrick, a rising journalist, has in its October issue materially changed and improved its make-up by the substitution of a new title design, which clearly indicates the scope of the journal. Its contents and circulation constantly improve.

SCIENTIFIC AND USEFUL.

A POWERFUL disinfectant, especially adapted to the destruction of insects, is prepared by passing sulphuric acid into alcohol.

WHEN swallows fly low, wet weather may be expected, because the insects which the swallows pursue in their flight, are flying low to escape the moisture of the upper regions of the atmosphere.

MOST aniline stains can readily be removed with alcohol. If the ink is made from cochineal, a weak solution of chloride of lime with a few drops of muriatic acid is sufficient to destroy the color, but it cannot be used on silks and woolens.

COLLECTORS of insects, and amateurs, were, at a recent meeting of the Entomological Society, advised to be on their guard against tricky dealers, who manufacture new varieties by dipping various insects into aniline and other colors.

SPONGE paper, made by adding finely divided sponge to paper pulp, has been used in France for dressing wounds. It absorbs water readily and retains moisture for a long time; it is therefore applicable to many purposes in the arts and manufactures.

FOREIGN journals report that experiments have been made at Langenschwalbach, in Prussia, with a view to utilize the fiber of the common nettle. It was found that when treated in the same way as hemp, the fiber came out as soft as silk and as strong as linen; and this result being regarded as encouraging, a large plantation of nettles has been made to provide material for experiments on a larger scale.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP HANDLE PAPERS, NO. 6.

MAY MAPLE.

DO RAG CARPETS PAY!

"Does it pay to make rag carpets, when one must pay from fifteen to twenty cents a yard for weaving; and when one can buy store carpet at fifty cents per yard?" inquired Mrs. W., as she finished winding a large ball of carpet rags.

"Indeed I think it is economy to make rag carpets; for they last so much longer than others. A good one will last for years," was my reply.

"Not when one has a houseful of men and boys to tear around as *we* have;" said Mrs. W.

"Of course not," said Mrs. Edson, our hostess. "It is very different at May's; you know there is only a small family there, and carpets and furniture last much longer with her folks than they would with you or me. For my part, I don't think a rag carpet would pay us for the time spent in getting the rags together. If one has a spare room that is only to be used once in a great while, it may pay very well. But with our small cottages, there is no economy about it, in my estimation."

This bit of conversation was between ladies who were living in a newly settled country. A few of the neighbors in the vicinity had been "putting on airs," by having their floors carpeted, and others were making preparations to follow in their wake; though, as in the case of Mrs. W, with some doubts and misgivings as to the economy of "the move."

I did not feel called upon then and there, to reply to Mrs. Edson's part of the argument. But I kept up a "desperate thinking;" for I was sure that a good substantial rag carpet did pay, and in many ways. In nine cases out of ten one who lacks energy to make a rag carpet, will not have the means to buy a store carpet, even at fifty cents per yard, when it must be cash in hand, and then, if purchased, it is a poor thing and will not, with the best of care, endure the wear of every day use for one season. But even that would pay by giving the house a more habitable appearance; for a house with bare floors, though it be ever so well furnished otherwise, looks naked and barn-like. But a rag-carpet pays better in an ordinary farm house, because it wears better and is better adapted to the circumstances of the family, and corresponds with the usually plain furniture.

It pays by subduing the noise caused by the tramp of boots, the moving of chairs, the rattling of dishes, and in softening the tones of voices. Indeed, a rag carpet has a softening and refining influence upon every member of the family. Even those rough boys forbear to scuffle in the house, because it will injure the carpet that mother worked so hard to make, and they hate to see the pleasant room grow shabby. Boys as well as girls, like to have their home look cheery and "stylish," and thus the rag carpet wears much longer than the matron imagined it would.

Mrs. Friendly had long contemplated making a carpet, and had her rags all prepared. But her husband, though a model man in most habits, had contracted in the days of "keeping back," the fearful habit of spitting upon the floor. And during his married life the habit had remained unchecked, perhaps, because his girl wife was all too timid to let him know that she could see his faults. And on account of this distressing habit, she had delayed having her carpet woven.

The third summer after their marriage they paid a visit to a wealthy brother of Mr. Friendly. Here every room in the house, except the little box of a "store room," was elegantly furnished, and Mrs. Friendly dreaded to have her husband come into those elegant rooms for fear the beautiful velvet carpets might be desecrated by his presence. She was agreeably surprised to see that he invariably used the spittoon. In less than a month after her return, Mrs. Friendly had her rag carpets upon her floors, and a neat little box of sawdust placed in the neighborhood of the arm chair, was all the hint her husband needed; his bad habit was at once cured.

Indeed if one had to make a carpet every spring, I believe it *would pay*; just for its refining influence, for it certainly paves the way for taking care of more elegant furnishings. And then it *does* save such an amount of hard labor, bringing water from some far-off spring, or drawing it from some deep, deep well or inconvenient cistern, to wash and scrub the floors six times a week.

A QUESTION OF FACTS.

I HAVE been looking over Miss Corson's Cooking Manual, of which I have bought several copies, and find in it many valuable hints and details as to cooking to the best advantage the simple food that is in every house, without waste and with a relish that is not always to be found even in elaborate cookery books. And it has occurred to me to ask why it is that physicians do not take up the subject of health in diet more, and enlighten the world as to the truth of many things that are in doubt at present. Are tomatoes healthful? Of course, you will say, "No one doubts it." Yet I know people who affirm that they are sure to encourage cancer if eaten in large quantities. And while I do not believe in their injurious effects, I am led to consider these things by a statement from the London Globe concerning a boy who died from eating peach kernels. Yet how many times, in making these preserves, have I broken the stones and put in the meats in order to give a flavor to the canned or preserved peaches!—We should surely have the *facts* proved and attested, if it is true that one ounce of peach kernels contains a grain of pure hydrocyanic acid, and less than a grain of this poison will kill an adult, two-thirds being sure death to a child. ANNIE L. JACK.

DOMESTIC RECIPES.

Boston Brown Bread.

ONE heaping coffee-cupful each of Indian, rye and Graham meal; sift and beat together with two cupfuls of molasses, two cupfuls of sweet milk and one of sour, adding a tablespoonful of cream; one dessert-spoonful of soda and a little salt. Beat thoroughly and pour into a tin form; steam four hours and then place in the oven to brown.

Pickled Pears.

SEVEN pounds of fruit; three and a half pounds of sugar; one pint of vinegar; cloves, cinnamon and allspice tied in a cloth. Put the sugar, vinegar and spice into a porcelain kettle, boil up and skim; then add the fruit; which should be peeled and left whole, and boil until fully done. Put into cans, pour over the syrup and screw down air-tight.

Graham Paste.

MIX lightly one pound of Graham flour with a pint of thick, sweet cream; add salt, roll thin and bake as other pastry.

Horse-radish.

IF horse-radish be prepared in the fall as follows, it may be kept all winter:

To each coffee-cupful of horse-radish allow one teaspoonful of salt; one tablespoonful of white sugar and a pint and a half of good vinegar; bottle and seal. E. M.

Tomato Catsup.

WASH green tomatoes and slice them rather thin; weigh them; allow three or four sliced onions, or not as preferred, four pounds of sugar and a gallon of cider-vinegar to eight pounds of tomatoes. Put the vinegar to boil in a porcelain kettle with the sugar, stir it, and when it boils up, set it off, and let it stand a few minutes until the scum can be removed without wasting the vinegar; then add the onions, two teaspoonfuls of salt, a tablespoonful each of powdered cinnamon and cloves, and a grated nutmeg; then set it upon the fire, and immediately add the tomatoes. When the vinegar begins to simmer, press the tomatoes gently down. Let them boil only two or three minutes. Put them into covered jars; or when cool enough, into wide-monthed bottles. When the pickles are all used, the vinegar need not be lost, as it is excellent upon baked beans, and cold salt meat or in mince pies, etc.

"YOUNG HOUSEKEEPER'S FRIEND.

News of the Week.

Monday, Oct. 13, 1878.

POLITICAL.

The results of the October elections held last Tuesday in Ohio, Indiana, Iowa and West Virginia seem to be highly satisfactory both to the republicans and democrats, judging by the loud huzzas and congratulations of their newspaper organs. Since the news came from Maine of the unexpected strength shown by the greenback party, both of the old parties were much alarmed by the "unknown quantity" represented by the new candidate for popular suffrage; and now both or them are not a little relieved by discovering that it is much smaller than their fears had pictured it. It entered so strong into the present campaign, winning three seats in Congress from the Pine-tree State, that it was naturally supposed it would be a formidable opponent in the Western States in which the greenback doctrine originated and where it has always had its ablest and most numerous supporters. The surprise to the old parties was as great therefore as the disappointment must have been to the new, to find that in the four States that cast their votes for congressmen on Tuesday, only two greenbackers were elected, and these only by democratic support. While republicans and democrats share equally the satisfaction arising from the discovery of the weakness of this third party, each has some special grounds for self-congratulation. The tide of unpopularity that was rising against the republicans at the last presidential election, has evidently reached its flood, and begun to ebb. The majority of 20,000 against them at the last election in Ohio has been wiped out, and they have carried the State by a plurality of about 10,000, making a gain of 30,000. In Iowa also they have probably increased the vote on their State ticket, although the greenbackers, by joining with the democrats, have there wrested from them two seats in Congress. In Indiana they have about held their own on the State ticket, and in an "off" year, with the loss of many farmers who usually supported them but who this year voted the greenback ticket, they are disposed to rest content with a drawn game. On the other hand, though the democrats have lost the State ticket in Ohio, they gerrymandered the electoral districts so skillfully in the last legislature, that they have won three congressmen, the republicans electing only nine congressmen this year instead of twelve at last election, and the democrats eleven instead of eight. In Indiana the latter have been still more fortunate; for, in addition to having gained three congressmen, they have secured a majority of the State legislature, thus insuring the reelection of Voorhees, the present Senator. By latest accounts the legislature stands, on joint ballot, 79 democrats; 65 republicans; six nationals. In West Virginia, though the greenbackers cast a heavy vote, the democrats succeeded, as usual, in gaining all three congressmen. The greenbackers only polled about 30,000 votes in Ohio, about the same number in Indiana, and nearly 35,000 in Iowa. It should be borne in mind, however, by the "hard money" men that most of the democrats elected are "soft money" advocates, so that many democrats who believe in the "Ohio Idea," finding they could support it within their own party, did so without joining the straight-out greenbackers.

It tickles the anti-Butler papers of Massachusetts—and nearly all the papers in the State are in that category—to be able to point out features in his business career inconsistent with his present *role* as the workingman's friend. Since 1857 he has been a large stockholder in the Middlesex Woolen Mills at Lowell, which, in 1862, paid 31 per cent. on the capital invested, 45 per cent. in 1863, and an average of 20 per cent. since the first date mentioned to the present time, yet the wages of the workingmen there have always been low in comparison with the amount paid elsewhere. Card-strippers in the Middlesex Mills now secure only 86 cents a day to support their families, while at the mills owned by Gov. Talbot, the republican candidate, at North Bellerica, the lowest wages paid to any man is $1.25. And yet Butler expects a heavy vote at Lowell. Then, these papers get hearty anathemas from Ben. for reiterating the old charges with regard to his enormous fee for securing the Farragut prize-money for the capture of New Orleans. The total sum obtained was $123,472,000; total expenses $142,411, of which Butler and a couple of subordinate lawyers pocketed $123,472; thus heavily mulcting the sailors to whom it was due. The large number of candidates in the field throughout the country is a pretty fair indication of the confusion of parties, the multitude of would-be statesmen the nation is blessed (?) with, and the probability of no small amount of scratching at the coming elections. There are altogether 292 representative districts and over 800 candidates, and as less than half the members of the present House have been renominated, and a good many of these will fail of election, there will be many new faces in the next Congress. Among the prominet absentees from it will be Gen. Banks, who missed a renomination by a single vote, and Mr. Sayler, a prominent rival of Randall for the Speakership, who has just been defeated at Cincinnati. Several republican campaign meetings having been broken up by the democrats in South Carolina, Alabama and Louisiana, Attorney-General Devens has instructed the district attorneys and U. S. marshals in those States to impartially, but firmly enforce the laws for the punishment of all combinations or conspiracies for such attempts, by the arrest and indictment of all guilty parties. This just measure has given rise to the charge, in a number of democratic papers, that Hayes is about to change his conciliatory policy towards the South. But surely conciliation does not mean permission to persecute political opponents and resort to the "shot-gun" policy. The Convention to frame a new Constitution for California, consists of 78 non-partisans, 52 workingmen, 10 straight republicans, 9 straight democrats, 1 farmer and workingman and 1 independent.

The past week has been rather unfortunate for Mr. Tilden's chances of being again the democratic candidate for President. On Tuesday last the Tribune of this city published, with translation, a series of cipher dispatches relating to the Florida count during the last electoral troubles. Of these the most important bear dates between Nov. 30 and Dec. 5, 1876, and passed between Col. Pelton, Tilden's nephew, and B. Havemyer in New York, and Manton Marble and others of Tilden's friends in Florida. They leave no doubt but that negotiations were entered into with one or more of the republican members of the Florida Returning Board, for the sale of their votes to Tilden. The decision of the Board and the Governor's certificate were offered for $200,000. Marble telegraphed this; but the figure was considered too high. An offer of a single member of the Board, however, to sell his vote for $50,000 was accepted, but by some mistake the cipher dispatch authorizing the payment arrived too late. The general opinion seems to be that it will be hard for Tilden to convince people that he knew nothing about this project of bribery. The same day these dispatches were published, Tammany Hall succeeded in organizing the State Democratic Committee in its own interest and against Tilden by a vote of 17 to 14; and on last Friday Harland, Tilden's lawyer in the Government's suit against him for unpaid income tax, was indicted at Marquette, Mich., for being an accomplice in the theft of the books belonging to the New York Mining Co., in which Tilden was interested, an account of which theft was given here the week before last. Here again there were inculpating cipher dispatches from Col. Pelton; and it is boldly said that the books show that Tilden cheated the Government. Yet, after all, public opinion should "give the old man a chance"—to explain. What kind of republican arguments were werful enough to nullify the liberal disposition of the democrats to bribe? Can any one guess?

MISCELLANEOUS.

On Monday last eight drunken, disreputable negroes entered a house of ill-fame at Mt. Vernon, Ind., and robbed and abused three of the female inmates. On Tuesday four of the miscreants were arrested and put in jail; on Friday morning at 2 o'clock the deputy sheriff with a *posse* surrounded the house of an old negro, named Harris, for the purpose of arresting his son, one of the criminals. Harris shot the deputy sheriff dead, but was arrested by his assistants. At night a party of masked vigilantes overpowered the guards of the jail; broke into the building; cut Harris to pieces, threw the fragments into the privy, and then dragged the four other wretches into the neighboring square and strung them up to the branches of the trees, where they were allowed to hang until taken down by the coroner next day.

FOREIGN.

There has been a negro rebellion in the island of Santa Cruz, West Indies. The whites number 3,000, the negroes 22,000, and there are only 50 soldiers on the island. French and English men-of-war, however, landed troops, killed 300 negroes on one plantation, and have suppressed the trouble. A small part only of the negroes rose in insurrection. On Friday last a couple of roughs began to fight in the pit of Liverpool, England, theatre; a cry of "Fire!" was raised, the audience stampeded, 30 men and a number of women and children were crushed to death. The outlook in Europe is anything but bright. In Great Britain the failure of the City of Glasgow Bank has caused a number of other heavy failures, the last of which is that of a large Manchester shipping house with liabilities of from $5,000,000 to $10,000,000. Strikes are in progress in several parts of Scotland and England, while in Ireland the National party are jubilant at England's troubles with Afghanistan. Telegrams last Monday that war had actually commenced were premature, and news to the same effect yesterday is contradicted to-day by hints that a peaceful settlement is yet possible. England is collecting a heavy force so as promptly to crush the enemy; the Ameer is already prepared, well supplied with Russian officers and arms, and in possession of the passes through the mountain range that separates his territories from British India. In Frace there is a prospect of a coalition of all other parties against the republicans, and a stormy time is anticipated. In Germany Bismarck is sternly pressing the passage of the laws against socialists, seeking supporters now from the Liberals, now from the Ultramontanes, while the Socialists declare that if driven to the wall the discontent of a military-ridden and tax-oppressed people will find vent in revolution and warn Bismarck of a repetition of the scenes of bloodshed and revolt in 1848.

In Austrio-Hungary, the Hungarians are bitterly opposed to the occupation of Bosnia and Herzegovina, and refuse to supply money to pay the invading army; although the country is occupied almost entirely, yet the population is intensely hostile; there is danger of Turkey taking a part in the struggle, should the Austrians attempt to occupy Novi-Bazar, a step they insist on taking. Russia is still lingering as close to Constantinople as possible; with England at war in the East, and Austria embroiled with Turkey, the Czar may think himself strong enough to treat the treaty of Berlin in 1878, with the same contempt with which he treated that of Paris, in 1871.

There are a good many jokes about the love of savages for missionaries, but five Methodist ministers who were recently eaten by the bush natives near Mallcota on the coast of New Zealand, found it no joking matter. Urged on by a holy wrath traders and christianized natives killed 80 of the tribe in retaliation. The close of the Paris Exposition is again definitely fixed—this time for Nov. 20. Mr. Krantz, the chief commissioner of the Exposition has arranged for a fete at the Trocadero on the 15th inst. for the benefit of our yellow fever sufferers. The Albanians who slew Mehemet Ali and his escort have added another to their deeds of blood. The commandant of Podgoritza in the territory given to Montenegro by the Berlin treaty, announced the receipt of instructions to surrender the fortress and straightway he and his whole garrison of 156 men were massacred. Montenegro is likely to find troublesome subjects in her fresh acquisition. The inhabitants of the Dobrudscha are so bitterly opposed to the Roumanian rule, to which they ave been handed over, that the Roumanians dare not for the present attempt to take possession of the country. The Porte has begun reforms by removing a number of Pashas who are accused of corruption, arresting others and ordering the execution of a number of Kurds and Begs for atrocities they have committed. HERMAN.

EVERY AMERICAN has freedom, and almost every American has catarrh. It is the national complaint. No surer index to its prevalence can be desired than the myriad remedies proposed for its cure. One meeting with great success is that recommended by the Rev. T. P. Childs, whose announcement appears elsewhere in this issue. This gentleman gives a very accurate description of the causes of the disease and the dire results of inattention in the preliminary stages. He also explains his manner of subduing the disease, which is simple, and it would appear should be effective. Inhalation is very generally conceded to be the most direct way to apply medicine to the lungs and air passages, and with the knowledge of the inhalants that are indicated, which Mr. Childs' success would seem to show that he possesses, the disease should yield to treatment.

THE MARKETS.

PRODUCE AND PROVISIONS

NEW YORK, Saturday, Oct. 12, 1878

BEANS AND PEAS.—The trade regards prices for mediums and marrows as rather strong for free purchases, and the market is tamer than it was at the opening for new stock. New beans lead the dom ind when very choice. Red kidneys are looking up a trifle. White kidney and pea firm and scarce. Black beans quiet, with a wide range. Canadian peas in bulk and bond, 78@80c.; green peas, $1 25@1.35.; Southern B. E. peas, $2.50@2.75 per 2-bush. bag.; Medium beans, new, $1 75; old, $1 62@1.65; marrows, new, $1 75@1 80; old $1.57½@1.60; pea and white kidney, 1 75@$1 80; red kidney, fair to choice, $1 75@2 20; black, $1.40@1.90.

BUTTER.—The market is rather limp, the only grades holding tone are choice creamery and selected half tubs and perfect western. Although receipts are large, fine September does not show its usual quantity. This grade is now generally looked for, especially for the full single-package trade, that has become one of the features of the butter market of late years. In dairies we hear of little animation; line firkin dairies are dull. Low grades of butter here and to arrive will have quite a contest with oleomargarine when cold weather sets in, as the latter is obtaining considerable enterprising push. Exporters are at the moment using low grades and name very low prices.

Dairy, pails, choice, 21@22c.; fair to prime, 15@20c.; poor, 12@13c.; State, half-tubs, choice, 20c.; fair to prime, 16@18c.; poor, 10@12c.; entire dairies, 18@20c.; firkins, 16@18c.; Welsh, tubs, choice, 19@20c.; good to prime, 16@18c.; poor, 10@14c.; creamery, selected, 25@26c.; other, 23@25c.; Ohio and State, sweet, cream, 22@24c.; Western creamery, choice, 25c.; poor to prime, 19@22c.; Western dairy, choice, 15@16c.; other, 12@14c.; Western factory, ladle packed, 10@13c.; milled and common, 7@10c.; State dairies, full, 19c.; firkin dairies, 15@18c.

Receipts for week, 33,857 pkgs. Exports, 4,083 pkgs.

CHEESE.—There has been rather an unsatisfactory look to the market this week, and especially so towards the close, when shippers became very indifferent. Early in the week 10c. was quite frequent, on a certain quality of fancy factories, but this price at the close is rarely talked, and 9¼@9¾c. are the more general rates. The outward movement for this week has been 47,638 boxes

Quotations are 9½@9¾c. for fancy late made; 7¾@8¾c. for good and prime; 6¾@7¾c. for fair to good; 5½@7c. for half-skimmed; 4@5¾c. for skimmed. State, farm dairy at 8@9c¼. for good to choice, 6¾@8c. for fair to good, and 3½@5¾c. for poor skimmed. Wisconsin factory, fine to fancy, 9@9¾c.; do. good to prime, 7¾@8¾c.; do. fair to good, 6¾@7¾c. Western factory, fine and fancy, 8¾@9¾c.; good and prime7@8c.; fair, 6@7c.

Gold closes at 101¼.

Liverpool cable 46s.

COTTON.—The market has suffered a bad break latterly. Aside from the exceptionally heavy port arrivals as an influence, there has been the rather gloomy look of affairs on the other side operating. Latest prices are October, 10.23@10.24c.; November, 10.21c.; December, 10.23c.; January, 10.26@10.27c.; February, 10.31c.; March, 10.43@10.44c.; April, 10.50@10.51c.; May, 10.60@10.61c.; June, 10.67@10.69c.; July, 10.72@10.75.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans.*	*Texas.*
Ordinary	8 7-16	8 7-16	8 11-16	8 11-16
Strict ordinary	8¾	8¾	9¼	9¼
Good ordinary	9¼	9 9¾	9¼	9¾
Strict good do	9 13-16	9 13-16	10 1-16	10 1-16
Low middling	10 1-16	10 1-16	10 5-16	10 5-16
Strict L. middling	10 3-16	10 3-16	10 7-16	10 7-16
Middling	10 5-16	10 5-16	10 9-16	10 9-16
Good middling	10 9-16	10 9-16	10 13-16	10 13-16
Strict G. middling	10 13-16	10 13-16	11 1-16	11 1-16
Middling fair	11 5-16	11 5-16	11 9-16	11 9-16
Fair	11 15-16	11 15-16	12 3-16	12 3-16

Stained.

Good ordinary, 8 9-16; Strict good ordinary, 9 1-16
Low middling, 9 9-16; Middling, 9 15-16

DRIED FRUITS.—Trade generally is sluggish. The better grades of apples have a jobbing trade which keeps them fairly steady in price; quartered lots are hard to move. Peeled peaches show a moderate degree of activity and firm prices. Small fruits are slow.

New blackberries are quoted at 5½c. Peaches—Peeled, new Georgia, at 6c. for poor; 7¼@8½c. for fair to good; 9@9¾c. for prime; choice North Carolina, 10@11c.; good do., 8@9c.; unpeeled new halves, 3½c.; quarters, 3¼c. Pitted cherries, 15@15¾.; southern plums, 11@12c. Apples—Old State quarters, 2½@2¾c.; do., sliced, prime, 4c.; do., good, 3@3¼c. New apples 2¾@3¼c. for Southern quarters in bbls.; 4½@5¼c. for prime sliced, and 6@7c. for fancy. New raspberries, 25@26c., and evaporated, 27@28c.

Exports past week, 823 bbls. dried apples.

EGGS.—Receipts for the week 8,562 bbls. Supplies are larger, but the demand has kept steady enough to hold prices where they were. Near points, 23@24c.; State and Penn., 23@23c.; Western, fresh 21@22c, Canadian 21½@22c.; poor lots, 20@21c.; limed State, 17@18c.; Western, 16@17c., prime; poor, 14@16c.

FRESH FRUITS.—The market for apples has ruled weak, and the bulk of the liberal supply is again down to very easy figures. Choicest fall varieties do not exceed $1.75; the general range for fall is $1.25@1.62; good to best, winter, $1@1.25; common stock, 50@75c. bbl. Cranberries have a fair demand; fancy bbls., $8; prime Capes, $7@7.50; other bbls., $5@6.50 including N. J. crates, $1.50@2.12. Quinces in good demand, at $3@6.50, the latter in choice apple. Fine pears are in few hands: extra Seckel, $12@14 bbl.; common, $7@9; choice Virgalieu, $9; other table pears, $5@7; cooking, $2.50@3.50. Grapes are tending higher, the improvement showing in choice packed, small boxes. Delaware, State, cases 18-3 lb. boxes, $4@5; loose, 8@10c. lb.; Concord, State, 18-3lb. boxes, $3@3.50; poor to prime, loose, 3@6c, lb.; Catawba, 7@8c.; Isabella, 4@6c. The remnant of peanuts is so small that quotations can only be revised until new crops arrive; last rates of hand-picked Va., $1.60@1.65; $1.55 quoted for new and old mixed. Chestnuts have dropped to $3@3.50 bush. Hickory nuts, $2@2.50. Hot-house grapes, 25@40c. lb.

Exports of apples, past week, 12,382 bbls.

FLOUR.—Supplies have been large, of the winter wheat grades especially, and there has been a pressure in selling which has led to a further decline.

Latest prices are: $3.50@3.80 for poor to choice superfine State; $3.85@4.15 for poor to good extra do., odd lots and lines; $4.15@4.40 for good to choice do., strictly choice and fancy lots above this; $3.50@3.90 for very poor to fancy superfine Indiana, Iowa, Michigan, &c.; $3.85@4.15 for inferior to good shipping extra do. and $4.15@4.40 for good to choice extra do.; common to about choice white wheat extras, $4.10@5.00; choice to about fancy do. at $5.10@5.85; red and amber winter wheat, inferior to very choice trade and family at $3.90@5.20; round hoop Ohio at $3.90@4.25, and trade and family brands of do. at $4.25@5.50, the latter rate for very choice. St. Louis, $4.00@4.65 for very poor to good extra, and $4.65@6.00 for good to very fancy; Minnesota clear, very inferior to fancy at $3.85@5.75; Minnesota "straight," inferior to very choice at $5.60@6.25; and patent fair to very fancy at $6.25@8.50; unsound stock at from, $3@5.00; city mill extra at $5 00@5.15 for West Indies (the latter rate for strictly choice in new packages); do. for England, $3.85@4.00; do. trade and family extras, $5.50@6.50; do. for South America, $5.25@5.75 for fair to fancy; No. 2 at $2.70@3.25 for very inferior to very choice.

BUCKWHEAT FLOUR is offered lower, down to $1.00@1.35 for fair and choice new.

GRAIN.—The advices from abroad—nervousness as respects the financial situation there, and the generally tame position of affairs, have operated against trade here, and prices have been feverish.

Latest sales of wheat are, of No. 1 white at $1 08@1 08¾; No. 2 white, at $1 06@1 06¾; ungraded white, at 98c.@$1 09; No. 1 red at $1 05¾@1 06¼; No. 2 red at $1 04@1 04¾; white State at $1 08½@1 09; extra white at $1 08¾@1 09; No. 2 red, steamer grade, at $1 02@1 02½; No. 3 red, at 98c.@$1; No. 3 spring at 82½@84½c.; rejected and ungraded spring at 70@85c.; ungraded red at 95c.@$1 05; No. 2 amber at $1 02¾@1 03; do., steamer grade, at 99@99½c.; ungraded amber at $1 01@1 05; white Canada, in bond, at $1 05; red Canada, in bond, at $1 03; No. 2 spring at 92¾@93c.; No. 1 white, October, at $1 08@1 08¾; No. 2 red, October option, at $1 04¾@1 04¾; do., November option, at $1 05¼@1 05¾; do., December option, at $1 06¾; No. 2 amber, October option, at $1 02¾@1 03; do. November option, at $1 04; New York No. 2 spring, October option, at 92¾@93c.; do., November option, at 94¼@95c. Rye at 60@65c. for prime State, in car and boat loads. Of corn, latest sales are, of steamer mixed at 47¾@47½c.; New York No. 2, at 47¾@48c.; ungraded mixed western, at 45¾@48¾c.; Jersey yellow at 50c.; New York No. 2 2 white at 51c., and round yellow at 63c.; New York No. 2, October option, at 47¾@48c.; do., November option, at 49½c.; do., December option, at 50@50¾c.; steamer mixed, October option, at 47½c.; do., November option, at 48c.; do., December option, at 47¾c. Oats at, for New York No. 1 at 31@31¾c.; New York No. 2 at 29c.; New York No. 3 at 27½c.; New York rejected at 26c.; No 2 Chicago at 29c.; extra white quoted at 33¾c.; New York No. 1 white, at 34¾c.; New York No. 2 do., at 33¾@33½c.; New York No. 3 do., at 28¾c.; white western at 27@35½c.; mixed do. at 26¾@32¾c.; white State at 29@33c.; mixed do., 28@33c.

HAY AND STRAW.—There is a good sale for prime hay, which holds steady in price; common and medium grades are abundant and easy.

Latest sales are at 40@45c. for shipping, and 65@70c. for retail qualities. Straw quoted at 20@45c. for long rye; 30@35c. for short rye.

Exports for the week, 1,015 bales; since Jan. 1st., 49,167 do.; same time last year, 35,249 do.

HONEY.—The offering is in early, but sales are confined to buyers who make first seasonable items embellish their stores. Sales for consumption will not open until later on. Clover, single comb, 15@17c.; two comb, 13@14c.; Buckwheat, 10@12c. Strained ranges at 6@12c., dark to choice clear.

HOPS.—Shipments for the week have been 450 bales; this rather better export movement has been prompted by easy prices as well as more attractive assortments. Sales rarely exceed 12 to 13.

Quotations are for New Yorks, new crop, choice, 13@14; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@13; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8; Olds, all growth, 2@4.

OIL-CAKE is plenty and easy in price: western quoted at $29.

POULTRY AND GAME.—Live fowls are doing better than chickens. Exportation to Havana will resume when prices are easier.

Chickens, N. J., 12@12½c. ₱ lb.; State, 11½@12c.; Southern and Western, 10@11c. Fowls—N. J., 13@13½c.; State, 12½@13c.; Western, 12@12½c. Ducks, fat, ₱ pair, $1@1.25; poor to fair, 40@90c. Geese, N. J. and Penn., $1.25@1.75; Southern and Western, $1@1.25. Turkeys, ₱ lb., 9@13c.

Some steam-picked dressed are arriving, but the plan is risky while the weather is fickle. Turkeys are in better demand.

Turkeys, dry picked, 15@16c.; other, 11@13c. Pa. chickens, 15@18c.; N. J., 13@15c.; State, 13@14c.; Western, 12@13c. Pa. dry picked fowls, 14@15c.; N. J., 13@14c.; poor to fair other, 10@12c. Ducks, extra, 16@18c.; State, 13@14c.; poor, 10@12c. Geese, choice, 14@16c.; other, 8@10c.

Game is in fair supply for the wants of the trade. Grouse doing better.

Grouse, trapped, pair, $1; State partridges, 80@85c.; Western, 40@50c. Woodcock, State, 50@60c.; Western, 40@50c.; English snipe, $1.50@1.75 doz.; plover, $1.50@1.75; wild pigeons, still-fed, $2; flight, $1.40@1.50; wild ducks, Mallard, 60c. ₱ pair; Teal, 50c.; common, 30@35c. Venison saddles, 18@20c.

PROVISIONS have tended a little stronger with more active export calls. Mess pork quoted at $8.35@9.00 for spot lots; $8 70@8 80 for October and November, and $8.80@8.90 for December. Bacon at 5¾c. for long clear and 6¼ for short clear. Lard at $6.60@6 67½ for spot lots; $6 65 for October and November, and $6 67½ for December. Stearine at 7c. for Western. Tallow at 6¾@6 15-16c. for prime. Beef Hams at $16.50@17 western. Beef—extra mess, at $10 50@11; plain mess, $10@10.50; packet, $11@12 for bbls.; extra India $19 50@21 for city brands; do., Philadelphia, $18@19.

SEEDS.—Grass are easy; timothy quoted at $1.15. Clover at 7½@7 11-16c. Flaxseed at $1.45 offered and $1.50 held.

TOBACCO.—Export trade continues steady, and prices well sustained. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	4 @ 4¼
Good lugs	3½@ 4¼	4¼@ 5
Low leaf	4¼@ 5¼	5¼@ 6¼
Medium leaf	5¼@ 6¼	6½@ 7
Good leaf	6¾@ 8	9 @10
Fine leaf	8¼@10	11 @12¾
Selections	—@—	12¾@14

SEEDLEAF—CROP OF 1877.

New England wrappers, fine		18	@35
do.	do. selections	18	@35
do.	seconds	10	@12
do.	fillers	6	@ 7
Pennsylvania assorted lots, common		8	@ 9
do.	do. fair	10	@12
do.	do. fine	14	@17
do.	wrappers	18	@35
do.	fillers	6¼	@ 7
New York assorted lots, common to medium		6¼	@ 8
do.	do. good,	10	@15
Ohio assorted lots		8	@10
Wisconsin assorted lots		7	@10

VEGETABLES.—Exports of potatoes, past week, 9,622 bbls.; of onions, 561 do. The market is strong for potatoes. Reports are numerous as to crop damage in this State. Eastern Early Rose, $2.50@2.75 ₱ bbl.; State, fair to choice, $1.75@2.37; Peerless, $1.75@2.12; Nova Scotia Prolific, $5.37. Sweet potatoes largely in excess of the demand; many Virginia turning out poor. Va., 75c.@$1.25 ₱ bbl.; Del., $1.12@1.37. Onions, white, $1@1 50; red, $1@1 25 bbl.; Yellow, $1@1 25. Marrow squash, bbl.; $1 25; Hubbard, do., $1 50@1 75. Cabbages, per 100, $2 50@4 50; Cauliflower, $1 50@3 00 per bbl; Egg Plants, 100, $1@2 50; R. Turnips, $1 25@1 50; Beets, 75c.@$1; Carrots, $1 25; Bullnose Peppers 75c.@$1; Cucumber pickles, 1000, $1 50@2 50; Tomatoes, crate, 20@25c.; String beans, bag, 25@50c.; Lima beans, bag, $1 00@1 50; shelled, $3@3 50; Sweet Corn, per 100, 50c.@$1 25; Pumpkins, per 100, $4@6.

WOOL.—The market has been fairly supported, and has shown a fair degree of animation. The Western fleeces, and especially medium grades are most wanted.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 40@42c.; XX, 35@37; X, 35@37; No. 1, 36@38c.; No. 2, 33@35c; coarse, 30@32c, combing, 38@42c.

New York, Michigan, and Wisconsin, XX, 32@34c.; X, 32@34c.; No. 1, 34@36c.; No. 2, 31@33c.; coarse, 28@31c.; combing, 37@42c.

Indiana, Kentucky and Tennessee—XX, 32@34c.; X, 32@34c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 35@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 32@34c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 27@30c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS

Saturday, Oct 12 1878.

BEEVES.—Receipts for the week, 10,492 head do. last week, 13,372 do. The local demand for beef is increasing, and prices at the yards this week indicate by their strength unaided by any material export demand. Some Texas, Cherokee and Colorado cattle sold at an advance of about ½c. per lb. Sales of Texans were at an advance ½c. per lb. The range for native steers in lots was 8@10c. per lb. to dress, 55@56 lb., with extra and fancy selections sold up to 10½@10¾c. to dress 57 lb. Texas, Cherokee and Colorado half-breeds were generally sold at 6¼@7¼c. per lb. to dress lb.; but some mixed Missouri and Colorado steers went up to 8¼@8½c. per lb. Light grass-fed bulls (3 car loads) were sold at $2 40@2 50 per 100 lb., live weight.

COWS AND CALVES.—Several car-loads again reported sold at $45@65 per head. A few extra milkers would exceed the extreme.

VEAL CALVES.—The market was dull early in the week, but at the close prime milk stock is firm. N. J. and Bucks Co., 7¼@7½c.; good do., 6½@7c.; extra heavy, 5@6¼c.; State calves, 6@7¼c.; fed calves 3½@4½c.; grassers, 2¾@3c.

SHEEP AND LAMBS.—Receipts for the week, 34,498 head; do. last week, 23,460 do. Market not steady. Common to prime sheep, 4@5¾c. lb. Lambs, $4.90@5 50 per 100.

SWINE.—Receipts for the week, 29,856 head; do. last week, 33,084 do. Late sales, $4 37½@4 43¾ per 100, and $4 41¼ for corn fed; rough stock, $3 31@3 37. N. J. pigs, dressed 5¼@5½c. heavy; 5¾@6c. medium; 6¼@6½c. light.

SPECIAL NOTICES.

For particulars regarding Electric Belts, &c., address PULVERMACHER GALVANIC Co., Cincinnati, O.

CATARRH

The possessors of the terrible disease known as CATARRH (many affections of the head and throat are called by other names, but properly belong to the catarrhal class) have no doubt in their own minds that they are shunned by their friends because of their foul and loathsome breath, but few, however, are aware of the danger they incur by allowing it to go on uncheoked.

WHAT IS CATARRH?

Thousands suffer without knowing the nature of this almost universal complaint It is an ulceration of the head. Its indications are, hawking, spitting, *weak, inflamed eyes*, frequent soreness of the throat, dryness and heat of the nose, *matter* running from the head, down the throat, often ringing or deafness in the ears, loss of smell, memory impaired. *Dullness* and *dizziness* of the head, often in the first stages, but more commonly in its advanced stages, attended with pains in the chest or left side, and under the shoulder blades. Indigestion usually attends Catarrh; a hacking cough and colds are very common; some have all these symptoms; others only a part. Very little pain attends Catarrh, until the liver and the lungs are attacked in consequence of the stream of pollution running from the head into the stomach.

All such persons catch cold easily, and have frequently a running at the nostrils; the breath sometimes reveals to all around the corruption within, while the patient has frequently lost all sense of smell. The disease advances cautiously, until pain in the chest, lungs or bowels, startles him; he hacks and coughs, has dyspepsia, liver complaint, and is urged by his doctor to take this or that; perhaps, even cod liver oil is prescribed. Perfectly ridiculous! The foul ulcers in the head cannot be reached by pouring such stuff into the poor, jaded stomach. The patient becomes nervous, the voice is harsh and unnatural, he feels disheartened, memory loses her power, judgment her zeal, gloomy forebodings hang overhead; hundreds, yes thousands in such circumstances, feel that to die would be a relief, and many even do cut the thread of life to end their sorrows.

THOUSANDS ARE DYING

In early life with consumption, who can look back a few years—perhaps only months—when it was *only catarrh*. Neglected when a cure is possible, very soon it will transform the features of health and youth into the dark, pallid appearance, while the hacking cough, the excess of blood gushing from the lungs, or night sweats, all significantly proclaim it is *too late; and thus a neglected catarrh ends in the consumptive's grave.*

NASAL CATARRH.

Sometimes the disease only affects the membranes lining the nasal passages, and they may be easily reached and cured by simple means But when it is located in the *frontal sinus*, or in the *posterior nares*, or if it has entered the *eustachian tubes*, and is injuring the ears, then nothing but finely medicated vapor can effectually reach it and destroy it. And certainly after it has affected the throat and bronchial tubes, as all well-read physicians will readily attest, nothing can be relied on to effect a permanent cure but the inhalation of properly medicated vapor. In the same manner that we breathe common air, we can inhale and breathe a medicated air; and it is perfectly simple, any one can see, thus to treat disease of the *throat, bronchial pipes and lungs*. How much better this method, by which remedies are conveyed directly to the seat of the disease, than to resort to the uncertain and too frequent *mischievous action* of medicines taken into the stomach.

THE COLD AIR INHALING BALM.

This part of my treatment I regard as very important, especially in warding off colds (which is a full half of the battle), and in relieving the head and lungs while under their effects. The Balm is composed of several kinds of gums, balsams, firs and essential oils, which are separately used by the best physicians in treating throat, bronchial and lung diseases. These I have combined and concentrated their virtues, which, by the inhaling process, are drawn through the various air passages of the head and respiratory organs, reaching and healing every irritated spot. If used when cold first makes its appearance—which usually begins by an irritation of the mucous lining of the nose, and a sneeze, which is *nature's emphatic warning*—it will, most invariably, check it, and by producing a quicker circulation and by throwing the blood to the surface, the bad effects of a cold are warded off. It is withal pleasant to use and almost instant in its effects.

MY EXPERIENCE.

Eighteen years of terrible headache, disgusting nasal discharges, dryness of the throat, acute bronchitis, conghing, soreness of the lungs, raising bloody mucus, and even night sweats, incapacitating me for my professional duties, and bringing me to the verge of the grave—ALL caused by, and the results of NASAL CATARRH. After spending hundreds of dollars, and obtaining no relief, I compounded my CATARRH SPECIFIC AND COLD AIR INHALING BALM, and wrought upon myself a *wonderful cure* Now I can speak for hours with no difficulty, and can breathe freely in any atmosphere. At the calls of numerous friends, I have given my cure to the public, and have now thousands of patients in all parts of the country, and thousands of happy fellow-beings whose sufferings I have relieved My cure is *certain, thorough and perfect*, and is indorsed by EVERY PHYSICIAN who has examined it. If I can relieve my fellow-beings as I have been relieved of this loathsome disease, making the possessor at once disgusting to himself and others, I shall be satisfied, and feel that I have done my little toward removing the ills of mankind T. P. CHILDS

OTHERS TESTIMONY.

FROM THE CHANCELLOR OF THE UNIVERSITY OF NEBRASKA.

T. P. CHILDS—*Dear Sir:* I think you have the true theory and practice for the cure of Nasal Catarrh, and also for the treatment of the respiratory organs. My throat is now so well restored that I lecture daily without difficulty, and I find no difficulty whatever in preaching. You are at full liberty to use my name for the benefit of others.

Yours very truly. E. B FAIRFIELD, D. D., LL.D., Lincoln, Neb.

JUDGE J. COLLETT of Lima, O., writes:—"You well remember how terribly Catarrh had taken hold upon me at the time you were at my house, making me offensive to myself and to all around, and withal suffering day and night. I began to use your excellent remedy about the 26th of August, and withal suffering day and night. I began to use your excellent remedy about the 26th of August. Now I am cured; head free, air passages all open, and breathing natural. I express to you again what I said in a recent letter, 'A thousand thanks to you for so safe a remedy, and so very cheap.' I have laid away the instrument, having no further occasion to use it. Thus in about six weeks I have accomplished what you thought could be gained in from three to six months." (P. S.—Write to him.)

MR. T. GILLESPIE of Woodworth, Kenosha Co., Wis., writes:—"I must say that I never had a medicine take hold of my Catarrh by the root, and *root* it out, as this has."

MR. THOMAS J. DAILY of Homer, Champaign Co., Ill., one of the worst cases I ever had under treatment, who was six months bed-fast, and nearly blind, and one eye utterly destroyed by Catarrh, nose and face much disfigured, and throat and lungs in a critical state, writes, June 21, 1878:

"DEAR MR. CHILDS:—I have used your Catarrh treatment, that my brother, B. O. Daily, of your place, kindly sent me, now over three months, and almost all this time in hopelessness, as it did seem I must die. By and by it began to take effect, and I began to have hope. I improved rapidly, soon could sit up, passages of the head began to open, throat and bronchial tubes grew better, cough ceased, and now I can see to write. I now expect to get well and go about my business again. I owe you a great debt of gratitude. Indeed, I owe my life to your treatment.

THOMAS J. DAILY."

"Very truly your friend,

P. S.—Mr. D. is now (Sept. 10) in Troy, looking quite well; almost every vestige of Catarrh has disappeared.

REV. MR. RECORD of Convoy, O., says:—"No amount of money would tempt me to be placed back into the misery and wretchedness I was in when I began to use your Specific."

MRS. W. D. LINCOLN of York, Neb., writes:—"My health is fully restored. The horrid and loathsome disease is all gone."

CONCLUSION.

It is now a well-established fact that Childs' Catarrh Specific, for thoroughness, completeness and efficiency, has no equal in the world. Everything known to be good for Nasal Catarrh in all its horrid forms, in the head, throat and bronchial tubes, arranged into one complete system of treatment. Two kinds of inhalants and two fine inhalers go with each full course of medicine.

Do not trifle with some cheap thing, which at best can afford but temporary relief, while the roots of the vile disease are left to strike deeper and deeper. Be in *earnest* and *thorough* or do *nothing!* Write at once and say what paper you saw this in. Circulars, Price-Lists and all necessary information can be had by addressing (with return stamp),

REV. T. P. CHILDS, Troy, Ohio.

Reading for the Young.

THE CATTLE TRAIN

SHUT in from pure and boundless air.
That lately round them flowed,
From wanderings free in pastures fair,
They come a hapless load.
Close huddled, on their weary feet,
They waver to and fro,
As thundering on, with boundings fleet,
Their cruel prisons go.

Their great, good eyes look mildly out
Between the wooden bars,
As clattering o'er the long, long route
Sweep on the freighted cars,
Past pastures green as those they knew,
Past cattle feeding there,
Past tempting streams and rivers blue,
Past all things dear and fair.

Yes past for these are all things bright;
Their day of doom has come;
Farewell to life, farewell to light,
Ye sentient beings dumb.
—Yet we who speak your wild, mute woe
Are scarce more blest than ye;
Our hope but strives less dark to show
That death ye do not see.

THE CATTLE TRAIN.

THIS incident was related some years ago by Miss L. M. Alcott, the well-known author.

Somewhere above Fitchburg, as we stopped for twenty minutes at a station, I amused myself by looking out of a window at a waterfall which came tumbling over the rocks and spread into a wide pool that flowed up the railway. Close by stood a cattle train; and the mournful sounds that came from it touched my heart.

Full in the hot sun stood the cars; and every crevice of room between the bars across the doorways was filled with pathetic noses, sniffing eagerly at the sultry gusts that blew by, with now and then a fresher breath from the pool that lay dimpling before them. How they must have suffered, in sight of water, with the cool dash of the fall tantalizing them, and not a drop to wet their parched mouths!

The cattle lowed dismally, and the sheep tumbled one over the other in their frantic attempts to reach the blessed air, bleating so plaintively the while that I was tempted to get out and see what I could do for them. But the time was nearly up, and while I hesitated, two little girls appeared and did the kind deed better than I could have done it.

I could not hear what they said, but, as they worked away so heartily, their little tanned faces grew lovely to me in spite of their old hats, their bare feet and their shabby gowns. One pulled off her apron, spread it on the grass, and, emptying upon it the berries from her pail, ran to the pool and returned with it dripping, to hold it up to the suffering sheep, who stretched their hot tongues gratefully to meet it, and lapped the precious water with an eagerness that made little barefoot's task a hard one.

But to and fro she ran, never tired, though the small pail was soon empty; and her friend meanwhile pulled great handfuls of clover and grass for the cows, and having no pail, filled her picking-dish with water to throw on the poor dusty noses appealing to her through the bars. I wish I could have told those tender-hearted children how beautiful their compassion made that hot, noisy place, and what a sweet picture I took away with me of those two little sisters of charity. "Blessed are the merciful for they shall obtain mercy."

ENGLISH LITERATURE.

SOME months ago I wrote you about a very famous author. By this time I suppose you have found out his name, if not, I must tell you that this man with a short, thick body, a face disfigured by small-pox was—well, now girls who was he? Oliver Goldsmith? Yes, to be sure. Have you time now to read something about another man, who wrote a number of books? As I can hear neither your "yes," nor your "no," I will write something for "yes" and beg "no" not to read it. That is fair, isn't it girls and boys, or are you all girls? I don't know whether boys care much about literature. I think they ought to do so, when it is of their sex we write. Another time, I think I must take a woman for my heroine.

This evening, for "Blue Monday" is over and I am writing to you by gas-light,—one which, by the way, is very far up towards the ceiling, as I have not a drop-light. I sometimes almost wish for an old-fashioned kerosene lamp,—but this is a great digression;—it is almost enough to make our poor, dear old author turn in his grave, that I should so far forget myself and him as to wander off to those highly prosaic and unromantic affairs, kerosene lamps. So no more of them. Let them remain quietly where they belong, only I do wish I had one!

This author of whom I shall write to you, was born in Litchfield, England, Sept. 18th, 1709. He received his early education of a man named Hunter, of whom he said, "He beat me well," adding, "without that, however, I should have learned nothing."

In 1728, he went to Pembroke College, Oxford, having been engaged for the two previous years of his life in learning his father's business of bookseller. It is said that books of his binding are still extant.

In 1736 he married a widow, a Mrs. Porter. A year later he went to London, where he wrote for the "Gentleman's Magazine." One of his books, Rasselas, was written to pay the expenses of his mother's funeral, to use his own words, "It was written in the evenings of a week." He was a very eccentric man, as you will see, this hero of ours. One day, on entering Sir Joshua Reynolds's studio with a blind lady, he quit her hand, whirled about on the doorstep, then gave a sudden spring, made an extensive stride over the threshold, as if trying for a wager how far he could step. Being one day invited to a dinner-party, he did not make his appearance until the party were about to sit down to the table. Then he appeared at the great gate, contemplated it, and, at length, climbed it. When asked if he had forgotten to open the gate, he said, "No, but I had a mind to try if I could climb a gate now as I used to do." Two lady admirers once visited him in Bolt Court. One had prepared a very elaborate speech which she delivered with much satisfaction to herself. When she had finished he merely said, "Fiddle-de-de, my dear!" (I have always felt sorry for that lady.)

THE CATTLE TRAIN.

Then our Mr. —— had an odd fashion of treasuring up bits of peel, and when walking through the streets he would touch every post he passed with his cane; if by chance he overlooked one and was reminded of his mistake, he would turn back several blocks and rectify matters. A queer man, was he not? and yet he wrote some very good and valuable books, among the number, "The Vanity of Human Wishes," "The Lives of the Poets" and a Dictionary; then he wrote for "The Rambler" and "The Idler," both periodicals.

From an entry made in his diary we find he read one book of the Æneid in an evening, and knew the Eclogues by heart.

In 1773 he made a tour to the Western Isles of Scotland, of which he gave an interesting account. As a man, he was, in mind as in body, powerful and rugged, but he was capable of acts of benevolence and of substantial generosity. Indeed, at one time he supported four or five poor creatures, who, but for his aid, would have been obliged to seek refuge in an almshouse; yet these people were sometimes very ungrateful to —— for all his benefits. "Strength, or at least force of mind, a certain sage solemnity in the treatment of moral themes, a sharp eye for the observation of character as it manifests itself in society, and a great power of caustic wit, are the chief qualities noticed in ——." He had good sense and solid judgment.

Now as the clock strikes nine, it is quite time I should tell you when our Mr. —— died. He died December 13, 1784, and was buried in Westminster Abbey.

I leave his name to be found out by the bright girls and boys. SANS SOUCI.

The Puzzler.

CHARADE.

My first comes in the pleasant spring,
When merry birds begin to sing;
My second, I am very sure,
Is used by all, both rich and poor.
To receive my whole is very pleasant,
It oft contains some valued present.

☞ Answer in two weeks. MARY WALEY.

TRANSPOSITION.

ETY od otn hinth I toubd heet;
I nowk hyt turth snimera;
I oldwu otn veil tiwohut hete,
Orf lal het lowrd tinsoacn.

Chipmonk Hollow. ROSA A. FROST.

☞ Answer in two weeks.

DOUBLE ACROSTIC.

1. A RHYMER. 2. One or the other. 3. A dog's name. 4. A medical writer. 5. An insect. Initials and finals form fishes.

☞ Answer in two weeks. BALTO.

PUZZLER ANSWERS.—Oct. 5.

CHARADE.—Penstock.

CROSS-WORD ENIGMA.—Rosa Frost.

HOUR-GLASS PUZZLE.—
TRINITY CHURCH, N. Y.
MASSACHUSETTS
PORTLAVACCA
CAMBRIDGE
PAMLICO
BOONE
ATE
T
FEZ
LASSA
CAUVERY
REIKIAVIK
MISSOLONGHI
PENNSYLVANIAN
GENESEE RIVER, N. Y.

Sabbath Reading.

THE TRIAL OF JESUS CHRIST.

Jesus was finally condemned for "blasphemy," because he made himself the Messiah and the Son of God, making thus higher personal claims than even the witnesses against him had suggested. That was the crime, therefore, towards which one of the intended accusations—that as to superhuman power—may be held to have pointed. But what of the other? The unexpected but satisfactory answer is that it fell under precisely the same legal category, that of blasphemy. This might be suggested to us by the witnesses against Stephen, who describe as "blasphemous words" the deliberate utterances of the deacon as to the passing away of the holy place and the law. But I believe that it will be found there is no Hebrew category of crime under which the attempt to supersede the old institutions could so naturally come as that denoted by the term blasphemy. The witnesses, therefore, may have had this somewhat in view from the beginning, as the judges almost certainly had; and it is not too soon to devote a few sentences to the question what so important a legal word means.

Blasphemy is not profanity—it is profanity which, as the name imports, strikes directly against God. This is the original sense of the word, and it is that to which we have returned in modern days. But throughout the countries of Europe, ruled by civil and canon law, blasphemy has long since taken on a secondary and constructive meaning. Now whether it is a necessary thing for ordinary nations and jurisprudences to have in their statute-book such a crime as treason against God at all, we need not inquire. One thing is certain. In the Hebrew commonwealth and under Hebrew law it was necessary. For that commonwealth was the one pure theocracy, and all its priests, prophets, judges, and kings were the mere courtiers and ministers of the invisible king, whose word was Israel's constitution and law. In such a constitution blasphemy, or the verbal renunciation of God, was in the proper sense high treason; and any attempt to subvert the great institutions of his government was constructive treason. Now neither the crime of the "false prophet" of the true God, nor that of "the idolator" or seducer to the worship of strange gods, seems to have attained to the generality and eminence of the name blasphemy in Jewish law. That the word was used in the age of Caiaphas to designate alleged attempts against the divine system of religion is certain.

We cannot therefore hold, as has sometimes been done, that these witnesses brought forward a special and isolated charge with regard to the temple, and that on the failure of it the council passed unfairly to other and disconnected counts. The special charge was at least in the line of the whole procedure contemplated. For unless we are to become wholly unhistorical in our legal criticism, we must believe that the general course of this night's proceedings was prearranged by the leading members of the Sanhedrin, and that they and not the witnesses really conducted the prosecution. The evidence is overwhelming that at repeated meetings of what the fourth Gospel even calls a council, and what may have been formal meetings of the acting committee of that body, the suppression and if need be the death of Jesus had been resolved upon. And in these preliminary proceedings it was not merely his acts as a prophet or as an opposer of existing institutions that were deliberated upon. His claim to be the Christ, and even (as his nearer followers had long ago acknowledged him to be) the Son of God—whatever that mysterious claim might mean—had during the second part of his career pressed heavily upon the Hebrew conscience, especially in Jerusalem.

The evidence, all agree, was not found sufficient—perhaps not found "relevant"—to infer a conviction upon it alone. The rule of law in such a case was clear, that the accused must be at once liberated. And even had the inculpatory evidence been found sufficient, the next step by the rules of the court was to call witnesses for the defence. Such a proposal would of course have been a mockery in a trial at such an hour. What was actually done was an attempt to cross-examine the accused. "Answerest thou nothing? What is it which these witness against thee?" are the exact words of the high priest repeated in two of the narratives. But he "held his peace, and answered nothing." The interrogation was unlawful. But I am not able to represent this silence as caused by indignation at the errors of the accusers, or the unfairness of the judges. That the ordinary rights of every accused Hebrew had been present to the mind of Jesus we have already seen. But that he had any expectation of escaping, or even any desire at this stage to do so, there is no evidence whatever. All the narratives combine to show that he had for some time been consciously moving on to a tragical and tremendous close of his brief career. His utterances in anticipation of it during the previous weeks, and especially on the preceding day, have held the world spell-bound in each succeeding generation. A similar hight of self-possession marks him at this final hour. The inaccurate or malicious recollections of what he had said three years before were nothing now to him. He had not come to Jerusalem to perish by a mistake; and if we are to fill that silence with thoughts at all, we may suppose that they had reference to the scene that now surrounded him. For there, at last, were gathered before him, the children of the house of Israel, represented in their supreme council and great assembly. To this people he had always held himself sent and commissioned. Now at last they have met; and all the ages of Israel's past rise in the mind of him who stands to be judged—or to judge.

At what hour the great concluding scene, so vividly described by three of the Evangelists, took place, it is impossible to say. Plainly enough, the private and public examinations of the witnesses must have occupied a considerable time, and whether or not these had been attended by "all the council," or a portion of its members, it is quite certain that by this time—at the point where these examinations were continued—a large number of the "great Sanhedrin" was met. The members of that body numbered seventy-one; the "little Sanhedrin," which was probably a committee or cabinet formed out of the larger, numbered only twenty-three. It is very possible that the smaller body may have been summoned at a somewhat earlier hour by Caiaphas, and it may be that no other ever assembled. Still the narratives rather suggest that the great council, which alone could at this time try a man for his life, and which alone could at any time judge a prophet, was also called. Let us concede to the language of the Evangelists that so much of the law was observed. We must, in that case, imagine the council as sitting in the hall Gazith, half within and half without the holy place.

It was they, the zealots of the council, who, no doubt, took the initiative in the extraordinary and tumultuous scene which closed the sitting. During the later examination of witnesses Jesus had been silent; but the thought of his Messianic and divine claim pressed upon his judges with overwhelming force, and broke out at last into passionate utterance. The discrepancy between the Evangelists at this point only brings out the whole scene more historically. "Art thou the Christ? tell us," they cried; and the irrepressible exclamations of the judicial crowd described in one Gospel were only put an end to by the solemn adjuration of their president, recorded in another. To the eager and hostile questions of the council, Jesus answered at first in a twofold utterance—"If I tell you, ye will not believe." Was he thinking sadly of their forgotten duty to weigh his claims, and of a result to himself or to them? But he adds, "And if I also ask you," as he had done a few days before in the temple, when they had demanded his authority, "if I, instead, put my questions to you, ye will not answer me, and ye will not release" your prisoner. It was true; but the council was long past being turned from its purpose by the reference which, I think, these words again have to judicial fairness and the order of justice. They saw in his face the light of that more than earthly claim which his lips only for a few moments delayed to make; and with a mixture of terrible and hateful emotions, starting to their feet, "then said they all, Art thou then the Son of God?"

But above that crowd of aged and evil faces was now seen rising the high priest of Israel, and all voices sank away as the chief magistrate and judge of the sacred nation demanded, in the name of the God whose office he bore, an answer to his most solemn adjuration, "I adjure thee by the living God, that thou tell us whether thou be the Christ, the Son of the Blessed!' It was the question for which men had waited so long; and now the answer came. "I am," the Christ, the Son of God: and, turning to the crowd who sat in their places of power around him, he added, "Hereafter shall ye see the Son of Man sitting on the right hand [of power, and coming in the clothes of heaven." When a king declared himself in Israel, the manner was that he stood in the temple by a pillar, and the people of the land receiving him rejoiced with hosanna and song, with palm-branch and with trumpet. And if this was the manner of a king, how should the King-Messiah be received? But when a man blasphemed the name of God, the ordinance in Israel was that every man who heard it should rend his garment from the top downwards—rend it into two parts which might again never be sewn into one. And scarcely had Jesus witnessed his confession before those "many witnesses," when the high priest standing in his place, rent his clothes, saying, "He hath spoken blasphemy; what further need have we of witnesses? Behold, now ye have heard his blasphemy, What think ye?" And they answered, and said, "He is IEH MAYETH—a man of death." . . . "Then they all condemned him to be guilty of death."

So passed that great condemnation.

But our conclusion on the question of Hebrew law must be this: that a process begun, continued, and apparently finished, in the course of one night; with witnesses against the accused who were sought for by the judges, but whose evidence was not sustained even by them; commencing with interrogatories which Hebrew law does not sanction, and ending with a demand for confession which its doctors expressly forbid; all followed, twenty-four hours too soon, by a sentence which described a claim to be the fulfiller of the hopes of Israel as blasphemy—that such a process had neither the form nor the fairness of a judicial trial. But though it wanted judicial fairness and form, it may nevertheless have been a real and important transaction. There is no reason to think that the council mistook the claim of Jesus. And there is every reason to believe that their condemnation truly expressed the nation's rejection of his claim.

PERSONAL ITEMS.

The Sultan of Turkey is thirty-six.

Commodore Vanderbilt's widow has to get along on $1,000 a week.

Capt. Eads estimates the loss of business by fever in the South at $200,000,000.

The Marquis and Marchioness of Lorne intend sailing for Halifax from England on the 14th of November.

Ex-Gov. Horatio Seymour has prepared an article on the cheese industry for the next number of the North American Review.

Thomas Carlyle, in his old age, says he reads the Lord's Prayer with increasing pleasure, and adds: "What else can we say?"

George Gorham, secretary of the Republican Congressional campaign committee, is quite seriously sick with some kind of kidney complaint.

Confederate Major-General Stockton, who has enlisted as a private soldier in the Federal army, has been detailed to a clerkship in the War Department at Washington.

Mr. Bancroft, the historian, is a rigid tetotaler, and firmly refused, in his great pain and exhaustion after the recent runaway accident, to taste the wine prescribed by his doctors.

The Marquis of Lorne, in his farewell address to the electors of Argyleshire, said that not one of his constituents had ever written him on any subject that the communication was not answered by the next post.

Count William Bismarck, the son of the Prince, and the youngest member of the Reichstag, is a jovial, hearty-looking person, so clever that he would have a future before him even if he were not the son of so powerful a man.

The estate of the late James Goodwin of Hartford, who was considered the wealthiest man in Connecticut, after the settlement of the administrator's accounts, has merely a balance in personal property amounting to $1,750,000, besides $500,000 in real estate.

General Sherman returned to Washington on Monday last from his extended trip West and to the Pacific Coast. He is in excellent health and speaks in high terms of the various posts which he officially visited, referring to them as models of neatness and efficiency.

"He was, in his friendly and scientific and business relations, in every case what we Americans would call 'a level-headed man,'" is what Dr. Hayes says of Dr. Petermann, when asked if he had ever perceived any appearance of insanity in the great geographer's letters.

Mr. Richard Rogerson, of Liverpool, is spoken of as a model English workingman. He is seventy-seven years old, and has worked in a foundry for one firm for the last sixty-six years. He has had fourteen children, forty-two grand-children, and twelve great-grand-children.

There is some criticism of the Queen's treatment of the Princess Beatrice, who is 21, pretty, full of life and capable of enjoyment, and who is still kept at the old lady's apron strings, accompanying her in all sorts of dismal journeyings, and being dressed in a dowdy style.

Senator Bayard is accredited with saying that in his opinion there will be three Presidential candidates in the field in 1880—the Republican, Democratic and Greenback candidates. It is possible, too, that the House of Representatives may be called upon to elect the next President.

Mr. Beecher was badly beaten at croquet every time he played in Minnesota. And now some people go so far as to say that this is a proof that Mr. Beecher will not lie and cheat. He may get a little mad sometimes, they say, but he lacks the qualifications of a successful croquet player.

Each Speaker of the House of Commons receives a pension of $20,000 a year, with remainder to his eldest son, at whose demise it terminates; but there is only one ex-Speaker—Viscount Eversley, Charles Kingsley's friend and neighbor—who has such pension, and he has no son. His successor, Mr. Denison, created Viscount Ossington, refused a pension. He died childless.

General Fremont says that his Indian policy, as Governor of Arizona, will be to interfere with those agreeable gentry as little as possible so long as they do nothing to retard the development of the Territory. The General is said to show few signs of his sixty-five years. His health is good, he is erect, and has the same nervous, quick motions as of old, and the same frank manner. His hair and beard are almost white.

When Mehemet Ali Pacha, who was murdered lately, was in Berlin, he took the opportunity to visit his birthplace, Madgeburg. Here he was so touched by old reminscences that he declared that he should lay down his military duties in Turkey as soon as possible, again become a true German and settle for the remainder of his life in some pleasant town in the Harts. As Gen. Noble, and more than one before him, have remarked, "Man proposes, but God disposes."

Gustaf Wallis, the most eminent of traveling botanists, died at Cuenca, Ecuador, last June. In 1860 he was commissioned by some very eminent Belgian horticulturists to gather new varieties of plants in South America, and for eight years traversed vast districts in that country, making subsequently an excursion, at the instance of a great London firm, to the Phillippine Islands. He died in a hospital, worn out and poor, in the cause of science, having given to European horticulture not less than 1,000 transatlantic novelties.

Five noble and wealthy English Roman Catholic girls are about to take the veil and become nuns, all having considerable fortunes in their own rights. They are Lady Edith Noel, daughter of the Earl of Gainsborough; the Hon. Constance Howard, sister of the Marchioness of Bute; two daughters of the Hon. Maxwell Stuart of Traquhar, Peebleshire, and the youngest daughter of Mr. Blount of Maplequrham, the representative of the staunchest Catholic family among the commoners in England.

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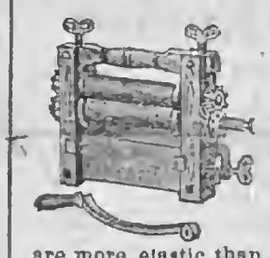

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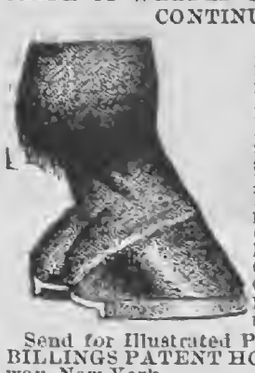

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"Feller-citizens," said he, "I'm a hard-fisted son of toil. I'm a bricklayer by trade, and not a bit ashamed of it. No, *sir;* I wasn't born with a silver spoon into my mouth or cradled in the lap of luxury. I'm a self-made man, gentlemen.

"You'd better have let out the job," remarked a voice in the rear of the hall.

He scorned to notice the interruption, but proceeded.

"Yes, feller-citizens, I'm proud of having risen by honest industry, proud of appearin' to solicit your suffrage as a true representative of labor; as one which has contributed to build up this community by the sweat of his brow, and the work of his hands. [Applause.] As I was saying, I'm a bricklayer by trade. I've worked to raise more than half the palatial mansions, magnificent commercial structures, and heaven-pointing spires which beautify and adorn our town. [Great enthusiasm.] And here, right here, gentlemen, are the identical tools with which I have carved out my way to prosperity."

Here the orator examined a trowel and hammer, amid deafening plaudits.

"Pass 'em this way," said an excited listener, evidently belonging to the working class; "let me gaze onto them relics."

The tools were handed to him, and he scrutinized them with deep interest.

"You say you work as a bricklayer?" said he, turning sharply to the orator.

"Yes."

"And with them tools?"

"Yes, sir; those are the very tools I bought when I made my first start as a journeyman. To them I owe all my prosperity."

"Well, then, I must say you deserve great credit. So does any man that could lay bricks with such weapons. Gentlemen," turning to audience, "just look at 'em. *It's a gardener's rowel, and a carpenter's hammer!*"

Tableau!

A HEATED lover wrote a letter of the same to his inamorata last week, beginning, "Sweatest." She will be a sister to him hereafter—nothing more.

"IT'S a poor rule that won't work both ways" is supposed to have originated with the schoolboy who took the rule away from his teacher and knocked him down with it.

MRS. PARTINGTON says the only way to prevent steam-boat explosions is to make engineers bile the water on shore. In her opinion all the bustin' is done by cooking the steam on board.

A DREAMY writer says it would be curious to follow a pound of silk from its spinning until it becomes a lady's dress. No doubt; but most men would prefer to follow it after it becomes a dress, and while the lady was in it.

WHEN a Hartford woman patted her friend's seven-years-old youngster on the head and said: "I should like to have such a little boy as you are," he looked up into her face and replied; "Well, I guess you can; I don't b'lieve God's lost the pattern of me."

"IT seems to me," said a customer to his barber "that in these hard times you ought to lower your prices for shaving." "Can't do it," replied the barber. "Now a-days everybody wears such a long face that we have a great deal more surface to shave over."

From Acute to Chronic

Is an easy stage in cases of dyspepsia. A slight attack of indigestion, especially when there is a predisposition to digestive weakness of the stomach, must speedily culminate in the more obstinate form of the disease. It is well, therefore, to adopt preventive measures early. Although Hostetter's Stomach Bitters overcomes, if persisted in, cases of dyspepsia of long standing, it is obviously the part of wisdom to use it ere the malady assumes a chronic phase. This is particularly true, because as dyspepsia advances, it engenders other bodily evils, such as disorder of the liver, constipation or undue looseness of the bowels, nervous disorders, hypochondria, sleeplessness. These maladies are both prevented and remedied by the Bitters, but how much better to check them in their outset with the great alterative, than to wait until they establish a firmer foothold in the system. Surely the advisability of this must be apparent.

PIANOS AND ORGANS AT FACTORY PRICES. Great Reduction to close out present stock of 200 New and Second-hand Instruments of first-class makers, fully warranted, and at prices that DEFY COMPETITION, for cash or installments. AGENTS WANTED for WATERS' SUPERIOR BELL ORGANS and PIANOS. Illustrated Catalogues Mailed. HORACE WATERS & SONS, Manufacturers and Dealers, 40 East 14th St., N. Y. Also General Agents for SHONINGERS' Celebrated ORGANS and PIANOS. The SHONINGER ORGANS have obtained at the Paris Exposition a brilliant triumph, and the judges have awarded them a medal for their Organs. Their Illustrated Catalogue mailed.

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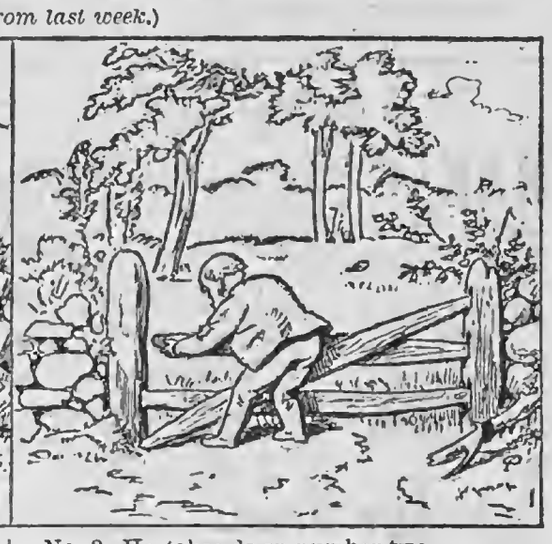
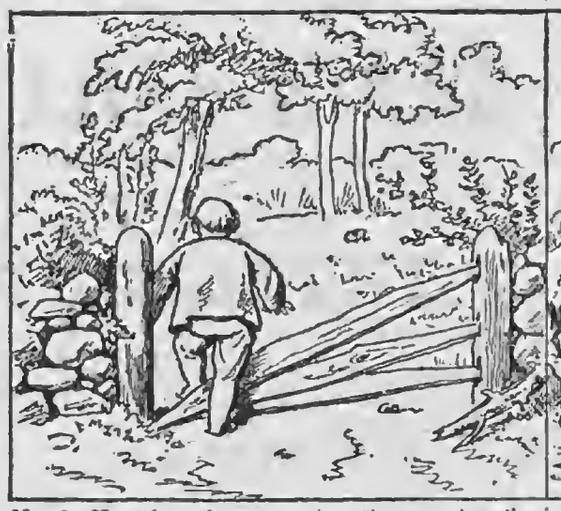
MR. JENKS' CAREER IN THE COUNTRY.

(Concluded from last week.)

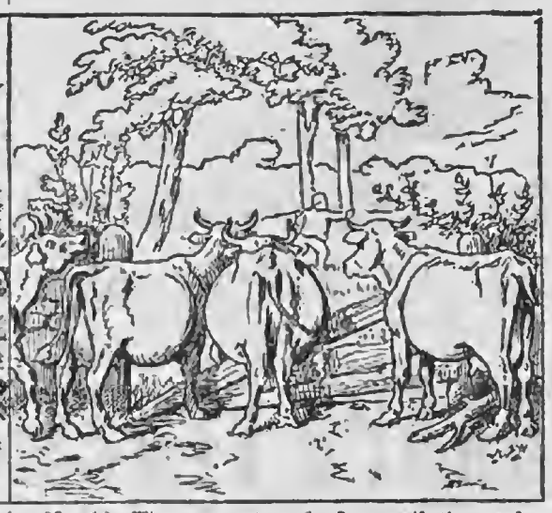
No. 7. So he has to take the bars down again to go after his hat. He takes down number one.



No. 8. He takes down number two.

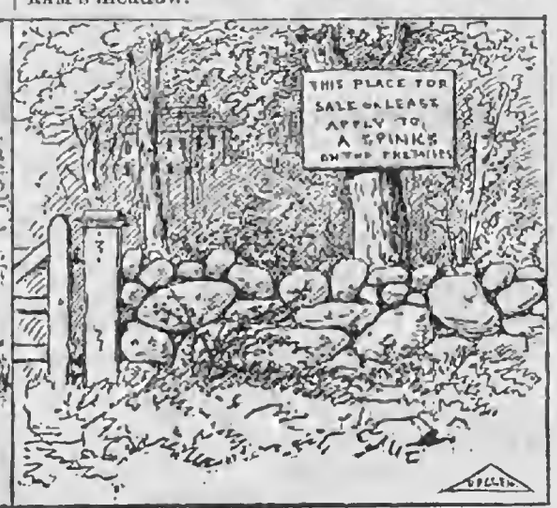


No. 9. He takes down number three and walks through.



No. 10. The cows, in a body, avail themselves of the opportunity to walk into Farmer BERTRAM'S meadow.

No. 11. Farmer BERTRAM raises Tophet! and Mr. JENKS effects a compromise by the aid of a quantity of our depreciated currency.



No. 12 The upshot of it all.

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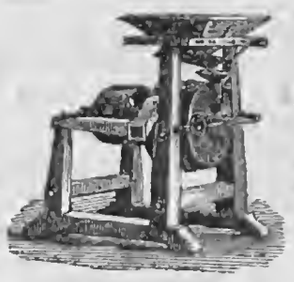

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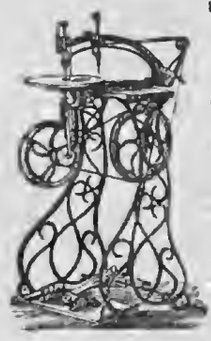

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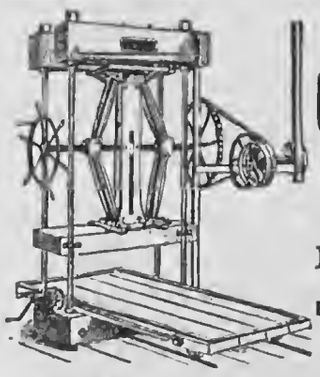

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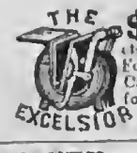

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RURAL AND HOME AFFAIRS. ARTS, SCIENCE, LITERATURE, NEWS, MARKETS, ETC.

VOL. XXXVII. No. 43.
WHOLE No. 1500.

NEW YORK CITY, OCT. 26, 1878.

PRICE SIX CENTS.
$2.50 PER YEAR.

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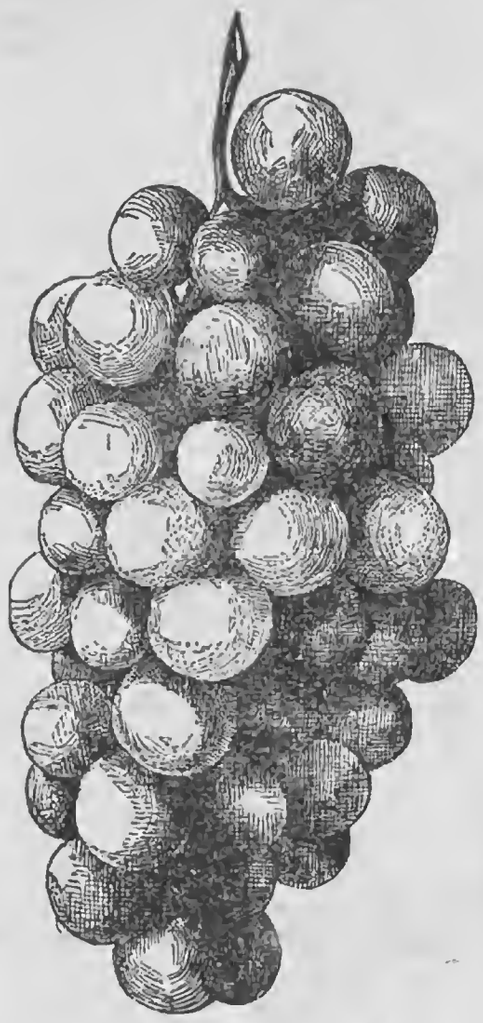


PRENTISS GRAPE.—(See page 679.

The Vineyard.

RICKETTS'S GRAPES.

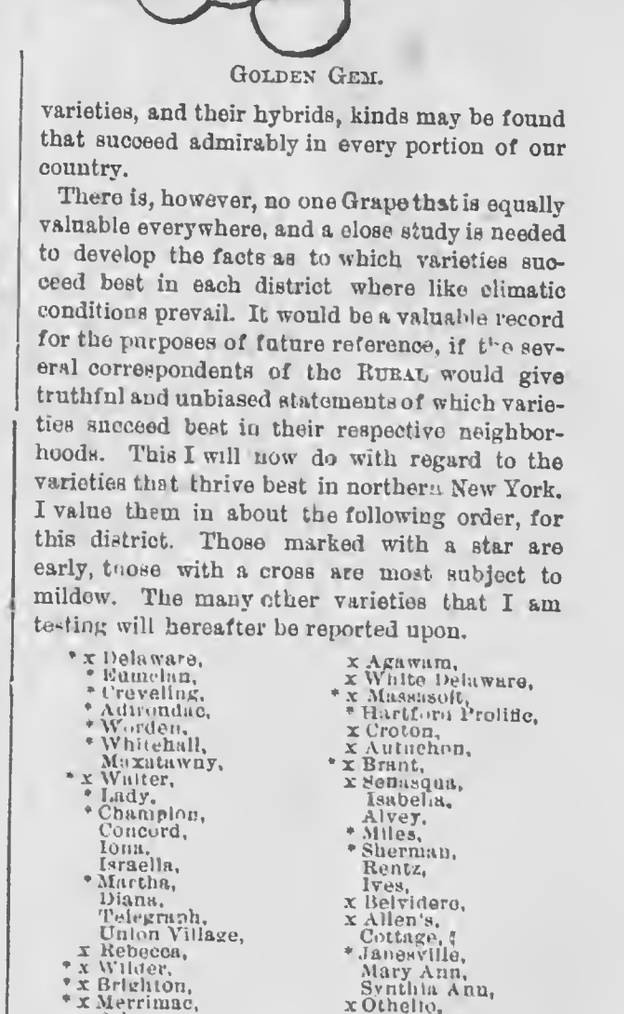
During the past few years hundreds upon hundreds of seedling Grapes have been raised—we might say, perhaps, thousands upon thousands, and there are but a few varieties for which even the claim is now made of superiority over old sorts. Among Hybrids, Mr. Ricketts's varieties have claimed a large share of public interest and admiration as they have been exhibited at our chief fairs for several years past. Many of them are beautiful to look at; many are all that could be desired for eating qualities. But are they fit for general cultivation? Nobody can answer this question. Except Lady Washington which is now offered for sale, a life portrait of which was presented in this journal of Nov. 10, 1877, the public as yet has had little opportunity of knowing anything about their adaptability to different situations and climates. Mr. Ricketts, several years ago, sold his Secretary which, we believe, is now offered by certain nurserymen. This is a black grape ripening with the Concord. The bunches are very large and it has proved with us very fruitful, but there seems no special merit about it that will insure its widespread popularity. Several other of his varieties were sold to Messrs. A. HANCE & SON of Red Bank, N. J., specimens of which were by that establishment sent to us for trial. Their names are El Dorado, Don Juan, Newburgh, Advance Quassaic, Imperial and Highland, none of which has as yet fruited. Lady Washington, as we stated in the RURAL above referred to, is a glorious grape both in taste and appearance ripening with the Concord. The vine is vigorous, hardy (according to Mr. Downing) and productive. The bunch is compact, generally double-shouldered; berry medium to large, round, color deep yellow with a tinge of delicate pink where exposed to the sun, and covered with a thin white bloom. Flesh tender, soft, sweet and very good. Still, confident hopes are entertained by many that the best of Mr. Ricketts's varieties will prove superior to any yet known among us, and we have therefore requested from him specimen bunches of such as he chose to send, that we might place them before our readers.

Concord No. 1 (see cut, p. 679) is a hybrid between Concord and Black Muscat of Alexandria. The bunch is large to very large. Berry is black, oval, irregular in size, the small without any seeds. Flesh melting, juicy, rich with a strong Muscat aroma. Foliage large, lobed, serrated, with the appearance of the foliage of native kinds. This may prove a first-class Grape for the amateur.

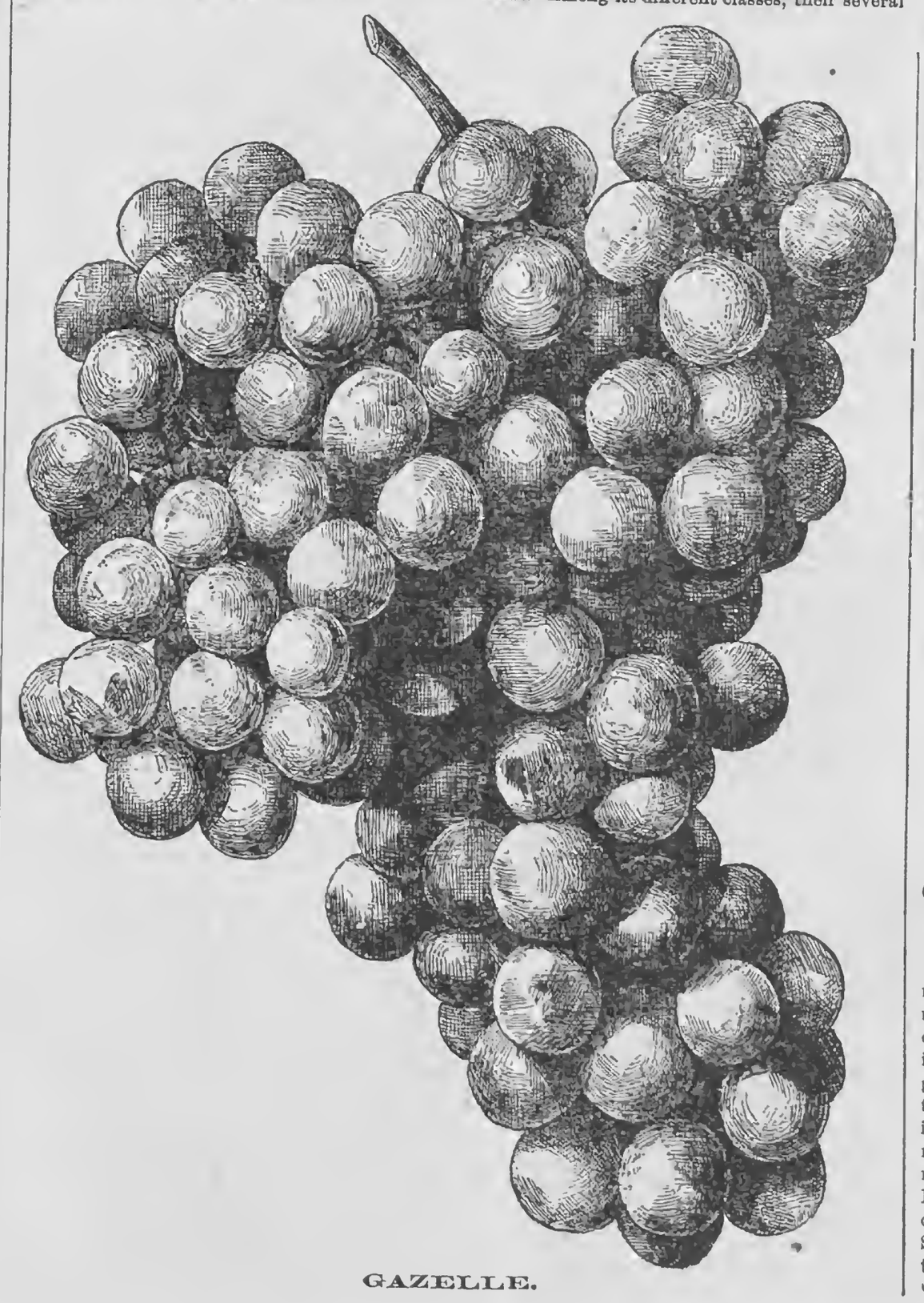
GOLDEN GEM (see cut) is a seedling of Clinton and Delaware. Bunch small, shouldered; berry, oval, size of the Delaware. Flesh soft, melting, with a racy flavor not to be found in any other grape we have ever tasted. Foliage like Clinton. This is ripe with Hartford and is perfectly hardy on Mr. Ricketts's ground.

GAZELLE (see cut below) is a hybrid between Israella and Tokay. Bunch large to very large; berry large, white, oval; flesh juicy and rich with a texture peculiar to the Chaselas grapes; foliage much like Isabella. This also will probably prove an excellent amateur variety.

WAVERLY (see cut p. 679) is a hybrid between one of the Muscats and Clinton. Mr. Ricketts emphasizes the hardiness of this variety. Bunch medium size, shouldered; berry medium black with a gray bloom. Flesh soft, juicy with a fine aromatic flavor. This he considers one of his best hybrids. It has fruited for about twelve years and no disease of any kind upon fruit or vine has ever been observed.



GOLDEN GEM.



GAZELLE.

NOTES ON VARIETIES OF GRAPES.

D. S. MARVIN.

OUR crop of native grapes is fast becoming next in importance to the apple crop. This beautiful and healthy fruit has an older history than any other one of our cultivated fruits. More sentiment, and more poetry are connected therewith than with any or all other fruits. It has also its intimate relations with our religion, for its relations are so close and tender with the Saviour, the apostles and Biblical heroes that the study of the grape is a part of the study of man and the Christian religion.

Mr. Longworth was of the opinion that Cincinnati was near the northern limit of successful grape culture, but I have twice received first premiums at the Cincinnati Exposition for grapes grown upon the forty-fourth parallel, and year by year we find the cultivation of the grape advancing northward, for the reason that the vine there finds less mildew to encounter, while the abundance of tropical heat during our short summers ripens in great perfection our early varieties. Indeed this splendid fruit seems designed by Divine Providence for cold climates as well as for warm ones, because its flexible trunk enables the husbandman to bend it down and give it winter protection.

As the Grape's greatest enemy is mildew, it must be grown upon well-drained and high lands. Among its different classes, their several varieties, and their hybrids, kinds may be found that succeed admirably in every portion of our country.

There is, however, no one Grape that is equally valuable everywhere, and a close study is needed to develop the facts as to which varieties succeed best in each district where like climatic conditions prevail. It would be a valuable record for the purposes of future reference, if the several correspondents of the RURAL would give truthful and unbiased statements of which varieties succeed best in their respective neighborhoods. This I will now do with regard to the varieties that thrive best in northern New York. I value them in about the following order, for this district. Those marked with a star are early, those with a cross are most subject to mildew. The many other varieties that I am testing will hereafter be reported upon.

* x Delaware,	x Agawam,
* Eumelan,	x White Delaware,
* Creveling,	* x Massasoit,
* Adirondac,	* Hartford Prolific,
* Worden,	x Croton,
* Whitehall,	x Autuchon,
Maxatawny,	* x Brant,
* x Walter,	x Senasqua,
* Lady,	Isabella,
* Champion,	Alvey,
Concord,	* Miles,
Iona,	* Sherman,
Israella,	Rentz,
* Martha,	Ives,
Diana,	x Belvidere,
Telegraph,	x Allen's,
Union Village,	Cottage,
x Rebecca,	* Janesville,
* x Wilder,	Mary Ann,
* x Brighton,	Synthia Ann,
* x Merrimac,	x Othello,
x Salem,	x Catawba.

Jefferson Co., N. Y.

GRAPE NOTES FROM NORTH CAROLINA

M. B. PRINCE.

THE reader must bear in mind that these remarks are only intended to apply to this immediate vicinity, and may or may not be true of other localities only a few miles away. For instance, less than ten miles from this place grapes have rotted to a serious extent during the past two seasons, no variety entirely escaping, while in my own vineyard but little rot was noticed last year, and then only on a few varieties, and there has been none at all this year. In preparing this article I acknowledge the aid of the pioneer in grape culture here, Mr. Henry Smith, who has spent the best part of a lifetime in the vineyards of France, a few years on the shores of Lake Erie, and the past seven years

in North Carolina. His vineyard of 30,000 vines I have frequently visited during the past two years.

The Grape hereabouts is subject to fewer diseases and those of a less serious nature than in almost any other part of the United States if not of the world. Planted, as many are, on poor, worn-out land, with no manure of any kind, they grow finely, producing good crops of fruit. In our

METHOD OF CULTIVATING,

the proper distance apart, at which to plant the vines, we find to be six feet each way. The most common manner of training is to put one stake to a vine, though some prefer two. Two canes are usually allowed to grow to the top of the stake and are rather closely pruned. Wire trellises are taking the place of stakes to some extent, and are much to be preferred. Although the first cost is more, the increased production of the vines, and the greater durability of the supports will cover the extra expense. The cultivation given is merely plowing under the weeds and grass in September, cleaning up the rows with the hoe, plowing again in April, and sometimes we get through them in May with the cultivator or harrow. As to

VARIETIES CULTIVATED,

we can say that all American Grapes, so far as tested, prove hardy and productive here; but all Hybrids of Vitis vinifera are defective in one way or another. As yet, we have only to consider two important traits, namely, the best possible flavor combined with enough firmness to bear transportation to Northern markets, and also fruit that will yield a fine quality of wine.

IVES' SEEDLING is the most reliable as yet found, for shipping.

THE HARTFORD ripens about the same time, is a little larger, but it lacks the tough skin. The gentleman mentioned above is testing the newer varieties in a small way.

THE BELVIDERE he so far thinks destined to supersede the above two kinds for shipping.

PERKINS, a few days later, is a strong, healthy grower and a profitable market grape.

MARTHA AND LADY, vigorous and productive, ship well when not fully matured.

THE SIGLAR, a variety received from Canandaigua, N. Y. and known here by the above name, promises to take the place of the slow-growing and not very prolific Delaware, being of as good flavor, larger berry, as well as strong and luxuriant in its growth,

CONCORD here, as almost everywhere, grows well, but it has the fault of cracking badly.

THE CONCORD SEEDLING which, as its name indicates, is a seedling of the Concord, having all the good qualities of its parent with twice the size of berry and clusters often weighing two pounds, promises to fill a prominent place as a table fruit for home use.

ROGERS' HYBRIDS all rot more or less.

ISABELLA is also liable to be similarly affected.

CATAWBA sometimes is specked but generally proves good.

NORTON'S VIRGINIA, among wine Grapes, gives the best promise.

Although all the varieties cultivated here make a fine claret, the market is so well supplied with "alum and logwood," and many other vicious compounds, that the pure juice of grapes goes begging; still we look for an appreciative acknowledgment of the superiority of our native wines at no distant day. We can produce a pure wine of fine quality for less than one dollar per gallon, delivered in any of our large cities. On elevated land well drained either naturally, as nearly all such land is, or artificially, the Grape is extremely vigorous and healthy. It is on the low lands, more or less wet, that the rotting occurs in nearly every instance. Phylloxera, leaf rollers, thrips, mildew and leaf blight are of rare occurrence, the latter being confined almost entirely to Diana.

It is not surprising that fruit growers should become discouraged in trying new varieties after paying high prices for one after another as they follow in quick succession, to be cast aside as worthless in nine localities out of ten. Still the cry is, "something a little better than what we already have," and the offers to supply this want are numerous. The originators, no doubt, as a rule, honestly believe they have found the thing wanted; but in most cases the new acquisition proves but ill adapted to any locality except the place of its birth. I would not pluck a single leaf from the nobly won laurels of those who have the perseverance and patience necessary to the production of improved varieties of fruit or of anything that increases the comfort and happiness of their fellow men. But it seems to me that it would be well for more of the originators of new fruits to follow the lead of those who have distributed a few of their plants for trial in different parts of the country, and await the results before offering them for sale. Such a course would save much disappointment.

Brookston, Warren Co., N. C.

EVILS OF SELLING UNRIPE GRAPES.

NELSON RITTER.

"The fathers eat sour grapes, and the children's teeth are set on edge."

THE grape crop in Onondaga Co. is considerably below the average. Probably the yield is about three-fifths of what it was last year, when the crop was uncommonly large and fine. Notwithstanding the light crop, the price rules low: Concords are selling for from four to five cents per pound; Delaware and other fine varieties, for about two cents higher. The reason why grapes are selling at such low rates in our market is in a great measure owing to the fact that for several years grape-growers have been striving for an early grape, without much regard to quality. As a legitimate result, we have several varieties, the Champion (Talman) being the most conspicuous, that color early and can be sold sooner than better varieties, but which, when eaten, effectually cure the consumer of his appetite for grapes. This prevailing desire to sell "early grapes" causes many to sell all kinds in a half-ripe condition, thus destroying the present demand, instead of creating a greater one. Mr. A., in order to be the first in market and, perhaps, sell for a cent or two per pound higher than he could later on, picks his grapes while totally unfit to be eaten; Mr. B. thinks, that as Mr. A. is selling, he must not be behind, so he, too, commences to sell, and is followed by Mr. C., D., E, to the end of the alphabet.

Most of the retail dealers in our city are poor judges of fruits, knowing little about quality, and next to nothing about varieties. They know that there are black grapes, red grapes, and white grapes, but that is about as far as their knowledge extends. The consequence of all this is that our market is filled, early in the season, with green, trashy stuff, and the doctors reap the benefits, if any one does. I affirm that nine-tenths of the grapes sold in Syracuse are unfit to be fed to swine. This is a strong charge, but a true one, and is susceptible of proof. I hope it is otherwise in other localities. When well-ripened grapes are finally taken into market, the people are so completely *soured* that they can hardly be persuaded to purchase, even at low rates.

"What are you going to do about it?" some one may ask. Well, I will leave *my* grapes on the vines until they are *ripe*, and endeavor to persuade others to do so. Even the "Champion"—the poorest grape I ever tasted—can be eaten when fully ripe. People who sell unripe grapes, even at higher prices, are not gainers by the operation. Grapes increase in size and weight as well as in quality, when allowed to ripen, and these folks sell fewer pounds as well as lessen the demand, and lower prices. We must, as far as possible, sell directly to consumers, and furnish them such fine fruit that they will feel compelled to buy of us from year to year. Thus we can build up a trade on our "own hook," and be independent of this rush of green grapes and "green" grape-growers. One thing more: we must become disillusioned of the single idea that an "extra early grape" is so very important. Suppose we are obliged to wait ten days longer for a good grape to ripen, is not our patience rewarded?

The strongest argument in favor of early grapes is, that the later varieties are sometimes overtaken by frost. The Catawba and Isabella are the latest kinds I know; and yet, with me, the former has only failed to ripen two years in ten, and the latter only once in the same time. The Concord, Delaware, Salem, Diana, and others, have ripened every time, and are good when ripe. Who ever heard of an early grape or apple that was a good winter keeper?

Onondaga Co., N. Y.

THE GRAPES OF SOUTHEASTERN TEXAS.

G. MARTI.

MANY are the attempts that have been made in viticulture in this part of Texas. Hitherto, however, the results of these efforts have not been very encouraging, success being the exception rather than the rule. Why it should be so, puzzles many a one that beholds the luxuriance and sturdiness of the wild Grapes loaded annually with a profusion of fruit. But if we look at these indigenous species, we find their character quite different from that of those from which our cultivated varieties originally sprang. The climate of southeastern Texas is so much at variance with that of the northeastern States, where most of the native cultivated varieties originated, that it is not at all surprising to see these Grapes struggle and at last pine away, not being able to accommodate themselves to our extremely long summers and short winter rests. And not until we succeed in improving some of our indigenous species, will grape culture prosper in this part of Texas. We do not lack the material on which to work. There are four different

WILD SPECIES OF GRAPES

growing in this region, and several more may be found in the central and upper parts of the State. These four species are: the Mustang, the Chicken, the Post-oak and Muscadine Grapes.

THE MUSTANG GRAPE—Vitis mustangensis (Buckley)—is about the best known of these. It bears profusely; the bunches are of moderate size; but the berry is too thick-skinned, pulpy and excessively acid to give much promise of improvement.

THE CHICKEN GRAPE—not named—is to be found associated with the former in rich alluvial soils, differing from it by its still stronger growth, climbing the highest trees and bearing only at the extremities of its highest and most exposed branches. The bunches consist of very large, loose, shouldered and branched racemes. The berries are small, the size of a buckshot, of a fine spicy flavor, with just acid enough to make them agreeable. They are thin-skinned, and contain no pulp. If this species could be crossed with a view of enlarging its berries, even at the risk of losing some of the extra size of its bunches, the cross might prove a valuable Grape.

THE POST OAK GRAPE (V. æstivalis.)—in the interior of Texas this name is given to a different species (V. Lincecumii (Buckley)—abounds on upland soil. There is great variableness in this class. Some may be found quite sweet and luscious, while others are sour and austere. This is decidedly the Grape that gives the best promise of assuming the dignity of being the coming wine Grape. The only prosperous vineyards I know of in this vicinity are planted with its varieties; and this was not done until their owners, after trying pretty nearly all the sorts named in nurserymen's catalogues, came to the conviction that it was the only kind worth planting.

THE HERBEMONT, among others, belongs to this class. Its productiveness is simply marvelous; its quality, when well ripened, excelled by no other; it is hardy, healthy, strong and of a vigorous growth, accommodating itself almost to any sort of soil, situation and exposure. But still, it is, after all, not yet perfect, so that in it there is still room for improvement. It is the earliest to push in spring, and, on this account, it gets cut down by frosts. It is no showy grape; the bunches are greatly intermixed with imperfect berries; its ripening process goes on rather tardily and imperfectly, and on this account it gets greatly damaged by birds, which profit by the long interval from the time the first berry turns color, until the last one arrives at maturity. Its color is a dull, brownish purple, not at all showy.

NORTON'S VIRGINIA, Lenoir, Devereux, Cynthiana, and others belonging to the same class, generally do well; but none of these combines as many good qualities as the Herbemont.

THE MUSCADINE, Vitis vulpina, is a Grape quite dissimilar to any other. Like the Post-oak-grape, it abounds on high, light soils.

THE SCUPPERNONG is a sport from it, differing from it in nothing but the color, which, in the former is a dark purple. The merits of the Muscadine, and especially those of its offspring, the Scuppernong, have been from time to time greatly extolled. I never could see for what the latter deserves this praise. It is of a dwarfish, bushy growth, bears its large berries singly, or, under the most favorable circumstances, in bunches of two or three together, and drops them as soon as ripe. What is left of the berry, minus a thick skin and an indigestible pulp, has a peculiar aromatic and agreeable flavor. It has been suggested, time and time again, that this species should be crossed with another in order to produce a hybrid partaking somewhat of that flavor which is peculiar to the Scuppernong. Why such a hybrid is rather slow of making its appearance I can account for very well since I have, myself, been making

EXPERIMENTS WITH THE MUSCADINE GRAPE

without being able to boast of great results. Twice I tried to fertilize the V. vulpina with the pollen of the Louisiana Grape, which blooms about two or three weeks earlier; but, both of the attempts resulted in failure. Two years ago I tried the same experiment *vice versa*, making the Louisiana the seed-plant. I was able to obtain the pollen at the proper time by retarding the one vine and forcing the other. Every precaution was taken against any other but artificial impregnation. Out of 124 flowers on which I operated, I only obtained 35 of what I then thought perfect seeds. Of these, only 23 germinated. A regular mongrel lot these seedlings were. Some of them had only one seed-leaf, some had three of them; others had them twisted and contorted. Those that exhibited the greatest monstrosities died before they pushed the proper leaf. Some would grow a few inches, pine away and finally perish without any apparent cause. At present I am in possession of only eight of these plants; but three of them, despite the care given them, made a growth of only about three feet, while the others are stunted, dwarfish cripples. In my opinion, this species of grape—the V. Vulpina—is so very different from any other in its structure, that it will not even produce a vital hybrid. The pollen of it is a course yellow powder, while in the æstivalis sorts, it is a whitish, almost imperceptible dust. But, after all, I hope we will, ere long, find the grape for southern Texas—*qui vivra, verra!!*

Harris Co., Texas.

EXPERIENCE WITH GRAPES IN MICHIGAN.

S. B. PECK.

HAVING, during the past twenty-five years, raised a few of the common varieties of grapes, mainly for family use, and having for fifteen years past had abundant opportunities to examine those that come into this city for retail market as well as those raised in the gardens of this vicinity, I have been compelled to come to the following conclusions: first, that of the large amount of this fruit consumed, a very small percentage is used while in its best condition, as it is generally marketed and eaten before its saccharine elements are fully developed: second, that the summers north of about 41 degrees of latitude are too short for the full perfection of many of the popular varieties now under somewhat extensive cultivation within the limit mentioned: third, that there is no department of agriculture, horticulture or pomology so little understood as to its requirements of heat, the proper amount of moisture and the best modes of training and cultivating. The science of viticulture is yet in its infancy, so far as concerns the common run of people who essay to raise a few grapes for domestic use. True, we have many men who have devoted a vast amount of time, energy, research and experiment to the production of new varieties, both by cross fertilization and by evolution, but the duration and number of their experiments are small in comparison with the time and experiments devoted to other branches of horticulture. Having come to these conclusions I am, moreover, of opinion that

THE GRAPE WANTED

is one that will fill the following requirements: First, that in ordinary seasons and in ordinary exposures it shall attain its full color early in September; second, that it shall have sufficient tenacity to remain on the stems and bear handling for at least two weeks after fully coloring; third, that it shall have a thick, strong, broad leaf, of which that of the Concord is the most perfect type. As to its size and color, I consider them of minor importance to the connoisseur; and as to flavor, that is a mere matter of taste in which consumers do, and always will, differ. Productiveness and hardiness are certainly very desirable, especially when the dollars and cents to be obtained from them, are considered.

With these ideas firmly fixed in my mind, I obtained, in the spring of 1875, single plants of twenty-eight varieties that were then new to me, among which were twelve of Rogers' Hybrids. Of the twenty-eight, six failed, including four of the Rogers'. A majority of the twenty-two left fruited in 1877. In 1878 nearly all failed, owing to the frost in May. With this very limited experience I should gain little credit were I to be very positive in my conclusions. Of the

NEW VARIETIES TESTED,

THE REQUA—Rogers' 28—a rather large, brick-colored grape, ripening a little before the Delaware, has best met my approbation.

THE MASSASOIT—Rogers' 3—is very nearly the same thing in size, color and time of ripening, both being also very vigorous in foliage and wood.

THE LINDLEY—Rogers' 9—is nearly the same in color and time of ripening, but it is not as large in berry, leaf or wood.

These three of Rogers' reds all adhered well to the stems after being picked, Sept. 10, '77, and kept on racks till January and February and are all, to my taste, superior in flavor, and only lack the thick, rough leaf of the Concord to resist the attacks of insects.

THE SALEM—first called Rogers' 22, but now 53—I have fruited one vine of, a few years. In foliage, wood and color it is much like the above, but it is larger and later in fruit. It is a little risky as to fall frosts, but I am so pleased with its size and rich, raisin flavor as to put out fifty more. It ripens not much, if any, behind Concord. As to its hardiness, I cannot say much, having always laid all these down with a little brush over them, but I see no reason for thinking they are less hardy than the Concord, though I do not expect them ever to be as prolific.

MERRIMAC—Rogers' 19—black, is much like Salem in size, foliage and time of ripening.

WILDER and AMINIA—the former Rogers' 4, and the latter his 39—stand high in my estimation. Both are black, vigorous and promising in growth.

ROGERS' 1 and 2 I have, but I judge them too late for me.

EUMELAN, black and rather small, is sweet, rich and as early as any of the above, and so far I like it.

NORTH CAROLINA is the old Isabella in size, color, flavor, hardiness and productiveness, with an advance of ten to fifteen days in ripening. I like it so far.

THE SENECA and the KEUKA appear to be about a second edition of the Hartford or Ives'.

THE DRAGUT AMBER, Perkins and Northern Muscadine are described by Meade as "unmitigated fox from the woods." The two former are in my experimental list and are highly spoken of by some, and I think are early, hardy and fair. I might say ditto of the Belvidere; but my two Northern Muscadines are old offenders on my grounds and not worth their room.

The above is about all I have to say of the twenty-two tested varieties, by the way of description. As to flavor, I would give preference to the Salem and Merrimac. For cultivation for

my own family use, I would, from my present experience, prefer Requa and Massasoit, mainly because they are a few days earlier and more nearly answer my requirements.

Muskegon Co., Mich.

GRAPE LEAVES.—No. II.

W. C. BELLAMY.

GRAPES FOR ALABAMA.

THE CATAWBA, although made so famous by Longworth in wine and Longfellow in poetry, though a fine Grape, will *not*, as a general rule, succeed in the South. I know of no locality south of the Cumberland River and east of the Mississippi, where it attains even a moderate degree of perfection. So, in spite of Longworth's success and Longfellow's wine-inspired song, we of the South may as well dismiss all hope of it here.

THE SCUPPERNONG and its seedlings, as mentioned in "Grape Leaf," No. 1, are, *par excellence, the* Grapes for the South. By changing two words in the last stanza of Longfellow's poem, it would be strikingly applicable to this Grape—thus—

"And this song of the vine;
This greeting of mine,
The winds and the birds shall deliver
To the queen of the *South*,
In her garlands dressed out,
On the banks of the *Scuppernong* River."

THE CONCORD AND IVES, well known throughout the country, come next in fecundity and value both as wine and table Grapes. Both are very prolific with us—much alike—both possessing in a high degree that Labrusca or foxy flavor so peculiar to that species. The berry of the Ives is smaller than that of the Concord, but the vine is more prolific in bunches, so that the actual quantity of fruit from each is about equal. They are so nearly identical in flavor that the wine of one is undistinguishable from that of the other.

THE HERBEMONT MADEIRA—known also as the Devereux and Warren—should, perhaps, have come in before the two last mentioned, for it is perfectly hardy and prolific with us, subject to no disaster, yielding annually large crops, and making a wine not easily distinguishable from good Madeira. I had one vine of this variety, in Barbour County, in this State, from which I made ten gallons of wine, after having given away and used much of the fruit. It requires less pruning than the Ives or Concord, and delights in arbors more than in trellises.

THE MARTHA, a white seedling of the Concord, is a delicious Grape for table use, with a thin skin, tender pulp, and a delicate modification of the peculiar Labrusca flavor of its parent. But it is neither so hardy nor prolific as the Concord, and will hardly ever come into general use with us as a wine Grape.

THE IONA is in every respect one of the most delicious Grapes we ever get in the South. Being naturally of a tender and delicate constitution, it attains with us, in the open air, only a moderate degree of perfection.

THE DELAWARE—which might be aptly described as a miniature of the Iona—is prized with us hardly more for its excellent qualities than for its striking beauty. When well arranged in a fruit-basket, its rosy color, contrasting with the deep purple of the Concord and the rich, clear yellowish green of the Martha, produces an effect strikingly beautiful, while the berry is no less pleasing to the eye than grateful to the palate.

THE SALEM is also a fine table Grape, and, with reasonable care, attains a fair degree of perfection with us.

There are very few others that are *known* to suit this section except all the seedlings of the Scuppernong, of which there are many, both wild and cultivated. The most popular of them are: Thomas, Flowers, Tender Pulp, and perhaps others. All these, in strict obedience to what seems a universal law with this Grape, are black, the parent being white. Much is said in praise of them, but not having cultivated any of them except the Thomas, I cannot give any personal experience beyond the fact that they all are hardy and prolific south of the 37th degree of latitude, but not so north of it.

FOREIGN GRAPES are only raised in the United States at great expense in hot-houses, and hence it has long been a great desideratum among vine growers to acclimate them to our open air. The famous Black Hamburg, that flourishes so well in Europe, is one of the finest Grapes grown, but I cannot learn of any one in the United States who has ever grown it successfully out-of-doors. The causes to which its failure hitherto has been attributed, are innumerable. I have studied the matter closely, and experimented with the Grape for years, and am at last rewarded with success in finding both the difficulty and its remedy, and I have the Grape now acclimated and thriving to perfection in the open air. The process or means, however, by which I have accomplished it I prefer to keep to myself; for it appears to me legitimate that I should reap any reward there may be for the time, labor, and money I have spent in attaining so desirable a result. I can only say of it here that it is purple and has a flower similar to that of the imported Malaga. It is my intention to try my acclimating process with the Malaga also, and with the Tokay.

Calhoun Co., Ala.

THE PRENTISS GRAPE.

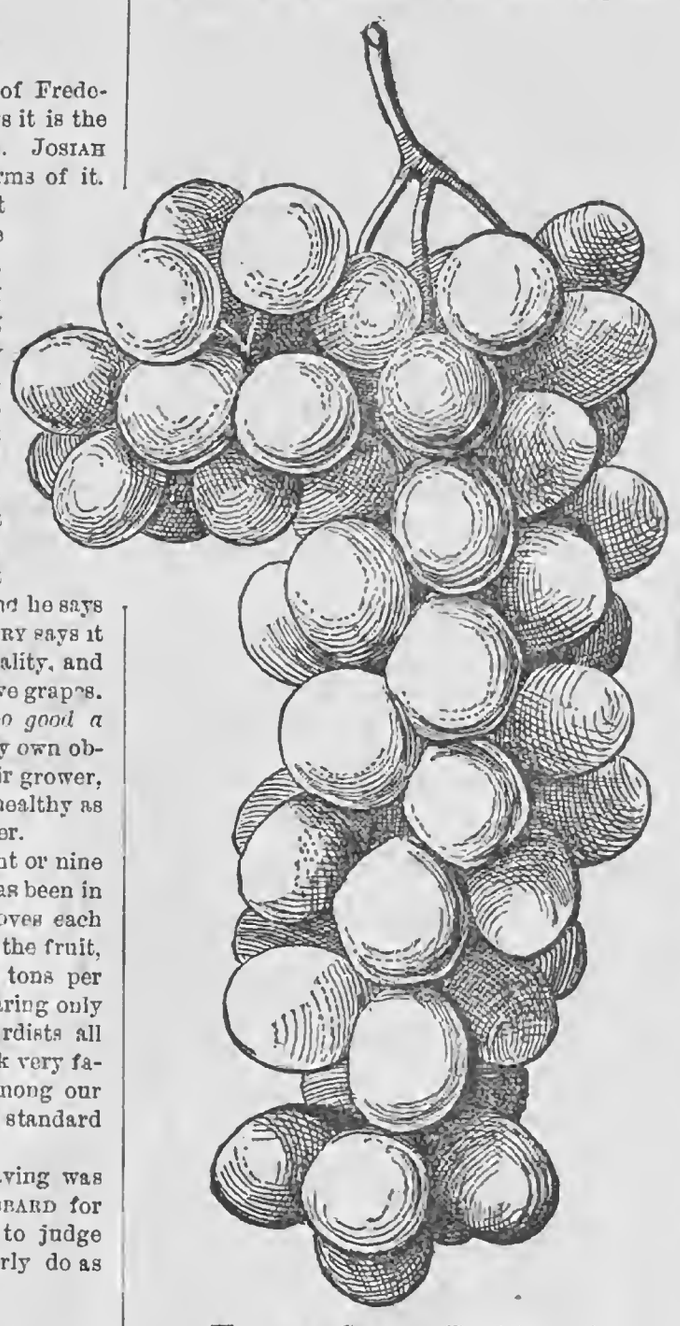
OF this grape, Mr. T. S. HUBBARD, of Fredonia, N. Y., writes us: "DOWNING says it is the best pure native grape he has eaten. JOSIAH HOOPES writes, speaking in high terms of it. Mr. OHMER, of Dayton, writes me it was seen and tested by a council of five good judges from Southern Ohio Fair, and each and all of them, including himself, pronounced it as promising to be the best of any of our American White Grapes. SAMUEL MILLER, the originator of the Martha, says it is the finest out-door, white grape that has come under his notice. D. BANDER, Secretary of Pleasant Valley Wine Co., says he showed it to several prominent grape growers at Hammondsport, and all with himself pronounce it the finest white grape they ever saw, and he says the foliage seems to be perfect. BARRY says it is a handsome white grape of fine quality, and will no doubt rank among the best native grapes. M. B BATEHAM thinks it of almost *too good a quality* to be healthy and reliable. My own observation of it is that it is hardy, a fair grower, not a rank grower, with foliage as healthy as that of the Catawba, and a heavy bearer.

Mr. PRENTISS originated it some eight or nine years ago. It is a seedling of Isabella, has been in bearing four or five years and improves each year. This year he has over a ton of the fruit, the vines bearing at the rate of three tons per acre while many other varieties are bearing only half a crop. The neighboring vineyardists all agree as to its good habits, and speak very favorably of it. I think it will rank among our best grapes and become a valuable standard variety." See illustration on 1st page.

[The bunch from which our engraving was made, was not sent to us by Mr. HUBBARD for that purpose, but merely to enable us to judge of its quality. This we could not fairly do as the grapes were not quite ripe.—EDS.]

THE SHELBURNE GRAPE.

THIS is a seedling of Allen's Hybrid, originated in 1869. It bore its first fruit—five clusters—in 1872, after the hard winter preceding, having been pruned the previous fall and left without protection. This was the third year from transplanting and the fourth from seed. It has been exhibited at the Franklin county Fair, Greenfield, every year since, and has repeatedly received premiums. So far the vine has proved perfectly hardy and healthy. The grape crop hereabouts has proved almost an entire failure this year on account of too much rain in August, when we had fifteen days of it; but the vines and fruit of the Shelburne have been uninjured. Indeed, it has done better than any of the old or new varieties. The fruit was fit to eat by the first week in September. I have crossed almost all the best varieties and have been raising seed-

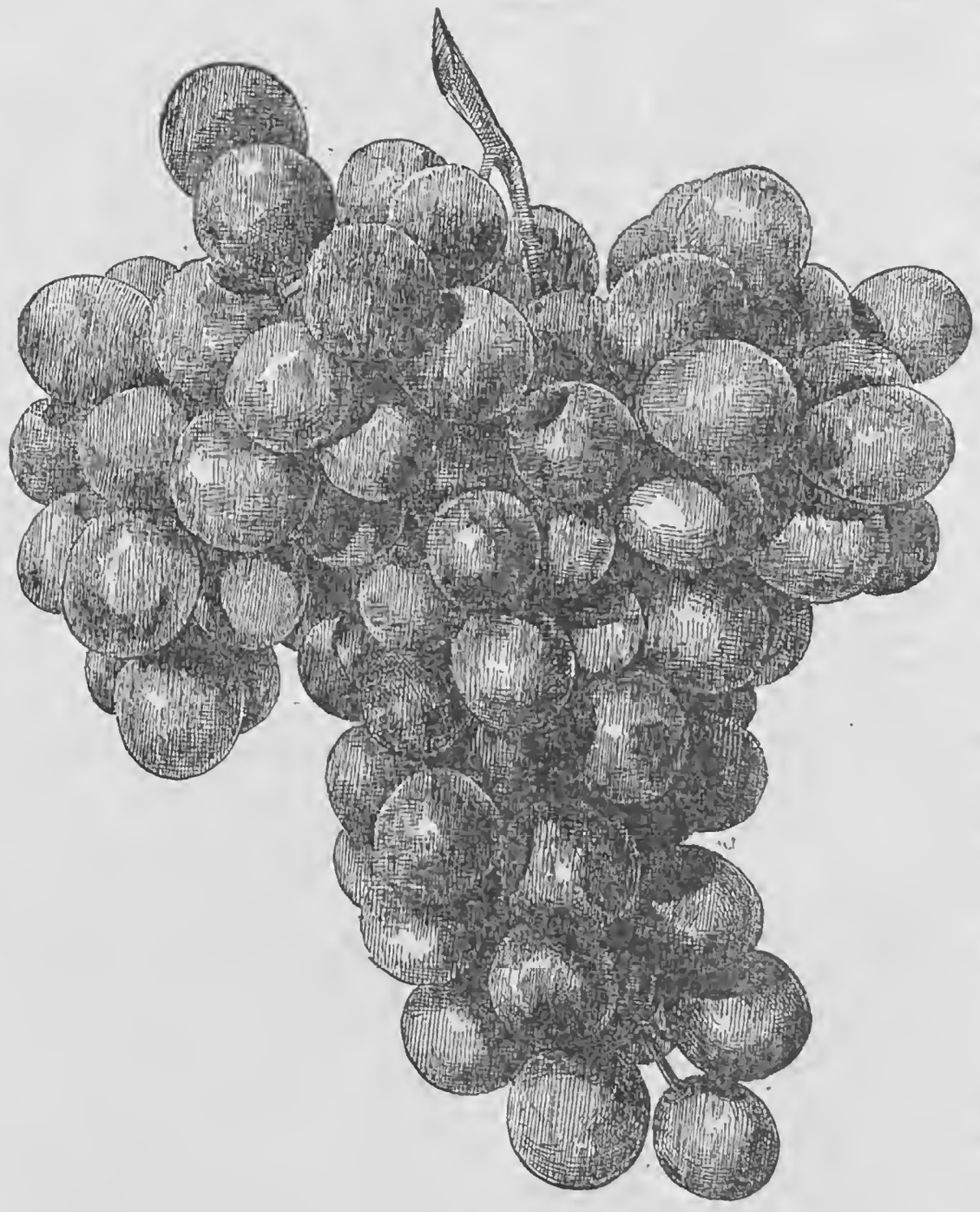


WAVERLEY GRAPE —(See 1st page.)

lings for the last fifteen years, and in my experience Hybrid-self-seedlings, expecially those of the Allen's Hybrid, are the most productive of the improved hardy varieties, in spite of all theories to the contrary advanced by others. I calculate on the principle of reversion. The Shelburne is a case in point: the vine closely resembles its grandmother while the fruit is like that of its grandfather. I have two more like Shelburne, of the same age, perfectly hardy and healthy, but ripening too late here. I have no vines for sale, because, having other business to attend to, I have no time to raise plants.

Franklin Co., Mass. JACOB STEIGLEDER.

[THIS seems a valuable variety. The grapes are white, and so nearly transparent that, when held up to the light, the form of the seeds can be seen. They are of medium size, thin-skinned, tender flesh, small-seeded and the flavor is sweet though sprightly and agreeable. The bunches are compact and the berries cling to the stems firmly.—EDS.] See illustration, p. 681.



CONCORD NO. 1.—(See 1st page.)

GRAPES IN WESTERN NEW YORK.

W. J FOWLER.

THE grape crop through this section will be everywhere much lighter than usual. The May frosts cut the tender shoots; and probably not one-quarter of the buds which would have fruited came into blossom. The result is that vines have made an immense growth wherever left unchecked, and even where the buds have been pinched back, the foliage and fruit have been healthy. Varieties usually subject to mildew, as Adirondac, are this year exempt. This indicates pretty strongly that overbearing is the cause of much of the mildew and other diseases so often complained of.

Grapes ripened this year earlier than usual. We have had a warm summer; but, in part, this early ripening is due to the light crop. I learned, years ago, that remorselessly thinning Catawba Grapes will make even this late variety perfect some fruit in ordinary seasons. Where two, three or four buds for blossoming start, pinch off all but one or, at most, two. Then, as the grapes attain some size, say by the middle of July, pinch the ends of the shoots and turn the strength of the vine to the production of fruit. In this way we may make two bunches weigh as much as three, and ripen a week or ten days earlier. The thinning by the frost was of a different kind. Not merely the bunches, but the shoots themselves were destroyed. The shoots which escaped did so entire. Generally the part of the vine on the top trellis escaped, and here is usually where the finest bunches are found

The season has been so extraordinary that little is learned about the new varieties. Almost any grape will ripen this year, and if it will not, it should be at once discarded. The Hartford was fair eating by the 28th of August, and the Champion was colored several days earlier. By the second week in September all the Rogers' grapes here were ripe, and so were the Delawares, Concords and Adirondacs. The Isabella was rapidly turning, while the Iona and Diana were translucent, but improved a good deal afterwards. The Brighton, a new grape, I have not seen this year. My one vine does not bear yet, but I hear very favorable reports from this variety wherever the frost did not destroy it. The Brighton ripens as early as the Hartford, and may be safely set down as the best very early Grape.

Farmers' vineyards have been more neglected this year than usual; but I think that the severe pruning last spring caused them to make enough good wood this summer for another year. That the vines are generally healthy is a strong point for the future. What grape culture needs is a yearly thinning of the fruit on some better plan than indiscriminate cutting by the frost. When vines get this, half the diseases which now destroy them will be removed. Even the phylloxera will not do so much damage except on vines enfeebled by overbearing

Monroe Co, N. Y.

GRAPE ITEMS.

KEEP Grapes in a dry, cold room.

VINES ought to be planted at *least* eight feet apart.

RICH SOIL is now generally considered better than heavy manuring for the hardy Grape.

IN transplanting dig large holes, spread out the roots carefully and cover with fine earth.

AMONG THE NEWER VARIETIES, we have yet to learn of any that will keep better than Isabella, Diana or Rebecca.

Mr. O B. Galusha says that it has been observed that Grapes grown upon sandy loam are sweeter than those grown upon clay loam. He has tested this for the past six or eight years and found it invariably true.

R. W. Hunt, of Galesburg, Ill., in the Trans. of the I. S. H. S., says: "the best evidence I can offer in behalf of the Concord will be found in the markets. I think you will there find twenty bushels of them to one of any or all other kinds during the Concord season."

BAD ADVICE —We find in the agricultural columns of the Weekly Herald the following: "Vines drenched every week with soap-suds flourish admirably and extend themselves so as to cover large buildings, every branch bearing fruit." How much fruit and of what quality?

GRAPE ROT —George W. Campbell says that he has never known the Delaware affected with the rot, even in the most unfavorable years. For many years the Concord was exempt; lately it is more or less affected in unfavorable seasons. Sulphur is recommended as one of the best preventives of the rot, to be applied in good season.

THE Southern Fox or Muscadine Grape is botanically Vitis vulpina, the original of the

Scuppernong;—the Winter or Frost Grape is V. cordifolia;—the Northern Fox Grape is V. Labrusca, the parent of the Concord, Catawba, etc.;—the Summer Grape is V. æstivalis. The thousands of varieties of Grapes cultivated in Europe are thought to have originated from Vitis vinifera.

GRAPE SELECTION.—The editor of the Germantown Telegraph recommends, 1. Telegraph; 2. Concord; 3. Hartford; 4. Clinton; 5. Salem; 6. Creveling. He says: "Salem has proved with us to be excellent—we think it the best out-door Grape, it having but little pulp; Rogers' 21 also bears abundantly, and will become popular. No. 32 is a beautiful pink Grape, almost transparent, an abundant bearer and very good in quality. There are new varieties "in the market," but we advise our friends to keep them at a distance for the present. Clinton, in the foregoing list, is only for wine, and is probably the very best for that purpose in this section."

"STAR" GRAPES.—In the transactions of the Am. Pom. Soc'y there are few varieties of Grapes that receive double stars. Agawam (Rogers' No. 15) is double starred by Maine, Wis., W. Va. and Ky. Catawba by Ohio, Tenn. Concord by N. H., Mass., Conn., N. Y., Mich., Wis., Oregon, Penn., N. J., Md., O., W. Va., Ky., Tenn., Ills., Iowa, Mo., Neb., Kas., S. C., Ala., Fla. Creveling by Oregon and Florida. Delaware by Me., N. H., Mass., Conn., N. Y., Mich., Wis., Md., Va., O., W. Va., Ky., Tenn., Ills., Iowa, Mo., Neb., Kas., S. C., Ala., Fla. Hartford Prolific by N. H., Vt., R. I., Conn., N. Y., Mich, Wis., Md., Va., O., W. Va., Tenn., Iowa, Neb., Ga. and Fla. Ives by Ky., Tenn., Ills., Iowa, S. C., Ga. and Ala. Massasoit (Rogers' No. 3) by Pa. Martha by Fla. Maxatawney by Tenn., S. C., Ga. Norton's Virginia by Va., O., W. Va., Ky., Mo. Salem by Maine and W. Va. Scuppernong by S. C., Ga., Ala., Fla. Wilder (Rogers' No. 4) by Me., N. Y., Wis., W. Va.

Horticultural.

A VERMONT "FRUIT JUBILEE."

T. H. HOSKINS, M. D.

LAST week, in acceptance of an invitation from the Secretary of our Board of Agriculture, I attended the fruit fair in Grand Isle. Perhaps many of the readers of the RURAL do not know where "Grand Isle" is, or which Grand Isle is meant, since there are several of them. It is not the Grand Isle of Niagara River, into which Major Noah proposed to gather the Jews so long ago, but the Grand Isle of Lake Champlain, an island some ten miles long and four wide, divided into two towns, South Hero and Grand Isle, and constituting with neighboring smaller islands, the fruit garden of Vermont, where, in 45° north latitude, the Pear and the Grape, and all the tender Apples thrive as well as about New York, while on the same line east or west of the lake, after leaving the immediate shore, only the hardiest Apples can be grown, and even the hardiest Pears are counted an impossibility.

The people of Grand Isle are well-to-do, slow and easy, extremely hospitable, generally well educated and fond of reading, but, like most people whose lines have fallen in pleasant places, they have not had the reputation of being very progressive. Only recently have they thought of exhibiting their products, as the farmers of the mainland are wont to do, in fairs or expositions. But the idea being once started, three or four years since, such success has attended the project as to fairly surprise those who took part regarding the magnitude of their resources. I feel sure that besides the immediate pleasure of such gatherings, the information gained and the neighborly feeling fostered, that a direct profit will be realized by the diffusion given to the knowledge of the great quantities of fruit now grown, and the vastly greater quantities that might be grown upon this and the neighboring islands, and that we shall not long hear of the bushels of luscious pears and glorious apples rotting down for lack of buyers, while half the people of Vermont do not see a pear from one year's end to another's, and many are deprived of a sufficiency of apples for home consumption.

Lake Champlain lies in the low valley that is practically an extension of that of the lower Hudson, northward to Montreal. The surface of the lake is less than 100 feet above the sea. It is frozen but few months in winter, even the coldest. Last winter it was not passable by teams at all. The effect of this lowness of level and openness to the south winds, together with the protection afforded by the waters of the lake, gives to Grand Isle its exceptional climate, and, with its rich limestone soil, insures its superiority as a fruit-growing region over all the territory surrounding it.

The meeting referred to was held in the neighboring churches of the Methodists and Congregationalists; the former being occupied, both below and above, with pomological and floral exhibits, while the latter was used for the meetings held under the auspices of the State Board of Agriculture. Three days were thus spent in practical addresses and discussions, as well as in the inspection of fruits, the comparison of varieties and the rectification of names. The attendance was large, being gathered not only from the islands, but from the mainland; though the number of visitors from the latter was greatly lessened by the high winds that prevailed, arresting travel by water, and preventing the expected visit of Mr. P. Barry, of Rochester, whose presence and address were warmly looked for. In a previous year, friend John J. Thomas received a hearty welcome at one of these meetings, and all the leading pomologists and florists are so well-known there, and so highly respected, that their visits will always be an ovation.

As the varieties of fruit grown upon Grand Isle are substantially the same as those of central New York and the Hudson Valley, I can offer you nothing of novelty in describing them. But for size, perfection and beauty of color, the fruits of Grand Isle seem to fully equal the fruit of the Centennial or of the shows of the American Pomological Society. I advise all interested in fruit-growing, and those who seek recreation during the summer and fall months, that Lake Champlain and its island afford them a field well worthy of exploration and study.

NOTES FROM THE RURAL GROUNDS.

EXPERIMENTS FROM WHICH NOTHING CAN BE LEARNT. NO. I.

UPON a little hilly part of these grounds, which has not, that we can learn, been cultivated in fifty years, we dug six holes one foot square, pulverizing the earth and leveling the surface as if it were a flower-pot. On the 18th April we planted three kernels of corn, top-dressing each square with different fertilizers as will be seen in the following table which also shows the weight of the corn and of the leaves and stalks produced:

Plot I.	Nitrate of soda.	Corn....	2	oz.
		Stalks and leaves	2	"
" II.	Dissolved Bone-black,	Corn....	3	"
		Stalks and leaves	5	"
" III.	Muriate of Potash	Corn... 1 lb.	2	"
		Stalks and leaves 1 "	12	"
" IIIa.	Sulphate of Potash	None		
" IV.	Nitrate of Soda Dis. Bone-black	Corn....	3	"
		Stalks and leaves	2	"
" V.	Dis. Bone-black Muriate of Potash	Corn....	12	"
		Stalks and leaves 1 lb.	0	"
" VI.	Nitrate of Soda Dis. Bone-black Muriate of Potash	Corn....	12	"
		Fodder. 1 lb.	0	"
" VII.	No manure.	Corn....	2	"
		Stalks and leaves	4	"

We are not aware that anything can be learnt from the above or similar experiments conducted in so small a way.

NO. II.

On June 2. we washed ten flower pots (four-inch) thoroughly and filled them with clean coarse sand. In these (half an inch deep) were planted Radish seeds. Each pot was manured differently and the sand kept constantly wet. All of them were well drained.

Pot. 1.	Nitrate Soda; would not germinate. Three seeds were tried.		
" 2.	Nitrate of Potash. Roots, tops and radish weighed when taken out of the sand	1 oz.	8 dr.
" 3.	Dis. Bone-black, weight	1 "	12 "
" 4.	Bone (flour)	1 "	8 "
" 5.	Sulphate of Potash. Did not germinate. Three seeds sown.		
" 6.	Nitrate of Soda. Dis. Bone-black	2 "	4 "
" 7.	Dis. Bone-black. Muriate of Potash.	1 "	5 "
" 8.	Dis. Bone-black. Muriate of Potash. Nitrate of Soda	1 "	4 "
" 9.	Bone (flour). Sul. Potash. Nitrate of Soda. Dis. Bone-black. Muriate of Potash	0 "	7 "
" 0.	Water only	0 "	12 "

The following is the composition of the ash of the cultivated Radish:

	Root.	Leaves.
Potash	21.98	5.05
Soda	3.75	15.60
Lime	8.75	27 09
Magnesia	3.53	7.08
Iron	1.16	8.72
Phosphoric acid	41.12	13.08
Sulphuric acid	7.71	9.64
Silica	8.17	8.22
Chlorine	4.09	5.16

It will be seen that the proportion of phosphoric acid is very large, as compared with other roots.

From the composition of the ash we should have looked for the largest plants and roots in No. 8 or 9, rather than in No. 6, 3 or 4.

If from this experiment we learn anything, it is that the Radish will do well enough in any soil provided it be light and kept well watered.

GOOSEBERRIES IN CALIFORNIA.

THE Gooseberry, although a favorite fruit with Californians, is cultivated less and less extensively every season, on account of its falling a prey to its deadly enemy—mildew. The plants require a peculiar soil, climate and cultivation to grow successfully and free from this pest. When well cared for, however, or when planted in a locality where they grow well, there is no more profitable or certain crop. The Downing and Houghton Seedling are the only varieties worthy of culture, being profitable, a sure crop, and in every way superior. Several English varieties have been tried here, but have given very little or no satisfaction. W. C. L. DREW.

El Dorado Co., Cal.

THE WILD-GOOSE PLUM.

SEVERAL years ago an article appeared in the RURAL, describing in favorable terms the Wild-Goose Plum. I invested in that kind of plum tree to the extent of $90, and looking for fruit on it has been a wild-goose chase ever since; and now I am convinced that it has no connection with the goose that laid the golden eggs. Last year, I got from it ten plums and, although they were nice, nine dollars apiece was rather a steep price to pay for them. E. B.

Middletown, N. Y.

Arboricultural.

TREE PLANTING.

"ALL the world and his wife" should plant vines, shrubs, ornamental, shade, and fruit-bearing trees, for comfort, for profit, for health, and in the interest of good morals. Every one loves fruit, yet how comparatively few grow it. As the season for planting is upon us, and that very many be encouraged to set out trees, &c. I propose briefly to describe the best method of tree-planting, so that all may live and thrive.

After staking off the ground, dig the holes at least 30 inches square, and 20 inches in depth, throwing the top soil in a pile, scattering the sub-soil, and making the bottom mellow with the pick. Fill to the depth of 12 inches with inverted sods, well rotted manure (old), or weeds, and tread them down well. Next, of the top-soil make a mound whose top shall be an inch below the surface and six inches at the sides. On the center of this hillock place the tree, the roots of which should radiate in an easy and natural manner down the sides of the mound. Hold the tree in its place, working well round the roots the earth which an assistant is shaking from his spade. After the hole is filled, press the earth round the tree with the feet, and finish by throwing over the spot some loose soil. It is well, too, to mulch young trees; which can be done with almost anything. If you have plenty of stones, pile them round the trees. They will keep the stems erect, and the ground moist and soft.

Set peach trees that are one year old; trim them up to a "bare pole," and cut them back to two feet from the ground, so that the trees may branch low. Set other trees when two years old, trimming off the branches. It is desirable to have the trees straight in the rows. This can be effected, very nicely, by using the old-fashioned "tree planter," which any person can make as follows: take a board, say five feet long and six inches wide; saw a notch on one side, midway between the two ends, and near each end bore a hole with an auger. Now, before you remove the stake where the tree is to stand, preparatory to digging the hole, bring this notch to it, at the same time thrusting down two stakes, one at each end; remove the planter, letting these end stakes remain. When ready to set the tree, replace the planter in the same position as at first; place the tree in the notch, and proceed.

In closing, I may remark that the four reasons I have mentioned above for tree-planting must commend themselves to every reader. Good fruit commends itself. Eat freely of it, you will be healthy and can "throw physic to the dogs." Raise it and it will pay you from 100 to 500 per cent profit. Grow it that your children may have their fill, and not be tempted to steal from the neighbors. The poet saith, "A thing of beauty is a joy forever." And certainly vigorous and fruitful trees are a joy and a benefaction! G. F. NEEDHAM.

District of Columbia.

LARGE LEAF OF TULIP TREE.—Mr. E. V. Teas, of Dunreith, Ind., knowing that the RURAL is an admirer of the handsomest of lawn trees, the Liriodendron tulipifera, sends us the measurement of a leaf he lately plucked from a fine specimen. The dimensions were: width, 16¼ inches; length, 17¼ inches, including 3¾ inches of stem.

Floricultural.

BULBS AND PLANTING THEM.

WM. FALCONER.

I CAN give no new information on this subject. This is planting time, however, and the sooner the bulbs are put in the ground the better for themselves. We had a glorious and varied display last spring, and are planting many more genera, species and varieties this fall. As different diseases require different cures, so different circumstances require different practice; therefore, I will relate last spring's lessons, and leave the rest to yourselves.

CROCUSES bloomed early and copiously when planted at the base of the south-front walls, and most charmingly when studded all over sunny banks, on grass lawns, and under trees. As borders to beds, too, we used them, planting them deeply, so that we might plant a row of summer-flowering plants over them without hurting them. Some that were in the way, we lifted, transplanted for the summer months in an out-of-the-way place, and now we replant them (fine bulbs, too,) in their former place. Some tufts of Crocuses were grown in the rockeries and, in common with other inmates, had a winter mulching. They came up weaker and less satisfactory than those that were not mulched at all, and where the leaves got a little bleached by the mulching, they were visibly injured. Crocuses planted among bushes, in shady places where the frost was firm till the end of March, did not begin to blossom till those on sunny banks had about finished. When grass-mowing begins, no respect is paid to crocus leaves, but the roots don't seem to take it badly, but come up next year as bright as ever. Plant Crocuses two inches deep, is often advised; I say four to six inches. In shallow planting, frost throws them out of the ground, summer sun parches them, and fall rains prematurely start them, and thus lay them liable to injury from keen frosts.

SNOWDROPS behaved, in every particular, as Crocuses did. But instead of planting them so scatteringly as Crocuses, I would advise to plant them in little clumps, and keep them more about the borders, rockeries, shrubberies, or half-wild places. There is a pretty double-flowering kind, also the Crimean Snowdrop, which is larger than the common one.

WINTER ACONITE (Eranthis hyemalis), a little yellow flower of the crowfoot family, loves a nook about the front of a shrubbery, where it will remain undisturbed year after year.

ERYTHRONIUMS, too, both American and European kinds, delight in a similar place, and good soil, with lots of leaf mold in it.

The European Dog-tooth Violet's roots, imported like other bulbs in a dry state, Mr. Woolson, of Passaic, N. J., told me did not bloom with him; now, our experience is quite the contrary. We imported some roots from Holland last fall; they were done up in paper bags like Crocuses, Hyacinths, or Daffodils, and they bloomed out splendidly the succeeding spring.

JONQUILS, DAFFODILS, and most kinds of Narcissus we find quite hardy and satisfactory, providing we can stay them from growing prematurely in the fall; but, in fact, the commoner kinds will take care of themselves. Plant six to eight inches deep, several in a clump, in places where they are not likely to be disturbed; and, as the clumps get crowded in after years, lift, make three or four clumps out of one, and replant.

FRITILLARIAS there are many kinds of, notably different varieties of Crown Imperial and Guinea-hen Flowers, which may be planted, two or three roots together, in the borders. And there are some recently introduced beauties of the same genus, as F. pudica from Utah. It is a tiny fellow, with nodding golden blossoms; hardy as a Crocus, multiplies freely from bulblets and seeds, and blooms contemporaneously with Snowdrops.

SQUILLS there are various kinds of, particularly Scilla Sibirica, amæna, and bicolor, whose blue flowers are very pretty. They bloom a few weeks later than Snowdrops, and require the same treatment.

IRISES, Persian, Spanish, and other bulbous sorts, should now be planted. Put a piece of board or mulching over them, but take care in spring, as their leaves show up early and may be damaged by bleaching.

HYACINTHS bloom in April and May, and are better suited for annual than permanent planting. They and Tulips, which bloom a little later, should occupy the conspicuous flower beds. About the middle of May, when they are done blooming, they may be lifted to make room for summer stuff, and planted in some out-of-the-way place till next fall. Grape Hyacinths (Muscari) are lovely things, with small heads of blue flowers. They should be planted like Snowdrops.

In the case of permanently planted bulbs, shallow planting I have found to be a great error. I know an instance in Massachusetts where, in '76–'77 Crocuses were planted two inches deep, as per directions, and, in the spring, the bulbs might be raked off the ground like horse-chestnuts or beech nuts in fall. And where Crocuses, Snowdrops, and Daffodils are naturalized about pleasure grounds, as is the case in many old European gardens, I have dug them four to twelve inches deep. Bulbs so very near the surface of the ground, cannot make fine bulbs for next year's use, neither will they multiply so fast; on the contrary, they degenerate.

Botanic Gardens Cambridge, Mass.

HARDY BULBS.

SNOWDROP is the first of hardy bulbs to blossom in the spring. The double ones are much the best. They should be set in clumps of a dozen or so, an inch apart and two inches deep. They are perfectly hardy, take up but little room and bloom before the snow is gone.

THE CROCUS is not far behind the Snowdrop in blossoming. I have had both in blossom with a large snow drift not two feet from them. The Crocus is more showy, however; the flowers are larger and are of different colors—white, blue, striped and yellow.

THE HYACINTH comes next. We can hardly do without a few of them, for fragrance. The bulbs are larger and need setting at least four

nches deep, and they do better if set as early as September, or early in October.

THE TULIP begins to bloom before the Hyacinth is gone, and what can be more gay than a bed or border of them! Some are quite fragrant and all are showy. They are the easiest for beginners to cultivate, requiring only any good common soil to grow to perfection. It is best to take them up every third year as soon as the leaves are dry, then set out again in October.

THE NARCISSUS in several varieties also delights us. Some are as early as the Hyacinth others later than the Tulip.

THE LILIES, the beautiful Lilies, that Solomon in all his glory could not equal in raiment, gladden our eyes after these. What can compare with the purity of the Lilium candidum and longiflorum, the gorgeousness of the Auratum or the richness of the Lancifolium, all sparkling like gems and all spreading abroad a delicious fragrance.

These have all proved perfectly hardy with me and are easy of cultivation, as they only need to be let alone to blossom freely. There are several other varieties, that are frequently cultivated and some of our native ones are well worth a place with the rest. My advice to every one that has never tried bulbs, is not to let this October pass without getting a few, and while they are getting some for next spring, save a few Crocuses, Hyacinths and Duc-Van-Tholl Tulips for the house next winter. My method of growing them for the house, is to take moss from the woods, fill whatever I use to grow them in, nearly full; then set the bulbs on top, put a thin layer of moss over all, keep just a little moist, then put in the cellar for a few weeks, and afterwards bring them up into my sitting-room where they are placed in the sunshine, and in a short time they delight all in the room with their fragrance and beauty.

Cortland, N. Y. MRS. H. W. B.

Miscellaneous.

HAND LABOR AND MACHINERY.

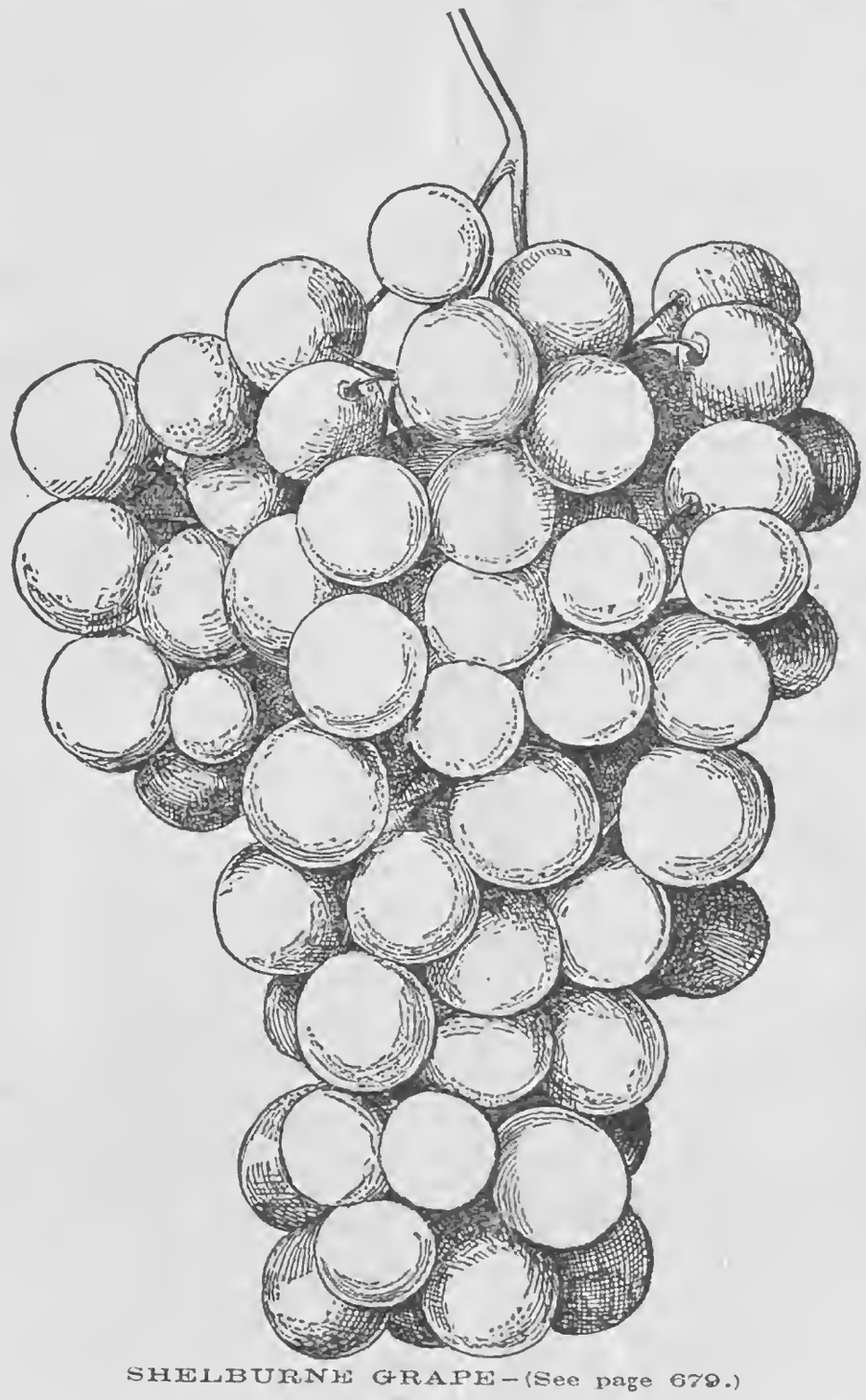
IT is a somewhat popular idea amongst what may, perhaps, well be called the "dissatisfied class" of laborers, as well as amongst some people supposed to be intelligent, that much of the present trouble is caused by the extensive use of machinery. Recently there have been riotous demonstrations against agricultural machinery, especially against harvesters and self-binders. The idea is, that for every machine an equivalent number of laborers are displaced, and reduced to enforced idleness. It is a very plausible idea, but to show its utter untruth is far from difficult. The facts which exist everywhere prove its falsity. Without entering into any argument or discussion, we may just now refer to a few pertinent facts which are so plain, apparent, and widely known, that nobody can deny them.

It is well known that there is more machinery used in every department of labor or industry in the United States than in any other country. People even go up stairs by machinery (elevators), barbers brush their customers' hair by machinery; there are type-writers to save labor in copying, as well as all sorts of labor-saving machinery; and from these light labors up to the heavy work of hoisting ships' sails and anchors, puddling iron, drilling rocks, and mining, human labor is displaced by machines. For human labor, everywhere it is possible, we use horse-labor; and horses, in their turn, are pushed aside by steam. Indeed, steam itself is probably on the eve of displacement by some cheaper and more effective power, and, if ever this happens, we may be sure it will begin in this country. At the same time there is no other country in the world where wages and, in fact, the rewards for all sorts of labor, are higher than here; nor is there any place in the world where there exists more comfort and ease in the circumstances of the people.

Now, let us look at the reverse of this. In China, everything is done by manual labor. Horse labor even is unknown. Men carry the chests of tea from the interior to the sea-board, over mountains and valleys, for hundreds of miles, frequently occupying three months in a journey, the chests being balanced in pairs upon the ends of long poles, which are supported upon men's shoulders, in the way so commonly figured in Chinese drawings and upon the old-fashioned "delf" ware. Passengers are carried in carriages slung upon poles, in a similar fashion. Men pull the boats upon the rivers or pole them along slowly and laboriously. In short, machinery of any kind is unknown, and its use forbidden, lest it might displace manual labor. In fact, an experimental railroad was recently torn up and destroyed as soon as it was built, for this reason. There a man employs a hundred days in a work which we would finish in a few hours in a lathe. There a man supports himself and family for a month in comfort for two dollars, and labor is worth from three to seven cents a day.

Let us take an intermediate example. In England most of the agricultural labor is done by hand. The traveler will see men, women and children at work in the fields weeding, hoeing, planting, sowing, reaping, mowing, raking hay, and doing all those things which we do here by machinery, by hand labor for a wage of two and a half to three dollars a week for man; a dollar a week for women; and twenty-five cents for boys and girls. A few years ago a mowing-machine could not be seen in England, and even now reapers are rarely seen; in fact, many farmers dare not use them lest their barns and stacks might be burned by enraged and jealous laborers. Men laborers were thought well paid at less than two dollars a week, and it is only since machines have come into use that farm wages and the value of horses have risen to nearly double former rates. Do not these facts proclaim a truth so plain that any man can understand it who is not blinded by ignorance or prejudice?

Facts are stubborn things; and these are too stubborn to be twisted or turned in any way from the purport which they should carry to a mind gifted with the most ordinary measure of intelligence. It may seem to be strange that this should be thus, but it seems equally strange to one ignorant of the facts, that the sun is stationary and does not rotate around us; and yet we all believe it, because of the evidences of it which appeal to reason and contradict our very sight.



SHELBURNE GRAPE—(See page 679.)

WHAT OTHERS SAY.

THE GREAT HOLKER SALE.—Females not bulls realized the highest sums at the Holker sale last week. This, however, does not alter the argument in the slightest degree. Mr. McIntosh gave two thousand six hundred and sixty guineas for Baroness Oxford 5th, because he has a manufactory of his own for this bonnie blue blood, at Havering Park. The Holker income will cause a more magnificent Havering outcome by and by, and in purchasing this female, Mr. McIntosh recovered his old sort, as he bred her celebrated grand-dam. For the same reason Mr. McCulloch gave 2,100 guineas for Grand Duchess of Oxford 22d. By mating her with an Oxford or Duke sire, he hopes to found a manufactory in Victoria of high-class pedigree cattle, and the rule of like producing like he no doubt desires to see verified in a pecuniary sense as well, by magnificent sums somewhat corresponding to the original outlay being realized by his own stock hereafter. He is seeking in England to collect the very *creme de la creme* of our herds, that he may have the very choicest material to offer to his brother colonists in a market admitting of great expansion.—*London Chamber of Agriculture.*

SUGAR BEET.—At the Farmers' Convention, as reported for the Maine Farmer, Mr. Genuert claimed that the culture of the sugar beet was needed by the farmers of a new section to subdue the land and to give a crop from which cash could be obtained; while it was equally as valuable to old sections, as a means of renovation, in connection with cattle husbandry. Beet culture and the raising of cattle are the accompaniments of high farming everywhere, and Belgium, which is the best-farmed section of the world, contains the largest number of cattle per acre. A crop of sugar beets he believed to be the basis of good farming, for the tops were as good as a crop of hay, the pulp was returned to the land through the cattle, while sugar was as good a market commodity as gold, the world over. The culture of beets means high farming, good manuring, and clean fields. Inferior cultivation is the great cause of non-success with the beet crop, generally—hence to succeed with beets, deep culture should be practiced, and this will lead to better culture for all crops the farmer grows. Intensive culture from which comes profit is not obtained without deep pulverization of the soil. No country in the world has ever "gone back" on sugar beet culture when once it has become well established as a leading branch of farming.

PROFESSORS GRAY AND DANA.—These two distinguished men, remarks the Boston Journal of Chemistry, are now in the evening of life, but still hard at work. Every hour of every day finds them either in their cabinets among their rare collections of specimens, in the field, or at their desks; but we can only hope that life and strength may be spared to them for many years, that they may make further and even richer contributions to human knowledge. Great learning and exhaustive intellectual labor, as far as our observation extends, do not produce unsocial habits of life, or pride of position, or arrogance; on the contrary, the truly great man, in science or literature, is in a marked degree genial and condescending. The men under consideration are in social life, simple, modest, kind, generous approachable. Such noble natures have no place for the pedantries and follies which environ little minds, when fortuitous circumstances bring them into notice. The earnest seeker after knowledge, however humble or untaught, never meets with rude rebuffs from the truly learned; they are the helpers and patrons of the lowly, if capable and honest.

JUDICIOUS PAIRING AMONG HUMAN ANIMALS.—The London Times says: Achievement breeds achievement. If improvement by the continual selection of the strongest and the best, is good for animals, it must be for the noblest of them. To a great extent the law is recognized; for, as a rule, aristocracy intermarries with aristocracy. In all ranks, health, strength, vigor of character, equitability of temper, and vivacity of manners constitute grounds for preference. The well-bred, the agreeable, the practical, the sympathetic—in a word, all who show the true type of manhood, or of womanhood, as contrasted with abortive, affected, or artificial developments—carry the day in the matrimonial race. Though with money and rank, the less perfect form goes to the wall.

Nevertheless, there is such an amount of intermixture with inferior qualities, that one may sometimes contemplate with dismay the possible degeneracy of great historical families, famous in the Legislature, the Cabinet, or the field. Indeed, as a lamentable fact, the taint of some lower nature does occasionally reveal itself in families with any number of noble and royal alliances. The great lords of creation will go on marrying whom they please.

But how about the majority of the great human herd that work with the hand, that minister to our wants, that till or defend the soil? Will it ever be possible to carry out in this sphere the principle now established and bearing excellent fruit at Holker? Will a crowded amphitheatre of lords and ladies ever see paraded before their admiring eyes the splendid results of careful selection and judicious pairing in the human species? It is to be feared the elements of the question are too complicated for that. They are moral as well as physical; and though these have much to do with one another, it is the moral element that most eludes scrutiny and defies assortment. Nevertheless, there is much to be learnt in the school of nature, for even the old heathen poet could observe that eagles will not produce doves, and that as there are breeds of horses, so there are of men.

FEEDING INDIAN MEAL TO STOCK.—The Mass. Ploughman says:

1st. Never feed it to a calf after it is three months old, but feed more for growth than for fat.

2d. Heifers intended for the dairy should not have meal until after their second calf, and not then until the calf is at least ten days old, and in small quantities at first.

3d. The injudicious feeding of meal is one of the reasons why farming does not pay.

4th. All grain fed to farm stock should be raised upon the farm, as every dollar put out for meal is a positive loss, unless dollar for dollar comes back as the direct result of feeding such meal.

5th. Heifers that are kept fat with meal will not breed, while those kept in good growing order on grass, hay and roots, breed readily.

Feeding meal to a bull, unless in very small quantities, is very injurious, to say the least, as it makes him ugly and renders him an unsure getter.

GOOD CROPS—CHEAP LAND.—The New-England Farmer remarks that there is plenty of land in Massachusetts that is not worth to-day in market ten dollars per acre, and yet such land can be made to produce good crops of rye and other grains, and at a profit, too. And good milk and butter can be made from cows kept on such food, if it is cut early and properly cured.

CATALOGUES, &c., RECEIVED.

L. B. CASE, Richmond, Ind. Botanical Index to the new and beautiful plants which he grows. This number gives cuts of Polygonum Sieboldi, Nymphæa odorata, Diospyros Kaki, etc., etc.

G. H. MILLER, Norwich, Muskingum Co., O. Circular of the Gregg Raspberry.

TRANSACTIONS of the Illinois State Hort. Society for 1877, for which we are indebted to the Secretary and editor, O. B. Galusha, Morris, Ill. Reference will be made to this volume again.

BULLETIN OF THE AMERICAN METRIC BUREAU, 32 Hawley street, Boston, Mass. Melvil Dewey, Secretary.

EDWARD A. FROST. Wholesale Catalogue of the Genesee Valley Nurseries for autumn of 1878. Rochester, N. Y., Fruit and Ornamental Trees.

MONTHLY CROP REPORTS of the N. C. Dep. of Ag. for September. L. L. Polk, Com'r, Raleigh, N. C.

E. Y. TEAS, Dunreith, Henry Co., Ind. Price-list, for this fall, of large and small fruits.

GEO. ACHELIS, Wholesale Trade-list. Fruits and Ornamental Trees of all kinds. West Chester, Pa.

BEACH, SON & CO.'s annual fall catalogue of Dutch Bulbs, Lilies, etc., and seeds for autumn sowing. Illustrated. 7 Barclay street, N. Y.

JOHN S. COLLINS. Price-list of small fruit plants for this fall. This list gives engravings of several of the new sorts of Strawberries; the Gregg and Reliance Raspberries and the Lady Grape. Moorestown, N. J.

The Poultry Yard.

LEGHORNS vs. PLYMOUTH ROCKS.

G. D. B., whose communication to the RURAL appeared in the issue of September 28, seems to me to have made a much greater error in his poultry record by omitting to state the amount of feed consumed by his Plymouth Rocks, than I did in my note published on September 14, in failing to state the number of eggs my Leghorns laid each month. I did not consider the number of eggs they laid an exceedingly large yield for well-fed hens; but I do believe that with the same care and feed, it cannot be beaten by any breed of fowls. I should like to hear from others who are testing, or have tested, the Leghorns as layers. I think that breeders generally pronounce them one of the best egg-producing breeds, G. D. B.'s evidence to the contrary notwithstanding. "ANON."

Industrial Societies.

THE GREAT ST. LOUIS FAIR.

The eighteenth annual fair of the St. Louis Agricultural and Mechanical Association has come to a successful close. For the character and extent of the general display, this collection is more like one of the great European fairs. The exhibitors are supplied with accommodations that permit them to show their wares to the best advantage, and this consideration on the part of the Association is reciprocated by manufacturers, as is evidenced by the fact that they exert themselves to show the best machinery in the most attractive forms that they are capable of producing. This is undoubtedly the great implement fair of the country, and the representation this year fell little short of the display made at the Centennial.

The accommodations for live-stock, poultry, etc, were equally good, and the representation in these classes was never better. I regret that time forbids more than a running mention of the various breeds. Indeed, the extent of the grounds—eighty-five acres—makes a complete report an impossibility. None but an O'Leary or a Centaur could make the grand rounds and have time to do justice to all departments.

There were 135 head of Jerseys on exhibition, 56 of which were shown by Churchman & Jackson; of these 20 were imported stock. Messrs. Miller, Stratton, Barber, and Turner & Kirkman also had well-filled stalls. The Devons were only 21 strong, but quality counterbalanced a fuller representation. L. F. Ross, whose herd of 18 took the first premium at Illinois State Fair, was here. The Short-horns made a sorry showing, and indications would seem to point to the declension of the furor for this breed at the West. The herds of Pickerell & Kessinger and J. H. Potts secured the most attention. T. L. Miller, Thos. Clark and W. Powell entered herds of Herefords; a fine yearling, the property of Mr. Constance, scored a first premium. The hog in agriculture always makes a notable figure, and here some six hundred—the gallant six hundred—ably sustained the class, the black breeds taking the lead. In sheep, the long-wools secured the honors of representation "by a large majority." Horses, both draft and road, were numerous. As curiosities, the largest and smallest horse in America, so asserted, focused the gaze of the curious, while such famous fellows as imported Intruder, Plantagenet, Illinois Chief, Rob Roy, etc., attracted the good judges of horse flesh.

In Textile Hall were gathered most of the local exhibits of a miscellaneous character, which differ merely in detail from similar exhibits the country over. Being in a commercial center, this fair has the resources of the city to make drafts upon, so that it does not require a nimble imagination to picture the gorgeous quilts, the piano war, the patent flap jack turners, *et al.* so dear to the hearts of the ladies.

Produce Hall contained a few remarkably fine exhibits, but as a whole was far below the other departments, and very far below what one would expect in such a rich farming district. Although Missouri is the third corn-producing State in the Union, there were but four exhibitors of corn, who showed altogether seven samples. Oats, barley and potatoes were no better represented. Wheat there was in considerable quantities and of very superior quality—Fultz and Clawson being the favorite varieties. Only two exhibits each of garden vegetables and honey were made. Dairy products were unusually well represented, and of as fine quality as is often seen at any of the Eastern fairs. Leaf tobacco, rye, castor beans and flax, all of which are largely grown in the State, were entirely wanting. Fruits were as good as could have been expected at a fair held so late in the season, and in a year when all fruits are nearly a failure.

Such an imperfect display seemed unaccountable until the premium list for the present year was compared with those of former ones, when it became apparent that the Fair Association was doing its utmost to crowd out the agricultural features of the fair, and to promote the stock and mechanical departments. For many classes of farm products no premium whatever was offered, and many of the remaining premiums were only half of what had been offered in previous years. Such a course is certainly unwise as a very large proportion of the attendance comes from the farming community, and if the farmers are not invited to come and exhibit the fruits of their labors, they will very soon take the hint and stay away.

The largest, and by far the most valuable exhibit in the Hall was one made by the Missouri Agricultural College. The collection contained forty-eight varieties of wheat, twenty-five of oats, sixteen of corn, and two hundred of potatoes. The wheat and oats were shown in sheaves, the grain in glass jars; the corn in half-bushel samples, and the potatoes in five-pound boxes. Every specimen was plainly labeled with the name of the variety and yield per acre, so that the comparative value of the different sorts could be seen at a glance. Among the potatoes were thirty unnamed seedlings that had been sent to the College for trial. Some of these gave a wonderful yield, and promise to be of great value. Several fine seedlings raised at the College were shown. The exhibit was constantly surrounded by a crowd of inquiring farmers, and showed very plainly that valuable practical work was being done at the College.

But the machinery was the conspicuous figure. Many firms own permanent buildings which enable them to show off their exhibits in the most attractive manner. One of these, Semple, Birge & Co., had a building filled with all kinds of agricultural machinery. Walter A. Wood, Whitman Agl. Co., Furst & Bradly Mfg. Co., Deere, Mansur & Co., Jas. A. Field, Son & Co., Moline Plow Co., C. Aultman & Co., and nearly all the prominent manufacturers of the West were represented, while the makers of small implements for multitudinous purposes were legion. The self-binders did a brisk business, tying up bundles with the ease and grace of a dry-goods clerk, and in fact, most of the machinery was in motion, the agricultural steamers that were present in numbers being utilized for the purpose.

The fact that the agricultural fair was not the only attractive feature may account for a part of the large attendance. Thirty-five acres are devoted to a zoological garden that counts hosts of admirers, and the divertisements were plentiful. The grounds being situated some three miles from the center of the city, made it difficult to reach them in comfort. The car lines had not the resources to accommodate the crowd, and the Jehus arranged prices in a way that left no room for doubt as to "What will the harvest be?"

J. A. Field, Son & Co. made a fine exhibit of their Giant Corn Mills and other goods for which they are general agents. They had their Corn Mills in full operation showing the farmers how to utilize the full corn crop by grinding the husks and cob with the corn. Since this mill was illustrated in the RURAL they have improved it by adding a grinding rim to the inside grinder and a corresponding rim on the outside grinder. This improvement doubles the capacity for fine grinding at a very small additional cost. It really cheapens the grinder, for the rims can be replaced for one-third the cost of the old grinding-plates. A new patent adjustable shell is also a great improvement, as by a simple device the wear is taken up by lengthening the shell. The grinding cone is also adjusted to grind at all times in a satisfactory manner.

The Springfield Mfg. Co. of Springfield, Ill., made a fine display of Corn-Planters. They had on exhibition their "Climax" and "Boss" two-horse planters, and "Capital" hand-planter, and "Sucker State" one-horse corn drill. The latter attracted a great deal of attention. It combines simplicity of construction with accuracy of operation. A number of these drills have been sold in the East, and wherever used have given the best satisfaction. It is a cheap, durable and efficient implement.

The St. Louis office of the Gibbs & Sterritt Mfg. Co. (Cory, Pa.) made a fine display of their celebrated Climax Mowers, Droppers and Self-Rakes. This concern has done a very large business during the past year, their sales being far ahead of the previous one. The Climax machines give the best of satisfaction wherever used, and their sale is being extended all through the Southwest as well as the East. They bring out this year a new light mower weighing less than 600 pounds. A number of these have been put out on trial and have stood the severest tests. They will be put on the market for 1879, and I have no doubt will more than meet the expectations of their originators and mow their way to the front rank.

THE FARMERS' FRIEND GRAIN DRILL.—Among western farmers the "Farmers' Friend," manufactured by the Farmers' Friend Manufacturing Co., Dayton, Ohio, has become a household word, and at this great western fair, the drill is always exhibited to crowds of enthusiastic friends and patrons. The drill has recently been the recipient of very great honors at Paris, where the company entered their exhibit against all competitors in its class, with the most satisfactory results, a large placard over their exhibit at the St. Louis fair announced its success at the Paris Exposition over twenty competitors, after extended field trials, so that the gold medal awarded the drill was earned by superior excellence in the field. The company has just been notified that it is the recipient of another gold medal at the hands of different judges. These medals in conjunction with the honors bestowed at the Centennial, give this drill peculiar *prestige*, as having received the endorsement of Europe and America to the claim of being one of the leading implements in its class. In 1877 the Farmers' Friend also took the premium at the St. Louis fair. This year the company did not enter for competition, but had a fine display of samples showing their different machines and attachments. The features that most contribute to its success in the field, it is said, are the double force-feed which is brought to perfection in its different parts, and then never disturbed, and the cone-gearing by which the quantity is regulated by simply moving a lever which changes the speed of the feeders. The general construction of the drill, and the arrangement of the hoes in particular, cover some very nice mechanical points. In these latter a rubber spring pressing on the end of a lever keeps the hoe in its normal position, which is held there by a latch so arranged that a continuous strain makes a positive lock, but the moment a quick, sharp blow is given, it starts the little roller in the latch, and the hoe gives way, to be brought back to position by the rubber spring as soon as the obstruction is harmlessly passed.

P. P. MAST & Co., Springfield, Ohio, were out-and-out Buckeyes, having on the ground the Buckeye Grain-drill, Buckeye Cider-mill, and Buckeye Cultivator. The drill and cultivator captured the first premiums. The Buckeye drill is too well-known to need much comment, but it has recently been improved by the addition of a fertilizer attachment that is in itself a most complete apparatus, and has greatly enhanced the value of the drill when it is desirable to sow commercial fertilizers with the grain. This attachment was fully illustrated and described in our issue of September 7.

The cultivator is rapidly advancing in favor; the sales last year included over five thousand of these implements. Its good points are its adjustable axle by which the wheels can be thrown forward or back, which permits the driver to throw the downward draft in front or rear of axle, thereby properly balancing the cultivator in hard or soft ground. The high wheels and broad tires insure light draft and sufficient hight to pass over corn, in the last plowing. The foot-treadles are a very good device, and one of the greatest conveniences about the implement.

R. H. W.

Dairy Husbandry.

A VERMONT CHEESE DAIRY.

T. H. HOSKINS, M. D.

I AM fond of good cheese, and as it is rarely to be had in the stores, I have now for some time purchased my small supply of a dairyman living in an adjoining town, who was highly recommended to me, and whose cheese I have found to be of remarkably high and uniform quality, keeping well, and improving in flavor for at least a year. Thinking the readers of the RURAL would be glad to hear how such cheese is made, I have recently visited the dairy referred to, that of Deacon J. C. Oliver, of West Charleston, Vt., and received from Mrs. Oliver a detailed description of her process of manufacture, which she calls "the old-fashioned Franklin County way, before cheese-factories were invented."

THE RENNET.

The calf is killed in the morning, fasting, and the stomach, when removed, is slit open and its contents, if any, shaken out. It is then filled with pure salt, laid on a plate of salt, and covered with salt. This plate, with others, is set upon a shelf in the cheese-room and left to dry; the rennets being occasionally turned over. When dry, they are packed in salt. Before using, they are soaked out in warm brine and rubbed thoroughly and repeatedly. The solution thus formed is strained, and is perfectly sweet and free from the least offensive odor,—indeed having scarcely any odor at all. One rennet makes from 175 to 200 pounds of cheese.

THE VAT.

The vat is a pine box about four feet long, two feet wide and twenty inches high, well painted within and without. It is supported upon a stand which permits one end to be raised about six inches when desired. In the middle of the other end are three holes, one above another, at about two, six, and ten inches distance from the bottom. There is also another hole in the bottom, close to this end. These holes are about three-eighths of an inch in diameter, and are fitted with pine plugs.

THE MANUFACTURE.

The milk of 16 cows is used, and a cheese of from 35 to 45 pounds is made every morning. The cows are of the common stock, well fed and cared for. Cheese-making begins the first of May; before that, butter is made. The night's milk is set in pans, and in the morning the cream is skimmed off, the skim-milk heated in a kettle not quite to the temperature of new milk, and added to the fresh morning's milk in the vat. The cream from the night's milk is heated *scalding hot*, and then stirred into the vat. No cream is lost in the manufacture; there is not enough on the whey to make it worth saving for greasing the cheese, as is often practiced. The dissolved rennet is added to the contents of the vat, stirred, and the whole covered with a cloth and left for half an hour. When the curd is set, it is cut coarsely in squares of, say, four inches, and left to stand twenty minutes to let the whey start. It is then broken by hand, "with a sort of rolling break," as Mrs. Oliver says. This is the most difficult art to acquire in the whole process, so as to break the curd up fine, and yet not make the whey white, thus losing the richness of the curd—when broken, the curd is covered and again left to stand twenty minutes.

The scalding of the curd is effected by drawing off two pailfuls of whey, heating it to scalding heat and pouring it back into the vat. This is repeated usually three times; in the warmest weather only about half as much whey is used for the third scalding. The purpose is to scald until the curd "creaks" slightly under the teeth. In this process no acidity is developed; the method is therefore the "sweet-curd process," which is now being put forward by Prof. Arnold.

When the curd is properly scalded, as above, the whey is drawn off, the curd salted to taste, and removed from the vat in milk pans to the buttery. The curd-making is finished about nine o'clock, and the curd is left in the pans to cool until noon, when it is put to press in a "self-presser," or automatic press, where the cheese is pressed by its own weight, for 24 hours. The bandages only are colored, no color being used in the cheese. No thermometer is used, so that I am unable to give the exact temperature in scalding, etc., and the salt is not weighed, but judged by tasting the curd; still, the product is so uniform that one cannot doubt that Mrs. Oliver's "scalding hot" is a very uniform temperature, and her judgment of the right degree of saltness, very accurate.

I have been thus particular in the account of the way in which this cheese is made, because it is a really first-class article in every respect. If our cheese factories could make as good, generally, the export value of their product would be raised several cents a pound, and there would also be a much larger home demand. But the difficulty is that first-class cheese cannot be made where everybody's milk and all kinds of milk are used. The factory system is a good one in many respects, but the only way in which first-class cheese can be made in them, is for them to use milk only from selected dairies. There is one such factory in this State, run by Mr. Mason, the president of our Dairymen's Association. His cheese is quite equal to the choicest English, and is sold in advance of manufacture to first-class hotels and restaurants in New York and Philadelphia. It is as far superior to common factory cheese as Mrs. Oliver's is to the common farm-dairy product. I hope soon to give RURAL readers the details of Mr. Mason's method.

Orleans Co., Vt.

Everywhere.

RURAL SPECIAL REPORTS.

CORNING, Steuben Co., N. Y., Oct. 10, 1878.

The weather is now delightful and it has been quite favorable to the agriculturist the past season, and now he is gathering in his late crops, and getting ready for winter. Soon the stock will have to be put up and tended; and no time should now be lost in fixing up the barns, and sheds, so as to be ready when needed. I find that these matters are usually neglected, and finally winter closes in upon us before we are ready; therefore let us try and get prepared, for once, in season.

Crops, on the whole, have yielded quite well with the exception of potatoes; these are very light indeed; some fields I hear of, are scarcely worth digging. The hay crop was very abundant and much more had to be stacked than usual for want of barn room in which to store it; $7 is all we can get for the best of hay, delivered at the hay press. It seems to me it is better to feed it to stock than sell it at that price, when one has to draw it four or five miles; yet many will draw it twelve and fourteen.

On the morning of the 23d ult., on waking up, I discovered that there had been a very heavy frost, killing all tender plants that were not covered up, and ice formed as thick as window-glass. On the 27th, we had another heavy frost. Last year our first frost did not come until the 5th of October.

Of four varieties of sweet corn grown hereabouts this year, the Farmers' Favorite is pronounced to be the nicest at our table. Will some of the RURAL's correspondents let us know their opinion about the best sweet corn?

I was glad to notice the sensible article on plowing, in the RURAL, page 614, by "A Jersey Farmer." Good plowing is the foundation of good farming; for without good plowing, good crops can not be expected. I have often been disgusted at the slovenly manner in which some men plow. To be a good plowman, one must take pride in what he is doing, and he must also have a good plow, as well as some practice. On no farm can one plow be used for all kinds of plowing, with satisfactory results. I do not like a land-side plow, on most fields, (unless they are wet.) so well as a swivel plow. I believe the swivel plow as now constructed for level land as well as hill-side, possesses many advantages over the land-side plow; and, before long I believe that it will come into general use here, the same as in New England. At the late trial of plows at the New England fair, none but swivel plows were admitted.

Prices of farm produce are about as follows: Wheat, $1 to $1 10; corn, 50 cents; oats, 50 cents; rye, 50 cents; barley, 70 and 80 cents;

beans, $1 to $1 25; potatoes, 60 to 70 cents; butter, 17 and 18 cents; eggs, 16; chickens, 7 cents alive, and 12½ dressed. F. H. D.

OWENSBORO', Ky., Oct., 10, 1878.

No frost yet to hurt the tenderest plant; weather very warm for Oct.; health hereabouts unusually good. The Daviess County "Agricultural Hoss Trot" is under way now—9, 10, 11 inst.—having, as a *secondary* feature, fine stock and other farm products. Fast horses got big premiums and only 10 per cent. off; other things, small premiums, with 30 per cent. off. Now is it an exhibit such as ought to be made by an Agricultural, Horticultural and Mechanical Association, or is it merely what Josh Billings calls an "Agricultural Hoss Trot?" I think Josh is right.

The tobacco crop is about 50 per cent. of last year's yield. Corn and potatoes are short; hay is fine. Irish potatoes are selling at 40 cts. per bushel; sweet potatoes, 40 to 50c. Hogs are plentiful, $3 $3.50 gross. Farmers are about half-way through seeding. A large area of grain will be sown. Wheat is worth 80c.; rye, 45c. The sorghum crop is good, the supply being greater than the demand; price 25 to 40c., according to quality. S. W. S.

JONESVILLE, N. Y., Oct. 15, 1878.

Our season, from May to about the middle of August, was very wet. Oats were badly damaged in gathering; but few escaped drenching showers. Most of the oat-straw was ruined for feeding purposes. Corn is a fair crop. Potatoes can hardly be mentioned as a crop in this section; but few were planted, and the yield is very light. Many farmers, who formerly raised potatoes largely for market, will have to buy for family use. Grass was a fine crop. Prices range as follows: Oats, 30@35c.; corn, 50@55c.; rye, same as corn; potatoes, $2@$3 per barrel; butter, 20c. per lb.; pork, $5.50 per hundred. The weather, at this writing, is delightful. There has been but little rain for weeks past. No heavy frosts. Apples abundant; market glutted; many are selling fine grafts for from 50c. to $1 per barrel. F. B. W.

PENSACOLA, Florida, Oct. 25th.

This is a place of about 4,000 permanent inhabitants, a number increased by about from 1,500 to 2,000 every winter and spring, during the season for shipping timber. Our harbor, consisting of a part of Escambia Bay, is the finest in the Mexican Gulf, and capable of affording ample anchorage to the fleets of the world, while the depth of water on the bar at its entrance, is enough to allow the largest vessels to pass. From 100 to 500 sailing vessels of all kinds are at anchor here in the winter months, taking on board hewed timber—chiefly yellow pine—brought down in large rafts from Escambia and Santa Rosa counties, Fla., and from the lower parts of Ala. W. H. O.

WEXFORD Co., Mich., Oct. 8th.

We have had a long, warm season here with no very hard storms or very severe droughts. The frosts in the spring damaged winter wheat to some extent, still it was a fair crop. Owing to the cool, backward spring the hay crop was not as good as usual with us. Oats and corn are good. Potatoes are fair. The potato beetles have left this place for parts unknown. Prices are low, though perhaps better than they will average throughout the country. Wheat, 75c. to 80c.; oats, 25c.; potatoes, 40c. per bush.

Any one wanting good land at cheap rates, in a healthy locality, will do well to come here. J. S. G.

BRIGHTON, Montgomery Co., Md., Oct. 9th.

Wheat sowing is progressing rapidly, while some fields are already commencing to show a greenish tinge. The most popular varieties of wheat hereabouts are the Fultz and Boughton. The Fultz is gaining popularity by its better yield, though its quality is not the best. Wheat this year is below an average crop. Corn, on poor land, is above an average; on rich, below, owing to an excess of rain in the early part of the season. Early potatoes are a fair crop; late, not yet dug. The butter market is improving; the best print is now selling for 40c. wholesale in Washington market. G. L. S.

NEW RICHLAND, Logan Co., O.

Crops hereabouts are good; wheat never was better in this county; corn is a fair crop; oats and hay are good; fruit is a fair crop; apples, however, are not as plentiful as two years ago. Stock of all kinds are low; horses are very dull sale; fat cattle, $3 50; stock, $3 00; hogs, $3.50 to $3.75. Grain, too, is very low; wheat, 85 to 88c. per bush.; corn, 35c.; oats, 18c. Wages from $1 to $1.25 per day, from $15 to $20 per month. Hands have been very hard to get this fall—plenty of tramps, but they will not work. Land is worth from $40 to $75 per acre.

PAINESVILLE, Lake Co., O.

The crop of grapes this season is not such as to inspire enthusiasm with regard to the future of grape culture. M. B. B.

ARKANSAS CITY, Cowley Co., Kan., Oct. 11.

Wheat here brings only 40c. per bushel. T. C. B.

CAMBRIDGE, Mass., Oct. 16, 1878.

No frosts, but leaves are falling. W. F.

The Querist.

ANSWERS TO CORRESPONDENTS.

Grasses for a permanent Pasture.

Van, Brown Co., Wis., says: "My thanks are due to Messrs. CURTIS and BEAL for their information about Orchard-grass. I am trying a small plot and an acquaintance is doing the same. There is a defect in our meadows owing to our giving too much attention to lumbering until within the last four or five years, and letting our farming take care of itself. We sow only clover and Timothy and the clover dies while the Timothy runs out in wet spots, and in come water, reeds and coarse grass. Now what mixture would Prof. BEAL recommend for a permanent pasture or rather for a lot near the house on which to turn cows at night—soil a heavy red clay on a blue clay subsoil?

ANSWER BY PROFESSOR W. J. BEAL.

Yes, the clover dies in two years unless it is reseeded, as it only claims to be a biennial and the Timothy runs out in a short time as it is unfit for a pasture grass in any place, except for a single season. If Orchard-grass be used alone, sow two or three bushels to the acre. Instead of Timothy, sow June-grass; also Meadow-fescue. If grass is wanted, there is no advantage in sowing oats or rye or anything else to shade it, any more than there would be in planting corn in a field of wheat to shade the young wheat plants. If sown early in spring without any other crop, the grass will start early, and the owner will doubtless be astonished to see how fast it grows. I should sow, to guess at the location, a bushel of Orchard-grass, a bushel of June-grass and a peck of Meadow-fescue. All these are of good quality, and with suitable soil and climate, will last for many years.

Works on Farriery.

W. C. P., Pierport, Mich., asks for the name of the best complete work on farriery, suitable for ordinary farmers.

ANS.—There is a considerable amount of difference of opinion with regard to the merits of the works of various authors who have written on diseases of the horse. Even among those who are acknowledged experts in the veterinarian profession there is a world of disagreement as to the best methods of treatment of some very ordinary ailments. Amid such conflicting opinions it would, therefore, be no easy matter to decide absolutely which is the best work on this vexed subject. A few of those we consider among the best are here mentioned in what we think their order of merit.

AMERICAN EDITIONS OF FOREIGN WORKS.—Stonehenge's—The Horse in the Stable and Field, 8vo, $3.50; 12mo, $2.

Mayhew's Ill. Horse Doctor, $3.

WORKS BY AMERICAN AUTHORS.—Stewart's American Farmer's Horse, $3.

Jennings on the Horse and his diseases, $1.75.

Dad's Modern Horse Doctor, $1.50.

Certainly among the best works on the diseases of farm animals is the Farmer's Veterinary Adviser, by Prof. Law, of Cornell University, price $3.

Any of these can be procured through this office.

Germination of Seeds.

A. C. W., Hugo, Ill., asks how to raise the following plants, from seed: Clematis, Purple-leaved Berberry, Deutzia gracilis, Weigela, Althæa, Cornus sanguinea, Juniper, Norway Spruce, Australian Pine, etc.

ANS.—Clematis seeds generally require a long time to germinate—sometimes one, sometimes two years. Planted now, many may germinate next spring; but most would not until another year. Deutzias, Weigelas and the other shrubs will germinate readily; those of the evergreens mentioned will also germinate readily if planted as soon as ripe. A good plan is to sow them now in cold-frames.

Making Hard-Stick Candy.

A. M. O., Savannah, Ga., asks for a recipe for making hard stick candy.

ANS.—The hard-stick candy is made by using 3½ pounds sugar, 1½ pint of water, and 1 teaspoonful of cream-of-tartar. If it is wished to make the clear candy, manipulate the mass as little as possible after turning out on greased tins; if clouded candy is wanted, pull it or stir it until the desired opaqueness is secured. "How to Make Candy" a book costing 50 cents, and to be had through this office, gives complete directions for making all kinds.

When to Plant Strawberries.

U. T. S., Bear Canon, Col., asks how late may Strawberry plants be set out, and how are they usually sent a long distance by mail.

ANS.—Strawberry plants, if properly put up, may be sent upon a week's journey without materially harming them. The sooner they are set out the better. They need some time before sharp frosts to become "established" in their new quarters. There is very little gained by fall planting. A partial crop is secured the first summer, but we fancy that this is lost subsequently.

Is there a Mole Exterminator?

W. H. M., Haddonfield, N. J., having had his entire front lawn badly cut up by moles, and having vainly tried several kinds of traps against them, inquires for some method of getting rid of the pest.

ANS.—Speaking for ourselves, we cannot give our correspondent any remedy. We have been troubled the same as he has been for years, and have tried everything that seemed to give the least promise of exterminating or driving them off, without any success commensurate with our pains. Has any reader of the RURAL ever found an efficacious method of extirpating the annoyance?

Miscellaneous.

Enoch Auter, Cedar Co., Iowa, raised the Lost Nation Wheat this year. It suffered from the heat just like other varieties, but it yielded 20 bushels per acre while they yielded only ten. He asks the difference between Lost Nation and Defiance Wheat.

ANS.—The Defiance is a spring wheat originated by Mr. Pringle, of Vermont, by hybridization. Lost Nation is an Oregon wheat. There is some sort of story attached to it about its being found in a mound, which is, no doubt, all humbug—like the other wheat that also came from Oregon, that was said to have been taken from a wild goose's crop, and which was said to have come from a long distance. But how far a wild goose could carry wheat in its crop before it was gizzarded and digested, we don't exactly know, but not more than a few hours, probably.

A. J. M., Seneca Falls, N. Y., asks, 1. For a good recipe for coloring hair. 2. The name of the best work on chemistry, which a farmer could study at home.

ANS.—1. There are numerous preparations for coloring hair, all claiming to be the best. Never having used any of them, we are unable to sit in judgment upon these claims. The next barber would be better able to advise on this topic. 2. Johnson's Agricultural Chemistry, $1.75; Norton's Scientific Agriculture, 75c; Johnson's How Crops Feed and How Crops Grow, $2 each, are among the best works of the kind desired. All can be had through this office.

P. H. F., Cobleskill, N. Y., asks us to republish an article on making capons, that appeared in the RURAL some years ago. We would do so to benefit him and others, were it not that an article containing a full account of the matter was published, among our Answers to Correspondents, as lately as the 20th of last April, on page 250 of current volume of the RURAL. Tools for performing the operation can be had at the office of the Pet Stock and Poultry Bulletin, Courtlandt street, N. Y. City.

J. H., Summerton, Erie Co., Pa, asks for some remedy or preventive of a repetition next year of the depredations of the little white maggot that last season destroyed the 6,000 Cabbage plants he had set out.

ANS.—From the date of this note it is evident that it was written before he received the last number of the RURAL, which contained, among Answers to Correspondents, two notices of this pest. We would refer him to these, and also to an article on the Cabbage Plusia, in the RURAL of Oct. 12, and to another on exterminating the Cabbage Butterfly, in our issue of Feb. 2.

Mrs. W. V., Oxford Center, Ont., asks, 1. How can Brompton Stocks and Wall-flowers be best protected through winter? 2. If Verbenas are kept in a cellar, do they require much light and water through the winter? 3. The names of the four best varieties of Grapes for glass-house, and the best time to plant them?

ANS.—1st. In a cold frame; or planted in boxes and kept in a light, airy cellar.

2d. All the light available; only enough water to keep the soil slightly moist.

3d. Black Hamburgh, Victoria Hamburgh, Lady Downes, and Buckland Sweetwater. Plant in early spring. But both in the case of varieties to plant and time of planting, much depends on local circumstances.

O. B. J., Battle Creek, Mich., asks where he can get a good, practical work on poultry-keeping.

ANS.—Tegetmeier's Poultry Book, $9. Saunder's Domestic Poultry Book, cloth, 75c.; paper, 40c. Wright's Practical Poultry-keeper, $2.

To be had through this office.

L. W. S., Pitcher, N. Y., asks the name of the tunnel on the Erie R. R. just before it reaches Jersey City.

ANS.—Bergen tunnel.

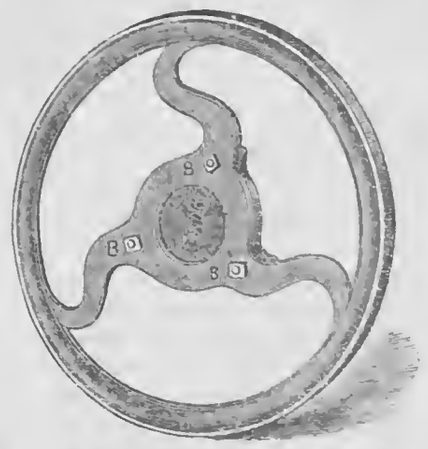
COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, OCTBER 19TH:

L. A. R.—W. F. W.—O. B. J.—W. J. B.—F. H. D.—A. C. W.—P. W. H.—C. C. G.—J. T. L.—J. T.—A. D.—C. D.—S. T.—U. T. S.—H. S.—W. B. P.—R. H. C.—S. B. P.—S. D. H.—T. H. H.—W. S. C.—F. B. H.—S. E. R. S. thanks.—L. L.—F. B. W.—J. H. R.—L. A. R.—W. F.—G.—C. C. A.—J. J. H.—H. P.—T. H. H.—A. A. M.—W. J. B.—C. C. G.—A. B. C.—

Industrial Implements.

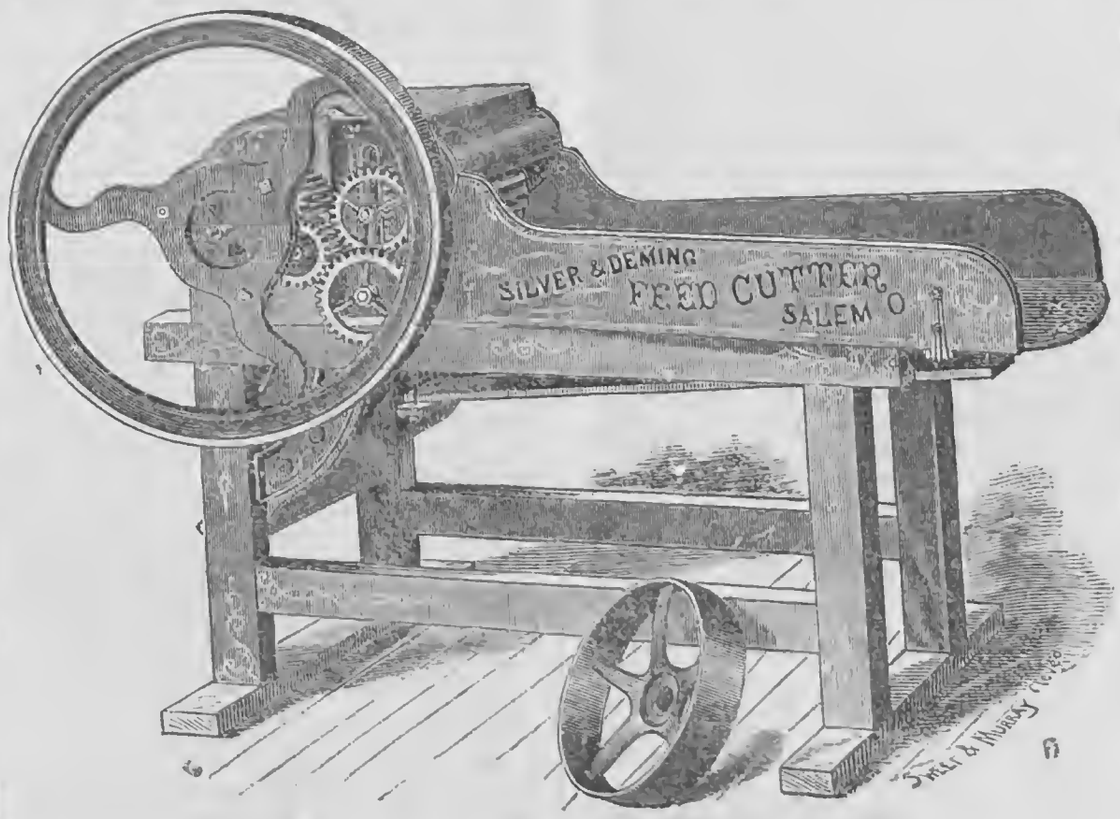
SILVER AND DEMING FEED CUTTER.

The illustrations in this department this week are explanatory of a new power feed cutter made by the Silver and Deming Mfg. Co., Salem, Ohio. The striking peculiarity of the machine is an independent safety fly-wheel, easily adjusted, and rendering an important service. The small cut shows this wheel detached. When applied to the shaft the nuts shown at B, are tightened



just enough to prevent the wheel from turning on its disc when the cutter is unobstructed. The instant iron or other hard substance enters its throat the knives cease revolving, but the fly-wheel continues to revolve, thus avoiding accidents that may be caused by a high speed when abruptly stopped; also oscillation of the fly wheel is prevented. The feed-cutter itself contains important features that we will briefly summarize. The adjustable feed roller has an extended vertical movement without materially altering the mesh of the gear wheel, which device overcomes strains caused by over-feeding. It is also maintained parallel with the stationary roller. The length of cut may be quickly changed without employing detached gear-wheels, that might be lost, or worse, run through the machine. No very small pinions are used, and the cutter-bar is made of hardened steel accurately ground, which secures a durable, sharp edge.

The machine received the highest honors a the Centennial for possessing the above good points. Five sizes are made ranging from a nine- to a twenty-inch knife. The cutter is commonly equipped with two knives, but four are furnished, if desired, at an increased price. The nine-inch machine is made for hand use but may be run by power. The mechanical finish and material seem to be, in every respect, satisfactory, and the work is performed in a superior and rapid manner. Circulars containing details may be had on application.



THE SILVER & DEMING FEED CUTTER.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Ricketts's Grapes—(Illustrated)..... 677
Notes on Varieties of Grapes—D. S. Marvin..... 677
Grape Notes from North Carolina—M. B. Prince. 677
Evils of Selling Unripe Grapes—Nelson Ritter... 678
Grapes of Southeastern Texas—G. Marti..... 678
Experience with Grapes in Michigan—S. B Peck. 678
Grape Leaves—No. 2—W. C. Bellamy..... 679
Prentiss Grape—(Illustrated)..... 679
Shelburne Grape—(Illustrated)..... 679
Waverley Grape—(Illustrated)..... 679
Grapes in Western N. Y.—W. J. Fowler..... 679
Grape Items..... 679
Vermont Fruit Jubilee—T. H. H..... 680
Notes from Rural Grounds..... 680
Gooseberries in California—W. C. L. Drew..... 680
Wild-Goose Plum—E. B..... 680
Tree Planting—G. F. Needham..... 680
Large Leaf of Tulip Tree..... 680
Bulbs and Planting Them—Wm. Falconer..... 680
Hardy Bulbs—Mrs. H. W. B..... 680
Hard Labor and Machinery..... 681
What Others Say..... 681
Catalogues Received..... 681
Leghorns vs. Plymouth Rocks—Anon..... 681
Great St. Louis Fair..... 682
Vermont Cheese Dairy T. H Hoskins—M. D.... 682
Communications Received..... 683
Silver and Deming Feed Cutter—(Illustrated)..... 683

Everywhere:

Corning, N. Y..... 682
Owensboro, Ky..... 683
Jonesville, N. Y..... 683
Pensacola, Fla..... 683
Wexford Co., Mich..... 683
Brighton, Md..... 683
New Richland, Ohio..... 683
Painesville, Ohio..... 683
Arkansas, City, Kan..... 683
Cambridge, Mass..... 683

Answers to Correspondents:

Grasses for Permanent Pasture..... 683
Works on Farriery..... 683
Germination of Seeds..... 683
Making Hard-stick Candy..... 683
When to Plant Strawberries..... 683
Is There a Mole Exterminator?..... 683
Miscellaneous..... 683

EDITORIAL PAGE:

Country Roads..... 684
Cleanliness of Stables..... 684
Value of Hen Manure..... 684
Our Exports..... 684
Good Laws Upon Land Drainage..... 684
Mildew..... 684
Brevities..... 684

Domestic Economy.

Mop-Handle Papers—No. 7—May Maple..... 688
Oat Meal, Cracked Wheat, &c.—Mrs. Mary Olin. 688
Domestic Recipes..... 688

LITERARY:

Poetry..... 690
Ornamental and Useful—(Illustrated)..... 685
Our New Serial..... 685
Weaker Than a Woman..... 685, 686
September in China—E. F. Mosby..... 587
Church Fairs—L. A. R..... 787
Recent Literature..... 687
Magazines..... 687
Bric-a-Brac..... 687

Reading for the Young:

Talk of One who Traveled to Learn what Shivering Meant—Grimm..... 690

Sabbath Reading:

A Happy Sunday..... 690
News of the Week—Herman..... 688
Markets..... 689
Personals..... 691
Wit and Humor..... 692
Advertisements..... 689, 691 692

THE
RURAL NEW-YORKER.

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RURAL PUBLISHING CO.,
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SATURDAY OCT. 26, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

COUNTRY ROADS.

ROAD-MAKING as an art is but poorly understood by the majority of our highway surveyors and road-masters, and what they do know is not always well carried out. There is, no doubt, a gradual improvement in our highways. The loss and injury occasioned by gullying and wash-outs are so great that those means by which stability of the traveled way is secured, are getting to be tolerably well understood. But the other points, such as securing easy grades, conducting a road over a swamp, the management of clayey or mucky soils, and the removal of stones, both fixed and loose, are all matters in which our rural road-builders may easily improve their methods. In every farmers' club, grange and agricultural gathering for the discussion of rural affairs, road-making should be made a matter of frequent consideration.

The losses by reason of bad roads are very large—far greater than the cost of maintaining good ones. But they are so uncertain as regards particular instances, and so divided among all hands, that the sum of them is not realized as it ought to be. The load that can be drawn over a road is limited by the load that can be drawn over the worst places, just as the strength of a chain is only the strength of its weakest link. The strains thrown upon the different parts of a wagon or carriage, upon the bolts and braces, the wheels, axles, pole, shafts, and on the harness, (to say nothing of the horses), by steep grades and the unevenness of the road-bed, by deep mud, and by stones, are also matters that are large enough in detail, but form a monstrous aggregate far beyond the conception of those who do not figure in regard to them. We believe that there are few traveled roads in the country on which the unnecessary injury to vehicles alone would not pay, and more than pay, for the cost and maintainance of a first-class turnpike.

There is one thing, in particular, which would cost but little to remedy, that is very destructive to wheels, the most costly parts of every vehicle, and which is also the cause of very great injury to horses. We refer to the loose stones left upon the surface of the roadway—thrown upon it, in fact, when the roads are repaired, and left there the whole season afterwards. These stones could be all thrown off in a very short time and at very little expense, but they are very rarely attended to. How many loosened and broken tires they cause, and how many horses' feet are injured by these provokingly loose stones in the road!

Other bad things, easily remedied, are the holes and hollows worn in the road by wheels, and rapidly increased in depth by the softening caused by the collection of water in them after rains. These holes break more axles, bolts, braces and spokes, ten times over, than the cost of filling them up would amount to. A "stitch in time" is here most important, but few road-masters will attend to the matter as they should.

We repeat that these are things worthy of frequent discussion among farmers, so that knowledge regarding the proper remedies may be disseminated, and, above all, a public opinion be created in favor of good roads. The civilization of a community is almost as well guaged by the condition of its roads as by the quantity of soap it uses.

CLEANLINESS OF STABLES.

WE frequently come across remonstrances against keeping harness in stables, the reason given being that the ammonia prevalent there rots the leather and soon destroys the harness. Now, this is beginning at the wrong end to remedy an evil. We may talk and advise "year in and year out" about this matter, but harness will be kept in the stable in spite of all. Where else can the majority of people who keep horses hang these trappings? A rich man may have a closet in which the harness may hang safely from fear of ammonia and all other dangers; but the average horse-owner will have his peg behind the beam, because he can have no other way of disposing of the harness. But the trouble would end if the production of ammonia in the stables was prevented. Enter an ordinary stable at any period, but especially in the winter when every cranny through which the wind can come in is carefully stopped, and what a pungent odor offends the nostrils and irritates the eyes! Is this odor of ammonia, strongly alkaline and irritant, injurious only to the harness? What of the horses and the tender membranes of the eye, the throat and the nasal passages? Do you think they are less sensitive than oak-tanned harness leather, well greased and preserved, as it is? By no means. If the prevalent odors injuriously affect the leather, you may be sure the eyes suffer; the throat and lungs are irritated and the nasal passages become inflamed. Then occur the frequent moon blindness; ophthalmia; weeping of the eyes, followed by inflammation, white specks, clouded cornea, and finally loss of sight; then follow coughs, bronchitis, pneumonia, heaves, catarrh, nasal gleet; and by and by, when the blood has become poisoned by the absorption of diseased matter from inflamed and suppurating membranes, farcy and glanders—dreadful and fatal to beast and man, too—result. And while we think of saving the harness and removing that to a purer place, the beast, which is worth a dozen sets of it, is left to rot from these pungent gases without any help. Clean the stables and the harness may hang in them safely; and be sure, if the stable is not a fit place for the harness, it is no place for the horse. A barrel of plaster can be procured for about one dollar. It is worth that as a fertilizer. It is worth ten dollars as an absorbent of ammonia, and a hundred as a health preserver to the horses; not counting the saving to the harness. Sprinkle it everywhere and be liberal with it.

THE VALUE OF HEN MANURE.

THERE is hardly a subject upon which more is written, by the correspondents of the agricultural press, than this. Every novice in gardening and farming, especially, is enraptured by the fertilizing vigor of this kind of dressing for the soil. And they are right,—the dung of fowls is a valuable manure. We want to say here, briefly, just how and why it is valuable, and draw a little moral at the end.

A great many, but not all, know that the urinary secretions of birds is discharged, not externally as in mammals, but into the bowels in a semi-solid form, and passes off mixed with the dung. There is, therefore, no loss of what we call the "liquid manure" in the case of fowls. All the valuable fertilizing salts, the potash, the phosphoric acid and the ammonia, which the kidneys excrete from the blood, are contained in the dung of fowls. They are there in a very concentrated and yet very soluble form, ready to yield a potent nourishment to the young plant,—too potent, without considerable dilution. Then again, our fowls live mostly upon a concentrated diet, chiefly seeds and insects in the summer, grain and meat in the winter; and the result of the digestion of this strong, rich food is a strong, rich manure. Fowls fed upon potatoes do not yield a rich excrement.

And, finally, our hen manure is made and preserved under cover, suffering no loss from the leaking or fermentation which always occurs when more or less water has access to any fertilizing substance of animal or vegetable origin.

"This fable teaches" the importance of preserving the urinary excretions of all domestic animals, as well as the solid manure, and of protecting both from loss by leaching or fermentation. Were this attended to, the manure of all grain-fed animals would be nearly as strong as that of fowls, and as valuable for fertilizing purposes. At the present price of commercial fertilizers, the like ingredients in a cow's urine are worth at least twelve dollars a year. It is a great loss on a stableful of animals when all, or most of this goes to waste, as is too commonly the case.

OUR EXPORTS.

AN enumeration of some of the exports from the port of New York in a single week, will give a very clear idea of the wonderful wealth of resources and material, and the extent of the foreign traffic of the United States. For instance, in one week in September there were two million bushels of wheat shipped abroad. Manufactures and produce were sent to 57 foreign ports. Of these the largest business was done with Liverpool, the amount being $1,667,360. This included 300 tons of fresh meat, 360 kegs of tongues, oysters, toys, chromos, shoe-polish, $62,000 worth of butter, nearly $300,000 worth of bacon, $283,000 worth of tobacco and $223,900 for wheat. London took $500,000 worth of goods, among which were 300 sewing machines, 730 packages of wooden ware, 500,000 lbs. of cheese, 156,000 bushels of wheat, and 4,515 cases of canned goods. Glasgow took 42 bbls. of shoe pegs and 1,200 cases of canned goods and other merchandise to the value of $200,000; $58,211 worth went to Japan; $500,000 to Australia, which took 1,397 packages of agricultural implements, 125 bbls. of shoe pegs, a lot of wind-mills, pumps, etc.

Good Laws on Land Drainage.—A proposed amendment to the constitution of the State of Illinois, which has to be voted on by the people at the coming fall elections, provides that the general assembly may pass laws permitting the owners of land to construct drains, ditches and levees, for agricultural, sanitary or mining purposes, across the lands of others, and provide for the organization of drainage districts, and vest the corporate authorities of such organizations with power to construct and maintain levees, drains, and ditches and to keep in repair all such improvements heretofore constructed under the laws of the State, by means of special assessments upon the property benefited thereby. The enactment of such laws as this amendment authorizes, would be of vast benefit not only to Illinois, but to many othes States in the Union. For not the least of the difficulties individuals and communities encounter in carrying plans for drainage into execution lies in the opposition or the lack of co-operation of other parties interested.

Mildew.—It has been remarked by one of our contributors, that the leaves of those grape-vines whose fruit buds were killed by the late spring frost, have not been injured by mildew. In so far as we can recall, they are seldom attacked before the fruit begins to form. It is the same with the leaves and fruit of the Gooseberry. Whether fruiting so weakens the plant as to present conditions more favorable to the growth of this fungus, or whether the time for its germination is not until fruit begins to form, we cannot say. It is a fact, however, that thrifty plants, both of the Grape and Gooseberry, are attacked by mildew during some seasons when no fruit is borne.

BREVITIES.

PLANT a Grape-vine.

THE best fruit to plant in City gardens—Grape-vines.

PROBABLY one of the very best deodorizers is fine dry earth.

WHICH grapes suffer most from rot—the white, red or black varieties?

FROM many different parts we hear good accounts of the Lady Grape.

ALL of our Grape portraits we have had drawn from life—and they are true portraits.

AMONG Rogers' Hybrids, Salem (red) and Goethe (yellowish-green) are among the best.

MAY not the Delaware be said to occupy about the same place among Grapes that the Seckel does among Pears?

WITHOUT regard to their manufactnre into wine, do not our hardy Grapes at the present day rank next in importance to the Apple?

MESSRS. ELLWANGER & BARRY send us a box of Bonne du puits Ansault pears, of which we gave a drawing from life Nov. 10, of last year.

THE Massachusetts Ploughman, in its issue of Oct. 5, gives a picture of "Moore's Esrly Prize Grape." As represented it is the largest hardy grape we have ever seen.

MR. MARVIN'S classification of Grapes most suitable for the latitude of northern New York, given elsewhere in this issue, is the result of no small amount of care, judgment and experience.

MR. ROGERS is, we believe, entitled to the credit of first attempting upon an extended scale the hybridization of our native with the foreign sorts of Grapes. Many question whether they *are* hybrids, since the marks of the foreign species are rather feeble.

THE RURAL of next week will present a large engraving of the "new" fodder plant Pearl Millet. Some of our readers may doubt that so many stalks proceed from one seed. We shall, perhaps, be enabled to give them the opportunity of testing it for themselves.

SEEDLING GRAPES will generally bear fruit the third year—sometimes the second—sometimes not at all. If our friends plant seeds now, taken fresh from the grape, they will germinate in a few weeks and make plants a foot or more high by next spring, when they may be thumped out of the pots and set in the soil where they are to remain.

ALFALFA TROUBLED BY DODDER.—Alfalfa does well in California as a forage plant, and is much liked where it has been tried—in Kansas and neighboring States. Farmers are cautioned about selecting the seed, as much of it in Europe and California contains seeds of a kind of parasitic vine or dodder called Cuscuta racemosa. This vine is a great pest.

CUTTINGS of grape-vines may be taken now and either planted in the open ground in rich, mellow soil, six inches apart, and covered with leaves or some other protection, or they may be buried in a dry place and then planted in the spring. There is no reason why every farm or garden should not have grape-vines. Those who are too poor or too mean to buy vines may procure cuttings from their neighbors.

THE Weekly Tribune, referring to exhaustive cropping, year after year, without rotation, without Sabbath rest of land, without even utilizing natural resources of manure, says that it is little less than pitiful to him who looks on rich soil as one of the best of God's temporal good gifts to men. It is not legitimate farming—it is land-slaughter in the first degree, and a crying injustice to succeeding generations.

EAST and west, men of experience and sound sense denounce the practice of selling grapes before they are fully ripe, a practice which is the abortive offspring of avarice and improvidence—of avarice, because the greed for petty gain gives birth to it; of improvidence, because a lack of foresight prevents those who are guilty of it, from seeing that thereby they are permanently injuring their own business by producing with their immature fruit a popular distaste for their wares.

MR. T. B. MINER devoted many years of his life to seedling-grape culture. Out of some 15,000 seedlings he produced, less than a dozen were selected by him as worthy of general cultivation, but several of these he believed would be accepted as improvements upon any previously known. A few months before his death, these varieties were sent to us for trial. We are glad to be able to say that they have made a strong, healthy growth, and we hope they may prove of sufficient merit to justify Mr. Miner's opinion of them, and that they will serve for all time to come, to keep his memory green in the minds of those, who, having labored in the same field, can appreciate the slight reward that generally attends original research in the world of horticulture.

THERE is a good deal of disquiet at present among extensive vineyardists in California and elsewhere at the prospect of a new reciprocal treaty with France, which would permit the free importation of French wines into this country. It seems hardly fair that while our manufacturers are guarded from foreign competition in our home markets by a protective and, in some cases, a prohibitory tariff, so important a branch of husbandry as viticulture should be exposed to ruin by the removal of the present duties on foreign wines. This would be a poor reward for the labor and research which have produced our present excellent varieties of Grapes which promise within the next five years to yield in California alone 50,000,000 gallons of first-class wine instead of the 10,000,000 gallons there produced yearly at present.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

ORNAMENTAL AND USEFUL.

No. 1.—PORTFOLIO FOR MUSIC.—For the foundation, cut two pieces of cardboard, 13 inches in breadth and 16 inches in length; cover these with gray cashmere, embroidered with any simple border in silk. The cashmere must be cut 20 inches wide and 31 inches long, and pointed at one end; this forms the outer cover for the two pieces of card and the fold over the pocket. A piece of cashmere, two inches wide at the top, and gradually sloping to one inch, is sewn to the outer card; and another piece of embroidered cashmere of the same size as the card, is sewn to this, to form a pocket. The fold-over, which is cut in the same piece as the cover for the cardboard, buttons over this. The two cardboard leaves are tied together with ribbon at the sides, and handles of ribbon are sewn to each leaf at the top.

Fig. 3.

NOS. 2 AND 3.—SHAVING TIDY.—This useful article may be easily made, and will form a nice present for a gentleman.

The outside of the case may be either of velvet or cloth, measuring sixteen inches long and six inches wide, embroidered with silk of two shades, in a pretty design round the edge, and a monogram in the center of one side. The case is lined with silk, and has two pieces of soft linen, edged with fringe; small squares of silk paper are tacked to the center, so that they may be easily pulled out after the razor has been wiped.

The case is folded in half, and a silk cord and tassels are sewn to the center of each side. Instead of embroidering the edge, narrow lace may be sewn on, if preferred.

Fig. 5.

No. 4.—PEN-WIPER.—Break the legs off a Dutch doll measuring four inches in hight. Sew tightly round the waist several petticoats of soft black cloth, pinked at the edges, each petticoat measuring two and one-half inches in depth. Make a skirt of dark gray cloth of the same length. The cape and hood are cut from a square of the same cloth, rounded at one corner, to form the back of the cape the opposite corner is first rounded at the point, and formed into a hood by running it across about an inch from the edge. Sew the hood under the chin to fasten it, and draw each side a little back from the ears, so that a point may be drawn up at the back of the head. A girdle of cord is tied round the waist to complete the friar's dress.

NOS. 5 AND 8.—WALL-BASKET FOR CLOTHES-BRUSHES.—The foundation of the basket is of bamboo, with panels of leather, colored or silver canvas, embroidered with claret chenille and blue silk as shown in design No. 8. The basket is lined with claret cashmere and ornamented with bows of blue satin ribbon.

NOS. 6 AND 7.—NEEDLE-BOOK.—The foundation for the needle-book is of card-board, measuring 3¼ inches in the longest and 2⅛ inches in the widest part; cut to the shape shown in No. 7. The card is covered with pale blue silk, with an *appliqué* of dark blue silk embroidered, as shown in No. 6, and fixed by a row of herring-bone stitches. The covers are bound with narrow ribbon and sewn together at the bottom. Two or three leaves of white blue cashmere are fixed inside, and the book is tied with ribbon.

NOS. 9 AND 10.—WORK-BAG.—The bottom of the bag may be made either of straw plait or braid interlaced as shown in No. 10. A bag of blue silk is sewn inside the foundation, and is drawn together at the top with silk cord and tassels. It is ornamented at the sides and bottom with bows of blue ribbon.

Fig. 2.

No. 11.—PINCUSHION.—The pincushion is in the form of a rabbit on a moss mat. The rabbit is made of a rough woolen cloth. It is cut in two pieces, and must be neatly joined down the back and filled with bran. The ears are cut in double material, folded in one pleat, and sewn neatly to the head. Two black beads serve for eyes, and a few stitches of red wool for the mouth. The mat is made by turning shaded green wool over a card, cutting it at one end as if for fringe, and sewing it to a circle of cloth, which must afterwards be sewn to a cardboard foundation. The rabbit is fixed to the mat by a needle and strong thread.

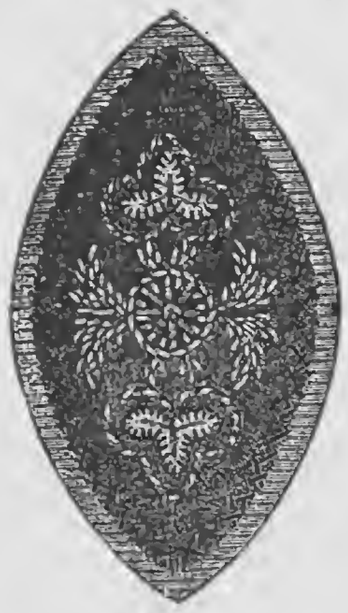

Fig. 6.

12—A FANCY BASKET.—A bag of crimson silk or cashmere is sewn on the inside of the basket, drawn together with cord and tassels. The sides are ornamented with bows of silk.

13—A PINCUSHION.—This graceful little design is a great improvement on the regulation cushion. The table may be of wood, bamboo, or metal, and the under-side of the cushion is made fast to it by means of tacks or glue. The cushion can be made of silk or cashmere, embroidered in contrasting colors, with a fringe of silk at the edges, or bright-colored silesia or cambric is pretty, with a cover made of white Swiss trimmed with Smyrna or Italian lace, and a box-pleated border edged with lace, around the sides.

Literary Miscellany.

OUR NEW SERIAL.

WE give this week the opening chapters of "Weaker Than a Woman." This is a story of domestic life, and while there is no lack of interesting incidents and dramatic situations, there is nothing in it approaching vulgar sensationalism. Its moral tone is exceptionally pure, the author not having followed the fashion of the hour, and introduced questionable love affairs to enhance (?) the interest of the tale.

The popularity of "Cora" (the last serial), and the numberless requests for another continued story, lead us to believe that the fortunes of the beautiful but unstable heroine and her handsome, noble-hearted lover, as narrated in "Weaker Than a Woman," will be followed by our many thousand readers with an interest not inferior to that inspired by "Cora."

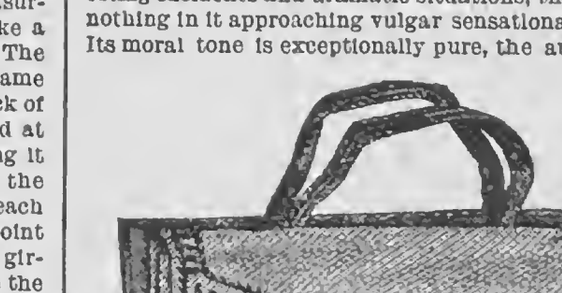

Fig. 1.

WEAKER THAN A WOMAN.

CHAPTER I.

"IT is true, Kate—every word of it. I was, like you, incredulous at first, but I heard the will read, and I assure you that Mrs. Hardman has left me six thousand pounds."

"I cannot believe it, Darcy. See how my hands tremble! I have hardly the strength to speak. It is impossible. Six thousand pounds! Oh Darcy, if there should be any mistake, let me know it at once, before I begin to found any hopes upon such good fortune—before I take it into my heart of hearts as a truth."

"My dear Kate, there is no mistake—there can be no mistake. I should not have told you had there been the least probability of such a thing. The money is our own, and will be paid to us when the estate is settled."

"Six thousand pounds! Why, Darcy, that means three hundred a year, does it not?"

"Certainly," replied Darcy Lonsdale, "properly invested."

Fig. 7.

"And three hundred a year means freedom from anxiety, from the constant toil of trying to make both ends meet. It means a larger and better house, a governess for the children. Oh, Darcy, how can we be thankful enough?"

"My dear Kate," said the lawyer simply, "I assure you that for some time after I heard it I did not know how I felt. The most pleasant part of it was coming home to tell you. I knew how delighted you would be."

"Have you told Felix?" asked the anxious wife.

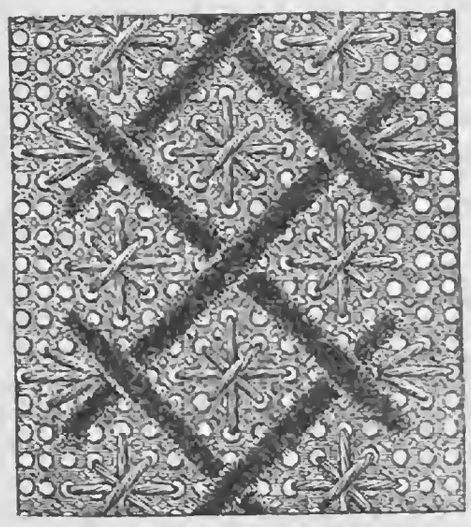

Fig. 8.

"No; I have not seen him yet. He is gone over to Nuncombe. He will be pleased. I can take him into partnership now, which is a thing that I have long wished to do. We have had a hard struggle together, Kate, but it is almost over now I should not have believed that money could make such a difference in any one's sensations. Yesterday I felt that the world was my master; to-day I feel that I have mastered the world."

"We shall be able to go to the sea-side now, and you can take a rest occasionally: and we can get some good port wine for little Nellie."

The lawyer smiled.

Fig. 4.

"And my bonnie Kate shall have a superb dress," he said—"one that shall make her look young and beautiful to others as she does to me. In truth, Kate, I see no end to the relief, the ease, the happiness, that this unlooked-for legacy gives us."

"We must take Vale House; it is to be let," remarked Mrs. Lonsdale. It is just such a house as I have always longed for; it is so large, so convenient, and has a much better drawing-room than that of the Newtons. What do you think, Darcy?"

Fig. 9.

"Yes; I think we might take Vale House. I will go out to-day, and inquire about the rent, rates and taxes."

"What will Mrs. Morton say?" mused Mrs. Lonsdale.

"Never mind about that," replied the lawyer. "All that we have to do is to enjoy our good fortune. I really do not know, but I think that such a sum of money never made people so happy before. Kiss me, Kate, and we will not forget to thank heaven together."

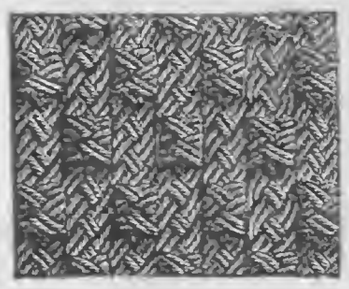

Fig. 10.

The speakers were Darcy Lonsdale and his wife. Darcy Lonsdale was the principal lawyer in the clean and well-built town of Lilford in Loomshire—a man who had had a hard hand-to-hand struggle with the world. He had been twice married. His first wife died in her twentieth year, leaving an only son, Felix; and ten years afterwards the lawyer married again. His second wife was a blithe, bonnie, rosy girl who loved him with all her heart, and thought no one in the wide world so clever, so great or so good. For his sake she took little Felix to her heart, and loved the dark-haired handsome boy as much as she did her own children. The lawyer's one drawback was his large family; nearly every year a pretty, rosy, smiling baby appeared, until, as he pleasantly declared, he had ceased to count them, for their

Fig. 11.

number frightened him. The "small army," he called them; and, though he was proud of them and fond of them, though he would not have missed one fair head from the circle for the whole world, yet the number told upon him—he could not save money, he could not even buy a house, his ingenuity was taxed to make both ends meet. The bills were so numerous—little feet must be shod, little fair heads must be covered, little minds trained; and nothing could be done without money. Still Darcy Lonsdale was a very happy man; he had a charming wife, beautiful children, a good practice, and he liked work. The one pride of his life was his tall, handsome son Felix, in whom the honest, simple-hearted lawyer had concentrated all his hopes and ambition. The "small army" were all under twelve, so that he could not build any hopes on them at present.

His life had on the whole been a pleasant one; but he did wish at times that he had a little more money. His practice was a good one; still it could hardly be called lucrative in the small pleasant town of Lilford. There was not much to occupy a lawyer; the setting forth and renewal of leases, the drawing up of title-deeds, the making of wills, the framing of agreements, composed almost the whole of his business.

Amongst his clients was an eccentric widow lady named Martha Hardman, [and Darcy Lons-

dale had for twenty years been her faithful friend, adviser, and guide. She said to him laughingly one day—

"You will have something to thank me for when I am dead."

"How can I thank you when you are dead?" he asked.

She nodded her head gravely.

"You will see," she replied. "You have done everything for me since you began to practice; but I shall not let you make my will. Tell me whom you would advise me to send for to do so?"

Thinking that she was in a capricious mood, he answered—

"Send for George Malcolm; he is an honest lawyer and an honest man. But why not let me make your will, Mrs. Hardman?"

"Because I am going to leave you something in it; and I have not read of the glorious uncertainties of the English law for so many years without wishing to be on the safe side. I may fail, but I will take all reasonable precautions."

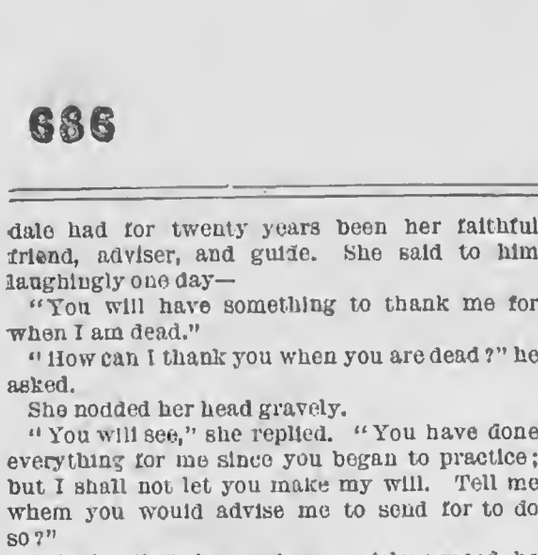

Fig. 12.

He laughed at the time, giving little heed to what she said, and soon afterwards he forgot all about the incident. Three years later Mrs. Hardman died, and her nephew, her heir-at-law, came upon the scene. Darcy Lonsdale had all her papers, an exact list of all her moneys, her deeds, leases, documents of various kinds—but he had no will.

"Did she make a will?" asked the heir-at-law.

"I cannot tell," replied Darcy Lonsdale. "I have certainly drawn up no will for her."

"Has she ever mentioned a will?" pursued James Hardman.

Suddenly the lawyer remembered that she had mentioned a will, and his face flushed as he thought of the conversation. James Hardman looked at him suspiciously.

"She did speak of her will to me once; she told me that I should not draw it up for her, and asked me to name some lawyer. I told her that George Malcolm was an honest lawyer and an honest man; but I never heard whether she sent for him or not."

"You know, of course, of what her property consists, and that I am her heir-at-law."

"Yes," was the cheerful reply; "we have often talked about you. I can give you the particulars of the late Mrs. Hardman's property. She owned the estate called Woodburn, consisting of a large farm and a good substantial house; and she had, besides this, twelve thousand pounds in the funds."

"And that is, of course, mine?" said James Hardman.

"I knew nothing as to that," replied Darcy Lonsdale. "I did not make her will, nor did she ever ask my advice about it."

After the funeral George Malcolm came with the will and the instructions that he had received from Mrs. Hardman. It was read aloud; and then it was discovered that the lady had left Woodburn together with six thousand pounds to her nephew, James Hardman, while to her true friend and adviser Darcy Lonsdale, in acknowledgment of his long friendship and faithful services, she had bequeathed the sum of six thousand pounds.

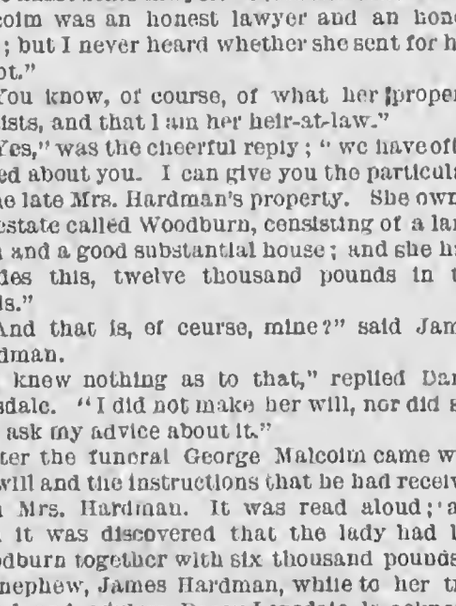

Fig. 13.

On hearing that, the lawyer hurried home, delighted with the intelligence, to his wife. What a vista of comfort this legacy opened! For the first time in his long and honorable career the lawyer felt some relief—he could meet his expenses now, and when he died there would be something for his wife and children.

Nor was his wife less delighted. In her heart she had longed for the same luxuries that the wives of other professional men enjoyed—for a drawing-room like Mrs. Merten's, for a nursery-governess such as the Doctor's wife, Mrs. Daiverly, had engaged, for a silk dress like the one that the Rector's wife wore. But of these desires she had never spoken. She knew that her husband did his best in every possible way, and gave her all the money that he could. But now she ventured for the first time to indulge in such blissful reveries. They were no longer idle dreams; they would be realized. She would live in Vale House, that delightful residence—she would have a charming drawing-room, a nursery-governess, and a costly silk dress.

While she sat dreaming with a smile on her face, her step-son Felix entered the room. There was the warmest attachment between these two—kindly liking and respect for his step-mother on his part, the highest admiration and the truest love for her step-son on hers. She was so young when Darcy Lonsdale brought her to the great white square house in Castle Street, Lilford, that it seemed absurd for Felix to call her mother. As he grew older it appeared to him that, with her soft Italian beauty, the most suitable title for her was *madre*. He looked at her now.

"*Madre*," he said, "you are looking very pleased and bright; what is the good news?"

Mrs. Lonsdale went up to him and clasped her arms round his neck. She drew the handsome face down to hers.

"Kiss me, Felix," she said; "I have news to tell you—the best you have ever heard. I know you will be pleased—indeed the very thought of the news makes me tremble with joy. You could never guess it, Felix."

"I suppose I never could. Have any of the 'small army' distinguished themselves?"

"No; it is nothing of that kind. It is this. You remember Mrs. Hardman of Woodburn?"

"I should remember her, *madre*; some of the dreariest hours of my life have been spent in copying deeds bearing her name."

"My dear Felix, her name must be held blessed amongst us for evermore. She has left your father a legacy of six thousand pounds—and to us, my dear, that means so much. It means Vale House to live in, a governess for the children, and a partnership for you."

His handsome face flushed hotly.

"And that, *madre*—that means for me Violet Haye."

A tender light came into Kate Lonsdale's clear eyes.

"I hope so," she said gently; "I shall be so pleased if it is so. Now, Felix, people call money dross. Could you or I estimate the amount of happiness that lies in six thousand pounds?"

"I value it because it will give me Violet," declared the ardent young lover.

"And I because it will give me every desire of my heart," said Mrs. Lonsdale. "And, above all, it will give your dear father a little rest."

CHAPTER II.

Violet Haye! There is something in a name. More than one man murmured this one over and over again, wondering to himself what sweet magic, what wonderful sorcery lay in it. Violet Haye—the very sound evoked a vision so beautiful, so full of witching grace, so dainty, so delightful, that dwelling on it proved too much for minds and brains not over strong. What had not Violet Haye to answer for? How many prosperous young farmers had wasted the best hours of the summer days, while the hay spoiled in the meadows and the corn grew over-ripe in the fields, watching in Castle Street, or waiting in the green lanes, for one glance at the peerless face of Violet Haye? The young doctor who had bought the old physician's practice had almost gone mad for love of her; and, when she told him, with a sweet, bright smile, that she disliked medicine and everything connected with it, in pique and despair he married a prim little old maid who had ceased for fifteen years to dream of a wedding ring. Young curates came, saw, and were conquered; but beautiful Violet resolutely refused to help in any parish work—she would have nothing to do with the schools. One after another the curates went away, with a bitter memory of one of the loveliest girls in Loamshire. The young tradesmen of the place had never dared to lift their eyes to her, for she belonged to the class known in Lilford as the gentry; but when by chance Violet Haye did enter a shop the master of it had need of patience during the next twenty-four hours, for Violet Haye was a most beautiful girl, and reigned queen of the country round Lilford.

There was a wonderful charm about the girl. It was not simply for the sheen of her golden hair, for the wonderful light of her violet eyes, the exquisite tints of her face, the beauty of her rosebud mouth, that men loved her so; it was not that she was tall and slender, with a perfect figure; it was not that she had white hands that wove wondrous spells, that she moved with grace that was all harmony, that she spoke with a voice sweeter than sweet music, that, when she laughed, the silvery chime stirred a man's heart like the sound of silver bells; it was not for this that men loved her. She was not a flirt, not a coquette—she never, by word or look, made any man believe that she loved him; but she could no more have helped the way she had of charming men than she could have helped living. She was the only child of Francis and Margaret Haye, who lived in a pretty villa called the Limes, on the outskirts of Lilford. By kind indulgence the Hayes were permitted to rank with the gentry. They were not poor; they were not "professionals;" they were not in trade. Francis Haye had an income that kept his family in comfort, but it would cease at his death. He had insured his life for the benefit of his wife and child, and the money that would come to them from that insurance was all that he had to leave them; still they belonged to the gentry. It was not a numerous class in Lilford, and was by no means to be identified with county society; that was a far-off and greater glory—a world that even beautiful Violet with her Greuze-like face had never hoped to enter. The gentry comprised old Colonel Maddox and his lady; Mrs. Brownson, a widow lady with a daughter of uncertain age; the late Rector's widow, Mrs. Boulders; a maiden lady Miss Stanley, the pride of whose life was that her second cousin had married a baronet, and who, in consequence, piqued herself on her high connections, and talked in a familiar way of the aristocracy; and a few others of the same calibre. It was not a brilliant circle, but to Violet Haye it was a world.

If of her numerous lovers she preferred one, it was Felix Lonsdale. It was an old story. He had certainly been her lover from the early age of seven. He had never thought of any one else; to him and for him the world was all Violet. In the sun's rays shone Violet; the birds sang "Violet"; no sweet flower bloomed that was as sweet as she. He had lived with this one thought; he had studied, worked, toiled—all for Violet, hoping that the day would come when he would be able to marry her. He had devoted his life to this one object.

Darcy Lonsdale had contrived to send his son to Oxford, he had distinguished himself as a scholar of no mean abilities, after that he had passed some time in London; and now he was with his father, sharing his labors and toil, and working hard, hoping one day to secure a partnership, and then to marry Violet. He had once thought of leaving Lilford; he felt that the place was but small, the circle of interests limited. Then he put aside the thought as a temptation; he must not desert his father or leave his business to the hands of strangers. There was something almost heroic in the way in which he looked round upon the great bright glittering world, with its magnificent battle-fields of skill and intellect, its great arenas where mind and brain fought mind and brain, and then said to himself, "No, my duty lies at home, and I will work there."

He was singularly gifted, this young Englishman, who was brave enough to make duty his guide. People often looked at him in wonder, asking themselves whence had come his clear-cut face—a face of the purest type, with dark clustering hair that waved back from a low broad brow—his beautiful mouth, that could be rigid and firm, yet often wore a smile as sweet as a woman's; the dark eyes that were as true and eloquent as the soul they revealed. It was a poetical face, yet combining with the intellectual and the ideal something of the practical keenness of a clever man.

Darcy Lonsdale formed great hopes for his son; he had rightly estimated his abilities, and he had said to himself that in time the best business of the country would be brought to him. He himself was industrious, honest, and in some degree a good lawyer; but his son was a genius, and the father told himself with a sigh that in these days a touch of genius was needed before one could make a mark in the world.

As boy, youth, and man Felix had loved Violet Haye—to win her, to make her his wife, had been the one dream of his life. He had had no other; and it was equally certain that up to the present time his love had brought him far more pain than pleasure, far more torment than rest, far more strife than peace. He could never tell whether beautiful Violet cared for him or not—all the country-side knew that he loved her. It seemed to him that the very birds in the trees and the flowers in the hedges knew that. It had never been a secret; but he could not guess whether she cared for him. If ever he felt hopeful and augured much from a kinder word or a sweeter smile than usual, the next time she saw him Violet would be cold. She was so proud that he could hardly extort a word from her; and yet he had a dim idea, a faint conviction, that she preferred him to any other.

Now was his opportunity. He was already making a fair income by writing reviews and essays. If his father took him into partnership, his share, though perhaps small at first, would be certain, and would increase. Now was his opportunity; he would delay no longer, but would at once ask Violet Haye to be his wife.

"It seems almost too good to be true," he thought to himself, "that I should succeed in my profession, that I should win the girl I love for my wife, that I should be happy and blessed. What have I done to deserve it?" He looked up to the sunlit skies. "Done," he repeated—"I have done nothing. It is the goodness of Heaven that has given it to me. Heaven grants all to industry," he thought, "and while I work I need not fear."

In that hour no thought came to him of the storm clouds that darken men's lives—of the terrible tempests that rend heart and brain—of the despair that looks for death as relief. He saw only the blue sky and the golden sunshine.

He saw nothing but the beauty of the fair earth and the laughing sky when he went to woo beautiful Violet Haye and asked her to be his wife. He had been waiting only until he saw a prospect clear and bright before him. Francis Haye might have objected to a man with an uncertain future; Francis Haye would not object to the junior partner of the old-established house of Lonsdale. He was only twenty-four, and, after selecting a very choice flower for his coat, was to be forgiven, if he looked once at his clear-cut face and dark moustache. As he quitted his father's house on that lovely summer afternoon there was perhaps not a handsomer, truer, more noble or gallant young lover in all broad England than Felix Lonsdale.

"Wish me good fortune, *madre*," he said, bending down to kiss Kate Lonsdale's kindly face—"I am going to the Limes."

Kate loooked up with a smile. She made no answer. She kissed him as his own mother would have done, and watched him as he walked down the street.

"There is no need to wish him good fortune," she said to herself; "the girl does not live who would say 'No' to him."

As she went through her round of duties, Mrs. Lonsdale thought often and anxiously that she would like to know how Felix was speeding in his wooing.

CHAPTER III.

It was a glorious afternoon. The country about Lilford was beautiful in the extreme, with lovely undulating meadows, great chains of green hills that stretched into the far distance, dark, shady woods, with some of the finest trees in England, lovely green lanes where wild-flowers raised their bright heads. The town itself was quaint and picturesque; the pretty, old-fashioned houses were almost buried in foliage. The one long main street of the town—Castle Street—might have been a Parisian Boulevard, it was so regularly planted with trees.

This afternoon seemed to Felix Lonsdale one of the fairest that he ever remembered. He walked through the clover meadows, his heart singing for joy, snatches of song rising to his lips. The hedges were all pink and white with hawthorn, long sprays of woodbine twined round the rugged trunks of the tall trees, the clover was thick and odorous. He crossed the path at the end of Oakwoods, where he saw most glorious vistas of light and shade, entered a long, green lane, and then he reached the fair green fields that led to the Limes, the home of his love.

Presently he saw Violet Haye. He gazed at her in mute wonder that earth should hold anything so fair. She carried a little basket filled with flowers, and on her golden head she wore a simple garden hat. Her dress seemed to him a wonderful combination of white and blue. A feeling of humility came over him—who was he that he should hope to win this brilliant young beauty and make her his own? Then his pride reasserted itself; his love ennobled him, he could hope to win her because he loved her so dearly. Violet did not see him. She was walking in the other direction, and he hastened after her.

It was no wonder that he loved her; the smiles with which she greeted him would have turned many a wiser brain than his.

"Felix," she cried, "I did not dream of seeing you."

"And seeing you, Violet, is like a dream," he replied, "and after I have left you I think of a hundred things that I wanted to say to you, meant to say, and yet forgot."

"That proves that you have a bad memory, Felix," laughed Violet; "but what has brought you to the Limes on this warm afternoon?"

"I have come to see you, Violet."

"I ought to be much obliged to you," she replied; "but the afternoon is a very busy time with me. I attend to all these flowers myself."

"I will help you with the flowers, and I hope that I shall be no obstacle to your pleasant thoughts, Violet," he said.

They walked together until they reached an opening in the lawn; there was a bank gay with wild-flowers, a hedge full of wild roses, and hawthorns crowned it. Felix took the basket from her hand and placed her on the bank.

"I have come to talk to you, Violet," he said. "You must forget your flowers for a few minutes and listen to me. Such a day as this, Violet, was made for a love-story. I have an idea that everything in nature is interested in mine."

"Your ideas are not of the ordinary kind," she remarked.

"No, they are not, I own. Still they please me, Violet. I have a sweet fancy. Shakspere says all sweet fancies come to lovers."

"But we are not lovers, Felix," she said, gravely.

"Then I hope we soon shall be. I have a fancy, Violet, that every bird singing in the trees knows why I am here, that the flowers and the sunshine knew it."

"Then," observed Violet, "they are wiser than I."

"No, not wiser or sweeter or brighter than you; but it was an idle, pretty fancy, Violet. As I walked under the great shady trees every leaf seemed to stir—as I passed, the roses in the hedges nodded; they said, 'The sun shines and the earth is fair; now is the time for youth and love.'"

Violet looked up at him with a resigned little sigh.

"Not being either a bird or a flower, I am not in their confidence, Felix; and perhaps when you have finished with them you will tell me what you have to say."

"I will tell you now. I have such good news, Violet. Mrs. Hardman, one of my father's clients, has left him six thousand pounds."

Violet's violet eyes opened wide in wonder.

"Six thousand pounds! That is a great deal of money, is it not, Felix?"

"Yes, a very great deal. You knew my father has an excellent business, but he did certainly want a little more money. This legacy has made him happier than I can tell you."

"I should not think that money would make any one happy," said Violet, thoughtfully.

"No, it would not. Never hold with that idea, Violet. But this is the important thing—my father will now give me a partnership. My darling, do you understand—a partnership?"

"Yes, Felix—what then?"

"I have one hundred a year that my dear mother left me; I make quite another by reviews and articles for legal papers—that makes two hundred; then from the business I am sure to obtain at least three hundred more—that will give me five hundred a year, Violet; and, my darling, there is a beautiful little cottage *orne* near Oakwoods; and, oh, Violet, Violet, will you be my wife? My darling, you know how long and how faithfully I have loved you. I have come to-day to ask you to be my wife."

Her white hands dropped listlessly; she turned her face to his; no warm flush covered it, no love-light shone in the violet eyes.

"How cruel of you," she said, in soft, lingering tones—"how very cruel on this sunny day to ask me such a question!"

There was no anger in her face, no annoyance—nor was there pleasure or happiness: she looked rather like a child who had been disturbed at play. He was neither anxious nor dismayed, for he understood the expression on her face well.

"Why is it cruel, Violet?" he asked.

"It is cruel. You know I do not want to be married, Felix. I do not like to be teased about love."

"But, my darling, no one can look at you and not love you."

"That is not my fault. And, Felix, you should not call me 'darling'; do you not know that is hardly proper?"

"If I knew a word that conveyed more, and sounded more sweetly, I should use it," he said, looking with passionate admiration at the pure, perfect face. "Oh, Violet, do accept me! No one else in the wide world loves you half so much. I would make you so happy that you would never regret it."

"I am very happy now," she murmured plaintively.

"That little cottage *orne* is so pretty, Violet. There is a little drawing-room that opens on to a flower-garden — imagine that all furnished in white and gold; then there is a little room upstairs I should furnish as a budoir for you—a room that would be a fitting shrine for my pearl of pearls. My darling, you should have everything that your heart desires."

She touched her face gently with her dainty hands.

"You would buy the moon for me if I wanted it and you could obtain it," she said laughingly. "But, Felix, I do not want the moon, and I do not want to be married. Do talk of something more pleasant."

"Violet, my heart is so full of this; it seemed to me as I came along that I walked on air. I have loved you so long; I have no life apart from you; and I have been waiting so impatiently until I could see a chance of making a beautiful home for you. Now I see it—do not be cruel to me, Violet, I implore you."

"It is you who are cruel to shadow this fair day by talking of love and marriage, Felix."

The words sounded harsh and cold, but there was no coldness on her fair face.

"You know that I have loved you, Violet, ever since we were children."

"Yes, I know it. I should know it—you tell me so every day."

"And you—you have had admirers of every kind, I believe, dark and fair, tall and short; but, Violet, you love me best, do you not?"

The lovely face drooped over a bunch of wild thyme. She did not answer; but he persisted in his questioning.

"You love me best, do you not? Oh, my darling, be a little kind to me!"

There was such passionate love in his handsome eyes, such passionate pain in his face, that she was touched.

"Yes, I do love you, Felix," she said gently; and then she looked up in alarm. He had clasped her hands in his and covered them with kisses; his dark eyes were dim with tears.

"Oh, my love," he cried, "you hold my heart in the hollow of your hand! If you had said you did not love me, the words would have killed me as surely as ever a man was slain. My darling, do you not see that if you love me you must of necessity be my wife? You must of necessity be my wife," repeated Felix, "or what is the use of love?"

"It is pleasant," she replied: "still, marriage—well, Felix, you will laugh if I tell you that it seems to me like calling a child into a gloomy house from sunshine and from play."

"That is not a pleasant comparison, Violet, my darling," he remarked, smiling, "you will be very happy. Now you spend your life amongst all sorts of pretty things. You shall do the same then. No shadow of care shall come near you. You shall be one of the most worshipped as you will be one of the most beautiful of wives."

"But, Felix," she said slowly, with an air of perplexity on her beautiful face, "it seems to me that marriage is the end of everything. Once married, there is nothing for one to look forward to, nothing, as it were, to hope for; it is the beginning of a dull, gray, monotonous stretch of life."

"You will not always say so, Violet." Felix laughed. "You must marry—you love me. Promise to marry me."

She was looking away beyond the green trees, as though she were trying to peer into some far-off future.

"I do love you," she returned thoughtfully—"I am sure that I love you—but there seems to be something more wanting. I cannot think this is all that life holds for me; yet I cannot tell what it is I want."

"You love me," said Felix. "I am quite content. The rest is nothing but the natural fear that a young girl has of a new life. Tell me again—my heart hungers for the words—that you love me, Violet."

Slowly she turned her eyes from the distant hills; slowly she raised them to her lover's face. Love him? Certainly she did. His ardent young face had some of the proud, stern beauty that immortalised the Greek heroes. There was none like him in Lilford. Certainly she loved him very much. Why hesitate to say so? She spoke slowly, in a sweet clear voice.

"Most surely, Felix, I love you"—and the words seemed to fill him with delight. He took the soft white hands in his, and held them while he made her repeat again and again that she loved him.

"You can never go back from your word, Violet. No human ears to hear us; but behold the great broad blue sky. Your vow is made to me, darling, before Heaven."

"I have made no vow, Felix."

"You have said that you love me. Violet, make me quite happy now. Already I am so happy that the air seems to intoxicate me. Say you will be my wife."

She was thinking again, with the same far-off look in her eyes, and she said suddenly—

"A cottage *orne*. Do you mean that pretty villa where the Hendersons stayed?"—[To be continued.

SEPTEMBER IN CHINA.

E. F. MOSBY.

The Chinese in the city of Canton have a very delightful time during the month of September. It is then that they celebrate the Feast of Lanterns in honor of the Harvest-Moon, whose birth they rejoice over.

On the night when the September moon is full, each Chinese householder has to suspend from the highest point of his house at least two lamps, and all day they are busy preparing and painting in gay colors the lanterns, which are of all sizes and hues, and are made in very curious and grotesque shapes. They fasten them on the points of long, slender bamboos, until the roofs of the houses look more like a canebrake in the South, or a bank of reeds by the side of a river, than a city.

But as night comes on, and the moon rises slowly in the lovely deep-blue sky of the East, all that is queer or ugly disappears in the faint shadows, and the colored lights in the air begin to shine. All the great city, with its many low, mean-looking houses, is suddenly transformed into a scene of sparkling, gleaming, twinkling beauty, like an Aladdin's garden, with fruits of gems and precious stones, hung by a magic spell, high over our heads.

On the river below are numbers of little boats, some full of flowers, some having refreshments for sale, or public entertainments and shows or plays on board, all brilliantly illuminated; in some cases with rows of colored lanterns in every imaginable device, but always gay, and moving here and there like troops of fire-flies. Nor are the lanterns over head still, for the bamboos are not only stirred by every light wind, but are swung to and fro by the weight of the colored lamps themselves, and the roofs are so close together, that they seem like great beds of flowers of light moving in the breeze.

The people in the flower-boats on the water send off a continual stream of rockets, like a fiery rain as they dart down, after flashing far up towards the clear blue heavens, and are reflected again in the dark waves underneath, that seem to sparkle and shine too. From every house, as well as from the floating crowds of tiny vessels, comes an explosion of fire-crackers—very like a Fourth of July in Philadelphia—only these are more elegant, as they are made fragrant by fine shavings of scented wood, which perfume the air as they burn. Far off near the outside walls of the city, the noise seems to die away into a softer hum, and the flash and sparkle of the fire-works into a dim red glow.

The Chinese have no bands of musicians with instruments like ours, but they have an instrument that is called a gittern, which makes a tinkling sound like the falling of drops from a fountain into a marble basin, and cymbals and gongs, whose clash and clang mingle with this, not inharmoniously—if one is very far off.

Canton is a sea-port, and among the Chinese you see crowds from other countries, people from England and the United States, traders who come to buy tea and silks and shawls and porcelain and carved ivory. From the vessels all the flags of the different lands from which they come are flying, and the most beautiful and brightest of these is our flag of the Stars and Stripes, to which the Chinese give the pretty name of the "Flower-Flag" on account of its pure white and tender blue and gay red colors, like a glowing mass of garden blossoms.

I can imagine the pure, pale moon, as it rises higher and higher in the quiet sky with its rich depths of purplish-blue, looking down as if surprised at noises and the glitter and movement below; the grotesque houses, and singular, oblique-eyed people who prefer their noisy festival and glaring illumination to the tranquil loveliness and stillness of the heavens overhead. But the same quiet Harvest-Moon shines down on far grander scenes, which surround this crowded city, and suggest very different thoughts,—on the shadowy hills, which as you see them from Canton, look like mountains seen in a dream—on the wide ocean and its solemn solitude, its rhythmic tides.

CHURCH FAIRS.

I have chosen to retain the old name at the head of this article rather than use the one which seems to be rapidly displacing it—to wit, Bazaar. Whether the latter be more appropriate, and if so, why, is a question that might be discussed with propriety, but I am not at present philologically inclined, so leaving it, I will proceed to consider the topic announced above.

This might also be an interesting question to investigate: When, where and by whom were church fairs invented, discovered, conceived, suggested or planned? What illogical mortal first dared to ask his neighbor to contribute articles for a fair, and then asked him to pay for the privilege of purchasing them at double their value? Who was so hopeful as to believe people in the full possession of their reason, would pay to be admitted to a room where they might buy ice-cream and oysters at a higher price than that for which they are sold at places where no admission fee is charged.

But somebody did have the audacity to try it, and, contrary to all rules of reason and common sense, it succeeded. Church fairs are permanently established as one of the institutions of the country. And am I going to urge objections to them? If I know myself I am not so unwise as that. There are some things in this world that, while they have few supporters who will not agree, if privately and confidentially interviewed, that they cost, all things considered, more than they are worth, cannot be publicly opposed by any one who has regard to his social status in the community where he resides. No, I do not intend to object to church fairs. I know the unanswerable argument always advanced by the ladies: "We couldn't raise the money in any other way;" and I admit its force.

Having thus broadly disclaimed any intention of objecting to church fairs as an institution, may I not be allowed to call attention to certain practices usually connected therewith, that seem to me unwise, injudicious and immoral. I refer particularly to the gambling carried on under the various disguises of chances, lotteries, grab-bags, and other similar devices.

I have seen a clergyman who preaches against the practice of playing cards for amusement, superintending in his own church the selling of chances and the raffling of the numbers when the list was full, while on a table near by a Bible was put up at lottery. It is fair to say, however, that this lottery was not drawn. That a Bible should be gambled for shocked the morals of some interested; so a cake was substituted for it with the understanding that to the fortunate holder of the number that drew the cake, the Bible should be presented. At this fair an anti-gambler who had declined the clergyman's solicitation to take a chance, made this proposition: That as many as pleased should put up five dollars each. Dice should be thrown in the usual way; he who threw the highest number should get in his money and the rest be paid into the church treasury. This was not considered for a moment. The dice were gamblers' implements and such a proceeding would be gambling. Many parents who would punish a child for playing marbles "for keeps," give them money to pay for chances in grab-bags, take a turn at a wheel of fortune or invest in "shares" for the "finest doll in the room." How little do they think they are giving lessons in wrong-doing, that may last a lifetime.

I will do the participants in lotteries at church fairs, particularly the ladies, the justice to admit they have never looked upon the matter in its true light. Usually some articles contributed are so valuable as to find no ready purchaser, and conscience is quieted, if indeed it has ever been disturbed, by the thought, "We can't dispose of it in any other way, and it is for the good of the church we are raising the money," forgetful of the injunction to do no evil that good may come. That gambling is an evil will be readily admitted. That all these practices are neither more nor less than gambling, will be apparent to any one who will give the matter a moment's serious thought. That they are unlawful in this and most of the other States is certain, although, perhaps, not generally known. For the information of managers of such schemes and that they may see to what penalties they expose themselves, we append extracts from the Statute Laws of New York:

"No person shall set up or propose any money, goods, chattels or things in action to be raffled for or to be distributed by lot or chance, to any person who shall have paid or contracted to pay any valuable consideration for the chance of obtaining such money, goods or things in action. Any person offending against this provision shall forfeit three times the sum of money or value of the articles so set up, together with the sum of ten dollars, to be recovered by or in the name of the Overseers of the Poor of the town where the offence was committed."

"No person, unauthorized by special laws for that purpose, shall, within this State, open, set on foot, carry on, promote or draw, publicly or privately, any lottery, game or device or chance, of any nature or kind whatsoever, or by whatever name it may be called, for the purpose of exposing, selling to sale, or disposing of any houses, lands, tenements or real estate, or any money, goods or things in action. Whoever offends against this provision shall be deemed guilty of a misdemeanor, and, on conviction, shall be subject to a fine equal to the amount of the whole sum or value, for which such lottery, game or device was made, and if such amount cannot be ascertained, then to a fine of Twenty-five Hundred Dollars, or to imprisonment not exceeding two years, or to both, in the discretion of the Court." L. A. R.

RECENT LITERATURE.

Sonia. A Russian Story. By Henry Greville. Translated from the French by Mary Neal Sherwood. Phila.: J. B. Peterson & Bro. Price 50 cents.

This is a very powerful Russian story, simple, while wonderfully impressive, and shows the author's intelligence, agreeable humor, ready wit, invention, and great power in the drawing of character. Sonia is a poor little Russian slave, knocked about and abused by the brutal aristocrats whom she serves, until a young tutor, Boris Ivanovitch, takes her under his protection. The great value of the work consists in the delicacy and originality with which the really beautiful character of the girl, Sonia, is developed. Sonia is a graceful, domestic story, displaying the author's ready invention, imaginative style and play of fancy, is careful in construction, and most charmingly and beautifully told—giving one a very distinct idea of every-day home life in Russia.

MAGAZINES.

Demorest's Magazine for November is full of just such things as most commend themselves to ladies. The "Kitchen" has a whole column devoted to candy-making; there are, besides, recipes for puddings and cakes, and a most entertaining article on the cabbages. Six stories, a letter on Etiquette by Jennie June, a sketch of Venice with illustrations, the correspondents' class, a useful contribution on Toilet Soap, a chat about home life, a report of What Women are Doing, besides fashion plates, cuts of modish garments, full and interesting descriptions of the latest styles in dress fabrics, jewelry, millinery, some pretty designs in fancy work; and all for 25 cts.

BRIC-A-BRAC.

A TIME-LY TOPIC.

What is it that's shouted, howled and sung
By every class, in every tongue,
By old and middle-aged and young?
Grandfather's Clock.

What is that I hear all day,
That's whistled from Dan to Beer-she-*ba*,
That every piano 's made to play?
Grandfather's Clock.

At night, what rouses me from bed?
At work, what starts my aching head?
At home, what's hummed by wife and maid?
Grandfather's Clock.

What *weights* for no one, *works* apace,
Confronts all *hands* with brazen *face*,
And *springs* at them from every place?
Grandfather's Clock.
[*Puck.*

A TINY thing—a fork.

A man dyes his gray head, when if he would but wait his gray head would die itself.

Suppose the women of this country should refuse to work over eight hours a day, what would man do for his supper?—*Philadelphia Chronicle-Herald.*

"Glass slippers" are announced. It is doubtful if the small boy finds as many panes in them as he has discovered in the old kind. "There's nothing like leather," after all.—*Norristown Herald.*

For of all sad words that ever were written,
The saddest are these, "I got the mitten."
[*Edenburg Herald.*

Caution and Love.—"Oh! Edwin, love, here's the announcement of our wedding. Listen!" (Reads)—"'On the 16th inst., at St. George's, Hanover Square, Edwin Goldmore Tomkyns, Esq., M. P., of Goldmore Park, Suffolk, and 248 Prince's Gate, to Lady Angelina, twelfth daughter of the Earl of Silverlake.'" "Read on, my own sweet love. There's another paragraph—in brackets, I think." "Oh! yes." (Reads on.) "'Mr. E. G. Tomkyns takes this opportunity to intimate that he will not be responsible for any debts contracted by his wife without his written authority.'"—*Punch.*

What was it that Thaddeus of Warsaw?—*Cincinnati Saturday Night.* What kind of grub was it that Henry VIII.?—*Wheeling Ledger.* What did Darwin?—*Kennebunk Star.* Whom did Gladstone?—*Bellair Phonograph.* What did Count Schouvaloff?—*Burlington Hawkeye.* Now, what did Hamlet?—*N. Y. Express.* What did William Tell? When did Bonaparte? Why did Marshal Ney? What did Theodore Hook? When did you Seymour? Upon what did Archbishop Trench and what did Captain Cook? Did Disraeli? What did William Penn? What did Bismarck? What did Leigh Hunt? When did they take Offenbach? Three or four hundred more crowded out for lack of room.—*Boston Transcript.*

Take it down tenderly,
Lift it with care,
Brush it and send early
To the talaire—
That old ulstaire
That you must wear.
U-g-g-h-h-h.
[*Whitehall Times.*

SOME EUROPEAN PRICES.

Col. Forney has been collecting some statistics with reference to the rates of wages paid at Brussels. He reports as follows:

Gentlemen's upper servants, $60 a year and boarding; coachman, $80; lady's maid, $40; house servants, $20 each year and found. The following get the sums opposite their trades, daily: Women lace-makers, 50 cents; tailoresses, 35 to 40 cents; washerwomen, 30 cents, and all find themselves. Machinists get $1; bricklayers and masons, 50 cents; cigar-makers, 30 cents; blacksmiths, 75 cents; locksmiths, 50 cents a day, and all find themselves.

Provisions are not very much cheaper there than they are now in the United States. Coffee, 30 to 80 cents a pound; rice, 10 cents; butter, 36 cents; sugar, 18 cents; eggs, 2 cents apiece; beef, pork, mutton and veal, which the poor rarely get, average about 25 cents a pound; ham, 45 cents a pound; bread by the pound from 5 to 6 cents.

H.

An old story used to go the rounds with "S" as the initial letter of each word. Here is an extract that will carry terror to an Englishman's heart:

Humphrey Hubbard had heard Hephzibah Huggins humming hymns hilariously, he having helped Hephzibah homeward. Humphrey hankered hugely, harboring handsome Hephzibah heartwise. He had high hawthorn hedges hiding his handsome house, harnessed horses hauling harrows, hoeing hilly hills, helping herdsmen, hewing hemlocks, hackling hemp, harvesting hops, hunting hawks hurting hatching hens. Hephzibah, helpful housekeeper, hemmed handkerchiefs, hoarded honey hitherto hived, heeled hose having holes, handled harpsichord harmoniously; happy Hephzibah! Her honest homely happiness hit Humphrey heavily. He hovered, handsomely habited, hinting humbly how Hephzibah had harried his heart. Hephzibah honored his hearty homage. Hating, however, haphazard haste, Hephzibah hung her head, halting, hemming, hawing, hoping Humphrey had harmless habits, hypocritical, hesitating Hephzibah! He held her hand hopefully, hungrily humoring her. Happily, Hephzibah heeded her hirsute hero. Hymen hitched Humphrey Hubbard-Hephzibah Higgins, he hugging her, happily hysterical! Henceforth husband helped housewife hop hornpipes, holding honeymoon holiday, hardly hearing harlequins howling hallelujahs, hailing house-warming. Ha! Ha! Ho! Ho!—*Philadelphia Bulletin.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP HANDLE PAPERS, NO. 7.

MAY MAPLE.

CLEANING SILVER-WARE.

WHILE washing the dinner-dishes to-day, I noticed that the silver teaspoons were slightly discolored. So I took a bit of soft flannel, dampened and dipped it into some *white* ashes from the stove, smooth and soft as the finest flour, and rubbed the spoons, and they were brightened immediately, without a scratch. While thus employed my thoughts took a run backward to my childhood's days, when I was visiting a dear auntie who had recently taken upon her shoulders the responsibilities of housekeeping. During the busy season she kept a hired girl. Now, it so happened that Phebe was desirous of doing her work in the very best manner, that she might please her mistress. And it also happened that Phebe was all unused to the care of silver.

One morning while Auntie was in another part of the house, attending to work that required her immediate supervision, Phebe was left to clear away the breakfast service. The dishes were all properly washed, rinsed and put away. Then came the scouring of the knives with the Bath-brick dust—and rather coarse dust it was—and to have the work finished as she would need to do it at home, she must scour the spoons as well as the knives and forks—those new silver spoons that were as bright as mirrors. Only a part of the dozen was in use, for the family was not large; but faithful Phebe hunted the rest, and took them out of the soft, silken wrapping paper, and scoured the whole of Auntie's setting-out—large spoons, dessert spoons, tea spoons, and sugar shovel—all went through the scouring process. And all came out severely scratched, their mirror-like beauty spoiled. An hour or two later Aunt Hattie had occasion to use a spoon; and then, RURAL readers, you should have seen her beautiful blue eyes open wider and still more wide, as she beheld all her spoons handsomely arrayed upon the pantry shelves, and as quickly discovered the exhibition of home-marking. And, as "Topsy" would have said, "didn't Phebe catch it, though?" No doubt some matrons will say she deserved scolding, if she did not know better than that.

But Phebe was not so much to be blamed, as she might have been. If her mother had been a wise woman, she might have taught her. But very likely there was not a bit of silver in the house, and so the lesson did not seem necessary. Now, I do hope some of the young ladies who will at some time have homes to preside over, will read these home talks which I have named "Mop-Handle Papers;" and, possibly, they may be wiser and happier in the future for heeding their well-meant precepts.

At the present time there is a great deal of *plated* silver-ware sold about the country. It looks as well upon a well-arranged table as though it were solid silver; and almost any energetic girl can afford a pretty set. Indeed, it is quite customary for brides to receive handsome presents of "silver," which, in very many cases, are only the plated ware. Now, if it is tossed about with other dishes promiscuously, the spoons left in the gravy or sauce-bowl, mustard cup or meat dish, if the creamer, sugar bowl, tea urn, etc., are left in an open pantry for the flies and spiders to inspect, they will all soon be tarnished; and scouring will quickly erase every particle of the plating, and then you will have the disgusting brassy metal to place upon the table. Yet, with proper care, this very same plated ware might last for years, and look as handsome as when it first came from the silversmith.

Now, one who can not use plated ware for a reasonable length of time, without despoiling it of its beauty, is not fit to have the care of that which is more valuable.

OAT-MEAL, CRACKED WHEAT, Etc.

THE RURAL of Oct. 5 contained an article written by Mary Wager-Fisher, on the use of oat-meal and cracked wheat and the method of cooking the same. She says it should be made precisely the same as any mush. I used to cook it in the same manner, but I found it needed constant watching to keep it from burning, and often it would get scorched in spite of all my care, so as to spoil the fine, sweet flavor. As I abominate food of any kind scorched, I set to work to improvise some better method of cooking rice, oat-meal, cracked wheat, etc., which could not burn, and would not require so much care while cooking. It is as follows: Put in a large yellow earthen bowl *one* quart of boiling water, a very little salt—enough to make it palatable,—and stir in, slowly, three or four handfuls of oat-meal and set the dish in a common steamer (if you have no steam cooker), and place over a kettle of boiling water. Cook one hour or a little more, and after it has commenced to cook and swell stir it not more than twice, for if stirred too often, it gets salvy, and it is very much nicer to have the grains left whole but dry and well cooked. Cracked wheat and rice can be cooked in the same manner, but cracked wheat needs more water and more cooking. Either of the above can be put over to cook and one can go to washing or any other work, and there will be no danger of its burning, provided you have plenty of water in the kettle.

Sweet Potatoes.

As sweet potatoes are plentiful in the markets, I will send my method of cooking them: Steam until done; remove the skin carefully, cut them in longitudinal slices, a quarter of an inch thick, and pour over each slice, as it is put into the dish, a sirup made of butter and sugar, equal parts and boiled together. Those who have never eaten them prepared in this way, have no idea of their deliciousness.

MRS. MARY OLIN.

GRAPE CATSUP.—A CORRECTION.

MRS. V. F. K., writes from Oil City, Pa., that in giving the recipe for Grape Catsup, published in RURAL for Oct. 12th, she inadvertently omitted to add to the ingredients therein mentioned, half a pound of sugar. Let all who have tried the recipe as given, repeat the trial with this addition and it is not unlikely that they will come to the conclusion that even half a pound of sugar is sometimes an important item.

DOMESTIC RECIPES.

Sour Krout.

Strip the cabbage until white, solid, and clean; slice with a krout cutter; season with salt, four quarts to the barrel. It will not work well if too salty, and sometimes gets bitter instead of sour. Throw into a clean barrel until a foot deep, and pound until the water rises above the cabbage; put in another layer of sliced cabbage, and pound as before, and so on until the barrel is full. Place a closely fitting board over top; roll the barrel under a force, and take a piece of scantling long enough to reach from the board in the barrel to the force; wedge up tightly until the water rises several inches over top; cover closely and leave until sour, which will be from ten days to three weeks, according to the heat of the room it is kept in. After it becomes as sour as required, it should be put where it will freeze, and when not frozen, should always have a weight on top, and be kept closely covered.

Buckwheat Cakes.

To make good buckwheat cakes requires good pure buckwheat flour, good yeast, such as will make good light bread—none other will do—warm water, no salt. Nothing else is needed. They should be baked out each day, and fresh yeast added. No soda will then be required, and soda never is an improvement to buckwheat, as it destroys the flavor and gives a very unpleasant smell.

MRS. C. F. MCCLOUD.

White Fruit Cake.

ONE cup of butter; two cups of sugar; one scant cup of sweet milk; whites of five eggs; one grated cocoanut; one pound of almonds blanched and cut fine; one pound of citron cut into very thin pieces; three and a half cups of sifted flour; two heaping teaspoonfuls of baking powder. Flour the fruit and add the last thing.

Stuffed Steak.

SELECT a good round steak; pound well; season with pepper and salt; have prepared a nice dressing; spread over the steak; roll up and tie closely with twine; place in a dripping-pan; add a very little water and bake in a well-heated oven, basting frequently with butter and water. Make a gravy of the drippings and serve at once, or it makes a delicious dish sliced when cold, for lunch or tea.

Snow Balls.

BOIL rice until tender; press into small teacups, and when perfectly cold turn into a dish; make a boiled custard and pour over a half hour before serving.

Breakfast-Dish.

SCRAPE and clean thoroughly a pig's head; boil for four hours, or until the meat will slip from the bones; remove all the bones; skim the grease from off the liquor in the kettle; and return the meat which should be chopped fine; season highly with salt, pepper and sage, if liked; thicken with Indian meal until of the consistency of soft mush; let boil for an hour or more; pour into dishes and set in a cool place; slice and fry for breakfast in winter. E. M.

Rice Pudding.

To five quarts of milk, allow one and a half cups of nicely washed rice; three-fourths of a cup of "A" sugar, or a little more if you want it sweeter: put in a pan cold with as many raisins as you like, and bake one and one-half hours stirring two or three times carefully while it is baking. This should have a pretty hot oven and not be stirred for the last half hour of baking, so as to form a nice brown crust on covering or the top. This pudding is a little nicer when cold and I always bake one large enough for two dinners in cool weather.

Meat Omelets.

Take two ounces of cold boiled ham, or cold corned-beef and chop it very fine; have five or six eggs well beaten, and mix with one small cup of milk and one spoonful of flour; stir all together and fry in a hot skillet with a little melted butter, with the skillet tipped a little, so as to cover only half of it; when nicely browned underneath give a brisk turn of one side, over the other, which will double it, and then as quickly as possible turn all on to a hot plate and serve immediately. This amount should make three omelets. Dried bread crumbs, chopped fine, instead of meat, make a nice omelet cooked in the same way, or begin to roll it on one side as soon as it is brown, rolling all when done.

AUNT FLORA.

News of the Week.

Monday, Oct. 21, 1878.

POLITICAL.

Tilden emphatically pleads "not guilty" to the charge of having been cognizant of the attempts at bribery made in his behalf in Florida during the last presidential troubles. He explicitly declares that he knew nothing whatever of any corruption till long after the 6th of December, the date on which the Electoral vote of Florida was cast, and then only by heresay. He winds up by calling attention to the fact that the republicans in every instance counted the votes which it is charged were notoriously up for sale. What a pity it is that an innocent man should have a guilty relative living in the same house with him! All these telegrams were directed to or from 15 Gramercy Park, Tilden's residence here, but then Nephew Pelton lived there too, and so did Private Secretary Smith! Another batch of Tribune cipher telegrams, with translations, has reference to democratic attempts to bribe the republican Electors of South Carolina. The cipher used is the same as that employed in communicating with Florida, and also lately in the case of that mine out in Michigan. It seems that Smith J. Weed went to South Carolina from this city and secured an offer of an elector's vote in favor of Tilden for $80,000. This offer was accepted in New York and Weed started for Baltimore, where a messenger was to meet him with the money. The Returning Board, however, being threatened with arrest by the State Supreme Court, suddenly cast their votes and dispersed, so that the scheme of bribery failed. Another cipher relates to other machinations for securing the desired end, but, strange to say, they all failed. The Tribune dogmatizes that 'twas Providence caused the failure.

Manton Marble also denies, in a very sweeping manner, that he stained his reputation by having anything to do with attempts to secure the election of Tilden by bribery in Florida. He admits that official venality there gave ample opportunity for such trickery, but boldly maintains his own innocence.

Then Ben. Butler, too, is out with a number of denials. He denies that his charges in the matter of the Farragut prize-money were too heavy, and shows that several lawyers to whom the matter was referred, thought ten per cent. on the amount recovered extremely moderate. He denies that—well, he denies every charge in any way reflecting on the purity, disinteredness and integrity of his record, and brands them all as campaign lies coined by a disreputable press.

Trouble between the negroes and whites has again culminated in bloodshed in Louisiana. At Waterproof, in Tensas Parish, a collision is reported between 2,500 colored men and a small body of whites. Several of the latter were wounded and over 30 of the former killed. Help was pouring in from all sides to the whites, and their opponents had been dispersed. Cause—political aspirations of the "niggers." Yesterday, there came from New Orleans what looks like a "cock-and-bull" story of a vast conspiracy on the part of the republicans and nationals of Louisiana, to secure the next election at all hazards. A secret society of the Know-Nothing type, with grips and pass-words, has been organized, it is said, with the express purpose of seizing upon the government. As, besides a large number of whites, it is reported to contain 4,000 negroes in New Orleans alone, the wonder is, not that the plot has been discovered in good time, but that it could have remained hidden for a day. Official returns from Ohio, Indiana, Iowa and West Va. lessen somewhat the republican vote mentioned last week, and slightly increase the greenback vote, but substantially the result is the same as then stated. Altogether, counting Vermont, Maine and Colorado, fifty-six elections have thus far been held for next Congress. The results are, 28 republicans, 21 democrats, and five greenbackers or nationals, with one vacancy in Vermont. In the present House these 55 districts are represented by 39 republicans and 16 democrats, so that the republicans have sustained a loss of 11 representatives.

Potter, chairman and getter-up of the Investigating Committee, has declined a renomination in his district, and after his present term will retire to the shades of private life. Col. Smith "of Kentucky," Horace Greely's son-in-law, and an out-spoken greenbacker, is running for Congress in the same district, and it is said that Potter's chances against him were mighty slim. By the way, it is not improbable, in view of the recent disclosures made by the publication of these cipher telegrams, that the scope of that Investigating Committee will be enlarged on its reassembling next December. It would be by no means strange if after having begun by exposing republican misdoings, it should end by showing up democratic transgressions.

Is there anybody with sufficient interest in him or curiosity about him to inquire "What's become of Kearney?" Well, the last heard of him here was when he delivered a speech to a small audience at Lawrence, Mass., last Tuesday. But he was considerably tamed down and didn't use a single "cuss" word. A short time before that he was reported as having been energetically greeted, during a speech in Boston, with a shower of rotten eggs and vegetables, on which he besought any friends he might have in the crowd to shoot the throwers; but not a shot was fired. It is said a bargain has been struck between the Butlerites and the Faneuil Hall democrats, by which Ben. is to receive the votes of all for Governor on condition that the ticket nominated at the Hall shall receive the support of his followers....In this city there is a prospect of a fierce political struggle at the coming election. The Mayor then chosen will have the appointment of the heads of all the departments of the city government. These have the control of all patronage and spoils. Tammany Hall, in spite of the rascality of its old "boss," Tweed, and his co-adjutors, has lived for years on this "pap," and will leave no device untried to retain hold of it while crowds of sore-head democrats, labor-reformers, greenbackers and all the discontented are joining the republicans to secure the defeat of the Tammany ticket, and divide the "spoils" among themselves. The Tammanyites are held together by possession of "plunder;" the anti-Tammanyites are brought together by the hope of it. Many fine phrases about public economy, good government and public interests, are on the lips of each party; but the thought of private gain is predominant in the hearts of both.

MISCELLANEOUS.

During a panic in a church in Lynchburg Va., 13 women were trodden to death and between 30 and 40 persons seriously injured. Examination into the condition of the labor market in Chicago has shown that the supply of men willing to work at moderate wages, is very little greater than the demand, and that the widespread distress among the laboring classes is due more to improvidence, especially in the form of intemperance, than to a lack of employment. Reports from different parts of the country throw much doubt on the practicability of making sugar profitably either from sorghum or corn stalks, despite the recent semi-endorsement of Stewart's invention by the chemist of the Agricultural Department at Washington. The Cheyenne Indians are still on the war-path having lately eluded a concentration of troops that expected to capture them. Contrary to former reports, Red Cloud and Spotted Tail, have remained peaceable and volunteered to hand over the hostile Cheyennes, should the latter come to their reservations. Already over 75 whites are known to have been killed during the present trouble, including about 30 white women who were outraged and murdered. If a band of only 100 Cheyennes have been able to work such misery, besides burning houses and crops, stealing and slaughtering cattle, how much greater would have been the destruction of life and property had the Sioux Indians joined the marauders! During the week there has been a terrible storm raging along the New England coast; and a large number of shipwrecks accompanied with a great loss of human life, is reported. Out in New Mexico a life insurance agent refused to pay a policy, the territorial judiciary tried to compel payment, trouble arose and already six people have been killed.

During the week Yellow Jack has been confronted with Jack Frost in Memphis, New Orleans and most of the other places which the deadly invader has lately been ravaging. A cold change of weather is always dangerous to those who are sick, however salutary it may be for those who are well, and accordingly the death rate has been increased rather than lessened by the bleak spell that has lately swept south. Henceforth, however, a rapid diminution of new cases may be expected until the pestilence takes its departure towards December. Lately a collection of clothing was made in this city for the destitute in the afflicted region, and it is estimated that the supply in this way gathered was worth $150,000. All over the North the response to the appeals for help from the stricken places has been ready and generous, and it is pleasing to notice that the Southern press thankfully acknowledge this prompt liberality.

FOREIGN.

Dr. Schlieman, the celebrated excavator of buried cities, has unearthed, by digging, 90 houses of vast cyclopean construction belonging to the Homeric city of Ithaca, in the island of that name. All the ancient treasures, however, have been washed into the sea by the winter rains. The awards at the Paris Exposition are to be made to-day. Of them 750 are made to Americans. Lord Dufferin, lately Governor-general of Canada for six years, and the most popular man who ever held that office, left Quebec for Liverpool on the steamer Polynesia, last Saturday. On the same day the official Gazette, at Ottowa, announced the names of the new ministry under Sir John Macdonald who, in accordance with the verdict of the late elections, are to govern the Dominion instead of the Mackenzie ministry which resigned a few days earlier.

The bill against the socialists in the German Reichstag has passed with considerable modifications from its original severity, but it is still sufficiently coercive to satisfy the government. The socialists have abandoned their open organizations, and during the two years and a half over which the new laws are to extend, they intend to propagate their ideas secretly and by individual effort. It is expected that the vigorous measures which Bismarck will doubtless adopt, will force very many to leave the country, and already Englishmen are alarmed at the prospect of a German invasion. The Britons complain that these newcomers have a habit of soon working their way into good positions, and of making money the loss and detriment of the natives. It is highly probable that the Teutonic immigration to this country also, will soon be largely in-

creased; but as German immigrants are among the best accessions to our population, there is little danger of complaint on this account on this side of the Atlantic. HERMAN.

VARIOUS.

Stickney, the latest Fall River defaulter, has been bankrupt seven years, yet he went on spending other folks' money freely. He gave a $2,000 reception while he was in Europe last year, and his house was fitted up in regal style. People had so much confidence in him that his credit was almost unlimited, and the facility with which he could borrow money probably encouraged him in his extravagant expenditures.

A rich sugar refiner of San Fancisco, has bought twenty thousand acres of land in the Hawaiian Islands for the cultivation of sugar-cane. He will irrigate the dry lands, drain the swamps, build railways, and spare no money to make the thing a success. The same man, when the reciprocity treaty making island sugar free of duty appeared safe of confirmation, slipped over and corralled all the sugar for three years ahead.

Though always kind and courteous in female society, Bismarck has never distinguished any of the numerous beauties he has met in his life, so as to authorize suspicion that he paid special attention to any one woman, still less that he courted any. He has had affectionate and respected female friends—among whom the Grand Duchess Helena of Russia must be reckoned—but the only women who, to all appearances, have found room in his heart and occupied it, are his mother, his sister, his wife and his daughter.

The statement that W. H. Earle, of Worcester, had obtained more than $2,000 from three acres of strawberries was confirmed by Mr. Hadwen. He planted three rows to a bed, with plants twelve inches apart in the row. Three rows eighteen inches apart form a bed, with an alley of two feet between. He cultivates deeply and manures highly. His fruit is always clean, bright and attractive. He waters heavily. Late in autumn the plants are mulched well with fine leaves, hay, or straw, and a part is left on late, keeping the berries unsoiled. Everything is doue in the best manner.

The talk in Leadville, Col., is about a vagabond of a miner, Bassick, who tramped into town without a cent in his pocket and jumped into an income of $2,000 a day. He began to dig in Tyndall Hill, and three feet below the surface struck a rotten, chalky substance that formed the entire eminence. Everybody laughed at the beggar and derisively called his find "Bassick's Whitewash Mine." But Bassick found the stuff rich in carbonate of lead carrying silver, and, digging down found boulders and pebbles that were coated with silver chloride. From the surface down 200 feet the mine has paid richer than any other in the county, yielding thus far $64,000 a month.

The earliest notice of yellow fever is that of Ligon, in his "History of Barbadoes." He there states that it broke out early in September, 1647, and that before the expiration of a month "the living were scarcely able to bury the dead." Thereafter it did not attain any very remarkable hight until 1793, when it destroyed not less than 6,000 men of the garrison of Port Royal in the course of a few months. In 1804 it was brought to the south of Spain and visited Cadiz, Malaga, and Carthagena. But its greatest force fell upon Gibralter, where out of the civil population of the town amounting to nearly 14,000 persons, only twenty-eight escaped attack.

THE GROVER & BAKER MACHINE advertised in another column is one of the best class of machines made by that company, and it is what it is represented. The advertiser is a trustworthy business man, and parties ordering will get just what the announcement sets forth.

THE ECLIPSE WIND-MILL CO., informs us that a cablegram from Paris is the source of their information that the Eclipse mill has taken the first prize silver medal. There were fifteen competitors. We are, of course, happy to know that our American wind mills have been so successful.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Oct. 19, 1878.

BEANS AND PEAS.—The feeling in beans is weakening; prices are extreme for new and they now supply the trade. Old mediums are of no commercial importance. Marrows of '77 remain but quoted materially below '78s. Red kidneys are firm without much demand. Black beans dull with a wide range. White kidney or pea not plenty. Green peas are better, $1 25@1 35; Canadian peas nominally, 78@80c.; exports light. Southern B. E. peas, $2.75 per 2 bush. bag; Medium beans, new, $1 70@1 75; marrow, new, $1 75; old $1.35@1.57½; white kidney, $1 80; red kidney, $1 75@2 20; black, $1.40@1.90.

Exports beans past week, 925 bbls.; receipts, 5,056 bush.

BUTTER.—The easy tone which prevails in the butter market is quite discouraging, especially as one-half of the second fall month is gone. Dealers look for fall sales to compensate in a measure previous slack times. Creameries are off in price. State half tubs and choice full Welsh are the strongest grades in market, but are quoted as high as they will bear. Full dairies are quiet as a rule; a few perfect ones have brought 21c.; but 20c. is full lots marked choice. Foreign financial troubles do not encourage shippers, and a long lull in sales for export is to be feared. Exporters who still have orders are paying 16c. for State firkins of good quality. A shipment to Europe of over 2,000 pkgs. Oleomargarine is reported. The practice of putting salt in each inside, and of pkgs., is condemned by the trade. It should be left off the bottom, and merely a brine-wet cloth put on top. Western dairy and other grades are weak in sympathy with State. Factory has a very slow sale. Even quality should be more carefully considered by packers and shippers of Western.

State dairy, pails, choice, 21@22c.; State, half-tubs, 21@22c.; good to prime pails and tubs, 18@20c; poor, to fair, 10@14c.; dairies, tubs and firkins, 17@25c.; do. firkins, fair to prime, 13@17c.; common do., 10@11c.; Welsh, dairies, 17@18c.; full Welsh, choice, 19@20c.; good to prime, 15@17c.; poor to fair, 10@13c.; State creamery, 22@24c.; Western creamery, best, 15@16c.; other, 10@14c.; factory (ladle-packed), 13@15c.; good to prime, 10@12c.; common, 6@8c.

Receipts for week, 26,250 pkgs. Exports, 8,852 pkgs.

BEESWAX.—Small lots have been placed at 26½@27c. for Western and Southern.

Exports past week, 15,154 lbs.

BROOM CORN.—Small lots of new only have been received. Nominal prices for old are for choice green hurl, 6@7c.; medium hurl, 5@6c.; choice short green, 5½@6½c.; medium short green, 5@6c.; red stubby and crooked, 4@5c.

CHEESE.—The exports this week have only been 30,9.0 boxes. Stocks have steadily piled in store, and the weeks' business on the whole has been very unsatisfactory. It has been impossible to sell except at a decided decline, and there are very few lots that exceed 9@9¼c. Shippers have had a few orders for special lots, for which they have met 9½c., but as a rule there has been very little export interest. The qualities this week have run very irregular, and usual choice lots have been frequently undesirable.

Quotations are 9@9½c. for fancy late made; 7½@8½c. for good and prime; 6@7½c. for fair to good; 5½@7c. for half-skimmed; 4@5½c. for skimmed. State, farm dairy at 8½@9c. for good to choice, 6@7½c. for fair to good, and 3@5c. for poor skimmed. Wisconsin factory, fine to fancy, 8¼@9½c.; do. good to prime, 7½@8½c.; do. fair to good, 6@7½c. Western factory, fine and fancy, 8½@9c.; good and prime 6½@7½c.; fair, 5½@6c.

Receipts for the week, 52,531 boxes.

Gold closes at 100¼.

Liverpool cable 47s.

CIDER.—Abundant and unsettled for bbls. Small kegs for immediate use, 10@13c. per gallon.

COTTON—Has been very much demoralized, selling down sharply, largely owing to the situation on the other side, but leaves off stronger. Latest prices are for October, 9.90@9.91c.; November, 9.85@9.86c.; December, 9.88c.; January, 9.93@9.94c.; February, 9.99@10.00c.; March, 10.09@10.10c.; April, 10.16@10.17c.; May, 10.23@10.24c.; June, 10.25@10.30c.; July, 10.33@10.35c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store ranking in quality not more than half a grade above or below the grade quoted:

	Uplands.	*Ala.*	*Orleans*	*Texas.*
Ordinary	8¼	8¼	8¾	8¾
Strict ordinary	8 9-16	8 9-16	8 13-16	8 13-16
Good ordinary	9 1-16	9 1-16	9 5-16	9 5-16
Strict good do	9¼	9¼	9¾	9¾
Low middling	9 11-16	9 11-16	9 15-16	9 15-16
Strict L. middling	9 13-16	9 13-16	10 1-16	10 1-16
Middling	10	10	10¼	10¼
Good middling	10¼	10¼	10¾	10¾
Strict G. middling	10½	10½	10¾	10¾
Middling fair	11	11	11¼	11¼
Fair	11⅜	11⅜	11⅞	11⅞

Stained.

Good ordinary.. 8¼; Strict good ordinary.. 8¾

Low middling.. 9¼; Middling.. 9⅝

DRIED FRUITS.—Apples of choice quality, sliced, have a good sale, and rule firm in price; quarters are slow and nominal. Peeled peaches of prime quality favor the seller. Blackberries are dull; other small fruits are scarce and held firmly.

New blackberries are quoted at 5½c. Peaches—Peeled, new Georgia, at 6c. for poor; 7½@8½c. for fair to good; 9@9½c. for prime; choice North Carolina, 10½@11c.; good do., 8@9c.; unpeeled new halves, 3½@3¾c.; quarters, 3½c. Pitted cherries, 15@15½.; southern plums, 11@12c. Apples—Old State quarters, 2½@2¾c.; do., sliced, prime, 4c.; do., good, 3@3½c. New apples 2½@3c. for Southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy. New raspberries, 25@26c., and evaporated, 27@28c.

EGGS.—Receipts for the week, 7,264 bbls.; do. last week, 6,562 do. The weather has been unfavorable for stock or consumption and prices have declined. Western and Canadian feel the depression most severely. We quote Near points, 23@24c.; State and Penn., 21@21½c.; Canadian fresh 19½@20c.; Western do., 19@20c.; inferior, 18½c. Limed eggs, State, 15½@16½c.; Canadian, 15½@16c.; Western, 15@15½c.; poor lots, 13@14c.

FLOUR—Has been steadily declining in sympathy with wheat. Prices have now got to the lowest point since the war. Trade at the close is better.

Latest prices are: $3.15@3.60 for poor to strictly choice superfine State; $3.50@3.85 for poor to good extra do., odd lots and lines; $3.85@4.25 for very good to choice do., strictly choice and fancy lots above this; $3.15@3.60 for very poor to fancy superfine Indiana, Iowa, Michigan, &c.; $3.50@3.85 for inferior to good shipping extra do. and $3 85@4.25 for good to choice extra do.; common to about choice white wheat extras, $3.85@4.75, choice to strictly fancy do. at $4 85@5.75; red and amber winter wheat, inferior to very choice trade and family at $3.75@5.50; round hoop Ohio at $3.65@4.60, and trade and family brands of do. at $4.10@5.50, the latter rate for very choice; St. Louis, $3.85@4.50 for very poor to good extra, and $4.50@5.75 for good to very fancy; Minnesota clear, very inferior to fancy, at $3.50@5.50; Minnesota "straight," inferior to very choice at $4.50@6.00; and patent fair to very fancy at $5.25@8.50. Unsound stock at from $2@4.75; city mill extra at $4 75@5.00 for West Indies (the latter rate for strictly choice in new packages); do. for England, $3.60@3.75; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.50 for fair to very choice: No. 2 at $2.25@3.00 for very inferior to very choice (fancy lots held higher).

CORN MEAL.—Sales at $2.90 for Brandywine, and $2.20@2.75 for Western yellow.

FEED.—Sales at $12 for 40 lbs.; $12@12.50 for 50 lbs.; $13.50@13.50 for 60 lbs.; $15@16 for 80 lbs.

FRESH FRUITS.—If it were not for the liberal export trade in apples, dealers would be sadly perplexed with the excessive supply. As it is, prices are very low and the weather prevents the stowing of winter sorts. Exports, past week, 15,000 bbls. We quote selected fall $1 62 ½ bbl.; mixed do. at $1.25@1.50; best winter, $1.18@1.37; fair, $1.00@1.12; common stock, 50@75c. Pears are in few hands. Duchess, $5@8 ½ bbl.; Sheldon, $7@9; Vicars, $3.50@5; cooking, $3@4. Massachusetts nurseries are sending very handsome fruit in bush. boxes; quoted $4@6. Quinces, $4@7.50, the latter for best apple. Cranberries are accumulating and lower; cheap apples will run them hard for a while. Cape Cod, extra bbls., $8; other bbls., $6@7.50; crates, $1.25@2. Grapes will wind up soon. Choice Concords, 6@8c. ½ lb.; poor, 3@4c.; Catawba, 7@7½c.; Isabella, 4@6c. Hot-house Black Hamburg, 35@45c.; Muscat, 35@45c. Chestnuts, $3.50@4. Hickory nuts, $2@2.25. A small sample of new Virginia peanuts sold at $1.25 for prime and $1.35 for extra prime. Old are of no account.

GRAIN.—This has been a severe week for breadstuffs generally. The advices from the other side, particularly those relating to the financial situation have operated sharply against the market, and not only have restricted export demand, but caused a steady sharp yielding of prices. At the close there is some recovery and rather a better feeling. Latest sales of wheat are, ungraded amber at 98c.@1 02, chiefly amber Michigan at $1 01@1 02; No. 2 amber at 99c.@$1; ungraded red at 95c.@1 02; No. 2 red, at $1@1 01; steamer grade, at 97@98c.; No. 1 red, at $1 01@1 02; ungraded white at 97c.@1 04; No. 2 white at 99c.@$1; No. 3 white at 98@98½c; extra white at $1 04; white State at $1 02@1 04; No. 1 white at $1 02@1 03; do. steamer grade at $1; New York No. 2 spring, October option, at 91c.; November option, at 91@92½c. No. 2 amber October option, at 99½c.@$1; November option, at $1 @1 00½; December option, at $1 02; No. 2 red October option, at 99¾@1 01, closing at $1 01; November option, at $1 01@1 02½, closing at $1 02½; do. December option at $1 02¾@1 03¾; No. 1 white, October delivery, at $1 02½; do November 1 to 5th, $1 03. Rye at 51@56c. for Western, and 59@60c. for State. Corn, for steamer mixed at 45½@46c. New York No. 2, at 46½@46¾c.; ungraded mixed 45@47½c.; No. 2 white at 50c., low mixed at 46½@47c.; New York No. 2 October option at 46½@46¾c.; do., November option, at 47½c.; do., December option, at 48¾c.; steamer mixed, October option, at 46c.; do., November option, at 47½c.; do., December option, at 47c. Oats at, for white western, 2c@35c.; mixed do. at 26@31c.; white State at 29@34c.; mixed State at 28½@31c.; New York No. 1 at 29@29½c.; New York No. 1 white, 32@33c.; do., October delivery, at 31@31½c.; New York No. 2 27¼@27½c.; New York No. 2 white at 29¼@30c.; New York No. 3 at 25¾@26¼c.; New York No. 3 white at 27¼@27½c.; New York rejected at 25½c.; No. 2 Chicago at 25½c., afloat.

HAY AND STRAW.—There is a more liberal demand for prime hay, and medium grades move out better, with prices well sustained.

Latest sales are at 40@45c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports for the week, 450 bales; since Jan. 1st., 49,025 do.; this week last year, 36,212 do.

HONEY.—The quality of some recent arrivals ought to help prices; in fact some dealers are asking 18c. for best. Market quiet. Clover comb, single, 15@17c.; two comb boxes, 13@14c.; Buckwheat, 10@12c. Strained 6@12c. as to quality.

HOPS.—Exports for the week 486 bales. There has been more done in choice lots from brewers. Arrivals run moderate and prices are steady and unchanged.

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8; Olds, all growth, 2@4.

LEATHER.—Sales of hemlock sole at 19½@20c. for light; 20@21½c. for middle; 20@22½c. for heavy, and 18@19c. for good damaged.

OIL-CAKE is plenty and lower; quoted at $28.50@$29 per ton for Western.

POULTRY AND GAME.—Live poultry has declined under free arrivals and warm weather.

Chickens, N. J., 10½@11c. ½ lb.; State and Penn., 9½@10½c.; Western, 9@10c. Fowls—N. J., 10½@11c.; State and Penn., 9½@10½c.; Western, 9@10c. Turkeys, N. J., 10@11c.; Western, 8@10c. Ducks, choice, 65c.@$1; other, 45@50c. Geese, choice, $1.50@1,75; other, $1@1.25. Pigeons, 30@35c.

Most of the dressed stock has arrived in poor order, owing to the unseasonable weather. Straw packed lots have frequently turned out worthless, while ice-packed, unpacked, soaked &c. are unsightly. Prices lower, dry picked, near points, leading the demand.

Turkeys, dry picked, 14@15c.; good to prime, scalded, 10@12c.; poor, 9c. Pa. chickens, 15@18c.; N. J., 13@14c.; Western, 10@11c. Pa. dry picked fowls, 13@14c.; N. J., 12@13c.; good to prime, S. & W., 10@12c.; common, 8c. Ducks, fancy, 15@17c.; other, 10@12c. Geese, fancy, 12@13c.; other, 8@12c.

Game is easier with supplies in excess of trade wants.

Grouse, trapped, pair, 85@90c.; State partridges, 75c.; Western, 40@60c. Woodcock, State, 40@60c. English snipe and plover, $1.50doz. Stall-fed pigeons, $2; flight, $1.40@1.50. Canvas back ducks pair, $1.00; Red Head, 50@60c.; Mallard, 40c.; common, 25@30c.

PROVISIONS have been depressed and lower, with much less active export requirements. Mess pork quoted at $8.50 for spot lots; $8 40 for October and November, and $8.40@8.50 for December. Bacon at 5¾c. for long clear and 5¼c. for short clear. Lard at $6 60 for spot lots of western steam; $6 57½ for October and November and December deliveries, and $6 62½ for January. Stearine at 6¾@7c. for prime. Tallow at 6½c. for prime. Beef Hams at $16@16.50. Beef at $19@20 50 for city brands of tierced.

SEEDS.—Flaxseed is lower; quoted at $1 40@1 41. Timothy is inactive at $1 15. Clover is active at 7@7¼ for prime, to 7¾ for choice.

TOBACCO.—Export demand has been quite active, and there is a good home movement as well in Seedleaf with prices strong. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3¼	4 @ 4¼
Good lugs	3¾@ 4¼	4¾@ 5
Low leaf	4½@ 5¼	5¾@ 6¼
Medium leaf	5¾@ 6¾	6½@ 7
Good leaf	6½@ 8	9 @10
Fine leaf	8½@10	11 @12½
Selections	—@—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, fine	18	@35
do. do. selections	18	@35
do. seconds	10	@12
do. fillers	6	@ 7
Pennsylvania assorted lots, common	8	@ 9
do. do. fair	10	@12
do. do. fine	14	@17
do. wrappers	18	@35
do. fillers	6½	@ 7
New York assorted lots, common to medium	6½	@ 8
do. do. do. good	10	@15
Ohio assorted lots	8	@10
Wisconsin assorted lots	7	@10

VEGETABLES.—Exports for the week 3,500 bbls. potatoes; 353 do., onions. There is a strong market for potatoes with authenticated advices of a scant crop. Shippers now have access to cheap grades only. Eastern Early Rose $2.75@3 per bbl.; State, fair to choice, $2@2.50; Peerless, prime, $2.25@2.50; common, $1.75@2. Sweet potatoes are a shade better than during the week; $1@1.50, bbl. For other vegetables the market is steadier, with limited supplies. Onions, white, $1@1 50; red and yellow, $1@1 25; Chester, 75c.@$1 12; Squash, Hubbard, $1 50@2 00; Marrow, $1 25@1 50. Cabbages, per 100, $2 50@4 00; Cauliflower, $1@2 00 per bbl; Egg Plants, 100, $2 50@4 Pumpkins, $4@5; R. Turnips, 75c@$1. Beets, 75c.; Carrots, $1@$1 25; Tomatoes, 20@30c., bush.; String beans, bag, 50@75c.; Lima beans, bag, $1 25@$1 75; shelled, $4; Celery, doz., 75c.@87c.

WOOL.—There has been more activity and prices steady. No. 1 Ohio fleeces sold at 38c.; X and above Ohio at 36½c.; X and XX Ohio at 35@37c.; Medium western fleeces at 32@36c.; Medium unwashed do., at 28½c.; Oregon at 29@30c.; spring California at 20@21c.; fall do., at 17@20c.; fall Texas at 17@20c.

LIVE STOCK MARKETS

Saturday, Oct 19 1878.

BEEVES.—Receipts for the week, 11,955 head do last week, 10,492 do. The past week has been one of the worst ones of the season. On Wednesday last the market broke, and has not recovered since. Lower class stock has been at the option of the buyer The range at the close was 6¼@9½c. for natives, to dress, 54@56 lbs. Texas and Colorado, 6½@7¾c., to dress, 55 lbs.

COWS AND CALVES.—Common to good milkers, $35@60. A few extras were in market this week that brought $75@80.

VEAL CALVES.—With a moderate supply prices are steady; choice very firm. N. J. and Bucks Co., milk, 6¾@7½c.; heavy, 5¾@6¼c.; State, 6@7¼c.; fair to prime; grass calves, 2½@3¾c.; fed, 3½@4½c.

SHEEP AND LAMBS.—Receipts for the week, 29,647 head; do. last week, 34,498 do. Market dull, prices easy. Sheep, 3¾@4½c. Lambs, 4¾@5c.

SWINE.—Receipts for the week, 34,961 head; do. last week, 29,830 do. Sales are in small lots at 3½@4c., the latter extreme; a few State sold at 3¾c. N. J. dressed hogs, 5c.; heavy, 5¾@5¾c.; medium, 5¾@6c., light.

The Chicago Drovers' Journal of Oct. 16, says: "The Chicago packers are trying to introduce a new feature in transportation of hog products—one which will curtail greatly their expenses and entitle them to additional credit for being the most enterprising of business men. They now have in process of construction iron tanks which are to rest upon railroad cars and to contain 20,000 pounds or more of lard. These cars are to be taken into the lard-rooms of the packing-houses and there filled with the hot lard. When closed they will be ready for transportation to any part of the country where railroads are. There will be no breaking of bulk, and the entire cost of cooperage, some $1.25 per tierce, together with the freight on the same and the cost of handling, will be saved. It is easy to see that this is a most important movement.

INDEX TO NEW ADVERTISEMENTS

Barrows Savery Co.—Prindle Food Steamer.
Boomer & Boschert Press Co.—Cider Presses and Graters.
Boyer & Bro.—Farm Grist Mill.
Challenge Mill Co.—Nichols' Patent Double and Single Header Wind Mills
Denlson, Fredericks & Co.—Osborn's Patent Grain and Seed Separator.
Field, Son & Co., J. A.—Big Giant Corn Mill.
Gilmore, S. J.—Cheap Farms and Homes in the West.
Hanford, R. G. & Son—Pear Trees.
Hance & Son, A.—Rickette' Seedling Grape, Highland.
Manchu & Wilson—30' Farms in Maryland.
Minkler & Co., J.—30 Mixed Cards.
Payne & Sons, B. W.—Eureka Safety Power.
Phelps, N. B.—Norwegian Balm for Catarrh.
Powis, W. V. R.—Genuine Grover & Baker Sewing Machines.
Pulvermacher Galvanic Co.—Electric Belts.
Reed & Co., Geo. I.—25 Cards.
Straub Mill Company—French Burr Stones, Portable Mills, Corn Shellers, &c.
Taylor Mf'g Co.—Portable Farm Engines.
Waters & Son, Horace—Pianos, Organs and Sheet Music.
Wells, Richardson & Co.—Perfect Butter Color.

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Reading for the Young.

A TALE OF ONE WHO TRAVELED TO LEARN WHAT SHIVERING MEANT.

A father had two sons, the elder of whom was forward and clever enough to do almost anything; but the younger was so stupid that he could learn nothing, and when the people saw him, they said, "Will thy father still keep thee as a burden to him?" So if anything was to be done, the elder had at all times to do it; but perhaps the father would call him to fetch something in the dead of night, and perhaps the way led through the churchyard or by a dismal place, and then he used to answer, "No father, I cannot go there, I am afraid," for he was a coward. Or sometimes of an evening, tales were told by the fireside which made one shudder, and the listeners exclaimed, "Oh, it makes us shiver!"

In a corner, meanwhile, sat the younger son, listening, but he could not comprehend what was said, and he thought. "They say continually, 'Oh, it makes us shiver!' but perhaps shivering is an art which I cannot understand." One day, however, his father said to him.

"Do you hear, you there in the corner? You are growing stout and big; you must learn some trade to get your living by. Do you see how your brother works? But as for you, you are not worth malt and hops."

"Ah, father!" answered he, "I would willingly learn something. What shall I begin? I want to know what shivering means, for of that I can understand nothing."

The elder brother laughed when he heard this speech, and thought to himself, "Ah, my brother is such a simpleton that he cannot earn his own living. He who would make a good hedge must learn betimes to bend."

But the father sighed, and said, "What shivering means you may learn soon enough, but you will never get your bread by that."

Soon after the parish sexton came in for a gossip, so the father told him his troubles, and how that his younger son was such a simpleton that he knew nothing, and could learn nothing.

"Just fancy, when I asked him how he intended to earn his bread, he desired to learn what shivering meant!"

"Oh, if that be all," answerd the sexton, "he can learn that soon enough with me; just send him to my place and I will soon teach him."

The father was very glad, because he thought that it would do the boy good; so the sexton took him home to ring the bells. About two days afterwards, he called him up at midnight to go into the church tower to toll the bell.

"You shall soon learn what shivering means," thought the sexton; and getting up he went out too.

As soon as the boy reached the belfry, and turned himself round to seize the rope, he saw upon the stairs, near the sounding-hole, a white figure. "Who's there?" he called out. But the figure gave no answer, and neither stirred nor spoke. "Answer," said the boy, "or make haste off; you have no business here to-night."

But the sexton did not stir, so that the boy might think it was a ghost.

The boy called out a second time, "What are you doing here? Speak, if you are an honest fellow, or else I will throw you down-stairs."

The sexton said to himself, "That is not a bad thought:" but he remained quiet as if he were a stone. Then the boy called out for a third time, but it produced no effect; so, making a spring, he threw the ghost down the stairs so that it rolled ten steps, and then lay motionless in a corner. Thereupon he rang the bell, and then going home, he went to bed without saying a word, and fell fast asleep. The sexton's wife waited some time for her husband, but he did not come; so at last she became anxious, woke the boy, and asked him if he knew where her husband was, who had gone before him to the belfry,

"No," answered the boy; "but there was some one standing on the steps who would not give any answer, nor go away, so I took him for a thief, and threw him down stairs. Go now and see where he is: perhaps it may be he; but I should be sorry for it."

The wife ran off, and found her husband lying in a corner, groaning, with one of his ribs broken.

She took him up and ran with loud outcries to the boy's father, and told him, "Your son has brought a great misfortune upon us; he has thrown my husband down and broken his bones. Take the good-for-nothing fellow from our house."

The terrified father came in haste, and scolded the boy.

"What do these wicked tricks mean? They will only bring misfortune upon you."

"Father," answered the lad, "hear me! I am quite innocent. He stood there at midnight like one who had done some evil; I did not know who it was, and cried three times, 'Speak or be off!'"

"Ah!" said the father, "everything goes badly with you. Get out of my sight; I do not wish to see you again."

"Yes, father, willingly; wait but one day, then I will go out and learn what shivering means, that I may at least understand one business which will support me."

"Learn what you will," replied the father, "all is the same to me. Here are fifty dollars; go forth with them into the world, and tell no man whence you came, or who your father is, for I am ashamed of you."

"Yes, father, as you wish; but if you desire nothing else, I shall esteem that very lightly."

As soon as day broke, the youth put his fifty dollars into a knapsack, and went out upon the high road, saying continually, "Oh, if I could but shiver!"

Presently a man came up, who heard the boy talking to himself and, as they were just passing the place where the gallows stood, the man said, "Do you see? There is the tree where seven fellows have married the hempen maid, and now swing to and fro. Sit yourself down there and wait till midnight, and then you will know what it is to shiver!"

"Oh, if that be all," answered the boy, "I can very easily do that. But if I learn so speedily what shivering is, then you shall have my fifty dollars if you come again in the morning."

Then the boy went to the gallows, sat down, and waited for evening, and as he felt cold he made a fire. But about midnight the wind blew so sharp, that, in spite of the fire, he could not keep himself warm.

The wind blew the bodies against one another so that they swung backwards and forwards; and he thought, "If I am cold here below by the fire, how must they freeze above!" So his compassion was excited, and, contriving a ladder, he mounted, and, unloosening them one after another, he brought down all seven. Then he poked and blew the fire, and set them round that they might warm themselves; but as they sat still without moving, their clothing caught fire. So he said, "Take care of yourselves, or I will hang all of you up again." The dead heard not, and silently allowed their rags to burn. This made him so angry that he said, "If you will not hear I cannot help you; but I will not burn with you." So he hung them up again in a row, and sitting down by the fire, he soon went to sleep.

The next morning the man came, expecting to receive his fifty dollars, and asked, "Now, do you know what shivering means?"

"No," he answered; "how should I know? Those fellows up there have not opened their mouths, and were so stupid that they let the old rags on their bodies be burnt."

Then the man saw that he should not carry away the fifty dollars that day, so he went away saying, "I never met with such a one before."

The boy also went on his way, and began again to say, "Ah, if only I could but shiver—if I could but shiver!"

A wagoner walking behind overheard him, and asked, "Who are you?"

"I do not know," answered the boy.

"The wagoner asked again, "What do you here?"

"I know not."

"Who is your father?"

"I dare not say."

"What is it you are continually grumbling about?"

"Oh," replied the youth, "I wish to learn what shivering is, but nobody can teach me."

"Cease your silly talk," said the wagoner. "Come with me, and I will see what I can do for you."

So the boy went with the wagoner, and about evening-time they arrived at the inn where they put up for the night, and while they were going into the parlor he said, quite loud, "Oh, if I could but shiver—if I could but shiver!"

The host overheard him, and said, laughingly, "Oh, if that is all you wish, you shall soon have the opportunity."

"Hold your tongue," said his wife; "so many imprudent people have already lost their lives: it were a shame and sin to such beautiful eyes that they should not see the light again."

But the youth said, "If it were ever so difficult I would at once learn it; for that reason I left home." And he never let the host have any peace till he told him that not far off stood an enchanted castle, where any one might soon learn to shiver if he would watch there three nights. The King had promised his daughter in marriage to whomsoever would venture; and she was the most beautiful young lady that the sun ever shone upon. And he further told him that inside the castle there was an immense amount of treasure guarded by evil spirits,—enough to make any one free, and turn a poor man into a very rich one. Many had, he added, already ventured into this castle, but no one had ever come out again.

The next morning this youth went to the King, and said, "If you will allow me, I wish to watch three nights in the enchanted castle."

The King looked at him, and because his appearance pleased him, he said, "You may make three requests, but they must be inanimate things you ask for, and such as you can take with you into the castle." So the youth asked for a fire, a lathe and a cutting-board.

The King let him take these things by day into the castle, and when it was evening the youth went in and made himself a bright fire in one of the rooms, and, placing his cutting-board and knife near it, he sat down upon his lathe. "Ah, if I could but shiver!" said he. "But even here I shall never learn."

At midnight he got up to stir the fire, and as he poked it there shrieked suddenly in one corner, "Miau, miau! how cold I am!" "You simpleton!" he exclaimed; "what are you shrieking for? If you are so cold, come and sit down by the fire and warm yourself!" As he was speaking two great black cats sprang up to him with an immense jump, and sat down, one on each side, looking at him quite wildly with their fiery eyes. When they had warmed themselves for a little while, they said, "Comrade, shall we have a game of cards?" "Certainly," he replied; "but let me see your paws first." So they stretched out their claws; and he said, "Ah, what long nails you have got. Wait a bit, I must cut them off first;" and so saying, he caught them up by the necks, and put them on his board, and screwed their feet down. "Since I have seen what you are about, I have lost my relish for a game at cards," said he; and instantly killing them, threw them away into the water.

But no sooner had he quieted these two, and thought of sitting down again by his fire, than there came out of every hole and corner black cats and black dogs with glowing chains, continually more and more, so that he could not hide himself. They howled fearfully, and jumped upon his fire, and scattered it about as if they would extinguish it. He looked on quietly for some time, but at last getting angry, he took up his knife and called out, "Away with you, you vagabonds!" and chasing them about, a part ran off, and the rest he killed and threw into the pond. As soon as he returned he blew up the sparks of his fire again, and warmed himself; and while he sat his eyes began to feel very heavy, and he wished to go to sleep. So looking round, he saw a great bed in one corner, in which he lay down; but no sooner had he closed his eyes, than the bed began to move of itself, and traveled all round the castle. "Just so," said he, "only better still;" whereupon the bed galloped away as if six horses pulled it up and down steps and stairs, until at last all at once it overset bottom upwards, and lay upon him like a mountain; but up he got, threw pillows and mattresses into the air, and saying, "Now, he who wishes may travel," laid himself down by the fire and slept till day broke.

In the morning the King came, and seeing the youth lying on the ground, he thought that the spectres had killed him, and that he was dead; so he said, "It is a great misfortune that the finest men are thus killed." But the youth, hearing this, sprang up, saying, "It is not come to that with me yet!" The King was much astonished, but still very glad, and asked him how he had fared. "Very well," replied he, "as one night has passed, so also may the other two." Soon after he met his landlord, who opened his eyes when he saw him. "I never thought to see you alive again," said he: "have you learnt now what shivering means? "No," said he, "it is all of no use. Oh, if any one would but tell me!"

The second night he went up again into the castle, and sitting down by the fire, began his old song, "If I could but shiver!" When midnight came, a ringing and a rattling noise was heard, gentle at first, and louder and louder by degrees; then there was a pause, and presently with a loud outcry half a man's body came down the chimney and fell at his feet. "Holloa!" he exclaimed; "only half a man answered that ringing: that is too little." Then the ringing began afresh, and a roaring and howling was heard, and the other half fell down. "Wait a bit," said he; "I will poke up the fire first." When he had done so, and looked round again, the two pieces had joined themselves together, and an ugly man was sitting in his place. "I did not bargain for that," said the youth: "the bench is mine." The man tried to push him away, but the youth would not let him, and giving him a violent push, sat himself down in his old place. Presently more men fell down the chimney, one after the other, who brought nine thigh-bones and two skulls, which they set up, and then they began to play at ninepins. At this the youth wished also to play, so he asked whether he might join them. "Yes, if you have money." "Money enough," he replied. "But your balls are not quite round;" so saying, he took up the skulls, and placing them on the lathe, turned them round. "Ah, now you will roll well," said he. "Holloa! now we will go at it merrily." So he played with them and lost some of his money, but as it struck twelve everything disappeared. Then he laid down and went to sleep quietly. On the morrow the King came for news, and asked him how he fared this time. "I have been playing ninepins," he replied, "and lost a couple of dollars." "Have you not shivered?" "No! I have enjoyed myself very much, but I wish some one would teach me that!"

On the third night he sat down again on his bench, saying in great vexation, "Oh, if I could only shiver!" When it grew late, six tall men came in bearing a coffin between them. "Ah, ah!" said he, "that is surely my little cousin who died two days ago;" and beckoning with his finger, he called, "Come, little cousin, come!" The men set down the coffin upon the ground, and he went up and took off the lid, and there lay a dead man within, and as he felt the face it was as cold as ice. "Stop a moment," he cried, "I will warm it in a thrice;" and stepping up to the fire, he warmed his hands, and then laid them upon the face, but it remained cold. So he took up the body, and sitting down by the fire he laid it on his lap and rubbed the arms, that the blood might circulate again. But all this was of no avail, and he thought to himself, if two lie in a bed together they warm each other; so he put the body in the bed, and covering it up, laid himself down by its side. After a little while the body became warm, and began to move about. "See, my cousin!" he exclaimed, "have I not warmed you?" But the body got up and exclaimed, "Now I will strangle you!" "Is that your gratitude?" cried the youth. "Then you shall get into your coffin again." And taking it up, he threw the body in, and made the lid fast. Then the six men came in again and bore it away. "Oh dear me!" said he, "I shall never be able to shiver if I stop here all my lifetime!" At these words in came a man who was taller than all the others, and looked more horrible; but he was very old, and had a long white beard. "Oh, thou wretch!" he exclaimed; "now thou shalt learn what shivering means, for thou shalt die!"

"Not so quick," answered the youth; "if I die, I must be brought to it first."

"I will quickly seize you," replied the ugly one.

"Softly, softly! be not too sure. I am as strong as you, and perhaps stronger."

"That we will see," said the ugly man. "If you are stronger than I, I will let you go; come, let us try;" and he led him away through a dark passage to a smith's forge. Then taking up an axe, he cut through the anvil at one blow down to the ground. "I can do that still better," said the youth, and went to another anvil, while the old man followed him and watched him with his long beard hanging down. Then the youth took up an axe, and, splitting the anvil at one blow, wedged the old man's beard in it. "Now I have you! now death comes upon you!" and, taking up an iron bar, he beat the old man until he groaned and begged him to stop, and he would give him great riches. So the youth drew out the axe, and let him loose. Then the old man, leading him back into the castle, showed him three chests full of gold in a cellar. "One share of this," said he, "belongs to the poor, another to the King, and a third to yourself." And just then it struck twelve, and the old man vanished, leaving the youth in the dark. "I must help myself out of here," said he, and groping round, he found his way back to his room, and went to sleep by the fire.

The next morning the King came and inquired, "Now have you learnt to shiver?" "No," replied the youth; "what is it? My dead cousin came here, and a bearded man, who showed me a lot of gold down below; but what shivering means no one has showed me!" Then the King said, "You have won the castle, and shall marry my daughter."

"That is all very fine," replied the youth, "but still I don't know what shivering means."

So the gold was fetched, and the wedding was celebrated; but the young Prince (for the youth was a Prince), notwithstanding his love for his bride and his great contentment, was still continually crying, "If I could but shiver! if I could but shiver!" At last it fell out in this wise: one of the chambermaids said to the Princess: "Let me bring in my aid to teach him what shivering is." So she went to the brook which flowed through the garden, and drew up a pail of water, full of little fish; and, at night, when the young Prince was asleep, his bride drew away the covering and poured the pail of cold water and the little fishes over him, so that they slipped all about him. Then the Prince woke up directly, calling out, "Oh! that makes me shiver! dear wife, that makes me shiver! Yes, now I know what shivering means!" GRIMM.

Sabbath Reading.

TWO ROBBERS.

F. W. BOURDILLON.

When Death from some fair face
Is stealing life away,
All weep, save she, the grace
That earth shall lose to-day.

When Time from some fair face
Steals beauty, year by year,
For her slow, fading grace
Who sheds, save she, a tear?

And Death not often dares
To wake the world's distress;
While Time, the cunning, mars
Surely all loveliness.

Yet though by breath and breath
Fades all our fairest prime,
Men shrink from cruel Death,
But honor crafty Time.

A HAPPY SUNDAY.

"I AM so busy just now," wrote Luther once, "that I cannot get along without at least two hours a day for prayer." The epigram points American Christians to the true doctrine of Sunday observance. We are so busy as a nation, that we need to guard more jealously than ever one day in the week for spiritual and intellectual refreshment, replenishing and rest.

There is a difficulty of old habit which is a great hindrance to a right and joyful acceptance of the Lord's day. From our youth up, unless we have been educated under exceptional auspices, it has been presented to our view by our religious teachers as a day of prohibitions. "Thou shalt not" has been the motto of the Sabbath: and we have been accustomed to feel that the keeping it holy consisted rather in the putting away of our ordinary occupations than in the energetic taking up of others. This is specially true in regard to children. "You must not play to-day," says the father or mother, glad to rest and read half drowsily the religious paper; forgetting that the time for weariness or for reflection has not yet come to these little bodies and minds, and that inactivity is the sorest trial to a healthy child. "I must not plow or sow to-day," says the Christian farmer to himself; nor does he desire to do so; but in lieu of this his wonted occupation, he does not quite know how to fill up the time not devoted to public religious exercises or private devotions, and gradually he seeks to know what is permissible; how near he may come to his week-day life without overstepping the Sunday-line. The necessary cares of his farm are sometimes a relief from this fear of transgression and uncertainty of thought; and much of the sleepiness of which workingmen complain on Sunday may be traced to the inactivity of mind and body to which they compel themselves by voluntarily turning away from their accustomed work and thoughts.

Hence it comes about that, except with the majority of reverent but not mentally active people, there is a constant striving to come as near the forbidden ground as possible, as if all delights except those exclusively religious were contained in the six days' lawful occupations, and the seventh was to be a time of privation and self-denial. Hence come all those questionings as to reading, walking, visiting, writing letters, etc., which trouble the consciences of Christians, and lead either to an overstrict line of conduct, or to indulgence, under some pretext of health or expediency, in that which conscience disallows. Hence comes the habit of which we have spoken, of making the family cares a sort of parenthetic relief to religious duties; and also a secret dread of the Sunday, and an undefined gladness when it is over.

REPENTANCE is a flower that grows not in nature's garden.

PERSONAL ITEMS.

B. Funnie is the name of a San Francisco undertaker.

The entire number (seven) comprising the Memphis "Sisterhood of Mercy," have died of yellow fever.

It was Artemus Ward who said of the Mormons: "Their religion is singular, but their wives are plural."

Mr. Edison has taken out one hundred and fifty patents. He only considers twenty of them of much importance.

Pierre Soule, grandson of the famous Louisianian, died last week in New Orleans, aged 19. The family name is now extinguished.

Alexandra Louise Olga Victoria is the name of the Duchess of Edinburgh's last baby, the twenty-sixth of the Queen's grandchildren.

Mr. Burchard Hayes, eldest son of the President, has completed his law studies and intends to open an office in Toledo this fall.

Eugene A. Cronin, who enjoyed some notoriety during the presidential count, and who had a very red nose, died at Portland, Or., last Saturday night week.

The report current that Senator Thurman has had an attack of paralysis is untrue. His illness was occasioned by a severe billious attack, from which he is fast recovering.

Commodore Cornelius K. Garrison of New York, aged sixty and worth several millions, has bought a wife—Miss Letitia Willett Randall of St. Louis. She is about twenty-five.

Count Von Bismarck, nephew of Prince Bismarck, the German chancellor, committed suicide at Venice, Italy, the other day with a revolver, on account of physical suffering.

Garibaldi will perhaps be a man of comfortable fortune, after all. He has sold to a company the privilege of quarrying granite on the island of Caprera to pave the streets of Rome.

M. Gambetta is the impersonation of self-poised resolution. He has a large, short, square figure, with a fine head, a Hebrew nose, one defective eye, yet a bright and inquiring face.

Mrs. General Sherman is quoted as saying that her husband first aroused her admiration when at the early age of ten years—"because he caught rabbits better than any of the other boys."

Edison is still going around inventing things. There doesn't appear to be anything he can't invent. People go to him with their troubles and Edison immediately gets up something that fills the bill.

It is said that Peter Mankins, of Washington county, Ark., aged 108 years, eats fat bacon twice a day, has a splendid set of teeth, and is as active as most men of fifty. This looks like an attempt to "bull" the pork market.

Blanton Duncan of Louisville, Ky., who is a Greenback candidate for Governor, travels about his district with a wagon equipped as his desk, a small cannon and some locomotive headlights. When he reaches a place where he wishes to speak, he fires off his gun, lights up and opens the ball.

Ida Greeley, the daughter of the lamented Horace, has a son. The father's name is Smith—Nicholas Smith. But the boy is not to be called Smith. He has been called Horace Greely, jr., and the Smith will not bo added unless the boy takes it into his head to be known as his father's son.

Sir Garnet Wolseley, the English Governor of Great Britain's latest acquisition, the island of Cyprus, who was roundly censured by good churchmen for having the Greek priests perform the religious ceremonies at the cession of Cyprus, has been celebrating the Turkish feast of the Warram.

The son of the Khedive of Egypt has not been permitted to find a royal road to learning. He has lived in London for two years, preparing for the Woolwich examination. Not only was the young man obliged to give himself up altogether to study, but every member of his suite was made to do the same.

The late Colonel Kinloch Falconer, Secretary of State for Mississippi, went from Jackson to Holly Springs, his native town, to help his friends and family in their hour of trouble. His father died, and then his brother, and then he himself was stricken. He served in the Confederate army on the staff of General Joseph E. Johnston.

Among those who have been converted in Great Britain to the Roman Catholic Church during the present generation, are a son of Dr. Arnold of Rugby, a niece of the historian Froude, a sister of Gladstone, a nephew of Whately, a granddaughter of Sir Walter Scott, a grandson of Paley, and a son of Wilberforce and more than a hundred members of noble families.

Bishop Williams used to tell an amusing story of the late Dr. Berrien, rector of Trinity parish, New York. On one baptismal occasion, in answer to the ritual request, "Name this child," the mother who lisped, said, "Luthy, thir." "Lucifer!" exclaimed the indignant doctor, "that is no name for a Christain child; I shall call him John"—and Lucy was duly christened John.

John B. Gough, who is lecturing in England, gets this high compliment from a correspondent of the Liverpool Mercury; "Mr. Gough's oratory is more like a raging fire than a tiny spark. He rushed along through pathos and fun, exhortation and declamation, now shouting, now whisporing, but always suiting his action to his theme dramatically, until he almost took away one's breath. The audience was completely at his mercy. He might before he had finished have said what he pleased to it, so ready was it to respond to him."

S. Augier Chace, one of the Fall River defaulters, while being interviewed recently, was told of the developments in Stickney case. His reply was substantially as follws: "Yes; I expected it. I was strongly urged at my trial to make a full statement, but I remembered a statement of Daniel Webster's, which was that he never shoveled off his walks until it had done snowing. Gentleman it has not yet done snowing."

Dr. Erasmus Wilson, who furnished the money which took Cleopatra's Needle to England, is the son of a Scotchman. His mother was a Norwegian. He is white-haired and pale, and he is a great authority on skin diseases. He says in opposition to some other authorities: "I think good food, properly assimilated, of course, one of the most potent safeguards against diseases of all kinds, and particularly of the skin. Children suffer terribly in this way for the want of being properly fed. Against common diseases I distinctly recommend high feeding.

The Emperor of China has the power of conferring the oldest decoration mentioned in history. This is the Yellow Tunic, which is made of yellow silk and has on the back a dragon, the arms of the Chintse Empire, embroidered in gold and black silk. It is the most distinguished order in China, and is conferred only on extraordinary occasions. Only two Europeans have ever received it—the Englishman, Colonel Gordon, who rendered great service to the Chinese Government during the Taeping rebellion, and the French engineer, Cignel, who built a military arsenal in Northern China,

Garibaldi has a liking for writing letters, and concerning this taste there is told a pleasant little story. Several years ago a poor man came to Caprera, with the intention of settling down there, so as to be near his hero while gaining a livelihood. He asked Garibaldi's advice as to what he should do, as he was somewhat too old for agriculture. The General reflected a few minutes, then said:—"The paper and ink sold on the island are detestable; import from Livorna some smooth paper, some good ink and some fine pens." The man followed the advice and, though no one on the island bought his merchandise except Garibaldi, he got enough by that to live on. Soon after Victor Hugo heard this story and ordered his writing materials from this same man, who is said to be now in very comfortable circumstances.

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GUSSIE—"Lizzie, darling, why do you wear another woman's hair?" Lizzie—"Gussie, dear, why do you wear another ca—I mean, why do you wear calf's skin on your hands?

MR. HO, of the Chinese legation in England, is translating Shakspeare into Chinese. One passage from "Hamlet" reads: "Ho, that this too too muchee venison would turn into saltee water."

LITTLE HARRY asked his mother what "blood relations" meant. She explained that it signified near relatives. After thinking a moment, he said: "Then, mother, you must be the bloodiest relation we've got."—*Boston Globe.*

AN inveterate wag, seeing a heavy door nearly off its hinges, in which condition of neglect, it had been for some time, observed that when it had fallen and killed some one, it would probably be hung.—*Chicago Commercial Bulletin.*

"MA," said a little four-year old, "I saw something run across the kitchen floor this morning without any legs. What do you think it was?" The mother guessed various legless worms and things, and then gave it up; when the little fellow said: "Why, ma, it was water!"

AN honest ignoramus, who had escaped a great peril by an act of heroism, was much complimented for his bravery. One lady said: "I wish I could have seen your feat," whereupon he blushed and stammered, and finally, pointing to his pedal extremities, said: "Well, there they be, mum."

A MAN may sneer at a woman all he will because she cannot sharpen a lead pencil, but she has the smile on him when he stands holding an unoccupied suspender botton in his hand, and wondering whether it will hurt less to pull the needle out of his thumb the same way it went in or push it on through.

A GENTLEMAN took the following telegram to a telegraph office: "I announce, with grief, the death of Uncle James. Come qutckly to read will. I believe we are the heirs. John Black." The clerk, having counted the words, said, "There are two words too many, sir." "All right; cut out 'with grief.'"

A SKEPTIC who was badgering a simple-minded old man about a miracle and Balaam's ass, finally said "How is it possible for an ass to talk like a man!" "Well," replied an honest old believer, with meaning emphasis: "I don't see why it ain't as easy for an ass to talk like a man as it is for a man to talk like an ass."

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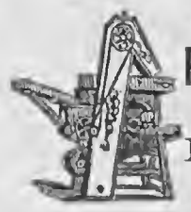

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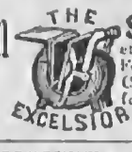

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XXXVII. No. 44.
WHOLE No. 1501.

NEW YORK CITY, NOV. 2, 1878.

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"Pearl" or "Egyptian" Millet. The New Fodder Plant. From a single Seed. Drawn from Life.

Field Crops.

NOTES FROM RURAL GROUNDS

"EGYPTIAN" OR "PEARL" MILLET.

See 1st page illustration, also opposite page for section of seed spike.

We have already stated that a large quantity of this seed was planted at the farm last spring. But it was sown too early and rotted in the ground. Later a few rows were planted here. Though the seed germinated readily, and the plants grew to the hight of a few inches—there they remained so long that while we were in doubt whether they would make any further growth or not, it seemed evident that "Pearl" Millet was a failure, at least with us.

The advent of steady hot weather rapidly changed this state of things, as our first-page illustration will show. This plant grew from a single seed, and is as true to life as our artist could make it. Many of the stems were nearly the same hight, the highest being 10 feet, 1 inch. Three feet from the ground, the circumference of the plant was 13 feet, 9 inches. The weight of the highest stalk, leaves and flower spikes was one pound, two ounces. There were, in all, small and large, 52 stalks, the weight of which was 42¼ lbs.

Several plants were cut down August 1st. The average weight of the subsequent growth was nine pounds per plant. Our first frost, which was very light, occurred while the seed was in the milk. A few seeds upon a few spikes have ripened. As the season has been unusually favorable for the ripening of the seeds, it may be concluded that seeds will never mature in this climate. This, however, is of little moment, since an abundant supply could be obtained from the South.

While, on the one hand, we are naturally desirous not to convey impressions which may lead our readers to waste time and labor upon worthless plants—on the other, we are naturally in haste to introduce to them any "novelty" that, having tried ourselves, we think may be advantageously cultivated. We are arranging to make seeds of this plant one of the set to be offered in our free-seed distribution, though, as even to send a small packet to each applicant would require us to secure a large quantity, we cannot as yet make any definite promise to do so. In case we do, however, all may try it next year upon a small scale, and estimate its value for themselves.

TEOSINTE.—(SEE ILLUSTRATION P. 695.)

Among novelties sent out by Vilmorin & Co., of Paris (France) last year was Teosinte (Reana luxuriana), a fodder plant resembling corn in its stalk and leaf. The accompanying engraving correctly shows the entire plant. Our seed was sown May 15. It was, like the Pearl Millet, slow to germinate and slow to grow until late in summer when the rate of growth was very like that of corn. Oct. 12, after the leaves had been somewhat withered by frost, one of the largest plants was cut and found to weigh ten pounds. It measured five feet in hight and consisted of seventeen stalks. These stalks were thicker, softer, the juice sweeter than those of corn. There were more leaves also and they were broader and more tender. It is a perennial plant in its native home, Central America, where the stalks are cut off and fed to cattle, new shoots again growing from the roots. Those plants which we cut back, made very little growth afterwards. The very large, tender leaves the heavy succulent stalks and their sweet juice and the luxuriant growth of the plant during hot weather, might warrant a trial of Teosinte in our more Southern States.

MILLETS AND THEIR ALLIES.

PROFESSOR W. J. BEAL.

KINDS OF MILLET.

The term "Millet" is applied alone or in connection with some adjective to a great variety of grasses. The word is about as indefinite as the term bilious, or smut, or mold, or pigweed. Sorghum vulgare and its varieties are known as Indian millet, Durra, Doura, Guinea corn, Sweet sorghum, Chinese sugar-cane, Imphee, broom-corn, etc. It is called Dana in India, where it is used for horses, swine and poultry.

The name "Millet," when used alone in this country, has mostly been applied to two species of Panicum, viz: miliaceum and miliare. Panicum miliaceum, or common millet, is a native of Southern Asia. In India it is called Warree and Cheena. Both it and P. miliare are considerably cultivated in Southern Europe and in various parts of the United States, where there are at least two prominent varieties; one known as brown and the other as yellow millet.

USE AND CULTIVATION OF MILLET.

The millets are raised both for their grains and for their foliage. For fodder they should be cut as soon as they are found in blossom and cured in the same manner as hay. In this country millet is mostly raised as a forage or fodder plant. All of the millets and the like, are annuals, and prefer a rich, warm, mellow soil. The seeds, like those of Indian corn, will not grow well in cool weather, but require considerable heat. For this reason millets are not of much use in England. There is no use in sowing the seeds till the ground is well warmed up by the spring sun.

Millet is an exhaustive crop, but with a good season and suitable soil, the yield is often enormous, running up to four or five tons, or more, to the acre. On poor or unfavorable soil it is certainly an unprofitable crop. The seed is usually sown broadcast from twelve to thirty-two quarts to the acre, usually about twenty quarts. It is harrowed in with a light implement. It may be sown with a drill, if it is made to run shallow. The seeds are much smaller than those of wheat, oats or barley; hence they will not bear sowing so deep as will those grains. The tops of Panicum miliaceum, or common millet, are open, spreading and nodding, much like the tops of broom-corn or heavy panicles of oats.

ALLIES OF MILLET.

The genus Panicum is a very large one. Panicum pilosum is cultivated in India as Bhadee, also Panicum frumentaceum which is called Shamoola in the Deccan.

Several of our grassy weeds belong to this genus, as Panicum sanguinale, crab-grass or finger-grass; also Panicum glabrum, or smooth crab-grass, is met with in the Southern States. Panicum capillare is often sold as an ornamental grass, under several different names, such as hair-grass, old-witch grass, etc. It is a common though not a very bad weed all over the Northern States. The tops, when ripe, break off and are blown over and over along the ground for long distances. In this way the seeds are scattered. One of our most prominent and weedy annual grasses abounding everywhere is Panicum Crus-galli,

BARNYARD GRASS, OR COCK'S-FOOT.

This is exceedingly variable in size, color, length of awns, etc. The tops are green, purple, or reddish. The plant appears so different under different circumstances that it is often mistaken by very good botanists as belonging to several species or even to different genera. It grows very fast and becomes large and rank on sandy soil which is moist and well manured. I have often seen horses, cattle and sheep eat it as though they liked it. I have sometimes cut it for hay or to feed when partially cured, always to find that all kinds of grazing animals devoured it with avidity. So far as I know, barnyard grass is always treated with abuse as a weed, an unwelcome plant, an invader. It is a self-seeder, and, in favorable soils, springs up with astonishing rapidity. This thick seeding, abuse and neglect probably tend to make the stalks small and the seeds small and few in number. If I mistake not, here is a grass worthy of some care and thought. It looks as though it was very sensitive to good treatment and would soon turn out to be valuable, if it had good culture and if seeds of the best were annually selected. Who will try it?

Closely related to the genus Panicum and sometimes included as a section of it, is Setaria. There are two of these common all over our country, in fields and gardens, where they are known as pigeon-grass, bottle-grass, fox-tail, wild-timothy etc. These are Setaria glauca and Setaria viridis and more rarely Setaria verticillata. These three are all treated as weeds, though, when young, cattle are fond of them either when green or dried. Setaria viridis looks much like a small specimen of

HUNGARIAN GRASS.

The latter is Setaria Italica or Setaria Germanica. Besides the common name of Hungarian grass, it is also often called Golden millet, Cat-tail millet, Italian millet, Bengal grass, Mammoth millet. The latter name is likely to be applied to specimens which grow in favored localities. In such cases the spikes often grow fifteen or more inches in length. Setaria Italica is a native of Southern Asia and is raised to a considerable extent in India where it is called Kala, Kangnee or Kora Kang. This, like the other millets, grows rapidly and likes the heat. In many cases, the spikes are cylindrical and, at a little distance away, appear to be unbranched On large specimens, the thick branches are more apparent. Some specimens have long, tapering and drooping spikes, others are shorter, broader and club-shaped. A club-shaped spike, reduced about one-third, is shown in figure 2, see p. 697.

Once in a while some lucky man succeeds in producing some sort of millet of extraordinary size; then perhaps he advertises it under a new name, or sells the stock to some seedsman. The Department of Agriculture at Washington sometimes distributes the seeds. This species has sported into many varieties and no doubt by constant selection and care these would soon be as distinct and unlike each other as are our varieties of Indian corn, which now appear as Dent corn, Flint corn, Sweet corn, and Pop corn in numerous varieties. Setaria Italica is more popular in the West than in the East where the soils are generally not so deep or rich. The treatment, uses, quality of seed, and vegetation, as well as the yield, are much the same as in the case of common millet.

Setaria Italica in its numerous forms, has from time to time, in the South and West, had a great run with varying results. Some people like to raise it and have continued its use for years, while others try it one year only to reject it ever afterwards. In 1859 or earlier "American Weeds and Useful Plants" was revised. With reference to this species, the author says that it was "some years ago introduced into Pennsylvania, but it was soon found not to be as valuable as the usual fallow crop of oats or barley. The cultivation soon declined and is now generally abandoned." It is still raised in many places in the West and South.

For reasons which I do not fully understand, the seeds of all millets are usually considered dangerous for horses and cattle. Perhaps it is because the animals swallow so much of the fine seeds without crushing them, in which case they do not digest well. Some men praise millet as safe for all animals. If ground and fed judiciously, I have no doubt it is a wholesome and valuable food for all kinds of live stock. We learn of some who have tried it as human food. They like it, give several recipes for cooking it, and say it much resembles hominy.

ELUSINE CORACANA.

is a sort of crab-grass for which I know no definite common name. Some five years ago, I received seeds from the Kew Gardens. It has grown at the Michigan Agricultural College in small quantity ever since. It grows about two feet or a little more in hight and is quite uniform in appearance. The vegetation is not large, but it seeds profusely. It has matured seed well every year in this frosty country with short seasons, and has had time to spare. It ripens quite evenly.

Figure 3, see cut, page 697, shows the top in fruit, natural size. The seeds closely resemble those of millet in size, color, and taste. The plant is raised in India where it goes by the name of Natchnee, Naglarageo or Mand. It is there raised for the grain and is considered of great value, especially when the crop of rice is cut short.

Agricultural College, Lansing Mich.

GOLDEN vs. COMMON MILLET.

COL. F. D. CURTIS.

We shall be under obligations to the Rural for telling us all about millet. "Experience is a good teacher," so the old proverb says; but, then, it is costly oftentimes. We have found this to be so twice in growing Golden millet. In both cases it was sowed too late and did not ripen the seed before frost came. This year it was put in the same day with the barley—the first of June—and it barely escaped the frost the last of September. We have found out that Golden millet requires, in our latitude, not a day less than three and a-half months to ripen the seed. We are satisfied it will yield nearly double the amount of seed when well ripened over the common millet, or Hungarian grass. When the seed is an important item in the calculation, Golden millet is the best, provided there is time to ripen the crop, and provided the ground is *rich*. If these necessary conditions cannot be met, then the common millet is the most profitable. The latter will mature in two months and a-half and ripen the seed perfectly. The seed is just as good for feeding, but there is not so much of it. It will produce a full crop on poorer land, as the corn-like blades of the Golden and the large, bunchy heads must be fed with a strong soil. This crop is necessarily more exhaustive. Common millet will make as good fodder when cut green, but the Golden, on very rich land, will yield more tons to the acre. If both crops are allowed to ripen before cutting, the golden would be the more desirable for hay. The common would resemble straw and the Golden would be more like a dry cornstalk.

Common millet is a *handy* crop, as it may be sown on patches where other crops have failed, or on spots in meadows where the grass is run out, in which case it can be harvested with the other grass. It is "handy" to supplement a short grass crop any time, and may be sown after an early spring crop has been gathered, and, with its prompt and rapid growth, produce a good yield of forage. Our cattle like the millet, even after it has been killed by the frost while growing, and in this condition it is almost worthless in comparison with that which has been cut green and nicely cured. We have a somewhat shiftless practice of throwing a bundle of millet down on the barn floor and letting the hens pick it out for themselves. This saves the labor of thrashing, furnishes amusement for the chickens and keeps them out of mischief.

The seed of millet is excellent feed for poultry, and when ground and mixed with bran or meal is healthful for stock and will give them the glossy look which oil meal does when animals are fed on it.

Kirby Homestead, Oct. 9, 1878.

EXPERIENCE WITH PEARL MILLET.

Mr. P. W. Hollingsworth, of Los Angeles Co., Cal., writes us that he sowed some Pearl Millet seed sent him by the Rural, in February, and some in April. The former did not come up on account of the cool evenings, he thinks; while the latter came up well, and has made a strong growth. He irrigated a part of it, and that part has seeded well, but the part he failed to water, didn't fill. He thinks, with us, that had he planted it on land having an ordinary amount of moisture, it would all have done well without irrigation. As every farmer should do with all new and promising plants, he intends to make further experiments with it next year. The corn crop, he says, is above an average in most of the county, while the barley is below an average on account of late rains last spring. The fruit crop is good, with the exception of apples, which this year seem to have fared badly even in "the finest climate of the world, Sir," as most Californians claim theirs to be. The Monarch of the West Strawberry, is *the* Strawberry for California, in his opinion, and it could not well have gone farther west to show itself worthy of its name.

THE CHINESE YAM.

S. D. PECK,

Some thirty years ago this esculent, with an additional foreign name, came upon the stage and was planted and experimented upon and joked over as growing down through the earth and clinched on the other side in China—hence its name. [This Yam—the Dioscorea batatas—has a better claim to the prefix, Chinese, than that humorously assigned to it here by Mr. Peck; for it was cultivated in China and Japan long before its introduction to Europe, about 1848, by the French consul at Shanghai. Soon after that it was brought to this country and excited considerable interest for a time.—Eds.] The plant and its culture soon died out for the want of patronage. Some ten years since it was partially resurrected and was advertised by a nurseryman in Indiana, but he claims that it did not pay to raise it for market seed purposes.

In "The Farmer's Book," by C. W. Dickerman, published in 1870, is a particular description of the plant and the best methods of its culture accredited to the "Canada Farmer," from which I make a few quotations:

"It is destined to supersede the tropical and unreliable potato in all northern climates. It is a native of the northern limits of the temperate zone—will endure everywhere the winters in the open ground—produces abundant crops from the fragments left in the ground—will flourish best in the now useless sandy lands—will succeed in any soil except a stiff clay—from tubers which grow among the foliage, the roots attain 10 or 12 inches in length—it is more palatable than the best Mercer potato—much more nutritious than wheat or any other grain—the only vegetable which combines with its other ingredients an ample portion of azote."

Others state that it continues to grow from year to year, and increase in size without any diminution of quality and may be harvested at any season of the year as wanted, that it is not injured by any frosts, that the vines may be trained on stakes or left to trail on the ground.

In the spring of 1877 I was presented with a small Yam freshly dug. It was planted in sections of one to two inches in length, in sandy soil unmanured. After I had given up the idea of ever seeing anything more of the pieces, the young vines peeped through the ground about June, and were provided with eight-foot stakes which they clung to affectionately and were soon at the top looking for a chance to climb higher. This fall, 1878, I essayed to test the growth and edibility of the tubers. The first effort was unsuccessful; I only found a piece of a Yam or root, chipped off by the spade, some 18 inches down. A few days afterwards I attacked another specimen, determined to probe to the bet-if there were any bottom. At the depth of about a foot the stem seemed to detach itself, and by its side was a bud evidently designed for another year's growth. At the base of this were the first branching rootlets, and about a foot further down I came upon the stem of the tuber, averaging half an inch in diameter, and slightly tapering. Below this was the yam, nearly a foot in length, and about two inches in diameter, tapering at each end. Below the upper stem the whole tuber was very tender, and could hardly be exhumed whole.

So much with regard to the growth of this oriental Yam; now with regard to its taste. Well, after baking it, we found it in no way objectionable; the dyspeptic members of the family ate it without fear or protest. *I* said it was like arrow-root and rice, that it needed extra flavoring, and suggested cranberry sauce or currant jelly, and hinted that it should be used instead of potato in making bread. On the whole, I think it worthy of cultivation on light soils. Suppose a vigorous man, living at a distance from market, has company to dinner in the month of June, and his wife tells him that she is without the indispensable potato, just think of the glow of pleasure with which he remarks, as he doffs his coat and seizes his spade, "Well, my dear, luckily there is a substitute always within reach of a good digger."

Muskegon Co., Mich.

The chief use of the Chinese Yam has not been mentioned here by our friend, Mr. Peck; for as our readers know from our references to it on many former occasions, it is far more deserving of cultivation for ornamental than for culinary purposes. The vines run from 10 to 20 feet and have rich, dark-green heart-shaped leaves in the axils of which are produced bulblets smaller than an ordinary pea, from which, as well as from cuttings of the upper portion of the root, the plant is propagated.

Horticultural.

THE STRUCTURE AND FUNCTION OF FLOWERS.

BYRON D. HALSTEAD.

ANCIENT AND MODERN IDEAS OF FLOWERS.

THERE are perhaps no objects in nature which have received more attention than flowers. They are the emblems of purity and beauty, which cheer the sick, gladden the hearts of the sad, give the last touches of charm and beauty to the bride, and fall as the fitting tribute of love upon the coffin at the open grave. The part flowers play in the culture and expression of the finer nature of man we all know full well, and we must not pause to dwell upon a subject which has been the theme of admiration and poetic praise since the world began.

If we could present the ideas of the nature of flowers, which have been held by great scientific men in the successive ages of the past, we would have one of the best illustrations of progress in human investigation and evolution in human thought. Not long ago flowers were considered as parts of plants for decoration only. Even Linnæus, the great Swedish naturalist and the acknowledged Father of Botany, of whom it has been well said: "He was one of that handful of men whose appearance in all ages of the world has marked an era in philosophy—one of those human land-marks whose personal history is the history of science"—even he, living only a century ago, held to the idea that the calyx of the flower was the outer bark, the corolla the inner bark, the stamens the wood, and the pistils the pith of a floral stem.

In this transformation of parts we see the first glimpse of that idea which was soon to dawn as bright and clear as a cloudless morning in June. This was the advent of the full conception of *Morphology*, born of one of Germany's greatest poets, Goethe, and set forth at length in his immortal work, "The Metamorphoses of Plants." Goethe reduced all parts of plants to *leaf* and *axis*, and showed that all organs, whatever they may be, are but these shaped and adapted to the functions they are called upon to perform. It was not until nearly a century later, upon the publication of Darwin's work on the "Origin of Species," in 1859, that the law of morphology came boldly to the front, and was so clearly and thoroughly presented that it at once commanded and received the attention of scientific men. Before this, the students of nature had been toiling for ages in accummulating facts, and now a theory was given founded on those facts as viewed in the light of the law of morphology

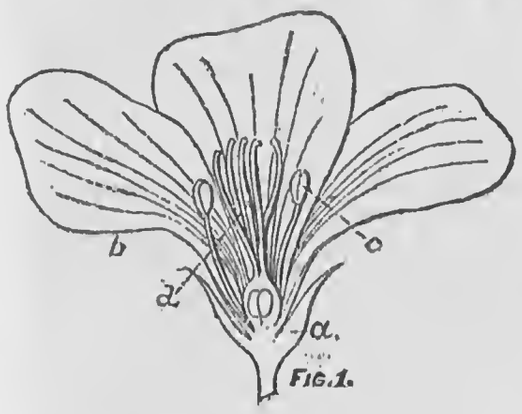


FIG. 1.

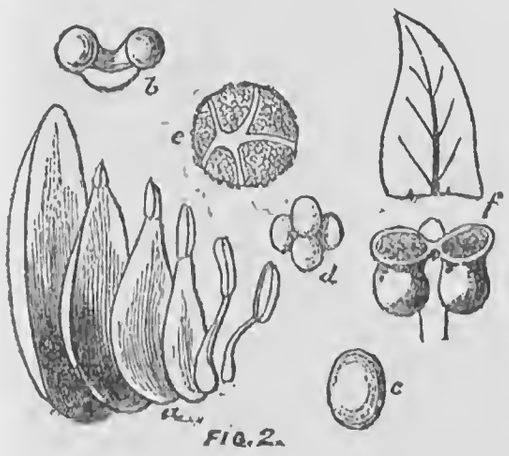


FIG. 2.

FIG. 3.

Fig. 1.—Section of flower of common Flax; *a*. calyx; *b*. corolla; *c*. stamens; *d*. pistil (after Gray). Fig. 2.—*a*. Transition from petals to stamens in the white Water-lily; *b*. plan of stamen; *c*. Lily pollen grain; *d*. pollen of Kalmia; *e*. pollen of Sicyos; *f*. pollen of Pine (after Gray). Fig. 3.—*a*. leaf infolded; *b*. a pistil of Cowslip opened; *c*. leaf of Bryophyllum with buds on margin (after Gray).

—the key, by means of which every variation of form, however remarkable, every deviation from type, however wide, every abnormality, however apparently capricious, may be referred to a common and well-known elementary standard by contrast with which its deviations may be measured and its abnormality explained.

It is in the comparison of parts and a careful study of the relations which they bear to each

FIG. 4.

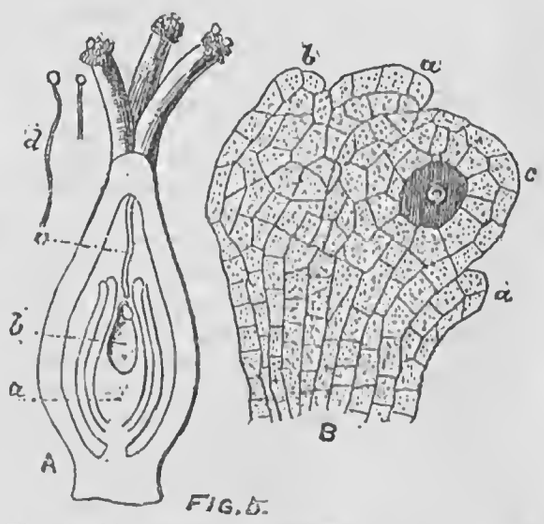


FIG. 5.

Fig. 4.—Plant with floral parts separated. *a*. bract; *b*. sepal; *c*. sepal; *d*. stamen; *e*. pistil. Fig. 5.—*A*. pistil of Buckwheat with ovary and ovule divided lengthwise; *a*. embryonal sac with its embryonal vesicle *b*.; pollen tube at *c*.; *d*. pollen with tube free (after Gray); *B*. ovary of Funkia very much enlarged; *a*. and *b*. the young coats; *c*. embryonal sac with vesicle (after Sachs).

other, and the special purpose which each modification subserves, that the most interesting and ennobling study lies. With these principles before us let us consider

THE FLOWER IN A STRUCTURAL POINT OF VIEW.

In a complete and perfect flower, like that of the Lily, Apple or common flax (Fig. 1), we have an outer whorl, with its separate or united parts, as the case may be, doing the duty of supporting or protecting the parts within. It is often of a green color, and thus shares with the ordinary foliage the important work of assimilating food for the growth of the plant. Next within is the *corolla*, with its usually conspicuous *petals* or *lobes*. Within the corolla is the next whorl of organs, the *andrœcium*, made up of the stamens, the male organs of the plant. At the center, surrounded by the calyx, corolla and andrœcium, is the *gynœcium*, consisting of one or more pistils, the female parts. These four parts, which are shown in section in a flax flower, in fig. 1, make up what the child as well as the botanist recognizes at once as a flower. But what is the nature of these strangely-formed and highly-colored parts? If all parts of plants are reduced to leaf and axis, our flower must be one or the other, or a combination of these two. In an ordinary stem, as any which we might cut from an apple or willow tree, we find there is an axis—the stem, with certain expansions upon it—the leaves. The axis may be long and the leaves widely separated upon it, as in a twining hop vine; or it may be reduced to the shortest possible length, and hid from view by the numerous closely-packed leaves upon it, as in the house leek, lily bulb, or any stem while it is in the bud condition. In every flower there is an axis, however short, upon which the floral organs are borne. It remains to be seen that these organs are leaves. There is no doubt about the calyx; in general it is leaf-like in shape and function. The petals are "the leaves of the flower," but are usually of other than a green color. But many true leaves have bright colors, as those of the Coleus, Poinsettia and many other common greenhouse plants. The true leaves of the Pitcher-plant and Venus's Fly Trap, are more curious in shape than almost any petals.

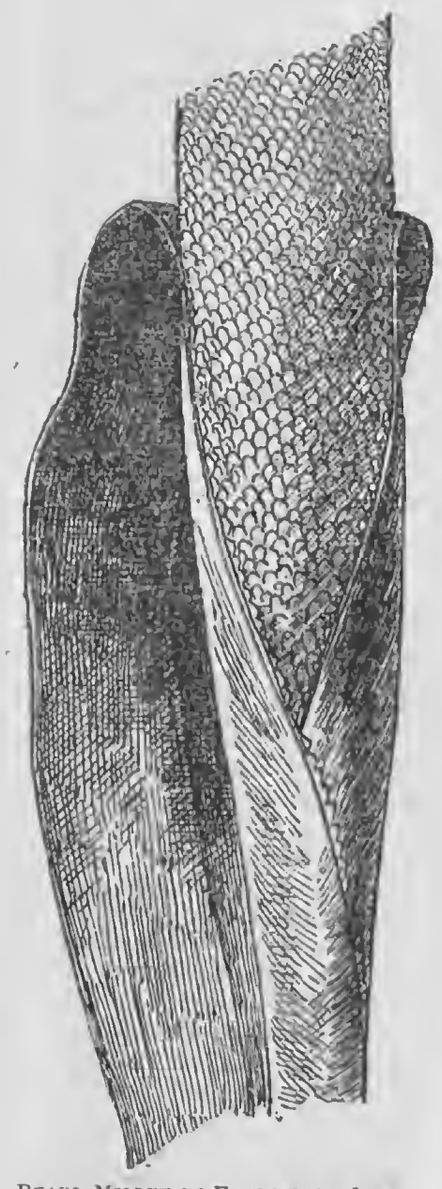
The sepals and petals are leaves; but how as regards the stamens? The cases are numerous where we find all gradations between petals and these male organs of the flower. The white Water-lily illustrates this in nearly every one of its large, showy flowers. (Fig. 2, a). Under cultivation many species "double"—as the gardeners say—and this is done by stamens changing back into petals. The Fuchsias often give fine illustrations of the plasticity of these organs as they are molded by the hands of man. Stamens are but changed petals, and petals are leaves. In the same way we can see that pistils are also leaves. Fig. 3 represents two regular leaves *a*. and *d*. and two simple pistils *b*. and *c*., and it is scarcely necessary to add that a leaf with its edges folded in and united, makes the ordinary female organ of the flower. Monstrosities are often found where, from some unknown cause, ordinary leaves have taken the place of pistils, showing that the pistils have reverted to the simple element from which they had been differentiated. We thus arrive at the structural nature of a flower through the study of comparative morphology, and express our result in the following terms: A flower is a metamorphosed axis, with its metamorphosed leaves.

We now come to a consideration of the

FUNCTION WHICH THE FLOWER FULFILLS

in the economy of the plant. Functionally a flower is a structure by means of which one plant individual acts upon another for the production of a third. In the elaboration of this theme we must see, in the first place, what is understood by the term individual, as used among plants. Among the higher animals the conception of an individual is clear and well defined. With lower animals such is not the case, where, as in the corals, many individuals remain attached to each other through life, and exist as a community of individuals. Among plants the unit is often still more difficult to determine, and upon this point some difference of opinion is still held. Some have considered all that results from a single seed as a single individual, but this would make all our Weeping Willows an individual, because they are propagated entirely by cuttings in this country. Likewise each variety of fruit which is propagated in like manner, is but a single individual, though there may be millions and millions of trees. Another view, and the one generally accepted is, *that a plant unit is that smallest part which, in general, will live and grow when separated from its former place in a plant community, and given the fitting conditions for growth by itself.* To such a plant individual the term "phyton" has been given, and it consists of a node with its leaf and bud and internode. A cion is often such an individual. The gardener divides his young branches of Verbena, etc., into these phytons, and places them in moist sand, where they begin an independent existence. With this view, a tree or shrub is a community of individuals, each one of which is joined to, and in great measure dependent upon, those around it, and often assigned some particular office in the combined labors of the community.

It is not difficult for us to carry our idea of a plant individual to the flower which we have previously seen to consist of simply stem and leaves—a stamen with its portion of the stem is an individual and the same with the pistil. Fig. 4 represents the division of a plant into its

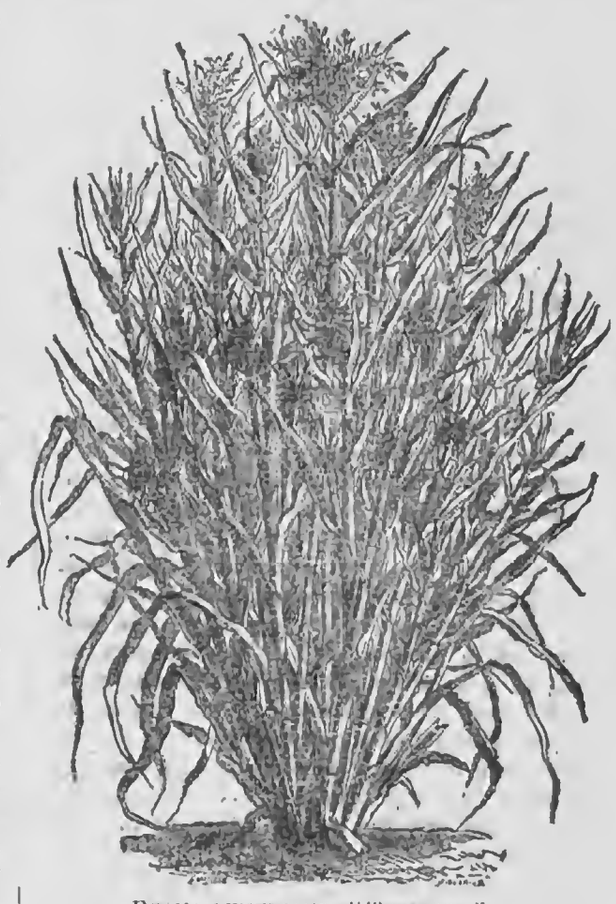


PEARL MILLET IN FRUIT FROM LIFE.

phytons, the upper ones of which are floral individuals. We have said one individual in the flower acted upon another for the production of a third. The staminate leaf is one such individual—the male—which acts upon the pistillate leaf—the female—to produce a new individual—the seed.

HOW THE SEED IS PRODUCED

is the question for us now to consider. The stamen has a work to do widely different from that of exposing a large surface of green to the air and sunshine; so that the cells beneath the epidermis of the anther, in place of containing chlorophyl grains—those bodies which give the green color to vegetation—have pollen



REANA LUXURIANS—"TEOSINTE."

grains. Figure 2 shows a part of an ordinary leaf above and a portion of anther below. These pollen grains represent the male element in flowering plants and consist of small roundish masses of protoplasm (Fig. 2, *c*, *d*, *e* and *f*,) provided with two protecting coats of cellulose, the outer often beautifully marked with bands and spines. This pollen is the "fertilizing dust" of flowers, and, when mature, escapes into the air through a rupture in the anther sacs. The production of these pollen grains is the aim and end of all stamens, and when this is done, they wither away and soon cease to be.

The pistil is a specialized organ also, consisting, when of a simple form, of a single leaf, with its edges folded in and united, thus forming an inclosed space called the ovary, above which the leaf is prolonged into the style and terminates in the stigma. Along the infolded edges of that portion of the leaf which makes the ovary, small bodies are produced which have received the name of ovules. Each ovule is an outgrowth from the leaf-edges, and consists of two coats of cellular tissue, not quite inclosing a mass of cells, within the central one of which is the *embryo sac*, which contains a little globule of protoplasm, the *embryonal vesicle*. (See Fig. 5.) This is the female element of flowering plants. Pollen grains and embryonal vesicles are thus the sexual elements. The pollen grains are small masses of highly endowed protoplasm, formed from the central cells of staminate leaves, which, by the breaking away of the surrounding membrane, are *set at liberty* from the male phyton which has produced them. The embryonal vesicles are also peculiarly vitalized masses of protoplasmic matter borne in the center of protecting layers of cellular tissue, and are *not* set free from the female individual which produces them.

SEXUAL ACTION IN FLOWERING PLANTS

consists in the union of the contents of a pollen grain with that of an embryonal vesicle, and is called *fertilization*, and is brought about, first by transfer of the pollen from the anther where it is produced to the sticky, receptive surface of the stigma—pollenation—secondly, in the growth of a tube from the pollen grain, down through the style to the embryo sac, where the contents of the grain—by means of the tube—pass by osmose, or membrane diffusion, into the female cell. It is, then, through this portable mass of protoplasm that one plant individual acts upon another for the production of a third. This third and new individual is the embryo plantlet which develops from the embryonal vesicle which has been stimulated into new growth by the pollen grain, whose contents have mingled with its own, and when the proper time comes the little individual, provided with food and protection, is thrown off from the parent community to begin a new colony and thus continue the species. The end of the flower is the seed; and the essential organs in the production of the seed are the stamens and pistils. The end of the seed is the beginning of a new community of plant individuals, all working together for the same common end—the production of new seeds.

And thus seed time and harvest do not fail, and the cycles of life move constantly forward.

The Apiarian.

HINTS TO INEXPERIENCED BEE-KEEPERS.

O. O. GEORGESON.

THE honey-gathering season is past, and the surplus honey sold or stored away for future use. So far the inexperienced bee-keeper may have met with but few difficulties in the management of his stock, and encountered little or no loss.

The most perplexing problem that now presents itself to him for solution is how safely to winter his bees, so that in the spring they may come out healthy and strong, ready for another season's work. This is a question that often proves a stumbling-block to the inexperienced, and one in which a mistake will be most severely felt. Yet, it is not at all a difficult matter if a few necessary precautions are observed, and of these I will first mention the necessity of keeping the colonies strong.

Strong colonies are to be preferred at all times, in the honey season as well as during the winter. It is from these that a good yield of honey is expected, and, other circumstances being equal, they endure best the inroads of robbers, disease and injudicious treatment. Weak colonies stand but a small chance of passing safely through a severe winter. The bees are few in number, and if the temperature should sink rather low, they are more likely to suffer than those in a strong colony, especially if they have not been breeding as late as the beginning of October. Late breeding is of importance; it not only indicates the prolificness of the queen and the general vigor of the colony, but as bees live but from three to seven or eight months, according to the season, it supplies the colony with active bees for spring work.

If for any reason there should be several weak colonies in the apiary, it is better to unite two or more into one colony, before preparing them for winter, than to run the risk of losing all before spring. This may be safely accomplished by daily bringing the hives a few feet nearer to each other, till they stand side by side. Then, on a pleasant day, find the queens of both hives, remove the poorest one, and empty her bees into the other hive by taking each frame and holding it over the colony whose strength it is desired to increase; give it a sharp jerk so that the bees fall off, and with a brush remove the few that still adhere to the comb. They may perhaps fight a little at first, but by smoking them with rags or rotten wood, with a few pieces of onion added to the fuel in the smoker, the hostility will soon subside.

In preparing for winter, which may be done now on any pleasant day during October, give to each colony thirty pounds of good capped honey; on a less amount they will be in danger of starvation, while more than this will be superfluous. Pack the frames rather close together in the hive, and to facilitate communication from frame to frame, make a hole of about half an inch in diameter in the middle of each comb. Put a division-board next to the frames; cover with a piece of quilt or thick cloth, ready for the purpose, and fill the vacant space in the hive, if any, with clean straw. Thus prepared the hives can remain at their places till cold weather sets in, when they should be brought to their winter-quarters.

Any dark, quiet room or cellar, free from dampness, and where a temperature of between 35° and 45° to 50° can be maintained, forms suitable winter quarters. It may not always be possible to command such a room, but the nearer these conditions can be approached, the better. Here, store the colonies as closely together as convenient, and if they continue healthy through the winter, let them remain undisturbed till the warm days of spring again call them into activity. *Do not let the temperature rise above 50° F.* if possible to prevent it. Above this temperature the bees become restless, eat more than they otherwise would, and are very liable to get dysentery. The presence of this disease may be known by a continual loud hum and noise in the hive, and, after a while (mostly when it is too far gone to be cured), a repugnant smell on opening the hive. If this disease should set in, choose the first warm and pleasant day in which to remove them to their old places in the apiary, that they may enjoy a cleansing flight, and of course, bring them back again at night. On the other hand, if the temperature should sink much below freezing, ice may be formed on the comb and prevent the bees from getting to the honey, and they may die from the combined cold and starvation.

In lieu of such a wintering place as that above-mentioned, other methods may be resorted to. Each hive may remain at its place, and a box, about two feet longer each way than the hive, nailed together of rough boards and supplied with a movable, slanting cover, may be placed around it. Then pack the space between the hive and box with chaff or straw, and secure the cover from blowing off. To permit flight when desired, let a wooden tube lead from the entrance of the hive to the outside. This method has been successfully employed here at the college; and if the colonies are strong and the place somewhat sheltered from the fierce winds, as the apiary always should be, such covering will be sufficient in all ordinary winters.

Another method, which has also been successfully tried here, is to bury them in the ground. To this end, dig a hole in a dry, sandy spot, about three feet deep, and of such lateral dimensions as the case may require. Put some straw in the bottom, on which place the hives close together, and pack with clean straw all around the sides and top. For the admittance of air, let a small tile lead from the hives to the top of the heap. Cover all with a layer of dirt sufficiently thick to exclude the frost, and they will remain safe till spring. For obvious reasons it is of importance that the place should be dry and the ground sandy, so as to allow free passage to any moisture that might gather from atmospheric precipitations. The hives should not reach above the level of the ground, nor should they be placed on top of each other, as the bees in the upper ones may get too warm, suffer from dysentery, and die.

During the winter, mice are sometimes troublesome guests in the apiary, especially if the hives are surrounded by straw in which they can harbor. The best preventive is to have the hives so tight that they can gain no admittance. For the sake of ventilation, it is not well, however, to have the entrance closed air-tight. Therefore, fasten a piece of wire gauze over the entrance of the hives that may be in the cellar or that are buried in the ground; this will exclude mice and admit air; and over the entrance of hives, that are covered with boxes, as mentioned above, fasten a piece of tin about a quarter of an inch above the bottom board, so that the bees can just pass under the edge of it, while the mice are excluded. The ordinary dangers, then, to which bees are exposed during the winter, are starvation, mice, too much cold, too much warmth, or, as in the case of weak colonies, they may die a natural death, and from sheer lack of young bees the hives may in the spring be void of life. But if the inexperienced bee-keeper will follow the above hints, he need not despair of wintering his bees successfully.

Michigan State Agricultural College.

The Garden.

CALIFORNIA SMALL FRUIT REPORT.

THE STRAWBERRY.

OF all the small fruits none is more popular with the masses in California than the strawberry. The season just passed has been a beautiful one and very productive. The crop of strawberries was unusually large, and at all times brought remunerative prices.

In the strawberry there have been more improvements made perhaps both in regard to quality and size than in any other kind of fruit. Our growers are beginning to realize this, and during the past season have more or less extensively experimented with the newer and greatly improved varieties. These experiments have pointed out most distinctly that varieties which are most successful in one locality are entirely worthless in another, making an imperative necessity for local selections. Another lesson which the observing grower has learned is, that varieties from one locality do much better than the same varieties from another section; thus, a plant of Monarch of the West from Southern Ohio, will grow more luxuriantly and bear earlier and more abundantly than a plant of the same variety from northern or middle New York. It would be well for intending growers to experiment in this way in order to learn from what section to get their supplies. As to

VARIETIES,

I can only report those which have proved worthy of culture in El Dorado County.

THE PROLIFIC is the standard variety throughout the State. Where irrigated and well cultivated, it produces abundance of large, rich fruit. In my grounds it commenced ripening in May.

THE MONARCH OF THE WEST is one of the most promising varieties here. It bears large, rich fruit in abundance; bears for a long season, not as constant as Prolific.

THE PROUTY'S SEEDLING will doubtless be in a few years a leading variety. It produces well, bearing abundantly large, rich berries. When irrigated, it bears from May to November. The fruit is a bright red, delicious in flavor, of good size and a fine shipper. One thing that is absolutely necessary in a good strawberry is, that it should be firm and sound in order to insure good shipping. This quality the variety under consideration seems to possess in a high degree.

BOYDEN No. 30 is a very fine variety, bearing abundantly, but not as constantly as Prouty's. The fruit is of good color, size and shape, moderately firm and a tolerable shipper. We have many other varieties, including the Colonel Cheney, Great American, and other highly recommended sorts, but I cannot as yet speak of their desirability for our section. If I were planting an acre of Strawberries, two-thirds would be occupied with Prolific and Prouty's Seedling.

The Poultry Yard.

POULTRY NOTES.

FOR the past eleven years I have been interested in everything I have seen printed about poultry, as I have been anxious to learn the best method of keeping fowls, and whether a farmer could make any profit from a stock of 100 or 200 hens. I have come to the conclusion that, according to the nearly unanimous verdict of different writers, there are few things from which a farmer can derive so large a profit with so small an outlay, as from a flock of fowls of the right breed, properly treated. I have kept from 25 to 60 birds in order to ascertain by experiment which breed was the best and would yield the largest profit. My conclusion is that farmers can do much better with good common hens, with some good-blooded cock, than with a flock of fancy fowls. A good cross among poultry is as valuable as among stock. One of the most profitable kinds for a farmer is a cross between the Leghorn hen and a Poland or Brahma cock. Their progeny are good layers, nice for the table and profitable for market. The White Leghorn is the most profitable breed for eggs; they need a little more care than some other sorts, but care of poultry pays.

In order to secure a profit from fowls, however, a few conditions are essential. First, every farmer who keeps hens should build a hennery for them, so arranged that it can easily be kept clean and well ventilated. In winter the temperature in it should be warm enough to prevent it from freezing—say from 45 to 60 Fah. A supply of fresh water therein is of great importance; hens drink often if they can get water. Ground feed is best when eggs are wanted. Corn and wheat middlings form an excellent combination for food; but meat should be given them, by way of a change, once or twice a week, if not oftener. With a large flock of fowls this is essential. Nests should be made of bright straw instead of hay. Hens are pleased with a neat place for depositing their eggs, and appreciate good care. Hens receiving proper attention will give a net profit of $1.50 to $2.00 a year each until they are four years old. Clam shells are excellent for making egg shells. They should be burnt, pulverized and kept in the hennery at all times, especially in winter.

Broome Co., N. Y. D. S. HOYT.

Miscellaneous.

GARDEN TALKS AND WALKS.

RENOCLAF.

THE BEECHES, Mass., Oct. 14th, 1878.

COLD-FRAMES.

MOST people know what these are and how easily and cheaply they can be made, how readily they may be moved about as desired, and the many precious plants we can winter in them better than elsewhere. Plants suitable for cold-frames should be planted out rather than kept in pots, and in this way they will grow more stocky and robust, flower longer, and need less care as regards watering and covering up. Sashes should be used to cover the frames, and in the event of severe weather, Russia mats, straw mats, wooden shutters, or loose straw may be placed over the sashes as additional protection. Snow is a first-rate protection, but should never be left on the sashes after it begins to thaw.

WHAT TO PLANT IN FRAMES

is now in order. First throw out some of the old soil, and fill up to within ten inches or a foot from the sashes with fresh loam, some very old manure, and leaf soil, if to be had; and if that be not free and open enough, add some sharp sand. Then plant Pansies, Violets and Daisies to blossom in winter and spring, Christmas Roses for January, Alpine Cyclamens for February, Anemones and Polyanthuses for spring, and such other early-flowering beauties as we can conveniently get and find room for. Besides, we want frame winter protection for a number of biennials for next summer's flower garden: for instance, Snapdragons, Wallflowers, Canterbury Bells, Centranthus ruber, etc. And, again, there is a number of unreliably hardy perennials that are better wintered in frames and transposed to the open garden in spring: for example, Plumbago Larpentæ, Verbena venosa, Liatris elegans, Vernonia Lindheimera, and many others. True, in many places these are quite hardy, too, and in some seasons and under some circumstances they may survive the winters unscathed in localities where, were they growing under different circumstances, they would be winter-killed. Many hardy plants, as Winter Aconites, Jonquils, Blue Squills, and the like, are often grown in frames, but when these are perfectly hardy out-of-doors, I cannot see the economy of such tender nursing. How to take

CARE OF PLANTS IN FRAMES

is of great importance. Do not let heavy rains and snow fall on your Pansies, Violets and other plants you have set out for spring-blooming, but at the same time be careful to ventilate freely, day and night, on fine weather; remove the sashes altogether in fine days, replacing and tilting them up at night. As regards the annuals, biennials, and perennials planted in frames merely to carry them through the winter, let them have a good deal of rough weather and frost from now till Christmas. Protect them from heavy rains, but at the same time tilt up the sashes or cover at back and front. Do not protect them from slight frosts, either by day or night; in fact, for a couple of months to come they may remain perfectly exposed, unless a severe frosty snap or two will come, when, of course, protection should be given.

LEAVENWORTH'S ERYNGO.

Talking of grasses and everlastings for winter bouquets, in a late number of the RURAL, I see there is no mention of this beautiful plant It is a Texas annual. We treat it like stocks or Asters, and now, when almost all other hardy plants have done blooming, its branches are laden with brilliant deep-purple flower-heads and involucral bracts, and the stems, too, have changed to the same color. But their great merit is their "everlasting" nature. Cut now, they retain their beautiful coloring all winter long, and their branchy habit and odd-like flowers being so distinct from the ordinary winter-bouquet stuff, they are quite a desideratum. Besides, like rosy cheeks, they are nature's coloring, that no dye can imitate. I do dislike dyed grasses or flowers. They are deceit. Give us nature and purity.

[We are in hopes to be able to offer this as one of the varieties of our Free Seed Distribution to be announced next week.—EDS.]

COOKING.

MRS. V. F. K., p. 656, Oct. 12, asks some of the RURAL ladies to furnish a good reliable recipe for Boston Brown Bread. Well, I am not a lady, but for the love I bear the blessed creatures, perhaps they will pardon me if I report from headquarters. Every Sunday morning, in true Boston style, we have brown bread and baked beans; we cook them at home, and as follows is just how we make our

BOSTON BROWN BREAD.

Use one quart of Indian meal, half quart rye meal, and quarter quart of wheaten flour; add a little salt, and barely a cupful of molasses. Raise it over night with yeast. Mix it soft with warm water in cool weather and cold water in summer time. Add a little saleratus in the morning before baking. Bake in an earthen pot or tin pan—most people use the earthen pots. Bake slowly.

Our women folks say you will not be likely to succeed well till after two or three attempts. I never cared much for brown bread, but I do like what we call

FRENCH TOAST.

Cut some white bread into one-half or one-third inch slices, then beat up some eggs with a little milk and sugar added, dip both sides of the bread in this, and dust on some powdered cinnamon. Then fry the slices till slightly browned' taking care to have the frying-pan hot and well larded before putting the bread into it.

These are not book recipes, but written to practical dictation.

THE TRUTH ABOUT IT.

[UNDER this heading, a number of articles have been prepared by able writers. These will appear from time to time. Their object is not at all to deal with "humbugs"—but with the many unconscious errors that creep into the methods of daily country routine life.—EDS.]

POPULAR ERROR ABOUT CHESS OR CHEAT.

THERE is rarely a generally popular delusion that has not some truth at the bottom of it, or some truth has been the seed from which it has sprung. One of the most popular delusions of the agricultural mind is that wheat or other small grains change their character under some circumstances, the former producing chess or cheat; and oats, among the latter, producing barley. Recently, as might have been expected from the constant wheat-growing in California, chess has begun to abound everywhere, and this weed is so prevalent as to give occasion to considerable popular excitement. The old idea has revived, and has gained such strength that men who seem to be otherwise well-informed, are insisting that the prevalent chess is degenerated wheat. Now, it is useless to argue with men who will believe that one plant, by reason of untoward circumstances, will change into another as different from it in its structure as an apple tree from a rosebush or a blackberry; or as different in character as a sheep and a goat. But the idea has become fixed in men's minds because the growth of a plant from a seed is something that is invisible to them in some cases, and they do not realize that no living thing exists that has not been derived from a seed, an egg, or some other similar source of

germination. There are men who believe very firmly that weeds are *natural* to the soil and grow spontaneously; and others, that potato beetles and other insect pests *are sent* and come and go by some mysterious dispensation. Now, as regards *cheat*, the origin of the delusion seems to be that the true cheat is merely an abortive or degenerate grain produced by plants diseased and stunted by the attacks of an animalcule known as Vibrio tritici. Instead of the plump grain expected, a shriveled, chaffy abortion, called "drips" by some, is gathered and this has been known as *cheat* for centuries past in England. Here is the basis from which the prevalent error has sprung, and anything that has had the appearance of the blasted grain, has come to be called cheat or chess, which are synonymous. To look into the origin and nature of things is necessary to the discovery of error, and if farmers could only study a little of the botanical character of the grasses, they would easily discover the truth of this matter.

H. S.

INFECTIOUS ROOMS.

Our correspondent, Mr. S. Rufus Mason, writes us that he is just recovering from a very dangerous attack of typhoid fever, and a knowledge of the way in which the disease was contracted may be a warning to others against exposing themselves to infection in places where the air is vitiated by the germs of putrefaction, whose presence is often indicated by offensive odors.

COMMON MILLET, (PANICUM MILIACEUM) AFTER FLINT.—(See page 694.)

In the latter part of August Mr. Mason was called to an old friend and neighbor to write his will. He was dying from an abscess in his side, of a most offensive character, which had already commenced to mortify. The stench was intolerable. He was in a tight room, only six by eight feet, with no ventilation, while the thermometer was at 84°. For two hours the visitor was shut up with him, and nearly fainted before he got through, but afterwards he thought no more of it. On the first of September, however, he was stricken down with the fever, confined to his bed for over three weeks, and, as stated above, is now slowly recovering.

WHAT OTHERS SAY.

TO RELIEVE CHOKED COWS.—In the always interesting proceedings of the Elmira Farmers' Club, as efficiently reported in the Husbandman, we find the following:—"My way is to open the mouth of the choked animal and insert a clevis wide enough to keep the jaws distended, and give space for the passage of a boy's hand. I hold the clevis in place, while my boy passes his hand through and picks out the apple or other obstruction. Any boy whose hand is small enough to pass without crowding, can easily remove the trouble with entire safety. I have tried to do it myself but my hand is too large. There is no difficulty or danger if the clevis is firmly held in position."

Another member said that an easy way to bring relief is to cause the choked animal to jump over bars as high as may be leaped with considerable exertion. It never fails to eject the offending substance or cause it to pass downward. He had tried it many times, always with success.

FIG. 3. ELUSINE CORACANA, (FROM LIFE.)

PROGRESS OF THE PHOSPHATES.—Professor Caldwell remarks on this subject, in the Weekly Tribune, that Mr. Lawes, whose name is as familiar a household word among English and American farmers as Liebig's, was the first to manufacture superphosphate on a large scale, and offer it in the markets as an article of trade. In 1858 he made 12,000 tons, procuring the raw material from beds of mineral phosphate in England owned by himself, from Norway and Sweden, and from bones imported from America and Germany. In 1870 the product of his manufactories amounted to 40,000 tons. In 1872 he retired from the business, and his extensive works were purchased by a company with a capital of about $3,000,000.

In another part of the article he says that Georgia is now the banner State of the Union with respect to the consumption of commercial fertilizers; and the State Government has set an example that might well be followed by other States in the older parts of the country, in the enactment of laws for the protection of consumers from fraud, and—what is often quite as important as the enactment of laws—in making liberal appropriations for carrying them into effect.

FARMING IN ENGLAND.—"Our local weekly papers teem with advertisement of sales by auction of live and dead farming stock, and it is interesting to read the "why and wherefore" of such and such sale. Some are relinquishing business, some going to a far-off country, others declining farming, and others speak of their tenancy expiring; and some we know of, have failed in their business, broken their covenants, and, if reports be correct, have not paid their last year's rent yet. It is no manner of use people going into farming if they have not got capital at their back. The tight-screw principle or make-shift system will not pay. We have before our eyes two fields of turnips very near to each other on the same side of the road we travel along; one is tenanted by a well-to-do farmer, who has mucked and worked his land well before sowing, and there is a good crop. The other belongs to a poor farmer, who cannot afford to buy manure, and is very nipping with labor, and consequently has only half a crop."—*London Ag. Gazette.*

ORIGIN OF THE JERUSALEM OR SUN-FLOWER ARTICHOKE.—A correspondent, J. J. Miller, Kansas, U. S., in the RURAL NEW-YORKER, writes:—"I am not wise enough to decide who invented the Jerusalem Artichoke, but this I can say, and vouch for, that it is found growing wild in abundance on the banks of the streams in this section, where none has ever been planted, where the virgin soil has never been touched by plow or any instrument or implement. They were here when the first white man arrived."

The Town and Country Journal, of Sydney, Australia, commenting on the above, says:—"The plant is indigenous to Brazil. How can Mr. Miller prove that it was found or existed before the advent of Europeans? He cannot have studied geographic botany."

[The editor of the above journal is mistaken. The Jerusalem Artichoke did not come from Brazil, but probably *did* originate in the Mississippi Valley from a species of Sunflower, Helianthus doronicoides, which there grows wild.—EDS.]

AN INTERESTING HYBRID CONIFER.—In his private garden at Verrieres, says the London Chronicle, M. Henry Vilmorin has, among other choice coniferous trees, an interesting and very handsome hybrid Conifer, obtained from a cross between Picea Pinsapo and P. Cephalonica. We do not remember at the moment which was the seed-bearing parent, but whichever it may have been, a dozen cones were fertilized. Of these, only one "set," and in this there was only one fully developed seed, which gave birth to the plant in question. The specimen, which measures eight feet in hight and as much in diameter of branches near the ground, is thickly furnished, differs from both its parents in the arrangement of its leaves, and promises to make a distinct and noble-looking tree.

"IMPORTATION OF AMERICAN CHEESE," the London Gazette states, "is growing, and appears to grow in spite of our low prices, which alone, however, can be trusted to check it. The pinch thus given us will be felt more and more. Let us hope that it will stimulate us to a greater attention, carefulness, and skill at home. In the contest of qualities those which are good will obtain a sale, and the inferior sorts will be more and more absolutely refused as the quantity of the latter increases in the market.

If our English dairies would, as they might, turn out the higher qualities alone, the American importation would be nowhere in competition, and we should be saved."

PERSONAL GENEROSITY, says the Town and Country (Australia), needs undoubtedly to be exercised judiciously, but when so exercised it is worth all the other generosities in the world. The man or woman who will take a fellow-creature by the hand and assist him to rise out of the mire into which he may have fallen, or stands by the sick and suffering, and with tender care and loving words softens their anguish, performs an angel's part. Would there were more who did this! There would be little need for big institutions and their long lists of subscribers who never, from year's end to year's end, enter the building they maintain.

FULTZ WHEAT.—The American Miller thinks this is the best variety now in the market, and if properly farmed, it will yield on an average equal to any wheat in the country. Many farmers claim 40 bushels per acre this season. It has a stiff straw, and does not lose any grain in handling, and when cut, will lie compact and take up less barn room than any other variety of wheat. It will weigh 64 lbs. per bushel, if clean; it always sells readily for the highest price, and the flour manufactured from it has no superior.

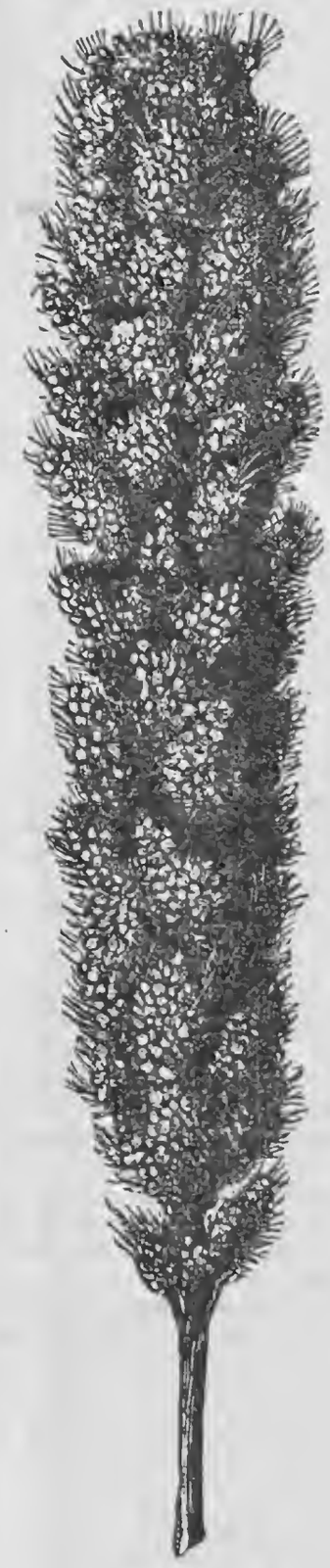


FIG. 2. HUNGARIAN GRASS. (SETARIA ITALICA) FROM LIFE.—(See page 694.)

POUNDS TO THE BUSHEL.—Blue Grass, 14; Oats, 32; Hemp Seed, 44; Timothy Seed, 45; Castor Beans, 46; Barley, 48; Flaxseed, 56; Rye, 56; Shelled Corn, 56; Onions, 57; Wheat, 60; Clover Seed, 60; Salt, 75; Corn on the Cob, 75.

"UNLESS prices take a turn before another season, many makers of second-class English cheese will turn their attention to something else."—*London Farmer.*

THE Western Rural says that the game the lightning-rod men play is, "Heads I win—tails you lose."

Dairy Husbandry.

FARMERS "BEARING" THEIR OWN MARKET.

T. H. HOSKINS, M. D.

FARMERS have complained bitterly of the effect of the oleomargarine manufacture upon the price of butter, and there is no doubt in regard to the fact that oleomargarine has killed the market for cheap grades of dairy butter. It is, in fact, a *sin* to convert good milk into poor butter or cheese, and we should all be glad when any sin becomes plainly unprofitable. The thing to be done now is to learn how to make good butter, and *make it*, or quit dairying for some business requiring less skill, care and neatness. "Scrub-farming," of all sorts, is getting very unprofitable in this new era of small margins, and the result will be such improvement in agriculture as comes from the pressure of dire necessity—a force of far greater potency than the persuasive voice of the agricultural editor, charm he never so wisely. The "root-hog-or-die" principle is being applied to a good many of us in these days, and as necessity is the reputed mother of invention, it is possible that a good many owners of cows will come to the conclusion that there *is* a difference between good keep and poor keep, between clean milking and dirty milking, between a careful and a slovenly handling of milk and making of butter, between a "good-enough" not seen by the buyer and the "first quality" that is sufficiently evident to be recognized in the market.

There is no doubt at all that the market for dairy products is, in the language of Wall Street, "beared"—that is, depressed, by the very large quantity of inferior goods forced upon the public over and above the natural demand. This demand is indeed now well supplied by oleomargarine, which takes the place of, and is generally preferred to, the cheaper grades of dairy butter.

Yet this is not the "bearing" of the butter market which I had in mind when writing the heading of this article. I wish to call the attention of dairymen to a depression of the market for even first-class butter, wrought by the product of cows that do not pay their way. In almost every herd there are cows that never make butter enough to pay for their keep. In not a few of our dairies 25 per cent. of the cows are of this class. I have known whole herds that, with the keep given, did not yield a dollar of profit to the owner; and perhaps would not with any keep.

Now, let us suppose that one-fifth of the cows kept for making butter in this country are of this class—cows that do not make enough butter to pay expenses. This butter goes into market at cost, or less than cost, even when well made and bringing the top of the market. The farmer has the care of them and the labor of manufacturing and handling their butter, yet without profit. If at an actual loss as, in many cases, this loss must be deducted from the small profit yielded by the rest of the herd. *And yet this butter comes upon the market in competition with that of paying cows*, and must depress the price of their product.

It is said that Vanderbilt objects to competing in freight tariffs with bankrupt railroads that do not pretend to pay any dividends. In this Vanderbilt shows the shrewd common sense of a trained business man—a common sense which is quite as useful to the farmer as to the man who carries the products of the farm to market. Are not the farmers who are running twenty-five "bankrupt" cows in competition with seventy-five that pay dividends, lacking in business sense? Are they not filling the market with goods upon which no profit is possible, and thus weakening the price of those goods on which they must make what gain they have to depend upon for a living? Are they not plainly "bearing" their own market; thoughtlessly, stupidly hurting their own trade far worse than the oleomargarine makers, who only compete with a class of goods that never should be made at all?

I put these questions squarely to the intelligent dairymen who read the RURAL and are farming for profit: "Had you not better at once, if you have not done so already, begin a thorough testing of each and every cow in your herd, with the purpose of ascertaining whether she makes butter enough to pay you for keeping her? And if you find that she does not, does not your interest, as a dairyman, demand that all such cows shall at once cease to make any butter at all?"

If the cows now producing butter at a loss were all put into beef this fall, the supply would be reduced and prices must rise. Thus the dairyman will make a double gain. He ceases to lose on the poor cows, and makes more money on his good ones. He stiffens his market instead of weakening it. He puts his feed and his labor where they will do the most good. He shows business sense, and if this view of the question could be brought home effectively to the minds of the dairymen of this country this very fall, the profits of dairying would be raised fifty per cent. next year, even though the price of butter did not advance at all. But if, as we might justly expect, a short supply was followed by an advance in price, dairying would have a still [illegible] it. And it needs it.

Farm Topics.

SANITARY ARRANGEMENTS FOR THE HOMESTEAD.

BY A JERSEY FARMER.

NO. 2. THE KITCHEN.

The kitchen is the workshop of the house. The female portion of the family spend therein the greater portion of their lives. That it should be conveniently arranged is necessary for ease and economy of working, and, in fact, for the saving of time and labor; that it should be kept clean and free from any infection from decaying wastes of the house, which are there disposed of, is imperative for the health of the inmates. It may be an easy matter to throw slops out of a handy window upon a pile of rubbish gathered there; or into a convenient pool at the door-step, but many a fatal case of fever or diphtheria has occurred from such a state of things—unfortunately too frequent—and the pet of the household has many a time fallen a victim to the ignorance or carelessness through which that sort of thing has been permitted. It is a question, which of the two, a well-constructed sink or a set of stationary wash-tubs, with proper drains connected with them, is the more important. The sink perhaps is the more needful, but the wash-tubs are indispensable, once their usefulness is known.

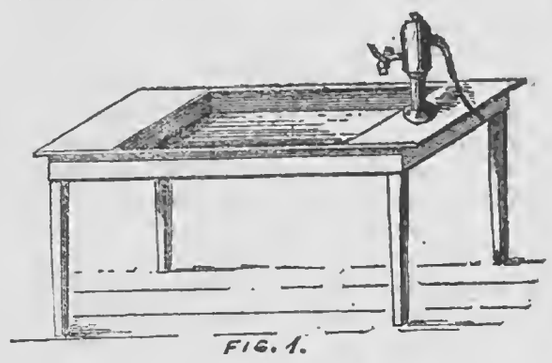


FIG. 1.

THE KITCHEN SINK

is generally a nest of foulness, even in some so-supposed well-ordered houses. It is usually closed up below, and a hiding place is there found for pots, pot rags and any rubbish that must be put out of sight. Here is the first thing that requires to be remedied. *No sink should be closed in.* From the nature of the thing, there cannot help but gather about it something disagreeable and unclean, and this becomes a pest in hot weather; for it is a breeding-place for flies and other vermin, if for nothing else. Wherever there is such a sink, the first work of the careful housekeeper should be to open it to day-light to the floor; where there is no sink one should be made without delay. There are cast-iron sinks which can be procured for a few dollars, furnished with legs so that they can be set in a corner or against a wall; but where there is a man handy with tools about the house, a very good sink can be made of wood, and painted, which will answer every purpose. A good-sized sink should be 36 inches long by 18 wide, and four inches deep. A plain cast-iron one of this size costs $3 50. A small table, at the right, should have a pump connecting with a well or cistern, and another, at the left, should be large enough to hold a tray of dishes. The arrangement complete of a home-made sink is shown at Fig. 1. The whole should be made of good fine timber, the joints put together with white-lead, and three coats of paint should be given to it. The pipe from the sink should be covered with perforated zinc, to prevent it from becoming choked, and there should be an air-trap in it; or the air-trap may be made in the drain-pipe, described further on.

FIG. 2.

STATIONARY WASH-TUBS

are such a convenience and so helpful to the housewife that a set may very well be considered as worth several years of life saved by thus avoiding the injurious results of heavy lifting of tubs and of water in and out of the house on the weekly washing day. In this sense, as well as in others, stationary tubs are a sanitary provision. These tubs are considered indispensable in a city house, and are equally so in a country house. The cost is trifling It is not necessary that they should be connected with a supply of water, although that would be convenient; it is their connection with the drain for the escape of the fouled water that is the most important point. At the same time a water supply may be had without much difficulty, as will be shown hereafter.

HOW THE TUBS ARE MADE.

The tubs should be made of clear pine, an inch-and-a-half thick. A section of the tub, showing the shape and the slope of the front is given at Fig. 2. It is 21 inches wide at the bottom; 25 inches wide at the top; 15 inches deep, and 30 inches long. This makes a tub of the largest size used in any private house. A set may consist of two or three. It is very little more trouble to make three than to make two, and the third is a great convenience.

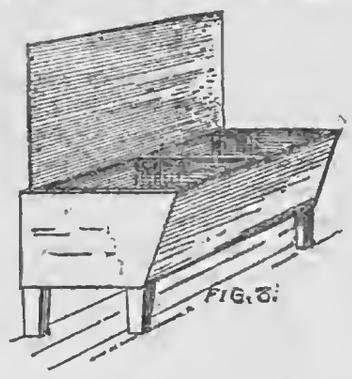


FIG. 3.

At Fig. 3 is shown a set of two tubs complete. A wringer can be fastened on to the partition between the two. The tubs are fastened to the wall of the kitchen at such a hight that the top is 30 inches above the floor; and they are also supported at each end on legs, as shown. The planks of which they are made are accurately jointed, and the joints are put together with white-lead and securely nailed with large nails. The outside is to be painted, but not the inside. Lead pipes are fitted to the bottoms, which should be strapped with S-straps and connected with the drains. Plugs secured by small chains are generally used, but wooden plugs will answer the purpose when the tubs are home-made. The lead pipe may be spread and flattened down, and fastened with nails around the hole in the bottom and the joint is made tight with white-lead.

THE WATER SUPPLY

of a house may be very conveniently made and at a small expense by arranging a suitable pump and a few pipes. For instance, the pump shown on the sink at Fig. 1, represents one made expressly for domestic convenience, and is well entitled The Universal Pump. It is a lift and force pump, and may be used in deep or shallow wells. It is made so that the handle may be behind the spout or work at right angles with it on either side. It has two openings from the spout so that by turning a "two-way" cock the water may be made to flow into the sink or through a pipe leading to an upper story into a tank, or across the kitchen into the wash-tubs. Then, again, if pipes from the pump are connected with a cistern and a well, by turning taps properly placed, water may be drawn from either at will. Further, by screwing a hose to the spout, the water may be forced to the stables or the barn, or by using a nozzle on the hose, windows may be washed or the garden and lawn sprinkled. All these conveniences make a pump of this kind very desirable and convenient and indispensable for a sink and wash-tubs.

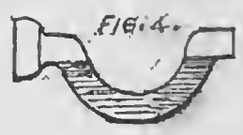


FIG. 4.

THE DRAINS

from a house are of the most serious importance; in fact, these are really a matter of life and death in many instances, if not always, and everywhere. Where waste animal and vegetable matters decay upon the ground, poisonous germs are given off, which are capable of generating the most deadly diseases. When, by ill-arranged circumstances, these germs are washed by percolating or surface water into wells, and are introduced from thence into the stomach of any person, typhoid fevers or dysentery of the worst types are occasioned, so that where fevers of any kind, diphtheria, summer complaints or dysentery occur, want of proper drainage, or the absence of any at all, may almost certainly be inferred. A drain should be perfectly well made and should have an outlet into a well-built and tightly-covered cess-pool, or what is preferable, should discharge into a liquid-manure tank, where the contents are disinfected with plaster or copperas, and are regularly removed for fertilizing purposes. The best drain is made of glazed stone-ware; the next best is made of round drain-tile; and next is a wooden pipe. If glazed stone-ware is employed, a trap (Fig. 4) should be used near the house. This prevents the back flow of foul-smelling gas through the pipes into the house. This sewer-gas is a deadly poison. If common drain tile or a wooden pipe is used, a trap made of a wooden

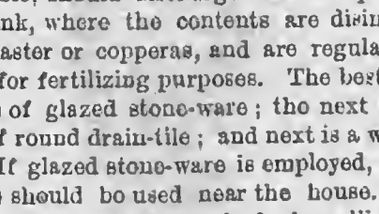


FIG. 5.

box (Fig. 5) will be effective. It is readily seen that at every flushing of the drain some water is left in the trap, which prevents any return of air from the outlet to the house. An occasional use of a pailful of water in which a pound of copperas has been dissolved, will keep a drain sweet.

A USE FOR SEWAGE.

House sewage is a valuable fertilizer. It contains much decomposed animal matter derived from the soiled clothes which are saturated with the constant insensible, as well as sensible, perspiration from the skin, which contains much nitrogen or ammonia; also potash from the soap and other matter from dish-washings. In a state of decomposition this waste has a more powerful odor than barnyard manure. No other fertilizer is more valuable for flowers, a grass-plot, shrubbery, vegetables, or as a mixture for the fields. The smallest house will supply a garden with manure in this way. To collect it, a barrel, large cask or box may be sunk in the ground in a secluded place and the drains may discharge into it; or a pit may be made in the form shown in Fig. 6, backed up with a few stones to keep the earth from falling down. All the solid waste of the house; garbage of all kinds; ashes; waste of the garden and all sorts of absorbents may be thrown into this pit and soak up the liquids from the drains. In this way a wagon load of rich manure may soon be procured. Otherwise the liquids will flow into the barrel or cask. It may be dipped out from this weekly, diluted with water and used to moisten the beds in which flowers or vegetables

FIG. 6.

are planted. Wonderful growth will thus be produced and a large sum may be realized in a year from this use of the house waste, besides the comfortable knowledge that by the sanitary precautions used, one's own health is not recklessly endangered, nor are the lives of the children—more precious than one's own—risked by avoidable dangers.

Everywhere.

NOTES FROM CENTRAL ILLINOIS.

BY AN OLD SUBSCRIBER.

WHEAT SOWING.

The largest breadth of wheat ever put out here, is now very nearly all sown. Continued dry weather has held many back, waiting for rain, and some will not sow till it does rain, if it fails to do so until the 10th of October. The excitement in favor of Fultz wheat has just reached this locality, several farmers having secured seed of that variety at considerable trouble rather than sow any other sort. I probably have the only Clawson in the county, having sown three and a half bushel of seed from an Ohio crop yielding forty-two and a half bushels per acre. The grain has the finest appearance of any I have ever seen. I have sown Fultz, Gold Medal, Sanford, Amber, Clawson, Silver Chaff, and a "common" red wheat, and expect to sow several sorts of spring wheat. Going to extremes? Yes, I like to do so occasionally. When I began with Strawberries I bought 25 varieties, and I got the right sorts for my soil by trying so many.

FRUIT NOTES.

I had a number of seedling-peach trees, which I cut or headed back regularly; I supplied them with abundance of potash, and gave them good treatment in every way. They were selected promiscuously from the lot, without reference to quality, really being no better than the rest. This season all bore, and the trees properly treated bore peaches eight and nine inches in circumference; and a common remark of observers was that I "had some fine budded Peaches among my seedlings." I thinned my Peaches and got better fruit and more of it.

I know of Ben. Davis apple trees that last year bore a large crop of fruit—too large a crop, indeed. This year they struggled and bore half a bushel of apples each; but they were the largest I ever saw of that sort. Now, if those trees were mine, by judicious pruning, and by thinning out the fruit severely in the year when they bear the heavy crop, I could make them bear a good crop the next year, when apples are usually scarce and command a high price.

A HANDY SUPPLY OF SUPPORTING POLES.

Broom corn has become a staple farm product in this part of the State. One of the difficulties encountered in raising it is to get the poles necessary to save the crop. I know of farmers who have been growing this crop for six or eight years, at a distance of five, eight and ten miles from timber, and who have no timber of their own when they get to the woods. In August scores of teams are perambulating all through the timbered districts, hunting for poles. Sometimes the hunt lasts a whole day before any one who will sell poles is hit upon, and not infrequently the hunters go home without any, and next day start off ten miles in another direction to repeat their search. Now, suppose ten or even only five years ago, they had set apart one or two acres of low, wet land on their farms, for a maple or willow grove. This grove would not only make the farm look better, but it would soon furnish abundance of poles, while the "laps" would make the summer's cooking wood. Moreover, it would furnish shelter for stock both in summer and winter, and all the labor of hauling poles long distances would be saved. But it was not done. It can yet be done however. For fifty cents a "timber boy" in June would gather a pick of maple seed on the banks of any of our water-courses, and if planted immediately, they will come up as readily as beans, grow two to three feet the first year, and reach a hight of from 25 to 40 feet in five years.

INTERCHANGING IDEAS.

Hog cholera has ruined many of our Western farmers, and will continue to do so till we profit by the example of our Eastern friends, and feed our hogs more roots, their natural food. They must have less corn, and what they get should be Mammoth, or Stowell's sugar corn. Of these varieties as much can be grown per acre, as of many sorts we now plant. The great need is to put the agricultural class into weekly communication with each other's successes, reverses, plans, theories and practices, and the only as well as the cheapest plan I know for doing this, is for the farmer to take agricultural papers, and through them give his own ideas to his brother farmers, at least occasionally. In this way we can all reap the benefit of each other's acquired knowledge, and sometimes learn in half a column's reading, how to accomplish successfully what we might have spent hard-earned dollars in trying to do, and then fail.

NOTES FROM ARKANSAS.

The Rural New-Yorker gives to the tillers of the soil valuable instructions in all the various branches of agriculture and horticulture, so that the farmer that reads the Rural need hardly make a mistake in planting or cultivating the earth, but in the Rural's columns I see no information to the thousands that are seeking new locations for their future homes. [Surely, our friend has not looked.—Eds.] The emigration this year from the East and North to the Far West is immense and nine-tenths of it is going to localities where nature has bestowed a fertile soil, it is true, but only at a distance of from 1,000 to 1,500 miles from a market, even when the country is all settled. There the hard-fisted sons of toil may raise wheat for 40 to 60 cents per bushel; beef and pork correspondingly low, while other cereals as well as vegetables, fruits, and market truck are not worth transportation. Building and fencing lumber there costs from $30 to $35 per M., while fuel is scarce and high.

I have spent many years in exploring for our most valuable minerals, coal, iron, manganese, zinc, etc., in the States of Pennsylvania, Ohio, Indiana, Illinois, Missouri, Arkansas and Texas, and I have been a close observer of the different sections as to their advantages for the production of grains, fruits, vegetables and stock, and the wealth that nature, in some of the localities, has stored away for those that may be so lucky as to inherit a portion of the soil that is underlaid with them. During my explorations in Arkansas and Texas, in the years 1876, '77 and '78, I found Arkansas to be a nearly unknown State as to her vast deposits of valuable minerals. The day, however, is in the near future, when she will produce iron, spelter, zinc, lead, crockery, queensware, cotton and woolen goods more cheaply than any State in the Union—much more cheaply than the old Eastern and Northern States.

My reasons for so predicting are: First, the coal territory of the Arkansas Valley embraces about 12,000 square miles of a pure, valuable coal, semi-anthracite, containing 80 per cent. of fixed carbon and less than three-fourths of one per cent. of sulphur. The iron ores are of the purest quality, and in abundant supply. They assay 50 to 65 per cent. of metallic iron, with no trace of phosphorus or sulphur.

Zinc ores are in abundant supply, and of as high quality as those found anywhere else in the United States.

Marl or phosphates for fertilizing purposes equal to those of South Carolina, are found here in a deposit 31 feet thick, that will yield per acre 41,000 tons, and at a royalty of but 10 cents per ton, will give $4,000 per acre.

The State of Arkansas is principally timber, one-tenth or one-twelfth only being prairie. The timber is of great variety and exceedingly well adapted to all farm uses. Good yellow pine boards can be had for $6 to $10 per M.

Peaches, Apples, Pears, Plums, Strawberries, Blackberries, and nearly all the fruits that grow in the Eastern States are produced to perfection in the fruit belt in Arkansas, and scarcely miss a crop any year; only two failures of the peach crop have occurred in 88 years.

James Watson.

RURAL SPECIAL REPORTS.

Warren Co., N. C., Oct. 16, 1878.

No frost yet. Cotton-picking is the principal farm operation about these days—yield an average one, and acreage somewhat greater than usual; present price, three cents per pound in the seed. Cow peas are below the average, on a less acreage than usual. Seed was scarce and high this year, which deterred many from planting. Oats and rye sown in August cover the ground and will furnish fine pasturage during the winter. But little wheat has been sown yet. Our farmers think cotton-seed the best fertilizer for wheat, 40 bushels per acre making a vast improvement in the crop, and costing from eight to ten cents per bushel at the gin. There are no mills hereabouts for extracting the oil;

consequently we can make no other use of the surplus over the small amount required for next year's planting. Fruit-growers are preparing to plant more Peaches; the fair crops and good prices of the two last seasons have encouraged them. The Early Beatrice seems to be the most popular sort just now, though some condemn it for the small size of the fruit. Alexander is preferred by some, but has not been sufficiently disseminated as yet, to allow of a competent decision as to its merits for this locality. M. B. P.

BELLEFONTAINE, Logan Co., Ohio, Oct. 18.

THIS has been a remarkably productive year in this section of the State, and truly the farmer has no just reason for complaint; for he has been amply paid for his labors, notwithstanding the low price of produce.

We have not had such a yield of wheat within my recollection. Very little of the crop is below 20 bushels to the acre, and some of it is as high as 45 bushels per acre. Corn, which is now being gathered, is heavy, and of a good quality. The yield of oats is good; perhaps the only crop that has fallen below an average is potatoes. The apple crop is enormous, and the price realized per bushel scarcely pays for gathering and marketing. Plums, pears, peaches and all small fruits are good.

A large crop of wheat has been sown, and the timely rains and warm weather are giving it a a good start for the winter.

Stock is doing well, and will go into winter-quarters in good condition. Our pastures are good, as there has not been frost enough to check or stop growth. A few more weeks of good weather and our fall work will be done, and then we shall want about "*two* RURALS *a week*."

G. A. H.

BEWDLEY, Northumberland Co., Canada, Oct 19.

ON the 4th of July our crops had a splendid appearance, but two weeks before harvest the prospect changed. The spring wheat will not, I think, average, in this township, over eight bushels per acre. Fall wheat is very good; that is, Clawson and Silver Chaff; Soule's is badly shrunk. Barley is a fair crop; oats, good; peas, fair; potatoes, none where the bugs were allowed to take them; where they were attended to, they are a fair crop; they are worth 60 cts. per bushel, and will be scarce. Hay is plentiful; of clover a great quantity has been left for seed; but it will not yield one-third of a crop, and that of poor quality. I sowed one pound of Pringle's Defiance wheat last spring, and I have fifty pounds from it, though I had considerable oss in harvesting it. It grows strong straw and large ears, but it has shrunk. J. F.

HUMBOLDT, Tenn., Oct. 19, '78.

THIS morning we have the first killing frost, and a little ice. Therm. 31°. Thank GOD, we now feel safe, and a new lease for life. A strict quarantine has doubtless protected our town from yellow fever and its awful ravages. From Memphis to Paris on the Louisville R.R., through West Tennessee, very few towns or stations have escaped entirely. Brownsville has been very badly afflicted. The weather is favorable for plowing and gathering crops—only a fair average with us. No late fruits, winter apples bear a good price. Oct. 20, another splendid frost.

E. F. T.

SUNSHINE, Boulder Co., Col., Oct. 15.

WE have a Cherry here, a native of the mountains, that is worth cultivating. We also have three or four varieties of Currants and red Raspberries but I do not think they are worth cultivation. The currants are large but they have an unpleasant flavor; the raspberries are fine but the vines will not bear cultivation here though they might do so East. The June or Serviceberry grows here, but it is a more shrub, often not more than from one to three feet high; but the berries are far superior to any I have ever seen in the East. A. C. S.

MENDON, St. Joseph's Co., Mich., Oct. 20.

WE have hereabouts a good soil devoted to a great variety of products. The past season wheat and oats yielded largely. Corn is a medium crop. Beans, of which a great quantity is raised here, were a fair crop. They are worth $1 per bushel; wheat, 75c. to 80c.; corn, 35c.; oats, 23c.; Irish potatoes, 40c.; sweet potatoes, $1; hogs, $2.50; farm labor, 75c. per day.

G. A. A.

NEWPORT, Vt., Oct. 21.

OUR crops have been good in Vermont, except potatoes, and we have had a good season for getting them in. Prices are low for everything except potatoes which are now bringing 65c. per bushel, with a prospect of a considerable advance. Already our local papers are begging the farmers to keep back at least enough for home consumption. T. H. H.

ROANOKE, Huntingdon Co., Ind., Oct. 22.

OUR crops hereabouts are light. Wheat yields from 12 to 15 bushels per acre; corn 25 bushels; clover seed 1½ bushel per acre. Prices are good. Farmers are all feeding hogs for November market. P. H. S.

BLOWING ROCK, Watauga Co., N. C., Oct. 19.

LAST night we had a slight fall of snow, and this morning the air is crisp and cold, while the snow contrasts strangely with the green, yellow and brown shades of the autumnal foliage, for the trees have not yet shed their leaves.

J. A. B.

NEW MARKET, Shenandoah Co., Va., Oct. 22.

WEATHER fine for seeding. Farmers have nearly all finished sowing hereabouts. Wheat, 90c.; corn, 50c.; butter, 15c. P. S. W.

RACINE, Wis., Oct. 22.

WE had quite a severe storm this morning, and it has grown quite cold. C. L. H.

WINONA, Minn., Oct. 19, 1878.

CROPS hereabouts are poor this year.

P. A. B.

The Querist.

ANSWERS TO CORRESPONDENTS.

ABOUT BONES.—1. *Relative Value of Nitrogen and Phosphoric Acid in Superphosphates.* 2 *Ground Bone and Farmyard Manure*—3. *The Organic and Inorganic Materials of Bones*—4. *Manner of Manufacturing Superphosphate.*

E. R. Walmsley, Flint Co., Mich., says:—1. What is the money value of the nitrogen and phosphoric acid in superphosphate, and what is their relative fertilizing value? 2. What is the comparative value, as fertilizers, of ground bone and farm-yard manure? 3. As bones contain organic and inorganic materials, is there any easy way of obtaining these separately; and, if so, what? and what is the function of each of these constituents? 4. Give some idea of how Superphosphate is made at the factories.

ANS.—1. There is only from two to four per cent. of nitrogen in raw-bone superphosphate—little or none when the article is made of burnt or steamed bones, and none at all in mineral superphosphate. The nitrogen in the superphosphate is worth 20 cents a pound, so that in every 100 pounds of raw-bone superphosphate there is from 40 to 80 cents' worth of nitrogen. The amount of phosphoric acid in superphosphate varies, but a good article should contain at least from 15 to 18 per cent., and some manufacturers guarantee as much as 20 per cent. The acid in that combination is worth 12½ cents a pound, so that in a hundred pounds of the superphosphate averaging 20 per cent. of phosphoric acid, $2.50 worth of that article is contained, and $1.87½ cents' worth in 100 pounds of superphosphate averaging only 15 per cent. of phosphoric acid. The comparative fertilizing value of nitrogen and phosphoric acid depends upon the amount of each in the soil and the kind of crops to which they are to be applied—nitrogenous manures being of a forcing nature, and phosphate manures being grain- or seed-forming.

2. According to the experience of good farmers in England, where bone-dust has been much more extensively used than here, and where its effects have been more carefully noted, the total action of a cwt. of finely pulverized bones is estimated to be equivalent to that of from 25 to 30 cwt. of barn-yard manure. Bone-dust resembles, in its chief constituents, the solid excrements of animals as well as straw, differing from them chiefly by being much richer in the more valuable parts of manure, as will be seen by the following comparison, taken from a high English authority:—

Constituents.	1000 lbs. of bone dust.	1000 lbs of fresh cow or horse dung.	1000 lbs of straw.
Nitrogen.....	50	4	4
Phosphoric Acid	240	3	2
Lime.....	330	4	4

Thus it will be seen, by this approximate exhibit, that bone-dust contains about twelve times more of ammonia-forming or forcing substances, and from 80 to 100 more grain-forming materials than dry straw or the solid excrements of animals.

3. Yes. If a bone be steeped in diluted muriatic or nitric acid—generally obtainable at the nearest drug-store—the inorganic or earthy matter is dissolved out, and the organic substance remains, retaining the original size and shape of bone, and capable of being easily bent. Then, again, if the bone be subjected to a strong heat, the organic or animal part is burned out and the earthy part remains, retaining its form, but ready to crumble to pieces at the slightest touch. To the earthy part, which consists chiefly of phosphate and carbonate of lime, the bone owes its hardness, density, rigidness and white color; to the animal part, principally cartilage, or some form of gelatine, it owes its strength and cohesion. In childhood the animal matter forms nearly half the bone, accounting for its greater flexibility then, and its less liability to fracture; whereas in the old, the earthy matter in the bones amounts to about 84 per cent., which explains the great brittleness of bones in aged persons.

4. The phosphatic materials, either bones or phosphatic minerals, are first ground to a very fine powder by mill-stones; the powder is then carried up, by means of elevators, and discharged continuously into a long iron cylinder having agitators revolving within it with great speed. A constant stream of sulphuric acid, having a specific gravity of 1.66, enters the cylinder at the same time as the dry powder, and the mixture of the two flows out at the other end in the form of thick mud, having taken from three to five minutes in passing through the machine. The quantity which such a machine can turn out daily is about 100 tons. The semi-fluid mass runs into covered pits 10 or 12 feet deep, each of sufficient size to hold the produce of one day's work. In a few hours it becomes tolerably solid, but retains a high temperature for weeks or even months if left undisturbed.

About Song Birds.

Fred. Offier, Miami Co., Kansas, asks whether there is in this city a bird store kept by a party whose name he gives; the names of some works treating of the best methods of raising song birds; whether we know of any one who breeds mocking-birds or thrushes in cages; a description of the nightingale, so that he could recognize it on sight.

ANS.—We cannot find the firm named, but Our Own Birds ($1.25), The American Bird Fancier (30c.) and Canary Birds (50c.) are books that deal largely with young birds. These can be had through this office. There is a gentleman, we are told, in this city, who attempts to breed mocking-birds in cages, but he has met with nothing but failure so far. He does it in an amateur way, professional bird-raisers deeming the occupation impracticable. The nightingale resembles somewhat some of the smaller thrushes in form and color as well as in the character of its song. It is very plainly colored; the upper parts being a rich brown, with a reddish tinge on the back and tail; below it is a grayish-brown with the throat and abdomen whitish; its length is 6¾ inches; the spread of wings, 10½ inches with the first quill one-third the length of the second and the third the longest; the length of the bill is about ½ an inch. The tail is moderate, and rounded at the sides; the toes are very long and slender, the outer being longer than the inner and united at the base: the hind toe is long with a curved claw. The female is like the male in color, and is nearly of the same size. The males only sing, and like other migratory birds, never during the winter in cages, and not until after the spring molt. In captivity they are very short-lived, from being kept too warm and from improper food. From this, or indeed from any other description, it would be no easy task for our friend to recognize a nightingale in Kansas; for among the multitudinous advantages of that State the presence of this bird cannot be counted; but then in this respect it's no worse off than than the rest of the U. S; inasmuch as the nightingale is strictly an "Old Country" warbler.

Destroying Borers.

R. C. K., Marietta, Ga., writes that the borers are killing the trees all through that part of the country, and asks, 1. How the pests can be destroyed? 2. The price per dozen of the Sharpless Strawberries? 3. Where can the seed of Alfalfa be bought, and how much does it cost per bushel?

ANS.—1. Offensive washes will, to some extent, prevent the insects from depositing their eggs upon the bark. When the eggs hatch, the grubs bore small holes in the tree which may be detected by the particles of wood thrown out. A wire may then be used to punch the pests to death. The wash we use consists of lime, soot, salt, sulphur, tobacco, etc., colored with lampblack and red mineral paint mixed with water. The consistency should be that of white-wash. The quantity of the tobacco, salt, etc., is not material.

2. Inquire of those who have advertised in the RURAL. See Strawberry number.

3. Any prominent seedsman. The price is about 30 cents per pound.

Treatment of Raspberries.

A. A. M., Auburn, N. Y., cultivates some red and orange Raspberries and has been in the habit of treating them to a variety of food in the shape of hen manure, autumn leaves, chip dirt from the wood-shed, clean sawdust, &c. Having a large heap of rotten apples our friend asks whether it would be beneficial to place them around the raspberry vines in the hope of stimulating them to a more bountiful yield by good treatment.

ANS.—All the information asked by our friend was given in detail in our Raspberry number, Oct. 12. It would be better to rot the apples in a compost heap before using them. Plow the ground deeply. Manure according to the richness of the soil with home manures, or if naturally rich, a thorough working of the soil will suffice. If planted this fall, cover the earth about the canes with fine manure. The richness will find its way to the roots and stimulate an early, vigorous growth in the spring. Should the Raspberries be some of the semi-hardy sorts, it would be necessary to lay down the canes and cover them with earth or something else.

Bermuda Grass.

A. B. Cooper asks where is Bermuda-grass indigenous; is it so in the Bermudas, as its name seems to indicate, and can seed be obtained from those islands?

ANS.—Bermuda-grass — Cynodon dactylon—is indigenous to British India, and was first brought to the Bermuda Islands in order that its tenacious growth might check the attrition of water which was wearing away the projecting mountain tops, which those islands really are. It was first introduced into the United States at St. Mary's, Ga., and about the same time into South Carolina. It does not seed in any part of the United States, or indeed outside the tropics, according to the best authorities. It is, therefore, a naturalized, not an indigenous product of the Bermudas, as it has become in many parts of this country.

Muhlenbergia Mexicana.

James B. McKinnon, Logan Co, Ohio, asks for the botanical and common name of a species of grass, a sample of which he sends us. It grows thickly in his orchard which he plowed in April and planted with corn, potatoes and other vegetables.

ANS.—This grass is Muhlenbergia Mexicana. It has no common name, except a general one—Drop-seed. There are several others in this country. It often thrives in open woods. It is in no way related to Quack-grass. It is of poor quality, as the stems become hard, and the leaves and tops are very light. A little persevering work, especially in dry weather, we think will kill it, if the land is properly drained.

Cement Walks.

E. S. M., Montreal, Va., wants to get some idea of the cost of a cement walk; the amount of material required to make it, and how to use the cement. The grade of the walk is such that every rain washes the gravel off.

ANS.—From our experience, we do not recommend cement walks. To do them properly the earth must be dug out at least two feet in depth and filled in with small stones. Then the cement should be used in the proportion of one part of cement to two of coarse sand. One barrel of cement would answer for about ten feet of walk three feet wide.

Self-Binders.

W F. Walsh, Chippawa, Welland Co., Canada, asks where the self-binding machine is made.

ANS.—We suppose self-binding harvesters are referred to. If so, one is made by the W. A. Wood, M. & R. Mach. Co., Hoosic Falls, N. Y. and another by the Johnston Harvester Co., Brockport, N. Y. The former uses wire; the latter, string.

Miscellaneous.

Thos. McBride, Corunna, Mich., asks what would be the price of a well-matched team of heavy draught horses in the New York market.

ANS.—In such a case as this, so much depends on the age, get, condition, appearance, temper and action of the horses, that on the above data even an approximate estimate would be extremely hazardous. The best answer we can give, under the circumstances, is from $300 to $1000 according to age, goodness and style.

J. P. McC., Jamestown, Pa., sends specimen of grass the name of which he wishes to learn as well as its value for pasture grass.

ANS.—It is Meadow Soft Grass, Velvet Grass, (Holcus lanatus). Cattle are not fond of it, and it is therefore of little value for pasture or hay. Except on poor, moist soils, it is not worth cultivating.

L. Wilbur, La Fayetteville, N. Y., asks whether he could get a small Alden Fruit Dryer, just large enough to dry the fruit on a small farm.

ANS.—The Alden Fruit Dryer is not designed for small operations. A dryer that would suit our friend's purpose better, we think, is made by the American Dryer Co., Chambersburg, Pa.

J. M. N., Boonton, N. J., asks the best way to keep through the winter a collection of hen manure swept up from time to time from under the roosts.

ANS.—See Brevities, editorial page.

Mrs. Haynes Lord, West Brighton, Staten Island, asks where is the depot for the sale of the Cleveland Rubber Paint.

ANS.—The N. Y. office is at 506 West St.

P. P. M., asks the name of some periodical suitable for a boy just learning to read.

ANS.—"The Nursery." Boston, Mass.

J. T., Albion, Ill., asks where can he get a set of tools for engraving wood-cuts.

ANS.—C. E. Little, 57 Fulton St., N. Y. City.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, OCTOBER 26TH:

A. L. J.—A. C.—D.—C. C., that is out of our power.—A. B. N.—F. D. C.—L. J. T.—J. J. T., many thanks.—J. W.—D. S. M.—J. W. G.—E. B. yes.—E. S.—M. C. G.—L. A. R.—G. A. H.—J. F.—S. R. M. welcome.—G. A. A.—B. M. P.—W. G. N.—B. F. T.—G. Mc. G.—Fern Leaf.—R. C. K.—J. I. C.—R. W. F. thanks.—V. J. E.—M. A. H.—M. O.—E. L. T.—J. T.—E. H. C.—A. L. J.—W. H. T.—"Social Reform" and others are reminded that full signature is required—H. S.—A. C.—W. J. F.—A. H. M.—W. R. B.—M. P —N. C.—

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Pearl Millet—(Illustrated) ... 693
"Egyptian" or "Pearl" Millet ... 694
Millets and their Allies—(Illustrated)—Prof. W. J. Beal ... 694
Golden vs. Common Millet—Col. F. D. Curtis ... 694
Experience with Pearl Millet ... 694
Chinese Yam—S. B. Peck ... 694
Chief Use of the Chinese Yam ... 694
Structure and Function of Flowers—(Illustrated)—Byron D. Halstead ... 695
Hints to Experimental Bee-Keepers—C. C. Georgeson ... 696
California Small Fruit Report ... 696
Poultry Notes—D. S. Hoyt ... 696
Garden Talks and Walks—Renoclaf ... 696
Popular Error About Chess or Cheat—H. S. ... 696
Infectious Rooms ... 697
What Others Say ... 697
Farmers "Bearing" Their Own Market—T. H. Hoskins, M.D. ... 697
Sanitary Arrangements for the Homestead—(Illustrated—A Jersey Farmer ... 698

Everywhere:

Notes from Central Illinois—Old Subscriber ... 698
Notes from Arkansas—James Watson ... 698
Warren Co., N. C. ... 698
Bellefontaine, Ohio ... 699
Bewdley, Canada ... 699
Humboldt, Tenn. ... 699
Sunshine, Colorado ... 696
Mendon, Mich. ... 699
Newport, Vt. ... 699
Roanoke, Ind. ... 699
Blowing Rock, N. C. ... 699
New Market, Va. ... 699
Racine, Wis ... 699
Winona, Minn. ... 699

Answers to Correspondents:

About Bones ... 699
About Song Birds ... 699
Destroying Borers ... 699
Treatment of Raspberries ... 699
Bermuda Grass ... 699
Muhlenbergia Mexicana ... 699
Cement Walks ... 699
Self-Binders ... 699
Miscellaneous ... 699
Communications Received ... 699

EDITORIAL PAGE:

The RURAL NEW-YORKER ... 700
Suavity or Agreeableness ... 700
Our Promising Future ... 700
A Request ... 700
Exaggerated Estimates ... 700
Brevities ... 700

Domestic Economy:

Fresh Sifting from the Kitchen-Fire—Annie L. Jack ... 704
Mop-Handle Papers—No. 8—May Maple ... 704
Domestic Recipes ... 704

LITERARY:

Poetry ... 701, 706
Everlasting Flowers for Baskets and Decoration—(Illustated)—J. J. Heinrich ... 701
Weaker Than a Woman ... 701
Coffee-Houses against Rum-Shops ... 702
Recent Literature ... 702
Poor Economy—Ruth ... 703
Recreative Housekeeping—A Tired Housekeeper 703
Ought We to be Gloomy at Forty?—Mrs W. C. G. 703
Those Dishes—Aunt Fanny ... 703
Bright Side View Recommended—Sarah E. K. Shepherd ... 703
The Wail and the Protest—Sans Souci ... 703
The Head to the North ... 703

Reading for the Young:

Letters from Boys and Girls ... 706
Puzzler ... 706

Sabbath Reading:

Materialism in the Popular Faith ... 706
Bible Arithmetic ... 706
Committee of Bible Revisers ... 706
News of the Week—Herman ... 704
Markets ... 705
Personals ... 707
Wit and Humor ... 706
Advertisements ... 705, 707 708

THE
RURAL NEW-YORKER.

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SATURDAY NOV. 2, 1878.

We offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

THE RURAL NEW-YORKER.

Many of our readers who have become familiar through association with the old title-heading of this journal, will best appreciate the new design that graces the first page of the present issue. While the lettering of the name has been preserved, the details have been so changed that the complete result will bear the closest critical scrutiny, inviting attention because of its suggestiveness.

The home grounds in the lower right-hand corner are typical of the refined country home, such an one as every well-to-do farmer *might* possess, thereby increasing the attractions of the homestead by simple and natural arts that create surroundings so pleasant that the young people would be loath to exchange them for the coarser allurements of city life. The foliage is true to nature, being drawn from life. All may recognize among the trees the Beech, Elm, Norway Spruce, Juniper, Hemlock, Magnolia, etc.

The bouquet over the "Y" is composed of some of our native flowers, which the artist has faithfully portrayed from life-specimens. Jack-in-the-Pulpit, Bog-arum and the Dog-tooth Violet, are in graceful juxtaposition with the Anemone, Violets and other modest flowerets.

Next, to the left, under "The," is a group of fruit and vegetables,—an exact copy of their prototypes in the field and garden; while the Blackberries, Raspberries, Grapes and Grasses further along, make a graceful and fitting border to the picture. Prominent among the industrial symbols are the bees and farm tools. The same minute attention to detail and artistic effect characterizes this group. Each implement is a model, accurate in all its parts. The vignette of the Short-horn bull is after Forbes, perhaps the most distinguished cattle artist in the country.

The complete design is intended to be a study, and its thoughtful consideration will, we believe, repay the reader. It is the work of seven gentleman, who have been unsparing of their patient labor. Under the superintendence of Mr. H. A. Jackson, the general design was made by Mr. L. Bauhahn. The cattle are from the pencil of Mr. R. Ankele, while the landscape is from Mr. E. White's sketches from nature. Mr. Wilhelme was engaged exclusively on the farm implements, leaving the hen, chickens, and several minor parts to Mr. T. Fleming. The mechanical labor of preparing the artists' work for its final place under the cylinder of the press is credited to Mr. J. C. Moss,—all of this city.

We have only now to express the hope that our readers will accept the new title-heading as an indication that Rural's promises of improvement are made to be fulfilled, and that increase of years will bring more of beauty as well as of wisdom.

SUAVITY OR AGREEABLENESS.

In that portion of the brain lying a little on each side of the upper part of the forehead, phrenologists locate the organ suavity, or agreeableness. As this is large or deficient depends, in a great degree, the natural politeness of its possessor. Some men are so organized that it is only with difficulty they can even force an appearance of politeness. Without intending it, their manner is repellent, and if they have a fair share of combativeness, antagonistic to such an extent as to make their society unsought and disagreeable. They receive favors ungraciously, and grant them in such a manner as makes the recipient regret having asked them. Of this kind was the young lady in the rail car, who took a seat offered her by a gentleman old enough to be her father, without remark. Perceiving that he stood by her side longer than she thought nesessary, she asked rudely what he was waiting for? "Merely to hear you say thank you," he replied, much to her annoyance and to the merriment of those sufficiently near to hear the remarks.

Sometimes a person really possesses a desire to be polite, the result of the action of other organs, as benevolence, reverence, &c., but lacks the power of expressing it by acts or words. Such are unfortunate, and are constant sufferers in consequence. Their questions are often put in such manner and word as to give unintentional offense, and their replies are shot out bluntly, and without the respect the circumstances demand. We know of more than one really kind-hearted and affectionate man, who impress a large majority of merely business acquaintances with the idea that they are ugly, unsocial disagreeable individuals, whose company is to be avoided.

On the other hand there are those whose brain is so largely developed and active in that region as to make them so desirous of appearing polite and agreeable that they often sacrifice truth itself in the endeavor. Of this class are those who treat you as if they desired to make you their dearest and most confidential friend; parting with you with an appearance of great sorrow, only to meet the next moment another person with the same expressions of affectionate regard. Their desire to please is so great, that their words are not always measured by the strict rule of fact, but expand or contract therefrom as it seems to them will best please the listener. Nor can those people be called really hypocrites or deliberate falsifiers. They act out their natures as inheritance and circumstances have made them.

But between these two unhappy extremes are various gradations tending to the happy mean. We occasionally meet men, (would it were oftener), whose every look and action have attractions, and whose words, not studied, are as agreeable as possible, who can say unpleasant things in such a way as to deprive them of half their bitterness, and even decline a request in such a way as makes a friend of the applicant. We cannot all attain this degree of perfection, but "character is not writ in marble," and it is left for each of us by care, attention and cultivation to make ourselves better or worse than nature leaves us.

There is no place where true politeness is worth more—is productive of better results than at home. And by this we do not mean the house and family circle merely, but everywhere about—on the farm, in the garden, among the animals. What, be polite to animals, do you ask? Most certainly, we say. And we leave it for your own observation to discover how much gentle words, pleasant tones, and kind looks can accomplish. The best cattle trainers we know have learned by experience it is not necessary to scold and abuse oxen to render them obedient; and a horse soon comes to love a gentle master. Try it with your farm hands. A request pleasantly preferred is complied with quite as readily and with a better spirit than a mandatory order. "Please" is an entering wedge to a man's good nature, and often opens the way through which the sentence following passes without friction, where otherwise it would chafe and rub.

Capt. Gardner, an old friend of ours, was a student of human nature, and knew men, their ways and their weaknesses, and their deserving too. After one of his long trips he called on us. In a conversation he said he believed, since he saw us before, he had done what no other man ever did. He had sailed a ship around the world without using an oath or striking a blow. He believed it was possible to be kind and agreeable to his sailors and still maintain their respect and obedience. He determined to try it, and proved by practice what he inferred from theory.

There are many rough places in life's journey. We cannot make them too few, try how we may; but most of us can, by a little self-control and will-power, keep back a disagreeable expression, and replace it with one not only more polite and quite as effective, but which is less a stumbling-block in the way of our neighbor.

A REQUEST.

We ask our farmers, who are not already possessed of the information, to read carefully—to study and to understand, in fact—the botany article under its appropriate department head. There is nothing new or especially interesting about it, but it explains, in simple language, what *every* farmer ought to know. What is a pistil, a stamen, an ovary, etc.? What relations do they hold to each other? Such elementary botanical knowledge is of itself of practical value, and when once gained—at least with many—leads to further investigation. At a fair held in Bergen Co., N. J., a few weeks ago, a fig tree was placarded thus: "A tree that bears fruit but never bears flowers." It seemed rather strange to us that neither the directors nor hundreds of visitors vouchsafed an explanation. All appeared to take for granted that the statement was true, and that it was, indeed, a remarkable tree. Any botany would have informed them that the flowers of the fig are inclosed within the receptacle, and that they might have been discovered by cutting open one of the young figs upon the tree in question.

There are many ways in which a knowledge of the beautiful and simple study of elementary botany might be rendered useful in the farmer's daily avocations, and we know of no other which, when fairly begun, so incites the inquirer to further research.

OUR PROMISING FUTURE.

When the owner of a farm or a workshop is producing and selling more than he is buying and is accumulating a balance at his bank, or is enlarging his good and sound credits, or his stock-in-trade, or the means of future production, he is prosperous; otherwise he is not. If two men or two thousand or two million, or the whole nation in the aggregate, are doing this, they or the nation are prospering, however much they may be practising economy, saving expenses or paying off previous debts. This must be evident. But yet there are persons who would have us believe differently; at least so far as the nation is concerned. A nation is only an aggregate of individuals, and what is true of one is true of every one together in combination.

While we are yet doubting whether, as a nation, we are in the way of prosperity or not, it might be well to consider what we are doing in business. Last year the exports from this country amounted to $728,617,425. Of this amount over $400,000,000 represented the products of manufactories of all kinds; including cotton cloths, jewelry, watches, tools, machinery, hardware, bells, locomotives, coffins, carriages, cars, statuary, paintings, books, wines, pianos, carpets, soap, boots, glass, stoves, scales, leather, ink, pins, marble, scientific instruments, agricultural machinery, and a vast assortment of other products of handicraft. These paid for all our imports, very nearly; leaving our cotton, corn, wheat, provisions and other farm products to be paid for in cash, which means gold; for that alone is accounted as money in this our best business.

Now, what an agreeable view is this for the farmer: what a home market is here opened for his produce at his doors! How much better this, than to have all these artisans working as farmers, growing pork and wheat to send to foreign countries in exchange for such things as they now make at home in their shops. Prices of produce are low enough at this time, but what would they be if the producers were doubled and the markets the same as they now are? On the whole, the figures of our rapidly increasing business with the world should be very satisfactory to every farmer, and should be a source of great hopefulness for the future, as proving beyond a doubt that our progress is sound and solid, and contains the elements of a greatly increased prosperity in the future.

Exaggerated Estimates.—Many of our agricultural writers estimate the possible yield of an acre of corn or wheat from the yield of a very small plot highly cultivated, or even from that of a single favored plant. Such reasoning excites hopes which never can be realized, though, it is true, that endeavors to realize them may, in some cases, do good. Suppose we were to reason in that way, taking our Pearl Millet plant presented on the first page, as a basis for our calculation. As it measured nearly 14 feet in circumference, suppose we allow 16 square feet to each plant. There are 43,560 square feet in an acre. This would give 2722 plants, which, at 42¼ lbs. to the plant, would be over 57 tons to the acre! The fact is, whenever anything new is offered to the public with a grand flourish, it is purchased at a high price, and given ten times the care that ordinary crops are given. The results are published as if they were due only to the merits of the new variety of plant—the extra culture is ignored.

BREVITIES.

Gather the leaves.

Plant all hardy fruits.

Be gentle and kind unto your colts.

Clear up stones, stumps and rubbish.

Harvest the sugar beets and mangels—leave the parsnips and salsify.

What is the use of talking about *new* fodder plants, if of less value than corn?

It seems that 29 bushels to the acre are the average wheat yield of England for 1878.

Keep a barrel in the hen-yard. Clean the hen-houses weekly, and throw manure into the barrel—then cover with a layer of dry soil or muck.

The students of our agricultural colleges should bear in mind that their studies there are but preparatory steps to enable them more quickly, more thoroughly, to understand in what successful farm management consists.

The English papers say that they have never before known so many farms of the better class in the market. They say that if any man will take a pen and correct the prices of any former year's balance-sheet by the prices of to-day, he will find sufficient cause for apprehension.

Many farmers will buy seeds because they are *cheap*, and run the risk of half of them being worthless. In many cases they should know that pure live seeds can not be raised, gathered and sold for such prices. Thus a bid is offered for dishonest practices, and the buyer is as culpable as the seller.

Pres. Hayes remarked in a speech last week: "Great changes have occurred during these five years of financial depression. The agricultural interests always suffer less by such depression, for in good and "flush" times the farmer is usually the last to branch out, run into debt and go beyond his means. He certainly is caught with less debt than the manufacturer or commercial man. When prosperity comes back the farmer leads off with good crops, and this makes business for railroads, steamboats and canals. It quickens and increases the products of the factory and the shop."

Skim-Milk Adulteration is justly denounced by a correspondent of ours from Circleville in this State. Although mixing skim-milk with new milk, and selling the mixture as pure new milk is probably the least hurtful form of adulteration practised by the dishonest milk-dealers who supply large and small cities with the lacteal fluid, yet no upright man will be guilty of this species of swindling; for it is not only an injustice to the purchaser, who pays an honest price for a fraudulent article, but it is also an injury to conscientious dealers, by begetting suspicions of their product and by "bearing" the milk market."

Literary Miscellany.

THE OLD PASTOR'S DISMISSAL.

ELIZABETH CUMINGS.

"We need a younger man to stir the people,
And lead them to the fold."
The deacons said: "We ask your resignation,
Because you're growing old."

The pastor bowed his deacons out in silence,
And tenderly the gloom
Of twilight hid him and his bitter anguish
Within his lonely room.

Above the violet hills the sunlight's glory
Hung like a crown of gold,
And from the great church spire the bell's sweet anthem
Adown the stillness rolled.

Assembled were the people for worship;
But in his study chair
The pastor sat unheeding, while the south wind
Caressed his snow-white hair.

A smile lay on his lips. His was the secret
Of sorrow's glad surcease,
Upon his forehead shone the benediction
Of everlasting peace.

"The ways of Providence are most mysterious,"
The deacons gravely said.
As wondering-eyed, and scared, the people crowded
About their pastor—dead.

"We loved him," wrote the people on the coffin,
In words of shining gold:
And 'bove the broken heart they set a statue
Of marble, white and cold.

EVERLASTING FLOWERS IN VASES AND BASKETS FOR ROOM DECORATION.

JULIUS J. HEINRICH.

SECOND PAPER.

DRIED Grasses, Everlasting Flowers, Pressed Ferns and Autumn Leaves can be arranged in many hundreds of beautiful designs.

Fig. 1—drawn from nature by Mr. L. F. Graether—represents a wall-pocket,—basket, filled with flowers, grasses and ferns. It makes a very effective and charming ornament for hanging against the wall. Fig. 2 is a Swiss moss-basket filled with grasses and flowers. It can be placed on the table or on the mantel in the parlor or sitting-room. Fig. 3 is one of the neatest and at the same time one of the easiest designs to make. Glue a piece of bark on a cardboard 12x14 inches, so as to represent a log of wood; then run the ferns in behind the bark and fill out with grasses and flowers. A Swiss moss-basket may be used, cut in two lengthwise. Glue this on the cardboard instead of the bark. After the basket has become dry, fill up with moss and then put the ferns and grasses in it. This can be framed, with or without glass, and looks very pretty.

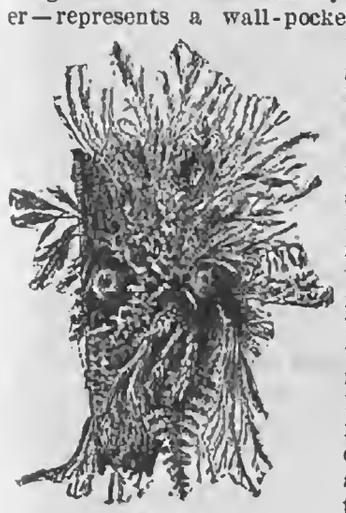

Fig. 1.

Fig. 2.

Fig. 4 is a bouquet made of grasses only. Fig. 6 is a bouquet made of flowers and grasses. These designs are popular, as they form beautiful ornaments for filling vases and they retain their shape and beauty for years. They can be made of all natural grasses, or the grasses may be dyed according to directions given in a previous article. In arranging the bouquet it is essential to use Stipa pennata to give it the graceful look which otherwise is lost, and which gives the beauty and shape to the bouquet, as shown in Fig. 4. Bouquets of domestic grasses can, however, be made without the Stipa, but they do not look as well as those with it. Before using the grasses, it is best to hold them over a kettle of boiling hot water and let the steam rise up among the grasses; this will expand them and also soften them, which will be found to make them easier to work with.

Fig. 3.

The hanging basket (Fig. 5) is made of Everlasting flowers and grasses. This design is very hard to make, as each flower is wired on fine hair wire, then twisted over fine pieces of moss, and lastly fastened to one long piece of wire which runs from the inside of the basket to the end of the branch; this is called branching. After the branches are made, the rest of the basket can be easily arranged. This will make a beautiful ornament for a bay-window or chandelier. It will last for years and needs but little care. If dust settles on any of them, they need only be well shaken and all the dust will be shaken off. Besides these, designs can be made in the shapo of wreaths, crosses, anchors, stars, and in many other styles. The straw baskets so much used by florists are especially adapted for this work. An article on Straw Baskets (illustrated) will appear in the RURAL in the course of a few weeks.

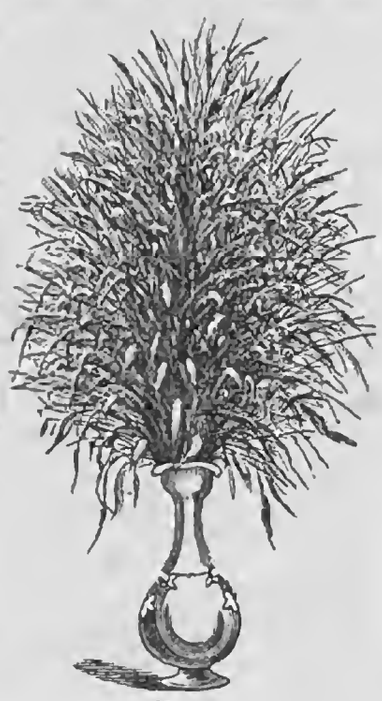

FIG. 4.

WEAKER THAN A WOMAN.

CHAPTER III.—(Continued.)

The question seemed to him almost decisive. She would not have asked it had she meant to refuse him. He could hardly answer her calmly, but he boat back his emotion. "She is so easily startled," he said to himself—"I must be very cautious what I say to her." He answered—

"Yes; and many of the boautiful things that Captain Henderson bought are thero now. To my mind it is the prettiest house in Lilford; and, my darling, I have a vision of you standing in that pretty entrance-hall, waiting for me when business hours are over. I can see the light from the stained-glass window falling on your golden hair. I can see the sunlight lying outside on the flowers. I can see my wife's sweet face grow brighter for my coming. I can see your hand stretched out to welcome mo. I can also see the years pass on, and life grow brighter and more beautiful. Do you like the picture, Violet? Will you make it real?"

His great, passionate love, shining in his eyes, trembling on his lips, touched her. Her beautiful face grew pale. She was woman enough to feel the beauty of the future he had painted for her—woman enough to appreciate the deep, honest, true love offered to her.

"I would rather not promise," she said; "but I will think of it, Felix."

"You do not refuse, Violet?"

"No, I do not refuse," she answered.

"Why, then," he cried, "the victory is won. You will be my wife. My darling, I love you all the better for your shy, sweet reserve. How could I be so foolish as to fear that I should not marry my sweet girl-love Violet? See, darling, I have been keeping this for you ever since I came home from London, last year." He drew a little morocco-case from his pocket, and, opening it, took out a pretty ring. It was of gold, set with pearls. "You will let me put this on your finger, Violet. This is your betrothal ring. You will never part with it—promise me."

She looked at the pretty jewel shining on her finger.

"No, I will never part with it," she said; "but remember, Felix, I have not quite promised."

"Not quite," he returned, with a happy laugh. "You will let me go back to the Limes with you, Violet, and tell Mr. Haye what I have asked you?"

"Must you tell them now so soon?" she asked. "It will be almost the same thing as being married if you tell them."

"It will be only the foreshadowing of a happy future, my Violet. Yes, I must tell them to-night. It would not be honorable to keep silence; besides, I am so proud of the treasure I have won that I could not be silent if I would."

They went back to the Limes; tea was ready in one of the sunny little rooms that looked into the garden, and Mrs. Haye sat waiting for her daughter. She smiled as the beautiful girl entered with her lover.

"I am not surprised," she said. "I thought it was so. Violet is two hours later than she intended to be, and then does not return alone. That is like Violet."

Later on in the evening Felix told his love-story to Violet's parents, who were pleased with it—pleased but not elated. Violet was very lovely; she belonged to the gentry. Her beauty ought to have done much for her; still Felix would certainly one day be the leading lawyer in Lilford, and the legacy had quite altered matters. But for that and the partnership, Mr. Haye would not have been willing for his daughter to engage herself to Felix Lonsdale; however, in that country spot he was now a good match. They talked for some time about the prospects of business, about the cottage *orne*, about Lilford, and then Felix knew that it was time for him to go.

Violet went with him to the garden-gate. How many times he had blessed that garden-gate! A great lilac-bush shaded it, and some of the happiest hours of his life had been spent there. The moon was shining and the flowers were steeped in glittering dew as the lovers walked through the garden. It was a long good night. They stood under the sweet-smelling lilac, and the moonlight seemed to soften Violet's heart just as it softened the beauty of her marvelous face.

"Violet," said her lover, "will you give me one kiss? It is customary at all betrothals, and this has been our betrothal-day."

She raised her fair face to his in the moonlight, and he kissed the sweet lips.

"Remember" she told him, "I have not quite promised."

"I have been thinking of your wedding-dress, Violet," he said; "it shall be of white silk. My darling, you will be such a beautiful bride that every one who sees you will want to take you from me."

The lilac-leaves were wet with dew, and the lovers laughed as the dew-drops fell over them. They laughed as the night-wind swept over the sleeping flowers—as the great boughs swayed and murmured. All the world seemed so fair. Then Felix found that it was growing late. It was hard to shorten this the happiest hour of his life, but it must be done.

"Violet, I could stand here saying good night until morning dawned; but that must not be. Good night."

Once more he kissed the beautiful face, and whispered to her that she was dearest, sweetest, truest, that the world had no other jewel so rare, that he loved her with his whole soul; but she, when her fair face was resting on his breast and his strong loving arm enfolded her, whispered—

"I have not quite promised. Felix, do not forget that."

"I shall remember it only to love you the more," he answered as he left her; and he smiled to himself each time that he thought of the words.

"You have brought good news home, Felix," said Mrs. Lonsdale, when she saw the happy light shining in his dark eyes.

"Yes, *madre*, good news," he replied. "I have seen Violet, and she was more beautiful and charming than I have ever seen her yet."

"And she promised," began Mrs. Lonsdale—and then she stopped suddenly, thinking to herself that after all she had no right to put the interrogatory that was on her lips. Felix looked at her with a bright smile. "She ill be my wife, *madre*. Mr. and Mrs. Haye are both willing. She has not exactly promised; but she will marry me when I have a house ready for her."

Love and youth were strong within him; the mighty passion stirred his heart; he could not breathe within the narrow compass of four walls. He went out into the moonlight; he could think of it all—realize it all—better there. He had won Violet. She was his own, the beautiful girl whom every one loved and admired—his own, to love him and bless him, to crown his life.

The union was a settled thing. Both families met and talked it over. It was a certainty; and a few days after Felix had placed the little pearl ring on Violet's finger he went to make inquiries about the cottage *orne*, while Mrs. Lonsdale said to herself more than once, "I do not know how it is, but I wish that he had choosen Evelyn Lester."

CHAPTER IV.

THE news of an engagement was always well received in Lilford; it was something to discuss, to think of—something in which both maids and matrons took a lively interest; and it was certain that no engagement ever courted so much discussion as this. How intensely the young farmers in the neighborhood detested Felix Lonsdale for having won beautiful Violet! Each one made up his mind that Felix Lonsdale should do no more business for him, and wondered why she preferred a lawyer to a farmer. All the old people thought it a most suitable alliance. Felix and Violet, they said, were equal in position, and marriages of that kind were the best. Mothers who had daughters of their own to marry were thankful that beautiful Violet could rival them no longer. The girls thought that Violet had won a prize, for there was certainly no one in all the country-side like Felix.

Fig. 5.

There was one pure, gentle heart to whom the news of the engagement came like a terrible blow, although it had long been expected. Evelyn Lester had never even owned to herself that she loved Felix Lonsdale, yet when she heard the news, it seemed to her that the bright face of heaven was hidden from her by a dark funereal pall. They had all been children together, and in their childish quarrels it was always Evelyn who defended Felix. He could do no wrong in her eyes; in her opinion the wide world held no other so brave, so handsome, or so noble; and the childish love had unconsciously grown with her—she called it friendship, and believed it to be nothing else. Felix had a real friendship for her, a real admiration, a great esteem, but nothing like love. He lent her books, he frequently asked Mrs. Lonsdale to invite her to the house; but it was all because he was sorry for her, and thought her life lonely and sad. Evelyn was an orphan, left to the tender mercies of a strong-minded aunt, Jane Lester, mistress of the pretty little farm known as the Outlands. Miss Lester would say of herself, "I am nothing if I am not strong-minded;" and therein she spoke the truth.

Fig. 6.

She looked like a strong-minded woman. She was thin and angular; she had what she called a useful complexion—the sun did not darken it, nor did the wind ever freshen it into deeper bloom; her gray hair was braided in most severely uncompromising style; her dress was of plain, rich material. In writing the word "woman" she always used a capital "W," and a capital "H" in "humanity." Of men as a whole she had the poorest possible opinion; she had the profoundest contempt for all their sentiments, principles, and inventions. She went to extreme lengths in her views about the rights of women. Where there was a man, she was accustomed to say, there was mischief. "If you want anything done well, do it yourself," she counseled; "do not leave it to men." She had a certain conviction that if the world were governed by women it would be quite another place. She did not dislike men, she had simply a superb contempt for them—a lofty pity and compassion that were infinitely amusing even to the objects of them.

It was the puzzle of the whole neighborhood how so sweet a girl as Eve Lester could have grown up under the charge of one like her aunt Jane. Eve was not beautiful. She was the perfect type of an English girl—graceful, healthy, with a rounded figure, a clear complexion, fair brown hair, red, ripe lips, a face that one would call sweet rather than beautiful; the dark-gray eyes were clear and tender, long lashes shading them—a frank, noble soul spoke from her eyes; her lips were firm and sensitive, with sweet and gracious curves about them. Of a hundred men perhaps ninety-nine would have passed Eve by and thought but little of her; the hundredth would have considered her face one of the sweetest and dearest. There was a quiet dignity about her, a graceful ease and self-possession that delighted her aunt. Evelyn had a small fortune entirely at her own command, but her aunt was always at hand to see that there was no undue expense.

The Outlands was a pretty farm not more than half a mile from Lilford, and Miss Lester was supposed to have made money. She, with her niece, belonged to the gentry, but, owing to the elder woman's peculiarities, the two ladies visited but seldom and seldom received any visitors.

If there was one man in Jane Lester's eyes less contemptible than another, it was certainly Felix Lonsdale. "The boy has a beautiful face," she was accustomed to say of him, "and beauty is a woman's gift." So because he had a "woman's gift" Miss Lester looked more kindly on him. She liked to see him at the Outlands. She gave him any amount of good advice; she was pleased that he should be a friend of Evelyn's.

No one was more delighed than Jane Lester to hear of the legacy, but the engagement did not please her so well. Love and marriage were folly in her eyes.

"I am disappointed in you, Felix Lonsdale," she said, sharply. "I thought you had a little more sense than the generality of men. Pray expect no congratulations from me—I have none to give."

But Eve smiled at him with her clear tender eyes.

"I am very pleased," she said, "for I know that you love Violet dearly."

"We shall always be friends," he told her.

And she answered him with a happy smile on her sweet face—"Always."

They would always be friends; for she desired nothing better in life than the friendship of Felix Lonsdale.

Miss was perhaps a trifle more disagreeable than usual for the next two or three days, and and then, to all outward appearance, everything went on as usual at the Outlands; but to Eve Lester life was never quite the same again. She was innocently unconscious of her love. If any one had suddenly taxed her with it, she would most indignantly have denied it. She hardly knew that the love of the woman differed from the love of the child. She did not know why the smiling earth and the fair heavens had so suddenly grown dark to her. She did not know why the spring of her life had left her.

* * * * * * *

Darcy Lonsdale had taken Vale House; he had for once in his lifetime the pleasure of ordering new carpets and pretty furniture. Mrs. Lonsdale was delighted. She had engaged a treasure of a nursery-governess, and prepared herself to enjoy life in real earnest. The deed of partnership had been drawn up, and the firm was known now as Lonsdale & Son. Every one agreed that Darcy had done a very wise thing in making his clever, bright, intellectual son a partner. Felix had taken the pretty cottage *orne*, and his spare time was devoted to preparing it for his beautiful bride. He had seen some fine photographs one day that he fancied would look well framed and hung upon the walls. He had asked Violet to look at them; but he could not get her to speak freely upon anything. The photographs were beautiful—with the most charming of smiles she condescended to say so; that was all. She was evidently in an amiable humor, and Felix resolved to make the most of it.

"Violet, do come and see the house?" he begged. "You say that you never visited it while the Hendersons lived there. You cannot tell how pretty the rooms are; do come and see them."

It was a brilliantly beautiful day in July; the sun shone on lilies and roses, on flowers of every hue; the earth lay in the warm heat and brilliant haze—there was a hush and sweet, brooding silence over all. Violet could not refuse; putting aside all other thoughts, it would be pleasant to see the interior of a pretty house. Mrs. Lonsdale offered to go also, and the three started together. But Mrs. Lonsdale had been in love herself, and she had pity on her stepson. When they had admired the beautiful grounds and gardens, she said laughingly—

"The kitchen will not interest you; it does me. I will go and inspect it."

Then Felix showed Violet the pretty rooms he had planned for her.

"The charm of them," he said, "is that they are full of light and brightness; from every window you see flowers and trees, through every door comes a breath of perfumed air. Oh, my Violet, we can be so happy here!"

"Is that jessamine growing yonder?" she asked. "Do gather a few sprays, Felix. I think I am fonder of jessamine than I am of any flower that blows."

He went in compliance with her wish. What request of hers could he have refused? And Violet Haye stood alone in the home that her lover sought to make hers. She stood there, dainty and bewitching; she looked round. The rooms were very pretty; she tried to imagine herself mistress there; she tried to picture herself living there, going in and out, waiting for Felix, giving orders. She tried to realize what life would be like when she was married and lived there. There would be no future to look forward to, no sweet, bright possibilities. "I should know all my life then," she thought, "it would hold nothing brighter than this;" and the dainty little foot tapped the floor. "Here it would all begin and end; there would be no more dreaming"—and she had dreamed wildly of a different life from this. Still she loved Felix.

"I wonder," said the dainty young beauty to herself, "in what I differ from other girls. I know not one but many who would gladly change their fate for mine, who would marry Felix Lonsdale and be happy in his love, who would think this pretty house a palace, and who would find the contentment of a lifetime within its walls; why cannot I do the same? What is it I am always looking for, hoping for, expecting? What more do I want? I cannot understand myself—and I am sure no one else can understand me."

The violet eyes glanced wistfully round the pretty rooms; why was she not content?

"I love Felix," she told herself; "and it seems to me that if I made an effort I could be happy and contented here. What is the effort that I have to make? I love Felix; nothing on earth can make me alter that fact." Yet she did not feel quite at ease. There was a vague shadowy feeling of something wanting that she had not yet found.

Felix amused her with his raptures when he returned. It was so novel, so delightful to see her there; and the day was never forgotten by him, because she had been gracious to him upon it.

CHAPTER V.

The inhabitants of Lilford were pleased at Darcy Lonsdale's good fortune. He deserved it, they said; his honest, honorable, industrious life had been spent amongst them; they had known him as boy and man; they had been interested in his marriage, in his children, in his business; he was one of themselves; they had been interested in his joys and sorrows and in his welfare, and now they were pleased at his good fortune.

With this sudden and unexpected gleam of prosperity came other gleams; his business increased—and Darcy Lonsdale owned to himself that he was a most fortunate man. He removed with his household to Vale House; and Felix began to think that he might induce Violet to marry him before the end of the year. He did not often speak to her of their marriage, for it was a difficult task; she would evade the question in a hundred different ways; she would laugh, yet look charming—do anything, in fact, but reply to his inquiry as to when they should be married.

He went to the Limes one lovely summer evening, quite resolved upon not coming away without a definite answer. Violet was looking even more charming than usual; she wore a white dress with blush roses, and her fair girlish face was like a sweet flower. He persuaded her to come out with him, beguiling her on the lawn under the pretext of showing her the gorgeous western sky.

"I do not care for sunsets, Felix," she said. "I cannot go into raptures over them. I see the sun set in some fashion or other every evening."

But he was so determined that she thought it less trouble to accede to his wish. The sight of the glorious sky made her thoughtful; then, when she was in a frame of mind proper for listening, he turned to her. How dazzlingly beautiful her face was in the sunlight!

"Violet," he said, "I want to quote a couple of lines from a familiar ballad to you. Can you guess what it is?"

"No, I cannot; I do not care for familiar ballads," she replied. "What is it?"

"You know 'My pretty Jane,'" he said. "The lines I want to quote you are these—

> 'Name the day, the wedding-day,
> And I will buy the ring.'

Now, sweet Violet, that is just what I want you to do—tell me when that happy day will dawn for me. Do not let the summer sunshine and the summer flowers all die before you are my wife."

She turned her startled face to his.

"You are cruel, Felix," she said. "You always spoil these lovely sunny days by talking about marriage."

"My heart is full of it," he replied—"at least it is full of you. I do not wish to startle you, Violet, but give me one kind word to dream about now. I am always wondering, 'When will our marriage take place? When will my darling consent? When will the end come to all my uncertainties, doubts, and fears? When shall I say to myself—On such a day I shall bring home my wife?'"

She answered half impatiently.

"You make so terribly sure of everything, Felix."

"Have I not the right to do so in this case?" he asked, laughing half sadly at her.

"I did not quite promise, you know, Felix."

"Perhaps not in so many words, Violet, but in honor you are bound to be my wife."

"I am willing to be your wife, Felix, but let me enjoy my youth a little longer. I am only nineteen—there is no hurry."

"You forget," he interrupted, "how dearly I love you to be with me. If I thought you did not love me, Violet, I would not urge my request—I would go far away, and occupy my life as well as I could—nay, I would rather die than make you unhappy. If you do not love me I will not hold you pledged to me, Violet."

"But I do love you," she said, looking up at him with sweet perplexed eyes; "still, Felix, it seems so sudden—"

"Hardly sudden, darling," he interrupted, "when I have loved you since you were seven years old. You will be just as happy when you are my wife as you are now—will you not?"

"I cannot tell," she replied. If she had spoken the real truth, she would have told him that she was unwilling to lay down her sovereignty—that the homage and admiration she received were very precious to her—that she liked to know she was the queen of the country-side. All that of course would end when she was married. The married ladies she knew led dull lives—or dull they seemed to her—spent in the routine of duty. They superintended their households, nursed their children, directed their servants. It seemed dreary work to her—a life that held little. She had hoped for more than this; her brilliant beauty ought to bring her a brighter fate than that which these plain-faced matrons had met.

While she sat musing with these bright thoughts plainly written on her fair face, Felix was looking earnestly at her.

"Let me say September, Violet," he pleaded; "that is a glorious month, and the house will be quite ready. My darling, gladden my heart with one word."

But he was never quite sure whether she had spoken that word or not; her eyes were dim with tears, and she murmured something to the effect that she loved him—had always loved him; while something of remorse seemed to tinge her manner. Her fingers thrilled him with their soft touch; her lovely lips quivered as she talked to him—but he could never tell whether she had whispered the word he wanted.

That evening, when he reached home, Evelyn Lester was there, and a sense of rest came over him at the first glance at her sweet face. She went up to him with the gentle grace and dignity that characterized her.

"Felix, I have heard good news—you are favored in fortune and in love. Is it all true?"

"Yes"—he told her it was all true; he had been spending the evening at the Limes—he had just left Violet.

He walked home with Evelyn, and he was struck with the strange sense of rest that came over him. She was not beautiful, but the sweet face was very fair and very tender, her voice musical and full of sympathy; she spoke so kindly of beautiful Violet, she praised her so generously and warmly, she spoke with such real enthusiasm of her loveliness, of the admiration she excited, of her brilliancy, that his heart warmed to her. She listened with such sweet sympathy to all that he had to say—to his history of the cottage, and of the pretty furniture and pictures he hoped to place therein; she was interested in it all. He said to himself that it was strange what perfect rest he found with her, a something which he could not describe, a sense of deep tranquillity and repose.

"I think, Evelyn," he said, as he stood at the hall door of the Outlands, "that no man was ever so blessed. I have the truest and fairest of loves, and the truest and warmest of friends."

The moon was shining brightly, and Eve stood in silence for a few minutes, watching him.

"You will need a friend," she thought—"and, when you do, you shall not fail to find one."—[To be continued.

COFFEE-HOUSES AGAINST RUM-SHOPS.

We sincerely hope the admirable suggestions contained in the following article (which we extract from Popular Science Monthly for November) will commend themselves to the serious attention of all who are interested in the temperance cause—more especially those whose work lies in the larger towns and cities.

The blessings of cold water may be expatiated upon until doomsday and yet the masses of working people (who furnish the largest quota of confirmed drunkards) cannot be persuaded to drink their solitary cup of cold water amid the squalor and misery that are the usual accompaniments of home-life in tenement houses, when the liquor-saloon offers the attractions of society, cards, music and a beverage which, for the time at least, cheers and exhilarates them.

It is very many years since total abstinence was first agitated, and after all these years of effort, intemperance is on the increase; this the temperance leaders themselves admit. Can their methods of combating the evil be at fault?

"A large party has been striving for half a century to eradicate the evils of intemperance by proclaiming certain great inflexible principles and insisting upon their being uncompromisingly carried out. Immense evils result from the use of alcoholic drinks as beverages, and it has been thought to extirpate these evils by reprobating the use of anything alcoholic under any circumstances, and by outlawing the commerce in these beverages. The rum-shops have been denounced, and the politicians have been called upon to suppress them. Much good may have been done; but drinking habits are still prevalent, and rum-shops still abound. The temperance reform, from this point of view, has been a failure, if by success we understand the eradication of the evils of intemperance. This failure has been, we think, at least partially due to the refusal of the master-minds of the movement to study the various ways in which partial advantages may be gained. Those who view the subject practically maintain, for example, that much benefit to the community would result if the weaker liquors could be generally substituted for the stronger, as wine and beer for distilled spirits; but this notion has been sternly resisted by the great mass of ardent temperance reformers as sacrificing first principles. All alcoholic liquors, they maintain, are poisonous, baneful, and to be equally condemned, unless, indeed, the weakest are not the most dangerous. To which the reply is, that these extreme views are self-defeating; that they have been preached until the community is wearied with it, while the liquor traffic still flourishes, and that it is the part of wisdom to check, diminish and circumscribe an evil where it cannot be wholly removed.

"Of one thing there can be little doubt, that to substitute the use of tea, coffee and cocoa, for spirituous liquors, would be a great gain. In the literature of teetotalism thus far there has been but one dietetical alterative to alcohol, and that is water. With curses upon alcoholic drinks, the temperance lecturer has interspersed copious praises of 'clear, cold, sparkling water.' In practice the abandonment of alcoholic stimulation has been often accompanied by a resort to the stimulations of opium and tobacco—a change which has in it but few elements of reform. As an ultimate fact of man's nature, he is so constituted that he seeks stimulus of some kind—some method of breaking the monotony of the feelings and getting contrasts in the psychical life. This may be wrong, and water may be the drink that should be exclusively patronized by everybody; but that consummation, whether desirable or not, is undoubtedly remote, very remote indeed. Meantime, there would unquestionably be a great gain in substituting tea, coffee, chocolate and cocoa for alcoholic liquors.

"Accordingly we are glad to see that a vigorous movement has been set on foot to fight rum-shops with coffee-houses. We have received a very interesting tract from Mr. Charles Collins, describing the results of experiments made chiefly in Liverpool, to maintain a system of 'public coffee-houses' and 'cocoa-rooms' for the use of English laboring men. There is a society in Liverpool for the promotion of this object, and the pamphlet before us is made up from its reports.

"It appears that twenty-nine places under the denomination of 'cocoa-rooms' have been opened in Liverpool under the auspices of this society, by the employment of a subscribed capital of $100,000. So successful has been the enterprise, not only in its favorable influence upon the habits of the people, but also pecuniarily, that ten per cent. profit on the investment was distributed to the stockholders last year, and it is now proposed to increase the capital of the association to $200,000, in order to still further extend its operations.

"The rooms are open to all at five in the morning, so that men may call on their way to work, as the early morning cup of hot cocoa, coffee or tea, is found to be of immense advantage. It is said that many by this means have been saved entirely from the use of other stimulants. The cocoa, coffee and tea are of good quality, and are furnished hot at the following prices: two cents per large mug and one cent per small mug of cocoa and coffee; tea, two cents per cup. The large mug contains a pint, the small mug and the cup contain each a gill. Newspapers are provided for reading, smoking is allowed for those who wish to indulge in it, and separate rooms for women are said to have been much appreciated. All the arrangements have been placed on a business footing, and with an eye to profit.

"There is an association in London for the promotion of a similar object, and in their circular, entitled 'The Coffee Public-house: how to establish and manage it,' they say:

"'Give the workingman a public-house, where he may meet his friends, and talk and smoke, and play games with all the freedom to which he has been accustomed, and where good coffee and tea—with stimulus and nourishment in them—take the place of beer and gin, and you set before him for the first time, plainly, the choice between sobriety and comfort on the one hand, and dissipation and wretchedness on the other. If it is proposed to carry on mission-work, it is better that this should be done in adjoining premises, rather than in the coffee public-house itself.

"'The rooms should be airy and pleasant, full of light and color. It is better to avoid giving to the coffee public-house a distinctively class designation, or one which might appear to connect the house with any particular social or philanthropic movement.

"'The plan of partitioning off portions of the ground-floor, or setting apart rooms for reading, smoking or other purposes, though occasionally useful, does not always work well. Men like being in a crowd; isolation is not to their taste; and an arrangement of this kind is apt to lead to overcrowding of particular rooms while others may be almost unoccupied. The only other exception to the foregoing rule is where a room can be set apart for the accommodation of women and children, or for youths. Wherever a room especially for women has been opened, as in some of the Liverpool houses, the boon has been highly appreciated. It should be understood that men accompanied by their wives may use the women's room, and every encouragement should be given to men who may be disposed to bring their wives and children to the coffee public-house. Women should be encouraged to avail themselves of the public rooms when no other accommodation has been provided for them.'

"There is everything to commend and nothing to condemn in this mode of promoting the work of temperance. It proceeds upon the assumption that there is no use in trying to shut up dram shops until something else has been provided to take their places. Various causes lead to the formation of intemperate habits, but perhaps the most powerful are social influences. Men are gregarious, and as they are cultivated they become more social and crave companionship. They meet together, and wine favors geniality and conviviality. If men are to be delivered from this temptation, they must be furnished with a substantial equivalent, or places where they can come together and have *some* social enjoyment without the temptation of intoxicating drinks. Reform here begins at the right end. Its spirit is not ascetic, but sympathetic, and it cannot fail to be well received by large numbers who would not be influenced by bare moral inculcations.

"It is to be hoped that the experiment that has proved so successful in Liverpool will be tried in New York and other American cities, under such modifications as the changed circumstances may call for. The desirableness of some systematic movement of the kind is undoubted; and if it will do positive good, and pay its expenses and yield a liberal profit, there ought to be no difficulty in getting capital for it, whatever may be the difficulty in finding competent and trustworthy managers, who will not steal the funds."

The Princess of Wales took lessons on the zither last year, and all the daughters of the nobility, and all who can afford to ape aristocracy, are now waking weird strains from that instrument. And now—horrible thought!—suppose Mrs. Wales were to take lessons on the accordion this year. The result would be too dreadful to contemplate! This country would be overrun with English accordion refugees, and millions of dollars would have to be raised for the sufferers at home. If there is one thing in this world worse than the yellow-fever scourge, it is an accordion epidemic. We shall send the Princess a copy of the Herald with this paragraph marked.—[*Norristown Herald.*

RECENT LITERATURE.

Hand-Book of Punctuation. With Instructions for Capitalization, Letter-Writing and Proof-Reading. By W. G. Cocker, A.M.: A. S. Barnes & Co., New York. Price 50 cents.

The author of this very excellent manual truly says, "Very little attention is paid in schools to punctuation, and the rules usually given in English Composition are either disregarded or not properly understood. The evils of bad punctuation are really more serious than the evils of bad spelling, and no student can be said to have learned to read well, much less write well, who has not studied punctuation intelligently." Many people who are in the main intelligent and fairly educated, cannot punctuate or capitalize even a short note correctly. Among Rural readers, how many would write the following address in the way it is here given?

Rev. E. O. Haven, D.D., LL.D.,
Chancellor of University,
Syracuse,
N. Y.

Why should there not be a period after the first of the two L's as there is in case of the D's? Which is correct, Yours affectionately or Yours Affectionately? Why is not the "d" capitalized in the following address: My dear Friend? Shall we say Dickens' Works or Dickens's Works?

For answers to these questions, and for very much other useful information, we refer those interested to the book under notice. It is written in a clear style, very few technicalities are introduced, and it is not cumbered with rules. The work merits a wide circulation, and its low price puts it within the means of all.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE WOMAN'S CLUB.

A POOR ECONOMY.

THERE seems to be a current opinion among our friends of the "Club" that if a woman hires help to wash her "greasy dishes" she should in some way supplement the family income so as to make up the "loss." Now, I think it would be just as reasonable to say that if she used flour in her housekeeping, she ought to sit up nights and do sewing work to pay for it. The "help" in a household where there is a baby to care for ought to be set down as one of the regular expenses as much as the family flour. And it *can be* even on a very small income. I know this from twenty years' experience. During the war, on as small an income as a professional man often gets, I kept both a nurse and a kitchen girl, and *paid them, too*. It takes self-denial in other things, but if that cannot be compassed in any other way, it becomes a moral duty to make these self-denials for the sake of securing the help. A young mother's health both of body and mind (which latter is so little thought of), is worth more than fine clothing, or rich table fare or more acres, or more stock or high-priced farm implements. I would ring it in the ears of every young householder, with a family of little ones growing up about him, "Keep help if you would keep your young wife from turning into a broken-down, snarling old woman in her early prime, or save her from the stony walls of a retreat for the insane." Man's inhumanity in this line calls loudly for another Mr. Bergh.

Sometimes it is a woman's fault. She can't "put up" with such help as she can get, and would rather slave along alone. Dear, working sister, it is a poor, short-sighted policy. Save yourself, now, while your children are small, train them to be helpful, and by and by you can enjoy the luxury of doing your own work in your own way, and having your whole house to yourself, with no cross Bridget to mar its harmony. I have "put up" with help for twenty years, and have enjoyed for one year the luxury of doing without, when I found that it could be done with the children, and I felt a little as "a man and a brother" might after the Emancipation Proclamation went into effect. The children, too, felt as if they had moved into new quarters, now that they had the freedom of the kitchen, a luxury the older ones had never known. "Don't ever keep a girl again," is the universal sentiment, though "Horatio" still looks upon it as an experiment."

Keep help of some sort when your health or labor require it, even if you can get only a hired boy to clean your steps and draw the baby out in his wagon. Whenever you economize do not save out of your life blood, or that saving will in the end gnaw like a viper at your heart.

RUTH.

RECREATIVE HOUSEKEEPING.

MISS RIPLEY:—With your permission, I have a few ideas to offer in response to some of the ladies who have joined the Club with matters of importance for discussion.

Naturally, the acme of my ambition would be above the very ordinary piece of labor termed dish-washing, but since such work always has been done, and always will have to be done by some one, and as "Sufferer" enters complaint, I wish to offer a crumb of comfort. She does not state whether "Horatio" has only the book and cigar to be entertained with, or whether there are any children to wash dishes for, or whether very often a goodly number of uncles and aunts, interspersed with troops of little cousins—not to mention other friends—come to dine as well as visit, thereby subjecting at least *one* member of the family to the care of dish-washing. But in any case she is not like my humble self if she is able or inclined to "rush" and "grapple" the soiled pile, with the soiled cloth, immediately after eating a satisfactory meal. At least, I for one, do not find such a proceeding agreeable, and the laws of health prohibit any exercise within a given time after eating.

A few moments, if not a whole half hour, for the strong and weak, can be profitably employed by matters of interest in book or paper, or in the inspection of house plants; or a stroll in the flower garden might prove beneficial. Allow yourself pencil and paper, and make a copy of any object or of any landscape before you which may please your fancy, though you are not an adept in the art of penciling. Choose a retired corner for fear of intruders upon your pastime; tax well your memory with the rules, and when complete, lay away on some out-of-the-way top shelf, and when you have forgotten your own perplexities, and have looked to some one for entertainment and help, perhaps they may possibly be as well amused by your productions of of pen and pencil, and wonder who has brought out so fine a picture of the old brick smoke-house, or of the oldest pear tree in the home place, with its dead branches represented so faithfully. Then when you've thus diverted your mind from the dreaded task, you've fresh ambition to "grapple" the cloth without a "rush" and forget the task, apparently, by allowing a more absorbing and agreeable subject to color your thoughts.

You can, if you choose, tie a cloth to a stick to save those pretty hands of yours, and then to be sure to have a supply of that valuable article, "Glycerine;" and the *only specific* known, is offered you until there's a machine invented, or a substitute in your place takes the burden from you. You cannot have a natural love for the womanly ways which all *married women* should possess, if you do not really like to see the pretty things which are so important in the partaking of "a satisfactory dinner." It is true, too much time can be spent in the cooking department, but there are circumstances which render the "dish-washing" an *absolute luxury*.

But your circumstances, individually, may be truly trying, so I will close by saying that Margaret Harvey, in another department of the RURAL, has said *all* in her article, "Small Courtesies at Home," and her letter has tempted me to make my particular grievances known; but as I have been a sufferer many years, I cannot very well enter complaint to a young housekeeper, nor ask advice of her; but truly it is one's privilege to make one's-self nobly happy, even in an humble way, and with little expenditure. Perhaps there's policy in being patient in well doing, because if, like children, we tire of the toys given us, we can easily shut the door on such stern realities as "dish-washing," and have a picnic in the woods and partake of some berries from bass-wood leaves, fish from a piece of birch bark, and nuts from off a clean piece of rock after the sandwiches from a dinner-basket brought from home; and of course "a sufferer" would not enjoy such cheap pleasure without "Horatio's" book and cigar.

Respectfully, "A TIRED HOUSEKEEPER."

OUGHT WE TO BE GLOOMY AT FORTY?

DEAR——, what shall I say? To "dear" a whole club of women is rather too comprehensive. There's the editor. I might have lavished my tenderness on her, but I forgot. For the nonce I'll let my "dear" stand solus. I suppose I ought to start out by stating how charmed I am with the idea of us women being permitted an opportunity to appear on the RURAL stage; how delightful I have always found the editor, and how from my youth up I've doted on the RURAL,—I believe that's the regulation way of introducing one's-self; but I want to do a bit of growling, and, like the deacon who complained that the only trouble he had about praying was his inability to to "switch off," I'm afraid if once I started on the amiability tack I'd never get to the growl.

My grievance is the following poem, which I clipped from a paper the other day. I think the last two lines deserve special condemnation:

AT FORTY YEARS.

Flying, flying fast—
Ah, whither have they fled?
Velvet cheek, and dewey lip,
And golden head,
Rose, and bloom, and blush,
Star-eyes, and bird-song's gush—
A cloud on airs Elysian
Flying, flying past;
Ah, lovely, fleeting vision,
Too lovely to last!

Drearily the waves
Of the Dark River flow,
Sad their under-tone on all
The winds that blow,
Rose, and bloom and blush,
Star-eyes, and bird-song's gush—
When lids are full of tears
The heart no longer craves:
For, after forty years,
We only tread through graves!

What a preposterous idea to doom those of us who are forty and over to perpetual graveyard pedestrianism. All the joy of life, it would appear, is in youth's morning and after the "rose, and bloom and blush" have fled, there is no future in this world for us! After that, all is to be suggestive of buried hopes, dead loves, lost friends and charnel houses generally—both mental and material. Certainly, a most cheering and winsome prospect for middle life and old age.

It's absolutely wicked to write such stuff. Think of all there is that is beautiful and grand in life, of all the enjoyable experiences one can have with friends, books, art, science and nature. Is the delight these afford us dependent on our being under forty? Does not every bird, flower, and fruit, every bit of lovely scenery, every ray of sunlight, and each and all of the thousand delights which crowd into the humblest life, bid us "rejoice and be exceeding glad" that it is our privilege to enjoy such blessings? And what right have we to indulge in never-ending grief and to keep our "lids" in a chronic state of tearfulness? It's an insult to the good God who made us.

The heart should know no growing old, for to the last moment of the longest life one can be happy, negatively so at least, if he but will it.

Out upon the doctrine which would condemn us after the brief season of youth to sit on the banks of the Dark River and listen to its dreary moanings, and by way of variety, permit us the luxury of graveyard meanderings.

LINDA BROWN.

CANCER CURE.

I HEARTILY approve of the "Woman's Club." Anything which has for its object the education, or advancement of the mothers, and sisters of our country should find a full indorsement, from every patriotic citizen, whether man or woman. There is such pressing need to arouse in woman a desire for higher development physically, morally and intellectually, that whoever engages in the good work, should receive the gratitude of womankind. There is scarcely a woman in the land, but what is possessed of some invaluable knowledge, which might prove of great benefit to others if she would but make it known. It is frequently more lack of confidence in herself than lack of ability to put it in proper shape, that prevents many from writing.

And now as a first contribution to the Club: Four years ago, I learned a remedy for cancer, which I have never known to fail in effecting a cure. It came to my knowledge in this manner. A lady, at whose house I was stopping, had a sister whose face was terribly disfigured, the nose being almost entirely gone, and the throat so much eaten away that the girl could not speak in a way intelligible to any but those accustomed to her. The sores were all healed, and had been for years, and there was now no appearance of eruptions or any other impurities of the blood. She was so disfigured that it would almost have seemed a mercy not to have saved her life, but she was an example of what the medicine could effect. While I was at this lady's house, I met a gentleman who, I happened to know, had been afflicted with a cancer, which had caused him much anxiety. He had recently spent some time in New York under the treatment of a celebrated cancer doctor, but without obtaining relief. I informed the lady of these facts, and she gave him this recipe. This was four years ago. I saw the gentleman a few months since and inquired about his. The reply was, "Oh, it gives me no trouble; if I have any fear about it, I take a little of Mrs. S.'s medicine, and it is all right."

I have an aunt between 50 and 60 years old, who has had an internal cancerous tumor, causing her much suffering, and rendering her for much of the time, unable to work. She has been treated by many eminent physicians, and has spent hundreds of dollars, but all to little purpose. For the last few months she has been taking this medicine, and says she has not been so well for years

I might mention other cases, but perhaps these will be sufficient. I have never known it to fail in a single instance to cure impurities of the blood, whether cancerous or otherwise. I wish I could inspire in others the same confidence which I feel, for I am certain it would mitigate a vast amount of suffering.

Cancer Cure.

Two ounces of Sulphur; ½ ounce of Quicksilver; 1 ounce of Cream-of-Tartar; ½ ounce of Saltpeter. Put into a pint of molasses, stir, take a tablespoonful before going to bed.

For outside application: 1 bottle of British oil; 1 ounce of Red precipitate.

The sulphur and quicksilver must be thoroughly mixed for a long time in a druggist's mortar, and then the other ingredients added.

I wish this could be published in every paper in the land, and that in after years I could have the satisfaction of knowing that many had been saved from horrible suffering and death by its use. Faithfully yours,

MRS. W. C. G.

THOSE DISHES.

I HAVE been reading the "Woman's Club" for October with great interest. I am sure I sympathize with "A Sufferer" over her dish-washing, but I am afraid society has not progressed sufficiently far, as yet, to allow of our dispensing with that needful ceremony, however handy a nice, crisp leaf might be as a substitute for a dinner-plate.

But if we cannot abolish dish-washing, the next best thing is to put science into it and expedite it all we can. "Sufferer" does not want energy, we feel sure, or Horatio would never have been disturbed by the clatter of the plates. Now let her add to this energy the best system she can possibly invent for putting the work along rapidly and successfully, and she will feel that she has achieved something worth doing. Let her have an eye to the finished result, as she goes along, and it will be quite a help. Wax-fruit making is a very dirty, sticky business, but the beautiful results more than pay one. A shelf filled with shining china and sparkling glassware, is a pleasant sight in the eyes of any housekeeper, and it will not detract from their beauty to feel that they owe their shine to your industry.

Of course, everybody knows her own business best, but if I have dishes to wash I like to get the worst over first. The baking pans and kettles I take first in nice, clean suds, and dry them about the stove. Then I pour out the water and take a fresh panful for the glass, the silver; then the cups, plates and vegetable dishes. Two good dish-pans, plenty of nice, soft water, soap and clean tea-towels are the main essentials of good dish-washing. It can be done very quickly, with proper dispatch and a good, stout determination. Without the latter all work will drag. I often think, in view of disagreeable duties, of the remark of the old Indian who was asked about a dry crust he was eating, "Do you like that?" He answered, stolidly, "He's my victuals, and I will like him." We have need of a little of this spirit if we would get along smoothly with life's trials. We can cultivate our likes and dislikes to any extent, if a man can learn to like the taste of tobacco. So, dear "Sufferer," even you may learn to like dish-washing. It seems incredible, does it not? but people have. Time yourself by the clock and see how quickly you can finish the unpleasant work. That will serve as a stimulus and keep the work from dragging on your hands. "Dragging" is what makes work particularly "hateful." Still, the main ingredient to make the cup palatable is a willing mind. Nothing is a task which we do willingly. Time and custom also make many things easy and even pleasant that once were very distasteful.

Your loving AUNT FANNY.

THE "BRIGHT SIDE" VIEW RECOMMENDED.

EDS. RURAL:—In looking over the RURAL of a few weeks ago, I noticed several excellent suggestions in the columns devoted to women, especially "Talks with Children," but was sorry to see so much discontent in regard to housekeeping.

Wherever our lot may be cast, we should try to make the best of it and, if possible, look at the bright side of the picture. If we are obliged to be "housemaid, nurse, dressmaker, mother and hostess,"—cook and dishwasher, I may add—why not try and arrange our work in such a way that it will be as little as possible distasteful to us?

There are other enemies to conquer besides the weeds that grow up among our fruits and flowers. If one has a time and place for everything and everything in its place, it sometimes seems remarkable in how short a time one can prepare a meal or wash a set of dishes. As to the dish-cloth being "slimy," that need not of necessity be so, for if it is well washed with soft water and good soap, and dried in the sun after every dish-washing, it will not become slimy.

It is a pleasure to me to serve a well-prepared meal, to see that the remains are not wasted, and to wash the dishes after it is over, with a *clean* cloth. I would much prefer cooking or dish-washing in a nice, clean kitchen, to pulling weeds in the garden on a warm summer day.

Let us be content with whatever we have to do, and do all in the best possible way, and it will lighten our burdens considerably.

When I began to write I only intended to write a few words, but my epistle has lengthed considerably. I hope the Editor will give me a place in the Women's Column, and if acceptable, I will occasionally contribute "one thing and another."

SARAH E. R. SHEPHERD.

"THE WAIL AND THE PROTEST."

IN striking contrast are the letters published in the RURAL of October 5th.

First. There is the happy mortal who has no dishes to wash, and also has no milk, no chickens, no fruit, no eggs to feast upon, if we except the feasting with the eyes, which it must be acknowledged, is not altogether unsatisfactory. Then, added to all this, the unsatisfied cravings of the inner man—there is that culminating misery of beholding a duplicate of one's love of a hat upon the head of the village Amaryllis (It's an ill wind that blows nobody good; the rustic beauty is, doubtless, happy)

Mrs. Price pays twenty dollars per week for that peculiar nectar and ambrosia which only the country yields, but alas! the gods *i. e.* the landladies are unpropitious and brew neither nectar nor ambrosia for her delectation. So much for the "Wail," now for the "Protest," which comes from the happy mortal who breakfasts on aromatic coffee, sweet, light rolls, tender juicy steak, or at least I suppose she does, for she is mistress of her kitchen, but all these advantages she counts as nothing compared with that "unmitagated horror," dish-washing.

The question seems to resolve itself into a conundrum—"which is better, to starve—(board) and have no dishes to wash, or to have feasting and dish-washing?" If we believe as our ancestors taught, that there is no rose without a thorn, I would prefer the dish-washing thorn to the starvation thorn.

I have no remedy to propose, as I wish I had, except the one—patient endurance. I heard a lady say last summer, that it need not follow because we wash dishes, our thoughts must be concentrated upon them. My poetry-loving sisters might learn an indefinite amount of poems by having them fastened on the wall before their eyes while their hands were grappling with the "slimy dish-cloth." Poor Horatio, with the pots and kettles to wash! the next protest will come from him.

SANS SOUCI.

THE HEAD TO THE NORTH.

IN order to have more convenient access to a case that has been opened frequently of late while pursuing certain investigations, the writer moved his bed with the head to the West. It continued to have this direction for two weeks, and during that time he had not a night of his usually unbroken sleep. A vague uneasiness tormented him, and half of his customary eight hours of repose was wretchedly spent in restless attempts to slumber. No particular ailment could be detected that might account for it; the day's experience was much as usual, only for the morning's soreness and heaviness, resulting from broken and insufficient sleep. A newspaper paragraph on the advantages of lying in the line of the magnetic meridian or near it, so that the body may be favorably enveloped by the currents that are excited by changes of temperature, reminded me that I had met with a similar direction fifty years ago, only that the advantages of lying in a north and south direction were not attributed to electric currents, about which little or nothing was then known. I had generally acted on this advice from an indoctrinated sense of its value, but losing sight of the reason, I allowed a different reason to turn me east and west, with the effect above related. At any rate, I turned back to north, a little west (for I live where the magnetic needle points about four degrees west of north) and my usual soundness of sleep immediately returned and has continued. One swallow does not make a summer, nor does it do to generalize from a single occurrence, but I give my experience in the belief that it may add to the ease of some others who, in the decline of life, find slight straws sufficient to rob them of rest.

W.

DEAR SISTERS.—It looks very much to me as though the "Club" was going to be given up to housework: can't those of us who are interested in art and in literature have a chance to air our hobbies before the club? Will some of the sisters tell me what is the best and newest text-book of the Russian language? Also what is the best authority on Harmony and Thorough Bass.

JESSIE CAMERON.

SEVERAL club letters arrived too late for publication. They will appear in "December Club."

F. R

Domestic Economy.

CONDUCTED BY EMILY MAPLE

FRESH SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

A Substitute for Rag-Carpets.

THE article on rag-carpets in our domestic department reminds me of my own troubles in the past with carpets in living-rooms, and how the difficulty was solved. An account of the method may be of benefit to other housekeepers. After years of suffering from dust and tacking with the inevitable wear and tear, we decided to lay a floor of hard wood and selected, as a bright and pretty contrast, ash and cherry. So the boys and papa went to the woods, cut down the trees and, without unloading them from their sleighs, took them to the saw-mill, where they were sawn into narrow boards, three inches wide by three-quarters of an inch thick. They were afterwards dressed, and when brought home, placed in the kitchen garret closely packed, *on edge*, and left to dry till spring. The carpenters were ordinary mechanics, and the floor was laid on top of the old one, care being taken, however, to insert wedges wherever it was uneven. It is now so firm that not a board creaks and with a slight oiling once a year, it retains its pretty markings, while the weekly washing is very easily done. In summer a rug and a bright piece of matting are placed where there is most walking, and in winter a couple of sheep-skin mats and a larger rug, produce an additional warmth, and those things are very easily taken up to be shaken, while the floor gathers no dust, and has a pleasant glow that a carpet cannot give. So we do not intend to make any more rag-carpets for our living-rooms, but to continue our polished floors to the kitchen at some future day.

Noise did you say? Then teach the children to *lift* their chairs and not to push them, and console yourself with the reflection that the little necessary noise is nothing in the way of annoyance in comparison with the dust that would irritate delicate lungs, covering and destroying every article of furniture in much-used, carpeted rooms.

MOP-HANDLE PAPERS.—No. 8.

SEVERAL years ago I was a boarder in Mrs. L——'s family, and roamed about the whole house much as I would at home. One morning she had sent the girls, her daughters, to the garden to pick currants for jelly, while she went to the milk-room to attend the butter and milk, leaving the breakfast dishes in the sink to await her return. Just as they had all got engaged in business, word came that several visitors would be there to dinner. The morning was already well advanced, and I had heard my landlady say that it was scrubbing and baking day.

Lina, the eldest daughter, was called in from the garden to attend to the fine arts of making cake, pies and puddings. I volunteered my services to attend to the dishes in the sink, while Mrs. L. finished working and packing butter, and then came in to clean the wood-work, and put things to rights all about the house. For there was not much system about the work, and things often seemed to be in a general commotion.

After having hunted all about the sink for the dish-towels, I found them both tucked down in the corner of the sink in a "mop," left so since the preceding night by the little girls who usually washed the dishes. Of course, they were soiled and sour. A large wooden bowl was used for a dish-pan, and this was so slimy with grease as to make it almost impossible to hold it for an instant in one's hand. The first thing to be done was to make use of plenty of soap and water in cleansing both cloths and the bowl. Then the dishes were soon put away in their accustomed places, with smooth, shining faces. Next came the iron-ware; and I began to look about the stove for the necessary cooking utensils. The kettles, large and small, were thoroughly cleansed and put away; only the "spider" or frying-pan remained; the inside of this was soon made clean, but the outside was—under the circumstances—beyond my control. How shall I describe its appearance? Apparently the iron was about four times as thick as was necessary; and the molding was certainly of peculiar workmanship. But its thickness was not all iron. Whatever of grease, milk, gravy, or juices of any articles cooked that had boiled over and drained down on the outside, during all the years it had been in use, remained there, burned on, resembling the warts, both great and small, upon a toad's back, only the protuberances were black instead of brown.

Had I been alone, I should have put that "spider" upon a bed of hot coals, and left it there till all that accumulation had burned off. As it was, I scraped off the rough portions as best I could, and thought what a blessing it would be if little girls could be taught *to do well* what their hands were often obliged to do. If iron-ware is thoroughly washed, every time it is used, there will be no accumulations though it be used for centuries. Then there will be no unsightly black rings or streaks of grease streaming down upon the wall where it hangs. And though children wash the dishes, the matron should *see* to it that the work is well done, each time, before the child leaves the apartment. If this were done, if the little daughter were taught to be neat and systematic about all her work, we should not find so many slatternly kitchens as we now do, even though many married at the too early age of sixteen, as is frequently the case at present. I sometimes think that cooking schools, with a department for washing dishes, should be organized in every district, and would be, in after life, of more importance than so many text-books.

MAY MAPLE.

DOMESTIC RECIPES.

Buckwheat Cakes.

As this is the beginning of the buckwheat cake season, I will give my experience for the benefit of those who have no buttermilk to put in them, to make them of that appetizing color so much desired; for, to have them good they must look well. To begin, I take one-half teacupful of good yeast and stir my cakes at night, adding a spoonful of molasses in the morning. Bake from two to four more than are eaten; while hot, pour boiling water on them and let stand until cool; then squeeze them fine and put in your pitcher, where there should be one teacupful of the batter. Add a cup of water, that it may not sour during the day, and set it in a cool place. If in danger of souring, pour off the water and add fresh when they are stirred the next evening. I think you will find no need of starting anew very often or using saleratus, unless you let them sour. One-fourth Indian meal improves them or, instead of meal, what we call wheat middlings—fry quickly. MAY.

Black and White Marble Cake.

The White:—Three cups of white sugar, the whites of eight eggs beaten to a froth, one cup of butter, one-half cup of sour cream, one teaspoonful of soda, and two of cream-of-tartar, one cup of sweet milk, one teaspoonful of lemon extract; flour enough to make it rise nicely.

The Black:—Two cups of brown sugar, one cup of molasses, one cup of butter, one-half cup of sour cream, yelks of eight eggs, one-half cup of sweet milk, one teaspoonful of soda, two tablespoonfuls of cinnamon, one teaspoonful of cloves, one teaspoonful of allspice, and one of black pepper. Put in a layer of the black and white alternately till it is all in. Draw a fork through it two or three times to mix it a little, or leave it as you put it in, if you like.

MRS. S. V. W. C.

Boston Brown Bread to be Baked in a Brick Oven.

TAKE a quart of rye-meal, and the same of fine Indian meal—if fresh, do not scald it; if not fresh, scalding will much improve it—also a pint or half-pint of white flour. Mix with warm water. Take also a gill of molasses or sirup, a small teaspoonful of soda, a large teaspoonful of salt, and half a gill of yeast. Such bread is improved by the addition of a gill of boiled pumpkin or winter squash. Make it as stiff as can easily be stirred with a spoon. Grease a deep brown pan, thickly, and put the bread in it, and dip your hand in water and smooth over the top. This will rise faster than other bread, and should not be made over night in the summer. The quantity can be doubled for two loaves. Bake long in brick oven—and long accordingly in stove. N. L. O.

Boston Brown Bread.

IN the "RURAL" of the 12th, Mrs. V. F. K., Oil City, Pa., asks some lady among the RURAL readers, to give her a recipe for Boston Brown Bread. Will not a recipe given by a RURAL bachelor do as well? I will give you my sweetheart's recipe: Four coffeecupfuls of sifted Indian meal; two cupfuls of coarse flour, either wheat or rye; one teaspoonful of salt; one teacupful of molasses, and boiling water enough to make as thick as griddle-cake batter. When nearly cool, add one-half cup of yeast, either home-made, or distillery. Put the mixture in an iron baking dish, cover tightly, let it stand in a warm place until it cracks over the top, (which should be smoothed over with wet hands before it is placed to rise.) Bake it five or six hours in a moderate oven which will not burn the crust to a cinder. F. B. H.

Jackson Co., Mo.

Steamed Brown Bread.

For a very small family, take half a pint of rye meal, not sifted, and a pint of sifted Indian meal, a tea-cupful of flour, a pint of sour milk, half a gill of molasses, a tea-spoonful of salt, and a small one of soda. Add soda last and stir the mixture well. Grease well a tin pan or pudding boiler with lid, and steam the mixture four hours. To serve it remove the lid, and dry the top a few moments in the stove oven; then it will turn out in perfect shape. N. L. O.

Boston Brown Bread.

Two teacupfuls each of Indian meal, Graham meal, rye meal, cold water and sour milk; one teacup of molasses; one heaping teaspoonful of soda; steam three hours, then bake one hour. EMILY.

Lowell, Mass.

SMALL LOAVES.—I wish the Domestic Economy department would preach the doctrine of making bread into small loaves. I believe the majority of housekeepers continue to mold their dough into loaves of old-fashioned bigness.

M. W. F.

News of the Week.

POLITICAL.

Monday, Oct. 28, 1878.

In this city the Tammany party has selected Augustus Schell, the grand sachem of the organization, as its candidate for mayor at the approaching election; while the anti-Tammany people have agreed upon Edward Cooper, a son of old Peter Cooper, as their candidate. Mr. Cooper is an old democrat and, in consideration of that nomination having been accorded to the anti-Tammany democrats, the nominations for city judge and district attorney were given to the republicans, while the German democratic association was allowed to name the candidate for coroner, these being the four principal municipal officers to be elected this year. Each party has also nominated candidates for Congress, the State legislature and the board of alderman, but the interest in the struggle for the mayoralty transcends that in all the others, inasmuch as the next mayor will have the appointment of the heads of the different municipal departments who control the vast and lucrative patronage of the City. At present each side professes to be confident of coming out ahead. Throughout the State the interest of the contest depends mainly on the elections of members of the legislature, for these will have to choose the United States Senator to succeed Mr. Conkling. At present the outlook is that he will be his own successor, having apparently succeeded in placating his chief opponents within his own party, while there does not seem to be much doubt but that the republicans will have a majority of the legislature, unless the greenbackers show unexpected strength and manage to elect members enough to hold the balance of power.

The report comes from Washington that the President has determined to conciliate the leaders of his party in order to strengthen and unite all elements for the great political conflict of 1880. To this end it is said Attorney-General Devens will retire from the Cabinet and take the vacant United States circuit judgeship for New England; Eugence Hale of Maine who has been lately defeated for re-election to congress by his greenback opponent, will then be made Secretary of the Navy, Thompson, the present Secretary taking Devens' place. Others say that Postmaster-General Key will also be provided for elsewhere in the public service so as to get rid of the democratic element in the Cabinet. This change is Hayes' policy is said to be the result of the intolerant spirit manifested by the democracy in some of the Southern States.

MISCELLANEOUS.

His Jersey City church has accepted the resignation of the Rev. Mr. Vosburgh, who was tried some months ago for poisoning his wife, but he was refused a "character" by a vote of 19 to 13.....The revenue yielded to Virginia during the past year by the bell-punch amounts to $850,000, which shows that they drink early and often in the Old Dominion.....Prairie fires have done immense damage in north-eastern Nebraska, besides burning to death nearly a dozen people.....During the week Edison has produced a new talking machine at Menlo Park, N. J.—in the shape of a fine twelve-pound boy. The Professor himself has been laid up with a severe attack of neuralgia, but is now considerably better. His invention of a means by which electricity can be used instead of gas, has caused considerable fall in gas stocks across the Atlantic, and much discussion as to its practicability here. The gas companies declare such a measure impossible, except at a much heavier cost than that for gas, and that for an inferior light, but Edison and his friends are confident of success and have organized a company with a capital of $300,000 to begin operations. It is said within a fortnight the town of Menlo Park, N. J., will be in this way brilliantly lighted up.

On the morning of the 21st a violent storm on its way north from the tropics, was signaled south of Florida; on the 22d it had reached Georgia; by midnight of the same day it had reached Hatteras, on the North Carolina coast; by midnight on the 23d, it had reached Baltimore and Philadelphia, and early on the morning of the 24th it struck this city. It was one of the severest hurricanes ever felt along the southern coast, and was extremely violent in Baltimore, and still more so in Philadelphia, where it unroofed over 40 churches, blew off the steeples of several or them, badly damaged a vast number of manufactories, depots, warehouses and dwellings, killed about a dozen persons and wounded many more by hurling falling *debris* upon them, and destroyed $3,000,000 worth of property. Everywhere its course was marked with ruin and disaster. Many shipwrecks are recorded, the most deplorable being those of the ship A. S. Davis and the steamer Maggie, 18 lives being lost on the former, and 20 on the latter.. ..Yellow fever is dying out all over the South, since the first frost. During the first part of the week, the number of deaths exceeded that of new cases, because, as stated here in advance, the cold spell always is injurious to those actually sick while a safeguard to those who have hitherto escaped; latterly, however, both the new cases and deaths have rapidly diminished everywhere. No more relief is required; indeed, it would seem that assistance has poured in so rapidly that the relief managers, here and there, will have a considerable surplus of money on hand after giving all necessary aid.

The October returns to the department of agriculture place the average condition of the corn crop at 96, an increase over the September average, which brings the figures up to those of August. New England and the Middle and Gulf States show a small decline. The south Atlantic States maintain their September condition. The State averages range from 77 in Pennsylvania to 116 in Maine. The average condition is three per cent. less than in October, 1877. The out-turn of the crop will not vary largely from 1,300,000,000 bushels. The October returns do not materially change the statistical aspects of the wheat crop. The New England and Middle States indicate a slight advance upon last year's yield. The Gulf States indicate a still more decided advance, owing to the very superior crop of Texas. The south Atlantic States and the southern islands show a very heavy decline, which, however, is more than compensated by the general increase in Mississippi valley and on the Pacific coast. The yield, on the whole, will be in advance of last year's, and from present indications will exceed 400,000,000 bushels. As to oats, a preliminary estimate based upon the October returns, indicates a yield somewhat larger than even the very fine crop of 1877. Nearly two-thirds of the crop are in 10 States from Ohio to Nebraska, occupying the northern portion of Mississippi valley. In these 10 States the aggregate net increase is about two per cent. Quite a number of counties in that region report an exceptionally fine quality, weighing in many cases 30 to 40 pounds per bushel. In the four southern inland States the season, so unpropitious to wheat, has been remarkably favorable to oats, raising the general condition to 110; in all other sections the product has fallen off. The present statement is that the cotton crop of 1878 is the largest ever known in the country. Published details do not justify the assertion, but further facts may show it to be sound. The number of bales is put at 5,500,000.

Gen. Sheridan has received additional reports of lawlessness in New Mexico. The cut-throats who are terrorizing parts of that State are mainly from Texas, and are known as "wrestlers." They recently killed three citizens near old Fort Sumner. Two were shot and one hanged. All the inhabitants for miles around have fled to the mountains....The California Chamber of Commerce, on Tuesday, considered the question of the proposed new treaty with France, and passed a resolution opposing any reduction of the tariff on French wines and liquors.....The hostile Cheyennes are reported to have escaped pursuit, and to be rapidly on their way to join Sitting Bull in Canada. It seems that they left their reservation to avoid starvation, as Gen. Miles reports an enormous deficiency of supplies at the Reno agency; so that all the deaths and destruction of property during the recent Indian raid are due to the dishonesty, inefficiency and mismanagement of Indian agents.

President Hayes has certainly shown more interest in agriculture than any of our former presidents, judging by the number of fairs he and many of his Cabinet attend. On Thursday, he received an enthusiastic reception from the farmers of Maryland, at the State Fair at Cumberland. He was introduced by Gov. Carroll, delivered a rose-colored speech, and aided materially to make the show a success.....Lately the Roman Catholic Church has suffered seriously by the death of several of her most prominent ecclesiastical dignitaries. Quick upon the death of Monseigneur Dupanloup, bishop of Orleans in France, at the age of 77, comes that of Cardinal Cullen, Archbishop of Dublin, Ireland, which occurred last Thursday afternoon, at the age of 75, while here, in America, Bishop Rosecrans' death has been caused by over-exertion at the dedication of a new Roman Catholic cathedral, on yesterday week.

FOREIGN.

The swindling directors of the City of Glasgow Bank have been arrested and are in jail awaiting trial. They were all "uncoo" good, saintly men, ranging from 60 to 75 years old, and very liberal to churches and to charities the names of whose contributors appeared in print, but with one exception they all owed money to the bank they were mismanaging, their indebtedness to it ranging from $150,000 up to $1,650,000. An assessment of £500 on every share worth originally only £100 has already been made on the stockholders, and bankrupted most of them. There have been numerous other failures, too. Business is exceedingly dull especially in Lancashire, the seat of cotton and woolen manufacture. Actual hostilities with the Ameer of Cabul will probably be deferred until spring; meanwhile preparations are being pushed vigorously forward.

The Emperor William of Germany has determined not to resume control of affairs until December. He became sovereign by the abdication of his brother and probably pride alone prevents him from following the fraternal example at his advanced age of 82. Wherever he goes the utmost precautions are taken against any further attempts on his life. The members of the families of Bismarck and Moltke are also reported to be in dire terror for the safety of these eminent men. In Berlin the Emperor's life is in jeopardy outside the walls of the palace; the Crown Princess is constantly worried by apprehensions for the life of her husband. Bismarck always has a body of police about him and his residence is strictly guarded; Von Moltke, whose life has been frequently threatened, takes things coolly, saying that the dead and the defeated only are happy, as success begets jealousy and enmity. Severe measures have already been adopted against socialism; between thirty and forty of its newspaper organs have been suppressed and a large number of its local organizations broken, still it is spreading secretly, it is feared. The fact is that Germany is fast becoming infidel. When the lower orders believed in future reward and punishment, they consoled

themselves for the present inequality in the conditions of the rich and poor by assigning heaven to the latter in the next world, and hell to the former; now, believing that this life ends all, they are determined to get as much as possible of the good things in it—and then the schoolmaster is everywhere abroad in the Fatherland, and education is apt to make one discontented with hardships and plot to evade them. Now that Bismarck has secured the passage of the Socialist bill it is announced that negotiations with the Vatican are useless, as no mutually satisfactory basis for an agreement can be hit upon.

In Russia assassinations by secret societies are reported to be very common, though the government tries to hide their frequency from the public in order to conceal the vast extent of popular discontent. Preparations are now being made for trying 300 Nihilists in different places, and hundreds, nay thousands of them, it is said, have already been condemned to Siberia. In view of possible complications with England or Turkey, the Czar has ordered military furloughs to be only granted for particularly urgent reasons and in any case not to extend them beyond February. There is a general feeling of uneasiness lest Russia should break through the treaty of Berlin and resume hostilities with Turkey. She has 80,000 infantry troops now in Eastern Roumelia. Another army corps is near Constantinople. There are 15,000 men at Adrianople. Baker Pasha is vigorously at work fortifying Constantinople, and Osman Pasha and other military authorities have been ordered to lend him every possible aid to complete the works within the next two months. To meet an issue of notes for 500,000,000 rubles during the war, the tariff in Russia is to be raised fifteen per cent. and an income tax introduced, while the people are earnestly exhorted to improve their methods of agriculture so as to be able to compete with this country. The tightness in money matters is probably the cause why Russia is likely to insist on Turkey paying her right-away a first installment of 300,000,000 rubles by way of war indemnity. It was supposed at Berlin that the territory conceded to the Czar would be taken by way of indemnity, but as this was not stipulated, the Muscovites insist that the treaty of Berlin did not supersede, but was merely supplementary to that of San Stefano, and that before they retire from Turkish territory, a private treaty will have to be concluded with them by the Porte. There is a report, however, that Count Schouvaloff is soon likely to succeed Prince Gortschakoff at the head of the foreign office in Russia, and such a change would be generally considered as an augury of a continuation of peace, as the Count is considered an advocate of a peaceable policy.

Several Powers have notified Servia that they will not acknowledge her independence till all civil rights are granted to Jews, in accordance with the provision to that effect in the treaty of Berlin. An autograph letter has been received at Bucharest, capital of Roumania, from President Hayes, recognizing the independence of that State and containing the stereotyped expressions of hope for her prosperity and for a continuance of cordial relations. On Tuesday last Roumania completed the surrender of Bessarabia to Russia, and with the latter's aid, she is about to occupy the Dobrudscha, which was assigned to her as a compensation....In Asia Minor reforms are under way. Mixed Christian and Mussulman police are to be commanded by English officers; an English assistant judge will be added to each Court of Appeal, and the governor and head taxgatherer will be appointed and dismissed according to English approval. These and some equally important clauses have been approved in principle by the Porte.

There are very severe floods in the north of Italy; crops over a large extent of territory along the river Borinda have been destroyed and many lives lost....The threatened disasters from an unusually high inundation of the Nile are now taking place in Egypt. The overflow from the Damietta branch of the river on Saturday last covered 120 square miles, had submerged 20 villages and drowned from 600 to 1,000 persons besides a vast amount of stock of all kinds. The government is loudly blamed for having taken no precaution whatever to guard against the calamity of which ample warning had been given....At Largentiere, France, on Monday last, the river Ligne rose 65 feet in an hour, flooding a great part of the town and destroying much property, but no lives....Several of the most successful American exhibitors at the Paris great show have been enrolled in the Legion of Honor. This numbers about 100,000. A majority are chevaliers, or knights; next in order are officers, then commanders, then grand officers, and lastly grand crosses—there are no American grand crosses....The ex-Sultan Murad V. still lives at the palace Tcheragan. His mental condition has improved, but he is still subject to attacks of the alienation that justified his dethronement and detention.

The late insurrection of negroes on the island of Santa Cruz has been followed by the execution of 100 of the insurgents already, while the loss of property due to it is estimated at upwards of $3,000,000....They have another of their frequent insurrections at St. Domingo, a rising having taken place at Azua in favor of the former president Baez....At Alzala, Mexico, a fanatical mob, incited, it is said, by a couple of priests, massacred 25 Protestants, and wounded many others on Sept. 20. At Puebla the Protestant missions are threatened by the rabble. Diaz says he will do all he can to protect all religious denominations. The soldiers of the Mexican army of the north have received no pay since July, and numbers of them are deserting from lack of subsistence. Escobedo has not been hanged yet, but is dangerously ill in prison. The other day 25 Indians crossed from Mexico into southwestern New Mexico, killed three ranchmen and an expressman, stole a lot of cattle and escaped, hotly pursued by citizens and troops.

HERMAN.

THE MARKETS.

PRODUCE AND PROVISIONS

NEW YORK, Saturday, Oct. 26, '78.

BEANS AND PEAS.—The supply of beans begins to show more general qualities, but what demand exists is directed to prime grades—the custom in new crops—and there are consequently few ranges of quotations. Old marrows rather firm at $1.55@1.60; new mediums, prime, $1 65@1 70; do., marrows, $1.70@1 75, delivered to vessel. Pea beans, $1 80@1 85; white kidney, $1 75@1 85. Red kidney weak, except for choice, $1 75@2 10; black beans, $1 50@1 95. Green peas, $1 25@1.35; Canadian field, do., lower, 74@75c., some western new competing, Southern B. E. peas, $2 60 per 2-bush. bag.

Receipts of beans for week, 7,900 bush.; exports, 618 bbls.

BUTTER.—Trade has been sluggish and otherwise unsatisfactory. Buyers of State are unwilling to accept the standard of fine, because our high grades of butter do not contain the usual excellence of fall churnings, and there is, consequently, a good deal of "shopping" before sales result. The weather has been severely against quality: it wants cool or cold temperature to bring out all the merit of stock on the trier. Dairies with tubs in are regarded fully valued at 20c.; and there is an abundance of good, useful stock, mostly firkins, quoted at 18@19c. Exportation is of little account. Western butter is in good demand for medium or market buyers, but the objection of late continues—lack of uniformity in dairy and factory packed.

Dairy pails, choice, 22@22c.; common to good, 14@18c.; half-tubs, choice, 21@22c.; fair to good, 14@18c.; Dairies, full, good to choice, 18@20c.; firkins, 15@18c.; Welsh, 17@18; Welsh tubs, choice, 20@21c.; other, 13@15c.; poor State, 10@13c.; creamery, choice, 25@2 c; other, 19@23c; sweet cream, 23@24c. Western creamery, 20@24c.; early packed, 18@19c; dairy, fine, 15@16c; other, 10@14c.; factory, ladle packed, 14@15c; good to fine, 9@12c.; poor to fair, including milled, 6@9c.

Receipts for week, 24,580 pkgs.

BEESWAX.—A light amount of trade is in progress on export account. Sales at 26½@27c. for Western and Southern.

BROOM CORN.—Offerings of new crop are light, and prices for the moderate amount of old offering are nominal. Quoted at for old choice green hurl, 6@7c.; medium hurl, 5@6c.; choice short green, 5½@6½c.; medium short green, 5@6c.; red stubby and crooked, 4@5c.

CHEESE.—Toward the close of the week the lull which had characterized the situation for several days gave way to rather more activity on export amount. Fancy factories have been most wanted and 9@9½ made, the latter for exceptional lots. Receipts have not been large, but of other than choice lots they have accumulated.

Quotations are 9@9½c. for fancy late made; 7½@8½c. for good and prime; 6@7½c. for fair to good; 5½@7c. for half-skimmed; 4@5½c. for skimmed. State, farm dairy at 8@9c. for good to choice, 6@7½c. for fair to good, and 3@5c. for poor skimmed. Wisconsin factory, fine to fancy, 8½@9½c.; do. good to prime, 7½@8½c.; do. fair to good, 6@7½c. Western factory, fine and fancy, 8½@9c.; good and prime 6½@7½c.; fair, 5½@6c.

CIDER.—Small packages 10@12c. per gallon.

COTTON has been usually depressed on the look of affairs abroad, selling down sharply, but closing with some reaction. Latest prices are for October, 9.61@9.62c.; November, 9.62@9.63c.; December, 9.69@9.70c.; January, 9.79@9.80c.; February, 9.89@9.90c.; March, 9.99@10.00c.; April, 10.09@10.10c.; May, 10.18@10.20c.; June, 10.27@10.29c.; July, 10.38@10.39c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade bove or below the grade quoted:

	Uplands.	*Alabama.*	*Texas.*
Ordinary.....	7 13-16	7 13-16	8 1-16	8 1-16
Strict ordinary.....	8⅛	8⅛	8⅛	8⅛
Good ordinary.....	8⅜	8⅜	9	9
Strict good do	9 3-16	9 3-16	9 7-16	9 7-16
Low middling.....	9⅜	9⅜	9⅝	9⅝
Strict L. middling...	9⅝	9⅝	9¾	9¾
Middling.....	9 11-16	9 11-16	9 11-16	9 15-16
Good middling.....	9 15-16	9 15-16	10 3-16	10 3-16
Strict G. middling..	10 3-16	10 3-16	10 7-16	10 7-16
Middling fair.....	10 11-16	10 11-16	10 15-16	10 15-16
Fair.....	11 5-16	11 5-16	11 9-16	11 9-16

Stained.

Good ordinary.. 7 15-16; Strict good ordinary. 8 7-16
Low middling.. 8 15-16; Middling..... 9 5-16

DRIED FRUITS.—Apples show a small export demand; choice, sliced, are moving but moderately well. Peeled peaches of choice grade are decidedly higher, as also pitted cherries and raspberries.

New blackberries are quoted at 5½c. Peaches—Peeled, new Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime, choice North Carolina, 11@11½c.; good do., 8@9c.; unpeeled new halves, 3½c.; quarters, 3½@3½c. Pitted cherries, 17c.; southern plums, 12@13c. Apples—Old State quarters, 2½@2¾c.; do., sliced, prime, 4c.; do., good, 3@3½c. New apples 2¾@3c. for Southern quarters in bbls.; 4½@5¼c. for prime sliced, and 5@7c. for fancy. New raspberries, 25c.

Exports, past week, 422 bbls. dried apples.

EGGS.—Receipts for the week, 7,143 bbls.; do. last week, 7,264 do. Receipts show the effect of accumulation at the West. Really fresh true counting stock would bring better rates than are current for the present supply. Near by, 23@24c.; State and Penn., 21@21½c.; Canadian fresh 0c.; Western, 20c.; poor are held 18½@19c.; choice limed, 16@17c.; other, 13@15c., including Western.

FLOUR.—The supplies are liberal, especially of winter wheats, and prices have been declining. Export demand has been to a moderate extent only, and the local trade have been buying reservedly.

Latest prices are: $3.10@3.50 for very inferior to choice superfine State; $3.50@3.75 for poor to good extra do., odd lots and lines; $3.75@4.25 for good to very choice do., strictly choice and fancy lots above this; $2.90@3.50 for very inferior to choice superfine Indiana, Iowa, Michigan, &c.; $3.50@3.85 for very inferior to good shipping extra do. and $3.85@4.25 for good to choice extra do.; common to about choice white wheat extras, $3.85@4.75; choice to strictly fancy do. at $4.85@5.75; red and amber winter wheat, inferior to very choice trade and family at $3.75@5.50; round hoop Ohio at $3.65@4.10, and trade and family brands of do. at $4.10@5.50, the latter rate for very choice; St. Louis, $3.85@4.50 for very poor to good extra, and $4.50@5.75 for good to very choice; Minnesota clear, very inferior to fancy, at $3.50@5.50; Minnesota "straight," very inferior to very choice at $4.50@6 00; and patent fair to very fancy at $5.25@8.50; unsound stock at from $2@4.75; city mill extra at $4 75@5.00 for West Indies (the latter rate for strictly choice in new packages); do. for England, $3.65@3.75; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.50 for fair to very choice; No. 2 at $2.50@2.90 for very inferior to choice.

BUCKWHEAT FLOUR comes in slowly and is wanted at $1.85@2.25, the latter for choice lots.

CORN MEAL.—Sales at $2.15@2.75 for yellow Western, and $2.85@2 90 for Brandywine.

FRESH FRUITS.—There is some improvement in apples but it does not extend beyond fancy fall stock, and these are cheap at quotations. Winter fruit is very quiet and easy; the weather prevents storing. Selected fall, $1.62@1.75 ₱ bbl.; good mixed do., $1.37@1.50; best winter, $1.25; mixed do., $1@1.12; common, 50@75c The stock of cranberries press somewhat upon the market, but fine, hard, high-colored Capes will bring, singly, $8 ₱ bbl.; other Eastern bbls., $5@7.50; N. J. do., $4@6; crates, choice, $2; poor to good, $1.25@1.75. Quinces are higher; selected apple, $8@10 ₱ bbl.; other, $5@6.50. Grapes in fair supply from the interior; near-by lots about used up. Catawbas, in any package, 7@7½c.; Isabella, Diana and Iona, 5½@7c. Cal fornia 40-lb cases, Tokay, $7@8; Muscat, $6; Black Morocco, $6.50; hothouse grapes, 50c. ₱ ℔. Few table pears left; best trade supplied by California boxes. Near-by Duchess, bbls., $7@9 for prime; common, $5@6; Vicar of Winkfield, $4@6; cooking, $2.50@3; California Vicars, $3@3.50; Glout Morceau and Winter Nelis, $3.50@4. Latest car of California arrived in bad order. New peanuts are not of good grade; ranging at $1.15@1.35, or about the opening rates. Chestnuts, $3.50@3.75; a few fancy, $4 25. Hickory nuts, $2@2.25 for clean shellbarks; no others wanted.

GRAIN.—Wheat has varied considerably, as the advices from the other side have been variable or otherwise; export demand has not been to a satisfactory extent. Latest sales are, of No. 2 red, at $1@1 01½; No. 1 red, at $1 02@; white Canada, in bond, at 98c.; ungraded white at 98c.@$1 06; No. 2 white at $1 01¾; No. 3 white at $1; No. 1 white at $1 03¼@1 04; extra white at $1 06@1 08; white State at $1 03@1 03¼ for ungraded; ungraded red at 95c.@1 02; No. 2 amber at 98c.@$1, mainly at 99½c.@$1; ungraded amber at 98c.@$1 02; No. 3 spring, part to arrive, at 83@81c.; No. 2 red, October option, at $1 01; do., November option, at $1 01¼@1 02; do., December option at $1 03¾; No. 1 white, October option, at $1 04; No. 2 amber, October option, at 99½c.@$1; do., November option, at $1; do., December option, at $1 01¾; New York No. 2 spring, October option, at 91½c; do., November option, at 92c.; No. 2 Northwest spring, November option, at 90c. Rye at 60@61c. for State, and 57@58c. for Western. Corn has been very slow and lower; sales of steamer mixed at 43c.; New York No. 2, at 46@46¼c.; ungraded mixed western at 44@46¾c.; western yellow at 48c.; New York No. 3 at 41c; New York No. 2, October option at 46¼c.; do., November option, at 46¾@47c.; do., December option, at 47⅞@47¾c.; steamer mixed, October option, at 46c.; do., November option, at 46¾c.; do., December option, at 47c. Oats have been higher, but closed easy. Sales of white State at 28½@35c.; mixed State at 25@31c.; white western, 28@34½c.; mixed do. at 27@30½c.; New York No. 1 at 30@30½c.; No. 1 white at 34c.; No. 2 at 28¾@28¾c.; No. 2 white at 30@30½c.; No. 3 at 25¾@27½c.; No. 3 white at 28¾@28¾c.; rejected at 26½@26½c.; No. 2 Chicago at 29@30¾c.

HAY AND STRAW.—A more active trade is noted, and prices generally steady.

Latest sales are at 40@45c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports past week, light, 175 bales.

HOPS.—Emmet Wells, in his circular, says, "The market keeps up remarkably well in the absence of a demand from Europe, but how long it will hold to the present price is beginning to be a matter of some considerable doubt. Exporters claim that there is really nothing to warrant higher prices now than ruled at this time last year, taking into account the fact that London is loaded down with our old hops, and the general trade in Europe is becoming paralyzed by late financial and political disturbances. Holders, on the other hand, knowing our crop to be some 100,000 bales less than last year's, and of a more varied quality, think they ought to have more money for their hops. The law of supply and demand must and will settle this whole question. No combination of growers or dealers can fix a price to suit themselves. We still hold to the opinion that without a liberal foreign call the price cannot advance; and until the question is determined whether or not England must have our hops we must remain in the dark as to the future course of the trade.

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@13; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8: Olds, all growth, 2@4.

HONEY.—City buyers will not stock up much while the weather is warm; many grocers wait until store cleaning is over before they add delicate supplies. Nominal rates: Single comb, clover, 15@16c.; two comb, do., 13@14c.; buckwheat, 10@12c.; strained, 6@12c, as to quality.

LEATHER.—Sales at 19½@20c. for light hemlock; 20@21½c. for middle do.; 20@22c. for heavy do.

OIL-CAKE is at $28.50@$30 for Western.

POULTRY AND GAME.—Live poultry has declined and is not likely to revive again to long prices, as dressed will soon be the feature.

Best fowls and chickens, 10@11½c.; State and Penn., 10@11c.; Western, 8@9c. Turkeys—N. J. and State, 10@11c.; Western, 8@10c. Ducks, common to prime, 40c.@$1 pair; Geese, do., $1@1 62. Pigeons, 30c.

Dressed poultry cannot count upon more than two active days in the week at this season. Latterly the weather has favored it and prices are much steadier than they were at our last when very warm weather prevailed.

Dry picked turkeys, 14@15c.; fair to good 10@13c. Chickens, dry picked, 15@16c.; N. J., 12@14c.; State and Western, 10@13c. Fowls, dry picked, 13@14c.; N. J., 12@13c.; State and Western, 10@12c.; poor stock, 9c. Ducks, choice, 16@17c.; fair to good, 12@15c. Geese, extra, 13@14c.; other, 8@12c.

Supplies have as a rule arrived in unmerchantable order. Good game has had a fair demand and sell readily at the close at the extreme.

Pinned grouse, 75c.@$1 pair. Partridges, 75c.@$1. Woodcock, 40@60c. English snipe $1.25 doz.; Plover, $1.50. Stall-fed pigeons doz., $2; flight, $1.40@$1 50. Canvas back ducks pair, $1.50; Red Head, 75c.; Mallard, 65c.; Teal, 40@50; common, 30@35c. Venison, saddles, short, 16@18c.; long, 13@15c. Whole Deer, 11@12c.

PROVISIONS—Have suffered a sharp decline on the large arrivals of hogs at the West. Mess pork quoted at $8.05 for October and November deliveries, and $8.15 for December. Bacon at 5¾c. for long clear and 5¾c. for short clear. Lard at $6 40 for western steam on the spot; $6 37½@6 40 for November and December, and $6 45 for January. Shearine at 6¾c. for prime western. Beef Hams at $15.50@16. Tallow at 6¼c. for prime.

SEEDS.—Clover quoted at 7@7½ for prime, and 7¼@7½ for choice. Timothy at $1 15@1 20. Flaxseed at $1 40@1 42.

TOBACCO.—Export demand is fair, and home trade good, especially in Seedleaf; prices are not showing important change.

VEGETABLES.—Potatoes are out of the reach of shippers, unless they will use very common styles. The trade, however, is not sought for, as dealers think the local demand will use up the scant crop at good figures. Choice Eastern Rose, $3 bbl., with $3 12 threatened; State, $2.25@2.75, fair to choice; Peerless, $1.75@2.50. Sweet potatoes have worked out of their low position, Va. now quoted, $1.50@$1.75; Md., $1.50@2. Onions steady; Ohio is adding to the supply, other vegetables steady with the advanced season. Onions, white, $1.25@1.50 bbl.; yellow, $1 25@1.50; red, $1@1.25. Hubbard squash, $1.75@2; Marrow do., $1.25@1.50. ℔. Turnips and Beets, 75c. Cauliflower, 75c.@$2. Cabbages, 100, $3@4 Egg plants, doz., $2@3.50; Pumpkins, do., $3@6. Celery, doz., 75@87c.

Exports for the week, 3,272 bbls. potatoes; onions, 200 do.

WOOL.—There has not been much activity; manufacturers buy close to actual needs, while there are free sellers, yet prices are generally steady.

Quotations are—Ohio, Pennsylvania and West Virginia—XXX and picklock, 38@40c.; XX, 35@37; X, 33@36; No. 1, 30@33c.; No. 2, 33@36c; coarse, 30@31c. combing, 40@42c.

New York, Michigan, and Wisconsin, XX, 30@35c.; X, 30@33c.; No. 1, 31@33c.; No. 2, 30@31c.; coarse, 27@30c.; combing, 38@40c.

Indiana, Kentucky and Tennessee—XX, 31@35c.; X, 30@34c.; No. 1, 33@35c.; No. 2, 31@34c.; coarse 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 3 @31c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana.—Fine unwashed, 25@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Oct 26 1878.

BEEVES.—Receipts for the week, 11,602 head do. last week, 11,955 do. It is generally conceded that the past week has been the best "buyer's week" since the second year of the war. This would certainly seem so when a look could be had at the fine, showy Ohio steers that sold at 10c., to dress, 57 lbs., while there were other buyers almost equally fortunate who obtained a splendid grade of native stock at 9¾c., to dress, 56 lbs. The general quality of the drovers was much above the usual average, having few Texas or Colorado, and quotations have consequently a deepened shade, not apparent to those absent from the collection. Arrivals were irregular at the close, and buyers obtained some advantage from that course. Wednesday's market was ¼c. higher than the closing one. We quote extra, 9¾@10c. Strictly prime, by the car-load, 9¼@9½c.; good to prime, 8½@9c; fair to good, 7¾@8¼c.; common to medium, 7@7½c.

COWS AND CALVES.—During the week five carloads sold at $35@75 per head.

VEAL CALVES.—Market quiet at 5¾@7¼c. for milk fed; 2½@3c. for grassers, and 3½@4½c. for fed.

SHEEP AND LAMBS.—Receipts for the week, 29,129 head; do. last week, 29,647 do. The demand was fair, but buyers insisted upon easy figures as the retail markets are well supplied with a general stock of meats. Sheep sold at $3.85@5 per 100. Lambs, 4@5¾c Some poor sheep at 3c.

SWINE.—Market dull; there were sales at the close at $3.55@3.62½ per 100; good Ohio's held at 4½c. without an offer. N. J. dressed pork, 5½@6¾c. for heavy, to pig.

SPECIAL NOTICES.

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Reading for the Young.

DOLLY'S CHRISTENING.

ELEANOR KIRK.

"I'LL be the goodest little girl
Tha ever you did see,
If you'll let me take my dolly
To church with you and me.
It's too dreff'ul bad to leave her,
When we's all gone away;
Oh! Casette will be so lonesome
To stay at home all day."

'Twas such a pleading pair of eyes,
And winsome little face,
That mamma couldn't well refuse,
Tho' church was not the place;
For dolls or play-things she well knew.
Still mamma's little maid
Was always so obedient,
She didn't feel afraid.

And tho' Casette came straight from France
She really was quite small,
And could be carried very well
Right under mamma's shawl.
So when they reached the great stone church,
And sat inside the pew,
Cosette was placed in Mabel's arms—
Both of them dressed in blue.

No mouse was ever half so still
As this sweet little lass,
Until the sermon was quite through—
Then this did come to pass:
A dozen babies (more or less,)
Dressed in long robes of white,
Were brought before the altar-rail—
A flash of heaven's own light.

Then Mabel stood upon the seat,
With dolly held out straight,
And this is what the darling said:
"O min'ster, pease to wait,
And wash my dolly up like that—
Her name it is Casette."
The "min'ster" smiled and bowed his head;
But mamma blushes yet.

LETTERS FROM BOYS AND GIRLS.

For the Little Folks.

LISTEN, little children, while I tell you about a hog that got drunk on cider. No doubt you have seen a great many drunken men, but perhaps never a drunken dumb animal—they usually having too much self-respect to get drunk like some men. And even this one of which I am about to tell you, would undoubtedly have scorned the idea, had he known beforehand the evil effects of taking "a drop too much."

It was a great many years ago, when nearly every farm had a large orchard, and after storing away what apples were necessary for family use, the remainder were manufactured into cider, which was afterwards converted into brandy and the most of it consumed on the premises during the year. I was a boy then, and we lived about half a mile from an uncle of mine where the affair happened, the relation of which, by my aunt, caused no little merriment among us children.

Previous to making cider, it was necessary to clean the barrels of all the old cider and settlings which might remain in them from the previous year's supply, and in doing this, my uncle thought it would be a matter of economy to turn it out where it would run down into the hog yard, where was confined a large old sow with some ten or a dozen pigs of about three or four weeks old, so that they might drink it and nothing would be wasted. Accordingly, barrel after barrel was brought out and the contents emptied before the old sow who stood ready to receive them, and as each new lot came, she grew more and more excited over it; her eyes glistened and she would fairly dance for joy, while she seemed mentally ejaculating, "A little more cider for Miss Dinah," until finally, she began to show evident signs of intoxication. She would cut up all sorts of hoggish capers—she would run, and squeal, and tumble down; then she would scramble up and try to walk on two legs, but she would make about as much headway as some other two-legged creatures do when drunk. But there was one thing noticeable about her, she was perfectly good-natured about it; she didn't offer to fight, or even to bet on how much she was worth, but kept on cutting up silly capers and ludicrous faces, till at length, yielding to the force of circumstances, she gave over her vagaries, and stretching herself at full length upon the ground, was soon lost in a state of *beastly* intoxication. The little pigs, which till now had stood back apparently wondering what had befallen their mother, now came forward to examine her as she lay insensible on the ground. They would ply their little noses to her to see if they couldn't rouse her from her stupor; failing in this, they would start in a string one after another and run her over from head to tail and back again; crying meantime most piteously, as though their hearts would break over the supposed death of their mother. This was continued for a long time, till finally the old lady, having in a measure slept off the effects of her debauch, with much difficulty, regained her feet, and looking around as if to ascertain her locality, sneaked off to her nest out of sight; nor did she show herself again until she was sure she was entirely sober

Whether she signed the pledge or not I never learned, but certain it was she was cured of drinking; for while she lived she was never known to taste of another drop of intoxicating drinks; which is more than can be said for a great many two-legged beasts.

You will agree with me that by getting drunk the mother was setting a very bad example before the little ones, but I think the whole family were heartily ashamed of it, since I never knew one of them afterwards to get any worse for liquor; though we can't tell what might have happened had they lived a good many years, and mingled in society; but they all died young, which was fortunate for them after all, if it saved them from drunkenness. Don't you think so?

A. H. M.

"Mississippi" Makes His First Appearance.

DEAR COUSINS:—I am a new cousin claiming a hearing, if Uncle True thinks this worthy of insertion. I like the letters from the cousins, and, as I have not seen a letter from this State, I thought I would tell you all something about this part of the world. I live in what is known as the "Prairie Belt;" of course this prairie is not to be compared with the prairies of Texas, it being only about fifty miles long, and not half so wide. This is very fine land, and most of it is now under cultivation; however, there is one place in it, just as it was when the Indians used to hunt deer here before Mississippi was settled. This prairie land gets very muddy in the winter, and the mud sticks so fast that some say it will pull the soles off of your shoes. I have never had it pull my soles off, but I have had it pull my shoes off leaving me to make my way as best I could without them. If one does not like the mud, he can go to the hills, and there he will find a rich sandy soil. Our bottom lands are also fine.

Our farmers devote their time to raising corn and cotton. Cotton is the chief product, but our lands will grow as fine small grain as the best lands in the West, and a few farmers do grow small grains and grasses.

I expect some of the cousins never saw a cotton plantation (for I have seen grown people who never had seen one) and for their benefit I will tell how one looks. It grows, on an average, about waist high, and is very pretty while growing; everything looks green, and the white and red blooms give it the appearance of a large flower-garden. A field of three hundred acres presents a grand sight in the fall when it has opened. Then everything is so white that it looks as if it had snowed. Cotton is picked with the fingers, and we boys have lots of fun picking cotton, we all run races and see who can pick the most. I never was a good picker, because I was always too lazy to stoop so much. A good picker can get out as much as three hundred pounds per day. I would like to tell you all more, but I am afraid I have already said too much for the first time. I hope the boys will be better hereafter, but the girls need not stop because the boys won't write. If Uncle True takes this, you may hear from me again. I won't say how old I am, but I am a good-sized boy.

Aug. 20th, 1878. MISSISSIPPI.

A Very Early Snow-Drop.

DEAR UNCLE TRUE:—Oh, Cousins, where are ye? I haven't seen a letter for a long time, and my spirits have decended three degrees and a tenth. The young people's column is nothing without the boys' and girls' letters. Why don't you write? I am stricken with grief at such tardiness. Where is Storm? Perhaps some of you remember his letter in the RURAL of October 28, 1876. I don't think I have seen one from him since. Why doesn't he write? We want such letters as his and those of Madcap Mollie, Bell, E. F., Adele W., Yound Ed, and Wild-fire. Come, cousins, wake up! and have a regular exciting time, even a pitched battle would be preferable to this continued silence. I defy the boys to beat the girls! Slayerofconceit, my lad, where art thou? Hast thou, too, deserted? or art thou waiting until the girls get cooled off somewhat? Solomon, some more of thy wisdom; we poor creatures are sadly in need of it; let us behold some of the productions of thy pen ere long. Cousins *all*, will you not heed my request, and write? I want to see the young people's page full of letters next week. If, when I take the RURAL in my hand and eagerly turn its leaves until my gaze rests upon *the* page, I find none, I shall be bowed to the earth in dire distress. I have another request to make: Will Rocky Mountain Joe, if he be still in existence, please step forward and tell me where, in the Rocky Mountains he lives, and what the place is like? Now, his hair needn't rise for fear of a girl's being after him, and I will dispel his fears at once, and inform him that it is merely for information regarding the country round there, that I ask him so to exert himself. Will he tell me what I wish to know? Sir Editor! Did you deem the cousin's letters that were sent you lately—if there have been any—unworthy of publication, and so filled the waste-basket to overflowing with them? Oh! I entreat you with uplifted hands and streaming eyes, to let this, my touching appeal, come forth in your paper, thereby sending a cheering ray to my saddened heart. Cousins, adieu. Yours, sorrowfully,

Norfolk, Co., Va. SNOW-DROP.

A Trip to the Falls.

DEAR COUSINS:—Good for Madcap Mollie! Now there will be some letters—or a fuss. And, Mollie, I would suggest that you tell us in your very first letter what you have been doing this summer. Have you been on a pleasure trip, or have you, like myself, been quietly baking at home? And I think after all, if one must bake, home is about the best place to bake in. I am sitting just now in my favorite nook in an old pear tree. Sometime I will describe it. I will only say now that it is in the middle of a large orchard, just a little way from my home. I came here with a pocketful—as the boys elegantly put it—"chock full" of plums. Delicious, little, sweet plums, but alas, they are rapidly disappearing. Now, just wait till I get another one and I will tell you of what was about the only pleasure trip I took last summer. It was an excursion to Niagara. We started quite early, going on the cars, and arrived there in due season. Then, after walking around a little in the Park, going down to Prospect Point, etc., we went down the Inclined Railway; some of the party went over in the ferry. I wanted to go very much, for I love the water, but the lady with whom I went to the Falls, being very timid, wouldn't hear of such a thing, so I was obliged to be content with land. When we came up to dry land again, for everything down there is washed with spray from the falls, we had our dinner in Prospect Park, which, (the dinner), wasn't the *least* pleasant part of the day I can assure you. After that we visited Goat Island and the Three Sisters, (I think the view from the Three Sisters is the finest I saw), and went a step into Canada, not more, for there was not time for any sight-seeing there; then to the depot. We had to run for the train as it was. But my plums are all gone and so I am sure is Uncle True's patience, so I must end this short (?) letter. Thanking Uncle True very much for the answers he gave to my questions last time, I remain,

LEONORA.

Query:—"Where is Jumping Jack?" Ans.—Dead Silence.

Her Introduction.

GOOD EVENING COUSINS.—May I come and swell your ranks? Methinks I hear your answer, yes. Why do they respond so readily? some one may ask. Because they think (judging by my name) that I am all animation, and will help to enliven their circle. Now cousins, I don't want you to be disappointed by inferring the opposite to what I may be. Perhaps my signature reminds you of Topsy, who took an active part in "Uncle Tom's Cabin," and that I will do the same in our circle. I don't propose to do any such thing, and why? for the simple reason—that I haven't the wit to do so. Perhaps I ought to have left my last remark unsaid, for some of the boys, as Slayerofconceit, Young Bach and several others I might mention, may regard me as of little consequence. And you know I wouldn't have them think that for anything, because I flatter myself that I am of a little importance if I am not humorous. I have some good common sense which is a great deal better. I am somewhat older than most of the cousins, I judge, and may be in your way; but as you have so kindly admitted me, I will promise not to tire you too often with my long, prosy letters. Trusting my admission has met the approval of UNCLE TRUE (for I suppose the invitation of new members must be sanctioned by him), I will close this introductory letter.

COUSIN TOPSY.

A Kiss for Uncle True.

DEAR UNCLE AND COUSINS.—Will you allow a little girl away off in Kentucky to enter your circle? I am a dear lover of the RURAL, and when it comes can hardly wait for mamma to sew and cut it, and being the only little girl in the family I generally get it first. Where shall I look first? Oh, turn to the pictures, what a treat! Little brother, four years old, crowds in to "shee" too. As soon as I get the paper all to myself I turn with eager delight to the letters. The names of Lily Lee, Wild Fern, Wild Rose, and many others are quite familiar to me. I am eight years old, have never been to school, but am learning at home. I have one little brother, Johnnie, and he is a true boy, full of mischief and fun. My papa has been taking the RURAL ever since I can recollect. I can't write much this time, not knowing if I shall be admitted. I have never seen a letter to the cousins from good old Kentucky, and if I am not counted in I will know I am not welcome; if kindly received, I will write again and tell you more about myself and my home. Love to all the cousins whether you claim me or not, and a kiss to dear Uncle True.

Todd Co., Ky. KATIE M. MOBLEY.

Not for Several Years.

DEAR RURAL COUSINS:—Although it has been several years since I have written to you, my dear unknown young friends of THE RURAL, still I hope you will give me a *hearty welcome* among you once more. I still read the letters, and hope that the writers will follow my example, and we will soon gain as much room in the paper as we ever possessed. We have been having quite a pleasant time this summer down here in our quiet little village of the Sunny South. There have been several picnics and we enjoyed ourselves greatly playing and fishing. The lady with whom I board has a great many flowers in bloom now, notwithstanding the dry weather and excessive heat of the last few months. I can send bouquets to my dear friends whenever I am so disposed, but sad to say, fate has not smiled on me as on most of my companions, for I have no sweetheart to love and cherish. I think it is best for the grown-up people to have lovers; and I abide by my own opinion.

Hoping my young friends will write oftener and long letters, I again subscribe myself your cousin, JOHN W. E.

Carrollton, Ala., Sept., 1878.

To the Front at Last.

DEAR UNCLE TRUE:—Will you please consider me one of the cousins. Some undefinable fear has prevented me from coming to the front and joining your number before. I would like to ask Uncle True if he considers it right for people to read novels? I have only taken your paper for about six months, yet I assure you I like it very much. Will some of the cousins please tell me how they fix their autumn leaves to keep them through the winter? Now, if Uncle True will please print this, he will greatly oblige,

A RURAL COUSIN.

PUZZLER ANSWERS.—Oct. 19.

CHARADE.—May-basket.

DOUBLE ACROSTIC.—Initials, Perch; finals, Trout.

TRANSPOSITION.—

Yet do not think I doubt thee;
I know thy truth remains;
I would not live without thee,
For all the world contains.

Sabbath Reading.

WHERE HAST THOU GLEANED TO-DAY

I.

AH, never true workman toiled in vain,
E'en though he watered his seed with tears;
Bright golden stalks and the full-eared grain
In God's "due season" for him appears!
Dear Christain worker, what sheaf for you
Stands safely bound in the twilight gray?
Thy soul drinks blessing midst falling due—
O, tell us, where hast thou gleaned to-day!

II.

Has some fallow ground sprung green at last—
Doth the stubble field its grace renew?
Where bramble shadows have long o'ercast
Doth rude fence-corner yield treasure too?
Where Sorrow's sickle, with edge so keen,
Left naught of promise in smiling May,
Humility's fragrant petals lean—
O, reaper, hast thou gleaned there to-day?

III.

Where Satan's briers the fingers wound
Have not your labors been all too brief?
Remember, where sharpest thorns are found
Stands richest blossom for Master's sheaf!
Yet there's precious grain in ev'ry field—
No scythe sweeps wholly, though swung for aye!
For thousands of sweets the harvest yield—
Say, Christian, where hast thou gleaned to-day?

IV.

E'en Job returned from the close-mown vale
More richly laden than joyful Ruth;
For him, where others thought crop would fail,
Flashed gems of wisdom and pearls of truth!
When in stubble field of affliction tried,
Like grand old Daniel, we'll often pray
The Angel of Mercy will walk beside,
And bend our sheaves at its closing day!

[Christian at Work.

MATERIALISM IN THE POPULAR FAITH.

MANY defenders of the faith are greatly alarmed, just now, by the spread of materialistic doctrines. It is feared that the belief of men in the truth of the gospel will be undermined by this movement; and a host of apologists under the able and confident leadership of Mr. Joseph Cook, are arming themselves with such arguments as they can command to meet this dangerous foe. The materialism which excites their alarm is that which appears in connection with the recent investigations in physical science—the materialism of Bain and Buechner and Carl Vogt; the alleged (but not acknowledged) materialism of Tyndall and Huxley and Spencer. From the teachings of these physicists and philosophers the danger to religion is supposed to come; and these are the names with which polemical pulpits are resounding, and the pages of quarterly reviews are plentifully besprinkled.

We are not inclined to belittle the perils confronted by the church on this side, nor to ridicule those who are trying to meet them; but it may be that materialism in other shapes is assailing our faith in another quarter. Sometimes it is true that the most dangerous foes of the church are in its own household. Sometimes the enemy outside the camp has a powerful ally within. We wish to suggest the inquiry whether it be not so in this case; whether there be not a very considerable materialistic element mingled through and through the popular faith; and whether this materialistic leaven, which is not the product of modern science, but which has been propagating itself in Christian thought all through the centuries be not, after all, more to be feared than scientific skepticism.

BIBLE ARITHMETIC.

ADDITION.—Add to your faith virtue; and to virtue, knowledge; and to knowlege temperance; and to temperance, patience; and to patience, godliness; and to godliness, brotherly kindness; and to brotherly kindness, charity. 2 Peter, 1: 5—7.

SUBTRACTION.—Laying aside all malice, and all guile, and hypocrisies, and envies, and all evil speakings—desire the sincere milk of the Word, that ye may grow thereby. 1 Peter, 2: 1, 2.

MULTIPLICATION.—Grace and peace be multiplied unto you through the knowledge of God and of Jesus our Lord. 2 Peter, 1: 2.

He that ministereth seed to the sower doth minister bread for your food, and increase the fruit of your righteousness. 2 Cor. 9: 10.

DIVISION.—Come out from among them, and be ye separate, saith the Lord, and touch not the unclean thing; and I will receive you, and will be a Father unto you, and ye shall be My sons and daughters, saith the Lord Almighty. 2 Cor. 6: 17, 18.

ONE of the religious journals expresses the hope that the Committee of Bible Revisers "will have honesty and grace enough to weigh with the utmost impartiality the authority for every passage in the Holy Word, and that wherever the evidence for an interpolation into God's Word overbalances by the slightest fraction that in favor of the passage, they will consign it to margin or brackets, or omit it altogether, as the evidence may require." To this the *Interior* seems to object. "Who," it asks, "shall certify to us the absolute accuracy of those balances? It was not nominated in the bond that they were to supply a new canon. If, however, the highly improbable supposition should prove true, that the Committee are thus amusing themselves, their work will fall so heavily from the press as to mash some of them. A steam derrick could not hoist an emasculated Bible into a single evangelical church." We do not quite get the force of this objection. It is true that the revisers were not expected to supply "a new canon;" and though the question of the canon was not settled by miracle, and cannot be regarded as beyond the pale of argument, yet we have heard no desire expressed that the Revision Committee take up that question.

PERSONAL ITEMS.

Dr. Carver's rifle brought him an income of $60,000 last year.

The Chinese Ambassador at Washington works from nine A. M. until six P. M.

Butler has one hundred and two Republic orators declaiming against him in the field, and still he is not happy.

Dean Stanley says that the Government buildings in Washington are among the grandest structures in the world.

Governor Bradley, the Democratic Governor of Nevada, is seventy-five years old, and is known among his people as "Old Broad Horns."

Mrs. Corbin of Elizabeth, N. J., sister of ex-President Grant, has taken the prize for the best home-made bread in that State at the State fair.

Christopher Mann, of Independence, Mo., has just celebrated the one hundred and fifth anniversary of his birth. He is the father of twenty-eight children.

Lord Salisbury, urged on, like a second Macbeth, by the ambition of his wife, is determined to be Lord Beaconsfield's successor as prime minister of England.

The Crown Princess of Prussia is a sensible woman. When she visits an exhibition she goes in a simple black silk gown, with a straw hat with black band and a veil.

The Duke of Edinburg, Queen Victoria's son, and husband of the Emperor of Russia's only daughter, will accompany the new Governor-General of Canada to America.

Emperor William of Germany has contributed $700 for the relief of the yellow fever sufferers, and United States Minister Noyes has sent $4,000 to Secretary Evarts from Paris for the same purpose.

The new preacher-Congressman, Rev. Gilbert de la Martyr, of Indiana, elected by the Nationals, is fifty-three years old, and very tall, spare and angular. He ran for prison inspector in New York in 1874.

This was Thomas Carlyle's estimate of Beaconsfield a good many years ago: "He's just a miserable mountebank, who does everything with the rattle of that tongue of his, and has no convictions whatsoever."

William B. Astor's country place on the Hudson, near Rhinebeck, contains about eight hundred acres, and gives employment to forty men during the whole year. He has one hundred and ten horses, of which thirty are road horses.

Ralph Waldo Emerson abhors the presence of a reporter, and Boston reporters all pay deference to his wishes, and do not cherish any antipathy. On one occasion he stopped in the middle of a lecture, and would not resume until he had assurances that the pencils should not follow him.

The intended husband of Fraulein Maggy Rothschild, a younger daughter of Baron Carl Rothschild, is not the Duc de Guise, as erroneously announced at Berlin on the 21st inst., but the Duc do Guicke, the eldest son of the Duc de Grammont.—It is a pleasure to correct a mistake about one's friends.

Prince Bismarck's big dog struck up quite a friendship with the Papal Nuncio. Mgr. Maselle, whom he followed everywhere, fawning on him and licking his hands. "Your dog seems to have taken a fancy to me," said the Nuncio one day. "He is not the only member of the family that has done so," said the Prince courteously.

The health of Mrs. Sherman, the wife of General Sherman, has received so severe a shock from her recent illness that she is too feeble to undergo the duties of society at Washington next winter, and for the purpose of recruiting her strength and of educating her two youngest children under her personal supervision, she will pass the winter season in Baltimore.

Lord Lytton, poetically known as Owen Meredith, Viceroy of India, is a genial man and a brilliant and delightful talker. His wife is a stately and graceful lady, and admirable hostess, most sweet and courteous. Their palace at Calcutta is a magnificent dwelling, and full of beauty and luxury. Lord Lytton's office is a very laborious one, but it has the compensation of power and splendor.

Senator Morton's son, John M., has just reached home from his lonely exile as United States revenue agent on one of the barren Alaska seal islands, but did not learn of his father's death, a year ago, until he reached San Francisco. About the time of the senator's fatal illness, John M. Morton was also thought to be at the point of death at the Alaska station, and was unable to return by that year's steamer, after which he became ice-bound and could not leave until the return of the steamer this fall.

The fine speeches of Lord Dufferin, which read as if they were delivered extemporaneously, are really prepared and committed to memory with the greatest care. He works out a speech generally in the morning, and dictates it to his shorthand writer, who then transcribes his notes upon large sheets of foolscap, writing on every second line, and leaving a margin of half the page. The extended manuscript is then returned to Lord Dufferin, who improves his composition until sometimes scarcely a word of the original conception remains. The amended copy is returned to the secretary, who makes a fresh transcription. This in turn undergoes revision, and a third, and often a fourth and a fifth, transcription will be ordered, until Lord Dufferin is satisfied. Then he reads and repeats his periods over slowly, walking up and down, and reciting paragraph by paragraph. A reply in Greek which he made to the professors of McGill University when he was given a degree, took him more than a week in its composition. It excited wonder and admiration in Canada and English learned circles as a piece of off-hand scholarship.

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"City Novelty Co.: MORRISTOWN, Pa., Oct. 10.
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"J. H. WARNER, Morristown, Pa."

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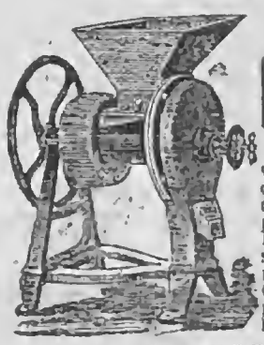

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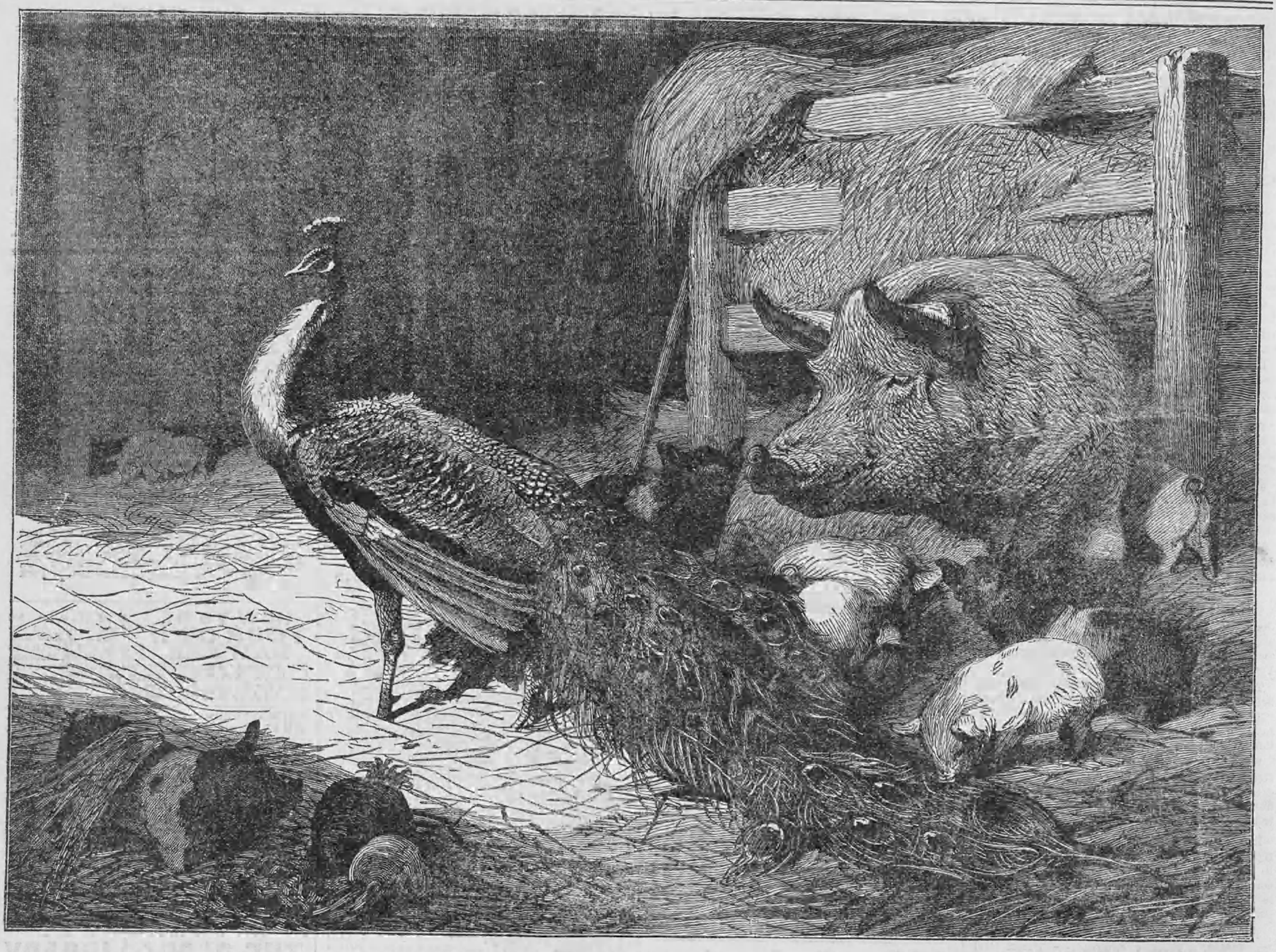

BEAUTY AND THE BEAST.

Wit and Humor.

THE little girl rattled it off as if she knew it by heart: "Why do ducks put their heads in the water? For divers reasons. Why do they take them out? For sundry reasons. Why do they put them in again? To liquidate their little bills. Why do they take them out again? To make a run on the banks."—*N. Y. Graphic.*

A NEWLY married lady, who, as in duty bound, was very fond of her husband, notwithstanding his extreme ugliness of person, once said to a witty friend, "What do you think? My husband has laid out fifty guineas for a large baboon on purpose to please me!" "The dear little man!" cried the other. "Well, it's just like him."

"BEAUTIFUL, beautiful silken hair!" Philip murmured fondly, toying lovingly with one of her nut-brown tresses; "soft as the plumage on an eagle's wing, light as the thistledown that dances on the summer air! The summer of sunset, the glitter of yellow gold, the rich red-brown of autumnal forests blend in entrancing beauty in its ——." And just then it came off in his hands, and he forgot just what to say next. There was a moment of profound silence, and then Aurelia took it from him and went out of the room with it. When she came back he was gone. They meet now, but they meet as strangers, and the eyes that were wont to beam upon each other with the awakening love-light, now glare as though life was an eternal wash-day.

Though Shaking Like an Aspen Leaf

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I am in receipt of a pair of the Wonderful Lefevre Ear Drops, for one dollar; to say that I am pleased with them hardly fills the bill, they are simply elegant.—ANDREW MORRIS, Hornellsville, N. Y.
The Wonderful Lefevre Diamond Ring, for one dollar, came to hand this morning. It is really elegant, giving entire satisfaction, and eliciting wonder and admiration from all who see it.—W. H. REEDY, Martinsburg, W. Va.
The Lefevre Diamonds, mounted in solid gold, are truly marvelous.—B. F. AVERY & SONS, Home and Farm, Louisville, Ky.
The eminently successful experiments of M. Lefevre silences all doubt of the artificial reproduction of the true diamond.—M. DU FRENOY, the great French Scientist.
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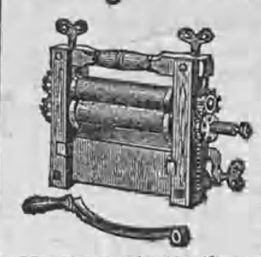

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME.

VOL. XXXVII. No. 45.
WHOLE No. 1502.

NEW YORK CITY, NOV. 9, 1878.

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NOTES FROM THE RURAL EXPERIMENTAL GROUNDS.

Oct. 29, 1878.

DEFIANCE WHEAT.

We have made frequent reference to this variety of wheat which was produced by Mr. Pringle, of Vermont, a studious, hard-working botanist, by cross-fertilization. It was offered for sale last season for the first time, and at the absurdly high price of thirty dollars per bushel, a large aggregate amount—made up of small, trial quantities—was sold.* Of the five varieties of spring wheat which we tried at the farm last spring, this variety bore the heaviest straw and broadest leaf, and while some of the others were lodged by strong winds, this remained upright. The heads also matured the greatest number of grains, but owing to the hot weather and almost daily showers or, it may be, to the unsuitableness of the climate for this crop, they were much shriveled. We find, however, that the best we have been able to purchase for our subscribers is also shriveled. It is, nevertheless, true that in *some* localities, Defiance Wheat has yielded, under high cultivation, immense quantities, relatively to the area sown, and the grains have been both large and plump, as may be inferred from the size of our engraving, which is a correct portrait of a head selected from a prize collection. This was first presented in the RURAL of Sept. 14, and is now reproduced for the benefit of our many new friends.

From our own knowledge, we cannot say one positive word in favor of this Defiance Wheat, and we place it among the varieties of our free distribution, because it was originated by one whose earnest labors at least entitle him to valuable results, and also because, having been extensively advertised, the demand for it is far greater than the supply.

"PEARL MILLET."

The available stock of seeds of this "new" fodder plant is so inadequate to supply the demand that the price will this season be so high as to prevent farmers in general from purchasing it in other than experimental quantities. We have read a number of letters from those who have tried it during the past season, extolling it in the language of well-meant but probably unwarranted enthusiasm, and stating conclusions that extended trial will, very likely, modify.

From our own investigations we may state the gist of what was given in detail in the RURAL of Nov. 2, viz., that our *largest* plant weighed (without roots) 42¼ lbs.; that it was ten feet high and 14 feet in circumference; that our horses and cattle relish the leaves as much as those of corn. The stalks, however, are more slender, harder—more reed-like than those of corn.

THE BEAUTY OF HEBRON.

We do not know of any way in which an Agricultural paper can make itself of more value to its friends and readers than by testing new plants and presenting conscientious reports of the results when of enough importance to warrant such publicity. Years ago we paid three dollars for a pound of Early Rose potatoes and, though we have tried many new sorts since, we have until now deemed this kind in essential respects, as good as, if not better than, any of the hundreds of varieties that have since been offered, earliness, of course, being a first consideration in our estimate. Last spring we were shown the Beauty of Hebron potato and asked to give it a fair and a careful trial. We had confidence in those who made the request and were much pleased with its appearance, so that besides planting it ourselves, we sent a pound, or so, to a number of farmers requesting that they, too, would give it a careful trial. At this time we have space but for a few extracts from letters received: Mr. Peter T. Hewlett, of East Rockaway, L. I., says: "They are ten or twelve days earlier than Early Rose, of better quality and the yield is nearly double."

Mr. Jonathan Talcott says: "We planted them on fair soil of fine gravelly, sandy loam. The yield was about two bushels from samples (?) sent, of fine, smooth potatoes, *which I think will prove valuable in the future.*" (Italics are Mr. Talcott's.—Eds.) "I have never known but a single year, in more than 40 years, so disastrous to the potato crop in this section; and that was in 1857," etc.

E. L. Coy, of West Hebron, N. Y., reports: "I had at the rate of 295 bushels per acre of Beauty of Hebron, while the Snow-flake, planted beside them with the same culture, yielded but 185 bushels." John R. Willett, of West Hebron, says the yield was twice as great as that of any other kind he planted. Under common field-culture 15 hills yielded one bushel. They excel all others for table use.

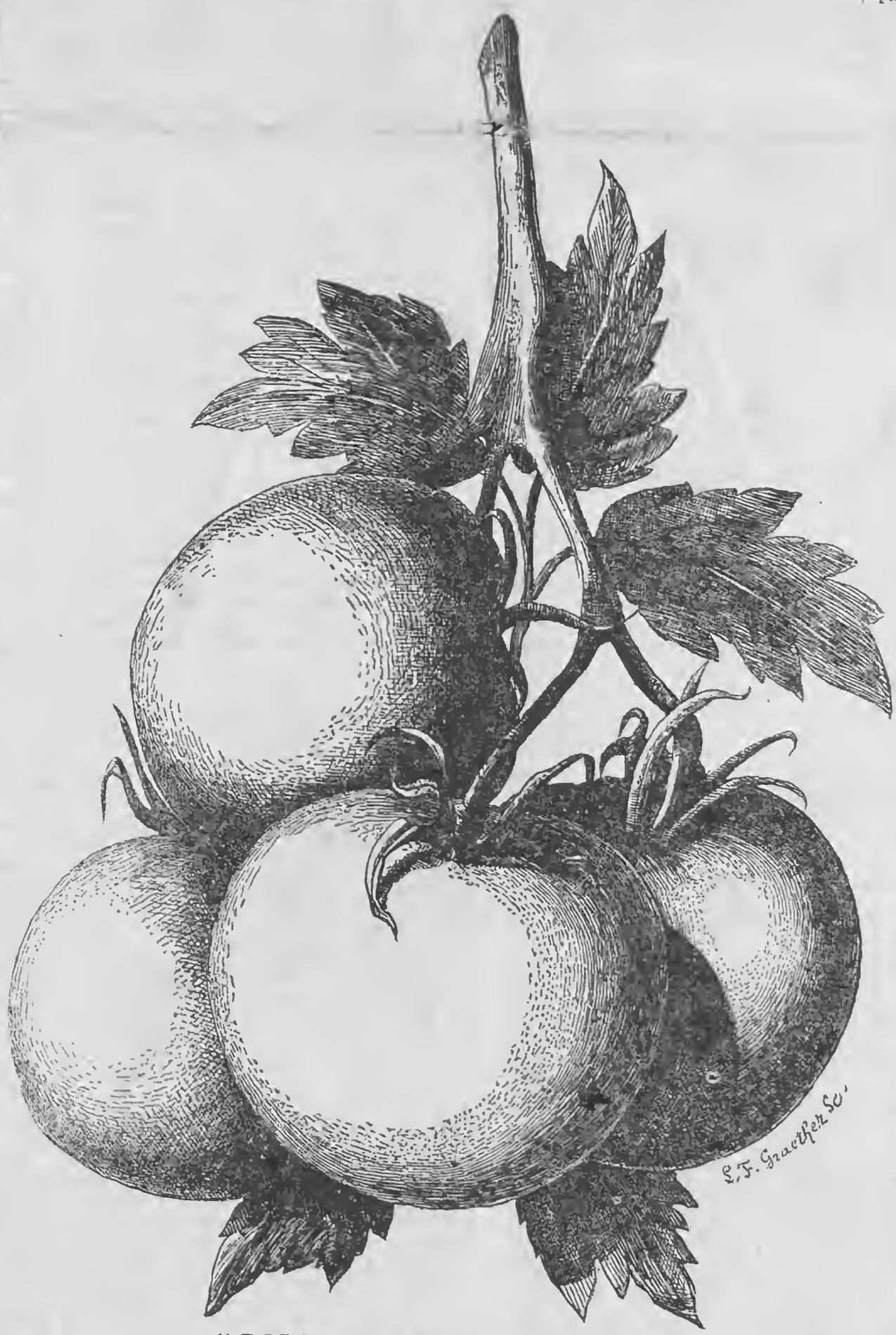
Mr. Coles Carman, of Hempstead, L. I., says: "Three small potatoes were planted in the garden. From these we got one bushel of very good size. I think they are about ten days earlier than the Early Rose. Tops of vine not so large as those of Rose."

Our own report is that they are ten days earlier than the Early Rose, that they will yield more potatoes in a given area treated in the same way, and that they are as good in quality.

The Beauty of Hebron originated in 1874 from seed-balls of the Chili-Red. The tubers are of medium size, very smooth, slightly tinged with pink about the eyes, but becoming white during the winter. They lie closely together in the hills, and the labor of digging them is consequently light. We propose to send a single potato to all of our subscribers who apply, until our own supply is exhausted, and we have contracted with J. M. Thorburn & Co. of this city who have brought this potato before the public, to supply any further demand.

THE VOORHIS WATERMELON.

Several years ago, one of our neighbors, Mr. Isaac Voorhis, saved seeds from either the Mountain Sweet or Black Spanish Watermelon which were planted together in his melon patch. These seeds produced an intermediate variety which he has since cultivated. Much pleased with this melon, we planted the seeds last year for our own use, and this year, with a view to placing them in the seed distribution, an acre was planted to them at the farm and as large a plot here as could be spared. Frost killed the vines at the farm. But Mr. Voorhis has obligingly collected all the seed from his crop for us, and so we are enabled to offer them to our readers as we had desired to do. The melon is longer than the Black Spanish and thicker than the Mountain Sweet, of a regular, thick, oval shape. It is obscurely ribbed and of a dark-green color, sometimes faintly streaked with a lighter shade. The flesh is remarkably solid, of a rosy-red color, lighter in the heart of the melon, extending in some melons, nearly to the rind itself. The seeds are of an ash-brown color speckled somewhat like Castor-oil "beans." The vines are wonderfully vigorous and productive, ripening fruit through a longer season than those of any other varieties which we have tried in these grounds.



"GOLDEN RURAL" TOMATO.

"GOLDEN RURAL" TOMATO.

THE Acme Tomato is said by many who have made Tomatoes a specialty, to be an improvement upon any other variety. Its superiority consists in its uniform size, its smoothness, its firmness, and in ripening perfectly about the stem. Comparing this with the "Golden Rural" as grown here, the latter is yet superior in several respects. It is nearly round, as our engraving will show; there are no lobes or irregularities whatever upon the surface; it is firm, ripens about the stem the same as in any other part, and is the earliest tomato we have ever cultivated. It is also the most fruitful throughout the entire season. It is the latest as well as the earliest, and is at this date (Oct. 27), of all the varieties cultivated the past season, only the kind of which we still have a supply. The variety grew from a seed of the Green Gage, the plant of which stood next to a Golden Trophy. Whether it is merely a self-seedling of the Green Gage, or a cross between the two, is merely a conjecture, of course; but the latter seems a plausible conjecture, inasmuch as several prominent characteristics of both seem blended in the new sort which, for want of a better name, we have called the "Golden Rural."

The color is a bright yellow. Our engraving is in every way true to life. We have also collected a large quantity of the seeds of the

ACME TOMATO,

which many may prefer, though this will, during 1879, be offered by most seedsmen.

OUR NEW BRONZE RICINUS.

This is a cross between R. communis Gibsonii and R. c. sanguineus, as we have already informed our friends. The cross was effected two years ago, an easy operation with these plants, since the male and female organs are borne by dif-

* Even this season, we understand, there is no likelihood of its being sold for less than twenty dollars per bushel.

ferent flowers though upon the same raceme. Seeds were planted across the entire garden and, here and there, about the beds and lawn. We have never grown plants which elicited more numerous or lively words of admiration. They grew to an average hight of nine feet, branching freely from the main stem, the effect of which is but imperfectly shown in our rather formal illustration. The leaves, main and secondary stems, as well as the fruit, pedunceles and pedicels, were of a rich violet-bronze hue, changing as viewed from different places or as moved by the wind. If our readers desire rich, luxuriant, "tropical" foliage, that will form a marked contrast with the bright green of other plants, or if it is desired to grow them as single specimens, we really do not know of a more imposing subject than this.

HIBISCUS MOSCHEUTOS.

We had intended to present our readers with a picture of this showy flower, but as its showiness rests in size and color rather than in the form, delicacy or markings of the petals, a few words of description may answer as well The Swamp Rose-Mallow grows wild in the brackish meadows along the Atlantic coast. The stems are annual, the roots hardy perennial. The stems in cultivated grounds grow about four to five feet high—the leaves are large, light-green, and not much lobed. The flowers resemble those of the better known H. coccineus, though instead of being crimson, they vary from deep-rose to pure white, with distinct eyes, varying from white to maroon. The flowers are immense, sometimes measuring twenty-seven inches in circumference. It is probable that cultivation might increase this size, and perhaps induce them to become double. Let our friends try, as we are trying, to bring about some such change. There is no trouble about raising the plants from seeds. They will thrive anywhere, and, to our way of thinking, will reward the cultivator for his pains.

The New Seedling Potato.—Beauty of Hebron.

CALLICARPA AMERICANA.

This is the French Mulberry and belongs to the natural order of Verbenaceæ or Vervains. It is hard to describe the beauty of this bush in a few words. The roots are hardy always, the tops are often killed by severe cold. But this is no objection, since by the first of July they will have again grown as large as desirable. The form is round, quite compact. The leaves resemble those of the peach tree in shape. The flowers are very small, of a rose color, in little umbels of four, each umbel bearing a dozen flowers axillary from every leaf. The umbels of fruit which succeed the flowers the last of September, are little berries of a rosy-purple color. As nearly every flower forms fruit, the bush is finally as full of fruit as it was of flowers and is then far more attractive. Each branch, indeed, becomes a wreath of clusters of rosy-purple beads which are more conspicuous than the leaves between. This lasts until frost. Our engraving, which is reduced to nearly half size to save space, will give some idea of this handsome shrub that deserves a place in every garden.

CHATER'S LEMON HOLLYHOCK.

We have before offered seeds of this strain to our readers and are induced to offer them again from the many letters we have received praising its "doubleness" and pure lemon color. A single extract from an esteemed contributor to our columns will suffice for all.

"I want to add a word about the Chater Hollyhock, the seeds of which came from the Rural office last year. The Hollyhock has been in bloom for some time and the blossoms are, in school-girl parlance, perfectly elegant. A pretty neighbor of mine finds them "lovely" for the toilet, placing one in her hair, another at the throat, one on each arm, and fastening them in the drapery of her skirts. They form the most exquisite rosettes—being perfectly double, triple and quadruple, and sextuple for that matter, and of a delicate straw-color—for toilette decoration that can be had, especially against a frock of black grenadine, or of pure white. They form plate bouquets of striking beauty, set in a background of dark, crimson Phlox." Mary Wager-Fisher.

CALLICARPA AMERICANA.

WEIGELA.

For a number of years we have much enjoyed raising this plant from seed. The seedlings are much inclined to vary, so that among every dozen plants one or two variegated specimens or golden-selfs may be looked for. Moreover, seedlings are far more vigorous and the leaves larger and fresher than those of old plants that have been propagated from cuttings. The flowers also vary from white to dark-red and are often blotched and striped. As with all of the other seeds we offer, they germinate freely, only needing a light loam, moderate moisture and plenty of sunlight. It need hardly be said that the Weigela (Diervilla, properly) is hardy and that it is one of the first to be thought of in planting new grounds.

DEUTZIA CRENATA, FL. PL.

The double-flowering Deutzia is everywhere acknowledged to be one of the best hardy shrubs in cultivation. It grows from four to six feet in hight, is of graceful form, blooms early and for a long time. The flowers are as "double" as they can be and so thickly set as half to conceal the foliage. From this variety, three years ago, we raised a large number of seedlings. In foliage there was no departure from the species, but the flowers, a large proportion of which were also double, were some of them pure white, while the others were more or less rose-color on the outside of the petals and white within. It is from this lot of seedlings that we have raised our seed for this distribution. The seed, though scarcely larger than those of Petunias, germinate very readily under usual care and the plants bloom the second year. Thus it may be seen that a dozen or more seedling plants of this beautiful hardy shrub may be obtained from a single packet of seeds, which will bloom as soon as those purchased of dealers at 50 cents each.

HIBISCUS MILITARIS

the Halberd Rose-Mallow bears sulphur-colored flowers with maroon eyes about five inches in diameter. The roots are hardy and send up heavy canes in the spring, forming by mid-summer formidable masses of foliage. It is a fine plant for clumps or thickets of shrubbery and makes a pleasing appearance upon the banks of lakes, though it thrives just as well in sandy soils.

ERYNGIUM LEAVENWORTHII.

This is a novelty in the way of annuals that attracts much attention. Our engraving will give the reader a very correct idea of the leaf and flowers, but it cannot show the brilliant purple color to which the leaves turn late in the season, or the intensely blue color of the innumerable stamens of the dense head of flowers. In the last issue of the Rural our sparkling floricultural correspondent, "Renoclaf "says of this beauty:

"It is a Texas annual. We treat it like stocks or Asters, and now, when almost all other hardy plants have done blooming, its branches are laden with brilliant deep-purple flower-heads and involucral bracts, and the stems, too, have changed to the same color. But their great merit is their "everlasting" nature. Cut now, they retain their beautiful coloring all winter long, and their branchy habit and odd-like flowers being so distinct from the ordinary winter-bouquet stuff, they are quite a desideratum. Besides, like rosy cheeks, they are nature's coloring, that no dye can imitate.

GERANIUM SANGUINEUM.

This is a true Geranium and *not* a Pelargonium. It is perfectly hardy and nearly evergreen. It forms a mat of foliage growing less than 18 inches in hight bearing purplish-red flowers over an inch in diameter. It blooms throughout the entire summer and autumn until freezing weather, and is one of the most desirable herbaceous bedding plants of which we have any knowledge. Removed to the house, it will continue to bloom through the winter. Our sketch was drawn from a piece cut off the 25th of October, after the plant had been exposed to three frosts. It is a native of Europe.

YUCCA FILAMENTOSA.

Because this is evergreen—because it is hardy—because it bears leaves which form a peculiar feature in the garden—because it bears hundreds of white, lily-like flowers—because it will grow in almost any situation or soil, it should be seen in every garden. Few people not specially interested in gardens, stop to think how easily a beautiful effect may be made at a trifle of expense or time. Every garden has a grass-plot; every farmer's wife, every man's wife needs one for laundry purposes at least. Suppose in the center a circle of grass be taken out and a sufficient quantity of good, mellow soil filled in. Here plant a Yucca or so, a Weigela, a Deutzia, a Rose-Mallow, a few Aquilegias, a French Mulberry—then we have a pretty little garden in itself, that, requiring but an occasional weeding, will last for ten years and yield flowers from spring until fall. We now furnish the

VITIS HETEROPHYLLA. (Variegated.)

VITIS HETEROPHYLLA.

This is a beautiful climber from Japan, with singularly variegated leaves and racemes of berries as large as peas. These wax-like berries, according to their stage of ripening, are light-blue, pink, white or green, speckled with tiny dots of brown, so that all of those colors may be shown in a single raceme. The roots are hardy, and the vines grow ten or a dozen feet in a season. It is rather singular that a majority of seedlings come variegated, though this variegation is not always permanent, unless the vines grow in partial shade. For low trellises, rocks or stumps, we know of no prettier vine than this variegated Ampelopsis, as it is called by some authorities. As the nodes are six inches or more apart, we could not spare the space to give a fair idea of its manner of growth without sacrificing the details of leaf and fruit.

RURAL HYBRID AQUILEGIAS.

All of our readers may know of the interest which the Columbine has excited of late years. Cærulea and Crysantha (see cut) are among the best acquisitions to our list of hardy herbaceous

Defiance Wheat.

plants. These, with others, have been planted together in these grounds and from the seeds collected, an infinite variety of curious markings may be looked for.

GRINDELIA SQUARROSA.

This belongs to the Composite family, somewhat resembling a Coreopsis in flower, though the stems are more leafy. The color of the flowers, which bloom in great profusion, is a dark brownish-red. As has already been stated in the Rural (Sept. 21), physicians are using the roots of this plant in the form of fluid extract for malarial fevers in place of quinine, with apparently excellent effect.

REMARKS AND EXPLANATIONS.

It will be seen we have announced nineteen plants, a small quantity of the seeds of any ten of which will be sent *free of charge* (except postage), to those subscribers whose names are, or may be, entered upon our books prior to May 1st, 1879, as yearly subscribers. Possibly a few other varieties (respecting which we are still in doubt as to whether we can collect a sufficient quantity of seed) may be added. Possibly also, we may run short of several varieties offered, in which case the best that we can *purchase* will be substituted. There is no doubt about it (in our minds at least) that this choice of seeds, many of which cannot elsewhere be procured, is worth more to

those who want them, than the new subscription price to the RURAL for a year, as each can ascertain for himself upon careful inquiry. Those who are pleased to view this offer in the light merely of a device to increase our circulation are respectfully solicited *not* to subscribe for the RURAL NEW-YORKER. This journal is now conducted with a fervent desire to *promote* the interests of agriculture and horticulture—*not* to harm those interests in promoting our own, and although we shall strive to place it in every respectable country or village home, a journal upon which less pains are bestowed, will doubtless answer the needs of those who look with distrust alike upon all motives whether benevolent or wholly mercenary.

Any ten of the following require a one-cent postage stamp:

The Voorhis Water-melon.
Golden Rural Tomato.
Acme Tomato.
New Bronze Ricinus.
Hibiscus moschentos.
Gaillcarpa Americana.
Chater's Lemon Hollyhock.
Weigela 5.
Deutzia crenata fl. pl.
Hibiscus solitarls.
Eryngium Leavenworthii.
Geranium sanguineum.
Yucca filamentosa.
Vitis heterophylla.
Rural hybrid Aquilegia.
Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance are included, a two-cent extra stamp.

FINALLY,

we have only to beg that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense.

The Poultry Yard.

A FRENCH POULTRY FARM.

POPULARITY OF POULTRY IN FRANCE.

THE French excel in poultry breeding. There is something in their active, sanguine, vivacious temperament akin to the fussiness of fowls, and, as like seeks like, the French people raise more fowls and produce more eggs than any other nation. The export of eggs from France to England amounts in value to several million dollars' worth yearly, and the home consumption of poultry largely exceeds that of any other nation. Poultry in some shape or other, openly or disguised by their inimitable cookery, is upon the Frenchman's table every day, and the *omelette au confiture* or *au fines herbes* is a standard and delicious part of the usual meal. It would do an American farmer a real good to see how well and delicately a Frenchman lives on what the former either wastes or neglects. The fat, boiled pork usual in our farm houses, is there rarely seen, and where it is, it is brought up in such a form and of such a quality as to make it unobjectionable to the weakest stomach. Poultry and eggs are in reality the cheapest products of the farm under the best management, and we might well take a lesson from the French both in managing poultry while alive, and in using it to the best advantage after it is slaughtered.

We owe some of our most popular breeds of fowls to the French. The Houdan, the Crevecœur, and La Fleche, are purely French, and have been found so satisfactory that we have not as yet undertaken the usual American process of "improvement" with them. But to see French fowls in perfection one must see them in their native homes, for the best of us must admit that in their excellent methods of caring for their fowls we are far surpassed. Among other methods of management, that of colonizing is peculiarly French. A peasant woman who has but a dozen or two fowls will have her separate coops, each shaded by an apple tree or by a vine or plum tree; and the largest professional poultryman or amateur will still have his colonies. Here is a great advantage at the outset, because all the evils which come through crowding are avoided, and good health—a grand requisite to success—prevails.

We find in a French journal a description of

A FRENCH POULTRY ESTABLISHMENT,

that of M. Lemoine, of Crosne—Department Seine-et-Oise—who was awarded the "prize of honor" given for poultry, for his exhibit at the great Parisian show. This gentleman began to keep poultry in 1873. His first experience was one that is usual with all successful poultrymen. He began with the common farm fowls of mixed blood, but soon abandoned these for pure breeds, as being the only profitable kinds to be kept. Careful selections were made of perfect specimens of each breed, and these were bred with care and crossed with each other in such a way as soon to obtain superb birds. Twenty-seven different varieties of fowls are kept by him. These are kept in "parquets" of 80 to 100 square meters each—a trifle over as many American yards—in which they have freedom, and find grass, insects and gravel. Each yard has a garden or plot of green turf, shrubs, fruit trees and sanded paths. The low shrubs give cool shade and the earth beneath them absorbs and decomposes the droppings, and furnishes dusting places for the fowls. The young chicks early in the season are raised in a long building (Fig. 1) in which they have warmth and are conveniently attended to. As soon as the heat of the sun makes this house too warm, the chicks and breeding hens are removed to coops placed in the "parquets" under the shade of fruit trees. (Fig. 2.)

A PECULIARITY OF THE SYSTEM

followed by Mons. Lemoine, is to raise his chicks from large eggs and to produce the heaviest possible birds. The result has been that his fowls have always been awarded first prizes.

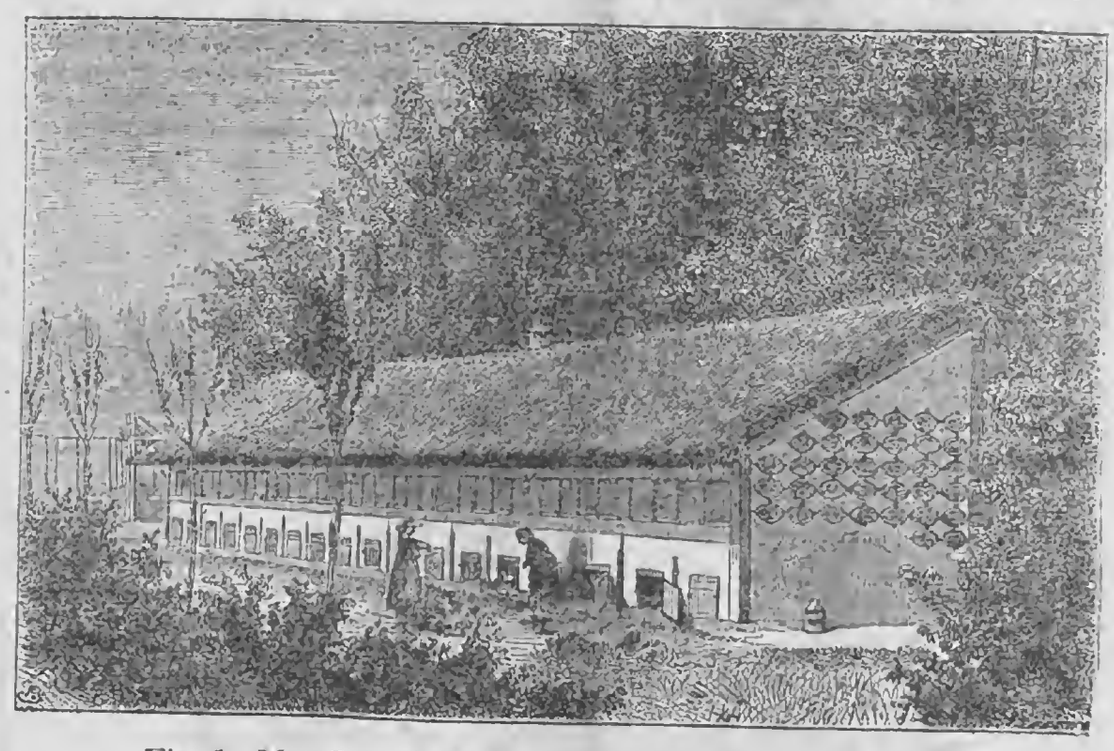


Fig. 1—Mr. Lemoine's Poultry Establishment, France.

He has found that a superior sire and an inferior dam produce a second-rate progeny, and that to procure the best offspring the dam must be the very best, while the sire may be of secondary character without injury. As to the scarcity of large eggs, M. Lemoine says: "This is not astonishing when we consider how frequently fowls are permitted to degenerate through negligence in killing off the hens indiscriminately, sacrificing those which lay large eggs equally with those which produce small ones." . . . "Those who know their best interests will guard carefully and keep for years the producers of large eggs and weed out their flocks, adding, by purchase of eggs of the best types, new blood through which the most profitable results may be obtained." In conclusion, Mr. Lemoine mourns over the extreme scarcity of the best quality of poultry in the French market, observing that "it is only by accident that one can find a satisfactory fowl offered for sale."

If this is said of the French markets, which are so far ahead of ours in this respect, what might be thought or said of ours, where to procure a decent fowl would be impossible without a long-continued search which, after all, might be unavailing? And yet it is not for want of willing purchasers who do not grumble at high prices so long as they can procure what they want.

Farm Topics.

NOTES FOR NOVEMBER.

PREPARING JOBS FOR WINTER COMPLETION.

THE days are rapidly growing shorter. The weather is becoming wet and cold. There are many things which cannot be safely delayed much longer. Work lively now if pleasant, and save cold fingers within the next thirty days. Some kinds of work may be prepared for completion during the winter. Wood, rails, stones, logs, may be got together for hauling when snow comes.

GOING TO MARKET.

It is a favorite time for marketing grain, apples, etc., if the prices are reasonable. In holding on for a higher price, the risk must be taken into consideration, also the interest on the money and the waste or shrinkage on the produce kept. The price should rise quite rapidly to keep up with all these drafts. After selling the produce, use the money to the best advantage. Pay debts if there are any, and invest the rest with judgment and discretion. Remember the needs of all the family and do not buy useless articles. Money spoils very quickly in the pockets of some persons: at least it will not keep well. It goes at once for something. In time of greatest need a man of this class has to "get trusted," borrow, or pay high interest. It is no small part of good farm management to learn to keep a little ready money. Nothing comes handier just when wanted to take advantage of some excellent opportunity to buy what is needed or certainly soon to be needed. It is rare to find a farmer who can carry money in his pocket or have it in a bank and not spend some or all of it foolishly. Farmers are not the only men in this large class of people.

STOCK.

Keep on the look-out for all kinds of stock; see that the fences are kept in good repair; cattle are likely to get uneasy in autumn, especially if the feed gets short. Get them up in cold weather, and do not neglect to give them feed as soon as they crave it. The spring pigs are fattening, ready to wintering in the barrel instead of in the pen. It is not often profitable to winter hogs to fatten the next season.

INDIAN CORN.

This is the most beautiful and one of the most valuable crops of the United States. Corn should all be cut and shocked before frost, except at the West and South where the practice does not seem to pay and is not "fashionable." Keep at the husking vigorously and get it in before freezing cold days. Take those shocks which have just tumbled down; bind the stalks well and set them up in large bunches where they may often be left till wanted for winter use. This saves another handling. They must not be stacked too early till well cured. The nicest sort of "binders" is made of basket-willow which is stout, light and always reliable. If you have not them already, get a few cuttings and start them near by in any wet place. Cut

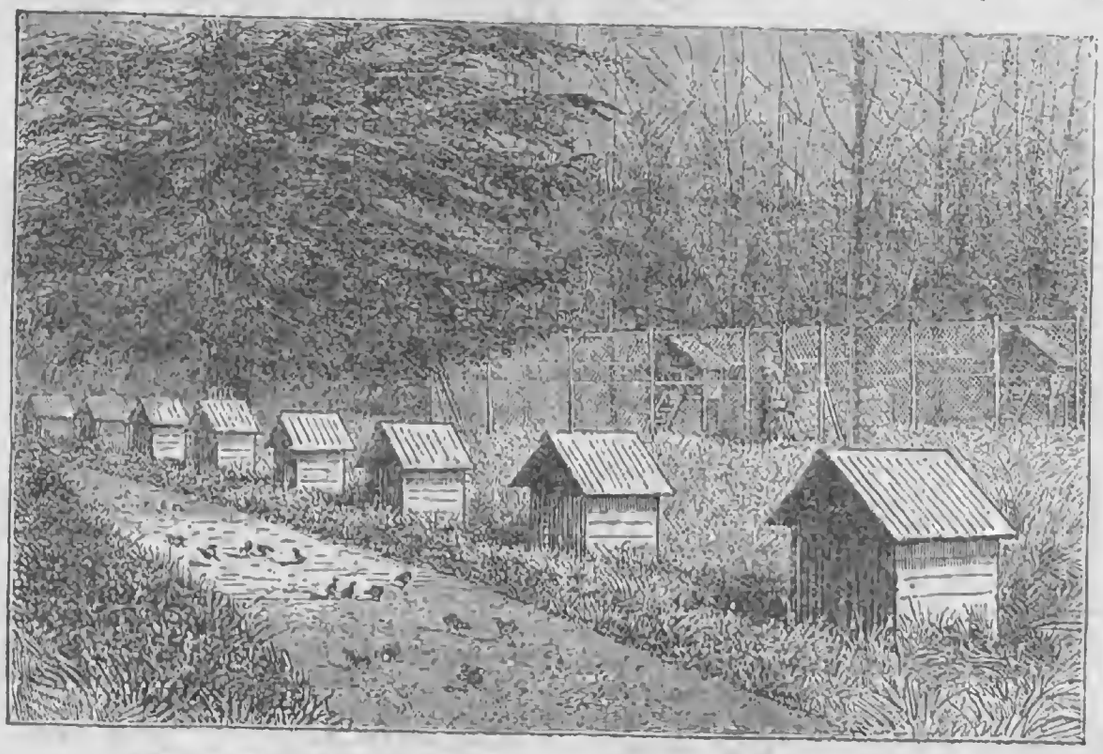


Fig 2—Mr. Lemoine's Poultry Establishment, France.

Clover seed must be harvested and saved. If there is time and the land is heavy, plowing at this time may advantageously be done for oats or corn in spring.

Fences can be laid over, ditches dug, tiles laid, wood cut, trees trimmed, and many other things can be done, if there is time and a willing hand to do them.

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VEGETABLES.

Potatoes must be dug and stored, the tops of asparagus cut and burned to kill the seeds which will otherwise grow and become a nuisance. Vegetables must be watched carefully. The cellar is kept closed on warm days and open when cold, to reduce the temperature and make it ready for storing fruits and vegetables in winter. Squashes must not be much exposed to the cold. As the ground freezes, potatoes and beets must be covered, a little at a time, to keep out the frost. A supply of nice sphagnum or moss in a good-sized box must be provided and well stored with beets, parsnips, carrots, salsify, turnips, a few cabbages, and a little celery for winter use. Some of the celery should be carefully taken up on a dry day, the roots set in mud in the bottom of a deep box, and the tops covered with damp sphagnum. Keep this cold, but not frozen. Apples are brought into the cellar or buried in the ground.

PICK UP.

It may be useless to mention the matter to the person who has left things "lying around handy" until this time of the year. But we must say again: pick up a little and make your farm and surroundings attractive, just once, at any rate, and see how it seems. Keep things in place; slick up; clean, brush out the fence corners; place the tools under the shed instead of leaving them sown broadcast along the road in front of the barn, or in the fields. If an implement is used up, burn the wood-work and sell the old iron before wintering it several years to allow it to decay and fall to pieces before your eyes.

A little time spent in keeping things tidy produces a good effect on the children, on visitors, on strangers who pass by and, above all, on the man who sees to the work.

WINTER WORK.

And now the summer is over and the harvest is ended. The tools are put away; the cattle are housed and fed; the evenings are getting long; look over the work of the past year and see what could have been better done. Look for the losses and see what was most profitable. Write up the books; read the valuable particulars about the different cattle, sheep and swine, that they may not be left to memory alone. Straighten up all old accounts; look over the list of papers; send for sample copies of those you see advertised and begin to make a good selection for the coming year. Buy some useful books each year; and do not forget to consult the tastes of your wife and the rest of the family. Join the Grange or Farmers' Club if you have not done so, or start a Club. Work, and learn; study, plan, and recruit for another summer.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

NECESSITY OF CLEAN MILKING PLACES.

WE consider ourselves fortunate in having a warm stable, well ventilated and roomy, in which to secure the cows at milking time, where we can milk in comfort with no concern for the rain which is drip, dripping outside. Cold storms may be expected at this season, and no more disagreeable job can be conceived than the milking of a dozen cows with no protection from the cold, drizzling storm. The yards are wet and muddy, the cattle uneasy, and it is next to impossible to so place the pail as to avoid the drippings from the animals' sides. Cleanliness is the first requisite—after the milking, of course—in successful butter-making. Disagreeable odors are readily taken and retained by the cream. Stables wherein cows are milked—and mine are confined in the stanchions at every milking—should be kept as cleanly as possible. A barrel of gypsum is kept in the stable all the time, and sprinkled about the floor after the stables are cleaned. It is an excellent deodorizer and a valuable absorbent of the liquid, the most valuable portion of the manure, yet that which most farmers lose entirely. If cattle are given plenty of salt, butter will be obtained much more easily than where it is given them only occasionally.

TIMELY HINTS ON CARE OF CATTLE.

Cows now do better if stabled at night, provided they are well-fed, than they would if allowed to remain in the field or yards. There is but little substance to grass after heavy frosts. Calves should receive much attention. They should have a little meal given them in their milk for some time. If they become poor in the fall and winter, it will be very difficult to make up the growth lost. Calves intended for the market when one or two years old, should be "crowded" from the time they are taken from the cow. The idea is to make a yearling as large and of as much value as an ordinary two-year-old. Those designed to be left on the farm as cows, should be kept only in fair condition. They do not then get their growth so young, yet they make better butter producers. To my mind it costs as much to winter a calf the first year as the second. It is as impossible to get them through in good condition, free from vermin, their growth unchecked, without grain of some description, as it is to have hens that will lay well through cold weather, with one feed of cold grain a day.

CHURNING BY POWER INSTEAD OF HAND.

Whoever keeps a dairy of even five cows, should either purchase or construct a power for

churning. I am a believer in woman's right not to be made a slave upon the farm or in the dairy and kitchen. While farmers, or the majority of them, are ready and anxious to procure all labor-saving appliances for their own share of the farm-work, the good housewife is, in many instances, forgotten, her comfort and often even her health entirely overlooked. While we see mowers, wheel rakes and hay-loaders in the field, in the kitchen we find the tired wife bending over the old fashioned wash-board, her hands worn by contact with its zinc surface until they bleed; her tired, care-worn face made old before its time by drudgery and incessant labor. While the farmer takes the world easy, his wife oftentimes is shown no more mercy than the cattle and horses, whereas, in many cases, to her efforts and advice may be attributed whatever measure of success has attended his career as a farmer. Two or three rainy days, well employed, are sufficient for anyone at all handy with tools to construct a durable and efficient power to be driven by dog, sheep or calf. I prefer sheep, as they are the most tractable. As a general thing, Carlo dislikes churning, and it is often difficult to find him when the cream is ready for the churn. Calves are not as cleanly as sheep, though some prefer them. A well built power, if housed, will last a number of years, and pay for its first cost many times.

POSTS IMMOVABLE BY FROSTS.

Mr. Barnard uses sawn fence-posts in preference to split ones. They are cut six inches square at the bottom and taper to two by six at the top. For what reason? The frost has no effect upon them. It is an error to suppose that deeply driven posts will not be thrown up by the action of the frost. They are not lifted from the bottom but at the surface of the ground. As the ground is frozen, it presses against the posts and raises them; when it thaws, the earth settles back but the posts do not. By having them sawn or cut tapering, this is avoided. The earth is pressed up the inclined surface and the posts remain firm. This is simply my idea of the matter. Mr. Barnard once called my attention to some gate-posts nearly a foot square, that he had set five feet deep. They had been lifted by frost nearly half the distance, while others close by but two feet deep, although set at the same time, were perfectly firm; but these had been sawn tapering.

SUGAR BEETS FOR STOCK.

Commissioner Le Duc sent me some sugar beet seed last spring. They received only ordinary culture, yet the yield promises to be enormous. Even if the manufacture of beet-sugar is destined to prove a failure in the United States, which I doubt, these beets can be raised to advantage as food for stock. All the animals on my farm eat them with apparent relish. Any good garden soil is capable of producing good crops.

Horticultural.

SOME NOTES FROM THE GARDEN.

GRAPES, with me, were almost minus this year, only three or four varieties of vines bearing, and these only a few clusters each. I have only a dozen vines of some half dozen varieties, some of which have not yet come into bearing. All of the vines have made a fair growth of wood, and appear well ripened off. My Rogers' No. 15, last year shed its leaves early, and this spring did not show any growth till quite late, and then not over half a dozen buds started from the last growth. Eventually, however, dormant buds on old wood started into growth, and the vine bore three or four small clusters of grapes which ripened. The vine has been set some five years, and kept short pruned in the fall.

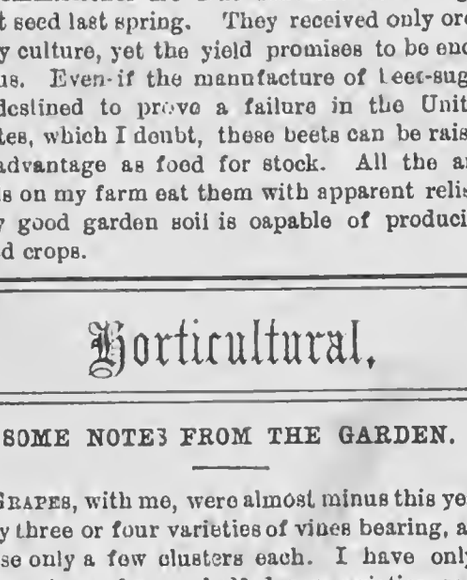

Fig. 1.

YOUNG PEAR TREES in my garden, which have not yet come into bearing, have made good healthy growth without any signs of blight, which I find is much less common about here this year than last, when in some orchards of 50 or more trees, more or less blight appeared on the principal part of them. The pear crop hereabouts was a light one where heretofore it was abundant.

STRAWBERRIES in my grounds were a medium o, lasting longer in bearing than oftentimes. The bed, however, must be renewed in whole, as it has been in part this fall. I grow only one or two varieties, just for my family use; but I like to have these good enough for eating without sugar.

HYDRANGEA PANICULATA GRANDIFLORA, after what has been said about it in the RURAL, deserves from me the report that the root planted out last fall came out this summer with eleven panicles of blossoms, some of which were larger than any before seen by my fellow townsmen. One panicle I measured was nine inches long, while its largest circumference was 28 inches, and that around the base 24 inches. Pretty

LEAVENWORTH'S ERYNGO.

good for the first season, I think. We have dried some two or three of the panicles, and intend them for dried bouquets.—[They are inclined to bloom larger the first year than afterwards.—EDS.]

GLADIOLI, on the whole, have given me satisfaction; for although of the eight named varieties planted by me this spring, two, Adaline Snedeker and Shakespeare, failed to grow at all, the others gave satisfactory blossoms—La Favorite particularly so.

TRITOMA UVARIA, which I thought dead, finally started, so that this fall we have a young root. Not having had any blossoms this summer, the root is taken into a box of earth and will be set in the cellar for the winter, for from what I can learn this plant will not endure our winters out-of-doors.—[Pure sand would be better. We have preserved the roots outside during severe winters by covering with straw and then placing sand over the straw.—EDS.]

ROSES I have only a few varieties of, but in their season there was a small rose show, the bushes seeming one mass of bloom. We have had less trouble than usual from insects, etc., on our roses this season. To-day, the 25th of October, I counted four roses on one bush, a hardy perpetual. Speaking of insect enemies of the Rose, I received a note from an amateur culturist in a different section of this State, inclosing a few rose leaves, part of which were beautifully skeletonized, which he stated was the work of a sort of thrip—a small white fly. Never having had experience of the sort can you or any of your readers give us information as to the insect and a preventive remedy?—[Syringing them with whale oil or tobacco solutions.—EDS.]

Worcester Co., Mass. W. H. WHITE.

ORIGIN OF THE HENRIETTA RASPBERRY.

WE have received a note on this subject from Mrs. E. Moreley, of Wetherfield, Conn. She denies that the Henrietta and Belle de Fontenay are identical, as stated by our correspondent Mr. Lovett, in our issue of October 12, and claims that the former variety originated in her own garden at the above town, in 1870. It was first found among the roots of a currant bush. There were no other Raspberries on the premises. The garden was contiguous to a gentleman's grounds, where there was a variety of fruits, among them several kinds of Raspberries of the latest and best varieties. It is supposed that the seed from which the Henrietta sprang was taken by a bird from this garden and dropped where the vine was found. The plant bore fruit the second year from its discovery. As it bade fair to be a fruit of some promise, she proposed that a neighboring firm of nurserymen should add it to their stock, and if it should prove worthy, give it a name and publicity. That such was the origin of the Henrietta Raspberry is a fact, she says, well known in that vicinity, and for which many trustworthy witnesses can be obtained.

Fig. 2.

Perhaps among the varieties of Raspberries in the gentleman's grounds from which the seed is supposed to have been taken, the Belle de Fontenay may have found a place. Mr. Lovett we know to be a careful, pains-taking, truthful gentleman, quite incapable of publishing a statement that he did not himself believe. Yet he may have been mistaken, although we find he is not alone in his opinion as to the identity of the Henrietta and the Belle de Fontenay.

NOTE FROM MR. DOWNING.

IN giving a description of the Lady Washington Grape in the last number of the RURAL, I am made to say that it is *hardy*, which is a mistake—not having said so, neither do I know if it is so or not, having only seen the vine during summer; but judging from the appearance of the wood and foliage, I would think it as much so as Isabella or any of its class. [We hold Mr. Ricketts for our use of the word *hardy* as applied by Mr. D. to this Grape.—EDS.]

Industrial Implements.

A SENSIBLE HORSE-SHOE.

A FEW weeks ago, there was sent to our office a new patented horse-shoe, differing radically from the ordinary shoe in design and construction. Following our custom, to test all new things that seem to be worthy of being tested, we procured a set and sent them to the Farm for trial. What in this instance we procured for trial, we have since purchased from choice. We think their merits entitle them to an illustration and description. The cuts here presented have been made to show the top of the shoe, (Fig. 1), the bottom or calks, (Fig. 2), and its position on the foot (Fig. 3.) Its merits seem to be due to its shape, presenting a wide bearing surface to the sole and wall of the hoof. It is, in fact and theory, a continuation of the foot in iron. The raised

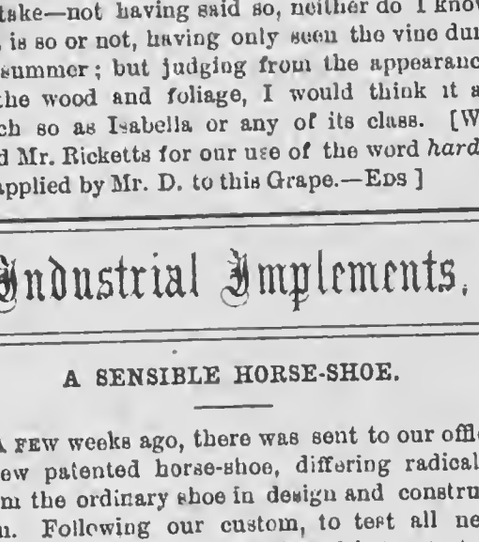

Fig. 3.

rim, or "clip," holds the horny crust of the hoof in position. The wide bearing surface supports, not only the wall but the sole of the hoof also, enabling the horse to stand firmly and naturally, with an evenly distributed pressure on all parts of the foot. But the conspicuous merit of the shoe lies in the fact that it follows the formation of the foot at the heel, where, as

will be seen, the "bars" have a natural, easy rest, obviating all compression of the hoof—an evil that is frequently produced by the ordinary shoes.

(Fig. 3) represents the foot closely fitted with the shoe, which is rendered transparent, showing what parts of the foot are supported and protected: *a, a, a*, the crust or wall of the hoof—perfectly represented by the continuous calk of the shoe, which, with its continuations, the bars, at the heels, sustains the whole weight of the horse: *b. b*, the bars supported and protected by the shoes: *c, c*, the heels, *perfectly* supported by the shoe: *d, d*, the situation of corns protected from injury: *e, e, e*, the sole, *f*, the frog. Instead of three prongs or "calks" for the horse to stand on, as if he were walking on stilts, the bottom of the shoe presents a continuous calk about a half inch in depth, which is worn off evenly, and always affords a square, solid foundation for the horse's weight, just as would be afforded by his hoof if he were unshod. Altogether, we are satisfied that this is a sensible, practical shoe that will correct some of the evils done by former faulty shoeing, and give nature an opportunity to keep the hoof in sound condition. These shoes are made by the JOHN D. BILLINGS' Patent Horse-Shoe Co., 265 Broadway, New York.

NICHOLS, SHEPHERD & Co., of Battle Creek, Michigan, have just erected a large addition to their already large factory. The new machine shop is 120x70 feet, built of brick, with power supplied by a new C. H. BROWN & Co., 50 horse-power engine. This shop is for the manufacture of portable steam-thrashing engines. The firm made and sold one hundred and twenty-three engines this season; and with increased facilities propose to turn out over three hundred next year.

Miscellaneous.

NOTES FROM NEBRASKA.

EX-GOV. R. W. FURNAS.

As the active agricultural and horticultural operations of the season are about closed, and a moment's leisure presents itself, I have an opportunity of letting readers of the RURAL know what we have been doing in this State.

THE SEASON has been remarkable for its advantageous characteristics in almost all respects. Plant growth has been all that could be desired, and as a natural result, products correspond. Our general farm products are unprecedented, even with us.

CORN, the great staple, is simply enormous. The great question is: "What shall we do with it?" We are in better condition to utilize this crop than ever before. Farmers have "catched up" as the saying goes, and have, or are able to purchase cattle and hogs to feed, and thus the crop can be condensed before transporting it. We raise anything we want, and as much of it as we want, out here. But the cost of transporting it in the raw, crude state, eats up the price of it before we can get it to you consumers in the East. But we are learning to put the corn product into beef and pork, and hand it to you in that shape.

OUR FRUIT CROP.

too, has been splendid this season, taken as an average.

APPLES, in quality and size this year, were very fine, but this is an "off year," and the crop is not as large as heretofore. Four Fallawater, or Tulpehocken, apples were on exhibition at our late State Fair, that weighed six and three-quarter pounds. The leading varieties of apples considered reliable with us, are Red June, Red Astrachan, Early Harvest, Maiden's Blush, Cooper's Early White, Rambo, Swaar, Rawle's, Genet, Winesap, Ben Davis, Jonathan, Domine, Fameuse, Willow Twig, Little Red Romanite, Baldwin, Ribston Pippin, Haas, Hubbardston's Nonsuch, Early Pennock, and Lowell. These have all been fruited with us successfully, for from eighteen to twenty years past, and thus established themselves as reliable. Very many other varieties are doing well as far as tried, and will doubtless in the end, prove valuable additions to our fruit list.

GRAPES of almost all the hardy varieties do well in this State. The Concord, Horace Greeley said, was "the grape for the million" you will remember: it is the leading variety with us.

PLUMS occasionally give us a good crop. The Curculio is the great plum obstacle. Wherever "eternal vigilance" has been practiced we have plums, however.

PEACHES were never better. The Agricultural Bureau Statistics, Washington, report us 121 in Peaches the highest of all the States in the Union, this year. We grow successfully the leading old and reliable varieties, such as Troth's, Hale's and Crawford's Early, Stump the World, Jacques' Rareripe, Crawford's Late, Newington, Heath Cling, Morris's White, Honest John, Old Mixon, George the Fourth and many others. The southeastern portion of Nebraska is particularly noted for its fine peach crop. Our native, or seedling peaches, particularly attracted the attention of non-resident fruit growers and pomologists at the

ANNUAL STATE HORTICULTURAL EXHIBIT.

held with the State Fair, at Lincoln during the last days of September. A very large attendance of prominent fruit men from the older States was present. Such men as Dr. Jno. A. Warder, Ohio, and Dr. Allen Furnas, Indiana, pronounced the exhibition the finest they ever saw. There were on exhibition over two thousand plates of apples three hundred of peaches, and one hundred of grapes and plums. These fruits were principally from the older counties in the State, bordering on the Missouri River. Richardson, Nemaha, Otoe, Cass, Douglas and Washington. There were some very excellent specimens, however, from the interior counties of Pawnee, Johnson, Saline, Lancaster and Buffalo. The latter county is in the heart of what has always been denominated the "Great American Desert" near Ft. Kearny, in the Platte Valley.

Nehama Co., Neb. Oct 29.

GERANIUM SANGUINEUM.—(See page 710.)

AQUILEGIA CRYSANTHA.—(See page 710.)

BOOKS RECEIVED.

PALLISER'S MODEL HOMES showing a variety of designs for model dwellings, also plans of a farm-barn and hennery combined, a stable and carriage house, a school house, masonic association building, bank and library, Town Hall and three churches, together with a large amount of miscellaneous matter. By Palliser, Palliser & Co., Architects, Bridgeport, Conn.

This is a very handsome volume of 83 pages octavo, elegantly bound in embossed dark-green cloth, costing only a dollar, and containing 27 illustrations of buildings erected by the firm in different parts of the country. Each illustration includes a front or side elevation, and a plan of the ground-floor together with a plan of the second floor whenever a full explanation of the structure of the house requires it. Each design is accompanied by a detailed information with regard to the construction and cost of the building; while a great deal of general information of value to all who contemplate building, is contained in three introductory chapters treating of Hints On Building and the Employment and Responsibility of Architects. The plans are all of a thoroughly practical nature, the instructions sound and economical, the designs handsome, convenient and wholly comfortable. In all cases they seem well adapted to the wants of those for whom they are intended, ranging from the neat cottage costing $500 to the elegant dwelling costing $4000 and upwards. The work is full of suggestiveness not only to all who are ambitious of owning tasteful, convenient homes, but also to the working builder who can derive many a useful hint from the skill and experience embodied in the plans and information here given. Of the various works on architecture which have come under our notice we do not know one which we can more heartily recommend to our readers.

SIXTEENTH ANNUAL REPORT of the Secretary of the Board of Agriculture of the State of Michigan for the year ending Sept. 30, 1877. This bulky volume of 732 pages is devoted to a statement of accounts of the Agricultural College, Reports of its various Professors on their respective departments, accounts of half a dozen Farmers' Institutes held in different towns in the State together with verbatim reports of the lectures delivered thereat, occupying altogether upwards of 300 pages. Then in succession come a collection of miscellaneous essays, a report of the State Board of Agriculture covering upwards of 200 pages, various reports from County Societies and finally a register of meteorological observations for 1877.

It is impossible for any one to look through such works without being impressed with the vast amount of worthless information they contain. This usually so far overlies what there is of value in them that one in search of the latter is very apt to overlook it and consign the work to its usual place—the waste paper heap or some unvisited shelf in the library. In case of the work before us, however, such a fate would be unjust to its merits, and a loss to the seeker for useful knowledge. It is not that it lacks an uninteresting mass of worthless information which no sane mortal will ever wade through; but the valuable instruction contained in it will amply repay careful perusal and study. This is comprised almost exclusively in the lectures delivered at the Farmers' Institutes, and to some parts of these we shall refer in future numbers of the RURAL. ROBERT G. BAIRD of Lansing, is the Secretary.

CATALOGUES, &c., RECEIVED.

L. L. POLK, Commissioner of Agriculture, Raleigh, N. C. Second Quarterly Report for year 1878.

DESCRIPTIVE CATALOGUE OF FRUIT TREES, HARDY GRAPE VINES, SMALL FRUITS, &c. Samuel Hape & Co., Hapewell, Ga.

VICK'S ILLUSTRATED MONTHLY.—We should write it "Vick's *Excellent* Illustrated Monthly." It is full of original and instructive matter, as usual. Rochester, N. Y.

CATALOGUE of the Ninth Annual Texas State Fair, to be held in the City of Houston, Tuesday, November 19, and continuing five days. James F. Dumble, Sec'y.

PRICE LIST and description of pure-bred Cotswold sheep and pure-bred Essex pigs raised and for sale by Joseph Harris "Moreton Farm," Rochester, N. Y.

BEECH GROVE FARM Catalogue of thoroughbred Jersey cattle, Berkshire swine and fancy poultry. Beech Grove Farm, the property of Messrs. CHURCHMAN and JACKSON is described and pedigree are given at length.

ADDRESS by Hon. Thomas F. Bayard of Delaware, at Pimlico Fair Grounds, near Baltimore, Md., before the Md. Ag. Assn., upon "The true Relation of Agriculture to Politics." Published by the Delaware Tribune, Wilmington, Del.

A. HANCE & SON, Red Bank, N. J. Catalogue of hardy fruit trees and small fruits, for market or garden; for pleasure or profit. The Rickett's El Dorado Grape. Also No. 1. AUTUMN OF 1878. CATALOGUE OF Hardy Fruit Trees and Small Fruits Free. A trustworthy establishment. Also Trade Price-list of Trees, Plants and Bulbs. Also, Trade Price-list of Fruit Trees and Small Fruits.

CATALOGUE OF SPRING BULBS AND HARDY HERBACEOUS PLANTS. J. M. Thorburn & Co., 15 John St., N. Y. Also Annual Descriptive Catalogue of Bulbs and other Flowering Roots, with directions for their management and culture. These catalogues are free to applicants.

H. & D. W. WATROUS, of this city have just sold the following A. J. C. C. Herd registered Jersey cattle, and they will be shipped on Tuesday, November 5th, to General J. W. BURKE of Jacksonville, Ala.: Maid of Amboy, Minnie of Orange, Delpha Weston, Rhoda of Merion, Carlatina, Olive Branch of Hillcrest, Io of Hillcrest, Lady Mildred of Hillcrest, Lady Alice of Hillcrest, Susette of Hillcrest, Salvadora of Hillcrest, Candace, Athalia Alabama, Maid of Perth, and bull Montgomery!

Everywhere.

TRADE AND AGRICULTURE IN ENGLAND.

PROFESSOR I. P. SHELDON,
OF THE ROYAL AGRICULTURAL COLLEGE, CIRENCESTER, ENGLAND.

For some time past things in general have been growing worse, gradually but not slowly worse, in these islands. The Franco-German war gave an extraordinary stimulus to trade, and through trade to agriculture, in Britain, and the country, for the time being, was almost gated with prosperity. But that prosperity was essentially fleeting and abnormal in character. Born of war and bloodshed, of tumult and anarchy; springing out of those convulsions which, wherever they occur, shake the foundations of society; coming to us because it was driven for the time away from other countries, this sudden and extra prosperity was fugitive and ephemeral. Commerce and manufactures were at a standstill, or next to a standstill in some of the finest and most industrious parts of Europe eight years ago, and they naturally gravitated to other parts where they could be carried on in peace. So the bulk of them came to England which, always excepting America, is the finest country on earth for refugees to flee to! But the war came to an end, as all wars must when men's evil passions have calmed down and their lust for blood is satiated; trade began at once to return to the places from which it had been exiled, and we in this country began to feel the effects of the inevitable reaction.

It is a law in mechanics that if you swing a pendulum violently in one direction it will, of its own accord, swing nearly as far in the opposite one, and that it will be some time before it again becomes settled. So it is with trade. Eight years ago we were very busy and very prosperous; our coal and iron industries had never before been so brisk; our ships were all profitably employed, and our insular trade and manufactures were in a state of the highest prosperity. As a matter of course, agriculture shared in the general welfare. Many of our people became in a sense intoxicated with success, and they thought their good fortune would continue forever—or at least they seemed to think so. These infatuated ones were found principally among the working classes, and there were strange scenes of wild extravagance amongst them. They were earning very high wages, and they squandered their earnings in reckless prodigality. Habits like these once acquired, are difficult to relinquish. But the time soon came when employers could no longer afford to pay such high wages, but sooner than submit to the reduction which was inevitable, the working classes struck work. Thus it was that our prosperity vanished like a dream—war drove it into our hands, our own folly drove it away again.

Thus it follows that we are suffering from long-sustained depression of trade, and agriculture is in a far from satisfactory state. The purchasing ability of our bread-winners is very much reduced, and they are learning habits of frugality—compulsory frugality. Our colliers no longer drink champagne themselves, or give legs of mutton to their dogs. They have to make one dollar go as far now as they made two or three go only a very few years ago. This, of course, is wholesome discipline, but it is diminishing the profits of our farmers. Bread, beef, mutton, cheese, butter—all are much lower in price than they were two years ago, nor are there any signs that the markets will improve very soon. Some people say they can detect symptoms of a revival in trade in some of its branches, but these speak their hopes rather than their convictions.

It is true, the country is wealthier now than it was ten years ago, but the wealth is less scattered than it was two years ago. When bad times come, money immediately begins to collect into the hands of a few people, just as ships hasten into port when stormy weather comes on at sea. The masses of our people are never frugal except when they are compelled to be, and they lay up no store against a rainy day. They are like the Esquimaux Indians, who grow fat in summer and in winter starve. Extravagance and its sister, improvidence—ugly twins, these—are the evil *genii* of the mass of our people, and the wise have to support the foolish when poverty comes.

Then, to make matters worse, we have a bellicose government in power who are taking the right way to increase the taxation of the country and to add to the national burdens. You are wisely paying off your national debt—we are augmenting ours. Lord BEACONSFIELD is squandering Mr. GLADSTONE'S savings, and with exquisite fatuity our people have hitherto encouraged him in it. The tide of popular favor is beginning to turn at last; we are now called on to pay for our swagger, our "spirited foreign policy," as it was vaingloriously termed. We are practically at war with Afghanistan, and it is quite possible we shall be at war with Russia before long, for our Government has done all it could to stir up ill blood between ourselves and the Russians; we should have been fighting them now but for Mr. GLADSTONE'S influence in favor of peace.

Meanwhile, the only thing that seems to be flourishing in this country at the present time, so far as agriculture is concerned, is the breeding of pedigree Shorthorns. The Duke of Devonshire sold off a portion of his surplus stock the other day, when thirty animals fetched close on £20,000! But it is only the longest pedigrees, the choicest strains of blood, and the most fashionable tribes that will fetch these high figures, and this because they are comparatively limited in numbers, and are all in the hands of wealthy men. Shorthorns of moderate purity of blood and limited pedigrees, but withal, sound and superior animals, can now be bought for moderate prices, within the reach of rent-paying farmers; they are, indeed, much lower than they were a short time ago; but this is owing not to depression in the agricultural world, but to the welcome and encouraging fact that the country is now full of well-bred stock; and the same remarks apply to sheep. Pigs we don't value so highly as you do in America.

The crops in England this year are, generally speaking, above an average—the hay crops especially. Wheat is about two shillings a bushel lower than it was a year ago—it is now worth about 5s. 3d. per bushel, or 42s. per quarter. Beef is lower; 4½ to 9d. per lb; mutton 5d. to 9d., prime; Southdown, 10½d. Cheese, inferior, 40s. to 50s.; middling, 50s. to 60s.; good, 60s. to 70s.; prime, 70s. to 80s. per cwt., and within these limits there are all kinds of qualities and prices. On the whole, cheese may be said to be 5s. to 10s. lower than it was a year ago.

NOTES FROM KENTUCKY.

WHEAT is growing finely. A few are yet sowing, but a large majority here, in Hunter's Bottom, finished during last month. We have taken more pains in preparing the ground than ever before. Many of us have planted on long fallows and, although the ground broke up cloddy, we are amply repaid for the extra rolling, harrowing, &c., by the thrift and evenness of the plants. We never before saw wheat look so beautiful at this time of the year. It seems as though each tried to have even the drills straighter than his neighbors', and so confident of victory are we that each has run his drill perpendicular to the road. It is gratifying to see such emulation, as it gives us a better prospect for an abundant harvest in 1879, than ever before.

POTATOES.—We are now, Oct. 20, in the hight of potato digging. We will not average more than forty barrels per acre, owing to the early and protracted drought and the rot; for these we find ready sale at our landing at forty cents per bushel. I dug 58 barrels on half an acre—variety, Scotch Nobles; soil, a dark alluvial, heavily manured in 1876 for celery in '77. I do not think the rot any worse on this plot than in my clover sod. My next neighbor has dug about 20 acres, and he has averaged 40 barrels of salable, 14 barrels of rotten and about five barrels of small potatoes per acre. No estimate is made of the tubers that were entirely destroyed; only those that were partly sound were picked up. These figures, I think, will closely approximate the average of this section.

APPLES have fallen badly and have rotted on the trees more extensively than for many years. They are worth from 40 to 60 cents per bushel.

STOCK.—Our cattle will go into winter quarters in better condition than for many years. Price 2½ to 3¼ per lb. on foot. Hogs are fattening finely. No cholera or other disease as yet. H.

RURAL SPECIAL REPORTS.

BERLIN, Hartford Co., Conn., Oct. 23, 1878.

EVERYTHING was in advance of ordinary seasons, nearly two weeks earlier. The hay crop was abundant, rye and oats good. Corn promised very well, but a dry spell came on about the time of its setting, and the ears are not filled out as well as expected, though there is some good corn. The "potato bugs" came on in force, and they, with the white grub, made the potato crop rather small. The grubs did not confine their attention to potatoes, but took strawberries, raspberries, and especially grass roots, killing, in the aggregate, many acres of grass. In some fields where they took the potatoes, the moles went through nearly every hill and took the grubs. It is a question whether the mole is not of greater benefit than harm to farmers. There is no doubt about its doing much apparent harm to meadow lands, but as it works for grubs, it very likely saves more than it destroys.

Pears were not very abundant, but the apple crop was too large for use. Besides this, the apples, ripening so much earlier than usual, promise to decay much earlier still. They are rotting very badly, and it is a question whether apples will not be scarce by mid-winter. They have been very low thus far, in some cases hardly paying for the trouble of picking and getting them to market. The grape crop was small, owing largely to the ravages of the "rose bugs." They took blossoms and leaves, too, especially on the Clinton. I have seen no rot or mildew worth naming, though the Dianas rotted most. IPSE.

HENRY CO., Ohio, Oct. 21.

WHEAT is a good crop—averaging 25 bushels to the acre. A larger amount has been sown this fall than ever before. It is looking finely now. The favorite varieties are Clawson and Blue-stem, which appear to do better here than any others. Potatoes are only half a crop. Apples are abundant, but the blight has injured pear trees so that pears are small and poor. Corn is a better crop than it has been for several years, being far better than was expected during the growing season. Rust has injured the fodder somewhat. Altogether the farmers are prosperous.

There is a cry here, as elsewhere, from a certain class, that they can't get work; but where work is to be done, it is difficult to secure hands at reasonable wages. In many cases laborers demand the same wages as before the general fall in prices. Crops often receive injury from the difficulty of securing laborers. One of my neighbors was obliged to do part of his harvesting with only himself and a single hired man to follow the reaper. Yet plenty of laborers (?) complain that they can't get work! V. J. EMERY.

AMHERST, Mass., Oct. 31, 1878.

OUR fall has been very dry and warm until the last two weeks during which we have had copious rains. No hard frost until the 26th. Apples are a glut in the market at 75cts, to $1. per barrel, and cider the same at $1.00 to 1.50. The crop of apples is the heaviest ever known in this valley, the trees fairly breaking down in many instances with their loads of fruit, which is of very fine quality, though not generally of large size. Potatoes are one-third or one-half a crop and are worth 75cts. to $1.00 per bush.; they are mostly of poor quality and were badly eaten by the white grubs of the May beetles which have increased rapidly within a few years and bid fair to become one of the worst pests the farmer has to contend with. Grapes were a failure, being 'nipped in the bud' by the late spring frosts. Corn a good crop. Tobacco a good crop and curing up finely and the growers are expecting good prices. L. W. G.

COVENTRY, Chenango Co., N. Y., Oct. 28th.

SPRING opened warm and dry. Potatoes, as a general thing, were planted in April, also some corn. May averaged dry; June cold and wet; July hot and dry up to about the 20th; after that light showers. Fall warm and dry up to about the 14th of October, when we had a cold rain with snow. Fall feed good; hay crop, unprecedentedly large; corn, good excepting on very wet pieces; oats a rather light crop, but quality good; buckwheat a good yield in this immediate vicinity. Potatoes were almost a total failure. Wheat, of which there is considerable raised hereabouts for a dairy region, was extra good, yielding about thirty bushels on an average. Spring wheat was hardly worth cutting. Corn is worth 50c.; buckwheat, 40c; rye, 75c.; wheat, $1.10@$1.25; oats, 30c.; butter, 18@22c.; pork, 5½c.; dressed beef, about the same by the side. J. H. M.

ST. CLAIR CO., Ills., Oct. 27.

THE wheat crop was very poor, averaging in this section about ten bushels to the acre. Nearly every one was disappointed, as the prospects before harvest were good for a heavy crop. The weevil damaged the wheat a great deal after it was stacked, and now quite a number of farmers are hauling it to market for fear it will be eaten up by this pest in the granaries. Corn and potatoes are not very good, the long, hot, dry summer having cut both crops short. There was considerably more wheat sown this year than last, but it was all a little late, as farmers were afraid to sow as early as usual on account of danger from the Hessian Fly; but considering the time when it was sown, it looks very well.

Land in this vicinity is considered worth from $20 to $60 per acre—$20 for unimproved timber land, and $60 for improved farms. N. J. SHEPHERD.

CORNING, Steuben Co., N. Y., Oct. 25, 1878.

GLORIOUS weather we are having for fall work, and most farmers are improving it. A large acreage is sown to wheat, but seeded very late, too late, I think. I have seen no appearance of the Fly on my own yet; dry weather has given it a small top, otherwise it is doing finely. I always cultivate my ground for wheat until it is as mellow as possible, Mr. Fowler to the contrary, notwithstanding. I am preparing to set a half acre of raspberries—a part this fall and a part in the spring. J. L.

HUGO, Ill., Oct. 24, 1878.

WE had considerable frost and some snow here from the 18th to 20th, and some ice formed. Oats, 12½c.; corn, 20c.; wheat, 75c.; hay, $8 per ton; labor, very low. Fine times generally. A larger area than usual has been planted to wheat. Apples are a light crop. Some orchardist who would come here and put out Ben. Davis, Rawle's, Genet or Gennetting, and work for annual crops, would do well. A. O. W.

ATTICA, N. Y., Oct. 30, 1878.

FIRST snow to whiten the ground fell here last Monday morning, Oct. 28th. The weather, however, is warmer since this snowfall. We had rain on Tuesday night and it is sprinkling to-day. Grape vines are green yet, with tips quite fresh. This is the latest fall weather we have had yet. Pasture is still fresh and good. S. F.

JACKSON, Mich., Oct. 27th, 1878.

IT has been snowing here all to-day and yesterday. The surrounding country is already buried beneath a spotless, white pall, and even the streets are covered with it, only that here and there, the mud shows its murky color through a rent in the texture. K.

CAMBRIDGE, Mass., Oct. 30, 1878.

A SHARP frost yesterday morning. Cannas, Morning-glories and other tender plants were spoiled. It rained all day to-day. The fall throughout has been unusually extended—mild and dry. F.

YORK, Neb., Oct. 28th, 1878.

VERY dry weather hereabouts. Grain turning out finely. Wheat worth 40 to 50c.; oats, 16 to 18c.; corn, 15c.; potatoes, 25c.; apples, $1 per bushel; hogs, $2 to $2.50 per 100 lbs.; wages, $1 per day. J. B. R.

DALLAS, Texas, Oct. 20, 1878.

WE had such a wet harvest that a deal of our wheat was spoiled; it is worth 50c. to 85c. a bushel, according to quality. Cotton, 8 to 9 cents. W. T.

The Querist.

ANSWERS TO CORRESPONDENTS.

Destroying Insects on Canary Birds.

W. H. W., Welland, Ont., Canada, asks for some way of destroying insects on canary birds.

ANS.—Powders warranted to kill parasitic insects are sold by all bird dealers. Quite a number of remedies are recommended, such as sprinkling a pinch of Scotch snuff under the wings, etc. One strongly recommended, from his own experience, by Rev. F. Smith, in his work on the Canary, is the following: Dissolve a couple of cents' worth of white precipitate powder in half a teacupful of warm water; dip the bird bodily into the solution, taking special care that none of the poisonous stuff gets into its beak or eyes; then dip it in a basin of warm water; then wrap it in a piece of flannel, lay it before the fire until partially dry; then put it in the cage, which should be kept before the fire until the bird is thoroughly comfortable. As preventives, a free use of the water and dust baths, thoroughly cleaning the nests and sifting the food well cannot be too strongly recommended.

Treatment of Smilax.

Mrs. E. N. C. is in trouble about her Smilax. About two weeks ago, unlike some other men, her husband managed to remember her order to bring the plant from the greenhouse. Since then, the young thing has been turning yellow and drooping, as if afflicted with the yellow fever or with regret at parting from its comrades. Like many other men, her husband forgot to ask all about how his new purchase should be treated, and accordingly she sends to the RURAL for information on this point.

ANS.—Take up the bulbs (it belongs to the Lily family) See that the drainage is perfect. Make the soil loose. Replant. After a rest, they will grow finely.

Miscellaneous.

W. H. W., Westborough, Mass., says that among some plants he received from the RURAL Grounds last fall was one whose name he could not make out. It has made only a small growth this season and seems to be a kind of vine or runner. He asks its habit, right name and use.

ANS.—It is Vitis heterophylla. For a condensed account of it, see RURAL columns this week under heading, Free Seed Distribution.

W. F. Mitchell, Perth Co., Canada, asks how to propogate White Thorn for hedges, by cuttings.

ANS.—If everything is favorable, it may grow out-of-doors from cuttings a foot long. It can also be grown by layers. A safe way is to grow it from cuttings of two or three eyes under glass.

We must again ask the indulgence of those whose questions are not yet answered.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, NOVEMBER 2ND:

F. H.—W. H.—J. S.—S. F.—J. LeR. N.—G. D.—H. S.—S. P.—W. H. H.—E. W. S.—I. P. S.—Mr. W. accept thanks.—F. D. C.—T. T. L.—S. L. F.—H. Bros.—G. W. C.—C. D.—T. H. H.—E. M. we are always happy to give both sides, so as to aid in establishing the truth.—N. J. S.—S. F.—Dr. A. C. W.—C. T.—L. W. G.—W. F.—E. W. S.—J. H. W.—M. B.—C. S. A.—R. C. the RURAL is invariably discontinued at end of subscription term.—L. W. S. We do not care for any vines or specimen plants except for trial, in which case we endeavo to report according to merits.—G. L. W.—M.—Renoclaf.—O. W.—J. A. F.—H. M. S.—E. E.—W. S W.—W. D.

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ORIGINAL ENGRAVINGS---THE BEST WRITERS OF THE LAND.

A JOURNAL THAT IS HONESTLY DEVOTED TO THE WELFARE OF ITS READERS.

No progressive Farmer, Fruit-Grower or Gardener can afford to do without the RURAL for 1879.

THE following are among a few of the recent notices of the press of the United States.

THE RURAL NEW-YORKER has been enlarged and improved, if that be possible. It stands at the head of the strictly agricultural and horticultural periodicals of the country.—*Philadelphia Germantown Telegraph.*

THE RURAL NEW-YORKER, so long and favorably known, seems determined to give its readers the benefit of whatever increased prosperity it secures. It has now, the best list of contributors of any weekly agricultural paper in the country, and is doing a noble work—*Boston Scientific Farmer.*

The editors of the RURAL NEW-YORKER now use a portion of their farm for experimental purposes in raising seeds for their subscribers. Their farm, which by the way is one of the best on the Island, is admirably adapted for such experiments. The RURAL is one of the best of agricultural papers.—*S. S. Observer, Long Island.*

THE RURAL NEW-YORKER.—We are glad to note by an increase of size in the RURAL NEW-YORKER, substantial signs of prosperity. The Agricultural Press of the country has severely suffered by the general depression of the last few years, and it is pleasant to note this first step in prosperity, especially as the Rural New-Yorker deserves all the success it seems to gain.—*Gardener's Monthly.*

THE trouble is that if you take it one year you will like it so well that you will take it every year.—*North Missourian.*

WE regard the Rural New-Yorker as the champion weekly paper of America, for the farm and family circle. While it is especially intended for Rural Homes, there is no fireside that will not be greatly benefited by the Rural New-Yorker's weekly visits. It gives you more for your money than any agricultural publication of which we have knowledge.—*Democrat, Coshocton, Ohio.*

WE are glad to receive assurances from headquarters that this excellent paper was never in such a promising condition as it is now, either financially or editorially, since its removal from Rochester. "It does not owe a dollar, and has half a million at its back." Good enough! but not better than it deserves.—*Buffalo Weekly Express.*

OF our agricultural exchanges none presents such a clear, crisp appearance, typographically, as the RURAL NEW-YORKER. Speaking of its contents, we are led to use the most emphatic language. It is edited with a precision unusual in agricultural journals, and a glance over its interesting "Questions and Answers" columns discloses with what painstaking it responds to requests for practical information. It is more comprehensive than papers of its class, also, embracing a literary department that is again subdivided into minor departments, which furnish excellent short and continued stories, fashions and cutpaper patterns for the ladies. Religious intelligence, the news of the week, and a cozy nook for the young people.

Its practical departments embrace articles by the foremost writers on agriculture, horticulture and kindred sciences, accompanied by illustrations that increase the interest of the text. In short, the Rural is just such a paper as our people should subscribe to. It is broad and national in its treatment of topics, and more than any other journal, serves the farming and fruit growing interests of the whole country.—*Dispatch, Live Oak, Florida.*

THE RURAL NEW-YORKER.—This old and well-established weekly is one of our best agricultural and horticultural exchanges.—*Phrenological Journal.*

THE RURAL NEW-YORKER.—One of the oldest, most reliable, and most welcome of farm and household journals published in America has been enlarged and otherwise improved. Its name has become a household word throughout the land, and we have yet to learn where the Rural is not welcomed by the family to whom it is sent.—*Journal, Flint, Mich.*

THE RURAL NEW-YORKER is the best and most prominent agricultural and home journal in the country.—*Democrat, Davenport, Iowa.*

On receiving The Rural New-Yorker, we scarcely recognized it, so greatly has it been changed, for the better.—*Observer, Bowmanville, Ont.*

THE RURAL NEW-YORKER has been enlarged to the size of Harper's Weekly, and otherwise greatly improved. It is one of the oldest and best agricultural weeklies in the country. Terms, $2.00 a year.—*Record, Yorkville, Ills.*

THE RURAL NEW-YORKER, one of the best family and agricultural papers in the land, has recently been enlarged, and its publishers claim that it has also been improved; but we can't see it, for the reason, we suppose, that our vision is clouded with the long and fixed notion that there was no chance for bettering it.—*Home and Farm, Louisville (Ky.)*

THE RURAL NEW-YORKER, once published at Rochester, but latterly at New York, has been the most widely circulated of the agricultural papers.—*Times, Hartford, Ct.*

RURAL NEW-YORKER.—That old reliable agricultural journal, The Rural New-Yorker, renews its youth every year, and steadily improves with age.—*Western Homestead, Kansas.*

THE RURAL NEW-YORKER has no peer as a family and farm paper.—*Commercial, Mitchell, Ind.*

THE RURAL NEW-YORKER has been enlarged and improved, and is now the best agricultural paper issued in the U. S. We cordially recommend it to our farmers.—*Times, Port Hope, Ont.*

THE RURAL NEW-YORKER, so long and favorably known as a guide and representative of the agricultural interests of the country, has been much improved in its typographical "get up." It would be hard to improve it otherwise. The Rural New-Yorker is a mine of information for farmers, wherever located, and amply repays perusal.—*Am. Mail and Express Journal.*

THE RURAL NEW-YORKER, published at 78 Duane street, New York, is now the best agricultural weekly we have any knowledge of.—*Spectator, Ohio.*

THE RURAL NEW-YORKER.—This popular agricultural journal has recently been enlarged and typographically improved, all of which will commend it still more, if such a thing were possible, to its vast army of readers in all the walks of life. The Rural New-Yorker is the most popular agricultural paper published, and we commend it as the best to all wanting a paper devoted to that department.—*Insurance Herald.*

THE RURAL NEW-YORKER has made another enlargement, which makes the Rural the largest agricultural weekly published in this country.—*Western Agriculturist.*

1878 Holiday Greeting! 1879

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No such offers as these were ever made before, but knowing that their introduction will repay me on future sales, I offer them to readers of this paper at these prices during the Holidays. **Order direct from this advertisement, which will not appear again,** and no further reductions can be made. Having met with unparalleled success within the past year and extended my sales over the world by an extended tour through the Continent of Europe, I have returned determined that no town or village in my native country shall be unrepresented by my instruments, and all energies, aided with ample capital, will be exerted to accomplish this object, hence the above offers, that can not be made by any other responsible house in America or the World. Don't miss these very valuable offers. **Order now.**

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TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Free Seed Distribution—An Announcement of—(Illustrated)..... 709, 710
A French Poultry Farm—(Illustrated)..... 711
Some Notes from the Garden—W. H. White..... 712
Origin of the Henrietta Raspberry..... 712
Note from Mr. Downing..... 712
Sensible Horse-Shoe—(Illustrated)..... 712
Notes from Nebraska—Ex-Gov. R. W. Furnas.... 713
Books Received..... 713
Catalogues Received..... 713

Everywhere:

Trade and Agriculture in England—Prof. I. P. Sheldon..... 714
Notes from Kentucky..... 714
Berlin, Ohio..... 714
Henry Co., Ohio..... 714
Amherst, Mass..... 714
Coventry, N. Y..... 714
St. Clair Co., Ill..... 714
Corning, N. Y..... 714
Hugo, Ill..... 714
Attica, N. Y..... 714
Jackson, Mich..... 714
Cambridge, Mass..... 714
York, Nebraska..... 714
Dallas, Texas..... 714

Answers to Correspondents:

Destroying Insects on Canary Birds..... 714
Treatment of Smilax..... 714
Miscellaneous..... 714
Communications Received..... 714

EDITORIAL PAGE:

The Truth About It..... 716
Feeding Cows in Fall..... 716
Stealing by Proxy..... 716
How to Manage Bones in a Small Way..... 716
Basket Willows..... 716
International Dairy Fair..... 716
Brevities..... 716

Domestic Economy:

Fresh Sifting from the Kitchen-Fire—Annie L. Jack..... 720
Cleansing Drains—Mary B..... 720
Cheap Paint for Out-Houses..... 720
Domestic Recipes..... 720
Queries Answered..... 720

LITERARY:

Poetry..... 718 719, 722
Coming Events..... 717
Feather-Flowers and Butterflies—(Illustrated)... 717
Items for Correspondents..... 717
Weaker Than a Woman..... 717
Rounding on an Old Chum..... 718
Recent Literature..... 718
Scientific and Useful..... 718
Bric-a-Brac..... 719

Reading for the Young:

Three Spinsters..... 722
New Toy..... 722
Answer to Sans-Souci..... 722
News of the Week—Herman..... 722
Personals..... 723
Wit and Humor..... 724
Markets..... 720
Advertisements..... 715, 721, 722, 723

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY NOV. 9, 1878.

Inasmuch as the income of THE RURAL NEW-YORKER, *during the present year, has considerably exceeded its expenditures — consistently with our statement often repeated, that our first aim is to benefit our subscribers—we shall furnish the* RURAL NEW-YORKER *from now until the first of January*, 1880, (fourteen months), *for Two dollars, and after the first of January at Two dollars per year, or* $1.10 *for six months.*

WE are glad to call attention to our paper from Professor SHELDON, upon Trade and Agriculture in England. Our readers may hope to hear from him again.

OUR Free Seed Distribution will remain open to all subscribers who may apply for them, until further notice.

OUR new Premium Lists, specimen copies and agents' outfits will now be forwarded free to all who apply.

THE RURAL NEW YORKER *is invariably discontinued at the end of the subscription term.*

THE TRUTH ABOUT IT.

WE presume to say, and we do so presume because we *know* it to be the truth, that our one object in conducting the RURAL NEW-YORKER is to benefit those who either from motives of pleasure, instruction, or as a means of livelihood, strive to know more of the soil—more of plant life—more of the relations of one to the other, and how to render them more serviceable to mankind. Our pleasure lies in these endeavors; our reward depends on their success.

We have had a very successful year, if the hearty approval of our readers and of the more liberal-minded part of the press of the country, as well as a considerable surplus of money beyond our business requirements, can be so construed. We propose to use this surplus in a way that shall be consistent with our professions, viz., first, in a free seed distribution among our subscribers, that, to all who are placed so as adequately to prize really choice seeds, shall equal in money-value the yearly subscription price of the RURAL NEW-YORKER;—second, by making the subscription price $2.00 TO ALL now and hereafter, whether singly or in clubs. Those who desire to get up clubs will be entitled, according to the size of their clubs, to the articles mentioned and fully described in our annual premium list, now nearly ready, or, if they prefer it, to a cash commission;—and, third, by improving the RURAL as much during 1879 as it has been improved during 1878—it is twaddle to assume that it cannot be improved.

We scarcely need request our friends to aid us in extending our circulation. If the RURAL NEW-YORKER is worthy of support; if our friends, from past experience, can confide in our ability and resolution to do what we declare we are earnestly striving to do; if they themselves desire to promote the interests of the rural home and the happiness of its inmates, they will, acting under the inspiration of their own impulses —— SPREAD THE NEWS!

FEEDING COWS IN FALL.

DAIRYING was formerly carried on generally in a very careless, slipshod way. A cow was a cow, and was supposed to give milk from some inherent power, regardless of the manner of keeping. Now, thanks to dairymen's associations and the more careful discussions in agricultural journals, dairymen are studying their speciality with much more care and attention to all its particulars. Few now believe that they can draw milk from the udder unless it first goes in at the month. They do not expect the cow to produce something from nothing, and they are inquiring anxiously about the best foods to produce milk, and the best methods of feeding. They study, not only the valuable characteristics of the different breeds, but the methods of perpetuating them.

This refers to the advanced dairymen; the great mass will have much to learn before they reach this point. Too many are careless about the feeding of their cows in fall. They think the season is past and that almost any thing will do them now. Having got through with the factory season, they pay little attention to the further yield of milk, drying off their cows without any thought of its effect upon the next season's yield. They do not sufficiently study the cow as a milk producer, and see that secreting milk is made a matter of habit; that if a cow is well fed and the flow of milk long kept up, this habit will continue year after year until she becomes almost a perpetual milking machine. Many dairymen are wont to extol the virtue of certain cows that yield a large flow of milk in the flush of the season, taking little note of how long this yield is kept up.

The value of a cow depends much more upon the length of the milking season, than upon the quantity of milk given for a few weeks. We have had cows that never gave more than 25 pounds of milk per day, and yet gave more milk during the season than others yielding even 40 pounds at the flush. The one class would average 20 pounds per day for 300 days, or 6,000 pounds per year; whilst the other would average only 20 pounds per day for 250 days, or 5,000 pounds per season. Now, the habit of holding out the milk was fixed in the first class at an early age, by good feeding through the whole season and careful milking. The second class had formed the habit of drying off at about eight months; and although yielding a large amount for a few days, they soon fell below the other class.

This habit of giving a pretty uniform quantity of milk is influenced very much by the uniformity of feeding and milking when the cow is young. If the cow gets a generous diet only when the grass is abundant and in a very succulent state, and no attempt is made to give a full ration when the grass is short, she falls off in her milk so decidedly and it continues so long as to become permanent, and cannot be recovered when grass again becomes abundant. The most important qualification in a cow, is to hold out her milk in a generally uniform quantity. This, to a great extent, is the result of proper treatment when the cow is young. If the heifer, with her first calf, is allowed to dry off at eight months, she will be very likely to do the same thing the next season. But if the young cow is to be established in a steady flow of milk, she must be fed uniformly a full ration during the whole season.

When the grass becomes short or dried, she must have other green food or grain to make up the deficiency. This extra food is the more important as the weather becomes cold, in the fall, and the grass becomes less nutritious from touches of frost. Then the dairyman must draw on his early-cut clover or late-sown corn. This being partly cured in shock, is sweet and nutritious and cows will eat it greedily in the stable at night and morning. If these are not sufficient to keep up the full flow of milk for the season, then a small grain ration of corn meal, oats, middlings, or bran, should be given also. Greater care should be taken in milking, for the milker should be sure that every drop is drawn from the udder. The cow yields her milk less readily at this season than when she gives a larger quantity. The cool weather renders the teats more sensitive to chafing in milking.

Too great stress cannot be laid upon the importance of a full milking season of ten months, but this full milking season must always be accompanied by a full and generous ration.

STEALING BY PROXY.

IN many parts of the country the fence-laws are now such that no one is obliged to fence against his neighbors' cattle or poultry. But in every community there are lawless individuals who will take advantage of the removal of fences—which is encouraged, and was designed to be encouraged, by this legislation—to turn out their cattle at night to depredate upon the property of the neighborhood. And it is astonishing what wonderful sympathy seems to exist between such people and their live stock, and what skill the latter develop in unlawful appropriation under the training they receive from their owners. Marks of their presence night after night, will be found next morning, especially if the nights be dark or rainy. But it is rarely that anything but a regular night-watch will catch the culprits, or trace their ownership. When, by chance or careful watching, their ownership is traced, the victim of the thievery is always assured that their escape from the inclosure of their owner was quite accidental, and the only instance during the season. Yet all surrounding circumstances may point to the fact that these animals get, and are expected to get, the most of their living by such plunder. The utmost severity of the law should, at all times, be visited upon men who practice this stealing by proxy.

How to Manage Bones in a Small Way.—A great deal of valuable fertilizing material is lost or wasted by reason of unacquaintance with cheap and handy ways of utilizing it. This is particularly true of bones, considerable quantities of which lie about and are accessible to farmers and gardeners, but are not used because no cheap way of making them available is known. Now, half a ton, or so, of bones may be easily reduced to a fine powder every winter by burning them, a few at a time, in the kitchen stove. Have a box or basket handy, and having collected a pile of bones and placed them where they will not be buried in snow or covered with ice, keep the box or basket filled with them in the shed. Put five or ten pounds in the stove with the wood during the day, and next morning when the ashes are taken up, the bones will be found mostly in a pulverulent condition. Any incompletely burned pieces may be left in the stove until the next day. This will quadruple the value of the ashes as a fertilizer, at no expense except that of a little trouble. The bone-ash thus produced is about half the weight of the raw-bones, and its commercial value is about $40 a ton.

Basket Willows.—While it may be questionable if the basket Willow can be grown extensively for profit in this country, except perhaps in foreign localities, no farm should be without a few plants. The long, slender branches—as tough as leather and as pliant—would be found useful in many cases. For instance, something better and more convenient than is usually at hand, is needed to bind cornstalks or millet. Many uses will suggest themselves when the article is at hand. This Willow will thrive almost anywhere, but best in a moist soil. It can be planted where most out of the way and requires little attention. It is readily grown from cuttings and a dozen plants well established, will produce more yards of useful material than would be at first supposed.

The International Dairy Fair.—We cannot too strongly urge upon our readers interested in dairy matters, the importance of at once making preparations either for exhibiting their products at the grand exhibition to be held in this city early next month, or, at any rate, for visiting it, if at all possible. Arrangements have already been made for making this the finest and most instructive display in its line ever held in this country, except possibly that at the Centennial; and here there will be none of the bickering and disagreement that characterized that department of the Philadelphia show.

BREVITIES.

PRUNE grapes-vines.

WHATELY says: "It is the neglect of timely repair that makes rebuilding necessary."

FULTZ and Clawson are the stars in the play of Wheat upon the Agricultural stage.

IT is suggested to our readers that they preserve this number of the RURAL for future reference.

BEFORE the ground freezes, take up the wooden labels (stakes)—tar the part that goes into the ground, and sprinkle it with sand while the tar is soft.

IN guarding as far as we may against the severities of winter, provide for the comforts of all farm animals from humane motives as well as from those of self-interest.

DR. HOSKINS thinks well of the Lost Nation (spring) Wheat. We would thank him if he would tell us how much he knows of its having yielded per acre the past season.

THE "Magnum-bonum," a new potato, is much praised in England. We have yet to learn whether it is really a good variety or whether it is simply greatly advertised.

IT may be well to bear in mind that the buds now formed on grape-vines contain the rudimentary fruit for another year. In pruning or laying down the canes, we should be careful not to harm such buds.

FROM Ex-Gov. FURNAS of Brownsville, Neb., we have received a basket of several varieties of apples, viz. Ben Davis, Rawle's Genet, Gilpin (Carthouse, Little Romanite), and Winesap. They are perfect specimens of their kinds.

"THE owl that watching in the barn,
Sees the mouse creeping in the corn,
Sits still, and shuts his round blue eyes,
As if he slept, until he spies
The little beast within his stretch—
Then starts, and seizes on the wretch!"

We were reminded by the above how very like the ways of the owl are sometimes the ways of some men.

THE general respect, if not affection, in which the name of Marshall P. Wilder is held throughout this country, is abundantly shown by the hearty congratulations of all upon the occasion of his 80th birthday. During a long life he has been an earnest worker in horticulture, and today there are few men in the world who have more friends and fewer enemies.

WE beg to say to those interested in our Domestic Economy Department that owing to a somewhat protracted illness of the editor, from which she is now happily recovered, a number of questions and communications have not received the prompt attention usually given to them. This week that and other departments are much shortened, or crowded out altogether.

WE repeat our advice not to spread manure or covering of any kind over the roots of fruit trees, or strawberry beds; not to lay down grape vines or raspberries until after the first hard freeze. If it is desired to cover the last two with earth, enough for the purpose must be set aside and so covered as to prevent its freezing. Our readers may rest assured that much harm results from covering such plants too early. Make the rule: Cover late in the fall and uncover late in the spring.

WE would state that we have already received more comments upon our soil experiments, as detailed under "Notes from the Rural Grounds," than we can find space for. It is notable that most of our correspondents criticise conclusions not among those of the article in question. We are happy at all times to publish the severest criticisms, if only just and pertinent. But our friends criticise us severely for what we neither said nor thought of saying, as they would discover, we are confident, were they to read our experiments and remarks carefully.

IF the people throughout the country who prize rare and choice seeds really believed that our free seed distribution amounted to as much to each applicant as the yearly subscription price of the paper, no doubt our circulation would be greatly extended by it alone. Choice seeds are dealt out sparingly in small envelopes, and twenty-five cents, sometimes fifty and seventy-five, are asked for each little packet. At the lowest price our ten packets (the choice), would amount to $2.50, which is fifty cents *more* than the annual subscription price of the RURAL NEW-YORKER.

IT seems that in England there has been a general failure of out-door tomatoes (they are extensively cultivated under glass), only a few plants on warm walls having ripened any. One case is mentioned by English journals where one grower had two acres of ground planted with tomatoes, "all carefully staked and tied," not one of which ripened. Thus it seems, that English gardeners this year have much to lament—a pitiful fruit crop, fearful destruction among potatoes, and the total failure of the tomato plant. English gardeners must try the Golden Rural Tomato.

FROM any of the numbers of the RURAL devoted to specialties, such as Strawberries, Millet, Grapes, &c., which have been issued from time to time during the past eighteen months, of course many of our usual departments are necessarily excluded. A gentleman calling at the office a day or so ago, said: "I sent for a specimen copy of the RURAL NEW-YORKER supposing it was a farm as well as a garden journal —but it was all full of Raspberries." To those who receive specimens of the present number we would say that the RURAL is not always full of free-seed distributions.

REALLY good dairymaids are rare now-a-days. The accomplishment of playing upon the piano is growing more fascinating in farmers' families. Pianos are rather more ornamental than milk-pails. A piano teacher costs fifteen dollars per quarter. Girls practice two hours per day for from one to five years. Sometimes they can then play something. But elegant music-boxes can be purchased for fifty dollars that make better music, play more tunes, and play them better than the girls—that is than forty-nine out of fifty of them. Why not buy the music-box as a reward for the young women who learn the arts of the dairymaid?

For Women.

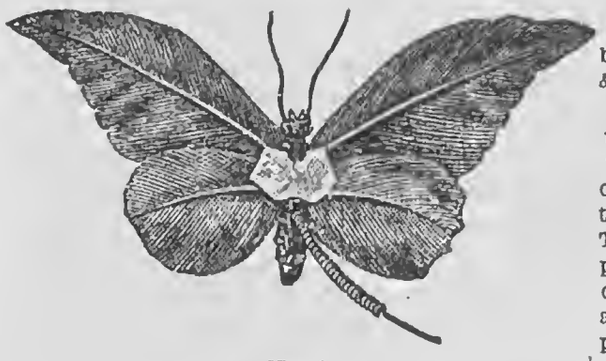
CONDUCTED BY MISS FAITH RIPLEY.

COMING EVENTS

A REVELATION.

BY THE EDITOR.

THE RURAL of Nov. 23d will contain an illustrated article on in-door garments and cloaks for ladies, for fall wear.



No. 2.

On 30th of Nov. I will publish cuts of a large number of fancy articles, suitable for Christmas gifts.

In the early part of January an article on Decorating China (illustrated) will be given, which I commend to those who are interested in this most beautiful art.

I am pleased to be able to announce, that Margaret B. Harvey, whose "Letters From a Country Girl" have been received with so much favor by Rural readers, will, in an early issue of the RURAL, tell the ladies about South Kensington-work and outline Embroidery on linen.

In response to many inquiries about cross-stitch embroidery, I will publish an article in the early part of February, giving the latest designs for monograms, initials and borders, in cross-stitch.

VASE OF FEATHER-FLOWERS AND BUTTERFLIES.

Description of Engravings.

THE feathers principally used for making these flowers are those of the goose, turkey and guinea-fowl. The design No. 12 represents a vase of flowers and foliage, with butterflies hovering over and settling on them. The Christmas rose shown in No. 8, is made of white goose feathers. The best way is to pull a natural flower to pieces, then lay one of the petals on the feather and cut it to the shape; five petals are required for this flower. The stamens are made of cotton, knotted at the end and fixed to a wire; they are first dipped into gum, then the knots at the extreme edges are dipped into a little sulphur powder to give them the yellow tint. The petals are next mounted on the stem round the stamens by means of a very fine wire; a narrow strip of green tissue-paper must be gummed round the stem. In cutting the petals, the stem of the feather should be left at least half an inch longer than is required for the petal. The leaf No. 3 may be easily made from one of the long tail feathers of a cock, cut to the shape and veined by means of a camel's-hair pencil and green water-color paint. The leaf No. 4 is made from a guinea-fowl's feather dyed green; any standard dyes answer for this purpose. No. 9, the Virginia Creeper leaf may be made with any small feathers, dyed, then cut to the shape required, all five being mounted to one stem as described for No. 8.

There are many pretty flowers which may be easily copied in feathers, and which give variety to the bouquet. For instance, daisies which are made of the very smallest goose feathers, the heart being formed of a little ball of cotton wool fixed to the stem, first dipped into strong gum, then into a stiff paste made of common ground starch and powdered sulphur, colored with a little tumeric; the petals are arranged round the center. The butterflies are made of the larger feathers of the turkey, dyed yellow and painted with brown and red, as nearly as possible like nature. The body is made of velvet stuffed with cotton wool and sewed up with a needle; the divisions must be formed by twisting fine silk tightly round; these are mounted as shown in No. 2, on a curled wire. In order to get the wings the correct shape, it is necesary to take pattern from a butterfly. These wings are sewn to a small piece of card-board, which is again sewn to the under part of the body, (see No. 2.) For No. 1 the feathery part round the body must be made of down. The antennæ are made of cotton stiffened with gum. Peacock's feathers, especially those from the neck, will be found useful for foliage. If the foregoing directions are not explicit, I will very cheerfully answer any inquiries addressed to me on the subject. FAITH RIPLEY.

ITEMS FOR CORRESPONDENTS.

BY THE EDITOR.

H. M. S., Lansingburgh, N. Y.—Where can I get bracket patterns of all sizes? Ans. J. S. Pratt & Co., 53 Fulton St., New York.

AN OLD SUBSCRIBER, asks "Can you tell me how to——an old lamp? I have a very nice one but the——is wearing off." Will the lady please fill out the blanks, so that I may know what it is that she wants to do and what is wearing off? The same writer wants to know how to make a pretty table cover. Coarse unbleached holland, or art canvass embroidered in the center and around the edge in fancy colors, makes a very pretty cover.

No. 3. No. 4.

JENNIE HAYDEN.—Twenty-five yards of silk will do for the costume you mention. I would recommend trimmings of velvet, brocade and elegant fringe. It will cost you about $150 to have it made in New York.

SARAH RUDOLPH.—I can send you samples of any kind of dress goods, or cloakings.

Miss L., Cortlandt, N. Y.—It is very unwise in you to poultice your eyes; nothing could possibly be more hurtful. Consult some occulist of acknowledged ability, without delay.

Literary Miscellany.

WEAKER THAN A WOMAN.

CHAPTER VI.

"THAT young man ought to be satisfied with his lot in life," said Jane Lester, as her niece told her of Felix Lonsdale's successes.

"He is quite satisfied, auntie," Evelyn returned gently.

"The worst thing that any man can do is to marry a girl with a pretty face," said the aunt. "Pretty girls are a mistake—they think themselves too good for anything. Felix Lonsdale has acted foolishly—Violet Haye will never make him a good wife."

"She is young, and she loves him dearly," remarked Evelyn.

"Youth and love—would any wise man build his house on such foundations?" said her aunt. "I tell you, Evelyn, it is a mistake, and Lonsdale will find it so. I read a character quickly, and I have read Violet Haye's."

"She loves him," repeated Evelyn, who could imagine nothing more unanswerable.

"Love—we know what a lasting sentiment that is," sneered Miss Lester. "If he married a sensible woman with a nice little fortune, I should have some hope; but the very curl of that girl's hair shows what she is."

Evelyn laughed as she thought of the glorious golden hair that had always been Violet's glory.

"There is no other hair in Lilford like it, auntie," she replied.

"It is a very good thing," was the retort—"I am no friend to nonsense."

No unfriendly criticisms reached Felix Lonsdale's ears—none could have hurt him. He had now the one great prize of his life; he was happy beyond all power of words to tell. He would have felt a little happier perhaps had Violet been less coy. But that very coyness had a charm of its own; it suited her; he could not imagine her other than coy; and, as for doubt or fear or mistrust, such shadows never darkened his mind.

He had settled in his own mind that he would persuade her to become his wife before chill October killed the flowers and stripped the trees. So he thought and hoped and dreamed, while a cloud was rising in the distance no larger than a man's hand.

One day Darcy Lonsdale returned with a perplexed look on his face to his new house. His wife, wondering at it, asked him——

"What is the matter, Darcy?"

After thinking for a few minutes he answered——

"Nothing; my brain seems to be full of foolish fancies."

The next time he returned home it was evening, and the pleasant tea-table, the happy circle of bright faces, might have gladdened any man's heart; but Darcy Lonsdale looked dull. Again his wife asked what was wrong, and he laughed uneasily, she thought.

No. 1.

"The very air seems thick with fancies," he answered. "I saw three of my best friends this morning standing in a group in Castle Street, and when I joined them I knew by the startled embarrassed expression on each man's face that they had been talking about me."

"What could they have to say about you?" asked Kate. "It was all fancy, Darcy."

"No; I am sure they were speaking of me. I went to the bank this morning, and as I was entering the door I distinctly heard the manager say, 'Mistaken in Lonsdale.' I heard the words as plainly as you hear them now. He was talking to one of the partners, and they were both cool, I thought, in their manner."

Kate threw her arms around his neck and kissed his anxious face.

"Why should any one talk about you or be cool to you, dear? You have done no wrong."

"No; but there is something—I am quite sure there is something, Kate—in the minds of people about me. I cannot imagine what it is."

Kate tried to cheer him; she laughed at the notion. What could there be? She knew that there was no one like him. No one could accuse him of a mean action; his life had always been fair, open, loyal, and transparent. It was absurd. He must be out of health; he should go away and rest himself for a time.

Yet she waited anxiously for him the next day. She was somewhat surprised, for there had been a perfect deluge of tradesmen's bills—an occurrence that had never happened before. The baker had sent in his bill, and the butcher wanted ready money; the upholsterers who had furnished Vale House pressed for a settlement in consequence of unlooked-for losses. Kate showed the bills to her husband.

"What does it mean?" she asked wonderingly.

"It means, my dear, that there is some subtle agency at work against us—I cannot tell what. It means also that the trades people must be paid at once. Indeed, Kate, we should have been wiser had we waited till the legacy had been paid us before we came here."

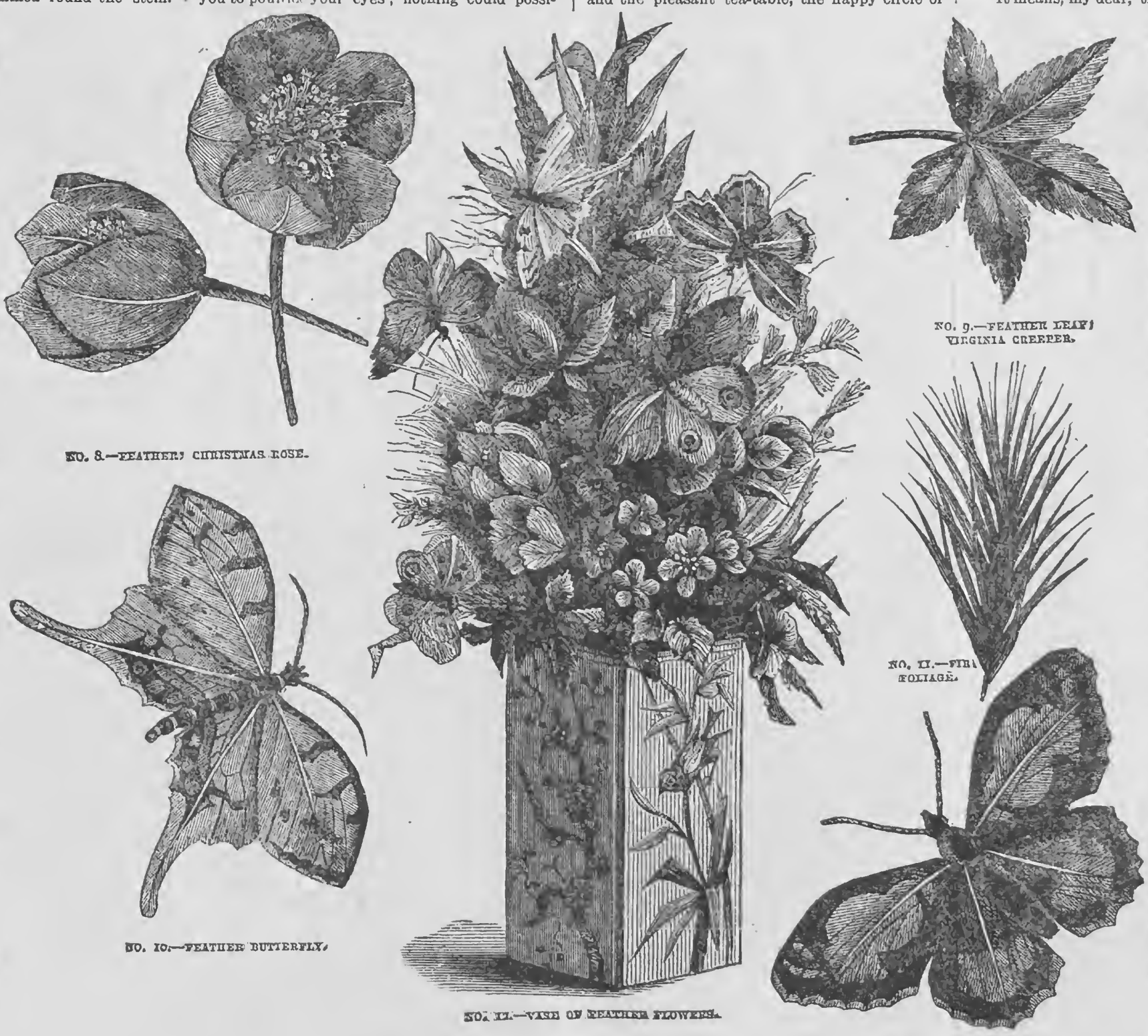
"But it is certain," said Kate, a little anxiously.

"As certain as fate," he replied; and then they talked a little more cheerfully about what they would do when the money was at command.

That same evening Felix came home looking slightly preoccupied. He had seen one of their oldest clients go into George Malcolm's office, and the Vicar of the parish, the Rev. Daniel Hunter, had passed him with the coldest of bows. He also had an impression that there was something wrong. He could tell neither what it was nor why it was.

Felix thought that there would be time to walk over to the Limes. He had a very beautiful book that he had bought for Violet, and he wanted to give it to her.

It struck him, when he entered the drawing-room at the Limes, that the three assembled there had been speaking of him, their greeting was so awkward, so constrained, so unlike the genial, kindly reception that had always been given to him hitherto. Mrs. Haye held out her hand to him, but her eyes fell, and her husband's half-murmured words were inaudible; Violet looked embarrassed; and for the first time under that hospitable roof the young lover



NO. 8.—FEATHER CHRISTMAS ROSE.

NO. 9.—FEATHER LEAF, VIRGINIA CREEPER.

NO. 10.—FEATHER BUTTERFLY.

NO. 11.—FIR FOLIAGE.

NO. 12.—VASE OF FEATHER FLOWERS.

FEATHER FLOWERS AND BUTTERFLIES.

felt ill at ease. When he laid the volume on the table, Mr. Haye took it up.

"This must have cost something," he said, "for it is very handsome. It would be better to save money than to spend it—we none of us know when an evil day may come."

"I do not fear evil days," remarked Felix, with all the sanguine hope of a young man.

"The wisest amongst us may expect them," said Mr. Haye briefly.

Then the conversation languished, and Felix grew so uncomfortable that he decided upon returning home. He had no misgiving—he thought he had called in at an inauspicious moment—he had, perhaps, interrupted a domestic conference. He cared only to see Violet. If she would go to the gate with him, so that he would have time for a few words, all would be well.

But when he had said good-night to the two seniors, and asked Violet if she would walk to the gate with him, Mrs. Haye interposed.

"It is too cold," she said. "Violet has been complaining of headache all day; she must not go out."

And the tone was so decided, so stern, that Felix could not oppose Mrs. Haye. He held Violet's hand one minute in his; he tried to look into the depths of her beautiful eyes, but they drooped from his, and he could not see them. He left her with a few whispered words, feeling more unhappy than he had ever felt before.

He said to himself over and over again that no one was so fortunate. Had he not a partership? Had he not a certainty of calling the loveliest girl in the county his wife? What had he to fear? Yet what was the strange dull pain that made his brave young heart fail him? Why had he a keen and penetrating, a vague, indefinite feeling of an evil day to come? He tried to repress it; he could understand women being nervous, but not men.

For the first time he noticed that night a look of anxiety on his father's face, and he asked what brought it there.

"Shadows—nothing but shadows; fancies—troublesome fancies," was the reply; yet it was strange the son turned away with a feeling almost of despair.

Nor was the mystery lessened when on the day following Mrs. Lonsdale, going on her daily round of shopping, met the Vicar's wife, Mrs. Hunter, who stopped to speak to her.

"This is a very sad affair, Mrs Lonsdale," she said; and Kate, looking at her, asked quietly what affair she meant.

She looked so entirely unconscious that the Vicar's wife was surprised.

"Have you heard no bad news of—of—anyone?" she asked; and Kate answered "No."

Then Mrs. Hunter related some trifling little story; and even as she related it Kate told herself that she was inventing it. With her honest, straight-forward eyes she looked at the Vicar's lady.

"You are not telling me what was in your mind when you first spoke to me," she said. "What were you thinking of Mrs. Hunter?"

But Mrs. Hunter, after laughingly parrying the remark, hastily said good-morning in very embarrassed fashion, and walked away.

Mrs. Hunter's remark could mean nothing; yet the heart of the loving, anxious wife grew heavy within her. Sad news? What sad news could there be affecting her or hers? And, if there was sad news about anyone else, why could she not have said what it was?

She was the third who went home that day with a terrible sense of foreboding. Her pretty house seemed almost to oppress her. She wished that she had not burdened herself with a nursery-governess; as for the new silk dress, it no longer gave her the least pleasure. What was this cloud hanging over her husband and her children? Was it only nervous fancy, or was there evil looming in the distance?

She was soon to know; and when she did know it proved to be even greater than she feared.

CHAPTER VII.

"I AM very sorry—I think it unjust; but it is quite impossible to say how it will end," said George Malcolm the lawyer.

For the secret was known now—the shadow had become a substance, the vague fancies had all assumed a form, the airy nothings had become realities so stern and so cruel that they had driven Darcy Lonsdale almost to despair. Mrs. Hardman's heir-at-law, James Hardman, had even given legal notice that he intended to contest his relative's will on the ground of undue influence. He maintained—and nothing could shake his opinion—that Darcy Lonsdale had taken undue advantage of his position, that he had influenced a weak-minded woman, and had persuaded her to leave him the half of her money. It was a clever ruse, advising her to send for another lawyer; but it would not help him.

Mr. Lonsdale found that the rumors about him had been growing daily, that his friends and neighbors were talking of him, while he had not the faintest idea of the mischief that was abroad. James Hardman had been in Lilford—that he knew, and the fact had not interested him in any way; but he did not know that James Hardman had been silently destroying his reputation, had called upon his old friends, insinuated that there had been conspiracy against him, and that he intended to dispute the will. Every one in Lilford knew this before the least rumor of it reached Darcy Lonsdale. He went at once to Mr. Malcolm, but the honest lawyer had no cheering news for him.

"I am a lawyer myself," he said, "but I can never tell how a lawsuit may end; it may take the right turn, and again it may take a wrong one."

"But," returned Darcy Lonsdale, "Mrs. Hardman meant me to have the money, did she not? That one broad fact no one can dispute."

"I believe honestly that she intended you to have it. I know she did. She talked to me for some time about the good it would do to you and your children."

"Then what can there be found to dispute? She intended to give me the money, and she did give it—what is it to any one?" cried Darcy Lonsdale.

"The law deals heavily with cases like this. James Hardman will plead that he is heir-at-law, that he is the rightful heir of the late Elizabeth Hardman, that he had been brought up in expectation of receiving the money, and that you took an undue advantage of your position as her legal adviser and friend to induce her to leave it to you."

"But," declared Mr. Lonsdale, "I did no such thing. I swear to you I never asked, influenced, or said one word to her about it. How dare any man say such a thing of me?"

"James Hardman has been brought up to believe that he would inherit twelve thousand pounds, and, finding six of it given elsewhere, he is very angry about it, and says some bitter things."

"But how is it possible that any one who knows me could believe that I have acted unfairly? How can my old friends and neighbors believe it? I have lived amongst them all my life—they ought to know me better. I should not believe such a scandal of any of them"—and tears of wounded pride and wounded affection stood in his eyes. "What are a man's friend's worth, Malcolm, if they believe evil of him so easily?"

"Perhaps they do not all believe it," said George Malcolm.

"Then why do they not say so? Why not say, 'We have known you for years and we believe in you?' Why not say that instead of looking coldly on me. As I pass by they converse about me in whispers and are startled when I meet them."

"James Hardman has talked a great deal amongst them," said Mr. Malcolm slowly. "He has said some hard things of you."

"But my old friends," rejoined Darcy Lonsdale, "the people I have lived amongst so long, how can they believe such slander?"

"I am not much of a cynic, but this I must say, that I believe our misfortunes are not always displeasing even to those we call our friends."

"But these people have known me so long."

Mr. Lonsdale could think of nothing so strong as that—no argument was so potent. He had lived amongst them all his life. Why did they not trust him if he trusted them?

"If any one amongst them had come to me and had told me such a thing of another, I would not have credited it—and they are only too ready, it seems, to believe it of me. Malcolm, how in Heaven's name am I to go home and tell this to my wife? Am I to tell her that a blameless life, spent in the midst of people who have known me since I was a child, is no shield against slander?"

"I am very sorry for you," said George Malcolm; "I can say no more. I do not believe it, and I shall stand by you through all."

The two men shook hands, but Darcy Lonsdale's face wore a puzzled, wondering look.

"Can it be a jest, do you think, Malcolm—a jest to try me?"

"No, it is no jest. Hardman will get the money if he can."

"I would not take it unless I thought it were really mine—I would refuse to touch it; but I cannot do that, for I am sure my old friend left it to me for the children. I must be just to them. Great Heaven, I have kept a blameless name all my life only to meet with this fate—to see my old friends point at me as a man who would cheat his client! I wish I had been dead before I had known this. Tell me what Hardman is going to do."

"He has placed the whole matter in the hands of a London firm, and the trial will come on about the end of September. You must prepare your defence and look up your witnesses."

"If my whole life does not witness for me," said Darcy Lonsdale, with quiet dignity, "then the words of no men can benefit me."

He dreaded going home—for the first time in his life he disliked passing through the streets of his native town, for the first time he shrank from the glances and words of his old comrades.

"Heaven help Kate!" he said to himself. "How am I to tell her?"

But Kate knew already—such news travels fast. It was no weeping, hysterical wife who clung to him, half mad with womanish fear; a bright, tender face looked into his, sweet, warm white hands clasped his, loving lips kissed him, a brave bright voice cheered him with the music of home-words.

"I have heard all about it, Darcy," said his wife. "Never mind—no one can injure you. You are innocent, honest, and honorable. Never mind what any one says, Heaven knows the truth, and I love you all the more that you bear this blame so well."

Darcy Lonsdale was relieved to find his wife so cheerful, and they sat down to discuss their difficulty.

"Give the money back again, Darcy," said his wife. "If I were in your place, I would not touch one shilling of it."

"If I did that, it would look as though I feared inquiry, as though I knew that I had gained it by wrong means, and remorse compelled me to to return it. It seems to me now that I am compelled, in justification of my own honor, to keep it—Mrs. Hardman certainly meant me to have it. Then there are the children—I cannot rob them; I must not take from them what is really theirs."

"But," said his wife, "if there should be a trial, and it should go against you?"

"Then I must bear it like a man, Kate. I have had many blessings—if it pleases Heaven to send me a reverse, I must not complain."

But, for all that, she knew that his heart was sore and heavy, and that he was disturbed by a hundred doubts and fears. She soothed him, comforted him, and did her best to encourage him; but she could not persuade him to forget his trouble for a moment—it was always in his thoughts.

Presently Felix came in, and one glance at his son's face told Darcy Lonsdale that he had heard the whole story. The handsome young face was full of emotion. He went straight up to his father, and laid his hand lovingly upon his shoulder.

"Let me help you, father," he said. "No man shall say one word against you while I live."

And the two men—father and son—shook hands. There was more expressed in that silent grasp than there could have been in a volume of words.

"You have heard the story, I suppose, Felix?" said Mrs. Lonsdale.

"Yes, I have heard it, and a more cruelly unjust story never was told. Let me help to fight your battle, father. I should like to take every man who believes the story, or who affects to believe it, and thrash him."

"My dear Felix!" exclaimed gentle Mrs. Lonsdale.

"So I should, *madre*;" and the young handsome face deepened with angry scorn for every one who should harbor an evil thought of one so beloved. The love between father and son was almost pathetic in its intensity.

Presently Mrs. Lonsdale said musingly—

"What will Violet say when she hears it?"

"Say?" cried Felix, "She will be indignant She will agree with me that any man who listens to it ought to be shot. Why do you look so strangely at me, *madre?*"

"I was wondering," she said, "whether this would make any difference to her or to her parents—I mean in respect of yourself."

"Difference? *No*—yet I am wrong. Yes, it will make this one difference. She will love me the better, and cling to me the more. I have no doubt about Violet—my sweet Violet! It is the one thing needed to quicken her love for me with a new strange life."

He wondered why Mrs. Lonsdale sighed. Why need any one sigh? Violet's love, Violet's faith, were his rock of refuge. To doubt her would be death.

"I have no fear," he said, throwing back his head proudly. "Violet will love me now as she has never loved me before. My only trouble is about my dear father, and what I can do to help him."

They talked until long after midnight; they looked the evil in the face. If they went to law, and the law was against them, what then? They would be dreadfully embarrassed for ready money. The nursery-governess must go, but they could remain at Vale House, and the partnership should not be dissolved.—[To be continued.

HOW LONG?

If on my grave the summer grass were growing,
Or heedless winter winds across it blowing,
Through joyous June or desolate December,
How long, Sweetheart, how long would you remember,
How long, dear love, how long?

For brightest eyes would open to the summer,
And sweetest smiles would greet the sweet new-comer,
And on young lips grow kisses for the taking,
When all the summer buds to bloom are breaking,—
How long, dear love, how long?

To the dim land where sad-eyed ghosts walk only,
Where lips are cold, and waiting hearts are lonely,
I would not call you from your youth's warm blisses;
Fill up your glass and crown it with new kisses,—
How long, dear love, how long?

Too gay, in June, you may be to regret me,
And living lips may woo you to forget me,
But, ah! Sweetheart, I think you will remember,
When winds are weary in your life's December,—
So long, dear love, so long! [*L. C. M.*

"ROUNDING ON AN OLD CHUM."

ONE fine evening at the end of June a girl and two young men were standing under the porch of a quaint old ivy-covered house—called Ashton Cottage—that stood on the bank of the Hudson not far from Peekskill.

The trio were laughing and chatting as gaily as children just let out of school. Judging by an occasional shout for "Will," they were evidently waiting for some one else.

Tardy Will—a broad-shouldered young fellow of about eight-and-twenty, rather above the middle hight, and not by any means good-looking—soon made his appearance. His hair and beard were almost red; his features large but regular; his hands and feet well shaped, though not small; he had a hearty mellow voice, and one of the softest and most genial smiles that could be seen. He came along struggling into his well-worn coat—explaining to his companions that he had just stayed to give a helping hand to Mr. Sinclair, who had come upon a tough bit of ground in the kitchen-garden, which had been too much for the old gentleman's strength.

The four then took their way to the river, on boating purpose intent, as evidenced by the nautical costumes of the males.

"I say, Devaine," said the youngest of the three men, a bright-looking young fellow of about seventeen, "I wonder when I shall be able to sport a silk hat? I know, though, what I shall buy out of my first quarter's money,"

"When do they begin giving you a salary, Frank?" asked Will.

"After Christmas."

"Well, Frank," said the girl—a tall, finely-built brunette, whose large, thickly-fringed, dark-gray eyes, slightly *retrousse* nose, magnificent teeth, and deep dimple on either side the large, but handsome mouth, made up as fine a specimen of girlhood as one would wish to see—"do tell us how you intend to astonish——"

"The natives? Ah, you needn't pull up short, Miss Conny! Girls are such humbugs. You know you can talk slang as well as any fellow when you like," was the saucy and voluble reply of her brother Frank.

"Do you plead guilty to the soft impeachment, Miss Sinclair?" smilingly asked the handsome Devaine, with a certain *tendresse* in his voice which brought a tell-tale blush into Conny's oval cheeks.

"You haven't told us yet, Frank, what you are going to buy," said Will, after a quick, pained glance at the girl's face.

"Why, I mean to get a pair of patent-leather boots, a blue satin tie, a pair of yellow kid gloves, and a silk umbrella."

A peal of laughter greeted this confession, and great was the chaffing Frank had to stand, especially from the handsome Devaine, who in his white flannel boating-suit looked, as Frank truly said, "no end of a swell." His finely-set head, with its short dark curls, was bent with that gentle deference so flattering to a woman, towards the girl whom he contrived to monopolise—by which arrangement Will and Frank were compelled to follow; and although many a gay repartee was laughingly exchanged over the shoulders to the two behind, still there were opportunities for a remark now and then, commonplace enough in itself, but which in Devaine's tone and manner gave a subtle meaning.

Arrived at the end of the avenue, they turned to the left, along the bank, until they came to where the high wall of Van Twiller House threw a welcome shade on the river path. A little way beyond the angle of the wall was a seat, and fronting it were wooden steps leading down to the river. At the foot of these a boat was moored, and in this they were soon all seated; Frank steering, William Mostyn, and Harvey Devaine rowing. As the boat shot out into the stream, upon the bosom of which the sunlight rained a golden shower, Conny trailing her firm white fingers through the cool water, felt, although she seldom met, the gaze of the dark, close-set eyes opposite. The bright summer evening, the charm of the surrounding scenery, the beauty of the man himself, the very lull of the plashing oars—all served to feed the feeling that had stolen into Conny's heart since her acquaintance with this fortnight-old friend, whom William Mostyn had, to his own bitter after-regret, introduced.

William Mostyn was the son of a near neighbor of the Sinclairs. He and his brother had come to the neighborhood only two years before, shortly after the death of Mrs. Mostyn, which had had such an effect upon her husband as to compel him to give up the care of his business entirely to his son, and to leave New York for the quiet of the country. The Sinclairs being their closest neighbors, an intimacy had sprung up between the families.

William Mostyn, although a day never passed without seeing him at Ashton Cottage, had never known what his feelings were towards the beautiful girl who always treated him with the same frank familiarity as she would have done an elder brother, until, in an evil moment, he took the young journalist, Harvey Devaine—who had run up by invitation one Saturday afternoon for a pull on the river—with him to his friends the Sinclairs.

Before Harvey Devaine left that night poor Will knew that love had lain slumbering, in its own security, in his heart—goodness knows how long—only to be awakened by the sight of its birth in his friend and Conny.

When the boat neared the landing-steps again, the summer moon, radiant in the starry heavens, was flooding everything with its silver light.

Devaine was the first to spring on shore and help Conny out, Will and Frank staying to secure the boat.

No word was spoken by the two who went on before, and the silence became embarrassing to Conny; still not for worlds could she disturb the "charmed hush" by any commonplace observation. As though divining her thought, her companion's voice harmoniously broke the stillness—

"'How sweet the moonlight sleeps upon the bank!'"

She smiled back softly—

"'Look how the floor of heaven
Is thick inlaid with patines of bright gold.'"

In low melodious strains he still continued quoting—

"'In such a night as this,
When the sweet wind did gently kiss the trees
And they did make no noise——!'"

"I'm jolly hungry, I can tell you! What have we for supper, Conny?" shouted unsentimental Frank. "I shall take the short cut through here;" and, suiting the action to the word, he plunged into the long fragrant grass and made straight for the house, followed by the rest.

Arrived at the door, Will held out his hand.

"Good night, Conny."

"Won't you come in and have some supper, Will—you and Mr. Devaine?"

"No, thank you, Conny," was the half-sad reply: "my father is all alone, so I'll not stay. I'll just go in and say good night to your father and mother." Saying which, he generously left the two together, although the act of magnanimity cost him a hard struggle.

It was Devaine's turn to hold the shapely hand which thrilled to his touch.

"Good night, Conny." How sweet her name sounded to herself pronounced, for the first time by his lips.

"Good night, Mr. Devaine."

They stood in the shadow of the porch, and as hand clasped hand Harvey Devaine's moustached mouth touched Conny's dimpled cheek.

"Good night, Mr. Sinclair. Good night, Mrs. Sinclair." Will's rather loud leave-taking startled them apart! then with a decorous handshake they all separated.

* * * * *

"Mother, I'm going across to hear the whip-

poor-wills," said Conny coaxingly to the old lady, who, with her husband, had settled down after supper to a game of cribbage, which Conny knew would last another hour at least—it was then about nine.

"Bless the girl, can't you hear them from your own garden? Besides, you'll catch your death of cold. Has Frank gone to bed already?"

"Yes, dear, tired out," said the wilful Conny, already on her way,

Conny was soon threading her way along the moonlit walks of the grand old garden to her favorite retreat—a high summer-house overlooking the river, built almost immediately above the landing-steps where Will's boat was always kept moored. The summer-house, embowered in its ivy covering and the foliage of the surrounding trees, was completely hidden from sight.

And now, alone at last with all her fluttering, new-born bliss, recalling every word and look, remembering every intonation of the musical voice, blushing again with the memory of her lover's kiss, Conny sat wrapt in a dream of love's own conjuring.

By-and-by, borne upon the warm night air, came the harbinger of man's lordly presence—tobacco fumes; and soon from her hiding-place she saw the two men, Will and Harvey Devaine, coming along the path. Her heart throbbing with the sudden joy of seeing him who had been uppermost in her thoughts, she drew back into the shadow until they passed.

As they approached Devaine was saying—

"Your ideas, my dear fellow, won't do for the present age. In fact, I don't believe they ever applied to men and women living in the world. Out away in the back-woods I can understand a Darby-and-Joan existence. In the world, in society, where a man meets with so much temptation, I affirm it's impossible."

"I don't see it," was Will's curt and dogged reply.

"My dear Mostyn," said Devaine, seating himself on the bench just underneath Conny's watch-tower, "you never do see things in the same light as other people. Your ideas of honor, truth, business, marriage, are all very fine, but simply not practical. Who but you would ever dream of annoying me about little Ada? Did I seek her out? What is a man to do if the women are so foolish? They are all alike; they never rest until they get a fellow in their toils; and when he grows weary of the joke, they kick up the deuce's own shindy, and begin to rave about man's inconstancy and selfishness, Constancy, by Jove!"—here he laughed amusedly. "I don't believe a man could be constant if he tried."

"Yes, yes," interrupted Will gravely, as he too seated himself—"that is all very fine in the 'light-o'-love' affairs men indulge in; but when it applies to marriage, to that partnership for life, it alters the case."

"Not a bit," persisted Devaine.

"I tell you, Harvey, that when a man marries a woman, taking her to be his help-mate to share his lot, for better for worse, in riches and in poverty, and, by so doing, takes from her every other chance in the world—setting aside all religious cant and maudlin sentiment—I say he is pledged to her as sacredly as she is to him; and, to my mind, being unfaithful to a wife is as dastardly as rounding on a chum,"

As Will delivered himself of this opinion, energetically enforcing each word with a wave of his meerschaum, he rose to his feet and strode on, leaving Devaine stretched out at full length on the seat, his elbow supporting his handsome head, his cigar between his lips, which were curled with an amused and pitying smile. With one swift glance at the man lying below, and a long wistful look at Will's receding figure, Conny turned and swiftly but noiselessly retraced her steps homewards.

* * * * *

"There—I knew how it would be! You're as white as a ghost. A nice cold you'll have to-morrow! Did you hear the birds sing?"

"No, dear, but I heard a raven croak. Is papa in bed? Good night."

* * * * *

"Then this is your final answer?" The speaker was Harvey Devaine, who, pale even to his lips, was standing in the parlor of Ashton Cottage, having just taken up his hat as if to go.

"Yes, Mr. Devaine," was Conny's low but firm reply.

"Then, Miss Sinclair, I compliment you upon being the most perfect coquette it has ever been my honor to know."

This taunt only served to bow Conny's head a little lower, and to bring the hot blood rushing over face and neck.

"Good morning."

"Good morning," she just governed her trembling lips to answer; but the moment the door had closed she threw herself in a corner of the sofa and cried as though her heart would break.

* * * * *

Three weeks had passed by and Will had not put in an appearance at Ashton Cottage. Frank and Mrs. Sinclair brought home his excuses for not having called. His plea was unusual pressure of business.

Conny scarcely missed him at first, by reason of the hard battle she was hourly fighting with herself; but, like the true, brave girl she was, she never flinched from the contest, but, facing the trouble, did her best to overcome it.

At last Will who had not seen Devaine since the morning following the boating excursion, when he, Will, left for business with the knowledge of what Devaine's purpose was in remaining for a later train—made up his mind that, as the thing had to be done, and not being able to frame any more excuse for keeping away, he would get the meeting with Conny over; so in a most cowardly state of mind he went across to Ashton Cottage.

He had waited until it was dusk before he ventured to trust his tell-tale face to the scrutiny of Conny's—and most likely Devaine's—keen eyes. Passing round the garden to the back of the house, where the sitting-room was, in which the old people invariably played their evening game of cards, to his surprise there sat Conny alone, reading by the light of the lamp, which shed, to his thinking, a paler over her dear face.

For one moment he meditated flight. He never would be able to go through the form of congratulation which would be expected of him. Just then Conny raised her head, and he was seen. As he stepped through the French window, she rose hastily and, putting out both hands, exclaimed—

"Oh, Will, I am so glad to see you again!"

The glow of pleasure which spread over her face—which was thinner and paler than when he last saw it—he mistook for eager delight to impart her sweet secret to one whom she regarded as a brother.

Holding her hands very tenderly in his own, he said, looking wistfully into the beautiful grey eyes—

"Conny, I have been a sad coward. Do you know I could not summon up the courage to come and wish you joy?"

"Wish—me—joy?" she echoed slowly and wonderingly. "Oh!" A sudden light seemed to dawn upon her. "Will, you are all wrong," she said, with a faint approach to her old saucy smile.

The hands that he held were grasped so hard as to cause her pain.

"Conny, don't joke, but tell me—tell me—did not Devaine——" As he hesitated, she supplied the words.

"Ask me to be his wife? Yes."

"And you, Conny—— ?"

"I refused him, Will."

"Thank Heaven!" said Will fervently, pressing her dear hands passionately to his lips.

"Amen!" was Conny's low and solemn answer. "And now, Will," and all her bright manner returned—"come and sit down and tell me——"

"Wait a minute, Conny," said he, without relinquishing her hands; "I want you to tell me something else."

"What is it, Will?"

"If I were to"—the tender voice grew husky in its intensity—"to ask you the same question that Devaine did, what would your answer be?"

"Why, Will, my answer would be," here she disengaged one of the imprisoned hands and, laying it confidingly on his shoulder, looked gravely and frankly into his face—"'Yes.'"

And Conny never regretted having given her life into the keeping of the man who scorned the idea of "Rounding on an Old Chum." M. V.

RECENT LITERATURE.

The Political Adventures of Lord Beaconsfield. New York: CHARLES SCRIBNER'S SONS. Price 40 cents. Originally published in Fortnightly Review.

THANKS are due the publishers, for collecting these caustic and clever papers and presenting them in a convenient form to the American public. The subject of them has for many years occupied so peculiar and prominent a position in the political world, that even the feeblest attempt at outlining his personal history, could not but be entertaining and when, as in the present instance, the author shows a thorough knowledge and appreciation of his subject, coupled with literary ability of no mean order, the result is a work, which no one, who cares in the least, for a just estimate of the character and life of England's Prime Minister, can afford to leave unread.

Disraeli is usually cited as an example of what persistent, well-directed effort can accomplish, and we are constantly being called on to admire the tact and ability by which a man belonging to a proscribed race, has conquered for himself a proud position in the greatest of modern Empires. Well, the world at large does admire him immoderately, and even the few who take the trouble to penetrate behind his theatrical effects, and to get at the real man, must allow him a certain measure of greatness. No one could possibly more fully appreciate Beaconsfield's attractive qualities than does the anonymous author of the book under notice, but while doing full justice to the Premier's undoubted ability, he is given to analyzing motives and methods and to ferreting out inconsistences, and the result is rather a sorry showing for Disraeli. "To thine own self be true" has been the Earl's motto, and never for an instant has he faltered in his devotion to his own interests. He has reaped wealth, position and the homage which these bring with them; but he has done this at the cost of all that honorable men hold dear. To no principle has he been true. Expediency has been the sole guide of his conduct, and bearing this in mind, it is small wonder that we find him identifying himself at different times with political parties holding the most diverse opinions. Whig, Tory, each in turn; in one breath advocating Free Trade and the next denouncing it as a most stupendous evil.

To-day, Sir Robert Peel is a demigod, and Disraeli racks his brains for laudatory adjectives of the degree superlative, in which to express his devout admiration of his leader's qualities of mind and heart. A little later, and this fervent admirer has developed into the most implacable of foes, and the ex-idol is plentifully bespattered with vituperation and invective. Beaconsfield's method of dealing with some of his books which it is inconvenient now to acknowledge, is, to say the least, unique, and besides, it has the merit of simplicity; he merely declares that *they never have been*, this too, in face of the fact that copies of the "never-have-beens" are still extant. Truly, his Earlship is a wonderful man, and those who inquire closely into his life, are tempted to add, "fearful."

Pauline and other Poems. By HANFORD LENNOX GORDON. New York: G. P. Putnam & Sons.

THE blank verse poem, which gives its title to this volume, is a pathetic tale of the war, and one which the author might have told with more effect in simple prose. In spite of the oft recurring alliterations and high sounding phrases, the treatment the subject receives is not poetic. The shorter poems making up the volume are of no especial merit.

Nursery Rhymes and Melodies of Mother Goose. Illustrated with 50 full-page sketches "in white." By J. F. GOODRIDGE. Boston: Lee & Shepard. Price 50 cents.

IT would seem that time-honored Mother Goose affords an infinite variety and inexhaustible entertainment for people of all ages. The strength of this little book lies in its unique illustrations of the well-worn rhymes—each rhyme having its appropriate and mirth-provoking silhouette, which is in itself a whole volume of fun. We commend the book heartily to those who, seeking amusement for the little ones, are not themselves averse to enjoying a broad smile, on their own account.

The Exile. A Story of St. Augustine. By FRANCIS FONTAINE. New York: G. P. Putnam & Sons, $1.25.

THIS is a romantic poem, founded on the massacre of a band of Huguenot settlers in Florida by Spaniards, and the loves of Jean Ribault, commander of the French fleet, and Leonore de Coligny. Though at times there is something strained in the style, the poem is full of vigor and beauty, and will well repay perusal. The theme affords abundant material for both the poet and the romancer.

Merry Times. Published by Porter & Coates. Philadelphia. Price $1.25. 400 pages.

THIS is a book for the little folks. It contains contributions from Louis M. Alcott, J. T. Trowbridge, A. L. O. E., M. Ballantyne, Caroline Hadley, and many from other authors not so well known to fame. The work is embellished with over two hundred illustrations.

WATSON'S COMPLETE SPELLER (price 25 cents), and a One Term's Course in Latin, or the Study of Latin Simplified and Condensed (price 20 cents), published by A. S. Barnes & Co., New York, are excellent text-books, which every teacher should examine for himself. Even though it may not be convenient to introduce these books into all schools, teachers can gather from them many useful hints, and by putting the suggestions into practice, they can vastly improve on the old methods of instruction.

SCIENTIFIC AND USEFUL.

IT is difficult to clean glass bottles and other vessels that have been soiled with fatty substances; but if a concentrated solution of permanganate of potassium, to which a few drops of hydrochloric acid are added, be used as a wash, the cleansing is effected speedily and thoroughly.

To show the comparative estimation placed upon the principal American woods used in cabinet-making, Professor C. S. Sage gives the following table of actual prices, per 1,000 feet, in the Boston market:

Black Walnut	$75	Butternut	$50
White Oak	65	White Ash	40
Cherry	60	Sugar Maple	40

IN Germany, according to the Polytechnic Review, sawdust is employed in the production of sundry articles both useful and ornamental. A plastic mass is prepared, composed two-thirds of hard-wood sawdust and one-third glue, resin, or other binding material. This is compressed in brass molds, and the moisture driven out by heat. The articles made are bass-reliefs, pianokeys, door-knobs, brush-handles and backs, etc.

M. TREUVELOT, a foreign scientific observer, has been experimenting with butterflies in order to solve the disputed question as to the use of their antennæ. He found that they could fly when deprived of the antennæ. It has been stated by other entomologists that they fell at once without any power of flight. When temporarily blinded by covering the eyes with India ink, they could fly without dashing into objects, provided the antennæ were left on, but if cut off they fell at once. When blinded they did not perceive sugar by the antennæ, but if the stump were touched with it, the tiny proboscis was at once unrolled and searched for it. When the stumps were covered with gum arabic, they were insensible to the seductions of sugar water. M. Treuvelot concluded that the sense located in the antennæ is not merely that of touch, hearing or taste, nor a combination of all three; but one that differs essentially from any experience by human beings; it is a kind of feeling and smelling at a great distance.

LIEUTENANT SAYCE, a retired officer of the British army, has patented a steel shield for soldiers. It is carried, when required, by the men suspended in front of the chest and in this position protects the vital parts of the body; but the particular feature in these shields, and which the inventor claims as the special novelty, is their use, when several are set up in a line upon the ground, in protecting the men while lying down or kneeling and firing from behind them. The shields, being slipped off the hooks, are set up by themselves, a hinged double rest at the back supporting them, this rest requiring to be fitted in a particular manner, to enable the shield, when standing by itself, to resist the shock of a bullet striking it, without being overturned. This arrangement proves to be a considerable difficulty in perfecting the invention. The principal objection is the weight; more than this would have to be carried extra, were it once proved there was an advantage in doing so, heavier weights having been formerly submitted to in ancient times, when physical activity was as necessary as it is at the present. One cart would carry a supply for two companies of a regiment, as the shields need not be issued to the men until they are in proximity to an enemy.

BRIC-A-BRAC.

ROMANCE AND REALITY.

"HERE is the bed where Nellie slept."
She turned the snowy coverlet down:
In through the lattice the ivy crept—
What a blissful change from the heated town!

"Good night." She left me: the moonbeams fell
On flower carpet and dainty bed;
I smoked and pondered, but strange to tell
I couldn't get Nellie out of my head.

"My aunt had never a friend," I said,
"Named Nell, or Nellie, yet I am here
Seated on Nell's, or Nellie's bed—
My clothes on Nell's or Nellie's chair.

Nellie! I always liked that name,
The gods are propitious, and I perchance,
Who voted the country dull and tame,
Am here beginning my life's romance.

"How fragrant this soap, and this ewer quaint
Has the water held in which Nellie washed—
Nellie, whose face needs no nasty paint:
And the basin, too—what a pity 'tis smashed.

"How soft this towel! Nellie or Nell,
Has hung it thus. What a dear, sweet girl
She is to be sure; and this brush—ah, well,
I wish I could drop on a truant curl.

"Is she a blond? or is she a brunette?
I'm sure to love her. These nights of bliss
Are made for loving. I knew that yet
I should meet my fate in some way like this."

I sank on the pillows. "O dear, sweet Nell,
To think that your cheek has pressed this down
And your limbs reclined here, my country belle,
One day to be queen of my house in town."

My sleep was broken. 'Twas not the breeze
That sighed through the trees the whole night long;
I rather feared that it was the fleas,
Though the thought seemed wicked, and base, and wrong.

I looked in vain in the breakfast room
For Nell, or Nellie. She was not there.
"Dear aunt," I said, "are we not too soon?
Miss Nell has not finished her morning prayer."

"Nellie come here." With cheeks aflame,
I could not raise my eyes from the floor
But grim was the air of the ancient dame
As Nellie, her poodle, came in at the door.

[From the Argonaut.

SOME SALARIES.

Increase in the salaries of some of Government officers of the present date compared with the compensation to incumbents of the same offices in 1832, forty-six years ago:

1832	Salary.
President Andrew Jackson	$25,000
Vice-President John C. Calhoun	5,000
1878.	
President R. B. Hayes	50,000
Vice-President W. A. Wheeler	10,000
CABINET.	
1832.	
Secretary of State Ed. Livingston	6,000
Secretary of the Treasury Louis McLane	6,000
Secretary of War Louis Cass	6,000
Secretary of the Navy Levi Woodbury	6,000
Postmaster-General Wm. T. Barry	6,000
Attorney-General Roger B. Taney	3,500
1878.	
Secretary of State William Evarts	8,000
Secretary of the Treasury John Sherman	8,000
Secretary of War George W. McCrary	8,000
Secretary of the Navy R. W. Thompson	8,000
Secretary of the Interior Carl Schurz	8,000
Attorney-General Charles Devens	8,000

FOREIGN MINISTERS.

1832. To Great Britain.		1878.	
Martin Van Buren	$9,000	John Welsh	$17,500
To France.			
William C. Rives	9,000	Ed. F. Noyes	17,50
To Russia.			
James Buchanan	9,000	E. W. Stoughton	12,00
To Spain.			
C. P. Van Ness	9,000	Jas. Russell Lowell.	12,0

[Cincinnati Gazette.

GOOD NIGHT.

Good night!
Now the weary rest by right,
And the busy fingers bending
Over work that seems unending,
Toil no more till morning light
Good night!

Go to rest!
Close the eyes with slumber prest;
In the streets the silence growing
Wakes but to the watch-horn blowing.
Night makes only one request—
Go to rest!

Slumber sweet!
Blessed dreams each dreamer greet;
He whom love has kept from sleeping
In sweet dreams now o'er him creeping
May he his beloved meet—
Slumber sweet!

Good night!
Slumber till the morning light,
Slumber till the new to-morrow
Comes and brings its own new sorrow,
We are in the Father's sight!
Good night!

RICH MEN'S SONS.

THE president of one of our largest banks said to us a day or two since, that a rich man's son had just left his place, and he was the last man of the kind he would ever employ. The man was faithful, honest, and fulfilled intelligently and well all the duties required of him; but just as he had become accustomed to his work, he found out it was too confining, and a raw clerk had to be put in his place. A bad look this for rich young men; but it is the old story repeated for the thousandth time. If rich men's sons will not endure the drudgery by which nearly all their fathers secured money and position, they must take a secondary place in the next generation; and oftener they drop out of sight amid the idle, worthless herd, if, indeed, they escape an association with loafers and criminals. What say the labor reformers to facts like these, for facts they are beyond question. Nearly every man in any leading position in the community began life poor. Let the sons of our rich men take warning and go to work honestly and faithfully every day if they hope to fill the positions honorably held by their fathers.—*Tribune.*

Domestic Economy.

CONDUCTED BY EMILY MAPLE

FRESH SIFTINGS FROM THE KITCHEN FIRE.

ANNIE L. JACK.

AUTUMN has come; we are glad to leave the garden—stripped as it is of floral treasures and all its beauty gone—to gather around the kitchen fire in the morning, as long as housekeeping duties keep us in that part of the house. What a work is ours at this season of the year! Before cold days come to benumb our fingers or our faculties, we must

"Open the camphor trunk,
And bring the mittens down"

for the many little hands that need them; repair warm garments, and prepare warm flannel underwear for the dear ones in our circle. The kitchen fire is very pleasant; its homely glow has something honest and hearty; the stick that sputters and glows is grateful to our chilled hands and has a peculiar charm as coming from our own piney woods where, while the summer lasted, we often went to search for flowers, bringing to mind the sweet companionship of one, the "gentlest of my friends." But sentiment is not allowed in these degenerate days, I believe, at least so say the would-be fashionables, and just now we are busy with vegetables. Long ago I banished from the house cellar all potatoes, cabbage, celery or any other vegetable in quantity, after a severe lesson in typhoid fever, that was caused by the unavoidable decay in early spring-time. It is not difficult to build a root house, but better still for convenience in a cold climate, is a barn cellar for storage of a root crop of any kind. The air of these cellars is generally more even than that under the living-rooms, and all vegetables require to be fresh and crisp. I wonder how many people pare their potatoes and other tuberous vegetables an hour before boiling, leaving them in cold water for that time. It is a very great improvement. In this, as in many things, I often think how "trifles light as air" make a great difference in our daily life, and in nothing more than in plain cooking.

CLEANSING OF DRAINS, ETC.

I TRUST my RURAL sisters will not rest content when *house*-cleaning is over or consider their work done, until every sink, drain, cesspool, cistern and well, if need be, are looked to and emptied, cleaned or deodorized. Copperas, carbolic acid and chloride of lime are all excellent disinfectants, and were these agents unstintingly used about our drains, cesspools and outbuildings, there would, unquestionably, be less malarial and typhoid fevers and fewer cases of that dreaded disease—diphtheria—among our little ones. MARY B.

CHEAP PAINT FOR OUT-HOUSES.

WE have found that the skins, cleanings and scrapings of paint cans and pails, when boiled up in oil, make a most durable as well as cheap coating for outside work. MRS. J. BRADY.

Chickasaw Co., Iowa.

DOMESTIC RECIPES.

Whigs.

One egg, one cup of sweet milk, one cup of sifted flour, a pinch of salt. Bake twenty minutes in gem pans.

Washing-Fluid.

Two pounds of soda ash; one-half pound of unslacked lime; add nine quarts of cold water and boil twenty minutes; take from the fire and add two quarts of cold water; let settle, pour off and bottle. Soak the clothes over night in cold water; in the morning, wring out, soaping the soiled parts. To a good-sized boiler half full of water, allow one-half pint of the fluid. Put in the clothes and let boil fifteen or twenty minutes. If the clothes be then taken through one suds and two or three rinsing waters, the RURAL housewives will find that by this process much time and labor have been saved, while their clothes are very white and in no wise injured. I write from experience, having used this fluid in my family seven or eight years.

California Cake.

One egg, one cup of sugar, butter the size of an egg, one cup of milk, three heaping teaspoonfuls of yeast-powder, sifted with the flour, which should be less than three teacupfuls. Flavor to taste. It will bake in fifteen minutes in a quick oven.

MRS. MARY E. GARRISON.

Orange Co., N. Y.

QUERIES ANSWERED.

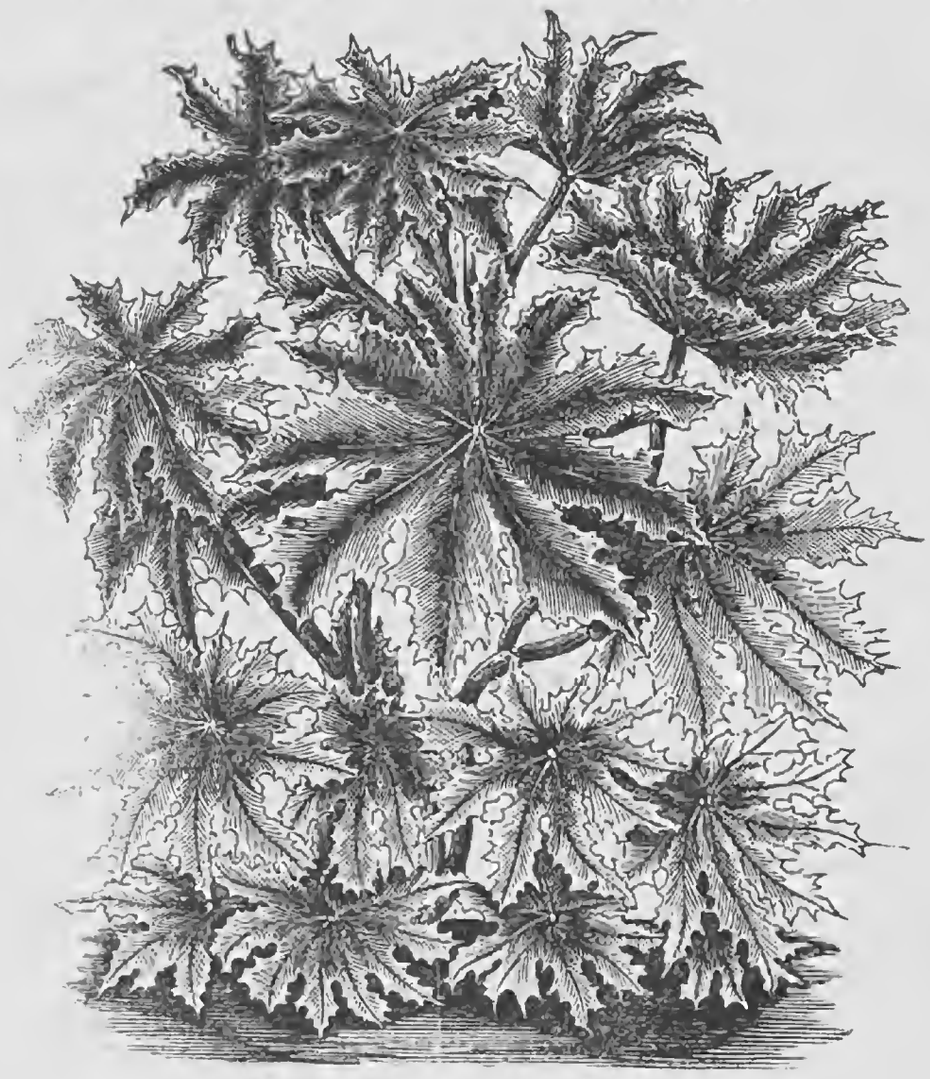
O. E. W. wishes directions for varnishing wall paper.

ANS.—In order not to injure the colors, and to prevent the absorption of the varnish, give the paper a coat of sizing, made by dissolving *white* glue in boiling water and then diluting to the proper consistency. If the paper be light and delicately colored, give a coat of white varnish; for less delicate work, furniture varnish. One coat will generally prove sufficient. Much depends upon the fineness of the brush. No part should be gone over the second time before drying.

WANTED.—A home-made varnish for shoes.

SUBSCRIBER.

ANS.—Put one-half pound of gum shellac, broken into small pieces, into a quart bottle; then add thirteen ounces of distilled or filtered water. Subject to a gentle heat until no odor of alcohol is perceptible, after which add four drachms of gum-arabic dissolved in three ounces of water. Mix and strain.



RURAL BRONZE RICINUS.—(See page 710.)

YUCCA FILAMENTOSA.—(See page 710.)

PLEASE give me a recipe for a good, cheap violet ink? ANON.

ANS.—The following is the best recipe that we know of: Mix one drachm of the desired aniline color with one and a half ounce of alcohol in a glass bottle; let it stand three or four hours and cover with alcohol, cork tight and put in a warm place; let stand for two or three days, shaking several times a day; then add a piece of camphor gum as large as a hen's egg; shake well and in a few hours add one ounce of lamp-black. Should it get too thick, add alcohol.

THE MARKETS.

PRODUCE AND PROVISIONS

NEW YORK, Saturday, Nov. 2, 1878.

BEANS AND PEAS.—With cooler weather local trade becomes more diversified, and the Bean market shows some neglect. Marrows are weak; wholesale buyers can obtain some concession from extreme rates. Mediums look as though they would not hold $1 65 for prime. Common quantities of any variety almost unquotable. White and Red kidneys, Pea and Blue beans a little something in buyer's favor. Western and Canadian field peas 70@75c., the latter in bulk and bond. Green peas slowly at $1 25@1 35; Southern B. E. peas, $2 50@2 60 per 2-bush. bag. Medium beans range fair to prime, $1 50@1 65; marrows, do. $1 50@$1 75; Pea, $1 60@ 80; White kidney, $1 60@1 80; Red kidney, $1 75@2 10; Black turtle soup, $1 50@2. Receipts of beans for week, 12,200 bush.; exports, 1,885 bbls.

BUTTER.—The receipts have included a better collection of fine quality State, and as the local demand has been looking for that style, business is more unlimited, but does not show much price-varying strength. In full dairies 21c. has been quite frequently made, but they must have a liberal lot of late made tubs to be so quoted. The outlook for summer State is very gloomy; there is no local use for off-flavors; butter, and export help is seemingly hopeless. Western butter, as before, is doing well where quality gives it a positive precedence of State, prices considered. We quote:

Dairy pails, choice, 20; fair to prime, 14@21c.; choice, half-tubs, 22@23c; other, 16@21c.; Welsh tubs, choice fresh, 21@22c.; other, 15@18c.; Welsh dairies, 18@20c.; fair dairies selected, 20@21c.; good, 18@19c.; Firkin, dairies, choice, 19c.; other, 15@18c; low grade, State, 10@13c.; State creamery, small lots, 27c.; fines, 21@23c.; held lots, 18@21c.; sweet cream, 23@26c.; Western creamery, choice, 25@27c.; fair to prime, 20@25c.; held lots, 18@19c.; dairy packed, 15@17c.; common to good, 10@14c.; factory makes at 6@12c., with little movement.

Receipts for week, 29,527 pkgs.; exports, 5,760 pkgs.

BROOM CORN.—Small lots of new are arriving: a car lot of about medium green brought 5½. Old stock quoted at for choice green hurl, 6@7c.; medium hurl, 5@6c.; choice short green, 5½@6½c.; medium short green, 5@6c.; red stubby and crooked, 4@5c.

CHEESE.—These light shipments show the indisposition to operate that has prevailed through the week. The inactive and lower country markets, and a decline in Liverpool caused easier prices and the spiritless situation. At the close 9 is the top price for fancy, although through the week up to 9¼, and even 9½ has been made for special lots.

Quotations are 8c. for fancy late made; 7@8c. for good and prime; 6@7c. for fair to good; 3@5¼ for skimmed. State, farm dairy at 8@9c. for good to choice. 6@7½c for fair to good. Wisconsin factory, fine to fancy, 8½@9½c; do. good to prime, 7½@8½c.; do. fair to good, 7@8½c. Western factory, fine and fancy, 8½@9c.; good and prime 6½@7½c.; fair, 5½@6c.

Exports past week, 22,688lbs.

Gold closes at 100¼.

Liverpool cable 47s.

EGGS.—Fresh stock has sold readily at the improvement, closing firm. State and limed stock has little call. Near points, 24@25c.; State and Penn., 22½@23c.; Western and Canadian fresh 21@22c.; poor or State, 19@20c.; limed, State, 15@17c.; Canadian, 15@16c.; Western, 13@16c.

Receipts for the week, 7,253 bbls.; do. last week, 7,148 do.

FLOUR.—Within several days a much more active export movement has been noted on both low grade winter and spring grades, and the course of the market has been for these to better prices. The higher grades are having more attention and are at steadier prices.

Latest prices are: $3.60@3.60 for very inferior to choice superfine State; $3.60@3.90 for poor to good extra do., odd lots and lines; $3.90@4.25 for good to very choice do., strictly choice and fancy lots above this; $3.00@3.60 for very inferior to choice superfine Indiana, Iowa, Michigan, &c.; $3.60@3.90 for very inferior to good shipping extra do. and $3.90@4.25 for good to choice extra do.; common to about choice white wheat extras, $3.90@4.85, choice to strictly fancy do. at $4.90@5.75; red and amber winter wheat, inferior to very choice trade and family at $3.75@5.50; round hoop Ohio at $3.70@4.10, and trade and family brands of do. at $4.15@5.50, the latter rate for very choice; St. Louis, $3.90@4.60 for very poor to good extra, and $4.60@5.75 for good to very choice; Minnesota clear, very inferior to fancy, at $3.90@5.70; Minnesota "straight," very inferior to very choice at $4.60@6.00; (about choice to fancy old at $6.00@6.50), and patent fair to very fancy at $5.25@8.50; mixed stock at from $2@4 75; city mill extra at $4 75@5 00 for West Indies (the latter rate for strictly choice in new packages); do. for England, $13.75@3.00; do. trade and family extras, $5.10@6 00; do. for South America, $5.00@5.50 for fair to very choice; No. 2 at $2.25@3.00 for very inferior to choice.

FRESH FRUITS.—Fine retailing fall apples are doing better, but the range continues low on Winter and common sorts. Exports for the week, 13,150 bbls. Fine Spitz and fall $1 50@2, the latter for King of Tompkins Co. Prime red winter, $1 25@1 37; good greenings, $1@1 25; common to fair mixed lots, 75c.@$1 12. Cranberries quiet, few extras here; eas ern bbls. $5@7 50, a few at $8; N. J. bbls. $4@6; crates, $1 75@2 for choice; $1 25@1 62 common to fair. Quinces rule high. Choice apple, $5@10 per bbl.; other $6@9, the lower for spotted. Late varieties of bbl. Pears quoted. Duchess, $8@10, extra; poor, $5@6; Lawrence, $7@8; Vicars, $4 50@5 50. Bu-lon fancy bxs. make a good display ranging $2 00@3 50 per bush. box, the higher rate for B. Clairgeau. California pears not turning out well. Seckel vs. Nellis $4@4 50; Vicars, $3; Lawrence, $4; California grapes, Tokay, $7@8 per box. Emperor, $6. per 40 lb. case. Cal Quinces $1 50@1 per bush. Hot-house grapes 50c. per lb., B. Hamburg and Muscat. State Catawbas 7@8c. per lb.; remnants of other kinds @¾@. Chestnuts steady, $1 00@4 per bush. Hickory nuts, Shellbarks, $2@2 50; B. Walnuts, 70c. Peanuts are low, arriving quite green. Virginia hand-picked $1 25@1 30; other, 95c.@$1 20.

GRAIN.—Exporters have resumed operations in wheat, purchases of which for shipment are large, and the whole situation of the market is better, with the calmer financial situation on the other side.

Latest sales are, at No. 2 spring at 94@96c., the latter for Milwaukee; New York No. 2 spring, November option, at 94c; New York, No 2 spring, December option, at 95@95½c.; No. 2 northwest, November option, at 96c.; No. 3 spring at 85@86c.; rejected spring at 80c.; ungraded spring at 80@90c; ungraded amber at $1@1 05; ungraded Michigan at $1 00@1 02; No. 2 amber at $1 02½@1 04; do., November option, at $1 02½@1 01; do., December option, at $1 04@1 04½; ungraded red at 97c.@1 05; No. 1 red at $1 00@1 05½; do., last half November, at $1 05½; No. 2 red, at $1 04@1 05; do., November option, at $1 04@1 15; do., December option, at $1 05½@1 06; do., January option, at $1 07, No 2 red, steamer grade, at $1 03½; ungraded white at 95c.@$1 01; extra white at $1 08½@1 09½; white State at $1 07@1 09; No. 1 white at $1 06½@1 07; do. November deliveries, part at $1 07; No. 2 white at $1 13. Rye at 61@64c. for State, and 59@60c. for Western. Corn at, for steamer mixed at 45½@47c.; ungraded mixed western at 46@47½c.; New York No. 2, at 47½@47½c.; New York No. 3 at 45c; New York No. 1 white at 53c. for car lots; low mixed at 44½c. for car lots; New York No. 2, November option, at 47¼@47½c.; do., December option, at 48½c.; steamer mixed, November option, at 47c.; do., December option, at 47@47½c. Oats are, for mixed State at 27½@30c.; mixed western at 30½@35c.; white western at 29@32c.; white State at 30@35c.; New York No. 1 at 30c; New York No. 1 white at 32@35c, asked and 33c. bid; New York extra white at 35c.; New York No. 2 at 28½@29c.; New York No. 2 white at 30½c.; New York No. 3 at 27½@27½c.; No. 3 white at 28½c.; No 2 Chicago at 29c.

HAY AND STRAW.—Prime grades are wanted and shipping stock in better demand.

Latest sales are at 40@45c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports past week, 275 bales.

HOPS.—Emmet Wells, in his circular, says: "Receipts are largely on the increase, reaching 4100 bales for the week. With scarcely any export demand, and only a moderate call for brewers, stocks are accumulating. Values remain unchanged, though it is believed that if sales are forced, concessions in price will follow. We hope soon to open a lively trade with England for some of our finest hops, and this expectation on the part of holders of such keeps the price firm. Hops from California, Washington Territory and Oregon are now arriving here in large quantities; these goods make very fine

samples, and ought to meet with more than usual favor with our brewers, in view of the great scarcity of choice New York State hops exporters will also find them very desirable for their London customers. In next week's circular we hope to report sales and give quotations on these hops."

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@8; Olds, all growth, 2@4.

OIL-CAKE quoted at $23 for Western.

PROVISIONS have been depressed lower on large arrivals of hogs at the West. Mess pork quoted at $7.80 S for spot lots; $7.70 for November; $7.75@7.85 for December, $7.75 bid for January. Bacon at 5@5¼c. for 10 lb clear and 5¾c. for short clear. Lard at $6.15 for spot; $6.25@6.27½ for November; $6.30 for December, and $6.35@6.37½ for January. Tallow at 6¼@6¾c. for prime. Stearine at 8¾c. Beef Hams at $9.50.

POULTRY AND GAME.—Live is steady for the season: city dealers as yet have been compelled to withdraw through free receipts of Dressed. Chickens, State, Penn., and N. J., 10@11c.; Western, 9@10c. choice fowls, 10@11c.; common, including the style of western now arriving, 8@9c.; roosters, 5@6c. Turkeys, 10@12c.; good to prime common, 8c.; Ducks, 40c.@$1, pair. Geese, near prime, $1.25@1.62; other, $1@$1.12.

Dressed poultry has had an unsettled week; rainy weather damaged the appearance of early offered stock, and low prices were forced. Now the weather is somewhat frosty, and buyers are purchasing with more confidence.

Dry picked turkeys, 14@15c.; prime State and N. J., 13@14c.; fair, 12c. Chickens range 12@15c. for good to dry picked. Fowls, Phila., 12@14c; good, 11@12c.; common, 9@10c. Ducks, choice, 15@16c.; other, 12@14c. Geese, 8@10c., for Western to dry picked State. An evidence of the approach to winter is given by a long list of game. Market good with better weather. Quail, doz., $2; grouse, trapped, pair, 75c.@$1; partridges, 75c.@$1. woodcock, 40@50c. English snipe and plover, 1 25@1.50c. doz.; soft-fed pigeons, $2; Illinois, $1.40@1 60; canvas-back ducks, pair, $1.50; red head, 75c; Mallard, 50@60c; Teal, 35@40c; common, 30@35c.; Rabbits, 30@40c.; Venison, whole deer, 10@11c.; short saddles, 15@16c.; long do., 12@14c.

SEEDS.—Clover is quoted at 5½@6¾c.; timothy at $1 55@1 70, and flaxseed at $1 40, with operations limited.

VEGETABLES.—Supplies of potatoes have accumulated quite freely under the late strong prices, and the market is easier for some buyers, but no important decline is intimated. Sweet plenty and dull. Early Rose, Eastern, bbl., $2 87@3; State, $2.25@2.75; Peerless and Jackson, $2@2.50; P. Blows, $1.75@2.75. Del. Sweet, $1.50 1.75; Va., $1 25@1.37. Onions doing better. White, $1.37@1.75; red and yellow, $1.25@1.50; Chester, $1@1.12. Squash, marrow, $1.25@1.50; Hubbard, $1. 0 1.75. Cabbages, per 100, $3@4. Cauliflower, bbl., $1@2. R. Turnips and Beets, 75c. Carrots, $1@1.25. Pumpkins, 10., $3@6. Celery, 75@87c. doz.

Exports, potatoes, past week, 9,281 bbls.; onions, 283 do.

LIVE STOCK MARKETS

Saturday, Nov 2, 1878.

BEEVES.—Receipts for the week, 9,391 head do last week, 11 692 do. Medium to good natives advanced 4c, in price Wednesday last, and are ¾c. higher than at our last. Coarse oxen sold at 6¾c. dress 54 lbs.; range at the close for good stock, 7@9c. dress, 55@56 lbs.; Cherokee and Colorado steers, 7@7½c. Exporters paid 9¾c. for extra stock.

COWS AND CALVES.—Nothing has transpired that essentially changes our former range.

VEAL CALVES.—Prime veal in good demand. Hog dressed beginning to arrive regularly; best quoted 11c.; other, 5@10c.; N. J. choice fed, five, 7¼@7½c.; good and extra heavy, 5 7c.; State, 6@6¾c.; fed calves, 5½@4¾c.; grasses 2¾@3¾c.

SHEEP AND LAMBS.—Receipts for the week, 27,928 head; do. last week, 29,129 do. Supplies large and prices favor buyers in both sheep and lambs. Prime sheep, 4¾@4¾c.; other, 4@4¼c.; common and ewes, 3½@3¾c.; lambs, 4@5c.

SWINE.—Receipts for the week, 37,421 head; do., last week, 35,547 do. Sample sales as follows: Western, 150 lbs, average, 3¾c.; Kent, 143 do., 3¾c.; 116 do., $3 45¾ per 100. Ohio, 185 lbs. average, $3 56 do.; 150 lbs. average, $3 60. N. J. dressed pork, light, 5¾@6c.; medium, 5@5¾c.; heavy 4½c.

PUBLISHERS' NOTICES.

OUR new Premium List, specimen copies and agent's outfits will now be forwarded free to all who apply.

DR. SYKES, whose announcement appears in this issue, is, we are assured, a most trustworthy gentleman, who possesses a valuable specific for catarrhal affections. He is, in himself, a proof of the efficacy of his remedy.

THE ALEXIS REVOLVER, advertised in this issue, is a tremendous bargain. It is a perfect gem, just like the picture, and would actually be cheap at $6. They are all that is claimed for them, and more, too. None should neglect this chance to provide themselves with a first-class weapon at a great deal less than it actually costs to manufacture.

THE Blake Crusher, advertised in this number, is commended to those in authority in towns and villages as being a cheap and efficient piece of machinery for either making or repairing roads. It will pulverize the hardest rock, and supplies a material that, where used, will give the highest satisfaction, and by keeping the roads in good repair, reduce the cost of maintaining them in that condition. Send for circulars.

IN this issue will be found a large advertisement of Daniel F. Beatty, the great piano and organ man of Washington, N. J. This is the first gun from Mr. Beatty since his return from an extensive tour through Europe, and as usual it is aimed direct at high prices. There is no manufactured article, except perhaps sewing machines, on which there has been anything like the reduction that there has been for the past few years on musical instruments, and the fact is largely due to Mr. Beatty. His aim has always been to manufacture the best piano and organ that could be made, and then sell them for the least possible price. The result has been the rapid building up of one of the largest trades on the continent. His sales, notwithstanding the hard times, are simply enormous. It will be noticed that he to-day offers one of his handsomest styles of organs at a still greater reduction. Attention is urgently called to the advertisement as a reduction from his very low prices is not to be disregarded at this time, particularly when the offer comes from a house having a world-wide reputation for honest, square dealing.

SPECIAL NOTICES.

A FAVORITE YOUTH'S PAPER.—The YOUTH'S COMPANION of Boston has steadily grown in public favor for more than fifty years, and is now one of the most admirably conducted papers in the country.

HEARING RESTORED.—Great invention by one who was deaf for 20 years. Send stamp for particulars. *Jno. Garmore*, Lock-box 905, Covington, Ky.

Genuine *versus* Spurious Electric Belts. Particulars free. Address PULVERMACHER GALVANIC Co., Cincinnati, O.

A HOLIDAY HINT.

Four Delightful New Books for Young Folks.

THE BODLEYS ON WHEELS.

By the author of "The Bodley Family in Town and Country," "The Bodleys Telling Stories" With 77 Beautiful Pictures, many of them full page, and an ornamental cover. 4to. $1.50.

This is the third of the "delightful Bodley Books," and deserves to be as popular as either of the others. Its stories are from the same charming story-teller. It is full of excellent illustrations, and the cover inside and outside is an attractive picture gallery.

MOTHER GOOSE.

A gorgeous new edition, with 8 large Colored Pictures. $3.00.

THE STORY OF A CAT.

An entertaining story, translated from the French by T. B. ALDRICH, author of the charming "*Story of a Bad Boy.*" Illustrated with a host of Silhouettes. $1.00.

PLAY DAYS.

A book of natural, amusing, *wholesome* stories for Children. By SARAH O. JEWETT. $1.50.

*** *For sale by all Booksellers. Sent, post-paid, on receipt of price by the Publishers.*

HOUGHTON, OSGOOD & CO., Boston.

APPLES FOR EXPORT

TO ENGLAND,
Consignments solicited for
GEO. WARREN & CO., Liverpool, Eng.
Address WARREN & CO.,
43 Exchange Place, New York City.
Good sound fruit will bring remunerative prices. Shipments made to New York. Address will be forwarded by first steamers sailing after arrival of apples in New York.

TEAS

This is a combination of capitalists to supply *consumers only* throughout the *United States* with PURE TEAS on the mutual principle, by getting up clubs. Send for New Price-List.

CONSUMERS' IMPORTING TEA CO.,
P.O. Box 4236 No. 8 Church St., New York City.

YOU CAN CURE YOUR CATARRH

By the Same Means we Cured Ours.

Catarrh of Head and Bowels, Deafness, Etc.

167 THIRTIETH ST., CHICAGO, Jan. 1, 1878.

DR. C. R. SYKES—*Dear Sir;* I was a great sufferer from Catarrh for about twelve years previous to March, 1876. The disease located mainly in my head and bowels, causing painful ulcerations in my nose, and I could scarcely breathe through that important organ.

During the last two years of that time the catarrhal condition of the bowels resulted in ulceration, and the discharges and other appearances were much like a chronic diarrhœa.

The stomach was also involved, and this organ, together with the bowels, would at times become so distended as to become terribly uncomfortable, then relax, until "I feel all gone," is the best expression I can give for it.

My eyes were badly affected, but worse to me if possible than all the rest, was a deafness that nearly disabled me for business. It came to be so bad at last that at church I had to take a front seat, and even then, with my head spread out back of the ear to catch and concentrate the sound, I seemed to miss about half the sermon.

My memory was also greatly impaired. I shall not attempt a description of my sufferings; you from your own knowledge of the disease, can well judge what they must have been.

In March, '76, I heard of and tried your "SURE CURE," and took it according to directions; I experienced great satisfaction from the first bottle, and after about four bottles were used, my hearing *suddenly* cleared up; I was in church at the time, and it seemed as if a new revelation had been opened up to me.

I discontinued the medicine gradually, the ulcers in my head and bowels healed, the chaos in my brain was restored to order, in fact I could hear, and smell, and breathe through my nose, and have been free from the disease since that time. I cheerfully recommend your "SURE CURE" to all like sufferers, and have known several cases of catarrhal colds that yielded promptly to the remedy.

Wishing you a "Happy New Year" in your noble work,

I am, respectfully and gratefully yours,
A. C. DAVIS.

Nose Raw—Bones Eaten Out.

148 N. ADA ST., CHICAGO, Sept. 10, 1877.

OVER two years ago I was cured by Dr. Sykes' remedies. The whole inside of my left nostril was perfectly raw, and it had eaten clear around the division of the nose on the lip. Two pieces of bone had got loose and came out. I had not been able to smell for three years, or taste anything in a long time, and my lungs had got quite bad also, and I was in despair.

I had doctored at out six months previous to going with my husband to see Dr. Sykes, and not getting any better, but rather worse, was afraid I could not be cured; but in about three months the cure was completed in every particular, and has remained so ever since. MRS. S. J. HILSON.

Loss of Voice, Etc.—A Resurrection.

OAKLAND, Douglas Co., Oregon, Dec. 22, 1876.

I SUFFERED indescribably from Catarrh for fifteen years, trying various remedies and physicians, all to no benefit. It had run into bronchitis, which threatened my life. I had been scarified, cupped, blistered, and wore setons in my back till I was nearly exhausted. My lungs, stomach and bowels appeared to be perfectly ruined. I had not preached in eighteen months, and had so far lost my voice that I could hardly make my wants known.

This was my state when, in June, 1875, I accidentally heard of "Dr. Sykes' Sure Cure for Catarrh." I had lost all hope, but thought I would try just this one more remedy. My course had been downward for years, until I was reduced from 175 pounds weight to about 120. I took the measles soon after commencing the "Sure Cure" (at fifty-five years of age). Physicians and friends all said I was surely gone now, but I clung to the "Sure Cure" as my only hope, and soon began to amend.

In six months I had gained forty pounds, and now my voice and health are fully restored. My case seems more like a resurrection than a mere cure. I think the remedy rightly named—'Sure Cure'—and I cheerfully recommend it to a suffering world.

JOHN F. DENNY.

Hearing, Sight and Memory Restored.

FACTORYVILLE, Cook Co., Ill., March 21, 1877.

ABOUT the first of last February I got one bottle of your Sure Cure and Insufflator. I had been suffering about three years with Catarrh. I am now using the third bottle, and have used one of your Ear Specific; and words cannot express how good I feel. I am a new man entirely. My head, which had been completely stuffed up, is now as clear as can be; the swelling has all left my nose; my eyes, which had been for two years dead and watery, are now as bright as diamonds. I was so deaf that I was completely stupid, and I could not remember anything; now my hearing and memory are as good as ever.

Before commencing with your remedies, I called on Dr. ——. He said I had catarrh in its worst form, and if I did not have it cured immediately, I would lose my hearing entirely. He said he would cure me for forty-five dollars. So you see I have saved over forty dollars, as your medicine has cost me only about four dollars, and I could not expect more from it if it had cost me four hundred. You can use this as you wish with the greatest pleasure.

To Dr. C. R. Sykes. WM. MURRAY.

Child of Five Years.—Terrible Scent Cured.

MRS. M. M. STACY, 58 Fulton St., Chicago, March, 1875, brought her only daughter of five years to my office. She scented so bad from her head as to be soon noticed. Her mother said: "It seems half the time as though I could not dress her." Had been so about a year, and found nothing to do her any good. April 22, 1875, Mrs. Stacy wrote as follows: "To say that your treatment for my little daughter was all that you recommended, would express it but feebly, for I think in her case it has surpassed your expectations, as one bottle of your 'Sure Cure' has wrought nearly a cure, if not wholly, for her. I am only too happy to add my name to your list of wonderful cures.

[No more was needed; the cure was complete.]

Came Home to Die—Returned Cured.

ON the 11th of September, 1876, Miss Annie Green, aged twenty-four, was brought to me by her mother for treatment. Her palate (the Uvula) was entirely gone, and a hole as large as the end of my thumb, flattened, was eaten through the veil above, also a hole through from the inner to the outside of the nose as large as a pipe-stem. These were so foul as to be almost unendurable, and as raw as they possibly could be.

Her throat and stomach were completely deranged. Lungs weak and sore, with bad cough, no appetite and great general debility; her weight was reduced to only eighty-five pounds. She had been living in Colorado, where she had been treated by several physicians, at an expense of nearly $500—all in vain. She said: "I have come home to my mother to die, but from what she has heard of you she thinks perhaps you can cure me."

The only medicines I prescribed were the 'Sure Cure, Liver Tonic," (with one additional ingredient) and an ointment. The good effects were apparent in three days, and in six weeks the holes in palate and nose were healed sound, the breath sweet, no cough or soreness of lungs, and a gain in flesh of twenty-two pounds. She soon after returned to Colorado and went to work. In about two months she wrote her mother that she was entirely free from her old troubles and weighed one hundred and thirty-five pounds, making a total gain of fifty pounds.

On the 16th of the following October, Miss Green, with tears of gratitude, made this, her statement, in my office, which I took down in presence of Mrs. Ball, of 12 Clayton street, and Miss Nora Gubbins, of 24 Dussold street, Chicago. DR. C. R. SYKES.

This statement in regard to my daughter is true in every particular. MRS. KATY GREEN,
Sept. 18, 1877. 151 N. Larrabee St.

Terrible Case—Wonderful Cure.

NEW RUTLAND, Ill., June 17, 1876.

DR. C. R. SYKES—*Dear Sir:* I feel it my duty to give you a condensed history of my case. In the summer of 1872 I took a very severe cold, which settled in my head. I paid but little attention to it, as I thought it would wear out, but it came very near wearing me out instead, as the sequel will show. I had a constant pain over my eyes and through my forehead, and as the disease advanced the discharge from my nose became of a thick, yellowish matter, and very offensive. Finally the disease extended to my throat, and eat my palate off; then it attacked my tonsils and eat them both out; nor did this horrible disease stop there, but in the fall of 1874 it eat a hole through the roof of my mouth that finally got so large I could run my fore-finger up as far as the first joint, and was as raw and ulcerated as it could be, and finally the scent became so bad that no one could stay in the room with me any length of time.

In the meantime, however, I used nearly all kinds of medicines that were recommended to me, besides physicians and surgeons, and all to but little benefit, only for the time being, but which cost me an immense amount of money; in fact, nearly reduced me to poverty at last.

In the spring of 1875 my disease assumed the form of asthma, and God only knows what I suffered. I had to give up all labor and was confined to the house the most of the time. In July, 1875, I went to Michigan for my health, from there to Northern Iowa, but continued to grow worse, until life became a burden to me, and I prayed to God to put an end to my sufferings. I had lost my voice so that for about two years I could scarcely speak above a whisper. At last I resolved to come home and patiently await the grim monster—Death. I passed through Chicago on the 15th of last March, but I never dreamed that there was in that city such a Good Samaritan as I have since since found in Dr. Sykes. At this time I was but little more than a skeleton, weighing but one hundred pounds, and could not walk ten rods without breathing so hard as to be heard by persons some yards from me, and when I arrived home I was so changed my mother hardly knew me. A while after this, I happened to read one of your pamphlets, entitled "The True Theory of Catarrh," which seemed so rational and common sense, I procured some of your "Sure Cure for Catarrh," and before I had finished one bottle my breath was sweet as honey, and while using the half dozen bottles the amount of slime and matter that I raised from my throat and lungs was truly enormous, almost beyond belief, for it might be counted up by quarts, if not by gallons.

Now I raise but very little, my voice is strong and clear, no more contraction of the air passages, or asthma, and I feel better and stronger than I have felt for at least five years. I now weigh 172½ pounds, and am still gaining. My friends here look upon my cure so far as "a miracle wrought from God." And when I meditate upon my condition now to what it was three months ago, I will often rub my eyes and get up and walk around to make sure that I am awake—that it is not all a dream.

My mother has watched the effects of your "Sure Cure" on me with an interest such as none but a widowed mother can feel for an only son. And every night and morning, when we bow around our family altar, we offer up an earnest prayer that you may be blessed and prospered. Oh, thanks be to God and to Dr. Sykes that I have been spared such a horrible death. My dear sir, I owe you a debt that I never can repay. My heart overflows with gratitude to you for the kind interest you have taken in my case—a stranger, and if you think best you may publish this letter, and if any one doubts for a moment the truth or veracity of this plain statement, I would refer them to Marcena A. Hicks, or Wm. H. Weober, both the most influential citizens of our town. Respectfully yours. PERCY T. ODEKIRK.

[Mr. O. was completely cured, and taught school in Dunan, Fayette county, Iowa, all the following winter, and the next summer followed book-keeping in Fond du Lac, Wis. In November, 1877, he stayed one week with me, where he was seen by many persons. His present address is Long Point, Livingston Co., Ill.]

Another Wonder—Chunks and Bones.

SUBLIGNA, Chattooga Co., Ga., Sept. 21, 1878.

I WRITE to thank you for the wonderful cure you have wrought on me by your medicine—"the Sure Cure." No words can explain the severity of my case or express the gratitude I feel, for I am sure your remedy has saved me not only from unspeakable suffering but from the very verge of the grave. My neighbors and physicians (I had tried a dozen doctors) look upon my cure as being almost miraculous.

For four years past I had suffered from Catarrh, Headache, Neuralgia and occasional lung troubles, so severe at times as to be confined to my bed. During last November my ears and nostrils became so tender I had to cover them with flannels even in this warm climate, when I went out doors. In January I had neuralgia, 36 hours, so severe I was in perfect agony, then my nostrils began discharging a blue, offensive corruption, growing gradually yellow and thick. I felt weak and diseased all over. My nostrils finally closed up so I could not breathe through them, and if I went to sleep it was to be awakened every few minutes with strangling and suffocation. I had not had a minute's ease in months, and my sufferings were indescribable. It was in this condition, after having tried all the remedies and physicians in my reach, that I began taking the "Sure Cure." It relieved me in eight hours so that I slept nearly all night, and in the morning I felt like a new man. The third day the matter began coming away in large lumps, and the quantity passed in three days was simply incredible. This continued at intervals for about forty days, when in trying to clear my head the whole thing seemed to break loose in the upper part of my head and fall into the air passages, nearly choking me; by means of a crooked instrument I succeeded in breaking it up into small lumps and pulling and hawking it out. When I got it all out there was a gill measure full of the tough hard lumps and softer matter. I will send you some of these excrescences, bits of bone that worked out of my nose. Your Ear Specific has given me equal satisfaction with the "Sure Cure." It is now over a month since I reported the fact of my cure to you. I inclose money for two of my neighbors; their symptoms are described on a separate sheet. Our doctors have failed to help them.

My wife and children join in gratitude to God and to you as an instrument in His hands for restoring to them a husband and a father. God bless you.

GEO. R. PONDER.

"DR. SYKES' SURE CURE FOR CATARRH"

Is an Internal and Local remedy, and, if rightly used, is as sure to Cure Catarrh as Sulphur is to cure the Itch. I had Catarrh 24 years, and after expending over $1200 in vain, originated this plan of treatment, which cured me in 1870, and the number of cures since is simply wonderful—the above are only given as specimens. The Sure Cure is within the reach of all; can be sent by mail or express. Price Complete, with Insufflator, $1.50. If afraid to risk the money—to a stranger,—send 10 cts. for a book of full information, worth ten times its cost. (Postage stamps are good as cash.) Address

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Reading for the Young.

YOUTH.

O YOUTH, sweet youth! never so dear to me
As now when I shall miss thy company.

Must thou so soon, then, go—haste thee away?
It is not long, but a brief summer day.

Which quickly sped, methinks, that thou and I
Together walked 'neath bright or somber sky,

Our path made ever gay by hope and joy;
Thy beauteous, white-winged doves, that tame, yet coy,

Fluttered and played around us ceaselessly,
Perched on thy hand or shoulder lovingly;

Then in the blue above would soar and dip,
And then return to feed from out thy lip.

Thou wast a grave companion—passing fair
Thy brow and eyes, but thy sweet smile too rare,

And unto me, perchance, thou'st scarcely proved
Too kind and fond a friend! Hast thou not moved

My eager soul with promises, that brought
How many a golden dream and happy thought,

Yet never knew fulfilment—all too vain
In air had vanished when I looked again!

But yet what couldst thou more? wherefore chide thee?
Didst thou not give me all thou hadst for me?

And now the hour has come for us to part,
I do remember with a bleeding heart.

Thou canst not even leave thy birds, to bless
My solitude with timid tenderness.

How dark shall be the path where I must go
Alone henceforward, only God may know!

Kiss me once more, sweet, one last long embrace,
One lingering look upon thy fading face,

And then farewell—nor cast one glance behind,
I cannot see, my eyes with tears are blind.

[S. Sterne in N. Y. Evening Post.

THE THREE SPINSTERS.

THERE was once a lazy girl who would not spin, and, let her mother say what she would, she could not get her to work. At last the mother, getting both angry and impatient, gave her a blow, which made the girl cry very loud. Just then the Queen passing by, heard the noise, and stopping the carriage, she stepped into the house and asked the mother why she beat her daughter in such a way that the passers-by in the street heard her shrieks. The mother, however, was ashamed that her daughter's laziness should be known, and said,

"I cannot make her leave off spinning; she will spin for ever and ever, and I am so poor that I cannot procure the flax."

The Queen replied, "I never heard of anything I like better than spinning, and I am never more pleased than when the wheels are whirring. Let your daughter go with me to the castle; I have flax enough, and she may spin as much as she pleases."

The mother was very glad at heart; and the Queen took the girl home with her. As soon as they entered the castle she led her up into three rooms, which were all full of the finest flax from top to bottom.

"Now spin this flax for me," said the Queen; "and, when you have prepared it all, you shall have my eldest son for a husband. Although you are poor, I do not despise you on that account; your unwearied industry is dowry enough."

The girl, however, was inwardly frightened, for she could not have spun the flax had she sat there from morning to night until she was three hundred years old. When she was left alone she began to cry, and thus she sat three days without stirring a hand. On the third day the Queen came, and when she saw that nothing was yet spun she wondered; and the maiden excused herself by saying that she had not been able to begin yet, on account of her great sorrow at leaving her mother's house.

So the Queen was satisfied; but on leaving she said, "You must begin to work for me to-morrow."

As soon as the girl was again alone, she knew not how to act or help herself, and in her vexation she went and looked out of the window. She saw three women passing by; the first of whom had a broad flat foot, the second such a large under-lip that it reached nearly to her chin, and the third a very big thumb. They stopped before the window, and, looking up, asked the girl what she wanted. She told them her trouble, and they offered her their help, saying,

"Will you invite us to the wedding, and not be ashamed of us, but call us your aunts, and let us sit at your table? If you do all these, we will spin the flax in a very short time for you."

"With all my heart," replied the girl: "come in, and begin at once."

Then she let in these three women, and, making a clear place in the first room, they sat themselves down and began spinning. One drew the thread and trod the wheel, the other moistened the thread, and the third pressed it and beat with her fingers on the table; and as often as she did so a pile of thread fell on the ground, which was spun in the finest manner. The girl hid the three spinsters, however, from the Queen, and showed her, as often as she came, the heaps of spun yarn; so that she received no end of praise. When the first room was empty, the three women went to the second, and at length to the third, so that soon all was cleared out. Now the three spinsters took leave, saying to the girl,

"Do not forget what you promised us; it will make your fortune."

When the girl showed the Queen the empty rooms and the great pile of thread, the wedding was performed, and the bridegroom was glad that he had such a clever and industrious wife, and praised her exceedingly.

"I have three aunts," said the girl, "who have done me much service; so I would not willingly forget them in my good fortune. Allow me, therefore, to invite them to the wedding, and to sit with me at table."

The Queen and the bridegroom asked, "Why should we not allow it?"

When the feast was begun, the three old maids entered in great splendor, and the bride said, "You are welcome, dear aunts."

"Ah," said the bridegroom, "how do you come by such ugly friends?" And going up to the one with the big foot, he asked, "Why have you such a broad foot?"

"From treading, from treading," she replied.

Then he went to the second, and asked, "Why have you such an underhanging lip?"

"From licking," she answered, "from licking."

Then he asked the third, "Why have you such a broad thumb?"

"From pressing the thread," she replied, "from pressing the thread."

At this the Prince was frightened, and said, "Therefore my bride shall never touch a spinning-wheel again."

And so she was set free from the unlucky flax-spinning.

A NEW TOY.—The latest plaything for French children is a mechanical Newfoundland dog, destined for the saving of dolls that fall into the water. He takes them in his mouth and paddles across a tank or very considerable pond, keeping his head and his precious freight above water until he reaches shore, his ample tail being used as a rudder.

ANSWER TO SANS-SOUCI.—The answer to "Sans-Souci's" question in English literature, in RURAL of Oct. 19, is Samuel Johnson.

EDITH CRATTENDEN.

THE "Puzzler" department is deferred until the next issue, when ample space will be devoted to it to make amends for the omission.—[EDS.

NEWS OF THE WEEK.

SATURDAY, Nov. 2, 1878.

POLITICAL.

THE lives of some men are full of magnificent opportunities — for keeping silent, opportunities which the chatterboxes are constantly neglecting. Such a chance has just occurred here this week; wisdom says "take hold of it," and the advice of wisdom is dutifully adopted. Before the mail shall place this issue in the hands of RURAL readers, the elections will have been held, and the People, with the aid of a little political trickery here and there, will have decided who are to be their servants in public offices until the next elections. The country is flooded with prophecies on this head, but of all the political prophets who have been "taken up" lately, the mantle of none has fallen near the RURAL office. It might not be difficult to shape a prediction so ambiguously that whichever side won, it would be possible to have the satisfaction of saying, "I told you so;" but such a Delphic trick is hardly considered candid now-a-days, and insincerity is not tolerated by the RURAL.

HOME.

It is claimed that, taking the British itemized account of losses incurred through Americans fishing in Canadian waters, it shows that the Canadians were entitled to only $12,000 a year, or a total of $1,200,000 for ten years, instead of the $5,500,000 conceded to them by the Halifax award. Then it is claimed that it would only be fair to deduct the special duties on fish and oil remitted by the United States for Canada. This item itself would amount to $3,000,000 in ten years, making the account stand $1,800,000 in favor of this country, instead of $5,500,000 in favor of Great Britain. This thing is to be discussed at length next winter in Congress, and by that time we ought to be smart enough to figure at least another million on our own side of the account. The inhabitants of Newfoundland have lately given us an opportunity for doing so, by maltreating the crews of some 20 of our fishing smacks, as well as destroying their nets, fish and other belongings, on the ground that they were fishing on forbidden limits, and on the Sabbath. Secretary Evarts says he will not hear of paying the award until this grievance has been settled satisfactorily. Secretary Sherman has a growing confidence in the entire success of resumption, and thinks that at the present rate of accumulating coin there will be enough on hand by January 1st to equal two-thirds of the outstanding legal tenders. It is expected that large quantities of gold will be shipped from England to this country.

After experimenting 20 years, S. C. Salisbury is reported to have produced from the residuum of petroleum and coal tar a new kind of fuel, which promises to supersede coal for generating steam. The fuel is carried in pipes, leaves no ashes or clinkers, consumes its own smoke, quickly produces intense heat, and has been successfully tested at the Brooklyn U. S. Navy Yard.....The Interior Department has been notified of one instance in which the United States Circuit Court has reversed the decision of Secretary Schurz, relative to the liability to pre-emption and occupancy by settlers, of land-grants to railroads if unsold three years after the completion of the roads. This adverse decision, of course, only affects the single case to which it refers, and will not change the policy of the Interior Department with regard to permission to settlers to enter upon these lands. The government will take the case to the Supreme Court on appeal.

The general impression seems to be that Tilden or his friends have ciphered him out of his chances of getting the next democratic nomination for President. Many, however, profess not to believe the cipher telegrams genuine, while others doubt the correctness of their translation, and others, again, place full or qualified faith in his profession of child-like ignorance in the matter. That report that came from New Orleans a week ago, about a monstrous republican and greenback Know-nothing conspiracy to seize upon the government, turns out as expected—a cock-and-bull romance. Jim. Anderson, the mendacious witness from Louisiana, having been interviewed at Indianapolis, exonerates Sec. Sherman from having anything to do with the so-called Sherman letter. He says it was written either by Kellogg or his clerk, was never seen by Mrs. Jenks and is still in existence in Philadelphia. Kellogg, away up in Minnesota, tells the public what it knew before, that Anderson is a monumental liar and denies his whole story. Senator Bayard of Delaware, one of the strongest of hard-money advocates, is credited with having written a letter to a friend in Indiana, saying that the election to the senate of Voorhees, one of the strongest of soft-money advocates, would be a national calamity. Yet it appears probable that the nation will have to endure that among its many other political misfortunes.

FOREIGN.

Bayard Taylor, U. S. Minister at Berlin, has just been tapped for dropsy, a gallon and three quarts of water having been drawn from him. By latest reports, he is getting on well. Last Friday week as Alfonso, the young King of Spain, was driving through the streets of Madrid, on his return from a review of a body of troops, he was shot at twice by a shoemaker, named Juan Moncasi, a native of Tarragona, aged 22. The King escaped without injury, and showed a good deal of courage, which still more endears him to the people, who warmly sympathize with him on the late loss of his Queen Mercedes. The would-be assassin boldly asserts that he belongs to the political society of the International, and that he came to Madrid for the express purpose of killing the King. Doubtless he'll soon meet the fate of Hoedel, the German would-be regicide; except that instead of being decapitated, he will be garroted, according to the Spanish mode of execution.

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James Gordon Bennett has taken a hunting lodge at Leicestershire, England, for the season.

Our new Premium List, specimen copies, and agent's outfits will now be forwarded free to all who apply.

A fine establishment is maintained in Paris by ex-Governor John T. Hoffman, and his wife's receptions are among the most brilliant of the gay metropolis.

The late Bishop Rosecrans, Roman Catholic Bishop of Ohio and brother of Gen. Rosecrans, did not lay up his treasures where moth and rust corrupt and thieves break through and steal. His only property was his watch.

Their excellencies the Marquis of Lorne and H. R. H. the Princess Louise will sail from Liverpool on the 14th of next month. The report that the Countess of Dufferin will accompany them is unfounded. The newly-decreed formula of court presentation is said to be a stiff puzzle to the Canadians. It is decreed that when ladies or gentlemen appear at a representative reception, the right hand shall be ungloved before the Marquis and Princess. Both hands are ungloved before the Queen. There will be no hand-shaking, only bows. At private receptions the Princess will outrank her husband, and while a gloved hand may be offered to him for shaking purposes, the right must be ungloved to her. Other folderol-derol is talked about.

Implements and Machinery.

PIANOS AND ORGANS AT FACTORY PRICES. Great Reduction to close out present stock of 200 New and Second-hand Instruments of first-class makers, fully warranted, and at prices that DEFY COMPETITION, for cash or instalments. AGENTS WANTED for WATERS' SUPERIOR BELL ORGANS and PIANOS. Illustrated Catalogues Mailed. HORACE WATERS & SONS, Manufacturers and Dealers, 40 East 14th-st., N. Y. Also General Agts. for SHONINGERS' Celebrated ORGANS.

Keystone Wringer

Has Greater Capacity, Is More Durable, and is better finished
Than any other wringer now made.

THE ROLLS

Are made of White Rubber clear to the shaft. No twine or wire or fibrous material, or anything else but rubber being used. The rubber is *vulcanized upon the shaft and cannot be taken off except by cutting it off.* They are more elastic than other rolls because there is nothing but rubber on the shaft, and more durable because there is no twine or fibrous material to rot out or wire to cut the rubber. They are greatly superior to any other kind of roll now known.

ASK YOUR DEALER for the KEYSTONE WRINGER

CORN HUSKER. No cold or sore fingers, if used with gloves or mittens. Can be used without gloves or mittens, if desired. Will last a lifetime. Taken 6 Premiums. One sample 25c; two for 45c; 5 for $1. CITY NOVELTY CO., 108 S. 8th St., Philadelphia, Pa.

"City Novelty Co.: MORRISTOWN, Pa., Oct. 10.
Gents:—Please send me 100 Huskers at once. They sell like hot cakes. Was out about 3 hours and took orders for 25 to deliver to-morrow. Please hurry; will send more orders soon. Have tried the Husker; they do all you claim. Met one farmer who had one and wants another, if he has to pay $1 for it.
"J. H. WARNER, Morristown, Pa."

BIG GIANT CORN MILL.

Every Man His Own Miller.

The only Mill that will grind Corn with Shuck on without extra expense. The only Mill grinding Corn and Cob successfully that will grind Shelled Corn fine enough for family use.
Grinds twice as fast as any other Mill of same size and price. Manufactured by
J. A. FIELD, SON & CO.
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SELF-CLOSING. SELF-FASTEN'G.
Acknowledged to be the best in use. A farm right & illustrated circular for 50c. to the first applicant in each town. Give name of town, county & State. Ready-made stanchions for sale. Address
W. C. GIFFORD
Patentee,
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MADE OF WELDED STEEL AND IRON, WITH CONTINUOUS CALK.

Acknowledged by VETERINARY SURGEONS, PROMINENT HORSEMEN, and ALL who have used it, to be THE BEST SHOE IN THE WORLD. It is a continuation of the shell of the hoof, and gives an equal bearing all around. It PREVENTS INTERFERING, LAMENESS, and ALL EVILS resulting from the use of the ordinary shoe. By its use horses having QUARTER CRACKS, TENDER FEET and CORNS, TRAVEL with PERFECT EASE. Trial set, with nails, sent on receipt of $1.
Send for Illustrated Pamphlet to THE JOHN D. BILLINGS PATENT HORSE SHOE CO., 265 Broadway, New York.

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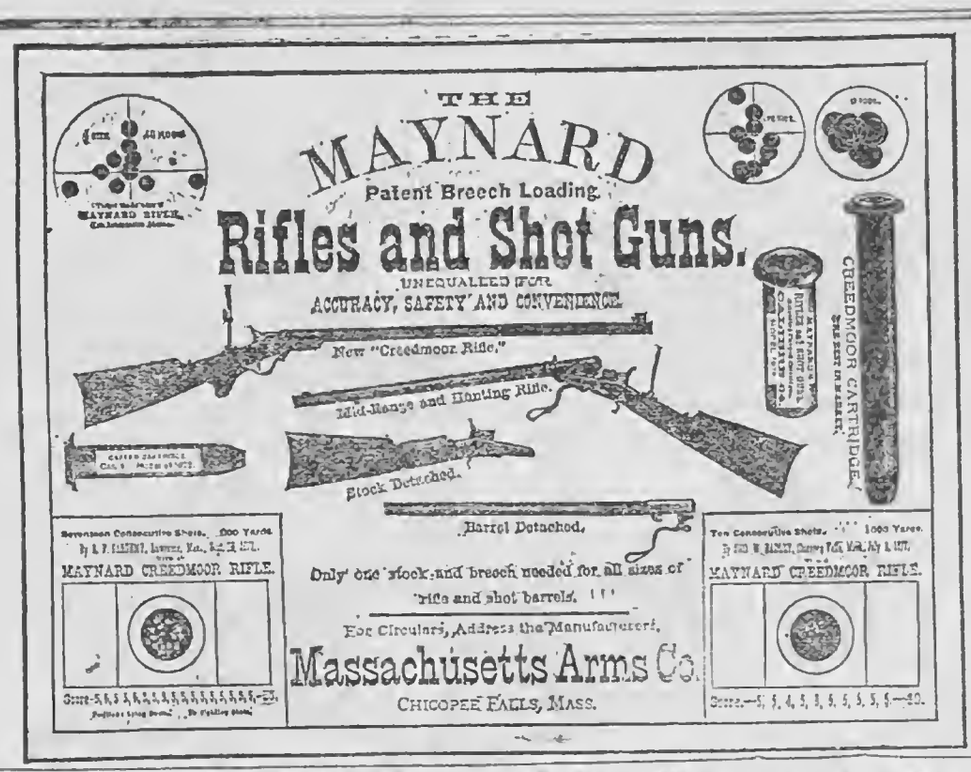

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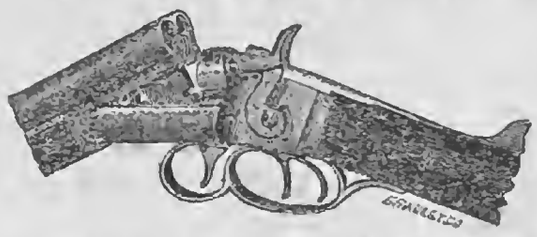
BREECH-LOADING
SPORTING RIFLES.



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Our Shooting Gallery Rifle is the favorite everywhere.

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Send for Price List containing description of all the different kinds of Skates made by this celebrated firm, including N. Y. CLUB, RINK AND ALL CLASP, and CHEAP STRAP SKATES; also, full directions for constructing a Skating Rink.
Above Goods sold by all leading Hardware and Skate Dealers generally. Also, sent by mail on receipt of price.

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CADY'S
Patent Iron Sleigh Knees
Reduces the cost of Sleds and Bobs
ONE-THIRD.
Enables every man to be his own mechanic.
2,000 in Use. No Breakage.
BRADLEY & COMPANY,
Send for Illustrated Circular. SYRACUSE, N. Y.

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Well Drilling, Boring,
MINERAL PROSPECTING and QUARRYING TOOLS.
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A $10 Revolver for $2.50.

THE ALEXIS (Russian Model).

It is the most extraordinary bargain ever offered in the Gun line. Full nickel silver plate, 7 shot, self-revolving cylinder; wgt., 13 oz., using extra long Rifle Cartridges, and will kill at 100 yards.

It is the most elegantly engraved and proportioned Revolver in the world. *This engraving is just one-quarter the actual size; is made from a photograph, and exactly represents this superb weapon in shape and finish.*

These Revolvers were made by the largest manufacturer in the United States for a leading firm in Russia, and were part of the largest contract ever placed in this country for Fire-Arms. They cost over $6 apiece to make, and the engraving on each one is worth $2.00. We have bought at forced sale the entire lot for less than the stock alone cost. They are made on *honor*, the engraving is the finest ever seen in this country, and the workmanship is equal to a COLT, which it equals in every respect. The stocks are **Ebony**, the most expensive wood that could be used. *The metal is finest English steel, the barrel being octagon and superbly rifled its entire length; the cylinder is fluted, as shown in cut.* The shape of this Revolver is what is called the New Russian Model (similar to Smith & Wesson, 38 calibre, N. M.), giving a firm grip in the hand, preventing the Revolver's throwing up, and producing elegant shooting at long range. This Revolver weighs 13 oz., having an extra heavy and very long barrel, greatly enhancing its value as a target pistol. **We guarantee more than satisfaction** in every instance, and a better Revolver than $10 will buy elsewhere, *and we will refund the money in every instance where our representation is at fault.* Every one should own a good Revolver, and this opportunity will **never occur again.** We will send this Revolver C. O. D., with privilege of examination at the express office, to any point east of the Mississippi River on receipt of $1, which will be deducted from the bill; or we will, when the cash **in full** comes with order, **give free** a box of extra long target cartridges. (*The fact that this Revolver uses the extra long Rifle cartridge makes it doubly valuable, and places it far ahead of all similar ones in the market.*) We will send it by mail to any address for 20 cents extra; if sent by mail cash in full must accompany order; we cannot send C. O. D. by mail, *neither can cartridges be sent by mail.* A complete set of cleaning tools go with each Revolver, and they are packed in an elegant box. Prices of Alexis Revolver, as described above, with **EBONY** stock, **$2.50;** with an elegantly engraved Rubber stock (same as on Smith & Wesson), **$3;** with a fine $2 Ivory stock, **$3.75;** or with an elegant $3 Pearl stock, **$4.50.** The last Revolver will compare with any $15 Revolver in the world, and for presentation would make an elegant and beautiful gift. **We know that this Revolver is all that we claim for it, and is the biggest bargain we will ever offer.** *Those who bought our Rob Roy last Spring will have no hesitation in purchasing the Alexis, for big a bargain as the Rob Roy was, this Revolver is far ahead of it. The parts of this Revolver are interchangeable and readily duplicated.* Address, **G. W. Turner & Ross, dealers in Fire-Arms, Sporting and Military, 93 Water Street, Boston, Mass.** Parties in vicinity of New York can see this Revolver at Editorial rooms of the *American Farmer*, 31 Astor House. *Preserve this advertisement.*

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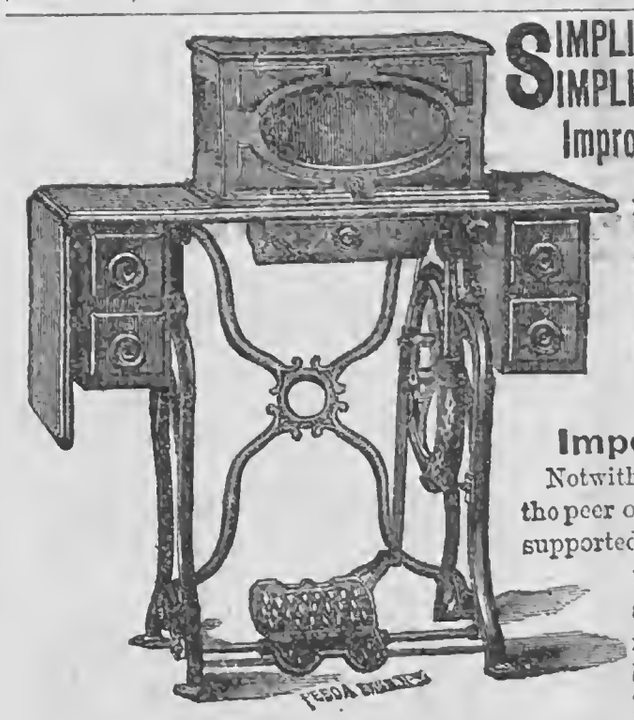

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Improvements September, 1878!

Having regard for the demand of this progressive age, we now offer to the World the

NEW VICTOR

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Important Improvements.

Notwithstanding the VICTOR has long been the peer of any machine in the market—a fact supported by a host of volunteer witnesses—we now confidently claim for it greater simplicity, a wonderful reduction of friction, and altogether a *Rare Combination of Desirable Qualities.* For sale by Merchants and others.

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I X L FEED MILL.

This mill is the cheapest, most durable and perfect feed mill ever offered. It is simple, easily managed, and can be run by Wind, Steam, Water or horse power. The chilled iron plates have grinding surfaces on both sides and can be reversed, thus making one set equal two on the old plan. An extra set is sent with every machine, and the two sets will grind Four Thousand bushels of good feed. New plates can be had for $1.25 per set. These mills are built wholly of iron, (except the Hopper,) are strong, efficient and durable. Thousands are in use on Stock Farms—every one giving excellent satisfaction. Every farmer should have one and grind his own feed.
Send for Catalogue "B" and Price List.
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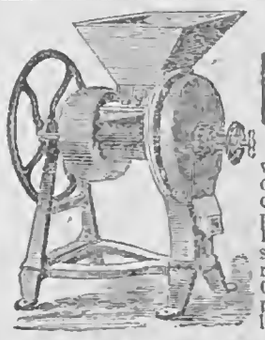

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The Victory Corn Mill will grind corn meal coarse or fine, shelled or on the cob. Self-sharpening plates. Made entirely of Iron and Steel. Very strong, durable, and warranted in every respect. Capacity, 10 to 20 bushels per hour. Send for circulars.
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MILLS MILLING MACHINERY &
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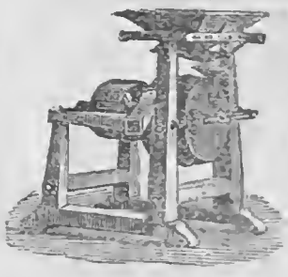

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Grist Mills
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FRENCH BUHR STONE
Portable Mills for Farmers, Saw Mill Owners, etc. Price from $80 up. Complete Mill and Sheller $96. A boy can grind and keep in order. Adapted to any kind of suitable power. Complete Flouring and Corn Mill very cheap.
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OSBORN'S PATENT
GRAIN AND SEED SEPARATOR.

We guarantee this machine to Clean, Separate and Grade, Wheat, Barley, Oats, Rye, Timothy, Clover and Flax Seed.
These machines have invariably taken the First Premium at every Town, County & State Fair wherever exhibited, including the St. Louis Fairs of 1874 and '75, and were awarded the Grand Gold Medal at the great Kansas City Exp'n, in 1875, for the best invention in Agricultural Implements.
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WIND ENGINE
IS
Proof Against Storm and Exposure to the Weather.
Made entirely of Iron
NO SLATS
To Break or Blow Out.
Self-Regulating and Perfect
In every particular.
They are giving Perfect Satisfaction where other mills HAVE FAILED.
Send for Circular and Price List to
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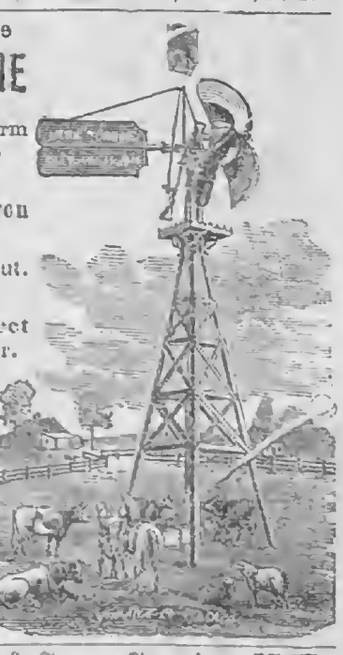
Manufacturers,
Springfield, Ohio.



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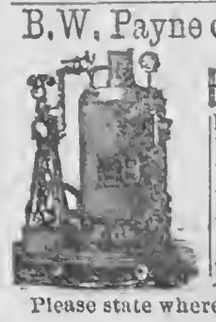
Established in 1840.
Eureka Safety Power



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2	3½	4	48in	40x25	900	$150
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Please state where you saw this.

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DID it ever occur to you that a gymnast wears spring and fall clothing at the same time.—*Norristown Herald.*

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A LATE lecturer remarked that it would not be a very violent stretch of imagination to believe "that a Massachusetts baby six months old sits in his mother's lap eyeing his own cradle to see if he could not invent a better, or at least suggest some improvement."

Whitcomb's Remedy

—FOR—

ASTHMA,

Rose Cold and Hay Fever.

The late Jonas Whitcomb of Boston, visited Europe a few years since for the benefit of his health, which was impaired by frequent attacks of *Spasmodic Asthma.* While under the treatment of an eminent German physician his asthma disappeared; he procured the recipe which had done so much for him. This remedy has been used in thousands of the worst cases with astonishing and uniform success. It contains no injurious properties whatever.

TESTIMONIALS.

ST. LOUIS, Nov. 10, 1877.

Messrs. J. BURNETT & Co.: The relief the Jonas Whitcomb's Asthma Remedy afforded me was perfect; I have not had a bad night since taking it, and I have in no case found any relief until your Remedy came to hand. I most cheerfully recommend it to anyone troubled with Hay Fever or Asthma, for it is the only remedy ever used by me with any good effects.

Yours truly,
WM. T. MASON,
Of Messrs. MASON & GORDON, *Lawyers,*
517½ Chestnut Street.

Messrs. JOSEPH BURNETT & Co.,
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Gentlemen,—In the fall of 1877 I used Jonas Whitcomb's Asthma Remedy and received immediate relief, and would most cheerfully recommend it to any person troubled with Hay Fever or Asthma. MRS. R. SHERMAN.
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For sale by all respectable Druggists.

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The Latest and Best

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For Family Use

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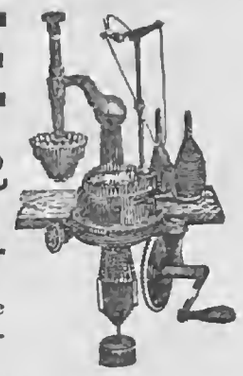

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Awarded 1st Prize Medal over all others.

We build 17 sizes Wind Mills for Farm Pumps and Power Purposes
The strongest Wind Mill in the world.
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AHEAD ALL THE TIME. The very best fresh goods direct from the *importers* at *half* the usual cost. Best plan to Club Agents and large buyers. All express charges paid. Quality guaranteed. New terms free.

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Portable Farm Engines

Using Patent Angular Driving Belt.
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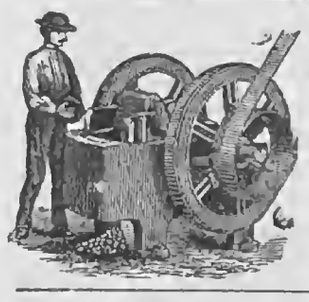
1. Fido is trained to carry the umbrella.

2. But fails to appreciate the object.

3. Which results in an unpleasantness.

4. And misunderstanding, the dire results of which will be illustrated next week.



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WILL MAKE YOUR HENS LAY!

The value of this preparation is established beyond question, and notwithstanding the most vigorous competition and many malicious attacks during the past few years, Imperial Egg Food is the favorite assistant of the best breeders, poultrymen and farmers in every State. **It permanently benefits Laying Hens, Moulting Fowls and Young Chicks,** and is invaluable in warding off and arresting the ailments of all varieties of Poultry.

☞ A special preparation for Canary Birds and Pigeons. 50 cents, post-paid.

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We also carry the largest stock of **Oyster Shell, Bone, Beef Scraps** and other **Poultry Supplies,** and are prepared to give favorable prices for large or small quantities, and make very low rates for shipping. Inquiries promptly answered.

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IN SOLID GOLD MOUNTINGS.

ONE DOLLAR ONE DOLLAR

THE WONDERFUL LEFEVRE DIAMONDS TRADE MARK PAT'D

Lefevre Ring, $1. Set of Studs, $1. [The Shah] Stud, $1. Lefevre Ear Drops, $1.

THE ONLY PERFECT FAC-SIMILE OF THE REAL DIAMOND IN THE WORLD.

Pronounced by the Academy of France that *M. Lefevre has really obtained artificially the true diamond.* The basis of these gems are pure crystals found in the Sierra Nevadas, from whence they are exported to the Lefevre Laboratory in Paris, France, where they are submitted to a chemical and voltaic process,

BY WHICH THEIR SURFACES ARE COVERED WITH A COATING OF PURE DIAMONDS,

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ON RECEIPT OF ONE DOLLAR we will send free, by REGISTERED MAIL, to any address in America, either article as above represented. Our "Book on Diamonds," with Illustrations of artistic Diamond Jewelry in solid (14 K.) gold, mailed free.

I have seen many imitations of diamonds, but never any that could equal the Lefevre Brilliant.—M. ELLROY, Stamford, Conn.

I am in receipt of a pair of the Wonderful Lefevre Ear Drops, for one dollar; to say that I am pleased with them hardly fills the bill, they are simply elegant.—ANDREW MORRIS, Hornellsville, N. Y.

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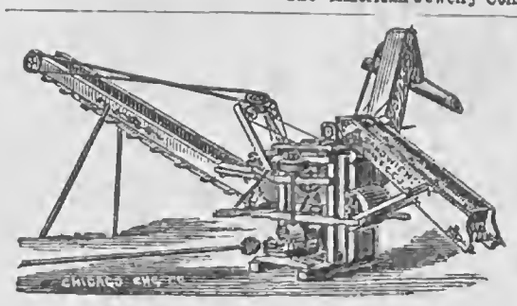

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Strong, reliable, thorough in all parts of their work (shelling, separating, cleaning and elevating) Perfect self-feeders, and best machines for mill and warehouse purposes, as well as for farm and plantation. Their superiority attested by twenty years' use in the heavy corn-growing sections, during which time they have received First Premium at all State and World's Fairs wherever exhibited.

Hand Corn Shellers, Horse Powers, Jacks, &c. The best in the market.

Send for Circulars and Prices.

SANDWICH MANUF'G CO.,
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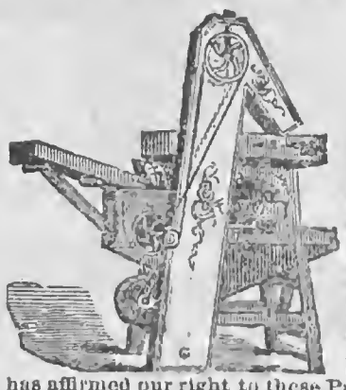

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They do not Clog or Heat.

Grind 60 bushels per hour. No other mill will do an equal amount of work with the same power.

All Feed Mills of similar construction to the Challenge are infringements on the patents owned by us. A recent decision of the U. S. Court has affirmed our right to these Patents, and we caution all parties against buying Feed Mills that infringe on said Patents.

For Descriptive Circular of Feed Mills, Wind Mills, Corn Shellers, Feed Cutters, Horse Powers, Wood Saws, Steamers, Pumps, etc., address

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Absolute Security,
In a Paid-up Capital Stock, besides the ample Reserve required by law.

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As low as consistent with security to the Insured.

Cash Insurance for Cash,
Without Dividend or Rebate, with no deductions at maturity, no false expectations and no disappointment.

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Pomological.

FRUIT TREES AND FRUIT ON THE FARM.

HENRY STEWART.

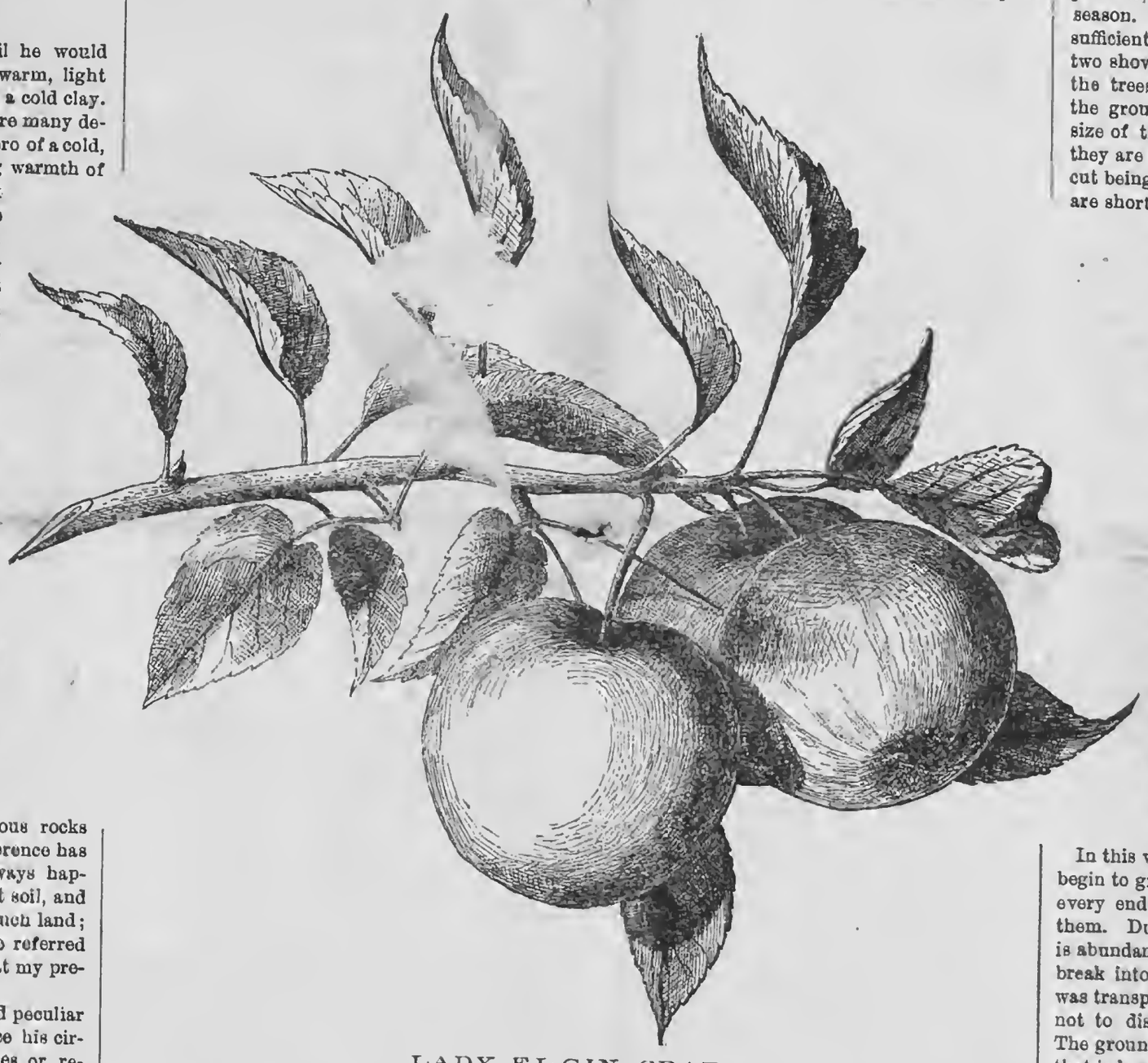
WHY I CHOOSE A LIGHT SOIL.

If you ask a gardener what soil he would choose for a garden, he will say a warm, light soil. The bugbear of a gardener is a cold clay. Between these two extremes there are many degrees; but they all verge from the zero of a cold, clay soil, up to the living, life-giving warmth of the light sandy or gravelly loam. At least such has been my experience and the results of my observation. In a rather wide range of observation, East and West, I have seen that the gravelly soils of the Hudson River counties of New York, the light soils of Long Island—famous for the Newtown Pippin,—the limestone soils of western New York, the "oak" soils of Oakland County, Michigan, and the light alluvial loams of Kansas, not to forget the sandy loams of Delaware and Maryland, all produce fruit of the finest flavor, the fairest quality and the richest color; while the trees arrive at a good old age in the highest health and vigor. Light soils are naturally well drained; they are soon warmed by the sun's rays, and retain their warmth for a long period; they respond immediately to the application of manure and are thus soon made rich. For these reasons I would choose a light loam wherein to plant fruit trees, with a fair proportion of gravel in it derived from limestone or micaceous rocks if possible. It may be that this preference has arisen from my fortune to have always happened to possess a farm of rather light soil, and that I have become used to manage such land; but then the shining examples I have referred to, could certainly seem to prove that my preference is otherwise well founded.

Every one cannot have particular and peculiar soil; but every one can generally force his circumstances to comply with his desires or requirements, to a great extent, if he will but try. Every one who plants an orchard can, at least, choose from his farm the most desirable site, and can improve the soil of that by drainage, fertilizing, cultivating and adding needed ameliorating substances—lime, ashes, muck, etc., for instance—so as to fit it for growing thrifty trees.

AN AVERAGE FARM ORCHARD.

Too often the farm orchard is planted in an ill-chosen site and its after management is consistent with the first grand mistake. The selection is made at hap-hazard, or no selection at all is made except by the irresponsible an ignorant "Tree agent;" or if a selection is make by the purchaser, it is on the faith of the gaudy pictures in the book the "agent" exhibits, and in the vain trust that the varieties chosen will be delivered.



LADY ELGIN CRAB.

Then the trees are badly planted; the holes are too small by far; the roots are crowded into them; the tops are unpruned; the sub-soil is returned upon the roots, and the tree is left to grow or die as it may. If it lives, the ground about it is cropped year after year; the trees are barked by the whiffle-trees; the roots are bruised, and from every bruise sprouts are started, which are permitted to grow around the tree and dwarf and stunt its thrift. If the tree survives, it is short-lived and unprofitable for the short time it exists. This is the history of the average orchard of the farm. Let us consider another view.

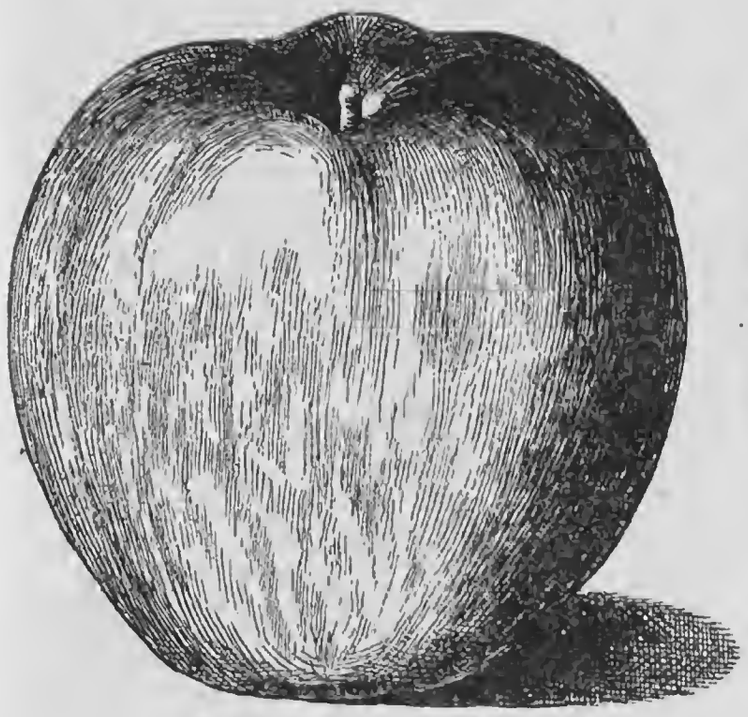
HOW AN ORCHARD SHOULD BE PLANTED.

Our friend Noing desires to plant an orchard. He chooses an elevated, yet sheltered site; well drained, warm soil; and this he prepares as carefully as he would do for his wheat crop. It is well and deeply plowed and cross-plowed, manured and planted to potatoes, roots or some hoed crop which is kept clean from weeds by constant and regular cultivation. In the summer time a catalogue is procured from some respectable nursery as near to his own locality as possible, and the varieties chosen are ordered in season. A heap of good compost is prepared, sufficient in quantity to give each tree at least two shovelfuls of it about the roots. In the fall, the trees are received and are *at once* put into the ground. The holes are dug to match the size of the roots; these are trimmed wherever they are broken or are not compact, a smooth cut being made with a sharp knife. The tops are shortened one-half and unnecessary branches are cut away. The holes, marked by stakes previously set, are at least six inches larger each way than the roots when fully spread out. The top soil is thrown to one side. The planting is done in a business-like manner. A load of compost is drawn on to the ground, and the trees are placed in the wagon with the roots covered with the compost. One by one the trees are set in the holes upon a few shovelfuls of top soil and one of compost mixed with it. The roots are carefully spread out in a natural position; the upper roots are held up while the lower ones are covered with the top soil, shaken carefully over them and well-worked among them with the hand; then a shovelful of compost is thrown in, the upper roots are spread out and covered with care; the soil is punched down compactly with a round-pointed stick and then trodden firmly; the remaining soil is then put into the hole, and *left loosely*, without treading, being heaped up around the tree for a few inches.

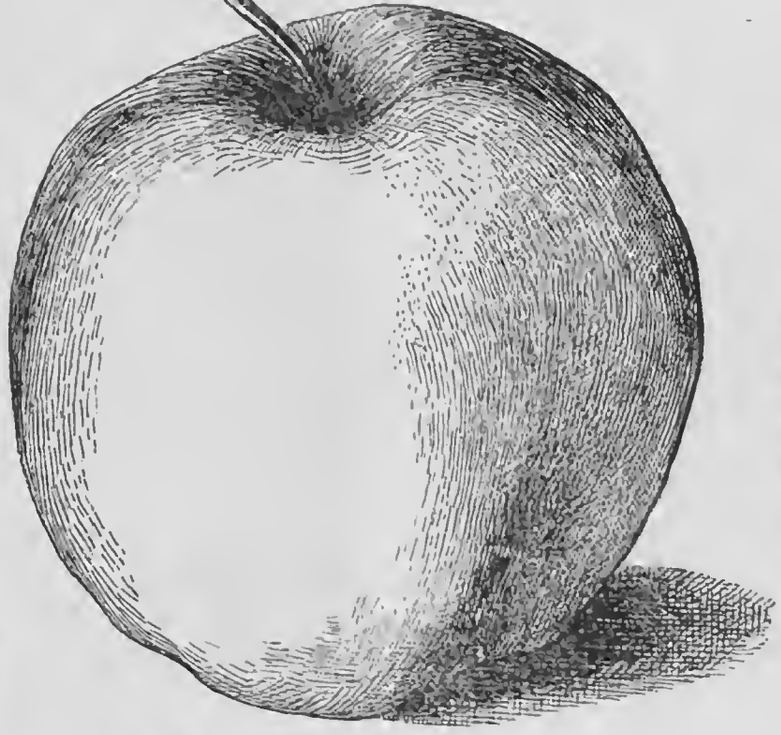
In this way the work is completed. The roots begin to grow at once; new fibers spread from every end, and seize upon the food ready for them. During the winter the new root-growth is abundant. In the spring the tree is ready to break into leaf with more vigor than before it was transplanted. The soil is then plowed so as not to disturb the roots or injure the stem. The ground is planted with some cultivated crop that is low-growing, or it is harrowed and sown to orchard-grass and clover; the trees being mulched for three feet about them with straw or coarse hay; or the surface is hoed once or twice in the season. The future of that orchard is safe. The owner will give it thought, and wherein he is not posted, he will study and learn what should be done and—*he will do it.*

VARIETIES I WOULD PLANT.

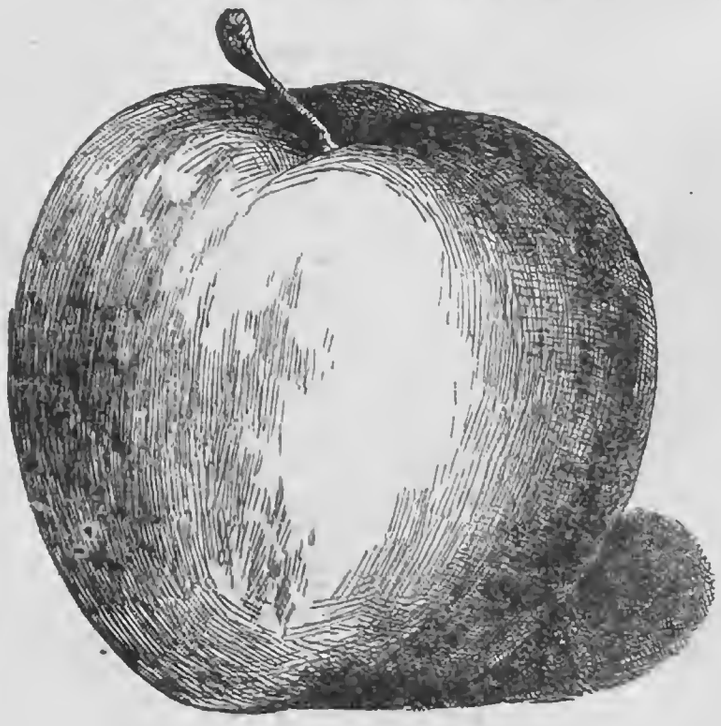
All the excellencies in the way of Apples and Pears may be summed up in less than a dozen varieties. What are wanted are good quality,



FANNY.—See page 728.



GRAND SULTAN.—See page 727.



BOURASSA OF CANADA.—727.

hardiness and continuous season. The latter is not so important, because the natural season can be lengthened artificially for a month or two by proper management. There are some good standard varieties which should be in every orchard, if it contains but a dozen trees; and they are enough if there are many thousands. It is a great mistake to think because one plants a hundred or two of trees he should have fifty varieties. There are fruits that one wants for home use, and others that are for market; but generally the popular market sorts are good for home use. My choice of ten varieties is:

Summer—Early Harvest, Red Astrachan,
Fall—Gravenstein, Porter, Twenty-Ounce Pippin, King of Tompkins Co.
Winter—Rhode Island Greening, Baldwin, Northern Spy, Roxbury Russet.

For ten Pears, ripening in the order named, I would choose for standards:

Summer—Clapp's Favorite, Manning's Elizabeth, Bartlett.
Fall—Buerre d'Anjou, Seckel.
Winter—Flemish Beauty, Lawrence.

And for Dwarfs:

Clapp's Favorite, Duchesse d'Angouleme, Louise Bonne de Jersey.

Among the newest Apples I would choose Tetofsky and Duchess of Oldenburg, as the most promising for market apples and for domestic use; the former being a precocious bearer, and both early. If I were to plant a hundred acres, I would have no more than these, and these do well with me on light, sandy loam, and with my friends who have gravelly or clay soils.

THE VALUE OF AN ORCHARD.

I consider an acre of well-planted and thrifty orchard to be worth $1,000 as an investment. It will pay from $150 to $400 per acre, according to circumstances—thorough good management being the most important of these. It is a matter, therefore, which deserves the best study and attention. One plants for the future. He waits patiently and his reward comes slowly. When it comes, it is sure and lasting if he has deserved it; otherwise the opportunity is gone for him forever. A man scarcely ever sees the planting and maturity of more than one orchard. What he does, then, in this way he should do well, if he ever did anything well in his life.

A FEW WORDS ABOUT APPLES AND PEARS.

PRES. T. T. LYONS.

FASHION IN FRUITS.

Yankees are as unlike as possible to Orientals, in their modes of thought and action. While the latter have, for thousands of years, adhered to the same fashion of clothing and style of agricultural implements, as well as surroundings in general; the former bloom forth with the newest and often the most fantastic fashions, only to lay them aside, like faded spring flowers, for something which the fiat of the "fickle goddess" may have more recently designated as "the thing."

It might fairly be anticipated that, in the supply of their pomological wants, our people would afford an exception to this rule; but I regret to be compelled to say that, in pomology as in dress, the dictum of the fickle goddess seems to rule. I give, as an illustration, the fact that, a few years since, the planter of a home or farm orchard, as a rule, was reasonably and properly ambitious to secure variety and quality for the supply of the dessert as well as the kitchen, not even forgetting a supply also for the winter evening fireside; while to-day the scepter seems to have passed into the hands of commercial orchardists, and in obedience to their behest, the planter even of a village or city garden or of a farm orchard, is asked to forget that fruit should be planted for any purpose other than for show and profit; or that there is any higher or worthier standard of value or merit than that set up by the motley crowd that may patronize the fruit-stands of our cities and towns.

So far, indeed, have our planters indulged this tendency that there is apparent danger that quality, in fruits, may become so far subordinated to mere profit that the very *elite* of our dessert or amateur fruits may become lost and forgotten; and, as a consequence, that the apple and the pear—to say nothing of the other fruits—may be remanded, along with the potato and other merely culinary vegetables, to the uses of the kitchen and cuisine. Should any one doubt the existence of danger in this direction, I could easily bring to his notice considerable districts, densely planted with orchards, in which the home need is so utterly ignored that, even in the hight of the fruit season, it might be difficult to treat a discriminating lover of the apple with a dish of this fruit, that his taste would not be likely to reject as scarcely fit to be eaten. I consider myself warranted in assuming that it is mainly due to the prevalence of the ideas indicated, that there is often a sad

NEGLECT OF SOME FINE, EARLY VARIETIES,

so that the season which can only be supplied with the beautiful and excellent Early Harvest, is largely unsupplied, even so far as the home want is concerned, for the reason that, in many localities, this variety is relatively unprofitable; while one of its most beautiful and excellent successors—Buffington's Early—has remained, for an age, practically unknown, doubtless for a similar reason. The same remarks will, with similar force, apply to Sine-qua-non, Early Strawberry, Summer Rose and others; while owing to the slender growth of those peerless sorts — Early Joe, Garden Royal and American Summer Pearmain—notwithstanding their prolific habit, they are by the same process remitted to the guardianship of the few who are willing to provide for the demands of an elevated and refined taste, even at the sacrifice of profit. To the above, as the season elapses, we may add the beautiful and excellent Scarlet Pearmain, the Mexico, the Dyer, the Hawley, the Jefferis; and there may be danger that the old-time popularity of even the Fall Pippin may be compelled to yield to that of a variety of coarser habit, less delicacy of texture and greater ability to withstand rough treatment. These remarks also apply very forcibly to that more recent candidate for popularity, the Shiawassee Beauty—a fruit with the finer qualities of the old Fameuse, somewhat heightened; but like it, unable to withstand the vandalism of railroad and market-men. The Melon apple also, which from the habit of the tree, as well as the beauty and excellence of the fruit, is so desirable for the garden or for limited grounds, seems incapable of making its way among the less satisfying but more showy or hardy sorts of the early winter. Passing to

THE MIDWINTER AND SPRING VARIETIES,

we find that the firmness necessary to constitute acceptable market fruits, is also indispensable to their keeping quality. Hence the difficulty which we have been combating, partially disappears in their case, only making itself perceptible in the case of such fruits as the Fameuse, Swaar, Esopus Spitzenburg, and some others, on account of the scabbiness or other imperfection of the fruit, or the deficiencies of the tree. Such partial imperfection, however, is sometimes overridden by other specially valuable qualities; as, in the case of Red Canada, the comparatively feeble habit of the tree is overlooked on account of its productiveness when mature, and also in consideration of the very satisfactory size and color of the fruit, together with its superior handling and keeping qualities, this being the apple so long and so deservedly popular in the markets of the northwest, under the erroneous name of Steele's Red Winter.

There is also a lack of discriminating appreciation in

PEARS;

for what we have said respecting the influence of the market idea, as applied to the selection of Apples to be planted for home use, will doubtless apply with but slightly diminished force, in the case of the Pear. The market grower seldom looks beyond the Bartlett, Flemish Beauty and Beurre d'Anjou, as standards; and the Louise Bonne de Jersey and Duchesse d'Angouleme as dwarfs; and in imitation of these, the amateur is but too prone to forget the earlier and luscious Doyenne d'Ete, Madeleine, Ott, Bloodgood, Tyson and Rostiezer; and even the Fondante d'Automne, Seckel, and a numerous *coterie* of others, peculiarly adapted to his purpose; while the small but excellent Washington remains comparatively unknown; and even the large and excellent Beurre Bosc has, so far, striven almost in vain for a recognition readily accorded to the comparatively coarse Onondaga, and not wholly withheld from the almost worthless Vicar. The time-honored White Doyenne yet stands, at the West, just upon the margin of the debatable ground, with the mark of censure upon it, on account of its occasional tendency to scab and crack. With numerous candidates for acceptance, as

LATE AUTUMN AND WINTER PEARS,

yet there are few, if any, which can be said to have been tried and proved as satisfactory. Lawrence yet maintains a doubtful contest for recognition; and Winter Nelis will fill the requirement, as far as fruit is concerned, when it can be *persuaded* not to overbear, and not to prematurely yield its delicate richness to the seductive influence of a too impressive warmth in late autumn, thus failing of the performances expected of it in the early winter. Leaving these out of the question, we can hardly yet be said to have a reliable and satisfactory winter Pear; though time may possibly yet develop it from among the comparatively new sorts now on trial, with their reputation yet to be established.

Van Buren Co., Mich.

A NURSERYMAN'S SELECTION OF APPLES FOR AN ORCHARD.

IRA J. BLACKWELL.

The Object of Planting an Orchard is either to make money or else to please the fancy of an amateur. In the latter case, the highest quality of fruit is the aim, without regard to cost or the quantity of fruit produced. This class of planters can afford to set out poor growers, poor bearers, bad keepers and small but high-flavored apples. The orchardist who plants for profit, must have trees that grow at least well; they must also bear well, while the quality of the fruit must be fair, and its size medium to large; the color should be red or striped, and, last, but perhaps not least, it must keep sound from October to March, or later. A very small supply of apples will overstock the market from June until October, while strawberries, raspberries, blackberries, peaches, pears, plums and tomatoes are abundant and cheap.

Our Orchard is situated at Washington's Crossing, N. J., the place where Washington's army crossed the Delaware, on the night previous to the battle of Trenton. We are on a ridge, which at the end slopes toward the river or southwest, while one side slopes to the northwest and the other to the southeast. The soil is a sandy loam on a red shale bottom, affording a natural drainage that is sufficient, as little or no surface-water stands on the orchard. We have over one hundred and fifty varieties of Apples that are prominently before the public or in the catalogues. The question is how many of these Apples meet the requirements of the orchardist. Of them the following are

GOOD VARIETIES FOR FAMILY USE OR MARKET.

New Jersey Harvest—Fruit, small or medium-sized; ripens in July; the tree is a good bearer.

American Summer Pearmain.—Fruit of medium size, striped; quality best, and will sell when any apple will; tree a fair bearer.

Summer Hagloe.—Fruit large and very fair, tart; one of the very best; ripens in August.

Primate.—Fruit large, yellow, tart, of superior quality, ripens in August; the tree is a crooked grower when young, but a good bearer.

Williams' Favorite.—Fruit large, striped, tart; one of the best in quality, ripening in September.

Porter.—Fruit medium to large, yellow, tart, ripening in September; tree, an early and abundant bearer of good fruit.

Fallawater.—Fruit large, green shaded with red, ripens in September and October, sells well; the tree bears well.

Cogswell.—Fruit large, red, ripening in October.

Wine.—Fruit large, striped, fair; ripens in October.

Baldwin.—Fruit large, red, ripens here in October; tree a strong grower, and a great bearer every other year.

Smith's Cider.—Fruit medium, when well grown, red or striped; quality fair for cooking or the table, ripens from October to March. This apple needs a long season, as it does not color much until October. It is the most profitable of all the varieties that we have, and south of latitude 42°, will probably do well. North of that it will not ripen well, in which case it will be of a green color and tasteless. The tree bears very young and in great profusion, the fruit being all on the outside of the tree. If I were now going to set out an orchard, in this section, for the purpose of selling the fruits, ninety of my trees in every hundred should be of this kind.

Pomme Grise.—Fruit of a russet color and medium size; does not keep long enough; quality superior, ripening from November to January; the tree bears heavy crops.

Cooper's Market.—Fruit medium, striped, tart, ripening in March. This variety may be profitable when the trees get age.

Willow Twig.—Fruit large, greenish, keeps until May, not first-class; the tree bears young and abundantly.

Lady's Sweet.—Fruit medium to large, ripens from January to May, and keeps the best of any variety that we have fruited; tree a good bearer.

English Russet—Known here as Jersey Russet; fruit medium-sized, green, a good keeper, ripening in March; the tree bears well.

The above will not supply all the wants of the amateur, while the orchardist here might profitably reduce the list.

THE POPULAR APPLES IN THE NEW YORK MARKET

are well-nigh all included in the following list:

Red Astrachan, Primate, Sweet Bough, Nyack Pippin, Porter, Twenty Ounce, Rhode Island Greening, Baldwin, Northern Spy, King of Tompkins County, Roxbury Russet. Most of the other varieties sell low. The dealers expect to get their profit out of the standard kinds and then sell the others at cost or less. Sweet apples seldom bring much, excepting the Sweet Bough and the Golden Sweet.

Before planting his orchard, the fruit-grower ought to know where he expects to market his product, and if the varieties that sell best there will grow well with him, they are the kinds to plant. The nurseryman throws away money by planting this and that, because he has a long list and only sells his choice kinds. I well remember the new varieties that were brought out some twenty years since, when most of the agricultural papers gave a long list of Apples that were promising, and I also remember selecting a large number of them, and sending North and South for the fine new Apples. It has never been our custom to invest very much in any one variety, for we desired to try a great many sorts, and now we are looking among them for an Apple that is superior to the Smith's Cider, take it all in all. We have trees grown from suckers; from the seed, and budded near the crown; also some that are grafted; some that are grafted or budded four to six feet up the stem; trees root-grafted on pieces of roots, and root-grafted on the whole root. I am of the opinion that it makes no difference, so that you get a well rooted tree. I favor trees that branch out from twelve to eighteen inches from the collar or top of ground. They bear younger; it is easier to gather their fruit; winds will not blow them over so easily, and it is less trouble to get at the caterpillars and other insects on them, and the borer that gets into the bodies of apple trees, always selects the place on which the sun shines.

Mercer Co., N. J.

THE APPLE ORCHARD.

CLINTON.

WHY THE APPLE IS THE MOST VALUABLE FRUIT.

Of all the different kinds of fruits adapted to our climate, the apple is undoubtedly the most valuable. While saying this, I have no purpose to disparage other fruits, each class of which has its merits, and each is desirable in its place and in its season; and with judicious selection, they will furnish us with their varied luxuries, from early summer, even into midwinter. But for permanency in use—running through the entire year—for variety in flavor, ranging through all the gradations and sub-gradations, from honey-sweet to sweet, to mild, to sub-acid, to acid, and to pungent sour, so that every palate may find its favorite flavor, and for the very many uses to which it is adapted in the culinary art, give me the apple as being the most valuable. Besides, there is no other fruit so generally adapted to the varied soils and climates of the Eastern and Middle States. I shall confine my remarks more directly to this fruit, and shall limit myself to the presentation of a few hints in regard to its cultivation—hints, which are the results of many years of experience as an amateur cultivator of various kinds of fruits, both indigenous and exotic.

Every man who sets out even a few trees, does so in the hope that a fine fruitage will reward his labors, yet he often neglects the conditions necessary to the realization of his hopes. It should, therefore, be borne in mind, that to insure a fair prospect of success it is essential to observe certain preliminary

REQUIREMENTS IN PLANTING AN APPLE ORCHARD.

First, Selection of Soil.—Without going into any learned disquisition on the component ingredients of what might be deemed a suitable soil—which, after all, might be unintelligible to the general reader—I will say, briefly: Select a soil, if possible, that is well adapted to the cultivation of wheat or Indian corn. This rule will be easily understood, and is sufficient for general purposes.

Second, Location.—Let this be one which is sheltered, as much as may be, from violent winds, especially from those of the west and northwest. A southern exposure is far preferable for several reasons; but an exposure to any violent winds will endanger the safety of the fruit, especially when nearly arrived at maturity. Wind-falls, as they are technically called, are comparatively of but little value.

Third, Preparation of the Ground.—Let the soil be deep, fertile, and thoroughly pulverized. If moist, let it be thoroughly drained. Planting in a heavy, wet soil should be carefully avoided. It is the hight of folly to plant the apple tree where the water does not pass off freely and speedily. Should it, for any reason, seem desirable to plant a tree in moist ground, dig no hole for the roots, but set them directly on the surface of the ground, and form a slight mound of mellow earth about the tree, sufficient to cover the roots to a suitable depth, and stake the tree carefully. As a rule, however, rolling land or even a dry hill-side is preferable to low, moist land that cannot be thoroughly and effectually drained.

Fourth, Selection of Varieties.—This will depend somewhat on the use intended to be made of the fruit, whether mainly for market, or for family use. In either case, do not plant very many kinds. If for market, let them be mostly of winter varieties, and such as are in greatest demand in the market you expect to supply. Do not forget, however, to consider, well before making your selection, what kinds can be successfully grown in your own locality. Some varieties, for instance, may be successfully grown in the valley of the Hudson, which cannot be made to succeed in less favored localities. It is a great mistake to plant a large number of varieties, as there are but few kinds that are in general demand, and which will always command a ready sale. Our nurserymen furnish lists of several hundreds, all recommended as valuable, while perhaps not more than one in a score of them is worthy of cultivation, either for profit or use. If you plant mainly for domestic use, select such varieties as will ripen in regular succession, from the earliest summer apple, to the latest keeping Russet; and with care in the selection, you may thus, with a few trees, secure a supply of this valuable fruit through the entire year.

Fifth, Planting the Trees.—In this grave mistakes may be made, either from ignorance or from want of proper care. Remember that "whatever is worth doing at all, is worth doing well." If you cannot afford time to plant your trees properly, better not plant them at all

—for the result will be likely to prove only a miserable failure. It is well to have the holes all prepared in advance of the time of planting. Dig them large and wide, so that all the roots may have ample space, without being cramped or distorted. Trim off all broken roots, and trim the tops only sufficient to insure a proper form during the subsequent growth. Even in this, it is well to leave much for future consideration. Serious injury may be done by hasty and inconsiderate pruning. Loosen the soil to the depth of eighteen inches or more. If the soil is of poor quality, remove it, and supply its place with good surface soil. Never allow any raw manure to come in contact with the roots. Avoid planting the tree any deeper than it grew in the nursery bed. Disregard all instructions as to the necessity of planting the tree so that it will face the same point of the compass as it did in the nursery, as it is the sheerest nonsense. Nature directs as to the proper depth for planting. Beyond that, exercise your own judgment. Work the fine earth carefully in between and around all the small fibrous roots. When it is properly filled in, press it down firmly with the foot. Never plant a tree when the dirt is wet, and liable to pack hard in treading it down.

If the roots are dry when the trees are received, wet them thoroughly, and bury them in moist earth for a day or two before planting. This is better than to soak them in water. But the roots should never be allowed to become absolutely dry, before they reach the purchaser. When practicable, it is well to visit the nursery in person and attend to the lifting or digging of the trees which you purchase, and see that the roots are not badly mutilated or injured, firmly rejecting all that have not sufficient roots to insure a vigorous growth. Even if you are compelled to take any such trees, better throw them away than to be at the trouble of planting them. See that the roots are covered from the sun and drying winds immediately after being taken from the ground. For this purpose, sacking or boxes should be ready at hand.

Opinions differ as to the distance at which apple trees should be planted from each other in the row. My practice has been to plant them two rods, or 33 feet apart, which takes 40 trees to the acre. As regards the season for planting, my own preference is decidedly in favor of the spring, and my choice would be about the time when the buds commence swelling.

Oneida Co., N. Y.

SOME NOTABLE APPLES.

THE FAMEUSE SUCRE APPLE.—(See cut, p. 728.)

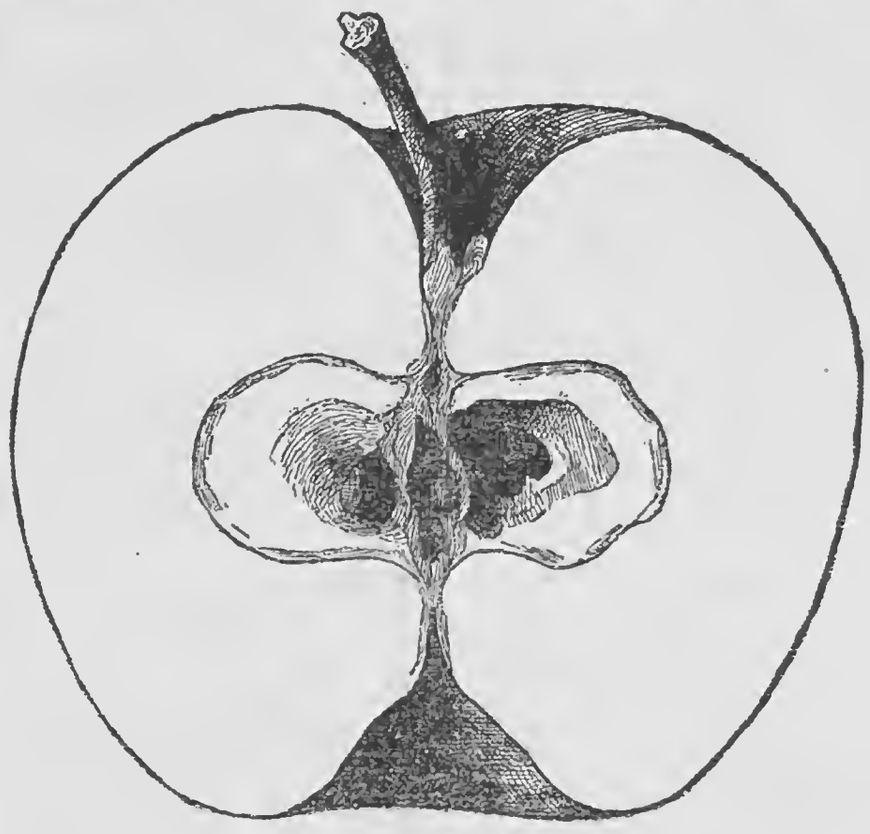
This fine little dessert apple originated upon the premises of Mr. Maurice Gougeon, near the city of Montreal. It has not been propagated by nurserymen, and but few trees are in existence, mostly in the orchards along the Corteau St. Pierre. The specimen from which our engraving was taken grew in the orchard of the Hon. E. Prud'homme. Mr. Prud'homme's gardener, M. Lortie, says the Fameuse Sucre (pron. *Sucray*) equals in productiveness the Fameuse of which it is probably a seedling. The tree is hardy, upright in growth, spreads but gradually, and its branches bear the bright gloss of health. The following is the description of the Montreal Horticultural Society: Fruit, fully medium in size, roundish, or slightly oblate, very dark red. It is very tender, but at first crisp; it is at once mildly sub-acid and sugary, the latter quality producing a rich flavor. Its chief merit is as a dessert apple, for which purpose it comes in just before the middle of September, continuing in good condition until the last of October.

THE DECARIE APPLE.—(See cut, p. 728.)

What, if a seedling, was the original tree of the Decarie (pron. *Decorrie*) Apple, says the Report of the Mont. Hort. Soc., stood in Jeremie Decarie's orchard in Coteau St. Pierre, east of the Cote St. Luke road, near Montreal. It was cut down a few years ago. It was then about a hundred years old, had a butt as large as a flour barrel, and was of a light so remarkable as to be compared to an Elm. The tree is vigorous, hardy and of erect growth, like Northern Spy. It bears light and heavy crops alternately. A tree 15 years planted has given a crop of seven barrels. The fruit is of Fameuse type, but much larger. Our engraving was taken from a specimen grown in sod. In cultivated soil it is very large, commanding marked attention. Form, roundish conic to oblong conic, often deeply ribbed, with a deep, narrow, russety cavity, and a basin, which, though medium in depth, is wrinkled and obscurely ribbed. The calyx is small and closed. Color of skin, light or dark red, sometimes very dark all over, covered with a beautiful bluish-white bloom, and with many medium-sized gray dots. Flesh, whitish, rather firm, juicy; with a slight and peculiar quince-like flavor. Season, October 15 to December 1.

THE RIABINOUKA APPLE.

This is one of the new Russian Apples imported by the Department of Agriculture in 1869. It has borne for the first time the past season, in the orchard of Dr. Hoskins, Newport, Vt., and was at first supposed to be the Alexander, which the fruit resembles in its general appearance on the tree. But a more careful study, both of the fruit and tree, reveals decided differences, which are in favor of the Riabinouka as regards the quality of the fruit. The tree is hardy, of spreading growth, and an early bearer. Further trial is requisite in order to develop its other characteristics and decide its value. Though eatable in October, it shows signs of being a keeper. It is a very large and showy apple, and attracted some attention at the Fruit Show of the Montreal Horticultural Society, the experts of which pronounced it to be decidedly not Alexander. The flesh is white, slightly tinged with red near the skin, and of a mild, pleasant flavor, with very little acidity.



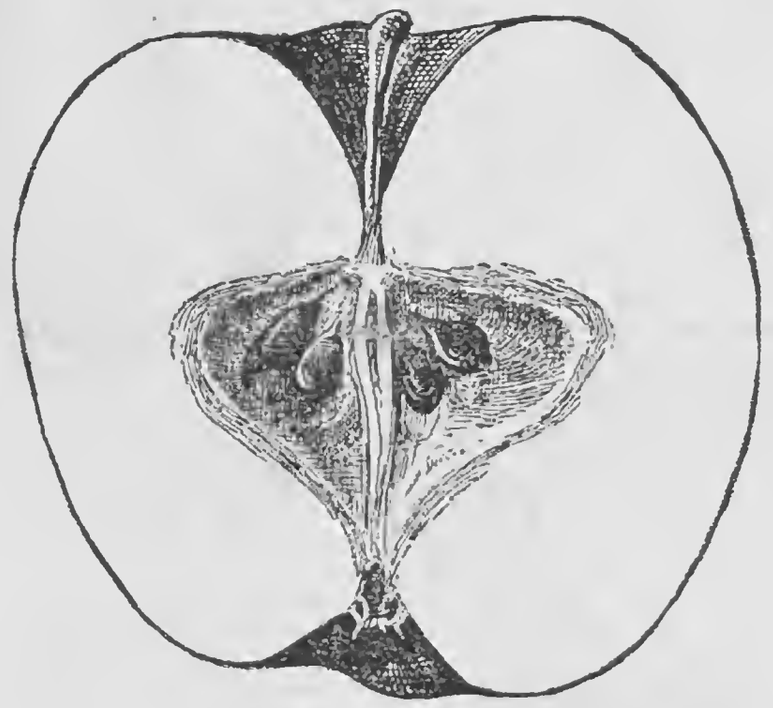
RIABINOUKA. — NEW RUSSIAN APPLE.

THE CELLINI APPLE.

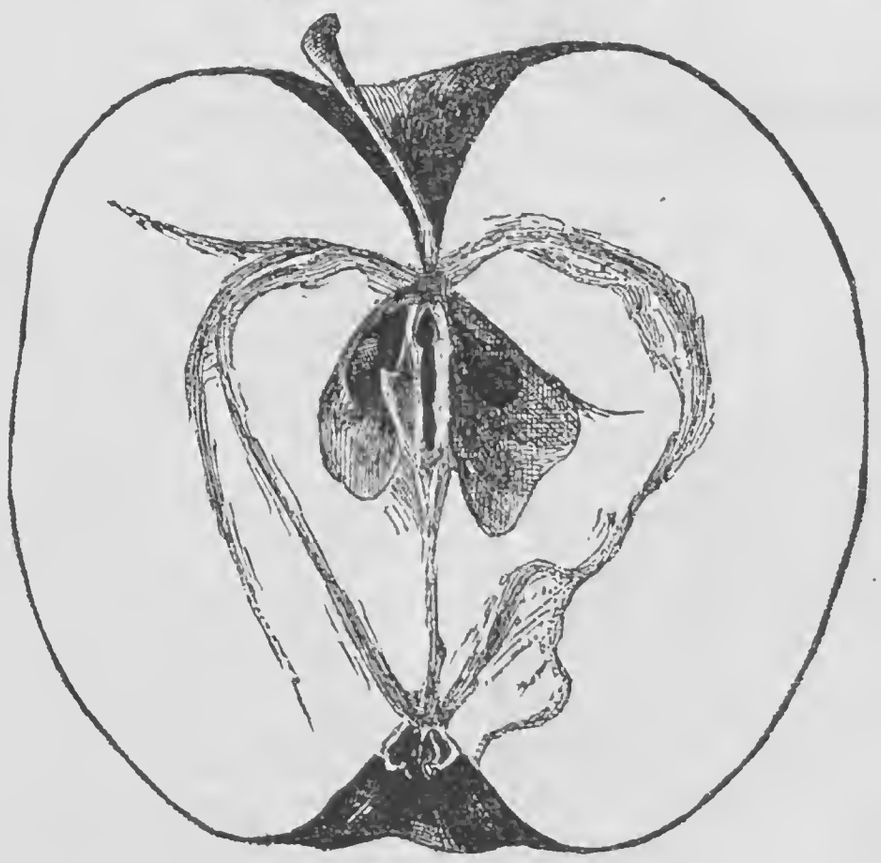
This is not the Cellini apple of the books, but a variety propagated under that name in Canada. It is said, however, to be an English apple, like the Cellini of the books, and is further distinguished by the Montreal Horticultural Society as being a seedling of the Stirling Castle. The tree is a strong and vigorous grower, forming an upright, close head, and is very hardy. The fruit is large, oblong (not oblate, like the Cellini described by Downing), even in size, and bears carriage well. In color it is deep yellow, mottled and blotched with dark red. Calyx very large and open. Flesh, slightly yellow, firm, crisp, juicy, mildly and pleasantly sub-acid. Season, September to the end of December. It is a favorite market apple in Montreal, and of increasing demand, as a tree, among orchardists in Canada.

THE NORTHFIELD BEAUTY APPLE.—(See cut, p. 729.)

This is a rather remarkable fruit, having been raised from a seed of the small, yellow, Siberian crab, by Leonard D. Cady, of Northfield, Vt. It is, therefore, sometimes called "Cady's Crab," but, whatever its origin, it is not a "crab" in any sense ordinarily attached to the word. The tree is vigorous, hardy and productive, coming early into bearing. The fruit is remarkably beautiful, above medium in size, whitish ground beautifully colored and tinted with a lively pinkish red. Flesh white, tender, fine-grained, juicy, sprightly sub acid. This apple is almost uniformly fair, even in size, and highly esteemed as a dessert fruit. In hardiness the tree is superior to Fameuse, or Red Astrachan. The fruit is rather too tender-fleshed for long carriage, but for home use or a near market, it is of great value, especially in cold localities. Its season is from October to March.



RAWLE'S GENET—(SEE SEVERAL ARTICLES.)



BEN DAVIS.

THE BOURASSA APPLE.—(See cut, p. 725.)

The Bourassa (pron. *Burrasaw*), is one of the russets of Canada, like Pomme Grise, that seem to have greatly declined in favor with growers of late, notwithstanding their admittedly high character as dessert fruits. The tree is hardy, a slow, crooked grower, never more than medium in size. It is tardy in bearing, and though once considered a good bearer, is now spoken of as only moderately, though annually, productive. The fruit is uneven in size, from medium to large, and like many winter russets, shrivels unless kept in a cool cellar. It is conical in shape with marked ridges, giving it almost a pentagonal section when cut across. The color is a rich, dark russet, with a bright red cheek in the sun. The beauty of this fruit and its rich aromatic flavor, commend it to amateurs, especially in colder sections of the country, where dessert apples of a high class, as especially those that are keepers, are less numerous than elsewhere. Its season is through the winter.

THE LADY ELGIN CRAB.—See cut, p. 725.

THIS was sent to us by Hance & Son of Red Bank, N. J., in the spring of '76 and bore the past season. The engraving shows the fruit of natural size. The tree is very productive and vigorous. The apple is prettier than the Lady Apple, having even a more brilliant red cheek upon a clear yellow ground and the flesh is tender, and of a sub-acid, rich flavor. We are inclined to praise this little beauty beyond what so short a trial could warrant us in doing.

MR. LOVETT, who is connected with A. Hance & Son, tells us that he can say nothing from his own experience, respecting Lady Elgin, except that the tree is an upright grower, with small leaves, having an unusual amount of pubescence.

IN reply to our inquiry respecting "Lady Elgin," Mr. J. J. THOMAS, Editor of the Country Gentleman, kindly replies as follows:

"I have not fruited the "Lady Elgin," but I have had specimens which grew at the West, sent me in quantity. They were by far the best of the Crabs which I have examined, being tender, pleasant and very agreeable. I have seen no other Crab which I would think of placing on the table with our fine sorts; this I think would almost answer to rival the Lady Apple. It may not be nearly so good, however, when grown here, or under more unfavorable influences.

STUMP APPLE.

I FIRST heard of the Stump Apple about 25 years ago, but paid no attention to its merit or its history. But as it has been gaining the reputation of being good and one of the handsomest of apples, besides being very productive, I made inquiry of Thomas Roe, of Monroe Co., N. Y., who has had it in bearing many years, and to him I am indebted for the following information:

The tree was first discovered growing up between the forks of an oak stump, on the farm of Richard Harris. Owing to the locality and position in which it grew and the difficulty in digging up the stump, it was allowed to remain until it fruited, when it was found to be too valuable to be destroyed. After the death of Richard Harris, one of his sons exhibited the fruit at Rochester Horticultural Society meeting, and it was voted the name of "Harris's Seedling," in honor of the owner of the land upon which the tree grew.

The tree is a great bearer and the fruit is in shape like Black Gilliflower, a very highly-colored red, and uniform in size. If properly picked and ripened, in order to bring it to a higher state of perfection, it is really a delicious fruit. [Mr. Downing says that its supposed origin is Delaware.—EDS.] FROST.

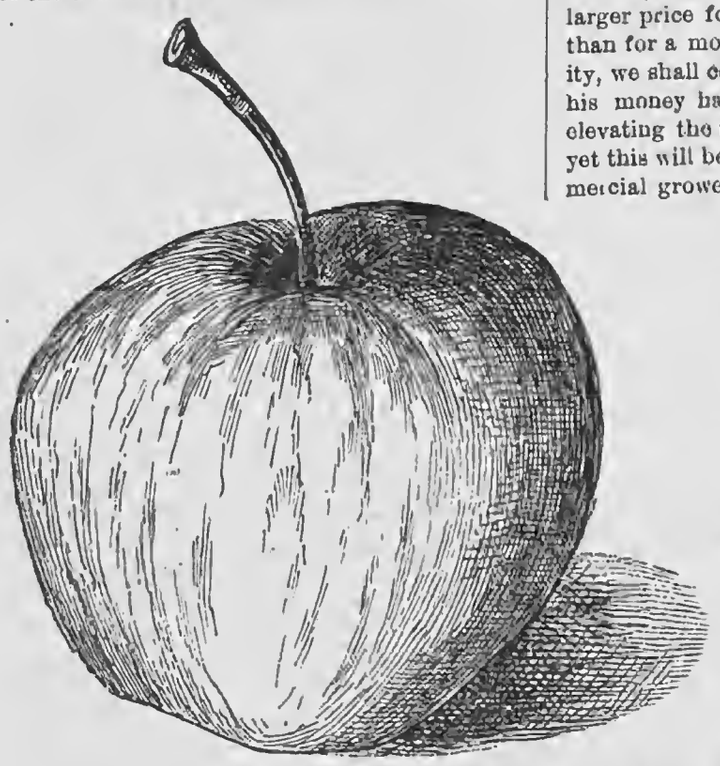
THE GRAND SULTAN APPLE.—See p. 725.

DR. HOSKINS, of Vt., who kindly furnishes the sample for the engraving of this apple, says of it:

"This large, early and beautiful apple (one of the new Russians) has fruited freely with me the present season, and fully sustains the high opinion I got of it from the few samples obtained from the tree in previous years. Like many of the Russians, it bears very young and very profusely. It is of about the same season as the Yellow Transparent (my description of which, last year, was copied in hundreds of papers, all over the Northern States and Canada) being about gone by the 20th of August, or near the time when Tetofsky and Red Atrachan begin to come into eating. In quality and size it is superior to the Yellow Transparent, and bears its fruit quite differently, all over the tree, and near the ends of the branches, instead of upon short spurs on the larger limbs. In color it is greenish white, changing to a pale translucent yellow at maturity. It is a very soft, mellow apple, with a decided and agreeable sub-acid flavor, and some aroma. In size it exceeds a well-grown Porter apple, and is similar to the Porter in shape, but less conical. It hangs well to the tree, and ripens in succession from August 1st to August 20th. The tree is thrifty, but not so strong a grower as Yellow Transparent.

THE ST. PETER'S APPLE.

The Apple illustrated in this issue over the above name, is one of the varieties the cions of which were imported by the national Department of Agriculture in 1869-70. It is the variety numbered 372 in the official list, the Russian name of which is given as "Petrowskoe." The fruit from which our illustration is taken, was grown in the orchard of Dr. Hoskins, on the banks of lake Memphremagog, near to the Canada line—one of the severest districts for testing the hardiness of fruit trees in the country. Dr. H. furnishes us with the following description of the tree and fruit:



St. Peter's Apply.

"It is called 'St Peter,' a name that led me to expect something very large and fine. But, in fact, it proves a little apple, averaging about six or seven inches in circumference. In appearance it very closely resembles the 'Early Joe,' though somewhat less flattened. and not so deep a red in the sun. The following technical description, when compared with that of Early Joe in the books, will show their close resemblance as to fruit, even in minute particulars: Size medium or rather small; roundish oblate, sometimes approaching conical; smooth and regular; color, with numerous short, broken red stripes on a yellow ground, a nearly uniform bright red in the sun, dotted with fine white specks; stem from an inch to an inch and a half long, rather slim; cavity shallow, acute; basin small and regularly corrugated or plaited; calyx closed; flesh white, fine-grained, very tender, slightly crisp, juicy, sub-acid, spicy; quality very good. Ripens (in northern Vermont) during the last two weeks in August. Tree, when young, an upright, slim, free grower; shoots reddish-brown, with a few inconspicuous white dots; leaves of medium size (small for a Russian) waved, finely crenate.

"Though the fruit is so much like Early Joe, the tree is very distinct. As to the quality of the fruit, while I cannot rank it with the Early Joe, as 'best,' it fully deserves to be called 'very good,' and decidedly 'best' for a Russian—no apple of that class within my knowledge being entitled to rank with the 'best' of American dessert apples. But when we consider that the St. Peter is entirely hardy, or 'Ironclad,' in the coldest section of New England, where Early Joe is grown only with difficulty in favored localities, and not by any means in perfection, we may consider the St. Peter as quite an acquisition to our list of nice, early dessert fruit."

THE FANNY APPLE.

Downing says of it, that it is a very handsome and valuable apple either for market or family use, ripening a week or two later than Red Astrachan, and of better quality, and that it is not as well known as it should be, although it is thirty or forty years since it was first introduced. Its origin is somewhat uncertain, but it is supposed to have originated near Strasburgh, Lancaster Co., Pa., on the property formerly owned by Jacob Beam, and not far from where the celebrated Belmont, or Gate Apple, was first found. The tree is a vigorous grower, spreading, and an abundant bearer on alternate years.

HOW FAR SHALL WE GO IN THE ATTEMPT TO CREATE A DEMAND FOR FRUIT OF THE BEST QUALITY?

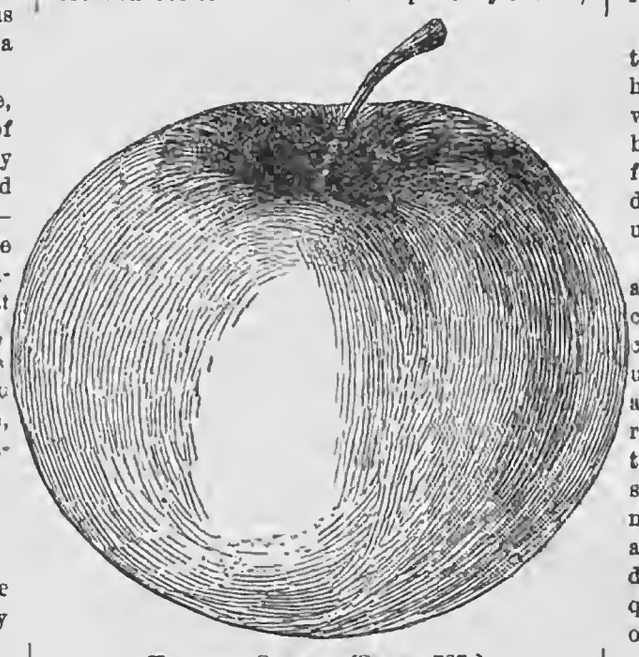
The following short discussion is furnished us from the minutes of a recent meeting of the Michigan State Pomological Society, by Secretary Garfield.

Mr. Stearns, of Kalamazoo—While we have a due regard for the present wants of our market, I am satisfied we shall make some progress in educating people to ask for fruit of good quality. It will not do to make an innovation of this character so suddenly as to sacrifice the best interests of commercial growers, but the fact stares us in the face that the apples which bring the most money are not necessarily fruit of excellent quality, and it appropriately comes within the limits of our Society to suggest methods by which the market shall demand a good quality of fruit as well as handsome specimens.

M. B. Williams, Sangatuck—I must confess that, in my opinion, we can, as growers, do little beyond what the mass of consumers demand. We are growing fruit to ship, and from it we get an income to support ourselves and families. We cannot afford to sacrifice this income or any part of it for the sake of educating the consumer to a higher or more delicate taste. We are bound, as commercial growers, to furnish the fruit that will bring the highest price in the market, and if the consumer is willing to pay a larger price for a big red apple of poor quality than for a modest-appearing fruit of first quality, we shall certainly grow the former to meet his money half way. We may theorize about elevating the taste of the people all we choose; yet this will be the action of the successful commercial grower every time. This Society combines amateur and professional men; if the former can do this educating, the latter will find no adequate excuse for not following the course they have made easy and profitable, but the market growers will not and cannot afford to take the initiative in this matter.

C. N. Merriman—I wish to enter my solemn protest against the doctrine of my brother fruit-grower. I believe it is in the power of the commercial grower more than of any other man to lead public opinion in this matter, and he can, by planting judiciously, raise as fine-appearing apples of first quality as he can of second or third quality, and in the end this policy will certainly bring him a larger return. The grower, to be successful, must produce such fruit as to bring buyers to him, and he must bring every thing to bear to induce this state of things. Quality must certainly take a prominent place in his decision upon what to plant. I can name a half dozen apples that appear but rarely in our markets, that are as good in quality as the very best, and notwithstanding their excellence in this point, nothing is lost in the ability of the trees to bear abundantly or in the appearance of the fruit. I tell you, Mr. President, we ought to go on record as a Society in favor of bringing to the front fruits valuable for their superior quality, and make that a market point.

Mr. Smith, Parma—I am working for dollars, and I am not willing to take the whole crowd of consumers upon my shoulders and "boost" them into a higher position as regards taste, with the poor prospect of pay for it that is promised. We are not far enough along to regard quality much yet. Perhaps in planting an orchard for our children to reap money out of,



Fameuse Sucre—(See p. 727.)

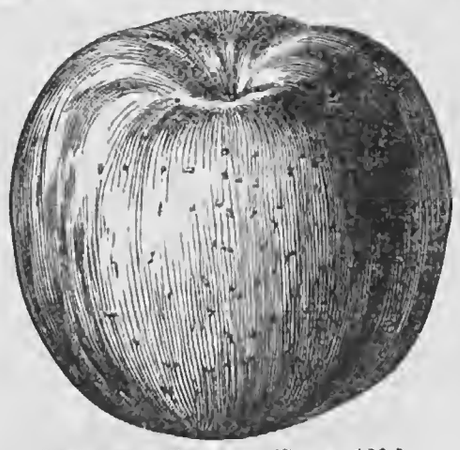
it would be well to look toward a little advancement in this direction, but not a great deal. It is too slow a process to be counted of much importance when we are figuring for dollars.

Mr. Holloway—It is demanded that this society should take firm and high ground in favor of a good quality of fruit. It is not the mere question of dollars and cents. There is something higher than mere profit. Different soils produce different qualities of fruit of the same variety. In my location the Baldwin is hardly worth eating, but I can produce the Yellow Bellflower in perfection. We must study the habits of Apples and then we shall get quality. We must learn the requirements of fruits. This Society cannot stop on the question of dollars and cents. This Society should be a leader in favor of quality. We must educate the tastes of the people, and third-rate Apples must be shoved out. Apples of first quality go to Europe, and for this and other reasons we should maintain quality.

S. O. Knapp, Jackson—It was a hobby of mine to elevate the tastes of people in relation to fruits. But I found it a hard task. I grafted largely of the Benoni, a variety of excellent quality, and now I have a good call for it. It is a little discouraging, however, to attempt to elevate the taste of people. They like good-looking fruit. I would recommend that we aim to combine good-looking fruit with good-keeping qualities and good-eating qualities—such an apple is the Northern Spy.

J. D. Baldwin, Ann Arbor—It is a pretty expensive business to educate rapidly, and, although I am in favor of taking ground looking toward an improved taste, still, as commercial growers, we must not lose sight of the margin that supports our families. It has been a favorite opinion of mine that people able to purchase, will seek good quality and will be willing to pay for it, but I confess this season my faith in this direction has been somewhat shaken. We have at Ann Arbor a considerable population whose money comes in the form of good salaries. I have often watched these men as they selected from the fruit-stands, and I have found they will pass the beautiful, melting Seneca Chief Strawberries for an inferior, perhaps nameless, sort, for the sake of the two or three cents per quart to be saved. Now, I do not wish to be put on record as opposed to such economy, but in marketing fruit, we must consider the disposition of the people who are to buy.

Mr. Holloway—I have one further remark to make: Michigan as a fruit State is in its infancy, and its future success in that line, will, as sure as you live, depend upon the quality of its fruit. If we are to look out for money, we must look beyond this year, or this decade. We have the location and circumstances that will give us a prominence throughout the world for the production of apples, and we cannot successfully do otherwise than make this reputation as perfect as possible. We can raise



Meader's Winter—(See p. 130.)

firm apples of good color; why not produce those of excellent quality as long as it is not more expensive I tell you, gentlemen, unless we look carefully to quality, we are living beneath our possibilities, and ought to be censured for it.

H. S. Rogers, Volinia—We can scarcely do better than supply the demand. If we consumed here in Michigan all the fruit we raised, it would be well for us to educate people's taste, but, inasmuch as only a small proportion of the fruit grown here is consumed within our borders, we are assuming a good deal of a task in undertaking to educate the taste of the world.

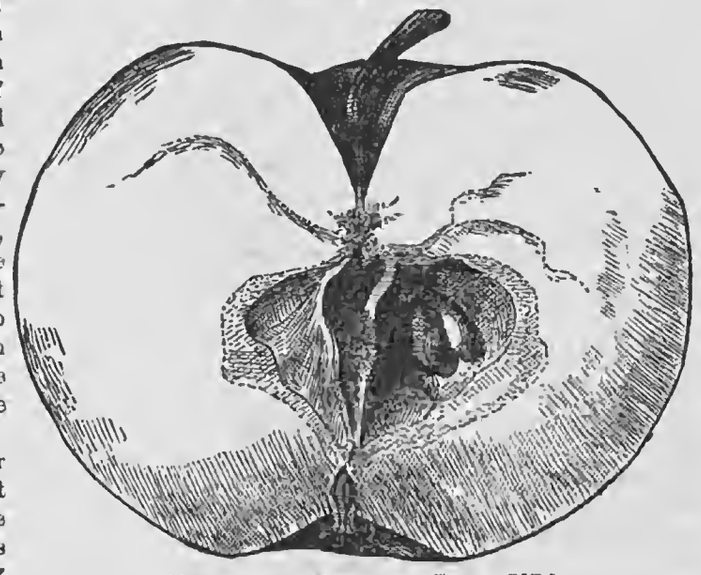
Mr. Harrison—I have shipped a good many apples, and there are some things that should come into this discussion as matters of no inconsiderable import, that have not been touched upon. The consumer demands a good-looking apple as well as a good-tasting apple when it reaches its destination. This involves the fact that a good-shipping apple must have a tough skin. The apples with a tough peel rarely rank as number one in quality, so that often, to get an apple that will be in good shape when at its destination, we must sacrifice something of quality. The Pennock apple we rank as one of our poorest sorts, because its quality is below medium, still I have never shipped a variety to New Orleans that would sell as well, because it opens there better than any I know. You may say it is popular there because the consumers do not know what a good apple is—which is true—and all because we cannot get the good apples there in shape to eat.

Secretary Garfield — Just one point I wish to make, and that is, that different localities require different kinds of fruit, because of locality and not because of any prejudice or education in taste. A malarial district will not consume sweet apples, and varieties of medium acid are scarcely salable at such places. They crave a sharp acid and will call for apples containing it. This same demand will come from other localities where fat meats are consumed largely; while in the South, where less meat is eaten, they ask for a milder fruit. Nearly all their native fruits when ripe, are very sweet. The inhabitants do not call for very acid fruits, and if we raise it for them, we should cater to their wants.

Mr. Pringle—I speak from a consumer's station, and desire earnestly that the men who grow our fruits shall look more to quality. If I get hold of a barrel of apples that are excellent, I inquire what they are, and who grows them. I am not alone in this habit. The people who are the largest purchasers will readily second any movement toward a better quality of market fruit. To be sure, we like fine form and color for a dessert fruit, but in getting these we do not want to sacrifice quality.

BONNE DU PUITS ANSAULT PEAR.

For an engraving of this delicious pear, readers may refer to the Rural of Nov. 10—1877. A



Northfield Beauty—(See p. 727.)

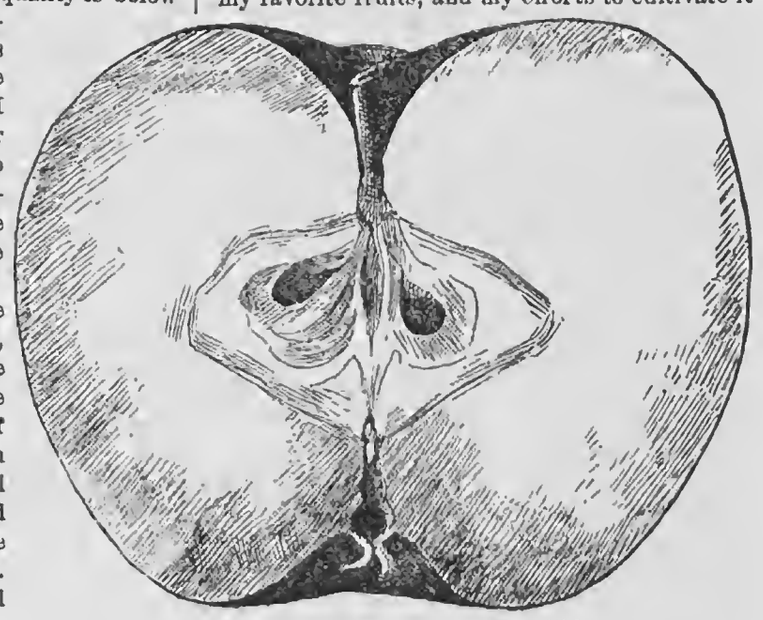
small box of them was sent to this office by Ellwanger & Barry of Rochester, N. Y., several weeks ago. They were quite green and hard when first received, but ripened beautifully in a few days. All who ate them said—"It is the best pear I ever ate"—or, "It is as good a pear as I ever ate;" and the latter was our own report. If the generality of people were asked, "How would you improve the Seckel?" the answer would be, "Make it a little more sprightly," or "not *quite* so sweet." You have it in the Ansault Pear—and a little more. If we were asked—"How would you improve the Ansault," we should say, "Make it a shade sweeter." Now they may be had ripe at the same time, so that if perfection in pears is wanted—eat them together!

In the Rural of Nov. 10, Mr. Charles Downing tells us that "the tree is moderately vigorous and very productive and a first-class Pear for the amateur, but rather too small of its season, September, to meet the wants of the general market-men; fruit scarcely of medium size; skin, light yellow, nearly covered with thin, light-russet; flesh, fine, juicy, melting with a sweet, rich, slightly vinous flavor." While eating some of the pears above referred to, the flavor seemed to us more than "slightly vinous" and so we wrote to Mr. Downing. To this he replies: "If you leave out the word *slightly* in my description of last year it will be right—so I find it in my corrected notes of last year, and so it is in my appendix of 1872."

PEAR CULTURE IN NEBRASKA.

BY EX GOV. R. W. FURNAS.

As a rule, among Nebraska fruit culturists, Pear culture is not considered a success. This seemingly prevalent idea, however, is attributable more to want of attention, treatment and proper selection of varieties than to soil, climate or any other of the natural surroundings. I am confirmed in this opinion by the fact that where lovers of pears have observed the essentials named, most gratifying success has followed. Better accommodation for penetration of the soil is required by pear roots than for most other fruits. This I consider one of the indispensable requisites to successful pear growing here, as well as elsewhere. The pear is one of my favorite fruits, and my efforts to cultivate it



Decarie of Canada—(See p. 727.)

have proved as successful as with anything else. Those of my neighbors and acquaintances who have given care and attention, have met with like success.

At our late State Fair, an extraordinary pear exhibit was made from orchards in this, Nemaha

county. Such fruit experts as Dr. Warder of Ohio and Dr. Furnas of Indiana, who were present and served on the Fruit Committee, so pronounced. No finer specimens could be desired than were shown of Bart'etts, Seckels, Lawrence, Beurre d' Anjou, Duchesse d' Angouleme, Sheldon, Howell, Bello Luorative, Doyenne Boussock, Buffum, Vicar, White Doyenne, Flemish Beauty, Louise Bonne, Swan's Orange, Beurre Diel, Glout Moroeau and other leading and well-known, excellent varieties. Some destructive instances of pear blight I know. But these were owing to improper selection of location and want of treatment. It is not my purpose here to give a dissertation on Pear culture, but simply to give a few rambling thoughts, with an expressed opinion that Pear culture, well directed, can be made as profitable as the culture of other fruits.

BEN DAVIS APPLE IN NEBRASKA.—(See ent, p. 727.)

What we in Nebraska, and in the West generally, cultivate under the name of "Ben Davis," in New York is known as "New York Pippin," if I mistake not. This apple, for profit, with us, heads the list. Very many of the most experienced would say: "If I were to plant one hundred apple trees for profit, at least ninety of them should be Ben. Davis." It comes into bearing early, bears regularly each successive year; the tree is hardy, prolific and a rapid and luxuriant grower; the fruit is showy and attractive to the general purchaser. It handles well, keeps well and, therefore, is number one for shipping. I have known five bushels picked from one tree, seven years old from the graft. As to quality, it has very many superiors. Indeed, in this respect, in my estimation, it will scarcely bear the classification, "fair to middling." In this assertion I think I express the opinion of a majority of those who have experience.

The Jonathan, with us, is showing almost as many popular characteristics as Ben. Davis. It does not come into bearing, however, quite so early, and is not so prolific. The quality is so far superior, however, as to make it the more popular with those who appreciate that feature in fruit.

Nemaha Co., Neb.

TWELVE GOOD MARKET VARIETIES OF PEACHES.

J. W. KERR.

For market purposes the varieties ripening before Troth's Early have no representative on the Eastern shore of Maryland. Very early Peaches are grown South, and, of course, these reach market ahead of those grown on our "Shore;" consequently the novelty of the "first ripe peaches," together with "Fifth Avenue" prices, has disappeared ere ours are ready to gather from the trees; hence, those varieties with a a permanent or at least with a less fluctuating value, are more sought after.

Troth's Early, would, of course, be my first choice; and this everybody knows without a description.

Montain Rose would be my next choice. This is a fine, large-sized, well-colored and good-flavored peach, when grown in good soil.

Mary's Choice comes next; yellow, free, not a heavy bearer, but invariably of fine size, and good quality for a yellow-fleshed peach.

Old Mixon Free: This variety, with all its good qualities, only pays as a market kind when peaches are somewhat scarce; for when there is a full crop the market is usually flooded at the season of the ripening of this one.

Crawford's Late: This is a reliable, and I believe a generally profitable sort; as much so as, or more than any other variety ripening with it.

Roulette: A splendid yellow-fleshed peach, ripening a little after Crawford's Late, of fine size and as dry as a Troth or a Smock, and on this account it is a first-class shipper. Another strong point in its favor, is its hardiness in the blossom; having a large blossom like that of Hale's, Beatrice, Amsden, etc, it seems to withstand the severest weather much better than many other varieties.

Fox's Seedling: A good Peach and a fair bearer after trees obtain some age; but while they are young the fruit has the very unpopular failing of rotting on them before it is ripe.

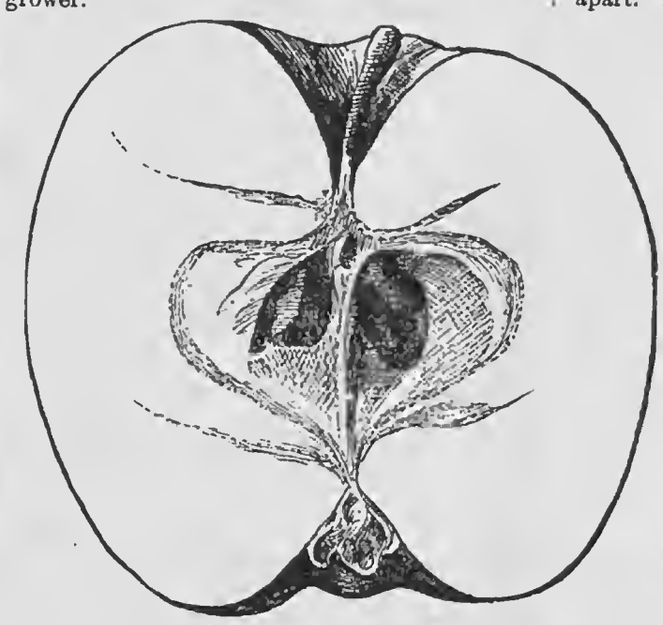
Silver Medal: For a white freestone peach this is without a rival. The fact that it is white at the stone and ripens some time after Crawford's Late, coupled with its fine size, makes it a desirable variety for loamy soils in good tilth.

Beer's Smock at this time is the most popular peach known to our growers. It is much sought after for canning purposes, being rather dry in comparison with some other kinds. It also ships and keeps well.

Washington: A very large yellow peach, as late as Smock, with an iron-clad blossom: of course desirable.

Hold On: This evidently is slightly akin to the Smocks. The tree is tough and wiry, and somewhat slender in its habits; the glands on the leaves reniform. This variety is very productive, and when in good soil—somewhat sandy—it has the merit of producing extremly few small peaches, considering its vast prolificacy—a very valuable yellow-fleshed, late-ripening sort.

Bilyen's October: The tree is not a great bearer, but the fruit has some striking characteristics. It resembles an Old Mixon, hanging long before ripening, which it does in October in ordinary seasons. It surpasses all other varieties known to me as a free-stone keeper. I have kept them on a shelf or in an ordinary room four weeks after pulling, yet they showed no signs of rot at the end of that time; having only shriveled slightly on account of the dry atmosphere; blossom large; tree a good grower.



Little Red Romanite.

Now, of course, I do not attempt to maintain that there are not other varieties equally meritorious in some respects with those on the above list; for instance, of those ripening between Mountain Rose and Old Mixon Free, I might name Reeve's Favorite—a very good Peach, somewhat shy in bearing. Stump-the-World, Beer's Melocoton, Ward's Late, etc—all fine Peaches, but no better than those on the list, in any respect, while the season from Troth's to the close is completely covered by those named. It will be observed that there are no Clingstones in the foregoing collection; the reason for which may be briefly stated as follows: The Heath and its progeny are the only Clings that possessed anything like substantial merits as market peaches; but in the last five years they have for some cause deteriorated to such an extent as to render them unprofitable and unpopular.

Carolina Co., Md,

SALLIE WORRELL PEACH.

Early in August we received a peach from Mr. C. W. Westbrook of Wilson, N. C. It was received in perfect order; was of medium size, very juicy and of good flavor. This was raised by an old lady whose name has been given to the peach. Mr. Westbrook says that last season some specimens grew as large as 14 inches in circumference.

FRUIT NOTES FROM NEBRASKA.

Horticulture is in its infancy in this part of Nebraska. A few years since it was generally supposed this would never prove a fruit country. A few ventured on fruit raising, however, and to-day success is written on their banners.

Fall seems to be a favorable time for handling nursery stock. The best location for an orchard here is a northern slope. Trees should be set inclining to the west of south, to lessen the effects of the sun. A windbreak is very desirable, and is more necessary on the south side than on the north. A young orchard should have clean culture until June, then a thorough mulching of loose, rotten straw that will let all the rain run through and afterward shade the ground. Sometimes mulching is piled up around the tree, forming a roof that throws off our dashing rains and thus starves the tree it is designed to feed. Make the ground beneath and the mulching saucer-shaped to retain the rain.

The best varieties of apples here are, Summer, Cooper's Early White, Duchess of Oldensburg, Red Astrachan, Red June, Fameuse, Haas, Maiden's Blush, Ben Davis, Rawle's Genet, Stark, Dominie and Winesap. The best Siberian is Whitney No. 20. In

CHERRIES.

Early and Late Richmond and the English Morello are the first choice.

Among Plums the Miner is most nearly exempt from the curculio.

Peaches do splendidly on the upland, seedlings often surpassing budded trees of the East.

In Grapes, Concord takes the lead.

Currants and Gooseberries, yes, and Strawberries are not a success in the hands of the average farmer. They need more attention, more hoeing and irrigating than, in our haste, we are inclined to bestow on them.

In Raspberries Mammouth Cluster takes the lead.

In Blackberies Snyder is the favorite.

R. H. Crane.

Harlan Co., Neb.

Field Crops.

EXPERIMENT IN PLANTING CORN.

F. HODGMAN.

Here is the result of an experiment which I tried the present year, to learn the comparative values of different methods of planting corn with regard to the amount of seed used and distance apart. For this purpose, when planting, I selected a plat of ground in the field which was as nearly uniform in quality as I could find. It had received no manure for three years.

I first planted four rows twenty inches apart, putting one kernel in a hill and making the hills twenty inches apart in the rows. There were thirty hills in a row.

Next to these I planted four rows forty inches apart, putting two kernels in a hill and making the hills twenty inches apart in the rows. There were thirty hills to the row.

Next I planted four rows forty inches apart, making the hills forty inches apart in the rows, and putting three kernels in a hill. There were fifteen hills in a row.

Next, I planted four rows forty inches apart with the hills forty inches apart in the row, putting four kernels in the hill.

Corn of the same variety grew adjacent to the plat on which the experiment was made, on all sides except the east. The corn came up well, but some stalks were destroyed by smut early in the season. So far as cultivation was concerned, it was all treated exactly alike, being kept clean and free from weeds by the use of a hand cultivator four or five times during the season. It was not hoed, and there was no difference in the relative amount of labor bestowed on the different parts of the plat. The corn was allowed to fully ripen on the stalks without cutting. I have husked it with the following result:

Lot	Row							lbs.
1	1.	had 24	stalks.	bearing	37	ears,	weighing	12¾
	2.	" 28	"	"	28	"	"	10¾
	3.	" 26	"	"	27	"	"	11
	4.	" 27	"	"	30	"	"	11
2	1.	" 60	"	"	52	"	"	19
	2.	" 60	"	"	55	"	"	20
	3.	" 60	"	"	50	"	"	16½
	4.	" 58	"	"	54	"	"	20
3	1.	" 42	"	"	46	"	"	17
	2.	" 46	"	"	47	"	"	16
	3.	" 44	"	"	44	"	"	17½
	4.	" 46	"	"	48	"	"	19¾
4	1.	" 56	"	"	56	"	"	19
	2.	" 59	"	"	50	"	"	19¾
	3.	" 59	"	"	53	"	"	19¾
	4.	" 57	"	"	51	"	"	18
Summary, Lot 1 had 105 stalks, bearing 122 ears, weighing 45 1-2 lbs.								
"	2	" 238	"	"	211	"	"	75½ "
"	3	" 178	"	"	185	"	"	70¾ "
"	4	" 231	"	"	212	"	"	76¾ "

From this table we learn that the average weight of ears on—

Lot 1 was 5,967 ounces
" 2 " 5,725 "
" 3 " 6 075 "
" 4 " 5,773 "

The yield per acre, estimating the space occupied by each hill as being in Lot No. 1, 20 by 20 inches; in Lot 2, at 20 by 40 inches; and in Lots 3 and 4, at 40 by 40 inches, would be for—

Lot 1 5,817 lbs.
" 2 4,583 "
" 3 4,581 "
" 4 5,000 "

Lot 1, Row 1, was at the east side of the field, and had no corn growing next to it on the east side, and so really occupied more ground than I have estimated in calculating the produce per acre of lot 1. On this row more than half the stalks bore two ears each. I did not weigh the stalks for the reason that when the corn was husked, they had become very dry and the high winds had stripped them of the greater part of the leaves. I make no comment on the result, leaving every one to his own conclusions. I will only add to this, that when the corn was about three inches high, each alternate row received a top-dressing of a small handful of hen manure to each hill, applied close about the corn. The variety of corn was the improved Triumph Sweet Corn.

Kalamazoo Co., Mich.

The Herdsman.

MILK RECORD OF JERSEYS.

W. S. Wickham of Flushing, L. I., sends us the following statement of milk yielded by his small herd of Jersey cows:

Josephine 2d,
No. 2355, A. J. H. Book. Dropped her last calf March 28, 1878.

Gave in June	742	lbs.	of milk.
" July	651	"	"
" August	707	"	"
" September	526	"	"
" October	544	"	"
Amount in five months	3180	"	"

During September she was stung by insects and lost her milk for a week.

Deborah of Staatsburgh,
No. 3193, A. J. C. C. H. R. Dropped her last calf May 21, 1878.

Gave in June	636	lbs.	of milk.
" July	614	"	"
" August	620	"	"
" September	560	"	"
" October	532	"	"
Amount in five months	2962	"	"

Bessie Comet,
No. 5810, A. J. C. C. H. R. Two years old. Dropped her last calf March 11, 1878.

Gave in June	541	lbs.	of milk.
" July	395	"	"
" August	439	"	"
" September	499	"	"
" October	517	"	"
Amount in five months	2441	"	"

The last heifer weighs only 450 to 500 pounds, live weight. He would like to hear from others as to the amount of milk they get from their registered Jerseys. In this case, the milk was weighed directly after milking each cow and he can vouch for the correctness of this record.

The Vineyard.

GRAPE LEAVES.—No. III.

W. C. BELLAMY.

This northeast portion of Alabama, embracing a spur of the Blue Ridge, which is but a continuation of the great Apalachian Chain running parallel with the Atlantic coast, is certainly well adapted to the culture of certain varieties of the vine; and if our people could only become awake of that fact, this could easily be made a wine-producing region.

In addition to the Scuppernong and its volunteer seedlings, to which most of my first "Leaf" was devoted, there are other Grapes that are well suited to the various sections of the South and which could be made a source of considerable income. The well known Concord, with reasonable care, is here free from rot or mildew, and produces good crops of fine, large fruit. Several of my neighbors, owning but a few vines, make annually enough of excellent wine for their own use from one vintage to the next, but notwithstanding the fact that there is no tax on wine made for sale in this State, there is very little made here. California, however, is reported to have furnished upwards of six million gallons for sale from her last vintage. This, at the very moderate price of one dollar per gallon, would bring to the State an income equal to that from the sale of one hundred and twenty thousand bales of cotton at the present price, and when the fact is taken into consideration that wine is produced at far less expense than cotton, the actual profit must be very much greater.

On one of our mountain sides, in sight of my prolific vineyard, a stock company planted a large vineyard previous to the war, and employed an Italian to manage it. They unwisely planted mostly the Catawba, but they set out a few Scuppernongs also. As the Catawbas did not suit the locality, the vines did not bear fruit enough to pay the expenses, and as the yield from the few Scuppernongs would not justify keeping up the vineyard, it was abandoned and has gone to ruin. The Italian still lives there and ekes out a precarious livelihood by selling fruit from the few Scuppernongs—which still thrive through all their neglect—and from a few Concord vines and fruit trees he has since planted. The old Catawba vineyard he plants in cotton, and he told me lately that he made only three hundred pounds of cotton on nine acres of it. If, instead of the insensate folly of attempting to raise cotton, he had put out more Concords or Scuppernongs, he might now be independent, but he never seems to have realized that if one Concord or Scuppernong would thrive, he might as easily have ten thousand.

I do not suppose I can hinder the production of our great staple, nor would I be so unwise as to do so if I could, but I might be instrumental in inducing some men to abandon a ruinous for a profitable crop. A certain man made, last year, from thirty-one Scuppernong vines, only four years old, thirty-four barrels of wine and expects to make fifty this year. That wine rarely sells for less than two dollars per gallon. Now the result can be easily figured up.

The Concord requiring closer pruning, an acre will accommodate with ease three hundred and fifty to three hundred and seventy-five vines, producing three gallons of wine to each, making an aggregate of upwards of a thousand gallons of wine, which, even at fifty cents a gallon, would bring in a larger income than could be derived from an equal area under cotton. But this is not a cotton region, the best lands here rarely producing over two hundred and fifty or three hundred pounds per acre, while twelve long months of tedious toil are needed to plant, cultivate, gather, gin, pack and haul it to market, where only ten or twelve cents per pound can be got for it. Wine, on the other hand, is made in half the time and with far less than half the labor. Now, which has the balance in its favor? Because St. Paul said to Timothy, "Drink no longer water, but take a little wine for thy stomach's sake and thine own infirmities," I would not take advantage of this saying and encourage drunkenness. On the contrary, I have little doubt that if pure native wine were in as general use with us as it is in Spain, France and Italy, there would be far less of the more baneful effects of distilled liquors throughout the country.

Calhoun Co., Ala., Sept. 21, 1878.

Farm Economy.

CLOVER FOR AMERICAN FARMERS.

W. J. FOWLER.

THERE is no good farming without clover. In a few exceptional instances near cities, where large amounts of stable manure can be procured, fields may be and are cultvated for years in succession without seeding; but this is market-gardening rather than farming. In the blue-grass regions of the South and West the grasses are used for pasturing large herds of cattle, horses other stock, and little, if any, clover is sown; but this is stock-growing and breeding rather than farming. The high price of his produce, and easy access to manures near cities, enable the grower of special crops to dispense with the cheaper means of maintaining the fertility of his soil. In the Far West, the original virgin fertility of the land is not yet exhausted and the necessity for any manure is scarcely felt. Between these extremes is the great body of farmers whose crops will not pay enough to manure their fields every year, but who are under the necessity of doing something yearly to keep up or increase the productiveness of their land. To these, who are, strictly speaking, the farmers of the United States, and who constitute ninety-nine hundredths of all who till the soil, clover as a renovating crop, is a necessity.

HOW CLOVER HELPS THE SOIL.

Wherever clover can be grown, the means for restoring exhausted fertility are always at hand. It does this in many ways. On heavy loams or clays clover roots penetrate the subsoil, opening it to the fertilizing influences of air and light. They take from the subsoil the manurial elements, chiefly mineral, which have lain dormant or beyond the reach of less vigorous feeders. The surface soil on land long cropped is generally deficient in mineral fertilizers. As the clover plant is mainly near or above the surface, what is brought from the subsoil helps to make the surface richer. At the same time another important renovating process is going on. The clover leaves form a mulch, protecting the surface from the heat and rapid evaporation of moisture which would otherwise occur. Under this shade there is strong reason to believe that unavailable nitrogen is transformed into nitric acid or unites with some base forming a nitrate, and is thus made available as plant-food.

I omit, in this enumeration of the benefits from clover, the advantage which many believe it to possess of using atmospheric nitrogen by absorption through the leaves. This is a mooted question, and, though important, its decision does not involve that of the necessity of growing clover. If clover has this power, it is probably through the ammonia held by dews and rains on its leaves and is thus helped by the use of gypsum or land plaster, which often produces remarkable results on the clover plant. There can be no doubt that a growth of clover heavy enough to form a mulch, adds to the nitrogenous fertility in the soil. Clover is rich in nitrogen. In the decay of its leaves and roots it gives the soil just what is wanted to grow a maximum crop of any kind of grain. On the wheat-growing soils of western New York farmers have found by experience that growing clover enables them to produce as large crops of wheat as in the early days when the virgin fertility of the soil was not exhausted. There is even an increase in fertility on cropped land regularly seeded with clover. Some years ago a successful farmer had occasion to remove a fence between two fields, throwing both into one. The fence was a crooked rail fence, and had been unmoved many years. He supposed, as a matter of course, that this uncropped land would prove the richest; but instead of this being the case, there was a poor streak through the field where the fence stood, which was not remedied until several years afterwards, when he applied a dressing of manure to restore equality. The clovered land on either side was without any fertilizer excepting clover, and yet it had constantly increased in fertility.

CLOVER ON SANDY SOIL.

The use of clover as manure has heretofore been chiefly on light, sandy soil deficient in vegetable matter. Here the soil, when not in crops, must be continuously seeded with it, and, as often as possible, the entire growth of the plant must be plowed under. Treated thus, sandy soils, which would otherwise become a barren waste, are rendered productive. In some localities are farms which consist mainly of drifting sand, which not even a mortgage will hold, and by their side other farms naturally no better that, by the use of clover, have been made fertile. Pure sand has no capacity for retaining manures. Adding vegetable matter, as we do with clover, we may add whatever else we choose, with the assurance that it will remain a fixed benefit. On heavy land clover benefits the crop by disintegrating the too compact mass. On sand the decaying clover forms the soil on which the crops must grow. It makes heavy soil lighter and light soil heavier.

CLOVER AS A WEED DESTROYER.

The advantages of clover in cleansing foul land have never been appreciated. As usually grown, in thin seedings, it does not have this advantage. Sown as it should be, at least a peck of seed per acre, and allowed to form a dense mat, clover will smother and destroy most annual weeds, and greatly aid in suppressing those hardy perennials, thistles and quack-grass. But to do this effectually, clover should be grown with the least possible check. No pasturing should be permitted when the ground is moist enough to poach by the feet of cattle or horses. Especial care should be taken of clover while young. The best farmers now will not pasture the first year after seeding. In a season like the present, I would make an exception. Clover this year blossomed and in some places seeded from last spring's seeding. So soon as the blossoms began to appear I would pasture lightly to keep down the blossoms. This makes a rich food for cattle or horses, and, as blossoming is very exhaustive to the plant, light pasturing rather promotes its vigor. But the second year no hoof of horse or cow should be allowed in the clover field, except as horses are used to cut and harvest the hay. If cut early in June, the second crop will grow more rapidly and the crop of seed will be generally better. It is during this second growth that the clover roots make most progress in penetrating the sub-soil. For this reason, as also because I like to feed a good deal of clover hay, I have as much as possible mown every year.

PLOWING UNDER CLOVER.

The advantages of this practice are generally well-known. For many years it was the only recognized mode of using clover in this section. The farmer who mowed his clover, and especially he who grew a second crop for seed, was thought to be "ruining his land." So he was most undoubtedly, if the clover hay was sold from the farm. In the old days of exclusive wheat growing, scarcely any farmer had stock enough to eat one-half or even one-quarter of the clover that the farm produced. Plowing it under was in these circumstances almost the only mode of using it, and the result showed that the practice was profitable. It had the advantage of saving labor and of distributing the fertilizer more evenly than it could be in any other form. Of late years, however, the increase of stock necessitates the use of more clover as hay. We find that this clover hay makes much richer manure than what we have been accustomed to get from timothy and natural grasses. The growth of clover roots from June till September often leaves as much in the soil as we should plow under in June. Hence, whenever we have sufficient stock to consume it, clover may be mown without detriment to the fertility of the soil.

CLOVER AS HAY.

The old idea that clover hay is injurious to horses has been pretty thoroughly exploded. Dusty hay is hurtful, and clover from its succulency and the difficulty of properly curing it, is most apt to be dusty. Clean, bright clover hay is never injurious to any horse. Care must be used in feeding it. Horses are so fond of clover that, if allowed all they can eat, they will distend their stomachs and thus hurt themselves for traveling. Clover is rich food, and if given in small quantities with grain, horses will work and travel on this food as well as on timothy. The advantage which timothy has is that it is so hard and tasteless that few horses will fill themselves with it; hence with grain they are in the best possible condition for work or travel.

SEEDING WITH CLOVER.

Clover seed in all northern climates should be sown in early spring, with some grain crop. Wheat or rye is much the best. Spring grain is apt to make too large a growth and smother the young plant. If sown on winter grain the ground should be harrowed thoroughly to make a mellow seed-bed. This practice is also beneficial to the grain crops, thus securing a double advantage. All the attempts I have seen to sow clover seed without grain, have been failures. The young clover is benefited by the protection of the grain leaves in early spring. Before summer heats come, it has, or should have, a root deep enough to withstand ordinary droughts.

MANURES FOR CLOVER.

In my own practice no manures, excepting gypsum and superphosphate, are used for clover. The latter is applied with the grain crop, and only benefits clover as a secondary consideration. No coarse manures should be thrown on clover at any time, as they will destroy the plant. The free use of gypsum insures a good growth of clover on ordinary soils, or, if additional fertility is needed, it is all the better if the manure has been applied to other crops a year or two previous, and thoroughly incorporated with the soil. On sandy land clover is often greatly benefited by a liberal dressing of ashes. The lack of potash is, on many soils, a reason why clover fails to catch, and sorrel or other weeds take its place.

VARIETIES.

Writing of clover as a farm crop, reference has naturally been had chiefly to the common red clover, Trifolium pratense, which is the best adapted to all farm purposes. White clover, Trifolium repens, is a small variety, but makes an exceedingly sweet and rich pasturage for cows. Where improvement of the soil is the chief end desired, and especially if the crop is to be plowed under in bulk for that purpose, the large red clover, commonly called Pea-vine clover, is worthy of attention. The experiments with Alsike clover have not proved it as valuable as the older and more generally cultivated kinds.

Monroe Co., N. Y.

Farm Topics.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

THE sight of thirteen Duroc and Victoria breeding sows, with a host of young pigs, led Esquire Davidson to exclaim, "If I had so many hogs I should go crazy!" It does take considerable to feed such a lot of hogs, but the keeping is not expensive when one has made calculations beforehand. Our pigs now live entirely on raw pumpkins, and many of them are fat enough to butcher. Before being fed pumpkins, they ran in the orchard and fed on the apples which dropped off and on grass. Before the apples began to fall, they had nothing but the grass. As soon as the pumpkins are fed out, one of the corn-fields will be cleared of corn, and they will all go in there to pick up the scattered ears and to eat the turnips which were sown amongst the corn. By the time the corn-fields are stripped the root-ground will be ready for them, and here they will thrive quite into the winter, eating the tops and refuse.

All this time the old hogs will not be fed anything extra, but the young pigs are taught to go into an inclosure where they can get all the corn they want. Mangels and sugar-beets will constitute the bulk of the winter food, with a change to apples and a light feed of corn. The turnips in the corn lots are now growing fast, and what the pigs do not eat will make rich manure. A pound of turnip seed costs this year seventy-five cents, and sown broadcast on the surface, required no labor but that of sowing. The first shower works the seed in, and the crop is started. It needs no attention afterwards. Counting the cost and labor, there is no crop which will pay better, and with lots of turnips and other roots, forty sows and pigs will not worry us, but, on the contrary, afford a satisfactory prospect.

The girl says the chickens, when she dresses them, are bloody inside. This is because their necks have been wrung. If the heads had been cut off, they would have bled freely and the bodies would have been emptied of blood. Wringing the necks tears the veins and arteries in two, and allows the blood to congulate readily and thus stops the flow. A clean cut would not do this. This is the reason why, in castrating an animal, the cords should not be cut off, or the umbilical cord on the young, but both should be scraped apart and then scarcely any blood will flow.

We are shipping our apples to New York by the canal. It costs fifteen cents a barrel to send them from Schenectady, 166 miles, and ten cents to have them sold when they arrive. The barrels cost fifteen cents and we pay ten cents to have the apples picked. This foots up fifty cents cash out for each barrel with no charge for barreling and hauling. If they net us $1 a barrel we shall be satisfied. This year we have picked the apples and placed them in small piles under the trees, where they remain until put into the barrels. Some of the neighbors have barreled them up and left them in the orchard until the cold weather comes. It is not a good plan to put them in heaps inside of a building, as they will heat and rot. An old fruit-dealer used to head them up in the orchard as soon as picked, and then stow them away in the cellar until wanted. He said this was the best plan. He was careful to have all the barrels dry, and his theory was that the barrels absorbed the moisture from the apples and kept them in just the right condition. Apples are ripening earlier than usual this year, and if people are not careful, they will lose a great many on this account. Many Greenings are now fit to eat, and this is two months sooner than they often are. The hot, dry weather has hastened their maturity. We shall leave our apples out of doors as long as possible, believing they will keep better than if housed; anyway it will be less trouble to look them over.

We are going to take courage for the future, as not a single pear tree has blighted among a thousand. Perhaps there will be another thirty years' interval before blight comes again.

The big, heavy-bodied fowls are apt to bruise the bottoms of their feet, causing blind ulcers, which make them very lame. We never had one get well, although we have applied liniments. A Dorking rooster had these humble-foot or ulcers on two of his toes. We cut the toes off and seared the ends. He is getting well. The ulcers would have killed him.

Everywhere.

FLORIDA NOTES.

THE health of most parts of Florida is good. We have had no cases of yellow fever excepting a few at Key West, which were brought there on vessels calling at that port. Crops of all kinds were excellent before the storm that lately swept over the Peninsula. This lasted three days and nights, and prostrated a great deal of sugar-cane, damaged the cotton crop very much in some places, and laid low a good many bahana stalks and blew off a great many oranges, etc. Moreover, the floods in the southern part of the State drowned much stock of all kinds and destroyed crops, fences and buildings. I have been traveling over two years in the Land of Flowers, most of the time over what is known as the Peninsula of Florida; and for the benefit of those who contemplate moving from the frigid North to this delightful climate, I can cheerfully recommend what is known as the Lake Region for orange and fruit culture, as well as for health, good water, and pleasant situations for homes.

This Lake Region embraces a belt of land about one hundred miles in length, and twenty or thirty miles in width, from which the water flows into the Gulf and Atlantic, so that it is the highest land in the State. This belt is the home for the Orange and the whole citron family of fruits, the trees having suffered less from the exceptionally cold weather, two years ago, than they did two hundred miles south of here. This was owing to the numerous lakes and elevations hereabouts. Most of these lakes are of pure spring water, abound with the finest of the finny tribe, and nature could not have formed more beautiful situations for orange groves, or for family residences, than those which surround many of them. This remark is especially true of Clay, Putnam and parts of Bradford counties. The people in these counties are becoming much elated with the prospect of a railroad being built to run from Palatka on the St. John's River, or from the Halifax River, by way of Palatka and the Lake Region to Lake City in Columbia Co.; this would give all of the country on the Halifax and Indian Rivers, and all of the upper St. John's River, an outlet for freight and passengers. There is also a prospect of a ship-canal being built from Matanzas Inlet, on the Atlantic, to Fort Waller at the month of the Suwanee River, on the Gulf coast. This would afford the shortest route from New York to New Orleans, being over one thousand miles less than the route now sailed. Moreover, all those dangerous reefs around the southern coast of Florida, would by this route, be avoided, saving millions of dollars annually in the way of shipwrecks, extra insurance and freight, besides the loss of time and many lives incurred on the outside route.

TH. PENOYER

RURAL SPECIAL REPORTS.

ORLEANS CO., VT. Sept. 13, 1878.

I HAVE had the Lady Elgin in fruit for several years; the trees were received direct from Dr. Andrews. It is of good flavor and keeps pretty well, but it never becomes soft, and it is too small. The Marengo is another failure here—so complete that it is difficult to make anybody who sees it believe that it can be good anywhere. The Van Wyck Sweet—trees from Maxwell Bros. —has fruited with me this year. The fruit is good and of good size, but in neither respect superior to Pringle's Sweet, while the tree is much inferior in point of hardiness—indeed it is too tender for our severest winters, and probably will prove a total failure in Minnesota and the colder parts of Wisconsin. There is quite a number of Sweet Crabs: Beebe's Sweet of Minnesota has not yet fruited with me, but it is highly recommended. Chase's Winter Sweet is of fair size and quality, and keeps as well as Tolman Sweet. I have tried over 100 Siberians, and the best of them all is Meader's Winter, figured seven or eight years ago in the RURAL, and described by F. R. Elliott. See out, 728.

H.

KANAWHA CO., West Va., Nov. 6.

WE need at least a thousand copies of the RURAL in this part of the country. If the people would get them, read them, and follow their suggestions when applicable to their circumstances, there would soon be a great improvement in all branches of agriculture hereabouts; but, alas! we are half a century behind the times. We have land that was good fifty years ago; it has been planted with corn or wheat every year since then and still some of it yields 30 bushels to the acre of corn; but most of it is badly worn out. We have everything, except a progressive spirit, to make a good farming country—coal, timber, iron, a fine climate, a healthy location. But not one-fifth of our hill lands is cleared yet, and good hill land can be bought for from $3 to $10 per acre.

SHERMAN, Chautauqua Co., N. Y., Nov. 5th.

THE first snow of the season fell here on October 23d, but it was only a sprinkling. The weather this fall has been fine, indeed. Farmers have had a golden opportunity to do fall plowing and ot[illegible]. Corn was a good crop; but we

have few apples and potatoes. Turnips and beets are also good crops. Butter is worth from 18@20c. per lb; eggs, 16@18c. per doz; wood, $1 per cord; hemlock lumber, $6 per M.; corn, 60c. per bushel; oats, 25@28c; wheat, $1; buckwheat, 50@60c; honey, 20c. per lb.; flour, $5 20 per bbl. M. L. D.

OFFERLE, Edwards Co., Kan. Oct. 28.

WE have had a long dry term here and it looks dark for the next crop of wheat—no rain since harvest. I have just taken 160 acres of land and put in 24 acres of wheat, but if I have to replant in the spring, times will be pretty hard on this farm at any rate. This part of Kansas is filling up very fast and, with few exceptions, with a very intelligent and industrious class of people. But it requires time, money and patience to develop the resources of even a rich land like this. W. A. S.

GRAND RAPIDS, Mich., Nov. 5, 1878.

I SEE the Longworth's Prolific Strawberry is referred to in some papers as fulfilling the requirements of an ideal Strawberry. There are some things, however, which are indescribable by any words in the English language, and a good "strawberry" taste is one of these. Hence I shall await a taste of the Longworth before casting a vote for or against it, for hitherto I have never seen it. C. W. G.

RIDGEFIELD, Conn., Nov. 4, 1878.

This is called the Gem of Conn. The fall so far has been unusually pleasant and mild. There have been a few frosts. Pastures all the season have been fresh and green. Crops are luxuriant. Prices are: wheat, $1; corn, 56c.; potatoes, 75c. per bushel; butter, 25c. per pound. K.

IOLA, ALLEN CO., Kansas, Oct. 30, 1878.

CROPS hereabouts are unusually good with the exception of spring wheat and potatoes; rust injured the former, while dry weather made the latter a very short crop. Wheat, 50 to 75c.; corn, 20c.; oats, 16c; potatoes, 50 to 75c.; cattle, $3 50; hogs, $2. H. M. S.

SPEEDSVILLE, Tioga Co., N. Y., Nov. 2.

PLEASANT weather and some hard frosts, and a very little snow on the last night of October. Farmers are plowing, husking corn and making cider for their own use; very little of it is sold; it brings only $1.00 a barrel; apples are only 15 to 20 cents a bushel. L. C. L.

CORNING, Steuben Co., N. Y., Nov. 2, 1878.

QUITE cold but pleasant; ground froze night before last for the first time this fall. In my "report" on page 682, I find the price of oats to be quoted somewhat higher than they should be; it ought to read 25c. instead of 50c. F. H. D.

STARK CO., Ills., Nov. 3, 1878.

THE weather has been very fine this fall. Farmers are busy harvesting their corn and preparing for winter. Pork is from 2½c; to 3c. per pound; hay, $14 per ton; potatoes, 50c. per bushel; new corn, 20c. per bushel. H. E. M'C.

Miscellaneous.

WHAT OTHERS SAY.

APPLES FOR PENNSYLVANIA.—Secretary Edge, of the Penn. State Board of Agriculture, records the following, as according to the votes of his correspondents, the best apples—summer, fall and winter:

SUMMER.		Strawberry,	6
E. Harvest,	192	Vandevor,	6
Red Astrachan,	124	Porter,	6
Bough,	70	Fameuse,	4
Townsend,	18	WINTER.	
Benoni,	10	Baldwin,	118
Doane,	6	R. I. Greening,	98
Red Stronk,	5	N. Spy,	78
Culoh,	4	Smith's Cider,	42
FALL.		Rox. Russett,	40
Malden's Blush,	101	King of Tompk. Co.,	40
Smoke House,	94	Seek-no-further,	38
Rambo,	70	Romanite,	18
Queen,	61	Swaar,	8
Fallwater,	54	Spitzenberg,	8
Gravenstein,	18	Ben Davis,	4
York Imperial,	10	Newtown Pippin,	4
Wineap,	8	Ridge Pippin,	4
Doctor,	6	Rome Beauty,	4

KEEPING APPLES.—Upon this subject the Germantown Telegraph says: 1st.—Apples to be good keepers, must be free from bruise or blemish. 2d.—They must be spread out on shelves or packed in barrels, and kept in an atmosphere of from forty to fifty degrees, better from forty to forty-five—that is at a temperature as equable as possible. Some cellars are just the thing and preserve them beautifully. Others are too moist. Where this is the case a few bushels of stone lime should be used. Sliding shelves, six inches apart, latticed bottom with a single layer of fruit, are extremely convenient, as they allow of constant examination without disturbing the fruit. A friend informed us some years ago, that with a large stand of these shelves in his cellar, with a few inches of lime on the bottom of the cellar, he kept his apples into May in perfect condition and of good flavor.

APPLES.—Mr. M. B. BATEHAM said at the last meeting of the Ohio Horticultural Society, that a serious drawback to the profitable culture of Apples is the fact of heavy and light crops in alternate years, causing a glut in the market at one time, and a scarcity the other. He gave the following figures to show the great disparity in different years:

1874, bushels of apples in Ohio			15,918,794
1875,	do	do	1,530,049
1876,	do	do	29,619,200
1877, estimated,		do	3,000,000

He proposed early thinning in abundant years, and keeping orchards in a thrifty state of good culture. The codling moth is a formidable enemy to the apple crop, and the best modes of preventing its ravages have been a continued confinement of sheep and swine in the orchard through the entire season of growth and for successive years, with the additional aid of paper bands around the trees for the capture of the insects.

LOW TOPS FOR FRUIT TREES.—Several writers have lately presented their views of the merits of low tops for fruit trees in the agricultural Tribune. It is a good plan for dwarfs, and also for such standards as are of upright growth, Mr. Charles Downing comments, but the branches should not be less than two feet from the ground, and three would be better. For standard trees of the kinds which have a spreading habit, the branches should not be less than four feet from the ground, and five is better, because when loaded, the branches with the fruit will lay on the ground, and of course the fruit is worthless for eating or cooking. It is true that the body of the tree is injured where exposed to the sun both winter and summer, but in most cases at the hight here named the branches will shade the bodies, and if not, a piece of cloth or stiff hardware paper tied on, will answer the purpose of sufficient protection.

HINTS ABOUT HORSE-BITS.—A writer in a German contemporary strongly counsels horse owners who study the health of their cattle to banish from their harness-rooms all bits but straight ones of the simplest possible construction. Through a long series of years he found, from practical experience, that powerful young horses frequently fell off in condition without any appreciable cause, their food being plentiful and of the best quality, and no symptoms of general ill health being apparent. On searching carefully for the cause of this state of affairs, he found, in nearly every instance, that the horses' tongues had been more or less injured in consequence of the employment of curved, jointed, hinged, or otherwise complicated bits. The sore and tender condition of so sensitive an organ as the tongue, necessarily prevented the animals doing justice to their food, and short rations with the usual amount of work, naturally led to a loss of condition. Unfortunately the mischief generally escapes attention until it is tolerably far advanced.

OF how much "stuff" is published by the best of Horticultural Journals the following bit is suggestive:—

Smilax.—For rapidly covering large spaces of wall the hardier species of this genus are well adapted, being very elegant, and not of such a common aspect as Ivy. There are several North American species, of which the most suitable are S. rotundifolia, glauca, and tamnoides, all readily procurable at nurseries, and growing in almost any kind of soil.—*London Gardener's Chronicle.*

This Smilax is our Greenbriar. S. rotundifolia forms impenetrable thickets in our woods, and is armed with prickles. It is just about the last plant we should care to select for ornamentation. Glauca and Tamnoides are of the same feather.

KEEPING FRUIT IN SAND.—A writer in the London Garden says that he keeps fruit in this way all the year round. He has had French crabs two years old. The Catillac pear has remained sound twelve months. The fruit must be sound when stored, and the sand must be quite dry. The chief advantages of packing in sand are, the exclusion of air currents, the preservation from changes of temperature, and the absorption of moisture which favors decay. Much will depend on the apartment in which the experiment is tried, a dry or cool one being best.

PROMOTING FRUITFULNESS.—The London Garden says that the best way of converting vigorous but unfruitful pear trees, or such as produce fruit of inferior quality, into remunerative ones, is to head them down while the sap is dormant, and to re-graft on all the extremities as soon as it begins to flow in spring with some tried sort. The double grafting will be certain to induce fertility, and in a few years the produce will exceed what it is possible to obtain by any less radical measures.

DUCHESSE ON SANDY SOIL.—A writer in the Weekly Tribune says that of the pears grown in his poor sandy soil this season, some Duchesse d'Angoulome weigh twelve to fifteen ounces, and are ten to twelve inches in circumference around the base and about the same from the top around the bottom. They are of fine flavor and very juicy. He thinks he deserves credit for proving this, for all the writers on fruits, from A. J. Downing to the present time, have asserted that good pears could not be grown on a poor sandy soil. He has only moderately fertilized the soil on which these pears are grown.

YEARNINGS.—Under this heading a writer in the Phrenological Journal says:—"We have all seen fools in high places, to which wise men—moneyless—dared not aspire. We know how the politician buys his triumph, and how mean measures make their way. We know how "patronage" keeps merit from its due and makes it yearn its life away. The least conscientious will push and scramble, and override the considerate, and we have either to fight them with their own weapons or let them take precedence of us. We dispise their weapons and so they go ahead.

INDELIBLE INK.—The London Garden gives the following recipe for indelible ink for zinc labels: 12 to 16 grains of bichloride of platinum dissolved in one ounce of distilled water.

DUCHESSE D'ANGOULEME.—"It has been remarked," says Mr. J. J. Thomas "that when this Pear weighs less than four ounces it is worthless in flavor."

NOT ON END.—The Journal of Chemistry says, the barrels in which fruit is stored should not stand on end; pile them up one upon another, the ends horizontal.

LOUISE BONNE.—A writer in the Maine Farmer thinks that Louise Bonne de Jersey on Quince, leaves nothing to be desired in the way of a Pear.

BOOKS RECEIVED.

PRIZE LIST of the Chicago Fat Stock Show to be held in the Exposition building, Chicago, from the second to the tenth of December, 1878. We have several times already commended this exhibition to the best attention of our readers. The list of premiums offered for choice Shorthorns, Herefords, Devons and other pure breeds as well as for grade cattle, and also for different varieties of sheep and swine, is liberal, and we trust that our readers living within a reasonable distance of the western metropolis, will become either exhibitors at the show, or at least, visitors to it. It was originated by the State Board of Agriculture, under whose auspices it will be held. It is not intended to be merely a local show, but its aim is to be national.

AMATEUR'S HANDBOOK of Practical Information for the Workshop and Laboratory. This is a handy little book, containing clear and full directions for bronzing, lacquering, varnishing, tempering tools, waterproofing, and a host of other matters of convenience and utility in every household. A copy will be sent post-paid for ten cents by the Industrial Publication Company of this city.

CIRCULAR from the General Land Office showing the manner of proceeding to obtain title to public lands under the Preemption, Homestead, Timber Culture and other laws. This pamphlet of 68 pages would be useful to all who may be intending to settle on the government lands out West, or elsewhere. It is sent out by the General Land Office, Washington, D. C.

PAMPHLET of 12 pages descriptive of the course of study at the College of Agriculture connected with the University of Minnesota, at Minneapolis in that State.

CATALOGUE of Veterinary Instruments manufactured and imported by John Reynders & Co., 303 Fourth avenue, N. Y.

The Querist.

ANSWERS TO CORRESPONDENTS.

Money at two per cent. per Annum.

Phenix, Elora, Pa., and others, referring to a late Editorial in the RURAL, in which it was stated that money is lying in the banks ready to be loaned at the rate of two per cent. per annum interest, wish to learn where money can be borrowed at that interest on good security. Having previously seen with suspicion such statements in newspapers, it is asked whether the RURAL also might not have thoughtlessly ventured upon a misstatement on this point.

ANS.—The rate of interest here referred to, is that asked for what is called "loans on call," or "call loans," with the best kind of collaterals. In all loans of this kind the money loaned must be promptly forthcoming immediately on demand, without any notice; and the loans are generally made only for from a day to a couple of weeks or so. The security must be deposited with the lender, and must be of such a nature that it can be instantly converted into cash, in case the borrower fails to repay the loan promptly on demand, and must always be valuable enough to leave a margin over the sum borrowed. For instance, a man wants $100,000 for a few hours or days, or weeks, it may be; he has bonds and other securities worth more than that sum, but he doesn't want to sell them on account of a mere temporary pressure. Well, he goes to his bank, deposits there U. S. or other bonds worth $110,000, and borrows the sum he stands in need of, promising to repay on demand. The money will lie idle in the bank's vault unless it is loaned, and accordingly, under the circumstances, the bank can afford to lend it at a low rate of interest. Frequently, however, when business is brisk, and money therefore in demand, the interest on just such loans is as high as at the rate of four or five per cent. per annum.

Prickly Comfrey—Alfalfa.

N. C., Berlin, Conn., asks 1. the botanical name of Prickly Comfrey and whether it is suitable for a forage plant. 2. Would Alfalfa be likely to thrive well in that locality, and where could the seed be obtained. 3. Is it a good time to prune pear and apple trees this fall.

ANS.—1. The botanical name of Prickly Comfrey is Symphytum asperrimum. We have tried it thoroughly, and found that none of the stock on the farm would touch it. Nevertheless, others praise it as a forage plant. These say that after a little forcing, stock will take to it kindly, get to like it and thrive well on it. We did not use the forcing process with our animals.

2. We cannot say whether Alfalfa will thrive so far north. It is reported by one party to have done well as far north as Herkimer Co., N. Y., yet we know of a case where it was winter-killed in New Jersey, while red clover planted beside it, was uninjured. It must have a deep, mellow soil, and the best practice is to sow it in drills from 18 to 30 inches apart. It should be cropped but lightly the first year, if at all; in its third year it is in full bearing, and may afterwards yield from three to five crops each season for an indefinite length of time. It must be planted from March to May, and the earlier the better. The seed can be had from most extensive seed dealers, such as R. H. Allen & Co. or Thorburn & Co. of this city. Should our correspondent make a small experiment next spring, we should like to learn the result.

3. Yes.

Dynamite Cartridges: Carbonate of Soda Preserving Milk.

G. W. Grant, Oceana Co., Mich., asks 1. Where are dynamite cartridges made, and from whom can they be purchased; 2. having read, in a former number of the RURAL, that carbonate of soda put in milk would keep it sweet a longer time, he inquires how much of it should be put in a gallon of milk.

ANS.—1. Dynamite cartridges are made by the Atlantic Giant Powder Co., of this city, among others, and can be procured of Varney & Doe, 61 Park Place, New York.

2. To put carbonate of soda in milk prevents or corrects acidity; sometimes the milk is slightly acid when drawn from the cow and, of course, it soon sours in that case. Otherwise it sours soon in warm, damp weather. A pinch of carbonate of soda dissolved in a gallon of milk will correct the slight acidity in the first case. To prevent acidity from occurring for 36 hours in very warm weather, one-fourth of a teaspoonful may be used to a gallon of milk.

Miscellaneous.

A. H. Huffman, Huntington Co., Ind, asks 1. where can seeds of Catalpa be purchased. 2. Should apple and pear seeds be kept dry. 3. When should they be planted. 4 Could seeds of trees or small seedlings be obtained from their native wilds.

ANS.—1. Of Thorburn & Co., N. Y. City.

2. They may now be obtained at Cider Mills. Place the seeds in sand slightly moist. (3) and sow in the spring. The box containing seeds may be buried or kept in the cellar.

4. Yes, but the seedling fruit would be worthless. The wild trees could only be useful as stocks upon which to graft.

S. D. Hartwell, Walworth Co., Wis., asks how to get rid of a plant, called Box Wood thereabouts, a specimen of which he sends us. It covers a good part of the cemetery, and is spreading into the adjoining fields. When mutilated, a white sap exudes.

ANS.—This is Cypress Spurge, Euphorbia Cyparissias, a European plant sometimes cultivated in gardens, and thence escaping to fields and roadsides. Cutting it to the ground frequently with lawn-mower or sickle will destroy it.

E. F. M., Beverly Farms, has a golden leaved Holly, some of whose branches are covered with leaves while others are entirely naked and apparently dead; and inquires how it may be rejuvenated throughout.

ANS.—We could only advise taking it up, examining the roots and replanting in a leaf-mold soil.

M. M. R., North Greenwich, N. Y. sends a leaf and asks the name of the plant from which it was plucked.

ANS.—It is probably a species of Chamæpeuce, a sort of thistle. The specimen is imperfect, as the flowers also should have been sent, to enable us to come to a right conclusion.

C. S. Greenpoint, N. Y., asks whether vines should be pruned after the first frost, such as visited that place on the 5th inst.

ANS.—Yes.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, NOVEMBER 9TH:

A. L. J.—S. A. W.—F. H. D.—S. C.—E. M. C.—C. O.—D. S. B.—F. R. B.—D. E. S.—W. B. D.—W. P. L. D.—S. I. P.—B. P. M.—S. L. F.—R. G.—L. I. G.—J. H. H.—S. R.—R. B.—W. H. N.—H. S.—K.—E. H. S.—M. L. D., thanks—T. H. G.—A. F. M.—H. H.—R. H.—J. W.—S. D.—A. C. H.—M. B. D.—W.—W. J. B.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Fruit Trees and Fruit on the Farm—Henry Stewart... 725
A Few Words About Apples and Pears—T. T. Lyon... 726
A Nurseryman's Selection of Apples for an Orchard—Ira. J. Blackwell... 726
The Apple Orchard—Clinton... 727
Some Notable Apples—(Illustrated)... 727
Lady Elgin Crab—(Illustrated)... 727
Stump Apple... 727
Grand Sultan Apple—(Illustrated)... 727
The St. Peter's Apple—(Illustrated)... 728
The Fanny Apple—(Illustrated... 728
How far shall We go in the Attempt to Create a Demand for Fruit of the Best Quality?... 728
Bonne Du Puits Ansault Pear... 728
Pear Culture in Nebraska—Ex.-Gov. R. W. Furnas... 728
Twelve Good Market Varieties of Peaches—J. W. Kerr... 729
Sallie Worrell Peach... 729
Fruit Notes From Nebraska—B. H. Crane... 729
Experiments in Planting Corn—F. Hodgman... 729
Milk Record of Jerseys... 729
Grape Leaves—No. 3—W. C. Bellamy... 729
Clover for American Farmers—W. J. Fowler... 730
Jottings at Kirby Homestead—Col. F. D. Curtis 730
Florida Notes—F. H Penoyer... 730
What Others Say... 731

Everywhere:

Orleans Co., Vt... 730
Kanawha Co., W. Va... 730
Sherman, N. Y... 730
Olferle, Kansas... 731
Grand Rapids, Mich... 731
Ridgefield, Conn... 731
Iola, Kansas... 731
Corbing, N. Y... 731
Stark Co., Ill... 731
Books Received... 731

Answers to Correspondents:

Money at Two per-cent Per Annum... 731
Prickly Comfrey—Alfalfa... 731
Dynamite Cartridges—Carbonate of Soda Preserving Milk... 731
Miscellaneous... 731
Communications Received... 731

EDITORIAL PAGE:

Apples Bearing Alternate Years... 732
Agricultural Literature... 732
Timely Hints... 732
Brevities... 732

Domestic Economy:

Pen Thoughts from Every-day House—Annie L. Jack... 736
Rag-Carpets—Mrs. S... 736
Domestic Recipes... 736
Questions Answered... 736
Notes... 736

LITERARY:

Poetry... 733, 735
Weaker Than a Woman... 733
Mrs. Purdy's "Parquisites"... 734
Magazines... 734
Letters from a Country Girl—Margaret B. Harvey 735
Why Should Farmers not be Legislators?—H. N. B... 735
Finish it Off—Mrs. J. M. McC... 735
Talks on Timely Topics—Rose Geranium... 735

Reading for the Young:

Singing Mice—Henry Lee... 738
Learning to Spell—W... 738
Letters from Boys and Girls... 738
Puzzler... 738

Sabbath Reading:

Stability of God's Church... 738
Serving the Lord With Gladness... 738
Be Strong in the Grace that is in Christ Jesus.. 738
News of the Week—Herman... 736
Personals... 736
Wit and Humor... 740
Markets... 737
Advertisements... 737, 739, 740

THE
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SATURDAY NOV. 16, 1878.

We shall issue our premium List as a supplement of four pages next week. Notwithstanding the reduction of our paper from two dollars and a half to two dollars; notwithstanding our free seed distribution which, at our lowest estimate, will require us to supply two hundred thousand envelopes of seed, we have never before offered so valuable a premium list, or one in which the articles were scaled so low. They will be found to be as represented, and so varied that everyone may find something that he needs. All may rest assured that $2.00 is the very lowest yearly subscription to this journal either in clubs or any other way. Those sufficiently interested in the RURAL'S welfare to be willing to secure clubs, will be entitled to a cash commission or to select suitable articles from the premium list, which are, of course, more valuable to those who wish them than a cash commission, since they are in part paid for by those who find it advantageous to advertise in our columns, and we are therefore enabled to offer them for less than their market value.

Our readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

Many of our friends continue to send us Two Fifty instead of *Two* Dollars, the new price of RURAL. In such cases we will either refund the fifty cents or make the subscription term fifteen months, as may be preferred.

Our Free Seed Distribution will remain open to all subscribers who may apply for them, until further notice.

THE RURAL NEW YORKER *is invariably discontinued at the end of the subscription term.*

APPLES BEARING ALTERNATE YEARS.

There seems to be much more mystery made about this question, of the reason why apple trees produce most of their fruit on alternate years, and in most localities, North, on the odd years, than there is any need of. Let us look into it a little, and see whether there are not good reasons for it, sufficiently obvious to one who will think a little, if not exactly on the surface of things.

In the first place, nature and the pomologists agree in dividing apple trees into the two classes, of profuse bearers on alternate years and of moderate annual bearers. There are two other possible classes on this basis,—the shy bearers every year, and the profuse bearers every year. But the first of these are not knowingly planted to any great extent, and the second are few in number, and, except in very favorable localities, short-lived; for they soon die of over-bearing. The question, then, as regards the first great class, resolves itself into the one why the profuse bearers on alternate years all get to bear, or not to bear, together. Plainly, it seems to us, for climatic causes. Take a young orchard, for instance, and it does not show this peculiarity for several years after it comes into bearing. Then comes a season that, by winter injury or spring frosts, destroys the fruit-buds or the bloom, and that year there are but few apples, and afterwards the trees in that orchard, so far at least as the biennial bearers are concerned, bear, or do not bear, simultaneously. The moderate annual bearers do not fall into line with them; but, for the reason that they *are* moderate bearers, and that on the off year of the biennial trees all the insects are concentrated upon them, they have little effect upon the aggregate production of the year.

Now about the "odd year" of which so much has been said and written since Mr. Cole brought up the subject, and persistently kept it before the public in his paper and in his "American Fruit Book." It is plain that if our first explanation is correct, namely, that climatic causes are the causes that unify the bearing of the biennial bearers, then, as there *are* only odd and even years, the year on which they bear must be either an odd or an even one. Now, in Mr. Cole's time the main bulk of the commercial orchards of the country were contained in the district comprising southern New England and the country south of the great lakes, extending down into Pennsylvania. The climate of this section is quite uniform, the same changes or "waves," as they are now called, occurring at the same time over the whole of it, with slight local exceptions. Consequently the orchards were brought into line by the climate, and mainly bore the same year, which happened to be the even year. That this was not a rule without considerable exceptions, was plain from the many contradictory examples brought out in the controversy raised by those who discussed the matter; yet substantially it was demonstrated that the even year was the bearing year, *with exceptions.* As apple culture has extended into climates more or less diverse from that of the section referred to, the exceptions have increased. Yet even now, that section produces so large a percentage of the whole crop that failure there has a great effect upon the supply, and the consequent prices of fruit. But there are now large areas where the odd year is the bearing year; and for this reason, though prices are higher on the odd years, the country is tolerably well supplied with apples every year. This will be increasingly so as soon as some sections of the South, excellently adapted to orcharding, have developed their capabilities in that direction. And the same may be said of a considerable section North, if the attempt to carry orcharding into successful operation there on a large scale, by the introduction of hardier varieties, attains the success that is hoped for, and already partly realized.

Now there is an important corollary to be drawn from the above stated facts, which is worthy the attention of fruit growers, namely, that no human efforts can alter the bearing year. It now happens to be, over a large area, the *even* year. A freak of climate may change it to the *odd* year over the same area, but nothing else can. High culture will compel some varieties that are naturally biennial to become annual bearers, but all fruit produced on the years when the majority of orchards do not bear, will be inevitably subject to an onslaught of insects which will greatly injure the crop. Some orchardists maintain, with a show of reason, that for this reason it would be better if not an apple were grown the odd year, where the even year is the bearing year, or on the even year, where the odd year is the year of fruit.

AGRICULTURAL LITERATURE.

According to the newspaper statistics sent out by the advertising agencies, the combined circulation of the agricultural newspaper press is about 600,000, which, as the census reports 6,000,000 farmers in the Union, is about one copy to every ten farmers.

It used to be queried in England, with a contemptuous accent and a supercilious wrinkle of the forehead, "Who reads an American book?" They have got over all that, what with the popularity of our poets and historians across the sea; but the question "Who reads an agricultural book?" still awaits a satisfactory reply. The agricultural book trade is about the very smallest branch of the great business of publication, and though the book-agent pervades the land, and knocks often at the farm-house door, it is with a volume of Mark Twain, or of some popular theologian,—it is never with "How Crops Grow," and "How Crops Feed," of America's great agricultural chemist, or with Downing's "Fruit Trees of America," that he beguiles the scrip from the farmer's pocket. He knows his market and equips himself accordingly. He may sell the life of some general or politician, or even of "Josiah Allen's Wife," but the lives of the great farmers, stock-breeders and horticulturists are still unwritten, because nobody cares to read them. When we see the portraits of Liebig, of Johnson, of Lawes, Bates, Bakewell, Hammond, Downing and Thomas, looking down upon us from the walls of the farmer's sitting room, and their lives and writings in his hands, or upon his table, we shall expect to see a surcease of leading editorials in our agricultural exchanges upon that well-worn topic, "Does Farming Pay?" "Reading," says Bacon, "makes a full man," but too many of our farmers, as yet, prefer to be full of bacon rather than of Bacon's wisdom,—or of the wisdom that is profitable (if they only knew it) to the production of bacon and beef, or of cream and peaches.

Timely Hints.--If there is a likelihood of your barn blowing down during the coming winter, or of its falling to pieces of its own accord, it would be well to prop it up! Of course, *all the cracks should be stopped up*—but it might be well to bear in mind that a nail hole or so might be left as ventilators, so that the animals will not be in danger of smothering to death! We would like much to vary our *Hints* from week to week and from month to month, so as never to repeat the same suggestions. If we have ever before advised "stopping up the cracks," we trust the importance of the advice will prove a sufficient excuse. The origin of cracks has never, that we know of, been scientifically investigated. Are they of fungoid origin? Are cracks in the barn related to Pear cracks? What a field for scientists! Whatever the origin of cracks, no doubt the intelligent farmers of the country are under a load of obligations to agricultural editors who never fail to warn them of the best time to stop up those in their barns. Without this timely advice, we must suppose the barns of our country would be all cracks. If we could only ascertain the *cause* of cracks and wipe the cause out of existence, there would then be no occasion for stopping them up. That is plain. We have a mind to call the attention of Congress to this subject in the hopes that an adequate sum of money may be appropriated for its *thorough* investigation.

BREVITIES.

"You are a dwarf beside me," said the Quince to the Pear.

A barrel of fine apples or pears is a sensible holiday present.

A temperature of just 32° Far. is probably the best for keeping apples.

Ex-Gov. Boutwell thinks borers are the cause of "yellows" in the peach.

Now is as good a time as any to apply manure to fruit-trees, and there is none better than barn-yard.

Mr. Downing says, in reply to our inquiry, that the Bourrassa is said to succeed well in Canada, but is not profitable here, although of good quality.

The Madeleine Pear is said to have derived its name from ripening about the period of the fete of St. Madeleine.

For our part, we wish the Duchesse (her of Angouleme we mean) had remained in the hedge near Antwerp where she was born.

Ah! Mon Dieu or *Poire d' Abondance* is a Pear that was much esteemed in France and England twenty-five years ago.

For Apples and Pears which thrive best throughout the various parts of the country, see RURAL of Nov. 17, 1877.

Mr. Meehan inveighs against the weight of name that the excellent pear Bonne du puits Ansault bears. It is *well* and *good.*

Andre Leroy (Angers, France) is probably the most extensive nurseryman in the world. He recommends the general cultivation of Russian Apples.

Thousands of pages have been written and published about the horizontal training of pear trees, all of which to practical men in this country, might as well never have been written.

Anybody that reads the many reports of Pomological Societies and all of the pomological books that are published, will be forced to the conclusion that new ideas of value come very slowly.

Mr. Downing writes us that he thinks many western apples, such as Ben Davis, etc., which are now very large and fair, but not equal to ours in flavor, will, some years hence, when the virgin soil is somewhat reduced, not be so large and coarse-fleshed, but less in size, more compact and richer in quality.

The English papers think that it is not American cheese but English carelessness that will be the real reason of English dairy losses. They grant, however, that American importation is growing not only in quantity, but in quality, and it is only by manufacturing the best qualities that cheese-makers can now-a-days succeed.

Some love winter—Some love summer—But as for us, if we may be allowed freely to express ourselves, we would prefer fruit; that is, apples, pears, grapes, strawberries, raspberries, currants, blackberries and gooseberries. Plums are too pecurculio to be added to this list, and as for cherries, we are convinced that robins and cat-birds need them all.

Robert Douglas & Sons, so states the Prairie Farmer, sell about twenty millions of trees annually from their nursery in Waukegan, Ills. So far as we are aware, this is the most extensive evergreen nursery in the world. Last spring, Mr. Douglas sent us a number of "sports" of American Arbor-vitæ and other evergreens which are very distinct in character.

It is always well to plant dwarfs so that the quince stock is beneath the surface of the ground. The borer is especially fond of the quince—but not of the pear stock. Some plant dwarfs deeper than is necessary to elude the borer so as to induce roots to form on the pear stock, thus converting the dwarf into a standard. This seems to us objectionable for several good reasons.

Very little is said at present about the Paradise stock for Apples. This stock dwarfs the variety worked upon it as much as or more than the quince dwarfs the Pear. The Paradise-stock dwarf Apple can not be recommended for large growers or for market purposes, but for the garden or amateur, we can not hesitate to recommend it from the gratifying results of our own experience.

G. H. & J. H. Hale of So. Gladstonbury, Conn: call upon us to say that the Henrietta is a Seedling Raspberry and is everything that they represent it to be. That it resembles Belle de Fontenay and may possibly be a seedling of that variety, they do not wish to deny. They claim for it superiority over Belle de Fontenay in several respects which, they think, will become apparent after further trial.

We condemn the practice of heaping up the earth about the stems of fruit trees as generally recommended. Some say this mound will steady newly transplanted trees and will also tend to keep away mice. The only effects of this mound, to our thinking, are to soften the bark underneath, rendering it more sensitive to the alternations of freezing and thawing of February and March, and to induce sprouts from the parts so covered.

Some varieties of Apples are hard workers. Some are not fond of bearing progeny and prefer the lighter work of forming leaves and twigs. Some work so hard during one summer that they are forced to rest all the next. It is so with man and animals. After a hard season of work, a longer period of rest is needed. This is the "off" season of Apple trees and of animals too. It does not seem worth talking about in the latter case, but in the former it is a matter worthy of grave speculations.

Some of the Pears which succeed best as dwarfs (that is, grafted on the Quince) are Louise bonne de Jersey, Bourre d' Amalis, Glout Morceau, Duchesse, Vicar of Winkfield, Easter Bourre and Dearborn Seedling. In some places the Seckel thrives also much better on Quince. There are many that succeed well both on Pear and Quince. Of these we may mention Buffum, Tyson, Madeleine, Beurre Superfin, Rostiezer, White Doyenne, Jaminette, Bloodgood, Beurre d' Anjou, Urbaniste, Josephine de Malines and Doyenne Boussock.

Trees may be transplanted in winter during mild spells. But if not ordered from the nursery already, we should now, for this climate and farther north, prefer to wait until spring. Trees, however, may be heeled in now and then planted in the spring. For this purpose, dig trenches in dry places, as wide as the roots of the tree. Dig the trench in the form of an inclined plane and place the roots in the deepest part. Only the upper portion of the trees will then be above the level of the ground. Work mellow soil about the roots and fill until the soil of the trench forms a mound above the ordinary level of the earth. Here they will winter in perfect safety.

We earnestly request that all letters containing money, or any communication intended for the Business Department *of the paper, be addressed to the Editor, the Publisher, or* The Rural New-Yorker, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money*

Literary Miscellany.

A SIMILAR CASE.

JACK, I hear you have gone and done it,
Yes, I know; most fellows will;
Went and tried it once myself, sir,
Though you see I'm single still.
And you met her—did you tell me?
Down at Newport, last July,
And resolved to ask the question
At a *soiree*? So did I.

I suppose you left the ball-room
With its music and its light;
For they say love's flame is brightest
In the darkness of the night.
Well, you walked along together,
Overhead the starlit sky,
And I'll bet—old man, confess it—
You were frightened. So was I.

So you strolled along the terrace,
Saw the summer moonlight pour
All its radiance on the waters
As they rippled on the shore;
Till at length you gathered courage,
When you saw that none as nigh—
Did you draw her close and tell her
That you loved her? So did I.

Well, I needn't ask you further,
And I'm sure I wish you joy,
Think I'll wander down and see you
When you're married—eh, my boy?
When the honeymoon is over
And you're settled down, we'll try—
What? The deuce you say! Rejected,
You rejected? So was I!

[*Acta Columbiana.*

WEAKER THAN A WOMAN.

CHAPTER VIII.

THE autumn was come; the golden glory of summer had given way to it.

The little town of Lilford had experienced a social earthquake. The great trial of Lonsdale *versus* Hardman had been decided, and the verdict—no one but the twelve intelligent jurymen who gave it knew why—was against Darcy Lonsdale; the will was declared null and void, and the whole of the property was to be given to James Hardman.

That was hard; but hardest of all were the cruel things said by the plaintiff's counsel. Darcy Lonsdale listened to them like one in a dream. He heard all kinds of underhand motives attributed to him; he heard himself described as a conspirator, as one who had taken advantage of his position to influence a weak-minded woman. He listened to words which burned him, which branded him—which almost robbed him of his self-respect—which so completely bewildered him that, if he had been a weaker man, he would not have known whether he was guilty or not. The blameless life of which he was so proud, the blameless name which he valued above all other blessings, were bespattered. As he listened to the cruel words, which fell like molten lead on his heart and home, he could have cried aloud that it was all false—he had lived in Lilford both as boy and man, and all his old friends knew that he was incapable of doing any creature a wrong or an injury.

He called for witnesses. He might have made a far better defence than he did but that he trusted so entirely to the notion that his own innocence must be patent to all men. The verdict was against him—unjustly so, some said, for the judge had summed up favorably for him—and Darcy Lonsdale went home crushed and heart-broken.

Those were dreary days in Vale House.

"I shall never hold up head again," said Darcy Lonsdale with a deep sob. "I shall never look my fellow-men in the face."

That his old friends should have believed this of him pained the brave honest heart. He had a long illness, from which it was feared at first that he would never recover.

It was a dreary time. The business fell away; the town's-people said to each other, with a grave shake of the head, that they could not trust a man of whom such things had been said—they could not leave their interests, as before, in his hands. One after another the old names disappeared from his books. Men he had known all his simple life fought shy of him, avoided him—and the dreary time passed on.

Felix worked hard, but it was like rowing against an angry current. There were some gleams of comfort; one of them neither father nor son ever forgot.

It was an evening in October, dark and chill. For the first time the invalid had come downstairs, and the weight of anxiety upon him was like a weight of lead. Those were days of strict economy in Vale House. There was no tempting fruit for the feeble appetite. The best medicine that the invalid had were the cheering kindly words of his wife, the love of his son.

That evening Felix came home late from his office; he was tired owing to the hard work and ill fortune of the day. He fought nobly with misfortune, but he fought in vain. His kind face brightened when he saw a letter for him. It must be from Violet. Who would write to him except Violet? And despite all his sorrows his heart glowed as he thought of her, his beautiful love. Oh to escape, if only for one hour, and sun himself in the light of her presence! He saw her so seldom now. He was hard at work during the day, and the nights were too cold for walks and rambles. He occasionally went over to the Limes; but the welcome that he received there was not of the warmest, and he could not see Violet alone.

He took up the letter with a smile, and read it. It was not from Violet, but from her father, Francis Haye, saying that the marriage must be deferred for at least a year, as he was quite sure that under the circumstances Felix could not hamper himself with a wife. "Violet was," he said "of the same opinion, as he would see;" and indeed there was a rose-tinted, sweet-scented note from Violet—just a few lines—to the effect that she thought her father was right.

He laid the notes down with a feeling of burning pain, a thrill of passionate anguish that frightened him. Nothing on earth, no power of man, should take her from him. She was his own and he would hold her until life was ended. Then he owned to himself that Mr. Haye was right—cruelly right—that without money, with an invalid father, a failing business, he could not take a wife. It was right to defer it. He must be patient. After all, he had not lost her, he reflected. She was still his own.

There came to him a mad desire to see her, to caress the golden hair, to kiss the lovely lips that had on them the breath and the fragrance of roses, to clasp the sweet white hands in his own, to hear the music of the voice that had no equal—a wild, mad longing. He read her note through again to see if he had overlooked some kindly word, to see if she had written "my love." Then he thought, to himself, that the little note was written for her father to see—for his faith in her was great; he could not believe that her love for him was not as true and as fervent as his love for her.

"Have you some good news there, Felix?" asked the feeble voice of his father; and the next moment Felix had repressed the emotion so rapidly mastering him, as he crushed the letter in his hand.

"It is only a note from Violet, father," he replied; and the satisfied smile on his father's face rewarded him. Darcy Lonsdale knew that while Violet was true to his idolised son nothing else would hurt him.

They were alone—father and son—for Kate had gone to the nursery—when the hall-door bell rang. Felix said cheerfully—

"Here is a visitor."

"Few visitors will come here; we have lost a fortune, not found one," said Darcy Lonsdale, who had never spoken a cynical word before.

But it was a visitor, and one whom they were both well content to see. It was Evelyn Lester, with a basket of grapes and delicacies of all kinds for the invalid, and, what was better still, with the light of love and kindness on her sweet face, and with words of sympathy on her lips. As Felix saw her bending over his father, he half wished for a moment that Violet had done something like this—had come to see them in their distress. Then he blamed himself for wishing that she were other than she was. Violet was a goddess to be worshipped—Evelyn a mortal woman. He saw his father's face brighten as the girl's sweet voice soothed him with well-chosen words.

"I knew you would come, Eve," he said. "Felix place a chair for her close here by my side; it is like breathing the fresh air of May to look at you, Eve. Now tell me, child, something that will brighten me."

It was a pretty picture—the invalid lying on his couch, the girl with her sweet face and earnest eyes bending over him, and, watching them at a distance, the handsome son; the fire burned brightly, the lamps were lighted, while outside the north wind wailed mournfully.

Evelyn took up a bunch of ripe purple grapes.

"I want to see you eat some of these," she said. "Mrs. Lonsdale told me that you ate nothing yesterday." And taking the grapes one by one in her white fingers she held them to his lips.

How could he refuse? He was so weak and feeble, he had been so completely crushed by cruel words, that the girl's simple kindness moved him.

"I have been heart-broken, Eve," he said. "I do not care to get well."

"You will live it down," she returned gently; "and those who have doubted you will be the first to feel ashamed of their injustice."

"You have never doubted me, Eve?"

"Oh, never! How could I? I should doubt all the world first."

Then she rose from her chair and knelt down by his side; she took both his hands—such thin, worn hands!—in hers, and held them there.

"I came to say something to you, Mr. Lonsdale," she said; "and now that I am here I have hardly the courage. Promise not to be angry with me."

"I could not be if I tried, dear child," he replied.

"You have known me all my life," she said—"have you not?—ever since I came here, a little friendless child."

"Yes it is true, Eve."

"And you have always been kind to me. I have come to you in a score of childish troubles, and you were always kind to me. Now I want you to let me repay you for all your kindness." She spoke so quickly that he could not interrupt her. "I want to help you. You know that I have money, plenty of money, all lying idle—for I want none, and aunt Jane will not touch it. Do accept it; let me give it to you. I shall never want it, for I shall never marry. Do take it; you would make me happier than any one in the wide world if you would. I am so grieved and so sorry that I would go out and work for you if you would let me. If you will not accept it, borrow it until you can repay me. Do not refuse me—let me help you."

Felix had come nearer to her, listening in wonder to the passionate words.

"So you would give me all your fortune, Eve?"

There was a glad light in her eyes when she raised them to his.

"I would—double my fortune if I had it," she replied.

"And why, Eve—tell me why you would be so good to me?"

The rich crimson flush burned in her face; she knew why, but she could not tell him.

"Because I love you all, and you are my dearest friends," she replied.

"And you would give it to me all without reserve, Eve?"

"All, and more if I had it," was her answer; and then there was silence for some minutes, while the fire burned brightly and the north wind wailed.

"My dear Evelyn," said Lonsdale—and his voice was broken with emotion—"how shall I ever thank you?"

An expression of perfect rapture came over the girl's face.

"You will let me do it?" she cried. "You have made me one of the happiest girl's in the world!"

The thin hands clasped hers, the sunken eyes looked tenderly into hers.

"Will I let you give it to me, my dearest Eve? No—a thousand times no! It is not for the money I am thanking you, but for the thought, for the intention. You have gladdened my heart, you have gladdened my life—you have given me the courage to get better, you have given me hope, I shall be so much the better for your coming."

"But that is not the point!" she cried. "Dear Mr. Lonsdale, do accept the money. Ah, if you knew how little I care for it, and how much I care for you—if you knew the pleasure it would give me, you could not refuse!"

He drew the sweet face down to his and kissed it.

"My dear Eve, I would rather have this offer made to me than any other. You have restored some of my self-esteem, child, some of my self-respect."

Evelyn looked up in wonder, for Felix had bent down and kissed her hand; he gazed at the sweet flushed face with wonder.

"Eve," he said, "you are an angel. I shall never forget that you have given a desponding, almost despairing man, hope."

And again there came to him just a passing wish, a faint fleeting desire, that Violet had shown the same affection for them; but again he checked the thought. Violet was a golden-haired goddess, and goddesses did not go about making offers of their possessions to unfortunate men.

Eve could hardly be comforted because they would not take her money. She did win one promise from Darcy Lonsdale, and that was, that if he saw himself very hardly pushed he would borrow a few hundreds at least to go on with.

But, though she had not succeeded in the one great object of her visit, she had at least done good—she left more hopeful hearts behind her.

Later on, when Felix had seen Eve home and Katie had listened with eyes dimmed by tears to the story of her generosity, the family sat round the fire discussing the event.

"I shall get well now, Katie," said Darcy Lonsdale; "yesterday I felt that it was a matter of indifference to me whether I lived or died, and now I have hope. Some persons in the world retain their old faith in me. I shall get well, and, as Evelyn says, I shall live my trouble down."

He had not been so cheerful since the first shadow of the cloud appeared; and from the depths of her heart Kate Lonsdale blessed the generous girl who had done so much good.

"I wish," she said to herself, "that Felix had chosen Evelyn. I should think of his future with hope if he were going to marry her." For in the depths of Mrs. Lonsdale's loving heart there lurked some little fear of beautiful Violet Haye.

So the winter passed. Mr. Lonsdale recovered his health but slowly; the spring of his life seemed broken—he found living his troubles down more difficult than he had anticipated. He had withdrawn himself from all positions of trust; he gave up his office as churchwarden, he would no longer be overseer.

"If they could believe that of me," he said, "I will hold no trust amongst them."

And he did not. What business was brought to his office he did, but he no longer mixed with his fellow-men. He had taken a leading part in all the business of the town; now he was absent from all the meetings, and there was a sense of remorse amongst his old friends—a slight feeling that perhaps after all they had misjudged him. Still he found life hard. There were times when the brave heart would have given way but for the few nearest and dearest to him had trusted him.

Felix had had his difficulties; he had hastened to the Limes as soon as possible after the receipt of his letter. Francis Haye received him coolly.

"I do not wish," he said, "to part you from Violet—I do say that the marriage must not take place until you are in a better position to support a wife."

There was nothing for it but for Felix to submit; he had to trample down the wild longing, the passionate love—and his sorrow educated him. He learned patience, perseverance, endurance, and self-control. The trial would have been easier to bear had he found that Violet was distressed about it. He looked in vain for some trace of sorrow on the lovely laughing face—for some sign of regret; there was none. She had written a very pretty note of condolence to Darcy Lonsdale, and when Felix talked to her she shook her golden head and said it was very sad; but when he went to her with his heart full of passionate love, passionate longing and regret, and spoke about their marriage being deferred, she looked very gravely at him and said—

"It cannot be helped, Felix; and after all what does it matter? What difference will a few years make? By not marrying now, we both escape the misery of living on limited means."

But he was half mad with his misery, and was not to be put off with such words. He took her white hands in his, and held them in an iron grasp.

"Have you no pity to extend to me?" he cried. "Have you no word to comfort me? Have you no heart? That which is a relief to you is deadly anguish to me. Oh, Violet you would have been a truer woman if you had clasped your arms around my neck, if you had laid your face on my shoulder, and consoled me!"

The ring of passion in his voice frightened her, as it always did; she shrank with a scared face from the great love she could not understand.

"I have to work and wait," he said. "Oh, my beautiful love, I would work for you as no man has worked, if need should be! It is not that, but I had built up my hopes, and it is hard to see them all destroyed. I had believed that this year I should take my darling home to begin the life that would be joy for me. I am young, and feel keenly; it is a terrible disappointment to me—a terrible blow. Oh, Violet, help me to bear it!"

She raised her beautiful, half-frightened face to his.

"What can I do to help you?" she said.

"Kiss me. I will not have a shy, coy, formal kiss, Violet. Kiss me as though your heart answered to mine. Say you are sorry for me, and that you will love me and help me to wait. Say all this—my heart is hungry for it."

She did as he wished. She laid her golden head on his breast and whispered to him that she was sorry for him, and then she raised her fair face and kissed him. In that moment he welcomed sorrow, he welcomed pain—it was all changed into untold bliss for him because it won a little kindness from her.

"I shall bear it all now, my darling," he said. "The waiting, the suspense, the uncertainty, the disgrace—I shall bear it all. I shall remember these moments, and I shall bless the pain that brought me this happiness."

A few moments afterwards she looked up and gave a little low laugh.

"How strange it is!" she said. "After all, you know I never quite promised."

Felix smiled. He was too happy just then to think seriously of her words.

"I have given you the greatest love, Violet, that a man can give a woman. You will not give me ashes in return. I have no fear—my heart rests on you. The only thing that I deplore is that months must pass yet before I can call my darling my own; yet I shall wait and work in hope. All things shall come to him who knows how to wait; and you will come, my beautiful love, in time."

There was something pathetic in his deep love and his great trust.

He left her that evening feeling happier than he had felt for some time. Violet loved him. She had never been so kind to him before. He forgot that he had asked her for the kindness—it had not been spontaneous. "There is a silver lining to every cloud," he thought, as he walked home. "But for this trouble I should never have known how Violet loved me. She was so shy and reserved before, now she is kind and gracious. Sorrow has been my sun—it has brightened my love."

Felix kept his word. He worked hard and denied himself much that makes life bright, but the labor was of love. He could not see Violet so often to the Limes in the evening. On the part of Francis Haye there was a sort of armed neutrality. He watched the young lovers, he took care that they should not enjoy many *tete-a-tetes*, but he did not take any active proceedings. He was a worldly man, and after all Felix Lonsdale might accomplish something out in the world. The chances were, all things considered, in his favor. Felix had his consolations in the shape of little love-letters, enclosing violets, forget-me-nots, pretty leaves, or some rare flower—letters that in after-years were like strains of half-forgotten music to him. They were very simple letters, but they were far more dear and precious to him than if they had contained gems of poetry and wonders of prose. The arrival of one of them brightened his whole day. How he read and re-read it, pondering each word in his mind, to see how much it conveyed, and then locking the letter away at night with his treasures. In what words of rapture he answered Violet's notes—for he had but one love, Violet; one hope, which was to win Violet; one faith, which was centred in Violet.

So winter wore away, and genial, lovely spring heralded by snowdrops and crocuses, came to gladden the hearts and souls of men.

CHAPTER IX.

"Sir Owen Chevenix." The inhabitants of Lilford uttered the name with awe and respect. Those who had never seen Sir Owen made a point of talking about him; while those who had not only seen him, but talked to him, were elevated almost to another sphere. Sir Owen was a man of note. He was that much-to-be-envied person, a millionaire, and he had just purchased the finest estate in Loomshire. It was called Garswood Hall, and lay between Lilford and the town of Oldstone.

There had been great excitement about this property. It had belonged to Lord Garswood, who was chiefly famous for his great love of travel. It was seldom that he spent two years together in England; and now that he had resolved upon living entirely in the East, Garswood Hall, with the grand estate belonging to it, came into the market, and the fortunate purchaser was Sir Owen Chevenix.

Sir Owen had arrived in great state at Garswood. Servants, carriages, horses, grandeur of all kinds, had preceded him. The number of horses in his stables and of servants in his household, the marvels of gold and silver plate at the Hall, the wonders in the shape of magnificent furniture—these things formed the staple of conversation in every house in Lilford. Then came the crowning intelligence, he was not married—this millionaire on whom Fortune had lavished her gifts; and the excitement rose to a great height when this became known. Maids and matrons took the greatest interest in him, the grandees of the county waited upon him, fashionable mothers offered him advice about his household, about the parties he intended giving, and about the people he must invite, while the squires were

much interested in his stable and pack of hounds. The younger ladies wondered what he would be like, and which among them would be the happy one chosen as queen of Garswood.

He must marry; that was very certain—he could not live alone at such a place as Garswood The matrons looked mysteriously at each other, and said that it was to be hoped he would settle soon; it was so much better for a man to marry young. Sir Owen himself made inquiries about the fairer portion of the population.

"Have you any pretty girls in this part of the world?" he asked one day of Captain Hill, the sporting man *par excellence* of the neighborhood.

"I believe so," he replied—"I have heard people say so. It is not in my line, you understand."

"Exactly. Well, it is in mine—and a very pleasant line I find it. The only thing I dreaded in coming hither was that I should find nothing but rustic beauty of the milkmaid sort. I have a decided distaste for it; and the fact of the matter is, I am looking out for a beautiful wife."

"It is a very sensible thing to do," said Captain Hill.

"It is all very well," continued Sir Owen, "for philosophers to say there is nothing in beauty. That is all a mistake; every woman ought to be beautiful. I will go so far as this—I would rather marry a woman with great beauty and a thousand faults than a plain woman with the virtues of an angel. I like something pleasant to look at."

And these ideas of the millionaire were soon known throughout the neighborhood. Beauty was at a premium; the plain faces gave up the contest.

Sir Owen Chevenix very soon became the great man of the county. He did not like Oldstone, but he did like Lilford; he had little patience with the gentry, but he liked the sporting squires. He was so lavish in his orders, so extravagant in his expenditure, that the tradesmen of Lilford looked upon him as an especial gift of Providence, while his coming seemed to have given fresh life to the county.

When the month of blossoms came round, Sir Owen was quite settled at Garswood. He had won golden opinions by not going up to town for the season. Now that he was a landed proprietor, he declared his intention of remaining on his land.

He had already attended one or two meetings of different kinds at Lilford, and he received an invitation from Doctor Hunter, the Vicar, to attend the annual festival of the school-children, held always in the month of May. At first he had laid it contemptuously aside. What had he, the sporting Baronet, as he liked to hear himself called, to do with school-children? He sent a check which caused the good Vicar to open his eyes. Then, some one having said that all the *elite* of the neighborhood attended the *fete*, he went.

In a field near the Vicarage the school-children played to their hearts' content; while in the Vicarage grounds the *elite* enjoyed themselves in quieter fashion. The military band from Oldstone was there, pretty white tents were erected, there were croquet and lawn-tennis, quadrilles for those who liked dancing, and archery for those who enjoyed shooting. Sir Owen Chevenix, having heard that all the pretty girls in the neighborhood would be there, decided on going himself. No one but Doctor and Mrs. Hunter knew of his intention, and they had kept it a secret, intending to surprise their guests. As a matter of course, beautiful Violet Haye was to be there. Evelyn Lester had been invited, and the Vicar had discussed with his wife the advisability of sending an invitation to Felix Lonsdale.

"There is a black mark against the whole family," said the Vicar, who forgot at times that his Gospel was the Gospel of Peace, and thought more of justice than mercy. "I do not say that Darcy Lonsdale was guilty of that which was laid to his charge, but there is a mark against him."

"Against the father, David, but not the son," corrected his wife.

"You might as well try to distinguish between husband and wife as between father and son," rejoined the Vicar.

"There is another thing," said the diplomatic lady; "we must ask Violet Haye. She is, in truth, the greatest attraction we shall have to offer, and, as they are lovers, I do not quite see how they can be parted on such an occasion."

"I shall do it against my will," remarked the Vicar.

"Well, that is far better than not doing it at all," replied Mrs. Hunter. "It will be a kind of test; if we see that people seem shy of Felix Lonsdale, we must not ask him again."

So Felix received an invitation. If he had known how and why it was given to him, he would have placed it under his heel and have gone twenty miles in an opposite direction; as it was, it gave him unbounded pleasure. He was to meet Violet; he would spend a whole half-day with her; he would see her beautiful and admired, yet with the proud consciousness that she was his—all his—his promised wife; and when he reached that point in his reflections he remembered how she had raised her face to his with the laughing words, "I have not quite promised." Still that meant nothing; there was no truth so sure as Violet's.

The prospect of that one day to be spent with her delighted him. He sat up the greater part of the night, so that by his unusual holiday business might not suffer. It seemed to him the time would never come when he would meet Violet.

Nor had the beautiful Violet Haye been unmindful of the coming *fete*. Her father had looked grave over the milliner's bill when it was given to him; but Violet had determined to be queen of the *fete*. Mrs. Brownson, Mrs. Baulders and Miss Stanley would certainly be there, perhaps even Lady Batle, and she must be dressed suitably to meet these potentates.

A beautiful costume of white muslin, rich lace and blue ribbons was provided, with a wonderful little hat that seemed to be made of feathers; and Violet decided that she had never looked so well before. She pictured to herself an easy sovereignty. Eve Lester was the only one she feared; but then Eve was never given to dress and flirtation.

The month of May had never set in more beautifully. The world was all thrilling with new life, the green leaves were springing on the trees, the hedges pink and white with hawthorn, the violets nestling in the fields, the primroses growing in great golden clusters at the foot of the trees; the air was fragrant with the odor of a thousand sweet flowers, all nature glad and bright. To be in the midst of all this beauty, and with Violet, was something for Felix to dream of.

Lovely laughing May had given her fairest hours for the *fete;* every one was full of congratulations—the sunshine, the music, everything was so beautiful. Felix saw nothing but the bright face of his love. They walked over the smooth green lawns together; and then Violet, turning suddenly to her lover, said:

"Have you heard all the wonderful stories about the new-comer, Sir Owen Chevenix?"

"I find but little time for gossip," he replied; "still I have heard that he is wealthy, and likes to spend his money freely."

Violet's face had quite a light upon it as she continued:

"People say that his plate is superb. Felix, I should like to eat my dinner off a golden plate."

"It would be no better for that, Violet," he replied, longing with all his heart to be able to make her such a present. "You know the saying about the dish of herbs?"

"Yes, I know it, but I do not believe in it. How wonderful it must be, Felix, to live in such a grand house, to have so much money and so many luxuries!"

"I know something that I would rather have than all Sir Owen's luxuries," said Felix.

"What is it?" she asked eagerly.

"Your love, Violet." And she knew that he meant what he said.—[To be continued.

MRS. PURDY'S PARQUISITES.

One day, some time since, we were summoned to the parlor to see a visitor who had sent up neither card nor name. As we entered the room, an under-sized, wiry, active, elderly, quaint-looking woman rose to greet us. We were struck at sight with the brightness of her dark, handsome eyes, and the russet redness of her thin, brown cheeks. Her dress was of calico, starched and ironed to a miracle, and she wore an indescribable air of independent out-of-fashionness, which took our fancy at the start.

She was living on a ranch not a very great distance from San Francisco. She was born in England, had come over to this country in her girlhood, had spent some years in Connecticut, had married in Pennsylvania, had tried her fortunes in the West, and had finally drifted to California—all of which we learned in the course of after conversation, and noted that her speech bore evidence of her wanderings.

She stood for a moment confronting us, while she darted forth a keen look from under the great round hat, which was tied down, Canada-fashion, at the ears and projected immensely fore and aft.

"Be you the woman that writes in the *Pacific*?"

"I take charge of a column in the *Pacific*, for the Woman's Board. Won't you sit down?" The interview promised to be interesting.

She dropped suddenly into her chair, and revealed as she did so, a good-sized covered basket which stood by her side.

"Wall, now, I am mighty glad I have found you! My old man he takes the *Pacific*, bein' brought up a Congregational, and I read it for my Sunday readin'—leastways your part of it partikelar, and very often permiskus, too. So I felt kind o' 'quainted with you like, and thinks I to myself the very fust time I go to San Francisker I'll take a run over to Hoakland and see if I can make her out."

"I am very glad to see you; very glad you like our column so well; we want all our friends to like it."

"Wall, when you first begun that column all about the missionaries and sich, it kind o' took me, and I determined I would do all I could to raise a little money. I've knocked round this world consider'ble myself, though not doin' it for the heathen, which ain't sayin' I hain't never found none, and that ain't neither here nor there, but I know by my own feelin's what it is to be in a strange country and everything queer and homesicklike, let alone the language, which must be powerful discouragin', specially if a body's hard to learn, which I don't s'pose the missionaries is, but some on 'em may be. We live on a ranch here-a-ways (with a jerk of the head), and my old man he's toler'ble close, and no wonder, bein' we've twice been burnt out and hain't no children to look after us bime-by and old age acomin', if we live, and our sheep dyin' off the last year or two"—and she made a sudden halt, looking at us intently.

Here was evidently a warm heart—one that had learned sympathy for others by its own experience; one that was too loyal, likewise, to cast reflections on any one else in doing its duty.

"I dare say," we replied, seeing that a reply was expected, and not knowing very well what else to say.

"Wall;" she resumed, in a tone of good-natured toleration, "I know he had enough to see arter, and so I determined to raise what money I could myself and give him no trouble about it. And, of course, I makes my own butter; so arter that, when I churned, I puts away a little in a missionary jar, which I called Mexico, and we neither on us never missed it, and arter a while Mexico was full of butter and we no wuss off; and bimeby I sold it and put away the money. Says I to myself"—and a smile came into her eyes—"That's my parquisities. Everybody has parquisities in these days, and why should not I?"

"It was all the same about eggs, for of course we lays our own eggs; and says I to myself, 'Now shall I parquisite two eggs out of every dozen or two layin' hens?' which I concluded to pre-empt two young layin' hens, me namin' 'em 'Japan' and 'Turkey;' and bein' lonely-like out there on the ranch and no one to talk to, I conversed with them, as if they was folks; and I declare for't, I raly think they understood me, for arter I had told 'em two or three times that they was parquisite hens and must lay accordin', and shouldn't have no excuse 'bout grain and gravel, 'cause I would give 'em plenty of both, them two hens went to layin' to that degree that I couldn't have done better myself, and they cut-cut-ca-dacut-ed me out to them nests that much and that reg'lar that it reely seemed as if they had missionary on the brain, and they laid me forty dozen of eggs, did Japan and Turkey last year, and I got two bits a dozen for 'em all round, which was pretty good parquisitin' for two—hens, and the money put away with the fust, do you see?" and she came to the usual sudden stop, and waited for us to speak.

"Certainly. What wonderful hens you must have!"

"Yes, that was pretty good. And then there was my calf, which my husband bein' so keen for money of course we doesn't eat our calves but sells 'em. And one of our cows she dropped a calf that was a poor, puny little creatur, and the butcher he wouldn't give nothin' for it, and my husband he said it would cost more'n it would come to to raise it, and he was for knockin' it on the head and sellin' the pelt, which I begged him agin it, and said I would raise it on skim milk, which wasn't good for nothin' to nobody, if he would let me have it, and he said I might if I wanted to, and was a great fool for my pains. So I took it, and the rains came on and I went missionaryin' out to the shed every mornin' and every evenin', and hot milk to carry to it, which it a' most sucked the end of my finger off, larnin' to feed, and wet my feet, and slipped down into puddles, and got rained on tremendous, and had the rheumatiz dreadful, me feelin' afraid all the time I shouldn't make nothin' of her, but determined to try, and after some months of such work she took a start.

"And the way that calf grow'd when she set about it beat all you ever see, besides makin' me into a Woman's Rights woman, which I have believed in ever sence, and shall as long as I am in this world and the next, too, if the men have all the say there as they do here, which I don't believe; and my calf, I named her 'Parquisite,' and shortened her into 'Parkie,' and she grow'd into a handsome heifer and begun to knob out on the forehead, and me a tellin' her how good lookin' she was gettin', and she a lookin' at me kind o' cur'us like as if she was a thinkin' on it over, and a runnin' arter me whenever I came where she was, and a rubbin' her nose on my shoulder, and me a tellin' her how much butter she would be givin' me bimeby, and what a stiddy hincome she would be for the missionaries, and one day a man rode up to the door and jumped down from his horse.

"Wall, my husband he took him all over the ranch, and he looked at the wheat and the vineyard and the fruit and the stock, and they looked at Parkie a long time and seemed to be talkin' her over, and I was awful proud (great fool!), 'cause I thought they was admirin' her. Then the man he staid outside and my husband he come in and went through the kitchen where I was, and says he, careless-like, 'I'm thinkin' of selling the young heifer.' 'What young heifer?' says I, never thinkin' of nothin', and says he, kind o' sharp-like, 'The calf;' and says I, jumpin' up, 'What, my calf?' and says he, mighty scornful, 'Your calf! it's my calf I'd have you to know!' and then he went out to the man agin.

"I sot right down and burst out cryin'. My husband is awful sot when he is sot, and I knew it wasn't no use to say nothin', and I just cried like a great baby, and with tears all runnin' down I watched the man drive away my Parkie, and she a hangin' back and he a whippin' her, and she never was struck before in her life; and just then my husband came in, and says he, as if he was a makin' up for all, 'You can have ten dollars of the money, if you want it,' and that made me mad. I didn't say nothin', but I just looked at him, and he didn't have no call to stay in that kitchen the rest of that day, I tell you; and I took on two or three days all by myself, and got mad every time he spoke or came near. And one day as I sot by the kitchen table, with my work done up and a clean apron on, he walked in and threw a ten-dollar piece into my lap, and says he, 'There is the money I promised you,' which I caught and threw right back at him just as hard as I could, and it hit him and fell on the floor, and he laughed and went out milkin.'

"By that time I had got to be awful wicked, and sot thinkin' to myself about Saint Paul, and how he says Sarah obeyed Abraham, calling him lord, and I hain't had no patience with Saint Paul ever since. We get the other side of that story in the Old Testament, which it is pretty easy seen how Abraham had to give up to Sarah and let her have her own way, and what would she have said if he had gone and sold her pet camel I should like to know?

"Wall, the money laid on the floor three days and me a sweepin' around it, and it seemed as if I couldn't touch it, which at last I made myself go and pick it up and put it with the rest of my parquisite money, and me a blubberin' while I did it; and may be it won't do no good to the missionaries on account of so behavin', which I did ask the Lord's pardon for gettin' mad over it, and hope to be forgiven. But all along of that calf I shall always believe in Woman's rights, leastways in Woman's wrongs, and all the old bachelors may preach till they are black and blue. And Saint Paul never was a married woman, and never had no idea what they have to put up with, and never brought up a calf neither, not as I ever heard of—did you?" and a smile spread over the worn, rugged face.

"No, I cannot say that I ever did," I replied, smiling back.

"And here is the money," she said, suddenly producing her purse; "and I hope you won't refuse 'cause I acted so. And if you have a mind to make me a life member with it there will be some to spare," and she placed in my hand thirty dollars in three shining gold pieces, the fruit of how much toil, self-denial and pain! "And," said she, sinking her voice, and swiftly lifting up and uncovering her basket, "I want to know whether missionaries like hard-b'iled eggs? I have brought some down, and if you think them three lady missionaries would like 'em, I want you to send 'em to 'em. They'll keep, for I b'iled 'em myself fifteen minutes by the clock, and it would please Jap and Turkey most partikelar if they could understand, and I shall tell 'em, and they're all I've got now to talk to, butter not bein' alive-like, and Parkie being took away. And if I should tell 'em that their own eggs which they've cackled over is hard b'iled and sent to the lady missionaries, it would encourage 'em like maybe, which, if you can't send 'em to heathen lands, p'raps the Board would like 'em, leastways the yelks, as many does who won't eat the whites."

As she spoke she rapidly emptied her basket on the table near, and hurried away, leaving me gazing in a half-dazed condition at the pile of hard boiled eggs, while I held the shining eagles, her generous donation, clasped stupidly in my hand.—*San Francisco Pacific.*

MAGAZINES.

Scribner for November.—The most noteworthy feature in Scribner for November is the beginning of Haworth's, the new novel by Mrs. Burnett, author of That Lass o' Lowrie's, the serial publication to continue throughout the magazine year, which begins with this number. The opening scene of this story is an English foundry, and the range of characters introduced promises to be wide and varied. The story is sufficiently picturesque to admit of four illustrations each month, two of which are to be by Mr. Bolles, and two by Mr. Dielman.

The publishers announce that during the coming year there will be four frontispieces (a feature introduced into "holiday numbers" only). These will be portraits of eminent American poets, to be drawn by Wyatt Eaton and engraved by T. Cole (from whose hands came the Lincoln and Bryant portraits), and in pursuance of this plan, the first one—of Mr. Longfellow—is given in the November number, accompanied by a full critical and biographical sketch, by R. H. Stoddard, with illustrations of the poet's study, drawing-room, "the old clock on the stairs," the lawn, Charles River, etc., by Swain Gifford and Francis Lathrop.

Another paper on a popular subject is A Night with Edison, by William H. Bishop.

Johnny Reb at Play is the first of several papers by an ex-Confederate soldier, Mr. A. Redwood, upon interesting phases of life in the Southern army. Mr. Redwood is his own artist, and draws for his rollicking paper pictures of regiments snow-balling, the Kimbomikin, Joining the Cavalry, Wearing a Confederit Watch, etc. The next paper will show the heroic and pathetic side of this life.

The Spelling-Bee at Angel's, by Bret Harte, is reported by Truthful James in the style of the author's early metrical successes.

There is also a paper on the Picturesque Aspects of Farm Life in New York, by John Burroughs, who can farm as well as write.

A Wind-Storm in the Forests of the Yuba is by John Muir, who took his notes from the top of a spruce-tree during the terrific gale.

The illustrated material is completed by a paper on Chambly Fort, on the Richelieu River, by Henry Sandham, the Canadian artist.

The unillustrated papers also cover a wide field. A Modern Playwright, by J. D. Osborne, is a sketch of the oddities and experiences of Eugene Scribe, and reflects much of interest concerning the French stage and its best playwrights and actors, including anecdotes of the dramatic methods of Rachel and Ristori.

Our Patent System and What we Owe to It, by James Richardson, is an effort to answer every objection yet urged to this system, which the author thinks will be put in jeopardy during the coming session of Congress. The idea that inventions are inimical to workingmen is incidentally discussed.

The Apparition of Jo. March, by Noah Brooks, is an original and laughable addition to tramp literature.

Parsons and Parsons, by Edward Eggleston, is a collection of humorous anecdotes for readers lay and clerical.

Mr. Boyesen's Falconberg reaches a fourth installment.

The poetry of the number includes a sonnet on Beethoven by Celia Thaxter, four songs by one of the two young Goodale sisters (not, however, accepted on account of the youth of the writer), and The Poet's Fame, by R. W. Gilder.

In the Departments, Dr. Holland writes of the progress of the Magazine (now entering upon its ninth year), of Greenbacks and Green People, and of Theodore Thomas. Home and Society contains the first of several papers on Hints to Young Housekeepers, by Mrs. S. W. Oakey, and Green Autumnal Foliage, by Samuel Parsons, and takes note of Sir Henry Cole's suggestion of a College of Domestic Economy. The review of Mr. Adams's book on railroads is a resume of that timely and important volume. The World's Work contains a full review of Progress in Electric Lighting, with an announcement that of 117 new inventions described in that department, 57 are known to have gone into active use. Bric-a-Brac is crowd-

ed down to a single page, which includes a cartoon on the labor question.

ST. NICHOLAS FOR NOVEMBER.—Begins the sixth volume of the magazine with seventy-two pages and fifty-two pictures filled with enchantment for the boys and girls.

Two new serials begin in this number. One for boys, is by Frank R. Stockton and has the inviting title A Jolly Fellowship. Its first installment describes the voyage of two boys to one of the Southern States, where the scene of the story is laid; and the seven telling illustrations are by James E. Kelly. Further on in the number the youngsters will find a short biographical account of Frank R. Stockton, with a portrait, which will pleasantly satisfy their curiosity as to this favorite author. The other serial for girls, is by Katharine D. Smith, and this first part has three pictures: two of them, by Frederick Dielman, are unusually fine.

Mrs. Mary Mapes Dodge, the editor, herself contributes to this number the poem entitled A Mistake, illustrated by Addie Ledyard; and a paper called Monkeys and Dogs to the Front, giving a lively account of some remarkable trained dogs and monkeys, with fourteen capital pictures by L. Hopkins.

One of San Francisco's curious new wire-cable railroads is described and thoroughly illustrated under the title Towed by Rail, the pictures being from photographs taken especially for this article.

There are five complete short stories, all illustrated. The first one, A Boy's Service, tells of the daring of a boy hero of the Vaudois mountains, during the religious persecutions carried on by Louis XIV. of France; the illustration, by Sol Eytinge, is used as the frontispiece to the number. Next comes Who Told? by Sarah Winter Kellogg, a story for girls with a fine picture by Walter Shirlaw. Then follow, at intervals: Handsome Hans, the history of a brave and beautiful war horse, with a fine illustration by Kelly; The most thoroughly Educated Young Lady in Miss Neal's School, a Thanksgiving story by Hope Ledyard; and The Poor Relations, a tale of the wonderful achievements of a shrewd and lucky dwarf with a picture by Geo. F. Barnes.

Among the other attractions of the number, besides poems by Lucy Larcom. C. P. Cranch and others are: The Three Wise Men, some funny verses humorously illustrated by Hopkins; The Magician's Lesson, a short and striking play by G. B. Bartlett; the usual large-print pages for the youngest readers: and Jack-in-the-Pulpit and the other departments.

HARPER'S MAGAZINE for November beautifully concludes a beautiful volume. The number opens with a bright little paper describing a Free Kindergarten in New York City, with exquisite pictures by Miss Curtis, of real children involved in the enchantments of Froebel's wonderful system. The same number contains a very interesting and attractively illustrated paper by Henry W. Elliott on Wild Babies, from Alaska to the Gulf. The quaint style of Abbey's illustrations has had no better illustration than in the Fire-Wizard, which Mrs. Helen S. Conant has happily rendered from an old German ballad. With the single exception of the paper on David Teniers—fifth in the series of Old Flemish Masters—the illustrated articles in this number are all American. Mr. Benjamin's description of the Sea Islands off our South Atlantic coast is full of interesting legend and romance, associated with this unique congeries of islands, and is accompanied by twenty-four beautiful illustrations.

John Muir contributes to this number an exceedingly interesting and well illustrated paper on the New Sequoia Forests of California.

Edwin P. Whipple's paper, Some Recollections of Rufus Choate, will not disappoint the large number of readers who have been looking forward to its publication.

Black's Macleod of Dare and Hardy's The Return of the Native—are continued; and there are two excellent short stories, The Angelique's Novitiate, by Kate P. Osgood, and The Thousand and Third Night, by G. D. Carrow.

Prof. Taylor Lewis's The Power and Pathos of Euripides—a posthumous paper—will prove of especial interest to all readers who admire the strong examples furnished by ancient classical literature.

The Editorial Departments are as interesting and entertaining as usual.

ATLANTIC MONTHLY for November opens with an admirable paper on the Nationals—their Origin and their Aims. The second installment of Home Life of the Brook Farm Association is a most entertaining chapter. Presidential Elections contains some timely suggestions. W. D. Howell's gives five chapters of his new serial, The Lady of the Aroostook. Chas. Egbert Craddock's, The Star of the Valley, is as artistic a story as we have seen for many a day. The Contributors' Club (one of the most attractive features of this magazine) is as bright and entertaining as usual.

SEWANHAKA, THE ISLAND OF SHELLS, a finely illustrated paper in Lippincott's Magazine, for November, well repays a careful perusal as also does Geo. Keenan's Unwritten Literature of Caucasian Mountaineers. Through Winding Ways, a delightful serial by Ellen W. Olney, will be enjoyed by all lovers of good literature. The bright, little story, Deserted, contains an account of a song-and-dance entertainment, given under the most extraordinary circumstances, and to a most peculiar audience. Music in America is a discriminating article, in which the author does full justice to whatever ability we, as a nation, possess in that line. The After-Dinner Speech of the Baroness Contaletto, is a capital bit of satire. In fact, so good do we think it, that we mean to give all RURAL readers an opportunity to judge of it for themselves. A carefully prepared paper on The Harvesting-Ants of Florida (illustrated), will interest the professional as well as the amateur naturalist.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THEN, NOW AND HEREAFTER.

MARGARET B. HARVEY.

I.

Oh, precious heart!
Thou knowest when my spirit drooped in pain,
And gently thou didst bid me hope again.

My wearied soul,
Like gladdened lark, with sudden thrill did rise,
And soar to the blue heaven of thine eyes.

Their wondrous light
Seemed like the gold through azure poured at morn,—
And where the singer's lost, the song is born.

And sweet the strain,
Or ringing jubilant, the humble bird
Cares only that the skies and sun have heard.

II.

Long years have passed,
And now my soul, like tired lark, doth soar
To warm blue skies and golden sun no more.

Her notes are hushed.
Beside her ruined nest, 'mid leaves and mold,
Alone she cowers in the damp and cold.

But still a song
Is quivering faintly, though her voice is dumb,
And some glad day a flood of joy will come,

For once again,
Like gladdened lark, my longing soul shall rise
And soar to the blue heaven of thine eyes.

LETTERS FROM A COUNTRY GIRL.—No. 8.

MARGARET B. HARVEY.

On Dress.

MEN, in describing the toilets of poor young ladies, and women who have never had to fix over their old clothes, in doing the same thing, write something like this: "By her taste she had made the cheap goods so beautiful that her appearance could scarcely have been improved had she been arrayed in the most costly fabrics."

To those who don't know, this sounds pretty. There *is* something attractive in the idea of a young girl's own loveliness lending grace to poor materials,—but, alas, the simple idea is all there is of it. It is impossible to dress well without good materials, first of all and always. I grant that the main beauty of a dress is in the making,—that common materials, made up with taste and care, will please the eye,—but this is not all. The question is, "What is worth this trouble?" Cheap goods have nothing but their external appearance to depend upon for effect, so they need to be well made up if made up at all. And then, when you have expended time and strength and anxiety and skill upon them, how long will you have anything to show for your pains? Rain streaks, damp shrinks, dust discolors, beyond remedy, and what is almost a work of art amounts to nothing because of its flimsy foundation.

On the other hand, good materials, by their intrinsic value, are able to sustain themselves, no matter how plainly made. Gotten up simply, they are still elegant; elaborately, well worth the trouble; injured to any extent short of destruction, they are capable of being restored; and, finally, they last in good condition, until, perhaps, you are tired of them.

Most persons desire good materials for better wear, but are in the habit of purchasing inferior articles for everyday use. But I think this is a mistake. I know that cheap now is always very dear at last. Resolve always to have some fabric with a good, honest name appended. I don't include calico in the class *cheap goods*. Calicoes ginghams, chintzes, percales are solid and reliable, of one pure material, and quite all they pretend to be, filling a place that nothing else could take. They can be made nicely, they wear well, they can be renovated easily, and look pretty as long as they hold together. But half-wool poplins, mixed *derbeges*, low-priced bourettes, cotton velvets, imitation laces, are worthless. To attempt anything satisfactory with them is pouring water through a sieve, and to make a show with the most elaborate arrangement of any of them, is acting a falsehood. I know a young lady who is always well-dressed, and yet she spends almost nothing for her clothes. She buys little, but takes care of what she has, and saves the pieces. And this is somewhat the way in which she manages.

She needs a dress. By saving her money she gets a handsome black silk, but she knows that for the next five years she won't get another best dress, so this must be taken care of. By different arrangements of laces, necktie, flowers, gloves, etc., she wears this same dress to church, at weddings, parties, concerts and everywhere. With her coat and plain gloves and collar, it answers for the street; with a handsome ruche and jewelry, flowers, white kid gloves, and elaborately-arranged hair, it is full dress, and so on, *ad infinitum*. It cost her considerable at first, but rain doesn't hurt it, dirt glances off it, it can be easily matched, and can be kept in repair, and because she always has something available, she doesn't have to buy any ordinary dresses to eke out her wardrobe, and almost before she knows it, she has, with her usual resources, saved enough to buy a handsome cashmere.

The pieces left from her silk trim it, and she can often wear the polonaise with the silk underskirt. And for over two years, winter and summer, (with, in the greatest heat, a white body or two) she has needed nothing else as regards solid dresses. Either of her skirts serves as a foundation for a calico, percale or linen overdress, while the handsomest white may be worn over her silk. So far good. But more. Her sister gets tired of her name redingote, and she alters and wears it over her silk, and with cardinal ribbon it is gorgeous.

When it comes to more extended renovations, she finds she has chosen wisely. She replaces fringe on her silk overskirt with guipure lace, which has been lying in a drawer several years. Her cashmere polonaise is not of style. She cannot, at present, afford any new material. So, of the body she makes a basque; of the underskirt, sponged and pressed, an overskirt; and with the rest, a sham skirt. Out of the lower part of the polonaise, with contriving and twisting, she makes a pretty dolman, and trims it with the fringe off the silk, which, beautiful when purchased, is still good.

After a while, from the dolman she gets a sacque, trimming it with folds of the never-failing silk, replacing the now worn-out fringe with the guipure from the other dress, which, meanwhile, has undergone another renovation and is like a different dress with its dainty knife-plaitings, while the cashmere is again made over. In hats, the same process. Within four years she purchased just two hats—a complete silk velvet, and an untrimmed black straw. But, every winter she has a handsome velvet bonnet, and every summer a stylish, quiet hat. The same velvet in winter covers different buckram frames; in summer trims the same modified hat. The same beautiful ostrich tips, recurled by her own fingers, adorn both, hanging differently perhaps, and the distinction between the hats of different seasons lies mainly in a simple wing or spray of flowers.

As for coats, the cashmere receives a coarse flannel lining for winter. A year or two before, a little walking jacket of cloth nearly threadbare, took on new youth by a border of rich fur, and when the young lady can afford fitting cloth for a new basque, she will reduce the cost of the completed garment by making it herself and putting this same fur upon it.

She could tell you many little things. One is, don't buy any pronounced fashionable goods unless you have plenty of money. A handsome bourette costs as much as a handsome silk, yet goes out of style in a season or two, while silk never does. Another is, it is a mistake to suppose that dresses made with overskirts and ruffles are extravagant. They endure refurbishings impossible for dresses so plain as to show all parts. And it is well to consider everything, even buttons, ribbons, etc. Smoked pearl buttons, for instance, never wear out, and can be used over and over again, upon all sorts of materials. The same with black gros-grain ribbon—its variety of uses is perfectly marvelous. In feathers, remember that breasts and bands never get out of curl; that real ostrich tips never crack like made tips. For under-clothing, it pays best also to have neat, white pearl buttons, for they last a lifetime. Good, all-wool materials are the only ones that dye nicely. Collars, cuffs and handkerchiefs should be of the very best quality. Above all, avoid cheap ruches. Gloves, neckties and shoes are the most expensive articles, yet even here much may be saved. In gloves, for spring, summer and autumn, it is best, for ordinary wear, to have them of *white* (not dark) lisle thread. The former wash beautifully, the latter do not. This same young lady, whose best kids are always exquisite, has worn, day after day, from May till October, one pair of white, four-button, thread gloves, washing them every other day and mending them often, always having her toilet neatly finished. In ties, with one real black guipure and one white valenciennes, a lady may be well provided for during many years, brightening her toilet by combining with either a little knot of ribbon or flowers. With wash goods for everyday, cashmere for better, silk for best, with little variations according to fancy, any girl may get along comfortably. But, if she still needs another dress for going out in the morning, for traveling, for chilly weather, the next best thing to an old cashmere, is a soft, all-wool *de beige*. Though this latter is a material becoming to nobody, it may be made to look well by accessories, and it is, itself, substantial, serviceable, and almost impossible to soil or crumple.

Though I hope most ladies will have a little more variety than the one alluded to above, still no one knows until she tries what may be accomplished on a little. The girl described actually has gone on and looked well, in the manner pointed out, for over five years. Perhaps, if all of the little shifts were known to the public, no woman would think herself poor,—happy thoughts, such as buying fine cambric remnants, here and there, to make a white dress, the whole costing about two dollars; trimming a jacket with the pieces of an old parasol; letting down the wide hem of a pair of gloves, stitching the edge neatly and working button-holes, to make them two inches longer; blackening a belt with shoe-blacking; and many, many little devices, producing great results in effect.

I re-iterate, *never buy poor materials*. What could this girl have done with her almost empty purse had she not had the remains of fitting fabrics upon which to exercise her taste and skill? And when I say that it is every lady's duty to be well-dressed, I am very sure that I set no impossible task.

WHY SHOULD NOT FARMERS BE LEGISLATORS?

H. B. N.

LAST week, I was invited to attend a Grange picnic at one of my neighbor's. The day was fine—one of those soft, balmy September days, that we read about but seldom enjoy. About one hundred in all, were gathered together, to enjoy the good things which each had donated, and to talk over the bountiful crops which the good Father had vouchsafed to them. It was a beautiful sight. The tables spread beneath the green trees and loaded with the handiwork of the thrifty housewives and as I looked upon the scene, I thought, in all the world where could we find such a picture of independence and true enjoyment as among the farmers? They are really the men who rule the world; sturdy, honest and upright, and I wondered while looking into their intelligent faces, why it was that our Congress was not composed of such men. Truly, they are the representative men of our nation;—and could we but have such to make our laws instead of the dissipated, broken down politicians, our country would not be in the condition it is. It would not cost us millions yearly to send men to Congress who do little else but get drunk, quarrel and bring disgrace upon us.

I noticed that there was a much larger attendance at the Grange picnic than at the Farmers' Club, and came to the conclusion that it was the good things to eat which attracted them, and thought, perhaps it might be well for the ladies to donate edibles to the club. The theory that the nearest way to a man's heart is through his stomach is a correct one, and perhaps some of our male members might be coaxed into performing their duty by the promise of cakes and coffee.

Our fair came off on the 25th and 26th of September. The ladies deserve a great deal of credit and the gentlemen came up at the last hour much better than we expected. Our fruit being cut off this year made quite a difference in the general appearance of things, and all are looking forward to 1879, when we hope for a better display. Each and every one concerned deserves credit for the part they have taken, and I would like to add that my neighbor who owns the hogs *does not* belong to the Grange or Farmers' Club, nor had he anything to do with the fair, but he has kept his hogs shut up for several weeks.

Bonnie Repose, Sept. 29th.

FINISH IT OFF.

MRS. J. M. M'C.

"I AM tired of the sight of this dress Phebe, I have had it around unfinished so long. I made fully three-fourths of it the day I got it, for I was full of enthusiam over the business then and if I had kept right on should have finished it the next day, and have had the use of it all this warm weather. I laid it aside, however, to settle on the question of sleeve trimming and have not yet quite decided. It will seem like an old dress to me, when I first wear it, I want it, too, this very day, but I hate to touch it."

"Milly, don't indulge yourself in notions that way. Thread a needle and go to work. It is only one seam after another one button-hole after another, and so on until the whole is done. Make a fair start and conquer your disinclination, and then the dress is as good as done. There is a delusion and a snare in this putting off until 'you feel like it.' There is nothing so hard as bringing up the arrears of work that ought to have been done before. If you cannot do it, because you are weary or ill, that settles the question. We who are own masters must make ourselves do a great many little tasks that we feel no affection for. It is the only way to keep squarely abreast with work.

This putting off habit grows rapidly, and follows one into every department. The fact that we do not like to do a particular thing comes to be thought a sufficient reason for letting it lie over. Fanny L. always detested stocking darning, and I have known her to crowd a drawer full of those that needed mending, until she had not one good pair to put on; then she was forced to begin the darning business in earnest. There was nothing she liked better, than to get a little bee of us together in her room and provide us each with a darning needle and cotton and set us to work. But it was a very poor way of managing, and I sometimes wonder how she gets along now that there are little toes to darn for.

Come, Milly, now for that cambric suit of yours. If you will give me an old paper I will cut you a pretty cuff pattern that I know will suit you. I took it in at a glance as a lady was passing my window. First, I marked it down on a piece of paper, and then cut away until I had it to suit. I like it very much, and have modified it in several ways since for different dresses. The wrist of a dress is so small you can afford to make a very elaborate trimming for it and not feel that you waste much time either; yet the finish there and about the neck, give a style to the dress hard to accomplish otherwise.

Whatever you do, dear, finish it off once for all. Iron it out and hang it in your wardrobe and see if you do not get a good night's sleep. Take my rule, Milly, and see if it does not bring you a great amount of peace and comfort in this matter of sewing. Always finish a piece of work at the earliest moment you can. Stick to it until it is done. Of course, when over-wearied, you must rest; but pick it up again at the very next chance you get. In this way I keep well beforehand with my sewing, though as you know very well, it is not a slight enterprise."

TALKS ON TIMELY TOPICS.—No. 8.

ROSE GERANIUM.

Phantom Bouquets.

IN a previous article I gave directions for the delicate process of preparing skeletonized leaves. Those whose experiments were successful may be glad of a few hints regarding mounting.

Of course, stems must be improvised, and of these there are two kinds. The first are made of fine wire, covered with white wax; the second, which are my favorites, are of simple white crochet cotton, stiffened with starch and gum-arabic. When dry, it is sufficiently pliable for the purpose, and different sizes may be employed for vine, twig and tendril.

If a wreath is to be made, procure a background of fine black velvet. Fix it firmly and smoothly to its place, and then skillfully gum the parts to their places to complete the design.

A cross is most effective as a receptacle for these airy products. In covering one, always cut the velvet bias, so that the folds may be more easily drawn out.

Instead of black, white velvet or white frosted plush may be used with good effect. In either case all should be immediately secured from dust and air by a covering of glass.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

NOTES.

When making coffee, add a pinch of salt.

In poaching eggs, if the bottom of the dish be greased before pouring in the water, it will prevent their sticking.

A pinch of brown sugar added to stove blacking causes it to stick and polish easier.

A friend tells us she was told by an excellent cook, to thin her buckwheat cakes in the morning with a half teacupful of cider.

To prevent wooden bowls from cracking, either pour sweet, hot lard over them or *immerse* in cold water, bring to the boiling point, boil an hour or longer, then let the water cool gradually when the bowl may be taken out.

PEN THOUGHTS FROM EVERY-DAY HOUSE.

ANNIE L. JACK.

"Old Stranger is failing in her milk," said the milkmaid one morning in November. "Give her carrots and corn straw," said I, "and she ought not to fail yet." There is a great deal in the way a pet cow is cared for at this time of the year. A few hurried days of careless feeding will reduce the milk both in quality and quantity, and at no time of the year are milk and cream more appreciated than during the autumn months. How delicate the custards! what rich squash pies we can make! and at no other season is a bowl of bread and milk so relished by the children, for the days are cool and bracing, and their appetites are good. In making custards, a little gelatine improves the appearance, and the secret of making them *well*, is to stir sufficiently. A little cream is a great improvement put in with the flavoring. All these things one cannot get if the cow fails in her milk.

It was something like this that formed the subject of our breakfast-table talk, and looking round I detected the amateur cook smiling dreamily. "Let us share," I said. "I was thinking," she said, "of the party last summer when I was assisting some ladies to prepare trifles. Each one chose her task, while I waited for orders, and the whipped cream fell to my share. I was told it was hard work, though I had never found it so at home, but then we had never whipped more than half a pint at a time. Well, I began, and slowly the half gallon swelled and foamed, became little globules floating in the dish, gathered and came forth soft, pale butter. More cream was sent for from another dairy. This was three times repeated and each time with the same result. Had I placed the dish in ice before commencing and put in the merest pinch of soda, this would not have happened; but then one never does know or remember a thing till too late."

"Did you taste that apple trifle the other day at Mrs. Stairs?" asked the family epicure. "Yes, yes," was answered by those present with every gesture of intense satisfaction, and as it may be useful to those who have apples in profusion during this season of plenty, I shall pen it for my readers:

One dozen tender apples of good flavor; a large cup of sugar for the custard, and a large tablespoonful for the apples; of milk not quite a quart; three eggs and the juice of one lemon; a pint of cream beat with powdered sugar. Slice the apples, place in a jar, cork lightly and set in a kettle of warm water, bringing to a boil gradually. When the apples are tender and clear beat to a pulp; sweeten with the tablespoonful of sugar, add the lemon juice and place in a glass dish. Make a custard of the milk, sugar and eggs, with a little isinglass; boil till it thickens and put it away till cold. Then, when the apples are cooled and firm, pour the custard over, and lastly your whipped cream. Is is a pretty Autumn dish, and well repays the trouble of preparing it.

RAG-CARPETS.

Allow me to give my experience in the making, wearing and durability of rag-carpets. To *my* mind they are exactly what a plain family room, inhabited by several healthy, restless children, ought to have on its floor. I am sure I do not know how I should have done without them, when I was bringing up my little ones.

Now, if a lady concludes, *all at once*, to make a carpet of rags and devotes her whole time for some days, or perhaps weeks, to the preparation of "rags and chain," she will weary and disgust every one and not enjoy her carpet when she gets it. Let me suggest a better way. I may say here that I tried the bustling way at first, but experience taught me better.

When one's husband or boys have really "got all the good," as the old ladies say, of a suit of clothes, and you feel that you do not need to lay them by for future possibilities, rip up the garments, shake and brush well. Choose some dull, rainy evening when you are tolerably certain of having no visitors for the work. Then cut your rags, trim corners, tack with strong thread, make into large balls, sew some strong cotton material on the balls to keep away moths, and lay them by. When another pile of old things accumulates—six months later perhaps—do the same. I assure my sister readers of the "Rural," that in a surprisingly short time they will find, upon weighing the nice balls, that the rag-carpet is no longer doubtful. The shears or scissors have not been used long enough at any one time to hurt the fingers, nor has any weary disgust been experienced. Cotton cord may be bought from many factories already dyed in bright colors, and one's taste may be gratified by the contrast of stripes. But to those who wish to do things in the cheapest way, I will say that coarse factory yarn doubled and loosely twisted, makes an excellent warp and can be dyed at home. Every farmer's wife knows the virtues of maple-bark set with copperas for dying a purple or slate, also of copperas-dyed cotton thread, set by dipping in lye of wood ashes. These are, I think, the cheapest and easiest dyes for *cotton*. *Pretty* they are not—but I am writing for those who prefer comfort to appearance.

Perhaps some do not know that an apronful of peach leaves boiled in water, will make a yellow dye for *cotton* (which will wash out, however), and the said decoction of peach leaves, with the addition of some of the above-mentioned lye from wood-ashes, will dye *wool* a good bottle-green, which can't be washed out at all. I am speaking of strictly domestic dyes which are almost of no cost. There are, however, many experienced old ladies who are only too happy to instruct less informed matrons in the more elaborate arts of dying. I have cut, trimmed and tacked, at odd times, the rags or filling for one hundred and fifty yards of nice rag carpeting, without ever feeling the work burdensome. And now that my boys have grown up and gone off into the world, I have no longer the old clothes to cut up, nor do I need to exercise such close economy, still, I recommend it to others who are in the morning of life, as it were, and who wish to be industrious and economical.

One item of information I must not omit. It is not the *masculines* of the family alone who can contribute cast-off clothing for the carpet. The worn out aprons, dresses and under-clothing of the little girls, properly managed, make an excellent filling, and the carpet is smoother as well as prettier. Tear them up into as fine strips as you well can, tack and make them into balls. If the clothes are white or light-colored, make the long strips into hanks or skeins and dye them in maple bark before winding into balls. No matter how streaked or blotched they look—it will not show. Then have your carpet woven with alternate threads of pantaloon and dress—a coarse thread of the heavy woolen cloth, and then a finely *beaten up* strip of the cotton. It will wear longer and look better than if made entirely of the thick heavy rags. I am writing of carpets striped in the chain *only*. Of course, there are those who prefer a checked carpeting and who choose to arrange a pattern or check according to their own fancy. These can be made very pretty, but are a great deal more troublesome to devise and carry out.

My aim in writing is not to assist those who have abundant time, means and appliances for gratifying their various tastes in domestic manufactures, but to assure some of the burdened housekeepers that with proper management, they may have neat, plain carpets without any great trouble or expense. I am supposing that the weaving is entrusted to some one skilled in such work. I never had anything to do with that part of the business save to pay the bill, which always seemed to me ridiculously small.

Mrs. S.

Summerville, N. C.

DOMESTIC RECIPES.

Corn Bread, No. 1.

Two teacupfuls of sweet milk; one-half teaspoonful of soda and one of cream of tartar; one good-sized handful of prepared flour; butter the size of an egg; mix sufficiently stiff with Indian meal; sweeten with sirup to suit the taste. Bake one-half hour.

Corn Bread, No. 2.

Two cups of milk; two and one-half of Indian meal; one-half of prepared flour; two tablespoonfuls of sugar or molasses; a teaspoonful of soda and two of cream-of-tartar.

Mrs. M. Randall.

QUESTIONS ANSWERED.

Ginger Snaps.

M. L. B. wishes directions for making good, crisp ginger snaps. We append the following, knowing it to be an excellent recipe: Two cups of molasses; one-half cup of sugar; one and a half cup of melted lard; two thirds of a cup of cold water; two teaspoonfuls of saleratus; two teaspoonfuls of ginger and one of salt; flour enough to roll thin. Bake in a quick oven.

Raised Biscuit.

Please give a reliable recipe for raised biscuit?

Ithaca, N. Y. A. E. M.

Ans.—One quart of rich milk; one cup of butter; one cup of yeast; a cup of mashed potatoes; a teaspoonful of salt and flour enough to make a stiff batter; let rise over night and in the morning knead, adding flour but no wetting; let stand until light; then knead into biscuit; again let rise for about twenty minutes and bake.

News of the Week.

Monday Nov. 11, 1878.

POLITICAL.

The returns from the elections held last Tuesday, though not yet officially announced in most of the States, are known with sufficient accuracy to indicate pretty clearly the results. The following list, made up according to the latest dispatches, shows the political affiliation of the members of the House of Representatives elected from the different States to the next or forty-sixth Congress: Alabama, democrats, 8. Arkansas, democrats, 4. California does not elect Congressmen until September, 1879. Her present delegation stands, republicans, 2; democrats, 2. Colorado, republican, 1. Connecticut, republicans, 3; democrats, 1. Delaware, democrat, 1. Florida, democrats, 2. Georgia, democrats, 9. Illinois, republicans, 12; democrats, 6; greenback, 1. Indiana, republicans, 6; democrats, 6; greenback, 1. Iowa, republicans, 7; greenbacks, 2. Kansas, republicans, 3. Kentucky, democrats, 10. Louisiana, democrats, 6. Maine, republicans, 3; democrats, 1; greenback, 1. Maryland, democrats, 5; republicans, 1. Massachusetts, republicans, 10; democrats, 1. Michigan, republicans, 9. Minnesota, republicans, 2; democrats, 1. Mississippi, democrats, 6. Missouri, democrats, 12; greenback, 1. Nebraska, republicans, 1. Nevada, republicans, 1. New Hampshire, republicans, 3. New Jersey, republicans, 4; democrats, 3. New York, republicans, 25; democrats, 8. North Carolina, democrats, 6; republicans, 2. Ohio, democrats, 11; republicans, 9. Oregon democrats, 1. Pennsylvania, republicans, 17; democrats, 9; greenback, 1. Rhode Island, republicans, 2. South Carolina, democrats, 5. Tennessee, democrats, 9; republicans, 1. Texas, democrats, 6. Vermont, republicans, 2; greeeba k, 1. Virginia, democrats, 8; republicans, 1. West Virginia, democrats, 3. Wisconsin, republicans 5; democrats, 3. Wyoming Territory, republicans, 1. Dakota Territory, republicans, 1.

According to the above list the next House of representatives will consist of 151 democrats; 130 republicans; 8 greenbackers and 4 to be elected in California. Later returns of a more accurate nature may slightly change these numbers, for in some districts the votes for the several candidates are so close that the official count only can decide the matter. The tendency of the returns, however, is considerably in favor of the republicans, and many of their best informed organs insist that the full returns will show a considerable reduction of the democratic majority here indicated. Despite the fact that the republicans lost 11 congressmen in the October elections, they have made steady gains nearly everywhere in the State and national contests at this time. In this State, besides carrying their State ticket by about 11,000 majority, they have carried the Legislature by a majority of 60—the heaviest majority they have ever had in that body. This triumph secures the unopposed re-election of Conkling to the Senate; and if the peace within the party lines continues, the victory may make the senior Senator from the Empire State "a bigger man than old Grant" as republican candidate for the Presidency in 1880. They have also secured a U. S. Senator instead of Barnum in Connecticut, having elected a majority of the legislature of that State.

In this city Tammany Hall has been completely overthrown, Schell, its nominee for Mayor, having been defeated by a majority of upwards of 19,000 in favor of Cooper, the candidate of the republicans and anti-Tammany democrats; the former having cast about 52,000 votes and the latter about 28,000, against Tammany's solid 61,000. As the combination also elected a strong majority of the Board of Aldermen, all Cooper's nominations to offices will be confirmed, so that during the next two years the spending of the $40,000,000 annually laid out here, will be chiefly in the hands of the new mayor and his backers. The remainder of the combination ticket was also elected by majorities varying a trifle in numbers. Many of the most important Tammany officials, however, hold over for different lengths of time, and cannot be removed, except for cause, and with the consent of the governor. Chief among these is John Kelly, the successor of Tweed as Tammany Boss, who now holds the office of Comptroller, the most important post in the city government, and whose term does not end for nearly two years. As Tammany has been Tilden's bitterest enemy, its defeat is regarded as a triumph for him, and it is said he will probably run as democratic candidate for governor of the State at next election, so as to keep prominently before the people with a view of again securing the nomination for President in 1880.

In Massachusets, Butler has been defeated by a majority of about 25,000, although the old man managed to poll 110,000 votes. In view of the tremendous odds of respectability, money and social as well as political influence against him, he certainly made a stout fight; but both an account of his record, character, platform and methods, it is to the honor of the old Bay State that she did not allow him to triumph. Talbot, the republican candidate, won by the union of the respectable class of democrats with the same class of republicans: Abbott, the democratic nominee secured only about 10,000 votes, the remainder of that party having split in favor of either Butler or Talbot, the former having secured the most of them.

The democrats will have a good working majority in both branches of the next Congress. On the fourth of next March the terms of 25 U. S. Senators expire; of these 17 are republicans and 8 democrats. As the legislatures which elect the successors of these, are already chosen, it is possible to state with almost entire certainty the political complexion of the new senators. The following States will send republicans: Colorado, Connecticut, Illinois, Iowa, Kansas, New Hampshire, New York, Nevada, Pennsylvania, Vermont and Wisconsin. Democrats will be sent by the following: Alabama, Arkansas, California, Florida, Georgia, Indiana, Kentucky, Louisiana, Maryland, Missouri, North Carolina, Ohio, Oregon and South Carolina. Of these California, Kentucky, Maryland, Ohio, Oregon and Vermont have already made choice of senators.

It may possibly happen that the next election for President may be made by the House of Representatives, as it has already been twice in the history of the Union, and as nearly occurred at the last election, for a third time. This has hitherto occurred when there have been more than two candidates in the field, and none of them has secured a majority of *all* the votes cast, though one or other of them may have gained a plurality, or more than either of his competitors. In such a case, the President is elected from the candidates by the vote of the members of the House, acting, not in their individual capacity but as representatives of the States that elected them; in other words, each State has one vote in making the election, and a majority of the Representatives from the State previously decide in whose favor that vote shall be cast. Thus, in such a case, Nevada, which has only one Representative, would have precisely the same influence in deciding the issue as New York with her 33 Representatives and a population proportionally greater. At present the democrats hold congressional majorities in nineteen States, or in just half the whole number, namely, Alabama, Arkansas, Delaware, Florida, Georgia, Indiana, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Ohio, Oregon, South Carolina, Tennessee, Texas, Virginia and West Virginia. The republicans control the delegations from 18 of the States, leaving California still in doubt. If the republicans should carry that State next year, dividing the delegations evenly between the two parties, some novel and perhaps dangerous results would arise in the event of the Electoral College failing to elect a President in 1880.

An impartial view of the elections shows that the greenback party will hardly ever amount to much in American politics; that though the people are not content with the republican party, yet they are scarcely willing to throw it over yet a while for its rival; that a solid South has a strong tendency to bring about once more a solid North; that the hard-money doctrine gains adherents as it is more freely explained to the multitude; and that the American People are sufficiently intelligent and honest to act on the whole for their own best interests.

MISCELLANEOUS.

It's fortunate for Miscellaneous and Foreign news that, like Christmas, a general election comes only rarely, for it forces other news out. Indeed there is but little of general interest to tell in either, this week. Abroad news with regard to the Eastern difficulties is still very contradictory. With regard to Turkish affairs, Russia speaks fairly of her intention to comply with the terms of the treaty of Berlin, having some four months yet to do so; but all the time she is said to be massing troops towards the south, to be ready for any contingency. In India, Great Britain is still waiting for an answer to an ultimatum she has sent to Shere Ali, forbidding his alliance with Russia and demanding an apology. At home the great news of the week, hereabouts at any rate, is the theft of the body of the late millionaire A. T. Stewart. The tomb in this city, in which the body was temporarily deposited until the completion of the grand Cathedral being erected for its reception at Garden City, L. I., was broken open on Wednesday night, and the corpse removed. A reward of $25,000 for its recovery was stimulated all the detectives and thief-catchers, but as yet no clue is known to have been found to the outrage.

The Cheyenne Indians, lately reported on their way to join Sitting Bull, have been captured in a half-starved condition. When surrounded and required to surrender, they positively refused to do so, if they were to be sent back to the reservation from which they had escaped to avoid starvation. They will be handed over for trial to the authorities of the States and Territories in which their late depredations were committed, just as Santa Anna and Big Tree were some years ago. Gen. Sheridan, in a report on the Indian question, dwells strongly on the hard and thankless task which a small, insufficient body of troops has on hand in keeping the red-skins in order over an enormous extent of territory. He lays the blame of most Indian troubles on gross mismanagement in the Indian Department or rather among its subordinates; says that the appropriations made by Congress, if properly spent, are ample to supply the aborigines, whereas these are now in a miserable, half-starved condition. He is strongly of opinion that kind treatment administered with tact, steadiness and justice, would remove from our western frontier all the appalling horrors arising from Indian outrages. Owing to the heavy expense it entails on the nation, the suffering and loss it is constantly causing our frontier settlers, and the horrors that periodically arise from it, this Indian question urgently demands some permanent settlement.

Herman.

PUBLISHERS' NOTICES.

A WEEKLY NEWSPAPER is one of the needs of every family; and one of National character and reputation is worth more than half a dozen of the ordinary kind. Such is the CINCINNATI WEEKLY TIMES. Published in the central section of the Union, it represents more truly the interests of all sections and classes, than those issued from the extreme East or South. Its Editorials, Correspondence, News and Market Reports are first-class all the time. Persons seeking Homes in the West will find in it much reliable information on this subject. We will be pleased to receive subscriptions for the TIMES with the RURAL, one year each, at the low rate of $3.25.

WE confidently refer our readers to the card of Dr. C. R. Sykes, in our issue of Nov. 9. Mr. F. W. Jones of the Chicago Farmers' Review says: "Dr. Sykes is an old resident of Chicago, a regular graduate, honest, honorable and responsible, and as a physician takes first rank in his chosen specialty of catarrh and its complications."

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Nov. 9, 1878.

During the week business has been at a pause, in consequence of local political excitement, and values have been, to a considerable extent, nominal. Improved weather and want of stock have latterly brought out a better attendance of buyers, and prices, for some articles, already show firmness.

BEANS AND PEAS.—Supplies of medium beans exceed current wants, and $1.65 is extreme for choice: fair to good, $1.50@1.60; marrows of desirable export grade are not plenty, $1.75 quoted and obtained for choice; other qualities, including prime old, $1.50@1.70; Red kidney, in limited demand, quality not generally attractive, range $2@2.10; White kidney have some call at $1.75; Pea beans scarce, but quiet, at $1.75@1.80; Black or turtle soup beans, jobbing at $1.85@2. Green peas, as before, $1.20@1.35; Southern B. E. peas, $2.50@2.60 per 2-bush. bag. Canadian field peas, 74@76c. in bond; Western, do., spot and track.

BEESWAX.—Shippers are taking small lots at 26½@27c. Exports past week, 1,372 lbs.

BUTTER.—Fine State indicates considerable wholesome strength in prices, and trade is steady with fairly free sales. The most prominent advance for the week is in high grade dairy pails and extra fresh half tubs, now rated 22@24c. Some of the latter would sell up to creamery if sellers would submit to the separation of tops from lines. A good many little lines arrive at this season and they help out the single package trade, as wholesale buyers in the present hardness of the market have to carry their share of the longer lines. Choice full dairies can be readily sold at 20@21c.; occasionally 22c.; but, as before, there is a free offering of useful table stock at 16@18c.—firkins seldom exceed the latter rates.

Welsh dairies, 17@19c.; selected fall, 21@23c.; other, 17@19c.; good dairy pails and half tubs, 19@20c.; creamery, choice, 26@27c.; good to prime, 22@24c.; early packed, 18@20c.; low grades of State, 10@14c. and dull. Western makes good prices when fine but the bulk of the offering is cheap. Creamery ranges 22@26c. good to fancy; 17@20 early packed. Selected dairy, 15@17c.; good to prime dairy and nice ladle-packed factory, 12@14c.; other factory including milled, 6@10c.

CHEESE.—There have been taken this week, by shippers, 31,001 boxes. This is almost entirely of the choicest factories and has pretty well absorbed the receipts of these parcels. Prices on these choice lots have been well supported—not affected by the dull accounts from the country. Sales have been chiefly at 9c., but special lots reaching 9¼c. Good and lower grades yet drag and are about nominal.

Quotations are 9@9¼c. for fancy; 7@8c. for good and prime; 6@7c. for fair to good; 3@5½c. for skimmed. State, farm dairy at 8@9c. for good to choice, 6@7½c. for fair to good. Wisconsin factory, fine to fancy, 8½@9¼c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 8½@8¾c.; good and prime, 6½@7¼c.; fair, 5½@6c.

Receipts past week, 20,319 boxes.

Gold closes at 100⅜.

Liverpool cable 47s.

COTTON.—The market has fluctuated widely, according as the English advices have been favorable or otherwise; dealings have been brisk; closing prices are for November, 9.26@9.27c.; December, 9.34@9.35c.; January, 9.45@9.46c.; February, 9.57@9.58c.; March, 9.68@9.69c.; April, 9.79@9.80c.; May, 9.90@9.91c.; June, 10.00@10.01c.; July, 10.09@10.10.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands	*Ala.*	*Orleans.*	*Texas.*
Ordinary	7 7-16	7 7-16	7 11-16	7 11-16
Strict ordinary	7¾	7¾	8¼	8¼
Good ordinary	8⅛	8⅛	8¾	8¾
Strict good do	8 13-16	8 13-16	9 1-16	9 1-16
Low middling	9	9	9¼	9¼
Strict L. middling	9¼	9¼	9⅜	9⅜
Middling	9 15-16	9 15-16	9 9-16	9 9-16
Good middling	9 9-16	9 9-16	9 13-16	9 13-16
Strict G. middling	9 13-16	9 13-16	10 1-16	10 1-16
Middling fair	10 5-16	10 5-16	10 9-16	10 9-16
Fair	10 15-16	10 15-16	11 3-16	11 3-16

Stained.

Good ordinary.. 7 3-16; Strict good ordinary.. 8 1-16
Low middling.. 8 9-16; Middling.. 9 15-16

DRIED FRUITS.—Small fruits generally are much higher, blackberries alone excepted. Apples have some export demand and a good home trade. Peaches of choice quality favor sellers.

Southern Plums, 13@13½c.; State plums, 15@16c. New blackberries are quoted at 5@5½c. Peaches—Peeled, new Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime, choice North Carolina, 11@11½c.; good do., 8@9c.; unpeeled new halves, 3@3½c.; quarters, 2@2½c. Pitted cherries, 20c. bid and 22 asked. Apples—Old State quarters, 2½@2¾c. New apples, 2½@3c. for southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy; State at 5½@6c. for new sliced; western at 3@3½c. for new quarters. New raspberries, 30c.

Exports, past week, 219 bbls. apples.

EGGS.—The market during the week has taken one of the sudden jumps that suits neither buyer nor seller. Quotations have advanced too high for consumption, while their influence will tend to throw in more stock than can be sold at a good round price. Light supplies and colder weather have caused the excitement, and the new prices are not expected to last. Near points 26c.; fresh State, Penn., Western and Canadian, 25c.; poor quality, 23@24c. Southern begins to appear, quoted 24@25c. Limed in fair demand, for the moment at 15½@18c.

Receipts for the week, 7,295 bbls.; do. last week, 7,143 do.

FLOUR.—Export and home trade demands have been active, and the market is the turn better.

Latest prices are: $3.00@3.65 for very inferior to choice superfine State; $3.65@3.95 for poor to good extra do., odd lots and lines; $3.95@4.25 for good to very choice do., strictly choice and fancy lots above this; $3.00@3.65 for very inferior to choice superfine Indiana, Iowa, Michigan, &c.; $3.65@3.95 for inferior to good shipping extra do. and $3.95@4.25 for good to choice extra do.; common to about choice white wheat extras, $4.00@5.00; choice to strictly fancy do at $5.00@5.85; red and amber winter wheat, very inferior to choice trade and family at $3.85@5.50; round hoop Ohio at $3.75@4.15, and trade and family brands of do. at $4.20@5.65, the latter rate for very choice; St. Louis, $4.00@4.75 for very poor to good extra, and $4.75@5.75 for good to very choice; Minnesota clear, very inferior to very choice, at $3.70@5.50; Minnesota "straight," very inferior to very choice at $4.30@6.00; (about choice to fancy old at $5.00@6.50), and patent fair to fancy at $5.25@5.50; unsound stock at from $2.50@4.75; city mill extra at $4.85@5.10 for West Indies (the latter rate for fancy in new packages); do. for England, $3.75@3.90; do. trade and family extras, $5.10@6.00; do. for South America, $5.10@5.60 for fair to very choice; No. 2 at $2.35@3.00 for very inferior to choice.

CORN MEAL.—Sales at $2.35 for Brandywine, and $2.15@2.65 for yellow Western.

FRESH FRUITS.—Apples continue in buyers' favor for large lots. Red fruit mostly sought after for export. A good supply of Spitzenbergs is noted this season. There is a fair demand for selected retailing sorts; mixed lots dull. Fancy Kings and Spitz, $1.50@1.75; Greenings, Spys and Baldwins, $1@1.25; common lots, 62½@90c. ₱ bbl. Quinces scarce and firm at $7@10. Catawba grapes, 6@7c. ₱ lb.; State cases, $3@3.50 ₱ case. Pears not in commercial quantity. Boston still sends some, showing large specimens for fancy use. Cranberries rule easy with cheap apples to compete with; the extremes are for high-colored, hard stock: bbls., $5@7, the latter for Capes; crates, $1.25@1.75 for fair to good; $2@2.12 for choice. Florida oranges are of uneven quality; quoted at $3@6 ₱ half-bbl. box. Chestnuts unusually steady: $3.50@4 ₱ bush. Hickory nuts, $2@2.25 ₱ bush, which is better than last season. It is thought the decline in peanuts is checked; present range, 90c.@$1.20 for good to hand-picked Va.

Exports of apples for week, 14,402 bbls.

GRAIN.—The export movement has quickened, and all articles are higher, and closed favoring holders.

Latest sales of wheat are, of No. 2 amber at $1.01½@1.05; ungraded red at $1.01@1.07; No. 3 red at $1.03@1.03½; No. 2 red, at $1.06@1.06½; No. 1 red, at $1.07@1.07½; red Canada, in bond at $1.01; ungraded white $1.06@1.09; extra white at $1.10@1.11; white State at $1.08@1.09½; No. 1 white at $1.08½@1.09; ungraded amber at $1.04½@1.07½; No. 2 Milwaukee spring in store at 97½c.; No. 2 spring at 94c.; No. 3 spring, 90c.; ungraded spring at 80c.; No. 3 amber, November option, at $1.04½@1.05; do., December option, at $1.05½; do., January option at $1.05¾@1.06¾; No. 2 red, November option, at $1.06½@1.06¾; do., last half November, at $1.07¼; do., December option, at $1.07@1.07¼; do., January option, at $1.08¼@1.08¾; No. 1 red, to arrive in November, at $1.07¼; No. 1 white, November delivery, at $1.09; do., November 25 to December 10 delivery, at $1.09@1.09½; No. 2 Green Bay spring to arrive at 95c.; New York No. 2 spring, November option, at 94@94½c.; do., December option, at 95@95½c.; No. 2 northwest spring, December option, at 97c. Rye at 57½@60c. for Western, and 59@63c. for State. Corn at, for steamer mixed 46½@46¾c.; New York No 2, at 47@47½c.; white western at 50@52c. No. 2 white at 50½c.; mixed at 46@48c.; New York No. 2, November option, at 47c.; do., December option, at 47¾@47½c.; do., January option, at 48¼@48½c.; steamer mixed, November option, at 46¼@46½c.; do., December option, at 46½c.; do., January option, at 46¾@46½c. Oats at , for New York extra white, quoted at 38½@40c. New York No 1 at 31c; New York No. 1 white at 33½@33½c; New York No. 2 at 30@30½c.; New York No. 2 white at 32c.; New York No. 3 quoted at 29c.; New York rejected at 28c.; No. 3 white at 30c.; mixed western at 28½@31c.; white western at 30@30c.; mixed State at 29@31c.; white State at 31@36c; No. 2 Chicago at 31c., averaging about 33¾ lbs.

HAY AND STRAW.—Receipts are not more than can be conveniently handled and prices rule firm.

Latest sales are at 40@45c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye; 30@35c. for short rye.

Exports past week, 737 bales.

HOPS.—Emmet Wells, in his circular, says, "Trade has been fairly active this week considering the intervention of the election holiday. Prices remain unchanged. The demand runs chiefly on fine goods which are scarce and command full rates. Our London letters give but poor encouragement for business from that source. The quotations of 75s. and 80s. per cwt. are really no better than our home brewers and dealers are willing to pay here, and our opinion is there must either be an advance in the price in London or a decline here before much business can be done on export account. It is simply a question as to who can hold out the longer, the buyer or the holder. Choice American hops, from their extreme scarcity, ought to command more money than we quote; but brewers, both home and abroad, seem determined to work up their old stock before facing the new crop at more money than their 77's cost them. Nearly half of the hops shipped to London this week and last were of last year's growth, and all went on owner's account. No sales of Pacific coast hops have been made this week, prices cannot, therefore, be quoted.

Quotations are for New Yorks, new crop, choice, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@7; Olds, all growth, 2@4.

OIL-CAKE is plenty and quoted at $28 per ton for Western.

HONEY.—Demand fair but dealers have to accept late figures. Single comb, clover, 16@17c.; two comb, do., 14@15c.; buckwheat, 10@12c.; strained, 8@10c.

POULTRY AND GAME.—Live poultry arrives heavily in opposition to advices at this part of the season when dressed becomes a feature. Prices low.

Fowls and chickens, 8@10c.; roosters, 4@5c.; turkeys, 8@10c. ₱ lb.; ducks, 45@90c. ₱ pair; geese, $1@1.50.

Dressed poultry has had a fair business, though moderate prices were accepted—a fact that has kept life in trade. Shippers must bear in mind that slovenly-dressed stock loses value in the New York market. Thanksgiving stock should be in market at least two days before the 28th, weather permitting.

Turkeys, N. J., prime, 11@13c.; State, prime, 10@12c.; Western, prime, 9@10c; Phila. dry-picked, extra, 13@14c.; poor to good, 8@10c.; chickens, Phila. dry-picked, 13@14c.; N. J., prime, 11@12c.; do., fair to good, 10@11c.; State and Pa., prime, 10@11c.; State, fair to good, 8@9c.; Western, 8@10c.; Fowls, Pa. and N. J., prime, 11@12c.; poor to good, 10@11c.; Phila. dry picked, prime, 13@14c.; State, prime, 10@11c.; Western, 9@10c.; Ducks, N. J. and Phila., 13@14c.; State, 12@13c.; Western, 11@12c; Geese, 8@12c.

Game is well represented in items and trade is fairly supported.

Quail, prime, ₱ doz., $1.50@1.75; Grouse, drawn, ₱ pair, 65@75c.; undrawn, 85@90c.; Partridges, State, ₱ pair, 85@90c.; Western, 60@75c.; Eastern, 50@65c.; Woodcock, State and Jersey, 50@60c.; Western, 35@40c.; tame Squab, ₱ doz., $1.75@2; Plover, ₱ doz., $1@1.25; English Snipe, ₱ doz., $1; Reed Birds, ₱ doz., $1; Canvas-back Ducks, $1.25@1.50; Mallard, ₱ pair, 40@45c.; Teal, ₱ pair, 30@35c.; common, ₱ pair, 20@30c.; Red Head, Western, 10@30c; do. Hd'r Gr. 35@75c.; Venison, short saddles, 14@15c.; long saddles, 12@13c.; carcasses, 8@9c.; Hares, ₱ pair, 50@60c.; Rabbits, 30@35c.

PROVISIONS have tended lower, the arrivals of hogs west being much beyond expectations. Mess pork quoted at $7.50@7.60 for ordinary on spot lots; $7.55@7.60 for November and December deliveries. Bacon at 4¼ for long clear and 5¼c. for short clear. Lard at $6.17½ for spot; $6.17½ for December, and $6.20 for January. Stearine at 6¾@6¾. Beef Hams at $15. Beef, new barrelled, $10.50; $11 for mess, and 11.50@12 for extra mess.

VEGETABLES.—Regardless of the high rates for potatoes the better sorts are most active. Western stock 25c. per bbl. under Eastern. Eastern Early Rose, $2.75@3 bbl., including N. S.; Peach Blows, $2.75@3.00; Peerless and Prolific, $2.50@2.75. Sweets easy again Del. or S. N. J., $1.25@1.50; Va., $1.25. Onions firm. White, $1.50@1.75; red and yellow, $1.25@1.50; Chester, $1@1.25. Cabbages, $2.50@4.50 per 100. Cauliflower, $1.50@3. Celery, doz., 75@87c. Hubbard squash, $1.50@1.75 bbl.; marrow do., $1.25@1.50. R. Turnips 75c.@$1. Carrots, $1 bbl.

Exports, potatoes, past week, 2,295 bbls.

SEEDS.—Timothy brings $1.20, if prime. Clover is in freer demand and quoted better, or at 6¾@7¾c.; for primo and choice.

TOBACCO.—The export movement has been less active, but the home demand is very fair. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3	3¼@ 3¾
Good lugs	3¾ " 4	4 @ 5
Low leaf	4½@ 5	5¼@ 6¼
Medium leaf	5¼@ 6¼	6¾@ 7¾
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8½@10	10 @12
Selections	—@—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers, common	10	@12
do. do. medium	13	@15
do. do. fine	18	@35
do. do. selections	27½	@35
do. seconds	10	@15
do. fillers	6	@ 7
Pennsylvania assorted lots, common	9½	@10
do. do. fair	11½	@13
do. do. fine	14½	@15½
do. wrappers	20	@40
do. fillers	7½	@ 8
New York assorted lots, common to medium	8	@10
do. do. do. good	12	@15
Ohio assorted lots	9	@12
Ohio wrappers	12	@18
Wisconsin assorted lots	7½	@10

WOOL.—The slack trade that has prevailed latterly has finally led to a little urging of business and a trifle easier prices on other than combing and delaine sorts, which hold firm.

Quotations are, for Ohio, Pennsylvania and West Virginia—XXX and picklock, 33@40c.; XX, 35@37; X, 35@36; No. 1, 36@38c.; No. 2, 33@36c; coarse, 30@32c. combing, 40@42c.

New York, Michigan, and Wisconsin, XX, 30@35c.; X, 30@33c.; No. 1, 34@36c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 38@40c.

Indiana, Kentucky and Tennessee—XX, 30@35c; X, 30@34c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 38@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 31@31c.; X, 32@34c.; No. 1, 32@31c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c. coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS

Saturday, Nov 9, 1878.

BEEVES.—Receipts for the week, 10,468 head do last week, 9,331 do. The market shows some graduai improvement. The range for native steers in a wholesale way 7¼@9½c. dress, 55@56 lbs., Texas, Cherokee and Colorado 7¼@7¾c., dress, 55 lbs. A few top native 9¼@10c., dress, 56@57 lbs.

COWS AND CALVES.—Supplies are liberal, but quality is poor. Sales range $35@65; a few extras at $75.

VEAL CALVES.—Course to good milk veals, 5@7c.; extra 7½c.. Grassers and buttermilk, 2½@3c.

SHEEP AND LAMBS.—Receipts for the week, 28,169 head; do, lastweek, 27,928 do. Sheep dull at 3½@4¼c. common to good; extra Ohio, 5¼c. Lambs, 4½@5c., slow.

SWINE.—Receipts for the week, 51,462 head; do., last week, 37,421 do. Supplies are assuming winter quantities. Good Ohio sold at 307½@318¾ per cwt. at the close. City dressed are low, 3¾@4¼c.

TERMS FOR 1878.

THE subscription price of THE RURAL NEW-YORKER is

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Great Britain, Ireland, Australia and Germany, per Year, post-paid	$3 04 (12s. 6d.)
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Any one sending a club of ten is entitled to one copy, one year, free.

Agents will be supplied with canvassing outfit on application.

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American Manufactures Abroad, particularly musical instruments, are in many cases supplanting those of foreign makers in their own markets. GEO. WOODS & CO., the well-known Organ makers of Cambridge, build a moderately-priced Parlor Organ which has as much variety as a Pipe Organ, and of such a refined and beautiful quality of tone that they are almost daily in receipt of orders for them from musicians in all quarters of the globe.

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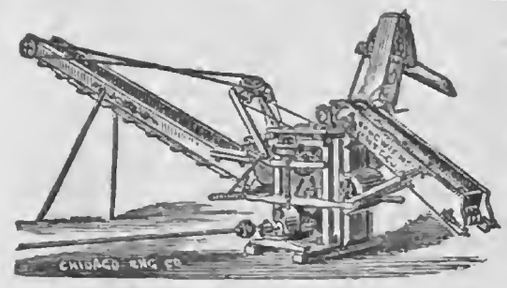

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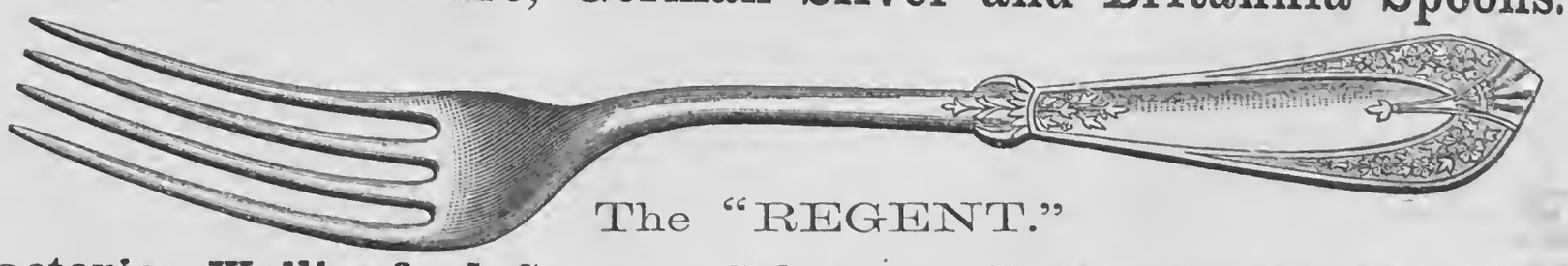

The "REGENT."
Factories, Wallingford, Conn. Salesroom, 75 Chambers St., New York.

Reading for the Young.

MY DOLL'S WEDDING.

My dear little dolly was married:
A sweet little wedding we had:
She married her cousin from Boston,
A red-cheeked and one-legged lad.

She was dressed all in white silk and laces,
With wonderful red 'rocco shoes,
And he in fine velvet and gold braid;
To admire him she did not refuse.

The cake was filled all full of raisins;
The frosting ran over the top.
And apples and cookies for each one,
With candies we bought at the shop.

And Jenny and I held the dolls up;
They were ready to faint with the heat,
In front of dear mamma, the priestess,
Who sat straight on the bright crimson seat.

[*Youth's Companion.*

SINGING MICE.

HENRY LEE.

A FEW days ago I was invited by a medical friend to visit him at his house, and hear two musical mice sing a duet, the performance to begin punctually at 8 P. M. I had never heard a singing mouse, though I had read and been told a good deal of the vocal accomplishments the little animal occasionally displays; so I gladly availed myself of the opportunity, and duly arrived half an hour before the commencement of the concert. My friend explained to me that every evening two little mice came out from behind the skirting-board in his dining-room, and sang for their supper of cheese, biscuit, and other muscine delicacies which he took care to place on the carpet for them always at the same hour. One of them had received the name of "Nicodemus"—an allusion, I suppose, to a certain furtive visit by night—and the other was known as "The Chirper." To "make assurance doubly sure" that they would fulfil their engagement, and not disappoint me, their supper had been withheld from them on the evening previous to my visit.

True to time, just as the clock struck eight, and while we were conversing, there came from a corner of the fireplace, "Chirp, chirp, chirp," the same note being repeated several times at the rate of about thrice in a second, and gradually becoming louder. Presently a slight movement was visible about one end of the fender; and, after some hesitation, a little brown mouse came out upon the carpet, leisurely sniffed about for its accustomed meal, came close to my chair, looked wistfully up to my face, and I was introduced to "The Chirper." As a critic, I am bound to say that "The Chirper's" performance was of second-rate quality; but it was merely a kind of *lever de rideau*, and the principal artist was yet to appear.

We had not to wait long. At the conclusion of "The Chirper's" ineffective solo, a prolonged trill was faintly heard from behind the scenes, followed by others, each more audible than its predecessor; and ultimately "Nicodemus," the soprano, came forth before the audience, perfectly self-possessed, and showing no signs of "stage-fear."

The song to which the little creature gave utterance again and again in our full view was as sweet and varied as the warbling of any bird. It most resembled that of the canary, but the melody of the nightingale was occasionally introduced. Every note was clear and distinct, but withal so soft, so gentle, tender and *pianissimo*, that I can only compare it to the voice of a bird muffled by being heard through a down pillow. In the room was a canary, whose cage was suspended in one of the windows. He had settled himself to roost, and his head was under his wing, but at the sound of "Nicodemus's" serenade he awoke, and listening attentively, and fantastically leaning alternately to right and left, peeped curiously down to the floor. I learned that mouse and bird were intimately acquainted with each other, and that the former frequently visited his feathered friend and staid to supper. Accordingly, while we looked on with interest and pleasure, "Nicodemus" climbed up the drawn curtains, entered the bird's cage, and partook of the seed—the canary showing no symptom of disapprobation or disturbance, but merely from his perch peering down on his visitor in a ludicrously quaint and odd manner. During his supper-time "Nicodemus" obliged us, from the cage, with several repetitions of his song, "The Chirper," down below on the carpet, occasionally coming in with a monotonous contralto accompaniment, and sometimes emitting a sound like the squeaking of a corkscrew through a cork. The two little songsters, having done their best to please us, were rewarded with all that mice could wish for as components of a feast, and, after selecting the portions they severally preferred, gracefully retired.

The singing of mice has been attributed to various causes: It has been thought to proceed from disease of the lungs or vocal organs, and to be akin to the wheezing characteristic of asthma.

Of course, I can say nothing about the condition of the livers of the two mice I heard sing last week; but they did not act as if they were afflicted with disease of the liver, or any other organ. Brisk and vivacious in all their movements, darting now and then back to their hiding-place, as if to keep open their means of retreat while foraging, they looked the impersonation of vigorous health and bright activity; and, like every one else who has heard them, I feel quite sure that their song—especially that of "Nicodemus"—is not involuntary, nor the result of any disease of the respiratory organs, but an intentional and conscious utterance of a series of notes in musical sequence. As Mr. Buckland says (*loc. cit.*), "The song is a genuine song, as good and as musical as that of a lark on a fine summer morning."

Prof. Owen tells us that the anatomy of the mouse is very similar to that of birds; and all who have seen this little rodent in the act of singing have noticed that the throbbing of its throat is like that of a bird in full song, and that it then elevates its snout as a bird does it beak.

It is remarkable that in almost every case of a singing mouse having been seen as well as heard, it has been described as very small, much browner than the common gray or slate-colored mouse, and as having very large ears. This exactly applies to my little entertainers, "Nicodemus" and "The Chirper." They are both very tiny mice, their coats are very brown (not so much as to be fawn-colored), and their ears are abnormally big. I should be tempted to regard the singing mouse as a peculiar variety, if this idea had not been contradicted by the recorded fact that one out of a litter of common mice has become a "cantatore" or "cantatrice," while the rest have remained incapable of "favoring with a song."

The fact is that, although singing mice are not very rare, they are not common enough to have permitted any common zoologist to note their birth and parentage, observe their habits in life, and dissect them after death in a series so complete as to give assurance of scientific accuracy.

LEARNING TO SPELL.

ALLOW me to submit to the attention of teachers and parents of the advanced and advancing class, who take delight in your paper, a valuable aid in school training. It is a radically new mode of teaching spelling, which, while this is its primary object, is of great service in training the voice, also for preparing the hand and eye for future lessons in writing and drawing, in appreciating scales, and geometrical and geographical lines and directions, in exciting interest on the part of the learners, and in enabling the teacher to give more instruction.

I send you a copy of a pamphlet of example exercises in this method. It contains all that a teacher can require to make use of the plan in school, and exercises enough for perhaps three months of daily use.

The original French method was shown in the French or Belgian exhibit at our Centennial, but not being of a nature to attract the eye, did not excite observation. It has been in use in France for six or eight years with rapidly increasing extension. Their need of a better way with the spelling difficulty is perhaps greater than even ours.

The pamphlet is entitled, "Examples of Spelling Lessons by Ocular Instead of Oral Dictation,' and the method is to place before the learner's eye the pronunciation of the words of the lesson, in simple sound-signs from which he writes them in the proper spelling; referring, as we all do, to the image of the word stored in the memory and seen by introspection. The jingle of letter-names, so painfully and slowly learned, is no guide to the hand in actual practice; and the learning of them is a monstrous infliction upon children who can be gay and happy over an exercise that is reasonable and within their power to solve.

The new plan delivers them from this incubus, and takes them along a near and pleasant way. The gain in time alone is estimated by French authorities, after experience in more than 1,000 schools, at a whole year! How much valuable instruction may be acquired in this length of saved time in useful branches which could else never be reached. In a school of eight grades under the writer's observation, the method was introduced in the second grade near the close of the spring term. It has been successively introduced since, into successive higher grades, up to the sixth, and with results in all which seem to justify the opinion just quoted, and which certainly show that it is easy for the teacher, even when unprepared and wanting in practice in the phonetic analysis of words; and, also, pleasant and stimulating to the scholars.

The sound-signs used are simple, each consisting of but a single stroke, yet as easily combined and as distinct when combined as common script or type. They are entirely unlike the letters in common use, and they are purposely made so; this dissimilarity being the main principle of the system, and the one that makes it so rapidly effective in making ready and accurate spellers. For if they resembled each other, as misspelled words resemble correctly spelled ones, there would be found in the mind a bewildering confusion of images, the wrong ones fastening themselves as tenaciously as the right ones. On this account care is taken to avoid showing the child any type form of the word other than the plain form seen in books and newspapers; no phonetic alterations of type nor even diacritical marks are employed or approved of while thus teaching current English spelling.

All *bona fide* teachers should make a study and trial of this common-sense method, which has its base in the very elementary rudiments of speech, and which cannot but affect beneficially the entire school course, and all subsequent employment of school acquirements. W.

LETTERS FROM BOYS AND GIRLS.

A Smooth Dog and an Elephant.

DEAR UNCLE TRUE—If I may so call you—I thought I would try and write to you. I live in the town of Cohocton, N. Y., and am a farmer's daughter. My health is constitutionally bad, so that I could not attend school, and therefore my education is but poor; my writing especially. I have a request to make and hope some of my cousins will be kind enough to answer; or, maybe, my Uncle True can tell me where I can get the verses entitled, "James Bird" and the "Lily of the West." And will the editor please send me a large picture of a smooth dog and an elephant? Perhaps you will wonder what I want them for, and I will tell you. I want them for guides by which to make the animals in cloth. Now I will tell you how I prepare autumn leaves. I select the brightest and best, and place them on an old cloth on an ironing board with the face uppermost, and smear each leaf with beeswax, and with a moderately hot sad-iron pass it quickly over them. I have ironed some on a branch, so that they look as natural as life.

LIBBIE E. JONES.

A Chance For City Cousins.

DEAR RURAL COUSINS AND UNCLE TRUE:—I have never written to you before, and now I would like to begin to have some conversation with you, too. If you please, would you kindly let me drop in? I would like to hear from some of the cousins that live in the city. I live in the city and would like to hear from some of you. Some wild city girl, like myself, please answer and let me known what city she lives in and all about what she does there. I don't see any city cousins writing now-a-days, nor country ones either for that matter. I hope UNCLE TRUE will stir the cousins up and make them write more than they do, for my part I like your letters very much. Some one please answer and oblige.

Detroit, 1878. AGNES DANE.

For Twenty Long Years.

DEAR COUSINS:—As my first letter was printed I thought I would try again. I was very glad to see that Lillie Lee had not forgoten us. She says she would like to know what the other cousins are doing? I, for one, am enjoying myself in different ways. I have been to the seashore twice during vacation. I do not see much of Slayer-of-conceit lately. I wish he would write again. I have just been rumaging through some old RURALS, which I do occasionally, as my Grandpa has taken the RURAL for about twenty years, and has saved almost all of them. I guess I had better stop as this letter is long enough. I thank Lillie Lee very much for those candy recipes.

River Edge, N. J. LIZZIE.

Lost the Address.

DEAR UNCLE TRUE AND RURAL COUSINS:—I have long wished to join your pleasant circle of cousins, but did not know until now where to direct. My brother takes the RURAL. I like it very much. I hope that you, Madcap Mollie, will stir up the cousins to write more and oftener.

Waterbury, Conn. CLIP BIRD.

The Puzzler.

RIDDLE.

I NEVER was caught nor likewise bought,
And I never can be sold;
I am with the lame and halt,
And with the soldier bold.
I am with the rich and lofty,
And also with the poor;
I am in the house of God,
And by the prison door.
But in dark dungeons I am not found,
Nor in the silent grave;
But on the sides of mountains,
And on the rolling wave.
And I never do any good,
And I likewise do no harm;
I am found in every workshop,
And also on the farm.

☞ Answer in two weeks. L. LAXTON.

FRACTIONAL PUZZLE.

TAKE one-sixth of bamboo; one-sixth of laurel; one-eighth of chestnut; one-eighth of palmetto; one-sixth of willow; one-eighth of laburnum; one-eighth of rosewood; one-eighth of magnolia; one-sixth of baobob; one-sixth of linden. Take one from each and form a tree.

☞ Answer in two weeks. BALTO.

CHARADE.

A SHIP was sailing on the bay,
My second was on it, so they say;
Now every second had my first, it is true,
But still there was only one in the crew.

☞ Answer in two weeks. T. J. CARLE.

DOUBLE ACROSTIC.

1. A TOWN in Pennsylvania. 2. A town in Michigan. 3. A town in Nebraska. 4. A town in New York. 5. A town in Rhode Island. 6. A town in Maine. 7. A town in Arkansas. The initials form a western city; the finals an eastern city.

☞ Answer in two weeks. MERMAID.

TRANSPOSITION.

WHO het dwil dwin shiwelts rothghu ony lapem eter,
Nad ryd salvee ear gliniaf, fingall;
Dan eth ghint drib gittins neloa no het eal,
Ot shi meta si fingiae, gineall.

☞ Answer in two weeks. MARY WALEY.

CROSS PUZZLE.

1. PEEVISH. 2. Stockings for men. 3. A loud sound. 4. Act of contracting. 5. Oranges of a certain kind. 6. Two at a birth. 7. A garment. 8. Two. 9. A learned man. 10. Thick twisted thread. 11. A head-dress. Centrals form part of Europe.

☞ Answer in two weeks. LITTLE ONE.

Sabbath Reading.

BETTER THINGS.

BETTER to smell the violet cool, than to sip the glowing wine;
Better to hark to a hidden brook, than watch a diamond shine.

Better the love of gentle heart, than beauty's favors proud;
Better the rose's living seed, than roses in a crowd.

Better to love in loneliness, than bask in love all day;
Better the fountain in the heart, than the fountain by the way.

Better to be a little wise, than in knowledge to abound;
Better to teach a child, than toil to fill perfection's round.

Better to sit at a master's feet, than thrill a listening state;
Better to suspect that thou art proud, than be sure that thou art great.

Better to walk the realm unseen, than watch the hour's event;
Better the "Well done!" at the last, than the air with shoutings rent.

Better to have a quiet grief, than a hurrying delight;
Better the twilight of the dawn, than the noonday burning bright.

Better a death when work is done, than earth's most favored birth;
Better a child in God's great house, than the king of all the earth. [*George Macdonald.*

STABILITY OF GOD'S CHURCH.

REV. DR. MACLAREN remarks in one of his published sermons:—"If it had been possible to destroy the church of the living God, it had been gone long, long ago. Its own weakness and sin, the ever new corruptions of its belief and paring of its creed, the imperfections of its life, and the worldliness of its heart; the abounding evils that lie around it, and the actual hostility of many that look upon it and say, Raze it even to the ground, would have smitten it to the dust long since. It lives, it has lived in spite of all, and therefore it shall live. 'God will establish it forever.' In almost every land there is some fortress or other which the pride of the inhabitants calls 'the maiden fortress,' and whereof the legend is that it has never been taken, and is inexpugnable by any foe. It is true about the tower of the flock, the stronghold of the daughter of Zion. The grand words of Isaiah about this very Assyrian invader are our answer to all fears within and foes without: 'Say unto him, The virgin, the daughter of Zion hath despised thee and laughed thee to scorn; the daughter of Jerusalem hath shaken her head at thee. I will defend this city to save it for my own sake, and for my servant David's sake.' 'God will establish it for ever.' And the pledges of that eternal stability are the deliverance of the past and of the present."

SERVING THE LORD WITH GLADNESS.

WE must serve something or some one. If we serve ourselves we gain nothing by it; for we can give ourselves only what we already have. If we serve our fellow-men, obey their commands, promoting their interests and enhancing their glory, we can obtain from them only what they have to give. Perhaps they will not perceive the value of our service, and have no grateful appreciation thereof. What they can give is perishable and of little worth. If we serve any lust we are the slaves of a beast. If we serve any passion we are the slaves of a demon. God permits us to serve Him, that is to obey His commandments, cooperate with His great movement and promote His glory. The service of God is a duty; it is also much more, it is a privilege. Christians dishonor their religion by representing Christian life as a chain that must be worn for a season, instead of a magnificent robe which adorns them. Serve the Lord with gladness. Be glad that you are permitted to serve Him. Engage in His service cheerfully. Let His service be the fountain of your highest joys. Do not act as though you would say, "Ah me, I must pray, I must fast, I must give Him my time, my labor, ah, me!" Go before His presence with singing. Sing praises unto Him, that He permits you to give anything which in any wise connects itself with Him. The only permanent joy on earth is the joy of God's salvation.—*Rev. Dr. Deems.*

BE STRONG IN THE GRACE THAT IS IN CHRIST JESUS.

Tim. ii, 1.

WE want to be strong in ourselves, or if we may not have confidence in ourselves, to have some fellow-creature on whom we can rely. But God will have us confide only in Jesus. God would trust no one but Jesus, and we should not even wish to do so. There is grace in Jesus. All grace is in Jesus. He says, "All things are delivered unto me of my Father." And the apostle says, "It pleased the Father, that in him should all fullness dwell." He is the fountain of grace, and we are to look to him at all times, and for all the grace we need. He giveth liberally and upbraideth not. Let us not fancy ourselves strong because of any grace we have received, or on account of the grace possessed by any one we love; put let us exercise confidence in Jesus alone, who giveth more grace. We are as our faith is; if therefore our faith is fixed on Jesus, if we exercise steady confidence in his veracity, word, and love, we are strong. But it is only as we feel weak in ourselves that we shall do so.

A LITTLE will satisfy nature, less will satisfy grace, but nothing will satisfy a proud man's lusts.

PERSONAL ITEMS.

Alfonso XII. is twenty-one.

Senator David Davis says that three days are enough to love, court and marry in.

Mr. Sartoris, Nellie Grant's husband, is said to have grown aldermanic in size, and now bears a striking resemblance to the Prince of Wales.

Mr. C. C. Fulton, editor of the Baltimore American, made a 155 days' trip to Europe on less than $1,000, and says he didn't try to economize, either.

Mr. Moody says he has parted from Sankey for a year, until he can get some new sermons, the old ones having been published and republished so many times that he is ashamed of them.

Twelve years ago Deacon Benson of Ft. Wayne, Ind., a man then forty-eight years old, was worth $500,000. He speculated, lost money, became a passenger conductor, then a saloon keeper, then a street car driver, then a pauper; last week he died in the hospital and was buried in the Potter's Field.

Senator Stanley Matthews had to be pulled feet foremost out of a back window in Washington the other night—not that there was anything the matter with Mr. Matthews' head (for he never gets so), but the vehicle that he was riding in upset and smashed against a pile of street debris, and he had to be extracted from it in that undignified manner.

A twenty-pound keg of powder exploded in the arms of Colonel William J. Sanford, Democratic nominee for Congress in the Third Alabama district, when he was a boy, and on hearing that the lad had escaped without injury, Senator Yancy predicted that he would live to be hung—or elected to something.

The lack of sympathy in some papers is atrocious; witness this way of "putting it" by one of them: "Hepworth Dixon has gone to Cyprus, has tumbled off his horse and has broken his collar bone—and yet there be people in England who make loud-mouthed affirmation that the annexation of the island has been productive of nothing but evil."

Major Forbes is off for Afghanistan as war correspondent of the London Daily News. The London Times, Telegraph and Standard are represented respectively, by Captain Charles Norman, Mr. Frederick Boyle and Mr. Philip Robinson. All four of these distinguished correspondents will send information to the RURAL!!!

Trees, Seeds, Plants, &c.

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CITY HALL, November 5, 1878.

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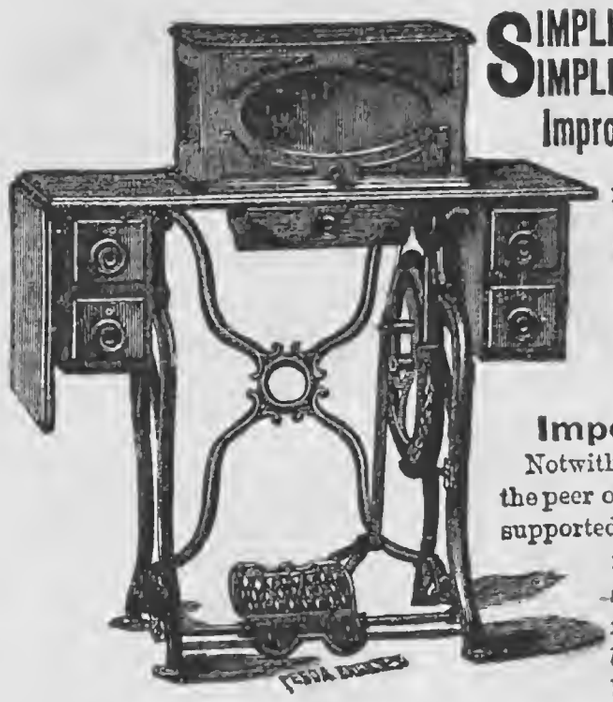

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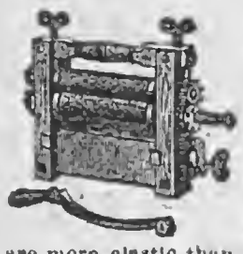

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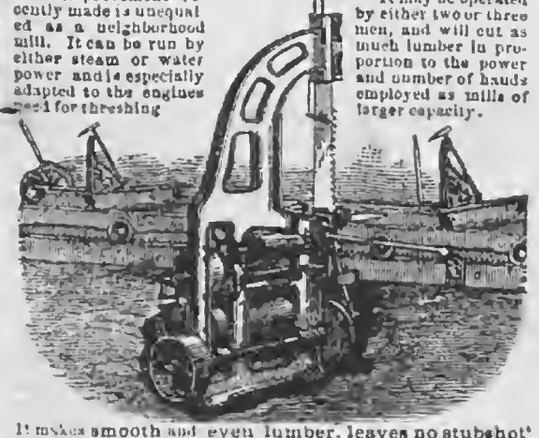

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Wit and Humor.

GOING UP THE SCALE.

A "MAJOR" loved a maiden so,
His warlike heart was soft as "Do."

He oft would kneel to her and say,
"You are, of light, my only 'Re.'

"Ah! if but kinder you would be,
And sometimes sweetly smile on 'Me.'

"You are my life, my guiding star,
I love thee near, I love thee 'Fa.'

"My passion I cannot control,
You are the idol of my 'Sol.'"

The maiden said, "Fie! ask Pa,
How can you go on thus? Oh, 'La!'"

The major rose from bended knee,
And went her father for to 'Si.'

The father thought no match was finer,
This "major" once had been "a minor."

They married soon, and after that
Dwelt in ten rooms all on "one flat."

So happy ends the little tale,
For they live on the grandest scale.

ODE TO A MONEY-LENDER—"Meet me a loan."

PAPER money—a newsboy's receipts.—*New York Mail.*

THE latest song is, "Mary, don't crowd me; I'm melting."

NEVER stroke a moustache when it is down.—*Danielsonville Sentinel.*

ODD-fellowship—Hard-money Democrats with Greenbackers.—*Lowell Courier.*

THERE is a pleasure in the pathless woods—hunting for the path.—*New York News.*

BRING me my salts—as the sea captain said when he wanted his crew.—*New York Mail.*

JOSIE MANSFIELD is wasting away with grief for her departed Prince of Erie. She weighed 230.

"KEEP your patients alive," said an old doctor to a graduating class of students: "dead men pay no bills."

THE individual who called tight boots comfortable, defended his position by saying they made a man forget all his other miseries.

How conscience doth make cowards of us all. Bob Ingersoll left for the seaside as soon as the hot wave began to shake his theories.

WHAT is the difference between a catechism and a cat fight? One is categorical and the other is cat-eye-gore-ical.—*Cincinnati Breakfast Table.*

MINNESOTA has a man who is so pious that he will not engage in sheep raising because the lambs gambol on the green.—*Cincinnati Breakfast Table.*

MR. WILLIAM E. PLEADWELL and Miss Leleah B. Larkin were married at Brockton on the 10th. William Pleadwell and long, so Leleah consented, though she knew he was fond of Larkin.

THE Post Office Department has ruled that a husband has no control over the correspondence of his wife. But this decision will not prevent a man from carrying his wife's letter around in his inside coat-pocket three weeks before mailing it.—*Norristown Herald.*

JOHNNY, who goes to a crack school, went a-fishing the other day. "What did you catch, Johnny?" said his mother, on his returning. "I captured an Anguilla Bostoniensis, mother, a fine specimen of the Malacopterygious fish," answered Johnny, promptly. Of course his mother knew he had caught an eel.

THE New York World evidently has designs upon certain classes of our population, for it remarks unobtrusively, but suggestively, "Organ grinders make from $14 to $16 a day at Grenada, Miss. Book agents are in great demand at New Orleans. A hundred able-bodied lightning-rod men are needed at once in Memphis."

CURIOSITIES—Judicious applause. Unostentatious charity. A German who dislikes beer and dogs. An artist who is not jealous. Perfect harmony in the love affairs of feline species. A true disciple of Izaak Walton who never deviated from the truth. A mother willing to acknowledge the superiority of a neighbor's child. An Italian who can't play on something—an instrument or our credulity. A critic who did never carry, or was unwilling to, a satchel from a stage entrance.—*Saratogian.*

Ease Attainable by the Rheumatic.

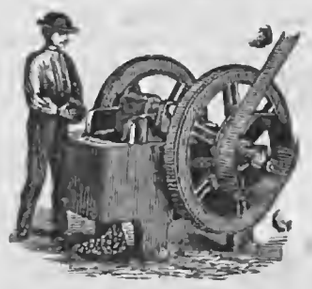
Yes, although they may despair of relief, it is attainable by rheumatic sufferers, for there is a remedy which carries off, by means of increased activity of the kidneys—important channels for blood purification—the acrid element to which pathologists the most eminent attribute the painful symptoms—a theory completely borne out by urinary analysis. The name of this grand depurent is Hostetter's Bitters, a preparation likewise celebrated as a remedy for constipation, which causes contamination of the blood with the bile—and a certain means of relief in dyspepsia, fever and ague, and nervous ailments. It is, perhaps, the finest tonic extant, and is highly recommended as a medicinal stimulant by distinguished physicians and analysts, who pronounce it to be eminently pure and very beneficial. The press also indorse t

THE ADVANTAGES OF A TRAINED DOG.—(Concluded.)

5. Remonstrance and threats fail.

6. Training triumphant.

7. Victory complete.



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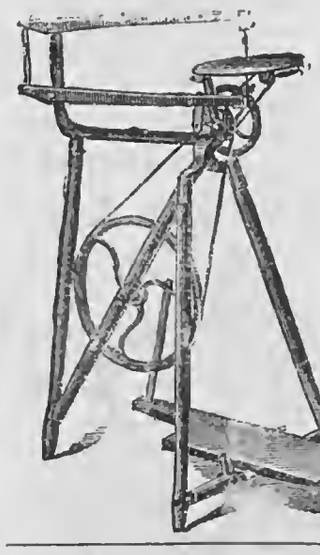

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It will put him in the way of doing something at once which will please him better than play, and enable him to make a little spare change by selling the articles which he manufactures. While it educates him to habits of industry, it also gives him a trade which he can fall back on in after-life if all other plans fail. Boys are not apt to think of these matters in advance, but their parents ought to attend to this part of their education when their habits are being formed, and it is easy for them to learn. More than 200,000 people are now using our Saw, and most of them with great success.

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The Lefevre Diamond most effectually disturbs the slumbers of the possessors of costly gems.—Journal of Science.

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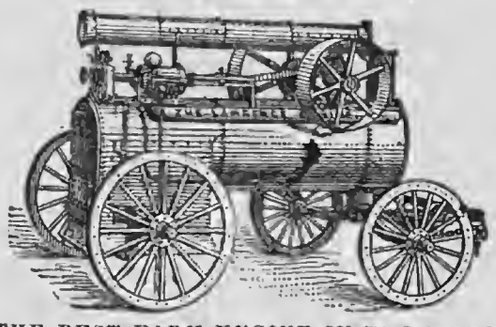

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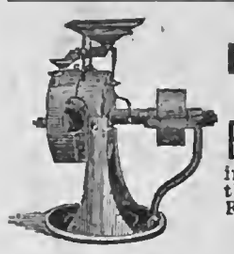

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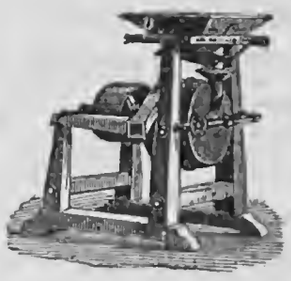

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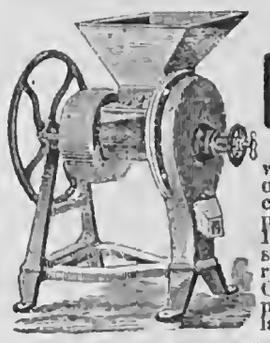

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VOL. XXXVII. No. 47.
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NEW YOK CITY, NOV. 23, 1878.

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The Herdsman.

OUR CATTLE ILLUSTRATIONS.

THE HOLKER HERD.

HOLKER HALL is the name of a beautiful estate belonging to His Grace the Duke of Devonshire. It is upon the northern shore of Morecambe Bay in Lancashire and supports one of the finest herds of Short-horns in the world. The sales have long been looked to as furnishing well-bred Bates animals of rare breeding and the herd has the merit of having been bred at home and not purchased. A selection of animals from this herd was sold at auction on the 18th of September, and the Agricultural Gazette, in comment upon the herd previous to the sale, gives very attractive portraits of four of the animals, which we reproduce. The dissertations upon the merits of particular animals and their influence in the herds would hardly be interesting to our readers. It is enough to say that the Bates tribes most in favor and comprising the bulk of the herd, are those pre-eminently favorites on this side of the Atlantic, namely, Oxfords, Wildeyes and Barringtons. The breeder, Mr. Drewry, has practised sending the cows of this herd to the most famous Bates bulls within his reach, and has thus introduced the best strains of blood by breeding rather than by purchase, and, of course, has followed up successful leadings. It is pleasant to see the familiar names of American-bred bulls occurring in the pedigrees of these fine animals.

The heads are strikingly fine, and have a high-bred style and quality which it is a great satisfaction to see so truthfully portrayed. Those of the bulls, and particularly that of the old bull, Duke of Wetherby 5th, who headed the catalogue, are especially life-like.

MILKING SHORT-HORNS.

There is no doubt but that the Short-horns are the deepest milking breed in England. At

SOME THINGS WE HAVE TO BE THANKFUL FOR.—(See Ed. Page.)

the recent Dairy Show held at the great Agricultural Hall at Islington, near London, the highest prize was won by Mr. Wodehouse's cow "Countess." She was exhibited with her twin calves and the group was greatly admired. Her general outline is well shown in the engraving which we present, but the photograph seems to be a little confused about the calves. There were, however, two nice calves which gave evidence of abundant nutrition and promise. Countess's pedigree is what Short-horn men would call a very "plain" one, but her form was excellent and though her udder and teats were not perfect, they were good and certainly serviceable. The sire of the calves was shown also, a fine "Knightly" bull named "Royal Havering 2nd" who was got by 3rd Duke of Geneva, an exported bull, and out of Mr. McIntosh's "Lady Knightly," a cow which was imported into this country.

Eastern breeders value milk-giving qualities in a Short-horn. There is something so tangible and satisfactory about the production of 20 or 30 quarts of milk a day that we cannot blame farmers for favoring families which are constantly paying for their own keep in this way; and it is a question which may well be mooted whether the grade cows of any other breed will equal the Short-horns as milk-producers.

AN ITALIAN BULL.

A bull of the *Val-di-Chiana* breed of Tuscany was shown with other cattle of the same kind at the cattle show connected with the Paris Exposition, by Mr. Landi of Florence. The accompanying engraving is from a photograph and must represent the animal very accurately. These cattle are of a tawny gray color, varying to light dun, the oxen being long-horned and of better form than the bulls. They are a fair type of an unimproved breed, slow-maturing, heavy-boned, coarse, thick but loose-hided, slab-sided, making little milk and poor beef. The picture offers a striking contrast to those of the well-bred animals exhibited in this number of the RURAL.

JERSEYS IN THE WEST.

ONE very noticeable feature of our leading Western Fairs during the season just past, has been the prominence, in point of numbers at least, of the Jerseys. At St. Louis they outnumbered all other breeds combined. I notice that the St. Louis correspondent of the RURAL puts the number of Jerseys at 135, but according to Mr. FILLEY, the very efficient superintendent of the cattle department, the actual number was 165, five better than at the Centennial and the largest collection of the breed ever seen on this continent, and in point of quality not very far in the rear.

This liberal patronage of the St. Louis Fair on the part of Jersey breeders, is largely due to the fact that the management was among the first to recognize their rights as exhibitors. The fashion in these parts, as in fact all over the country, has been to discriminate in the matter of premiums in favor of the Short-horns, and in many places it has only been by dint of the most persistent efforts that the Jersey men have been able to secure judges who had any adequate knowledge of the Jersey breed. Something of the character of the obstacles they have had to contend with, was shown by a remark made by one of the officials, who stood in very intimate relations with the cattle department of the Indiana State Fair, at Indianapolis. It was to the effect that he regarded the introduction of Jerseys as an actual detriment to the cattle interest of the State. His words and his manner indicated that, in his estimation, the management was conferring no inconsiderable favor upon the Jersey exhibitors in permitting them to show their stock.

But, in spite of this prejudice, the little Jersey is very rapidly pushing its way to the front. Some sales made at St. Louis were quite significant. Mr. Jackson, who had on exhibition 54 of the Beech Grove Herd of Indianapolis, including 20 of his later importation, sold to Gen. Guitar, of Mo., six head for the sum of twenty-seven hundred dollars, or an average of $450 per head. Another exhibitor sold a two-year-old heifer for $300. Even Jersey grades are looking up. A neighbor of mine has just sold sixteen head, mostly yearlings, for eight hundred dollars. Since the first of January he has sold two thousand dollars' worth at prices similar to the above, and finds a demand far beyond his ability to supply.

G. L. WRENN.

Arboricultural.

THE BEST TIME TO PLANT TREES, PLANTS, ETC.

THE argument so generally advanced in favor of fall planting, that farmers have more time in fall, than in spring to do their work properly, is one that cannot be overlooked, and yet it does not seem to be quite conclusive.

If trees and plants *must* be shipped long distances, the fall is undoubtedly the best time to do it. I should much prefer to have trees set where they are to stand, than to have them "heeled in" over winter. But when it is possible to procure those freshly dug, give me spring planting every time. Neither should the planting be done too early in spring. Let any one set a portion of his trees or plants in the fall, and reserve a portion quite late the following spring, until growth has commenced, then have them freshly dug, and immediately set out, and compare results. The better plan is to prepare the land thoroughly in the fall, have it all marked, and then the planting will consume very little time and, as I believe, it will prove more satisfactory to defer this until spring.

Currants, Strawberries, and perhaps, Raspberries are exceptions to this rule. The arguments that by fall planting the earth becomes firmly settled about the roots by the time growth commences, has no force. One should "firmly settle the earth about the roots," at the moment they are planted, trusting nothing in this way to time or change, as neither will be likely to "patch up" his neglected job. I have set trees in the fall and, under certain circumstances, may do so again; but under no sort of circumstances will I ever set grape vines until late in the spring. Where freshly dug vines can be procured, I prefer to wait until the buds have started. When they are shipped from a distance, this is, of course, impossible.

Such are my opinions upon this subject. Others may, and probably do, think differently.

NELSON RITTER.

Syracuse, N. Y.

FIFTH ANNUAL REPORT of the Commissioner of Agriculture of the State of Georgia, for the year 1878. This has one great merit, rarely found in such works—it is very short, only 26 pages.

Dairy Husbandry.

DAIRYING AND DAIRY COWS OF NEW ENGLAND.

R. GOODMAN.

FAVORITE BREEDS OF DAIRY COWS.

DURING the last fifteen years a great change has taken place in the character of the cows used for dairy purposes in New England, and the Short-horns, Jerseys and Ayrshires have been substituted largely for the old mixed breeds in addition to being bred for sale to the Middle and Western States.

THE DURHAMS OR SHORT-HORNS, are not well adapted to the pasturage of New England, and many of the early breeders of this stock have removed to richer preserves in New York or nearer the setting sun, while nearly all those who continue the business here confine themselves to the old-fashioned Short-horns, more noted for hardiness and milk-producing qualities than the high-priced, beefy Duchesses and other illustrious families.

THE JERSEYS have crept steadily into public favor, not only as family cows, but as the most useful for large butter dairies, and they are now numerically at the head of the list. Moreover, buyers from the West and South are constantly making drafts upon the herds of New England, and this will continue until, as a breeder from Illinois remarked, every woman at the South and West has a Jersey cow.

THE AYRSHIRES have continued to improve in the estimation of those whose business is the production of milk, and with the Jerseys, have, by crossing, added largely to the better qualities of the mongrel stock of the country which has, in fact, only been kept up to fair condition by the constant use of blooded bulls. The action of the State Board of Agriculture of Massachusetts, which authoritatively controls the thirty Societies of that State, in prohibiting them from giving premiums to grade bulls, has had a decidedly beneficial effect, and now that pure-bred and registered bulls can be had of all the prominent breeds at reasonable prices, the farmers are adapting themselves to the new conditions with the best results.

THE DUTCH, misnamed Holstein, cattle are, to some extent, in favor, and a few Swiss are to be found, but the Jerseys and Ayrshires take the lead and are pre-eminent in their special departments.

Two marked results are noted as the consequence of the growing attention to these fancy cattle, as they were formerly slightingly called, namely, greater care and attention to the animals themselves and their surroundings, and a better quality of product, including calves, butter and milk. Just as the youngster who owns his colt, takes pride in its keeping and grooms it carefully, so the owner of thoroughbred, high-priced stock gives attention to their appearing well, keeps the byres clean, beds with saw-dust or poor hay, increases the milk and butter production by judicious feeding, and carefully rears the calf which will bring a good cash price when six months old. The great benefit of fancy farming by wealthy men, is that it incites those who have not so much money to spend to imitate their flusher neighbors in those improvements and appearances which can be arrived at by labor and taste, and no one can fail to have perceived the great advantages which accrue to any farming neighborhood by the advent of one or more amateur agriculturists who work with golden plows and spades. There may be some heart-burnings at first, but in the end the hard-working man gains in knowledge, and is justly grateful for the information he has obtained without cost, and finds that the new processes put money in his purse.

SALE OF GILT-EDGED BUTTER.

Naturally following such attention to details have been the more excellent quality of butter and quantity and quality of milk, and the consumers of the latter now, as a general rule, obtain it free from the impurities of the stable and other vile odors; whilst the lovers of good butter and even those who have acquired a taste in Europe for the delicate flavor of that compound there, can find in every large city an article equal to that made anywhere in the world. When consumers are willing to pay a dollar a pound for it, and the guests of hotels call for the brands they prefer as they do for wine or cigars, butter-making has become a fine art, and in the hands of the Darlingtons of Pennsylvania, Starr of Echo Farm, Connecticut; Burnett of Massachusetts, and others who might be named with them, it has become a profitable and constantly increasing business. In nearly every town or village in New England to which city residents resort during the summer months, there will be found one or more farmers who make Jersey gilt-edged butter, and get for it double the price obtained by their neighbors for their inferior product, and their customers who know how thus to discriminate between the best and its inferiors, engage their butter for the ensuing winter to be made and sent weekly in small amounts. Thus, in addition to the large quantity of high-priced butter sold by the large family grocers, and that specially delivered by the agents of noted makers, great numbers of families in the cities are directly supplied from the country with fresh-made butter, in quantities ranging from five to ten pounds a week, at prices from 50 to 60 cents a pound. Nearly all the hotels and clubs in New York, Philadelphia and Boston receive from private dairies their best quality of table butter, and no one of any taste can fail to discern the great improvement in this article at such places during the past five years. The wealthy people, as a rule, only purchase this quality of butter for their own table, letting their grocers supply that used in cooking, but they are beginning to find out that good butter is even more essential for the latter purpose than to be eaten directly; for the bad used for culinary purposes has to be eaten, and in fact there will soon be but two kinds of butter—the very good and the very bad, and oleomargarine will be substituted for the latter, if it continues to be manufactured in as cleanly a manner as at present.

Cheese making has almost entirely devolved upon factories, and there are a few creameries which make an excellent quality of butter, and, as they increase in number, the quality of butter generally will advance, but the real gilt-edged, sought by the epicure, the refined in taste and those addicted to the article as found in the capitals of Europe, can only be made in private establishments, where the best cows yielding the richest homogeneous milk, are properly fed and cared for, and all the appliances are of the best sort, and the *art* of butter making is understood in all its details. Such butter will always command a paying price, and as the wealthy denizens of the cities are constantly demanding it, there is a wide and comparatively unimproved field for the intelligent and ambitious dairymen of the Eastern States, as well as for those near to the markets of the large cities of the Union.

Milk from some dairies is now transported in quart or half-gallon glass vessels, and delivered, sealed up, directly to families who can thus be sure of a clean article with the cream on top, which can be skimmed off for the coffee and the balance fed to the baby, without danger of resulting diphtheria or other malarial diseases.

BERKSHIRE CO., MASS.

Sheep Husbandry.

FALL MANAGEMENT OF SHEEP.

PROFESSOR E. W. STEWART.

HARDINESS OF IMPROVED BREEDS.

IT is claimed by some who keep the hardy Merino, that the Long-wools cannot be fed with profit in our rigorous Northern climate; that they require so much more attention, and so much better feed, that it is only contending against nature to attempt it. This opinion, however, is quite extreme and held only by those who desire a breed of sheep that require little attention. The same accusation may be brought against all the improved breeds of cattle, as compared with the wild Texans and the scrubs of the Western plains. The magnificent Short-horn is not as capable of enduring the rigors of a cold winter on what it can pick through the snow as the Chillingham Park cattle; but are they thence to be discarded and the latter substituted for them? The American Merino is a much better developed animal than the Spanish Merino, and the best American flocks will not stand anything like the neglect of the former without serious injury. The Indian is more hardy and can stand more exposure than the most civilized European or American, but this fact is hardly to be taken as proof that Indian civilization is preferable.

There is a great deal too much nonsense about this or that improved breed being less hardy and requiring more care than the common, thin, unimproved stock of the country. If Bakewell had not improved the method of breeding and feeding the Leicester sheep, it would have remained as long-legged, thin, and slab-sided as ever. All improvements in breeds of sheep have been accomplished by better food and greater care than had theretofore been given, and if this improved condition is to be maintained, then, there is a

NECESSITY FOR A FULL-FEEDING SYSTEM

to be kept up through the entire season. These improved breeds are more profitable feeders, requiring less food for a pound's growth than common sheep. The question then that properly comes, is, not how little food is necessary to keep sheep in store condition, but how much food can be digested and assimilated consistently with health. The more food sheep can digest within a given time, the greater will be the per cent. of gain and therefore of profit. The skillful feeder will watch the condition of his pasture and the condition of his sheep, and see that they are supplied with abundant food at all times. An increase of condition always brings an increase of fleece.

There are usually several classes of sheep kept; as breeding ewes, lambs, young ewes and wethers. The breeding ewes should be kept in good condition, not fat, and they are not likely to get in too high a condition after suckling lambs through the summer. They should be kept well in fall preparatory to breeding again. Ewes will require as good feed to recover what they have lost in milking as wethers will to get fat. A strong, healthy ewe is likely to bring a vigorous lamb, which will develop early for market, if desired. But any neglect in fall feeding, after the weather becomes cold and stormy, will tell most disastrously upon breeding ewes and the lambs they will bring.

SHELTER FROM STORMS

is absolutely necessary for economical feeding. No flock-owner can afford to dry the drenched fleeces of his sheep with extra food. This extra food should go to put his sheep in better condition, instead of being expended in keeping them warm during exposure to cold storms. Open sheds should be provided, accessible to the sheep in fall, and no labor will be required to induce them to avail themselves of this shelter. They know enough to "get in out of the rain." Here also should be arranged some troughs in which could be placed daily a pint of grain for each sheep, when the pasture becomes impaired by being eaten too close or injured by frost. Oats and corn, mixed half-and-half, form a good ration, and will pay an excellent profit when fed to improve the condition of sheep in fall. It should be remembered that the mild fall weather is much more favorable to improving the condition of sheep with a small grain ration than the cold winter weather. Half the amount of grain will then put on a pound of flesh, that will be required when the thermometer averages 20 degrees. When the weather becomes very cold, good rations are required to prevent loss in thin sheep instead of producing gain. Sheep that are in good condition at the beginning of winter, are not troubled with cold and will gain on a moderate ration all winter.

Erie Co., N. Y.

The Poultry Yard.

HATCHING CHICKENS.

PREPARE a box 15 inches cube, closed on all sides but the front, on which nail a narrow slat opposite the egg place, leaving an opening below, so as to be able to clean it the more easily. Place in it a sod, grass side up. If the weather is warm, place the eggs directly on the sod for moisture; if cold, cover it with cut straw—long straw may entangle the hen's feet—do not use hay, as it is apt to get musty; level the surface of the sod, to prevent breakage of eggs. If the eggs get soiled, wash them with warm water

Place the box in a retired place away from the roosts and from other fowls. The boxes should be somewhat different from the laying boxes to prevent mistakes, and yet of the same general appearance, to make the hen feel at home. Generally Brahmas and Cochins may be moved and set almost anywhere. Medium-sized fowls are less likely to break the eggs. Set from 9 to 15 eggs, the number depending on the weather and size of the fowl and eggs. Those outside are apt to be chilled in cold weather. An odd number is preferable, because then the arrangement of them more nearly approximates an oval.

Examine the hen carefully to see if she is free from lice; if she is, set her after dark on some

common or china eggs for a couple of days to learn if she means business. Sprinkle the whole nest with sulphur and dust it among the hen's feathers and under her wings, to prevent the spontaneous generation of vermin and to kill any lice that may have escaped observation. All fowls will generate lice if they do not take a dust bath often or if they are not protected artificially. Do not use coal oil, as any grease will smother the chick germ—the embryo likes air in common with other animals, and the shell is porous to let it in.

Do not disturb the hen, but some Asiatics require to be lifted daily off the nests for food, exercise and dusting. In lifting, place the hands under the wings and separate the feet, to free her from the eggs. If the weather is hot, do not worry about her staying off two or three hours. It is a good plan to set two hens at the same time and then give all the chickens to one to raise. Fresh eggs hatch in 21 days—stale eggs take a day or two longer.

Leave the hen and chickens alone for a day, unless all the eggs are hatched. The absorbed yelk affords sufficient nourishment to the chicks for 24 hours. Chickens need drink before they need food. Feed them the first day on the chopped yelk of hard-boiled eggs mixed with milk. Then with oat-meal, pounded pop-corn, stale bread-crumbs and sweet milk. Do not wet corn-meal too much; it is better boiled and mixed with boiled potatoes. After a few days, cracked corn is good food. Milk is always good, whether sweet or sour. Give pure water, pure air, feed often, and keep everything clean, dry and comfortable. J. H. CAMPBELL.

Lucas Co., O.

THE BEST BREED OF FOWLS?

A CORRESPONDENT from Batavia, N. Y., referring to an article about the merits of Leghorn Fowls, that appeared in the RURAL of Oct. 26, claims that the Leghorns are the best egg-producers. He has had ample experience in breeding choice poultry and maintains that the Leghorns are prolific layers of good-sized, very rich eggs. Moreover, the birds are very handsome, their bright yellow legs and snowy-white plumage forming a very beautiful contrast. The chicks, too, are very hardy and can be easily reared. He has a hen six years old that lays as well now as she ever did (!) and she has never wanted to sit. The combs of the fowls of this breed, however, are so large that they require a warm place in winter to prevent these appendages from freezing. In his opinion, the Black Spanish rank next to the Leghorns. Of all breeds they lay the largest eggs. They are non-sitters. They have a large red comb, a large white face and glossy black plumage, so that he considers them very showy fowls.

EXCELLENCE OF SOUR MILK.

A CORRESPONDENT writes from Otsego Co., N. Y., that he has found a sure preventive of gapes in chickens in his method of feeding them. He feeds corn and oats, ground and mixed, and wetted with sour milk; with the addition of some curds, when the chicks are quite young, and plenty of sour milk to drink all the season. He thinks the latter a sure preventive of gapes, and if that could not be had, he would fall back upon water as next best.

He has also fattened three pigs on sour milk exclusively. Two were half-bred Berkshires, and the other a cross of white breeds. One of the former was killed when seven months old, and dressed 207 pounds. The white one met its fate when it had enjoyed life and sour milk for seven months and sixteen days.; and it then dressed 214 pounds. The other half-breed when eight months and five days, dressed 235 pounds. They were fed five or six times a day, shut in a small pen, and had no food, except milk. Of course, he does not consider the weight remarkable, but he had met with poorer success when he had fed less frequently.

Field Crops.

MILLET AGAIN.

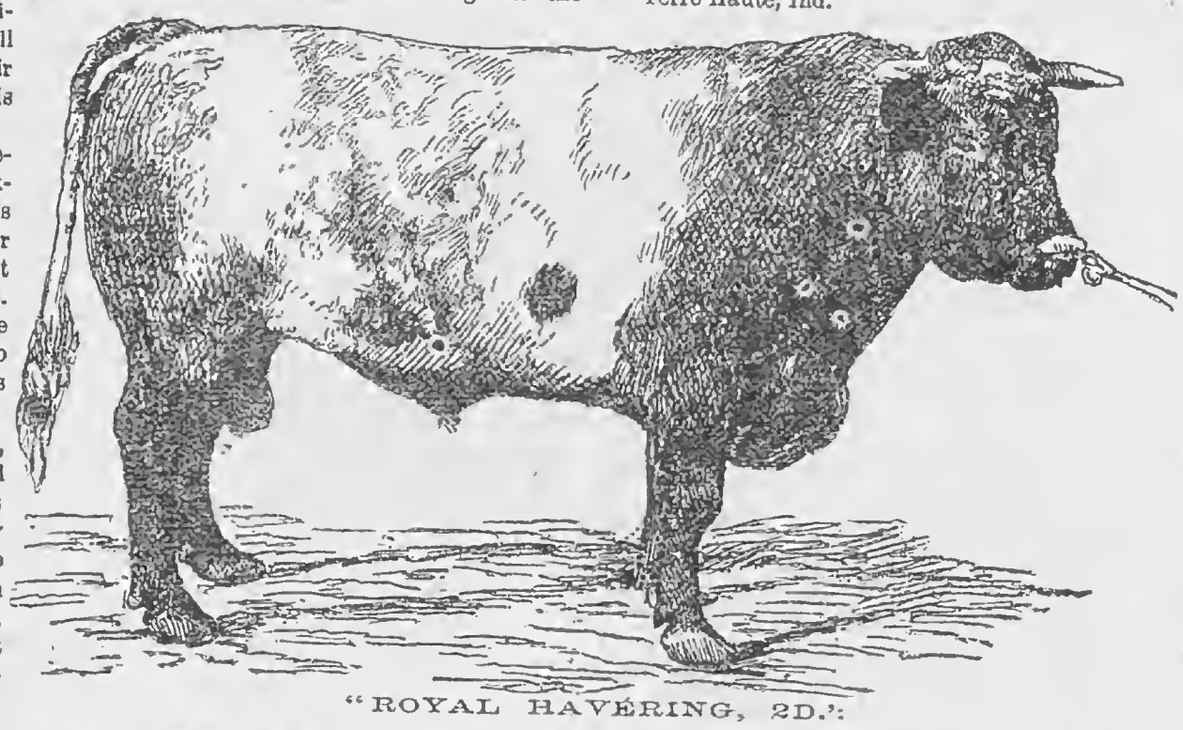
THE new method of treating subjects in the RURAL NEW-YORKER is a great advance on the old way. The articles on Strawberries, Raspberries and Grapes, were especially valuable. The subject of Millets, however, is lacking to some extent, particularly the article of Prof. Beal. Either he is not acquainted with the different species of millet in common use, or else he is not clear in his statements. The following is a sample: "Besides the common name of Hungarian-grass, it is also often called Golden millet, Cat-tail millet, Italian millet, etc."

There are three kinds of millet well known to all dealers in the West, under their proper names, but I have noticed that seedsmen and editors in the East have not yet learnt the distinction between them. A year ago a Western seedsman advertised German millet in an Eastern agricultural paper, putting its price at about half that charged by Eastern dealers. Having had few responses to the advertisement, inquiry was made as to the reason, and he was told that "Golden" millet was the kind wanted—that they did not care for the common variety.

The fact is that the new variety—which was first grown to any extent in Tennessee, and thence has been used much throughout the West—has been called German millet from the beginning. It is for sale by all seed dealers in Nashville, Memphis, Louisville, Cincinnati and St. Louis, under that name and by no other, so far as I am aware. At last it reached the East, and in some way the name Golden was attached to it. These, then, are the three varieties in commerce—Common millet, German or Golden millet and Hungarian-grass. The German produces much larger heads, more seed and more grass to the acre than the common. The seeds of these two varieties are alike in color, but the German is nearly round, while the common is of an oval shape and more glossy. The Hungarian is shaped like the common, but it is of two colors—yellow and dark-brown—and in the Chicago market, that containing the most brown seed, is rated best.

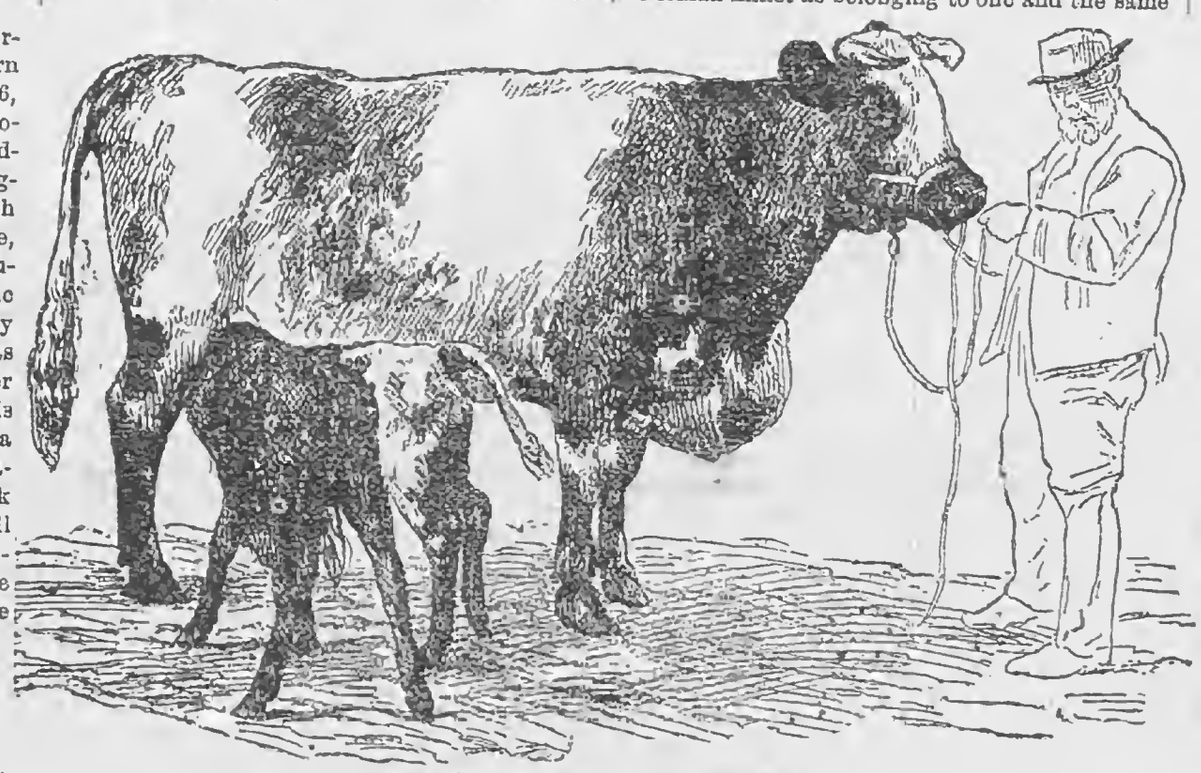
As to effect on stock: it is undoubtedly true that Hungarian has killed many horses. I never heard of its injuring cattle. I believe, however, that Hungarian can be grown and used in such a way as to be a safe food for horses. I have no authenticated case of injury caused to animals by the use either of common or German millet. J. A. F.

Terre Haute, Ind.



"ROYAL HAVERING, 2D.":

In reference to this article and others for which we cannot find space, Professor Beal says: "The seedsmen and editors in the East" and the botanists are all willing and trying to learn. On the authority of Dr. Asa Gray, I gave the scientific name of Hungarian-grass and German millet as belonging to one and the same species viz., Setaria Italica or Germanica. He still questions which one of the two is the correct specific name. After examining specimens which I have raised for some years as Hungarian-grass, I had no hesitation in calling them Setaria Italica, or what most men mean by that name.



"COUNTESS" AND TWINS.

About other specimens which I had before me, I admit that they were unlike those which I called Hungarian-grass. They answered well the description of what many call Setaria Germanica, German or Golden millet. Now comes the question as to the characters of Setaria Germanica: Dr. Gray thinks that Golden millet and Hungarian-grass are, at most, only varieties of one species and not distinct species; that is, that they are as much like each other as are Clawson and Gold Medal wheat, or some large, yellow Dent corn and white Dent corn. The numerous specimens which I have seen show so many intermediate forms, that I confess my inability to define them all, and therefore made no attempt. The specimen from which my drawing was made in a late number of the RURAL, was what I supposed to be a good form of German millet.

"DUKE OF WETHERBY, 5TH, (31,033)—Holker.

Farm Topics.

SALTING WHEAT-LAND.

AGRICULTURAL progress is made mainly through discoveries by experimenting and by scientific researches, and whatever tends to advance the farmers' interests and help them to overcome the obstacles against which they have to contend, should be made public. The sage remark that "he who makes two blades of grass to grow where but one grew before, is a public benefactor," is applicable to the progressive farmer wherever he may be found.

Experiments in farming are not always successful, and many of them are attended with loss and vexation to the experimenters; but occasionally something useful is found out that amply repays all past expenditures and trouble. Such has been the case with some people of late in the experiment of salting wheat-land.

Last spring Mr. Joshua Knight, of Ogle Co., Ills., sowed 13 barrels of salt on 20 acres seeded to wheat, and left a strip in the middle of the piece without salt. The ground on which he sowed the salt produced over eighteen bushels of good spring wheat per acre, while that on which there was no salt was hardly worth cutting—the wheat being badly shrunken, injured by rust, chinch bugs, etc.

I consider this a fair test, and it has never before been published, though I deemed it of sufficient importance to report it to the Department of Agriculture. A similar experiment was tried in Iowa last spring, and the result was published in the Iowa City Republican, as follows:

"H. G. Coe, of Cedar County, tried the experiment of spreading three bushels of salt broadcast over two acres of his wheat-field. The yield was forty bushels per acre, while the rest of the field gave only nine and a half bushels per acre. The straw was bright, not being injured by rust, as the wheat alongside of it was, and it stood six inches higher."

The following, from the Montreal Gazette, is *apropos*, as it gives the results of valuable scientific experiments on the effect of salt on wheat:

"In an interesting series of experiments recently made on the farm of the Royal Agricultural Society of England, the manurial value of salt was unmistakably indicated. An acre of wheat dressed with 300 pounds of common salt yielded thirty-nine bushels of grain, with a proportionate amount of straw; while an adjoining acre, left unmanured, produced only twenty-nine bushels per acre, with the straw imperfectly developed. The entire cost of the crop is not stated, but this experiment shows that the additional ten bushels resulting from the salt were produced at a cost of 30 cents each. In another case a piece of ground intended for wheat was plowed the preceding fall, and again in May, when it was sowed with salt, and afterward plowed before seeding. On the 1st and 2d of September wheat was sown at the rate of two bushels to the acre. The crop, when harvested, yielded, according to the estimate of the owner, Mr. John Park, not less than forty bushels of grain to the acre, with a luxuriant growth of straw. From these and many similar cases, the inference seems to be that salt is a specific for the wheat crop, imparting solidity to the grain and firmness to the straw. But it must not be concluded that equally good results will always follow the application of salt."

From the foregoing, it seems evident that salt has a beneficial effect upon wheat-land, and I hope the farmers will give this matter a further trial and report the success of their experiments *pro bono publico*. W. B. DERRICK.

Ogle Co., Ills.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

WE must make more meat. Every farmer should inscribe this sentiment over his barn-door, and when he goes in and when he comes out, he should study upon it until every mouthful of food produced upon the farm is utilized to the best possible advantage. Even a turnip leaf has its value, and can be transformed into milk or meat. If into milk, it is in the best form to make pork. An ear of corn may be made to count two; first, in the form of muscle and fat; and then as food for another ear, and by borrowing a little from the soil and air, it will count for a hill and be multiplied four-fold. If the turnip leaf is allowed to dry up or to go to

waste, it represents nothing, and if the ear of corn is sold, it returns only the price of itself, whereas if fed out judiciously, it has a double or quadruple value. It is a reflex axiom, "More meat, more feed; more feed, more meat." It requires judgment and experience to work out this idea to perfect success. The sooner we begin, the better. A small start is better than no start at all. When we learn to feed one animal successfully, we may venture with more.

A successful farmer in this vicinity has been looking for a flock of sheep to eat out his barns. He wants sheep because they are but little care and are sure to sell for all he may have to pay for them. He will be satisfied if the sheep bring in the spring the price he pays now. It may be asked, "Where is the profit in this sort of an investment?" He may pay $4 for the sheep and feed all winter and sell them for $4. The kind of fodder he intends to give them is not marketable, or if it is, the price is too low to pay for hauling. The sheep will consume this and convert it into manure. It will be kept on the farm, and next year this savings bank investment will pay a profitable dividend. We know a man who sold out straw for two dollars a ton and drew it several miles. For every load sold, this man made himself poorer by a good load of manure.

The black-walnuts which were partly dried last winter in the wagon-house chamber, would not grow when planted. All nuts, to grow well, must be kept moist. Now, boys, is the time to gather them and start a little grove. Put the nuts in the ground just where you want them to grow and cover them about an inch deep. Be sure to plant a variety. Choose out the best shaped walnuts, and the largest chestnuts. Do not forget some butter-nuts. The butter-nuts and walnuts will do well on moist land, but the chestnuts like a dry soil the best. We have got our chestnuts all planted, and have put some of them in a bed to transplant when they are two or three years old. Last fall we planted a row of hickory nuts, and now we have a lot of little hickory trees about six inches high. It will be some time before they bear, but our little boy will grow up with them and by the time they bear nuts, he will be old enough to gather them. He will not have to wait so long for the chestnuts, as they will bear in eight or nine years. Won't there be fun then, and these will be his trees, and you can all have a lot of them too. Put them in some corner and get father to make a fence around them. If you will plant the nuts, we will promise that the fence will be built.

The soft and small nubbins on the corn stalks may be stripped off and fed to the beef cow, and so save the bother of husking them. By leaving the husks on, the animal will masticate the kernels, and there will be no waste.

Pomological.

NOTES ON APPLES FROM ONEIDA CO., N. Y.

JONATHAN TALCOT.

THE season of 1878 is near its close and the crops in this latitude are nearly all secured and the farmer has reason to rejoice in his bounteous harvests and give unfeigned thanks to the Giver of all his blessings. Our crops have been above the average the past year. The apple crop especially has been very abundant, but the fruit is so cheap that many will be left to rot under the trees where grown. Such a course is not wise, for as feed for farm stock they are fully equal to the various roots grown on many farms for cattle-feeding purposes. They are especially good for milch cows. If fed to them in small quantities at first, and increased to a peck or half a bushel for each cow per day, the results will be very favorable, and if a little meal is given with the apples, all the better for the cows, and the milk they will then give will be richer and better for making both butter and cheese.

Perhaps some farmers may desire a better quality of apples and will be looking about them the coming winter for a selection for a young orchard of a few trees to replenish the old one. To all such I would say: "Select such varieties as are known to do well in your own vicinity, and then if you wish to try some new sort, do so; but don't make up your list from the new sorts so often offered by tree peddlars, or pretended nursery agents, unless you can afford to be disappointed in your expectations in regard to them, when they come into bearing. Send your order to some reliable nurseryman to be filled and have him add a few trees of the newest varieties, such as he thinks most desirable, or select a few yourself. Then test them on your own soil with your method of treatment, which should be a liberal one, if you would be successful in the cultivation of good fruit."

There is a great pleasure in testing and fruiting some new variety of fruit on one's own grounds, and if the variety proves itself hardy and of good quality, a great acquisition is gained, and another source of pleasure and profit is added to the homestead of the fruit grower. In Oneida County the apple is the fruit *par excellence* for both rich and poor, and in seasons like the present, none is so poor that he cannot have plenty of them, especially in the fall and early winter, as they cost but a trifle except the picking up. In some cases indeed, they are given to the poor for the picking alone.

In setting out my orchard, I made the too common mistake of selecting too many varieties, not knowing which would do the best, but on trial, I have found which has proved most hardy and which has borne the most fruit. In other sections, other varieties would doubtless do better than here, and hence the need of making such selections as will do well where the trees are to be located. In my orchard no sort has borne either so many or such handsome apples as the Hubbardston Nonsuch, while the Baldwin has been a failure, and so has the Esopus Spitzenborg. The Swaar, too, has been nearly worthless from some cause. The Yellow Bellflower has been hardy and a good bearer in alternate years, but I do not consider it a profitable Apple, although a few may be kept for variety and early winter use. The Rhode Island Greening is a standard Apple, moderately hardy and productive. Seek-no-further and Peck's Pleasant are good for sweet apples. Talman Sweet, and Lady's Sweeting are hardy and good bearers, especially the Talman's Sweet, and for sauce or baking, the Talman Sweet is not excelled by any variety known to me. Both are long keepers, the Lady's Sweeting excelling in this respect, keeping nearly, or quite, as well as any of the Russet family and retaining its freshness and juiciness till late in the season. The Black Gilliflower is a hardy tree and a good bearer, but many don't like them, and a tree or two for one's own use, is all that is desirable of this sort.

For early varieties, the Early Harvest, Red Astrachan, Bough and Primate, are all good sorts, and where they flourish, will give satisfaction. For fall, the Autumn Strawberry, Gravenstein, Fall Pippin, Porter, Norton's Melon, and Fameuse, are all good sorts that are very desirable for the farmer to have in his collection, if his soil is suitable for their growth. Other sorts are valuable and, as said before, each person should make his selection from such as will best suit the location in which they are to be grown, or the fancy of the grower.

Rome, N. Y., Nov. 8, 1878.

Horticultural.

SOME OF THE RASPBERRIES.

H. HENDRICKS.

THE HUDSON RIVER ANTWERP has been for many years past the principal variety of Raspberry cultivated here along the river from which it takes its name, and when nicely grown, it is still perhaps the best red Raspberry we have, all things considered. The great objection to it lies, however, in its tenderness, the canes being large and succulent, and requiring protection in winter in all this latitude. And this I certainly consider a very grave objection attended with much labor and some loss, despite the opinion of an enthusiastic neighboring writer and grower for the trade, who says the children can protect the vines in a few minutes after school hours. A Raspberry or a Grape that will not endure our winters without laborious protection, had better give place to another variety that will. I may say, however, that I have never given the Antwerp any winter protection in my garden, and yet it has usually fruited well and, at times, abundantly. But the vines were planted on the south side of a building, which doubtless gave some slight protection. Most growers in this vicinity, however, bury them in winter. The Antwerp ripens early here, produces well, is quite firm and fine-flavored. With a full knowledge of the enormous operations in this fruit on the river at Milton and Marlborough, in the lower part of this county, you will not lack for magnitude.

THE PHILADELPHIA more recently introduced, has the advantage of being more hardy, but in all other respects it certainly is inferior to the Antwerp; especially in size and flavor of fruit, if not in vigor of plant as well.

THE CLARKE is quite similar to the Philadelphia and scarcely more desirable although it is also quite hardy. I have grown both these for some years past, but will now replace them with others of more value.

THE FRANCONIA, though of foreign origin, is in every respect a very desirable sort. It is as large as, and more hardy than the Antwerp, more acid, darker in color, and a week or ten days later at this point, a feature which, in itself, is an important one. Indeed, I am surprised that the Franconia is not more largely cultivated throughout the country, and can only account for it from the fact of its being so little known. Why, only yesterday an experienced and careful cultivator, a lady friend, said to me: "Why, you don't mean to say the Franconia Raspberry will stand our winter unprotected? I have always covered mine the same as the Antwerp; but now I do remember one or two plants were neglected last winter, and really they came out and bore just as well as the others." Hence it is obvious that the good qualities of this variety are not generally known or understood.

"DUKE OF OXFORD," 44th.—Holker.

"DUCHESS OF OXFORD" 21st.—Holker.

THE HIGHLAND HARDY originating in this valley a few years since, is now quite largely grown here and seems, thus far, to bear out much that was claimed for it on the start. The vine is vigorous, perfectly hardy and bears most abundantly. I think I never saw a finer display of raspberries than I witnessed on the grounds of a neighbor here this season. He had a large plot of ground devoted to this sort and the vines were uniformly loaded with a marvelous amount of ripening fruit. True, they are not large, but the flavor is good, flesh firm, light red in color; and, at least in this soil and locality, we regard it as a valuable sort. It is also very early, coming in just after the rush of strawberries is over. It has withstood a temperature of 30° here without injury; and its extreme hardiness admits of copious manuring, which increases the size of the berries.

HERSTINE is perhaps one of the best new red varieties for home use, though too soft for a distant market. It is large and productive, hardy and fine-flavored, and in every way promising.

THE GANAROUA is a hybrid between the red and black, being of a brownish color. It is quite popular in some localities, though but little grown here and lacking in flavor.

BRINCKLE'S ORANGE is the finest Raspberry for amateurs and family use on the whole list, in my opinion. The fruit is large and showy and most delicious in flavor. Indeed it is difficult to conceive of a finer dish of berries than one composed of these transparent orange-colored beauties; they are very attractive and inviting. There is, however, much diversity of opinion in regard to its general constitutional vigor. Ellwanger & Barry find it quite hardy at Rochester; Mr. Roe finds it somewhat tender down here on the Hudson; Mr. Poety, on the east bank of the river, at "Ellerslie," finds it quite hardy, and thus growers differ on this point. With me it is hardy, vigorous and productive; and I shall continue to regard it with much favor, advising a place for it in every private garden where fine fruit is appreciated. It has the peculiarity of adhering firmly to the stem after being fully ripe, and never drops.

THE HENRIETTA is a new Eastern seedling for which great size of fruit and extra flavor are claimed. The berry is said to be 4½ inches round!

THE PRIDE OF THE HUDSON, raised on Mr. Roe's ground, if not too tender, may prove a valuable sort. Of the

BLACK-CAPS

I have fruited Davidson's Thornless, Doolittle and Mammoth Cluster.

DAVIDSON'S THORNLESS, on account of its smooth, purple canes, is surely an acquisition, but aside from that, it has not proved of much value here, being an indifferent grower and bearer, and not large.

THE DOOLITTLE is an old sort, succeeding fairly in some sections, but I think far surpassed in every respect by the Mammoth Cluster, except that it is earlier.

THE MAMMOTH CLUSTER I have had excellent success with; its fruit is large, handsome and abundant, and, so far as I know now, it is the best Black Cap we have.

THE GREGG, of which dealers give us such glowing accounts of late, I cannot yet speak about with certainty. It is, however, really large and fine, and quite promising. Another season will tell the story.

All these, and other still newer sorts, need further trial to establish their several claims to public favor. There are many other varieties, both new and old, which might be named, such as Brandywine, Caroline, New Rochelle, Turner, etc., each having some points of value in certain localities; but those I have named above embrace about all, I think, now considered of special value to the general grower. We can scarcely hope to thoroughly combine in any one variety all the most desirable requisites of hardiness, vigor, size, flavor and firmness. For instance, high flavor and great firmness of flesh are incompatible, and will not be found to exist in the same berry. We must therefore be content with those sorts combining the largest measure of good qualities, each for himself seeking those best adapted to his soil and locality. And yet we must not fail to aid and encourage the pains-taking hybridizer and originator of new kinds, for to him great credit is due.

It has often occurred to me that the Raspberry has not received the amount of attention its merits deserve. Its cultivation is comparatively easy, and success with it quite certain. The fruit is most wholesome, delicious and refreshing, supplying on our summer table successfully a gap that nothing can fill. Medical men advise us of its eminently healthful proper-

ties, and some even regard it as a specific in certain maladies. Surely it deserves a place in every garden.

On the Hudson.

THE HENRIETTA RASPBERRY AGAIN.

In The Rural of the 9th inst., I observe a note by Mrs. E. Morely, in regard to the origin (?) of the Henrietta Raspberry. I would state that the note referred to only goes to prove more conclusively, if further evidence were necessary, that the Henrietta and Belle de Fontenay are one and the same. The note reads, "It was first found among the roots of a currant bush. There were no other Raspberries on the premises. The garden was contiguous to a gentleman's grounds, where there was a variety of fruits, among them *several kinds of Raspberries.*" The root of the Belle de Fontenay possesses such a decided disposition to *travel*, and is so well furnished with adventitious buds that it assumes the character of a rhizoma or root-stock, and will spread and multiply nearly or quite as rapidly as couch-grass or quick-grass (Triticum repens), so much dreaded by farmers and gardeners. It is not at all unusual for this Raspberry to thus travel or creep, under ground, twenty-five or even fifty feet. Not long since I heard a learned and most reliable nurseryman say he believed that if a single plant of it were planted in the center of an acre lot, and left to run, it would, at the end of five years, cover the entire lot. A *fence* would be no barrier whatever to it, and I doubt if a *stone wall* would, unless sunk deeply in the ground. Therefore to prove at all that Henrietta and Belle de Fontenay are *not* identical, it will be necessary for your correspondent to *first* prove that there was no Bello de Fontenay in the "gentleman's grounds," "contiguous to" "the garden."

In speaking of the Belle de Fontenay, in Rural of Oct. 12th, the type made me say, "*over* producing suckers in infinite numbers," which should have read, "*ever* producing suckers," etc., of which I meant to inform you before.

J. T. Lovett.

Red Bank, N. J., Nov. 7th, 1878.

Miscellaneous.

SANITARY ARRANGEMENTS OF THE HOMESTEAD.

BY A JERSEY FARMER.

THE BACK YARD

is the great trouble of the housewife. Here everything "common and unclean" gathers and molds and rots, causing nuisance, discontent and mischief. The difficulty lies all in want of arrangement and the proper disposal of the wastes of the house. A great amount of extra labor is thus caused at the most inconvenient times, and if the matter is not attended to, much trouble ensues. Vermin is also encouraged by the presence of the accumulated waste matters, and this is not one of the least of the troubles; for, when vermin once find a hiding place, they spread everywhere and cause great loss by their depredations. The first and most important thing to consider in the arrangement of the back yard, is the well. Many people think that unless the well is open, the water cannot be kept pure. This is all wrong. Spring water, which is considered the best of all, is not exposed to the air. It is confined in subterranean channels and escapes pure, sparkling and *full of air bubbles* from its dark, underground source. One of the best of all wells is

THE DRIVEN WELL,

and this is simply a pointed pipe forced down through the earth into the stream of water flowing below. By the working of the pump attached to the top of the pipe, a quantity of sand or gravel is removed from about the lower end of the pipe, and an underground cistern is formed in which the reservoir of water exists. This is shown at Fig. 1. Unfortunately this useful well, although no new thing, has been patented, and every person using one of them is in danger of being threatened with prosecution for damages. But it is here referred to only as an illustration of the mistaken idea, that

A CLOSED WELL

is not a healthful or a safe one. On the contrary, it is the only safe and healthful one, and the water supply of any well should be kept perfectly free from any outside contamination,

"DUKE OF OXFORD" 45th.—Holker.

even through the presence of air, which always carries injurious germs with it. The only safe well is one that is closed in perfectly, so that earth-worms even cannot g ain access to it, that surface water cannot find its way into it, or in-

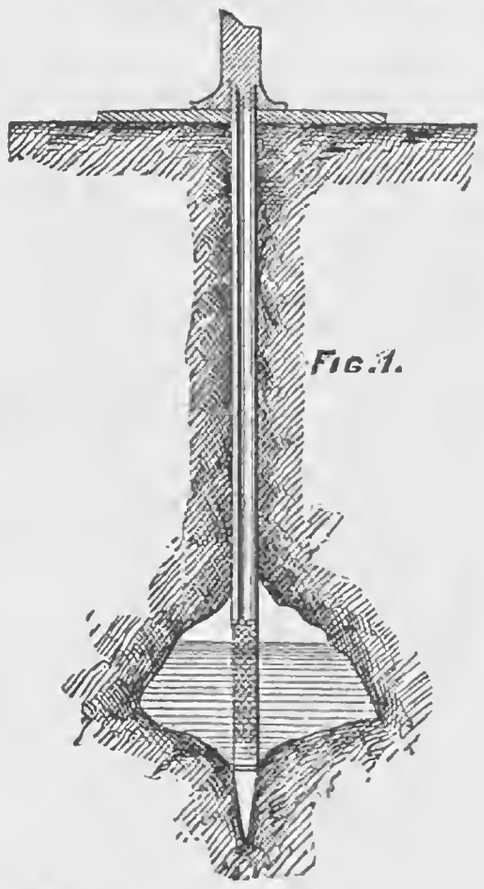


Fig. 1.

fusorial or confervoid growths cannot occur in it. The water will then be pure. Such a well may be made by lining it with cement pipes, that are manufactured for this purpose, or with brick laid in water-lime mortar. Or such a well may be made by building up the sides with stone or brick to the level of the water and then covering it with flag-stones or an arch, and filling the rest of it with earth again. The surface about the top of the well should be graded, so as to have a slope in every direction away from it, that surface water may be carried off and not soak down into it. This should be done the more carefully in wells that are not filled in above, because then there is the greatest danger that surface water and many impurities would gain admission. The best way to finish off around the top of a well, is to cover with a large flag-stone or with chestnut plank and then cover this with six inches of water-lime cement, spreading it several inches beyond the sides of the well. If a good pump is put in the well, no repairs need be made for years and the cost of all these items of safety will be less than that of one doctor's bill, not to speak of the cost or misery of a funeral of some loved one of the family. To prevent this, cost is of no account, as against safety.

The next weak point of the back yard is

THE CESS-POOL.

This should be the most carefully arranged, and it may be so that it shall be perfectly inoffensive and actually a source of profit instead of loss and disease. Then this necessary provision for comfort may be placed in a woodshed close to the house or in some sheltered spot, and may be made ornamental and comely, as it well deserves to be, instead of being a loathsome thing, to be hidden away out of sight in an inaccessible locality, just as the water-closet and bath-room of a well-furnished house are made as handsome and luxurious as possible. With a cess-pool, such as is shown at Fig. 3, all this may be done and an inoffensive provision for the comfort of the most delicate members of the household procured in the most accessible part of the premises. The cess-pool, both walls and bottom, should be wholly made of brick laid in water-lime, or with common lime mortar. In the latter case, the wall and floor should be well soaked with pitch to be made water-proof. A convenient shape for this will be as shown—a floor with sloping sides in front and rear, and with the rear sill of the house over it raised nearly to the level of the seat, so that nothing can fall on to it. The house stands only partly over the reservoir. The portion uncovered by the house is closed by a platform and trap-door of plank, through which dry earth, or common loam from the fields or coal ashes, are thrown in daily in sufficient quantities to absorb all offensive matter. When half full, or at more frequent stated times, the cess-pool is emptied (with a large hoe, such as is used for scraping streets,) by drawing out the contents, which will be perfectly inodorous and inoffensive, on to a temporary platform of boards. This should then be carted away to the manure heap, or to a field and spread directly upon the soil or the grass. This is very little trouble; but if it were greater it ought to be done.

It is some trouble to be clean; indeed it is more labor than to be godly; and yet cleanliness is considered next in importance to the highest virtue, so far as our welfare is concerned. And this business begets cleanliness in every sense of the word; for a man who permits foulness to be apparent about his house, is not a clean person, so that, in spite of the trouble, it should be done; better let the pig-pen go uncleaned, for a time, than neglect the cess-pool. To procure all the ventilation that may be needed, a wooden pipe (*a*), shown by the dotted lines, is carried

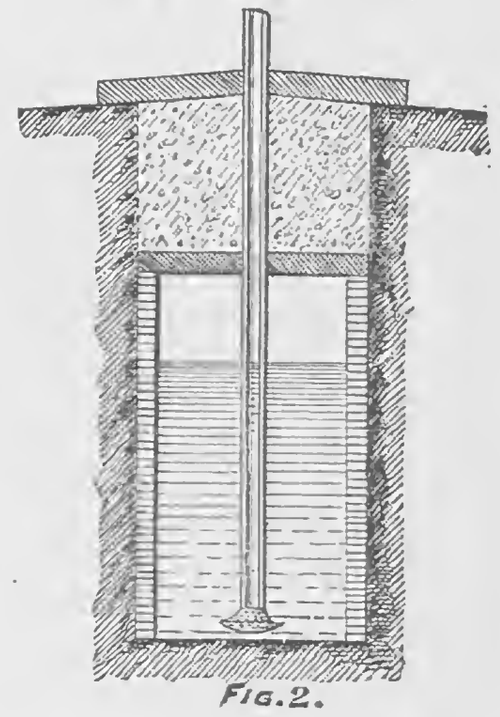


Fig. 2.

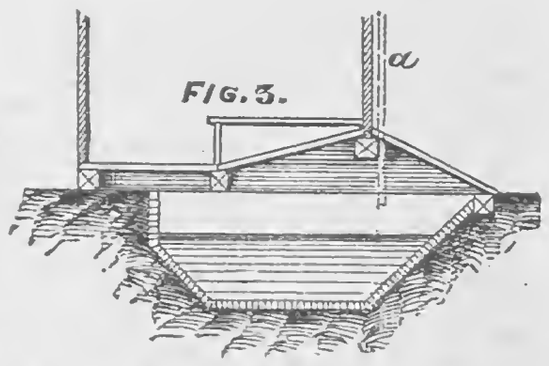
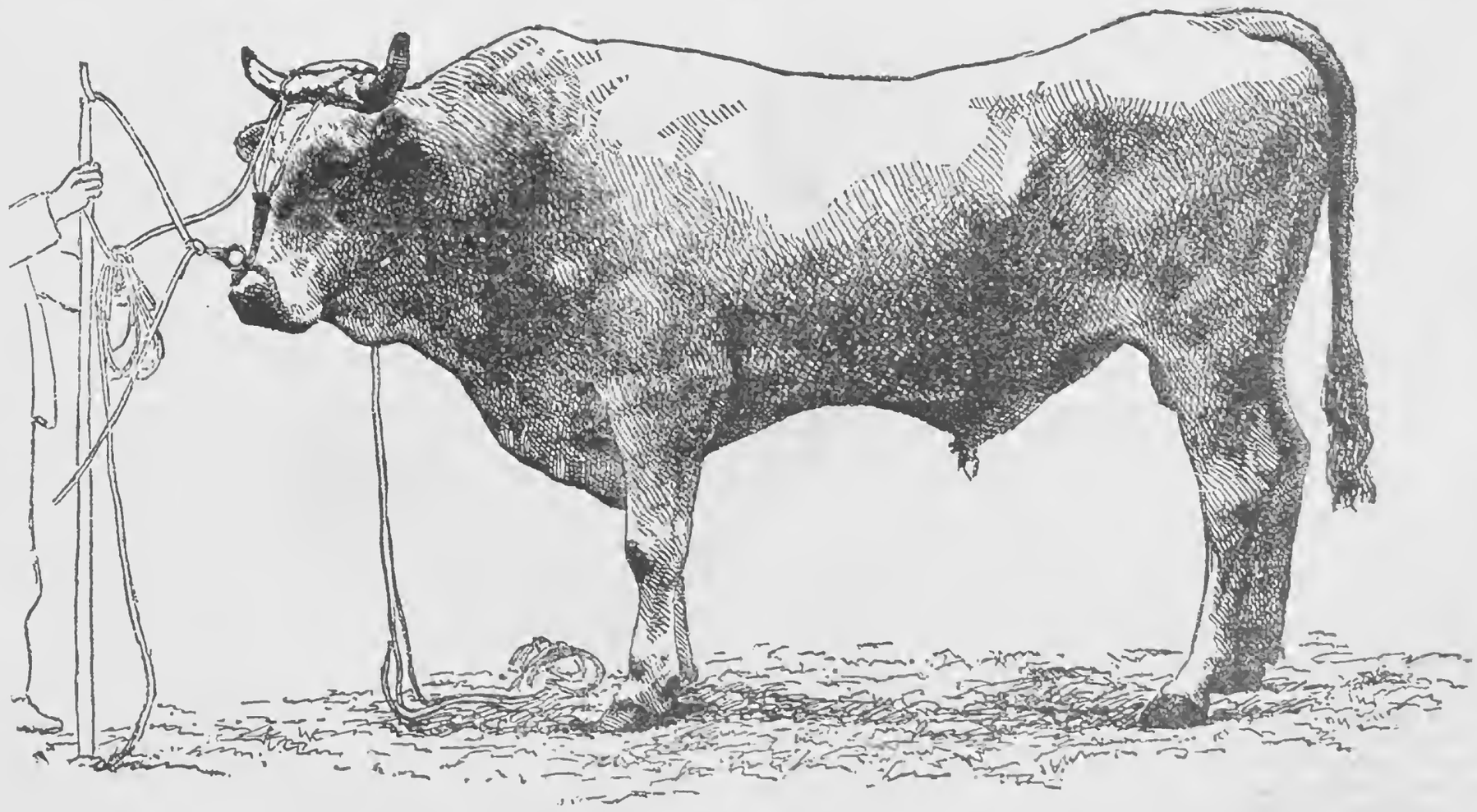


Fig. 3.

from the cess-pool up the rear wall of the building to a hight of three or four feet above the eaves of the roof. Whatever garbage is produced about the house, that does not pass away by the drains—if these are provided—should be gathered into a tub and removed daily to the pig-pen; otherwise this waste may be deposited in the cess-pool and should be covered at once with a shovelful or a scoopful of the earth which should be kept on hand in a pile at all times, with a shovel ready for use.



ITALIAN BULL, SHOWN AT PARIS.

CATALOGUES.

Monthly Bulletin of the American Jersey Cattle Club. Edited by Geo E. Waring, Jr., Secretary of the Club, Newport, R. I.

-Semi - Annual Wholesale Price-list of the Home Nursery, Normal, Ill. Augustine & Co., Proprietors. Fruit and Ornamental Trees.

Circular of Moore's Early Grape. John B. Moore, Concord, Mass.

Circular of The Japanese Persimmon. Henry Loomis, 194 Sansom Street. San Francisco, Cala.

John Saul, Wholesale Catalogue of Fruit, Evergreens and Ornamental Trees, Shrubs. Roses, &c., for 1878-9. Washington, D. C.

Entomological.

THE COTTON BOLL MOTH.

W. B. Pratt, Marion Co., Ind., lately sent us a half a dozen specimens of an insect intruder on his green corn. Last year the pest attacked his early corn, but did not appear on the late sorts. This year, however, it has made its appearance in almost every ear of his latest variety; and he wishes to learn what the "critter" is; its origin, metamorphoses, end, and any possible remedy or preventive that may have been devised for it.

ANSWER BY B. PICKMAN MANN.

The specimens sent have not preserved their original appearance well, but from what can be concluded by the examination of them and by the account of their habits, it seems likely that they are caterpillars of the cotton-boll moth (Heliothis armigera). My attention was first called to the ravages of this kind of caterpillar by seeing an ear of corn filled with a repulsive-looking and fetid-smelling black fungus. I took this home with me to examine it more closely, and found upon this one ear seven distinct species of larvæ, some of them, at least, of the most destructive character. The most prominent of these larvæ was of this species.

THE PERFECT INSECT, OR MOTH,

measures about 40 mm. across the extended wings, which are generally of a tawny or pale clay-yellow color, with a faint greenish tinge. The front pair are branded with two or more bars or rows of pale olive and rufous, and have a crescent-shaped, dark mark near the center. The hind wings are paler than the front wings, and invariably have, along the outer margin, a dark-brown or black band, in the middle of which is an irregularly shaped spot of the same color as the wing. There is likewise a dark spot in the center of the wing, and the nerves are black or dark-colored.

THE EGGS

are laid during warm evenings in summer and fall, when the moth may be seen hovering over the tops of the plants about sunset. This happens as early as June and continues until August. One egg is deposited upon the silk or point of each ear of corn. Each female moth is capable of consigning to their proper places more than five hundred eggs. The egg is of a pale straw color, tapering, cylindrical in shape, and regularly ribbed longitudinally.

THE CATERPILLARS

hatch out in three or four days. When full-grown they are from 35 to 40 mm. in length, varying in color from pale green to dark brown; the head is reddish, and the under side is yellowish-white. There is a double line of darker color down the middle of the back, or the whole back is covered with fine longitudinal light and dark lines, and on each side of the body is a clear brown stripe with a yellowish stripe below it. Each ring, or segment of the body, has about five black dots, or spots, on each side, from which arise soft hairs. There are two or three broods in a year, according to the length of the season. The first brood feeds upon the undeveloped tassel of the corn-plant, which is the staminate or male flower, boring into the stalk for the purpose, and is developed in time to attack the ear and the female flower or silk, during its second brood. This it does by penetrating into the point of the husk and cutting off the silk, so that the pollen is unable to reach the unimpregnated germ, which therefore fails of its development. It also feeds upon the kernels of corn while they are still soft and milky.

But the damage done is not confined to the actual consumption of grain, for the ends of the ears, when partially devoured and left by this insect, afford a secure retreat for hundreds of other smaller insects, which, under cover of the husks, finish the work of destruction begun by the caterpillar, eating holes in the grains or loosening them from the cob. A species of greenish brown mold or fungus is very apt to attack such ears, the dampness from the exuded sap appearing to favor such growth. The kernels or grains then swell up to a great size, and become filled with the filthy spores of the fungus, which burst out and sow themselves in every direction. Animals fed with the corn which has been attacked by this disease, frequently die from its poisonous qualities.

When the caterpillar is full-grown it descends into the ground, where it forms a rough, oval cocoon by gluing together the particles of earth with the silk which issues from near its mouth. In this cocoon it sheds its last skin, and becomes a green chrysalis, but soon turns to a bright chestnut-brown color, with four thorns at the extremity of the body, the two middle ones being stouter than the others. At the end of three or four weeks, in summer, the moth is developed, the moths from the last brood appearing in November.

THE HABITAT OF THIS INSECT

covers a vast extent of territory, for it has been found in North and South America (I found it in Brazil), the United States, England, Japan and Australia. It is very destructive, especially in dry seasons, when the growth of the plant is retarded by the drought; for it not only feeds upon the silk and the soft kernels of roasting-ears of corn, and upon the flowers and balls of the cotton-plant, but also upon pumpkins, tomatoes and other vegetables. For instance, during a year of drought (1860), the corn crop in the State of Kansas was so much injured by this caterpillar and the diseases it introduced, that one county which had raised over 150,000 hectolitres of corn in 1859, produced less than 20,000 in 1860, and most of the other counties suffered as badly. There can be no doubt as to

THE BEST TIME TO ATTACK THESE PESTS,

for all who have studied the matter, agree on the necessity of adopting some practicable method of destroying the early and less numerous broods in the caterpillar state, or in the perfect moth state, as it is entirely from these early moths (which do little damage) that the immense multitudes are generated, which commit such ravages on the crops. This is evident; for if we consider that should only two female moths be allowed to deposit each two hundred eggs in safety, the third generation, if undisturbed, would amount to the considerable number of forty thousand caterpillars. The devastation these insects would cause can be better imagined than described, especially if the moths developed from them were also allowed to deposit their eggs in safety. Happily, however, nature has provided them with many enemies, such as birds and the ichneumon flies, which destroy immense numbers of them. Several

REMEDIES

have been proposed, and some have been tried. The surest method is to go through the cornfield and remove the caterpillar wherever it is found at work, but this is slow and almost impracticable, unless done to the first brood. But a method which would avail completely if adopted at the exact time that the first moths appear, is to light fires in various parts of the plantation in the early evening, as the moths are attracted by light, and perish in great numbers in the flames. Some successful experiments in killing these moths with molasses and vinegar were made by Col. Sorby of Georgia, and are described in one of the U. S. Patent Office Reports, from which I take the following account:

"We procured eighteen common-sized dinner plates, into each of which we put about five centilitres of vinegar and molasses, previously prepared in the proportion of four parts of the former to one of the latter. These plates were set on small stakes or poles driven into the ground in the field, one to about each hectar, and reaching a little above the plants, with a board about fifteen centimetres square, tacked on the top to receive the plate. These arrangements were made in the evening, soon after the moths made their appearance; the next morning we found from 18 to 35 moths to each plate. The experiment was continued for five or six days, the plates being distributed over the entire field; each day's success increasing, until the numbers were reduced to two or three moths to each plate, when it was abandoned as being no longer worth the trouble. The crop that year was but very little injured by the caterpillars. The moths were caught in their eagerness to feed upon the mixture by alighting into it and being unable to escape. They were probably attracted by the odor of the preparation, the vinegar probably being an important agent in the matter. As the moths feed only at night, the plates should be visited late every evening, the insects taken out, and the vessel replenished as circumstances may require."

It is also said that the odor of certain chemical substances, such as cresylic soap, or carbolic acid, sprinkled on the plants, will prevent the moth from laying her eggs upon them, but experiments of this kind have not always proved successful.

I must acknowledge my indebtedness for much of the above account, to the writings of Messrs. Glover and Walsh.

The Querist.

ANSWERS TO CORRESPONDENTS.

MALADIES OF STOCK.

What Ails the Hogs?

J. J. Davis, Woodson Co., Kansas, says that he has some Berkshire pigs one year old that won't weigh nearly as much as they should do, while some that were farrowed last March are not bigger than those a month old ought to be. Yet they have had the run of 20 acres of timber with running water and all the corn and slop necessary to keep them in good condition. The slop and meal were cooked, too, during the cold weather. Some of them droop around and have thick white matter running from the corners of their eyes, while on some of the others the skin appears dry and harsh. He has given them salt, ashes, copperas, salts and turpentine, but with very little success. He thinks it is the liver that is affected, and asks the real nature, cause and cure of the ailment, whether it is contagious, and if it would be likely to affect hogs brought from other places for breeding purposes.

ANS.—This description is not sufficiently detailed to allow us to speak with confidence in regard to the nature of the trouble. It may be some form of parasitic disease, or it might possibly be the results of a mild form of the hog fever, generally called cholera. The digestive process is evidently impaired, and we are inclined to believe this due to intestinal or hepatic parasites. In this case, the treatment followed should have produced good results, especially the turpentine, if given in sufficient quantity. It is advisable to give a dose of jalap, one drachm each for pigs, and after this has cleared out the bowels, give a teaspoonful of oil of turpentine to be followed by another dose of jalap in three or four hours. As a preventive, pigs should never be allowed to run on the same pasture as the old hogs and all such pastures should be changed yearly.

Spaying Cows.

M. H. M., Lexington, Mass., asks for recent and reliable information with regard to the practice of spaying cows. "I am aware," he says, "that the books for fifty years, and perhaps longer, agree in stating, in terms suspiciously similar, the manifold advantages secured by this operation. If all they say is true, and there are no drawbacks which they fail to mention, it seems strange that the operation is not more generally practiced on dairy and family cows, where stock-breeding is not only of no consequence but altogether unprofitable. I have never heard of an instance of the practice being followed in this section, although it is a milk-farming region, despite the trouble and expense of the method in vogue, and although not one calf in five is raised here. A more extensive practice of spaying cows of a certain character and for certain purposes, would undoubtedly result in the elevation of the character of dairy stock, as only the best animals would be retained entire for breeding purposes."

ANS.—Spaying cows is not practiced for the reason that the benefits derived from it are not in general sufficient to counterbalance the expense and danger of the operation and leave a profit besides. If a dairyman has good cows it is not to his interest to dispose of them in twelve, fifteen or eighteen months after calving, even if he can secure a good yield of milk for that time. Nor is it to his interest to incur the expense of spaying in order to fatten his cows that are poor milkers, when he can accomplish this result as well in the first months of gestation. In some circumstances, near large cities where animal food is very high and cows are kept but a few years at best, and sometimes but a single season, it would be well for dairymen to consider this operation.

Black-Leg in Cattle.

R. M. Crane, Orleans, Neb., asks: Is there any known cause or cure for black-leg in cattle? Is it more liable to attack one condition of cattle than another?

ANS.—Anthrax always develops on lands with rich soils, underlaid by impervious subsoils. The drainage of such soils is sufficient to prevent the disease; where this cannot be done, cattle should be pastured on high, naturally drained land during the months in which this disease is likely to appear. The disease is probably not contagious through the atmosphere, but contact of the blood or other liquids of the affected animal with the skin, or eating the flesh may produce the disease in other animals or in man. It is more liable to attack fat, high-conditioned animals than others. An exhaustive article on this disease, from the pen of Dr. SALMON, D. V. M., appeared in RURAL for May 11.

Corns on Horses.

Mathew Odell, Flint Co., Mich., asks for a sure remedy for shoe boils on a valuable horse of his.

ANS.—If the corn has suppurated, make an opening for the escape of the pus; poultice for two or three days with bran mixed with hot water, then dress with tar and apply the shoe so that it will not bear on the part. If it has not suppurated, proper shoeing will be sufficient.

Coryza, or Nasal Catarrh in Swine.

J. D., King's Creek, Ohio, asks for the name of a disease which afflicts his hogs and a remedy therefor. It commences with sneezing which can only be relieved by bleeding at the nose. The infected hogs thrive very slowly on their feed, but do not die of the ailment.

ANS.—This disease of swine is called coryza, or nasal catarrh, and is as old as history, and was mentioned by Aristotle, in his History of Animals. As treatment, give castor oil till a laxative effect is produced, and follow with nitrate of potassa in ½ to 1 ounce doses, according to size of animal. Fumigations with sulphur or tar, by burning in a moderately tight building where the animals will be compelled to breath the air charged with the fumes, is also advantageous. In some cases the disease is very obstinate and cannot be profitably treated.

Caponizing Cockerels.

S. H. F., Selby, Ohio, asks how to caponize cockerels.

The following is a description of a simple way of performing this operation, practiced very successfully by a neighbor of ours. There are several bulky books which give a full account of the process, but in all of them an expensive outlay for instruments is recommended, but with the process we now describe very little outlay for tools is required as most of the necessary instruments are in many homes.

In the first place, secure the bird to be operated on to a bench or table. This is easily done by arranging three holes through the bench about an inch apart. Pass a cord through these, forming two loops on the bench between the holes; pass the bird's left foot through one loop, tie the lower leg, then draw the right or upper leg forward, and secure that to the bench, through the other loop, the bird lying on his left side. His wings can now be laid back so as to expose his side, and a weight laid on them to keep them in that position. The feet cannot be held still without tying them. With a penknife, or, what is better, an ink-eraser, cut with one clean cut a gash between the last two ribs, an inch or more from the back-bone, an inch and a half to two inches long—obliquely downwards—according to the size of the bird; cut through both skin and flesh with the same stroke, but not more than a quarter of an inch deep, so as not to cut through the intestines. Do not cut any lower down than the cartilage that connects the ends of the ribs. To keep open the incision while continuing the operation, a piece of old clock spring about six inches long, is used, and a quarter of an inch broad—but the width is not material. This piece of spring when extended—not in use—forms a semicircle. The two ends are tempered soft, and bent up at right angles to the spring at a distance of a quarter of an inch from each extremity. Press the two ends of the spring together and insert in the wound, so as to keep it extended, while the two turned-up ends keep it from springing out.

The intestines are now in view covered with a membranous skin. This must be cut with great caution so as not to cut the intestines. The instrument for doing this is made out of a crochet hook made sharp, and cutting on one side, the point, and on the inside the barb, so as to cut when pushed forward or drawn back, at will. If the bird has been kept from food—as it should be—two nights and one day before, the intestines will be small and allow room for further work. The testicles are now seen enveloped in the same kind of membrane as were the intestines. If the bird has been kept fasting, they will be all the more readily seen. If they are not easily detected, the intestines may be gently pushed forward toward the breast. The membrane inclosing the testicles must be cut with the hook very carefully, as there is an artery between the two. Now, insert a small spoon—a salt spoon is the best—hold it under the lower testicle; place the testicle in the spoon, then cut away to edge of the spoon with a pair of spring pincers curved at the points, such are used by dentists; take away and clean the spoon. Then the same operation is performed with the upper or left-hand testicle, letting no blood get beyond the spoon. When this is done and the spring removed, sew up the wound with a surgical needle which is curved; use floss for thread.

With due care this mode of treatment is better than those recommended in poultry works, and has given entire satisfaction.

Show "Points" of Light Brahmas.

A. J. Collins, Bergen Co., N. J., asks as to the "Points" of Light Brahma fowls, as regards markings, build and particularly whether white or yellow legs are considered the best.

ANS.—Yellow-colored legs are the only color admissible in the show pen. The feathers must be well down to the outer toe ends. The body should be broad and deep, heavy with fluff behind; breast full and carried well forward. Except in wings, tail and hackle, there should be no black. The backs, down from the hackle, should be clear white; the combs should be pea or tripple-shaped; that is, in three ridges, the middle ridge being the highest. Cocks should weigh twelve pounds; hens, ten; cockerels, ten pounds; pullets, eight, for the show pen.

Paradise and Doucin Stock.

H. M., Lexington, Mass., asks 1. is there a difference between the Paradise and Doucin stocks used for dwarfing Apples, and if so, what? 2. What, if any, is the botanical difference between a Crab and a common Apple. 3. Will cions of the former take on stocks of the latter?

ANS.—1. It is presumed that the apple is of Eastern origin, and that all of our present varieties sprang from the wild Crab. The wild Crab often exerts a dwarfing influence. The Paradise is naturally a small tree or shrub, and dwarfs whatever variety is worked upon it much more than the Doucin. 3. There is no botanical difference. 3. Yes.

Summer Savory.

S. B., Johnstown, N. Y., 1, sends specimens of leaf and root of plant for name; and 2, asks at what time Summer Savory should be gathered, and for what purpose should it be used.

ANS.—1. The specimens sent were imperfect, having no flower, while the leaf was pulverized; hence we cannot name it. 2. Summer Savory

should be gathered just before the plant is in full bloom, and put aside in a shady place to dry slowly. It is used for seasoning dishes.

Miscellaneous.

S. S. V C, Erieville, N. Y., has a horse that "interferes" badly. He cannot get any blacksmith to shoe the animal so as to prevent this fault, and he inquires whether the new horse shoe with continuous calk, advertised in the RURAL, would be likely to effect a cure, and whether it is really what it pretends to be.

ANS.—We cannot speak of our own knowledge, but we have seen very strong letters that have been sent to the company in which special reference is made to the fact that the use of the shoes not only prevents interfering, but eradicates the habit. We have found by actual trial on our horses at the Experimental Farm, that in other respects the shoes do what is claimed for them. As our horses did not interfere, the shoes of course, could not be tested on that point.

W. U. R., Hubbardsville, N. Y., asks 1. where the Herald's Almanac can be purchased and its price. 2. The name of some reliable commission house in Boston and Philadelphia. 3. Where can he get a horse-hoe adapted to hill land, which will do good work there.

ANS.—1. New York Herald office, this city. 2. We are not sufficiently acquainted with the commission houses of either of those cities, to guarantee the reliability of any of them. 3. Write to R. H. Allen & Co., New York City.

J. W. D., Grand Rapids, Mich., asks for instructions on the cultivation of Cranberries.

ANS.—A longthy article on this subject was published in our issue of Dec. 22, last, and a shorter one among Answers to Corrospondents in RURAL for July 6. A full account of the matter will again be given so soon as the present calls upon our columns shall have relaxed somewhat.

B. P. Moon, Oswego Co., N. Y., wishes to know where he can procure a kind of corn for field culture that we could mention.

ANS. —Try Chester Co. Mammoth, probably, of D. Landreth & Sons, Phila.

H. M. Stowe, Iola, Allen Co., Kansas, asks the name of some manufacturers of good windmills.

ANS.—U. S. Wind Engine and Pump Co., Batavia, Ill.; Eclipse Wind Mill Co., Beloit, Wis.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, NOVEMBER 16TH:

C. L. T.—J. B. L.—J. T.—thanks—J. H. C.—J. M. C.—O. B. M.—H. K.—J. T. L.—F. V. B.—G. A. L.—J. B. M.—thanks—S. P.—L. B. A.—B. A. W.—S. G.—M. L.—W. H. M.—I. J. B.—L. B. A.—T. H. H.—V. D. C.—S. R. M.—E. E.—W. C. L. D.—E. P. S.—J. G. K. K.—J. L. N.—J. M. V. A.—M. B. P.—T. H. H.—A. C.—B.—S. W. J.—G. L. S.—G. G.—R.—S. A. R.—G. M.—E. P.—E. H.—F. H. D.—D. C. H.—M. W. F.—thanks—M. R. J.—V. S. G.—H. B.—C. W.G. —J. G.—S. A. M.—J. T.—thanks—J. E. M. C.

Everywhere.

RURAL SPECIAL REPORTS.

GRAND RAPIDS, Mich., Nov. 4th, 1878.

IN the RURAL of Nov. 4, under the head of "Sanitary Arrangements for the Homestead," fixed tubs in the kitchen are described. I, too, believe that no kitchen should be without them, and have put in three sets by using wash-tubs for the purpose. Take as many tubs as you want of the size you may desire. Fasten to the bottom of each a board just thick enough to be flush with the rim, so that in placing the tubs on a bench the boards as well as the rims may touch it. This arrangement will cause the tubs to stand more firmly, give a greater thickness through which to screw them to the bench, and through which to make the outlet for refuse water. Let the tubs project over the bench in the rear, and through the part thus projecting bore a hole to let off the soiled water. For stopping this hole, I have used a plug and chain, such as plumbers use for the same purpose. If a wooden plug is used, the water should be drawn off from the front instead of from the rear of the tubs, so that the projecting end of the plug shall be out of the way of the washboard. I use a cover just like that described in the article referred to, but without hinges. Let the bench lie open underneath, for in truth "no sink should be closed in."

James Watson writes of the productiveness and other advantages of Arkansas. Before any man migrates there, however, he should inquire about the educational facilities — particularly what proportion of the children there attend school. Why do not papers give the P. O. addresses of their correspondents? [Because many correspondents prefer that they should not do so.—EDS.]

An "Old Subscribor" in "Notes from Central Illinois," recommends sweet corn as food for hogs. One of the milkmen of our city keeps 126 cows and feeds them largely with sweet corn, with such satisfactory results that he intends to increase the amount hereafter—he feeds stalks and corn together. S. L. F.

LARNED, Kansas, Nov. 7, 1878.

THREE years ago the buffalo and the Indians traversed these prairies; now I can stand at my door and count over 100 houses. I am located ten miles from Larned, the county seat of Pawnee Co., which is a R. R. station on the Atchison, Topeka & Santa Fe R. R. All the government land around here is taken and all R. R. land is sold. The wheat crop looks good. So far we are needing rain very badly. There is a heavy immigration to this part of Kansas this fall, as there was last spring. The people come from all over the country. Every State is represented here. I have neighbors from N. Y. City. The climate is healthy and the water good. It is a fine wheat country. Some raised 30 bushels to the acre on the wild sod, and they will do better when the land is cultivated. It is also a good stock country. M. F. R.

CHENANGO FALLS, Broome Co., N Y., Nov. 8th.

THE past season has been one of unusual prosperity for farmers in this part of the country. Though prices are low for what we have to sell, a little money will procure a great deal of what we have to buy. Corn is worth about 60c.; oats, 25c.; apples, 30c.; potatoes, 60c.; butter, 18@20c.; cheese, 6@12c.; eggs, 15c.; hay, $6@7, and everything else in proportion.

We pay from 8 to 10c. for sugar; and from 5 to 10c. for calico and the prices of sheeting, and other things which we have to buy, stand in about the same proportion.

October was a very fine month in which to harvest crops, and all within my knowledge are housed in good order; but November has come in cold and snowy. To-day it has snowed nearly all day, and there are about eight inches of snow on the ground. H. K.

INDIANA Co., Pa., Nov. 12, 1878.

THIS has been a beautiful fall for doing up work. It rained last night, but it is clear today. Corn is mostly up; it was a light crop owing to unfavorable weather. Oats proved a good crop; wheat was about half a crop. Potatoes were very small. The Fly is hurting the wheat that is sown. Wheat, 85c.; corn, 40c.; double bushel; oats, 30c.; rye, 45c.; flags, 2½@2¾c. per pound; cattle, $2.75 per 100 pounds; sheep, 3½c. and scarce. Butter, 17c. per pound; eggs, 16c. per dozen. Wages, thrashing, 75c. per day; other work, 60c.—Thrashing wheat, 4c. per bushel; thrashing oats, 2c. per bushel. J. GILMORE.

CLEARFIELD Co., Pa., Nov. 11, 1878.

CONSIDERABLY more attention has been given to agricultural pursuits in this county in the last two years than ever before in the same length of time. In former years nearly the whole attention of the county was turned to lumbering, but the Pine being nearly exhausted, the land is being cleared up for farms. We miss the good apples this county is famous for. The late frosts in the spring killed nearly everything in the fruit line. Wheat is selling at one dollar per bushel. Corn, 60c. Potatoes 60c. H. F. S.

GRIFFIN, Ga., Nov. 11, 1878.

WE have here, in middle Georgia, the best fruit country to be found east of the Rocky Mountains, with an altitude of 1,000 feet, pure air and pure water—at a distance of only two days' railroad travel from New York. But we want a few thousands of live Yankees to help us develop the resources and possibilities of the country. W. W. W.

WARREN Co., N. C., Nov. 11.

WE have lately had some cold weather hereabouts, causing the behind-class of farmers to hurry up cotton-picking, though the price is now so low—eight cents for lint—that it will not pay cost. The fields are almost as white as snow, and many a back-ache and cold set of fingers are in store for some folks. Corn and cotton excepted, crops are all secured. M. B. P.

PIEDMONT Co., Va., Nov. 13, 1878.

WHEAT is looking well here, and is worth 90c. per bushel; corn, 45c.; potatoes, 50c.; butter, 16¼c.; eggs, 15c.; hogs, gross, $3 per 100 lbs.; beef, gross, $3@3.25 per 100 lbs.—sales slow. We have had a good many heavy frosts here this fall and a little ice; but very few cold days up to this time. P.

A SUBSCRIBER writes us that having seen by the RURAL Special Reports that potatoes were considerably below the average yield, this year, he bargained for a large amount in his neighborhood, and since then the price has risen so much that he has cleared $100 on his surplus stock. Those reports are not only interesting and instructive, but may also be often easily made a source of profit to the intelligent reader. The number, published some weeks ago, containing special crop reports from a large number of different places in thirty-four out of the thirty-eight States in the Union, might well have been a source of as much profit as pleasure.

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No progressive Farmer, Fruit-Grower or Gardener can afford to do without the RURAL for 1879.

THE following are among a few of the recent notices of the press of the United States.

THE RURAL NEW-YORKER has been enlarged and improved, if that be possible. It stands at the head of the strictly agricultural and horticultural periodicals of the country.—*Philadelphia Germantown Telegraph.*

THE RURAL NEW-YORKER, so long and favorably known, seems determined to give its readers the benefit of whatever increased prosperity it secures. It has now, the best list of contributors of any weekly agricultural paper in the country, and is doing a noble work—*Boston Scientific Farmer.*

The editors of the RURAL NEW-YORKER now use a portion of their farm for experimental purposes in raising seeds for their subscribers. Their farm, which by the way is one of the best on the Island, is admirably adapted for such experiments. The RURAL is one of the best of agricultural papers.—*S. S. Observer, Long Island.*

THE RURAL NEW-YORKER.—We are glad to note by an increase of size in the RURAL NEW-YORKER, substantial signs of prosperity. The Agricultural Press of the country has severely suffered by the general depression of the last few years, and it is pleasant to note this first step in prosperity, especially as the Rural New-Yorker deserves all the success it seems to gain.—*Gardener's Monthly.*

THE trouble is that if you take it one year you will like it so well that you will take it every year.—*North Missourian.*

WE regard the Rural New-Yorker as the champion weekly paper of America, for the farm and family circle. While it is especially intended for Rural Homes, there is no fireside that will not be greatly benefited by the Rural New-Yorker's weekly visits. It gives you more for your money than any agricultural publication of which we have knowledge.—*Democrat, Coshocton, Ohio.*

WE are glad to receive assurances from headquarters that this excellent paper was never in such a promising condition as it is now, either financially or editorially, since its removal from Rochester. "It does not owe a dollar, and has half a million at its back." Good enough! but not better than it deserves.—*Buffalo Weekly Express.*

OF our agricultural exchanges none presents such a clear, crisp appearance, typographically, as the RURAL NEW-YORKER. Speaking of its contents, we are led to use the most emphatic language. It is edited with a precision unusual in agricultural journals, and a glance over its interesting "Questions and Answers" columns discloses with what painstaking it responds to requests for practical information. It is more comprehensive than papers of its class, also, embracing a literary department that is again subdivided into minor departments, which furnish excellent short and continued stories, fashions and cutpaper patterns for the ladies. Religious intelligence, the news of the week, and a cozy nook for the young people.

Its practical departments embrace articles by the foremost writers on agriculture, horticulture and kindred sciences, accompanied by illustrations that increase the interest of the text. In short, the Rural is just such a paper as our people should subscribe to. It is broad and national in its treatment of topics, and more than any other journal, serves the farming and fruit growing interests of the whole country.—*Dispatch, Live Oak, Florida.*

THE RURAL NEW-YORKER.—This old and well-established weekly is one of our best agricultural and horticultural exchanges.—*Phrenological Journal.*

THE RURAL NEW-YORKER.—One of the oldest, most reliable, and most welcome of farm and household journals published in America has been enlarged and otherwise improved. Its name has become a household word throughout the land, and we have yet to learn where the Rural is not welcomed by the family to whom it is sent.—*Journal, Flint, Mich.*

THE RURAL NEW-YORKER is the best and most prominent agricultural and home journal in the country.—*Democrat, Davenport, Iowa.*

On receiving The Rural New-Yorker, we scarcely recognized it, so greatly has it been changed, for the better.—*Observer, Bowmanville, Ont.*

THE RURAL NEW-YORKER has been enlarged to the size of Harper's Weekly, and otherwise greatly improved. It is one of the oldest and best agricultural weeklies in the country. Terms, $2.00 a year.—*Record, Yorkville, Ills.*

THE RURAL NEW-YORKER, one of the best family and agricultural papers in the land, has recently been enlarged, and its publishers claim that it has also been improved; but we can't see it, for the reason, we suppose, that our vision is clouded with the long and fixed notion that there was no chance for bettering it.—*Home and Farm, Louisville (Ky.)*

THE RURAL NEW-YORKER, once published at Rochester, but latterly at New York, has been the most widely circulated of the agricultural papers.—*Times, Hartford, Ct.*

RURAL NEW-YORKER.—That old reliable agricultural journal, The Rural New-Yorker, renews its youth every year, and steadily improves with age.—*Western Homestead, Kansas.*

THE RURAL NEW-YORKER has no peer as a family and farm paper.—*Commercial, Mitchell, Ind.*

THE RURAL NEW-YORKER has been enlarged and improved, and is now the best agricultural paper issued in the U. S. We cordially recommend it to our farmers.—*Times, Port Hope, Ont.*

THE RURAL NEW-YORKER, so long and favorably known as a guide and representative of the agricultural interests of the country, has been much improved in its typographical "get up." It would be hard to improve it otherwise. The Rural New-Yorker is a mine of information for farmers, wherever located, and amply repays perusal.—*Am. Mail and Express Journal.*

THE RURAL NEW-YORKER, published at 78 Duane street, New York, is now the best agricultural weekly we have any knowledge of.—*Spectator, Ohio.*

THE RURAL NEW-YORKER.—This popular agricultural journal has recently been enlarged and typographically improved, all of which will commend it still more, if such a thing were possible, to its vast army of readers in all the walks of life. The Rural New-Yorker is the most popular agricultural paper published, and we commend it as the best to all wanting a paper devoted to that department.—*Insurance Herald.*

THE RURAL NEW-YORKER has made another enlargement, which makes the Rural the largest agricultural weekly published in this country.—*Western Agriculturist.*

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Our Cattle Illustrations.... 741
Jerseys in the West—G. L. Wrenn.... 741
Best Time to Plant Trees, Plants, etc.—Nelson Ritter.... 742
Dairying and Dairy Cows of New England—R. Goodman.... 742
Fall Management of Sheep—Prof. E. W. Stewart. 742
Hatching Chickens—J. H. Campbell.... 742
The Best Breed of Fowls.... 743
Excellence of Sour Milk.... 743
Millet Again.... 743
Salting Wheat Land—W. R. Derrick.... 743
Jottings at Kirby Homestead—Col. F. D. Curtis 743
Notes on Apples from Oneida Co.—Jonathan Talcott.... 744
Some of the Raspberries—H. Hendricks.... 744
Henrietta Raspberry Again—J. T. Lovett.... 745
Sanitary Arrangements of the Homestead—A Jersey Farmer.... 745
Catalogues Received.... 745
Cotton Ball Moth.... 746

Answers to Correspondents:

What Ails the Hogs?.... 746
Spaying Cows.... 746
Black-Leg in Cattle.... 746
Corns on Horses.... 746
Coryza, or Nasal Catarrh in Swine.... 746
Caponizing Cockerels.... 746
Show Points of Light Brahmas.... 746
Paradise and Dousin Stocks.... 746
Summer Savory.... 746
Miscellaneous.... 746
Communications Received.... 746

Everywhere:

Grand Rapids, Mich.... 437
Larned, Kan.... 747
Chenango Falls, N. Y.... 747
Indiana Co., Pa.... 747
Clearfield Co., Pa.... 747
Griffin, Ga.... 747
Warren Co., N. C.... 747
Piedmont, Va.... 747

Domestic Economy:

Household Conveniences—Sarah Gamp.... 752
Uses of Ammonia—M. G. R.... 752
Rug-Carpets—Ellen.... 752
Bed-Quilt Pattern—Libbie D. Jones.... 752
Cheap Carpeting—Aunt Em.... 752
Domestic Recipes.... 753

EDITORIAL PAGE:

Thanksgiving.... 748
In Which all of the Readers are interested.... 748
Brevities.... 748

LITERARY:

Poetry.... 749, 754
Fashion Notes—(Illustrated).... 749
Weaker Than a Woman.... 749
After Dinner Speech of Baroness Contaletto Louise Stockton.... 751

Reading for the Young:

The Handless Maiden.... 754
The Singing Bone.... 754

Sabbath Reading:

The Mountains of God.... 754
News of the Week.... 752
Personals.... 755
Wit and Humor.... 756
Markets.... 753
Advertisements.... 753, 735, 756

THE
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SATURDAY NOV. 23, 1878.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

OUR readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

MANY of our friends continue to send us Two FIFTY instead of *Two* Dollars, the new price of RURAL. In such cases we will either refund the fifty cents or make the subscription term fifteen months, as may be preferred.

OUR new Premium Lists, specimen copies and agents' outfits will now be forwarded free to all who apply.

TO OUR READERS.—Please again read the postal terms of our free seed distribution. Many are sending us more stamps than are called for.

OUR Free Seed Distribution will remain open to all subscribers who may apply until further notice.

THE RURAL NEW YORKER *is invariably discontinued at the end of the subscription term.*

THANKSGIVING.

On twisting strings fat Turkeys fry;
In oven bakes the Chicken Pie;
The roasting Pig with butter swells,
And oh, how good Thanksgiving smells!

Let us read a page of the early history of New England:

The winter succeeding the landing of the Pilgrims was one of unusual severity, and during the following summer (1621) sickness prevailed to such an alarming extent that but little food was raised, while in the autumn more immigrants arrived, with whom that little was shared, compelling the colony for six months together to subsist on half allowance. Some fishermen off the coast kept them from famishing, by occasional gifts of fish. The little extra provisions on the ships were held at exorbitant prices, showing that then, as now, the necessities of one are made the opportunities of another. In the spring of 1623 victuals were so entirely spent that a famine seemed imminent. The little corn left was used for seed, and lobster, fish and muscles, without bread, were their only sustenance. After planting came a season of drought which promised to destroy the hoped-for crop, in view of which a day of fasting and prayer for rain was appointed. According to Cotton Mather, before the close of this day which began hot and cloudless, the clouds gathered, showers descended, and the crop was saved. In the autumn, after the abundant harvest was gathered, Gov. Bradford appointed a day for thanksgiving. A company was sent out for game, that they might have dainty and abundant materials for a feast, and rejoice together. "So they got their game and they cooked it, and they ate of it, and they feasted Massasoit and 90 of his Indians, and they thanked God with all their hearts for the good world and the good things in it." So they kept their first Thanksgiving.

The annual appointment of a day of thanksgiving early became one of the customs of New England and has been continued to the present time. It soon became a day for family gatherings and attendant frolics and festivities, and in later years, it was not seldom that three and even four generations were found under the roof of the ancestral home, making not only the day itself one of joy and gladness, but extending the merry-making through the week. Christmas was not recognized in the Puritan's calendar, and Thanksgiving came, in some measure, to fill its place.

There is no section of our broad land where the influence of early New England is not felt to this day. When her sons and daughters leave the stony hills and unproductive fields of their ancestors, to make their homes elsewhere, they take with them a love for many customs, that is not easily eradicated. Their children are taught to respect what the parents loved, and among the first duties of the Governor of a new State, in which the New England element was prominent, was that of issuing the annual proclamation for Thanksgiving Day—not now, however, as in our youth, to be read by the minister at the close of the sermon, on the morning of the Sunday preceding the appointed day, always closing with the declaration that on that day "all servile labor and vain recreation are by law forbidden."

Until recently the appointment of the day rested with the Governors, each choosing for himself, but always some Thursday in November. An opportunity was thus offered by which two or some times three Thanksgiving dinners could be secured by journeying from State to State, a practice the appointment of a National Thanksgiving Day by the President prevents. We are not positive that because some people could get advantage of others in this way, was the reason a President took the matter in hand, but it was that—or some other reason. The thing is done and no longer can more than one legal Thansgiving Day be observed in any year.

But why should not every day be one of thanksgiving? There are times when clouds arise, and the mists of sorrow and trouble enshroud us; when gladness is not ours; when days seem long and nights never-ending; when no words bring comfort, and hope seems to have departed; when we forget the blessings we have in grieving for those we have not. "Look up and not down." Man was not made to mourn. All nature repudiates the assertion.

Let us consider a moment, our situation as a people.

We have a Government that, in theory at least, is as good as the world has ever seen, and the growing intelligence of our citizens is warrant that it will be made so in practice.

We have a climate more various than that possessed by any other nation. Our soil is fertile and well adapted for the production of every crop grown in the temperate and semi-tropical zones. Our great Northwest alone is capable of producing sufficient food to support the entire population of the globe.

In manufacturing facilities no country is our superior. Our water-power is practically unlimited, and our coal-beds almost inexhaustible.

Our mineral wealth is beyond computation. One State alone has iron enough for the world, and thousands of acres beyond the Mississippi lie on foundations of silver.

Passing from the physical, we may be congratulated on our mental and moral advantages. We find the same spirit that built the New England school-houses two hundred years ago, permeates our entire country. Free Schools are the rule, and if any are uneducated, it is their own fault; while the statistics of crime show there is nowhere a more moral and law-sustaining population than ours.

The result of all these advantages is happy homes. Look, for instance, at the picture on our first page, in which the artist has shown one of the many thousands where the RURAL is welcomed every week. See three generations in one house, with the faithful dog to keep them company. The "Cricket" measures for them the passing time and the package of seeds from the RURAL office, gives promise of hours of pleasure during the coming summer, from which will result many things of beauty which will be joys forever. Look through the window and catch a glimpse of the surroundings and say if there can be any doubt this is a happy home, from which fervent thanksgivings will arise—and what shall we say for ourselves? What but that our past year has been crowded with causes for thankfulness. Our time has been spent in earnest endeavor to accomplish two results! One to make a more acceptable paper than we had before—both in appearance and matter; the other to increase its circulation that more might profit by our labors. That we have done the the last, we know, and believe we have not failed in the other. We are thankful for the kind words of approval and encouragement received from many friends, as well as for the co-operation and assistance of many others, all of which have served to make our labors less arduous and our path to success more free from thorns.

IN WHICH ALL OF OUR READERS ARE INTERESTED.

WE state what is pretty generally known, when we say that seeds (and very often those of very poor quality), have frequently been offered as premiums by weekly journals. So far as we are aware, they have always been those which might have been found in any one of the seedsmen's catalogues, such as Balsam, Zinnia, Portulaca, &c., &c. There are two points which we would like to impress upon our readers in regard to the seeds which the RURAL offers. First—They are not offered as premiums at all. We offer no premiums except as a compensation to those who get up clubs, and for this work they are as much entitled to compensation as for any other kind of labor. Our seeds are offered to subscribers only. If this offer induces many to subscribe who would not otherwise, we shall be glad; but if not, our subscribers are entitled to a choice of them all the same. Second—The seeds offered with the exception of Pearl Millet, Defiance Wheat and Acme Tomato, cannot be purchased of seedsmen, while the Beauty of Hebron potato has not passed out of the control of those who commenced its dissemination last year. Of the seeds of the Golden Rural Tomato, Bronze Ricinus, Hybrid Aquilegias, Seedling Deutzias, Weigelas and Voorhis Watermelon we have the entire stock; while seeds of the others, excepting Leavenworth's Eryngo, are not to be found in any of the advertised lists of the catalogues in our possession. All of them will grow readily from seeds, and, speaking for the perennial hardy plants, they will grow in one season to the size of those purchasable from nurseries at from twenty-five to fifty cents each, while from a single packet of the RURAL seeds, not less than half-a-dozen seedling plants may be counted on.

We have not the least desire to overestimate the value of the seeds we offer, but we are not the less disposed to make their value appreciated. It does not seem to be generally known that Deutzias, Weigelas, hardy Hibiscus, etc., may be obtained from seeds even more readily than from cuttings, while the amateur cultivator may be confident of variations in the flowers, if not in the foliage and habit, that will invest the seedling with an interest that purchased plants never could arouse. There are no better hardy shrubs than Weigelas, Deutzias, Hibiscus, &c., and we hope by our free seed distribution, to be instrumental in causing them to be cultivated in every garden in the country. If they are as desirable as we represent them to be, and if they may be procured for the trouble of sowing the seeds and caring for the young plants, then surely there will be no excuse for the neglect of the farmers' dooryards. We may excuse a farmer for a paucity of fine shrubs about his house if he is obliged to purchase them; but there is no excuse if he refuses to give them a place in his grounds when they are freely offered by those from whom he has a right to accept them in connection with the paper he helps to support.

Respecting Pearl Millet, we hope it may take a high and permanent place among fodder plants. We shall send out seeds enough to enable everyone to settle the question of its utility for himself. Defiance Wheat which has produced such remarkable yields in some places, is at least worthy of a trial wherever spring wheats will thrive, and the Beauty of Hebron potato we are in high hopes will take the first place among the favorite varieties of the day.

BREVITIES.

WE beg of our friends not to stick to their letters the stamps they may inclose in them.

MR. LAWES' experiments show that sheep utilize a greater proportion of their food than cattle.

DR. HOSKINS says that politicians as a class are the most stupid, as they are the most selfish and venal of men.

THE outbreak of the rinder-pest in England in 1865, when at its hight, carried off 17,000 head of cattle a week, and in eighteen months England lost by the plague fully $40,000,000.

WE wish that our farmer readers would write us what variety of field corn has produced with them the largest yield. If they have any distinct varieties which they have cultivated, we would be glad if they would send us a sample ear at our expense.

THOUGH early to speak of it now, we hope all of our subscribers who receive the Beauty of Hebron potato will plant it beside the early Rose, treating both in the same manner, and advise us of their comparative values. We will gladly publish such reports, whether for or against the Beauty of Hebron, having no interest in the potato except the desire to make its value known.

THE serious nature of the losses to which the thoroughbred live stock interests of this country would be liable to in the event of the occurrence here of some of the cattle plagues that ravage Europe, is shown by the havoc committed by the foot-and-mouth disease among the late T. C. Booth's Warlaby herd of Short-horns. Last year the owner testified before a Committee of the House of Commons, that in a few years he had lost from that pest alone, no less than £30,000 or $150,000.

SOVEREIGNS alone confer titles of nobility on illustrious scions of the human race, whereas the commonality mainly bestow such symbols of distinction on eminent members of the "lower creation." Judging by the power of the parents, in both of the honored classes, to transmit their excellencies to their descendants, the people seem better judges of true nobility than the monarchs, while the value of the progeny of original Short-horn Dukes, Duchesses, and Princesses far exceeds that of the offsprings of hundreds bearing similar titles among the peerage of the Old World.

THE island of Jersey, the original home of the cattle breed of that name, has a total area of only 28,000 acres, yet last year its export of early potatoes amounted to £230,000 or at the rate of about $40 per acre of the whole island, including roads, rocks, bye-ways and waste places. This year the breadth planted to potatoes was unusually great, but the potato disease appeared in May and the entire crop has turned out a failure. Many a fine Jersey cow, heifer and bull, that money could not have otherwise bought, will have to be sold this fall and winter to pay for rent, guano and advances.

A CAUTION TO BUYERS OF JERSEY CATTLE is needed from the fact that there are three Jersey Herd Books; namely, the Herd Register of the American Jersey Cattle Club, published at Newport, Rhode Island, and edited by Secretary Waring under the supervision of the Executive Committee of the Club; a State Herd Book published in Maine, and a Herd Book published in Massachusetts. The Jerseys entered in the first are alone authoritatively entitled to be considered pure-bred, and, as a rule, the animals entered in the others are not eligible to entry according to the rules of the Club. Before purchasing animals advertised for sale as entered in "Jersey herd book," it would be well, therefore, to find out which herd book is meant. It is estimated that there are about 10,000 Jerseys in this country entered or entitled to entry on the Register, and about as many more claimed to be pure-bred but not entitled to the entry, owing to the stringent rules of the Club.

THE HORNS OF CATTLE in south Africa are said to be longer than even those of our Texans and are often curiously bent and twisted. This is effected by scraping the horn on the side towards which it is desired that it should bend, and repeating the operation until the wished-for shape has been attained. The question of "horns or no horns," seems to be lately attracting considerable attention on both sides of the Atlantic. Here the Kentucky Live Stock Record sees preponderating advantages on the "no horns" side, but deprecates the introduction of polled cattle to bring about the change, as it can be readily done by searing with a hot iron the spot where the horn is to grow on the calf. On the other hand the National Live Stock Journal, while acknowledging, with us, that horns are no longer necessary as a means of protection against wild animals, and that they are sometimes used to inflict serious injury on other stock, is not prepared to sacrifice the elegant and graceful appearance of the heads of horned cattle for the homely heads of "muleys."

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

DEAD.

A LILY broken by the rain,
Before a single earthly stain
Has on its velvet whiteness lain;

A snowy bird that close caressed
By the soft, brooding mother breast,
Dares yet forsake the sheltering nest,

And straight, before its silver wings
Have ever stooped to baser things,
Flies up to heaven, and flying sings.

These and all other pure and mild
And lovely objects undefiled
Are types of what thou wert, our child!

[*Detroit Free Press.*

POMEGRANATE BLOSSOM.

SAXE HOLM.

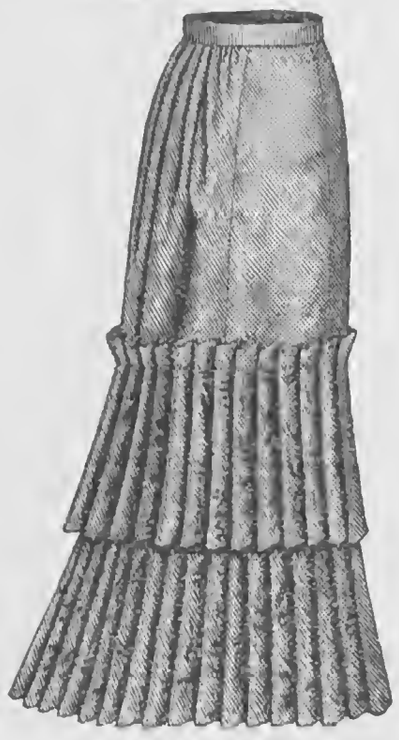
POMEGRANATE blossoms! heart of fire,
I dare to be thy death,
To slay thee while the summer sun
Is quickening thy breath,
To rob the autumn of thy wine,
Next year of all ripe seeds of thine,
That thou mayst bear one kiss of mine
To my dear love before my death.
For, heart of fire! I, too, am robbed,
Like thee, like thee, I die;
While yet my summer sun of love
Is near and warm and high,
The autumn will run red with wine,
The autumn fruits will swing and shine,
But in that little grave of mine
I shall not see them where I lie.

WHAT SHALL WE WEAR?

THE bewildering variety of materials displayed in the shop windows makes this problem rather difficult of solution. So many exquisite fabrics are to be had, that it is hard to make a selection

6343

unless one has started out with the fixed determination to confine her purchases to solid colors and standard materials. All the old-time favorites, —merinos, cashmeres and camel's-hair cloths—are to be had in all the fashionable shades, and many ladies content themselves with these fabrics, but the new, fancy goods are so seductive, that it requires considerable strength of mind on the part of a beauty-loving woman, to resist the temptation to invest in at least one of them.



6389

There is no question, however, but that for people who cannot afford to discard a costume after one season's wear, cashmere is a much better investment than Cheviot, or Brussels cloth and combined with velvet, brocade or satin, these plain goods make really elegant suits and their cost is infinitely less than that of the rich fancy goods. A new fancy fabric is a novel cloak pattern in basket-weaving. There are four colors worked in the manufacture, two being of rather

6343

bright silk and two of rich dark worsted. The silk is in hair lines; the wool in alternating blocks not over a half an inch long and wide, and the several combinations shown in this style of material are unique and rich.

Dress goods suitable for polonaises, coats or vestings are in raised plush stripes bordered by hair stripes of silk. The general effect is dark and it appears in handsome navy-blue, myrtle-green, olive, seal-brown, plum or garnet with the fine silk lines of pale-blue, gold, pink, red or white. Other novelties in heavy suitings are in mixtures of different shades of one color, sprinkled with silk to make the "silk stitch" effect.

Brussels cloth is woven with little loops projecting from its surface and comprises a great many varieties, the most pleasing of which is wool intermingled with fine silken bars, and also those with the looped pattern in narrow stripes or small figures.

6352

A peculiarity of the season is the odd and effective combination of shades. Entirely different browns, such as olive, *Havanne* and seal, are intermingled in a fabric, and myrtle, moss, olive and bottle-green are distributed in the same manner. Some of these goods are scattered over with indistinct checks or stripes, and some have scattered particles of cardinal, cream and other bright-tinted wools, woven among their somber colors Vestings of cashmere, brocaded with small figures of old-gold, pale-blue, Magenta, silver-gray, garnet, and a variety of shades are stylishly combined with French and India cashmeres.

Armure cloths are wool goods with a solid shade at the foundation, on which is a fine, close embossing, resembling lace chain-work. Large merino plaids are in scarlet and black, black and white, and blue, green and gold. The smaller varieties are in the newer colorings of old-gold, plum-color, bronze, silver, orange, and the several dark fashionable hues, cross-barred with narrow lines of rainbow tints.

Garnet is undoubtedly the most fashionable color of the season, but the darkest shades of other colors are extremely popular, and, as usual, black, in all materials, holds its own.

Cloakings come in many new and handsome materials. The large plaided-goods in wool are used in circulars and Ulsters. For cloaks a great variety of material is offered. Among them black camel's-hair, diagonal cloth, *damasse*, *matelasse*, Cheviot and plain black silk are the most popular. In trimmings, jet beading takes the lead; passementerie ornaments and gimps are plentifully besprinkled with it. Fringes are more elaborate than ever and are very much worn on handsome costumes. Pipings, bands, vests, *revers* and cuffs of corduroy, velvet, satin, brocade, or moire-antique, comprise most of the modish materials and styles of decoration.

Satin folds and chenille fringes make a charming finish for merino, camel's-hair and fancy cloth costumes, and silks are made very elegant by the addition of brocade, handsome passementerie and showy silk fringes. There is a disposition to use little ornamentation on street costumes; many ladies confining themselves to cordings and pipings.

In a future article I will give prices and widths of fashionable goods for dresses and cloaks. Any ladies who may desire samples of fashionable materials will be supplied, free of charge, by addressing me, care of RURAL NEW-YORKER. Please state explicitly the color and style of goods desired.

Description of Cuts.

THE Ulster, shown at 6343, is a new and stylish design. It is simple in structure, gives the wearer

6352

a very slender and graceful appearance, and the straps and buttons on the lower part of the skirt, relieve the back of the too severe simplicity which usually characterizes garments of this kind. This Ulster will be found exceedingly comfortable and dressy and it may be made of any kind of cloth—waterproof, camel's-hair or Ulster cloth—and decorated with braid, pipings or machine-stitching, and with smoke-pearl, bone or horn buttons. Price 30 cts.

The popularity of the "Washerwoman" costume has given rise to almost endless modifications of it, one of the prettiest of which we give at No. 6352. The skirt is kilt-plaited, and about the figure is artistically draped a wide scarf. The military-looking basque adds to the jaunty effect

6387

of the costume. It may be made of silk, cashmere or camel's-hair. The scarf may be of the same material as the skirt, ornamented with fringe and velvet, or it may be composed of plain or brocaded silk, velvet or satin. This costume looks well made up in plain and plaided woolen goods. Price of pattern, 35 cts.

No. 6389 is a model of a ladies' short walking-skirt. It is short and round and consists of a front gore, with two narrow gores at each side and a plain back-breadth. Two deep side-plaitings of the material from which the suit is constructed supply a handsome garniture for the

6387

bottom Box-plaitings may be employed instead of the side-plaitings, as may also knife-plaitings, gathered flounces, flat bands, galloons or braids. This skirt may be worn with any of the over-skirts or polonaises in vogue. Price of pattern, 35 cts.

The double-breasted cloak, No. 6387, is an economical and comfortable wrap. It requires but little trimming, and any material is suitable for its construction. The model given is made of heavy basket-cloth, finished with buttons and velvet. Price of pattern 35 cents.

The polonaise still holds its own, despite the popularity of basques, and the model we give at No. 6670, must commend itself to all on account of its simplicity and grace. Made of plain and brocaded goods, it would make an extremely handsome garment. A material closely resembling corduroy, is a novelty in this season's fabrics, and combines handsomely with silk or velvet in a polonaise of this description. Price of pattern, 35 cents.

No. 6362 illustrates a tasteful coat of tufted beaver cloth of a dark blue shade, ornamented with buttons and braid; diagonal, basket-cloth, silk velvet, or any of the fashionable dress or cloak goods may be made up in this model and decorated in any way to suit the taste.

6362

A stylish little mantle, an offshoot of the "Dolman," is illustrated at No. 6385. It is composed of only two pieces, and falls gracefully about the figure. It is adapted to any figure. It may be made of silk, trimmed with fur (as shown in the engraving), or of any of the fashionable cloths. Crape cloth, trimmed with tape fringe headed by a band of crape, forms an appropriate wrap to be worn over a mourning costume. Price of pattern, 25 cts.

No. 6,375 — Ladies' basque, is a sort of compromise between the old-fashioned basque and the dashing, masculine cutaway coat, so fashionable at present. This basque is jaunty, without being in the least loud, and as it is adapted to any figure, and combines handsomely with any gored or plaited skirt in vogue, it bids fair to be one of the popular models of the season. Price, 30c.

6362

A short walking skirt, box-plaited, is given at No. 6,365. It is made up in light and dark suit goods. The garment is made to present a unique

effect by constructing the plaits alternately of the dark and light colors and by the artistic disposition of a wide scarf composed of the dark goods. The front of the scarf is cut in deep, castellated scallops at the lower edge, and piped with the light goods, while the sash-like end at the back is decorated with a fine knife-plaiting of the same color. Any of the dress goods in vogue will be found available for its formation, and any pleasing method of trimming it may be adopted. Price of pattern, 35c.

6370

Patterns sent from this office on receipt of prices named. All patterns are accompanied by full directions, as to how they are to be put together, amount of material required, and all needful information. I have a number of other fashion cuts to publish, and as there is no room for them in this issue, I have decided to give them in the RURAL of December 14.

I have omitted all mention of circulars, and for the reason that they are so extremely common that it hardly pays to make new material up in that shape. Manufacturers made up great quantities of them in the early fall, and they retail as low as five dollars; and the result is that every chambermaid in town owns her long circular fastened with an elaborate oxydized clasp.

Literary Miscellany.

WEAKER THAN A WOMAN.

CHAPTER X.

UNDER one of the spreading elms on the Vicarage lawn, stood Violet Haye, talking to her lover. They were watching the contest for a silver

arrow, enjoying the failures and mistakes which were out of all proportion to the success. The sunlight fell on her, tinging the golden hair with deeper gold, making the fair flower-like face still more fair, brightening the white dress with golden gleams. As she stood there her crimson lips parted, smiling at the bright scene before her, she looked like a picture of something almost too fair and ethereal for earth. Her lover was near her. For him the *fete* held naught but Violet. He was supposed to be watching the archers—he was looking at Violet. The sunlight was not so fair to him as the light in her eyes. The harmony that came from the whispering wind, the silvery murmur of laughter, the notes of the air that the band was playing held not such music as her voice. Many eyes lingered on the handsome couple under the great elm. Men looked with envy. Many a man there would have given half he had in the world to stand by Violet's side as an accepted suitor. Women looked with jealous admiration; they could say just what they liked about her, they could criticise her dress and her manner, but each one knew she was simply the most beautiful woman present.

The *fete* was at its hight. From the meadow came the hearty shouts of the children at play. Suddenly there seemed to be a slight commotion amongst the guests, and Felix saw the Vicar standing with a gentleman who was certainly not remarkable for the handsomeness of his personal appearance, but the Vicar seemed to be impressed by his presence. Then Captain Hill joined them, and the Vicar went away, leaving the two men together.

The new-comer, Sir Owen Chevenix, turned to his friend with a smile.

"It is not bad," he said; "but I see nothing that repays me for the trouble of coming."

Captain Hill turned slowly, and motioned to the great elm-tree.

"That is the prettiest sight in the grounds," he remarked; and a curious light came over the heavy face of Sir Owen Chevenix as he gazed. At the same time a keen, subtle instinct which he could not understand told Captain Hill that he had acted cruelly.

"You are right," agreed Sir Owen Chevenix, looking intently at Violet—"that is by far the prettiest sight in the grounds. Who is that young lady?"

"Miss Violet Haye," replied the Captain. An honest impulse prompted him to add, "She is engaged to Felix Lonsdale," but a subtle sense that such a statement would be displeasing to Sir Owen restrained him.

6385

"Will you introduce me to Miss Haye?" asked the Baronet. The light in his eyes had grown lurid; the Captain did not like it.

"It would be better for Mrs. Hunter to do that," he replied. "I am not one of Miss Haye's friends."

Sir Owen walked quickly away. There was a look on his face as of earnest purpose when he saw Mrs. Hunter. She listened to his request, and she wondered at the strange light on his face.

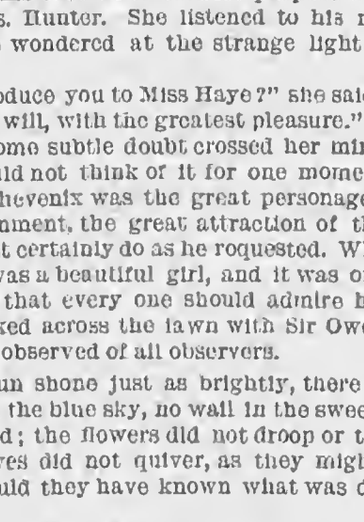
"Introduce you to Miss Haye?" she said. "Of course I will, with the greatest pleasure." Then, oddly, some subtle doubt crossed her mind; but she would not think of it for one moment. Sir Owen Chevenix was the great personage of the entertainment, the great attraction of the *fete*. She must certainly do as he requested. Why not? Violet was a beautiful girl, and it was only reasonable that every one should admire her. So she walked across the lawn with Sir Owen, who was the observed of all observers.

The sun shone just as brightly, there was no cloud in the blue sky, no wail in the sweet western wind; the flowers did not droop or tremble, the leaves did not quiver, as they might have done could they have known what was drawing near.

Neither Violet nor her lover saw the two until Mrs. Hunter spoke.

"Miss Haye," she said, "Sir Owen Chevenix has asked me to introduce him to you."

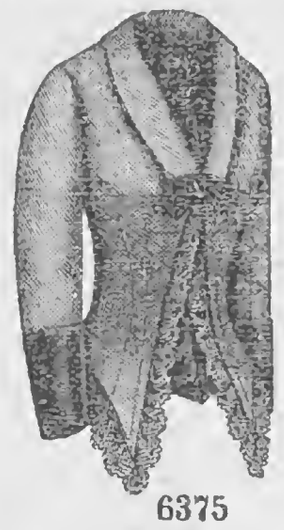
Violet's face flushed hotly—it was so sudden, it was such a surprise. This was the rich Baronet of whom so short a time before she had been speaking with such awe and wonder. She bowed, and murmured a few words—she never remembered what they were; then, as a matter of course,



6385

Mrs. Hunter was compelled to introduce Felix. Sir Owen acknowledged the introduction by a few careless words. The whole scene occurred in the radiant sunlight, in the midst of blooming flowers and happy faces—yet it was the prelude to a terrible tragedy.

"A beautiful day," said Sir Owen to Violet—"a charming scene too, quite rural, quite pastoral—the kind of thing I like."



6375

But Violet had not recovered her composure. She was quite unused to society; and the consciousness that she was talking to a rich young Baronet, the great man of the neighborhood, was for the moment too much for her. He liked her shy, pretty embarrassment. He had been accustomed to women whose eyes met his boldly, who gave him word for word, repartee for repartee; he liked the drooping eyes that showed the long fringed lashes, the downcast face, so attractive in its sweet confusion. Felix made some remark, and again the Baronet answered him with a careless word or two.

"I hear that we are to have quadrilles," said Sir Owen to Violet. "Will you favor me with the first, Miss Haye?"

She answerd "Yes," because she did not know how to refuse him.

"I had no idea that this kind of thing could be so well managed in a place like Lliford," said Sir Owen. "It inspires me with an idea—I must really give a *fete* at Garswood."

"That would be very pleasant," returned Violet shyly.

"It would if you were there," thought Sir Owen; "and there you shall be queen of the *fete* if I can manage it." Aloud he said—"Have you seen Garswood, Miss Haye?"

"I have been in the park," replied Violet, "but I have not seen the house."

"There is plenty of room for a *fete* there. I am quite in love with the place myself—it has such fine old trees, such grand oaks and elms, such ferns, and all that kind of thing."

Violet wondered for one moment whether it was fashionable to be always speaking of "that kind of thing," and why it was that the Baronet had such a dearth of ideas. She looked up at him so inquiringly that Sir Owen almost involuntarily said—

6375

"Were you going to ask me anything?"

Her face flushed again, remembering what she had thought. He thought her rich, lovely color going and coming the most attractive thing he had ever seen in his life. To give her time to recover herself he addressed some indifferent remark to Felix.

He was not gifted with any remarkable comeliness, this young Baronet to whom fortune had been so kind. He was tall and thin, without any dignity or ease of manner; his gait was awkward, his hands and arms always gave one the impression that that they were more than he could manage. His hair was black, his eyes were dark with a furtive expression; he had a dark heavy moustache, which drooped over cruel lips; his face was a strange mixture of moral weakness and brute force. His voice was unpleasant; there was no mellow ring in it, no music; it was high, clear, and shrill; but then he wore superb diamond rings, his dress was a marvel of the tailor's art, and he had an income of forty thousand a year. What was the grand beauty of Antinous, the grace of Apollo, compared with that?

"You will remember you have promised me the first quadrille, Miss Haye. I see Lady Rolfe. I must pay my *devoirs* to her; and with a low bow Sir Owen turned away.

"What splendid diamonds!" cried Violet.

"What a horrible man!" thought Felix.

Violet had been struck with the gems, Felix had been chiefly impressed by the awkward gait and ungainly carriage. He turned to Violet.

"My darling," he said, "why have you promised to dance with that horrible man?"

"Horrible!" cried Violet. "Do you know how rich and how great he is, Felix?"

"That makes him even more horrible—it is so many magnificent gifts wasted. You must not dance with him, Violet, but with me. You are mine—you belong to me. I cannot let you go even for one dance—even for five minutes."

Violet laughed.

"I must dance with him now that I have promised, Felix."

"I do not think that I shall be able to endure it, Violet. I am afraid, if I see his hand touching you, I shall strike it aside."

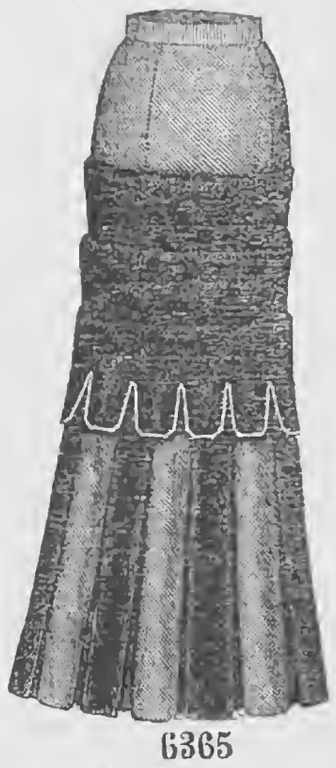
She laughed again as a child laughs who points a loaded gun for mischief, never dreaming that it may cause sudden death.

"I feel that I ought to have danced that quadrille with you, Felix," she said, "but really, I did not know how to refuse. I was quite embarrassed—you must have seen it. How jealous all the other girls will be! How Lady Rolfe will watch me! She said the other day that her daughter, that insipid-looking girl, was far more beautiful than I. She is not, is she, Felix?"

The lips that asked the question were of the loveliest crimson, the eyes that looked into his were like violets steeped in dew, the face smiling before him was like a blush-rose; that the words were foolish never occurred to him.

"My darling, you are more beautiful than any one else," he said. "Violet, you must dance this quadrille with Sir Owen, I suppose?"

"Yes, I must indeed," she replied.



6365

"It drives me half mad to think of it. Violet, do not look at him as you look at me—do not, do not let him know how sweet your smile is. Oh, Violet, I shall go mad if you do!"

Again she laughed. "You will have to go mad then, Felix, for I cannot dance with him like a Stoic, can I?"

"You are mine, Violet. If I had a lovely, rare, and precious lily, should I like every one to touch it and inhale its sweetness? You are my own—you belong to me."

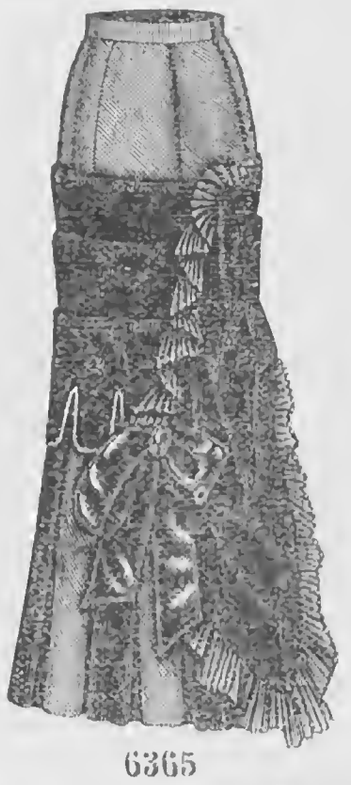
"Here comes Sir Owen," said Violet, cutting short the passionate words. "I shall not be long away from you, Felix;" and, laying her white hand on Sir Owen's arm, they went away together.

CHAPTER XI.

As Violet had foreseen, glances of wonder followed her and her companion. Lady Rolfe was bitterly annoyed; here was this girl chosen by Sir Owen, while her own daughters sat unnoticed. Mrs. Hunter did not know whether to be glad or sorry; of course it was a great thing to have Sir Owen there, and to see him enjoy himself and evidently feel so perfectly at home, but Sir Owen should have danced with Miss Rolfe, certainly not with Violet Haye.

Sir Owen however was grandly indifferent; a man possessed of forty thousand per annum is master of almost every situation, and he certainly was master of this. He enjoyed the quadrille very much.

"I had no idea *al fresco* dancing was so pleasant," he said; "but dancing anywhere with



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you, Miss Haye, would be the same, I should imagine. Who was that gentleman talking to you under the tree?"

"That is Mr. Felix Lonsdale," she replied

And he fancied the warm blush that came over her face was the result of his compliment

"Lonsdale! Is not that the name of the lawyer who forged a will, or something of that kind?" asked Sir Owen.

She looked up at him, horrified by the words.

"You are making a grave mistake, Sir Owen," she said. "Mr. Lonsdale was falsely accused of having influenced one of his clients to leave him money but it was not true."

"True or not, I wish that I were in his place," said Sir Owen.

"Why?" she asked in wonder.

"Because you defend him. I wonder, if you heard evil spoken of me whether you would defend me?"

"Do people speak evil of you?" she asked.

"I suppose so," was the careless reply; "not that I care. Why should I care? Nothing of that kind matters to me. But I know they tell queer stories about me. They say I drink and gamble—they say that I——But I forget—I must not repeat scandal to you. Now if you heard these things said of me, would you defend me?"

"How can I answer you? You forget that I have never seen you before."

"Yet you defend this Lonsdale. Do you know him?"

"The Mr. Lonsdale who has suffered so unjustly is the father of the gentleman to whom you saw me speaking," she replied. "and is one of the oldest friends I have in Lilford."

"I suppose," said the Baronet, "that Lonsdale's son imagines himself a very handsome man. That kind of man always thinks a great deal of himself."

"Do you not think him handsome?" asked Violet, who knew well that her lover had the statuesque beauty of a Greek god.

"I never waste one thought on a man's face," he replied.

But Violet's quick instinct told her the awkward Baronet was jealous of the young lawyer.

Then the quadrille was over, but he would not leave her. She must go with him to have some refreshments—he was sure she felt tired. If he had only known, he would have sent all kinds of choice fruits over for the *fete*, but how could he foresee that the queen of society herself was to be present?

It was all flattery, but very pleasant flattery, when offered by a man worth forty thousand per annum. It was pleasant too to know that every one was looking at her, every one was thinking and talking about her. She could not help contrasting her present position with that she had occupied half an hour previously.

Felix Lonsdale had been but coldly received. No one seemed to forget that he was the son of a man whose fair fame was darkened by a cloud. The *elite* had not recieved him very kindly. Lady Rolfe had passed him with a bow; Mrs. Brownson had held out two fingers for him to shake, and had drawn them back very quickly; Mrs. Boulders had shaken hands with him and then looked round very quickly to see if any one had observed her. He had not been "cut;" no one had been pointedly unciyil, but he had been coldly received, and Violet had observed it even more keenly than he had himself, when she stood talking to him. She had a strange feeling as though she were in some manner sharing his disgrace—as though she, too, were under a cloud.

Now it was so different. Sir Owen's glory seemed to be reflected on her; people who had never troubled themselves to speak to her before, now were fulsomely polite to her. It was but reflected glory, she knew; but still it was very pleasant.

Sir Owen insisted on her taking some refreshment; he waited upon her as though she had been a princess; she could not tell how it was, but she seemed suddenly to have left far behind her the world of sorrow, pain, and disgrace in which, through sympathy with Felix, she had been living so long.

"Here is your friend," said Sir Owen; and, looking up suddenly, she saw Felix at the entrance of the tent looking wistfully at her.

At first something like impatience vexed her. It was such a magnificent triumph for her, he might let her enjoy it—he might have waited a few minutes. It was not every day that she was waited upon by a rich baronet and envied by other women; she might never see Sir Owen again, while all her life was to be spent with Felix. Surely he might have waited a few minutes longer; but no, he was coming to her, and her triumph was ended; she had no idea of resisting his will, and rose from her seat. Sir Owen looked at her in amazement.

"Are you going?" he asked. "I was just about to presume to ask if you would go with me to see the flowers; they have some very fine ones here, I am told."

She looked helplessly from one to the other. She did not know how to refuse such a tempting offer from Sir Owen; it would be an unequaled triumph for all the guests to see her—to see how proud and pleased he was to escort her through the grounds; but it seemed equally impossible to leave Felix, who had looked forward with such delight to this holiday with her. So the beautiful eyes glanced first at the one and then at the other, while the white fingers toyed with the pretty flowers she held up until their scented leaves fell on the ground. Felix cut the Gordian knot for her.

"Pardon me for the interruption," he said. "Miss Hayo was kind enough to promise me that honor."

He took Violet's hand, placed it on his arm, and led her from the tent.

The Baronet stood looking after them with more than amazement in his face.

"What unequaled impertinence!" he said. "The father of such a man as that would be capable of forging half a dozen wills."

"Oh, Felix," said Violet, "I am afraid you have offended him!"

"I do not care if I have, Violet. You are mine. What right has he to monopolize you? I know we are not married; but it is almost the same thing. You are my promised wife, and no one shall take you away from me even for one hour. Come away from all these people—I want to talk to you. Come down this avenue of chestnuts."

He mastered her by his stronger will; she went without one word. They walked slowly down the avenue of chestnuts, the sunlight glancing on her golden hair and white dress.

"Let me look at you, Violet," he cried, with the passionate impatience of a young lover. "It seems to me that that man's presence near you must have dimmed your beauty as poisonous air kills a delicate flower. Let me look at you, my darling."

He held her hand and stood looking at her, watching the radiant face with such love in his eyes that a woman must have had a marble heart to resist him.

"No," he said; "you are just the same. You must humor my fancies, Violet. Does not some one say that 'great love is semi-madness?' It is true. You must humor my fancies, sweet. Stand here; let this cool breeze blow over you—it will purify you from even the very breath and echo of his words."

She laughed a low, tremulous laugh, but the words touched her. She stood quite still, and the western wind kissed her face, played with her golden hair, showered the chestnut-blossoms over her.

"You shall not even have the echo of another man's words hanging over you, sweet," he said. "Now the breeze has taken it all away."

"Oh, Felix, how much you love me! It makes me tremble to think of it."

"You do not understand it even yet," he replied.

As she walked by her lover's side she could not help feeling the contrast. Who would ever—who could ever love her as this man did? Who in the whole wide world, she thought, had ever been so loved except herself? The memory of his words thrilled her; they stirred the inmost depths of her soul. How he loved her, this handsome, noble-hearted man! His very heart, his soul and life, seemed wrapped in her.

Even as she felt these things she could not help noticing the difference. When she had crossed the lawn with Sir Owen she had met nothing but bows, smiles, glances of admiration, ill-concealed envy and wonder. Now that she was once again with Felix no one noticed her, no one spoke to her. It was like being in a different world.

Sir Owen had been asked to play croquet, and had refused. He had taken a bird's-eye view of the party—four old maids and a hopeless schoolgirl. It was not in his line, he assured Mrs. Hunter. He would not engage himself in any particular way; he would only linger and wait, watching for the next glimpse of the beautiful face that had set his heart and brain on fire.

He saw her at last, standing with Felix watching the players at lawn-tennis, and the next moment he was by her side. Lady Rolfe, eyeing him, whispered to Mrs. Hunter—

"Sir Owen seems to be infatuated with Violet Haye. Some one should tell him she is engaged. Dear Mrs. Hunter, would you mind saying that I should like to speak to him?" And she smiled a well-satisfied smile when she saw the Vicar's wife deliver her message.

"You wished to speak to me," said Sir Owen, approaching Lady Rolfe with an air of ill-concealed impatience.

She saw that he looked annoyed, and had recourse to her favorite weapon—flattery.

"If it be to an elderly lady like myself to feel jealous, I certainly am jealous. We are old friends of nearly two months' standing, yet you have not spent five minutes with me. Sit down here, and give me your views about the *fete*."

Ungraciously enough he took a seat by her side. She saw him look with angry eyes at Felix and Violet; but Lady Rolfe was a woman with a purpose. It took much to daunt her.

"I have no views," he declared angrily. "I am quite tired of people with views."

"Clever men are all alike," remarked her ladyship, and his face softened a little at the words. "At least we have had a beautiful day," she said, "and beautiful music."

He could not deny it, or he would have done so. She continued—

"This is the first time that you have met your new friends and neighbors together. Do you like them?"

"They are very much like other people," he sneered.—[To be continued.

THE AFTER-DINNER SPEECH OF THE BARONESS CONTALETTO.

LOUISE STOCKTON.

In one of the most salubrious sections of Alaska there exists—or did exist in December, 1876—a society named "The Irreparables." It was composed of women only. For this there were several reasons. The subjects discussed were not supposed to interest men, but this might have been remedied had not the men, already in a minority in the village, absolutely refused to have anything to do with a society in which they were sure to be voted down without any very promising power of appeal. It was at one time suggested that they could become associate members, but the notary, upon examining their prospective position in the club, declared that their taxes would be so many and their rights so few that it was an offer not to be considered. So the matter was dropped, and an "Irreparable" was always a creature of the gentler sex.

The most important event in the year to this society was its annual meeting and festive celebration in December. Upon this occasion the members reviewed their accounts, perhaps voted in a new member, acted upon delinquents, and, in a word, settled up the business of the year. The festivities sometimes took the shape of a mothers' meeting, a quilting-party or a cozy little tea. In 1876 they were, however, affected by the excitement that prevailed throughout the whole United States, and which fairly reached them in December. Alaska, it was true, was not one of the thirteen colonies, but neither was Ohio nor Colorado. It was much larger than Rhode Island or Delaware. It had great possibilities, and it had cost money, which was more than could be said of the original thirteen, leaving out Pennsylvania, which even then could not be counted as a very expensive investment on the part of Mr. Penn. These patriotic reasons fired the hearts of the "Irreparables," and they determined that Alaska should celebrate the Centennial of their country, and that the celebration should be theirs.

Then the question arose of what nature this celebration should be. An exposition was clearly out of the question, and even a school-fair was voted troublesome. Some of the younger members favored a dance, but this was objected to because of the absurdity of a roomful of women waltzing and treading the light, fantastic German by themselves. It would seem, said the Baroness Contaletto, like a burlesque of merriment; and so the dance fell through. A service of song, a tea-drum, a cream-cornet, and a pound-party met the same fate; and finally all minds gently but firmly centered upon a dinner-party; and so it *was* a dinner with courses.

Naturally enough, it was not at first easy to arrange, but the admirable spirit of organization pervading the society soon brought everything into shape. There was a committee upon the bill-of-fare, upon the toasts, upon invitations, upon the room and upon the general arrangements. It was true that the only room in the village that was suitable was the little hall back of the tavern, and the invitations were verbally given at the meeting when the matter was decided upon; but as one never knows what emergencies may arise, it is always well to have a committee ready to act.

The chairwoman of most of the committees was the Baroness Contaletto. This was not because of her rank, as, in fact, she had no claim to her title either from birthright or marriage. Her claim rested upon the fine sense the village had of the fitness of things. She looked like a baroness; she always made it a point to behave like one. In the course of time they called her so, and when she added the name of Contaletto, the village acknowledged the fitness of that, and very soon the Baroness Contaletto was universally accepted, and Thisba Lenowski forgotten. The reason of her being so many chairwomen also rested on her fitness. She was a woman of ideas and of deeds. The minister's plans might come to naught, the editor's predictions be falsified, and the schoolmaster's reforms die out; but the enterprises undertaken by the baroness went through to a swift success. Her ideas were both contagious and epidemic, and she was always a known quantity in the place.

And so when she pooh-poohed the dance, laughed at the tea-drum and shivered at the idea of the cream-cornet, declaring for the dinner, the matter was settled, and each of the younger members promptly decided whom she would ask to escort her and deliberated as to what she should wear.

Then the baroness arose. She glanced around. She read the thoughts of the members. She looked at two women. One was the sister of the county clerk: she was a woman of the most appreciative character, the clearest sense, and—she was the faithful echo of the baroness. The second was a pretty girl. She represented the other pretty girls. Then the baroness spoke. She said it was of the first importance to do this thing decorously and in order. When the men had suppers they never invited women. They wanted to have a good time, and women spoiled it. She was not in favor of an "invitation entertainment." She supposed that what they wanted was a society, an "Irreparable" dinner. Therefore, she did not propose to invite men.

"But," said the pretty girl, with a rosy color mounting to her cheeks and an ominous flash in her eyes, "when I was in New Moscow I was invited to the Hercules dinner."

"To the table?" asked the baroness.

"Well—no," replied the pretty girl.

"Did you get anything to eat?" pursued the baroness.

"Oh, no," answered the victim, as if this was something preposterous—"of course I didn't. We did not expect anything. But I had a splendid seat, and I heard all the toasts and everything."

"That *was* very nice," answered the baroness, grimly; "but I think we can do quite as well. We will invite the gentlemen to the gallery—fortunately, there is one—we will have toasts, and *we* will be very entertaining."

Of course the baroness had her way. Here, at once, was an advantage in the absence of associate members. Rosy cheeks and pretty eyes now counted in the society for nothing, and when the sister of the county clerk promptly moved that no gentleman be invited to the floor, the sexton's wife seconded the motion. It was carried, and on the night appointed the "Irreparables" had their dinner, and up in the gallery sat the minister, the sheriff, the county clerk, the editor of the Snow-Drift, the head-teacher and a dozen other gentlemen, all in strict evening—if still Alaskan—toilettes. At first it was funny. Then it wasn't funny. It became tiresome, and the sheriff went away. His boots creaked, the ladies looked up, and then not a married man but smiled delightedly and settled himself in his seat.

They paid much attention to the wine. It had been bought in New Moscow of the Hercules Club, and was of course all right. Yet it was over the wine that the county clerk grew restless. It was not that he wished for it particularly, but when the "Irreparables" drank champagne with their soup, sauterne with the meat, ate their nuts and made their toasts with sherry, his patience was put to a severe test. It was something to see that most of the glasses went away almost untasted, but the head-teacher found it best to keep a steady eye upon him and save him from doing more than mutter his opinions.

But when the toasts came the gallery visibly brightened up. The "Irreparables" toasted the country and its resources, the United States, Mrs. Seward, the Centennial, Mrs. Grant, and the widow the chief alderman was to marry. They drank to Queen Victoria, and, with a remembrance of past loyalty, to the czarina. To each toast a member responded in terms fitting and witty, and when the pretty girl arose and, with a glance at the gallery, gave "The gentlemen—God bless them!" the baroness stood up and made reply. She thanked the company in the name of the gentlemen. She spoke of them in high and eloquent terms. She alluded to their usefulness, their courage, their good looks. She did them full justice as resources in times of trouble, of war and of midnight burglaries.

The county clerk ran his fingers through his hair, the color came into the cheeks of the clergyman, and a subdued murmur as of pleasure ran through the little group in the gallery.

Then the baroness continued. She said she was not a woman-suffragist—at least she wasn't sure that she was. She had, she thanked her stars, her own opinion upon most matters, but while she had no positive objection to right-minded women having any real or fancied wrongs redressed, and in their own way, she had not yet thought clearly enough upon the subject to be sure that the ballot was the remedy. She knew there was a great deal of nonsense talked about the moral influence women would exert in politics: perhaps they would, but to her it seemed very much like watering potato-blossoms to get rid of the worms at the root.

Here the county clerk half rose, but the head-teacher held him with his disciplining eye, and he sat down again.

What was needed, said the baroness, was not mending, regenerating, giving freedom or doing justice. These things were all very good, but more was necessary. "There is no remedy," she said, with rising inflections and with emphasis—"no remedy but a total change. What we want is not an extension of the suffrage, but a *limitation!*"

She wished it, however, distinctly understood that she in no way meant to affirm that woman was man's superior; she did not think so. In his own place man could not be surpassed. The sciences, the arts, the industrial pursuits, religion, civilization, all owed a deep debt to a man, and it could not be ignored. She was the last person in the world to wish to ignore it. Properly governed, disciplined and educated, his development might outrun hope, defy prophecy. Out of his place he was a comet without an orbit. Drawn hither and thither by sinister stars, he was an eccentricity beyond calculation and full of harm. For this reason the interests of humanity demanded that the place of man in the conduct of affairs should be well defined and limited. It was well to look this matter in the face.

"Now," proceeded the baroness, "I leave it to any class of men, to any one man, to declare whether the world is, or ever has been, well governed. Is there any age, any country upon record, where justice has reigned, where the interests of every class have been consulted, and where the people have lived together in mutual esteem, in unity and in prosperity? If we look through the world to-day, we find but one country that is governed in anything like a satisfactory manner. It is loved by some classes of its people, and admired by very many foreigners. When we reflect that it is governed by a queen, and that history tells us that its most prosperous period in the past was under Queen Elizabeth, it is certainly safe to assume—No, no, my friends," she said, hastily, "do not applaud. That is not my point. It is possible that women may govern better than men, but that is yet to be tested. This illustration proves but one thing—*that a country is better for not being governed by a man.*"

Her point was this: she did not appear as an advocate of suffrage for women, but as an earnest petitioner against its being any longer held by men. The one thing a man could *not* do was—to govern! This was no assertion. It was a fact proved by all history. Since the beginning of the world men had the governing power in their hands, and what a mess they had always made of it! There had never been a decent government. Oppression, rebellion, anarchy, war, bloodshed, slavery and tyranny,—this was their record.

If women could do anything better, she was in favor of giving them the opportunity of proving it, but it was not her purpose to propose the after treatment. She was not a physician in charge, but the surgeon for the moment.

She had made suggestions: she freely confessed it. She had, for instance, proposed to their talented townsman, the editor of the Snow-Drift, a series of articles upon the existing Presidential contest. As far as she could learn, there was a great lack of unanimity regarding the vote, and it was not clear to the Hayes party that Tilden was elected. Now, she had suggested that there were certain classes concerned but *not* consulted in the election, and to them she proposed leaving the decision. The legal voters had blundered horribly in some way, and she would have been in favor of allowing the Indians, the Chinese, the convicts, the idiots *and* the women to decide the matter. It could not be made worse, and it might be made better.

But leaving all these questions of a past hour, she would put the axe where George Washington did not put it—at the root of the tree—near enough also, she would remark, to leave no stump, and so at once place politics upon a new basis by taking the governing power away from the gentlemen, God bless them!—*Lippincott's Magazine.*

Domestic Economy

CONDUCTED BY EMILY MAPLE

HOUSEHOLD CONVENIENCES.

"A PLACE for everything and everything in its place," is rather a hackneyed saying, but, after all, it perfectly describes the domain of a good housekeeper.

As much attention should be given to the kitchen as to any other part of the house. A busy housewife spends a large amount of time in that room, and she should strive to render it a pleasure and not a dread to enter it. A great convenience in the kitchen is a roomy wall pocket. It may be made very nicely of common, brown card-board, bound with scarlet braid, having three pockets—a large one at the bottom, and two smaller ones above. In the larger one may be put dusters, towels, etc.; in the others string, rag for ents, and other small articles. Another convenience is a bag for dirty towels and dusters, which may hang in a closet in the kitchen. It saves much time and labor on washing-day.

Always have a match safe and scraper in the kitchen. It saves much disfigurement of walls. Get your tinman to make you tin boxes with tight-fitting lids to hold yeast cakes, tea, coffee and spices. They preserve the flavor. A large apron made of oil cloth, and bound with braid, is useful when washing clothes or dishes. Squares of zinc or tin are useful in the kitchen for standing saucepans on. If you are without ice in the summer, keep drinking water in unglazed earthen-ware jars or pitchers. The evaporation and condensation of the water on the outside of the jar will keep its contents cold. "SARAH GAMP."

USES OF AMMONIA.

I DO not know of an agent that can be put to so many household uses, as ammonia, or hartshorn, as it is sometimes called. In cookory, there is no alkali that is equal to it. A small teaspoonful of sal volatile (carbonite of ammonia) in powder, and the same of alum, to one quart of a mixture—bread or cake—will rarely fail to make it light. Both must be dissolved, but separately, in as little warm water as possible and added just before baking. Many recipes in cookory books written thirty years ago and even later, call for sal volatile instead of salaratus, or bi-carbonate of soda.

A large spoonful of liquid ammonia to each gallon of suds, in which woolen fabrics are to be washed, will make them clean and soft, with half the labor necessary for washing in the ordinary way. Hartshorn, sufficiently reduced with soft water, is unequaled for cleaning silver and gold, mirrors, window glass and all painted surfaces. A little ammonia, so little as to be hardly perceptible in the water used for plants in winter, will make them wonderfully thrifty. If the color is taken out of cloth, either cotton or woolen, by acids, it can generally be restored with hartshorn, slightly weakened. Applied in full strength to the bites and stings of insects it gives instant relief. Both liquid and powdered ammonia should be kept in bottles, with glass stoppers. The odor of hartshorn is agreeable to most persons, and it is strange that any housekeeper who understands its properties, will ever be without it. M. G. R.

Iowa.

RAG-CARPETS.

I FULLY endorse May Maple's statement respecting rag carpets. I know there are so many now-a-days who say:

"Oh! you had better throw away your rags and buy a carpet than to fuss to make one." I have not kept house but a few years and have not, as yet, made a carpet, but am saving all my rags to make one within the next year. I bought a carpet the first year I went to housekeeping. Mother had just made one, and we counted up the cost of hers and found it cost more than mine. She said, "Well, I shall never make another rag carpet." A year from that time her carpet was good, while mine was faded considerably, for I disliked to keep the curtains down and the sun out. As mother had a family of growing girls, she soon collected a lot of worn, bright-colored dresses. She said, "it seemed a pity to put them in the paper rags," and the result was she made fifty yards of very pretty carpeting, while her other carpet is good yet. I have noticed as a general thing, that it is the warp and not the rags which wears out first. If one would therefore take pains in buying the warp, I believe a rag carpet will outlast two which are boughton. I have a friend living in town who has a rag carpet upon her parlor floor, and I wish that every woman who objects to rag carpets could see it. I know if it were mine, I should rather have it than any carpet I could buy for a dollar a yard. My sister just remarked, "That even an old rag carpet, if it is clean, looks better and is much to be preferred to a bare floor." Again, a rag carpet shows that a woman is industrious and not afraid of work. ELLEN.

Clymer, N. Y.

BED-QUILT PATTERN.

IN reply to Mrs. Mary Olin, I will say that if she examines honey-comb work of bees, and cuts a piece exactly like one of the cells, she may have a pattern which will suit her for a variety quilt. Before piecing, cut quite a number and lay them down in forms, arranging according to her fancy. In my quilt like this, I put them together so that the pieces ran crosswise, corner to corner,—first a light and then a dark stripe. This kind of work looks well in rugs, made of thick cloth, with each piece corded with some bright color and then sewed together. I use the best parts of old coats and pants, with now and then a piece of bright woolen. These pieces are quite difficult to set together, as one must not sew within a seam of each side before joining on another piece. I had to put mine together two or three times before I could get them to suit me.

LIBBIE E. JONES.

CHEAP CARPETING.

I KNOW of a cheap kind of carpeting which I would like to make known to my rural sisters and all those who find it necessary or wise to economize on floors, as well as in other matters. After all, it may not be so new as I think, but I am going to tell what I know about it. Buy wall paper, that which comes in stripes or diamond-shaped patterns, is prefered; paste to a lining of old cloth of almost any kind, fitted to your floor, and cover with coats of varnish. For halls and chambers, or any floor which is not constantly under the tread of feet, this is a cheap and pretty carpetting, looking like oil cloth, but being very much cheaper. It will last two years with careful using. AUNT EM.

DOMESTIC RECIPES.

Cabbage Toast.

ONE medium-sized cabbage chopped fine and cooked tender in a little water; add two or three quarts of sweet milk and season with plenty of butter, pepper and salt. Prepare the toast in the usual way and pour over it the above mixture. Serve at once.

Force Meat.

One and one-half pounds of cold boiled ham, about one pound lean and the remainder fat; chop very fine and while chopping add three fresh eggs; season highly with pepper and salt. A few onions might be added if you are fond of them. Mix thoroughly and make into little round cakes. To be eaten with bread and butter.

Onion Dressing.

Take pieces of dry bread and pour over them boiling water; let soak until soft, then mix with the hand and season with butter, pepper, salt and a few onions chopped fine. Heat the dressing but not enough to cook the onion. I usually add the onions after the dressing is warmed through—mixing thoroughly.

MRS. E. H. SARGENT.

Oswego Co.

Oyster Soup.

Take one quart of liquid oysters; drain the liquor from them and add as much more water; a teaspoonful of butter, and a teaspoonful of rolled crackers to each person; put on the stove and let it come to a boil; the moment it boils pour in your oysters, having ten, or at least six, to each person; watch carefully and the moment it boils, count just thirty seconds by your watch and then take them from the stove; have the soup tureen or large dish ready with two tablespoons of rich, cold milk or sweet cream for each person; pour in your stew, adding salt and pepper to taste. Never boil an oyster in milk if you want it good. Salt should always be put in the last thing in any soup, fricassee or stew where milk is used, as it is apt to curdle the milk. MRS. MARY OLIN.

Yates Co.

News of the Week.

Monday, Nov. 18th, 1878.

POLITICAL.

The republicans boast that they have only to carry, in 1880, the States which in October and November, this year, have gone republican, to elect their President, despite the solid South. The republican States and their electoral votes are: Colorado, 3; Connecticut, 6; Illinois, 21; Iowa, 11; Kansas, 5; Maine, 7; Massachusetts, 13; Michigan, 11; Minnesota, 5; Nebraska, 3; Nevada, 3; New Hampshire, 5; New Jersey, 9; New York, 35; Ohio, 22; Pennsylvania, 29; Rhode Island, 4; Vermont, 5; Wisconsin, 10; total, 207; necessary to elect, 185. In the next Congress the democrats will have 43 Senators, counting David Davis, and the republicans 33, counting two from Nevada. Eighteen States will send two democratic Senators each, and thirteen States will send two republican Senators each. The seven whose representation will be divided are: California, Connecticut, Illinois, Louisiana, Mississippi, New York and Pennsylvania. The latest returns from the congressional districts show republicans 133, democrats, 141, greenbackers, 15. Among the greenbackers are four republicans. Later returns from Missouri and Florida may show three more republicans. It is also claimed that one independent in Alabama is a republican. Should the California election result in favor of the republicans, they and the democrats will be very close in the House, and in any event, the greenbackers will hold the balance of power.

MISCELLANEOUS.

Despite the hard times the number of immigrants for the year ending last June was 138,469, of whom Germany furnished the largest number—29,313, though Great Britain and her colonies sent us about 65,000, 16,000 of whom were Irishmen and 25,000 Canadians. There were 9,000 of the Chinese Kearney wants to drive out; 10,000 sturdy Northmen, about 4000 each from Italy, France and Hungary, but only 11 representatives from the whole of Africa.

While Gov. Hampton of South Carolina, with some friends, was hunting deer near Columbia, last week, a mule he was riding became frightened, and the bridle breaking, the governor leaped from the saddle, and his right leg was broken in two places below the knee, so that the bones protruded, and the ankle was badly hurt.

James Murray has taken his family from Gilbertville, N. Y., to his South African farm of 37,000 acres, which is stocked with 1000 ostriches and 300 mares of rare blood and pedigree. Murray was a classmate of the prince of Wales at Oxford, and now finds ostrich raising so profitable that he recently sold 60 birds at Cape Town for $27,000 and a pound of feathers for $860, or $8 a feather.

A T. Stewart's body has not yet been discovered despite the best efforts of private detectives, official detectives and the host of amateur detectives whom the hope of the $25,000 reward has urged on in the search. Numerous letters have been written to the newspapers and to Judge Hilton, Stewart's business man formerly and now Mr. Stewarts business representative, offering to disclose the whereabouts of the corpse for various sums, ranging from $10,000 to $500,000, but nothing has hitherto come of them. While all classes are bitter in their denunciations of the scoundrels who desecrated the grave of so prominent a citizen, and, as it were, sympathize with his remains, there is among many very little sympathy with the real or affected grief of those who, in the opinion of these callous-hearted worthies, pettifogged the poor working girls of this city out of the $3,000,000 the dead merchant left invested for their benefit.

FOREIGN.

The sum of $450,000 has already been subscribed by British generosity for the relief of the impoverished stockholders of the City of Glasgow Bank, and efforts are being made in their behalf to induce the depositors in the bank and other creditors to accept seventy-five per cent. of their money, so as to bear a little more lightly on the stockholders, whom the law forces to pay up to the uttermost farthing. With regard to the new tangle about the Fishery Award, between Great Britain and this country, Lord Salisbury, the English Minister of Foreign Affairs, yields to Mr. Evarts' arguments that local laws made in Newfoundland after the completion of the treaty by which our fishermen gained the right to fish in adjacent waters, could not be made to operate so as to lessen the rights guaranteed by that treaty. This conceded, the award of $5,500,000 will doubtless be paid to the British Treasury on or before the date on which it falls due—Nov. 23; and afterwards demands will be made by us for compensation for the losses inflicted last January on our fishermen by the irate, pious and jealous Newfoundlanders.

Prince Hadji Abdullah Singh has arrived at Vienna on his way to London. He is *de jure* sovereign of Oude, from which kingdom he was banished in 1860, at the close of the campaign which resulted in merging that province into England's Indian empire. The object of his journey is to solicit permission from Queen Victoria to return to his native land. As a guarantee of his loyalty and future good behavior he offers to deposit $150,000,000 in the Bank of England. Princess Thyra, of Denmark, lately said to have been betrothed to the Prince Imperial of France, turns out to be so related to the Duke of Cumberland, one of Queen Victoria's sons. She is exceedingly tall, and 25. He is of medium-size, and 33. They are said to have met about three years ago in Rome, and to have become greatly attached to each other there. It is said further that the Princess of Wales espoused the cause of her sister, and that to her is due, in no small measure, the present result which promises a happy future to the young Princess, who with her husband will live the greater part of the year in England. It's not improbable that there will soon be a gold fever in British India. Sir Andrew Clarke, a member of the vice-regal council, has examined the Wynaad district in Madras, and declared it highly auriferous. Miners have been brought from Australia, and great results are anticipated. Within an area of twenty-five by thirteen miles ninety outcrops were discovered of auriferous quartz from two to four feet thick, yielding from a few pennyweights to 200 ounces per ton. The richer stone shows, when broken, fine and coarse seams and jagged pieces the size of a pea. In some reefs much of the stone will probably not pay for working, but it is believed that, on the whole, a very large and profitable industry will be insured with the aid of capital and good management. Wynaad is healthy and pleasant for Europeans nine months of the year, but fevers prevail during three.

Poverty in Germany is to-day greater than it has been for years. For instance, since the year 1875 indigence has constantly increased in the capital of Germany. In that year the city gave regular pecuniary relief to one inhabitant out of ninety-two; in 1876, to one in eighty; and in 1877, to one in seventy-four. According to calculations already made, the number of poor has again increased during the present year. These figures only concern what is called public assistance, that is to say, the help Berlin is bound to furnish to the indigent persons who have their legitimate domicile in the city. In the above calculation are not included the people who are suffering from poverty, but who are ashamed to ask for help. Although the funds for benevolent purpose in Berlin are considerable (they amounted to 6,736,000 marks—1 fr 23c. each—in 1877), that city occupies, as far as regards public assistance, a rank much inferior to that of other places in Germany, such as Hamburg, Bremen, etc. The municipal hospital in the capital is insufficient for all the patients who require succor, and the city is obliged to pay for the sick it places in the royal asylum called "Charity" a monthly subvention of about 60,000 marks.

The Russian papers announce the return of the river Amu Daria to its original bed. The Moscow Gazette thinks all that is now necessary is to make this change definite, and thus create a new route to India, the shortest and easiest, to secure the connection of the Russian possessions in Central Asia with the rest of the empire. A Berlin special says it seems certain that several thousands of former Russian soldiers and officers have been permitted to volunteer and start for Afghanistan. Telegrams from northern and eastern Europe announce heavy falls of snow. The Appenines and Black Forest are covered and the Swiss passes are blocked. In France the rivers are very high, and the Seine threatens inundation. In Italy the waters of the Tiber are rising and have already overflowed the river's banks at Rome. The lower part of the city is inundated, and it was expected that during last night the flood would become nearly as widespread as the disastrous one of 1870. There have been violent storms throughout Central Italy. The damage caused by them is almost unparalleled. Travel on all the railways between Rome and the North is interrupted.

The cost of the Austrian occupation of Bosnia, up to the middle of October, has been reckoned by the Vienna Press to have reached 85,000,000 of florins, or equal (at the par of exchange) to $42,500,000. Should it be necessary to maintain the occupying force at so large a number as 200,000 men, the additional expense, from the middle of October to the close of 1878, would not be less than 75,000,000 of florins, or say, $37,500,000. It is difficult to see in what manner Austria is getting any material compensation at all equal to this expenditure.

The prospects of working people in Great Britain during the coming winter are anything but cheerful. The season promises to be unusually cold and severe there and throughout Europe. Snow-storms of exceptional severity for this time of the year have occurred in the North and Northwest of England and throughout Scotland, while labor troubles and business depression were never so alarming. Eighteen iron firms of Ashton, Hyde, Stalebridge, Newton and Guidebridge have given notice of their intention to reduce the wages of skilled workmen two shillings a week and of unskilled workmen one shilling a week, after November 14. Donner & Co., East India merchants, have failed. Their liabilities are $500,000. The cotton manufacturers at Glasgow have resolved to reduce the working hours in their establishments one-third. This will affect 8,000 employes. The Bolton cotton spinners have decided to make a reduction of five per cent. in the wages of their employes. The enforcement of the Bolton masters' resolution is dependent on the concurrence of the masters owning two-thirds of the spindles in the district which includes Bolton, Leigh, Tyldesley and Atherton. Eight thousand operatives in Blackburn, who are out of employment, are organizing a meeting to express indignation at the paucity of the parish relief.

Two attempts on the life of the Emperor of Germany and one on that of the King of Spain, all three within a few months, have just been supplemented by a determined attempt to assassinate King Humbert, of Italy. During a grand entry into Naples between two and three o'clock yesterday afternoon, an ill-clad man rushed to the royal carriage containing the king, queen, and prime minister, Cairoli, and attempted to poinard King Humbert. The latter received a slight scratch on the arm, but drew his sword and struck the would-be assassin on the head, while Cairoli caught him by the hair, receiving a wound in the thigh. The guards then rushed in and secured the fellow. His name is Giovanni Passanante, 29 years old, a cook, belonging, he says, to no society, poor, and therefore a hater of kings.

PUBLISHERS' NOTICES.

WE confidently refer our readers to the card of Dr. C. R. Sykes, in our issue of Nov. 9. Mr. F. W Jones of the Chicago Farmers' Review says: "Dr. Sykes is an old resident of Chicago, a regular graduate, honest, honorable and responsible, and as a physician takes first rank in his chosen specialty of catarrh and its complications."

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Nov. 16, 1878.

BEANS AND PEAS.—The bean market obtains some strength through the firmness in potatoes, the effect noticed locally. Exporters are using a good share of stock, Cuba, South America and Spain now taking considerable quantities. Low grade quality of any sort are dull, the run being chiefly for best priced hand-picked. Mediums, choice, $1 60@1 65; fair to good, $1 50@1 55; marrow, choice, delivered to vessel $1 70; fair to good, $1 50@$1 60. Pea beans and white kidney are a shade higher, ranging $1 65@1 85. Red kidney in demand for deep colored at $2@2 10; pale parcels, $1 75@1 90. Black or turtle soup, $1 65@2 00. Canadian field peas, bulk and bond,

Green peas easier, $1 25. Southern B. E. peas, per 2 bush. bag, $2 40@2 60.

Receipts of beans for the week, 9,440 bush., exports, 585 bbl.

BUTTER.—There is no special variation in the style of trade to be noted; fine grades are active and low neglected. Supplies of best quality have kept steadily liberal, and free access to lines and lots gives a shade of easier prices to State. The market has dropped 1c. from our last outside rates. Dairies are in demand when fine. The West latterly has shipped quite heavily but a good deal misses sale owing to inferior quality. Western creamery is

working into its cold weather position of leading the demand for extra. Recent good rates for both State and Western have started a good deal of butter this way, and if supplies keep the rate of the past two or three days sellers will be forced to humor buyers to a greater extent than the noted decline.

Welsh dairy, pails and half tubs, choice, 21@23c.; dairies, 17@19c.; selected full, 21c.; other, 15@18c.; good, 19@20c.; creamery, choice, 25@27c.; good to prime, 22@24c.; early packed, 18@20c.; low grades of State, 10@14c. and dull. Western makes good prices when fine but the bulk of the offering is cheap. Creamery ranges 22@26c. good to fancy; 17@20 early packed. Selected dairy, 15@17c.; good to prime dairy and nice ladle-packed factory, 12@14c.; other factory including milled, 6@10c.; rolls, prime, 18@20c.; other, 10@16c.

Receipts for week, 34,000 pkgs.; exports, 7,176 pkgs.

CHEESE.—The shipments for the week have been 33,989 boxes. The grade most wanted has been fancy factories, which has brought 9c, promptly, and special lots 9¼c.; these figures showing no change from last week. The good grades and under are easy in price and move out slowly. The receipts have been much larger this week, and they have chiefly gone in store.

Quotations are at 9c. for fancy, and special lots at 9¼c.; 8¾@8¾c. for fine lots; 7@8c. for good and prime; 6@7c. for fair to good; 3@5½c, for skimmed. State, farm dairy at 8@9c. for good to choice, 6@7½c. for fair to good. Wisconsin factory, fine to fancy, 8¾@9c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 8¼@8¾c.; good and prime, 6@7½c.; fair, 5@6c.

Receipts past week, 71,637 boxes.
Exports past week, 33,901 boxes,
Gold closes at 100¾.
Liverpool cable 47s.

COTTON.—There has been a fair degree of activity, but prices fluctuating in sympathy with the Liverpool advices, generally to a lower basis; latest prices are at 9.37@9.37c. for November; 9.40@9.41c. for December; 9.53@9.54c. for January; 9.65@9.66c. for February; 9.77@9.78c. for March; 9.89@9.90c. for April; 10c. for May; 10.09@10.11c. for June, and 10.17@10.19c. for July,

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade bove or below the grade quoted:

	Uplands.		*Ala.*		*Orleans*		*Texas.*	
Ordinary	7	¼	7	⅛	7	⅛	7	⅛
Strict ordinary	7	15-16	7	15-16	8	3-16	8	3-16
Good ordinary	8	7-16	8	7-16	8	11-16	8	11-16
Strict good do	8	⅛	8	⅛	9	⅛	9	⅛
Low middling	9	1-16	9	1-16	9	5-16	9	5-16
Strict L. middling	9	3-16	9	3-16	9	7-16	9	7-16
Middling		9⅜		9⅜		9⅜		9⅜
Good middling	9	⅜	9	⅜	9	⅜	9	⅜
Strict G. middling	9	⅞	9	⅞	10	⅛	10	⅛
Middling fair	10	⅛	10	⅛	10	⅛	10	⅛
Fair	11		11		11	¼	11	¼

Stained.

Good ordinary	7⅝	Strict good ordinary	8⅛
Low middling	8⅝	Middling	9

DRIED FRUITS.—Apples are easy and unsettled in price, with moderate operations. In peeled peaches fancy lots are higher and in considerable demand, with light supplies. Blackberries and small fruits generally are better.

Southern Plums, 13@13½c.; State plums, 15@16c. Blackberries are quoted at 5¾@5¾c. Peaches—Peeled Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime; choice North Carolina, 11½@12½c.; good do., 8@9c.; unpeeled new halves, 3@3½c.; quarters, 3@3½c. Pitted cherries, 20@22c. Apples—Old State quarters, 2½@3c. New apples, 2½@3c. for southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy; State at 4½@6c. for prime sliced; western at 3@3½c. for new quarters. New raspberries, 30c.

Exports, past week, 400 bbls. apples.

EGGS.—A few days of high prices checked the grocery trade, and that demand should soon become a feature. A good many limed are in the receipts, and when they are prime their comparatively low price brings them trade. Near points 27@28c.; State and Penn., 26@26½c.; fresh Western and Canadian and Southern, 25@25½c.; poor fresh, 24c. Limed N. Y. and Canada, 17@18c.; Western, 16@17c.

Receipts for the week, 11,231 bbls.; do. last week, 6,888 do.

FLOUR.—There has been a fair degree of activity, largely on local trade wants—the exports demand having fallen off, and prices ruled steady.

Latest prices are: $3.15@3.75 for very inferior to choice superfine State; $3.75@3.25 for poor to good extra do., odd lots and lines; $3.25@4.25 for good to very choice do., strictly choice and fancy lots above this; $3.15@3.75 for very inferior to choice superfine Indiana, Iowa, Michigan, &c.; $3.75@3.95 for ordinary to good shipping extra do. and $3.95@4.25 for good to choice extra do.; common to about choice white wheat extras, $4.00@5.00; choice to strictly fancy do. at $5.00@5.85; red and amber winter wheat, very inferior to choice trade and family at $3.85@5.50; round hoop Ohio at $3.80@4.15, and trade and family brands of do. at $4.20@5.65, the latter rate for very choice; St. Louis, $4.00@4.75 for very poor to good extra, and $4.75@5.75 for good to very choice; Minnesota clear, very inferior to very choice, $3.75@5.15; few brands going above $4.65; Minnesota "straight," inferior to very choice at $4.65@5.75; and patent fair to fancy at $5.25@8.50; unsound stock at from $2@4.75; city mill extra at $4.75@5.00 for West Indies (the latter rate for fancy in new packages); do. for England, $3.75@3.90; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.60 for fair to very choice; No. 2 at $2.35@3.00 for very inferior to choice.

CORN-MEAL.—Sales at $2.85 for Brandywine and $2.15 to $2.65 for yellow Western.

FRESH FRUITS.—A good grade of winter apples has arrived latterly, and dealers begin to store safe sorts liberally. There is, however, an abundance to supply a fair local and shipping demand, at very easy prices, quality considered. A few extras quoted $2 and $2.25, but choice Spitz. will not command above $1.50@1.75 in a load way. Greenings Spys and Baldwins, $1.12@1.25; a few of the last, $1.50. Some common stock quoted 75c.@$1. Exports for week. bbls. Catawba grapes are the only quotable ones, 6@7c., all pkgs. Quinces gone. Fla. oranges, $3@5 per ½ bbl. box; quality not extra. Cranberries are weak, the grocery demand of the latter part of this month, however, may help them. Cape, bbls., $6@7; N. J. do., $4@5; crates, prime, hard, high-colored, $1.75@2; fair to good, $1@1.50. Chestnuts, $3.75@4 per bush., including Southern. Hickory nuts, choice, $2.25@2.50; common, $1.25@1.50. Peanuts slow at easy rates. Hand-picked Va., $1.15@1.20; other, 90c.@$1.05. Cal. pears, E. Beurre, Glout Morceau, W. Nellis, $4@4.50 per box. Pounds and Vicars, $3@4. Tokay grapes, $7@8, 40 ℔ case; Muscat, 6@7; Black Morocco, $7. Quinces, $3 box.

Exports, apples, past week, 14,400 bbls.

FURS AND SKINS.—The catch of some sorts is said to be early, and quotations will soon be given.

GRAIN.—Wheat has had less export demand and has ruled easier.

Latest sales are, of No. 1 red at $1 07@1 07½; No. 2 red, at $1 06¾@1 06¾; do. steamer grade at $1 04@1 05; No. 3 red at $1 02@103; ungraded red at $1 02@1 07; No. 2 amber at $1 03¾@1 04; ungraded amber at $1 05@1 08; extra white at $1 10¾@1 11; white State at $1 09@1 10; No. 1 white at $1 06¾@1 08, mainly at $1 07¾@1 08; ungraded white at $1 06@$1 11; No. 1 white, steamer grade, at $1 08; No. 2 white in lots at $1 03@1 04¾; No. 3 white, steamer, 97½c.; ungraded spring at 83¾@89c.; No. 2 spring at 86@88c.; No. 1 red, to arrive, at $1 07¾; No. 2 red, November option, at $1 06¾@1 07; do., December option, at $1 06¾@1 07; do., January option, at $1 07¾@107¾; No. 2 amber, November option, at $1 04@1 04¾; do., to arrive last ten days in November, at $1 04; do., December option, at $1 04¾; No. 1 white, to arrive, at $1 07¾@1 08. Rye at 58@59 for No. 2 Western, and 60@61c. for State. Corn is offering lower on larger supplies and a fair trade; latest sales are of steamer mixed at 45@46¾c.; New York No 2 at 46¾@46¾c.; New York No. 3 at 43¾@44c.; New York No. 2 white at 52c.; ungraded mixed at 43@45¾c.; New York No. 3 at 43¾@44c.; New York No. 2, York No. 2, November option, at 46¾@46¾c.; do., December option, at 46¾@47c.; do., January option, at 47¾c.; steamer mixed, November option, at 45¾@46¾c.; do., December option, at 45¾@45¾c.; do., January option, at 45¾@45¾c. Oats are higher on light receipts and a fair trade demand; latest sales of New York No. 1 at 31¾c.; New York No. 2 at 31¾c.; New York No. 2 white at 33¾c.; New York No. 3 at 30¾c.; New York No. 3 white at 31¾@32c.; white western at 32@36¾c.; mixed do., at 30¾@32c.; white State at 32@37c.; mixed do. at 31@32c.; No. 2 Chicago quoted at 31¾@32c.; New York extra white quoted at 40c.; New York No. 1 white at 34¾@35c.; New York rejected at 29@29½c. Barley and barley malt dull at old prices, four rowed 94@96c.; late sales representing lots to arrive.

HONEY.—Although the season is ripe for use the market is dull and really good comb is offered lower. Single-comb boxes, 15@16c.; two do., 13@14c.; buckwheat, 10@12c.; strained, 6@12c., as to purity.

Exports, 596 boxes.

HAY AND STRAW.—The lower grades are in ample supply and easy in price; the better qualities are wanted at steady prices. Sales at 35@40c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye, and 30@35c. for short rye.

HOPS.—Emmet Wells, in his weekly circular, says: "The call for nearly 1,300 bales for export to London this week has given impetus to the trade and caused a much better feeling Prices remain steady at late quotations, though it is believed that if the present lively export movement continues more money will soon be asked for choice hops, which are anything but plenty. Holders of low and medium grades, we think, will do well to take advantage of the present activity, and not hold for an advance, for this class of goods largely predominates, both here and abroad, and there is little or no chance of doing better by holding. Holders of choice export hops, on the other hand, stand a good show of getting more money than the present currency, and can afford to be a little independent and not force their hops upon the market now. The scarcity of fine hops, the world over, is sufficient to insure better prices than now rule. Consumers who can't see it in this light now probably will see it as the season advances, for late advices from London fully confirm the early reports of a shortage of prime hops of English growth, and the high prices asked for German hops preclude the possibility of England getting enough from that country to make up her own deficiency. America, therefore, must come to the rescue. New Pacific coast hops have changed hands this week at from 12 to 15c. ₱ ℔.

Quotations are for New Yorks, new crop, choice to fancy, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@7; Olds, all growths, 2@4; Pacific coast, 12@15.

POULTRY AND GAME.—Quotations for cooped poultry ought to indicate how little is wanted. Chickens are unprecedentedly cheap; Western, 5@6c.; others, 7@8c.; fowls, quoted 6@8c.; roosters, 4@5c.; turkeys, 6@8c'; ducks, 40@90c., pair; geese, $1@1.50.

Dressed poultry is assuming seasonable activity. With low prices for prime, it is difficult to dispose of inferior or even bad-looking stock. Careful dressing is of great help to sales and new shippers should inform themselves as to the desirable style of this market. By all means avoid pin-feathers and over-scalding. It will be seen that prices are low, but a rough end of the crop is apt to come here this part of the month. To those whom this paper will reach timely, we repeat that stock intended for Thanksgiving market should be here two or three days before the 28th. Small turkeys are mostly wanted for that festival. Turkeys, choice, 11@12c; good, 9@10c.; poor, 7@8c., the latter mostly for western. A few dry picked, 13c.; fowls and chickens bear about the above quotations. Ducks, near points, 12@13c.; other, 8@11c; geese, choice, 12c.; other, 8@11c.

Game arrives rather faster than it can be used, and prices are decidedly in buyers' favor: a good many poor quail are included in the receipts; selected quail, doz., $1@1,25; soft do., 50@75c.; grouse, drawn pair, 40@50c.; undrawn 60@70c.; partridges, State 65@75c.; other, 40@50c.; woodcock, 35@50c.; tame squab, doz., $1.75; plover, 95c.; English snipe, $1@1.25; canvas-back ducks, Havre de Grace pair, $1.25; western, 75c.@$1; red head, 30@40c.; H. de G. do., 40@50c.; Mallard, 35@40c.; Teal, 25@30c.; common, 20@25c.; hares, pair, 25@30c.; rabbits, 20@25c.; Venison, whole deer, 8@9c.; short saddles, 14@16c.; long do., 13@14c.

OIL-CAKE quoted at $23 for Western, with fair supplies.

PROVISIONS.—Hog products have generally fluctuated, and closed easy, but a more active export demand. Mess pork quoted at $7.60@7.65 for spot lots; $7.55@7.60 for November $7.50@7.55 December and $8.80@8.85 for new for January. Bacon at 4¾ for long clear and 4¾c. for short clear. Lard at $6.27½ for Western steam on spot; $6.25 for November and December; $6.32½ bid for January and 6.40 for February. Tallow at 6¼ for prime. Stearine at 6¾@6¾. Beef Hams at $15@15.50. Beef—Extra India mess, $20@21 for city brands; do. Philadelphia, $18.50@19; packet at $11@11.50; new plain mess at $9.50@10; new extra mess at $10.50@11.

SEEDS.—Grass are in better demand; clover at 7@7¾c. for best lots; timothy at $1.20, for prime. Flaxseed at $1,40 bid.

TOBACCO.—Seedleaf is especially active on local trade account and at firm prices. Kentucky leaf has a fair sale and is not changed. Quotations are

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3	3¼@ 3¾
Good lugs	3¾ 4	4 @ 5
Low leaf	4¾@ 5	5¼@ 6¼
Medium leaf	5¼@ 6¼	6¾@ 7½
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8⅜@10	10 @12
Selections	—@—	12½@14

SEEDLEAF—CROP OF 1877.

New England wrappers,	common	10	@12
do. do.	medium	13	@15
do. do.	fine	18	@36
do. do.	selections	27½	@35
do. seconds		10	@18
do. fillers		6	@ 7
Pennsylvania assorted lots,	common	9¾	@10
do. do.	fair	11¾	@13
do. do.	fine	14¾	@16½
do. wrappers		20	@40
do. fillers		7¾	@ 8
New York assorted lots,	common to medium	8	@10
do. do.	good,	12	@15
Ohio assorted lots		9	@12
Ohio wrappers		12	@18
Wisconsin assorted lots		7¾	@10

VEGETABLES.—Exports of potatoes, past week, 10,161 bbls.; do. onions, 510 do. Potatoes firm for all good qualities. A further advance has been attempted, but buyers withdraw after $3 is refused for best Eastern stock. Eastern Rose, $2.75@3; State, $2.50@2.75; Peach-Blow, $2@2.75; Peerless and Prolific, $3@3.50 Nova Scotia Mercers, $2 25. Onions are higher in demand and firm. White, $1.75@2.25; red and yellow, $1.75@2; Chester, $1.50@1 75. Cabbages, ₱ 100, $3@4. Cauliflower, bbl., $2@4. Beets, 75c. R. Turnips, 75@87c. Carrots, $1. Pumpkins, ₱ 100, $3@8. Celery, do., 75@87c.

WOOL.—There has been some little pressure to sell this week on the prolonged inactivity and prices have ruled easy.

Quotations are, for Ohio, Pennsylvania and West Virginia—XXX and picklock, 38@39c.; XX, 35@—; X, 35@—; No. 1, 36@37c.; No. 2, 33@35c; coarse, 30@32c. combing, 38@42c.

New York, Michigan, and Wisconsin, XX, 32@34c.; X, 32@34c.; No. 1, 34@35c.; No. 2, 31@33c.; coarse, 28@31c.; combing, 36@40c.

Indiana, Kentucky and Tennessee—XX, 30@35c.; X, 30@34c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 38@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 31@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@31c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS

Saturday, Nov. 16, 1878.

BEEVES.—Receipts for the week, 10,432 head do. last week, 10,468 do. The market has been dull and pointless; at the close it was difficult to hold last Wednesday's prices. The range was 6¾@8¾c. to dress 55@56 lbs., sales mainly at 7¾@8c., same dress.

SHEEP AND LAMBS.—Receipts for the week, 23,775 head; do. last week, 28,000 do. N. J. Sheep, 4@4¾c.; western, 3¾@4¾c.; ewes, 3¾@3¾c.; lambs, 4@4¾c. These low rates are mainly attributable to the medium quality of stock.

SWINE.—Receipts for the week, 39,190 head; do., last week, 51,402 do. Market steady for live, at $3.20@3.35 per cwt. W. J. dressed hogs, heavy to pigs, 4@4¾c.; city, 4@4¾c.

VEAL CALVES.—A fair trade has ruled at 6¼c. for extra N. J. milk. State, 6¼c. do.; other, including 200 and 300 lbs. weight, 5@6c.; fed calves, 3@4c; grassers, 2¾@2¾c. Hay dressed calves, 7¾@9c.

COWS AND CALVES.—Receipts have included a number of strippers, quoted at $20@30. Fresh cows quoted at a range of $45@60, with some Penn, at $55@65 per head.]

SPECIAL NOTICES.

STRANGE, BUT TRUE.

KINGSTON, N. J., Oct. 1, 1878.

Messrs. Charles R. Allen & Co., Hartford, Conn.:

GENTS:—Your favor, asking me if I would make affidavit to the facts set forth in the letter I wrote you a few days ago, came to hand, and I herewith inclose my sworn statement.

Last May I went to Mr. Van Duny's store, in this place, to get some powders for my chickens, which were dying off, and he induced me to try a package of your *Imperial Egg Food*. I took it home and fed to my chicks with very good effect, but the strangest part of the story I have yet to relate. I have an old black hen which I brought with me when I moved here in April, 1868. She was then a pullet, having been hatched the June previous, 1867, consequently is now nearly 12 years old, almost blind, and crippled, having lost the use of one foot. She had been sick some time, and was around under foot; but being an old family pet I did not want to kill her, and thinking the Egg Food might help her, I put her upon the grass in the back yard and mixed it in her feed a few days, and she soon began to pick up, her comb turned red, she commenced to sing and cackle, and shortly to lay, and has laid *twenty-five eggs* this season.

Her new feathers have come out black and glossy, and she looks remarkably well, though crippled and almost blind. SARAH LEONARD.

STATE OF NEW JERSEY,
MIDDLESEX COUNTY, SS.

Personally appeared Sarah Leonard, and upon her oath saith the above statement is true and correct

Sworn and subscribed before me this first day of October, A. D. 1878.

CHARLES L. STOUT,
Justice of the Peace.

The New Drying Process invented by Mr. Geo. Woods, the ingenious Organ and Piano maker of Cambridgeport, Mass., is proving of much advantage to all who dry materials of any kind (particularly lumber), and has lately been introduced into cotton factories with great success. It is very simple and inexpensive; can be used in any form of dry-room, and not only accomplishes the work in one-fourth the time, but greatly improves the quality of the material. The tendency to fires in the dry-room is also very much lessened.

A PAPER FOR YOUNG PEOPLE.—The YOUTH'S COMPANION of Boston employs the same writers as the best English and American magazines, and no other publication for the family furnishes so much entertainment and instruction of a superior order for so low a price. Among its contributors are DINAH MULOCH CRAIK, Miss YONGE, J. T. TROWBRIDGE, LOUISA M. ALCOTT, HENRY W. LONGFELLOW, JAS. T. FIELD, JOHN G. WHITTIER, and nearly fifty of the best story-writers.

INDEX TO NEW ADVERTISEMENTS.

Armington & Sims—The Lawrence Engine.
Barrows Savery Co.—Prindle Food Steamer.
Burnett & Co., Jos.—Flavoring Extracts.
Challenge Mill Co.—Nichols' Patent Double and Single Header Wind Mills
Denison, Fredericks & Co.—Osborn's Patent Grain and Seed Separator.
Douglas, W. & B.—The Aquapult Fire Extinguisher.
Empire Forge Co.—Empire Farm Forges.
Field, Son & Co., J. A.—Big Giant Corn Mill.
John D. Billings Patent Horse Shoe Co.—A New Horse Shoe.
Judson, R. C.—Help Wanted.
Lamb Knitting Machine Co.—The Tuttle Knitter.
Mast, Foos & Co.—Iron Turbine Wind Engine.
Payne & Sons, B. W.—Eureka Safety Power.
Phelps, N. B.—Norwegian Balm for Catarrh.
Pierce Well Excavator Co.—Artesian Well Drilling Tools.
Pulvermacher Galvanic Co.—Electric Belts.
Rubber Paint Co.—Rubber Paint.
Sandwich Manuf'g Co.—Vel. ran Corn Sheller.
Taylor Mf'g Co.—Portable Farm Engines.
Warren & Co.—Apples for Export.
Waters & Son, Horace—Pianos, Organs and Sheet Music.

SPECIAL NOTICES.

Allen & Co., Charles R.—Imperial Egg Food.
Mason & Co. Perry—The Youth's Companion.
Woods & Co., Geo.—Parlor Organs.

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Inside, 14th and 15th pages (Agate space)..40c. per line
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Fifty per ct. extra for unusual display.
Special Notices, leaded, by count..... 70 "
Reading " ..... 1.00 "

Discount on 4 insertions, 5 per ct.; 8 ins., 10 per ct.; 13 ins., 15 per ct.; 26 ins., 20 per ct.; 52 ins., 25 per ct.

☞ No advertisement inserted for less than $2.

New Advertisements.

HELP WANTED.—R. C. JUDSON of Farmington, Minnesota, wants a first-class Farm Hand. Correspondence solicited.

PAINT YOUR HOUSES
WITH THE
Rubber Paint.
Send for Sample Card and Circular to
THE RUBBER PAINT COMPANY,
New York, Cleveland, Chicago or St. Louis.

USE THE PERFECT BUTTER COLOR! WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop's, Burlington, Vt.

PALACE ORGANS
THE BEST IN THE WORLD

Manufactured by the LORING & BLAKE ORGAN CO., of Worcester, Mass., and Toledo, O.

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The most exquisitely beautiful solo effects ever produced.

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The *best made* and most elegant cases in market.

No shoddy ornaments used—*nothing but solid wood. Every Organ fully warranted for five years.*

Write to us for Illustrated Catalogue and Price List, which will be mailed postpaid on application. Address

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DIAMONDS
IN SOLID GOLD MOUNTINGS.
ONE DOLLAR ONE DOLLAR

Lefevre Ring, $1. Set of Studs, $1. [The Shank] Stud, $1. Lefevre Ear Drops, $1.

THE ONLY PERFECT FAC-SIMILE OF THE REAL DIAMOND IN THE WORLD.

Pronounced by the Academy of France that *M. Lefevre has really obtained artificially the true diamond.* The basis of these gems are pure crystals found in the Sierra Nevadas, from whence they are exported to the Lefevre Laboratory in Paris, France, where they are submitted to a chemical and voltaic process,

BY WHICH THEIR SURFACES ARE COVERED WITH A COATING OF PURE DIAMONDS,

Imparting to them all the BRILLIANCY, HARDNESS, and refractive qualities of the natural diamond, and making them as desirable for Wear, Brilliancy, and Beauty, as the veritable gems themselves. The Ring, Studs, and Ear Drops, as displayed in this announcement, are accurate engravings of SOLID GOLD MOUNTINGS, CONTAINING THE WONDERFUL LEFEVRE DIAMOND, warranted by certificate U. S. Mint assay.

ON RECEIPT OF ONE DOLLAR we will send free, by REGISTERED MAIL, to any address in America, either article as above represented. Our "Book on Diamonds," with illustrations of artistic Diamond Jewelry in solid (14 k.) gold, mailed free.

I have seen many imitations of diamonds, but never any that could equal the Lefevre Brilliant.—M. ELLROY, Stamford, Conn.

I am in receipt of a pair of the Wonderful Lefevre Ear Drops for one dollar, to say that I am pleased with them hardly fills the bill, they are simply elegant.—ANDREW MORRIS, Hornellsville, N. Y.

The Wonderful Lefevre Diamond Ring, for one dollar, came to hand this morning. It is really elegant, giving entire satisfaction, and eliciting wonder and admiration from all who see it.—W. H. REEDY, Martinsburg, W. Va.

The Lefevre Diamonds, mounted in solid gold, are truly marvelous.—B. F. AVERY & SONS, Home and Farm, Louisville, Ky.

The eminently successful experiments of M. Lefevre silences all doubt of the true artificial reproduction of the true diamond.—M. DU FRENOY, the great French Scientist.

The Lefevre Diamond most effectually disturbs the slumbers of the possessors of costly gems.—Journal of Science.

☞ We guarantee the Wonderful Lefevre Diamonds for One Dollar to be mounted in Solid Gold, and will cheerfully refund the money if found unsatisfactory. Address all orders to the

AMERICAN JEWELRY COMPANY, 5 Arcade, CINCINNATI, O.
The American Jewelry Company is a prompt and reliable house.

Sabbath Reading.

FORWARD.

SHALL this life of mine be wasted?
Shall this vineyard lie untilled?
Shall true joy pass by untasted,
And the soul remain unfilled?

Shall the God-given hours be scattered,
Like the leaves upon the plain?
Shall the blossoms die, unwatered
By the drops of heavenly rain?

Shall I see each fair sun waking,
And not feel it wake for me?
Each glad morning brightly breaking,
And not feel it break for me?

Shall I see the roses blowing,
And not wish to bloom as they;
Holy fragrance round me throwing,
Lure others on the way?

Shall I hear the free bird singing
In the Summer's stainless sky,
Far aloft its glad flight winging,
And not seek to soar as high?

Shall this heart still spend its treasures
On the things that fade and die;
Shall it court the hollow pleasures
Of bewildering vanity?

Shall these lips of mine be idle;
Shall I open them in vain?
Shall I not, with God's own bridle,
Their frivolity restrain?

Shall these eyes of mine still wan er—
Or no longer turned afar,
Fix a firmer gaze and fonder
On the bright and morning Star?

Shall these feet of mine, delaying,
Still in ways of sin be found,
Braving snares, and madly straying
On the world's bewitching ground?

No, I was not born to trifle
Life away in dreams or sin;
No, I must not, dare not stifle
Longings such as these within!

Swiftly moving upward, onward,
Let my soul in faith be borne;
Calmly gazing, skyward, sunward,
Let my eye unshrinking turn!

Where the Cross, God's love revealing,
Sets the fettered spirit free,
Where it sheds its wondrous healing,
There, my soul, Thy rest shall be!

Then no longer idly dreaming
Shall I fling my years away;
But, each precious hour redeeming,
Wait for the eternity. [*Bonar*

THE MOUNTAINS OF GOD.

SOME of the most sublime events in sacred history are associated with the mountain scenery of Palestine. From the peaks and table-lands of these everlasting hills, these lofty sentinels of nature, many of the Divine laws were imparted.

On mount Ararat the ark rested after the waters subsided, and on it Noah builded an altar unto the Lord, and there the blessing of Elohim rested upon the patriarch.

On Mount Moriah Abraham offered his son in sacrifice, a striking type of the great offering beyond the *pomœrium* of the Holy City. He dedicated the place, and called it Jehovah-jireh, "The Lord will provide."

From the rocky summits of Sinai Moses received the tables of the testimony, tables of stone written with the finger of God.

Beyond the plains of Moab rises the mountain of Nebo, the top of which is known as Pisgah. Here the great lawgiver was permitted to view the land of Canaan, even unto the utmost sea, including the valley of palm-trees in the plain of Jericho, a land figuratively flowing with milk and honey; and in a valley beneath this mountain, over against Beth-peor, this holy man was buried, "but his sepulchre is not known to this day."

Mount Carmel, which stands some two thousand feet above the Mediterranean Sea, was the theatre of Elijah's triumph over the false prophets, when the cry was elicited, "The Lord is the God; Jehovah is God."

Lebanon, with its cedars and fir-trees and luxurious vineyards, is famous in sacred story. It is called "the good land beyond Jordan," where the Lord promised "to make the place of His feet glorious."

In the midst of the Holy City mount Zion rears its eternal head, known in the song of Asaph as the dwelling-place of the Most High, where in after days it was ordained that He should cut off the spirit of princes, and become terrible to the kings of the earth, for before His Son "all gates should be open; before Him the iron bolts be broken, and the folding doors of brass move."

Most beautiful for situation is this mountain, the joy of the whole earth; for God is known in her palaces for a sure refuge.

Zion is also the picture of paradise, the final home of the traveler, the delight of the redeemed, the refuge after the great storm.

On the plains of Esdraelon, some few miles from Nazareth, in a rich country covered with trees and odoriferous plants, is the Tabor of the gospel, where Jesus is said to have been transfigured, His face beaming as the sun, and His garments becoming white as light. A golden cloud soared above Him, and out of this heavenly canopy came the everlasting testimony, "This is My Son, well beloved; hear Him."

A short distance east of Jerusalem is the edge of Olivet, the mountain being separated from the city by the valley of Johoshaphat and the brook of Kedron. From its top is a fine view of Jerusalem and the Dead Sea. The Redeemer often withdrew to this place for retirement and repose. Here He wept over the doom of the city, and here it is supposed He ascended to heaven in the presence of his disciples.

Northwest of Jerusalem, on the north side of mount Zion, is the elevation of Golgotha, the place of skulls, so called from its resemblance to the form of a man's head, or more likely because it was the place of state executions.

Here the great scene of human history was enacted, when at midday the sun refused to impart light, the veil of the temple was rent in twain from the top to the bottom, the earth trembled, the stone slabs of the tombs were unseated, and the sleeping dead came forth and on the third day appeared in the Holy City.

Here the "*Jah*," "*Shua*" of Hebrew prophecy ("I shall be the powerful") rendered up His life a ransom for many; and here for ever concentres the story of Divine glory and human happiness.

These mountains of Palestine may be called the mountains of God, for on their summits Moses received the law, and Christ made the sacrifice. Their soil is hallowed, not as the walls of a temple that must crumble into ruins, not as the enclosure of the beloved dead, the boundary lines of which time will remove, but as the enduring places where God communed with man as friend speaketh to friend, and where the monuments of His mercy and His love have been immovably reared, "which the decays of mortal nature cannot vary, nor time vary with oblivion." Holy spots are these, dear both to the devout Jew and to the pious Christian, for ever set apart to all those who love God and cherish His commandments. R.

Reading for the Young.

THE HANDLESS MAIDEN.

A CERTAIN Miller had fallen by degrees into great poverty, until he had nothing left but his mill and a large apple tree. One day, when he was going into the forest to cut wood, an old man, whom he had never seen before, stepped up to him, and said, "Why do you trouble yourself with chopping wood? I will make you rich, if you will promise me what stands behind your mill."

The Miller thought to himself that it could be nothing but his apple-tree, so he said "Yes," and concluded the bargain with the strange man. The other, however, laughed derisively, and said "After three years I will come and fetch what belongs to me;" and then he went away.

As soon as the Miller reached home, his wife came to him, and said, "Tell me, husband, whence comes this sudden flow of gold into our house? All at once every chest and cupboard is filled, and yet no man has brought any in. I cannot tell how it has happened."

The Miller in reply, told her, "It comes from a strange lord, whom I met in the forest, who offered me great treasure, and I promised him, in return, what stands behind the mill, for we can very well spare the great apple tree."

"Ah, my husband," exclaimed his wife, "it is the Evil Spirit whom you have seen; he did not mean the apple-tree, but our daughter, who was behind the mill sweeping the yard."

This Miller's daughter was a beautiful and pious maiden, and during all the three years lived in the fear of God without sin. When the time was up, and the day came when the Evil One was to fetch her, she washed herself quite clean, and made a circle around herself with chalk. Quite early came the Evil One, but he could not approach her; so, in a rage, he said to the Miller, "Take away from her all water, that she may not be able to wash herself, else have I no power over her." The Miller did so, for he was afraid. The next morning came the Evil One again; but she had wept upon her hands, so that they were quite clean. Then he was baffled again, and in his anger said to the miller, "Cut off both her hands, or else I cannot now obtain her." The Miller was horrified, and said. "How can I cut off the hands of my own child?" But the Evil One pressed him, saying "If you do not you are mine, and I will take you yourself away!" At last the Miller promised, and he went to the maiden, and said, "My child, if I do not cut off both your hands, the Evil One will carry me away, and in my terror I have promised him. Now help me in my trouble, and forgive me for the wickedness I am about to do you."

She replied, "Dear father, do with me what you will; I am your daughter."

Thereupon she laid down both her hands, and her father cut them off. For the third time now the Evil One came; but the maiden had let fall so many tears upon her arms, that they were both quite clean. So he was obliged to give her up, and after this lost all power over her.

The Miller now said to her, "I have received so much good through you, my daughter, that I will care for you most dearly all your life long,"

But she answered, "Here I cannot remain; I will wander forth into the world, where compassionate men will give me as much as I require."

Then she had her arms bound behind her back, and at sunrise departed on her journey, and walked the whole day long till night fell. At that time she arrived at a royal garden, and by the light of the moon she saw a tree standing there bearing most beautiful fruits, but she could not enter, for there was water all round. Since, however she had walked the whole day without tasting a morsel, she was tormented by hunger, and said to herself, "Ah, would I were there, that I might eat of the fruit, else shall I perish with hunger," so she knelt and prayed to God, and all at once an angel came down, who made a passage through the water, so that the ground was dry for her to pass over. Then she went into the garden, and the angel with her. There she saw a tree full of beautiful pears, but they were all numbered; so she stepped up and ate one to appease her hunger, but no more. The gardener perceived her do it, but because the angel stood by he was afraid, and thought the maiden was a spirit; so he remained quiet and did not address her. As soon as she had eaten the pear she was satisfied, and went and hid herself under the bushes.

The next morning the King to whom the garden belonged came down, and, counting the pears, found that one was missing; and he asked the gardener whither it was gone. The gardener replied, "Last night a spirit came, who had no hands, and ate the pear with her mouth." The King then asked, "How did the spirit come through the water? and whither did it go after it had eaten the pear?"

The gardener answered, "One clothed in snow-white garments came down from heaven and made a passage through the waters, so that the spirit walked through on dry land. And because it must have been an angel, I was afraid, and neither called out nor questioned it; and as soon as the spirit had finished the fruit, she returned as she came."

The King said, "If it be as you say, I will this night watch with you."

As soon as it was dark the King came into the garden, bringing with him a priest, who was to address the spirit, and all three sat down under the tree. About midnight the maiden crept out from under the bushes, and again ate with her mouth a pear off the tree, whilst the angel clothed in white stood by her. Then the priest went towards her, and said, "Art thou come from God or from earth? Art thou a spirit or a human being?" She replied, "I am no spirit, but a poor maiden, deserted by all, save God alone."

The King said, "If you are forsaken by all the world, yet will I not forsake you." And he took her with him to his royal palace, and, because she was so beautiful and pious, he loved her with all his heart, and ordered silver hands to be made for her, and made her his bride.

After a year had passed by, the King was obliged to go to war, so he commended the young Queen to the care of his mother, and told her to write him word if the crown should have an heir. Soon afterwards the old mother wrote a letter to her son, containing the joyful news. The messenger, however, rested on his way by a brook, and, being weary with his long journey, fell asleep. Then came the Evil One, who had always been trying to do some evil to the Queen, and changed the letter for another, wherein it was said that the heir was a changeling. As soon as the King had read this letter, he was frightened and much troubled; nevertheless, he wrote an answer to his mother, that she should take great care of the Queen until his arrival. The messenger went back with this letter, but on his way rested at the same spot, and went to sleep. Then the Evil One came a second time, and put another letter in his pocket, wherein it was said the Queen and her child should be killed. When the old mother received this letter, she was struck with horror, and could not believe it; so she wrote another letter to the King; but she received no other answer, for the Evil One again placed a false letter in the messenger's pocket; and in his last it said that she should preserve the tongue and eyes of the Queen for a sign that she had fulfilled the order.

The old mother was sorely grieved to shed innocent blood, so she caused a calf to be fetched by night, and cut out its tongue and eyes. Then she said to the Queen, "I cannot let you be killed, as the King commands; but you must remain here no longer. Go forth with your child into the wide world, and never return here again."

Thus saying, she bound the child upon the young Queen's back, and the poor wife went away weeping bitterly. Soon she entered a large wild forest, and there she fell upon her knees and prayed to God; and the angel appeared, and led her to a little cottage, and over the door was a shield inscribed with the words, "Here may every one live freely." Out of the house came a snow-white maiden, who said, "Welcome, Lady Queen;" and led her in. Then she took the little child from the Queen's back, and gave it some nourishment, and laid it on a beautifully covered bed. Presently the Queen asked, "How do you know that I am a Queen?" and the maiden answered, "I am an angel sent from God to tend to you and your child." And in this cottage she lived seven years, and was well cared for, and through God's mercy to her, on account of her piety, her hands grew again as before.

Meanwhile the King had come home again, and his first thought was to see his wife and child. Then his mother began to weep, and said, "You wicked husband, why did you write to me that I should put to death two innocent souls?" and, showing him the two letters which the Evil One had forged, she continued, "I have done as you commanded." And she brought him the tokens, the two eyes and the tongue. Then the King began to weep so bitterly for his dear wife and son that the old mother pitied him, and said, "Be comforted, she lives yet! I caused a calf to be slain, from which I took these tokens; but the child I bound on your wife's back, and I bade them go forth into the wide world; and she promised never to return here, because you were so wrathful against her."

"So far as heaven is blue," exclaimed the King, "I will go; and neither will I eat nor drink until I have found again my dear wife and child, if they have not perished of hunger by this time."

Thereupon the King set out, and for seven long years sought his wife in every stony cleft and rocky cave, but found her not; and he began to think she must have perished. And all this time he neither ate nor drank, but God sustained him.

At last he came into a large forest, and found there the little cottage whereon the shield was with the words, "Here may every one live freely." Out of the house came the white maiden, and she took him by the hand; and, leading him in, said, "Be welcome, great King! Whence comest thou?"

He replied, "For seven long years have I sought everywhere for my wife and child; but I have not succeeded."

Then the angel offered him meat and drink, but he refused both, and would only rest a little while. So he laid down to sleep and covered his face with a napkin.

Now went the angel into the chamber where sat the Queen, with her son, whom she usually called "Sorrowful," and said to her, "Come down with your child: your husband is here." So she went to where he lay, and the napkin fell from off his face; so the Queen said, "Sorrowful, pick up the napkin, and cover again your father's face." The child did as he was bid; and the King, who heard in his slumber what passed, let the napkin again fall from off his face. At this the boy became impatient, and said, "Dear mother, how can I cover my father's face? Have I indeed a father on the earth? I have learnt the prayer, 'Our Father which art in heaven;' and you have told me my father was in heaven,—the good God: how can I talk to this wild man? he is not my father."

As the King heard this he raised himself up, and asked the Queen who she was. The Queen replied: "I am your wife, and this is your son, Sorrowful." But when he saw her human hands, he said, "My wife had silver hands." "The merciful God," said the Queen, "has caused my hands to grow again." And the angel, going into the chamber, brought out the silver hands, and showed them to him.

Now he perceived that they were certainly his dear wife and child; and he kissed them gladly, saying, "A heavy stone is taken from my heart." And, after eating a meal together with the angel, they went home to the King's mother.

Their arrival caused great rejoicings everywhere: and the King and Queen celebrated their marriage again, and ever afterwards lived happily together to the end of their lives.

THE SINGING BONE.

ONCE upon a time great complaints were made in a certain country of a Wild Boar, which laid waste the fields of the peasants, killed the cattle, and often tore to pieces the inhabitants. The King promised a great reward to whomever should free the land of this plague; but the beast was so big and strong that no one durst venture in the neighborhood of the forest where it raged. At last the King allowed it to be proclaimed that whoever should take or kill the Wild Boar should have his only daughter in marriage.

Now, there lived in this country two brothers, the sons of a poor man, and they each wished to undertake the adventure; the elder, who was bold and brave, out of pride; the younger, who was innocent and ignorant from a good heart. They agreed that they might the sooner find the Boar, that they should enter the forest on opposite sides; so the elder departed in the evening, and the other on the following morning. When the younger had gone a short way, a little Dwarf stepped up to him, holding a black spear in his hand, and said, "I give you this spear, because your heart is innocent and good; with it you may boldly attack the Boar, who can do you no harm."

He thanked the Dwarf, and, taking the spear, went forward bravely. In a little while he perceived the Wild Boar, which ran straight at him; but he held the spear in front of his body, so that, in its blind fury, it rushed on so rashly that its heart was pierced quite through. Then he took the beast upon his shoulder, and went home to show it to the King.

However, just as he came out on the other side of the forest, there stood on the outskirts a house, where the people were making merry, dancing and drinking. His elder brother was amongst them, exciting his courage by wine, and never thinking at all that the Boar might be killed by any other than himself. As soon, therefore, as he saw his younger brother coming out of the forest laden with his booty, his envious and ill-natured heart had no rest. Still he called to him, "Come in here, my dear brother, and rest, and strengthen yourself with a cup of wine." The younger brother, suspecting no evil, went in and related his story of the good little Dwarf, who had given him the spear wherewith he had killed the boar. The elder brother detained him till evening, and then they went away together. But when they came in the darkness to a bridge over the stream, the elder, letting his brother pass on before till he came to the middle of the bridge, gave him a blow which felled him dead. Then he buried him in the sand below the bridge, and taking the Boar brought it to the King, representing that he had killed it, and so received in marriage the Princess. He declared, moreover, that the Boar had torn in pieces the body of his younger brother, and as he did not come back, everyone believed the tale to be true.

But, since nothing is hidden from God's sight, so also this black deed at last came to light. Many years after, as a peasant was driving his herd across the brook, he saw lying in the sand below, a snow-white bone, which he thought would make a good mouth-piece. So he stepped down, took it up, and fashioned it into a mouth-piece for his horn. But as soon as he blew through it for the first time, to the great astonishment of the herdsman, the bone began to sing of itself:

"My brother slew me, and buried my bones,
Under the sand and under the stones:
I killed the Boar as he came from his lair,
But *he* won the prize of the lady fair."

"What a wonderful little bone!" exclaimed the herdsman; "it sings of itself! I must take it to the King."

As soon as he came before the King it began again to repeat its song, and the King understood it perfectly. So he caused the earth below the bridge to be dug up, and there all the bones of the younger brother came to light. The wicked brother could not deny the deed, and, for his punishment, he was sewed up in a sack and drowned.

And the bones of the other brother were placed in a splendid tomb in the churchyard. GRIMM.

PERSONAL ITEMS.

The King of Holland, in justification of his marriage, says: "Time will equalize us. To-day, when I am sixty and my betrothed twenty, I am, of course, three times as old as she is; in twenty years, however, when we shall be respectively eighty and forty, I shall be only twice as old; and, if we live long enough, we shall one day be a very good match."

Ben Butler, according to a Western newspaper, was once engaged to a young lady of Waterville, Me., and to break off the match, which for some reason displeased him, he hit upon the notable expedient of going upon a feigned spree and jamming an inoffensive citizen's hat over his eyes. The reckless inebriate was promptly arrested and fined. The girl wrote a letter repudiating him; her father threatened to kick him out of the house, and the wily young man chuckled greatly at the success of his innocent stratagem.

The present Sultan has a grave and anxious face, a sallow complexion and a quiet voice. He dresses in European fashion—with the one exception of the fez—and wears no jewelry but plain pearl studs in his shirt front. He wears no orders or riband, except upon State occasions. As he talks a melancholy smile frequently crosses his features; he has a weary, somewhat sad air. He leans his head a little forward habitually, as though thinking, and while talking he has a habit, when not smoking, of playing with some article or other which may chance to lie on the table.

Madame Marie Dumas, daughter and sister of the celebrated French novelists—Dumas, Sr., and Dumas, Jr.—is described as a person of even more eccentricity of character than her father. Having been divorced from her husband, she returned to her maiden patronymic, and besides acting as secretary to her father, "published books that nobody read and painted pictures in crayon and oil that nobody looked at." She was of very robust physique, and inherited her father's Ethiopian features. While she lost no opportunity to inveigh against luxury and extravagance, her every-day toilet seems to have been a simple, unpretentious yellow and black satin dress with red scarf and yellow silk turban.

In accordance with a custom which every President has observed of presenting to friendly Indian chiefs a "peace medal," President Hayes has caused such a medal to be designed. It is to be of bronze. On the obverse side will be a medallion head of the President, around which will run the words, "Rutherford B. Hayes, President of the United States." On the reverse the word "Peace" and date, "1877," will be above a cut representing civilization. To the left of the cut will be a frontiersman's cottage and a man plowing; to the right a farmer will extend to an Indian in war feathers an invitation to come and plant too. Below the cut will be emblems of peace—a crossed pipe and a tomahawk.

Mr. Smalley, in a recent letter to the New York Tribune, says that "In sending him to Canada as Governor-General, Lord Beaconsfield has really done Lord Lorne the greatest favor he could do him. He has relieved him from the burdens of the iron-bound etiquette which weighed him down at home. As Governor-General he is the personal representative of the crown, and takes rank at last—so I am told—above his wife. At the same time, her royalty makes the appointment a more brilliant one, and more welcome to that loyal people, the Canadians. All the good things that have been said of the Princess Louise have been well said. She is a woman of unusual force of character—as her story, to those who know it, proves—pretty, accomplished, and amiable. In no sense is she responsible for whatever irksomeness may have accrued to her husband from his marriage. He too is credited with good abilities, and though he has to follow Lord Dufferin, his friends believe that he will prove himself equal to the task laid upon him. Imperialism is just now in fashion. The Marquis of Lorne and his Princess may make it not only fashionable but popular to one of the most important dominions of the crown."

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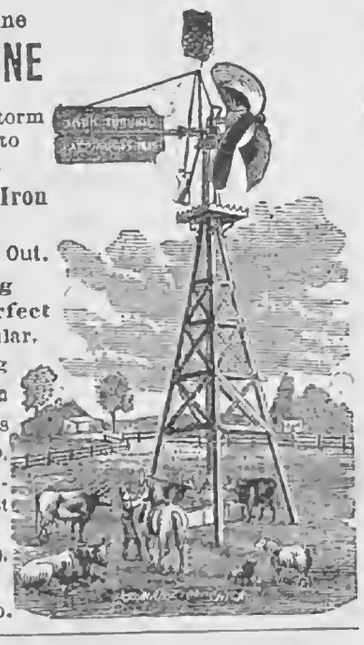

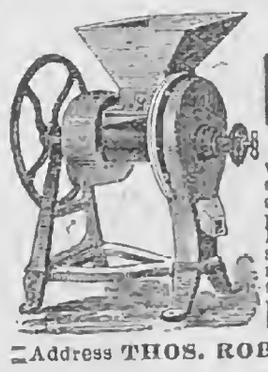

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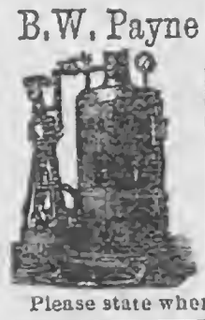

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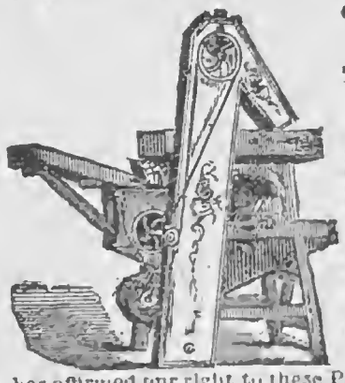

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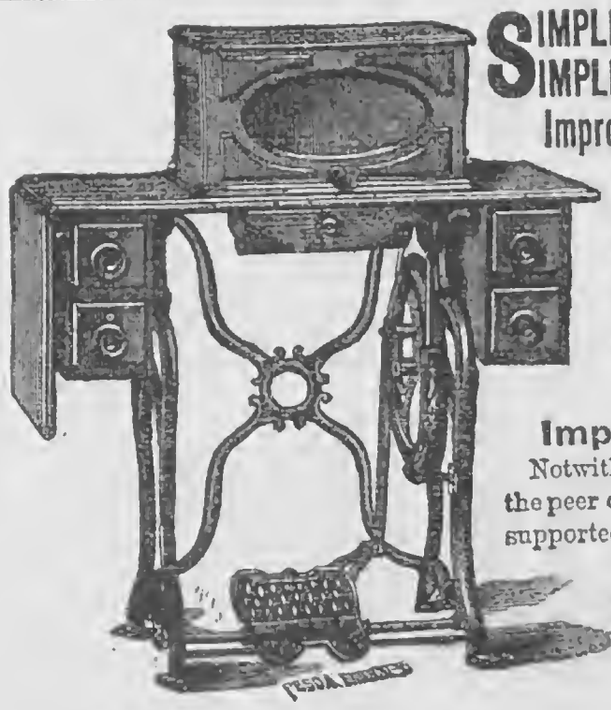

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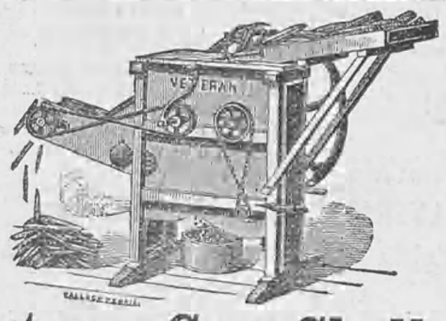

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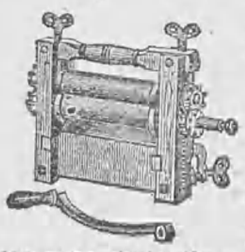

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It contains No Poisonous Drugs.
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Natives gathering Gum from the Norway Spruce.

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One Bottle is sufficient for Two Months' use.
It is an excellent Gargle for Sore Throat, and Wash for Sore Mouth. Cleanses the Teeth, Hardens the Gums, and Purifies the Breath. All its properties are SOOTHING, CLEANSING, and HEALING. It never fails to give relief in the most obstinate cases of *Dry Catarrh.*

"A most wonderful effect."
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At times my affliction has been so severe, that I have been almost entirely unfitted for mental labor, and have seriously meditated abandonment of business and removal to a milder climate.
Fortunately, four months ago I was induced to try the NORWEGIAN BALM, as I had been induced scores of times before to try other remedies by advice of friends, but I feel free to say with but little confidence in finding any essential relief.
Now Sir, I am very glad, and I feel it is due to you to say, *that the Balm has had a most wonderful effect.* ITS BENEFICIAL EFFECT WAS APPARENT FROM THE START, and to-day, I am almost free from the distressing and loathsome disease.
I use the Balm daily and it is a luxury that I should be very unwilling to dispense with.
Yours very truly, LIVINGSTON SCOTT.

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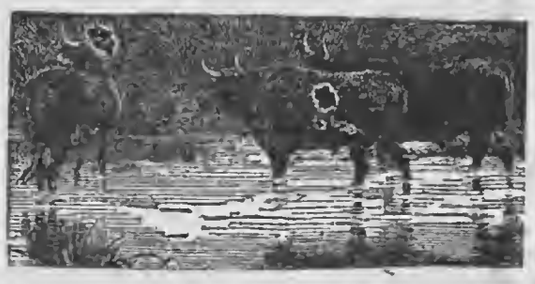


A CONVENIENT DAIRY BARN.

THERE has been no more propitious time for making improvements upon the farm than the present. There is no more profitable investment upon a dairy farm than a well appointed and comfortable stable for the cows. Putting this and that together, the inference may be drawn that those who have not a really good cow stable and feel their need of one, should set about getting it as soon as possible before the opportunity passes away. For the benefit of such persons the following description of a dairy stable for 14 cows is here given. The stable is now in actual use and is found convenient and comfortable for the cows and those who attend them. Of the

REQUISITES IN A COW STABLE,

room is the first. Perfect cleanliness cannot be maintained unless there is ample room. The second is comfort for the cows; this includes warmth and cleanliness. Then follow security, convenience of arrangement so that the necessary work can be done with the least labor and in the least time, and a method of safely and easily making and saving the manure.

In this especial case, the making of manure is considered as the greatest source of profit, the chief business of the farm being growing truck for a city market, and in this business manure is usually purchased every year to the amount of several hundred dollars' worth. By good management one cow can be made to yield 25 loads of the best quality of manure in a year and, at the usual value of purchased manure, this is equal to about $65 annually. This being the case, a stable well calculated for the winter and summer feeding of the cows, under a system of complete or partial soiling, is a source of great profit upon any farm.

THE BARN HERE DESCRIBED.

is 50 feet long, 24 feet wide and 16 feet high from sill to eaves. It is built wholly of hemlock and spruce, except the sills which are of oak, and the heaviest timbers in the frame are 6x8, for the corner posts. The floor is of two-inch spruce plank; the sides are of dressed fine box boards, battened up and down; the upper floor is of dressed spruce, tongue and grooved flooring seven inches wide; the roof is of sawed pine shingles and has a ventilating cupola in the center. The building is painted with mineral paint of a dark-brown color, with the trimming of light-brown stone color.

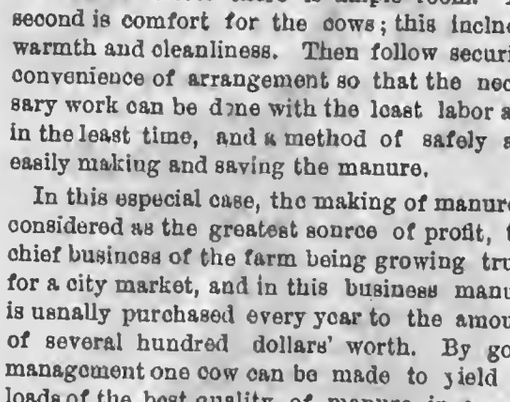


FIG. 1.

THE BASEMENT,

or cellar, is walled with stone and is divided as follows: at one end is the pig-pen 8x16 feet, divided into two compartments opening in a yard into which manure is dropped through a trap-door in the gutter above. In the middle is a winter poultry roost, having a lathed partition and opening into the manure cellar under a second trap-door in the floor above. At the other end is a root-cellar, with a place in front of it for tools and odds and ends of things which do not need more careful storage. At one corner, outside, is a cistern of brick and hydraulic cement, eight feet in diameter and ten feet deep, holding 120 barrels of water, and taking the rain from the roof by gutters and spouts. This basement is seven feet deep and the plan is shown at fig 1.

THE MAIN FLOOR.

is divided into two parts by a row of stanchions of 5x5 timber, which assist to support the upper floor by sustaining a beam upon which the middles of the upper floor joists rest. These stanchions are 3½ feet apart from center to center. The cows are fastened to these by means of chains attached to rings which slide up and down upon staples driven into the stanchions (see fig 3). The staples are 16 inches long and the lower ends are 10 inches from the floor. The cows are fastened by means of a snap-hook attached to the central ring in the chain, which hooks to a ring in a stout leather strap around each cow's neck. The cows thus fastened, are very quickly secured and loosened; they are held safely; can move with much freedom, and are kept free from filth by the gutter behind them on the edge of which their hind feet stand. The standing floor is 4 feet 10 inches wide; the gutter 16 inches, and the floor outside of the gutter is 5 feet in width, giving ample room for the passage of the cows and for the dairymen to work in. The gutter is eight inches deep and has two trap-doors as shown in the engraving, through which the manure is dropped into the cellar below.

The method of making the gutter is as follows: The lower floor beams are 16 inches apart in the clear where the gutter is made; iron straps made in form of a double hook, are suspended upon the beams on each side of the gutter; in the lower hooks, 4x4 scantlings are laid and the planks which make the floor of the gutter are laid and secured upon these. This is shown at fig. 4.

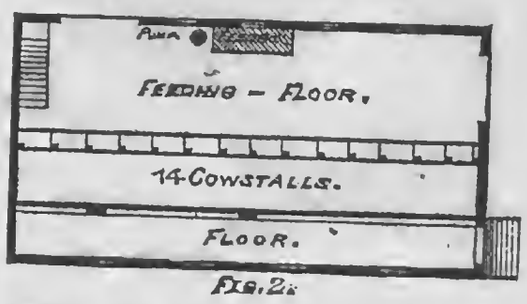


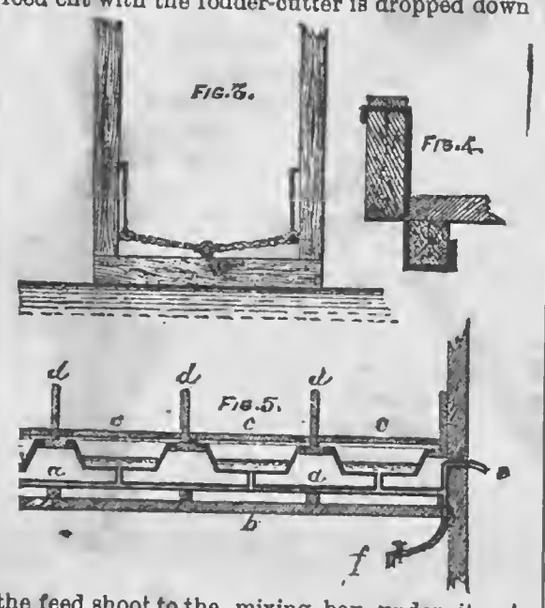
FIG. 2.

The feed boxes, in front of the stanchions are 22 inches wide and 8 inches deep. An arrangement for watering the cows in their stalls is made under the feed boxes. This is shown at fig 5. An iron water pipe (*a*) rests upon blocks upon the floor (*b*). The pipe is connected with water-boxes which consist of cast-iron kitchen sinks, 16½ inches long, 12 inches wide and 5 inches deep, costing $1.25 each. These are let into a false bottom of the trough as shown, and are covered with the true bottom in which are hinged flaps to cover them. The flaps are shown at *c*, *c*, and the sides of the feed boxes *d*, *d*, *d*. The water when let into the pipe *a*, fills the boxes, and is prevented from overflowing by the outlet *e*, which is placed at a proper hight. The water boxes are emptied, when necessary, by means of the cock (*f*) in the cellar, and the waste-water may be used for the pigs or poultry, or may run on to the manure piles. The cover for the water boxes (shown at fig. 6) is provided with a wire staple, driven in flush with the surface, and a hollow is gouged out under it, so that a hook may be inserted to lift it up. Thus there is nothing in the way of the cows feeding from it, as it makes the bottom of the feed box. The water boxes are provided with a grated screen over the pipe such as is used in kitchen sinks, an arrangement by which solid matter is prevented from getting into the pipes.

The remainder of the main floor is devoted to the feeding room. There are two spacious doors through which a cart may be driven through this floor, with fodder in the summer time or roots in the winter. The feed box is used for mixing the feed, and there is a pump near by connected with the cistern. The stairs at the end lead to the

UPPER FLOOR.

This is laid out as shown at fig. 7. The feed bins are for storing ground feed and spouts lead down to below the stairs on the lower floor, from which what is needed may be drawn. The feed cut with the fodder-cutter is dropped down



the feed shoot to the mixing box under it. A crib for storing several hundred bushels of corn, is at one corner and a quantity of hay or fodder may be stored in the opposite corner. There are two doors in the upper floor for taking in hay or feed, and a hoist wheel is placed at the door near the feed bins, for drawing up bags of feed. A Big Giant feed-mill is kept outside the stable, below this door, for grinding grain.

LIGHT AND VENTILATION.

The building is well lighted by five large windows on the south side on the main floor and four smaller ones on the north side. These are all protected with close shutters to completely darken the stable in the fly season. The upper floor has four large windows on the south. Ventilation is secured by the openings leading from the lower to the upper floor, which are closed when needed by trap doors, and by a large cupola on the roof with slatted sides.

THE COST OF THIS STABLE

was $396 for lumber, oil and paint; $86 for water pipes, nails, and hardware, and $100 for carpenter work. The cost for the mason work for the cellar is not yet ascertained, but will be in the neighborhood of $100. The cistern cost $32. The whole cost will be a little over $700.

Field Crops.

LARGE CROPS OF CORN.

THE ELEMENTS OF SUCCESS.

THE skillful dairyman understands that the secret of profit is to get a cow that *can* give a good mess, and then to feed and care for her so that she *will* give a good mess. The same principle extends to plants as well as to animals. Good seed, sown in good soil, and good cultivation, are the elements of success, and all are equally necessary to that success.

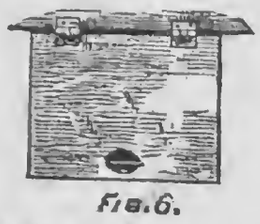


FIG. 6.

The seed saved from crops that receive inferior or even ordinary cultivation through a series of years, is not the seed to be used where the aim is to secure large crops. Such seed can be improved by years of high culture and selection so as to possess the requisite productiveness, but seed taken, as remarked, from poorly grown crops will not, at first, give maximum results when planted in even the best soil, and receiving the most careful culture.

LESSONS FROM THE PAST YEAR'S EXPERIENCE.

The past year has been one unusually favorable to the corn crop, and this favorable condition of the soil and season has been coincident with a much larger breadth of planting, especially in the East. In New York and New England, the demand for Western grain will be far less than usual during the coming winter, and were it not for the extraordinary foreign demand, it is hard to imagine what profitable disposition could be made of the product of the western corn-lands. This greater area under cultivation and the generally abundant yield, have given Eastern farmers an excellent opportunity to judge of the comparative value of good seed with good culture contrasted with the results got where good seed has received but poor culture, ordinary seed the best culture, and—as is far more common—where poor seed and poor cultivation have gone together.

The average of our corn-yields in the various States, is quite significant, and the study of the statistics is capable of affording valuable instruction. One thing is evident from them—it must have taken a large number of very poor crops to pull down the average to where it stands. An average of twenty-five to thirty-two bushels, proves to the most careless observer that crops of from fifteen to twenty bushels must be extremely frequent, since there are a goodly number of farms where the average is seldom lower than forty bushels and where, in such years as the present, it exceeds fifty bushels to the acre. Now, it may be set down as a reasonably close approximation to truth, to say that one good, full ear to the stalk, will give a total yield of 100 bushels of shelled corn to the acre. This is without regard to the kind of corn planted, because the taller kinds with larger ears must be planted farther apart in proportion. This yield of 100 bushels is within the possible result by at least 25 bushels, when one full ear is reckoned to the stalk; but this allowance is made for defects in the stand, which

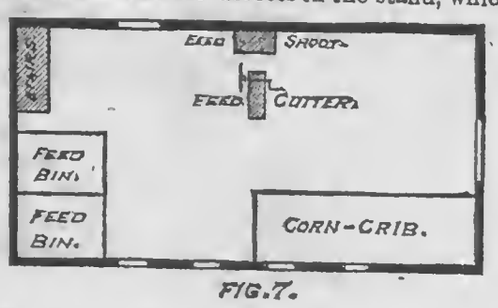


FIG. 7.

will always occur from the depredations of insects and birds, and the accidents of cultivation. Now, we wish to inquire, not what reduces the average actual results to the neighborhood of 30 bushels, for *that* is plainly attributable to bad farming, but why even our best farmers in the best years can rarely show an average crop of over 60 bushels to the acre. We have just been examining the details of

A CAREFULLY FERTILIZED AND CULTIVATED CORN CROP,

the yield of which has been submitted to a careful examination and analysis. The field was planted with a thoroughbred variety—*i. e.*, one carefully selected through a series of years—with the view of raising as much seed corn as possible. It was a variety of rather less than medium hight for the New England farm where it grew, and was planted in drills four feet apart, the seed being dropped on one-third, five inches, and on the remainder, 10 inches asunder in the drills.

There was hardly a stalk in the field that did not produce its ear, but the total yield was equal to but 80 bushels of shelled corn to the acre. Thirty bushels of this were selected at husking as being suitable in all respects for seed corn. Besides this, there were about 20 bushels of full ears, but each was in some respect unsuited for seed. The remainder—within a fraction of 30 bushels—consisted of

short ears and nubbins, and the larger part of this grew upon that portion of the field where the seed was dropped five inches apart. Most of the ears of this sort which grew on the rest of the field, were from the suckers, or were second ears on stalks where one perfect ear grew, and on this part of the field a large proportion (about 25 per cent.) of all the stalks produced twin ears. It was estimated that if the whole field had produced in proportion to this part, the entire yield would have been about 100 bushels to the acre, or, in other words, that the close planting of one-third of the field reduced the yield of the whole by 20 bushels per acre. This reduction was caused by the shortening of the ears where thick planting was done, for the variety was so thoroughbred that, as observed above, some sort of an ear was found on nearly every stalk.

These facts, and they may be relied upon *as* facts, are, we think, full of instruction to those who aim at growing large average crops of corn.

POTATOES AS A FARM CROP.

WM. J. FOWLER.

The use of potatoes as a common article of food is little more than a hundred years old, and it is probable that their cultivation and use are yearly increasing. It is quite certain that the business of growing them extensively is far more common than formerly. The increased proportion of urban population would alone insure this. The amount of potatoes required for large cities, like New York, Philadelphia or Brooklyn, is vastly greater than can be grown by market gardeners in their vicinities. Years ago, potatoes were largely grown in market gardens; but they were found less profitable than other crops and abandoned to the cheaper lands of the general farmer. What the market gardener has rejected, has proved one of the most profitable crops that we grow. Many farmers in this section plant yearly from five to thirty or forty acres of potatoes, and, on an average of seasons, they return more money per acre than any other crop grown. It is true they require a good deal of work, but this is true of all crops that pay. Grains, like buckwheat and oats, which cost least labor, are almost always a glut in the market.

In my practice of growing potatoes I have not found them an exhausting crop. I never plant more than one-eight or one-tenth of the cultivated land, and alternate with grains and clover, feeding stock and making large quantities of manure. Some years ago, farmers on sandy soil in this section did exhaust their fields by repeatedly cropping with potatoes. The temptation was a strong one, as in some years the crop was worth more than the price of the land on which it grew. Of late years fewer potatoes are grown on the sand. Some of the new varieties are quite as good or better when grown on heavy soil. Where we have land in potatoes not oftener than once in eight or ten years, and in the meantime manure it twice and turn under at least two clover sods, there is little danger of starving the soil. The exhaustion of sandy soils consists in the removal of their potash and lime, in which such soils are deficient. It is marked by the failure of clover after repeated croppings of potatoes. Our heavy loamy or calcareous soils are usually rich in all mineral elements of plant food. Clover, in my experience, catches better with grain sown after potatoes than after any other crop. This is probably due to the fact that a potato crop pulverizes and cleans the soil better than any other.

The ravages of the potato beetle are likely to make an unexpected revolution in the cultivation of the potato. The crop will be grown and used as formerly, perhaps not quite so freely; but it does not follow that farmers all over the country will grow them as they have done. Probably three fourths of all the potatoes grown have been in small patches, to supply the families of the growers. It is likely that this will be less the fact in future. Small patches of potatoes, grown by general farmers, do not pay. Very few can give them the care they need, and without this the crop is a certain loss. High as the price of potatoes is this year, those which many farmers have grown on their own land have cost more than it would to buy them. With equal care in fertilizing and cultivating, a large field can be planted, tended and harvested at from ten to fifty per cent. less expense than a small one. In a potato-growing section, as many beetles will visit a half-acre patch as a ten or twenty-acre field. I do not mean that it is possible to plant so largely as to get rid of the labor of fighting the beetles. The rapidity with which they increase makes diligence always necessary. What I do say is that on a large field the labor of fighting the enemy is proportionately lessened. The large growers of potatoes can afford to sell at prices which would leave no profit to those who only grow a few.

We are learning something new every year about growing potatoes. Large fields have been grown which, in ordinary seasons, yielded 200 to 350 bushels per acre, at a cost of less than fifteen cents per bushel. Those who grow such crops need only care about the market, to learn how large are their profits. It is probable that for years to come the price of potatoes will not rule as low as it has done. The potato beetle is a steady factor in all calculations of the cost of growing. Practically the small growers of potatoes are out of the market. An increasing proportion of farmers who do not make a business of growing potatoes for market, will not grow enough for their own use. This may restrict consumption to some extent; but potatoes will still be always largely used at higher prices than heretofore.

Monroe Co., N. Y.

SOME MISTAKEN IDEAS.

A New England agricultural journal, in referring to the difference in the chemical constituents of grains, and especially of corn, mistakes somewhat the essential value of the same. For instance, a comparative analysis of different varieties of corn was made for the first annual fair of the Farmers' Club of Massachusetts. The following table shows the results, which, we must say, should be received with caution, for the reason that the amount of cellulose, or woody fiber, is remarkably small.

VARIETIES.	Water.	Fat.	Albuminoids or Flesh-formers.	Carbo-hydrates. Starch, Sugar, Gum, etc.	Woody Fiber.	Minerals or ash.
8-rowed Golden (Mass.)	11.51	4.94	10.25	69.37	1.35	1.58
Mason Co. (Ill.)	13.61	5.62	9.79	66.10	3.13	1.35
Kansas	11.34	4.69	8.81	73.99	1.78	1.07
White (Mass.)	10.22	5.40	9.22	74.25	1.47	1.41
Red flint (Mass.)	11.68	5.40	12.06	69.47	2.02	1.10
Burr's Sweet	10.68	7.77	11.09	62.70	4.91	2.22

From this the idea is evolved that each section should, on the discovery of the most valuable variety of corn, grow only that; and thus make a market for the product as a valuable merchantable article, as well as for seed to be used in other localities where the corn grown is less valuable. Now, here is a grand mistake. The seed alone is insufficient to produce the crop; soil, fertilizers, and, above all, climate, influence the product of the seed immensely, so that a seed rich in fat or gluten, grown in New England soils, may be sown in a warmer climate upon rich alluvial soils and will produce a crop rich in starch and woody fiber. It is the soil first; the climate second; the fertility of the soil third; and the seed lastly, which influence the character of the product. Do not we find this abundantly shown every day in our experience and in the history of agriculture? Are there not dairy districts, the grasses of which give aroma and quality to butter and cheese produced there? Is it not thus with oats, barley, wheat, potatoes and fruits of all kinds? There are Delaware peaches, Norway and Nova Scotia oats, Canada barley, Colorado wheat, Michigan and other apples, not to forget the showy Kansas fruit and the brilliant specimens from California. Indeed, it is useless to extend the list because everybody can add to it from his own knowledge, so that, to use the words of the journal referred to "If it costs more to raise corn in New England than in the West, the idea that the farmers in the first section must raise better corn and conduct their business on a more careful and intelligent plan than is customary on the prairies," will be found delusive, if the attempt is made only to grow superior kinds of grain. That is not the point. Eastern farmers must grow larger crops to meet their less favorable soil and climate, and must not depend wholly upon their more favorable locality to help them in their competition with the corn, wheat, pork, butter and cheese of the West.

It will lead us into costly error to take a narrow or one-sided view of things, and "to teach men so"; we must look broadly and in a comprehensive manner on these things, to gather the "true inwardness" of them. And, first of all, we should learn that in this regard, it is soil, climate and method of culture that produce varieties, and that these, with careful selection of our own seed year by year and patient watching and waiting, will finally help us to grow larger and more profitable crops.

PEARL MILLET.

A letter from a correspondent in Florida tells of a small experiment made there with the above forage plant. The seed was sown about the middle of June on new and poor ground, and a little fertilizer was put with it into the drill. It was cut four times. The first time, it measured over seven feet in hight. The other cuttings were shorter, but none of them was under four feet. For the quantity of seed sown and the quality of the land which received it, the yield of forage is stated to have been enormous.

Another correspondent, writing from Birdsville, Ga., says that he has cultivated "Pearl" Millet as a forage and soiling plant for twenty-five years, and esteems it highly. It is a sure crop thereabouts until the advent of a killing frost, and its yield is always in proportion to the fertility of the soil. It has never yet developed either an enemy to itself or a pest to neighboring plants. It withstands droughts well, and readily recovers from any temporary disaster.

THE BEAUTY OF HEBRON POTATO.

The following extract from a letter shows how the Beauty of Hebron behaved herself under moderate care last year. "I got a single tuber of the Beauty last spring and from it I have gathered 142 tubers, together with about as many small ones as could be held on the palm of the hand. This must be considered a very large yield. The culture was flat; that is, no earth was drawn to the plants. The quality of the Beauty is excellent, and I have no doubt that she will take her place among "the fairest of the fair." P B Mead.

Farm Topics.

MOISTURE-RETAINING POWER OF THE SOIL.

EFFECTS OF STIRRING THE SOIL.

The experiments related in "Notes from the Rural Grounds," in the Rural New-Yorker of Oct. 19th, are remarkably interesting. The results are not in the least surprising. Indeed, they might have been foreseen by a careful consideration of the behavior of water held in suspension by porous bodies. A sponge or a mass of loose, fine soil offers an exceedingly favorable opportunity for the absorption of water, because there is a very large number of particles of matter contained in these, the surface of each of which exerts a powerful attraction for water. It is a well-known fact that the finer the particles of a porous mass, the more rapid and the greater is the power of absorbing water that is exerted by these particles. Another well-known fact is that the more rapidly water is absorbed by a soil, the sooner it is evaporated from it. So, a soil that absorbs water slowly, holds more of it at the point of saturation and parts with it slowly.

But these experiments do not, to my mind, include the whole question involved in the practice universally followed by good farmers, and recommended by well-informed agricultural writers, viz., the frequent stirring of the soil in dry weather, for the avowed purpose of aiding the growing crop to better supply its roots with moisture. If they did, there would be a conflict of fact with fact. For it is a fact that the stirring of the soil during dry, hot weather *does* prevent a corn crop from curling its leaves, turning yellow or wilting; also that pulverizing the surface of a clay soil in dry weather *does* prevent it from cracking deeply, as a compact soil will do; and lastly it *is* a fact, known very well to many farmers this very season, that unplowed stubbles have been so dry that it was impossible to plow them for fall crops, while those that had been once plowed could be cross-plowed without difficulty.

It is not a simple question whether or not a loose soil evaporates water more quickly than any other; but, does a loose soil supply more water to a growing crop in dry weather, when evaporation is active, than a compact soil? In the experiments referred to, *the pot containing loose soil became saturated with water in the least time.* This is a vital point, and actually proves the practice of "stirring the soil," "loosening it," pulverizing it, to be really "the farmer's best method of protecting his crops during seasons of drought." For if a pulverized soil has an increased power of absorbing moisture, that is the very thing that is wanted. Suppose the moisture is evaporated quickly, what then? Do not the roots get their share? How do we know what small proportion of the moisture escapes the roots and is wasted on the dry atmosphere? In the experiments in question, there were no growing plants and the action of the roots of a crop did not enter into the result. But in practice this is of the greatest importance.

Again, this very soil that loses the moisture most rapidly, most quickly regains a new supply, and this new supply may come from the subsoil or from the condensation in the cooler atmosphere during the night, when the warmer soil will receive greedily a large quantity of the precipitated moisture. Besides, this very quickened circulation of moisture, this rapid absorption and quick evaporation, will tend to bring to the roots of the plant a much larger supply of food contained in solution in the water and deposited in the surface soil by the process of evaporation, or actually carried into the roots in the increased supply of moisture. It seems clear to me that the conclusion "that this advice (to stir the soil,) is wrong in theory and wrong in practice," is itself wrong, and the reverse is actually proved to be right, by these very experiments; and that in this instance the complainant has positively proved the defendant's case. Henry Stewart.

CULTURE AS AFFECTING THE MOISTURE OF THE SOIL.

Under the above heading, the Country Gentleman says:—"A writer in the Rural New-Yorker has made the curious discovery that it is a great mistake to keep the soil mellow with a view to retain in it a supply of moisture for growing crops. He is surprised to find that stirring and loosening and pulverizing the soil—its culture, in point of fact—facilitates instead of retarding the evaporation of moisture, and as he does "not take into consideration at all the amount of moisture a loose soil may take from the air more than the compact soil," or the difference between them in shedding or absorbing rains, or some other attendant questions, the conclusion he reaches is quite adverse to any such laborious operations. He expresses this conclusion in the following somewhat positive language:

"From experiments which we have been conducting for the past three years, we have been forced to the conclusion that this advice [to stir the soil] is entirely erroneous—wrong in theory—wrong in practice. Stirring the soil *does not* disconnect the capillary tubes—does *not* act as a mulch; does not preserve the moisture either in seasons of droughts or in any other seasons, and that, consequently, in so far as *this* principle is concerned, the incalculable amount of labor performed to this end, has not only been performed to no purpose, but to the accomplishment of results precisely the reverse of those intended."

If stirring the soil as compared with leaving it hard and compact, does not enable a crop, either in farm or garden, better to withstand drought,—if it does not, in other words, increase the available store of moisture for the growth of plants—an incalculable amount of labor has indeed been wasted, as our contemporary remarks, and many practical farmers and gardeners have been sadly misled in trusting to the evidence of their senses. The more rapid the evaporation the greater the absorptive power, whether from subsoil below, or atmosphere above. In one of the experiments here narrated, a foot of compact soil required nearly three times as long to absorb a certain amount of moisture, as one in which the soil was loosely sifted. Place the two between a comparatively never-failing store of moisture beneath, and an intermittent supply from above, and which would best sustain the constant drafts upon its moisture from the immense demands of a heavy crop, as well as the action of the rain and wind upon its own surface?

As we write, an associate states that once in cutting a culvert four feet in depth from a cultivated field across a country road, in a very dry time, he found the soil in the field moist up to within twelve inches of the surface, while that under the closely compacted road was dry down to the full depth of digging. And yet we do not doubt that evaporation took place much more rapidly in the field than in the road.

A NOTE FROM PROFESSOR S. W. JOHNSON.

We have received from Professor S. W. Johnson, of the Connecticut Agricultural Experiment Station, a note in which he says:

"I read with much interest in the Rural of Oct. 19, the article in 'Moisture-retaining Power of Soils' and am desirous of obtaining a sample of soil exactly similar to that there used, for making some comparison in the apparatus used here in similar trials. Our results (see report for 1877, p 79, *note*,) show or indicate that the greatest power of capillary transmission of water occurs in soil, or soil-like media, of a certain grade of fineness of particle and pore, and that either coarser or finer pores transmit water more slowly.

FARMING IN KANSAS.

L. J. TEMPLIN.

This State has lately attracted a great deal of attention as an agricultural region, and people in great numbers have been flocking here, not only from all the States east of the Mississippi River, but from every country in Europe. The equable and healthy climate, and the generally fertile soil, make it probably the most desirable place for the emigrant to be found on the globe. But it should not be forgotten that there are

DRAWBACKS IN KANSAS.

Many come here apparently under the conviction that if they can but reach this land, all their troubles will be over; their "bread and their water will be sure," whether they work or not. Some have an idea that if they can but get a title to a piece of land, their fortunes are made. Now, it should be borne in mind that this country, like all other parts of this continent, is liable to an occasional drought, and with our hot sunshine and drying winds, these droughts are apt to prove quite damaging to crops. Again, an occasional visitation of the Rocky Mountain Locusts causes a wide discrepancy between the expectations of spring and the realizations of the autumn.

Nor is all the land of this State first class agricultural land. An occasional bluff or hill is found so full of rock and so steep that it cannot be brought into cultivation. Then, a ridge of sand-hills will be seen extending for miles. These are only fit for grazing. In some few localities salt marshes will be found that are utterly useless, except for the manufacture of salt. But all of these together do not occupy probably more than one acre to a hundred of rich, tillable soil. People come here to engage in farming, and the State has a fine climate and

PLENTY OF LAND FOR NEW-COMERS,

of a good, rich nature, to meet their wants

There are now in cultivation, or inclosed for pasture in this State, 6,538,727 acres. This is an actual net increase of 943,422 acres over the area inclosed last year, or 16 86 per cent. Yet the amount of uncultivated land in the State is 45,504,793 acres. The State is filling up with people who, for enterprise and intelligence, will compare favorably with those of any State in the country.

THE METHODS OF FARMING

introduced into the State are as widely different as the localities from which the people have come. Doubtless some of these methods were the best where those people came from, while others were not. But in coming to the West and attempting to follow those old methods, disappointment is too often the result. Many have an idea that the soil is so rich and mellow here that about all that is needed is to get the seed into the ground, and a crop is sure. It is true that the ground is of such a friable nature that it is much easier put in good condition for crops than most of the soils in States farther east, but my observations have led me to the conclusion that there is no soil in which thorough cultivation is of more benefit than in the rich soils of Kansas. Though our soils do not "bake" or dry out with ordinary weather, yet the difference between a well tilled field of corn and one that has been carelessly run through once or twice, will be often found one-half or more in favor of thorough cultivation. A man with the same appliances will generally cultivate a much larger area here than in any other country I have seen, and yet, as a rule, people here undertake more than they can do well, which is bad economy here or elsewhere.

One of the great evils under which agriculture labors in this State and almost everywhere else, is

SHALLOW PLOWING.

This, doubtless, results everywhere from shallow thinking. Men whose minds have been stirred with deep thoughts and improved with thorough culture, will seldom be satisfied with the skinning process, so often called farming. In breaking sod, which is the first step in opening a farm here, the correct idea is to break as shallowly as possible, provided the plow goes below the crown of the grass roots. This causes the grass to dry out and die so that it rots the first season, while if broken deeply it will often turn and grow, thus keeping the sod green and making trouble the second year. But many imagine that because two inches is deep enough for sod, four inches is deep enough for ordinary soil, which is a mistake of from 100 to 200 per cent.

The man who is a routine farmer, following a certain course just because he has seen the work he has in hand done in that way, or because some one else does it in that manner, is not the one to make a success of the business, especially under new and strange conditions. It is the man who has studied the science of agriculture, who understands the first principles of the business, that most readily adapts himself to his surroundings and makes a success of his business. The "book-farmer," in his first efforts to apply his principles to practice, will make mistakes, but his acquired knowledge of general principles will soon enable him to discover the cause of his failures and avoid them in the future, while the routine farmer will continue to blunder without knowing the cause of his failures.

THE USE OF FARM MACHINERY

in Kansas is almost universal. The labor is principally done by horse-power, while the farmer rides at nearly all his work. He breaks his sod, stirs his fallow, drills his wheat, reaps and binds the same, plants and plows his corn, mows and rakes his hay—all with machinery upon which he rides, and over which he can, if he so desires, spread a canvass for shade. Our broad, rich prairies without stone or stump, afford a splendid field for the employment of the improved farm machinery of the day, and the farmers have not been slow to avail themselves of their benefits. Farming is losing much of its drudgery and becoming a much more intellectual pursuit than in our grandfathers' or even in our fathers' days.

Reno Co., Kansas.

Pomological.

THE APPLE ORCHARD.—No. 2.

BY CLINTON.

THE PROPER DISTANCE FOR PLANTING APPLE TREES.

was spoken of in my former article as being two rods, or 33 feet. This I adopt as an average rule, but in special cases, the rule may be deviated from somewhat. For instance, in case the trees are upright growers, like the Northern Spy and Baldwin, they will admit of somewhat closer planting; but if the branches are spreading, like those of the Rhode Island Greening and the Talman Sweeting, a greater distance may be required. I name these varieties as being such as are familiar to most cultivators. The distance should be such that when the trees are well grown, there will be no danger of their interfering with each other by the interlocking of branches, which increases the inconvenience of gathering, and by preventing a free circulation of air, tends to diminish the value of the fruit, not only in color and flavor, but in quantity. Of course, this objection to close planting is not apparent while the trees are small, but as they advance in size, it becomes more and more manifest. I have just measured an apple tree standing in my garden, which, at 20 years of age, I find is extending its branches eighteen feet in each direction from its trunk; thus covering a space thirty-six feet in diameter. This may be considered by some as an exceptional case, but I think it not unusual in a suitable soil and favorable locality. I have recently read, in a New York paper, a description of the orchard of Mr. Richard McKinstry, of Columbia County, in which it is stated that the boundary line, of over four miles in length, is marked by more than "2,600 apple trees, standing each ten feet apart." Trees planted thus closely may be useful in defining the boundary, and in serving as a wind-break for the orchard, but cannot be the most profitable for fruit-growing, for the reasons I have stated.

PRUNING.

is an important matter which should never be neglected. If properly attended to from the first, the top may be so shaped that there will rarely be any necessity for lopping off large branches at any subsequent period, and thus may be avoided the sudden shock to the tree which always results from the removal of a large branch, and from which it does not speedily recover, if indeed it ever fully does. I have witnessed many instances in which trees have been seriously weakened and permanently injured by over-pruning, and the cutting away of large branches. In one case, the owner of a fine orchard which had been somewhat neglected, let out the job of pruning it to a poor neighbor, giving him, as a remuneration for his labor, all the branches he might think it necessary to cut out. Of course, the poor man found it convenient to provide himself with a good supply of fire wood for future use, to the great damage af the orchard, as soon because apparent to the owner.

An orchard properly attended to, will require but a moderate pruning in any one year. To begin with, encourage a low growth of top. This is important for several reasons, among which are: first, the much greater convenience in gathering the fruit, and, second, the less danger of the fruit being blown off in case of high winds. Some farmers advocate high training, so that the branches will not be in the way of the team in plowing. But to plow an orchard after the trees are well grown, is, in my opinion, a very questionable policy; and while the trees are small, there will be no trouble arising from the low growth of the branches, if proper care is observed.

If the tree is forked when received, remove one of the main branches, as a forked tree is quite liable to split in the trunk and thus be ruined. If, from any oversight, the matter has been neglected until the top becomes large, the difficulty may be remedied, in a great measure, by boring through the two parts with a half-inch auger, and inserting through the hole an iron rod, or bolt, with a head at one end and a screw and nut at the other, thus binding the two parts firmly together. If the tree is vigorous, all will soon become imbedded in the new growth of wood, and the remedy will become permanent. I have spoken of encouraging an open top to the tree; but judgment is requisite in regard to the matter. A tree which naturally inclines to have a low, spreading top, will need but little attention in this direction; for after a few seasons of bearing, the top will spread out, owing to the weight of fruit, and thus it usually becomes sufficiently open. But those of more upright growth of top, will need some thinning out from the center. In all cases, remove all dead or dying branches, as a matter of course, and in all cases where branches are likely to interfere with each other by crossing or otherwise, remove one of them, while they are yet small. Prompt attention to all such matters is essential to success.

If the branch removed is of any considerable size, it is well to cover the wound either with grafting wax, or a preparation of gum shellac dissolved in alcohol, or with a coat of thick paint. In removing a limb of any material size, the rings in the bark at the base of the branch, will indicate where amputation should be made.

As to the best time to prune the trees, authorities differ somewhat, some advocating the fall, some midwinter, and others the spring, and still others, a little before midsummer. These various opinions may be affected in some degree by the locality and climate. My own experience induces me to believe that, for central New York, there is no more suitable time than in early spring, before the sap commences to circulate. There will be no injurious loss of sap by bleeding if done at that time, and the healing process will commence very soon, and the wood will remain in a sound condition until covered by the growth of bark.

I will not occupy space by giving extensive instructions on

GRAFTING.

Every fruit grower should be competent to do his own grafting. The process is so very simple that any one possessed of common ingenuity should be able to perform it, after having once seen it done. For the most satisfactory results, it should be attended to while the tree is young and vigorous. If the tree is of considerable size, it is best to graft only a portion of the top in a single year, as in this way the orchardist to some extent avoids the injury that may result from removing a large portion of the top at once. If he does the grafting himself, he *ought* to know what kinds of fruit he will get as the result. If he employs others to do it, or purchases his trees of traveling agents, he will, too often, be disappointed in this respect. If he cannot see to the matter personally, in procuring his trees direct from good, reliable nurserymen, I would recommend him to procure seedling trees from his own vicinity, if possible, and graft them himself while they are small—say the second or third year after transplanting. He will thus avoid being imposed upon as to the varieties, and have trees accustomed to his climate and soil, and which have not been forced into early and rapid growth in the highly cultivated grounds of the nursery.

The orchardist should make a regular map of his orchard, on which he should carefully mark, legibly and plainly, the names of the several varieties, in their proper places. This is better than to rely on labels, which are so liable to be changed or lost. It is well to have trees of the same variety planted near each other, and not scattered promiscuously through the orchard. There should be some system about it.

SUBSEQUENT CARE.

Keep the soil clean and well worked under and around the trees while they are small. Plant what you please between the rows, but never disturb the roots with the plow, or rob them, by planting over or too near them. The first season, a good mulch, covering the ground as far as the roots extend, will be highly beneficial to the trees, and in a dry season may prevent serious losses. To guard against the depredations of mice, which in winters of deep snow are often quite disastrous, form a little mound of earth about the trunk, to the hight of a foot, before the snow falls, and level it off again when the spring fairly opens. Coal ashes may be profitably utilized for the same purpose, and will furnish some protection also against that pest—the borer. Examine the young trees carefully every spring, to see if they have been loosened by the winds and frosts of winter and spring, and if so, press the earth firmly about the roots, and stake the trees only when necessary. Search carefully, at the same time, for the eggs of the Tent, or other caterpillars, which may then be easily removed and destroyed, and much subsequent labor, and perhaps injury, guarded against.

Never allow cattle or horses to run in your orchard, unless the trees have become so large that they cannot injure them. Sheep and hogs may be pastured there to advantage, as by eating the wormy fallen fruit they will check, in some degree, the increase of the Codling-moth. But no kind of stock should be allowed to run in young orchards until the trees have become fully and firmly established. Do not anticipate much profit from any other crop which may be attempted to be grown in the orchard after the trees have attained a good bearing size. Let the trees themselves be the main objects of consideration. Whatever else is grown in the orchard should be considered as but a secondary matter. But in all these particulars, the novice will frequently find himself obliged to rely very much on his own judgment, coupled with that experience which, after all, is usually the best teacher.

Oneida Co., N. Y.

FACTS ABOUT THE JAPANESE PERSIMMON

The Japanese Persimmon is a dark-stemmed tree with large glossy leaves. It seems to somewhat resemble, in its method of growth, an Angiers quince tree, but the leaves are larger, and the tree is handsomer. It buds and grafts readily. The fruit is produced on the new wood of spring growth, blossoms appearing in April, the fruit not being fit to gather until after the leaves fall. The fruit is not usually good until it has lain in the dark for some months, and has become soft. The trees are hard to transplant, unless great care is taken. It appears probable that the Persimmon prefers a rather moist location. It promises to be an immense bearer. One orchard of 1,200 trees, planted for market, lies near San Jose. CHAS. H. SHINN.

Alameda Co., Cal.

Horticultural.

TESTS OF GARDEN SEEDS.

Prof. Beal's experiments with seeds in a green-house are altogether too favorable. It is well known to all gardeners, and his experiments prove it, that the shelter together with the regular care and attention possible in an artificial soil and climate, affords no proof of the vitality of seeds. His tests in the open soil, out-of-doors, subject to the weather, and all casualties, are the only true tests, and just the ones which farmers and others must put these very seeds to. Hence seeds can only be fairly tried in situations similar to those in which it is natural for the people at large to place them; that is, in their gardens.

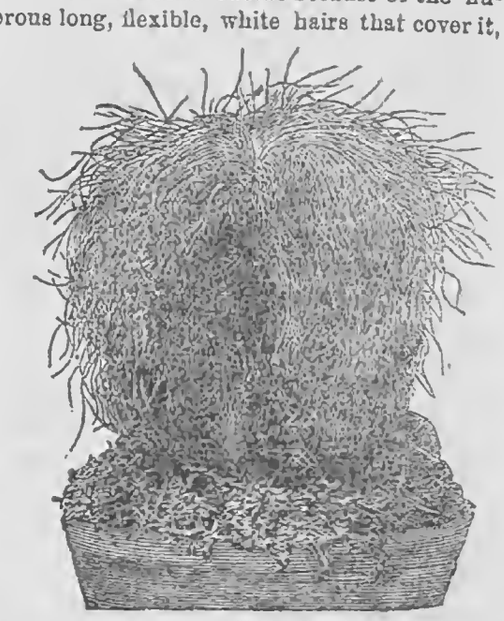
An expert gardener can take a lot of seeds known to be old and of doubtful vitality, and by giving them green-house shelter and a due amount of nursing, produce germination, when open-air culture would not give a single live plant. After all, the proper germination of seeds in gardens, depends fully as much upon the one who puts them in, as upon the quality of the seeds. As an evidence, place a lot of portulaca or of tobacco, or of celery seed in the hands of an inexperienced person to sow, and not one in a thousand will ever show, unless it may be those accidentally spilled upon the borders of the patch. The true way to test garden seeds is to plant them properly, at the proper time, in the average soil and under the average conditions which farmers have at command. S. RUFUS MASON.

Dodge Co., Neb.

Floricultural.

THE OLD MAN CACTUS.

Just look at this funny little Cactus with its shaggy head, as white as the driven snow. It is called the Old Man Cactus because of the numerous long, flexible, white hairs that cover it,



and which resemble the gray hairs of an old man's head. But old men are often bald-headed, which is not the case with this Cactus, for its crown is the whitest and hairiest. A-down its body—it is hairy from head to foot—by reason of age and handling, the hairs are less numerous and of a duller color. This Old Man Cactus is an irresistible temptation to the ladies; we never knew them pass him by without stroking down his pate or wanting to—just to see if he is good-natured He shows no great aversion to this fondness, but when they ruffle his temper by stroking his locks upwards instead of downwards, the many tufts of white spines that are thickly set along the ridges of his body and hidden by his silvery hair, chastise such undue familiarity.

Botanically he is known as Pilocereus senilis. He is at home in Mexico, where he attains immense columnar proportions—some 20 feet high, by eight or ten inches in thickness. Little fellows are not uncommon in our greenhouses, where, though they grow slowly, they are very tenacious of life. And they are good window plants too. They do not like dusty apartments, and are averse to having much water spilt on their heads. During the winter season they want but very little anyway, and even in summer time, great moderation should be exercised. They like a gritty, loamy soil, despise peat, and though a little very rotten manure is relishable to vigorous specimens, its use had better be dispensed with; so should that of all artificial manures. These old men Cactuses like warmish winter quarters, and for all the room they occupy should get a winter seat in the window and not in the cellar.

EULALIA JAPONICA VARIEGATA

It is surprising how few people as yet appear to know anything of this beautiful, hardy grass. We have a row of plants which have been in full beauty for the last six weeks, on the sight of which every visitor exclaims "How charming!" but the full beauty is scarcely seen outside; although in this fine, dry, bright autumn weather the flower plumes show much of their true character. We had plumes of this grass in the house in full beauty from last year until the plumes of this year were ready for the same purpose, and they looked about the same as when cut last year.

I have noticed that, in a few cases, people have bleached this grass, but I consider it looks unnaturally white, and I have no doubt some of our European friends will soon begin to dye it green and probably magenta, just as they already do with the Pampas grass plumes and also the very pretty Feather grass and Briza;

a more vile taste I cannot imagine, unless it be manifested in some of the floral designs displayed in florists' windows, and also in some cases thought worthy of prizes at some of our horticultural shows. Is it that the American people have no taste in these things and cannot appreciate any light and elegant design, but must run in the groove cut by an ignorant and uncultured flower-seller? I cannot think it is the former with many American ladies, having seen a few common flowers and leaves put up with the best taste, both as parlor ornaments and also for funeral purposes.

We often see a criticism on the bad taste of floral designs in general, and people usually agree with the critic; but yet we see no alteration afterwards, so that it amounts to nothing; but I believe if any florist of taste would get up basket and other pieces in good taste, it would be appreciated and he would make money.

JAMES TAPLIN.

CATALPA SPECIOSA. (?)

MR. MEEHAN, of the Gardener's Monthly, seems to doubt the existence of this distinct species of Catalpa. No person seeing this and C. bignonioides—the common Catalpa—side by side, can fail to notice the marked and uniform difference, a difference as well marked as that habitually noticeable between the Northern Spy and R. I. Greening apple tree, the Vicar of Winkfield and Buffum Pear, or the Kilmarnock and Babylonian Weeping Willow.

C. speciosa is uniformly upright and pyramidal. If trees of the two varieties are planted contiguous, when eight to ten years old the Speciosa will average about twice as high a growth as Bignonioides, with a far larger, longer and straighter trunk. The bark of Speciosa is rough, like that of the Ash or Walnut, while that of Bignonipides pulls off like that of the Birch or Sycamore. The foliage, flowers and seed pods of Speciosa are also much larger than those of the common variety, and the flowers are nearly pure white. It is also said to be much hardier, flourishing in northern Illinois and Iowa, where the common variety will not stand the severity of ordinary winters. The origin of C. speciosa is as yet unknown. Dr. WARDER first described it in his Western Horticultural Review in, 1853.

Dunreith, Ind., Oct. 7. E. Y. T.

Miscellaneous.

CONNECTICUT AGRICULTURAL EXPERIMENT STATION.

NEW HAVEN, NOV. 12, 1878.

BULLETIN NO. 20.—FERTILIZER ANALYSES.

208 Ground Bone. Sampled Oct. 5, 1878.

209 Bone Sawings. Bone sawed in water, dried and sold in dry state. Sampled Aug. 30.

The above are sold by the Rogers and Hubbard Co., of Middletown. The samples were drawn and sent by CHARLES FAIRCHILD, Esq., Middletown.

210 Muriate of Potash 80 per cent. standard.

211 No. 1 Peruvian Guano. "Lobos." Gnarantee: 6 per cent. Ammonia, 15-20 per cent. Phosphoric Acid, 3-5 per cent. Potash.

210 and 211 are from the stock of CHAPMAN & VAN WYCK, 170 Front St., N. Y. The samples were taken Oct. 8, by G. M. BARBER, Esq., New Britain.

	208	209	210	211
Nitrogen	4.00	3.02	.....	5.14†
Sol. Phos. Acid	.....	.....	.....	5.19
Rev't'd Phos. Acid	.....	.....	.....	5.73
Insoluble Phos. do.	24.13	26.97	.....	8.69
Potash	.....	.....	55.01*	3.75
Cal'ted val. per ton	$36.13	$48.63	$49.51	$59.40
Cost	30.00	30.00	40.00‡	51.00

* Equivalent to 87.2 per cent. of Muriate of Potash.
† Equivalent to 6.24 per cent of Ammonia.
‡ The potash actually costs 5¾ cents per pound.

W. H. BOWKER & Co. note several errors in 19th Bulletin and furnish the subjoined corrections.

a. The articles made by W. H. B. & Co. are designated the "*Stockbridge Manures*" (not Stockbridge Fertilizers).

b. 175, for Strawberries and 193, for Kitchen Garden, contain *sulphate* and not muriate of potash. This would raise the valuation several dollars per ton.

c. 181 is *Bowker's* (not Stockbridge's) *Lawn Dressing*, price $65 per ton (not $130.) Contains Muriate of potash.

d. 193, Kitchen Garden Manure, price $50 per ton (not $60.)

e. 195, Corn Manure, price $50 per ton (not $56.)

f. 197 *Grass Manure*, top dressing (not Hay Fertilizer).

In reference to these errors it may be said—

a, *c*, and *f*. The Bulletin gave the names that were furnished with the samples.

b. 175 contains sulphate and but little muriate of potash. Its estimated value is therefore $48.24 per ton. 193, however, contains 6.8 per cent. of chlorine or 2.9 per cent. more than the amount necessary (3.9 per cent.) to form muriate with the potash present. The advantage, if any, of buying a sulphate is avoidance of chlorine compounds. This advantage is not offered by 193. The potash used in 193 can, at the most, be credited as that of a low-grade sulphate worth 6 cents per lb., and the valuation corrected accordingly, is $40.68.

c. 181 The selling price named to the Station was 65 cents per bag of 10 lbs. From this was computed the ton-price reported, which is evidently unjust to the manufacturer.

d. 193 Selling price was $3.00 per 100 lbs.

e. 195 Selling price was $5.00 per 200 lbs. The ton-price was misprinted $56, should be $50.

f. 197 Selling price was $5.00 per 150 lbs.

In all cases the Stockbridge Manures were sold by Olds & Whipple, with "freight added."

Here follow the amended names, valuations, and prices.

175 Stockbridge Strawberry Manure. Sent by P. M. Augur, Middlefield.

181 Bowker's Lawn Dressing.

193 Stockbridge Manure for Kitchen Garden.

195 Stockbridge Manure for Corn.

196 Stockbridge Manure for Squashes, Cucumbers and Tomatoes.

197 Stockbridge Grass Manure, top-dressing.

181, 193, 195, 196 and 197 were sold by Olds & Whipple, Hartford, Ct. Samples were taken May 1, 1878, by J. J. Webb.

	175 Pr. ct.	181 Pr. ct.	193 Pr. ct.	195 Pr. ct.	196 Pr. ct.	197 Pr. ct.
Nitrogen as Nitric Acid,	2.32	7.93	....	1.39	1.45	8.03
Nitrogen as Ammonia,	2.10	....	4.57	2.23	....	....
Organic Nitrogen,	6.54	5.17	4.83	2.61	3.61	2.11
Sol. Phos. Acid,	1.19	....	0.79	3.11	4.05	....
Reverted Phos. Acid,	0.24	....	0.17	1.44	....	....
Insoluble Phos. Acid,	6.49*	6.35	7.224	2.32	7.60*	10.38
Potash,	....	....	....	6.95	....	....
Estimated Value per ton,	$48.24	$58.01	$40.68	$45.31	$43.02	$56.28
Cost per ton,	$53.33	$65.00	$50.00	$50.00	$55.00	$56.57
Cost, per bag,	{ 150 lbs. $4.00	10 lbs. $0.65	100 lbs. $3.00	200 lbs. $5.00	200 lbs. $5.50	150 lbs. $5.00

*As Sulphate, valued at 7¼ cents per pound. In the others, †As low-grade Sulphate, valued at 6 cents per pound. potash as muriate, is valued at 4½ cents.

The station in now ready to test Sugar Beets as to their Sugar value. Send 6 to 10 roots representing an average of the crop. Send as soon as possible, but so that the roots will not freeze. Give also answers to the questions found on p. 104 of Report of Station for 1877.

S. W. JOHNSON, Director.

NOTES OF CURRENT EVENTS.

VALUE OF LAND.

A GOOD index of the actual value of land is the amount realized at public sales for cash in the best agricultural localities. Recent sales in the Blue-grass region of Kentucky, have been made at $75 per acre for farms of superior quality. In that portion of the garden of Pennsylvania, Montgomery Co., sales have been made at $125 an acre. This shows a reduction of 50 per cent from the prices of five to seven years ago. At these rates there is no surer or more profitable investment than land.

LOW PRICES.

As to prices, we are now down to what is called "hard-pan." Pork at 2½c. per pound in the West and at 4 to 5c. in the East, and wheat at from 75c. to $1 a bushel, are surely low enough to stimulate business and industry into a healthful activity. But then, after all, the farmer has his equivalent in the low prices of what he purchases. A good pair of boots can be procured for $3, which used to cost from $7 to $9. Cotton goods are selling for six cents a yard and a good suit of woolen clothing for $15. Wages of labor are reasonable, except for domestic female help, and, on the whole, there is really nothing to grumble about, unless it be that our "pile" of savings is not so bulky as it used to be in years past. But then, one cannot always be laying up a pile.

THE VERY BEST INVESTMENT.

Just now there is no better way for the farmer to add to his savings than to improve his farm. The tide of events is on the turn. One dollar now will do as much in the way of clearing land, draining, building, as two would a few years ago, and undoubtedly as much as they will do in a year or two hence. When the tide has fully flowed, every dollar thus spent will be worth two or more. But at any rate, *every dollar thus spent is safe*, and is in a position to return good interest every year. Money judiciously spent in farm improvements, can be made to pay 25 to 100 per cent. and, in this case, the big interest does not measure the risk of the investment.

BIG CROPS.

A person in Chester Co., Pa., would have us believe that there never was a crop of wheat raised that measured over 35 bushels per acre.

Now is all the evidence of hundreds of English farmers who return their crops as 7, 8 and 8½ quarters of 8 bushels each to the acre, to go for naught? Are all these men knaves and liars? Is John Johnston's record of 45 bushels per acre, or Joseph Harris's of 40 bushels and over, and an unsatisfactory crop at that, to be disbelieved? The time was when we believed 100 bushels of corn per acre to be an innocent guess of some enthusiastic farmer. But the present season, the writer has taken with his own hands 43 baskets of ears of corn weighing 40 lb each, from a piece of land measuring 108 feet long, 48 feet wide at one end, and 96 feet wide at the other, being thus what is known in geometry as a trapezoid in form, and containing 7,776 square feet, or not quite 18-100 of an acre. By simple figuring, this can be seen to amount to 9,525 lbs. of ears to an acre, and if 95 lbs of green corn when husked, are allowed to be one bushel, there are over 100 bushels per acre. It is true that this is a very prolific kind of corn, averaging three ears to each stalk but there was but one stalk to a hill, and there is no difficulty in growing corn of common kinds which shall bear one ear to a stalk, with 3 stalks to a hill. The fact is we have not yet nearly learned what can be the full capability of a good soil well cultivated.

A TEXAS HOMESTEAD.

WE have received a brief but interesting sketch of his homestead from a new friend of the RURAL living in Texas. Those whose lot has been cast among the fixed surronndings of the long-settled parts of the country, can learn a good deal about the better kind of life in our frontier States from just such a description of the farm homes to be met with here and there in them. He has a farm of 140 acres on prairie land in northeastern Texas, one mile from the city of Corsicana, a place located on the Texas Central Railroad and containing a population of about 10,000. His farm, like those up North here, is divided into pastures and cultivated land; but, unlike too many of our farms, there are on his place orchards of Apples, Pears, Peaches, besides Cherries and other small fruit, such as Grapes, Blackberries, Raspberries, Strawberries, etc. His house is situated on rising ground and overlooks the whole farm, in the center of which it was built, as nearly as possible. On the northwest of it stretches the orchard, which comes right up to the yard in that direction. On the other sides of the house are upwards of a thousand trees, consisting of a few exotics, but mainly of those of native growth, and of between 400 and 500 Cedars, which he has planted, as that kind of tree does not grow naturally on the prairie. On the farm he also has had, for the last four years, a fish pond, not wholly unlike that pictured in the RURAL of October 19th.

Another feature of his homestead is far too often wanting about the farm houses in States whose inhabitants are supposed to be much wiser in agricultural matters than the rough denizens of the Lone Star State. What is it? Well; he has 57 stands of Italian bees, from which he has derived more profit than from anything else on the farm, taking into account the amount of capital invested. He has always felt a very praiseworthy sort of pride in having his stock at least a little better cared for and of somewhat better blood than those of his neighbors; and pride of this kind is always profitable to the man blessed with it, and a source of gain to the neighboring farmers owing to the emulation it is likely to engender. On a thrifty, well-kept farm of this kind, of course, flowers are not forgotten. These are the ornamentation, the embroidery, the trimmings, that beautify and brighten the somewhat somber aspect of farm life, and are no more absent from a really well-kept homestead than the ornaments to which they have been here compared, are absent from a handsome dress. In view, therefore, of the foregoing sketch of this Texas homestead, our friend very appropriately finishes his description by declaring that his wife's garden is a perfect Eden of flowers, to which she wishes to add other beauties, by availing herself of the RURAL free seed distribution.

THE MANAGEMENT AND DISEASES OF THE DOG.

THIS is a work of 383 pages, by John Woodroffe Hall, of England, Fellow of the Royal College of Veterinary Surgeons, and already very favorably known to the public as the author of Essays on "Parturient Apoplexy in the Cow," "Some Diseases in Farm Stock," "Diseased Meat as an article of Food," "The Actual Cautery," "Canine Distemper," and several other valuable treaties on kindred topics. The present work will certainly not detract from the reputation won by its predecessors. Its scope embraces full accounts of the ailments to which man's faithful canine friends are liable together with clear statements of the latest veterinary practice for alleviating and curing them. The work is fully illustrated, a feature that materially aids the ordinary reader to obtain a clear understanding of the nature of the diseases described in the text, and of the treatment recommended to remedy them. To such of our readers as are interested in fine dogs, we can strongly recommend this work as an embodiment of the latest pathological and therapeutical knowledge on the subject of which it treats. Published by Albert Cogswell, 24 Bond street, New York city; price $2.

WHAT OTHERS SAY.

POLLED CATTLE FOR SHIPMENT.—From an interesting and well-considered article under this heading by the veteran John H. Wallace, we extract a few remarks: "In a trip across the ocean last summer I had an opportunity of studying this question from a standpoint that was eminently practical. On the same steamer there were 70 or 80 head of very fine cattle for the English market. Those on the main deck were packed, two and two, in boxes, with just room enough to stand up, but no room for either to lie down. If by any means one succeeded in getting down, it required a terrible struggle to rise again, for his fellow was compelled to stand over him. These struggles would have been comparatively harmless if there had been no great horns in the way. But the horns were not only unintentional sources of injury and pain, but they were at the same time the causes of entangling the halters in such a way that it was impossible to avoid injury and pain. * * * If this question were merely one of commiseration for the suffering of dumb brutes, we might have some doubts as to its commending itself to cattle breeders in this age of money-making and greed, but every one knows, whether he is a novice or man of the widest experience, that every hour of suffering on the way detracts from the health, appearance and condition of the animal when he reaches his destination. * * * If a carload each of horned and polled cattle were shipped from beyond the Mississippi to this market, I am fully satisfied that the difference in condition and the difference in shrinkage would make a percentage of advantage on the latter over the former that would tell largely in the profits of the producer. Unfortunately, however, the test cannot be made, for the polled cattle with which to make it cannot be found. * * * A question of a very practical nature presents itself here. How are we to produce polled cattle without a breed of that kind? The answer is that we must have a breed of polled cattle. Then another question follows, Shall we throw away all the improvement we have made in Short-horns, for example, and go back to first principles again in founding a good beef-producing race? There is no need of taking a single step backward, for there are three races of polled cattle in England and Scotland that have been carefully bred for many generations—the polled reds of Norfolk, the Galloways of southwestern Scotland, and the Angus or Aberdeen cattle of northeastern Scotland."

Mr. Wallace proceeds to speak of the polled Angus: "It is now eighty years since Mr. Watson, of Keillor in Forfarshire, founded his herd. This takes us back to a period contemporaneous with the early improvers of the Short-horn. As a race they are probably nearly as old and well established in their characteristics as the Short-horn. * * *

It is claimed for the breed and I am disposed to think the claim is just, that the beef itself is better than the beef of any other breed, and brings more in the markets of the great cities.

Like all the Scotch cattle, this breed have hardy, vigorous constitutions, and are very prolific. They are gentle in disposition, and mature very early. As milkers they are not distinguished, for they have not been bred for that purpose. They are generally jet-black, with fine, glossy coats and plenty of hair. They grow to a large size, and are easily fatted at almost any age. It is claimed for them, also, that they weigh heavier than any other breed to their measurement, which makes them attractive to buyers for the fat market. * * *

It is conceded on all hands that, as a beef-producer, the well-fatted Short-horn ox is very near perfection. For many generations he has been bred for perfection of form—the greatest amount of beef with the smallest amount of offal. Now, all we want is this same ox without the horns. * * * A distinguished Scotch authority says: "Of all the varieties of cross-bred cattle, there is none more satisfactory and remunerative to the feeder than the cross between the polled Angus, or Aberdeen, and the Short-horn. It grows to a large size, shows great aptitude to fatten, and when killed, the fat and lean are found to be distributed over its carcass in most desirable proportions. * * * At the exposition in Paris recently, there was a prize of $500 for the best herd of cattle bred outside of France by one exhibitor. For this prize a herd of Angus polls took the first, a herd of Angus polls took the second and a herd of Short-horns from England took the third. As a still greater triumph, there was a prize of $500 for the best beef-producing group, embracing animals from all countries, and the Angus polls were again the winners.

As beef-makers they are certainly in quantity equal, and in quality superior, to our Short-horns; as breeders they are more prolific, and to withstand our wintry blasts, they are more hardy. With a cargo of hornless cattle for either railroad or ocean travel, and whether for one mile or a thousand, the danger of accidents is greatly reduced, the suffering of the animals

is greatly ameliorated, tho facilities and convenience of the keepers are greatly improvod, the animals reach their destination not fevered with suffering and torn with the unwilling horns of of their neighbors, but comparativoly fresh and in good condition.

WHEAT SOWING.—THE Agricultural Gazette of London, says that no crop is planted in a greater varioty of ways than wheat. It is broadcasted, drilled and dibblod, plowed in, pressed, and cart-wheelod, thick sown and thin sown, wide drilled and narrow drilled. The advocates of many of these methods have been known to become exoitedly attached to their own particular systems to an extent which has rendered them somewhat troublesome to their friends and neighbors, and they have been known to make themselves unhappy because tho rest of the world would not look through or could not see through their spectacles.

It is the privilege of well-balanced, or as they might be called, philosophic minds to look at questions in a quiet and imperturbed manner, and to acknowledge that there is "much to be said upon both sides." With regard to wheat planting, we aro certainly inclined to address tho disputants in the words of the poet, "You aro all right and all wrong." Circumstances alter cases, and what is good practice in ono locality may be bad and impracticablo in another. Above all things, let amateurs and gentlemen farmers beware of what they read in agricultural jonrnals and papers. An article is best written by an enthusiast. If a gentleman becomes prominent as an advocate for thick or thin seeding of wheat, prickly comfroy, lucerne, or any other hobby, what is more natural and proper than that he should be roquested to commit his views to writing and publish them to the world. To the man whose eyes are opened, snch litorature is interesting and harmless; but to the man who is all agape for something new, and but little versed in the old ways, it is dangerous.

RECIPE FOR CURING MEAT.—Major FREAS thinks that if the following recipe be strictly followed, it will requiro but a single trial to prove its superiority over the common or most ways of "putting down" meat: To one gallon of water, take 1½ lbs. of salt; ½ lb. of sugar; ½ ounce of saltpeter, and ½ ounce of potash.

In this ratio the pickle can be increased to any quantity desired. Let these be boiled together until the dirt from the sugar rises to tho top and is skimmed off. Then throw into a tub to cool, and when cold, pour it over the beef or pork. The meat must be well-covered with pickle, and should not be put down for at least two days aftor killing, during which time it should be slightly sprinkled with powdered saltpeter, which removes all the surface-blood, etc., leaving the moat fresh and olean. Some omit boiling the pickle, and find it to answer well, though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. The moat is unsurpassed for sweetness, delicacy and freshness of color.

SINGULAR CAUSE OF A COW'S DEATH.—JAMES MCCANN says, in the Elmira Husbandman, that he reported some weeks ago a sick cow. She could retain no food upon her stomach. Even water was vomited soon after swallowing it. Afterward by the use of Croton oil she had seemed to improve. A short time ago she died. She had no passage after her first difficulty except as Croton oil was given her. On cutting open the carcass the source of trouble was easily found. In the first stomach there were three eight-penny nails, several pieces of nails, one screw and several gravel stones. All these had worn smooth by the action of the stomach.

WHAT STOCK NEEDS.—A writer in the Farm and Fireside remarks: "the requirements of success in stock feeding for profit, are well-bred stock, olean, warm quarters, pure water, sufficient salt, a stall for each, having rope and chain fastening instead of stanchions, gentle exercise daily, when the weather is not stormy, sufficent sweet olover hay, cured in the cock, to supply their wants, and a uniform supply of finoly ground corn meal. Whatever method of feeding may be adopted, the question in which the progressive, practical farmer is the most interested is "how can I produce the most tender, juicy beef in the shortest time, at the least possible expense!"

CIDER APPLES,—The Mass. Ploughman says, as for cider apples, it pays to take more pains with them than used to be the case. The editor well recollects the time when it was customary to let all sorts of apples go in together, and if half of them were rotten and the other half full of worms, it was not thought to make any difference. Those who aim to make good cider now-a-days take far more care to select good apples, and he thinks it pays.

GAMBLING AT FAIRS.—If agricultural fairs cannot be conducted on a good, healthy, moral basis, it were far better that they be entirely abolished, and the youth of our rural districts remain in quiet obscurity and away from contaminating influences.—*Indiana Farmer.*

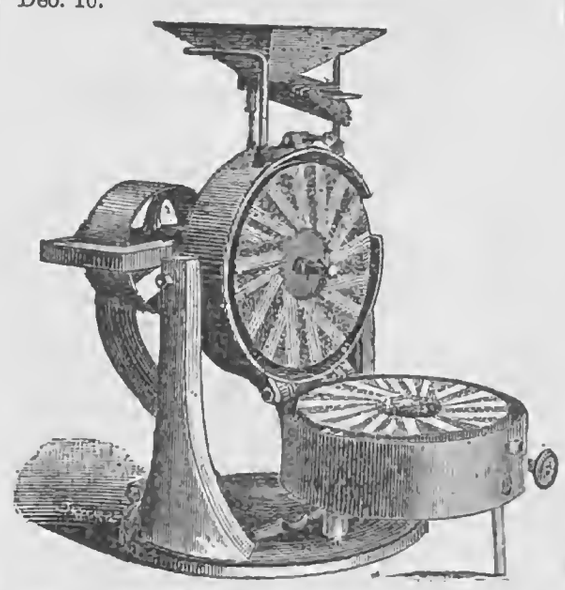
HOW TO TELL.—By six qnalities may a fool be known, says the Journal of Health: Anger without cause, speed without profit, change without motive, inquiry without an object, putting trust in a strangor, and wanting capacity to discriminate between a friend and a foe.

CURE FOR HOG CHOLERA.—Dutch papers say that vigorous rubbing in mustard on the first appearance of the disease, will curo hog-cholera.

CATALOGUES, &c., RECEIVED.

PRICE-LIST of Franklin Squaro Nurseries, New Lisbon, Ohio. H. Guy, Prop'r. Fruit treos.

ILLINOIS STATE HORTICULTURAL SOCIETY—Twenty-Third Annual Meeting, Springfield, Dec. 10.



NEW CONVERTIBLE MILL.

LIST AND AWARDS by the New Jersey State Agricultural Society at the twentieth annual exhibition at Waverly.

HANDSOME LITHOGRAPH of Edward L. Coy's Ayrshire Stock Farm and Seed Gardens, West Hebron, Washington Co., N. Y.

HOW TO DESTROY INSECTS on Plants and Flowers in the garden and house. Published by H. T. Williams, N. Y. Price 30 cents.

THIRTEENTH ANNUAL MEETING of the Ohio State Hort. Society, to be held at Dayton, Dec. 4th to 6th. M. B. Bateham, Sec'y. Excellent topics are selected for discussion.

DESCRIPTIVE Catalogue of Fruit Trees and Ornamental Plants grown and for sale at Shinn's Nurseries, Niles California. Shinn & Co., Proprietors. Colored plate of Japan Persimmon.

PAMPHLET.—Discussion on Hortionltural Education in Michigan and Experimental horticulture at the Agricultural College at the June meeting of the Michigan State Pomological Society.

ILLUSTRATED CATALOGUE of Bronze Turkeys, Pekin Ducks, and Light Brahmas, owned by Chas. H. Mattocks, Riverside Farm, East Baldwin, Me. Also, Illustrated Catalogue of Berkshire Swine and Cotswold Sheep on the same farm.

THE MICHIGAN HOMESTEAD.—This is the first number of a new agricultural paper issued at Detroit, Michigan, by J. P. Thompson, Ex-Secretary of the State Agricultural Society, and also Ex-Secretary of the State Pomological Society. One number only is to be issued in November; another in December; and on the 2d of January the regular weekly publication commences. From the first number of a journal little can be learnt of its permanent character, except its general appearance. This contains 36 columns, on large paper, and promises fairly. We heartily wish this new venture in agricultural literature all the success it may deserve.

THE NEW BEE-KEEPER'S TEXT BOOK by A. J., King, editor of the Bee-keeper's Magazine. The foundation of this is a thorough revision of the well-known Text Book by N. H. and H. A. King. Much new matter has been added, however, as shown by the fact that while the old Text Book contained only 140 pages, the new one runs up to 229. Many handsome illustrations have also been added to those in the former work, and all discoveries down to to-day in the science and practice of bee-keeping, are clearly detailed. Nor has the present work been improved by merely adding fresh matter, for the old one has been carefully pruned, and only that which experience has proved to be good, has been retained. We do not know any way in which the novice or adept in apiculture could more profitably invest one dollar, than in purchasing this handsome, cloth-bonnd volume.

Industrial Implements.

A NEW CONVERTIBLE MILL.

THIS mill is a novol, complote, inexpensive piece of mechanism that is very useful to farmers because it grinds equally well cement, tobacco, bone-dust, salt, feed, or re-grinds bran, coarse flour or anything of the kind.

It is convertible because it may be made to assnme a horizontal or vertioal position in a few minutes' time, at no expense of money, and without requiring mechanical skill on the part of the operator. It is operated by steam-, wind-, water-, or horse-power. Its construotion is very simple. The buhrs run in a cast-iron oase, and the entire rnnning machinery is supported by a strong iron frame, all cast in one piece. It requires no bolts or screws to keep it in position, except such as fasten its frame to a firm foundation.

Whenever it becomes necessary to pick the stones the millor requires no crane, tackle or other assistance to put them in perfect position for this process. He has merely to remove a nut, a bolt or two, and the stones turn on their trunnions and open as simply and as easily as a large well-bound ledger in the hands of a competent bookkeeper. Without any extraneous props or machinery the stones are at once thus placed in position to be picked and prepared for fresh work. In this process neither the journals, spindle, nor any other part that requires oil, is exposed to dnst, dirt or grit. Indeed all these parts are so cased and covered, running in self-oiling boxes, that there is no waste of oil, and tho bearings are such that friction is reduced to a minimum.

The face of the stationary stone can be adjusted actnally parallel from the outside of the casing, and tho means of always keeping the faces of the stones perfectly parallel have never yet been excelled or equaled. In opening them for picking or in readjusting them, none of the principal parts of the mill are in any mannor deranged or affected so as to require the skill or labor of the machinist to put them in perfect running ordor again.

No extra skill is required to set it up or to keep it in running order, and when in operation but little friction is generated, because the machinery is so true to its adjustment; which insures durability and long wear.

Our illnstration shows this mill, which is made by Messrs. Oglesby & Co., Chicago, Ill., who are scrupnlously careful to maintain its excellencies by using only the best materials in its manufacture.

THE MULAY SAW-MILL.

IT has often been a subject of speculation with us why farmers do not more generally evince that many-sidedness of brain not uncommon among successful business men? That they are not strangers to it is domonstrated by the fact that they do show it if they change their circumstances and calling. It is only as farmers that they have an eye single to agriculture.

The opportunities for engrafting small commercial enterprises on the business proper of the farm are plentiful and may be made to supplement gains in good, or repair losses in bad seasons.

The large sales of farm steam-engines reported by manufacturers of them, seem to point to the very general introduction of this motor. To yield a fair return on the investment the engine should not remain idle for lengthy periods, and in calling attention to a good use for the engine we may, perhaps, be imparting a seasonable hint. There are many localities where timber exists, which, though it might not justify the erection of a very extensive saw-mill, might yet be made to yield a very generous profit, if it could be made into lumber without too great an expenditure for machinery and help. In these regions, a mill of moderate capacity, requiring light power and few hands, might not only be made profitable to the owner but would be a source of great accommodation to the inhabitants of such localities. Almost any neighborhood would supply the sawyer with logs, to be sawed on shares, or at a stipulated price per thousand feet, and there would therefore be no investment required beyond the mere mill and power.

We illustrate a small saw-mill operated by a farm-engine. Where an engine is owned by a neighbor this Mulay mill would be a good investment to be worked on shares, or if the engine is already a part of the farm equipment, the mill will prove the means of profitably employing the engine after tho close of the thrashing season.

The main frame of the mill is made entirely of iron, cast in one piece, and is faced off true, to form proper bearings for the sides, track and other attachments; all the working parts are attached to this frame, and are therefore always in proper position for either working or transportation. The head blocks are similar to those used upon circular saw-mills, and are provided with suitable arrangements holding the log until it is all cut up, leaving an inch board upon tho knee. The thickness of tho plank is regulated by moving the pin in the radius iron, each hole making a variation of one-sixteenth inch. The knees move forward simultaneously by a lever. The carriage is made in sections so as to be conveniently handled, and tho track is fastened together with wooden keys, making the whole mill complete in itself.

Tho capacity of the mill is from one thonsand eight hundred to four thousand feet per day, varying with the size and quality of logs.

The mill is made by Chandler & Taylor, Indianapolis, Ind., who will supply further information.

SOAPSTONE AS A LUBRICANT.

A WRITER in one of the foreign technical journals expresses a decided preference for soapstone powder, in the form of dust, as a lubricant for the axles of machines. For this purpose it is first reduced to very fine powder, then washed to remove all gritty particles, then steeped for a short period in dilute muriatic acid, in which it is stirred until all the particles of iron which it contains are dissolved. The powder is then washed in pure water to remove all traces of acid, after which it is dried, and is the purified steatite powder used for lubrication. It is not used alone, but is mixed with oils and fats, in the proportion of abont 35 per cent. of tho powder added to paraffine, rape, or other oil—or, the powder may be mixed with any other of the soapy compounds employed in the lubrication of heavy machinery.—*Imp. Mch. Review.*

ANOTHER PARIS EXHIBITION.

IT is stated with some authority that an international exhibition of machinery will be held next year in the Palais de l'Industrie, Paris. The space available for this purpose is very considerable, but it will, nevertheless, be so circumscribed that a rigorous selection must be made, and it is said that nothing will be admitted which is not nearly perfect of its kind.

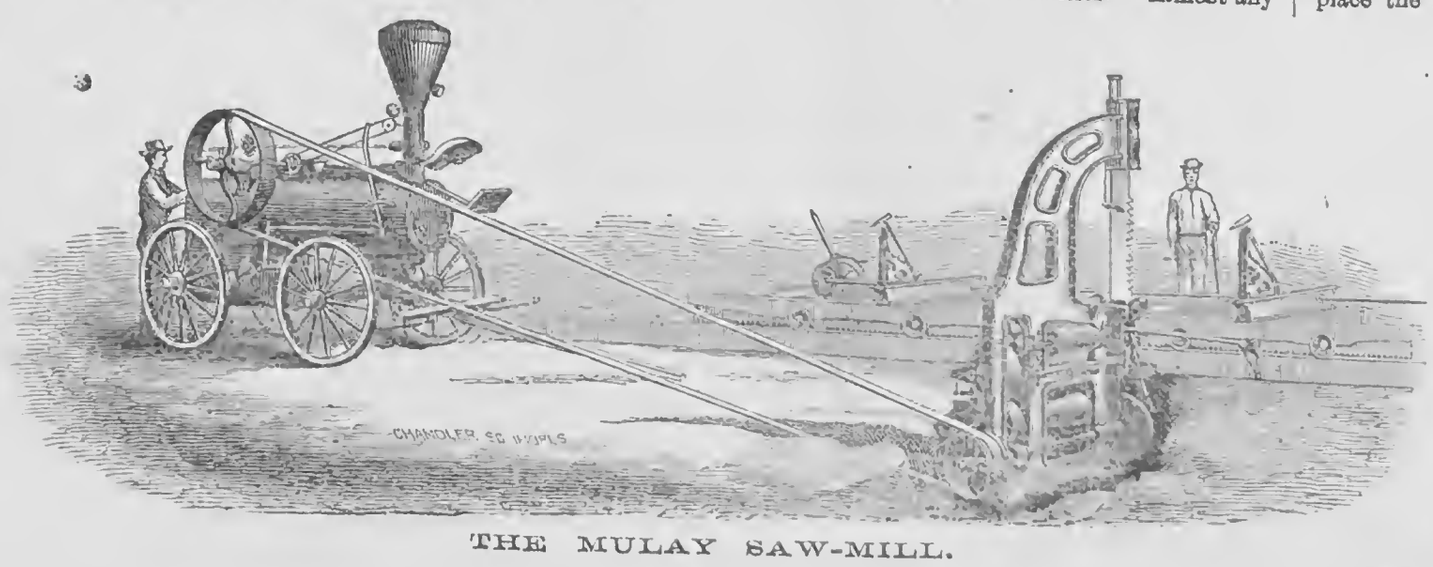
THE people of Australia have an idea that a machine that shall be at once a combined reaper, binder, thrasher and cleaner will abont meet requirements, and the Government of Australia offers a bonus of $20,000 for snch a machine. It is to be sanctioned by five judges, who will consider strength, durability, draft, cost and effectiveness of work. The trials to take place in December, 1879, and the first of that month is the limit fixed for notice of intention to compete. Here is a chance for our inventors.

Armington & Sims, of Lawrence, Mass.,—lately of the late J. C. Hoadly Co.,—have opened very extensive and complete machine shops, in which their new farm engine, the "Lawrence," is being built in numbers, to fill orders already received. Their system of direct dealing with the consumer at the lowest cash price is meeting favor and success. In the near future we may have occasion to briefly enumerate the points of excellence possessed by this steamer.

THE Russian agriculturists will assemble at Odessa, Dec. 5–20, to take part in their fifth great general congress. At the same time and place the Agricultural Society of South Russia will improve the occasion to celebrate its fiftieth anniversary. Here is an opportunity for our implement dealers to be represented through their agents, at the most important meeting of its kind held in Russia.

THE Challenge Mill Co., of Batavia, Ill., has just filled a foreign order of importance, having shipped to Honolulu, Sandwich Islands, one 14 foot, two 12 foot, and one nine foot "Nichols" windmills; also, one 10-foot mill of the same description, to New Zealand.

CENTRAL ASIA should be looked after by our implement trade. There is to be a grand industrial exhibition at Tashkend, and agricultural implements are in special demand.



THE MULAY SAW-MILL.

Dairy Husbandry.

THE INTERNATIONAL FAIR—AN OPPORTUNITY FOR CHEESE-MAKERS.

PROFESSOR L. B. ARNOLD.

AMERICAN dairymen have a just right to feel proud of the merit accorded to American and Canadian cheese at the recent Dairy Fair in London. To have our cheese declared superior to English cheese by English judges, a verdict confirmed by the opinion of the English press, when placed in competition on so large a scale as at the London Show, is to establish, beyond dispute, a high comparative merit for our cheese, even if, as some of the English journals claim, the English cheese fell behind by default. But American cheese-makers should not become so elated by this success as to lose sight of the star of progress which has been their guide in marching to the high position now accorded them. Our finest cheese is some distance from perfection. It is capable of being improved and made more desirable. The best cheese-makers I meet with, realize this most fully, and are the most ardent and persistent in their efforts to advance still further the quality of their goods. With their modest claims and the acknowledged imperfections in their best productions, what must be the light in which the great bulk of factory cheese appears to them. It cannot be otherwise than very faulty, and it is, in fact, so. It is a fact generally recognized by consumers, both at home and abroad, and by dealers and by all classes of experts, that, while a few factories make cheese of very fine quality, the great bulk of American and Canadian cheese does not come up to the wants of the trade, and that it goes at an inferior price and at a loss to all concerned. With the numerous dairy organizations and their frequent conventions for discussions, which are ample and full, and with the large space in agricultural journals devoted to the dairy interest, it seems somewhat strange that such wide differences should exist as are everywhere seen, and often in factories near each other.

But there is a plain cause for this, and it lies chiefly in the minds of the cheese-makers. This remark does not mean that the army of cheese-makers in this country have no desire to improve. There is no class of men connected with the dairy, more earnest and anxious to do the best they possibly can in their art, and to at least turn out as good a product as their neighbors. They are indeed sensitive in regard to the reputation which their cheese shall have, as determined by the test of sales. The point is, they have not in their mind's eye just what qualities are desired, and they have no adequate means of gaining this important information. Very few see much cheese besides their own. Samples of perfect cheese, or cheese of highest merit, seldom fall under their vision, if it happens not to be found in their own factories. Men who know little of cheese and less of cheese-making, tell them their cheese is not right; that they should put on more acid, or perhaps not so much; or that the salting is too little or too great; or the scalding is too low or too high, etc., etc., all of which only tends to confusion if any regard is paid to the advice of such advisers. Directions from persons not conversant with an art, however well intended, will never carry that art to its highest perfection, and are generally worse than useless.

Cheese-makers who desire to get a clear idea of the goods most desired, can best acquire such a knowledge by personal inspection of samples of such cheese, and by examining their characteristics carefully with the aid of all the senses they can bring to bear upon them—sight, touch, taste and smell. As the cheeses which draw the highest prizes at the great International Dairy Fair to be held in New York during the first week in December next, are to be be donated for public inspection, there will be the best opportunity for studying the peculiarities of first-class cheese, ever offered to the manufacturers of the country. That the occasion will bring together a large collection of cheeses of superior merit, is certain, and the privilege of testing the best of such a collection will be a rare advantage—such an one as has never been enjoyed by the cheese-makers of the country, and the opportunity ought not to be allowed to pass without their availing themselves of its advantages. Cheeses from different parts of the United States, Canada and Europe will be there in greater variety than has ever been seen in the States before, making the entertainment novel as well as profitable. It is to be hoped that no manufacturer who can possibly do so, will fail to give a few days' time for studying the lessons this great show will afford him.

A MILK RECORD.

MR. GEORGE HUTCHINSON of Chautauqua Co., N. Y., an old friend of the RURAL engaged in the dairy business, spurred on by the example of Mr. Wickham's record of the milk yield of his Jerseys, in RURAL of Nov. 16, sends us the record of two of his cows—the imported Holstein cow, Mary (Holstein Herd Book, Vol. 2, No. 187), and a native cow of no particular breed:

MARY dropped her calf April 15.

Gave in May	1,542	lbs. of milk.
" June	1,456	" "
" July	1,247	" "
" August	1,075	" "
" September	822	" "
" October	610	" "
Total in six months	6,792	" "

The native cow dropped her calf May 10.

Gave in 16 days of May	765	lbs. of milk.
" June	1,396	" "
" July	1,200	" "
" August	935	" "
" September	804	" "
" October	650	" "
Amount in five months, sixteen days	5,750	" "

Mr. H. says that for amount of milk other breeds will beat the Jerseys, but then it is for the quality rather than for the quantity of their milk that this little breed has become famous. He thinks it would be a good thing for dairymen generally, and all interested in deep-milking cows, to record carefully and publish the milk yields of exceptionally good animals. We also think that such a measure would tend to beget a healthful spirit of emulation with regard to the possession of the best kinds of animals, and a closer regard to the kind of care, feed and general attention which would be most conducive to the largest production of milk, and consequently to the best condition of the milk-producers.

Everywhere.

CALIFORNIA NOTES.

BY "SPECS."

THE VINTAGE IN CALIFORNIA.

THE vintage in California is nearly over. All the foreign sorts of grapes have been worked, and the season is winding up with the Missions. Few RURAL readers have ever seen a wine-press, or cellar. Well, the process of wine-making does not much differ from thrashing grain. De Turks' winery is crushing forty tons of grapes daily, at Santa Rosa. It requires two men with scoop shovels to feed the machine, which is something like the cylinder of a thrasher. The juice pours out into the receiving tub below, in the form of a stream as large as a man's wrist. Thence it is pumped into great tanks, holding, usually, two thousand gallons. The husks are placed in other tanks where they ferment. There is a very decided smell of sour mash about the establishment. But each night the place is scrubbed and washed as clean as water can make it. There is no truth whatever in Harper's Weekly's cartoon, which represents Chinamen treading grapes. That process would be as absurd as to attempt the thrashing of our vast crop of wheat with the old-fashioned flail.

There was a fire at Lachman & Co.'s winery at Sacramento recently. Some small buildings were destroyed because the engines could not get water, and the main building caught fire. It was saved by a happy thought. Somebody with lucky presence of mind, ordered the firemen to drop their supply pipe into a five-thousand-gallon tank of wine, when the flames were easily extinguished. Here, where grapes are rated by car-loads and ship-loads, wine is not very precious. That tankful was only worth, on the spot, one thousand dollars.

REDWOODS.

Our redwood trees are fast going the way of the earth. Only a few days since some vandals cut a Sequoia 27 feet across the stump, intending to travel with a section for exhibition. Sawmills, the axe of the woodman, and forest fires are reducing the limits of these big woods. There are no others on the globe, and the annual destruction of these is estimated at six hundred millions of feet. That big tree showed 4,860 rings of annular growth. It was eight hundred years old when the great pyramid was built, and would have made a huge battering ram for the Greeks at the seige of Troy. I own five hundred acres of monster Redwoods, which posterity can safely count on, unless some of my descendants got stricken with a love for fast horses, or go to gambling in mining shares. One standing dead tree burned down to the roots, leaving a hole ten feet in diameter and fifteen feet deep, to the water, showing the slow accumulation of silt and soil for ages after its planting.

California is peculiarly adapted to the business of

GOAT RAISING.

The mohair is in demand even here in San Francisco. Having noticed paragraphs in the newspapers referring to this industry, I may be able to throw a little light on the subject from my own observations and the experience of others engaged in the business. With this object in view I recently talked with S. H. Rendall, of Santa Rosa, a well known goat raiser. He started in 1869, with one hundred common California goats, females, worth one dollar and fifty cents each, and three Angoras, one male and two females. His yearly increase in numbers averaged over 100 per cent., until the breeding reached three-quarters pure, when it declined to about 100. As the flock grew, he sold off his surplus at the rate of five dollars for half-breeds, and ten to twenty dollars for the better sorts.

The wool on half-breeds is short staple, and worthless, except that on males which is worked into mats and robes. Three-quarter-bred fleeces weigh from one and a half to two pounds of low-grade mohair, worth in this market 40 to 60 cents per pound. The fleeces of better bred goats are worth all the way from 60 cents to one dollar a pound. This includes the fifteen-sixteenths and thirty-one thirty-second grades, which are practically as valuable as the pure-bred, though some are not quite as glossy. The length of the staple is from eight to twelve inches.

It is Mr. Rendall's opinion that a flock of 250 Angoras is as profitable as one of 500 Spanish Merino sheep. The advantage in keeping goats is that they are browsing animals, and the most inaccessible mountains and foot hills afford them food when covered, as is common, with chemisal and other scrub growth. There are millions of acres of this kind of government land, unsurveyed, forming free pasturage for all comers. It is valueless for other uses, and never will be sold. Kids and wethers are good food. A two-year-old will weigh, dressed, sixty or seventy pounds. If not shorn, they shed off in February. They are very hardy, and singularly exempt from diseases. Some newly imported have scab, but the climate seems to eradicate it.

I have known this flock several years. They are very little trouble to herd or drive, and will easily make twenty miles a day. The owner lately moved his flock of 500 from Lakeport across the Coast Range, sixty miles to Santa Rosa, in two days and a half. He drove behind in a buggy, and only had the assistance of his shepherd dog. I remember when once descending the mountains through the Squaw Creek Gap, several years ago, encountering this man and his goats. They were miles away from the settlements, in the midst of the wildest and most romantic scenery of the Coast Range. I had started at peep of day from Tyler's. There were a cold, grey sky overhead, and a smooth toll road under foot. The mountain air was fragrant with the perfume of Pines and Laurels, and inspiring with its purity. The road descended rapidly between tall cliffs fringed in places, and overhung with trees. We were skirting around the face of a precipice, opening out into another and deeper canon, where there was a cloud of smoke from a fire far below. Yellow bars of the morning sunshine rested on it, and splashed through the green leaves in the tops of the Live Oaks. Rendall was encamped in the bottom, and the opposite side of the mountain was white with his goats. They had spread out and upwards, feeding a thousand feet aloft, and some of the patriarchs of the flock, with long beards, had climbed to the edge of the dizziest hight and were gravely looking down at us.

They are certainly intelligent animals, and most assuredly care for themselves in providing their own food the whole year around, on this coast, as they are not at all choice in their provender. Sometimes it is grass, at other times they turn to and strip a Scrub Oak of its branches and bark. If nothing else offers, they will cheerfully demolish a thorn-bush or Cactus. They have been seen taking airy walks on the top of the redwood fence after breakfasting on parts of the lower panels.

HOGS.

While on the subject of domestic animals it may be worth while to mention the arrival of half a dozen Magie hogs from Butler county, Ohio, on their way to Australia. They go out by the next steamer. We have some good hogs here. But there are many of the long-legged, long-snouted elm-peelers, half-wild in the hills, such as grew on the frontier when I was a boy. Who that does not remember how willing one of the slab-sided, razor-backed brutes always was to make a race with the boy and horse overtaking him in the road? Though there might be plenty of room to turn out, the gaunt creature seemed to be lying in wait for some boy on horseback, when he would raise his bristles, give a loud "booh," and starting sidewise, like a ship falling off before the wind, was off down the road in a cloud of dust, scorning to turn out under a quarter of a mile, while the pursuer, with whoop and hallo, and hat brim flapping, and bare legs urging on the old plow-horse, always got left behind.

San Francisco, Nov. 4, 1878.

NOTES FROM CHAUTAUQUA CO., N. Y.

THE past season in Chautauqua has been one of abundant harvests in nearly all the various products of farm industry, and the Lord has seemed to smile upon the pathway of the farmer another season.

The hay crop has been more than an average one; butter has brought as high a price as could be expected, considering the low price of nearly everything that the farmer has to purchase for his use; cheese averaged about medium prices; eggs brought low prices, and as a consequence were all the more used in the farmer's family; corn was more than an average crop; apples have not been so plentiful as last season; oats were a very good crop in some sections; potatoes turned out small and there were but a few of them. In fact, nearly every crop raised on the farm was good and some larger than for years before, save potatoes and fruit.

Thus the farmer has little or no reason to complain of the quantity of his products or of the prices they brought in market; and as the day for Thanksgiving and prayer draws nigh, let all lift up their hearts in praise to Almighty God for his loving kindness and bountiful mercies!

Chautauqua county has generally taken the lead in the art of producing fine butter; but we have this season heard for the first time that some commission merchants in New York City say that of late they do not get hold of so fine an article of "Chautauqua gilt-edge" as they used to. Perhaps the reason for this is that some dairymen are trying to produce a larger quantity and at the same time an article of the second grade. It is to be hoped that no Chautauqua dairyman will do this, but that Chautauqua County will ever "hold her own" in the art of fine butter making.

Some people, after having "gone West," and remained a few years, come back fully satisfied that they can live as cheaply and as easily in "old Chautauqua" as they can elsewhere. Fruit growing could be made a valuable branch of industry here, if more would take hold of the matter. Apples, Pears, Plums and Strawberries (and Peaches in some parts of the county) grow as readily here, and with as little care, as in any of the counties of New York State. Now that nearly all kinds of nursery stock can be purchased so cheaply, we hope to see more interest taken in the matter. The raising of more fine poultry and blooded stock could also be made a source of pleasure and profit to the enterprising agriculturist. M. S. DORMAN.

CROP NOTES FROM NORTHEASTERN NEW YORK.

POTATOES.—The most important crop and the one most remunerative to the farmers in this section, is the potato crop. Washington County annually yields as many as, if not more, of this valuable esculent, than any county in the State, although Saratoga, Warren and Rensselaer may also be counted among the great potato-growing counties of the State. Most of our farmers had their potatoes dug by the 20th of October, but some were dug later. The crop this year was about up to the average, though not as good as it was last year. Some pieces yielded 100 bushels to the acre, but this was above the average.

CORN is with us this year a good crop, and is about all husked. There was a good growth of fodder, and it eared well.

APPLES are a more abundant crop than for a number of years, although they fell off badly and show signs of early decay.

HAY is made an important crop by some of our farmers, who bale and ship it to the city.

G. F. T.

RURAL SPECIAL REPORTS.

ST. MARKS, Florida, Nov. 17.

THE main products of this portion of the State are corn, peas, pindars, potatoes, sugar-cane, cotton and oats. Crops are good this year; cane unusually so. It is now being converted into sugar and syrup, and it is a merry-making time for everybody. Corn has been housed and hogs have been brought up from the hummocks and turned into the pindar fields to fatten. In some instances they are almost fat enough for killing when driven from the hummocks, not having cost the owner anything except the trouble of an occasional count. Potatoes are still growing. Caterpillars have done very little damage to cotton this year; the yield is generally seven to eight hundred pounds of seed cotton per acre. Rice is grown to a limited extent; it yields fifty bushels of rough rice per acre. Fruit culture is receiving more attention here than formerly. I have quite a variety of fruits growing, but my Grapes are my special pets. G. S. W.

HENRICO CO., Va, Nov. 24.

THE wheat crop was light for this section; yielding, on an average, only 10 bushels per acre. Winter oats were a fair crop; spring oats, light. Corn is what the native Southern would call "tolerable;" the ears are short owing to a severe drought through August, September and a part of October. On that account also wheat sowing has been late: but, I think, there is a larger area sown this year than last. Potatoes were an extra crop, and when sold at the time the crop was gathered, in July, they were worth only from 75c to $1.00 per barrel. Late potatoes are very small; sweet potatoes are a good crop. Richmond, our market, is, I think, as good a one as New York. Wheat is worth from 75c to $1 per bushel; oats, 35c. to 40c; Irish potatoes, $1.50 to $2 per barrel; sweet potatoes, $1 per barrel; corn 50c per bushel; pork, dressed, $3.50 to $4 per hundred; cows are worth $30; horses $50 to $100. W. B. H.

ST. JOSEPH, Mich., Nov. 14, 1878.

WE have had splendid weather for fall work and our farmers have improved it. We had no frost until the end of October. That snow storm mentioned some time back by a RURAL correspondent from Jackson, in this State, did not reach us. Wheat was a light crop. A good breadth of it has been sown this fall and it is looking well. Corn was an excellent crop and it has been mostly secured in good shape. Of small fruits we had an abundance, except on low ground where the May frosts hurt them. Peaches we have discontinued raising for the present owing to the Yellows. Apples are abundant, but prices range so low that people hardly know what to do with them—although they have managed to get rid of most of them in some way. Grapes have been a light crop, owing to May frosts. M. W.

ROSELLE, N. J., Nov. 24th, 1878.

MR. MARVIN wants us to tell about our Grapes; so I would say that the Rogers's No. 1 and 53 seem scalded and the 44 mildewed badly. Of two No. 15 vines, standing side by side, and in all respects equal, one failed to ripen well. The Dianas rotted and the Marthas were small. The RURAL does not think much of the Concord, but they do better than anything else around here, and with them we are always sure of a crop.

Some of my pear trees which were apparently all right six weeks ago, now show the blight badly in the body of the tree. I concur with Col. Curtis in hoping that we have seen the end of it for thirty years to come, but this does not look very much like a realization of that hope. J. R.

FLORENCE, Benton Co., Ia., Nov, 18.

WE are having splendid weather, warm and bright. The ground has not been frozen any this fall. Many farmers have finished gathering corn and are now plowing. All kinds of crops were good except potatoes and wheat. Prices are low: wheat, 50c. per bushel; oats, 15c.; corn, 12½c.; potatoes, 25c.; apples from 60c. to 75c. The highest price for hogs is $2 35 per cwt.; butter from 8c. to 12½c. per lb. Rather a poor prospect, isn't it, for farmers who are in debt? S. T. S.

MARSHALLTOWN, Marshall Co., Ia., Nov. 9th.

WE are having splendid weather here—real Indian summer, since the first of this month. October was very changeable—very hot and very cold. The farmers are now in the midst of corn harvest; the quality of the grain is good, but the yield is not what appearance indicated, as the ears are rather small. Corn now sells for 18c.; wheat, 30 to 55c.; oats, 10c.; barley, 20 to 30c.; rye, 30c.; potatoes, 30c.; butter, 12 to 15c.; eggs, 15c: hogs, $2 30 to $2.50 per cwt.; cows are from $2 50 to $3 50. N. L. C.

IOLA, Allen Co., Kans., Nov. 14, 1878.

IT makes me home-sick to read about luscious raspberries and strawberries in the RURAL. The native strawberries here have been destroyed by fire, and the only raspberries and blackberries to be seen are a few that folks have bought. It is a fine country, nevertheless, for small fruits. We have hitherto had only three or four light frosts this season. H. M. S.

GRANVILLE, Washington Co., N. Y., Nov. 12.

THE first snow to whiten the ground fell on the 8th inst. We have been having cold weather for a week, but are hoping for more warm weather yet. Fall work is nearly all done, except that now and then there is a little corn to husk.

Potatoes are selling for 70c. per bushel; corn, 60c.; oats, 40c.; apples, $1 per bbl.; butter, 20c., cheese, 8@9c. G. F. T.

STARKE Co., Florida, Nov 11, 1878.

IN this part of the State crops have been almost a failure, especially with newcomers, owing principally to the excessive rains, but we hope for much better times the coming season. Newcomers are still arriving and settling fast all around us. Last summer was the wettest known here in 40 or 50 years. D. D.

BELLE PLAIN, Ia., Nov. 20, 1878.

WHEAT hereabouts was a poor crop; only from two to fourteen bushels per acre; nearly all marketed now for from 45 to 55c. Corn was a light crop, yet, sweet and ripe, it is only worth 16c. Hogs are worth 2½c., and at that price there is plenty of them. H. B.

HERNDON, Fairfax Co., Va., Nov. 17, 1878.

WE have had a very fine, warm fall. Crops of all kinds have been good. Corn never has been better hereabouts. Our farmers are improving their worn-out lands very fast. S. K.

DANVERS, McLean Co., Ill., Nov. 18, 1878.

WEATHER very fine; crops moderately good; corn very solid; produce low; times rather hard; money scarce. T. M'C.

EAST HAMILTON, N. Y., Nov. 15, 1878.

I RAISED 40 bushels per acre of Clawson wheat during the past season. B. C. A.

The Querist.

ANSWERS TO CORRESPONDENTS.

Salt as a Fertilizer on Sandy Soil.

D. D. N., Lawton, Mich., asks, whether an application of salt to sandy soil would be beneficial.

ANS.—From long before the Christian Era salt has been used as a fertilizer, yet there are not many kinds of fertilizers the precise effects of which are still more in dispute. So much depends on the constituents of the soils on which it is used, and on the degree of availability as plant food of those constituents, and also upon the crops to be grown on them, that experiment is the only test at all reliable as regards its value in each case. In many cases it has been found very beneficial, especially upon cereal crops, particularly in inland districts, while in other cases its action has been neutral or injurious. On looking over our record of experiments in this connection, we find that Mr. C. Johnson found salt to answer extremely well on light, gravelly soil at Great Totham, Essex, England. The produce of wheat per acre on a part of his land that had not been manured for four years was found to be, without salt 17 bushels, 26 pounds; with 5 bushels of salt per acre, 26 bushels 12 pounds. Of barley, the land yielded without salt 30 bushels per acre; with 16 bushels of salt to the acre, it gave 51 bushels; for oats, no salt, 51 bushels; with three cwt. of salt per acre, 53 bushels. An article giving a condensed account of the best experience of salt as a fertilizer, was published in this department of the RURAL on April 20 last, page 250.

Thoroughbreds and Grades.

S. Cary, Barton, N. Y., asks 1, what is meant by a thoroughbred animal; 2, what by a grade; 3, what are the requirements to have animals registered in the Herd Books.

ANS.—1. A thoroughbred animal is one whose pedigree can be traced back through the Herd Books of the breed to which it may belong, thus proving that it possesses the distinctive characteristics of that breed so firmly as to be able to transmit them with certainty to its pure-bred offspring and, to a great extent, when crossed either with another pure-bred or with a scrub animal of no particular breed.

2. The result of such a cross is a "grade" which takes its name from the breed to which its sire belongs; for instance, the offspring of a Short-horn bull and a "native" cow, is a Short-horn grade.

3. The conditions of entry to the Herd Books of the different breeds of cattle and of other animals, vary considerably, so that unless the particular breed is mentioned, it would be impossible to give detailed information. In all cases, however, the rules are designed to exclude from the Herd Books all but thoroughbred animals.

Large Yield of Hungarian-grass Seed.

I. H. Spofford of Genesee Co., N. Y., asks how much is considered a good yield for Hungarian grass. He thrashed from one and a half acre fifty-two bushels of seed, which he considers an enormous yield.

ANS.—Probably the average yield of seed to the acre of this grass would be about from 23 to 25 bushels, although a yield of from 25 to 30 bushels is by no means uncommon. From our own observation and the records in this connection, we are disposed to consider our friend's yield of 31⅗ bushels per acre an unusually large one.

Keeping Celery in Winter.

Mrs. W. H. C., Springboro, Ohio, asks how Celery can be kept through the cold winter weather.

ANS.—We have already given instructions in recent numbers of RURAL. Briefly, trenches should be dug in dry places, the celery placed perpendicularly therein and covered with soil to the tops. Over the ridge place boards at such an angle as to shed rain, and then cover with hay, straw or any other like material. One end is left open so that the celery can be taken out as needed. Small quantities may be preserved in the cellar in deep boxes, the roots being covered with moist soil.

When and How to Plant Seeds of Rural Free Seed Distribution.

M. S. F., Kingston, asks whether it would be better to plant seeds from RURAL Free Seed Distribution when they come, or wait until spring; in the open ground, or in boxes.

ANS.—The hardy shrub seeds, may be planted at once in boxes or pots with advantage, but they may all be sown in the open ground in the spring.

Miscellaneous.

S. E. Richardson, Matthews Co., Va., referring to a new invention for applying paper bottoms to ships, described in RURAL of Aug. 17th, asks what composition would fasten the *papier-mache* to the hulls, and whether common roofing felt would not do as a coating for ordinary sail boats.

ANS.—The account referred to was an extract from the columns of an English paper, which gave no details of the adhesive composition, which is probably either a chemical secret or covered by a patent. The object of coating vessels with copper, copper paint, or *papier-mache* is to preserve the timber from injury by boring marine animals or to prevent the vessel's speed from being slackened by the accumulation of barnacles and other pests on her bottom. Roofing felt would afford little resistance to animals that readily honeycomb hackmatack or oak, would afford a comfortable resting-place for the barnacle family, and, moreover, its rough surface would materially increase the friction of the water on the boat's bottom and consequently lessen her speed.

L. P., Danville, Pa., asks whether the Cahoon broadcast, Hand seed-sower is of practical value, and whether it would pay a farmer having from 25 to 50 acres of small grain to sow by hand, to purchase one of them, not being able to get a drill.

ANS.—The Cahoon Broadcast Hand-sower is a good implement, and does its work satisfactorily, but as there is a marked difference between broadcasting and drilling, we cannot say which it would pay you best to buy. If you think it cheaper to broadcast, the Cahoon Sower is what you want. We send you our Premium List by mail, and in it you will find both the Cahoon Seed-sower, and the Matthews' drill offered as premiums. You could procure either by sending us a club, and have your choice whithout paying anything for either.

Mrs. D. C. H., Homer, N. Y., asks 1. the name of a fern a description of which she gives. 2. The name of a Cactus, a flower which she sends. 3. Are Deutzia crenata, and Wistaria hardy for out-of-door culture as far North as central New York.

ANS.—(1). We cannot tell the name of the plant from the description given.

(2). Cereus flagelliformis.

(3). Yes, Epiphyllum truncatum. Deutzia is perfectly hardy. The Wistaria will suffer unless covered up for winter.

M. B. R., New Smyra, Fla., asks: 1. where "Pearl" millet seed can be procured. 2. Also that of common millet.

ANS.—1. Through the RURAL Free Seed Distribution. 2. From any prominent seedsman.

D. J. R., Sardis, Pa., asks the name of the plant a leaf of which he incloses.

ANS.—It seems to be Mesembryanthemum cordifolium variegatum, and a very pretty plant it is for vases, baskets or rockeries.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, NOVEMBER 23D:

M. B. R.—E. M. C.—V. D. C.—W. J. F.—G. F. T.—G. H., such practical notes always welcome—C. H. S.—H. S.—R. L. H.—E. B.—R G.—D. K., Jr.—W. G. W., Sr.—B.—N. T. C.—D. S. M.—W. H. I.—D. E. S.—H. H. R.—L. S. H.—S. R. M.—J. D.—J. H.—H. L. K.—Rose Geranium—F. S. W.—W. H. Y.—F. A. C. M.—W. A. H.—M. W.—W. W. R.—G. D. N.—W. H. Y—L. B. S.—W. B. Y.—S. R. M.—D. W.—A. L. J.—W. H. W.—M. E. A.—E.—H. H.—F. A. A.—R. L.

Various.

MANDRAKE.

J. STAUFFER.

THE May Apple—Podophyllum peltatum—has active purgative properties, and was used among the Indians as a cathartic before the country was settled by the whites. It has different local names, such as Mandrake, "Wild lemon," "Raccoon-berry," "Indian apple," etc. This is another instance of the necessity of a universal term for a specific thing, in medicine at least.

The Atropa Mandragora or Mandragora officinalis, however, is the real Mandrake and has been known by that name for ages, as a powerful narcotic poison. But this latter grows in rich soil and is a native of the countries bordering on the Mediterranean. It is mentioned by old authors, as Hippocrates, Galen and Celsus, as having some wonderful powers, and is said to have been the drug which Hannibal infused in the wine left in his camp, when he feigned a retreat, and thus rendered his enemies who partook of it, unable to withstand his subsequent attack. Its use, however, is almost abandoned in Medicine.

Many were the superstitious notions about this plant that prevailed in early times. That half-doctor and magician, Albertus Magnus, asserted that the most potent roots grow under a gibbet. Again, it is stated that it must be collected with magic rites; a circle was traced three times around it with a naked sword, and as the person who plucked it from the ground was considered in danger of his life, a cord was attached to a dog and fastened to the plant to tear it out. The dog was beaten till, by his effort to escape, the thing was accomplished; the result was—the death of the dog. Griffith, in his Medical Botany, mentions this. He also states that it was said to be eminently aphrodisiac, and was much used for the purpose of exciting love, hence the name of Mandragontis bestowed on Venus.

In our Bible we find, Genesis xxx chapter, 14th verse:—"And Reuben went in the days of wheat-harvest and found mandrakes in the field, and brought them unto his mother Leah. Then Rachel said to Leah, Give me, I pray thee, of thy son's mandrakes. And she said unto her, Is it a small matter that thou has taken my husband? and wouldest thou take away my son's mandrakes also?" Again, in the Songs of Solomon, vii., verse 13, the word occurs:—"The mandrakes give a smell, and at our gates are all manner of pleasant fruits, new and old, which I have laid up for thee, O my beloved." Now there is no pleasant smell connected with the mandrake or mandragora, which is rather nauseous and offensive. Scholars have discussed the matter, and think different plants are meant by the word translated mandrake. The Hebrew word is Dudaim, from Dadim, breasts, or Dodin, friends, twins, to signify something double, as the mandrake root, which is bifurcate and used to promote love. But in the Talmud it is also called Siglin, which was referred to as a Jasmine or Lily, and hence it must have a pleasant smell. Perhaps, after all, a fruit of the Plantain or Banana may have been meant. This latter idea, however, hardly meets the first case, in Genesis, nor does it signify much whether it was mentioned at all; only we find it a very ancient name—in use before the May Apple of America was discovered or even the country known.

The fact is, the charlatans of our later superstitious ages, before employing the mandragora root, gave it a human form either by growing it in a mold or by cutting it into that shape after it became dry, and pretended this to be its natural manner of growth—hence it was also known among the ancients by the name of Anthropomorphas. We find in the old botanical works figures of this plant, true in leaf and flower, while their embellished roots present a male or female form, which were sold to propitiate the birth of a son or daughter, as might be desired.

Adanson, in his work, has the following curious passage:—"Every plant, although without sensation, being animate, possesses a soul, which is not solo nor fixed in any part, but equally spread through all, and divisible, since every one of its integrant parts which participate in a common life, possesses in itself an isolated vitality, and because, when separated and detached from them, it grows and fructifies, finally enjoying all the properties and faculties which it possessed before its separation." I mention this here as an old phase of vegetable psychology, upheld by two of the most celebrated savants of studious Germany—von Martius and Theodore Fechner—who considered a plant a sentient being, endowed with an individual soul. But such fanciful notions are exploded; modern scientists consider even animals, including man, as being only simple automatons, set going and accomplishing their round by a blind material force. They set aside all spirituality or influence as coming from or under certain creative laws founded in wisdom to accomplish certain ends. Nevertheless, all naturalists who have treated the question seriously as physiologists, maintain that plants enjoy quite as active a life as many animals (for instance, compare the Mimosa or "Sensitive plant" with an oyster), and they also possess traces of sensibility and contractility.

Lancaster, Pa., Oct. 10, 1878.

HAND LABOR AND MACHINERY.

A VALUED correspondent writes us: "The writer of the article Hand Labor and Machinery is in error, I think, in his idea that the dissatisfied class of laborers object to machinery *per se*. They are in favor of as much of it as possible, provided they may share the benefits of the abundant increase of production secured by it. They claim that under the present state of things, capitalists secure the lion's share. The method of righting the wrong, pursued by the more ignorant among them in "smashing," is simply an ignorant and helpless man's protest against what he feels to be a wrong. The remedy is for the intelligent portion of society to help him to right the wrong. He will be docile enough as soon as he feels that he has influential friends. His violent acts are acts of blind despair. To call for troops and the police—except to arrest actual wrong-doing at the moment—is only the spirit of the "shot-gun" policy said to prevail among the aristocracy of some parts of the country. *Fiat justitia* is the only basis for a Republic, and the only safe basis for any government."

THE Husbandman, which publishes each week a full report of the interesting discussions of the Elmira Farmers' Club, announces that it will be sent to any address the remaining weeks of 1878 for ten cents. Certainly every farmer can afford to make the acquaintance of our vigorous young contemporary on such terms. Those of our readers who wish to avail themselves of the offer mentioned above, will address, The Husbandman, Elmira, N. Y.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Convenient Dairy Barn—(Illustrated.) ... 757
Large Crops of Corn ... 757
Potatoes as a Farm Crop—W. J. Fowler ... 758
Some Mistaken Ideas ... 758
Moisture-retaining Power of the Soil ... 758
Farming in Kansas—L. J. Templin ... 758
The Apple Orchard—No. 2—Clinton ... 759
Facts About the Japanese Persimmon—Chas. H. Shinn ... 759
Tests of Garden Seeds—S. Rufus Mason ... 759
The Old-Man Cactus ... 759
Eulalia Japonica Variegata—Jas. Taplin ... 759
Catalpa Speciosa. (?)—S. T. F ... 761
Connecticut Agricultural Experiment Station ... 760
Notes of Current Events ... 760
A Texas Homestead ... 760
Managment and Diseases of the Dog ... 760
What Others Say ... 761
Muley Saw ... 761
Catalognes Received ... 761
New Convertible Mill ... 761
Soapstone as a Lubricator ... 761
International Fair—An Opportunity for Cheese-Makers—Prof. L. B. Arnold ... 762
Milk Record ... 762

Everywhere:

California Notes—"Specs" ... 762
Crop Notes from Northeastern N. Y. ... 762
St. Marks, Fla. ... 762
Henrico Co., Va. ... 762
St. Joseph, Mich. ... 762
Roselle, N. J. ... 763
Florence, Iowa ... 763
Marshalltown, Iowa ... 763
Iola, Kansas ... 763
Granville, N. Y. ... 763
Stark Co., Fla. ... 763
Belle Plain, Iowa ... 763
Henderson, Va. ... 763
Danvers, Ill. ... 763
East Hamilton, N. Y. ... 763

Answers to Correspondents:

Salt as a Fertilizer on Sandy Soil ... 763
Thoroughbreds and Grades ... 763
Large Yield of Hungarian Grass Seed ... 763
Keeping Celery in Winter ... 763
When and How to Plant Seeds of RURAL Free Seed Distribution ... 763
Miscellaneous ... 763
Communications Received ... 763
Mandrake—J. Stauffer ... 763
Hand Labor and Machinery ... 763

Domestic Economy:

The Dreadful Dish-Washing—Mary Wager-Fisher ... 768
Behind the Curtain—Eva E. E ... 768
Scientific Cookery—Sairey Gamp ... 768
Domestic Recipes ... 768

EDITORIAL PAGE:

Drugs as Food and Drink ... 764
Observation the Key to Success ... 763
The Movement of Grain ... 764
Our Plant and Seed Exchange ... 764
Effects of Manure ... 764
Brevities ... 748

LITERARY:

Poetry ... 765, 770
Fancy Articles for Christmas Gifts—(Illustrated) 765
Weaker Than a Woman ... 766
An Essay on Foods ... 767
A Rival for Edison ... 767
Recent Literature ... 767
Magazines ... 767

Reading for the Young:

Our Schools ... 770
A New Departure ... 770
Letters from Boys and Girls ... 770
Puzzler ... 770

Sabbath Reading:

Progress of Religious Ideas Through Successive Ages ... 770
News of the Week—Herman ... 768
Markets ... 769
Personals ... 771
Wit and Humor ... 772
Advertisements ... 769, 771, 772

THE
RURAL NEW-YORKER.
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RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY NOV. 30, 1878.

OUR readers are particularly requested to read the particulars of our free seed distribution on p. 769, under publisher's notices, before ordering seeds. We thought we had made the postage particulars very plain—but many are sending us too many stamps. A one-cent stamp suffices for all except *three*—the Beauty of Hebron requires a two-cent extra stamp, and the Defiance Wheat and Pearl Millet, *together*, require a two-cent extra stamp.

OUR readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

OUR new Premium Lists, specimen copies and agents' outfits will now be forwarded free to all who apply.

OUR Free Seed Distribution will remain open to all subscribers who may apply until further notice.

THE RURAL NEW YORKER *is invariably discontinued at the end of the subscription term.*

DRUGS, AS FOOD AND DRINK.

WHEN the tomato was beginning to be introduced as an article of diet, many years ago, it was extolled, not so much as a wholesome fruit, but as an excellent alterative medicine, "acting on the liver like calomel," and, strange as it may seem, there is no doubt that this recommendation had a powerful effect in introducing the tomato into the gardens of the people. So general did the idea of its medicinal virtues become that the patent-medicine men took it up, and for a while tomato syrups and bitters were for sale in all the apothecary shops. But familiarity soon bred contempt, and for a long time we have heard nothing of the medicinal virtues of the tomato. But recently the poor tomato has been cried down as much as it was once cried up, and all the country papers have heralded the ridiculous statement that the use of the tomato caused cancer! And as the fools are by no means all dead yet, a good many believed the story! The simple truth is, that the tomato is no more a medicine, or a drug, than apples and pears. If it were, that is, if it had any disturbing action upon any of the functions of the body—which is the true mark of a medicine—it ought to be rejected from every garden, and used only under medical advice, in suitable cases.

There is no instance where any drug has come into common use, that injury, and often great injury, has not resulted. To say nothing of alcohol and opium, the popular use of nervines, like tobacco, tea and coffee, has been most baneful to the public health, and the noteworthy increase of insanity and nervous diseases is justly attributable to them more than to any other cause.

And now another harmless garden vegetable is being pushed as of a wonderful medicinal value. Celery, that delicate adjunct of the dinner-table, is heralded to us as a cure for "nervousness" and "palpitation of the heart." One wiseacre tells us that he has known many men and women who, from various causes, had become so much affected by nervousness that when they stretched out their hands they shook like aspen leaves on a windy day, and by a moderate daily use of the blanched footstalks of celery as a salad, they became as strong and steady in limbs as other people. He has known others so nervous that the least annoyance put them in a state of agitation, and they were in constant perplexity and fear, who were also effectually cured by a moderate use of blanched celery as a salad at meal time. He has also known others to be cured of palpitation of the heart. Everybody engaged in labor weakening to the nerves should, according to his opinion, use celery daily in the season, and onions in its stead when not in season.

Onions, too! How the *materia medica* is being enriched!

Now, if there is any region of the country where "many" men and women can be found diseased as this person describes, it is probably the result of their already excessive use of drugs affecting the nervous system, and the cure is not to add another to the list, but to leave off those they are already using. They need not, on that account, forbear the flavorous celery, or the still more flavorous onion. These are good victuals, and for that reason they cannot serve as medicines. They will neither harm nor cure; but they will gratify and nourish, and, with the tomato and all other good fruits and vegetables, will prove as promotive of health as fresh air and pure water—because *they will not act upon any of the organs of the body to disturb their functions*, as all drugs and medicines will.

OBSERVATION THE KEY TO SUCCESS.

IN looking over the broad fields of agriculture, its successes, difficulties and failures, the first thing that strikes the investigator is the want of observation—*accurate observation*—in the farming class. It is as if the traveler should never learn the road over which he is traveling every week of his life. In every walk of life we often attribute to genius what is merely the result of observation. The law of gravitation exhibited itself to all mankind before Newton, yet his eye took in the whole philosophy on observing the fall of an apple. To the mind of Watt the forcible ejection of steam from a tea-kettle suggested that embodiment of power—the steam engine. Yet this action of steam had been before the eyes of all men for thousands of years.

A German workman in a gypsum stone quarry traveled across a meadow in going to and returning from his work; a clergyman of the name of Meyer, who saw this field every day, observed the greater luxuriance of grass on each side of this path than elsewhere in the field. This simple observation laid the foundation for the extensive use of plaster as a fertilizer for the last hundred years. But how many thousands of farmers travel the same road year after year, like the German workman in the gypsum quarry, without seeing anything on either side, leaving all practical instructions to be drawn by outside observers?

What an immense field for observation agriculture presents! and what an overwhelming corps of observers the six million of farmers ought to make! Why, by a proper system of observation, they ought to settle, in a few years, most of the vexed questions that now distract our agriculturists. Yet we know that twenty farmers in discussing any question in agriculture, will give about as many opinions as there are persons in the discussion, and this arises from a want of accurate observation—taking in all the circumstances and giving proper weight to all the points of variation.

But we see that whenever the same acute observation is brought to bear upon the facts of agriculture as upon mechanical inventions, results equally important are obtained. Let us refer to the breeding of Short-horns by the Collings and Bates, of Long-horns and Leicester sheep by Bakewell. Their success beyond the breeders before them was the result of closer observation of the facts concerning animal growth, and they followed these hints by experiments which settled the accuracy of their judgment. Rarey subdued the wildest passions of the horse that no other had been able to curb or guide, by putting in practice the simplest observations.

The habit of accurate observation, to be developed among the mass of farmers, is really the one thing now most needful to the future progress of agriculture. Every farmer is surely capable of adding something to the general stock of knowledge belonging to his occupation. We should be very glad to be the means of inducing some thousands of farmers to begin a system of close observation of all the facts established in their practice. The agricultural journal must be the chronicler of the best practice of its time. Its highest aim can only aspire to be the medium of communication between those who know and those who want to know. We are extremely anxious to increase the number of both these classes.

THE RURAL NEW-YORKER takes in the whole field of agriculture, and wishes to instruct its readers in all departments. There is, therefore, no fact or experiment in the wide range of agricultural activity that does not interest its readers. We wish every reader to take a special interest in all the other readers of this paper, and show his interest by communicating some fact or experiment that has come under his own observation, or been worked out by his own hand. He need not be particular about the phraseology in which he states his facts—let him give them to us in the simplest and plainest words that convey his meaning. We are only anxious that the facts necessary to a full understanding of the case should be given.

Soils are almost infinite in variety of texture and situation, and an account of an experiment with a given crop, to be of any value to the distant reader, must give a description of the soil, the fertilizer used, the latitude or temperature, the aspect, the prevailing wind, &c. If he is writing about tests in feeding animals, let him state the age, the food—kind and quantity—the time fed, and the result in gain, &c. We wish to turn all farmers into observers and reporters—into agricultural scientists, who shall quite understand the management of their own business.

THE MOVEMENT OF GRAIN.

THE receipts of grain at the chief ports for the past two years for the ten months ending Nov. 2, 1878, were as follows:

Cities.	1877.	1878.
New York.	61,923,455 bu.	107,971,411 bu.
Boston.	11,525,427	15,691,430
Port'and.	889,843	1,603,933
Montreal.	11,875,728	12,427,420
Philadelphia.	17,621,959	33,235,761
Baltimore.	23,656,384	34,167,600
New Orleans.	6,245,327	9,152,961
Total:	134,038,123.	214,250,515.

The increase of 1878 over 1867 is 60 per cent and equal to more than 80 millions of bushels. The vastness of the business of transporting and shipping all this grain is almost beyond our comprehension. An aggregate of 700,000 carloads or 2,300 every day of the year, goes to make up the grand total which represents a line of cars which placed end to end would reach from Chicago to London or Paris, or a distance of more than 4000 miles.

The result of all the labor and industry involved in the production and disposal of this quantity of grain, reaches into the midst of every family in the land; there are none so low and none so high, but their interest have been favorably affected by it. That this beneficial influence has been enlarged 60 per cent the past year, will go a great way towards accounting for the improved condition of affairs; the more so, as it is true that the fact we are considering relates to but a small fragment of the whole business of the country, which begins with agriculture, which rests upon it, and which is supported by it. For many years there has not been so auspicious a prospect for the closing year, nor for the opening of a coming one; and at this season of thankfulness when men's hearts bound with gratitude for favors received, it is something even for the stony-hearted Gradgrinds, that we can give them figures whereon to rejoice.

Our Plant and Seed Exchange.—Last year and the year before we offered the use of our columns to our friends for the purpose of facilitating the reciprocal interchange of plants, bulbs and seeds.

If A. had more than he needed of certain sorts and wished to exchange his surplus stock for others of which he was deficient or destitute, the announcement of the nature of the kinds of which he had a superabundance, and of those in which he was lacking, put him into communication with those whose means and desires would lead to an exchange of floral and other treasures. After a trial, however, we are regretfully obliged to discontinue this "Exchange." Of course, if the announcement is made for one, it must be made for another. Now, we have discovered that the multitude of names thus made public were used for improper purposes, while others, in making announcements, had business axes to grind, etc. Accordingly, we are forced to put an end to this business, although there are upwards of one hundred announcements laying in our pigeon-holes.

Effects of Manures.—A Tribune correspondent says that certain parts which were manured heavily with stable manure thirty years ago, now yield far more wheat than the other parts of the same field. This is an important fact. It will be remembered that Mr. J. B. Lawes wrote us that the difficulty of comparing the effects of commercial fertilizers with those of stable manures was owing to the slow action of the latter.

BREVITIES.

CLAWSON beats Fultz in Michigan.

WE have not heard much this year about Indian Summer.

WELL shaped potatoes of *medium* size are the best to save for seed.

A. L. MURDOCK, of Mass., says, "Two-thirds of our potatoes are Early Rose and mostly diseased.

THE distinctions made between the results of scientific training and practical skill are hard to understand.

WE are working at our seeds as hard as ever we can, so as to be ready to begin the distribution this year.

THE pomological article by "Clinton" tells nothing new. But it tells all that needs to be told, in a plain, forcible way.

Mr. Taylor, of London, says that American potatoes do not retain their good qualities long after leaving their native country.

THE members of the Appropriate Committee of the Mich. State Agricultural Society are convinced that Michigan is second to no State in the Union in making good butter and cheese.

WE state an impression only when we say that we believe the Seckel pear has paid those who have sent it to the New York market the past season better than any other variety, or, excluding Bartlett, better than any other two varieties.

MANY of our subscribers are asking us to give instructions as to the planting and culture of the seeds we offer. We will do so after they are distributed. But really all of them will germinate and grow so easily that "instructions" are scarcely needed.

How to keep plants in the house is a subject about which many persons inquire every year. The advice given too often makes a mountain out of a mole-hill. The whole story may, we think, be told in a few words. Use sandy loam—keep the pots clean; give them sun and fresh air. For the mealy-bug use alcohol, for green lice (aphides), tobacco fumigations.

PRUNINGS from desirable sorts of Grapes may now be easily obtained. Make cuttings a foot in length, set them in trenches a foot in depth, six inches apart, and fill in with loam, pressing it firmly from time to time, then cover the trench with some light material, such as straw or leaves. Many of these will form roots next spring and may be transplanted in the fall. Thus everybody having land, may have grapevines at a small cost.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

THE CHILDREN.

THE children! ah the children!
Your innocent, joyous ones:
Your daughters, with souls of sunshine;
Your buoyant and laughing sons.

Look long in their happy faces,
Drink love from their sparkling eyes,
For the wonderful charm of childhood,
How soon it withers and dies!

A few fast-vanishing summers,
A season or twain of frost,
And you suddenly ask, bewildered,
"What is it my heart hath lost?"

Perchance you see by the hearth-stone
Some Juno, stately and proud,
Or a Hebe, whose softly ambushed eyes
Flash out from the golden cloud.

Of lavish and beautiful tresses
That, wantonly floating, stray
O'er the white of a throat and bosom
More fair than blossoms in May.

And perchance you mark their brothers—
Young heroes who spurn the sod
With the fervor of antique knighthood,
And the air of a Grecian god.

But where, ah, where are the children,
Your household fairies of yore?
Alack! they are dead, and their grace has fled
For ever and evermore!

Paul Hayne, in Harper's Magazine for December.

FANCY ARTICLES FOR CHRISTMAS GIFTS.

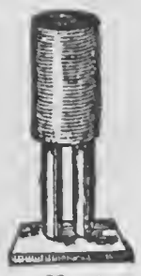
No. 1 WINTER GARDEN, IN PLACE OF A CHRISTMAS TREE.

A large cardboard box will do well for the foundation of the garden. This must be inverted, and covered with a sheet of good white wadding. The box must be 24 inches long and 14 inches wide. The fence which incloses the garden is composed of pieces of stick 4½ inches long taken from a blackthorn tree. These are placed about 1 inch apart, and a fir-cone of about the same length is placed after every fourth piece of stick. A little glue will be best to fix the fence to the foundation, as it is stronger than gum. Paint the fir-cones and sticks with gum, and when wet, sprinkle some ground glass or alum over them, and also over the wadding, to give it a frosted appearance. The little flags at the gate are shown in No. 2. They are made of scarlet paper, or silk, fastened on wire. The wire is covered with gold paper. The presents are scattered about inside the garden. Some may be rolled up in cotton wool, to look like snowballs, and others left uncovered. The snow man shown in No. 3. stands as sentinel at the gate. The winter garden may, of course, be increased to any size at the pleasure of the maker.

NO. 3.—SNOW MAN TO HOLD SWEETS.

No. 4, shows the top part of cylinder, in a reduced size. No. 5, the bottom. A small round

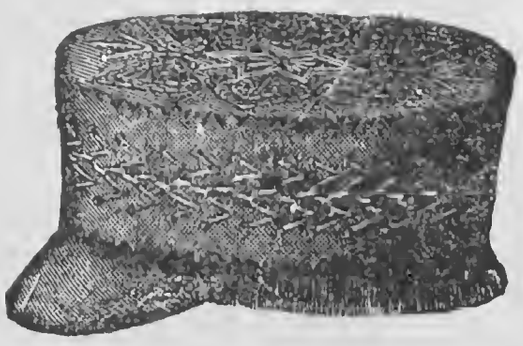
No. 2.



No. 5.

No. 4.

box would be most convenient for the foundation or cylinder to hold the sweets, or if this is not easily obtained, one can be made of cardboard. Cut a piece of cardboard 1¼ inch wide and 4 inches long: lay one end a little over the other and sew them together; cut the same piece of cardboard for the bottom, the same size as the cylinder is round; sew it firmly in the bottom. The top piece or lid of the cylinder is made exactly the same way, allowing the cardboard of a little larger size, so that it may easily be taken on and off the under part.



No. 8.

A round or oval box, such as hair-pins are sometimes sold in, will answer as well as making the cylinders, if easy to obtain it.

For the head, take a wooden skewer 1½ inch long, make a hole through the top of the box, put the end of the skewer through, leaving 1¼ inch out at the top, glue this to the top of the box. The legs are made of skewers, but they must be smaller than for the head, they should be about 3½ inches long; make two holes in the bottom of the box, just put the skewers through them and glue them fast. The stand for this foundation should be made of a small flat box, also to contain sweets, make two holes in the lid, and put the legs through them, as you did into the bottom of the cylinder, glue them very firmly. A sheet of the best white cotton wool, or jeweler's cotton is now required. Paint the skewer for the head with some strong gum, lay some of the wool over it, taking care to keep the head a nice round shape. Now cut a piece for the coat 4½ inches wide and 6 inches long. This must be gummed to the top of the cylinder. The foundations for the legs and the stand are also covered with cotton wool. For the arms, take a piece of wire six inches long, run it through the wool, above the cylinder; leave an equal length at each side, cover with wool, and bend as shown in the engraving. Take a fine camel-hair brush filled with gum, and with small pieces of wool fill up all the little places that have become disarranged. The moustache and beard may be made of a small piece of black or brown wool, frayed out, and gummed to the face. The eyes, eyebrows and nose must be painted with a fine brush and India ink; and dots of India ink may also be put down the front to simulate buttons. The pipe is made of a small piece of wood, such as you can gather from a hawthorne tree. The broom is also made of wood, with a little brown wool tied to the end. The crown of the hat is made in the same way as the cylinder; the cardboard must be about ¾ of an inch deep, and two inches wide. For the brim cut a piece of cardboard about the size of a penny, make a hole in the center to fit the crown, and gum them together. They must be painted black, and gummed to the head.

No. 3.

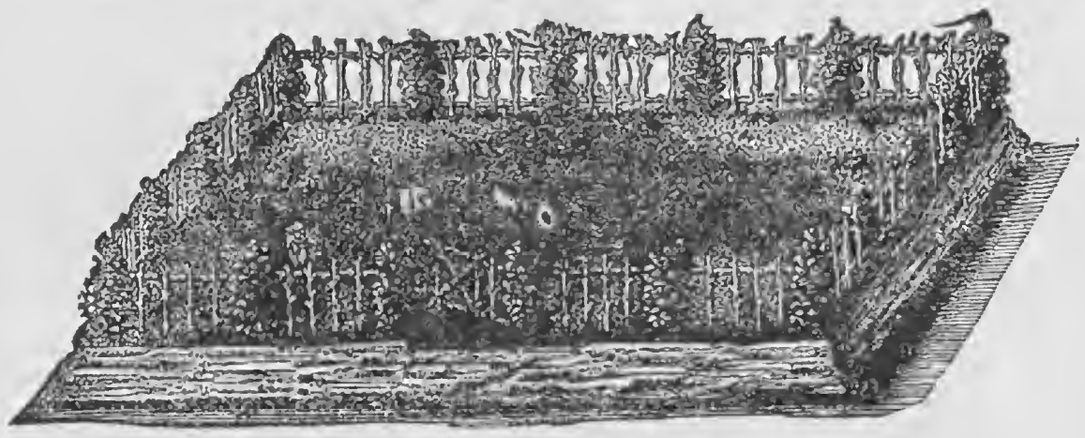
NO. 6.—BRACKET: CONE-WORK.

A wood bracket must be made for the foundation, which is covered with velvet at the top. The center of front of bracket is a circle of embroidered velvet or satin.

The wood bracket measures 11½ inches across the back, which is straight. The width of the middle is 5½ inches. It is sloped at the sides to a semi-circle. The cardboard for the front measures 17 inches in length; it is 10 inches in depth in the front, and is sloped at each end to 5 inches (see design). The embroidered medallion is edged with small scallops of button-hole stitch. Bows of ribbon ornament the top.

NO. 7.—LETTER-RACK; CONE-WORK.

The foundation is made of cardboard, 15 inches long and 12 inches deep. This is covered with brown glazed paper. The straps to hold the letters are neatly gummed to the back; these measure 13 inches long and two inches deep; they are covered with the petals of the cones, which must be arranged and sewn on as shown in the illustration.

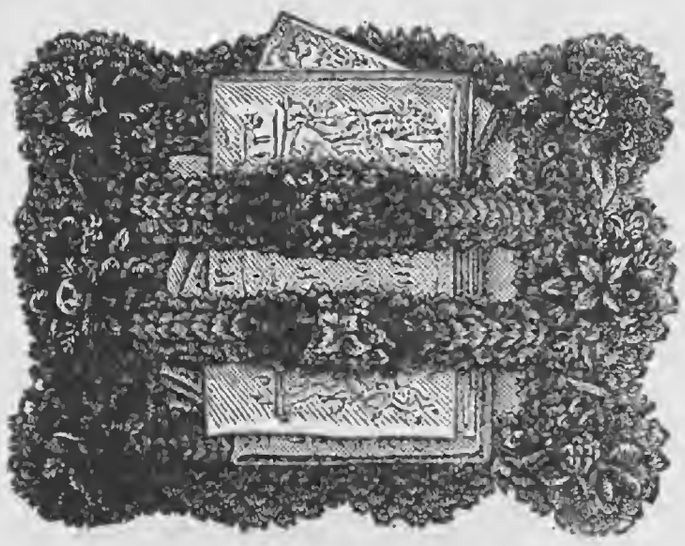


No. 1.

The bouquets on the border and in the ends of the straps are composed of oak-galls, cones of different sorts, small acorns, and some of the larger ornaments can be fastened with glue to the foundation. The seeds of the cones must be well soaked in water, so that they can be sewn on to the foundation with a cambric needle and cotton. The back must be covered with colored paper after the cone-work is finished. When all are quite dry, brush over with good copal varnish.

NO. 8.—CAP FOR PEN-WIPER.

The foundation of the cap is cardboard. The

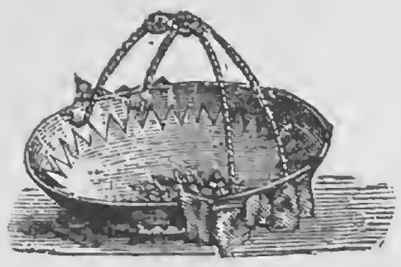


No. 7.

No. 21.

embroidered covering may be of velvet, silk or cloth. The border is in feather-stitch, with beads at the outer stitches. The cardboard for the top should measure 10 inches in circumference. The band is 1¾ inch in depth; this measures 10 inches at the top, and it should be shaped into nine inches at the bottom. The peak is cut in proportion, and is covered and lined. Black cloth cut into a sort of fringe, and bound closely together, is fitted into the crown of the cap to form a pen-wiper. A pin-cushion stuffed with bran may take the place of the pen-wiper, if preferred.

No. 15.



No. 17.

NO. 9.—DUSTING-WING.

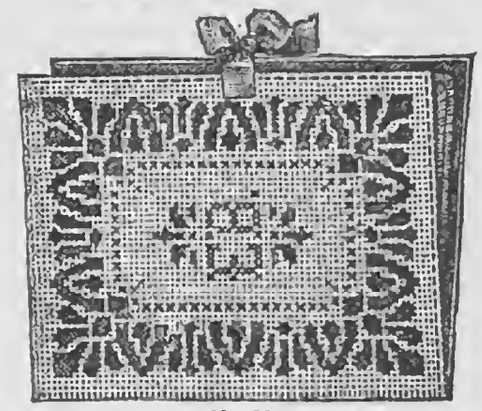
The wing of a goose or other bird is always considered useful for dusting corners with. After properly drying the wing in a cool oven, it is made neat at the top by a ruche of scarlet cloth, which may be plaited at the edges or bound with ribbon, and separating the ruche is an embroidered band. A loop of braid or ribbon is put on to hang the wing up by.

Nos. 11.—CARD TRAY.

The stand, which is shown in No. 11, may be bought at any fancy repository. The tray is of some smooth white wood, mounted on a gipsy stand of gilt bamboo, and ornamented with cord and tassels. The tray is ornamented with spray-work, the leaves and flowers being arranged as shown in reduced size No. 12. The mat, on which the card-tray is placed, is of crimson cloth, ornamented with acorn-cups, varnished.

NO. 13.—NEEDLE-BOOK.

For the cover, cut two pieces of perforated cardboard three inches long, and two-and-a-half wide. Embroider these with blue silk, according

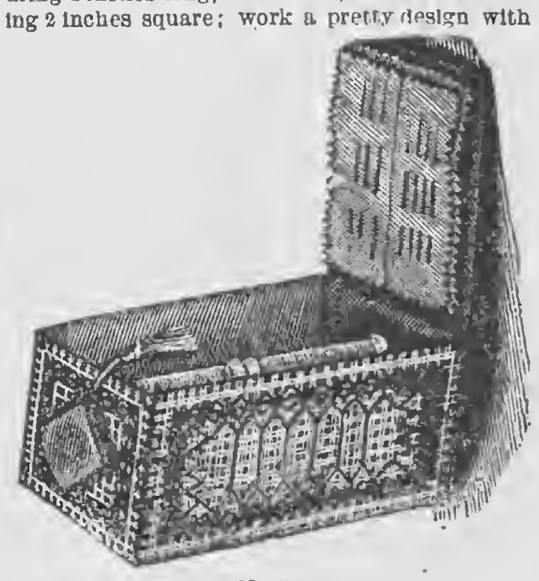


No. 13.

to the design, with initials or monogram in the center. Line the covers with silk, and sew them together up the back. Fasten in four leaves of white cashmere, and tie the covers together with narrow ribbon.

NO. 14.—NEEDLE-CASE.

Cut four pieces of perforated cardboard, measuring 4 inches long, and 2 wide, and two measuring 2 inches square; work a pretty design with

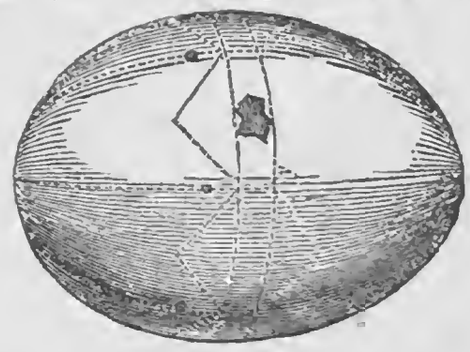


No. 14.

silk on three of the largest pieces, and the two squares; line all the pieces with silk, to match the embroidery; sew them together to the shape of the design, leaving one of the larger pieces for the lid, which must only be sewn at one end. Make two little leaves of white flannel, and sew them to the lid; to put the needles on, a little button must be sewn to the end of the lid and a loop on the corresponding end of the box to fasten them together.

NO. 15.—EASTER EGG.

No. 15 shows the ornamented shell; No. 16 the diagram for ornamenting and cutting it. A hen's, goose's, or duck's egg may be used. Make a small hole in the center, and empty the contents; then lay the shell in vinegar for five minutes;



No. 16.

this gives it a delicate whiteness. Take a fine pencil and draw the lines shown in No. 16; then, with a very fine saw, separate the egg-shell, cutting the inside skin with a sharp penknife. The shell is lined inside with gold paper, and ornamented with either painted designs, or small pictures may be gummed on. Pierce small holes in the top and bottom for the purse-silk (which forms the cord) to pass through.

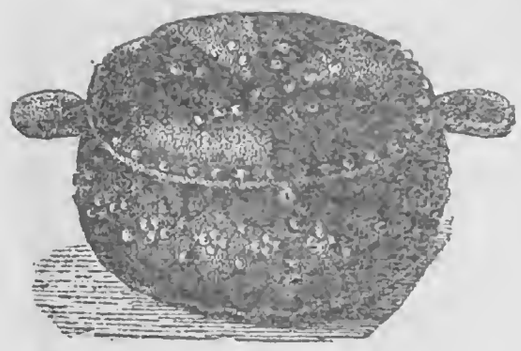
NOS. 17 AND 18.—EGG-SHELL BASKET.

The shell is prepared the same as for No. 16. One half of the shell is cut plainly round the edges to make the basket shown in No. 17. This may be ornamented with a narrow gold paper border, and a bunch of painted flowers or monogram. The handles are of fine flower wire, covered with colored silk, and finished with small bows of gold paper gummed to the side of the basket. No. 18 is made from the other half of the egg-shell, which must be cut into vandykes at the edge. These may be painted or covered with fancy paper. The handles are the same as No. 17, finished with small silk tassels.

No. 18.

NO. 19.—PIN-CUSHION.

Make a small, round pin cushion, measuring seven inches in circumference, and fill it with bran, or emery-powder may be used, if preferred. This must be covered with scarlet-and-black cloth; six sections of cloth cut as shown in the design, are required to cover the top; these must be neatly sewn together and fastened to the cushion. For the sides, a strip of black cloth, seven inches in length, and one in depth, is needed. This must be embroidered with scarlet silk and ornamented with gold beads, and afterwards neatly sewn to the cushion. To make the work neat where the side is sewn to the top, a narrow gold or scarlet braid may be sewn over



No. 19.

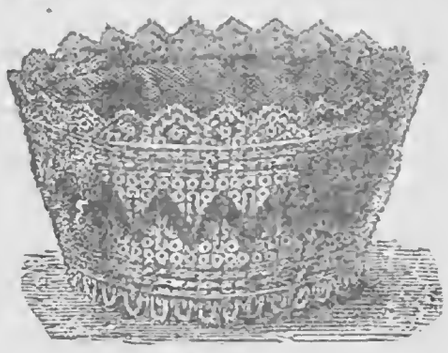
the stitches, or put in as a piping. The little handles, which are sewn to the cushion before the side-piece, are kept in shape by means of a a very fine wire, which is fixed in between the double cloth of which they are composed; they are also ornamented with the narrow braid. The center of the cushion is ornamented with a fancy button and beads like those on the sides.

NOS. 20 AND 21.—WORK CASE.

The case is made of American cloth, lined with blue silk or cashmere. The bottom is cut in one piece, measuring twelve inches in length, and seven in width. Two pockets, ornamented with embroidery, are sewn to the bottom, and a strap of ribbon stitched at intervals, to hold scissors, thimbles, etc. The sides and ends are cut separately; they measure three inches in depth, and are bound with blue ribbon, they are seamed neatly to the ribbon which binds the bottom. Two bands of blue cashmere, ornamented with a design in cross-stitch, are fixed to the back; a buttonhole is worked at the corner. The closed case is shown in No. 21; it is fastened by means of buttons: the buttonholes are worked in the embroidered bands.

NO. 22.—COTTON BASKET

composed of perforated cardboard, and embroidered with blue silk, or fine chenille. The card measures two and a half inches high, and ten



No. 22.

and a half inches in circumference; each edge is cut in scallops to form a border; this must be fixed to a bottom of plain cardboard, and lined with blue silk.

NO. 23.—HANDKERCHIEF SACHET.

The two sides of the sachet are formed of blue silk, each measuring seven and a half inches square. The blue silk is lined with white silk, quilted and well padded. The four corners of the outer side are embroidered with the spray, shown in No. 24, the flowers are worked in shades of amber silk, and the leaves and buds in green and brown. The center of the cover is bouillonnee and finished with silk cord. A ruching of ribbon is placed round the edge, and a bow of ribbon at each corner. The sachet should be perfumed with scent powder, which can be purchased at any chemist's or perfumer's. The two sides are tied together with bows of blue ribbon.

Literary Miscellany.

WEAKER THAN A WOMAN.

CHAPTER XI.

(Continued from page 751.)

"You are sarcastic," cried her ladyship. "It is very wrong, but I really adore sarcasm."

His face relaxed just a trifle more. She watched him intently. He was worth some trouble; for as soon as he had entered the neighborhood she had resolved upon marrying her daughter to him.

"There are some nice girls here," said her ladyship—"some very pretty girls—Violet Haye for one."

Then his face brightened. She had touched on a happy theme at last.

"Violet Haye is quite the queen of the *ete*," she continued. "There are few, any, who can compare with her."

"There is not one," he said and in her heart her ladyship disliked him or the words.

"Perhaps you are right," she allowed calmly. "I do not know who could really be said to be like her. She is a fortunate girl, too. She has no great fortune and no connections, yet she is engaged to be married to that handsome young Mr. Lonsdale."

"Engaged to marry him!" cried Sir Owen, with an angry scowl. "A girl like that engaged to marry the son of a man who has been tried for perjury, or forgery, or something of the kind!"

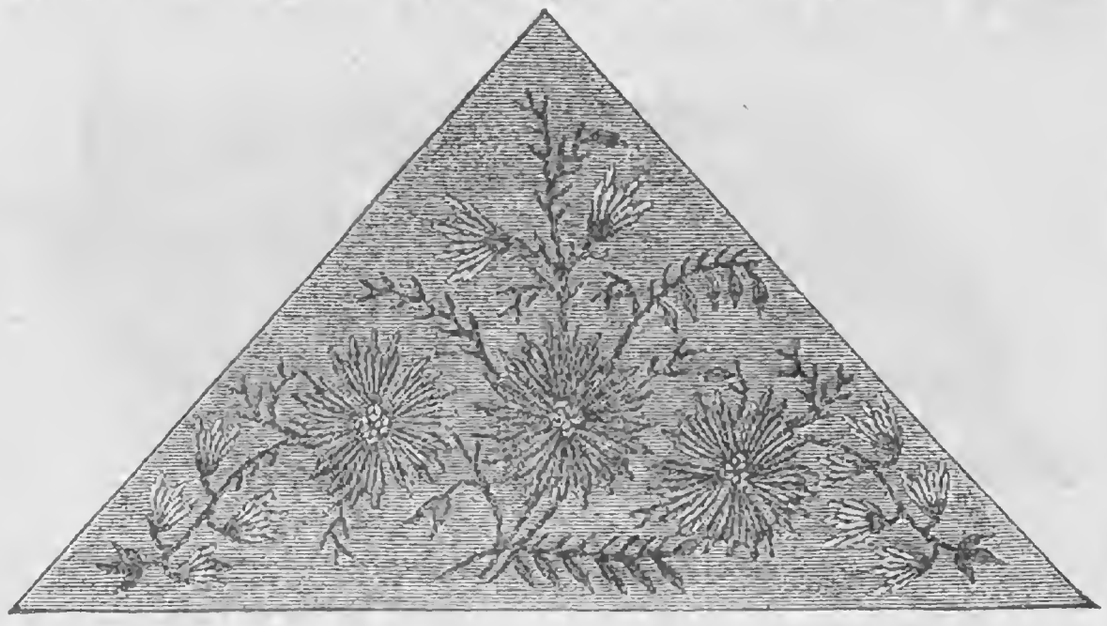
Lady Rolfe laughed lightly, and touched him on the arm with her fan.

"Nay, nay; it was not so bad as that. Poor Mr. Lonsdale was innocent enough; but she is to marry his son—the wedding-day is fixed, and they will be a very handsome pair. She will marry him, I hear, in the spring."

"That accounts for it," he said, and the heavy black moustache drooped over as cruel lips as were ever seen on a man's face.

"Accounts for what?" asked Lady Rolfe, with a great assumption of innocence.

"Oh, nothing in particular! but I thought he seemed to consider that he had some kind of right to her,"



No. 24.

.—MINIATURE OF FERN-WORK FOR CARD-TRAY.

No. 11. No. 12.

And then, looking at him, Lady Rolfe saw a stern, cruel, set expression settle on his face.

"So they are to be married in the spring, are they?" he asked slowly. "I suppose this young Lonsdale is very proud of her?"

"What a question to ask me, Sir Owen! He is a man, and has eyes. I should not think it would be possible to tell how much he loved her."

"Does she care for him?" he asked quickly.

"Dear me, yes. Care for him! Why, it is a love-match *pur et simple*. She cares very much for him and for no one else besides."

Lady Rolfe had unconsciously done the very thing to defeat her own purpose. The fact which would have made Violet sacred to another man, simply urged him on. It would be a triumph to win her, because so many others admired her; but it would be a double triumph if she was engaged to another man. Sir Owen often congratulated himself on his perfect freedom from what he was pleased to call "affected nonsense;" and he was never more free from it than in this case. If, besides winning Miss Haye for himself, he could add to that the triumph of making her

No. 20.

No. 6.

No. 9.

He asked no more questions, but Lady Rolfe, still watching him intently, saw that the set, firm look deepened every moment on his face. She could not tell whether she had done right or wrong. She had told him that the girl was engaged and that it was quite useless for him to think of her; but what did that look mean? Like any one else who had any part in naming Violet Haye to Sir Owen that day, she had an uneasy feeling about it.

Sir Owen seemed to think that he had done all that was required of him. He rose from his seat, and left her ladyship with a bow.

"He will go to Lavinia now," thought Lady Rolfe. "He will waste no more time over Violet Haye."

But Lavinia beamed upon him in her superb costume of mauve silk all in vain—he passed her with a careless bow. The moments seemed to him hours before he should be near Violet Haye again.

It was well for his popularity that no one saw the lowering, angry expression of his face as he crossed the croquet-lawn.

"I would have her if I wanted her," he said to himself, "if every other man on earth laid claim to her, and if I had to fight them all." Such men talk boldly of fighting in anticipation.

break an engagement to another, it would be the greatest success of his life.

"She is beautiful enough to be a queen," he said, "and it would take a hundred lawyers to frighten me. A man with forty thousand a year ought to be able to do as he likes. If he cannot, what is the use of money?"

He went at once to Violet, and Felix, standing by her side, longed to lift him up in his strong arms and throw him over the bridge.

"Miss Haye," he said, quite ignoring the presence of her lover, "do you live here in Lilford?"

She appeared half frightened as she answered him—

"Yes—I live at the Limes."

His face cleared.

"I know it," he went on. "It is a pretty little place just outside Lilford. I have often admired it. Does your father hunt?"

"No—he is quite an invalid," replied Violet, half longing that Sir Owen would leave her, and half enjoying the distinction that his great notice of her brought.

"Ah, an invalid—very unfortunate! Not able to leave the house often, I suppose?"

"No—not often," replied the girl, looking at her lover's averted face.

"I shall be glad to see him sometimes," said Sir Owen; "he has no objection to visitors, suppose?"

"No," replied Violet; "he is pleased to receive any."

"Then, with your permission and his, I will ride over to-morrow," said Sir Owen.

He waited for her reply. Violet made none. She was frightened at the expression on her lover's face.

"You do not say that I shall be welcome, Miss Haye," he added impatiently;

She recovered herself. After all she was doing no wrong.

"We shall be pleased to see you, Sir Owen," she told him with quiet dignity; and then the Baronet, finding there was no chance of further conversation with her, went away.

"My darling," cried Felix, "do not be at home to-morrow when he comes! I do not like him, Violet—he has a cruel bad face, and there is an evil light in his eyes. I do not like him, sweet."

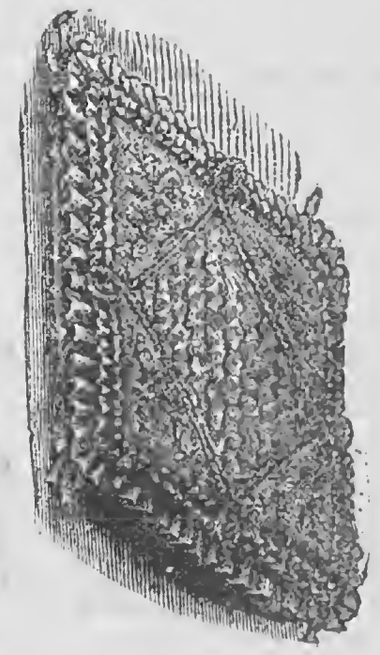
"I wonder why he has paid me so much attention," she said, "and why he is coming to see us?"

But Felix was too wise to answer that question. He only clasped the little hands in his own. To him this girl, in her beauty and innocence, was little less than an angel.

"My white dove," he said—"my pure sweet love, never mind him! Promise me that when he or any other man comes to you with flattering words, you will say—'I am pledged to Felix Lonsdale,' Will you say that, Violet?"

"Yes, I will," she replied.

"Would that I could take you away from them all and keep you safely under the shelter of my own great love, Violet! You will not be in to-morrow when he comes? Promise me, my darling—do you not see that I am half mad with jealousy?—promise me you will go out! If I knew that to-morrow he would sit by your side, touch your hand, look into your beautiful face, I think that I should shoot him to-night!"



No. 23.

"Oh, Felix, what a dreadful thing to say!"

"Jealousy is like fire—it destroys all things,' he said; "but I am foolish to be jealous. I have all faith in you, sweet—all faith. Say once again, 'I belong to you, Felix.'"

The sun shone on her fair face as she raised it to his; the wind stirred the leaves as she said—

"I belong to you, Felix,"

CHAPTER XII.

The *fete* was over, but people still talked of it—of the unexpected appearance of Sir Owen Chevenix and his admiration for beautiful Violet Haye. Violet had said but little at home; she had told her father that the Baronet intended to come to see him, and Francis Haye had looked up in bewilderment.

"Coming to see me!" he cried. "What is that for?"

He did not see the hot flush on his daughter's face. She knew well enough why he was coming.

"If it is about that right of road," he continued, "he may save himself the trouble, for I shall never give in—never."

"You will see what he is coming for when he comes," said Mrs. Haye; "there is nothing so absurd as guessing. I shall not believe it until I see him"

Then after talking eagerly of his boundless wealth, the beauty of his estate, the number of his horses, Francis Haye exclaimed—

"And to think that he should come to see us!"

Violet remembered her promise; she knew that Sir Owen would probably call about one o'clock. Soon after noon she put on her garden hat, and, without saying a word, went out into the woods where no one could see her, and no servant could be sent after her. She sat there thinking—thinking of how Felix loved her, and how sweet it was to be loved—telling herself that she would not exchange his love for the world.

Why did he dislike Sir Owen so much? Why was he so anxious for her to be away during the

Baronet's visit? She had never loved Felix better than she did that morning, as she sat thinking of him; her heart warmed to him—his great love had touched her at last. She would not go back home until after two; the Baronet could not prolong his visit beyond an hour, she thought.

As she entered the house she saw her mother watching eagerly for her at the dining-room window. She went to her at once. The moment she opened the door she heard the Baronet's voice.

"Good morning, Miss Haye. I was just saying that after my long ride over, I would not go away without seeing you, if I had to stop here until midnight."

She looked at him in simple surprise.

"I thought that it was my father you wanted to see, Sir Owen."

He laughed; he was somewhat disconcerted at her answer.

"Did you not see that that was my excuse for coming to see you?" he said.

Violet turned away, while Francis Haye and his wife looked at each other. The Baronet sat down again; nor did he leave until long after three. He talked of all kinds of things which he thought would interest Francis Haye. His least word was listened to with intense admiration by those children of Mammon. Then, after promising to send grapes and choice fruit, after offering all kinds of favors, he went away. Violet was compelled to go to the garden-gate with him. He asked her, and Mrs. Haye answered the question for her.

"What a very good friendly neighbor!" said Francis Haye, as he, with his wife, watched the Baronet mount his horse.

His wife turned to him with a face that quivered with agitation.

"He is worth forty thousand a year—forty thousand! If you are a wise man, you will not say one word; if you do, you will spoil it all."

So when Violet returned, half dreading the debate that she felt sure must follow, there was no reference made to the Baronet or his visit, save that, in general terms, her father expressed himself much gratified. The only perceptible difference was that the girl's parents treated her with even greater deference and affection than before.

That night—it was a lovely night in May—Violet, sitting with her parents, heard a signal that she knew well.

There was a quick beating of her heart, a thrill ran quickly through her veins—Felix was outside.

"How the leaves tap the window!" said Mrs. Haye. "It is growing late; we will have the shutters closed."

Violet hastened away, ostensibly to see that her mother's wishes were obeyed, but in reality to see if Felix were outside.

How lovely the night was! The world lay calm and smiling under the light of the moon; the soft breeze brought the scent of the pink hawthorn in the hedges, of the clover in the meadows, or the violets in the woods. Violet went quietly out, and there, by the great lilac bushes, stood Felix. She had no time to remonstrate, for he had clasped her in his arms as though nothing but death could part them.

"Did I frighten you, sweet? I hope not—I have but five minutes to spare."

"Will you not come into the house, Felix?" she asked.

"No. I have but five minutes, and I want to spend them with you. I ought not to have run over, but I could not help it—I could not rest. I want to know if you saw that man to-day, and what he said to you. Yes, I know," he continued, "that I am jealous. Never mind that, sweet. Jealousy is a consuming fire. I could not rest, I could not sleep. I have tasted no food—my very life has seemed to be leaving me. I felt that I must run over, that I must hold you in my arms, kiss your lips, hear you say that you love me, or the fire would destroy me."

Once more his great love mastered her, once more the mighty passion in him seemed to make her strong and noble by example.

"Tell me all about it, sweet," he said.

Looking into his handsome face, his loveliit eyes, she could not say many words which would hurt him.

"There is little to tell you, Felix," she replied. "I went out soon after twelve; I did not return until after two. Then he was still here. He went away soon afterwards."

"Did he talk much to you, Violet?"

"No; he talked to my father," she answered.

He drew her nearer to him.

"He has not taken one thought, one word, one look, one smile from me, has he, sweet? Oh, my darling, if I could but take you where your beauty could gladden no eyes but my own! It seems to me, Violet, that this fever of longing is burning my heart away. Will the longed-for time never come?"

"Yes," it will come," she replied; and this time she did not add her usual remark—"I have not quite promised, you know."

She was sorry for him. She could not quite understand his feelings, but she had some dim perception of what he suffered, of the torture of his love and jealousy, of the greatness of his love. She saw such pain in his face and in the trembling of his lips that she did what she had never voluntarily done before—she caressed him of her own free will; she laid her hand on the clustering hair, and drew his face down to hers. She turned her sweet lips to him.

"You need not fear, Felix," she whispered. "I love you—no one but you!"

"That was worth walking a hundred miles for," he said. "If you are so kind to me, Violet, I am afraid that I shall run over every night. I would walk all day and walk all night for the chance of hearing such words."

The dew was falling, and the fragrance of the lilac floated round them.—To be continued.

AN ESSAY ON FOODS.

The two great duties which food has to perform in the body are to maintain the heat of the body and to supply material for its growth and renewal. Hence foods are divided by writers on the subject into carbonaceous or heat-producers, and nitrogenous or muscle-makers. This division, however, is arbitrary and of only partial application, since nearly all carbonaceous foods contain nitrogen, and nearly all nitrogeneous foods contain carbon. In lean beef, which ranks with nitrogeneous foods, there is more or less fat or carbon, and in vegetables richest in nitrogen, as beans, peas, cabbage and onions, there are sugar and starch. So that all foods are more or less nitrogeneous, all foods are more or less carbonaceous, and those terms are used with relation to foods simply to indicate which quality they possess in the greater degree. The chief function of the three great carbonaceous foods—sugar, fat and starch—is to keep up the animal heat, and if more of these substances is used than is necessary for this purpose, it is stored up in the body and produces corpulence. Hence all foods containing large proportions of these elements must be avoided by those who do not wish to increase their weight. In the potato, for example, the composition is, for every hundred parts, water 75, nitrogen 2.1, starch 15.6, sugar 3.2, fat 0.2, salts 0.7. It will be seen that the proportion of starch is nine times as great as that of the nitrogen, and the sugar also largely exceeds the nitrogen.

Wheat flour contains in 100 parts, water 10.7, phosphate 0.96, nitrogen 2.4, albuminoids 15.4, starch 65.4, cellulose 0.3. Wheat flour, therefore, contains more starch in proportion than potato does but the conversion of a large part of the starch into dextrine by toasting bread, neutralizes, in a degree, the fat-producing quality. Then, as four-fifths of all we eat supports respiration, there must of necessity be in our food four times as much carbon as there is nitrogen. The wheat alone will supply this sufficiently for persons tending to fatness, so that the starch in the potato is surplus, and should, therefore, be declined. In new milk, though the constituents vary with the kind and quality of food given to the producer of the milk, there are in every hundred parts, water 86, nitrogeneous matter 5.5, sugar 3.5, fat 3.6, salts 0.66. So, adding the fat and sugar together, they exceed the nitrogeneous matter, and hence milks rank among carbonaceous foods. But from the lime it contains, milk is the growing food, and better for children than any other food, since its constituents are blended in just the proportions required by the growing child. Milk is also very grateful to men and women of large osseous development who are not inclined to corpulence, while small-boned and plump persons complain that it makes them "bilious." An egg weighing 1¾ ounces contains 15.25 per cent. of carbon and two per cent. of nitrogen. In the classification referred to, eggs would rank with carbonaceous foods, but they are so rich in the various salts required by the body that they are permitted, even in the diet of corpulent people. On the scale of nutrition beef has always been regarded as the kind of flesh which gives the best nutriment to the eater, while mutton and poultry are softer in texture and more delicate in flavor.

Fish is richer in phosphorus than flesh, but on the whole less nutritious. It is recommended, however, that fish form a part of one meal every day. Next to the fish in nutritive qualities, eggs deserve mention, and then comes caseine or curd, which is strained from milk, but exists also in seeds, as peas, beans, almonds. Of all vegetables, peas and beans rank highest in nutritive qualities, as they contain from twenty-three to twenty-five per cent. of nitrogeneous matter. Of the grains, oats are the richest in nitrogen; wheat comes next; then, in order, maize, millet, rye, barley and rice, the latter being the least nutritious seed in extensive use. Fruits are nutritious to a greater or less degree, but are valuable chiefly for their flavors, the relish they give to food, the acids they contain which promote digestion, and the various salts which render them peculiarly grateful, not to the palate alone, but to the whole body. It is impossible in the space at command to do more than outline the subject. What has been said is intended to answer inquiries already made and to stimulate research in those who read. In the preparation of this brief article, Edward Smith's book on "Foods," which is a volume in the International Science Series, has been consulted, also Pereira on "Food and Diet," and also the articles on various kindred topics in the cyclopædias. To these we refer those who wish to pursue these inquiries further. In all these books the chemical composition of articles treated of is given, and there are tables showing the comparative values of foods with respect to their power to produce heat in the body, to promote its growth, and to restore its wasted tissues.—[New York Tribune.

A RIVAL FOR EDISON.

During all the agitation of the woman question, which has so shaken society for the past dozen years, there has been one safe refuge for the opponent of woman's emancipation. Driven to admit that woman had climbed as high as a man in literature, in art and in government, compelled to confess her equality, if not superiority, in a social aspect, it has always heretofore been open to the scoffer to shelter himself behind the triumphant declaration that woman has never shown herself an inventor. But unless the London correspondent of the New York Evening Post has been deceived, or is deceiving that journal, this last stronghold of the foe to feminine progress has been invaded and his last defense beaten down. According to the correspondent, woman, in the person of Miss Harriet Hosmer, has shown herself not only an inventor, but a great inventor in a time which is peculiarly one of great inventions.

One of the inventions with which the account credits Miss Hosmer far exceeds in importance and value anything that Edison has discovered or pretends to be on the the point of discovering. It is the use of a permanent magnet as a motive power. Miss Hosmer claims to have discovered in the permanent magnet a property hitherto unknown and unsuspected, which can be turned to practical use in the driving of machinery; and she is now having constructed in London a machine of four-horse power to be run by the new motor. There is no battery, no electricity, no heat, no fuel. It is the magnet, and that alone, which is to move the machine.

The enormous possibilities underlying such an invention it is utterly impossible to estimate. The falling off in the price of coal alone is sufficient to revolutionize the trade of the world. It would diminish the cost of every manufacture under the sun by doing away with the necessity for transportation of raw material. It would in this way destroy half the manufacturing centers of the world, to rebuild them in the wildernesses and the mountain. It would relieve Niagara from the shameful possibility hinted at of late—of being given over to the drudgery of turning wheels and driving spindles; and it would enhance immensely the value of the latest Edisonian invention, the electric light, by furnishing a cheap means of generating the electricity. There is no end, in short, to the marvels which the new invention will perform if it answers the expectations of the inventor.

The very immensity of the discovery and of its possible consequences will serve, however, to make people incredulous, or, at the very least, skeptical concerning it. There is something in the story so suggestive of the will-o'-the-wisp, perpetual motion, that the world, both scientific and unscientific, will be cautious about committing itself to approval until Miss Hosmer's claim is established by the production of a working machine. The production of such a machine is promised in the near future, and will be awaited with a good deal of interest.—*Detroit Free Press.*

RECENT LITERATURE.

Marrying off a Daughter. By Henry Greville. T. B. Peterson & Bros. 75c.

There is a charming simplicity and freshness about the works of this author which have rendered her a very general favorite. The prominent characters in Marrying off a Daughter, are not intrinsically interesting, but are faithful portrayals of individuals or a class abounding in European society, of which we on this side of the water, happily know little or nothing. In point of delicacy and finish, this book will not compare favorably with some of her other stories. We cannot, however, help sympathising with the artless heroine, the victim of the persecutions of an unprincipled mother, nor can we help enjoying the quiet humor and general interest of the story.

Stock Breeding: A Practical Treatise on the applications of the laws of development and hereditary to the improvement and breeding of domestic animals. By Manly Miles, M. D. New York: D. Appleton & Co.

Prof. Miles has at last concluded to publish in book from the essence of his admirable lectures. It is the first successful attempt of which we are cognizant to present to both farmer and student, systematically and in convenient form the known facts and principles of improving and breeding domestic animals. The manner of classifying and arranging the facts is simple and easy of comprehension; the subject is treated as exhaustively as is necessary for a comprehensive outline, and as a text-book for students, or as a work of reference for farmers, it meets every requirement. We hope its introduction will be extensive, among farmers especially.

MAGAZINES.

Harper's Magazine for December opens with four old Christmas poems: by Ben Jonson, George Wither, S. T. Coleridge, and Giles Fletcher. Abbey illustrates these with three pictures: the Christmas Waits, the Shepherds, and the Madonna in the Stable.

An illustrated article on England's Great University, contributed by M. D. Conway, gives a satisfactorily comprehensive view of the various colleges of Oxford, the social life of the students, the most eminent of the professors, and the work accomplished by the University in promoting scholarship in England. The illustrations are picturesque and interesting.

The most interesting paper in the Number—because of its humor—is the fun-provoking narrative of B. Munn Chowson of Dedham, concerning the peculiar institutions of Knoware—an island upon which he is thrown by shipwreck. This article is by Rose Terry Cooke. The illustrations are as humorous as the letter-press.

The thrilling adventures of the Red River Colony belong to the early pioneer history of the West, and are told by General Chetlain, a descendant of one of the colonists. The article is effectively illustrated.

Lovers of music have a treat given them in the illustrated paper on Mendelssohn and Moscheles, covering a remarkably interesting era in the progress of music both in England and Germany.

An illustrated paper by Charles Barnard, describes the mining of silver in all its stages. The brief paper on storm signals by E. H. Knight is also very timely.

Ex-Governor Seymour, under the title Crime and Tramps, makes some important suggestions as to the punishment of minor crimes. Dr. Coan, in Some Peculiarities of Yellow Jack, presents very curious facts as to the migratory character of yellow-fever epidemics, and other features of the disease. A. A. Hayes, Jr., contributes an interesting and piquant description of the First Railroad in China, the Woosung Railway—recently demolished by the Chinese.

Besides Mrs. Cooke's Knoware, already, mentioned, there are three capital stories. Two Hundred and Two is contributed by Elizabeth Stuart Phelps; Helen, by Alice Perry; and A Rescue from Cannibals, by Mrs. Frank M'Carthy.

Poems are contributed by E. S. Phelps, Will Wallace Harney, Frances L. Mace, Paul Hayne, and W. H. Babcock.

The serial novels by Black and Hardy, continued in this Number, will be concluded in January, to be followed immediately.

Sunday Afternoon for December has in the way of fiction a story by Ellen W. Olney, The Story of Allie; there is another entitled Gallowses; an installment of Edward Everett Hale's serial, and of Fishers of Men, the latter bringing the story to its climax.

What a Radical Found in Water Street, gives the experience of one who, disgusted by the petty bickerings and jealousies which accompanied the worship of Culture in the Club of the True Brotherhood, was made glad by the cordial and genuine brotherly love found among the Christian workers in Jerry McAuley's Water Street Mission in New York. McAuley was formerly a noted bruiser, and a graphic account of his experience is given in his own words. Rev. Tryon Edwards solves the riddle, Why Michael Angelo put horns on his Moses. Mrs. C. T. Leonard discusses Destitute and Delinquent Children, and favors scattering them, rather than bringing them together in large institutions. The Art of Alms-giving is set forth by Rev. G. T. Lidd. Co-operation and Simplification should be read by all women overburdened with the cares of housekeeping and dressmaking.

Among the shorter contributions are the Bambino Santissimo, Temperance and the Laborer, Poor Relations and their Uses, and Poems by Caroline Leslie, Margaret J. Preston, and Julia C. R. Dorr.

In The Prophetic Conference the Editor reviews some of the reasons advanced at the late New York conference in proof of the second coming of Christ, taking a negative view. He writes also of What Dives Knows about Lazarus and The Flat Iniquity, besides the usual briefer paragraphs. A liberal installment of book reviews closes the number.

The possibly most interesting statement in Sunday Afternoon, for December, is that before January 1, 1879, yearly subscriptions may be made for $2.10, postage paid, the regular price being $3.00.

The Eclectic for December opens with an extremely interesting paper by Archibald Forbes, the distinguished correspondent, on the British Annexation of Cyprus. Another timely article is The Austrians in Bosnia, by A. J. Evans. Jas. Henderson in his article on England and America as Manufacturing Competitors, aims to convince Englishmen that so long as Americans cling to a protective tariff there is little danger that England will lose her supremacy as *the* manufacturing country of the world. As an Englishman's view of the situation, the paper is both instructive and interesting.

Animal Intelligence, The First Edinburgh Reviewers, Coven's Revenge, Slavery and Polygamy in Turkey, The Earth's Place in Nature, Hallucinations of the Senses, Fred: A Tale from Japan, Musical Poetry, Biographical Sketch of Beaconsfield, Literary Notices, Science and Art, and Varieties (a most interesting department) comprise the other prose contributions. A fine steel engraving of Beaconsfield adorns the first page.

The Descriptive Catalogue of Houghton, Osgood & Co.'s publications makes an octavo of 235 pages. It describes all of their books and periodicals in all external features, size, form, binding; and, besides giving the contents, either characterizes these so as to aid the reader in understanding their value, or, more frequently, quotes the estimate of the most competent critical authorities. The high literary standing of the persons and journals quoted is especially noteworthy.

This Catalogue contains quite a remarkable array of notable names in literature, such as Agassiz, Aldrich, Anderson, Bacon, Dr. John Brown, Robert Browning, Bryant, Carlyle, Dr. E. H. Clarke, James Freeman Clarke, Joseph Cooke, Cooper, Dana, De Quincey, Dickens, Emerson, Fields, Fiske, Goethe, Bret Harte, Hawthorne, Hillard, Holmes, Howells, Hughes, James, Mrs. Jamoson, Starr King, Miss Larcom, Lewes, Longfellow, Lowell, Macaulay, Harriett Martineau, Owen Meredith, Montaigne, Parton, Pascal, Miss Phelps, Miss Adelaide Proctor, Saxe, Scott, Scudder, Principal Sharp, Stedman, Stoddard, Mrs. Stowe, Bayard Taylor, Tennyson, Mrs. Thaxter, Dr. J. P. Thompson, Thoreau, Ticknor, Waring, Warner, Whipple, Mrs. Whitney, Whittier, and scores of others hardly less distinguished.

This Catalogue will be of great value to all libraries and to all who buy and read good books. It will be sent by Houghton, Osgood & Co., Boston, on receipt of ten cents.

Sunday Afternoon, for November, contains a most interesting article on the Woman's prison in Massachusetts, entitled Women in Prison. The author points out a way for the philanthropically inclined to exercise their reformatory proclivities, nearer home than India or Africa. How To Use The Bible, is a suggestive paper, by Washington Gladden. Fencing The Lord, contains some excellent hints, which, it is to be hoped, those who frown on diversions of every kind, will profit by. Who Are The Demarks? Is answered pleasantly and intelligently by H. K. Carroll. The Japanese Story of Creation, is a unique contribution to Magazine literature. Chips From a Northwestern Log, deals mainly with the Indian question, and as it is a record of the experiences and opinions of one who has lived among this race, it is at least worthy of respectful attention.

Domestic Economy.

CONDUCTED BY EMILY MAPLE

THE DREADFUL DISH-WASHING.

MARY WAGER-FISHER.

A YOUNG lady who was visiting me a few days ago, after commenting upon an article in the RURAL NEW-YORKER concerning dish-washing, said, "Shall I tell you how I wash dishes?"

"Yes."

"Well, as a prelude, I must tell you that I think it the most abominable work under the sky! The smell of the dish water makes me sick, and my hands, they are under my face and eyes all the time, and I like to have them white and lady-like-looking; that is one of my vanities. But all this is neither here nor there, for since the 'hard times' struck us we have been much of the time without servants, and dish-washing falls to my lot. After a meal is cooked I fill all the gravy pans and skillets with water, place them on the top of the stove, and put a lump of washing soda into each, and by the time the meal is well over, these greasy vessels have actually cleansed themselves. For washing dishes I use a 'mop' and wear rubber gloves."

"How much do the gloves cost?"

"From $1.25 to $1.50, and they last me eighteen months."

WHAT CAN BE DONE SITTING DOWN.

Dish-washing.

Bread and pastry making.

Ironing.

Window cleaning.

I have been told that the house of Mr. Edison, the wonderful inventor, is a museum in its multitude of labor-saving contrivances; but Mr. Edison is not the inventor of a high stool for the kitchen, which humble piece of furniture, when properly introduced into the economy of the work, will prove to be a source of salvation to many a woman tired to death from being so much on her feet. One can do with ease all the above-enumerated tasks, which are usually done in a standing posture, and the facility in working while seated upon a stool is, of course, greatly increased by practice. With an ironing-board well adjusted at both ends, and high enough so that the knees will pass under it, one may do a large ironing, only rising to change the irons. And if one is too much of an invalid for that, she can have a small charcoal stove, which will heat the irons, placed at her hand. With such contrivances, ironing becomes "fancy-work," for a lady may do it in her parlor, with ease. The charcoal or kerosene stove is very nice for "doing up" fine and elaborate pieces that require much time and skill.

An improvement on the ordinary high stool, or low stool, is an adjustable top, connecting with the stool top by means of a strong screw, by which the second top may be lowered or raised at pleasure; in fact, something like a piano-stool, only it should have three or four legs and cross-pieces for the feet to rest upon. Such a stool is especially convenient in cleaning and polishing windows. The reason why very many tired women do not sit more at their kitchen work is because the ordinary chair is too low, and it is impracticable to bring tables and shelves down to the level of chairs. But the high stool and the adjustable stool, make the thing pleasant and practicable. Try the stools and save your health. Make your kitchen a Christmas gift of one!

Bryn Mawr, Pa.

BEHIND THE CURTAIN;
OR, THE OTHER SIDE OF THE QUESTION.

MUCH has been said in these columns concerning over-worked, weary, worn-out women, and the assertions are too sadly true to admit of any denial to the oft-repeated theme; but for this once let us look at the other side of the question. Let us lift the curtain of domestic life and see what is beyond. Let us ask ourselves if our homes are as bright, our firesides as dear, as it is our duty as women to make them; whether they are homes of our own, or homes of our loved ones, where we find a welcome. I know of a home,—at least it goes by that name, though to my mind "Home is not merely four square walls,"—which lacks, in fact, everything that makes a home a place of rest and joy; yet there are wealth enough, taste enough, and would be love enough if the sacred flame were ever replenished by a loving deed or thoughtful word. And here let me quote the words of a very dear friend: "Little acts of love are like adding fuel to a heavy flame, but if withheld, the flame is still, blacking over, and the warmth is beneath the surface—sleeping." How true! and in this way love is sleeping in this household, and I fear will sleep its life away for want of food.

We will enter first the kitchen; but we need go no farther, for this room will truthfully portray a woman's domestic qualifications. It ought to be neat, surely, for it is nearly noon, and there will hardly be time to arrange things in order and prepare the mid-day meal in season. Yet the wife sits composedly sewing. It is a lovely pattern in silk embroidery, and she gets so interested in her work that no thought of dinner enters her mind till she hears the clock striking. "Why, who could have thought it was so late!" and she bustles about, trying to do everything in a minute; but there is no time for cooking, so cold potatoes, bread and meat—remnants of the morning meal—are hustled upon the table. Then she sits down to her work as Hal enters—not, however, in the way I like to see husbands enter their homes, with a light, quick step, as if sure of comfort and welcome. He is annoyed at the looks of things in general, and sits down to the cold meal with a frown and an impatient word. She explains she is in a hurry to finish her work and does not feel hungry; so her husband eats in silence. He looks up once or twice, but it is not a pleasant picture; soiled wrapper, frouzy hair, slip-shod feet, and the room looking as if stirred up with a spoon, and he goes back to his work without a word.

A trifle, 'tis true, but many of them cause the flame to slumber. She is making a pair of slippers for his birthday. It is kind of her, and he appreciates it when she gives them to him; but what man would not rather go without slippers than wear them in a tumbled up, disorderly room, with an untidy wife for a companion, who thinks more of the last magazine stories than of her husband's conversation? If he should tire of all this negligence at last, and seek companionship elsewhere—at the store, "tavern," or at a neighbor's, she would complain of neglect, and declare herself misused. The flame would deadon; and where's the blame? She might not have been the first to withhold the answering smile, but many, many times a neglected wife can lay her heart-aches at her own door; and not many men can admire a careless, slovenly woman, whether wife or not.

A lady may appear as an ornament to society: she may have accomplishments, beauty or talents, while beyond the folds of the curtain which ought to shut out all discomfort, she may prove an idle, dissatisfied woman, an unloving helpmeet, and false friend! What ought woman's ambition to be; what more noble ought she to be, than to gladden and keep warm hearts which claim her as their own? Oh! let us keep these things fresh in our minds. They are our duties, our rights, which should never be forgotten; and let us keep our homes bright and cheerful, a white spot for our loved ones.

EVA E. E.

SCIENTIFIC COOKERY.

COOKING is the proper preparation of food for human consumption. Theoretically, the gauge of cookery should be the healthfulness of its results; practically, the standard is simply one of individual taste, and that in this country, where the majority are educated to relish compounds indigestible and worthless as brain and muscle producers, is fallible in the extreme.

It seems to be a general assumption among men that women are born cooks. This is a great mistake. Cookery is a science nearly akin to chemistry. A chemist must be carefully educated, yet we place the most foolish Hibernian virgins in our kitchens to prepare our food.

If cookery were reduced down to accurate rules, like chemistry, any one might make eatable dishes; but it is not so. Let the reader ask any successful cook how he or she makes any dish, and very likely no explanation will be given. "Practice" is probably stated as the reason, or "experience" or "luck." In most cookery-books the same inaccuracy prevails. What does a teaspoonful mean—heaped up, or level with the rim? Or a teacupful? What size of teacup? Or a pinch? There is no standard of measures conscientiously followed; and hence a woman will gauge her ingredients by the grab with the same unquestioning faith she reposes in the notion that the distance from the end of her nose to the tips of her fingers is just one yard.

The practical solution of the question whether people can be taught to cook their food properly is yet to be determined.

Make practical cookery a part of the education of every woman; and, above all, let us have recipes as accurate as physicians' prescriptions.

SAIREY GAMP.

DOMESTIC RECIPES.

Fried Pork-steaks.

These are much nicer to my taste if sprinkled with powdered sage before frying.

Sausage.

To twelve pounds of meat allow a teacupful of salt, two teacupfuls of powdered sage, eight teaspoonfuls of black pepper, and a tablespoonful of ginger. Mince finely, pack in jars, and pour over hot lard to the depth of an inch.

Hams.

These I find convenient kept as follows for summer use: After curing out them into thin slices as for cooking; trim off the rind and place as compactly as possible in stone jars; cover with hot lard to the depth of an inch or more.

When wanted for use, scrape off the lard, take out as much meat as required, but be careful to re-heat the lard and pour over the remaining slices at once.

MARY B.

Layer Cake.

Two teacupfuls of granulated sugar, one half teacupful of butter; one teacupful of sweet milk; three eggs; three teacupfuls of flour; beat all the ingredients together, reserving a little of the flour to add last with a teaspoonful of soda and two of cream-of-tartar. Bake in layers.

For Jelly.

Take the white of one egg; three-fourths of a cup of white sugar; a lump of butter the size of a hickory-nut; rub butter and sugar together and add to the beaten white with any flavoring desired; spread between the layers when they are slightly warm.

Will somebody please give a recipe for cleaning soiled buckskin gloves? MRS. W.

News of the Week.

Monday, Nov. 25th, 1878.

POLITICAL.

There is considerable doubt as yet as to the exact numbers of democrats, republicans and greenbackers in the next House of Representatives. Later official returns change somewhat former estimates, especially in some of the Southern States. Early reports sent some greenback republicans or independents from that quarter, but according to recent advices these have been generally "counted out." There is a world of complaint in republican organs and a good deal of it in independent newspapers about fraud and intimidation in the solid South, especially in South Carolina, Louisiana and Florida. The very peculiar electoral machinery devised by the republicans in these States, in spite of a good deal of alleged democratic bull-dozing, kept its originators in power for a considerable time, during which it incurred the bitterest democratic denunciation as outrageously fraudulent. Now, that it has at length fallen into the hands of these same democrats, or been seized upon by them, it seems to suit them mightily, while it is execrated by their opponents, who with their own petard have been hoisted completely away from the loaves and fishes. It makes a wonderful difference, whose ox is gored—yours or your neighbor's! It is to hoped, however, that the Southern democrats will at once see that with the Returning-Board machinery in their own control, the horrors of bull-dozing are really unnecessary, and that strong in their numbers, intelligence and principles, they will soon shame their opponents by abolishing the political machinery which has now been justly denounced as fraudulent by all parties. The President declares that all who can be proved guilty of having violated the electoral laws, shall be rigorously punished, a declaration which, strangely enough, makes many democratic and republican organs cry out that he has changed his southern policy; the former reproachfully, the latter contentedly. His friends, however, claim that he never had any policy as regards the South, and his non-friends add "or with regard to anything else." With a slur on his title, however, with few friends in either party and with several powerful opponents in both, he has had a "hard road to travel," and it should be acknowledged that he has hitherto managed to get along pretty well.

Since the elections there has been a good deal of speculation as to who will be the candidates for the Presidency in 1880. It seems generally acknowledged that Tilden has been "ciphered" out of the race, and that Bayard, Thurman and Hendricks are the most likely democratic champions. Among the republicans, Grant is undoubtedly the favorite of the bulk of the party all over the country, but there is against him a small but vigorous minority. Conkling and Blaine come next, the former highly respected everywhere, and the latter extremely popular in most places. The latest saying is that Grant or Conkling could carry New York, and that New York must be carried to secure a chance of republican victory. Butler, it seems, is by no means dead yet; in fact, the old man is reported extremely lively, and already preparing to capture the governorship of Massachusetts at the next election, preparatory to becoming the candidate of some party or faction for the presidency. Kearney has started for home without having hung a single "leecherous" bondholder or done any of the other terrible things he threatened on his arrival. He says he is going to make things hot for John Chinaman on the Pacific Slope, and as Ah Sin has few friends there and many foes, he may not fall in his efforts as ludicrously as he did East. Many of the "slimy editors" seem disposed to kick the fellow towards the setting sun, forgetting that shoe-leather has little effect upon brass, and Kearney must be brass all over. Though the greenbackers failed in electing many representatives either to the State or national legislatures, yet, for a brand-new party, they cast a pretty big vote here and there. In Pennsylvania it ran up to 81,000, and it is claimed to have been 80,000 in this State.

MISCELLANEOUS.

San Francisco is now suffering the customary reaction of a booming season in the stock market. Sierra Nevada, which has been the chief speculative stock, has collapsed this week to $65, after touching over $200 within the past month. Many operators, large and small, have been ruined by this break in the market, and the excitement at San Francisco is very great. The movement is thought to have been engineered by the people of the Nevada bank of San Francisco, and many experienced observers expect to see a reaction and a great rise very soon.

A stringent tramp law has been passed by the Legislature of Vermont. A party have been down the Mississippi, scooping up imprisioned fish from pools and setting them back into the river. About 3,000,000 fish have had their lives preserved thereby. Gov. Hartranft of Pennsylvania has decided in accordance with the opinion of the attorney-general, to issue a warrant for the execution, December 18, of the notorious Mollie Maguire, John Kehoe, and five others of the assassins. The murder for which Kehoe suffers was committed away back in 1862, but ever since he has been the leader of all the outrages committed in the Pennsylvania coal regions. At Philadelphia, Thomas H. Powers, of the drug manufacturing house of Powers & Weightman, died Wednesday morning, leaving property worth $10,000,000. The January half-yearly interest to be paid to foreign holders of United States 6 per cents of all classes, will probably fall below $4,500,000. Eight or nine years ago this interest was about $27,000,000 on $900,000,000.

The number of State banks in the country is 853, with an aggregate capital of $124,347,262 and deposits of $229,452,625; savings banks with capital 23, having an aggregate capital of $3,237,342, deposits $26,179,269; savings banks without capital 668, with deposits of $303,299,345; private bankers 2,856, capital $77,793,228, deposits $183,832,965: whole number of State banks, savings banks and private bankers 4,400, capital $205,380,000, deposits $1,242,790,000; national banks 2,056, capital $470,390,000, deposits $677,160,000; total number of banks and private bankers in the country 6,456, aggregate capital $675,776,000, deposits $1,919,954,000.

The joint commission appointed at the last session of Congress to examine into the question of transferring the Indian bureau to the War Department have completed their labors, and will meet at Washington in a few days to prepare their report. The committee report will probably be a majority and minority affair, with the weight of testimony against the proposed change.

There is no doubt that Sitting Bull has got over the defiant spirit with which he told Gen. Terry a year ago that he intended to stay where he was in British America, and that he now longs for his old hunting-grounds on this side of the line. Rev. Abbot Martin, the Benedictine missionary who visited the famous Sioux in his exile some time ago, has been interviewed at St. Louis, and says that Sitting Bull has given him the task of making terms with our government.

Yellow fever still lingers in New Orleans and a few other places in the South, though the fatal cases are almost invariably old ones or relapses. Last week there were about 29 deaths in the Crescent City, but it is very rarely that any new cases appear. There have been grave charges made about the manner in which the Howard Association has disbursed the vast fund which the charity of the North and the world at large has placed in their hands. Investigation, however, shows that the conduct of the Association has been blameless. After the fever began to abate, a notice was given through the press that the funds on hand were amply sufficient to meet all demands. The heavy surplus was divided among the doctors who had volunteered their services, at the rate of $25 per day. When the money was all expended in this way, it was found that some debts were still due, and moreover the Association also wishes to pay local doctors for their services in the same generous way. Accordingly another call has been issued, begging for money to enable them to be thus generous.

The report of the yellow fever commissioners, who have been investigating the epidemic at the South, attributes the origin of the fever to cases imported into New Orleans as early as May 23. The commissioners also comment on the general neglect and violation of the laws of health, neglect of drainage, inattention to deposits of fetid matter and refuse, and inattention to the purity of drinking water.

Tennessee bondholders have a sorry prospect of ever receiving any interest on their investments or recovering the principal. It's only occasionally that some extra-honest man talks about allowing the creditors of the State 50 cents on the dollar; others would favor paying 33⅓; but the majority prefer to pay nothing. Folks in Minnesota also object to pay what they owe. A proposition to devote about 500,000 acres of State lands to paying off old railroad bonds was voted down by an overwhelming majority at the late election. Nor is the objection to paying debts confined to such large communities exclusively; for all over the country there are scattered, here and there, counties, towns and villages which either have repudiated their indebtedness or are trying to do so; nay more, there are numerous individuals in these and other States, counties, towns and villages who, by hook or by crook, are following closely such public examples. These, however, are sometimes so far unfortunate as to be placed behind prison bars for their efforts at imitating their illustrious exemplars. Governor Emery of Utah recommends, first, that provision be made for the selection of jurors in that Territory in precisely the same manner as they are selected in the States. As matters now stand, the peculiar legislation by Congress is so hampered by Territorial legislation as to render conviction in certain causes almost impossible. He recommends, too, that woman suffrage in the Territory of Utah be abolished, and that polygamy be made by act of Congress a continuing offense, based on cohabitation rather than the marriage ceremony, as now provided by United States law. Stocks have been comparatively quiet at New York, and prices have kept up pretty well. The demand for United States 4 per cents is very large, beyond the ability of New York dealers to meet, and the price has risen a little. Money is perhaps a little stronger, though plenty is to be had on call for 3@4 per cent. Gold

has been bid at par at New York again, and the Government has actually made some purchases at 100 in the West. There have been some rumors of a corner in No. 2 spring wheat, engineered by John Keene, the big stock speculator, but no effect of such a movement is yet observable at the exchanges.

On Saturday evening last the Marquis of Lorne, the new governor-general of Canada, together with his wife, the Princess Louise, and their 25 servants, arrived on board the steamer Sarmatian in the port of Halifax, Nova Scotia, after a stormy voyage. Vast preparations have been made to give him a grand reception to-day, and all along the route on the way to Ottawa, the party will be the recipients of the most demonstrative welcome ever accorded to anyone in Canada, except perhaps that given to the present Prince of Wales—was it a hundred or a hundred and fifty years ago? Nothing has yet been discovered about A. T. Stewart's body, despite the increase of the reward to $50,000. Probably at least $100,000 and immunity will be demanded by the thieves. Neither is it known that anything has been found out about the two and a half million dollars stolen a few weeks ago from the Manhattan Bank in this city, though there is a rumor that the directors are compromising with the burglars for the return of their plunder. A poor show for the finest police in the world!!!

FOREIGN.

Manuel Pardo, ex-president of Peru, who is reported to have been assassinated in that country, was one of the most accomplished of Peruvians. He was a man of fortune and of education, who was called to the highest post in the government after the slaying of President Balta, and the brief but savage ursupation of the brothers Gutierrez in 1872.

Statistics compiled by the Paris police show that since May last only a little more than a quarter of a million of foreigners have entered that city. Of these about 13,000 were Americans, despite the common notion that forty or fifty thousand went over to the Exhibition. Paris shopkeepers say the Americans are not what they used to be. They ask the price of things, and grumble if too much is asked, very much like other people. The receipts of the exposition were $2,530,749, $400,000 more than when it was last held in that city, but almost $1,300,000 short of our Centennial success at Philadelphia.

There have been violent storms thoughout central Italy the past week, and the damage is almost unparalleled. At Rome all the lower streets of the city were overflowed by the Tiber. England has also suffered from floods, the city of Norwich in particular receiving great damage by the river's overflow.

The publication of 28 newspapers and 88 books has been prohibited since the promulgation of the anti-socialist law in Germany, and the dissolution of 102 societies ordered.

England began the threatened war with Afghanistan last Friday and has secured some small successes.

Across the Atlantic distress and discontent among the lower orders are growing more widespread every day. Strikes, lock-outs, want and starving turbulence prevail in Great Britain among the laboring classes to an almost unprecedented extent, while military oppression, wielded by the Man of Iron, cannot suppress the cries of distress and the execrations of discontent in broad Germany. Throughout monarchial Europe there is an ever-present dread of a vast socialistic conspiracy whose primary aim is the assassination of sovereigns, with the ultimate view of establishing some kind of Utopian republic, where everybody will be as good as everybody else, and a great deal better. HERMAN.

PUBLISHER'S NOTICES.

OUR readers are requested to read the following before making up their orders for seeds:

Any ten of the following require a one-cent postage stamp:

The Voorhis Water-melon.	Weigela.
Golden Rural Tomato.	Deutzia crenata fl. pl.
Acme Tomato.	Hibiscus militaris.
New Bronze Ricinus.	Eryngium Leavenworthii.
Hibiscus moscheutos.	Geranium sanguineum.
Callicarpa Americana.	Yucca filamentosa.
Chater's Lemon Hollyhock.	Vitis heterophylla.
	Rural hybrid Aquilegia.
	Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance Wheat are included, a two-cent extra stamp.

We request that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense. For particulars, send stamp for RURAL of Nov. 9.

THE MASONIC BOOK AGENCY.—We have received several inquiries concerning the Masonic Book Agency. Their place of business is on the southwest corner of Broadway and Warren St., over Devlin's store. They are all right, and we have no hesitation in recommending the company and their books to our readers.—*New York Weekly Sun, Sept. 4.*

WE confidently refer our readers to the card of Dr. C. R. Sykes, in our issue of Nov. 9. Mr. F. W Jones of the Chicago Farmers' Review says: "Dr. Sykes is an old resident of Chicago, a regular graduate, honest, honorable and responsible, and as a physician takes first rank in his chosen specialty of catarrh and its complications."

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Nov. 23, 1878.

BEANS AND PEAS.—Beans hold a good position. Trade has not been specially active, but with the prospect of a steady local and export demand, all prime sorts are named with confidence. Peas quoted easy. Canadian field in bulk and bond 70@75c.; green $1.25@1.30; Southern B, K., 2-bush. bag $2.40@2.55; Medium beans, prime, $1.65@1.70; fair to good, $1.55@1.60; Marrow, prime (put on board), $1.75@1.80; fair to good, $1.55@1.65. Pea $1.65@1.85; White Kidney, $1.85@2.00; Red kidney, $1.75@2.10; Black or turtle soup, $1.60@2.10.

Receipts of beans for the week, 10,638 bush., exports, 775 bbl.

BUTTER.—There has been a lull in business which dealers dislike to see in November. The offering now contains a good many attractive small lines and dairies with liberal fall ends, and sellers count upon a brisk trade at good prices. For the past week good prices have been only obtainable in a small way, wholesale buyers when they attended having rather the best of the position, owing to an enlarged supply. Wet weather has tended to keep many away—a good deal of eastern trade being missed in consequence, and there is some accumulation of useful table to fine stock. The offering of State is better as a whole from late receipts than might be expected considering the unfavorably warm fall, yet there is a material quantity that will require help from cold weather and periodical scarcity of choice to get into real commercial motion. Dairies must be exceptionally light to make 2c. Western butter shows a better average quality and holders keep the tone of prices in unison with weaker sound in State.

Dairy, pails and half tubs, choice, 23@24c.; dairies, 17@19c.; selected full, 21c.; other, 16@18c.; good, 19@20c.; creamery, choice, 27@28c.; good to prime, 24@26c.; early packed, 18@20c.; low grades of State, 10@14c.; fair to prime half-tubs and pails 15@20c.; State Welsh pails, 21@23c.; other, 13@16c. Creamery ranges 23@27c. good to prime; 17@20 early packed, Selected dairy, 15@18c.; good to prime dairy and nice ladle-packed factory, 12@14c.; other factory incuding milled, 6@10c.; rolls, prime, 18@20c.; other, 10@15c.

Receipts for week, 35,800 pkgs.

BEESWAX.—Small lots are moving out at 26½@27 for Western and Southern.

Exports past week, 2,349 lbs.

CHEESE.—Shipments for the week have been 45,437 boxes. The export demand has been almost entirely for fancy lots, which have scarcely changed in price, and quoted at 9c.; grades only a trifle off are at least ½c. under this, and the general market is dull and depressed.

Quotations at 9c. for fancy, 8½@8¾c. for fine lots; 7@8c. for good and prime; 6@7c. for fair to good; 3@5½c. for skimmed. State, farm dairy at 8@9c. for good to choice; 6@7½c. for fair to good. Wisconsin factory, fine to fancy, 8¾@9c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 8¼@8¾c.; good and prime, 6@7½c.; fair, 5@6c.

Receipts past week, 92,420 boxes.

Gold closes at 100½.

Liverpool cable 47s.

COTTON.—The market has fluctuated sharply, closing steady and moderately active; latest prices are for November, 9.32@9.33c.; December, 9.33@9.34c.; January, 9.45; February, 9.57@9.58c.; March, 9.69@9.70c.; April, 9.81@9.82c.; May, 9.94@9.95c.; June, 10.02@10.03c.; July, 10.10@10.12c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*N. Orleans.*	*Texas*
Ordinary	7½	7¾	7¾
Strict ordinary	7 15-16	8 3-16	8 3-16
Good ordinary	8 7-16	8 11-16	8 11-16
Strict good do	8 13-16	9 1-16	9 1-16
Low middling	9 1-16	9 1-16	9 5-16
Strict low middling	9 3-16	9 7-16	9 7-16
Middling	9¾	9¾	9¾
Good middling	9¾	9¾	9¾
Strict good middling	9 15-16	10 3-16	10 3-16
Middling fair	10¾	10¾	10¾
Fair	11¾	11¾	11¾

Stained.

Good ordinary	7¾	Strict good ordinary	8¼
Low middling	8¾	Middling	9

DRIED FRUITS.—Apples have a better trade and rule steady in price. Peaches show no change. Small fruits generally strong.

Southern Plums, 14@14½c.; State plums, 15@16c. Blackberries are quoted at 5½c. Peaches—Peeled Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime; choice North Carolina, 11½@12½c.; good do., 8@9c.; unpeeled halves, 3@3½c.; quarters, 3@3½c. Pitted cherries, 20@22c. Apples—Old State quarters, 2½@3c. New apples, 2½@3c. for southern quarters in bbls.; 4½@5½c. for prime sliced, and 6@7c. for fancy; State at 4½@6c. for new sliced; western at 3@3½c. for new quarters. New raspberries, 30c.

Exports, past week, 1,650 bbls. dried apples.

EGGS.—Fresh eggs are dearer than almost any of the food list, and when that is the case the market has not much snap. For cheap or mixing purposes good limed are in demand. Southern fresh will soon be wanted. Near points 28@29c.; State and Penn., 24½@25c.; Western, fresh, 23½@24c. Canadian, 23@23½c.; poor fresh, 20@22c. Limed, 16@17c. prime; 14@15c. fair to good.

Receipts for the week, 8,102 bbls.; do. last week, 11,231 do.

FLOUR.—There has been a good export movement and fair local trade, with prices well supported.

Latest prices are: $3.25@3.75 for inferior to fancy superfine State; $3.80@4.00 for poor to good extra do., odd lots and lines; $4.00@4.25 for good to very choice do., strictly choice and fancy lots above this; $3.25@3.75 for inferior to very fancy superfine Indiana, Iowa, Michigan, &c.; $3.50@4.00 for ordinary to good shipping extra do. and $3.85@4.25 for good to choice extra do.; common to about choice white wheat extras, $4.10@5.00; choice to strictly fancy do. at $5.00@5.85; red and amber winter wheat very inferior to choice trade and family at $4.00@5.65; round hoop Ohio at $3.85@4.25, and trade and family brands of do. at $4.25@5.65, the latter rate for very choice; St. Louis, $4.10@4.75 for very poor to good extra, and $4.75@5.75 for good to very choice; Minnesota clear, very inferior to very choice at $3.80@5.15; few brands going above $4.65@4.75; Minnesota "straight," inferior to very choice at $4.65@5.75; and patent fair to fancy at $5.25@8.50, few brands going above $7.50; unsound stock at from $2.00@4.75; city mill extra at $4.75@5.10 for West Indies (the latter rate in new packages); do. for England, $3.80@4.00; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.60 for fair to very choice; No. 2 at $2.50@3.10 for very inferior to choice.

CORN-MEAL.—Sales at $2.85 for Brandywine and $2.15 to $2.65 for yellow Western.

FRESH FRUITS.—Heavy owners of apples are not the most cheerful merchants of the period. Of course they have bought low, but the demand does not respond at a rate that uses up stock fast enough to brighten the future. Large quantities of apples have gone into store that will not come out again with any money in them. Choice Spits and Kings, $1.75@2 bbl.; good truck and boat stock, including Greenings and Baldwins, $1.25@1.50; poor to fair, 75c.@$1; Lady apples, choice, fine lot, $3@4. Cranberries feel the competition of cheap apples and are not quoted firm. Rather more stock is being distributed locally for Thanksgiving's feast. Fancy Capes, $7@8 bbl; other, bbl., $4@7; crates, choice $1.87@2; poor to good, $1@1.50. California reports only one-half a crop of shipping pears. At the moment a good many car-loads are arriving at once and prices are easy. Winter Nellis, Glout Morceau, Vicars, Pound and D'Aicon, $1@4.50 per box. Cal. grapes scarce and higher. Choice varieties are becoming quite popular among buyers who used to depend upon hot-house productions. Tukay and Muscat, $8@9 per box of 40 lbs. Hot-house grapes, Black Hamburg and Muscat, 60@75c. Catawba grapes have a long scale coming here in various qualities from the West, Phila. and Boston; loose, 2@6c.; cases, 5 lbs. in boxes $1.50@3.50. Florida oranges, $3@4.50 per standard box, viz.: 12x12x7 inches. Chestnuts, firm at $3.50@4 per bush. Hickory nuts, shellbarks, $2.25@2.50; B. Walnuts and Butternuts, 50c. There has been quite an active trade in peanuts, though prices are no better. Va., hand-picked, $1.15@1.20; other, 95c.@$1.05; shelled, 5@5½c.

Exports, apples, past week, 8,500 bbls.

GRAIN.—Wheat shows a good export movement, and with speculative manipulation as well, prices have advanced.

Latest sales are, of No. 2 spring, 90c.; ungraded spring at 97c.; No. 1 red at $1.08¾@1.08¾; No. 2 red, at $1.08@1.08¾; ungraded white at $1.06@1.11; extra white at $1.12½; white State at $1.09@1.10½; No. 1 white at $1.08¾@1.09¾; No. 2 white at $1.06@1.06¾; No. 2 red, steamer grade at $1.05¾@1.05¾; ungraded red at $1@1.08; No. 3 red at $1.04@1.04½; No. 2 amber at $1.05@1.05½; ungraded amber at $1.04@1.05¾; No. 2 red, Nov. option, at $1.05¾; do. for Dec. option, at $1.08@1.06½; do., January option, at $1.09; No. 2 amber, November option, at $1.05¾; do., December option, at $1.05@1.06; do., January option, at $1.09; New York No. 2 spring, December option, at 97c. Rye is easier; Western quoted 57@58, and State at 60@62. Corn is easier and in light export demand; latest sales are of steamer mixed at, 46@46¾c.; New York No 2 at 46¾@47c.; yellow Western at 49¾c.; yellow Jersey at 48c.; ungraded mixed at 44@47c.; New York No. 3 at 43¾@43¾c.; New York No. 2, November option, at 46½@46¾c.; do., December option, at 46½@47c.; do., January option, at 48¾c.; steamer mixed, November option, at 46¾c.; do., December option, at 45¾c; do., January option, at 45@c. Oats strong and active, with sales of New York No. 1 at 31c.; New York No. 2 at 30@30½c.; New York No. 2 white at 32¾@32¾c.; New York No. 3 quoted at 29@29¾c.; New York No. 3 white at 31¾@31¾c.; white western at 31@37c.; mixed do., at 29@31c.; white State at 32@37c.; mixed do. at 30@31c.; No. 2 Chicago quoted at 30¾@31¾c.; New York extra white quoted at 39¾c.; New York No. 1 white at 34¾c. New York selected at 29¾c. State 2 rowed barley, 90@95c.; do. 3 rowed, 75@80c.; Canadian, 95c.@$1 22½. Canada malt, 1 10@1 25; State, $1 05@1 10.

HAY AND STRAW.—Prime hay is wanted and rules firm in price; common grades plenty and easy.

Sales at 35@40c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye, and 30@35c. for short rye.

Exports past week, 1,123 bales.

HOPS.—Emmet Wells says:

The improvement in the demand noted in our last continues, but the price stands the same as last week. The receipts for the week reach nearly 5,000 bales, some 1,600 bales of which have been taken for export. The shipments include 1,000 bales of California hops. We think our brewers will miss it letting these fine hops slip out of the country; the day may come when they will wish they had taken a few bales themselves.

Quotations are for New Yorks, new crop, choice to fancy, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@7; Olds, all growths, 2@4; Pacific coast, 12@15.

OIL-CAKE.—Western quoted at $28 ₰ ton.

PROVISIONS.—Have tended easier, but closed firm with increased export demand. Mess pork quoted at $7.50@7.90 for spot lots; $7.45 for Nov.; $7.35@7.45 for Dec. Bacon at 4¾ for long clear and 5 for short clear. Lard at $6.20 spot lots; $6.20 for Dec., and $6.25 for Jan. Stearine at 6¾c. for Western. Beef Hams at $14.50@15. Beef—Extra India mess, $20@21 for city brands; do. Philadelphia, $18.50@19; packet at $11@11.50; new plain mess at $9.50@10; new extra mess at $10.50@11.

POULTRY AND GAME.—Live poultry still quoted unprofitably low. Chickens and fowls, 7@9c.; roosters, 4@5c. Turkeys, 8@9c. Ducks, pair, 45@85c. Geese, N. J., $1.25@1.50; other, $1@1.12. Pigeons, 20@25c.

Dressed poultry has fortunately arrived in moderate quantities, as the demand would have been light, owing to the soft weather.

Dry picked Phila. Turkeys, 13@15c.; choice, N. J., 13@14c.; other, 9@12c.; dry picked Phila. Chickens, 12@13c; other, 8@11c.; dry picked Phila. fowls, 10@11c.; N. J., choice, 10@11c.; other, 6@9c. Ducks, best, 12@13c.; other, 9@11c. Geese, prime, 10@11c.; other, 8@9c.

There is demand for game, but buyers are cautious, as quality is irregular through damp weather. Choice items bring the extreme. Venison has suffered most in condition.

Quail, doz., $1.25@1.50; Grouse, trapped, pair, 65@75c.; drawn, 40@50c.; Partridges, State, 60@70c.; other, 35@50c.; Woodcock, 40@50c.; Tame Squab, doz., $1.25@1.50; canvas back Ducks, $1.12@1.37 pair; red head, 50@75c.; Mallard, 40@50c.; Teal and common, 20@30c.; Hares, 30@35c.; Rabbits, 20@25c.; Venison, short saddles, 12@14c.; long saddles, 10@12c., whole deer, 8@9c.

SUNDRIES.—Honey offered easier, 15@16c. Single comb clover, 13@14c.; two, do. Buckwheat, 10@12c. Oil Peppermint, in tin, $1.40@1.50; in glass, $2@2.25; Sassafras, 48@50c.; Wintergreen, $1.90@2.

VEGETABLES.—A large supply of potatoes is offering, and the market is weak. Wholesale buyers can supply themselves at the inside range. We give the full list of sorts now in market. Nova Scotia E. Rose, bulk, $2.87 bbl.; Prolific and Chili red, $2.50; P. E. I. Jackson whites, $2.37; Marcers, $2@2.25; Eastern E. Rose, with bbl., $2.75@3; State, $2.50; fair to good, $2@2.37; do. Peach Blow, choice, $2.50@2.75; common, $2@2.25; Peerless, choice, $2.37@2.50; poor to good, $2@2.25. Sweet potatoes, Del., $2@2.25; Va., $1.50@1.75, which is higher. Onions slow at the advance. White, $2@3 25; red and yellow, $1.75@2; Chester, $1.25@1.62. Hubbard and marrow squash, $1.75@2. Cabbage, $3@4.50 per 100. Cauliflower, bbl., $1.50@3. R. Turnips, 75@87c. Beets, 75c. Carrots, 75c.@$1. Pumpkins, 100, $4@8 Celery, 75@90c. doz.

Exports, potatoes, past week, 8,050 bbls.; of onions, 600 do.

SEEDS.—Clover quoted at 6¼c.; 6½c for prime to 7¼c. for choice. Timothy at $1.20 for prime.

TOBACCO.—Prices have not varied; quoted essentially as last week, with a good export and local trade demand.

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@ 3	3¾@ 3¾
Good lugs	3¾@ 4	4 @ 5
Low leaf	4¾@ 5	5¾@ 6¾
Medium leaf	5¾@ 6¾	6¾@ 7¾
Good leaf	6¾@ 8	8 @ 9
Fine leaf	8¾@10	10 @12
Selections	— @—	12¾@14

SEEDLEAF—CROP OF 1877.

New England wrappers,	common	10	@12
do. do.	medium	13	@15
do. do.	fine	18	@36
do. do.	selections	27½	@35
do. seconds		10	@18
do. fillers		6	@ 7
Pennsylvania assorted lots,	common	9½	@10
do. do.	fair	11½	@13
do. do,	fine	14½	@16½
do. wrappers		20	@40
do. fillers		7½	@ 8
New York assorted lots,	common to medium	8	@10
do. do.	do. good,	12	@15
Ohio assorted lots		9	@12
Ohio wrappers		12	@18
Wisconsin assorted lots		7½	@10

WOOL has been rather urged and quoted easier—leading to moderate transactions with manufacturers.

Quotations are, for Ohio, Pennsylvania and West Virginia—XXX and picklock, 37@39c.; XX, 35@—; X, 35@—; No. 1, 36@37c.; No. 2, 33@35c; coarse, 30@32c. combing, 39@42c.

New York, Michigan, and Wisconsin, XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 36@40c.

Indiana, Kentucky and Tennessee—XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 30@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@30c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS

Saturday, Nov. 23, 1878.

BEEVES.—Receipts for the week, 9,596 head, do. last week, 10,432 do. The week has been dull one even with moderate offerings. Stormy, moist weather has caused a low, quiet, dressed beef market, and wholesale butchers have not been sharp purchasers. Still, quotations were thought in the average to be a shade higher than on Wednesday last for under grade stock. It should be understood that the Wednesday's market is a test for cattle. Fine steers did not hold up compared with that day. Very common, 7c. lb., dress 55 lbs.; ordinary to good steers, 7¾@8¼c., dress 55@56 lbs.; prime to extra, 8¾@9¾c., dress 56 lbs. No Texas or Colorado in market.

MILCH COWS.—Receipts are not heavy and the market is quiet, at a range of $35@65 per head. Sales mainly for Long Island.

VEAL CALVES.—Live calves have sold low, but at the close are working better. Choice N. J. & Buck's Co., 6@6¾c.; heavy IN. Y., 5@6c.; State, 5@6c.; fed calves, 3@4c.; grassers, 2@2½c. Hay dressed calves, 7¾@9c.

SHEEP AND LAMBS.—Receipts for the week, 23,372 head; do. last week, 23,775 do. Sheep have sold better as a rule. Western quoted, 4@4¾c.; N. J., 4@4¾c.; N. J. ewes, 3¾@4c.; fancy for export, 5¼c. Colorado have sold at 3c. Lambs, fair to extra, 4@5¾c.

During the week several car-loads of live Canadian were taken to England.

SWINE.—Receipts for the week, 45,193 head; do., last week, 39,190 do. No late sales, trains having been detained; recent rates for live; $3 20@3 50 N. J. dressed pork; 4@5c., heavy to light. City dressed, 3¾@4¾c.

SPECIAL NOTICES.

The Upright Piano is surely supplanting the square in this country. The tone is considered superior by most musicians, and when strongly made, so that it will remain well in tune, it is superior in all other respects. Mr. Geo. Woods, the ingenious Organ builder of Cambridge, Mass., who was formerly a piano maker, has patented a new frame for the upright, which secures for it a great degree of strength and solidity, and at the same time improves the quality of tone. It is claimed that the Pianos made on this principle will remain in tune longer than the squares, and the improvement is attracting much attention among musicians.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

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Single Copy, per Year	$2 00
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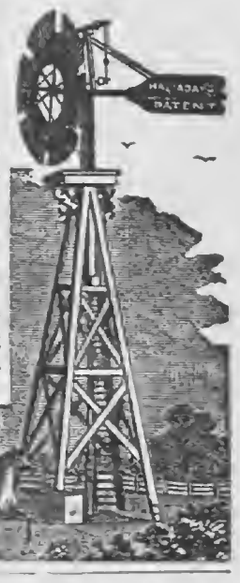

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WELLS, RICHARDSON & CO.'S PERFECTED BUTTER COLOR is recommended by the agricultural press, and used by thousands of the very best Dairymen. It gives a perfect June color, and is harmless as salt. A 25-cent bottle colors 300 pounds, and adds 5 cents per pound to its value. Ask your Druggist or Merchant for it, or send for descriptive circulars. WELLS, RICHARDSON & CO., Prop'rs, Burlington, Vt.

THIS NEW

ELASTIC TRUSS

Has a Pad differing from all others, is cup-shape, with Self-Adjusting Ball in center, adapts itself to all positions of the body, while the BALL in the cup PRESSES BACK the INTESTINES JUST AS A PERSON WOULD WITH THE FINGER. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.

Eggleston Truss Co., Chicago, Ill.

Reading for the Young.

BABY HAS GONE TO SCHOOL.

THE baby has gone to school; ah me!
What will the mother do,
With never a call to button or pin,
Or tie a little shoe?
How can she keep herself busy all day,
With the little "hindering thing" away?

Another basket to fill with lunch,
Another "good-by" to say,
And the mother stands at the door to see
Her baby march away,
And turns with a sigh that is half relief,
And half a something akin to grief.

She thinks of a possible future morn,
When the children, one by one,
Will go from their home out into the world,
To battle with life alone;
And not even the baby be left to cheer
The desolate home of that future year.

She picks up garments here and there,
Thrown down in careless haste;
And tries to think how it would seem
If nothing were displaced;
If the house were always as still as this?
How could she bear the loneliness?

N. O. Picayune.

OUR SCHOOLS.

THE notable exhibit of Belgian school methods and equipments at the Centennial has had good effects in many of our States. It set us good examples in ingenuity of device as well as in thoroughness and exactitude of completion. They have contrived ways of grounding learners in the necessary fundamental arts of using letters, words, figures and maps, so early and so well as to save some time, even in the commonest schools, to impart something of the principles of science, and the processes of useful arts, and to imbue the mind with a desire to learn more. This last effect, although merely an inclination, almost assures a useful and therefore happy life. Who can measure the difference in the prospects of two youths, one of whom has acquired a love for knowledge, and has found the way to gain it, while the other has acquired a distaste or even a disgust against mental and moral culture, and therefore goes to meaner and debasing sources for subjects of thought and excitement.

In the schools of the country town (Tyrone, Pa.) from which I write, there has been gradually brought about a change in the school course, which seems to be worth telling of in a paper like the RURAL, which seems so acceptable to parents and teachers all over the land.

Some years ago—before the Centennial—the first step in a great change was taken by the appointment of the ablest teacher—the principal of the eight large schools or grades—to teach the little ones just entering school,—the six-year-olds. He entered upon this humble work not only with readiness, but with real zest, and developed methods which his successors have continued and improved upon; so that the infant school has become the pride of the place.

The little ones are not troubled with spelling before reading. They learn words and phrases that are familiar to them, and in which there are no silent letters. They utter the sounds in a word, and that is their rational guide to its pronunciation. They learn, as if by intuition, or by magic, and their reading has a naturalness of tone that is delightful, and in entire contrast with the stilted, drawling, falsetto tones that are too commonly heard where the learner is driven over the stumbling blocks and pitfalls of spelling by the letter names. Every step seems to enable the learner to make the next step longer. They advance with accelerating speed, in geometrical ratio. They feel their own progress, and are inspirited by it. No weather prevents their attendance. They are an earnest, aspiring, happy flock, and they do not lose this initial impulse.

They do much more than read. They copy the lesson on their slates, and they copy and sum up columns of figures, and do it well. They sing—march—drill—learn the clock-face, and many other things. A visitor declares that they were learning grammar! the teacher was correcting some one's error of speech, and rhetoric! (because they made a slight stop—a rhetorical pause—between the subject and predicate, as indicated on the chart by a distinguishable interspace). In three months a class will be not only through the Primer, but half-way through the First Reader; when they go into the next grade. There they begin to spell, with the pencil words that are placed before them on the board in homographic sound-signs, a method which seems to relieve spelling of its dullness as well as of its ineffectiveness. They begin to draw too, and these procedures, as well as the science-talks in the rooms above, are either derived from Belgian example, or in consonance with it.

Time is saved to teachers as well as to the scholars. The Principal has an hour after he dismisses the little beginners to give to classes from the High School, or to lectures there, or to talks in the intermediate rooms. These are on instructive subjects and nearly always illustrated by objects, specimens or apparatus. This is most acceptable, nourishing and stimulating food for inquiring young minds. The tone of the schools, and the processes followed, relieve the teachers of much worry and trouble, and they, under the stimulus of these talks, give much more oral instruction and use more practical illustration than formerly.

Writing with pen and ink is deferred until the fifth grade is reached;—ages mostly 10 to 12. By that time the fingers get some firmness, and have good control of the pencil in lines and directions and lengths of all sorts; and the management of the two-nibbed pen and the black fluid of the ink-well is then soon acquired. A handsome style of writing is soon taught when made a specialty at that age, and is not then likely to degenerate.

W.

A NEW DEPARTURE.

BOSTON school authorities have quite revolutionized the old system of teaching in the public schools, as the following description from the Traveller indicates:

To show what a departure it is from the beaten paths of the past, we present the main features of this new course of studies. In the primary schools the instruction is to be almost entirely oral. Scholars are to learn from objects, and from the teacher, instead of from the book. Oral lessons will be given upon pictures, plants, animals or whatever the ingenuity of the teacher may suggest, or order to accustom the scholars to express what they know in words. This exercise will be called "Language." Other oral instruction will be given upon form, color, measures, animals grouped by habits, traits or structure, vegetables, minerals, the human body and hygiene. Fables, anecdotes and simple poetry will receive proper attention. The metric system will be taught from the metric apparatus. Heretofore much time has been given to spelling and many hours spent over the primary speller; that book is to be entirely discarded, and "some easy, common words from the reading lessons" substituted in its place. Two new studies are introduced called "Recreation" and "Miscellaneous," to which an hour and a half a week is to be given. Whether this means work or play, teachers and scholars are yet to learn.

In the grammar grade, some equally important changes are indicated. Grammar is abolished, at least in name. How the eyes of the boys will glisten when they learn this fact! "Language" takes the place of grammar, which means less of technical grammar, such as parsing, etc., and more attention given to composition, structure of sentences, use of capitals, letter-writing and analysis. Spelling is to be from the reader and other text-books. The amount of writing in copy-books is reduced more than one-half, and more writing in blank-books and in other exercises required. The great amount of time previously devoted to geography is reduced and natural philosophy and physiology are to be taken up in the third class. Music and drawing receive the same attention as during previous years. The most important change here, as in the primary grade, is in reference to oral instruction. It is not to be, as in the old programme, merely mentioned and rarely attended to by the teachers for want of time, but a specified amount of time per week is to be allotted to it as well as to arithmetic or reading. In the two lowest classes the instruction will be almost entirely oral. In the fourth class it will be largely so, and in the other classes from one to two hours per week will be given to this exercise. In the lower classes the subjects for oral instruction will be natural history, plants from May to November, animals from November to May, trades, occupations, common phenomena, stories, anecdotes, mythology, metals and minerals. In the upper classes, physiology, life in the middle ages, biographical and historical sketches, and experiments in physics. Every study has its specified time assigned to it.

LETTERS FROM BOYS AND GIRLS.

Gaslight by Day.

FOR a long time I have thought I would enlist in the army of Rural Cousins, but from some cause, I have failed to do so, the cause most probably being that I did not possess the courage to stand the cross-fire from the batteries that support the Cousins' brigade. A few months ago they seemed to have their guns in such excellent condition, and handled them with such skill and precision, that raw recruits were compelled to succumb under the murderous fire; but now since the signs of peace are good, I will offer myself to the recruiting officer, and if I am admitted, we may become acquainted, providing peace and good-will prevail.

I have long been interested in the Cousins' columns, and am delighted when I find that page full of the sayings and doings of the little Rural brigade. I hail from the banks of the Ohio. I sing of the miniature city of Liverpool, situated on the banks of that river. The thing that appears strange, or unaccountable to a person entering the place for the first time, is the street lamps, all burning brightly through the entire day. Because of such a sight a person is almost led to believe, that day came on so suddenly, that no time was had to put the lights out; but on inquiry, we find that the place is lighted by gas furnished by a well or wells in the heart of the city, which supply enough gas to light a city of many thousand inhabitants. The reason the lamps are burning at all times is that it costs less to let them burn than to employ a man to extinguish the light.

Many buildings are not only lighted, but are also heated by gas. Many families use it in cooking as well as heating their houses. Most of the private houses are illuminated with it; no one doubts that the city will be heated as well as illuminated by gas before another year rolls around.

It is claimed to be less expensive than coal or wood; no ashes; no dust flying around; no stirring and poking at fires; no carrying of wood and coal; just turn on the gas and light, and your fire is made. You can keep your room the same temperature at all times, go away from home a week, and when you come back your house is still the same. You cannot possibly be bothered about getting up to stir the fire in the morning!

I might write more concerning the use of the gas, but I don't wish to crowd any out, and, besides, our examining surgeon may report me unfit for duty, and I should be bowed out before I had time to introduce myself as your Cousin.

ANNIE.

From Heliotrope.

DEAR UNCLE TRUE:—Seeing how cheerfully the new cousins are welcomed, I thought I might be allowed to claim relationship too. I am a dear lover of "THE RURAL" and always enjoy reading from the Cousins, and having never seen any from Delaware I thought I would try and represent our little State. If it is small it is of some importance, for what would you do without our delicious peaches and other fruits? How many of the Cousins like the country better than the city? for I find so many boys and girls living in the country that positively dislike it. I love the country and would be miserable if I had to live in the city all the time. There are so many things to interest one on a farm. What has become of our Swiss Cousin? His letters were instructive as well as entertaining. I hope the girls have not frightened all the boys away, for they are real nice animals when they don't tease.

HELIOTROPE.

His First Written Letter.

DEAR UNCLE TRUE:—I am but a little boy, eight years old, but I am going to try to write you a letter. I have printed a few. I go to school and study reading, spelling, writing, geography and arithmetic. I have two brothers older than myself; one of them you know by the name of Young Teetotaler. I have been fixing some autumn leaves for mamma; and I sign myself yours,

Coxsackie, N. Y. JAY BIRD.

The Puzzler.

GRAMMATICAL ENIGMA.

I AM composed of 62 letters:

My 1, 7, 17 a possessive neuter pronoun that did not exist in English until about 250 years ago.

My 2, 16, 61 a co-ordinate conjunction.

My 3, 13, 52, 35, 8, 19, 15, 5 not immediately dependent on the other parts of the sentence in government.

My 18, 41, 6, 4, 17 a noun used only in the plural.

My 12, 11, 62 an independent adverb.

My 22, 28, 61, 9, 14, 10, 32, 23, 44 harmony or correspondence of one word with another in gender, person, number or case.

My 20, 48 a verb often used incorrectly as a substitute for other verbs.

Most 26, 42, 17, 29, 61, 30, 56, 40, 27, 53, 29, 55, 52 have no plural.

My 49, 33, 31, 36, 61, 43, 17 are pluralized by adding "s."

My 25, 46, 24 a transitive verb.

My 38, 57, 54 should not be used before "that," or instead of it.

My 17, 44, 22, 60, 43 may be predicated of the subject.

My 47, 45, 53, 58, 37, 50, 39 what qualifying adjectives express.

My 59, 51, 12, 14, 18, 21 a numeral adjective.

My whole is a quotation from Locke.

☞ Answer in two weeks. ROSCOE BAILEY.

ACROSTIC.

1. A CROWD of persons. 2. To eject with force. 3. A spring flower. 4. Apart from. 5. A native of New England. 6. Part of a sewing machine. 7. A shout of joy. 8. The Lord's supper. 9. A finger-joint. 10. According to the Holy Gospel. 11. The cry of agony in a dog. 12. A prayer. 13. To render easy. 14. A ditch. 15. Eastern lands. 16. Greedy of gain. 17. Correct in doctrine. 18. A paltry wretch. 19 A sort of snuff. 20. Left to choice. 21. The trachea. Initials form a subject for a school composition set by my teacher.

☞ Answer in two weeks. LITTLE ONE.

DIAMOND PUZZLE.

1. A CONSONANT. 2. View. 3. The universal name for an Irish peasant. 4. Fathers and mothers. 5. A vest. 6. Shining with vivid brightness. 7. A sea. 8. Act of breathing. 9. Too much talk. 10. A farmer's place for grain. 11. Each one. 12. A cape of Spain. 13. A consonant. Centrals form a sea.

☞ Answer in two weeks. FLORIDIAN.

TRIPLE ACROSTIC.

1. THE whole money won at a race. 2. Manufacture. 3. A river of Europe. 4. A lady's name. 5. To divide member from member.

☞ Answer in two weeks. BALTO.

WORD-SQUARE ENIGMA.

1. ACID. 2. O! I see you. 3. You see, I see. 4. Ah, you see I!

☞ Answer in two weeks. MERMAID.

PUZZLER ANSWERS.—Nov. 16.

RIDDLE.—A Shadow.

FRACTIONAL PUZZLE.—Buttonwood.

CHARADE.—Head man.

DOUBLE ACROSTIC.—Initials, Madison; finals, Trenton.

TRANSPOSITION.—
How the wild wind whistles through yon maple tree,
And dry leaves are falling, falling;
And the night bird sitting alone on the lea,
To his mate is calling, calling.

CROSS PUZZLE.—

T E S T Y
S O C K S
T W A N G
S H R I N K A G E
S H A D D O C K S
T W I N S
T U N I C
T W A I N
S A V A N
T W I N E
T I A R A

Sabbath Reading.

THE ALTERED MOTTO.

OH! the bitter shame and sorrow,
That a time could ever be,
When I let the Saviour's pity
Plead in vain, and proudly answered:
"All of self, and none of thee."

Yet He found me; I beheld Him
Bleeding on the accursed tree,
Heard Him pray, "Forgive them, Father!"
And my wilful heart said faintly:
"Some of self, and some of thee."

Day by day His tender mercy,
Healing, helping, full and free,
Sweet and strong, and ah! so patient!
Brought me lower, while I whispered:
"Less of self, and more of thee."

Higher than the highest heavens,
Deeper than the deepest sea,
Lord, thy love at last hath conquered;
Grant me now my soul's desire:
None of self, and all of thee.

Th. Monod.

THE PROGRESS OF RELIGIOUS IDEAS THROUGH SUCCESSIVE AGES.*

A KNOWLEDGE of when, where or how the religious element of man's nature may have been brought into action, is hidden in the mist of remote ages. It must have been long before the sacred books of the Hindoos were composed, and that was so long ago that no tradition even exists of any people that used the language in which they were written. Since that time, wherever civilization has had an existence, although but a step removed from barbarism, religion has been her hand-maiden.

The volumes before us give a history, written in a plain, simple style, of the religions and beliefs of different leading nations, relative to the Creator, individual duty, and immortality, from the earliest Hindoos to the establishment of the Catholic Church. It is not a theological work—the difference between religion and theology is made as wide as possible. Neither is it a controversial book—no belief is commended and none condemned. The author seems to hold with Lowell, whose lines she quotes on her title-page:

"God sends his teachers unto every age,
To every clime, and every race of men,
With revelations fitted to their growth
And shape of mind; nor gives the realm of *truth*
Into the selfish rule of one sole race:
Therefore, each form of worship that hath swayed
The life of man, and given it to grasp
The master-key of knowledge, *reverence*,
Enfolds some germs of goodness and of right."

There is usually an obstacle, not easily overcome, in the way of all writers about religions not their own, and that is a theological bias—the result of study or early education. We find this book particularly exceptional in this respect, and and on that account the more readily commend it to all who may desire to know what the religions of other lands really are; and, indeed, we need not except Christianity for, strange as it may appear, there is a sad lack of knowledge even among Christians of the rise and progress of their faith. Mrs. Childs seems to have had an earnest desire to "nothing extenuate or set down aught in malice." In her preface she says: "I have treated all religions with reverence, and show no more favor to one than to another. I have exhibited each one in the light of its own sacred books. I have honestly tried never to exaggerate merits or conceal defects. I have not declared that any system was true, or that any one was false. I have tried to place each form of worship in its own light, that is, as it appeared to those who sincerely believed it to be of divine origin."

That the general ideas on which the Christian religion is founded, such as belief in a God who is at once Creator and Sustainer of all things, in the natural tendency of man to do evil, in Divine inspiration, in a Messiah, in immortality, in future rewards and punishments, belong not to Christianity alone, but are also the foundations of other religions, will probably be new to some but it is nevertheless true, as Mrs. Childs conclusively shows.

Different ages have had different forms of expressing truth, but the truth has ever existed and is always the same—although the power of the human mind to grasp it, to comprehend and understand it, is susceptible of growth. As the animal nature gives way to the spiritual, progress in religious knowledge is made, and the soul of man opens to the influx of spiritual truths at the present time to a far greater extent than in the days of Buddha and Confucius. Hence the difference between the religions of India and China and those of our own country.

The labor attending the preparation of this work must have been enormous. Only years of patient and attentive study and careful and conscientious analysis, could have produced it. No one would have undertaken it whose whole heart was not in the work, and the author deserves the thanks of the whole community for the contribution she has thus made to the religious literature of the age.

We hope the book will be widely read, for we know of nothing better calculated to do away with the bigotry that is so largely injurious to true Christianity.

* The Progress of Religious Ideas through Successive Ages. By L. MARIA CHILD. New York: Jas. Miller.

The Rev. Dr. Ingram, of the Free Church at Unst, Scotland, is probably the oldest clergyman in the world, being in his one-hundred-and-third year.

PERSONAL ITEMS.

Edison's great grandfather died at the early age of 103.

Robert L. Taylor, the Congressman-elect from the 1st Tennessee District, is only twenty-five years old.

Edward Kimball who saves churches by raising their debts, was a Sunday school teacher of Evangelist Moody, who saves souls.

Lydia Squlon, the last lineal descendant of the famous Indian King Phillip, is still living at Bedford, Mass., and although eighty-three years of age, she is still bright and vigorous.

Connecticut has two Barnums, Democrat and Republican, one a large manufacturer, and the other the famous showman. Every time this Barnum is elected to office, the other Barnum is defeated.

Queen Margaret of Italy, is said to be one of those happily constituted people who never feel fatigue. Her life full of traveling and public ceremonies, seems to suit her perfectly; she has always a sweet smile and bow and gracious manner.

That wheelbarrow idiot, Potter, hasn't gone to roost yet. We hear of him now as defendant in a suit before Justice Perrine, of San Francisco, one Ant Belener, who acted as umpire during the trans-continental jog, seeking to recover $294.50 cents for his services.

Joseph, Chief of the Nez Perces, is described as a man, who by his distinguished bearing, would attract, notice anywhere. He has a noble figure and a clean-cut, handsome face, with a bright, clear, expressive eye, and a quick, nervous manner, in a strong contrast with the Indian's usual stolidity.

Col. T. W. Higginson does not think Queen Victoria an attractive lady. She is short, stout, with a rather heavy and not altogether pleasing face, he says; but, in spite of all this, she has a dignity of bearing which amounts to grace, and which is the only personal charm that her subjects claim for her.

Alfonso of Spain, it is asserted, has written to the Pope, asking his advice on the subect of contracting a second marriage. The young King begins by lamenting the loss of Mercedes and asking prayers for her. He goes on to say that, personally, the thought of another marriage is distasteful to him, but that every influence is being used to convince him that the interests of the Spanish monarchy require him to take another royal partner.

There is a pretty story told of Alexandre Dumas *fils*. As he and one of his friends were returning from the theatre a few evenings ago, in Paris, they met a poor old woman who was holding out her hand for alms. As Dumas gave her something his friend remarked how often people were deceived, for most beggars were humbugs. "My dear fellow," said the author of "La Dame aux Camelias," "when an old woman holds out her hand to you for aid, you may give without fear, for it is almost always a proof that she has the misfortune to have no son."

Colonel Ingersoll was set upon at Owasso, Michigan, on Sunday night, by fifteen masked men, who flourished tar pots and bags full of feathers. A gallant hand-to-hand resistance and the timely arrival of Judge McCurdy drove the dastardly assailants away. Colonel Ingersoll caught and held the hat of one of the gang, and the hat has been recognized as the property of the County Clerk. By the way, this Colonel Ingersoll is not Robert, but J. N. Ingersoll, editor of the Corunna American, who made a hot fight in his county against the re-election of the County Clerk.

Mr. Leighton, the newly-elected president of the Royal Academy, a body composed of the 40 most celebrated artists of England, is described as a handsome man, well built, with deep gray eyes, a broad, white forehead, curly brown hair, just tinged with gray, a fine beard and a mouth about which, on greeting a friend, "a smile flickers in which is a strange mingling of a girl-like sweetness and manly power." He is an accomplished linguist and a musician; a thorough man of the world; a good comrade, and loves to encourage the talent of younger men. He lives in a gorgeous house in Kensington, which is full of pictures by celebrated men and costly and beautiful things from every country.

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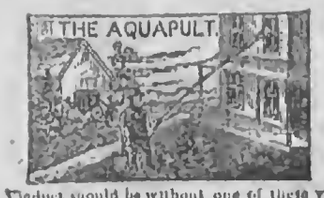

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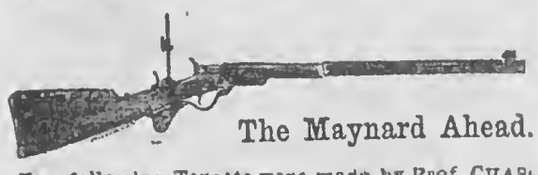

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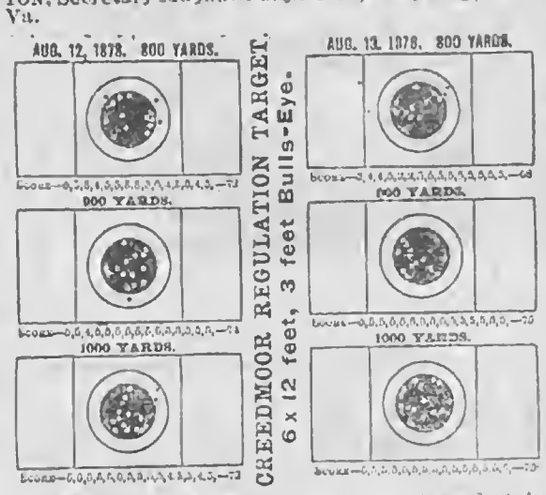

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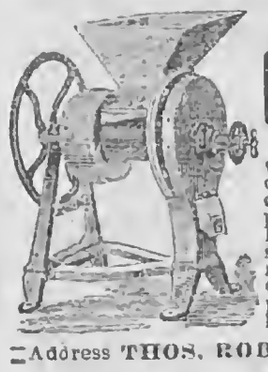

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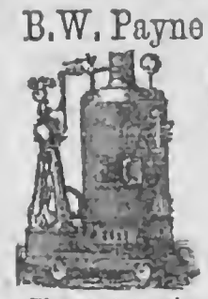

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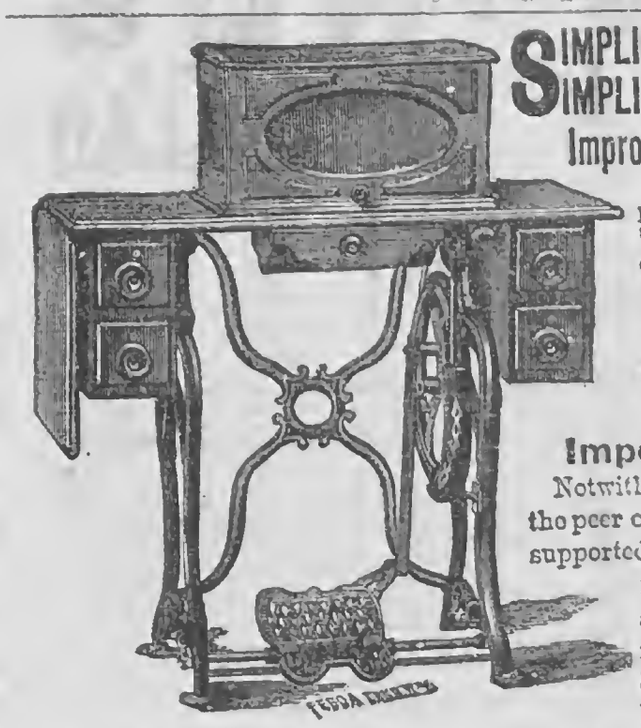

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Wit and Humor.

In Hindostan they call the paragrapher's labor the Punjaub.

An agricultural school—where thrashing is a regular exercise.

A sheep-shearing match is a barberous thing. —*Oil City Derrick.*

Travelers up the Nile say there isn't an Nile land in it worth mentioning.—*Post.*

The butcher who sells ox-tails for soup and calves' heads for dinners undoubtedly makes both ends meat.

How did Noah provision the ark? With fruit. How so? how with fruit? Why, don't you remember? he stocked it with pairs.

"Love is an infernal transport!" exclaimed an enthusiastic poet. "So is a canal boat," said a practical old forwarding merchant.

The right kind of a man will always have his life insured. It gives his wife's second husband a start.—*Louisville Courier-Journal.*

In these days the fly is less agile, but more persistent. We do not consider the change an improvement—from the bald-headed point of view.

Ten mills make one cent, say the arithmetics; but competition is so strong among the cotton factories down East that ten mills don't make a cent.—*Exchange.*

The lady and gentleman at Swampscott who received a portion of the shot intended for the pigeons can now know something of the excruciating delight the birds take in the manly sport.

John Iron is the steward of a Jersey beach hotel, and now that business is falling off, he sits at the range beside his brother Grid, and a pair of sad Irons are they.—*Lowell Courier.*

Why spend so much time and money on horse rearing? Put the animal in charge of the advertising young man who "understands taking care of horses," and he will rear himself at any time and at all times on the slightest provocation.

Here is an extract from a little boy's first composition: "W'en cats is a swearin' and a blasfemin' and a tryin' the gages of their steam b'ilers in the back yard at nite, it makes a feller offle frade, if he isn't a sleepin' with his big brother."

A lady with a fatal squint came once to a fashionable artist for her portrait. He looked at her, and she looked at him, and both were embarrassed. He spoke first, "Would your ladyship permit me," he said, "to take the portrait in profile? There is a certain shyness abont one of your eyes which is as difficult in art as it is fascinating in nature."

Sir Wilfrid Lawson, at an agricultural dinner in Cumberland recently, told a good story illnstrating the effect of hard times on farmers: "One Scotch farmer had determined, in spite of the bad times, to pay his rent if it were his last shilling, and saying to the factor who received it, 'It is my last shilling,' he threw down a roll of notes. The factor counted them and said, 'There is £50 too much,' 'Odds, man,' said the farmer, 'I put my hand in the wrong pouch.'"

In attempting to carve a fowl one day a gentleman found considerable difficulty in separating its joints, and exclaimed against the man who had sold him an old hen for a young chicken. "My dear," said the enraged man's wife, "don't talk so much about the aged and respectable Mr. B; he planted the first hill of corn that was planted in our town." "I know that," said the husband, "and I believe this hen scratched it up."

Little Johnny wanted to go to church. His mother was afraid he would make a noise, but his father said: "Johnny knows better than to make a noise in church." So he went. He kept very still till the last prayer. By that time he had grown tired of sitting still, and was standing on the pew cushion, with his back to the pulpit. When the lady in the next seat bowed her head for prayer, Johnny thought she was crying. He leaned over and said to the lady, in a tone that was meant for a whisper, but which was only too plainly heard: "Poor lady! What ee matter? Do oo stummut ache?"

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The liver is the largest secreting organ in the human body, and the bile which it secretes is more liable to vitiation and misdirection from its proper channels than any other of the animal fluids. Luckily for the bilious, however, there is an unfailing source of relief from liver complaint, namely, Hostetter's Stomach Bitters, a medicine which for over a quarter of a century has been achieving thorough cures of the above-mentioned ailments, fever and ague, dyspepsia, bowel complaints, rheumatic and kidney affections, and disorders involving loss of nervous vigor. It is, moreover, a preventive of malarial disease, and affords protection to thousands of persons residing in districts of country where that dire scourge is prevalent. As a remedy adapted to the medicinal requirement of families, it is supremely desirable, and as a means of fortifying a debilitated stem, it is t ly to be depended upon.

A LATE CROP.

Farmer Briggs' neighbors take to raising Pumpkins in November.

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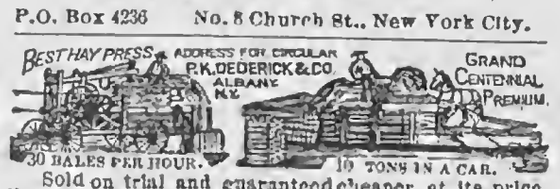

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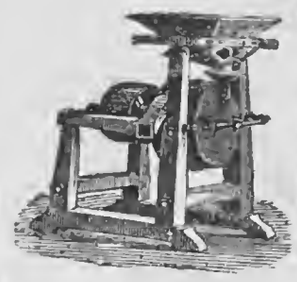

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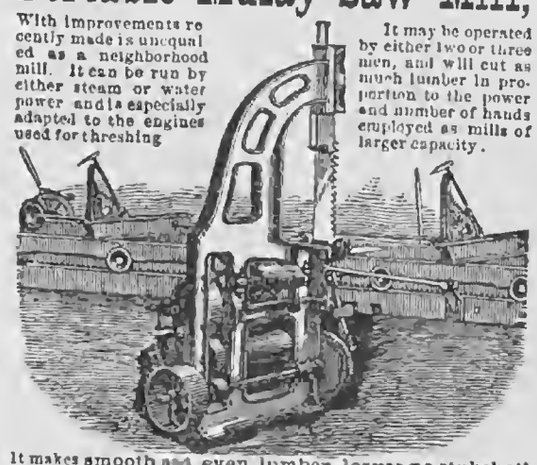

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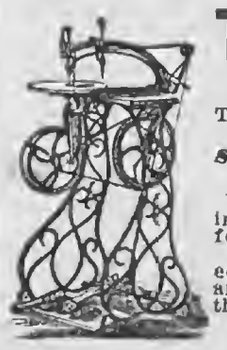

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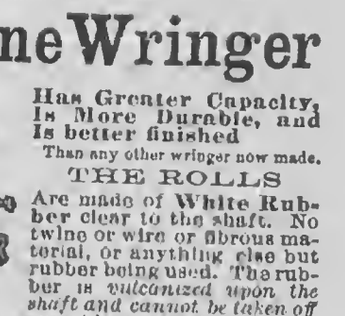

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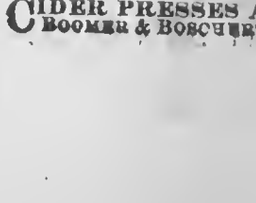

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XXXVII. No. 49.
WHOLE No. 1506.

NEW YOK CITY, DEC. 7, 1878.

PRICE FIVE CENTS.
$2.00 PER YEAR.

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Rural Architecture.

SUMMER COTTAGE, THOUSAND ISLANDS, NEW YORK.

PALLISER, PALLISER & CO., ARCHITECTS, BRIDGEPORT, CONN.

To those who are the happy possessors of a fair amount of wealth in these times of financial stringency, and who prize good health more than filthy lucre, this design will have an attractiveness which those in less favorable circumstances can hardly see or appreciate. The idea that has been prevalent in the past, that a summer visit to the country was a luxury that could be enjoyed only by the very rich, is fast melting away, and the time has come when all with moderately-filled purses, can enjoy the comforts of a home for the summer months in some healthy and pleasant neighborhood. While admitting that the beauties of many country places, sea-side resorts and watering-places are very numerous, yet for quiet picturesqueness and beauty, there are few places that can be compared with the numerous isles in the mouth of the St. Lawrence River, known as the Thousand Islands.

In the designing of this cottage, the aim has been to supply something in exterior picturesqueness in harmony and keeping with the scenery, also to produce something that is home-like and pleasant to look upon, yet not expensive—a house that the every-day carpenter can build, and the owner of which can feel that though the work may not be of the very finest description, yet that it is an artistic rendering of good things suited to the place, the times and the circumstances. Such a house always makes the mechanics feel that it is a pleasure to help to build it, and after years they will point to it with no small degree of gratification as having had a hand in its construction. Such a house as this is thoroughly practical in its appointments, convenient in its internal arrangements, economical and sound in construction, and gives the comforts of a permanent home together with a quaintness in exterior outline that forms as pleasant and pleasing a picture in the landscape as it is possible to obtain for a similar outlay.

The building is designed to stand on posts, and is inclosed under the base, as shown. The entire frame-work shows inside, being dressed, the exterior sheathing forming a face on both sides, which dispenses with any further covering. The floor joist is to be dressed and exposed with the floors above; the first story is to be laid double, with an air space of one-half inch thoroughly deadened, to stop the transmission of sound. The main entrance-hall containing the large open fire-place, with hardwood floor and border, answers as sitting and reception room, and, with its old-time fire-place, on which the logs are burning brightly, will make a center that all will love to gather around at eventide to recount the day's pleasures and doings. Of a truth, this hall carries us back to the primitive times of our forefathers in other and older lands, when dishonesty in building and the modern improvements in plaster walls and stucco-work were almost unknown.

The second floor speaks for itself, and to the family of culture and taste it is all that can be desired. The balconies connected with the two main chambers are desirable features in such a house, and cannot fail to recommend themselves, as the views obtained therefrom far more than compensate the owner for the few dollars additional expense needed to construct them. The attic will contain two good chambers, and the whole, when built, gives a very roomy and desirable residence for a very small outlay, there being but very little to expend outside of the cost of lumber and carpenter labor. This is very low now; in fact, it cannot well be lower. There is no frippery or unmeaning work in the construction; for everything serves a good purpose. The exterior of such a house should be made to harmonize in colors with the surroundings. The shingle work of roofs should be painted a warm Venetian red; the body of a light-brown, with dark trimmings for the frame-work, etc., while the whole interior should be finished in the natural wood with one coat of varnish.

A RAT-PROOF CRIB.

A neighbor of mine has just built a rat-proof crib that strikes me as being just the thing. It is constructed as follows: Lay down the sills, and on these lay a good oak floor. Set the studding one foot apart; line the crib with sheet iron two feet wide, nailing it to the studding both at the edges and in the middle of the sheets. Let this lining run from the floor up the studding and rafters to the comb, so that your crib will be completely lined with this sheet-iron, except the floor. Let the doors also be lined in the same way. Before putting up the iron, perforate it with a punch that will make a hole one half inch in diameter, putting a hole to each square of one and a half inch, to give proper ventilation. The cost of the iron for this crib, which holds 200 bushels of ears, is $7.

In this way a crib can be made perfectly rat-proof at a cost of very little more than that of a good wooden crib. T. M. H.

Ritchie C. H., W. Va., 1878.

Farm Topics.

HINTS ABOUT AUTUMN WORK.

WM. J. FOWLER.

HAULING MANURE.

Farms are usually leased in April, and help for the farm is usually hired then, for the reason, I suppose, that the farm year then begins. But this is entirely too late. On many accounts the manager of a farm will be anxious to commence operations at least as early as January, and sometimes, during pleasant weather, in November and December. What manure has accumulated since wheat seeding should now be drawn out on sod land which is to be plowed next spring. If drawn on bare fields, something will be lost by washing away. But on grass land the leaves and roots prevent loss, while the better distribution of the manure adds largely to its availability for the next crop. Probably the best effect of manure is to be found on clover sod, when applied in the fall. I think two loads of stable manure on clover sod in the fall equal in value to three loads of the same quality applied the following spring, just before plowing. Of, course the larger part of our stable manure in northern localities, is made in winter, and

SUMMER COTTAGE, THOUSAND ISLANDS, N. Y.—(For Ground Plan, See page 775.

should be hauled out as early in the spring as possible. But there will be greater gain in hauling out all that is made before the first of January. Teams are less busy and help is cheaper at this season. It will pay to scrape scattering manure from by corners, left in the hurry of spring and fall seeding. Rich soil, well saturated with manure, may be gathered around barns and drawn on sod. In these and other ways the fertility of the farm may be improved.

REMOVAL OF STUMPS, STONES AND USELESS TREES.

Stumps and stones should be got out of the way now. A good stump-puller will do this work expeditiously and cheaply for large stones and stumps. Wherever a deep hole is made, it should be filled to within two feet of the surface with small stones, thus securing a double benefit—preventing a hole and removing an encumbrance. Small stones should be removed from mowing fields. It is best to defer rolling until spring, when the ground is soft and loose stones that have been missed will be pressed into the soil. Not much can be done to wheat fields, except to provide for the drainage of surface water. But this should have been attended to at the time of wheat seeding.

While removing stumps, it is worth while to consider whether a useless tree, bearing nothing and not needed for shade, is not equally a nuisance: in other words, whether a stump would be less injurious for having branches and leaves to shade the growing crops and millions of living roots to rob them of needed food and moisture. Many a farmer, during this past season, has lost from five to fifty dollars from superfluous trees in his cultivated fields. Of course, some regard may and should be had to beauty of landscape; but let those see to that who can afford to do so. For the millions of farmers worried by debts, working hard to make a living and pay up their interest semi-annually, many of them having to stint themselves for money to pay for an agricultural paper, it is the height of foolishness to cumber their cultivated fields with useless trees—the worst and rankest weeds for all hoed crops. In the hard struggle for existence and to keep their homes, which many farmers maintain, very often the useless trees on the farm turn the scale the wrong way, and the family homestead is sacrificed to an idle and silly sentiment.

CARE OF THE ORCHARD AND VINEYARD.

In almost all orchards the trees are altogether too close, preventing fruitfulness and injuring the quality of the fruit. It will pay to cut out every other tree, and manure those that are left. If no other manure can be had, leaf mold from the woods, or sods from the roadside where it has the wash of the track, will serve a good purpose. This is especially important if the trees are in grass. A good covering of earth sufficient to check the grass, will keep the soil loose, and make the trees vigorous. Every farmer knows that some of his apple trees are much more productive than others, even of the same varieties. These should be saved, manured and pruned, while the feeble and barren trees should be removed.

November and December are good months for pruning grape-vines. I prefer to do it in the fall—any time after the leaves are off. It is safer, after pruning, to lay down the canes on the ground, so as to save them from severe freezing. It is just as well, with tender varieties, to only partly prune in the fall, cutting out some after the buds have started in the spring, when the loss from winter killing can be better known.

Monroe Co., N. Y.

MOISTURE-RETAINING POWER OF THE SOIL.

STIRRING THE SOIL IN A DRY TIME—IS IT AN ADVANTAGE?

PROFESSOR G. C. CALDWELL, CORNELL UNIVERSITY.

From the Weekly Tribune.

The editor of the RURAL NEW-YORKER has given us in "Notes from the Rural Grounds" an account of some experiments of his own on the influence of loosening the surface of the soil on the rapidity with which it dries. Three flower pots with the drain-holes loosely covered were filled with sifted loam; in one case the loam was pressed down compactly quite to the top; in another it was compactly filled up to within an inch and a half of the top and the remaining space was filled loosely; in the third case the whole pot was loosely filled. Each pot was then set into a pail of water, and the excess of water was allowed to flow over the sides of the pail; all the pots and buckets being of the same size, the same quantity of water remained in all three cases. The water disappeared soonest in the bucket with the pot containing the loose soil, then in the pot with loosened surface soil, and last in the compact soil; the difference in time between the first and last was about four days. Hence the editor concludes that the teaching now so generally given by the masters to the effect that stirring the soil serves to retard its drying, may be erroneous.

I can hardly regard these results as leading to this conclusion, because they do not actually represent the ordinary condition of the soil, where the level of the bottom or standing water is usually a few feet instead of a few inches below the surface. In the soil we have two kinds of spaces between the solid particles—those that are too large to be capillary, and which cannot therefore hold the water above the level of the bottom water, and secondly, the capillary spaces that can hold the water above that level, the wider spaces only for a short distance, the narrower ones holding it up to a higher point. But even the narrowest do not appear to have the power to raise the water more than about six feet; and many writers on these subjects assert that if the level of the bottom water is even not more than two or three feet down, no capillary spaces will take it to the surface under ordinary circumstances. Furthermore, in a soil in its usual condition as to moisture, not only are the non-capillary spaces empty, but even the capillary spaces are to a great extent dry; soils in such a condition do not contain more than one-tenth to one-third of all the water that they can hold in their capillary spaces, and still plants show no evidence of suffering from drought.

In these experiments of the RURAL's editor, the level of the bottom water was, I infer, no further from the surface than the depth of an ordinary pail; all the capillary spaces were probably therefore filled with water quite up to the surface during the whole duration of the experiment, even in the pot with loose soil; it was simply a question of pumping up the water through these capillary spaces by a series of continuous columns reaching from top to bottom; as fast as the water was evaporated from the upper surfaces of the columns it was replaced from below, and the evaporation would be most rapid in that pot with the freest circulation of water. Some recent experiments by Von Klenze have shown that capillary spaces of a certain size conduct water more rapidly than those that are either larger or smaller. In the RURAL's experiments the pot with the loosest soil appears to have allowed the freest circulation; at least we can in this way, without doing any violence to the facts, account for the more rapid evaporation in that case.

In an ordinary soil, on the other hand, the desiccation is not a pumping up of bottom water through a multitude of minute pipes reaching down to it, but rather a drying out of that comparatively small proportion that remains nearer the surface and within reach of plants, after the water of the last rain has fallen to its level in or far below the subsoil; we have, instead of full capillary spaces throughout, only scattered full ones; and it is argued that the more we break up the connection between them by stirring the soil, the less rapidly the water will find its way to the surface where the evaporation goes on; the more we stir, the more the water is divided up into disconnected portions having no communication with the surface. Experiments with soils in their natural position in the field, appear to confirm this view. The record of one of these trials comes to us recently from France. Grandeau, of the experiment station at Nancy, by means of a new form of apparatus devised by him for measuring the evaporation from plants or from the soil, found that while from a soil that was beaten down 13.5 grams of water were evaporated from a square decimetre in twenty-four hours, only 8 grams were evaporated from another like area under the same exposure and in the same time, the surface of which was loosened up.

Finally, there is one point that does not, I think, get enough consideration in this respect. A soil that is well stirred has a far greater power of absorbing vapors and gases from the air and condensing them in its pores, than one that is compact. During the night the soil is exposed to an atmosphere that is often heavily charged with vapor of water. If the soil is loose at the surface this air circulates freely through it and there is large opportunity for condensation of water, which will offset a considerable amount of evaporation during the day. Even a thin crust of compact soil on the surface, and, much more, a thick layer of it, would greatly lessen this absorption. Therefore, while I have read with much interest the account of the RURAL's experiments, I am not yet convinced that its inferences are correct.

MOISTURE IN THE SOIL.

I am glad to see the question opened by the RURAL's experiments at River Edge, and hope it will result in ventilating the subject, if not the soil.

In the first place, the editor, and, as far as I can learn, all previous investigators, have given too much prominence to the idea of capillarity, and have not distinguished between evaporation and condensation. The extent of the capillarity of soils is quite limited under the most favorable circumstances, which are, that the earth shall be in a medium state of compactness. The capillary action can not take place if the earth is too compact, from being actually stopped as by any impervious substance, neither can it occur if the soil is too loose, because the attraction ceases for want of sufficiently close contact between the particles of earth. As to capillary tubes being found in the soil, I consider that a myth. The advantages of stirring the soil are self-evident, and the amount of moisture thus engendered in the loosened earth, is far greater than many suppose.

The fact, also, that evaporation carries off moisture, while condensation collects and retains it in the soil, is an important point in the matter, heretofore overlooked. A body of undisturbed soil is so compact as to nearly exclude the atmosphere; the water which falls upon it sinks but a little way, and is always within reach of the sun's heat, which quickly evaporates it; the earth dries up and bakes, and vegetation perishes. This soil is just compact enough to render the capillary attraction active, and owing to the joint action of this and the sun's heat, evaporation is rapid. But if we stir the soil, we make it so loose that its capillarity is totally destroyed to that depth; we force the water in the soil down just that far from the surface, and interpose between it and the sun a blanket so open as to admit the atmosphere freely. At once evaporation is checked, the vapor rising from the water below, and that contained in the atmosphere above meet here upon neutral ground and are both condensed, because the temperature of the open soil is intermediate between that of the hard-pan and that of the atmosphere. Evaporation is totally checked, the loose soil is moistened, and the moisture is retained until the soil resumes its compactness, when stirring becomes necessary again. And this explains why stirring the soil immediately after a heavy, soaking rain, is so important.

To arrive at the amount of moisture condensed in the foregoing manner and held in the soil, take a delicate pair of scales, on a hot day weigh a tumblerful of cold water to a perfect balance, watch the condensation taking place upon its surface, and notice how soon the basin holding the tumbler sinks. Measure the surface of the glass, and from the increased weight calculate the amount of moisture taken from the air. This will represent, probably, one-tenth of the quantity which the same surface of earth would absorb. Every little particle of earth, every little grain of sand, is a condenser, as any one may prove by turning up a half-buried stone on the hottest day in summer, and noting the moisture beneath it. The RURAL's experiments produced evaporation and prevented condensation, and have so far opened the subject but not the soil.

S. RUFUS MASON.

Dodge Co., Neb.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

We cannot agree with Mary Wager-Fisher in prefering black-walnuts to English walnuts, although we thought enough of the former to bring some nuts from Bryn Mawr in the Centennial year, which are now growing nicely in the nut grove. The English walnut is our favorite nut; and we do not know of any, except our own, growing north of Westchester Co., New York. We are 260 miles north of Bryn Mawr, hence our "anxiety" in regard to their growth. We have a dozen young trees from nuts which grew in Newark, N. J., 175 miles south. Two trees purchased of Mr. Hoopes, near Philadelphia, went through last winter without injury, and have made a vigorous growth this year and have ripened their wood well. When in Washington last winter, we gathered, in one of the public parks, a few Catalpa seeds which we planted in the spring, and we now have seventeen thrifty young trees, some of them three feet high, with strong and stocky bodies. The Catalpa tree is quite common in the parks of Washington, and we have also seen it about the parks and streets in New York and Brooklyn. It grows crooked and has a stunted appearance in these places, and unless it will grow larger when cultivated for timber, it will not be very profitable, on account of its diminutive size.

Mr. Conde thought there was nearly ten dollars' worth of feed in the tops of the Swedish turnips. There were sixteen loads of turnips as big as the horse could draw. We expended ten dollars for labor, all told, not counting the use of the team or horse for cultivating. The piece of ground was just about a quarter of an acre in size. When we take into the account that a heavy crop of the large kind of clover was taken off of the same ground before the turnips were put in, the yield from the quarter acre is very satisfactory. The fine growth of turnips is due to the rough and clean cultivation, stimulated by a dressing, broadcast, of hen manure and ashes, which was immediately cultivated in, and a light dressing of 50 pounds of Manhattan Blood Guano a couple of weeks previously, when the turnips were quite small. The turnips were not put in until the very last of July, and they were harvested the first week in November. The crop was such a success that next year we intend to increase it to several acres. As we have remarked before, the excessive growth of summer grass this year, nearly doubled the cost of taking care of this crop. We used ashes with the hen manure, because the plaster was all gone; but for immediate use and to be mixed with the soil, ashes may be used without any loss of ammonia, of any account.

An ingenious neighbor thrashes his corn and husks it at the same time. He runs the stalks with the ears on, at the rate of a half stook at a time, through his three-horse thrasher, which husks the corn, shells it, separates the cob and delivers the shelled corn in the measure, clean and fit for market. He can average a bushel a minute of clean, shelled corn. The corn is drawn from the field as fast as required. The stalks and husks are torn into shreds and put into good condition to be economically fed, doing away with the necessity of any cutting machine, as they are thoroughly broken up, and the stalks particularly are crushed and broken into pieces. The corn has to be spread or kiln-dried, as it is liable to mold if put into bins or stored in any considerable bulk. This is the only serious objection to his new plan of husking. He uses a common thrasher, a cylinder with spikes running against a concave, also spiked. He can husk and shell corn faster than another neighbor can husk with an improved corn husker.

We have butchered a four-year-old Jersey bull, and have the testimony of the butcher that he never killed a steer which had a hide so soft, thin and fine. A velvety skin is an important prerequisite in a good cow, and in a dairy breed is an essential point in a bull. A good cow always has a mellow hide, and a poor cow one that is thick and harsh to the touch; hence in a stock bull the breeder cannot be too particular in regard to the character of the skin. Common bulls usually have very harsh and thick hides. Breeding for a purpose, as in the case of the Jerseys, will produce certain results, and it is those which make pure-bred stock more valuable. The skin of this four-year-old bull only weighed seventy pounds—thirty to fifty pounds less than that of a native animal of the same age would have weighed.

Mr. Stewart, in his excellent article on fruit, left Spitzenbergs out of his list of apples. They sell the best in market and are deservedly popular. They will produce well on new or rich land. He also placed Flemish Beauties among the winter sorts of pears. In this latitude they ripen a week or two after the Bartletts, which he classes as a summer variety. I would recommend leaving Flemish Beauty out altogether, as the fruit cracks badly and has lost caste in market, and I would put Beurre Bosc in its place. The latter is a November pear, bears heavily, and sells with the best.

VAN'S VIEWS.

CORN.

I am satisfied that the farmers in this region whose land is of a lightish character, give altogether too little attention to this crop. On my heavy, unsuitable soil, if not planted in a place where its roots are wet, corn is a very good crop. I have raised of the eight-rowed Yellow Flint, sixty bushels per acre, and a neighbor, last year, had between eighty and eighty-five bushels per acre of a twelve rowed variety, and this on a heavy clay.

A farmer in this county has been experimenting with corn, beginning with improved King Philip and Ohio 24 rowed Dent, and he has now a corn which will ripen in ninety days from seed, and has from 16 to 24 rows well filled out to the end of the cob. A farmer who has seen the best corn region in this country, having resided for some time in the corn region of Ohio, said that he never saw a finer-looking field of corn than that in this variety, and estimated its yield at 100 bushels of shelled corn per acre.

I had some of his earlier cross of corn this year, which ripened in seventy-four days from the time of planting, and as I write, there lies an ear before me containing 16 rows of long kernels, which grow over the end of the cob, which is ten inches long. There were many longer ears, some thirteen inches; but this was a fair sample of its yield through the field.

Another crop that is too much neglected is fodder corn. I had a small patch last summer, and from its yield, I am sure I could grow seven tons to the acre, and it beats everything as a food for milch cows, makes a good pig feed, will keep a team in good order if they are at light work. The variety I used was Pratt's Early Sweet Corn. It should be cut with a reaper when it tassels; tie up the bundles and let it stand till wanted for use. If cut with a mower, the chances are that it will never get cured, but will rot on the ground.

At the November meeting of the Brown County Society, there was a discussion on

SWINE AND THEIR MANAGEMENT.

Mr. Van Auken opened the subject by reading a paper on the "Pig, from the beginning to the barrel," after which the matter was discussed by the members present.

Mr. H. P. Campbell, of Scott, said that he had tried feeding hogs in the mud and on a floor, and one year ago he had built a good pen, dry and warm, and he believed it was the best investment he had ever made. It paid in the growth, as well as in the looks of his pigs, and it gave him satisfaction every time he looked at it.

Mr. Bonuet, of Green Bay, said that he was not now in the pork-raising business, but in his business he bought considerable pork. He was satisfied that farmers sold their pork at the

wrong time of the year. It was a mistake to rush it in in November and December, when prices were *always* very low, while from March to October prices were much higher. He said that wheat middlings cooked made fine fat hogs, and for making pork were worth more, ton for ton, than corn-meal.

President Smith said that he thought the manure from his pigs was worth more than the pork; that they paid for themselves in working up garden waste into excellent manure. He was now feeding his pigs boiled potatoes with a little corn-meal on them, and asked if he could use turnips in the place of potatoes.

Mr. Van Auken, of Ashwaubenon, said he could, and that the best and most satisfactory pig and chicken-feed he had ever seen was made by boiling a kettle of potatoes or turnips, and, while hot, mashing them and mixing with them one-half bushel of corn and oat-meal and one-and a half bushel of wheat bran to each barrel of potatoes.

Mr. Bennet said that when he was a boy his work was feeding the pigs; his folks boiled a kettle of roots or potatoes and put some pumpkins in with them; when boiled soft those were emptied into a trough and mashed. When they first began to feed in the fall, but little meal was used, but as they drew near the end it was increased, and each hog had eaten during fattening perhaps three or four bushels of corn-meal.

Mr. Lyon, of Ft. Howard, said that in his younger days he had charge of a large flouring-mill in Penna., and it was with some difficulty that they disposed of the bran. One spring when they had a large amount on their hands, the proprietor asked him if hogs could be fattened on bran; he said they could, and some time in May they bought six good, fair shoats which were put in a grass plot of about one-eighth acre in extent, which had a spring brook running through it. At a point where the fence crossed the brook he set seven barrels; into each barrel he emptied a bag of bran, and on Monday filled one with water; on Tuesday he filled another, and so on. He found his six pigs would eat or drink one barrel per day, and that it would reach the sweet stage of fermentation in about seven days. This was all the feed they had, wheat bran and spring water, and when killed in December they were fat, and were a very nice lot, weighing from 275 to 325 pounds. This, at that time (1845), was considered a very heavy weight for hogs.

Messrs. Smith, Burden, Campbell and Van Auken agreed with Mr. Bennet as to the proper time of selling pigs, and cited several instances in support of their view.

Mr. Potter, of Pittsfield, asked about the comparative value of corn-meal and meal of the corn and cob ground together.

President Smith replied that when corn was new, it paid to have cob and corn ground together, but when it was dry, the corn had drawn all the nutriment out of the cob.

Stephen Burden, of Howard, said that for three years he had not had a pig on his place, but had bought his pork in the city, believing that was the cheapest way he could get pork.

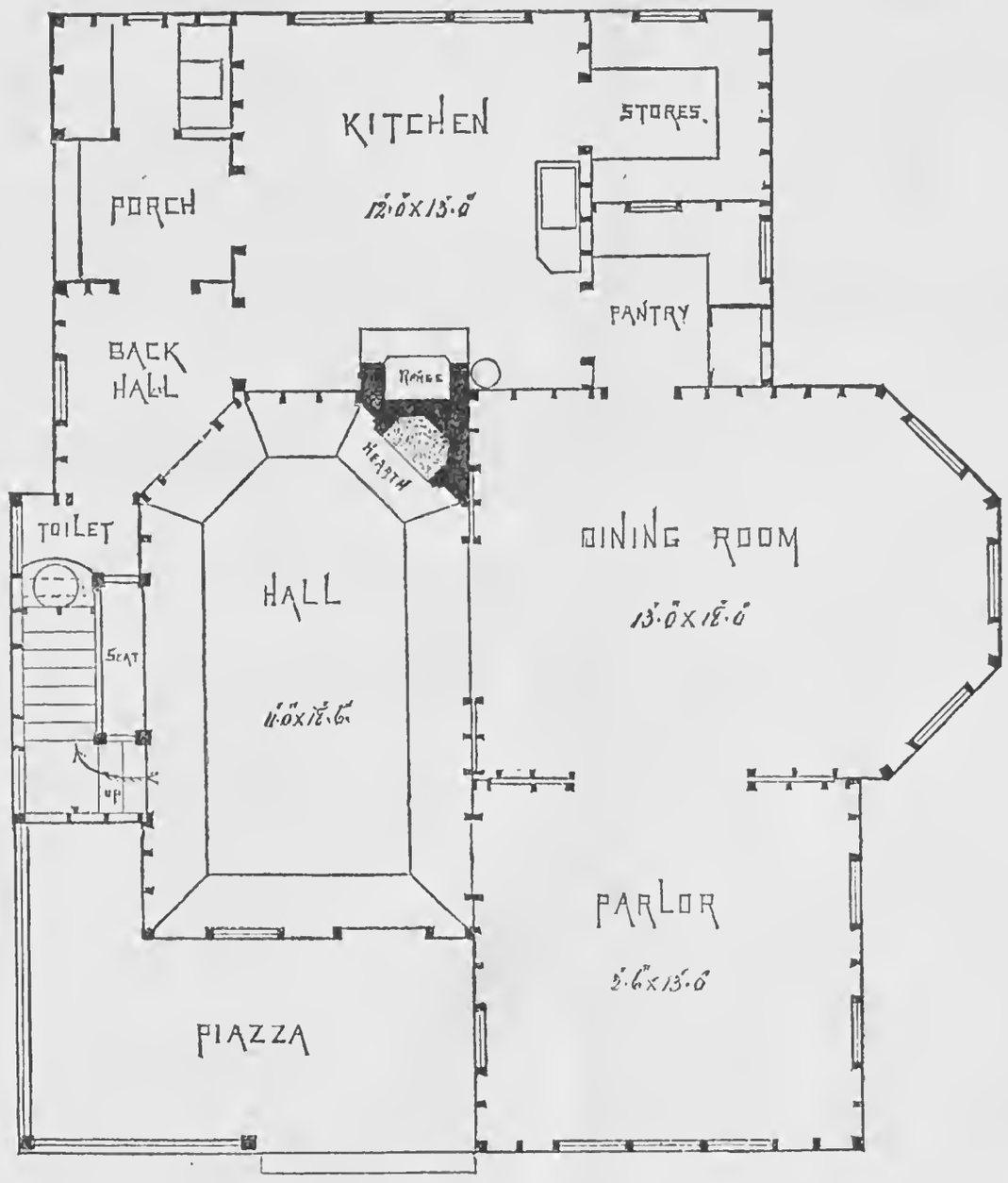
Field Crops.

HOW NINETY-SEVEN BUSHELS OF CORN PER ACRE WERE RAISED.

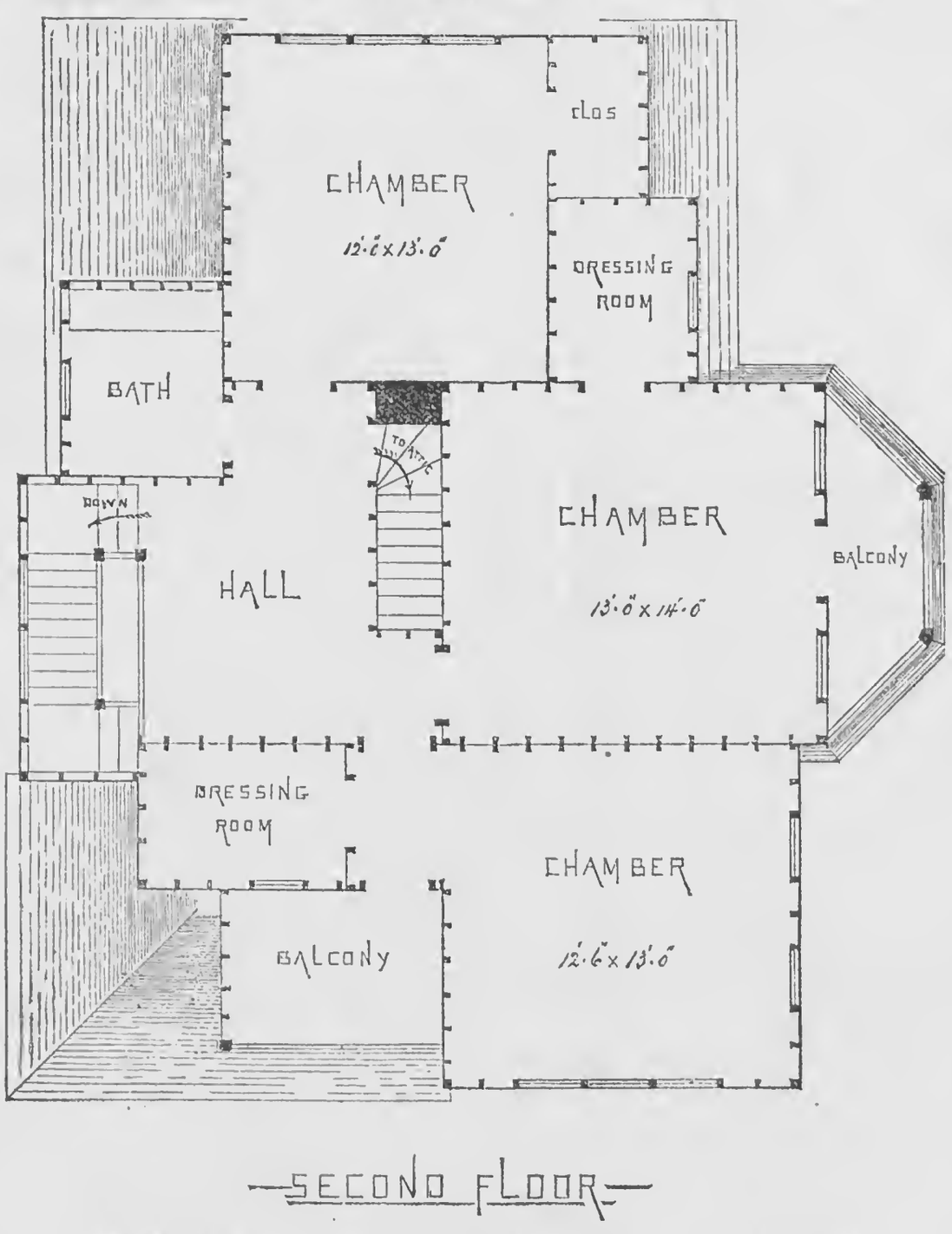
During the week before last I finished gathering my crop of ten acres of Reuno's New White Field Corn. The yield was 1,457 bushels of ears, and as three half-bushels of ears shell one bushel of corn, the product is 97 bushels of shelled corn per acre. The past summer has been so dry and otherwise unfavorable to the growth of corn in this part of our State, that not more than a half crop of this cereal has been produced; and, notwithstanding all this, I think I have succeeded in getting the largest yield ever made in Lycoming County.

The soil on which this crop was grown is a sandy loam, resting on creek gravel. In the summer of 1877, three tons per acre of clover hay were cut from this ten-acre field. In the autumn two and one-half bushels per acre of clover-seed were gathered from the same. As soon as the clover-seed was removed—which was done by the last of September—I commenced hauling barnyard manure, and spread it on the surface as fast as hauled at the rate of ten two-horse loads per acre. No stock was allowed to pasture on the field and poach the life out of the soil during the wet autumn months. The land was plowed about ten inches deep from the middle to the last of April. It was harrowed three times between the first and tenth of May; on the 11th it was marked out one way, three and one-half feet apart; on the 14th it was marked across, the same distance apart, and two kernels—*no more and no less*, according to my instructions to the droppers—were dropped and covered about one and one-half inches deep at each intersection. The corn was cultivated four times between the first and last of June.

At the beginning of July it was plowed with a double corn plow, and the ground between the furrows was loosened with a narrow cultivator. This was intended to be "the finishing touch," but a few days afterwards a heavy rain and hail storm beat down the soil so solid that I concluded it would be better, as soon as dry enough, to run through both ways with a cultivator and loosen the surface once more. The result of this operation was to pull down the furrows that had been thrown against the corn with the plow, and leave the surface nearly flat. By this time the corn had grown nearly as high as the horse's back, and its shade, together with the loosened surface of the soil, contributed to keep the ground in fair condition for the growing crop, though but little rain fell during the remainder of the summer.



FIRST FLOOR



SECOND FLOOR

The ears are not quite so large this season as last, I suppose owing to the unfavorable corn weather. Last season many of the ears shelled one full quart each; three-quarters of a quart is about the most the best will make this year. The grains are about as deep, but the ears have not grown quite so long. Many ears have grains three-quarters of an inch deep.

Experiments in 1877 on different distances apart, with one to four kernels in a hill, showed that three and one-half feet each way, with two kernels in the hill, gave the most satisfactory returns.

DANIEL STECK.

Lycoming Co., Pa.

LOST NATION SPRING WHEAT.

With regard to this variety of wheat, Dr. Hoskins, of Orleans Co., Vt., writes us: "I was one of the very first to plant it in Vermont, having, with three others in different parts of the State, four years ago, received a quart of it from Rev. Marcus R. Keep, of Dalton, Aroostook Co., Me. I got a bushel from that quart, sowed it all, and distributed the twenty-six bushels that grew from it among my neighbors, and now it is the principal wheat grown in this vicinity. It has spread equally fast in Orange, Washington and Essex counties, where the other packages from Mr. Keep went. Crops have been reported of from twenty-five to fifty bushels from one sown. Of course, like all new things, it has probably had extra care, but all agree as to its hardiness, its productiveness, the excellence of its flour, and its quality of giving a full crop even when sown as late as June 1. As I am not a grain farmer, having got it started, I have not sown any the past season, but I continue to receive favorable accounts.

Pomological.

A FEW WORDS ABOUT PEARS.

GEN. WM. H. NOBLE, BRIDGEPORT, CONN.

DIFFICULTY OF CONDENSING THE SUBJECT.

It is always hard work to cramp a large subject into a little space. It is no easy task to write a brief article on pears. I am such a zealot about the fruit that when once my pen or tongue gets running on its kinds, qualities or culture, I hardly know when to put down the brakes. Then it needs a pretty cool head to steer through the "many men of many minds," such unlike tastes, such a host of kinds. How are you going to make an article brief about so many varieties of real excellence; so many only kept on the lists or in the garden, because no one is bold enough to doubt their merits? There are so many finer than the old list-keepers, to which we are accustomed and therefore plant; so many, which though superb in your ground, are good for nothing in some near-by county or State; so many that crack and wither in the Eastern States, or New England, that in Pennsylvania's deep clays, and other places, are joyous companions at the dessert. Then so many are puffed as "great acquisitions" which, after you plant them and pick their fruit, you find to be very tame and insipid. How are you to pack the essence of all this into the space of a very "few words?"

I have often tried earnestly to tell briefly what the public ought to know about the choice and care of fruits. But I fail every time. What may be very plain to one, those not used to kind and their culture take in but slowly. No short-hand method will do; your dwarf, in spite of you, will swell into full stature and bulk. Besides, you have to combat from the start all sorts of tastes, whims, and old-time notions, both among those who know little, and those posted about fruit.

THE BARTLETT PEAR.

Right here, the RURAL NEW-YORKER, which is supposed to speak from a large trial of kinds in its Experimental Grounds, offers a case in point. A while since, in one of those "brief articles" struck out from the editorial mind, the RURAL sentenced the Bartlett into outer darkness as insipid, and suggested that it should give place to its betters. This banishment accords neither with the public sense, nor with the taste of the most of those who are familiar with a large range of fine pears, nor with a just assay of the merits of the Bartlett. Now the Bartlett is the most popular of pears. If the great Public could have but one pear, and vote their choice, the Bartlett would beat the crowd. There are lots of good reasons to back their ballots, though the pear is not one that I fancy. I suppose, as with the RURAL, that its spicy, musky, vinous flavor and lack of sweetness, do not suit my taste.

But I speak for the masses. With them it's the choice, because it is of uniform and reliable quality. It has no "off" years, but puts in a crop to every harvest. It is always fair, and of good size. It stands hard usage, and answers quickly and largely to good, high culture. It ripens into eatableness, all the way from wind falls to its plumpest growth. It keeps well, and "does up" well. It's flesh is melting and juicy. When grown in the full sunlight, and ripened carefully in the house, it colors into the golden glory of the dessert—the very "form and fashion of a pear."

Then the Bartlett markets a large, juicy, buttery pear, which fills the bill and stomachs of the mass. Nor does it meet with much neglect from those who know pears. At my table, which, during the season of this fruit, gets a taste of some hundred and fifty of its varieties, no pear vanishes more quickly than prime Bartletts. Besides all, it is not like some, a local pear. It is cosmopolitan. Throughout the sea-board, all through the South, where the pear will grow, and along to and at the golden gates of the Pacific, the Bartlett holds loving friends, and repays wide culture. It's not going to vanish right off into dim distance with the "innumerable caravan" of old-choke, worthless and insipid pears. It will hold on to, and be held close by, the friends throughout the land, whom it has won by solid and lasting traits of excellence.

Look, now, at the space that the Bartlett's

fair defence has taken. Is it not plain that no short article can mete out justice to pears, and define their management, or name the qualities and seasons of the best?

GUIDES TO SELECTION OF VARIETIES.

One of the first questions asked about the fruit is: "What kinds do you prefer for each season?" Of course, no one can answer for every taste or section; for, though some pears, like the Bartlett, are at home and thrive wherever the fruit will grow, others are only good in certain localities, States or latitudes. These local fruits can only be told by trial, made by one's self or his neighbors. The best one can do is to give a list, to fit the purpose and the room for planting. There are some varieties, which, by their high quality, suit the home supply, that are thrown away if planted for market. There are, indeed, some few small pears, of such luscious texture and flavor, that they are welcome at the family table or the stalls. But, as a rule, the market, while eager for high quality, seeks it in the largest pears.

Another guide to making out a list to plant, is the home space that can be spared for the fruit. Many in confined city grounds, can only indulge in a single tree. Some who enjoy a warm wall side, or the shelter of a fence, seek the right kinds to train on trellises. Then, as the home enlarges its area, two or three and more trees will find space to spread themselves. On large grounds, a good crop for every season, to delight your table and friends, can spare to the market quite an item from each, to swell your cash. I find all ready to make gain out of their over-stock of fine fruits. I have known a good many rich men to stint their families, in order to get but a pittance for their ill and ignorantly picked and managed fruits.

CHOICE VARIETIES.

First, then, if you can enjoy but one tree, plant a Bartlett. It will give as sure comfort and good regimen to you and the little ones, as any in the whole round of kinds. If two are all your space will take, in the fair treatment of other fruits, put in a Barlett and a Sheldon; or if you want one a litttle earlier, a Beurre Giffard and a Sheldon; and if your soil is deep and rich, a Bartlett or Giffard and a Seckel. In such places the Seckel swells to a glorious size, for that queen of pears. If you would try three: say Giffard, Hull and Lawrence. These will carry your pear supply well towards New Year's.

Should your space allow a regular train of the fruit, from early to latest, say Giffard, Henicart Bartlett, Hull, Sheldon, Des Nonnes, Anjou, Lawrence, Niles, and Easter Beurre. All these, except the Lawrence, are above medium, some quite large. Being large, if you want to sell, some buyers are always ready.

So, if you plant largely, either in home ground or the orchard, looking to sell your fruit, plant the best of the large varieties. Small pears must be very fine, and large of their kinds, to sell well. I find slow sale for any small pears, but Dearborn's Seedling and the Seckel. The golden yellow, and real excellence of the Dearborn, and the supreme quality of the Seckel command a market.

MANAGEMENT OF LESS DESIRABLE SORTS.

Let no one suppose that in the above lists, I have named more than a taste out of the very large number I deem desirable for either home or market. There are many, large, fair and excellent, which, though desirable for the home, are unfit to market very largely. Such are the pears that readily decay either on the surface, or at the core. Some of the very best, for your table, do this so persistently, that neither you nor your customer will try them a second time. I think, however, much of this trouble may escape him who makes it his business, to watch and pick his pears just at the right time. They will well repay every man of leisure, who whiles away his years in the graceful care of fruits and home. It especially concerns him whose sole eye to pears is their culture and sale, as a business. Even those like Clapp's Favorite, Dunmore, Beurre Superfine, etc, may be shielded from this evil, by picking and housing just those which have nearly reached ripening. This cannot be done by sending up Patrick to pick the "peers." His eye has not been taught the task, and he will surely make a clean sweep of the green as well as the ripening.

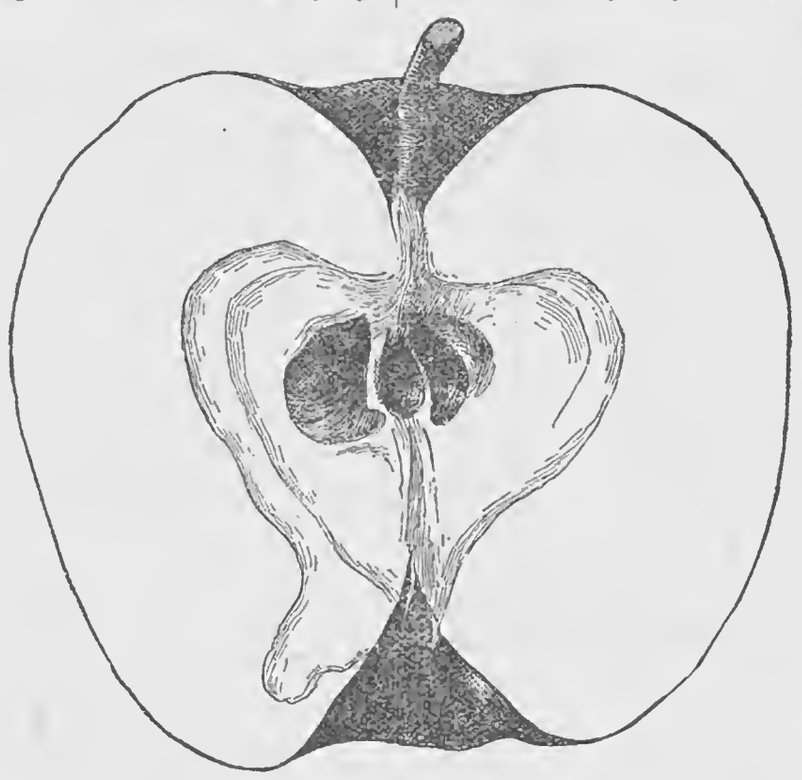
PROFITABLENESS OF FRUIT.

I will not spin out this "short article," except to say that the pear should have a broader acreage on our farms, and that as the supply swells and prices lessen we should be content with fewer dollars per bushel. At fair paying prices, there is hardly a limit to sales. Not half or a tithe of the acreage, care and culture which more profit invites is given to any fruit. No crop pays better than apples or pears. A short supply of the latter cannot be gained on very much for years. The crop is one, too, which needs and will pay for careful culture and harvesting. The fruit business is a vast industry. Year by year it swells in value with the growth of the land and the more refined tastes of the people. No such young nation ever gave to fruit culture the like devotion, or made such strides in its acreage or improvement. Fine fruits are a national longing, and they pay. From what can you, year by year, be surer of a harvest in a crop or cash?

I finish with this counsel. Let more be done for a supply of winter pears. It is these, in the long run and the large way, that will pay best. They require some study as to kinds and their keeping, not found in books. These things must be learnt by watch and trial. To fair brains and right care, it is no more trouble to have fine pears, tempting to look at and taste, all through the winter, than is needed by a Rhode Island Greening or a Roxbury Russet.

KING OF THE PIPPINS.

This is an English apple which has proved to be hardy in the province of Quebec. The fruit is said by the Montreal Horticultural Society to be larger and more highly colored in Canada than as grown in England. The tree is a strong, vigorous grower and forms a spreading head, forced open by the weight of the fruit. It is an early and unusually heavy bearer, killing itself, indeed, by overbearing if the fruit is not thinned, and being therefore usually not long-lived. The fruit is large, sometimes very large, and never runs to small, even when heavily bearing. When large, it is roundish-conic; when very large, oblong-conic. Color, yellowish green, mostly covered with dark red and slightly marked. Calyx large and open; flesh yellow, firm, juicy, sub-acid; season (in Canada) Sept. 10 to December. Use, kitchen and market. This is as given in the report of the Montreal Horticultural Society for 1876. The fruit is quite abundant in the Montreal market during its season, and brings a good price. The apple from which our drawing is made was kindly sent to us by Dr T. H Hoskins of Vermont.



KING OF THE PIPPINS.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

TRANSPLANTING LARGE TREES FROM THE WOODS.

It seems a very simple and economical operation to merely transplant an Elm from a piece of woodland lying near the very house perhaps, or at least on the farm. Great size is obtained at little cost, and the farmer is thus enabled to do lawn planting with materials produced by his own land. Lawn planting would indeed become very simple, if this were the case. Let us look at the matter squarely. Trees in the woods are invariably crowded, shut out more or less from sun and air, and their roots confined among the multitudinous fibers of other trees. Now let them be transplanted with all the skill possible, and in any case, their environment changes utterly Surfaces of branches always heretofore shaded, come into full sunlight; roots always matted and crowded together, not only have free and unaccustomed room, but are fully exposed to the swaying influences of the wind. In addition to these sudden changes and hardships such trees are obliged to endure, another one is added by professional tree planters, when they cut back the tree to a bare pole, and thus allow the sun, frost and sleet to strike vertically on a large wound. The monstrosities and scars arising from this treatment are often perceptible throughout life, whereas if the tree is merely relieved of its heavy branches, and enough be left to feed or assist the flow of the sap, it will soon loose all appearance of having been pruned at all. Elms fare best under the operation of removal from the woods, and many entertain the idea that they continue to do perfectly well, because they live and grow.

But it makes a vast difference how one lives and grows. There is a difference that needs no pointing out between two trees in a vigorous, growing condition, when one develops naturally and harmoniously with a healthy open bark, and the other throws out spasmodic, irregular growths that never continue harmoniously and in proportion to the growth of the stem. One compound word expresses the condition of the stems of the forest trees: it is "hide-bound." The unhealthy bark and adjoining tissues have gradually lost vitality, and the center of the tree having no real life, the active functions of the stem are reduced to a narrow compass, or ring. In the shade of the forest and in positions to which it has long accustomed itself, such a tree will thrive probably after a fashion, but on the open lawn, the strain of transplanting and other adverse influences will be sure to overcome or stunt the practically half-dead tree. The larger the tree, moreover, the more difficult always becomes the operation of transplanting. Thrifty, well grown nursery trees, ten to twelve feet high and one and a half inch in diameter of stem at a point one foot from the ground, will always eventually surpass, in size, beauty and everything else, transplanted forest trees with stems exceeding, say half an inch in diameter. There is no easier tree to transplant from the forest than the Elm, but these statements apply to the Elm also.

Allow me to illustrate by a short anecdote. Twenty years since my father moved from the woods with great labor and care, several large Elms at least eight inches in diameter of stem. They grew and did well, for forest trees; indeed, they attained large dimensions. About the same time, if not the same year, two rows of Elms taken from a nursery, were planted along a street in the neighborhood. Soil and general conditions were very much the same. Yet to-day the nursery-grown Elms are the largest, thriftiest and decidedly the most shapely; the "hide-bound" forest trees having hardly increased at all in size of stem. If you must move forest trees, avoid, if possible, any that have grown about swamps or in dense woods, selecting rather trees from open fields or lawns. In any case retain every particle of root-fiber you can.

WINTER PLANTING FOR LARGE TREES.

There is a general impression abroad that any large tree, a foot in diameter of stem, if need be, may be transplanted with safety, provided it is moved with a frozen ball of earth around its roots. Doubtless this plan works well in many cases, where the distance of transportation is short, and the handling quickly and easily accomplished. Much experience in moving trees, both with and without frozen balls, has convinced me that the chances are, on the average, better without the frozen ball or freezing weather. I do not undertake to explain why this is so, but simply give it as my experience, and rather to my surprise, the experience of very many to whom I have referred the matter as to respected authorities. Perhaps the injury to the frozen tree comes from a jarring during the operation of moving, that vibrates throughout its structure and, in some way, disarranges its organization; but I will not elaborate this theory. Reasons are readily given for most things, but, then, they are always true in part only. Natural conditions are decidedly complicated. After all, it is safer to fall back on the fact, after the manner of Falstaff, and hazard no reason whatever.

Flushing, L. I.

[It seems to us under the system of removing trees with a frozen ball, that the best parts of the roots, the fibers, are left in the ground from which the tree is taken, and that the frozen ball preserves only the larger and less valuable roots.—EDS.]

HOW FAST YOUNG FOREST TREES GROW.

PROFESSOR W. J. BEAL.

At Lansing, Michigan, near the center of the Southern peninsula, is located the State Agricultural College. Twenty years ago most of the surrounding country was a wild forest. It seems too early to awaken enthusiasm on the subject of forestry; nevertheless we have made a small beginning. Some of the results so far may interest readers of the RURAL.

A hard frost in last May, killed the early growth of many trees and checked them for a little while. In our collection, in the arboretum, there are not far from two hundred and seventy-five species of trees and shrubs. At this time I shall only speak of some of the most prominent trees which we have planted for timber. The oldest of these were started from the seed or transplanted to this lot three years ago this fall, or since that time. The soil is a sandy loam and not what one would call strong. It is naturally well drained. An old road once cut the lot in two, at which place the land has been graded down

A TABLE SHOWING RAPIDITY OF GROWTH.

NAME.	Age.	Hight.	Girth.	Weight. Cut at surface.	REMARKS.
Burr Oak	3 years.	36 inches.	1¼ inch.	3¾ ounces.	Not transplanted.
White Ash	3 years.	9—36 in.	3—4½ in.	16—22 oz.	Not transplanted.
White Ash	3 years.	72 inches.	2¾ inch.	2 ounces.	Removed after 1 year.
Basswood	3 years.	96 inches.	3¾—4¾ in.	....	Not removed.
Sugar Maple	3 years.	72 inches.	2¾ inch.	....	The largest tree.
Sugar Maple	3 years.	36 inches.	1¼ inch.	8 ounces.	A large average.
Sugar Maple	3 years.	18 inches.	1¼ inch.	....	Many of this size.
Butternut	3 years.	72 inches.	2¾ inch.	....	Largest tree.
Butternut	3 years.	66 inches.	1 inch.	44 ounces.	An average tree.
Butternut	3 years.	34 inches.	2¾ inch.	10 ounces.	Grew in old road, graded off.
Butternut	3 years.	43 inches.	2¼—2¾ in.	2 ounces.	Transplanted after 1 year.
Chestnut	3 years.	28—13 in.	2¾—3¾ in.	....	Not transplanted.
Black-walnut	3 years.	8 inches.	....	3¾ ounces.	Not transplanted.
Black-walnut	2 years.	162 inches.	8 inch.	11 ounces.	Moved after 3 years.
Carya sulcata (Hickory)	2 years.	105 inches.	7 inch.	2 ounces.	Moved after 3 years.
Box Elder	5 years.	144 inches.	12 inch.	1-5 ounce.	Not transplanted.
White Ash	5 years.	12—15 ft.	8¾—12 in.	....	Transplanted.
Ailanthus	4 years.	12 feet.	9 inch.	....	A large sample.
Catalpa	6 years.	18 feet.	11—11½ in.	....	Moved after 3 years.
Butternut	6 years.	....	....	....	Moved after 3 years.
Silver Maple	4 years.	....	....	....	A sucker, 3 years set.
....	....	....	....	....	Moved after 3 years.
....	....	....	....	....	Moved after 3 years.
....	....	....	....	....	Moved after 1 year.

Some people never read tables, but this one will bear studying by those interested in trees. The weight of the tree is in ounces avoirdupois, as the trees were cut at the surface of the ground. It will be seen that the trees grew small where the top soil was taken off. See, too, the effect on the trees which were once transplanted, as in the case of the White Ash after one year, the Butternut and the Black-walnut. The seeds, in all cases, were planted soon after they were gathered, in rows four feet apart. The tape line to learn the circumference, was applied six inches from the ground. The seeds of the Ashes, Oaks, Maples, Butternuts and Box Elders, all came up well without delay or accident. At the end of two years, the Ashes were straight, clean, and without a branch.

In case of the three-year-old Ashes, Butternuts, Black-walnuts, Chestnuts, which were transplanted after growing one year, they seem to be checked about one year in size of growth. Whether this difference will grow less or more remains to be seen. The single specimen of Ailanthus is already damaged and will soon die to the ground. The Catalpas have passed through two dreadful winters when the thermometer marked 32° and 33° below zero. They were killed back, to some extent, yet the main trunks now all appear sound. The trees have grown well. Last winter was a mild one, so during the past summer they made a fine growth.

Three years ago, I transplanted three small Red or Slippery Elms from the woods. They were then about four feet high. We generally consider this a slow grower, but these have all grown rapidly. One of them has this year made a growth, on one of its leading branches, of eight feet and six inches.

In all cases, the trees have been well cultivated and the land kept very clean all summer. In case of the Black-walnuts, the nuts were much disturbed by red squirrels in spring. Half of the nuts were dug up. The soil is probably rather too sandy for the Sugar Maples to do their very best, but they are very slow growers by the side of most others tried. Some European Larches, some Norway Spruces and other evergreens have done well, but the growth is less so far than with most other trees. A second species of Hickory—one growing in the neighborhood—is on trial. The plants have grown one year, but like the Hickory given in the above table, the plants are feeble and small.

Agricultural College, Lansing, Mich.

TOO LATE FOR CLASSIFICATION.

The annual convention of the New York State Dairymen's Association will be held in the Court House, Binghampton, on Tuesday, Wednesday and Thursday, December 17, 18, 19 next.

CIRCULAR of the Magie and Poland-China Swine, from Magie & Kumpler, of Oxford, Butler Co., Ohio.

Horticultural.

THE HENRIETTA RASPBERRY ONCE MORE.

SOUTH GLASTONBURY, Conn., Oct. 15, 1878.

WE notice, in issue of Oct. 12, a statement made by J. T. Lovott that the Henrietta Raspberry is nothing but the old Belle de Fontenay brought out under a new name, and he goes on to say that he would not make such a statement did he not know it to be perfectly correct. Now, the facts are there was never a plant of Henriotta sold until the fall of 1877, and Mr. Lovott bought a very few for the first time in April 1878, which, of course, bore no fruit this year, and as he has never taken the trouble to come to Conn. to see it in fruiting season, *he knows nothing* about it except what he can judge from the plant and foliage.

That the Henrietta is an entirely new and distinct variety we can prove by a large number of prominent fruit growers who have visited our grounds, and seen not only the plants but *the fruit.*

The first small plant sprang up in the middle of a large currant stool, in a well cultivated garden that had not had Raspberries growing in it for more than 20 years, showing conclusively that it must have been a chance seedling. The above can be vouched for by reliable parties living in the vicinity.

HALE BROTHERS.

EXTRACTS FROM CORRESPONDENTS' LETTERS.

OKOLONA, Miss., Nov. 19.

Some of the Pelargoniums sent me by the RURAL last year are now large, velvety and very pretty. T. J. B.

NORFOLK, Conn., Nov. 12, 1878.

All the seven cuttings of Pelargoniums sent me last season started, but two have since damped off, the remaining five, however, are flourishing, L. P. S.

RECEIVED the cuttings of Pelargoniums in good order. Six out of eight are growing very nicely. One of the others we think will start, but the eighth is dead. J. H. W.

SPRINGBOW, OHIO, Nov. 13.

AMONG seed received from the RURAL last year was a paper of Phlox. I planted them early in the house, afterwards replanted them in the garden where they bore a few flowers. Those were the nicest I ever saw.

MRS. W. H. C.

WILLIAMSVILLE: Erie Co., N. Y.

THE seeds sent me by the RURAL last year gave such satisfaction and the plants and the flowers from them attracted such attention that I gladly avail myself of the RURAL'S kind offer of seeds to its subscribers this year also.

O. F. A.

CLYMER, N. Y., Oct. 18, 1878.

WE live on a dairy farm and all work hard, but I manage to have a few flowers. I think it rests me to go out among my flowers after a hard day's work, and see their wonderful beauty of form and color. I have a family to bring up and educate, so I do not have money to spend for seeds, and so do not have any but common varieties, and am, therefore, thankful for the RURAL free seed distribution. MRS J. W. G.

ALMA CITY, Minn.

THE Geranium seed sent to me by the RURAL two years ago came up in a short time after sowing. Two of the plants are very fine; the others are as good as those usually for sale. One of the best is a very strong grower, the leaves very large, with a dark zone in the center; the flowers large, bright scarlet. The other is a medium grower; leaves about one-half the size of the first, with a very dark zone; flowers large, color between salmon and pink; they are splendid bedders The Hollyhocks were large and fine, and the Antirrhinums the largest I have ever seen.

CLYDE, Wayne Co., N. Y., Nov. 6.

From the seeds sent me by the RURAL last year, I obtained several fine plants of Cleome spinosa, which bloomed. but did not ripen seeds. I also had a fine Ricinus which did not succumb to the frost until the night of November 5 My other plants did not bloom, but I did not plant all the seeds sent me, so that I have another chance. One of my Chinese Yams I gave to a friend; another died; but the remaining two are fine. I have dug up one of them, and intend to keep it in the cellar; the other I shall leave in the ground. M L.

CASTILE. N. Y., Nov. 2.

I HAVE thought many times that I would write to the old RURAL and tell my experience with it. I commenced taking the Genesee Farmer, published in Rochester, when the first number was issued, and when the RURAL took its place, I subscribed for it, and have continued taking it every year up to the present time, and probably shall as long as life is spared me. I have never seen the day during the whole time, that I regretted the outlay. I don't expect to take any paper many years longer, but mean the RURAL to be the last received by me during life. Are there many among your present subscribers to the paper that can boast of such long acquaintance with it, and in this case it has been on the part of one who has been an agriculturist but a very small portion of the time. C E. T.

Entomological.

SECOND REPORT OF PROF. C. THOMAS, State Entomologist of Illinois.

THIS Report, which constitutes the seventh of the series of Entomological Reports of the State of Illinois, is at length printed and will soon be ready for distribution. By the Act of the Legislature of that State during its last session, this Report is made to the State Board of Agriculture, and hence is bound in the Proceedings of that Board of which it constitutes a part. Although this arrangement is not so satisfactory to those who devote considerable attention to entomology and desire these Reports in the separate form, yet for the farmers and horticulturists of the State, for whom it is intended, it is a decided advantage and allows a much larger number to be published than would otherwise be done.

This is much the largest, and also the most comprehensive Entomological Report that has yet been issued in that State, or, in fact, in the West. It will contain, when the tables and indices are added, about 300 pages, with numerous illustrations. An introductory letter to the President of the State Board of Agriculture, occupying some 12 pages, gives a brief account of the insect injuries in the State during the previous year; the work of the entomologist and his assistants during the year; and next follows "Notes on Corn Insects," occupying something over 90 pages, and embracing an account of some thirty-five species that depredate upon this valuable cereal. Some 30 pages of this portion are occupied with an exhaustive account of the chinch-bug, giving a pretty full history of its operations in Illinois since 1840, drawn chiefly from the files of the Prairie Farmer; and a careful estimate of the loss on corn occasioned by it in 1874, which amounted to about $20,000,000. The cut-worms and wire-worms also receive a large share of attention.

Next follows the Report of Miss Emma A. Smith, who acted as assistant to Prof. Thomas during the summer in the northwestern part of the State. It contains "Notes of the Year" on injurious insects observed; an account of the "Stalk Borer" (Gortyna nitela); and somewhat lengthy notices of the Oak-leaf Tortrix and Maple-tree Bark-louse, occupying in all about 52 pages. Most of the remaining portion of the Report is taken up by Part Second of the "Economic Entomology of Illinois," (Part First in the previous Report included the Coleoptera). This part is confined to the Lepidoptera, or Butterflies and Moths, and their caterpillars, and was compiled by Prof. G. H. French, who was employed as a general assistant by Prof. Thomas who was engaged during a large part of his time as one of the Commissioners to investigate the Western Locust.

Following this is a Synoptical Table of the families and genera of the Lepidoptera mentioned in the Report, which is introduced for the purpose of facilitating in determining species.

One valuable feature of this work is an alphabetical list or index of the various plants and other substances injured by the insects mentioned, with the scientific names of the insect or insects injuring each, placed opposite also in alphabetical order. By means of this index or table, the labor of hunting out the insect found injuring a plant is greatly lessened. The Report closes with a very full and copious general index to all the common, generic and specific names mentioned.

This Report will doubtless prove of great value to the agriculturists not only of Illinois but other sections of the West.

The Poultry Yard.

LEGHORNS AND PLYMOUTH ROCKS ONCE MORE.

In my article, Sept. 28th, page 618, I did not mean it to be understood that I thought "Anon" to have committed any error by not giving the monthly product of his Leghorns. I simply expressed my regret that he had not done so, in order that it might be compared with the table given in same article. The quantity of feed given to my Plymouth Rocks was all they would eat; if the quantity named by "Anon" was the same, I still consider the Leghorns had the advantage, by the unlimited range for foraging; with the unlimited range, they will not require or consume as much food as when confined.

I am aware that many are of the opinion that hens can be over-fed, thus producing too much fat at the expense of eggs; but I am not aware of any one having yet learned just the exact point between too much or too little. If "Anon" believes his method the correct one, the number of eggs shows the Plymouth Rocks to excel in egg production while confined and fed all they will eat, as against the Leghorns with a free range, and fed as stated by him.

It makes little difference what breeders generally allege, if they cannot substantiate their assertions with facts. I was led to try the White Leghorns on just such pronounced opinions, only to dispense with them after two years' experience. In my experiments it was not for the purpose of profit by sale of fowls or eggs, but for my own family use. Whatever breed may be best for this purpose may be justly considered the best for all practical purposes. When I am convinced that fowls of any breed combine more essential qualities in this respect than the Plymouth Rocks, I shall not hesitate to adopt them; but I shall want something more than breeders' pronounced opinions to make any change. G. D. B.

Rutherford, N. J.

Miscellaneous.

WHAT OTHERS SAY.

"NEW ENGLAND begins to fell the need of some of the money and a good many of the young men she has sent out West."—N. E. Farmer.

DECLINE OF THE WHEAT CROP IN ENGLAND.—That the increased depth of plowing may enhance the crop is highly probable, but we cannot help arriving at the conclusion that wheat-growing is, year by year, getting less successful, and we fancy the time will come when even at better prices than at present wheat-growing will hardly be able to be done at a profit.—London Ag. Gazette.

SHEEP ON ROOTS ALONE.—Professor Church of Cirencestor says that many experiments have been made to ascertain how far sheep could be fed on roots alone. Mangolds, swedes and turnips have been used, but chiefly mangolds, in the Continental trials, and the general conclusion seems to be, that not only must one lose a very large proportion of the feeding material in roots when he employs them alone, but that the rate at which animals increase in weight when so fed, is excessively slow.

"BEAUTY OF HEBRON" says the Weekly Tribune, is the resonant name of a new seedling potato circulated for test by Messrs. Thorburn, of John street. It "originated in 1874 from seed-balls of Chili Red, and reports from various quarters where it has been tried, indicate that it may be the 'coming potato.'" One says it is ten days ahead of Early Rose, a better cropper and of better quality than that famous kind, and is more easily harvested, as the tubers lie very close together in the hill.—[THE RURAL NEW-YORKER is circulating this potato for test, though we are free to express our obligations to the Messrs. Thorburn for their liberality in supplementing our own supply, which is quite inadequate for our purpose.—EDS.]

AXE-GRINDERS.—Horticulturists are usually men of generous instincts, but not all. There are among them a number who watch constantly for opportunities to grind their axes gratuitously on somebody's grindstone, and especially to get their advertising free. They will send a small sample of some new variety of plant, fruit or vegetable, to some prominent member of the profession, or some editor, with the request that he will "give it a trial and report"—the "report" being their objective point. And if a truthful report is unfavorable, then they are "mad," while if it is favorable, they make extensive use of it in circulars, etc., without a word of thanks or acknowledgment. We have had a wide experience with these gentry, and our good-nature has led us to tolerate, and even encourage them much more than we are likely to do in the future.—Vermont Watchman.

WORTH THINKING ABOUT.—The Monetary Times says that farmers, as a rule, capitalize a larger part of their earnings than most other classes. A farmer and a professional man make equal incomes; but while the professional man spends his whole income and often necessarily and unavoidably, the farmer adds largely to his means of reproduction. The man who spends relatively the larger part of his income in the cost of living, does most for trade in the meantime: the man who spends the smaller part, is conquering the leisure which affords opportunities of higher education to his offspring, or leaving to his descendants a capital-power by which labor can be moved and further material progress made. It is just when the farmer spends with the freest hand that he does most for trade; but when he kills the goose that lays the golden eggs, retribution must follow.

PENNY WISE, POUND FOOLISH.—Dr. Hoskins says in the Vermont Watchman: "We hear it said, on every side, that the immense shipments of agricultural products from this country to Europe are making us rich. But are we not selling more than the corn and the wheat, the butter, the cheese, the cotton and the tobacco? What is the recorded history of that section of our country that in years past exported the bulk of its agricultural productions? Are we not now transporting over sea not alone the products, but the productive power, of our corn and wheat and grass lands, as in former days the productive power of Virginia's tobacco fields and of Carolina's cotton fields went to Europe along with the crops themselves? Are we not engaged in the diffusion of barrenness and of leanness over the country for a little money in hand,—a little "balance of trade,"—that will not make our farmers rich, though it will leave their farms poor?"

INCREASING THE VALUE OF KAINIT.—The London Chamber of Agriculture says that a quantity of fresh horse dung was taken to the science school (Cirencester), and placed in a large stone cistern, and between different beds of manure of a few inches thick, the kainit was scattered. The smell of the dung was strong and offensive, and the pupils complained of it on the day on which it had been mixed, but in a few hours the smell entirely disappeared. On the following day and subsequently no smell was observed, and when the manure was tested chemically about three months after, it was found that a mutual exchange had been effected, and instead of sulphate of potash and carbonate of ammonia evolved from decomposed manure, there were carbonate of potash and sulphate of ammonia. It is unnecessary to say that the value of both of these bodies is considerably greater than that of kainit, and that both of these have a certain and prompt action.

FAIR ENOUGH.—The Smith's Falls News (Ont.) of last week has the following:—"EDITOR'S TROUBLES.—A late number of the RURAL NEW-YORKER, the prince of good papers for farmers and their families, contains a complaint that a New York daily, big enough and old enough to know better [N. Y. Sun.—EDS. R. N. Y.], stole an article from its columns, gave it a new heading, and published it as original. The same paragraph states that numerous lesser journals are in the habit of appropriating their matter without credit. Well, the News uses its matter and says nothing about it, but does *not* palm it off, or any other selections, as original. The entire outside of our paper is made up of carefully selected and boiled-down reading from numberless exchanges, and no one comes under the scissors oftener than the RURAL—the fact is, so many really excellent articles are taken from it that it would become seriously monotonous to give the regular credit every time. Perhaps a good plan would be, whenever rural readers find anything exceptionally interesting or profitable to them, to just say: 'That's from the RURAL,' and take it all for granted."

CATALOGUES, &c., RECEIVED.

THE third annual exhibition of the Berks Co., Pa., Poultry and Pet Stock Society, will be held in the city of Reading from the 24th to the 28th of December next. The exhibition promises to be the finest of the character held in that city.

ANNUAL REPORT of the Secretary of the Interior on the operations of his Department for the year 1878. These Reports from the different governmental Departments often contain matters of interest and always of instruction, though their dry form is a trifle uninviting. But during the leisure of long winter evenings their perusal might help to pass time profitably on the farm. This is a pamphlet of 48 pages, issued free to applicants by the Interior Department, Washington.

INSTITUTE.—The College of Agriculture of the Illinois Industrial University will hold an Agricultural Institute, at the University, from Monday, January 27, to Friday, January 31, 1879, which all interested in Agriculture are invited to attend. The Institute will open on Monday evening with addresses by the Regent of the University and others. During the forenoons of the four succeeding days courses of lectures—four in each course—will be given by members of the faculty, on the following subjects: Soils and their Management; Animal Husbandry; Diseases of Animals; Plant Growth; Chemistry; Rural Architecture and Hygiene. The afternoons will be devoted to more General Lectures and Discussions on Agricultural topics by members of the faculty, aided by representatives of the leading agricultural interests of the State. In the evenings a course of lectures on the Political Economy of Agriculture will be given by the Regent. Opportunity will be given for the examination of the University Museums and Collections, and the Library will be open for use by those in attendance. There will be no fees or charges of any kind. Reduced fare on the railroads running through Champaign is expected. Board can be had at a cost of not exceeding one dollar a day. Full programmes will soon be issued. For these or any special information address Prof. G. E. Morrow, Dean of the College of Agriculture at Champaign; to whom those purposing to attend the Institute are requested to send their names

Dairy Husbandry.

WHAT IS BUTTER?

T. H. HOSKINS, M. D.

"BUTTER is a fatty substance extracted from milk," would be a general answer to this question. But what is milk, then, and how does butter come to be a constituent of it? We are told that milk is a substance secreted in the udder of a cow (or some other mammal), and that it is composed of water, casein, butter, sugar and mineral salts. The casein, sugar and mineral salts are in solution in the water, while the butter is dispersed through the fluid in the form of very fine globules, which have a tendency to rise to the top when the milk is left at rest.

ABOUT THE GLOBULES,

then, which are butter in its first stage—how are they produced from the blood of the cow? The blood of all warm-blooded animals contains fatty or oily matter, derived from their food. Some of this comes directly from the oil of the plants that are eaten. Besides this, the digestive organs are able to transform starch and sugar into fat. The milk-glands contained in the udder are, as to their minutest parts, composed of myriads of little sacs, or bladders, called cells. A thousand of these would, often, not make a mass as large as a turnip seed. These cells lie surrounded by a net-work of the smallest blood-vessels, called capillaries (from *capilla*, a hair, on account of their fineness), and continually grow from matter which they draw from the blood that flows on all sides of them. Their growth is at first simply enlargement, but when their full size is attained, they begin to "segregate" or "proliferate," that is, to divide or bud, producing from each mature cell a number of little ones, in which the same process of growth and division continues. The space allotted to these cells being limited, as they continually increase in number and size they must have an opportunity to escape, which is afforded by the little passages called ducts, which lead from every part towards the pouches provided in the lower part of the udder to receive the milk. The mature cells do not pass along these passages without rupturing and dispersing their contents. This rupture of their inclosing membrane is caused by their absorbing the surrounding moisture until they burst. The milk consists of the contents of the cells, mixed with the surrounding fluid, which has exuded from the capillaries without entering the cells. The special contents of the cells, which escape when they are ruptured, are the butter globules—those little masses of oil (for butter at the temperature of the blood is fluid), which, as remarked above, are butter in its first stage.

It might be interesting here to say something about the peculiar nature of

BUTTER, AS DISTINGUISHED FROM OTHER ANIMAL FATS,

such as lard, tallow, or suet. The oleomargarine makers contend that there is no difference, or, in substance, that the fat of cows' milk is simply tallow, and of sows' milk, simply lard. But chemistry is able to show, though as yet not with perfect precision, that secreted fat differs from deposited fat; that is, that fat formed in the secreting glands, like the glands of the udder, for instance, is differently composed from the fat which is simply deposited in the tissues of the body. We know, as a matter of common experience, that it is both more palatable and more digestible; and it is reasonable to suppose, aside from the demonstrations of science, that these differences are due to variation in composition, adapting milk to its special use as food.

COVERING OF GLOBULES.

It is stated above that the cells are little sacs, that is, they have an envelop, wall, or covering around them, similar to the shell of an egg, only not hard, but thin and flexible. This covering, or cell-membrane, as it is called, is visible under the microscope as a transparent film, and there is no doubt about its existence. But after bursting, it dissolves or falls to pieces, and disappears in the fluid by which it is surrounded. It is often asserted that the butter-globules, the minute oil-drops that constitute the principal contents of the cells, have also each a fine covering, similar to, but thinner than, the cell-membrane; and we have long been assured that the process of churning is only a process of thrashing these globules in order to beat off the membrane, which is said to be the impediment that prevents the globules from adhering together to form visible butter. But this is a belief which some of the best observers declare has no proof, either optical or chemical, to sustain it. It is a hypothesis merely, a bare supposition, which probably arose from the notion that without such a covering the oil-drops would run together of themselves. There is, however, abundant proof that this is not necessarily so. The drops are able to preserve their identity if not violently disturbed; and even when so disturbed, they cannot be made to unite except within certain narrow limits of temperature, while the milk itself remains pure and undecomposed.

THE RISING OF CREAM.

So long as these oil drops remain disunited they may be heated to scalding heat and cooled, even more than once, without injury to the butter. Under certain circumstances, this heating will favor their separation from the milk by the action of gravity—that is, the rising of the cream. But if undisturbed, they will always tend towards the surface at all temperatures from scalding down to freezing; and according to recent experience the colder the milk, so long as it remains fluid, the more quickly and completely this rising occurs.

When these oil globules are cooled, they become solidified. They crowd together upon the surface of the milk closer and closer, hour by hour, so long as the milk lying between them remains sufficiently fluid to permit them to do so. This phenomenon, which is best observed when the milk is set to rise in a deep glass vessel, is called the "shrinking" of the cream; and if it is not understood, error will occur in estimating the comparative quantity of cream in the milk of individual cows, since some creams "shrink" more quickly and more completely than others. It is not, strictly speaking, a shrinking of the cream itself, but a drawing more closely together of the globules, which presses out the milk from between them. It is the large-globuled milk, such as that from Jersey cows, that exhibits this contraction most rapidly and strikingly, because the larger globules have the strongest relative attraction for each other in proportion to the resistance offered by the milk.

BUTTER MAKING.

In order to make the butter globules adhere together and form butter, it is necessary to agitate the cream in a suitable vessel at a proper temperature. If too cold, they will not adhere for the same reason that cold butter is "crumbly"—particles of fat not being adhesive at a low temperature. If, on the other hand, the cream is too warm, the action of the churn is ineffective to cause adhesion, since warm fat in a half-oily state will not cohere into a plastic mass, such as we expect butter to be. The temperature for securing the best results is in the neighborhood of sixty degrees.

The physical condition of the butter globules, when they become adherent under the action of the churn, has a very important influence upon the commercial value of the product. As they join, globule to globule, the little pellets thus formed become, after a time, visible to the naked eye. Supposing the right temperature to have been preserved, now is a very critical period in the operation. "Over-churning" has the same effect as "over-working" to destroy what is called "the grain" of the butter. This "grain" is the result, simply, of the preservation of the form of the little pellets distinct even after their union, and this is effected by first lowering the temperature a little so as to harden them slightly, yet not enough to prevent cohesion of their sides when moderately pressed together. The method is usually to draw off the buttermilk as soon as the pellets have reached the size of peas, and pour cold water into the churn, before going on to "gather" the butter by further moderate churning. The succeeding operation of removing the adhering buttermilk and replacing it with a small quantity of strong, clear, pure brine (called "working"), requires the highest skill of the dairyman, and, supposing all preceding operations to have been rightly performed, is the determining crisis that decides whether we shall have a perfect product, waxy, and uniform in texture and color, that can be kept sweet for a long period, or a salvy, streaked mass, that hastens rapidly to rancidity.

Thus I have tried to answer, briefly, the query, "What is butter?" and the facts stated are all of them important for butter makers to know, since they each have a direct and important bearing upon the practical operations required of them in developing a "gilt-edged" article of trade from the milk of their herds.

WHICH BREED FOR THE DAIRY.—NO. 1.

L. S. HARDIN.

DIFFICULTY OF FINDING OUT THE TRUTH.

It is a fearful thing to tell the truth. You may not believe it, but it's a fact. For instance, if you have ever made a laborious and conscientious effort to succeed with any particular breed of cattle, sheep or chickens, or in growing any special crop of roots, fruits or foreign grasses, and ignominously failed, and then gone back and read up all the celebrated writers have published on the subject, the chances are a dozen to one that in all your reading you did not find a single word relating to the very prominent, inevitable and unavoidable fault, habit or weakness in the breed or crop, that shipwrecked your fortunes. The writers know very well that so far as getting readers is concerned, if they cannot speak well of a thing, they had better leave it alone. But fortunately for those who are desirous of getting at the truth of things, there are some of us not inappropriately termed "free lances." Having been through the mill, we own no cows and write no books. If we tell an unpopular truth, the breeding world comes at us with blood in the eye, but having become somewhat expert at dodging, we say something good about the breed, and for a time the offence is forgotten. Of course, some correspondents become so expert at replying, that few enter the lists against them, unless they are guilty of a gross mistake.

These remarks are intended to preface a few short articles on dairy breeds of cattle, wherein it is my intention to give my candid opinion of the merits and demerits of the various breeds without the slightest hesitation or reservation. If any one will furnish me well-authenticated facts or statistics, I will cheerfully alter, amend or revoke any statement that these facts or figures prove to have been erroneous. It is the truth we are after, and there are no pet theories to support.

RELATIVE YIELDS OF MILK AND BUTTER.

While I draw a strong distinction between beef breeds and dairy breeds of cattle, I cannot say that I have ever been impressed with the importance of that further distinction which most, if not all, writers on the subject draw between what they call cheese and butter cows. The Jersey, Guernsey, and sometimes the Kerry and Swiss cattle are called butter cows, while the Ayrshire, Short-horn and Holstein are called cheese cows, whereas the poor native is disowned by both sets. It is, of course, true that the milk of the former class is richer in butter qualities than that of the latter. As a matter of fact, on an average the milk of the Channel Island cattle contains one-fifth more butter than the milk of the English or Dutch breeds, but if they give one-fifth less milk, unless there are other economical points about them, the thing is as long as it is broad.

A few weeks ago I gave to the public a statement of the milk and butter yields of the various breeds that are now aspiring to dairy honors in this country. The test was the average yield of a herd of not less than ten cows for one full year. I applied to all the noted dairymen in the country for statements of their herds, and, of course, used my judgment as to which were sufficiently explicit and reliable to go on the record. From the best information I could get I made up the following table:

NAME OF BREED.	No. of cows in the herd.	Av. No. of lbs. milk per cow per annum.	Av. lbs. milk to lb. butter.	Av. lbs. butter per cow per annum.
Short-horns	28	Actual.	..	252½
Ayrshires	11	5,469	25	273
Jerseys	14	5,625	20	281
Natives	17	Actual.	..	302
Holsteins	12	8,767	25	350

The Short-horns belonged to Harris Lowis, the Ayrshires to E. T. Miles, the Jerseys to E. Burnett, the Natives to O. Bronson, and the Holsteins to H. C. Hoffman. This statement encroaches so closely upon the individual interests of breeders, laying, as it were, a rude hand upon their tenderest nerves, that few who were not directly interested in the matter cared to venture upon such dangerous territory, as the slightest slip would bring an avalanche of abuse upon the unfortunate victim. As it is, I have been able to gather but little further information, but I think it will be interesting to discuss the relative merits of the different breeds in the light of this comparison.

Sheep Husbandry.

PROFIT IN KEEPING SHEEP.

AN excellent farmer told me this year that for every sheep he kept he sold, in lambs and wool, an average of five dollars' worth per head. He said also that his sheep paid him better than anything else grown on the farm. Five dollars are nearly ten cents per week, and during the pasture season sheep can be kept at a cost of two to four cents per week. In the winter the cost is a little more; but if bean straw and other coarse fodder are freely used, winter keep need not be very expensive, and the manure would be worth a large part of the cost of feeding. I am not so clear about the profit in summering sheep. Where a farmer has a large amount of rough land unsuited to cultivation, sheep will utilize it better than any other stock, provided the land is not wet as well as rough. On low or swampy lands sheep will not do well, are liable to foot-rot and other diseases. But if a farmer has only clover pasture, let him beware of sheep. Either he must feed so light as to get little benefit from his pasture, or he will ruin the young clover—and he may do both. Sheep and clover both improve the farm, but they will not do it together. One neutralizes the other. That "the foot of the sheep is golden," is a proverb only true when pastures are filled with natural grasses and the herbage is made sweeter and richer from being kept closely cropped.

Five-dollars-per-head sales from a flock of sheep pre-suppose a good many ewes, nearly or quite as many lambs as sheep and a good market for them. My friend this year sold lambs at $3.63 per head and wool at $1.50. Not all the lambs were sold, the ewes being saved for breeding and about as many old sheep fattened in the winter as were saved of ewe lambs. To get such a price for lambs, they must be good ones. A full-blood Cotswold buck is used. As the ewe lambs are saved, the second cross is three-quarter blood, and the third is seven-eighth. Lambs even of the half cross are very strong, thrifty and heavy for their age. They are commonly dropped in February and March. This requires close watching and warm quarters in cold and stormy weather; but with these there is usually little loss, often less than farmers suffer who have ordinary lambs dropped in April or May. The grade of the Cotswold buck on the common native sheep, is hardier than the thoroughbred. They need better feed than the common native lambs; but they pay well for all they get. It will pay well to have a field of winter rye to turn on early in the spring, after the weather becomes warm—better still if some grain is given to the ewe to stimulate her flow of milk, and as soon as the lamb is old enough to eat, to increase its size. Young lambs will begin to nibble at oats when two or three weeks old and will soon learn to eat greedily. Only a very little is needed in addition to the dam's milk. The larger the lamb, the higher the price per pound. This is an unvarying rule, be the price high or low. I know no way in which a little grain will pay so surely and so well as if fed to young lambs. Unless extra feed is given to the mother at least, early-dropped Cotswold grade lambs are apt to become stunted and will never fully recover.

W. J. F.

The Apiarian.

EXPERIMENTS WITH BEES IN CALIFORNIA.

I HAVE seen several articles in the RURAL from bee-keepers, giving their experience, success, profits, etc., with bees during the past season. With fifteen years' experience in that business myself, in northern Ohio, I should say that they were more than ordinarily successful. Their success most certainly shows that brains are very essential to the bee-keeper to enable him to develop to the full extent, the capacity of his bees to collect and store the sweets that nature has so bountifully supplied.

Here in southern California, bee-keeping is almost another business from what it is East. We have scarcely one day of the three hundred and sixty-five in which the bees do not collect some honey. The swarming season commences the last of March and continues into August, thus affording an excellent opportunity for a strong colony to propagate its species and gather honey. Let me give the readers of the RURAL a little item of bee culture, that came under my observation the past season.

Mr. J. Archer—formerly a Michigan bee-keeper—experimented with three several swarms, with the following results, an account of which was published from month to month in the Santa Barbara Press, as the experiment progressed.

From No. 1 no swarm was permitted to issue. The top, or honey board, was removed and an empty hive with frames was placed upon the first, and others added from time to time, as the stock increased, until five hives were placed one above another. The honey was extracted as often as it became necessary to give the bees store-room. Seven hundred and thirty-five pounds were thus extracted, besides leaving enough in store to carry the bees safely to the next honey season.

Nos. 2 and 3 were swarmed artificially. No. 2 increased to thirty-six swarms, and fifteen hundred and seventy-six pounds of strained honey, and sixty-five pounds of comb-honey were taken from it. No. 3 increased to twenty-four swarms, and gave twelve-hundred and sixty pounds of strained honey and twenty-four pounds of comb-honey. With No. 3 the result would have been more favorable, had the bees remained in Mr. Archer's apiary a month longer, but they were removed to another place in the beginning of August. At this time, the greater part of the hives contain very much more honey than is necessary to carry the bees to the next season.

R. F. BINGHAM.

Everywhere.

FRUIT CROP REPORT FOR THE SAN JOSE VALLEY, CAL.

LAST winter was a very wet one over the entire State, and dry weather came suddenly, without our usual gradually diminishing showers. Fruit of all kinds ripened more nearly together in this section than ever before. Early Beatrice, Early Rivers's and Early Louise peaches ripened at the same time. Plums which are usually far apart, as the Prince of Wales and Bradshaw, ripened simultaneously. Prices for early fruit were, on the whole, lower than ever before. Cherries of the Black Tartarian and Royal Ann varieties brought 12c. per lb.; other varieties, not over 6 to 7c. Peaches were worth

25 to 50c. per box of 30 lbs. Apricots were high, ranging from 4 to 5c. per lb. Plums, of large varieties brought only 2c. per lb.; other kinds rotted. The late fruit paid better. Pears are now high, but the market is over-stocked with apples. Apricots, clingstone peaches and late pears have paid best this year.

CHAS H. SHINN.

Alameda Co., Cal., Nov. 10.

RURAL SPECIAL REPORTS.

SENECA, Nemaha Co., Kan., Nov. 20th, 1878.

WE are having exceedingly fine fall weather. During the last two months we have had several fine rains, so that winter wheat and rye have a very healthy color. Farmers are very busily engaged husking corn. Many of them have finished, and nearly all are much farther along than they usually are at this season of the year. The corn crop is not as good as it was expected to be, but is of good quality and is very dry where the land was well cultivated; the yield has been about fifty bushels per acre on prairie land, and more on bottom lands. Owing to the depredations of Chinch-bugs and rust, spring wheat was nearly a failure. In fact, farmers here would do well not to try to raise spring wheat, as it is very seldom that they get paid for their seed and labor. Barley and oats were very fair crops. Millet, the tame grasses, and our prairie grass were all a little better than usual, and nearly all the hay is of extra quality. Potatoes were not generally a large crop. Produce of all kinds, and also cattle and hogs, bring very low prices; but either because we are more philosophic, or because we are more used to being "hard-up," we don't grumble as much as farmers further east do. An immense number of "prairie schooners," or immigrant covered wagons, have passed through here this fall. The most of them were bound for the homestead region. G. H.

WALDEN, N. Y., Nov. 22.

Walden is situated in the fertile Walkill valley, is eleven miles west of Newburgh and is noted for its great water-powers. It is a very prosperous village, and has a large number of persons employed in its various manufacturing interests; consequently we farmers find a good home-market for much of our produce. The weather is quite warm and cloudy; farmers are generally up with their work, and some of the more active ones are making needed improvements. Crops have been good. Prices are about as follows: Wheat, $1 to $1 25; rye, 56c; oats, 30c; corn, 50c to 53c; hay, $8 to $10 per ton; eggs, 26c to 30c; apples, about $1 to $1.50 per barrel; good fruit sold to-day at 75c; cider is very plentiful and hard to sell, from $1.25 to $2 per barrel; potatoes sell at 90c per bushel by the load; wages are 50c to 75c per day. With strict economy we anticipate a good balance on the profit side of our farm accounts. RURALIST.

LOWVILLE, Lewis Co., N. Y., Nov. 25.

IT has been cloudy and rainy for a week, but we have had a pleasant fall. Cows are looking well; good cows are worth from $20 to $26 a head. Butter 18c. a pound; corn is 50c. a bushel; potatoes 75c. a bushel. I send the RURAL a sample ear of Compton's Early Corn, which I planted on sod 3½ feet each way, 1⅓ acre. I spread two loads of hog manure on the ground. I leave three stalks in a hill; it yields fifty-five bushels per acre. This is the second year I have planted it, and I have taken the first premium at our county fair both years. M. B.

BEAR LAKE, Manistee Co., Minn., Nov. 18.

OUR soil here is what is called sandy loam, and our winters are usually long, with deep snows, though last winter was almost like a continuous spring. Moreover, we are somewhat subject to droughts, although the past year has been an exception in this respect, for in this locality we have not been two weeks without more or less rain, and during the last three months it has rained a great part of the time, thus keeping the farmers from their fall work, so that much of it yet remains to be done. M. E. A.

LARNED, Kansas, Nov, 22, 1878.

I am a squatter on Government land where, four years ago, the Indian and buffalo ranged. Two years ago last May I came here and took up my home in a little dug-out. There was no house within sight. South of me it was sixty miles to the nearest house. Now I can stand at my door and count over one hundred homesteads. I have raised over 7,000 bushels of wheat since I came here, besides other crops, mostly on rented ground, my own not having been broken until this season. I had only one span of mules, and "nary" dollar to start with. J. D.

MELROSE, Florida, Nov. 21, 1878.

This is a nice country and climate in winter for those with plenty of money; but during the rest of the year one is tormented with insects, etc., and the soil is very poor, or most of it is at any rate. Some of the hummuck land is rich, but it will cost $40 per acre to clear it, and we can make apples pay us more North than they can get out of their orange groves here, after deducting expenses. On the whole, Florida is a nice place to stay during the winter if one has money; but no money can be made here at farming, and it is no place for a poor man, for a laboring man cannot get work that he can depend upon. H. L. C.

ROCKFORD, Floyd Co, Ill, Nov 25.

THE Beauty of Hebron potato I have, and find this variety most excellent. I took the first premium on them at the county fair this fall. The failure of the wheat crop hereabouts, the very low price of beef and pork and, in fact, of all farm products make our people curtail expenses in every way. The weather continues beautiful. For the past two weeks it has been dry, before that it was very wet. The corn crop proves good; but corn is worth only 15c. per bushel; wheat, owing to its poor quality, brings only 35c; oats, 15c; potatoes 25c; hogs $2 00 per cwt; beef cows, 1¼, steers 2¼; butter, 12½; eggs 12½. The kind of wheat most extensively raised hereabouts is Lost Nation; Fultz comes next. W. L. MC'E.

PERKINS, Erie Co., Nov. 20.

WE have had no snow hereabouts as yet this fall, and no very bad storms. Husking is nearly all done. A few are plowing. Wheat is looking well; not much fear of the fly. Some fields of potatoes gave a full crop; the yield of others was much below an average one. On the whole, potatoes were not an average crop. The corn crop was good; at present corn is worth 21c.; wheat, 85c.@87c.; oats, 22c.; potatoes, 50c.@55c.; apples, 00c. Cattle and hogs are away down. F, A. A.

ITHACA, N. Y., Nov. 26.

IT has rained every day, with one exception, for ten days past. The roads are therefore bad. Corn is nearly all husked at last, and farmers are fitting things up for a hard winter. Times are hard and money is scarce. Hay is worth $5 to $7 per ton; oats, 25 cts. bushel, buckwheat, 35 to 40 cts.; barley, 65 cts.; potatoes, 60 to 65 cts.; cider, $1 50 per bbl. Fall-sown wheat is looking fair. Labor abundant and cheap. Apples are an immense crop, but they are rotting badly. ANON.

DUNNSVILLE, Essex Co., Va., Nov. 22, 1878.

OUR crops of corn and vegetables have been saved. This has been an unfavorable year for the farmers of this section. The best manured land produced the poorest corn—very unusual this. Wheat is looking well, and so is clover. With the exception of hogs, all other stock is looking well, but prices are very low. Corn, 40c. per bushel; wheat, 80c. to 95c., according to quality. Farmers are very much disheartened. R. S.

FOSTER'S CROSSINGS, Warren Co., O., Nov.,24.

The farmers in this neighborhood are getting well through with their fall work. I have my stock corn all cribbed, and only a day or two more are required for husking my standing corn, which I intend feeding to my hogs. Wheat is looking finely, and a larger area of it than usual has been sown. Some fields of corn are yielding well; others are not so good. A field I finished to day averaged fifty bushels per acre. J. D.

GALLION, Crawford Co., O.

WEATHER pleasant for time of year, but very little freezing weather yet. Fall wheat looks good. The last crop was very good, the average yield in this part of the country having been 25 bushels to the acre. Corn is about a medium crop, average 30 bushels; oats, 45 bushels. Wheat is selling for 84c. per bushel; corn, 35c.; oats, 21c.. Live pork, per hundred, $2.25. S. H. B.

ALMA CITY, Minnesota, Nov. 19.

We have had very fine weather this fall, and it still continues. The past week has been more like September than November. Farmers, although greatly behind with their work two months ago, are fully up at present. Produce of all kinds is very low; wheat, from 30c to 50; corn, 20c; oats, 20c; pork, 2c per lb.

NAPLES, N. Y., Nov. 26.

THE weather is cool; there has been some snow; the roads are simply horrid. Times are dull; produce low; wheat, 80c. to 90c. per bushel; corn, 40c. to 45c.; oats, 25c.; potatoes, 35c.; butter, 18c. per lb. Potatoes were a light and fruit an abundant crop. Farmers hereabouts are generally ready for winter. L. F. D.

NEW HAMPTON, N. Y., Nov. 25, 1878.

THE wheat crop hereabouts was nearly all a failure both in quantity and quality, fetching only 25c. to 40c. per bushel; oats, 10c.; corn, 15c. to 18c. in trade; pork, $1.70 to $1.90 per cwt., live-weight. W. O.

AUGUSTA, Ga., Nov. 28.

WE are now planting wheat and oats, transplanting cabbage, strawberries, and raspberries. Our turnips have suffered for rain, it having been remarkably dry. J. M. A.

ELM POINT, Bond Co., Ills.

THE weather is fine. The wheat crop is large as regards acres sown, and looks well. There has not been cold enough to hurt root crops in the open ground. N. C.

GARRETTSVILL, N. Y., Nov. 22.

We are having warm, open weather, with considerable rain. Farm produce of all kinds is low, and slow of sale.

The Querist.

ANSWERS TO CORRESPONDENTS.

Utilizing Bones

R. R., Friendship, N. C., asks whether bones lose any of their fertilizing ingredients in process of burning. 2. Which would be the most profitable way of using bones—to burn them or draw them eight or ten miles, and then give half for grinding?

ANS.—In the process of burning, bones lose their organic constituents, chiefly composed of gelatine, and containing from two to four per cent. of nitrogen, worth 20c. per pound; so that in every one hundred pounds of bones burnt, from forty to eighty cents' worth of nitrogen is lost, besides an uncertain amount of advantage supposed to be derivable from the other constituents of the organic matter. 2. Still this loss can be so readily restored by the use of a little guano or other nitrogenous fertilizer, that on nearly all farms burning bones, so as to be able the more easily to pulverize them, is certainly the most economical way of utilizing them. Indeed, the addition of the potash from the ashes of the wood fires in which they would be generally burnt, would go far towards compensating for the small loss of nitrogen. In the present case, therefore, it would certainly be more profitable to burn them on the farm and save all the bone and wood ashes, than to haul them either eight or ten miles, and then give half for grinding them.

Donnelly's Early Champion and Tolman's Grapes.

P. H., Lynn, Mass., asks whether there is any difference, except in name, between these two sorts of Grapes sent out by the same dealers?

ANS.—Mr. D. S. Marvin says he has grown and fruited for several years the Tolman from Fredonia, and the Champion from Rochester, and there is no difference between them. Donnelly's claim that his Early Champion is a new Grape, ripening its fruit two weeks before the Tolman, is unfounded. The Grape is very early and hardy, but of poor quality. It originated at Syracuse, N. Y., and is a seedling of Hartford Prolific.

Remedy for Lice on Cattle and Hogs.

A correspondent sends us the following recipe for the above purpose, with the assurance that he has found it more effective than any thing he has ever tried:

To one gallon of soft water add one pint of soft soap, and boil them together; then add one ounce of arsenic, and stir the whole till well mixed. After this add another gallon of soft water and the mixture is fit for use. His theory is that the soap neutralizes the poison and renders it harmless to the cattle, and the whole is a "dead shot" to the lice and their eggs.

Apples for Virginia.

W. B. H., Henrico Co., Va., asks which varieties of Apples are likely to thrive best between latitude 38° and 37° in Virginia. Among the Apples there are the June (Red June Sweet?) ripening in the latter part of the month from which it derives its name; the Strawberry, ripening at the end of July; the Cheese, ripening about the middle of September, and the Winesap, an early winter sort.

ANS.—Nicksjack, Pryor's Red, Rawle's Genet, Winter Sweet Paradise, York Imperial, London Pippin, Edward's Early, Fallawater.

Fish Pond.

W. J. Beaty—no address—has a large running spring, which he is thinking of utilizing for the purpose of making a fish pond, and asks how much care, expense, etc., would be needed to construct and maintain it.

ANS.—Much depends upon the size of the pond; how much earth is to be removed; how much to be added for banks; the lay of the land; what sort of a dam, or outlet, is desired, etc. We do not see that we can make an answer of any value without these particulars.

Privet Berries.

A. C. W., Hugo, Ill, asks when should privet berries or seed be plucked, how treated, and when and how planted to produce young plants for an ornamental hedge.

ANS.—As soon as ripe. They may now be preserved in sand and sown the same as any other small seeds in the spring. They will make a foot of growth the first season. They may be planted now in boxes or pots in the greenhouse.

Pulling Beans.

Can any one suggest a new mode or tool for pulling beans when ripe? This work is both slow and back-ache-producing when done by hand. S. R. M.

Miscellaneous.

W. Collins, Talbot Co., Md.: 1. Has a mare over one of whose eyes a blue film and false skin had grown. He has treated by blowing white vitrol and burnt alum into it, and also by using a wash made of the same. There is still a film over the pupil, though the animal can see. Owing to restlessness, he can put no more of the powder into the eye, and the wash seems to do little or no good. He asks what is the best form of treatment. He also has a young mare that injured her right hind limb while practising for a tournament. He thinks the injury is in the hip or upper part of the leg. 2. She has only been able to walk with the greatest difficulty for six weeks; when running that leg is held up; after exercise the stiffness and soreness seem less, and when brought out of the stable in the morning, it cannot be used at all. Has been bathing with cold and warm water, and "Horsemen's Hope."

ANS.—1. The film mentioned was simply opacity of the external coats of the eye, the result of inflammation. The treatment mentioned was decidedly wrong, and, besides causing much unnecessary suffering to the animal, the disease was undoubtedly aggravated. It is much better to pay for good advice in such cases than to trust to one's own judgment. The treatment in such cases should consist of soothing applications and protection from the light, instead of blowing irritating substances, like burnt alum and white vitrol, into the eye; these are sufficient to cause inflammation when it does not already exist. The best treatment now would consist in occasionally touching the spot over the pupil with a feather dipped into a solution made by dissolving four grains of nitrate of silver in an ounce of water. It may or may not be possible to remove it.

2. No advice can be given in regard to the lameness, as no symptoms are given by which it can be located. Would advise a careful examination of the hock joint.

Mrs. G. S., Springville, N. Y., has had a Passion Vine for three years without its having shown a blossom, and inquires how long she must wait before seeing it bloom, and what is the cause of its tardiness in this respect.

ANS.—Many Passion Vines are stove-plants, and to do well require a temperature of between 60 and 70 degrees, and a moist atmosphere. If the plant is otherwise healthy, and these conditions are complied with, Mrs. G. S. ought soon to have the gratification of seeing flowers on her plant. There are several half-hardy species.

W. H. M., Haddonfield, N. J., asks what is the matter with his chickens. Their appearance is drooping; they stand about with their eyes shut; there are lumps on their faces and heads; their dung is loose and of a light-brown color, and their faces somewhat pale.

ANS.—The above symptoms are common to several ailments. The disease is probably Roup. Hale's Roup Paste is a good remedy; keep the fowls warm and in a dry place; feed with soft, warm food daily.

D. Pierce—no address—asks when and how to plant seed of Peony and Perennial Phlox, and how to increase the Calla Lily?

ANS.—Sow the seed of Peony and Phlox in boxes in March; prick out the plants soon after they come up, and when they are large enough to set out, transfer them to the open ground.

The Calla is propagated by the young bulbs that form around the old plant. After flowering let the plants dry out partially, shake the soil off, remove the young bulbs, and plant them separately in pots or in the garden.

M. W., St. Joseph, Mich., says: "From th flower seeds sent me last year, I raised plants of Shell-flower, Aquilegia, Cleome and a variety with long, notched, curled leaves of silvery color, whose name I do not know. It did not blossom; how shall I call it?"

ANS.—Glaucium luteum.

M. E. W., Burlington, N. J., asks how ears of corn can be sent to this office?

ANS.—By mail. We have to thank our subscribers for quite a number. The trouble is we can not always tell which letter and ear of corn go together. Whenever we can, we are happy to return postage stamps.

F. K. G., De Golier, Pa, asks when is the best time to cut back an Oleander. 2. Is there any such bulb as Zephyranthes, and if so, is it hardy?

ANS.—(1.) Now. (2.) No doubt Amaryllis Atamasco is referred to. This bulb was first sold as Zephyranthes, by which it is called by some authors. Yes, it is hardy in Pa.

Mary Waley asks if she can be supplied with bound volumes from this office, as her friends read the RURAL so continuously that the current numbers are actually worn out.

ANS.—We regret that we cannot supply complete bound volumes.

Mrs. T. J. B., Okolona, Miss, asks the price of Azaleas and Rhododendrons, and the best time to plant them?

ANS.—The best time is in the spring. The price varies from fifty cents to one dollar each.

E. L. M., Greenwich, O, asks whether the Early Vermont potato is a distinct variety.

ANS.—Yes.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, NOVEMBER 23D:

W. J. B.—D. P.—W. J. F.—W. J. B.—W. H. N.—T. M. H.—D. S.—W. O. H.—R. T. B.—thanks—G. H.—T. N. E.—J. W. S.—A. C. W.—L. L.—F. D. C.—O. M. L.—A. M. V. A.—R. S.—M. B.—M. W.—J. D.—F. J. R.—M. M.—M. H.—T. H. H.—F. D. C.—E. H. P.—J. M. D.—F. A. R.—H. E. McC.—A. J. B.—A. L. J.—E. L. M.—W. H. M.—L. E. K. T.—W. R. B.—thanks—F. B.—Anon.—G. P.—S. A. L.—B. P. M.—T. H. H.—thanks—L. G.—A. E. Y.—W. S. McE.—W. B. D.—M. L. G.—R. W. F.—J. E. McC.—D. E. S.—M. H. H.—D. C.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

Summer Cottage, Thousand Islands, N. Y—(Illustrated) Palliser, Palliser & Co. 773
A Rat-Proof Crib—T. M. H. 773
Hints About Work—W. J. Fowler 773
Stirring the soil in a dry time—is it an advantage 774
Moisture in the soil 774
Jottings at Kirby Homestead—Col. F. D. Curtis 774
Van's Views 774
How Ninety-Seven Bushels of Corn Per Acre Were Raised—Daniel Steck 775
Lost Nation Spring Wheat 775
A Few Words About Pears—Gen. W. H. Noble 775
King of the Pippins 776
Every-day Notes—Samuel Parsons 776
How Fast Young Forest Trees Grow—Prof. W. J. Beal 776
Henrietta Raspberry Once More—Hale Bros. 777
Extracts from Correspondents' Letters 777
What Others Say 777
Catalogues Received 777
What is Butter?—T. H. Hoskins, M. D. 778
Which Breed for the Dairy—L. S. Hardin 778
Profit in Keeping Sheep—W. J. F. 778
Experiments With Bees in California—R. F. Bingham 778

Everywhere:

Fruit Crop Report for the San Jose Valley—Chas. H. Shinn 778
Seneca, Kan 779
Walden, N. Y. 779
Lowerville, N. Y. 779
Bear Lake, Minn. 779
Larned, Kan. 779
Melrose, Fla. 779
Rockford, Ill. 779
Perkins, N. Y. 779
Ithaca, N. Y. 779
Dunnsville, Va. 779
Foster's Crossing, Ohio 779
Galion, Ohio 779
Amity City, Minn. 779
Naples, N. Y. 779
New Hampton, N. Y. 779
Augusta, Ga. 779
Elm Point, Ill. 779
Garrettsville, N. Y. 779

Answers to Correspondents:

Utilizing Bones 779
Donnelly's Early Champion and Tolman Grapes. 779
Remedy for Lice on Cattle and Hogs 779
Apples for Virginia 779
Fish Pond 779
Privet Berries 779
Pulling Beans 779
Miscellaneous 779
Communications Received 779

Domestic Economy:

Pen-Thoughts from Every-day House—Annie L. Jack 784
Copperas—Mrs. M. G. R. 784
Domestic Recipes 784

EDITORIAL PAGE:

Skilled Labor 780
Purchasing Horses 780
The Unscientific Temperament 780
How to Eat Milk 780
Brevities 780

LITERARY:

Poetry 781, 786
Weaker Than a Woman 781
Malta De Vere 782
Clara Morris and Her Husband 782
Recent Literature 782
Magazines 783
Scientific and Useful 783
Woman's Club 783
Amusement for the Little Folks—Fern Leaf 783
Useful and Useless Husbands—John Lynn 783
Life's Cheery Autumn—Ruth 783
One Reason why some Women Accomplish more than Others—Leola 783
A Home Chat—M. E. B. 783
Give Your Girls a Chance—Aunt Flora 833

Reading for the Young:

Sponges 786
Pack of Ragamuffins 786
Duties of Scholars—A Cousin 786
The Dodo 786

Sabbath Reading:

Conscience Void of Offence 786
The Little Orphan 786
News of the Week—Herman 784
Markets 785
Personals 787
Wit and Humor 788
Advertisements 785, 787, 788

THE
RURAL NEW-YORKER.
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RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY DEC. 7, 1878.

OUR readers are particularly requested to read the particulars of our free seed distribution on p. 785, under publisher's notices, before ordering seeds. We thought we had made the postage particulars very plain—but many are sending us too many stamps. A one-cent stamp suffices for all except *three*—the Beauty of Hebron requires a two-cent extra stamp, and the Defiance Wheat and Pearl Millet, *together*, require a two-cent extra stamp.

SKILLED LABOR.

AMERICAN agriculture is undergoing a rapid change. The capital invested in it is increasing more rapidly than in any other industry. The cheap lands with poor dwellings, occupied by the pioneers, have become well tilled farms with buildings costing three times as much as the original value of the land. The sickle, scythe and cradle have given place to the mower and reaper. Most farm operations are done by machinery which requires some mechanical skill to manage. The evident tendency is to work larger farms, the operations of which the owner can only superintend, the labor being almost wholly hired. It costs less, in proportion, to work two hundred than one hundred acres, and still less as the farm grows larger, provided the labor is skillfully directed. And the more machinery is substituted for hand labor, the stronger will be this tendency to absorb the smaller into the larger farms. This has been the result in Great Britain, and it is not likely to be avoided in the United States. We believe it would be better for the individual independence of the farmers if the small holdings might continue, instead of their being aggregated together, and the present proprietors, more or less, becoming laborers. This result cannot be avoided, except by co-operation in the purchase of machinery to work small farms, a plan for which we may soon point out in another article.

But this change is strongly demanding the substitution of skilled labor on the farm for the very unskilled labor at present employed. One of the greatest impediments to successfully carrying on farming on a large scale, is the fact that there are no skilled laborers in the market. Farming has been carried on, in this country, so much at haphazard, and with so little order and system, that a laborer, when he can find nothing else to do or succeeds in nothing else, offers his services to the farmer. On the farm he regards success as certain. The consequence is that the laborers are entirely unskilled in the parts they are performing, and unless directed by unusual activity and knowledge, the work must be badly done. It requires skill everywhere in farming—skill to lay out a field for the plow, to turn a fine straight furrow, to put it in fine tilth for the seed, to sow the seed accurately; skill in cutting and curing grass, in harvesting grain; still greater skill in raising and feeding animals; skill in milking and managing cows; skill in all the operations of the dairy. Indeed, what operation in agriculture does not require skill? And yet a large part of all these operations is carried on by laborers new to the business, and who perform them in the clumsy way of novices, at wages which in Europe are only paid to skilled mechanics. Perhaps this explains why the farmers' profits are all gone, when he hires the labor to carry on his farm.

The manufacturer never carries on business with such unskilled labor. His workmen have served a regular apprenticeship at the various branches of his manufacture, and he can estimate with a reasonable certainty the profit upon each workman. The English farmer stands on as favorable ground as the manufacturer, having skilled laborers at his command, and can make a reasonably certain calculation upon the result of their labor. The English plowman serves an apprenticeship at this most important specialty from the time he is old enough to reach the plow-handles till he becomes an expert; whilst the American farm-hand thinks he can perform this skilled operation without any previous practice! The American farm hand makes up in assurance what he lacks in practical knowledge. But assurance, however important in desperate enterprises, will never lay a straight and even furrow. The American farmer is, no doubt, saved from even greater losses through unskilled labor, because a large percentage of his labor is done by machinery, which works much more perfectly than the unskilled hand. But the cost of wear and tear of machines operated by unskilled hands, is much greater than if they were run by experts.

It is evident that the changed condition of our agriculture must soon compel the employment of skilled hands, and these skilled hands must be educated before they can be employed. Agricultural laborers are composed too largely of a floating, unsettled class, and this must be changed before amendment in the degree of skill can be expected. They must be composed of a class with settled and definite ends and aims, who are educated to the business as earnestly as mechanics. With such assistance agriculture will attract capital, and afford it a safe investment. Skilled labor is the immediate demand of the future in agriculture.

PURCHASING HORSES.

FEW persons who purchase and use horses are able to make a selection of an animal with a sufficient knowledge of what they are buying. It is rarely that a horse is bought except upon faith in the declarations of the seller, and a haphazard sort of dependence upon luck. The consequence is that when a man is very frequently "stuck" in his bargain, and when he suspects or discovers it, he thinks it no harm to put off the beast upon some other purchaser in the same way that it was palmed off on him. "Is he all right?" asks the would-be purchaser. "Well, I bought him so, and so far as I *know*, he is all right," replies the seller, trying to make believe to his own conscience that he really *knows* very little, although he may *think* a great deal.

Now, it is very easy for any person of judgment to learn to know, when he is buying a horse, whether the animal is sound or not. Blemishes speak for themselves, but unsoundness requires a close inspection and some knowledge, for its detection. The feet are the most usual seat of unsoundness in work horses. From the general careless habit of caring for horses and the reckless manner of using them, there is a large proportion of them unsound in the feet. But disease of the feet is easily detected, although there may be no apparent lameness. An intending purchaser should have the horse brought out before him, and watch the animal as he stands at rest. If the owner is continually starting the horse into motion and urging him to "show off," something may be suspected; because it is when the horse is at perfect rest that his weak points are divulged. If the horse is sound, he will stand squarely on his limbs, without moving any of them, the feet being placed flat upon the ground and all the legs plumb and naturally posed. If one foot is thrown forward with the toe pointing to the ground and the heel raised, or if the foot is lifted from the ground and the weight taken from it, disease of the navicular bone may be suspected, or at least tenderness, which is a precursor of disease. If the foot is thrown out, the toe raised and the heel brought down, the horse has suffered from lamnitis—founder—or the back sinews have been sprained, and he is of little future value. When the feet are all drawn together beneath the horse, if there has been no disease, there is a misplacement of the limbs at least, and a weak disposition of the muscles. If the horse stands with his feet spread apart, or straddles with the hind legs, there is weakness of the loins and the kidneys are disordered. When the knees are bent and the legs totter and tremble, the beast has been ruined by heavy pulling and will never be right again, whatever rest and treatment he may have. Contracted or ill-formed hoofs speak for themselves.

If the eyes are of a bluish or milky cast, they constitutionally tend to opthalmia and there will be certain trouble there. If the ears are thrown backwards, the temper is bad; if they are thrown forward and the horse starts nervously at every movement or sound, he will probably be a shier and unsafe to drive. If the hind legs are scarred, he has been a kicker. If the knees are blemished, he is apt to stumble. If the skin is rough and harsh and does not move easily and smoothly to the touch, the horse is a heavy eater and has poor digestion. When these peculiarities are absent and there is nothing to cause suspicion in any other way, the horse may be taken to be all right so far as soundness of foot, limb and digestive organs are concerned. Disease or imperfection of the respiratory organs may be discovered by pinching or holding the throat, by observing the behavior of the horse when he is speeded, or by placing the ear at the side of the chest, when any sound heard other than a clear, resonant one, is indicative of trouble.

The Unscientific Temperament.

Men who form their opinions hastily and adhere to them tenaciously, are unfitted by the very constitution of their minds for scientific investigations. Usually the less substantial are the grounds for such a person's opinions, the more violent is he in the expression of them, and the more intolerant of other views. We have too many writers of this type in agricultural journalism. They will give no attention to facts that oppose their preconceived ideas, and have no other method of opposing the propounders of such facts but by a weak scornfulness. Truth cannot be put down in that way, but its progress may be hindered when those who find pooh-poohing! more convenient than reasoning occupy conspicuous places. The history of all progress shows the encounters of truth with this false conservatism, which stands in the way of progress as snow obstructs a railway engine. Sometimes it is packed in drifts so hard that it has to be *shoveled* out. But though hindered, truth makes its way out at last.

How to Eat Milk.

—There are many who say, "I like milk, but milk does not like me,"—that is, it does not agree with them. The reason for this, in most cases, is, that the milk coagulates in the stomach in too firm a curd to be easily digested. But many who cannot drink milk, or eat bread and milk, find no difficulty in digesting a bowl of baked apples and milk. Upon this hint the experiment has been successfully tried, by a physician of large experience, of telling his patients who could not digest milk to use apple-sauce as a concomitant, taking a spoonful of apple alternately with a spoonful of bread, crackers, or pudding-and milk. The apple prevents the formation of a solid mass in the stomach, and its juice also aids digestion, so that no distress or sense of heaviness follows after a meal thus taken. This information is given for the benefit of RURAL readers, and we think it will be worthy of trial, though, perhaps, not successfully in every case.

BREVITIES.

WE are now laying down and covering up our grape vines and raspberry canes.

MR. TEMPLIN thinks there is as much in pedigree in corn as in horses or cattle.

IN a short time we shall present our readers with a poultry number of the RURAL.

FARMERS are liable to forget the necessity of pure water for their stock during winter.

UNCOVER the celery during warm days, or when the temperature is above freezing, and recover at night.

ASK yourself: "What can I do now that would otherwise have to be done in the spring when time is twice as valuable,"—and do it.

WE are now preparing articles and illustrations for a poultry number of the RURAL NEW-YORKER. Any hints or suggestions from our readers, the outcome of experience or observation, will be welcomed.

WITHIN a few weeks we have had three well-to-do city gentlemen apply to us for the names of intelligent farmers who would take their sons on their farms and be willing to instruct them and give them their board and bed for their services.

SPEAKING of Catalpa speciosa in last week's issue, speciosa ought to have been given as a *variety* instead of a *specific* name. The correction was made in the proof but overlooked. It is claimed that Catalpa bignonioides speciosa is hardier than the species.

WE have heard it stated more than once that Bridgeport, (Conn.) is indebted to Palliser, Palliser & Co., more than to all other architects for its beautiful suburban architecture. We present this week the second of an original series of elevations and plans which they have prepared for us.

IT seems to us, from a casual notice of returns, that the average yield of Clawson wheat is far higher than that of any other variety. It is now well known that this wheat should be well seasoned before it is ground. We find, also, that the bread made now is better than that made earlier from flour ground at the same time.

THE price of the RURAL NEW-YORKER is now two dollars to all. Those, therefore, who cannot get up clubs, or who do not live near club agents, may send us the money direct, feeling assured it is the lowest price. While those who spend time in getting up clubs are unquestionably entitled to pay, it has long seemed to us that all are entitled to receive the paper at the same price.

THERE are few plants more showy in appropriate places than the American Aloe (Agave Americana). The plants grow very fast and increase by suckers which are readily separated from their parent plant. All may be wintered by covering the roots with soil and keeping them where the thermometer does not sink below 28°. We do not know of a fine plant that may be wintered with less trouble, or that will stand more neglect.

WE would suggest to those of our good friends who can afford to do so, that The RURAL NEW-YORKER would prove, to those interested in its departments, a more suitable present than many others which are thoughtlessly selected. We have well-grounded hopes that the RURAL for 1879 will prove more stirring, more instructive, more independent, more earnest than ever before. As this year we have inaugurated several new features not promised, so we desire for next year to please our readers beyond their expectations.

MR. THOMAS, referring to what Mr. Lovett says respecting the identity of Early Andrews with Highland Hardy; of Norwalk with Naomi and Franconia; and of Henrietta with Belle de Fontenay, says that a single season or single observation is hardly sufficient to determine questions of this sort, the same variety often differing more under influences of seasons and soils than others well known to be unlike, and *vice versa*. The seedling from any sort may appear very much like the parent and be pronounced identical, while really a distinct variety.

IT is a singular fact, strikingly illustrated within the past ten years in the case of real estate, that people are readiest to buy when the article is at its highest price. Thousands of people made fortunes by holding real estate and selling it at the right time, it is true; but tens of thousands have been reduced to poverty by not selling. There is little doubt that real estate is now below its real value. Yet there are no buyers, because there is no immediate prospect of an appreciation. But for this impatience for immediate returns, farmers would give more thought to planting timber trees. There is a sure market in the future and those who sow now will then be the fortunate reapers.

OUR readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

OUR new Premium Lists, specimen copies and agents' outfits will now be forwarded free to all who apply.

OUR Free Seed Distribution will remain open to all subscribers who may apply until further notice.

THE RURAL NEW-YORKER *is invariably discontinued at the end of the subscription term.*

Literary Miscellany.

WISHING AND HAVING.

R. H. STODDARD.

If to wish and to have were one, my dear,
You would be sitting now
With not a care on your tender heart,
Not a wrinkle upon your brow;
The clock of time would go back with you
All the years you have been my wife,
Till its golden hands had pointed out
The happiest hour of your life;
I would stop them at that immortal hour;
The clock should no longer run;
You could not be sad and sick and old—
If to wish and to have were one.

You are not here in the winter, my love,
The snow is not whirling down;
You are in the heart of the summer woods,
In your dear old sea-side town;
A patter of little feet in the leaves,
A beautiful boy at your side;
He is gathering flowers in the shady nooks
It was but a dream that he died!
Keep hold of his hands, and sing to him;
No mother under the sun
Has such a seraphic child as yours—
If to wish and to have were one.

Methinks I am with you there, dear wife,
In that old house by the sea;
I have flown to you as the bluebird flies
To his mate in the poplar tree.
A sailor's hammock hangs at the door,
You swing in it, book in hand;
A boat is standing in for the beach,
Its keel grates on the sand;
Your brothers are coming—two manly men,
Whose lives have only begun;
Their days will be long in the land, dear heart
If to wish and to have are one.

If to wish and to have were one, ah, me?
I would not be old and poor,
But a young and prosperous gentleman,
With never a dun at the door;
There would be no past to bewail, my love,
There would be no future to dread;
Your brothers would be live men again,
And my boys would not be dead.
Perhaps it will come all right at last:
It may be when all is done,
We shall be together in some good world,
Where to wish and to have are one.

WEAKER THAN A WOMAN.

CHAPTER XII.

(Continued from page 767.

"I must not stay, Felix," she murmured.

"No; I will not ask you. My darling, say only once more to me the words I love to hear—'Felix, I belong to you.' Say it, Violet!" he added with sudden passion.

"Felix, I belong to you," she whispered, and he was content. He touched the lilac-flowers with his hand.

"Darling," he said, "I shall love every lilac bloom because it will remind me of this night and of you. See, there are dew-drops on your hair! You must not stay, sweet; you must go in, Violet. You will repeat my name before you sleep to-night, and when you wake? You will say 'Felix—I love Felix, and will be true to him.'"

"Yes," she answered.

He touched the little golden chain she wore round her neck.

"I wish I were that chain. I wish I were this golden ring of hair that lies on your face. I wish—oh, Violet, I am mad with wishing—mad with longing! But I love you so dearly."

In another minute he was gone. The moon was shining, the dew lay upon the lilacs, and Violet stood alone, her heart beating as it had never beaten before.

"After all, it is better to be loved than to be rich," she thought—"it is better to have love than riches. I—I wish that I had always been kinder to Felix; but I did not think—I did not understand."

She stood for some minutes while the western wind cooled the hot flush on her face, and she became calmer as she watched the pale light of the moon.

"There is nothing like love," she repeated; "and there never yet was any love like his for me."

If the girl's father and mother suspected anything they made no sign, they said no word, and Violet was grateful.

It happened three days later that Felix, finding he had a leisure hour in the afternoon, went over to the Limes. He took with him a little bouquet of roses; they were the first choice ones that he had seen, and he knew that Violet loved roses. He found her at home; and he was received with civility, though not with warmth, by her parents. Violet was pleased with the roses. She praised them—she buried her face in them, and Felix wished with all his heart that he were one of them.

While he sat there, a box came from the Hall. Francis Haye was excited about it. It must be opened at once—he could not imagine what it contained. Felix offered to help, and his offer was eagerly accepted. The first thing they saw was a magnificent bouquet—such a bouquet as had never been seen in Lilford—the conservatories must have been robbed to provide it. There were camellias, red and white, gardenias, stephanotis, white heath, heliotrope, lemon-scented verbena—the rarest and loveliest flowers that grew. A little white card was at the side of it—a card which bore the hackneyed quotation, "'Sweets to the sweet.' For Miss Haye, with Sir Owen Chevenix's compliments."

Violet gave a little cry of delight when she saw it. Mrs. Haye took it up in her hands, and, turning it round, said, in a most impressive voice—

"This is worth five guineas, at least."

Then they uncovered several bunches of superb grapes, some fine peaches and apricots—delicacies such as previously Violet had only heard mentioned—also a dozen bottles of choice Madeira for Mr. Haye.

"It is very kind of him," said Francis Haye—"wonderfully kind. I have never met with any one so generous."

And Felix, who was far above all ignoble jealousy, joined in praise of the Baronet. But when Violet stood at the garden gate alone with him he said half sadly—

"What does it all mean, Violet? I cannot understand it." For to his mind—so brave, so noble, so incapable of meanness or wrong—it had not yet occurred that any man could deliberately try to take his betrothed wife from him. He would have scorned the notion—he never even so faintly suspected it, until it was too late. But, as he stood there—and it was only natural—there came to him for a moment a passionate longing for wealth. If he could only make such presents as those he had just helped to unpack!

"Violet," he said half sadly, "I am afraid my roses seem very poor and trifling by the side of all Sir Owen's magnificence. My darling, if I could coin my heart's blood into gold and lavish it upon you, I would do so. My poor roses!"

She laughed a low rippling laugh, that sounded very sweetly to him.

"Those beautiful flowers will stand in mamma's favorite old china bowl," she said. "Look where one of your roses is"—pointing to the bodice of her dress; "they shall change places if you like."

A passionate embrace was Felix Lonsdale's only response; and as he walked home that night he felt that he was the happiest man in the world.

CHAPTER XIII.

There was no place in England prettier than the old parish church at Lilford. It was an old Norman edifice with quaint square towers and a harmonious peal of bells. The church stood on rising-ground, and behind it was a grove of oak-trees—fine old spreading oaks, that had seen many generations of men and women come and go. Great green hills stretched out on either side—hills with quiet little hamlets nestling on their wooded slopes; little old-world villages were dotted around, and the old church stood up royally on the hill-side. The walls were gray, and covered with ivy; the old windows were of stained glass; ivy covered the square towers; the old porch with its stone seat was a marvel of architecture; the path that led to it was bordered by lime-trees; look where one would, one saw nothing but ripples of foliage and a gold-green light.

Sunday in Lilford was a day that would have charmed a poet. The very spirit of peace and rest seemed to brood over the earth, while the sweet chime of the Sabbath bells sounded through the venerable oaks.

So long as he could remember, Felix had always walked home with Violet from church; when they were children they ran down the hills in very gladness of heart, but now they walked sedately, Felix almost forgetting the beauty of the fair world around him, as he looked into the beautiful face of the young girl by his side—Violet faintly conscious of the admiring glances that came from all sides, yet really trying with all her heart to disregard them because it was Sunday.

It would hardly have seemed like Sunday to Felix if his privilege had been withdrawn. He went, as usual, on the first Sunday in June, when the old church was looking its fairest and the sunlight on the oak-trees was wonderful to see. There was Violet, her beautiful face shining, he thought, like the face of an angel; there was Evelyn, looking like a fair, meek saint. Great was his surprise to see Sir Owen Chevenix also. It was the first time that he had made his appearance at church, and the congregation was just a little excited about it. Doctor Hunter, on seeing him there, fondly fancied that it was due to the fame of his effective preaching. Lady Rolfe suspected that the charming Lavinia had lured him there, but the Vicar's wife, shrewd Mrs. Hunter, sighed and smiled. "It is the old story," she said to herself; and then she reproached herself for the thought and applied herself to the Psalms.

Felix did not think much about the matter. He was not ashamed to bow his handsome head, and join with all his heart in the beautiful words of the service; but when it was all over he hastened to meet Violet. She was standing with her mother, and, to his surprise, Sir Owen Chevenix was talking to them. He gave a careless nod to Felix, but continued talking.

"I beg that you will let me drive you home, Mrs. Haye," he was saying. "To tell you the truth, I ordered my carriage on purpose—I did indeed. It is a lovely morning, and if you will permit it, we will drive round by Queen's Ash."

He did not look at Violet as he spoke. He knew that whatever her mother did she must do. Felix had taken her hand. He did not care if all the world heard what he had to say.

"You will not break through the old custom of walking home with me, Violet, or rather of allowing me to walk home with you?"

She looked from one to the other with real distress in her face. Sir Owen did not even glance at her; he knew that his cause was safe in Mrs. Haye's hands.

"Violet," said Felix, "you cannot hesitate;" and the girl stood staring at him while her mother said——

"Really I do not know what answer to give you, Sir Owen. I do not know what people will say."

"Why, what does that matter, Mrs. Haye?"

"Well, you see, Sir Owen, Lilford is a small place, and 'everybody' knows 'every thing.'"

"My dear lady, what can it matter if all the world knows of this? I shall be very proud of the honor, I assure you. Lady Rolfe would not require so much pressing."

The last words, vulgar as was the spirit which dictated them, quite determined Mrs. Haye. Evidently, if she did not go with him, he would drive Lady Rolfe and her daughter. She simpered a little.

"Since you are so kind, we will accept your offer," she said. "It will certainly be very pleasant. I always tell Mr. Haye that the one thing I want to make me perfectly happy is a carriage. Now, Violet."

"Violet will allow me to escort her, Mrs. Haye," suggested Felix.

"Oh, no," replied Mrs. Haye, "Violet must come with me! I cannot go alone and leave Violet with you. Another time, Felix, you shall be her escort. Sir Owen has been kind enough to order his carriage for us; it would be really unpolite to refuse. We will say good morning to you now." And she watched him while he shook hands with her and then with Violet.

His handsome young face had grown white even to the lips; but what could he do? He was a gentleman; he could not make a "scene;" he could not take the girl from her mother's side against her will; he had no carriage with roan steeds, and coachmen and footmen in livery. What could he do? Only one thing. If Violet was to go in the carriage he himself would put her into it. The Baronet's hand should not touch even his darling's dress.

So he walked by her side down the avenue of limes, and they reached the high road where the carriage stood. There were many curious eyes watching them. Lady Rolfe and the fair Lavinia looked on in angry indignation.

"What does that girl mean by encouraging Sir Owen?" said the mother. "Surely one lover ought to be enough for her. Felix Lonsdale must be blind."

"Perhaps he cannot help himself, mamma," returned the philosophical daughter, and in that she was right.

When Felix had helped Violet into the carriage, he bent over her to arrange her dress.

"Darling, you would sooner have walked home with me would you not?"

"Yes, I would," she replied; and after that the disappointment was not quite so hard to bear. He turned away without a word or a bow to Sir Owen.

"This is pleasant," said Mrs. Haye, as the carriage rolled swiftly along the high road. "Violet, of all the luxuries of life give me a carriage."

The luxury and grandeur were certainly very pleasant; while the novelty delighted Violet.

Sir Owen did nothing to alarm her. He talked to Mrs. Haye, while he merely looked at Violet. He was wonderfully solicitous that she should be comfortable, and there was but one drawback to Violet's pleasure, the memory of the pain on her lover's face.

"How I wish Felix had a carriage!" she said to herself. "But that will never be."

She enjoyed her father's surprise when the horses stopped at the Limes, and she wondered what her mother meant when she said—

"If I had a chance of keeping such a carriage as that, I should not lightly throw it away."

CHAPTER XIV.

It was a bright day in June, the lilies and roses were all in flower, the laburnums were in the full perfection of their golden glory, and again the sun at noon-day found Sir Owen at the Limes. He had discovered Violet in the garden dreaming idly amongst the roses. It was a picturesque, old-fashioned garden, with quaint-looking seats under the trees and a pretty arbor of trellis-work in the back-ground. Sir Owen professed himself so charmed with it that he would not go into the house, and Mr. and Mrs. Haye went out to meet him there.

After the first greetings were over he turned to Violet.

"Miss Haye," he said, "I have come on purpose to see you. Do you remember our conversation about a *fete* in the park? You said that you thought it would be very pleasant.

Violet looked up with animation.

"Yes, I remember," she replied. "I had forgotten it."

"I have come to say that if it pleases you I will give orders for everything to be prepared for it. What do you say?"

She looked at him with a curious expression on her face, while her father and mother glanced at each other.

"What do I say?" she echoed. "I have nothing to say, Sir Owen, but that I have no doubt it will be very pleasant."

Sir Owen looked disconcerted. After a pause, he added—

"But you do not understand. If I give the *fete* at all, it will be in your honor and to please you. Everything in it shall be as you wish—you shall choose your own amusements—indeed, you shall be the queen of it. Now what do you say?"

Mrs. Haye frowned at her daughter.

"You must really show some little interest in it, Violet," she said, "since Sir Owen is so good as to consult you."

"'Consult'—that is just the right word, Mrs. Haye—thank you. That reminds me," he added, with a smile, "Lady Rolfe told me to consult her when I found myself in any difficulty."

Violet looked up with an air of great relief.

"I wish you would," she said. "She knows far more about such matters than I do."

"But you see it is your opinion I want, not hers," said Sir Owen. "I thought of this—a *fete* in the park, and, to wind up with, a grand ball in the house. We could have Pearson's quadrille band from London; and I thought of sending to Gunter for the supper. What do you think of it?"

Her beautiful face paled a little and then flushed up.

"I think it would be most delightful," she replied."

"Though Mr. Haye is an invalid, still he would like to see everything going on," continued Sir Owen. "Perhaps he, Mrs. Haye and yourself would come to the Hall on the day before the *fete* and stay until the day after."

"I should like it very much," declared Mr. Haye. "I have not had such a treat for years."

"Nor have I," said his wife. "I cannot imagine anything that I should like better."

After that Violet could make no objections.

"But you must grant me one favor," continued Sir Owen—"you must promise to open the ball with me."

Again the girl's beautiful face flushed and then paled; but her mother looked impatiently at her.

"Why do you hesitate, Violet?" she said. "It is an honor of which any lady in the county might be proud."

"You consent, then?" pursued Sir Owen.

"Yes, I am willing," she replied, inwardly dreading all that Felix would say about it, yet half delighted with the idea.

"And I have your sanction for all that I do. Is there anything you wish to suggest in the way of improvement?"

"No, I think not," she replied, more than half frightened.

"What do you say to Tuesday week?" he asked. "Then I can drive over here and take you all to Garswood on the Monday. Lady Rolfe will stay two days; we shall be quite a pleasant little party. I may rely upon you?"

"Yes," agreed Violet, still somewhat nervous; then, looking up at him quite suddenly, "Why do you set store by my opinion and sanction?' she asked. "I do not know anything of these matters; I do not understand why you consult me."

Sir Owen laughed a loud, hearty laugh that was music to the ears of Francis Haye and his wife.

"I have a reason," he replied, "and a very serious one; I will speak to you about it later on."

She could not imagine to what he alluded, and Mrs. Haye listened in silence.

Sir Owen showed her a list of names.

"I thought of sending invitations to these people," he said. "If there are any among them you do not like, strike them out; if there are any you wish to ask, add them."

She read the long list of names, and then produced her little pencil-case; she added two more—those of Evelyn Lester and Felix Lonsdale.

"That is her lover," thought Sir Owen, as he looked reflectively at them. "Well, he may come—it will save trouble. When he sees all that he will see, he will be taught a lesson."

Violet was more pleased and contented when he smiled. She did not know why she felt so greatly relieved.

Then Sir Owen rose to take his leave; he was going to London that evening, he said, and it would be some days before he would see them again. He asked Violet to go with him to the garden-gate; and again, when Mrs. Haye saw the peculiar expression on her husband's face, she whispered—

"Not one word, Francis Haye, not one word, or you will spoil it all;" and he obediently held his peace.

They saw a look of perplexity on Violet's beautiful face all that day, and she had lost her animation. She fell into long fits of musing; she was unlike herself; but no word from father or mother helped her in her difficulty, or solved her doubts.

Felix had been quite pleased about his invitation; he smiled and thought to himself how foolish he had been. What could be more natural than that Sir Owen should admire his beautiful Violet? He could not help it; he told himself that he had been unreasonably jealous, that here was a proof of it. If Sir Owen had entertained any false, dishonorable notion of supplanting him in Violet's affections, here was a proof that he had changed his mind. Another and more generous idea still came to him—namely, that Sir Owen had not known at first that Violet was engaged, and hence had admired her; but, that, now that he did know it, he had changed his ideas.

"Some one has told him," thought generous Felix, "and that is why he invites me."

This noble-hearted man could not imagine a fellow-man holding out one hand with a smile, while he clutched a dagger in the other. He was sorry for having misjudged him, and thought to himself that on the day of the *fete* he would seek out Sir Owen, and shake hands with him. So, to Violet's great relief there was no cloud on his face when he told her that he would be pleased to attend the *fete*.

But he looked very thoughtful when Violet told him of the invitation.

"I do not want to go," she said—"I do not like Lady Rolfe; besides, I do not see the use of making friends with all these great people—it cannot last."

"You really do not care to go there, Violet?" he asked.

"No not to the ball. I shall enjoy the *fete*, but I shall not enjoy the visit."

Felix drew near to her.

"Violet," he whispered, "you will not think me jealous or disagreeable?"

"No," she replied.

"I want you to do something for me. I am puzzled. Sometimes I think Sir Owen must know that we are engaged—sometimes I fancy he does not; yet he must know."

"I should imagine that he does know—every one round here knows; he would be sure to hear it spoken of."

"Most probably. But, Violet, let us make sure of it—tell him yourself, sweet. He will be quite sure to talk to you, and it will be so easy; just a few little words, and then all my suspense will be ended—indeed I have not felt at all anxious about it, since I received this invitation:

No man could be so false as to invite another to his house if he intended doing him any harm. I am quite easy about it, Violet."

And he meant what he said; he judged others by himself, and in his nobleness of heart had no notion what meanness was.

There was a great surprise in store for Violet. She had talked to her mother about her dress, and Mrs. Haye had said that she must have something very nice; but something "very nice" would be costly, and Francis Haye was hard to manage on such points.

Mother and daughter were discussing what was to be done under the circumstances, when a large box from London was brought by the carrier's cart to their door; it was for Miss Haye—there was no mistake as to the address—and with some curiosity they hastened to open it.

"It is directed in a lady's hand," said Violet. "What can it be, mamma?"

"We shall see, my dear," replied Mrs Haye.

When it was opened both ladies were speechless with surprise. It contained three complete costumes—one for a garden-party, a most charming combination of blue and white, with a tasteful Parisian bonnet, gloves, shoes and everything to match—a dress that Mrs. Haye declared made her heart beat to think of the money it must have cost; then an evening dress of white silk, with a train of blue velvet and blue velvet trimmings; lastly, a full and most exquisite costume for the ball, of white silk trimmed with silver fringe and silver leaves.

Mrs. Haye was amazed when she saw it. With it were white satin shoes, a fan, white feathers mounted in silver, a silver bouquet-holder, gloves, and a marvelous handkerchief of dainty lace. Violet looked at the treasures in wonder.

"Who can have sent these, mamma?" she asked. "I do not like to take them. Have you ever seen anything so beautiful?"

"If I believed in fairies," said Mrs. Haye, "I should think that a fairy had sent them."

In her own mind she felt quite sure that the donor was Sir Owen, but she would not say so. Violet had no suspicion—not even the faintest. She never thought of Sir Owen.

"It must be a lady who has sent them," said Violet. "No man would have understood what was wanted. Mamma, should you think that it was Lady Rolfe?"

"I am really puzzled," replied Mrs. Haye. "We will call your father."

Francis Haye came to the rescue. Violet wearied herself in trying to guess, but she could not divine who was her benefactor. When she had carried the ball-dress away, the husband and wife looked at each other.

"It is just as I said, Francis; but, mind, not one word! One careless word may spoil it all."

And neither of them breathed a sound to Violet of what they suspected.—To be continued.

MALTA DE VERE.

H. A. H.

THE day had been cold and stormy. A drizzling rain, with now and then a flurry of snow, had set in at early dawn, and still continued, with no prospect of abatement.

Doctor Morand had returned from his evening calls, and, in dressing-gown and slippers, sat before his cheerful fire, studying the glowing embers, as though he could see in their fiery depths his own futurity.

Elton Morand was a bachelor, and the last surviving member of a proud family, and sole heir to immense possessions. Proud and ambitious, he was not content to live a useless and idle life.

"No," he said, "I will win for myself a name befitting that of Morand."

And now, to-night, as he sits in his luxurious home, and reviews the thirty-five years of his life, a smile of pleasure flits across his face, with a consciousness that in all those years he has to the best of his ability, done what he thought to be right.

Rising, he walked to one of the windows, drew aside the rich lace and satin drapery, and peered out into the darkness.

The storm had increased in violence, great whirls of snow and wind dashing against the house in all its mad fury, then onward, moaning and creaking through the tall pines, compelling them to bow in submission before the blast.

"What an awful night!" said he. "I hope no poor mortal will have need of my assistance before morning." And with a cold shiver, he turned and resumed his place by the fire.

But such was not to be the case, for scarcely had he seated himself when his servant entered and handed his master a small slip of paper containing these words:

"Doctor:—Please come as soon as possible; mamma is much worse. MALTA DE VERE."

"Two horses and the close carriage," he said, hurriedly to the servant, who still remained awaiting orders; "and do have them here quickly."

"Poor woman!" thought Dr. Morand, as he prepared to go forth on his mission of mercy, "it is very doubtful if she lasts till morning; and Malta! dear little Malta! what will become of her?" And as he entered the carriage, buttoning up his fur coat, an idea presented itself to him. "Yes; I have more than enough, while this poor child has literally nothing. I will adopt and educate her as I would a sister; sheltering her with a brother's watchfulness from the cold blasts of this troublesome world."

* * * * *

Mrs. de Vere was the only child of Colonel and Mrs. Wallingford, and they, proud of their beautiful daughter, lavished upon her everything wealth could offer. But alas! in an unguarded moment she had given her heart to a man far beneath her in social position, and one against whom her father entertained the greatest dislike, knowing him to be utterly devoid of principle.

In vain he reasoned, entreated, and finally commanded his daughter to cease receiving attentions from August De Vere. It was of no avail; she turned upon all a deafened ear, even when told that the moment she became his wife her claim upon them as a daughter would forever cease; this, like all other warnings, she passed by unheeded, and married the man of her choice.

For a few years all went smoothly, until he, seeing no prospect of a re-union with the family of his wife, gradually became more tyranical, until the poor woman was obliged to seek refuge elsewhere; while the man who had vowed to love, honor, and cherish her, was rapidly sinking deeper and deeper into the pit of vice and degradation, ending ultimately in his death. And long years after, as she looked back upon her shattered life, it was with that pang of remorse which only those who have suffered can feel. Her atonement now was in the desire so to rear her child in the path of honor and obedience that she, unlike her mother, might never know the anguish of heart caused by filial disobedience.

It was before a small cottage, white as the snowdrifts around it, that Mr. Morand's carriage stopped.

The door was opened by a young girl of not more than fifteen; tall and slight with long golden curls, eyes of a violet hue, and a complexion of the opal tint.

Yes, Malta de Vere was beautiful, and so thought Dr. Morand, as he took the small white hand in his, tenderly asking after his patient.

"Oh! doctor," was the shivering reply, "mamma is so very ill I fear she will never be any better. After you left she continued to grow rapidly worse."

Entering the cosy little sitting-room into which the dying woman had been moved, Dr. Morand saw at a glance her stay upon earth was short.

"You have come," she said, faintly; "I am so glad. Malta, dear, leave us; I wish to see the doctor alone."

Moving to a small stand upon which stood glasses and phials, he mixed a cordial, reviving in its effects, and held it to the lips of Mrs. De Vere.

"I am stronger, now," she said, motioning him to a seat, "and what I have to say must be said quickly. Doctor, I am dying. My moments are numbered; one link alone binds me to earth. My child. What, oh! what will become of her? Who will care for her when her mother has ceased to breathe?"

"Mrs. De Vere, with Heaven's help I will care for your child; and so long as I live and possess a dime she shall never want."

"Heaven bless you, my friend!" was the almost inarticulate response. "I can now die happy."

In a few hours all was over. All that remained of Colonel Wallingford's daughter had been consigned to the dust, and as Dr. Morand led the weeping Malta back to the carriage, he gave orders to drive to Morand Hall, that being now the only place Malta De Vere could call her home, and the only one she was destined ever to know.

* * * * *

Malta's grief became lessened by time. Five years have passed since her bereavement, and the wound is gradually healing.

Again Dr. Morand sits before his cheerful fire, but not alone; his beautiful and accomplished ward is his companion. She, busily intent on her book, sees not the look of affection bestowed upon her, and not until her name has been spoken twice, does she look up.

"This book is so interesting," she said, smiling, as she met the clear eyes of her guardian fixed upon her.

"I do not doubt it in the least, my dear," he replied, "for I spoke twice before I could bring you back to this earthly sphere."

"You did?" she exclaimed; "and I only heard you once. I must have been wrapped up in my story. But, guardy," she continued, in her sweet, gentle way, "it is dull for you sitting there without anyone to speak to. It was selfish of me to not think of this before."

Rising, she crossed the room to where Dr. Morand was sitting, rolled a cushion to his feet, and sat down.

If beautiful at fifteen, Malta De Vere is now superb; and particularly lovely she looks to-night, in her dress of black silk and velvet, and glittering jewels.

The five years she has been under Dr. Morand's guardianship have been improved, and the unusually fine education she possessed at the time of her mother's death, has received additional polish. Now that all has been acquired, and her masters dismissed, she controls Dr. Morand's household, and entertains the society in which he moves, with the grace and air of one born to rule.

To-night, as Malta sits silently looking into the bright red embers, her mind is evidently far away, while she is silent, unusually so, for her.

"Guardy," she said at last, hesitatingly, "it is five years since you took me in, a wanderer, and cared for me. My education, everything that I am, I owe to you; and, dear guardy, I think now I ought to try and do for myself. I know I have been a great expense to you, and it is my duty to repay as much of it as I can."

She glanced up into the face of Dr. Morand, while he, unable longer to restrain his mirth, leaned back in his large easy chair, and laughed heartily—more heartily than Malta had ever before seen him do.

"Oh! guardy!" she said, her face flushing crimson, while her eyes filled with tears, "what did I say so terrible? If you would only look at it as I do."

"My child," said he, drawing the agitated girl to his breast, "do you really care so little for me that you wish to leave me?"

"Oh! no, guardy, it's not that; but I feel so dependent; and to-day I saw in the Times that a teacher is just now wanted in Legrand Seminary, and I am sure that I could meet the requirements, if, guardy, you would only let me try. Please, guardy, do say yes."

Dr. Morand smoothed gently the bright golden head, with his eyes turned away from the sweet, childish face looking up so pleadingly into his.

He looked steadily into the firelight, the one absorbing thought of his mind being how best he could weaken Malta De Vere's resolution.

That she was sincere in her request he well knew, yet not for one moment could he think of his idol, his Malta he had reared so carefully, going forth into the world to earn her livelihood. Could he, possessor of thousands, and without a relative in the world, remain submissive to so preposterous a piece of folly? Never!

"Malta," said he, tenderly, turning to the bright, expectant face, "tell me, my child, if your sole idea in wishing to leave me is because you feel yourself to be a burden? I cannot part with you, my darling. You are the light of my home—of my life! Tell me, my child, do you love me enough to share with me through life my joys and sorrows? Is there in your heart no response to the great love I bear you? Will you, Malta, accept that love, and be my wife?"

"Oh, guardy!" she faltered, with quivering lips, "I am not worthy your great love! You forget the difference in our positions. Choose from your acquaintance some one of wealth and rank, and let me go, as I have asked. I will not deny that I love you better than anyone else on earth; but, oh! guardy, think what your friends would say! Please let me go away; do not ask me to do what my better judgment tells me would not be for the best."

"But I shall, Malta, urge you now, more than ever," he said, drawing the golden head still closer to his breast. "Oh! Malta, do not wreck both of our lives for the sake of pleasing society! What do I care for the remarks of the envious? Now, little one, which shall it be—'yes,' or 'no?'"

"It shall be 'yes,'" was the low reply; "and I will strive to be all you would desire."

"Heaven bless you, my darling! for you have to-night made me the happiest of men!"

* * * * *

Three months have passed since Malta De Vere pledged herself to be the wife of Dr. Morand, and now three days only remain before she will be his—made his by vows pledged before Heaven and man.

"Malta," said he, that night, as they sat at dinner, "I have a surprise for you."

"For me, guardy! What can it be?" she asked, eagerly.

"Read this," he said, handing her a letter, "and tell me what you think of it."

Without the slightest suspicion of its contents she opened and read the following:—

"DR. MORAND—Sir.—By the last will and testament of the late Colonel Wallingford, his daughter's child, and only surviving heir, inherits all his vast estates, personal and real. Communicate with us at once. BRADLEY & WELLER, Att'ys."

Malta's face was a shade paler as she looked at her guardian, while upon it there was a bright and happy expression, as she said:

"For your sake, guardy, I am glad; for, after all, you will not marry a poor girl."

"Malta," was the reply, "my love for you now is no greater than when I thought you penniless: and could I have had my choice I should have preferred that the fortune of Colonel Wallingford had been given to public charities. However, little one, if it gives you a greater feeling of content, I will for your sake try and think of it with pleasure."

The morning of Malta's bridal dawned clear and bright. The wedding was to be a grand affair; for Dr. Morand would have it so; and now that the hour has come, St. Mark's is filled with hundreds, eagerly impatient for the coming of the bridal party. They come at last, passing slowly up the broad isle, to the altar, while the great organ peals forth one of Beethoven's grand marches.

Radiantly beautiful is Malta De Vere as she stands at the altar to take upon herself the marriage vows, as, with heart-felt trustfulness she clasps the hand of the man beside her, while the minister slowly repeats, "What God hath joined together let not man put asunder!"

Together they kneel in prayer, invoking Heaven's blessing and guidance through life, rising as the marriage bells merrily peal forth their congratulations.

The vow of Dr. Morand, registered at the bedside of death, and the second act in the drama of their lives have thus far been fulfilled.

CLARA MORRIS AND HER HUSBAND.

Her Statement to The Dramatic News.

I NEVER loved Mr. Harriott, but I looked up to him as a man in whom I might have confidence and respect. I did not marry him for money, for I thought he had merely a good business—not that he was wealthy. I desired to settle down, to become somebody in a social world, outside the eternal work and anxiety of a theatre. Probably two more ill-assorted beings never were paired. To this day he is an enigma to me. He has his good qualities, and I can see in him good traits which, apparently, nobody else can see; but he is, nevertheless, the opposite of myself. I am warm-hearted and impulsive. He is cold, phlegmatic, indifferent, and sometimes almost forbidding in his demeanor toward me.

Above all, he is selfish, and appears to think no more of me than of some useful article that can be used to bring in so much a week. Such a life is killing me. I feel that I am gradually growing discouraged, and that, sick as I am at all times, this weight is the most potent in bearing me down. I shall not leave Mr. Harriott, not because I ought not, but for the sake of the world's opinion. I have taken my burden and I shall bear it. I must act. If I did not, heaven only knows what would become of us. His business does not pay, and my earnings go to keep it up. And yet I am unfit to act. I am never out of suffering. Never a night passes that I go on the stage that I do not feel I would sooner die than end the play. As I sit here I am in agony enough to break down any ordinary woman.

Many a time have I been lying on my bed wondering if I could live another hour in such pain, and he has come and urged me, almost forced me, to go to the theatre, in spite of the most strenuous orders of my physician. And then I am reproached by both the press and public for simulating sickness to make myself interesting. How little they know Clara Morris! How little they are aware of the eternal struggle of my life, battling on through calumny and opposition, yet always ready to do my work; always taking the abuse in good part and submitting to it. I never felt I could hate my husband until he told some Boston woman who wrote to the Sun that I made his life miserable, and that I was worn out, physically and mentally; for nobody knows my life better than he does, and no one is aware how I have struggled for him better than himself. I am nothing but his chattel—his property. I feel that he looks upon me as no use if I play to poor business; it is not the business that terrifies me, but what he will say at my drawing no more money. In Philadelphia recently the business of the week opened only fairly, probably better than any other house in town, but still only fairly. He never spoke a word to me that week until Friday, when there was a large house, and then he came to my dressing-room, spoke to me affectionately, and wanted to know if there was anything he could do for me. How can I be expected to care for such a man? Yet, I do not suppose that he realizes to himself that I notice all this or feel anything about it. Pure selfishness, that is what it is. I know I can't be alone in these feelings, and that other people see him as I do.

RECENT LITERATURE.

Just How. A key to the Cook-Books. By MRS. A. D. T. WHITNEY. Boston: Houghton, Osgood & Co. Price $1.00.

THE place this book aims to fill in the world of cook-books is well explained by the author, who says: "The Literature of Cookery is already enormous. The name of the recipe books is legion. I do not madly propose to add, as such, to the number. But what is a literature without a grammar? I do propose to make a little grammar of cuisine. I mean to take up the very A B C of its etymology; to give its parts of speech; to show the elementary principles of its syntax. Then you may go to the encyclopedias and libraries. All print will be open to you. With due and thankful acknowledments to the books of direction that have helped me in more than thirty years of housekeeping to get my experience, I must say that in none of them have I found what would anticipate that experience with a sufficiently definite showing of 'Just How.' In no recipe that I ever mixed by, has the mysterious element of 'knack,' 'gumption,' been allowed, resolved, and measured with the least attempt at precision. Yet it should be, more than—even instead of—ingredient, weight, or proportion. Good guess and clever invention may compass these; the other is the *trade*, the *handling*,—that one must be apprenticed to learn.

You cannot learn to knit by a pattern-book that tells you to "knit four, purl three, cast off one;" you must be shown first how to hold your needles, how to catch your yarn and put it over, how to pick the stitch through. You could not make a garment by being told to "close the side seams, hem the bottom, gather the top into a band," if you did not first know how to use thimble and needle together; how to run and stitch and over-sew; how to turn a hem and fit a band.

More than half the difficulty and bewildermont of kitchen work is from taking things wrong end foremost, or plunging into the middle, and so making an anxious muss of it, instead of a clean, clear, successful process. I will save you, if I can, the using of an unnecessary cup or spoon, or the hurry of a critical moment for want of a dish or an ingredient that should be right next at hand.

There are in cookery, as in all things, three definite stages of doing; and they are the stages of the children's play-rhyme:—

"One to make ready;
Two to prepare;
Three to go slambang,
And there you are!"

If you can make ready and prepare, you can go slambang with the most delicious confidence.

There are no fancy or hearsay recipes in this manual of examples. Neither are there any so closely duplicated, or so superfluous, as to perplex you in your choice, or be needless in your regular repertory. You may begin with "Yeast," and cook through to "Cider Apple Sauce," with perfect reliance. Having done so, in such order and combination as you found convenient, you will have set forth from time to time, in your results, just such a fair, simple, palatable, and sufficient variety of food-preparations as befits most family tables, from which you may form a comfortable bill-of-fare for the year round. By the same progress, you have become, in like degree, a capable journey-woman at your trade."

The Dinner Year-Book. By MARIAN HARLAND. 713 pages. Price $2.25. New York: Scribner's Sons.

THIS book will be most acceptable to many a housewife whose life is burdened by the eternally recurring question, What shall we have for dinner? The colored plates (a new departure in cuisine literature) serve not only to embellish the book, but they illustrate the text. The author says, that there have been dinner-giving books published, that is, books of *menus* for company dinings, "Little Dinners" for especial occasions, etc., etc.; but that she has never yet met with a practical directory of this important meal, for

every day in the year. In this volume she has furnished the programme in all its details, and has superintended the preparation of each dish, proceeding even to the proper manner of serving it at table. Yet large as is the variety in a book so extensive, there has been no yielding to the temptation to extravagance. The book has been prepared for the family, for the home of ordinary means, and it has hit the happy line where elegance and economy meet. The most simple dishes are made dainty and inviting.

The Art of Flower Painting. By Mrs. WILLIAM DUFFIELD. With twelve illustrations by Dalziel. Edited by Susan N. Carter. New York: G. P. Putnam's Sons.

This little volume will be found of great service to all who are in any way interested in that most beautiful of arts, painting in water-colors, and a glance through its pages will stimulate many to attempt a little in this line. The suggestions are clear and practical, and it is to be hoped, now that ladies have recovered from the mania for pasting tinsel, gauze and coarse pictures on blacking-bottles and tomato-cans, they may be induced to turn their attention to something which will be truly art work.

Fourteen Weeks in Physics. By J. DORMAN STEELE, Ph.D., F. G. S. New York: A. S. Barnes & Co. Price, $1.25.

This work is designed mainly for the use of those beginning a course in Physics. It is fully illustrated and contains much that will be of interest to many beside students. As the author claims, the work "has grown up in the classroom," there is little doubt but that teachers will find it a valuable assistant.

Francis Murphy's Gospel Temperance Hymnal. Price, 50c. New York: A. S. Barnes & Co.

MANY of the hymns in this collection are new, some are old favorites, and altogether it is a most attractive book for use at prayer and temperance meetings. There are, in all, one hundred and fifty hymns, arranged with music.

MAGAZINE NOTES.

ST. NICHOLAS for December whets the appetite for more. There is just enough of ante-Christmas flavor about it to let you know the merry season is near, and to assure you that the real Christmas number of St. Nicholas is yet to come.

The December number has eight extra pages and fifty pictures, and begins with a poem of home-life that sings itself into the heart.

There are several short stories, the most attractive of them being those retold by T. F. Crane from the versions familiar to Italian children. They are the dear old fairy tales that everybody knows and loves, but in strange Italian dress, and delicately illustrated by Alfred Fredericks. Mr. Crane also explains from what ancient sources come these beloved stories.

Young students of German are presented with a short legend in that language, for them to turn into English; and Very Little Artists are supplied with white-line pictures to be copied upon their slates.

The serial story, A Jolly Fellowship, by Frank R. Stockton, carries its readers through a "jolly" installment of fun and travel in the sunny southland. Half a Dozen Housekeepers, with their winter fun and frolic and laughable scrapes, continue, and the text is enlivened by three fine pictures from the pencil of Frederick Dielman.

SEVERAL articles in Lippincott's Magazine for December will be found of special interest to different classes of readers. All who have made mechanics an object of study, theoretical or practical, should read Edward H. Knight's lucid description of the machinery exhibits at the Paris Exposition, which is accompanied with cuts of some of the most striking and novel specimens. Every one who cares about art will find a masterly, yet not too technical, analysis of the characteristics of the different schools of the present day in Some Aspects of Contempoary Art, by M. G. Van Rensselaer. Those who care to know something of what Spain is doing in the way of literature, and indeed general readers as well, will be charmed with Professor T. F. Crane's account of A Spanish Story-Teller. Edward King writes pleasantly of Danubian Days, with the aid of many good illustrations, and Isabella Anderson, a resident of Venezuela, gives a graphic account of the great earthquake which destroyed some of the fairest regions of that country in the spring of the present year. For Percival is concluded in this number, which is, we observe, enlarged to admit of its completion with the year. Miss Olney's Through Winding Ways grows steadily in interest; Sister Silvia is the title of a very touching story, and the poems and shorter papers are numerous and diversified.

THE December Scribner contains fiction by four of the leading American novelist, viz: Mrs. Burnett's Haworth. The Great Deadwood Mystery, by Brete Harte, a complete story in a semi-satirical vein. An Irish Heart, a pathetic Oldport story by T. W. Higginson, and the fifth installment of Mr. Boyesen's Falconberg.

The illustrations of Dr. Brewer's fourth paper on Bird Architecture (The Humming-Birds) are regarded by the managers of the Monthly as among the most exquisite cuts yet published by the Magazine. The Cliff-Dwellers, by Emma Chamberlain Hardacre, embodies the latest discoveries regarding the ruins of the San Juan region (some of which are situated in the rock at a hight of 700 feet), and is written under the sanction of Professor Hayden. The Douglass Squirrel of California, has found a friend in John Muir, who writes with enthusiasm and with rare knowledge of this little forest-planter. Mr. Bolles draws some Indian boys using the Douglass as a target for archery-practice. There is also a sketch of Dora D'Istria the eminent philanthropist and social writer of Wallachia, with a portrait after Schiavoni.

In public discussion there are some timely papers by experts; The National Bank Circulation, by Professor W. G. Sumner: Are Narrow Gauge Railroads Economical? by Lorenza M. Johnson, an engineer who has built both broad and narrow gauges, and a painter's view of Art at the Paris Exposition.

Dr. Holland discusses The Prudential Element, Literary Materials and Tools, Social Needs and Social Leading, Home and Society has a second installment of Hints to Young Housekeepers, and an account of The Maternity Society. The World's Work has descriptions of new appliances, including Street-car Motor, New Electric Lamp, Improved Ironing Machine, Improvement in making Artificial Stone, Automatic Device for Reproducing Music, etc.

SCIENTIFIC AND USEFUL.

A GOOD waterproof cement is made by dissolving five parts of gelatine in hot water, and adding one part of chromate of lime; the cement must be kept in vessels which are well shielded from light.

THE Suez Canal, among its other curiosities, presents the traveler with the extraordinary spectacle of vast flights of flying-fish, which at times suddenly appear in the vicinity of the vessel and as suddenly disappear.

THE reason that milk boils more readily than water is because it is a thicker liquid, and consequently less heat is carried off by evaporation of steam; therefore the heat of the entire mass will rise more rapidly. Again, there is a thin skin which forms upon the top of heated milk, which of course confines the steam, and increases the heat.

THE principles of acoustics are but poorly understood. As a general rule the ceilings of halls and churches should be at a moderate elevation only. Sometimes the hanging up of flags or draperies will improve the acoustic properties, sometimes a hood or false ceiling becomes necessary. The whispering gallery of St. Paul's, London, offers an interesting example of one of the principles of acoustics.

THE article known as vegetable isinglass, and which has hitherto been derived from eastern Asia, is now extracted from French factories. It is, in its crude state, a yellowish gelatine, but which, after repeated experiments under the auspices of the Industrial Society of Rouen, has been successfully converted into what bids fair to prove the best sizing for cotton cloth known. Macerated in water for twelve hours, boiled for fifteen minutes, and stirred till it is cold, the article gives a clear solution, which, as it does not again become a jelly, can be laid in its old state upon any textile fabric, and be left to dry. One invaluable property it possesses is that of defying, at common temperatures, damp and mildew, and is therefore being applied to give luster not only to French prints and muslins, but to woolens and silks.

TREATMENT OF CHRONIC ALCOHOLISM.—In reply to a question in the British Medical Journal for May 4, p. 669, regarding the best treatment for the tremors of chronic alcoholism, and a substitute for the constant craving for drink which exists, Dr. Lauder Brunton recommends fifteen minims of tincture of perchloride of iron, with ten minims of tincture of nux vomica, as most efficacious for the tremors, combined with bromide of potassium if restless at night. The chalybeate mixture, either alone or with the addition of tincture of capsicum (five or ten minims), relieves the craving for drink, for which purpose also a mixture of carbonate of ammonia in infusion of gentian is valuable. If there be derangement of the stomach, it should be treated by ten-grain doses of sub-nitrate or carbonate of bismuth, with magnesia and tragacanth.—*London Med. Record.*

AMONG the hosts of catarrhal specifics that almost annually are pressed upon those who are inconveniently aware that they possess noses, we acknowlege the presence of a stranger which is spoken of by "New Remedies" as follows: "Among the new remedies for catarrh, cold in the head, sore throat, foul breath, asthma, and all bronchial affections, the smoking of a preparation, of which cubebs forms one of the principal ingredients, seems to have been received with great favor by the medical profession and the public, and is rapidly coming into general use. It can be smoked in an ordinary pipe with ease, comfort, and even pleasure, as well by the ladies and children as by the men of the family, and a direct cooling application is made to those parts which are found irritated in catarrh and other diseases mentioned. Those who have tried this remedy, (Marshall's Prepared Cubebs), say that after smoking one pipeful of it, the worst cases will experience immediate relief, and a permanent cure may eventually be effected by using it according to directions.

THE WOMAN'S CLUB.

AMUSEMENT FOR THE LITTLE FOLKS.

WHAT shall I do with my little ones to amuse them during the cold days which are hastening on us? you ask Some day when you are very busy give wee little Bess (who can just sit alone) a feather, be sure her fingers are a trifle sticky (as most babies' are); then see how she will amuse herself by pulling it from one hand, only to find it adhere just as closely to the other. It will entertain her for a long time, and Julia who is older can make bubbles with a pipe. No matter if she does wet her apron, let her enjoy herself. It is difficult for adults to be content unless employed, and what can we expect of these little active minds and spirited bodies unless engaged in some busy occupation. They must be diverted, and many simple things will interest them for hours at a time. Let them string button molds, build block houses, watch the sand in the hour-glass or give them geograpical puzzles to place together, and they will be instructed as well as entertained.

All of us can remember when visiting, how lonely and weary we were because of nothing to do. Let these little ones all have something to do, and make it your study, for if you do not find something for them, Satan will.

When visiting recently, the little daughter of my hostess came into the room, her pinafore cut to pieces, and holding the scissors, behind her. "Mamma, see what naughty scissors did" said the little culprit.

"Child what have you done" said the irate mother, "why did you cut your apron thus?" And, taking her rudely by the arm little Miss was thrust—not gently—into an adjoining room, there to await her punishment.

"My friend" said I "you know I would not interfere in the government of your child, but in her absence let me remind you that she came to you asking for some paper to cut, and you cast her aside. Had you then given her something to do, the tempter would not have enticed her into mischief."

Listen to the wishes of the little ones, do not put them off till they can be taught to remember that older ones must be cared for first, and instead of slapping the little hands, even when erring, kiss them when they have done well, and refuse the kiss when they have been wicked. Soon you will see that the kiss would do for them what unkind treatment never would. Learn the great luxury of doing good, and, sisters, think more of brightening the lives of the little ones given to your keeping than of using the rod to to enforce obedience. God pity the mother who cannot govern herself! how can she rightly govern her child? Do not wait till the little hands are at rest to fill them with flowers, or till the loving hearts are still ere you bestow the words of endearment and praise. They will fall more sweetly on the listening ear than on the closed coffin lid. Fill their lives with sweetness now while you may FERN LEAF.

USEFUL AND USELESS HUSBANDS.

THE average husband is conceded by all intelligent wives to be utterly useless when at home. He may be acute and skillful at his business, and he may be an affectionate husband and father, and when there is anything to be done in the house in the way of repairing furniture or improvising cheap substitutes for bedsteads or mop-handles, he is of less value than his own little boy, who often helps his mother. While this is undoubtedly true of most men, there is occasionally found one whose delight consists in constantly practising as an amateur cabinet-maker plumber or carpenter. He often prowls about the house, seeking articles upon which he can use a little glue or varnish, and devising plans for filling up the corner of the dining-room with a few triangular shelves, and for putting up a wooden mantle-piece in the hall bedroom. The sound of his saw and hammer are heard often, and he goes to bed at late hours, with more paint adhering to his fingers than his wife regards as strictly necessary.

It is a curious illustration of the perversity of the female sex that a husband with this fondness for doing little useful things is held among wives to be even more undesirable than the kind of husband who is perfectly useless. He is charged not only with a fiendish fondness for late hammering, but is constantly upbraided because he "makes so many chips." In vain does he explain that planing a board necessarily results in chips, and that saw-dust is the inevitable consequence of using a saw. He is told that he ought to be ashamed of himself, and that no decent man would think of making chips all over the floor. These things, however, never dishearten a husband of an active disposition, who cannot possibly find enjoyment in sitting at home and doing nothing at all; to him the little domestic jobs are a relaxation, especially when the nature of his daily routine business is of another kind; and we earnestly implore wives who happen to have such husbands to be indulgent toward them, as they are really of more value to them and their children than those who, when at home, do nothing but fill their rooms with tobacco-smoke.

JOHN LYNN.

LIFE'S CHEERY AUTUMN.

RUTH.

I WISH that any one who fancies life at forty is necessarily gloomy, would read the noble sermon by that most noble man, Albert Barnes, on "Life at Four-score." Such cheery, inspiring, heavenly views are good for body and soul. With good health and even measurably easy circumstances, forty may be the very golden autumn of life. The little children are probably now grown and sound sleep can prepare one for the day's duties, and helpful older ones relieve the mother from many cares. A good woman in any neighborhood has an assured position, and is prized in any community; and this last adds not a little to the pleasantness of one's condition. She has time now for small, neighborly charities, which bless her own soul even more than those to whom she ministers. Do not dread the fortieth milestone, because the bloom will depart. Many a woman is far more charming at middle life than she was in the rosy flush of youth. Wisdom, the result of experience, and a thoroughly kind heart will make a wrinkled cheek and silvery hair more beautiful than the fairest face which has the "crow's feet" of a sharp temper, or a sinful, censorious spirit. It is ourselves, and not our age, that will make us happy and admired, and better still, beloved.

Do not adopt the gloomy view even when you have gone still further on the journey. As Linda gave us a verse on "Forty Years," let me give you another on a still later age:

"Just sixty-two! Then trim thy light,
And get thy jewels all re-set.
'Tis past meridian, but still bright,
And lacks some hours of sunset yet.
At sixty-two be strong and true,
Scour off thy rust and shine anew.

"'Tis yet high day, thy staff resume,
And fight fresh battles for the truth;
For what is age but youth's full bloom,
A riper, more transcendent youth.
A wedge of gold is never old,
Streams broader grew as downward rolled.'

Above all, to have the way seem glad and bright as we go down life's sloping hill-side, we need to have it lighted from the cross of Christ. This can gild the darkest clouds that ever brooded over our earthly path, and it will light us through the low-lying valley which stands at the end of the way.

ONE REASON WHY SOME WOMEN ACCOMPLISH MORE THAN OTHERS.

LEOLA.

WE are always being told that Mrs. So and So, with a large family and a large dairy, manages to keep her house in admirable order, besides finding time to read all of the newest books, as well as to visit and entertain, while Mrs. Somebody-else, who has only a small family, and but one or two cows, has an untidy house, and although she works incessantly, she never has any leisure, for reading or visiting. One of the latter class once said: "I was wishing last night that we had more cows, so that I could have more butter to sell. Father said that he could not see the sense of people killing themselves to earn something, and that I worked all of the time now. I did not say anything, for I knew by experience that it would do no good. But I thought over my day's work. First, I moved a bedstead; it was an old-fashioned cord-bedstead, with one side broken at that; the cord was in three pieces, and I was an hour taking it down; when I put it up the broken side would slip out, and it took me an hour to get it up. If I'd had a decent slat-bedstead it would not have taken more than fifteen minutes to have moved it. Then, I worked three hours washing wood-work that would not have needed any washing if there had been netting to keep out the flies Next, I sat down and sewed two hours by hand and did not accomplish as much as I would have in twenty minutes with a machine. That makes six hours and ten minutes lost time in one day, and it is just that way every day. I think if I should do dairy work six hours every day all summer I would make butter enough to pay for more than one sewing machine."

I thought so, too.

A HOME CHAT.

A FEW months ago I was made glad by reading in the dear, old RURAL the proposal for a "Woman's Club," a corner where we might exchange experiences for our mutual benefit, and now that the club is fairly established, it remains with us to make it interesting and readable.

The October meeting of the Club was burdened with the drudgery of house work, particularly dish-washing. I have done house work nearly all my life, and am now keeping my own house and doing all my work, besides caring for a dear, blue-and eyed baby, I consider it more independent and less wearing than either teaching or dress-making. I began washing dishes so young, that I was obliged to stand upon a stool to reach the dish-pan, and yet to me there is something really enjoyable in the washing of a big pile of dishes, with plenty of hot, soft water, good soap, and a clean, soft cloth. The crockery looks so nice after being polished with a dry towel.

Won't some of the many women who are striving after perfection in the art of housekeeping and home-making, give their experience?

I have nothing, I believe, that I can exchange; but I have patterns for a complete suit of infants' clothes, a night-dress, a yoke-dress, robe-dress, a morning-wrapper, and a shirt and bib; six patterns in all, which, if anyone would like, I will send to them for 12 cents, to pay postage and trouble of cutting the patterns. M. E. R.
P. O. Box 169, Phelps, N. Y.

"GIVE YOUR GIRLS A CHANCE."

AUNT FLORA.

IF one has never taught her little daughter to dress her own dolls, as well as to make little quilts, sheets, pillows and shams, she can have but little idea of the benefit of such instruction. Little girls desire to have their dolls dress neatly, as well as fashionably, and if they are shown how to make the garments and furnished with suitable material, they will do it themselves, at an early age. I knew a little girl who often astonished her mother with a new, stylish hat for her doll, which she had made from scraps her mother had given her. In this way she learned to fit and make the wardrobe for her doll, and when her doll was laid by she began making her own clothes, so that at the age of fourteen years she could make herself a suit throughout.

When I see mothers sit up half the night to dress dolls for their little girls, I cannot but think, what a pity mothers will not be wise and teach them to do it themselves! The children would really enjoy it better, as it makes their little fingers skillful, and they feel such an interest in having each doll look as neat as those owned by their playmates. I know this to be the case. Will not some one try it and report for the benefit of other mothers and daughters?

Domestic Economy.

CONDUCTED BY EMILY MAPLE

PEN THOUGHTS FROM EVERY-DAY HOUSE.

BY ANNIE L. JACK.

"WELL, girls, I wonder if all mothers have such a time with mud as I do," I said in despair. For Willie had brought in the milk by the passage door, and forgotten to wipe his feet on the mat, and Jim, whose work it was to carry the wood in, left his mark from the kitchen door to the wood box. I was turning over my scrap-book in search of a recipe for citron preserves when speaking, and my eyes caught a verse that checked my murmuring. It was the sorrowfully spoken regret of a mother for her lost boy and I read:

"I wonder so that mothers ever fret
At little children, clinging to their gown,
Or that the footprints, when the days are wet
Are ever black enough to make them frown."

Ah! well, mud is bad enough, but health and strength are best; besides, if boys know the care and toil their mothers undergo to clean the floor, they will soon learn to be more careful. It is an excellent lesson for a careless boy to present him with a bucket of clean water and a cloth after some particular act of careless walking, and let him wash the floor he has soiled. A few such lessons will soon teach him to remember the mat. It is very often the case, too, that other members of the family give themselves work by thoughtlessness, and a little attention to spilling water, or needless going out and in, would prevent a great deal of dirt, of which we complain.

While I moralized on the subject, the citron was cooking slowly in the steamer after being pared and cut up into squares, and a sirup of sugar and water was boiling on the stove. When the pieces of citron had changed color, turning from a dull white to a watery hue, they were left to cool a few moments and then, with a few pieces of candied peel and a teaspoonful of essence of lemon, the citron is put into the sirup, and slowly boiled. We know when it is ready to be taken out by its transparent appearance, and then the jars that have once this season been filled with strawberries which have been used early, are again in requisition. The sirup is boiled a few minutes longer, and then poured over the fruit. It looks well and the critics of the family jars, say, "tastes a great deal better."

Just now it is impossible to settle down to anything of importance in the house. There are so many little things to finish out-of-doors. To-day it is some Pansies to be removed to another part of the garden; yesterday some late Hyacinths must be planted; and the white raspberry vines must be gently laid upon the ground and covered with a shovelful of earth, to keep them in safety till the snow gives a warmer blanket. The boys revel in the glints of sunshine, and chase each other over the orchard in search of any stray apples that may have escaped their numerous raids, and if by chance a choice one is found among the frosted grass, be sure it will be brought in and shyly given to *mother*.

KNITTING WORK.

As long evenings put in an appearance, we begin the winter campaign with the everlasting knitting work. Oh! who invented knitting? and to use the words of "Josiah Allen's wife," "again I ask wildly," who invented it? It is a useful occupation, and a blessing almost after all, especially for the dear old fingers that find other work too hard. But oh! the endless loops of the endless rows of endless stitches. But as we must accept it, we will try to find something interesting in it. I know of a grandmother who colored a skein of woolen yarn with butternut bark, and knit it in strips for stockings belonging to little six-year-olds with a beautiful magenta, colored with Leamon's aniline dyes. They were so pretty that I never once heard—"Will they *ever* be done!" In fact, we might put a seven-line advertisement in the RURAL concerning "knitting made easy." But instead of any kind of a machine, I would recommend bright colors and new ways of specking, striping and dotting, to cheat the monotony.

After the knitting comes darning, which many regard as an especial nuisance, only to be got along with by hustling over it with all possible dispatch, no matter if heels and toes *do* look like puckered-up ruffles, only get it out of the way. But I don't believe a woman feels quite satisfied unless her work looks well, after all. A glass egg, or, better still, a round ball, is excellent to darn over, making the work look smooth and even, and I know a lady who always "darns" biasing. And I would say to all darning women, "try it—you will find almost a pleasure in the work from the happy results. AUNT EM.

COPPERAS.

ONE pound of copperas (sulphate of iron) dissolved in four gallons of cold water, makes a good and cheap deodorizer. Pour the liquid into the waste-pipes of sink and drain, not forgetting to give the cellar a light sprinkling close to the walls. Sprinkle from a common tin watering-pot, and be careful in handling, as copperas stains badly. In very warm weather everything about the premises needs more than ordinary care. Perfect cleanliness should be the rule for the dwelling, barn, poultry house, etc. Bones, decayed fruit, and the like, ought never to be thrown near the house. Such objects are unsightly, and, worse than that, they make the air impure, tending to cause disease. The pails used for the refuse of the kitchen should be rinsed often with copperas-water, and left out-of-doors over night. Many housekeepers keep chloride of lime in the cellar, and though an excellent disinfectant, its suffocating odor makes it objectionable. With these simple agents at hand, it is easy to have the atmosphere in and about our dwellings healthful and pure.

Iowa. MRS. M. G. R.

DOMESTIC RECIPES.

Delicate Apple Sauce.

Pare, halve and quarter a sufficient quantity of nice stewing apples; put them into a baking dish and cover thickly with sugar—bits of lemon peel may be added, if liked; put a plate over the dish and set it into a pan having a little hot water in the bottom, and place in a hot oven. Bake until the pieces are clear and tender.

Cranberry Sauce.

I usually "plump" the cranberries before stewing by pouring boiling water over them and letting them stand until the water is cold. For one quart of berries I allow one pint each of water and sugar. After adding the water, which should be hot, let it boil twenty minutes; then add the sugar and boil ten or fifteen minutes longer. Stir the berries often, mashing evenly. When done, the sauce may be strained into a mold or bowl, and when cold, cut and served in slices, or poured into a sauce-dish and served the commoner way.

Snow Potatoes.

I dined with a friend last week where potatoes were brought on the table in an unusual form to me. They made a delicate, appetizing dish, and I will append my friend's simple directions for preparing: After the potatoes are boiled and steamed off, rub them through a colander, where they will drop below in coiling strings, heaping themselves in a light and airy mass. Serve at once. MARY B.

Genuine Boston Brown Bread.

Sift together three teacupfuls of Indian meal; two of rye meal, not flour; one of wheat flour; a teacupful of sirup or molasses; a teaspoonful of salt; mix with one quart of sweet milk in which one tablespoonful of soda has been dissolved. Bake four hours in a moderate oven in a covered pan.

Dish-Washing.

Why do all the housewives make such an ado about washing dishes? There are many other things more disagreeable to do. All that is needed is plenty of soft water, just hot enough to bear the hands in, and enough soap so as never to let the water get greasy—if it should, turn it away, and get clear—with soft, white, sweet towels, and a good dish-cloth—not a rag.

Florida. MRS. M. B. ROLFE.

Lemon Cake.

Three cups of sugar; one and one-half of butter; one of sweet milk; a teaspoonful of soda; four eggs; six cups of sifted flour; the grated rind of a couple of fresh lemons, and the juice of one. Stir the sugar and butter to a cream, then add the eggs beaten to a froth, and half of the flour. Dissolve the soda in the milk, and strain it in; add the remainder of the flour. When the whole is thoroughly mixed, add the lemon juice and rind, and stir it for several minutes. Then bake it in buttered pans in a quick oven.

Cold Meats.

Cold boiled ham, or any cold boiled meat or fowls, can be made into very dainty dishes by mixing cold boiled potato with the meat after it has been chopped fine; season with salt and pepper, and moisten with beaten eggs; make up into balls, roll in beaten eggs, then in rolled cracker, and fry in butter or fat. Serve as soon as done.

How to Cook Rice.

Soak a cup of rice for several hours in cold water; then cook slowly without stirring it, till perfectly tender. Be careful to have as little water left as possible. Add one pint of rich cream, one cup of white sugar; three eggs and lemon to taste. Let it boil up two or three minutes, and it is ready to dish up.

Cranberries.

To keep these berries whole while stewing, prick each one with a pin; lay them in sugar over night, and cook very slowly. They cook much nicer in this way than when stewed all to pieces. LORETTA E. K. TURNER.

News of the Week.

Monday, Dec. 2d, 1878.

POLITICAL.

There is little or no political news of importance or interest this week. The reaction after the late excitement during the elections is now keeping even politicians moderately quiet. There is, however, a world of rumors with regard to the constitution, action and management of the next Congress, but it is hardly worth while to repeat such reports this week, in order to have to correct them next. Political papers, of course, find it absolutely necessary to employ such trickery to fill their columns, and keep up interest enough in their contents to obtain buyers; but the RURAL is so interesting everywhere that it disdains to have recourse to such expedients.

MISCELLANEOUS.

Dispatches from the West say a tremendous snow and sleet storm prevailed on Saturday night along the line of the Missouri Pacific Railroad, west of Otterville, and extended into Kansas. The telegraph line was torn down on the Pacific road, Kansas City was entirely isolated telegraphically, and the whole surrounding country is buried in snow.

Senator Davis of the Judiciary Commitee will report in the case of Surgeon Draper, restored to the navy by order of Secretary Thompson, and of Major Runkle, restored to the army by order of President Hayes—that neither had a legal right to restore. It does not appear, however, that the present position of either one of these officers can be affected by these reports, even if adopted as the opinions of the Senate committee. It is said that the administration will hold that under the tenure of office law Merritt, whom Hayes appointed Collector at this port, *vice* Authur suspended, will hold office till March 4, whether the Senate confirm him or not. In any event Mr. Authur will not be permitted to resume the office till that date, when the power of suspension will again rest with the President.

The Stewart grave robbery will undoubtedly result in greater precautions for the protection of the remains of the dead. Some of them are heard of already. The grave of Mr. Powers, the ten-millionaire who died last week at Philadelphia, will be watched by night and day, four men being employed. To the tombstone will be attached a key to a watch locked in a case which the men on guard will carry. The watch must have the key at the grave inserted every half hour, and it will be inspected twice a day to see whether it has been carried to the grave at the intervals required. Vanderbilt's grave in this city is now also watched nightly. Meanwhile all the efforts of "the finest police in the world" to discover what remains of the body of sixty-million-dollar Stewart are unavailing—perhaps, because the detectives, like the thieves—their frequent friends—are waiting for heavier rewards and immunity for their "pals." What is the sum of $50,000 divided between a dozen first-class thieves and second-class policemen in payment for the trouble, thought and risk incurred in getting away with the "sacred remains," which became "sacred" only when they became useless except for purposes of extortion?

It is claimed that under the amended Virginia constitution legislative sessions must be held biennially, and that its assemblage next month would be unconstitutional. The treasury is said to be empty. A Legislature would cost $150,000. At Richmond, Va., commissioners from various States interested in the erection of the Lee monument decided not to award a contract at this time, owing to the insufficiency of funds in the treasury of the Association. The matter has been indefinitely postponed. At Memphis, Thursday, a public meeting of returned citizens adopt resolutions expressive of gratitude to the President of the United States and public and private individuals, associations, etc., who contributed so generously to the aid of the stricken city during the epidemic, while they were in safety elsewhere.

Commissioner Raum states that it is a remarkable fact that while the authorities in the southern States are ready to proceed rigorously against revenue officers who commit offenses against State laws, no hand is raised to punish crimes of the most outrageous character against the persons of United States officials. Between 25 and 30 revenue officers have been murdered or wounded in the discharge of their duty in the southern States during the last two years. With only a single exception, and that in a republican district in East Tennessee, no indictment or arrest has followed.

The Marquis of Lorne and his wife, the Princess Louise, have been making a right royal progress from Halifax, Nova Scotia, to Ottawa, Canada, having been greeted everywhere along the route with enthusiastic loyalty. This is easily pardonable in Canadians, for a provincial is always disposed to become a flatterer of any offshoot of royalty, but it is apt to give rise to a feeling of contempt to see some of the most prominent of American daily papers containing column after column of telegrams detailing, with sycophantic minuteness, all the sayings, doings, etc., etc., *etc.*, of this worthy couple and of their obsequious entertainers. Pshaw! No sort of toad-eater has such a glutonous appetite as a free-born American citizen of the tuft-hunter type.

From the book of estimates which the President will transmit to Congress, it appears that the Commissioner of Education asks an increase of $18,000. The Commissioner of Agriculture recommends an increase of $1,000 to his own salary, and an increase of $100 each for five other officers, and $200 each for two more. He also recommends the appointment of three assistant chemists. There is an increase of $18,000 asked for by the Department of Justice, but none of this is in the fund used for such prosecutions as those now in progress in the South. The funds required for this purpose are under the head of United States Courts, and the increase asked is $260,000. Of this sum a considerable portion is stated in the text to be for defraying the expenses incurred in the enforcement of the act to protect the right of citizens of the United States to vote in the several States of the Union. Upon this item and the corresponding one asked by the Commissioner of Internal Revenue, a great political battle is expected to take place in each House.

Mrs. Lockwood, the female lawyer of the District of Columbia, whom Judge Magruder, of the seventh judicial circuit of Maryland, characterised as a wandering woman and forbade to speak, not only in his court, but in his court house after the court had adjourned, intends to test the question of her right to practise in the Maryland courts. The federal courts in Maryland, it is said, permit her to practise before them, but it is doubtful if the State courts will be found as liberal.

FOREIGN.

The following news with regard to the grain crops in England was cabled last Saturday: During the earlier portion of last week the weather was cold and boisterous. The excessive rainfall caused serious floods in the Midland and Eastern counties. Large tracts of land were submerged and enormous damage was done to stock and property. Toward the middle of the week the waters subsided to a great extent and a normal temperature has since prevailed. Some little progress has been made with agricultural labor. The supplies of home-grown wheat continue very moderate in both the Mark Lane and Provincial markets, but, taking all things into consideration, the present aspect of trade appears to be sufficiently sound to justify the farmers in withholding their produce as long as possible, and the continuance of light offerings indicates the expectation of better prices later on. Business has been restricted owing to the impaired condition of most of the samples, it having been quite impossible to thrash with satisfactory results of late. The absence of speculation has been largely felt in the grain trade, and the spirit of commercial enterprise has been broken by the severe financial vicissitudes through which the general trade of the country is passing, but brighter days for the merchant and agriculturist may be looked for with the new year.

The law passed by the Brazilian Legislature in 1871 for the gradual emancipation of the slaves, declared that all children born of slaves after the date of the passage of the law, should be held in all respects as though born of free mothers. The bill provided that the owners of the slave mothers should have the care of the free-born children up to their eight year with their gratuitous services until the children are twenty-one years of age; or the option of $36 annually during thirty years for each child attaining eight years. In this last case the minor is to be at the disposition of the State, but a part of his wages will be paid to him when he reaches his majority. It was believed at the time of the adoption of the measures that the cost to the State for compensation and carrying out the provision of the law, would be about $800,000 annually. The Government is now preparing for the free-born children which will come under its care in next September or next year. The actual number is not accurately known, but in the province of Rio de Janeiro, where there are 570,000 slaves, the number of children born free since September, 1871, is 62,000 of whom 18,300 have died. It is estimated that, at the same rate, there should now be in the empire 248,000 of these children, and that of those the Government will have to receive and care for 26,000.

The population of European Russia is estimated at 77,000,000, about 64,000,000 of whom are peasants. According to official reports there are only 29,308 primary schools, and 1,152,713 scholars. The amount of money appropriated in 1877 for instruction was $30,000,000. The constant cry of the minister of finance when applied to for money for schools is said to be: "The State coffers are empty." The Golos publishes a budget for 1877. It shows that the revenue was 549,000,000 roubles, and the expenditures 1,014,000,000 roubles—nearly half on the army. The czar will arrive at St. Petersburgh to-day. General Kauffman is expected to arrive at the same time, and the action of the Russian Government with regard to the war in Afghanistan will be decided in a great measure by his report. 'Twas he who had command of the successful Russian expedition, three or four years ago, against Khiva, and since then he has been in command of the Muscovite forces in central Asia, and knows more about matters in that quarter than any other Russian.

Last Tuesday, shortly before 12 o'clock at night, the Hamburg-American steamer Pomerania, on her way from New York to Hamburg, after having touched and landed some passengers at Cherbourg, in France, was proceeding towards the Downs, in the English Channel, when she was run into by a coasting bark called the Moel Ellian, and sank in twenty minutes. Out of 111 men composing the crew, 108 were saved, while about 78 passengers are reported to have been lost—upwards of two-thirds of the whole list. The night is said to have been foggy, the vessel going at ordinary speed—about 14 knots an hour—and a bright look-out kept, yet, although it was the captain's 126th voyage across the Atlantic, he could not save those committed to his charge from so terrible a calamity.

A New York Daily gives a list of the ocean steamers wrecked during the past twenty-eight years which, though palpably incomplete, is startling in its aggregate of lives lost—3,730. The vessels named number thirty-two, and among the wrecked steamers not named, occur to my mind the Schiller, Deutschland, Abbotsford, Russland, Colombo, Europe, City of Washington, City of San Francisco, America, Japan, Bramall, Hermin Ludwig, a Guion vessel, the

Idaho, if memory fail not—and others on various oceans whose names are forgotton. The loss of life by the Schiller was larger than by any other of the wrecks here named—something over three hundred. The Columbo sailed from New York less than two years ago, and was never heard from. The Ludwig is now so long overdue as to be given up for lost. A correct list of all the ocean vessels lost during the time specified, would present an appalling aggregate of fatility.

Angell, the Chicago defaulting secretary of the Pullman Car Company, has been arrested at Lisbon as an Englishman, under the name of Seymour. He is on his way home a prisoner. Out of the $125,000 he stole, $80,000 were found on his person. Most defaulters become so through speculating at first with money not their own, losing, and gradually sinking deeper into debt and dishonesty. Angell, however, is merely a common thief, uncommon only in the amount of his theft.

The British attack upon Afghanistan is made in three columns, which are intended to penetrate the territory of the Ameer by the three principal trade or caravan routes and to divide his defensive resources. The principal column, consisting of 16,000 men, and under the command of Sir Samuel Browne, was collected at Peshawur, and has already won a signal battle in the capture of the Khyber Pass and Fort Ali Musjid. This fort was the frontier post of the Ameer, and is distant from Cabul, his capital, about one hundred and fifty miles. The second column of 6,000 men, under command of General Roberts, has crossed the frontier at Thul, and is advancing up the Koorum valley, with Ghuznee as its objective point. The latter city, which was stormed by the British in 1839 and again captured by them in 1842, is very near the heart of the Afghan territory and about eighty miles southwest of Cabul. The third column, 12,000 strong, commanded by Donald Stewart, is advancing from Quettah, the frontier town in the Khanate of Beloochistan, in the direction of Candahar, two hundred miles beyond which, is the large town of Herat, near the Persian frontier. The Ameer is said to have under arms 100,000 men, good but undisciplined fighters. Among them is a large number of Russian volunteer officers, who will doubtless be of as much service against the English as a similar class of the latter, in the Turkish army, were against the Muscovites during the late war. Cablegrams received this morning seem to indicate that the British advance will not extend beyond seizing the Mountain Passes until milder weather in early spring.

Our transatlantic cousins for years, nay for generations, have taken a good-natured (?) pleasure in twitting us with dis——well, not altogether upright dealings; but we have never had a bank so outrageously mismanaged as the Glasgow Bank, and seldom have we had among us so disgraceful a bankruptcy as that of Smith, Fleming & Co., mentioned here in October. An approximate statement of the affairs of this firm shows gross liabilities $14,557,425, but only $8,132,975 of this is expected to rank against the estate. The assets are $1,426,915, or less than 17 cents on the dollar, and after the costs of liquidation are paid, it will not yield 10c. on the dollar. The Times says one of the partners stated that the house would have stopped long ago but for the intervention of the manager of the City of Glasgow Bank. Whoever may be responsible for it, this failure must be ranked among the most disgraceful and disastrous of our time.

A SPECIAL meeting of the N. Y. State Farmers' Alliance will be held in the Court House, in the city of Binghampton, on Thursday, Dec. 19th. Specific measures of reform in Taxation, Transportation and Insurance will be discussed, and also the best plans for extending the Alliance organization through the State. It is desired that all Agricultural Societies in the State be represented, and farmers should be present in as large numbers as possible. A special invitation is extended to members of the State Dairymen's Association to remain through the meeting.

The proposition of State Assessor Jas. A. Briggs, to assess only real estate for purposes of taxation, should receive an effective protest from the farmers and real estate owners of New York.

By order of the Ex-Com.,

Wm. J. Fowler,
Sec'y.

PUBLISHER'S NOTICES.

OUR readers are requested to read the following before making up their orders for seeds:

Any ten of the following require a one-cent postage stamp:

The Voorhis Water-melon.
Golden Rural Tomato.
Acme Tomato.
New Bronze Ricinus.
Hibiscus moscheutos.
Callicarpa Americana.
Chater's Lemon Hollyhock.
Weigela.
Dentzia crenata fl. pl.
Hibiscus militaris.
Eryngium Leaveuworthii.
Geranium sanguineum.
Yucca filamentosa.
Vitis heterophylla.
Rural hybrid Aquilegia.
Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance Wheat are included, a two-cent extra stamp.

We request that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense. For particulars, send stamp for RURAL of Nov. 9.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Nov. 30, 1878.

BEANS AND PEAS.—The bean market is quiet; receipts are large and prices for the moment have a lower tone. Local buyers have been busy with Thanksgiving purchases, and that fact has tended to slacken trade. Still, unless export buyers put in a larger presence than is expected, prices may now favor buyers. Receipts of beans for the season are less than for same date last year, while exports are somewhat larger. Ordinary Canadian field peas in bulk and bond, 70@72c.; choice, 75c.; green peas, $1.25@1.30; Southern B. E., 2-bush. bag $2.50@2.55; Medium beans, prime, $1.65@1.67½; fair to good, $1.55@1.60; Marrow, free to ship, $1.75; fair to good, $1.60@1.70; pea, $1.60@1.80; white kidney, $1.80@2.00; Red do., $1.85@2.15; Black, $1.90@2.25.

BUTTER.—Trade has run steadier but does not indicate prospective vigor. Dealers look upon last week's rates as fairly full and do not attempt to advance any grade in the present better attendance. Full dairies are in demand, and as some eastern buyers are calling for larger supplies, Welsh tubs are quite active. Low styles of butter are still neglected, as exporters and bakers have a good selection in the unsold under grades without looking at the common accumulations. Western butter holds quotations rather better than any other class but must have real table merit to reach extremes. Rolls are low and not attractive; buyers are suspicious of early lines of roll as some shippers keep up the practice of injudiciously packing old as fresh.

State, full dairies, choice, 20c.; other, 16@19c.; firkin dairies, fair to prime, 13@18c.; Welsh dairies, fine full, 18@19c., choice dairy, pails and half tubs, 22@23c.; fair to prime do., 16@21c.; choice Welsh, 21@22c. fair to prime 13@17c. Choice creamery 26@27c.; other, 22@24c.; sweet cream, 24@26c. Best Western creamery, 25@26c.; other, 20@24c.; early packed creamery, 17@20c.; poor State 10@12c.; Western dairy, fine fresh, 16@18c.; fair to good, 10@14c.; factory, choice, 13@14c.; other, 6@12c.; rolls, 10@14c.

Receipts for week, 26,900 pkgs. Exports, 4,573 do.

CHEESE.—The exports for the week have been 33,667 boxes; these are partly of through shipments from the country, and include Canadian lots. Requirements as shown on this market have been very light, and centering on the choicest grades. A few special factories have reached 9; but most of the business in the fancy lots has been at 8¼@8¾. For the lower grades the market with the stagnation is left without fixed values.

Quotations are 8¼@9c. for fancy, 8@8¼c. for fine lots; 7@8c. for good and prime; 6@7c. for fair to good; 3@5c. for skimmed. State, farm dairy at 8¼@8½c. for good to choice; 7@8c. for fair to good. Wisconsin factory, fine to fancy, 8¾@9c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 8@8½c.; good and prime, 6@7c.

Receipts past week, 74,336 boxes.

Gold closes at 100¾.

Liverpool cable 47s.

COTTON.—There has not been much activity, and the market has been lowest on the weakness abroad. The latest prices are for November, 9.15c.; December, 9.17c.; January, 9.25@9.26c.; February, 9.37@9.38c.; March, 9.47@9.50c.; April, 9.61@9.62c.; May, 9.73@9.74c.; June, 9.85@9.81c.; July, 9.92@9.93c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Upland.	N. Orleans.	Texas.
Ordinary	7¾	7⅝	7⅝
Strict ordinary	7 13-16	8 1-16	8 1-16
Good ordinary	8 5-16	8 9-16	8 9-16
Strict good do	8 11-16	8 15-16	8 15-16
Low middling	8⅞	9⅛	9⅛
Strict low middling	9 1-16	9 5-16	9 5-16
Middling	9¼	9⅜	9⅜
Good middling	9 9-16	9 13-16	9 13-16
Strict good middling	9⅝	10⅜	10⅜
Middling fair	10 7-16	10 11-16	10 11-16
Fair	11 3-16	11 7-16	11 7-16

Stained.

Good ordinary	7⅛	Strict good ordinary	8
Low middling	8¼	Middling	8

DRIED FRUITS.—The best lots of State quartered apples are having a light export movement and rule steady in price, and there is a fair sale for choice sliced. Peaches are without change and firmly held. Small fruits are held at strong prices.

Southern Plums, 13@14½c. State plums, 15@16c. Blackberries are quoted at 5½c. Peaches—Peeled Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime; choice North Carolina, 11½@12½c.; good do., 8@9c.; unpeeled halves, 3@3½c.; quarters, 3@3¼c. Pitted cherries, 20@22c. Apples—Old State quarters, 2½@3c. New apples, 2¾@3c. for southern quarters in bbls.; 4½@5½c. for prime sliced, State at 4@5½c. for new sliced; and 3½@3¾c. for quarters; western at 3@3½c. for new quarters. Raspberries, 30c.

Exports, past week, 244 bbls. dried apples.

EGGS.—Moderate receipts with the extra call for the recent holiday leaves a scantily supplied market and prices are firm at quotations for fresh. Near points 28@30c.; State and Penn., 25@25½c.; Western and Canadian, 24@24½c.; poor do. as low as 20c. Limed State 16½@17c.; Canada, 16@16½c.; Western, 14@16c.

Receipts for the week, 6,214 bbls.; do. last week, 8,102 do.

FLOUR.—There has been a very liberal home trade movement and export demand fair with prices generally steady.

Quotations are $3.25@3.80 for very inferior to very fancy superfine State; $3.85@4.10 for very poor to good extra do., odd lots and lines; $4.10@4.35 for good to very choice do., strictly choice and fancy lots above this; $3.25@3.75 for inferior to very fancy superfine Indiana, Iowa, Michigan, &c.; $3.85@4.10 for poor to good shipping extra do. and $4.10@4.35 for good to very choice extra do.; common to about choice white wheat extras, $4.20@5.10, choice to strictly fancy do at $5.10@5.85; red and amber winter wheat very inferior to very choice trade and family $4.10@5.75; round hoop Ohio at $3.90@4.30, and trade and family brands of do. at $4.35@5.75, the latter rate for very choice; St. Louis, $4.15@4.85 for very poor to good extra, and $4.85@5.75 for good to choice; Minnesota clear, very inferior to very choice at $3.85@5.15; few brands going above $4.75; Minnesota "straight," inferior to very choice at $4.05@5.75; and patent fair to strictly fancy at $5.25@6.50, few brands going above $7.50; unbound stock at from $2.00@4.75; city mill extra at $4 80@5.10 for West Indies (the latter rate in new packages), do. for England, $3.85@4.60; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.60 for fair to very choice; No. 2 at $2.50@3.15 for very inferior to very choice.

FOREIGN DRIED FRUITS.—Layer raisins at $1.65 per box, loose Muscatel do, at $1.55@1.65; Valencia do., at 6½c. per lb.; London layers, $2.00@2.10 per box; Turkey Prunes at 5½@5¾c. per lb.; Currants at 3½c. per lb.; Sardines at 10½@11½c. per quarter boxes.

FRESH FRUITS.—The market continues easy for buyers of lots; lighter receipts, however, have to some extent decreased the pressure to sell, but a low season is looked for. Lady apples, selected, $9 bbl.; choice King's and Spitz, $2; good Spitz, and fine Baldwin, $1.50@1.75; good Greenings and other sorts, $1@1.25; common, 75@87c. Cranberries have moved better and are higher; fancy Cape Cod, $8 bbl.; other, $6.25@7.50; best crates, $2@2.25; poor to prime, $1.25@1.75. Catawba grapes have wide ranges and varied quality quoted, 2 to 8c. lb. Fla. oranges are in good order, and are rapidly assuming their place in retail places. Standard boxes, poor to choice, $4.50@4; bbls., $6@7. The usual varieties of California late pears range at $3.50@4 per box. Cal. grapes are done. No hot-house in this week. Chestnuts scarce and firm at $3.50@4. Hickory nuts, shellbarks, $2.25@2.50. Trade in peanuts is stimulated by the very low rates. Hand-picked Va., $1.15@1.20; other, 85c.@$1.05; shelled, 5½@6c. lb.; Pecans, new, 12@14c.

Exports, apples, past week, 8,000 bbls.

GRAIN.—Wheat was subjected to speculative manipulation early in the week, but towards the close has eased off a little on full supplies and easier foreign advices.

Latest sales are, of ungraded white at $1 08½@1 10½; white State at $1 09@1 10; extra white at $1 11@1 11½; No. 1 white at $1 09½@1 10; do., steamer grade, at $1 08; No. 1 red at $1 08½@1 10; No. 2 red, at $1 05½@1 09½; No. 3 red $1 03; ungraded red at $1@1 04½; No. 2 amber at $1 05@1 05½; ungraded amber at $1 03; No. 2 spring, at 99c.@$1; ungraded spring at 90c.@$1; No. 3 spring in store and afloat and to arrive at 91@92c.; No 1 white, first half December at $1 10½; No. 2 red, Nov. option, at $1 09; do. Dec. option, at $1 09; do., January option, at $1 10@1 10½; No. 2 amber, November option, at $1 05½; do., December option, at $1 05@1 05½; do., January option, at $1 06½@1 07; New York No. 2 spring, January option, at $1. Rye at 58c. for No. 2 Western, and 60@61c. for State. Corn has been rather slow and easy in price; latest sales are of steamer mixed at 46@46½c.; New York No. 2 at 47@47½c.; New York No. 3 at 41½@41½c.; ungraded mixed at 44@47c., round yellow at 52c.; yellow Western at 48c.; New York No. 2, November option, at 47c.; do., December option, at 47½@47½c.; do., January option, at 48½c.; steamer mixed, November option, at 46½c.; do., December option, at 45½c. Oats have scarcely varied, with demand fair; latest sales are of New York No. 1 at 31c.; New York No. 2 at 30@30¼c.; New York No. 2 white at 32½c.; New York No. 3 at 29¼c.; New York No. 3 white at 31c.; white western at 31@35c.; mixed do., at 29@31c.; white State at 32@36c.; mixed do., 30@31c.; No. 2 Chicago quoted at 30½@31c.; New York No. 1 white at 34½@35c. Barley, State, rowed 90@95c.; do. 2 rowed, 75@80c.; Canadian, 95c.@$1 22½. Malt, State and Canadian, $1@1 25.

HAY AND STRAW.—There are pretty good supplies, but demand is very good and especially for prime stock, with prices well sustained.

Sales at 35@40c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye, and 30@35c. for short rye.

Exports past week, 3,152 bales.

HOPS.—Business is not brisk, but steady, and seems to absorb choice stock. The feeling among holders is one of confidence on the parcels wanted for export, but good and lower grades are put upon the market freely at current figures.

Quotations are for New Yorks, new crop, choice to fancy, 13@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 8@10; Eastern, new crop, 10@12; Wisconsin, new crop, 10@12; Yearlings, growth 1877 (nominal) 5@7; Olds, all growths, 2@4; Pacific coast, 12@15.

HONEY.—Market quiet at easy rates; single comb clover, 15@16c.; two comb, 13@14c.; Buckwheat, 10@12c.; strained, 6@12c. A large consignment of comb honey (80 tons) has gone to Europe this season, Chiefly California product.

OIL-CAKE.—Western brings $28 ₰ ton.

LEATHER.—Hemlock sole at 19@20c. for light; 20@21½c. for middle; 20@22½c. for heavy, and 17½@19c. for good damaged.

POULTRY AND GAME.—Moderate arrivals of live poultry have given prices some tone.

Fowls and chickens, 9@10c.; roosters, 5@6c. Turkeys, 9@11c. Ducks, pair, 45@90c. Geese, choice, $1.25@1.50; other, $1@1.12. Pigeons, 25@30c.

Supplies of dressed for Thanksgiving sold briskly at 13@15c. for turkeys; quality averaging better than usual. This was particularly noticeable in remote State and Western. The market since Tuesday has experienced the usual quiet that follows a feast day and quotations are generally easy at the close.

Good turkeys quoted 10@12c.; common, 9c.; dry-picked, 13@14c.; chickens, dry-picked, 13@14c; good to prime, 10@12c.; common and stuff in poor order, 6@9c. Ducks, choice, 12@14c.; other, 9@11c. Geese, fancy, 11c; other, 8@10c. The weather has been somewhat off for carrying, but dealers do not apprehend an uncomfortable glut

In game the holiday did not lead to very high rates, and the supply did not sell out as well as turkeys and other fine poultry. Venison cheap, owing to mild weather.

Quail, doz., $1.12@1.37; Grouse, trapped, pair, 60@70c.; drawn, 40@50c.; Partridges, 40@75c.; Woodcock, 40c.; wild Ducks, Western, $1.37@1.50; Havre de Grace, $1.62@1.75; redhead, 75c.@$1; Mallard, 40@50c.; Sqnab, tame, $1 62@1.75 doz.; common, 25@30c.; Venison, whole deer, 6@8c; long saddles, 9@10c; short do., 10@12c.; Hares, pair, 30@40c.; Rabbits, 25@50c.

PROVISIONS—Have shown insufficient export demand, the large receipts considered and the tendency has been generally to a lower basis of values. Mess pork quoted at $7.45@7.50 for spot lots; $7 40@7.45 for December and new for January at $8.80. Bacon at 4½ for long clear and 4¾c. for short clear. Lard—Western steam at $6.10 for spot lots; $6.07½ for December; $6.12½@6.15 for January and 6 20 for February. Stearine at 6¾@6¾. for best Western. Tallow at 6¼@6 9-16 for prime. Beef Hams at $14.50@15. Beef—Extra India mess $20@21 50 for city brands; do. Philadelphia, $19@19 50; packet at $11@11 50; new plain mess at $9 50@10; new extra mess at $10 50@11.

SUGAR.—Refined quoted at 9¼@9¾ for crushed and cut loaf; 9¾ for powdered; 9@9¾ for granulated; 7¼@8½ for soft white and 6¾@7¾ for soft yellow.

SEEDS.—Grass seeds are moving out moderately well; clover quoted at 6¾@7¼c. for about prime to choice, and timothy at $1.20. Rough flax at $1.40.

TOBACCO.—The home trade are taking seed leaf promptly, and the export call for western leaf runs very fair, with prices generally well sustained. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs	2¾@3	3¼@3¾
Good lugs	3½@4	4 @5
Low leaf	4¼@5	5¾@6¾
Medium leaf	5¾@6¾	6¾@7¾
Good leaf	6¾@8	8 @9
Fine leaf	8¼@10	10 @12
Selections	—@—	12¾@14

SEEDLEAF—CROP OF 1877.

New England wrappers, common	10	@12
do. do. medium	13	@15
do. do. fine	18	@35
do. do. selections	27½	@35
do. seconds	10	@13
do. fillers	6	@7
Pennsylvania assorted lots, common	9¾	@10
do. do. fair	11¾	@13
do. do. fine	14½	@16¾
do. wrappers	20	@40
do. fillers	7¼	@8
New York assorted lots, common to medium	8	@10
do. do. do. good,	12	@15
Ohio assorted lots	9	@12
Ohio wrappers	12	@18
Wisconsin assorted lots	7¼	@10

VEGETABLES.—Potatoes are arriving heavily, especially from P. E. I. and N. S. Dealers quote as before, but an early break in prices would not be surprising. Nova Scotia E. Rose, bulk, $2.85 bbl; Prolific and Chili red, $2.50; P. E. I. Jackson whites, $2 37; Mercers, $2@2.25; Eastern E. Rose, with bbl., $2.75@3; State, $2.50; fair to good, $2@2.37; do. Peach Blow, choice, $2.50@2 75; common, $2@2.25; Peerless, choice, $2.37@2.50; poor to good, $2@2 25. Sweet potatoes, Del., $2@2.25; Va., $1.50@1.75, which is higher. Onions steady. White, $1.75@2 25; red and yellow, $1.75@2; Chester, $1.25@1.62. Hubbard and marrow squash, $1.75@2. Cabbage, $1@5 per 100. Cauliflower, bbl., $1.50@3. R. Turnips, 75@87c. Beets, 75c. Carrots, 75c.@$1. Pumpkins, 100, $4@8 Celery, 75@90c. doz.

Exports, potatoes, past week, 3,182 bbls.; of onions, 258 do.

WOOL.—A number of eastern manufacturers have been buying this week and the market is placed in better shape, with fleeces and combings and delaine sorts in most demand. The impression seems to be that the bottom prices have been reached.

Quotations are, for Ohio, Pennsylvania and West Virginia—XXX and picklock, 37@38c.; XX, 35@—; X, 35@—; No. 1, 36@37c.; No. 2, 33@35c; coarse, 30@32c. combing, 39@42c.

New York, Michigan, and Wisconsin, XX, 30@31c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 36@40c.

Indiana, Kentucky and Tennessee—XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@35c.

Illinois, Iowa and Minnesota—XX, 30@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@30c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Nov. 30, 1878.

BEEVES.—Receipts for the week, 8,862 head do. last week, 9,536 do. Poultry week did not materially vary the demand for beef, though moderate receipts helped to give the market steadiness. Poor to ordinary steers ranged at 7@7¾c., dress 55 lbs.; medium to good, 8@9c., dress 55 lbs.; prime to choice, 9¼@9¾c.; a few extras, 10c.

COWS AND CALVES.—Quiet and unchanged; $40@65 ordinary to good; extras have brought $75.

VEAL CALVES.—Receipts have been small; a special poultry week keeping back some supply. Choice milk, Buck's Co. and N. J., 6¼@7c; good, 6c.; heavy weights, 5¼@5¾c. State, fair to prime, 5¼@6¼c.; fed calves, 3½@4½c.; grass, 2@2½c. Hay dressed, 8@10c.

SHEEP AND LAMBS.—Receipts for the week, 19,426 head; do. last week, 23,372 do. The market has ruled steady. Western sheep, fair to prime, 3½@4¼c.; N. J., 4@4½c.; N. J. ewes, 3½@4c.; Lambs, 4¼@5½c.

SWINE.—Receipts for the week, 46,019 head; do., last week, 45,192 do. Market steady; rough hogs, $2.90 per 100; good Ohio, $3 2 @3.30.

Dressed hogs in fair demand, but cheap. N. J. pigs, 4¾@5¼c.; medium, 4¼@4¾c.; heavy, 3¾@4c.; city, 3¾@4¼c. Tenderloins, 6@7c.

SPECIAL NOTICES.

THE YOUTH'S COMPANION.—For judicious editing, select and popular contributors, and sprightly, entertaining reading, the YOUTH'S COMPANION has no superior among the Youth's publications.

Genuine *versus* Spurious Electric Belts. Particulars free. Address PULVERMACHER GALVANIC CO., Cincinnati, O.

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Challenge Mill Co.—Nichols' Patent Double and Single Header Wind Mills
Denison, Fredericks & Co.—Osborn's Patent Grain and Seed Separator.
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We will during the HOLIDAYS *dispose of* 100 PIANOS & ORGANS, at EXTRAORDINARY LOW prices for cash. SPLENDID ORGANS 2 3-5 sets of reeds $65, 3 sets with Sub Bass and Coupler $80, 2 sets $50, 1 set $40, 1 set $35. 7 Octave *all* ROSEWOOD PIANOS $130, 7 1-3 do $140, warranted for SIX years. AGENTS WANTED. Illustrated Catalogues Mailed. Music at half price. HORACE WATERS & SONS, Manfrs. and Dealers, 40 E. 14th., St., N.Y.

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THE BOREL & COURVOISIER SWISS WATCHES

HAVE BEEN AWARDED

THE GOLD MEDAL

at the Paris Exposition of this year, based on the greatest superiority of of performance during the test made manufactured of the best material and finished by skilled hand labor er beyond peradventure. Messrs. B tion in prices, so as to bring their Great care is taken in the finishing those adjusted for railroad use. Call Improved B. & C. Watches. The relative merits of Swiss Watches, as manufacture. Can a country that *Hundred* years be ignored? Give and they will demonstrate to you you to institute an impartial com-

The Jury of Awards' decision was workmanship and extreme accuracy by the Judges. These watches are and made with improved machinery, thus insuring an accurate time-keep- & C. have made a still further reduc- watches within the reach of all of their movements, particularly on your jeweler and ask to see the public is asked to investigate the compared with those of American has made watches for the past *Two* the Borel & Courvoisier fair play, that none can excel them. We ask parison before purchasing.

QUINCHE & KRUGLER
17 MAIDEN LANE, New York, Sole Agents or the United States.

Reading for the Young.

PAYING HER WAY.

WHAT has my darling been doing to-day,
To pay for her washing and mending?
How can she manage to keep out of debt
For so much caressing and tending?
How can I wait till the years shall have flown,
And the hands have grown larger and stronger?
Who will be able the interest to pay
If the debt runs many years longer?

Dear little feet! How they fly to my side!
White arms my neck are caressing;
Sweetest of kisses are laid on my cheek;
Fair head my shoulder is pressing.
Nothing at all from my darling is due—
From evil may angels defend her—
The debt is discharged as fast as 'tis made,
For love is a legal tender!

[*S. S. Advocate.*

SPONGES.

A. HYATT.

AMONG the dark-brown leaves and green filaments which are borne upon the edge of the incoming tide, one frequently observes a substance hardly distinguishable from the surrounding plants, except for its light-brown color and porosity. This is sometimes dendritic (branching like a tree), with lank branches springing from broad, thick-spreading bases; but generally it is broken into fragments, and only the palm-like parts, with their finger-shaped ends, are left grasping among the froth-covered sea-weeds. A slight pressure will expel the water, and the aspect of the half-dried specimen will at once arrest attention.

It is in fact a Sponge, differing only in the details of its structure and its general form from the sponges of commerce. The latter, whose irregular swelling outlines are so familiar to us, are of foreign origin, the better kinds coming from the more eastern shores of the Mediterranean, the coarser and larger kinds from the Bahamas. The commercial value of these is based upon the horny nature and closely interwoven texture of their internal skeleton.

A sponge is, typically, a gelatinous mass, in which is imbedded numerous little spikes and plates, of a horny, calcareous, or siliceous substance; or hair-like threads of various forms, which are so thickly disposed and knit together by animal matter, that they form a sort of open-work frame supporting the looser tissues.

In the common sponge this frame-work is wholly composed of horny hairs, which are so densely packed and elastic that they immediately resume their original shape after being compressed. The gelatinous matter is in all cases cleaned out after the sponge is torn up from its rocky bed, and those which we utilize are only the horny skeletons of the living animals. So loosely constructed and fragile, however, are the large branching species of our own coast, that a dried specimen may be crushed to powder in the hand.

The exterior of our beach specimens have a furry look, due to the projecting points of the spicular, which protrude through the outer skin. Scattered holes of considerable size reveal portions of the interior, and between them are innumerable smaller pores. These larger apertures connect with distinct channels which ramify through the mass in all directions, and, when surrounded by their native element, expel continuous jets of water. In fact the whole is only an apparatus for absorbing and ejecting sea-water, well deserving its old name of sea-lungs.

The surrounding liquid is taken in through the smaller pores of the outer side, and, passing through the lung-like interstices of the structure, is finally collected in the main channels and thrown out again, together with quantities of feculent matter through the larger openings. The meshes of the sieve and the channels are thickly lined with myriads of microscopical animalculæ, to which the perpetual current bears their minute food, sifted of all the coarse, unsuitable particles, and maintains an invigorating supply of fresh sea-water throughout the whole colony. The animals themselves create this current by the motion of cilia, or little hairs, which grow out from the region of the mouth. The form of their bodies has been ascertained in only one species, called *Leucosolenia botryoides*. In this, which is quite small, though common on the shore, it was found that they were minute sac-shaped beings, with a collar projecting from the free end, in the middle of which was the mouth, situated at the base of a long filament which was hardly ever at rest. It seemed to be employed principally in casting morsels of food down into the mouth, and this action, in itself so slight, is yet, when carried on by the thousands of neighboring filaments, sufficient to keep the fluids in rapid motion through the meshes.

Until of late years the animal nature of the sponge was disputed. Then it was referred to the Amœba forms, creatures which are mere sprawling drops of jelly, without mouths or stomachs, but which, however, manage to move about, and even in some species build up most elaborate internal structures resembling minute shells. Now, through the investigations of Professor Clark, we know that they are colonies of such comparatively highly organized beings as those I have described, and we are also able to state, upon the same authority, that their young are free, roving globules, resembling an isolated individual of the parent stock.

The mode of growth has not been studied in the sponge itself, but in a closely allied animal where a number of little bells grow upon a stem (*Codosiga pulcherrima*). The young of this is free at first, but finally attaches itself, and becomes elevated on a pedicle. Then the vase grows more oval, the opposite sides at the narrowest diameter approach each other, coalesce and split, dividing all the internal organs, and the mouth and calyx, or collar, into two parts. Two other filaments grow up from these halves, and a fissure begins in the disc, which gradually spreads both upward and downward, until two transparent vases, complete in structure, swing upon the trunk which bore only one an hour before. This process in some species is continued until quite a cloud of descendants cluster around the parent branch, but in others, again, only separate and distinct individuals are produced, the division totally separating the stem as well as the body.

The sponge, probably, grows in the same way; but the vases, having no stems, remain attached side by side, and secrete the gelatine and spiculæ, or horny hairs, from the lower surfaces of their bodies. These support the membrane and enable it to maintain a definite outline, and continue its growth without the danger of collapsing.

There are several species on our coast, but the most noticeable is the great Halichondria, whose favorite resort is an old wharf-pile. This may not seem an attractive object, but Nature has clothed the whole coast with her living tapestries, and even here, her taste is as faultless, and her hand as lavish in decoration, as in more favored and sunnier spots.

Get into your boat, and when the tide is lowest float down under the wharves through which the current has a clean sweep. The waves lift the dank bladder-weeds and long green sea-hair which cover their stained sides, while below these, brown clusters of mussel-shells open their fringed mouths, and huge anemones, as thick as your arm, spread their laced crowns of white, brown, crimson, or variegated colors on the water-worn logs; and in the midst our great sea-lungs hangs out its mass of branches, and spreads its weird fingers up towards the observer. Even the sponge is beautiful in such places and with such associations.

THE PACK OF RAGAMUFFINS.

A COCK once addressed his Hen thus: "It is now the time when the nuts are ripe: let us go together to the hills, and eat all we can before the squirrels carry them away."

"Yes," answered the Hen; "let us go and enjoy ourselves."

So they went together to the hills, and as it was a bright day they stopped till evening. Now, I do not know whether they had become proud, but the Hen would not go home on foot, and the Cock had to build a little carriage out of the nut-shells. As soon as it was ready, the Hen sat herself in it, and said to the Cock, "You can harness yourself to it." "You are very kind," said he, "but I would rather walk home than harness my own self. No, we did not agree to that. I will willingly be coachman and sit on the box; but drag it myself I never will."

While they were quarreling a Duck called out hard by, "You thieving folk, who asked you to come to my nut-hill? Wait a bit, and it shall cost you dearly." And she rushed up to the Cock with outstretched beak. But the Cock was not idle either, and attacked the Duck valiantly, and at last wounded her so badly with his spur that she begged for mercy, and willingly undertook to draw the carriage as a punishment. The Cock set himself on the box as coachman, and off they started at a great rate, crying out, "Quick, Duck! quick!" When they had gone a portion of the way they met two walkers, a Pin and a Needle, who called out to them to stop, and said it had become too dark to stitch, and they could not go another step; that it was very dirty upon the road, and might they get in for a little way? They had been stopping at the tailor's house drinking beer, and had been delayed. The Cock, seeing they were thin people, who would not take much room, let them both get up, but not till they had promised not to tread on the toes of himself or his Hen.

Later in the evening they came to an inn, and because they could not travel farther that evening, and because the Duck had hurt her foot very much, and staggered from side to side, they turned in. The landlord at first made many objections, saying his house was already full; he thought, too, that they were nobody of any consequence; but at last, after they had made many fine speeches, and promised that he should have the egg which the Hen had laid on the road, and the one which the Duck laid every day, he said that they might remain over the night.

So when they had refreshed themselves, they held a great revel and tumult; but early in the morning, when everybody was asleep and it was still dark, the Cock awoke the Hen, and fetching the egg, they broke it, and ate it together, throwing the shell away into the hearth. They then went to the Needle, who was still asleep, and, taking him by the head, stuck him in the cushion of the landlord's chair, and the Pin they put in his towel, and then they flew off over the fields and away. The Duck, who had gone to sleep in the open air, and had stopped in the yard, heard them fly past, and getting up quickly, found a pond, into which she waddled, and in which she swam much faster than she walked when she had to pull the carriage. A couple of hours later the landlord rose up from his feather-bed, washed himself, and took up the towel to wipe himself dry; then the Pin, in passing over his face, made a red scratch from one ear to the other; so he went into the kitchen to light his pipe, but just as he stepped on the hearth the egg-shells sprang into his eyes. "This morning everything happens unlucky to me," said he, sitting down in vexation in his grandfather's chair; but he quickly jumped up again, crying, "Woe's me!" for the Needle had pricked him very badly. This drove him completely wild, and he laid the mischief on the guests who had arrived so late the evening before, and when he went out to look after them they were gone. So he swore that he would never again take such a pack of ragamuffins into his house, who destroyed so much, paid no reckoning, and played mischievous tricks in the place of thanks.

THE DUTIES OF SCHOLARS.

THERE is much said about the duties which the scholar owes his teacher. The teachers give their pupils many hints concerning duty, but very seldom do they speak of the duties which the student owes his fellow student. At one time a scholar will become angry at his teacher, and thinking to revenge himself, will do wrong repeatedly, not dreaming of the harm he may be doing his schoolmates.

Scholars ought always to be punctual. This is one of the duties they owe each other. How disagreeable it is for a scholar to come stalking into the school-room just after the morning exercises have begun! He disturbs the whole school, and unless all work is stopped until he takes his seat, there is so much noise and confusion that only a few, if any, can hear or remember anything which the teacher is reading. Thus the tardy scholar is not the only loser, for he prevents his schoolmates from gaining the good which they might if undisturbed. The pest of a class-room is a student who is always late to class. I remember a young lady who was in my Algebra class, and she was invariably late. She left chapel at the same time the others did, and had as much time to reach class as others, yet she never came in till after roll-call. It did not seem to occur to her that she was infringing on the right of her fellow-students. Students owe each other patience. They owe this in all their school-work. If there is a dull scholar in class who really tries to learn, it is the duty of his companions to be patient. If he does not understand an explanation of some part of the lesson and requires some one to explain it, he should do it patiently and kindly, and not with a frown on his face, for often that hurts the questioner so much that he cannot understand or think about the explanation, even if it is given clearly and precisely. Each student should do his own work as nearly as possible, and very seldom ought he to ask for outside help. Each and every scholar should dare to say no! Often this is hard to do. For instance, Charley and Will are in the same Arithmetic class. Will studies carefully and thoughtfully and completely masters his lessons. Charley knows this, and evening after evening goes to Will, asking him to do his examples or help him to do them. Will works his examples, and by looking them over a few times, he is quite well prepared to write his lesson the next day; but very likely in three days he cannot do one of them. This is doing Charley much harm; it is hurting his memory and he is losing his independence. Even now, he could not recite his lesson at all without Will's assistance in preparing it. Is it not Will's duty to refuse to help him? Each scholar should prepare his lessons well and thoughtfully. One or two in a class, without good lessons, half kill the interest of the others and makes the teacher impatient. Scholars should not work for their own selfish interests alone, but should be obliging and ready to work wherever duty calls them.

A COUSIN.

THE DODO.

THE Detroit Free Press has been devoting its genius to natural history for very young people, and directly under the picture of an uncommonly sorry-looking Jack is the following "lesson:"

"What do I see here?"

"It is a dodo, my boy—one of the largest and finest specimens ever seen."

"But I thought the dodo was extinct?"

"Oh, no. Some men, on account of family resemblance, have evinced a disposition to bury the dodo in obscurity."

"Didn't the dodo used to have wings and fly?"

"He did, but as he was of no account among the birds he was given two extra legs and deprived of his wings."

"Where is he now found?"

"Travelers can hardly run amiss of him wherever they go."

"How does he enjoy himself?"

"In various ways, one of which is in assuming the position seen in the above cut. It tickles him immensely to get that way and then have fifteen or twenty men try to move him along the highway."

"But why does the dodo have such long ears?"

"He was either first intended for a rabbit, or the rabbit was first intended for a dodo, and Nature could never fully unravel the mystery. If his ears were small, like those of a horse, he could not stand and flop them when he had an idle hour, and would, perhaps, resort to some vicious practice, like cribbing and kicking."

"Is his song anything like the sad notes of the whip-poor-will?"

"Not a bit. When you hear the sad notes of the bird you named you think of some dear dead friend. When you hear the strains of the dodo you think of some dear friend who ought to be dead for not coming around with his shot-gun and a full bag of swan shot. The song of the dodo, when first rising on the midnight breeze, is as soft and sweet as the sound of a buck-saw striking a nail, but as they float further and faster the strains seem to grab each other by the hair and you feel as if a tarantula was walking up your spinal column."

"Does a dodo kick the same as a mule?"

"He does not. He could if he wanted to, but it would be too much of an effort."

"What is the prevailing color?"

"A fashionable gray. One of them standing against a fog-bank may sing all night and not be hit with a brick-bat."

"Do they prefer mountainous countries or low lands?"

"They have no choice. If they find the garden gate open they would not stop to see whether a Balkan Range divided the land. If one of them should fall over a precipice he would stay right where he struck instead of hunting up new territory."

Sabbath Reading.

HERE AM I, O LORD, SEND ME.

J. E. RANKIN, D. D.

I HAVE not an angel's tongue,
Skilled in winning speech or song;
Weighty words at my command,
Pleas fallacious to withstand—
Is there not some little child
I can win from paths defiled?
Weak, unworthy though I be,
Here am I, O Lord send me.

I cannot the sickle wield,
In the noon-day harvest field;
Bear the burdens of the day,
Garner loaded wains away;—
I can only stoop and glean
Where more stalwart forms have been.
Weak, unworthy though I be,
Here am I, O Lord, send me.

I cannot the sword gird on,
If there's vict'ry to be won;
When has ebbed the battle shout,
I can seek the wounded out;
Soothe the dying; make the bed
Of the sad and lonely dead.
Weak, unworthy though I be,
Here am I, O Lord, send me.

Send, O Lord, by whom thou wilt!
Cleanse this world of woe and guilt!
Where the hosts of error low'r,
Clothe thy chosen ones with pow'r;
In the kingdom of thy grace,
Give to me some humble place.
Weak, unworthy though I be,
Here am I, O Lord, send me.

[*S. S. Times*

CONSCIENCE VOID OF OFFENCE.

"Herein do I exercise myself, to have always a conscience void of offence toward God and toward men."—*Acts xxiv, 16.*

WHAT is conscience? The indicator of our doings; the tablet on which are writ all our deeds, good and bad. We find a good conscience spoken of seven or eight times in the New Testament. In this portion of the Acts Paul speaks of "a conscience void of offence toward God, and toward men." Let us see if we can understand what the apostle meant.

The conscience that God has given us is the guide of our lives when it is "void of offence." Paul meant that he always acted so that his conscience did not reproach him, and, more than that, so that his conscience approved of what he did. "Void of offence,"—that which is offensive, or might cause another to stumble. He kept his conscience so pure and enlightened in regard to duty, that he acted in accordance to its dictates, and his conduct was not displeasing to God nor injurious to men. "Toward God,"—he endeavored to discharge all the duties of public and private worship, did constantly what God required, believing all He has said, and doing all that He approves.

Let me try and show you what I mean by acting so that the conscience approves.

There was a lad in Ireland who worked at a linen manufactory, and one day a piece of cloth was wanted to be sent out which was found to be shorter than thought to be. The master thought it might be made the proper length by a little stretching. He unrolled the cloth, and, taking one end himself, told the boy to take the other. "Pull, Adam, pull," said the master. The master pulled with all his might, but the boy stood still. "Pull, Adam, pull," said his master again. "I can't," said the boy. "Why not?" said the master. "Because it's wrong," said the boy, and he refused to pull. His master discharged him. That boy became Dr. Adam Clarke. His conscience approved of what he did. It was the purity of his conscience that enabled him so to act.

Could we, in as simple a thing as that, act as he did?

Paul says, "Herein do I exercise myself, to have always a conscience void of offence toward God and toward men." But how toward men? What does it matter to our fellow-creatures whether we have a conscience void of offence or not? Having it toward men is endeavoring to meet all the demands of justice and love; to promote their happiness, knowledge, and salvation so that we may look back on our lives with the reflection that we have done our duty; so that we may have nothing to reproach ourselves for, nothing of this kind to make a death-bed miserable.

Now how had Paul come to speak with such certainty about this matter. "Herein, do I," etc. He had found, through constant study and practice, that he could, trusting in God, so act as not to have an accusing conscience. E. T

THE LITTLE ORPHAN.

WHEN I was in Europe Mr. Spurgeon told me a story of a boy who was in an orphan asylum. This little boy came up to Mr. Spurgeon and said: "Mr. Spurgeon, would you allow me to speak to you?" He said, "Certainly, get upon my knee." The little fellow got up and said: "Mr. Spurgeon, supposing that your mother was dead, and that your father was dead; and that you were put into this institution; and that there were other little boys that had no father or mother, but they had cousins and uncles and aunts, and they brought them fruits and candy and a lot of things. Don't you think that you would feel bad? 'Cause that's me." Why, Mr. Spurgeon put his hand in his pocket and gave the little fellow some money right off. The little fellow had pleaded his cause well. When men come to God and tell their story—I don't care how vile you are, I don't care how far down you have got, I don't care how far off you have wandered—if you will tell it all into His ear, the relief will come.—*Moody's Child Stories.*

PERSONAL ITEMS.

Ex-Governor Fenton will spend the winter in Paris.

Prince Gortschakoff is suffering from continually increasing weakness.

"Mrs. Gibbs, elocutionist, poetess, washer and ironer," resides in St. Louis.

Ex-Minister Pierrepont has resumed the practice of the law in New York City.

Victor Hugo says England produces wealth admirably, but distributes it miserably.

Hans Breitman works steadily for a London journal and talks broken English no more.

Sir George Nares, of Arctic celebrity, has been commissioned on a voyage of scientific exploration in the South Pacific.

Daniel Webster's widow is still alive, though very aged and in feeble health. She resides at New Rochelle, New York.

Miss Celeste Winans of Baltimore is said to be the richest young lady in America. She inherited $20,000,000 from her father.

Thos. A. Doyle has been nominated for Mayor of Providence, R. I., for the fifteenth time. He has never been beaten for the office.

The Hon. W. D. Washburn, elected to Congress from Minnesota, is the fourth of that famous brotherhood given seats in the lower House.

Mr. Bancroft recently presented the lady who reads the proof of his work with $50 for discovering an error in a Latin quotation. Would that there were many of him!

Miss Braddon is in Brittany turning out twenty pages of novel a day. Novel writing has become automatic with her now, as it has with our own Mrs. whole-alphabet Southworth.

Mrs. Hayes seems to be a good match-maker; her niece Miss Cook who was married the other day, is the fifth of the young ladies who have visited Mrs. Hayes at the White House who has married within eighteen months. The others are the two Misses Sullivant, Miss Platt, and Miss Macfarland.

Chin Lan Pin, the Chinese ambassador, is a man of imposing appearance, between sixty and seventy, with a kind and intelligent face. He is slight and tall and has very courteous manners. In the credentials which he brought from the Emperor he and his suite are mentioned as "ust and honorable men."

Boston Letter says: "Miss Hosmer, who is proclaimed as having wrought wonders by her new inventions, was a school girl in this vicinity between thirty and forty years ago. She was the daughter of Dr. Hosmer of Watertown, and developed into an original character very early. There are several stories of her eccentricity and independence in those days. One of her freaks was the unhitching of a railroad engine and setting it in motion. She went to Italy to study sculpture, and has staid there ever since. I believe she lived with Charlotte Cushman in Rome at one time. She is not at all a marrying kind of woman."

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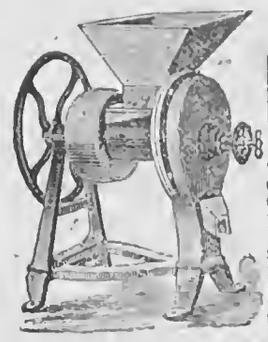

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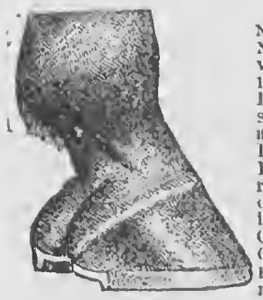

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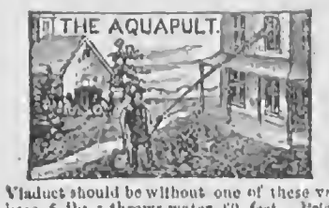

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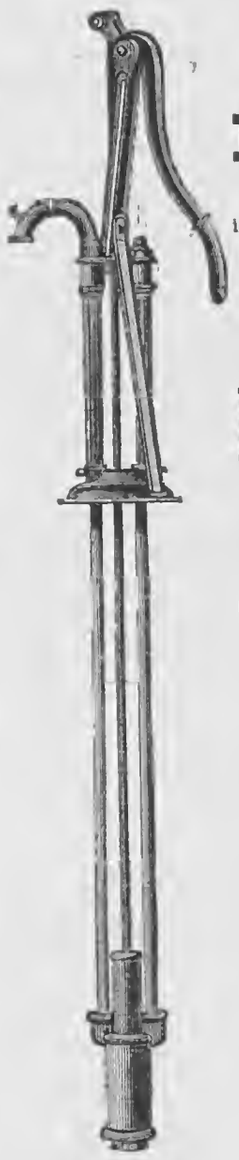

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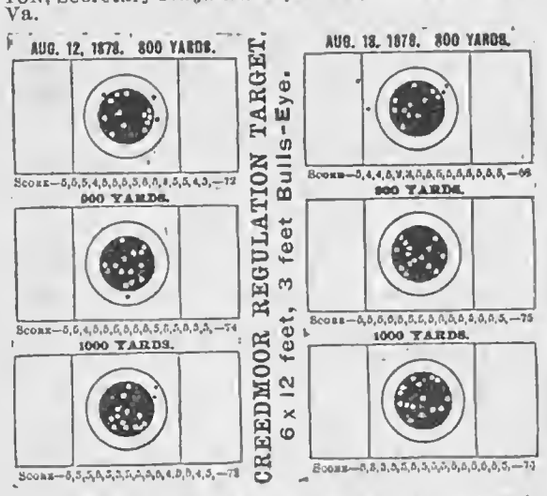

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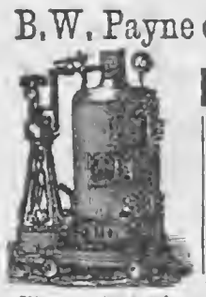

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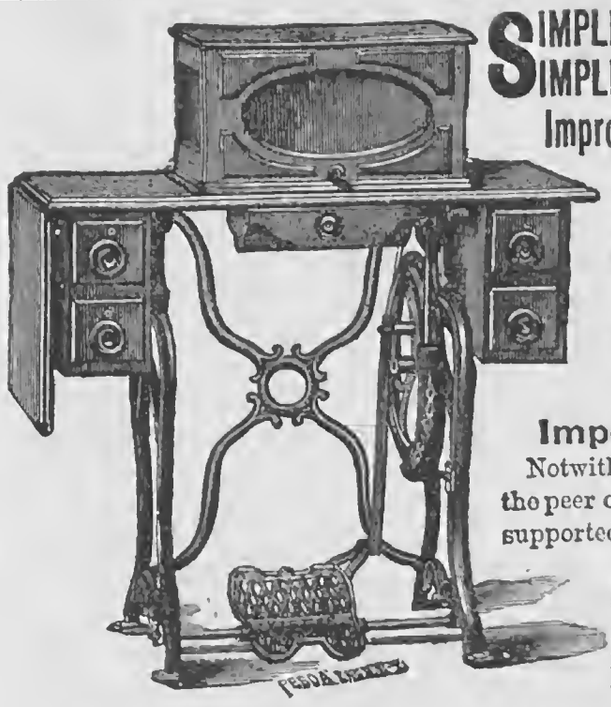

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To Thomas:

Died, when young and full of promise,
Of the whooping-cough -our Thomas.

A Cherubim:

Sacred to the memory of
Miss Martha Gwinn.
Who was so very pure within,
She burst this outer shell of sin
And hatched herself a cherubim.

A father:

Weep, stranger, for a father spilled
From a stage coach, and thereby killed.
His name was John Sites, a maker of sacengers,
Slain with three outside passengers.

Our Willie:

Our dear little Willie,
As fair as a lily;
God for him sent
And so we let him went.

Mrs. Bly:

Oh! mournful day
That stole away
Poor Mrs. Bly:
Who chanced to die
Of a sky—
Rocket
In her eye—
Socket.

[*Traveler.*

"TAKE away women," asks a writer, "and what would follow?" We would. Give us something harder next time.

WILLIAM AUGUSTUS to sleepy room-mate: "Come John Henry, why don't you get up with the lark, as I do?" John Henry, grimly, "Been up with him all night."

"Is your master up?" asked an early visitor of a nobleman's valet. "Yes, sir," answered the valet with great innocence; "the butler and I carried him up about three o'clock."

FRENCH papers state that Gambetta is about to marry a widow with a fortune of $8,000,000. If the right-angled and everlasting truth were told it would probably be that he was about to marry a fortune of $8,000,000 with a widow.

A PHYSICIAN, finding a lady reading "Twelfth Night," said: "When Shakespeare wrote about Patience on a monument, did he mean doctor's patients?" "No," she answered: "you don't find them on monuments, but under them."

A FULL-BEARDED grandfather recently had his beard shaved off, showing a clean face for the first time for a number of years. At the dinner table his three-year-old grand-daughter noticed it, gazed long with wondering eyes, and finally ejaculated. "Grandfather, whose head have you got on?"

THE following startling announcement was given out by the parish clerk in a small church in Somersetshire, England: "I gees notice nex Sunday there wun't be no Sunday, 'oause Rector's goin' to t'other parish fishin'" By this the accustomed congregation understood that the clergyman would be officiating a few miles off.

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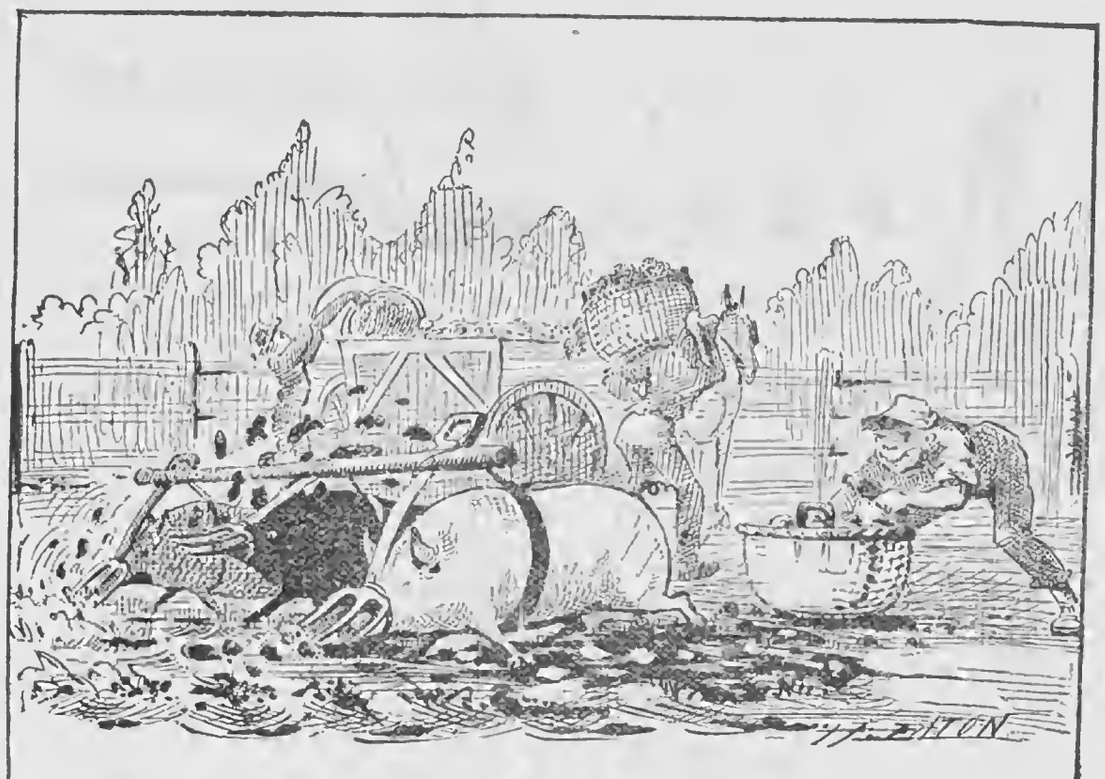

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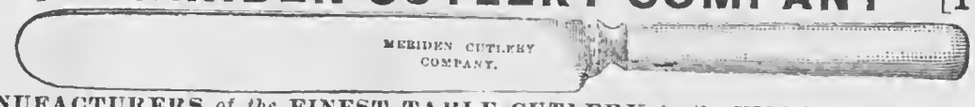

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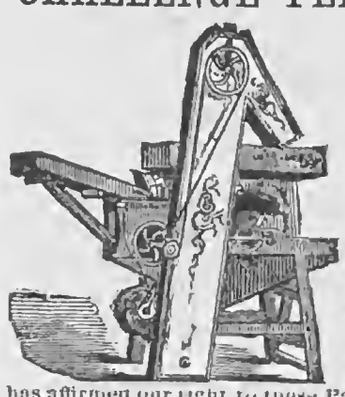

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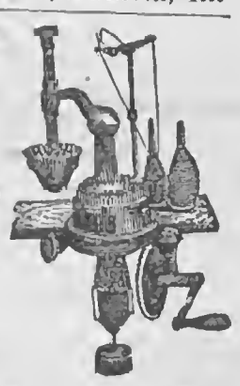

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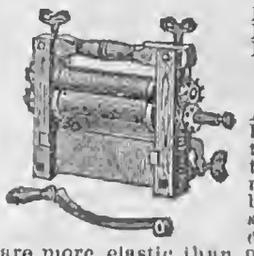

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XXXVII. No. 50.
WHOLE No. 1507.

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Farm Topics.

AN INNOVATION.

WORK is always pressing on the farm. And often farmers fail to have a good garden, thinking they couldn't spare time from attending to the farm crops to prepare the ground and put in the seeds. Where this has to be done with the spade and by hand labor it is a great deal of work and necessitates patience and painstaking. Farmers' boys hate to work in the garden where much hard labor is required, and especially when it has to be done at odd times and at noonings. They will follow the team without murmuring, but "puttering" in the garden among beds is another sort of business. This system is apt to put the garden in the background, or to put it out of the way altogether. A better place and one more in accordance with the boys' tastes, and the fathers', too, is to have the garden in a field. The corn field, if not too remote from the house, is a good place. In the field

SCENE AT THE INTERNATIONAL DAIRY FAIR.

the sweet corn and early potatoes may be planted with all sorts of vegetables, in rows, and be cultivated with a horse, reducing the labor of raising at least three-fourths. Compared with most gardens, vegetables in the field will be earlier, as here they will get the full benefit of sunshine and moisture, of which the trees about and in a garden rob the crop. Renewal crops may be put in readily, as a few minutes' work with a horse and cultivator will prepare the ground. Plenty of vegetables is a decided acquisition for a farmer's table, and helps the good housewife wonderfully to prepare the meals, when fresh meats are not attainable, and good health demands that food should be plentiful and in accordance with the season. A greater variety of wholesome food is one of the lacks to many homes, and helps to make discontented those who gather around such an uninviting table, besides discouraging housekeepers who might be made happy where plenty abounded. Let the old garden be given up to more delicate plants and to flowers.

USE OF FERTILIZERS IN OHIO.

M. B. BATEHAM.

BENEFITS TO CROPS OF THE GROWING USE OF FERTILIZERS.

Thanks to the agricultural press, there has been a very rapid increase in the number of farmers disposed to make use of commercial fertilizers in the north-eastern half of this State, embracing most of the old wheat districts. On the clayey soils of this region, which have become a good deal worn by hard cropping, applications of moderate dressings of bone dust or a good superphosphate were found generally beneficial, and, in many cases, the increased yields of wheat and the succeeding crop of grass, were so noticeable that old-style farmers were compelled to lay aside their prejudice and to admit that there was, in these new-fangled notions, something which they might as well look into.

Hence they began to experiment, and the demand for the fertilizers increased, so that the manufacturers were induced to appoint local agents in almost every county, to distribute printed circulars and encourage sales. In this way the amounts sold have, in most districts, doubled each year for two or three years past, in some cases several car-loads at a time going to one neighborhood; and it is estimated that not less than ten thousand tons were sold during the past year. The proprietor of a bone mill informed me recently, that his sales the past season were more than double those of any previous year, and some of the time the demand exceeded the capacity of his machinery, though grinding at the rate of five tons per day. Some credit is due to this movement for the excellence of the wheat crop on thousands of old farms during the past two years, in this portion of Ohio.

BENEFICIAL EFFECTS ON THE MINDS OF FARMERS.

But it is of the *moral influence* on the minds of the farmers that I wish especially to speak, as I have not seen this distinctly alluded to in any of our agricultural journals.

In the first place, the farmers in these old wheat districts, where the fertilizers are used, are more hopeful and cheerful than before, as they now feel that the means are within their reach for restoring fertility to their worn fields. It is quite possible that some are over-sanguine, and will place their main reliance on fertilizers instead of regarding them only as helps along with manuring, the use of clover &c.; but these mistakes will soon correct themselves.

Another grand result is the prompting of farmers and their sons to read agricultural papers more generally than ever before. They see and feel that the use of fertilizers, or the effect produced on the crops, is a matter of *science applied to farming*, and it is a necessity that they should read and learn something about it. So, too, they are more ready to talk on these subjects, and to listen to discussions or lectures at the Farmers' Clubs or Granges.

We have in Ohio about a thousand Grange organizations, one in almost every township in all this half of the State. Each of these serves the purpose of a farmers' club, and, holding meetings every fortnight, discussions are held on all matters deemed of interest to the farmers. Each Grange has its "lecturer" whose special duty it is to see that suitable topics for discussion are introduced at each meeting, and for a year or two past no subject has afforded so much interest as that of fertilizers and their use.

Another good result is the effect on farmers' sons in convincing them that agriculture is really an intellectual pursuit, affording scope for scientific knowledge as well as strength of muscle, and that the old farms can be made to produce more bountifully than they have supposed. Hence, more of them are disposed to stay on the farm instead of going west, or risking the chances of finding success in the city or town. As a result of this mental awakening among the farmers, we find a large number desirous of attending the course of lectures to be delivered by the professors at the State University at Columbus, (Agricultural College), which are to commence the 9th of January and continue four weeks, four lectures each day, on the various branches of science relating to agriculture. There is a prospect that the number in attendance at these lectures will be quite large; but there are hundreds of young farmers who would gladly attend them if the low price of farm products did not prevent their finding the means for defraying the expenses of travel and board.

Our farmers feel severely the effects of such low prices; but, with the exception of those who are pressed with debt, they know that they are more comfortably off than are the great majority of the residents of the towns and cities; and so they are content to wait till the better times come, and until the lessons of adversity shall have their due effect on the people at large.

Lake County, Ohio.

MOISTURE-RETAINING POWER OF THE SOIL.

EXPERIENCE VERSUS THEORY.

After reading "Notes from the Rural Grounds" in the issue of October 19, three times, I am still at a loss to understand whether the writer wishes the reader to believe that soils will resist the effects of drought more effectually without pulverization in ordinary field cultivation, or whether he applies his reasoning only to pots. In the case of two adjoining plots of land alike in every respect, except that one has received no more cultivation than has been necessary to destroy the weeds, while the other has been thoroughly stirred to the depth of several inches at least once a week, in such a case every observant tiller of the soil knows that the plants growing thereon plainly show, by the greater thrift of those growing on the well tilled ground, which plot has received most cultivation during a protracted drought. Moreover, on examining the soil, it will be found that the neglected plot is dry to a considerable depth, while that which has been cared for, is moist nearly to the surface.

Now, whether this moisture comes from the sub-soil or from the atmosphere, it is undoubtedly the result of thorough cultivation. In a measure, the conclusions arrived at in the experiments, are applicable to such soils as are thoroughly underdrained; for there the percolation of the water through the soil, produces a partial loosening of the particles of clay or loam; but since only a small proportion of our cultivated lands are so drained, I fear such reasoning may lead many unthinking people astray, unless the subject is amply discussed. If, however, it can be proved that this new departure is correct, it will certainly be a boon to the lame and the lazy. If the writer of "Notes" only expects to show that the moisture in the loose soil is not due to capillary attraction, then he may be right; but even in that case, he does not show that stirring, working, and breaking up the surface soil are unnecessary.

THEORY VERSUS EXPERIENCE.

One more point deserves consideration. I suppose the soil in the pots continued moist as long as there was any water in the buckets; when the supply was exhausted, then the drying commenced. Of course, the soil could not draw, by capillary or any other attraction, moisture that was beyond its reach. Now, it is supposed that somewhere down in the earth there is always a stratum of water, and if the soil be in a proper condition, may not the water be raised a long way? M. B. PRINCE.

[Rarely, if ever, more than a few feet—five or six.—EDS.]

A SINGLE EXPERIMENT VERSUS A LIFETIME'S EXPERIENCE.

The conclusion drawn, in RURAL for October 19, from experiments with pots and buckets upon the utility of cultivating the soil, go to quite upset the results of my life's experience in doing that very thing. Would not the test be more satisfactory, if equal plots of ground, side by side, were experimented upon? At wheat-sowing time I have often seen the ground so dry that the only soil that would sprout the seed, was fallow land which had been plowed early and often until seeding time, and ground so treated I have never known to fail to do so. This was my experience in Western New York where all farmers adopt the practice as an essential requisite of good farming; here, however, the theory of the inutility of cultivation is likely to be popular—until bankruptcy at any rate—for few either use, or believe in the utility of using, a turning-plow. When I began to plow here one foot deep, the natives said it was a great mistake, as the Almighty had put the right side of the land on top, and gave vent to not a little more ignorant wisdom, to the same effect. Yet, despite their prophecies, the best results followed my work, and they begin to see the advantage of the practice now—and to do likewise S. I. C.

Fulton Co., Ga.

FARM NOTES FROM ILLINOIS.

Corn here is a large crop and well matured. Husking has commenced, and if the weather continues favorable, the crop will all be cribbed in good condition by the first of December. Very little corn is cut off in the West and the fodder saved as in the East; but here it is husked from the stalk, thrown into wagons and hauled direct to the cribs, a method which economizes the labor. Then the cattle and other stock are turned into the fields to glean what may have been missed and devour the stalks, which afford them good feed during most of the winter. I am not sure this is the best way, as the animals are often exposed to the inclemency of the weather, but it is the practice here, and the stock seem to stand it well. This State is celebrated for its fine horses, cattle and swine. Sheep, however, are not so plentiful as they might or should be.

Potatoes are about all dug. The crop, in general, is a light one, though some yielded well. Those that were planted very early in suitable, well-drained soil, and properly tended, did well. Early Rose, planted late, turned out poorly. Some of the late potatoes (Peachblows) are good, and others "small and few in a hill," which shows the importance of good cultivation. The Colorado beetles did not prove so troublesome this year as formerly, though they did some harm and in some fields had to be picked off or "Paris-greened," in order to save the crop. Owing to the general scarcity of potatoes throughout the country, the price has advanced here from 25 cents to 35@40 cents per bushel, and it is thought they will be still higher before spring.

Apples are also rather scarce and of poor quality, but they are more plentiful than they were last season. A considerable amount of cider and apple-butter has been made this fall, and those who are so fortunate as to have orchards, have their cellars pretty well supplied with apples for winter use. The price of apples this fall ranges from 30 to 60 cents per bushel. Good-keeping apples are worth more.

Turnips, beets, cabbages, etc., are variable—some good; others failed to do well. The turnip crop is generally a "hit and miss." If the seed is sown at the right time, just before rain the latter part of July or first of August, in good clean soil, the crop seldom fails, but if the land is foul with weeds, and the seeding is done in a careless, "slip-shod" manner—which is too often the case here—the crop fails. Under such conditions this is a thing it has a perfect right to do, but "ye farmer" will say, "turnip-raising don't pay anyhow." Root crops are not in much favor "out West," as the farmers don't like to "stoop to such work." If they could perform all the labor by automatic machinery, this necessary adjunct to good farming would be in better repute. The time will come when more attention will be paid to the culture of vegetable crops than at present, for the soil is well adapted to them.

Buckwheat is another crop that is grown here only to a very limited extent. It sometimes does well, but more often fails, and our prairie farmers don't like to be called "Buckwheat Farmers." They may fail in raising wheat, and will thereon sympathize with each other; but any one who is foolish (!!) enough to attempt raising buckwheat and fails, gets no more sympathy from his fellows than does a whimpering boy with the tooth-ache. In a drive over the prairies this fall, through quite a long distance, I saw but one field of buckwheat. It looked well.

Clover Seed had the appearance of a good crop this season, but the weather has been so stormy every little while, that it has been a difficult task to save it, and as it is not hulled yet, we cannot tell how it may yield.

Hay was a heavy crop and most of it was saved in good condition; but still a large amount got spoiled and wasted for want of suitable shelter in which to store it. It pays to have good barns and "hay-barracks," and, no doubt, the animals would express their grateful thanks for such kind consideration—if they could only talk. And they do speak by their looks and actions—a kind of language more expressive and far more truthful than words.

Threshing is mostly finished now, and the crops—with the exception of spring wheat, which was injured by sun, blight, rust, etc.—have yielded well. Winter wheat and rye were unusually good, and a larger acreage of these cereals has been sown this fall than heretofore.

The Fall Grain and Pasturage are very promising, as there has been no severe "killing" frosts yet. The weather has been generally favorable to the autumn crops and for work.

Ogle Co., Ill., Oct. 23. W. B. Derrick.

NOTES FROM CENTRAL ILLINOIS.

The great bulk of the corn crop is in the crib here. The yield, as usual, is very unsatisfactory, and will be till we learn to put in less and cultivate more. How much better would it be to have fifteen acres yielding 75 bu. per acre—1125 bu.—than 45 acres yielding 25 bu. per acre—1125 bu.—to say nothing at all about the grass, wheat, oats, pasture, potatoes turnips and garden truck the 30 acres botched in the latter case would afford.

Fultz wheat seems to be stooling better this fall with us, than any other sort I have noticed, and I have seen six or eight varieties.

The Butman was the finest squash I raised this year; its color, too, was not as objectionable as that of most varieties.

Of 27 varieties, the Monach of the West strawberry, looks the thriftiest after several hard frosts.

Now is a good time to brandish a sharp knife and make a brisk attack on those old brush heaps many a farmer has been in the habit of calling grape-vines. Those having such piles of brush, often waste enough time to prune them in spinning out some long "yarn," or talking politics.

The rabbits already are gnawing some of the young trees belonging to those who think that to set out trees is all that is needed to insure fruit. When a young orchard is a wilderness of grass and weeds, rabbits find good quarters therein, and the trees will very likely be injured. If young orchards are clean through the winter, and an ear of corn is placed near each tree, rabbits will not stop to bark the trees; but a better plan is to wrap all rapidly growing trees, young and old. An Old Subscriber.

Arboricultural.

EVERY-DAY NOTES.

SAMUEL PARSONS.

AMPELOPSIS JAPONICA. (?)

Japonica is a broad term, and I fancy that in this case it has been given for want of another and more correct name. The plant is certainly rare, and yet most readily grown and worthy of employment. Many good qualities commend it and it should only be known to gain appreciation. It is exceedingly vigorous and very different in every way from the Japan Creeper, Ampelopsis Veitchii. [A. tricuspidata.—EDS.] The green foliage is less deeply cut than that of other varieties, and bright blue and red berries relieve and increase the beauty of the rich coloring of the leaves in fall. As a member of its genus, and a climber generally, it is very distinct in form and appearance, possessing at the same time all the good qualities of the genus Ampelopsis.

A NEW WEEPING JAPAN CHERRY.

We have long had Weeping Cherries which are pretty and graceful, but this introduction from Japan is of another make. Its growth is as strong and vigorous as that of any variety of the ordinary fruit-bearing Cherry, and as eccentric and grotesque, if less beautiful, than that of the Weeping Beech. Throwing up great far-reaching shoots of young growth, the branches curve finely and sweep down to the very surface of the ground. The leaves are large and healthy, and the general appearance is that of a common cherry tree. It remains as yet extremely rare, but would soon be common, if people only knew its value and demanded its culture, which is not difficult.

THE JAPAN ALDER

is another tree bearing the broad designation of Japonica. It is, however, a noble tree, vigorous and rapid in growth and attaining large size. The leaves are of a bright shining green, and of a long oval shape, forming a compact, erect head, strikingly elegant. Were not comparisons odious, and had not nearly every tree its own special claim and suitable place, I should be tempted to term this the finest Alder I ever saw. One of the marked peculiarities it possesses in a higher degree than other Alders, consists in large, curious, roundish seed-vessels, green late in the fall, and strangely marked, like an undeveloped cone. These seed-vessels hang in clusters of four or five, and impart a peculiar appearance to the tree at this season of the year. The Cut-leaved Alder (Alnus imperialis laciniata) has been heretofore considered the most ornamental of Alders; but this Japan species is quite as ornamental in its way, and of hardier and more vigorous habit. [Not *hardier* it seems to us.—EDS.] It deserves general recognition.

THE JUJUBE TREE.

The remarks concerning the Jujube made by Mr. Wm. R. Smith, Chief of the Botanic Gardens, Washington, in the Star of that city, and quoted in a late number of the RURAL NEW-YORKER, interested me much. I have seen the tree several times in Washington, and have been much impressed with its valuable qualities. It is well known how greatly we need a good hedge plant, one that is at once cheap, rapid-growing and hardy, and at the same time satisfactory as a barrier, ornament or screen. The Jujube, as I have seen it growing, has apparently all these qualities. It comes surely and rapidly from seed, and can therefore be grown cheaply. Evidently, also, it is a natural hedge plant, from the fact that it remains after many years' growth, a tree of moderate size, although in five years or so we have seen that it will develop into as many feet in hight. This is an important quality, as indicating the aptitude of the shrub for hedging purposes. Unlike the Osage Orange, there are no suckers about it, and as far as tested, it has proved hardy. As a barrier, its value can be easily proved by the size and sharpness of its thorns. Good ornamental qualities are evident in its thrifty, shining acacia-like leaves, and richly colored bark and fruit, the latter of which

is very ornamental as well as edible. A very vigorous foliage demonstrates sufficiently its capacity for screening. It would indeed be strange if in this long-known shrub, a valuable hedge plant should be discovered. If such is ever the case, the merit of strenuously and persistently calling the attention of the public to the fact will be due to Mr. Wm. R. Smith.

TREE SURGERY.

GEN. WM. H. NOBLE, BRIDGEPORT, CONN.

LACK OF TIMLEY SURGERY IN THE ORCHARD.

THERE are little items of home and homestead care, rarely known and more rarely practiced. They are not great or vital matters; but their neglect leaves a good work undone, and a waste all the while gaining.

One of these neglected duties is the rightful care of our fruit trees. I never go near an old home lot or homestead, or to a residence which has known the household presence of a century, but I find lots of their tumble-down and gangrened trunks. Somebody has driven his loaded cart hub against a choice Apple or Pear, and gouged a big wound into sap-wood and bark, or in haste or ignorance, some large limb has been sawed off, and a long stump left to rot. The wet, and frost, and air, have made havoc of the unsightly deformity, and have mined down into the trunk. Thus, year by year, a ceaseless corrosion, has chambered out great areas of decay. Rarely is thorough work done to stay this waste.

THEIR VITAL FORCE HELPS TREES TO A LONG LIFE.

Now, the trunk of the Apple and the Pear, and the sap-wood of most fruit trees, are so life-bearing that they keep up the struggle against their decay, for years. After the heart-wood and all, perhaps, but a strip of sap-wood and bark, are gone, the old thing still puts out leaves and blossoms, and bears fruit. It is done, though, under a strain of vitality and against a drag and a torment, which is plainly seen after the ailing tree has submitted to a little wholesome surgery. Though but a maimed, diseased remnant of its former self, yet you may so stay its waning forces that for years it will yield the comfort of its fruit. The song of "Woodman Spare That Tree" may well be paraphrased for one of these old landmarks and memories of early homes. Its companionship for a score of your allotted years is only a question of care. A generation may gather its store before the young tree of to-day gives you more than a taste.

HOW AN OLD TREE WAS SAVED.

The story of an old pear tree near by, and of help to the ills and waste of lots of old fruit trees on an ancient home ground here, though told before, will bear telling anew.

That pear tree's trunk, if whole, would have been some 18 inches through, but it was a mere shell, some three inches thick, and one whole side was gone, clear to the ground. I think it would have keeled over many times, had not a kind of cork-screw twist in its fiber, made one whole turn and stiffened it to hold above its shoulders its three stout and sound limbs. Inside this shell, the borer-grubs and gnawing ants had honey-combed the decay, and channeled burrows well into its sound wood. It looked as if a stiff northern blast would topple over the old thing. But the twist held it, and surgery was tried.

First, all decayed and unsound limbs were pruned off and their stumps well painted. The top was also somewhat lightened. Then the bark was thoroughly scraped and washed, away up to the small limbs, with a coat of lime and sulphur. The inside rot and a good slice of the channeled hard wood were cut clean out. All the grubs and ants were dug, killed, or smoked out. This work was carried on away down to the roots. Then all that bare and raw interior was coated with a heavy shield of paint skins. All small holes were puttied tight. Every opening and every crevice were filled. This shut out the rain and air and kept moisture in the wood, which else would have drank up the vital flow of sap. Moreover, such coatings are not relished by the boring pests.

This work was done in the early spring. The ailing thing seemed to feel the care. That very season it took on new life and growth, and has since flourished in forgetfulness of its maimed and crippled state. Now for 25 years the venerable tree has never failed of a crop, partly of its own Old Harvest pears, and partly from grafts of choice varieties, grown on its thrifty young shoots. It has during all that time stood wet-nurse for lots of fine fruits, as each new and valuable kind came along to be tried.

HOW TWO OTHER OLD PEAR TREES WERE REPRIEVED.

Several other old pear trees on the same property have been saved, or given a new lease of life, by operations fitted to their cases. Two, not quite as large as our venerable friend, had become heart-rotten, for six feet from the ground. Only the sap-wood and bark, about two inches thick, were left. A slender crack, which ran down the whole shell, gaped wide at every severe cold snap. They were but hollow shafts, full of rottenness and of all the vile pests that fatten on decay. The trees evidently felt the torment and drain upon their lives of this gangrene and gnawing.

Along in these cracks, at equal distances, holes about three by four inches, were cut through the shells. Into these, and up and down the rotten space, stout wires were bent and thrust. This regimen worried and drove the decay "down and out." After thorough cleaning had thus been done, water was poured into the holes at the top of the hollow, and the whole interior again churned and washed clear of dirt and insects.

Strong hydraulic cement, moist enough to flow from a tin trough fitted to the second opening from the ground, was then poured therein, and worked down with those same wires, so as to fill compactly every space of the void. As the filling mounted to an opening, that opening was stopped tight. The like pouring of cement was continued from higher orifices, till under the pressure of the column and the working of the wires, all the hollows were filled. The whole inside to the topmost opening, thus became a mass of stone, effectually shutting out moisture, air and insects. The very year this operation was performed, both trees marked by their growth, vigor of leaf, and size of fruit, the virtue of this regimen. I have no doubt that, in time, they will close over every crevice and opening with a new wood and bark.

LIKE SURGERY ON SOME OLD APPLE TREES.

Some fine old apple trees, on the same homestead, were saved and given new life by like means. There were, in some of these, great hollows, a foot or more across, and deep and big enough to hold a bushel. Some were only holes where the neglected stumps of limbs, left at the pruning, were at the mercy of the elements, and had invited decay. Those smaller voids, after all rotten wood and uncleanliness had been carefully dug out, were troweled full of cement, and then coated with paint.

Those larger places, after having been thoroughly cleansed of all unsoundness, were filled with concrete of sharp, small, broken stones and cement, well rammed solid by an iron rod. The surface of this was then troweled smooth with rich cement. This, when thoroughly hardened, was heavily coated with thick paint, to keep all dry and tight. The result is that, after some twenty years, most of these unsightly, gaping wounds are entirely closed with sound wood, which, year by year, has lapped over the cement. In the largest, which once were only water log, waste and disease, there is now but a span's breadth of cement, whose bareness year by year the bark curls over and contracts.

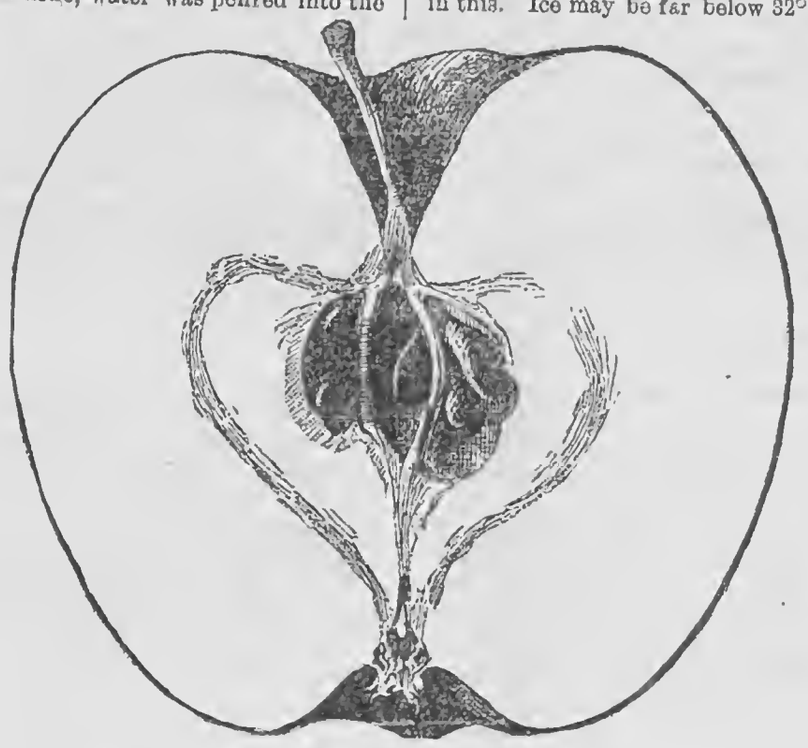
MORE OF SUCH TALK TO COME.

In some future articles, I shall have a word to say about "pruning, as a fine art," and about that sensitiveness of trees, which some one has lately called "tree mind," a sensitiveness that makes suffering from decayed limbs, rotten trunks, and slovenly treatment in general, something very much keener and more hindering to the life and health than would be any real injury, the gnaw of insects, or the waste of gangrene.

VAN'S VIEWS.

BEST SOIL AND MANAGEMENT FOR AN APPLE ORCHARD.

IN the Pomological number lately published by the RURAL I see its worthy contributor, Henry Stewart, advises choosing a light soil for an orchard. This may be the best plan in his region, but here in Brown Co., Wis., we have found, at a severe cost, that it is of no use to set anything but crab Apples on a light soil. I see that he also recommends manuring the ground where the trees are set; with us this will stimulate the tree to too great a growth, so that much of the wood will not be riponed and will be winter-killed. According to him, all that one needs to care about is to get a good growth of the tree and the rest will take care of itself; on the other hand, we wish to keep the tree from making more growth than can be thoroughly ripened the same season. If there is unripe wood it will be winter-killed, almost certainly. Another mishap that must be guarded against, is root-killing; and one of the preventives against root-killing is a wet soil (?). The temperature of a wet soil can be lowered to only about 32° above zero; while that of a dry soil can sink to 40° below zero, and still lower, if the weather is cold enough. [We think our friend is wrong in this. Ice may be far below 32° though, it is true, a better non-conductor than the dry soil.—EDS.]



THE WINESAP APPLE.

An acquaintance of mine had his trees—which had been potted and were making a famous growth—all killed by the cold winters of '72-3 and '74-5. He was "mad," and, on being told he cared for them too well, he chose the poorest piece of land on his place, and in the spring of '75, set out an orchard, 16½ feet apart each way. The ground was at once seeded down and has been mowed annually since. The trees were well mulched, and bore this year for the first time. They are thrifty, healthy and able to stand a cold winter well. He is converted. We have but few Apples that are hardy enough to stand the winters and bear. Perhaps, the following is as good a list for this country as can be had of tested Apples:

SELECT VARIETIES FOR 250 APPLE TREES.

160 of Famouse—our very best winter Apple; 25 each of Pewaukee, Wealthy, Walbridge and Plumb's Cider; 10 Duchess of Oldenburg; 10 St. Lawrence; 5 Red Astrachan; 5 Tetofsky; 2 each of Northern Spy, Sops of Wine, Sweet Pear, Bullock's Pippin, Wagener, Belmont and Jewett's Fine Red; and 6 sorts of Crabs for home use—no sale at all for them here. The Spy and the last four in the list should be top-grafted on some *very hardy* variety, such as Plumb's Cider.

I believe that we shall have good orchards here, and will make apple growing a success, just as soon as we shall take proper precautions, and set only those trees which are top-grafted on crab or "iron-clad" stock. Setting out an orchard of this kind here is expensive at this time because, so far as I know, only one of our nurserymen keeps a stock of these trees, and we have to graft our own. The time will come, however, when the name of Wilcox will be held in as high regard among Western orchardists as those of Warder and Downing now are in our American pomological circles.

Brown Co., Wis.

Horticultural.

THE TEXAS INDIAN APPLE.

THIS is a beautiful and profuse-blooming, scarlet-flowered, shrubby plant which bears an abundance of smallish, scarlet fruits. It belongs to the Mallow family, and is botanically named Malvaviscus Drummondii. It is a native of Texas, where, in Leon county near the Trinity River, it is locally known as "Indian apple plant." I found it freely scattered along the banks and upon bottom lands of the Brazos and Colorado and their tributaries, but I don't remember having met with it on Trinity land. My friend Capt. Henderson of Jewett, however, sent me specimens from Leon county, with the following note:—"I herewith send you some young plants, also shoots of older ones, to show you the handsome red flowers and berries. It grows wild hereabout, and we call it 'Indian apple plant.' The plants are from three to four feet high, and die down in the winter, growing up again from the same roots in the spring, when they blossom all along through the summer and fall."

It grows thriftily and blooms copiously in our northern gardens in the summer time, but as it is not hardy, it requires the winter protection of a well-clad cold-frame or a cool greenhouse, or it may be wintered quite successfully in the cellar, like a Crape Myrtle, Pomegranate, Fuchsia or Oleander, but the roots must not get very dry.

One of the prettiest combinations of wild flowers I remember having seen, was near the Brazos where, on a bank, the Indian apple plant and the Mist Flower—Conecliuum cœlestinum—grew up together, forming a soft but brilliant carpet in front of the dense and high-depending vine-drapery of that rich bottom land.

It is a smaller grower and more profuse bloomer than M. arboreus, the West-Indian species commonly found in greenhouses, but otherwise both kinds are much alike.

W. FALCONER.

THE WINESAP APPLE.

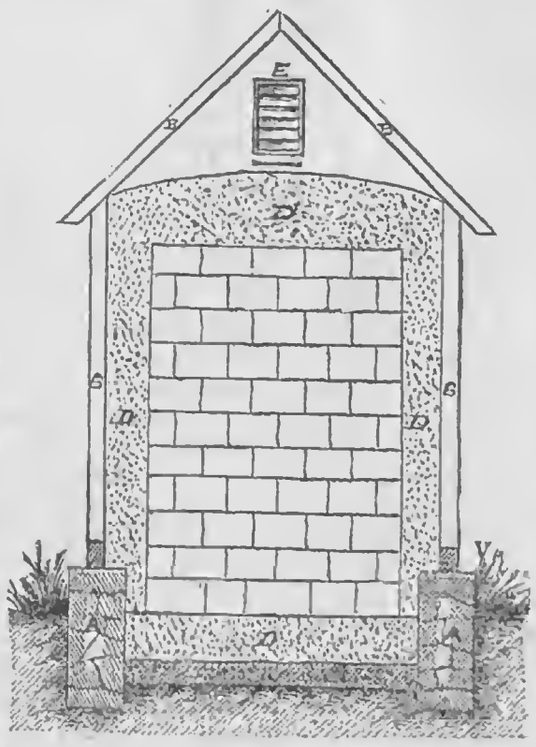
THIS variety, in the West particularly, is one of the most reliable and marketable sorts cultivated. The tree is perfectly hardy, comes into bearing early, and is very prolific, fruiting annually. As to quality, it is quite above medium—a little too tart for some—handles, ships and keeps well. In Illinois, Iowa, Missouri, Kansas and Nebraska, it is classed among the "iron clads." No orchard, or nursery is considered complete without a good supply of Winesaps. We have to thank Ex-Governor Furnas, of Nebraska, for the specimen from which our engraving is made.

Rural Architecture.

PLAN FOR AN ICE HOUSE.

THE season is once more at hand when the construction of an ice house would be in order by all those who intend to make preparations for the enjoyment of this luxury next summer. The construction of a building that will properly keep ice through the hot summer months, is a very simple problem, if three points are kept well in mind; these are non-conduction, drainage, and the prevention of air spaces or *drafts, through the body of the ice.* Ventilation over the top of the body of sawdust covering the mass of ice, should also be provided for. The plan shown in the accompanying sketch fulfills all these requirements in a very simple and inexpensive manner. The sketch shows a sectional end view of the ice house, filled with ice and packed with sawdust.

A represents the stone foundation in cross section. It should be carried below the ground about two feet and rise one foot above the same. B sectional views of the walls and roof, the sides formed of four-inch studding and boarded up smooth and tight on the inside, at least. The construction of the outside is more a matter of appearance, perhaps, but it might also be made an additional protection. The roof is shingled.



The earth is excavated inside the foundation walls to within six inches of the bottom of the same, and then filled in to a depth of six inches with round stones, the smaller ones on top. On this, place a foot or more of sawdust, and on this, lay the ice to within a foot of the inner walls all around. C, in the picture, represents the stones and D the sawdust. As you fill in the ice, keep the sawdust well packed down all around in the space between the ice and walls of the building. When you have reached as high as the eaves, cover the ice all over the top with two or three feet of sawdust. A ventilator, made like a Venetian blind with immovable slats, is shown at E, at the farther end of the building; one should also be placed at the opposite end.

With this general plan to guide him, any intelligent person will have no trouble in constructing a *very good* ice house. The dimensions, of course, must depend upon the size of the family and the requirements. A building 10 feet wide, 14 feet long, with 12 feet walls, would be a good size for a farmer's family of eight to ten persons, and a dairy of a dozen cows.

WILLIAM ROBERT BROOKS.

Ontario Co., N. Y., Nov. 27th, 1878.

THE INTERNATIONAL DAIRY FAIR.

The Greatest Display of Dairy Products Ever Made.

AN ENCOURAGING SUCCESS IN ALL RESPECTS.

FULL SPECIAL REPORTS.

THE GREAT DAIRY FAIR.

The term International is applied to so many evén petty things now-a-days that, with all deference to the management, the use of the word gives a sort of impression of clap-trap—a cheap "greatest-show-on-earth" sort of thing. So the visitor to the International Dairy Fair, has been at once most agreeably disappointed in finding solid excellence and positive interest of a very high degree drawing him thither day after day and detaining him, in spite of himself, in the investigation of what might at first have seemed common-place and unattractive to any except professional dairymen.

THE ARRANGEMENT OF THE DISPLAY

is very simple. The spacious floor of the old "Rink" (now the exhibition building of the American Institute) is occupied by the butter and cheese display, mainly arranged in groups, by States, or classified according to certain premiums offered for the best butter or cheese made from certain kinds of salt. The cheese is shown in lots weighing not less than 250 lbs.; the butter in lots of 200 lbs., if made in creameries, and in lots of 100 lbs, if made in private dairies, except when competing for the special prizes offered for the best 50 pounds made with Higgins's Eureka salt, or with Ashton's Factory-filled salt.

Grouped near the great fountain in the center of the floor, are the lofty cheese pyramid of the Messrs. H. K. & F. B. Thurber & Co., surmounted by a well stuffed specimen of a Jersey cow and gay with flags, evergreens and quaint mottoes from the Bible, Shakspeare and Hudibras, and a far less pretentious, but scarcely less attractive pyramid of American cheese, erected by Smith & Underhill, conspicuous for its severe simplicity and freedom from any clue to proprietorship; and besides, there are two more or less pyramidal pillars of salt in bags—the one, Higgins's Eureka, shown by the Thurbers; the other, Ashtons', shown by their agents, F. D. Moulton & Co. Along one side of the floor, happily the cheese side, the cow stalls are arranged, and at the farther end two cheese factories, Whitman & Burrell's, and Jones & Faulkner's, are in full operation, exhibiting rival vats and apparatus. Churning and butter-working are going on also at each of these stands, to the great interest of the ever-changing crowd.

DAIRY APPARATUS AND APPLIANCES

of all kinds are shown on the elevated platform surrounding the floor; as are also patent milk-pails, strainers and coolers; vats for setting for cream; vats for cheese making; creamers, that is, systems of setting milk for the rapid separation of the cream; churns in great variety; butter-workers to the number of five or six; butter prints or molds, some for simply stamping the butter upon one side, and one for stamping it upon five sides in brick-form and very rapidly; butter packages in great variety, including those wrapping or packing butter in pound or half-pound prints, and those adapted to packing 50 lbs. in tubs, or 100 lbs. in boxes; butter coloring shown in three different forms, namely, in solution in alkali and water, in solution in oil, and in the form of highly colored salt; rennet-extract in both solid and fluid form; lactometers, cream gauges, etc.; thermometers for dairy use and a great variety of minor utensils; butter and cheese tryers, etc.; Howe's New Improved scales; jars of glass for transporting milk, cream or butter; milk cans, and perhaps other articles of property for dairy use.

Besides these, the New York Plow Co., makes a display of goods particularly adapted to dairy-farmers' needs. Somebody shows a hay cutter working with a scalloped knife which would make hard work on most farms look like fun. The exhibitor had not any cards and did not tell his name. The Alligrotti and Whitson refrigerators made each a great show. There were in addition a number of exhibits having not the least reference to dairy matters which were allowed in the building probably because they paid well and helped to fill up, for there was room and to spare.

THE CATTLE SHOW

was a source of constant interest to all classes of visitors, and to none more than to the exhibitors of cheese and butter. There were a few good specimens of the cows of several breeds and a few bulls. The Ayrshires came nearest the door and consisted of a number of young things with a single cow which, by the way, had a nice calf the second day of the fair, shown by Wm. Crozier, and three superb cows belonging to S. M. & D. Wells of Wethersfield Ct. These three cows represent the three principal families of their herd. They are 24-to-30 quart cows and have won prizes enough to lead us to speak of them with great respect, even were they less perfect types of the breed than they really are. Next to them come the Holland cattle called Holsteins, belonging to Jas. Neilson, two bulls and half a dozen females. Among them were two very symmetrical heifers, and some fresh cows, yielding each a large mess of milk. Beyond these stand three beautiful Devons belonging to Harvey N. Weed, of Stamford Ct. How sleek and smooth their red coats! How symmetrical their white horns! And how fine their forms! How closely also they match in form and feature! No breed of neat cattle has anywhere near so thoroughbred a look or is so perfect in all good points as the beautiful Devon. Next to the Devons stand the Polled Norfolks only two—a cow, and a heifer shown by G. F. Taber, of Patterson N. Y. This beautiful breed is red, like the Devons, and is claimed to be equally good for beef, and for milk. The animals exhibited are remarkably fine; in fact, one seldom sees a finer cow, take her all in all, than the older one.

It was unfortunate to place the Jerseys next, for they rarely show well alongside of Devons, and the Norfolks are no better companions for them. These breeds keep in good flesh while they are giving 14 to 20 quarts of milk a day, but the Jerseys milk down very thin, and it is impossible to keep a good cow in flesh while she is in full milk. Next to the Norfolks come James A. Hoyt's Jerseys, very beautiful ones they were, and very good ones, too. He showed a large solid-colored bull and several females, among them one old cow, quite thin but of most excellent form, having a fine maternal face, which it is a pleasure to see. Next to these, Mr. Crozier showed some good Jerseys and one Guernsey, among them two cows recognized as those with which their owner won the award at the Centennial Exhibition, and also the highest prize as well as the herd prize at the New York State Fair this year—namely, Josephine second and Bella Hinman. The line of cows is completed by a number of "natives" exhibiting points of decided excellence as milch cows; but, as a rule, coarse, heavy gross animals contrasting unfavorably with all the rest.

As a whole, the cows form not only one of the most attractive features, but one of the most instructive; and to the breeders the advertisement has been so valuable that similar opportunities will not be neglected. Nevertheless, it was a great blunder to place them on the floor of the Rink. There was plenty of space in the rear room, called the machinery annex, where the odors of the stable would not have contaminated the butter and the milk. We observed butter which was exposed near the cows only a short time, which though freshly churned from excellent cream, was so tainted with those odors as to be absolutely unedible.

BUSINESS ASPECT OF THE FAIR.

A Dairy Fair is a novelty in the city of New York. We are quite accustomed to seeing one whole quarter of the city, and other localities besides, given up, in a great measure, to traffic in butter and cheese, and our dealers might any day, and in fact *do* every day, make a greater show than is this week seen at the American Institute Building. Nevertheless the show proves of great interest to many people. So far as appears upon the face of things, we conclude that the show had its inception in the natural desire of the great cheese and butter interests of the great West, to gain for their ever-increasing and improving products a wider reputation and better market than their home shows and fairs afforded. The Dairymen of New York and Pennsylvania have long enjoyed a sort of monopoly in which they have felt secure, and have not minded it much when somehow or other prizes to which they felt themselves entitled, as at the Centennial, for instance, by the favor or error, or just decision (?) of Judges, went to the West, especially when the slighted articles would bring several cents more per pound in the open market than those which won the prize. They have been, to say the least, not enthusiastic about the fair, and perhaps have not prayed fervently for its success. Why should they? They stand at the head now, and it is not exactly pleasant to be crowded and jostled by an aspiring crowd, each trying to gain the same position of pre-eminence, many not being over scrupulous as to the ways and means. Nevertheless, we are proud to say they contributed liberally to the show. They made their entries in time—on or before the 20th of November—and their goods were here and ready to be put on the tables promptly on the 28th. This was according to the published requirements, and, of course, they feel as if it was hardly fair for goods, especially for butter, to to be entered and presented as late as the middle of the week of the Fair, and still be admitted to competition with their own—"kept" as one of them phrases it, "in a cow stable for a week."

This state of things was unavoidable; even the managers had no idea of the grand success which the Fair would prove, and were unprepared for it. Exhibitors held aloof and many had to be urged to come. These came quite at the last, and every allowance ought to be made, considering that the whole thing was new to those who had the control of it, as was painfully evident from the rules and premium list put out by them.

The Fair owes a great deal to the zealous co-operation of the Messrs. Thurber & Co., one of whom has just returned from a dairy trip to Europe where he attended the great Dairy Fair of London. There he interested at least one notable English dealer to make a most interesting exhibit of

FOREIGN CHEESES,

and moreover, he brought out a most curious and instructive collection of cheeses, himself. It is wonderful what attachment mankind exhibit for cheese such as they have been accustomed to, or brought up upon. This alone will account for the continued use of those barbaric forms and varieties of cheese which one sees, such as the common kinds of Italy, Spain, Switzerland, and even of Germany and Holland. Nothing can be worse in appearance than the cheese put up in bladders or other skins, in Italy and Spain; certainly nothing is so bad in odor as the Limburg and some others of the cheeses of Central Europe. We have long imitated the cheeses of England; more recently those of France and Germany; and it is not too much to expect that our cheese-makers will be vying with Spain in goats' milk cheeses, and possibly with Nubia in cheeses of mares' and camels' milk, if there is a market for them.

THE MARKET.

We may well consider what the market is for our Dairy produce. It seems fairly to be limitless. Certainly at present and for a long time to come it is and will be unlimited. We are making great advances in our ability to produce these standard articles cheaper and better than ever before. Herkimer County butter, packed in June 1875, was opened on Thursday last, "fresh as a rose." We need not fear to meet the butter of either Ireland or Denmark, famous and excellent as they both are, in the markets of the world. If, however, great as our exports have become, we study statistics as we should, it will appear that we are not doing very much, after all. France and Holland are vastly our superiors; and beside the enormous exports from these countries, their populations consume cheese as we do meat. What we have especially to look to is improvement in flavor, and this should begin with the feed which the cows have both in summer and winter. Next, the purity of the milk promoted by its exclusion from the air of the stable, and from all contamination, is one of the most important things—all the more important because neglected and very hard to secure. We have been improving our processes of cheese and butter making and marketing, until but little improvement seems now to be possible, and yet it may be in these particulars that the most important advances may soon be made.

In one thing certainly we must change; we should eat more cheese ourselves, as a nation. We are small consumers of cheese, and it is an exceedingly palatable, nutritious, muscle-building and cheap food.

THE ADDRESSES.

The instructive addresses of Ex-Governor Seymour on Tuesday evening, of Hon. B F. Butler on Wednesday, and of Mr. F. B. Thurber on Thursday evening, have been an important and valuable feature of the fair. The speakers have dwelt more or less upon statistics, but have given us other and very instructive views of the whole subject. This was particularly the case with Mr. Webb, a very large English dealer in dairy goods, whose address on Friday evening was a comprehensive view of the mercantile features of cheese from a foreign standpoint. Prof. Arnold, also, spoke entertainingly, but his words, like those of most of the other speakers, were indistinguishable six feet from the platform, because of the ever-present noise in all parts of the large hall.

PROGRESSIVE FEATURES OF THE BIG FAIR.

IMPROVEMENT ON BYGONE SHOWS.

The big fair, the Grand International Dairy Exhibition, has come and gone. The memory of it is stupendous. Think of it—three acres of butter and cheese, and some of it thirty feet deep. It was truly international, and, dairymen of America, allow me to blush for you! England took the grand sweepstakes premium for best cheese, and Ireland, the beautiful gem of the "say," beat us in butter. I will never look an Irishman in the face again. I am not altogether certain that the Irish victory was in the sweepstakes contest, but I tasted the butter and it was better than anything I got hold of at the fair, no matter where it was made.

Having indulged in these few "glittering generalities" let us come down to the business in hand and see if there is any solid good to come of all this hurly-burly.

All exhibitions of dairy products, like the exhibits in any other line of commerce, must of necessity be, to a great extent, mere repetitions of one another. We must not look for something new and startling at each dairy fair we attend. Gradual progress is better than sudden revolution, and if this fair has contributed its quota of improvements, that is all we have a right to ask of it. That it has not only done so, but greatly surpassed any other dairy exhibition that has ever been held in this country, I think no one who has seen them will deny. Fortunately there was no disagreement or dissention among the projectors of the enterprise, and without any special experience in this line, they had energy and good sense enough to press it through to a magnificent success. All men cannot be original, but they can be accommodating, and this excellent quality pervaded every member of the committee of arrangements, and caused them to furnish everything within their power for testing cows, implements and products, which to the practical eye that is familiar with the common processes of the dairy was interesting, absorbing, educating to the highest degree. If milk was wanted, it was furnished by the wagon load; so with water, ice and anything that was called for, the supply was equal to the demand. The patent cheese vats turned the milk to curds. The patent annatto was on hand to color it; the new-fangled press to mold it; the different kinds of cheese cloths to cover it, with innumerable boxes to put it in. For butter the different cream raisers were on hand to separate the cream. The multitude of churns pounded, sloshed or rolled the butter out of it. The numerous patterns of butter molds formed it into quarters, halves and pounds; and there was every conceivable form of package on hand to ship it in. With these processes in operation before our eyes, we would have been dull scholars, indeed, if we had not noted many vast improvements over the old ways of the dairy.

IMITATION CHEESE.

In cheese the most interesting feature was the perfection of the American imitations of the finer classes of European cheeses. The factories have been able to imitate English cheddar pretty closely, but the art of imitation was carried highest by the dairy makes. A dairyman from Otsego County, whose name I have lost, displayed a cheese of his own make, that was full brother to an English Gloucester. I was particularly struck with a remark this dairyman let fall. He told me that his great-great-grandfather was an Englishman and made Gloucester cheese in the Old Country and came across the Atlantic bringing the knowledge with him. This family has now been making this cheese in this country something like a hundred years, imitating an English cheese, and yet this was the first time that any of the family, except the original great-grandfather, ever saw an English Gloucester cheese. It is simply a miracle that they have been able to preserve the uniform quality of their cheese until it is to-day as correct an imitation as it was a hundred years ago, without once seeing an original package to pattern after.

There were two displays from Orange County of imitations of the French cheese called *fromage de Brie*. Unfortunately there was no original package on hand to compare with these makes. This cheese being made of fresh cream, will not bear transportation well across the water. This cheese sells in this market for from fifty to seventy-five cents a pound.

Why is it that our dairymen insist upon making a third-rate skim cheese that sells for six or seven cents a pound and drives the consumer out of the market, when a little more enterprise and patient study would quadruple their profits? These imitations contain a grand lesson, and it cannot be long before the dairymen will profit by it.

DEEP SETTING.

Nothing about this fair was so striking as the evidence of the drift of the inventor's energies towards perfecting a system of deep setting for cream raising. A few years ago the whole space of a dairy fair was taken up with full-grown or model pans for shallow setting, made to run water through, over, under and around them, with hot, cold and no-water attachments. At this fair that class of pans was conspicuous by its absence. I saw but one model of a shallow pan, while there were four systems of deep setting on exhibition, with the representatives of three others present. This thing has certainly been revolutionized. It was generally regretted that a warm room could not be gotten to test the coolers in.

SALT-LINED BUTTER PACKAGE.

There is probably no one thing that causes a greater loss to the butter dairyman than the taste of the wood that always gets into butter when packed in wooden tubs and firkins. Various linings have been invented to prevent this, but with one common result of a failure. The best the dairyman has been able to do was to soak his tubs in brine and in that way kill the wood taste as much as possible. There was on exhibition at this fair a salt-lined box. The lining looked as though it were made of pure salt, and was about the sixteenth of an inch in thickness, and—if it does not melt down, and the agent assured us it would not—I would consider it a very decided improvement, and of the very highest value to the dairyman.

The professional butter maker was there go-

ing around like a roaring lion seeking whom he might devour; or in other words, looking for some man to talk to death, telling him the only true way to make good butter.

It did me good to hear one cheese dealer remark that one day at that fair had taught him more than he had learned in three years in the store.

There was an immense show of butter colors. Many of them were good, while others had on exhibition a vile stuff, compounded of old butter or rancid lard, that would help to spoil the meanest butter that was ever made. H.

DAIRY IMPLEMENTS AND SUPPLIES.

Our special reports of the fair which follow will give a comprehensive idea of its extent and importance, while our engraving shows some of the more striking exhibits. The success of the enterprise has led to a desire to perpetuate the fair under an organization to be known as The International Dairy Fair Association, and at a meeting of exhibitors it was moved and carried that a committee of twenty-one be appointed to meet in Utica, the second Tuesday in January, to perfect an organization. The committee are J. H. Reall, c, H. D. Sherman, Wm. Crozier, F. D. Moulton, Hon. T. Ballantyne, D. E. Wood, R. P. McGlonsey, W. E. Smith, N. D. Hoard, A. M. Fuller, G. W. Simpson, T. Mortimer Seaver, Sec., Jno. Gould, M. Folsom, H. Lewis, F. B. Thurber, Geo. A. Blanchard, C. W. Hoer, G. C. Lawrence, L. S. Hardin, and X. A. Willard. Messrs. Reall, Seaver, Hardin, Moulton and others, were energetic in debate, and after some little friction concerning details, the meeting adjourned, after thanking Messrs. Seaver and Folsom and Reall for their efforts in contributing to the success of the fair.

The dairy implements ranged around three sides of the hall included about every necessary mechanical appliance for the manufacture of good butter and cheese, while the rennets and artificial colors were in great force. Nothing was more conspicuous than the patented

CHURNS,

and it would really seem that every possible shape and motion had been exhausted, in the endeavor to secure something that should express the final and supreme effort in this direction.

The Blanchard in various shapes and sizes was at the head of the dash churns, and notwithstanding the constant change maintained its position among churns with success.

The oscillating principle found exponents in the Monitor pendulum, a metal cylindrical churn, with tapering pointed ends. It is swung from a rack by cords which allow an easy swinging motion that throws the cream with force into the contracted ends, where it rebounds upon itself falling back into the larger part of the cylinder. The motion in the Davis is the same, but the churn is made of wood, semi-square, with beveled corners, while the Bullard is an unmodified box, as angular as the tenets of the Puritans, with a hobby-horse motion that would make it as welcome in the nursery as the dairy. Whipple's rectangular is a square box fastened to a rack by two of its corners, that imparts an end-over-end, tumultuous motion quite unlike the Herndon churn which is the same in shape, but fastened at the center of the diameter of the flat side. The churn is made of metal. The large revolving barrel factory churns are too well known to require comment. The old dash churn, the lineal descendant of the goat-skin, was neglected entirely.

It is said butter can be made in anything that will hold the cream together during its agitation, so that the test is reduced to questions of rapidity, ease of handling, and grain of the product. Almost all the churns enumerated made butter that seemed a most acceptable article, but the judges were so slow in their movements that the result can only be ascertained at the close of the fair—too late for comment in this part of the report.

BUTTER WORKERS

were almost as plentiful as churns and as various in design. Mr. Geo. Blanchard of P. Blanchard's Sons, showed a power worker, something entirely new. The action nearly approaches human motion, and the machinery is simple, strong and effective. The Vermont Farm Machine Co. had a butter worker that depended for its pressure on a large roller hung on a frame one end of which ran in grooves at the side of the table, while the other end formed the handle. The motion was lateral. The Lilly worker, as well as Embre's, revolved the butter on a circular table over a grooved stationary worker, the the power being contributed by a crank-motion. Whitman & Burrell used a worker somewhat similar to Reed's which was also on exhibition.

The improvement in butter workers has greatly lessened the labor of handling the product, and the power worker mentioned is an excellent thing for factories.

The patented apparatus for setting milk was conspicuous in the

COOLEY CREAMER,

which is an exponent of the cold, deep-setting plan, and, in operation, it made a very satisfactory exhibit. The cans are immersed in a box and surrounded by ice-water, on the theory that the congelation of the milk forces the light cream globules to the surface mechanically. Shaw's Creamery works on precisely the opposite system. In a metallic box containing places for deep cans which are immersed in a water-jacket, surrounded by a hollow compartment is forced hot-water or steam until a temperature of 130° is attained, when the process is reversed and cold water becomes the agent to cool the milk from the bottom upwards. This is all done on the "current" theory, and its inventor claims fine results, as do also Smith, Ryder & Clark with their creamery pan which is said to be self-skimming, top-cooling or refrigerating, a combination that enables the owner to practice either, or both systems. We regret we have not space to describe the apparatus, which is somewhat intricate.

The average dairyman would be puzzled to decide among the many means suggested for carrying milk and butter to market.

BUTTER PAILS AND BOXES

consisted of the familiar Orange County pail, and one somewhat similar, made by J. B. Gilberds, which has a new, simple fastening, and is very low in price. The same exhibitor has a wood-lined tin package for preserving butter, and a pail was opened in the presence of the judges that had been sealed three years, and subject during that time to all temperatures. The butter was sweet and palatable. Tinkham's butter box and shipping case was simply a nest of six square wooden boxes in a felt-lined case, while Sabin's box was of similar construction, salt-lined. N. Waterbury appealed to the consumer by placing butter in brine-soaked one-pound boxes, which are packed in a large case, the interstices being filled with salt. The Lester Milk Company showed how they delivered milk in glass jars, hermetically sealed, while Mr. Ward of Washington, had a model of his manner of keeping milk in good condition while being delivered. He simply incloses the cans in a refrigerator jacket. N. Halsted uses glass jars for butter. When filled they are placed in a box, the bases resting on rubber buffers, and the compartments separated by double strips of thin wood. Ice may be inclosed in the case if desirable.

MILKING-MACHINES, PAILS AND STRAINERS.

Durand's milking-machine is a new idea. It is sought to impart the natural motion of milking by inserting the teat into a vulcanized rubber cup with soft rubber continuation. By working a lever, a vacuum is created which pulls just as does the motion of the hand. The motion is the same as if the operator were manipulating a large pair of pruning shears: It was not experimented with on any of the cows in the stalls.

The Perfect Milk Pail is a tin pail that supplies a seat to the milker who directs the streams into an open-mouthed funnel, passing through which it comes into contact with a strainer before entering the pail. Bailey's Milk Pail is also a covered receptacle which receives the milk into a funnel so placed that impurities are said to drop outside on the ground before reaching the funnel. Those who do not avail themselves of either pail, may choose between two strainers made by Moseley & Stoddard, and P. S. Ryan. Both strainers hail from Vermont. The Pyramidal strainer made by the first-named firm, is a pyramid of very fine wire cloth (100 threads to the inch), that projects up into the bowl. The milk impinges on these surfaces, impurities falling to the bottom of the bowl. This arrangement admits of very fine gauze being used, and secures a good, clean milk. The

BUTTER COLOR AND RENNET

men were in force, Wells, Richardson & Co., taking the lead with their color, which was displayed to advantage by a sample of butter from the farm of A. W. Cheever, editor of the N. E. Farmer, one-half of which was colored by the butter color. C. Hansen, Mrs. H. B. Smith, Geo. B. Sanders & Co., and Perrin, with his granulated June butter color, followed.

Whitman & Burrell displayed some fine rennets, while F. A. Reichardt's dry extract of rennet, and Visser's artificial rennet attracted attention. Charles Millar & Son, made their entire exhibit of Visser's rennet.

Mr. C. Am Ende had eggs, fruits and vegetables in a state of fine preservation by means of his Regalin preserving powder.

CHEESE FACTORIES

in operation were fully shown by Whitman & Burrell, and by Jones, Faulkner & Co., these two firms making the finest, most complete and interesting exhibit in the hall.

The "Cooley system" of butter-making, for a young invention, may be said to be progressing. In the short time it has been before the dairy public, something over four thousand of the creamers have been introduced, and the sales are increasing, we are told, in a very satisfactory ratio. At the fair, the Vermont Farm Machine Co., of Bellows Falls, Vt., made a very complete exhibit of the creamers, Davis's Oscillating churn, and its Eureka butter-worker, all of which were put to the test of practice under the supervision of the energetic vice-president and manager of the company, Mr. Butler.

As the Cooley system is a new departure in the treatment of milk, our readers will doubtless find a brief description of it interesting.

Mr. Wm. Cooley discovered, as the result of his experiments, that cream could be raised in twelve hours, or between milkings, and, as a result of that, the labor, expense and annoyance of handling this product would be materially lessened, while the manufacture of butter would be placed on a uniform basis that would permit of anyone making butter that should be of one uniform quality all the time; that is, that climatic changes would not in the least interfere with or modify the product. As a result of this discovery, we have the Cooley Portable Creamer, which is a water-tight, tin-lined box fitted for the reception of cans, and provided with inlets and outlets for running spring water, which may be used instead of ice, when thought desirable, or in connection with it. Into this receptacle are submerged cans that are twenty inches in depth, and eight and one-half inches in diameter. A tight-fitting cover fits over the can, the air between the cover and the milk forming a barrier to the entrance of the surrounding water. The temperature is then maintained at from forty to forty-five degrees in spring and summer, and at forty degrees in winter, and no further attention is required until the cream shall have risen in about twelve hours.

The celerity and neatness of the operation enable the operator to employ sufficient cans only to contain a single milking, which is a great saving in dairy utensils; sweet cream from sweet milk of a uniform quality is said to be secured, that makes a uniform quality and quantity of butter, and as the milk is cooled rapidly and equally in a closed can, it is free from any contagion, and is certain to remain unvitiated by noisome odors. The milk set during the fair produced perfectly sweet cream, free from any "animal odor," and the quantity was the subject of comment. This cream was worked in the Davis Oscillating Churn, a churn which may be described as an oblong box with beveled corners, swung from a rack by iron hangers, which give the churn a lateral swinging motion, by which the cream is thoroughly agitated, the globules crushed and the butter made in a very short time.

The Eureka Butter-worker is a table with a shallow tray, one end of which is shelving. A large wooden roller is hung on a frame, the lower sides of which run in grooves on each side the table. The other end makes the handle, by which the roller is manipulated. By this arrangement, it is claimed, that an even pressure is exerted, and the table being deep, the butter may be covered with brine that cuts the buttermilk, brings out the flavor and color of the butter better than water, keeping the tray moist, and preventing the butter sticking to the roller or sides of the table.

This rapid generalization of the exhibit will convey an impression of its completeness, and inform those who wish to keep abreast of new and meritorious inventions what is being done in the dairy interest of the country.

Occupying a large area in the northwest corner of the hall was the very complete exhibit of Messrs. Whitman and Burrell of Little Falls, N. Y. The firm had made elaborate preparations not only to display its excellent wares, but had also arranged its machinery in a way to give an intelligent idea of the operations of a cheese and butter factory—a really novel sight to New Yorkers, whose notions of cheese making are not quite as clear as crystal. The announcement that *real* cheese would be made during the progress of the fair attracted large crowds, and when the milk was poured into the six-hundred-gallon vat and the steam turned on, the curiosity to see how the thing was done, knew no bounds.

It is only necessary to add that the skillful cheese-maker (a lady by the way) went through her part of the work as serenely as if she were at home, raking over the curd and mixing things generally to her entire satisfaction, and when finally the curd was made ready for the gang-press, it was discovered that an excellent product had been made in a very short time.

To old hands in the business this is of course understood, and while the newly-made cheese is in process of curing we will stroll through the exhibit noting the many new improvements in cheese- and butter-making machinery. As we enter the inclosure, we stop to look at the easy noiseless action of the new "Economiser" return-flue boiler, which is furnishing power to run a large Blanchard factory churn. This boiler has some peculiar points in its construction, that command attention.

It is very economical of fuel to begin with, and by surrounding the fire with water all the heat at the sides and bottom of the fire is utilized, and fire tile are made an unnecessary expense. Owing to the arrangement of the heating surface, the fire does not impinge on the bottom of the boiler, hence does not bake the scale into the rock-like substance that is such a trouble and expense, especially in localities where lime-water is prevalent. The sediment remains in loose particles and is easily removed through the hand holes. Since the introduction of these engines by the firm, the sales have been rapid, and testimonials to the efficiency, power, economy and cheapness of the "Econmizer" have been most flattering. But all this time the large cheese vat has been silently obtruding itself upon our notice. Its tastefully painted exterior completely disguises the fact that it is made of clear pine, two inches thick, the bottom of but two planks which are furnished with bolts that traverse their entire length, effectually regulating any tendency to swelling or shrinkage, while the levers applied to the legs at one end, make dumping a simple matter of a twist of the wrist. The inner vat is made of large sheets of heavy tin of a quality and smoothness that leaves nothing to be desired,—except perhaps a Hubbell gang press. This press exerts a pressure that would convince even Congressmen, and with the Wilson hoop that discards rubber-ring, followers, etc., relying on its two solid stamped-out covers and hoop to give perfect shape to the cheese it is easy to press cheese evenly and with little labor. A new gang press that flanks the Hubbell is just being introced by Messrs. Whitman & Burrell. It is so simple and easily worked, and the device for exerting and holding the pressure is so ingeniously contrived that it elicited approval from all who saw it worked.

Another specialty, that looked to the uninitiated like an instrument of torture, was a knife curd-mill. The cylinder is studded with knives instead of pegs, which are arranged spirally so as to carry the curd through rapidly. The grate also is a set of knives, and when the cylinder is set in motion there is no nonsense about it.

Perhaps this explains why the cheeses made by it have so monotonously carried off first premiums at fairs. Since the introduction of these mills three years ago, two hundred of them have been turned loose and are making sad havoc with curd—but only to benefit the cheese.

It would consume too much space to particularize the many small things that, while in themselves inconspicuously meritorious, contributed to the completeness of the entire exhibit. There, for instance, in one corner, was a cunning machine for making cheese-boxes, while whole rows of bottles of rennet extract, contained enough liquid to curdle the milk of human kindness itself. A long table was filled with nickel-plated cheese and butter-tryers, thermometers, curd-knives, annatto, and similar small articles, looking quite like a surgeon's table waiting for a "subject."

Strolling out of the inclosure after our round of inspection, and meditating on the perfection to which the science of cheese-making had been brought, we were attracted by a legend—"Get the best"—and it seemed to the reporter that he had seen enough to be competent to advise any one where to go who was seeking for the best.

Messrs. Moseley & Stoddard of Poultney, Vt., displayed a pyramidal strainer. It is a seamless bowl made in brass, copper or britannia, to the bottom of which is screwed the strainer, made of very fine wire gauze. As the strainer projects up into the bowl in the shape of a pyramid, the milk as it is poured around it, cannot deposit sediment on the meshes, hence clogging is avoided. This is the main principle. Additionally are many conveniences for its application to cans of any size and shape, which, with its extreme simplicity and low price, makes it a very desirable addition to the apparatus of every dairy.

The display of coloring compounds made by Wells, Richardson & Co., of Burlington, Vt., was awarded a diploma. During the fair the cheese made by Jones, Faulkner & Co., was colored with their color, and butter exhibited showed its merits to good advantage. If popular taste will demand a uniform tint in butter and pay proportionately for it, it is fortunate that the color made by this firm is so generally used as it is not in any respect deleterious, in fact, is perfectly neutral in its effect except on the price of the butter which its use increases in value from four to five cents per pound.

Mr. James B. Gilberds of Jamestown, N. Y., had a few of his recently improved Optimus butter pails on exhibition, as also a wood-lined metallic package designed for preserving butter for an indefinite time. One of these packages was opened for inspection, which contained butter that was perfectly sweet after having been packed and sealed for three and a-half years. The Optimus is made as a return pail, and Welsh tubs are also fitted with the cover, making it a very cheap, serviceable package. It received a diploma.

Three very meritorious articles, namely, liquid rennet extract, liquid cheese-coloring, and liquid butter-coloring, were shown as products from the laboratory of C. Hansen, 444 West Sixteenth street, New York City.

These articles have, in addition to the honors just received at the fair, taken three gold medals at the Paris Exposition. It is claimed for the butter-color that it increases the yield of the butter by its own weight; it does not color the butter-milk, and that the color given the butter is very fine. The liquid rennet extract is a pure extract of calf rennet, perfectly preservable, always uniform and free from objectionable ingredients. It is endorsed by Prof. Arnold and other authorities.

(Continued on page 797.)

Everywhere.

NOTES FROM NORTH-WESTERN PENNSYLVANIA.

In the RURAL of October 26th, a correspondent from Steuben County, N. Y., inquires which is the best sweet corn. Having tried several varieties, I can recommend the Russell's Prolific as the best for table use and general cultivation. It is only a few days later than the Early Minnesota, has ears nearly as large as the Evergreen, and in flavor is far more sweet and nutritious than any kind I ever saw.

I am located in a good farming country, about twenty miles south of Lake Erie. In this section, along the creek bottoms, the soil is gravelly, but changes to a loam as the surface becomes higher, until we reach the oak and chestnut ridges, where the soil is principally clay. The highest land is generally selected for fruit, because it is considered that the frost is heavier and more injurious in the valleys. All farms, however, have more or less fruit trees of various kinds, yet it is very seldom that the farmers along the valleys have enough fruit for their own use. They are quite often obliged to call on the hill farmers for their supply of fruit.

This is a good country for corn, the average yield being about seventy-five bushels per acre. During the past season a new variety called the Early Compton, has been raised with success. A neighbor of mine informs me he husked 140 bushels on one acre, one ear measuring eighteen inches in length. The ears are quite large at the butt end, and sometimes are difficult to break off. But that is the only fault that can be found with it. When ground, the meal is very fine, and most excellent for making bread.

Wheat is one of the main crops here. We usually have from twenty to thirty bushels per acre. The ground is plowed; next about twenty-five loads per acre of good barn-yard manure are spread on, then harrowed in, and after that the seed is put on at the rate of two bushels to the acre, when the ground is well harrowed, if the drill is not used, and, lastly, the field is well leveled with a roller. The White Michigan has been the variety mostly sown till this fall, when quite a number of farmers have sown the Clawson.

A neighbor of mine has an excellent plan of mixing his manure. He has two barns with a space of about sixteen feet between them, occupied by a hog-pen. In one barn he stables his cows and in the other his horses, and it is so arranged that the manure of all his stock is thrown into one part of his hog-pen where his hogs have a wonderful faculty of mixing it with their own droppings. He says that since he has used the manure after the new plan, he can notice a difference in his land and crops, both being much better than before, when the manure was applied separately. A RURAL READER.

RURAL SPECIAL REPORTS.

HURON CO., OHIO, NOV. 28.

FARMERS are well along with their work in this section. The weather has been favorable; some frosts, but no cold weather yet. Winter never varies more than by a few days from the 1st of December in its genuine advent to this "south shore country," and provident farmers have learned to be prepared, though often we do not need the precautions usually taken, owing to the mildness of the winters.

We have an abundance of apples, with very low prices—ranging from 75 cents down to 50 cents per barrel for selected fruit. Cider apples only bring from six to eight cents per bushel; thousands of bushels of good fruit have not been picked and will be wasted. Wheat sells for 90 cts. per bu.; clover seed, $3.60; corn, 30 to 35 cts. for 75 lbs. in the ear from the field—about 40 cts. in the crib; potatoes, 75 to 80 cts. per bu., and scarce.

Here let me say that I saved a large amount by not contracting my potato crop last fall. I saw by the Crop Reports in the RURAL that potatoes would bring a good price, so refused an offer that I would otherwise have taken, and have made at least $100 by being posted, and have about 500 bushels of nice potatoes in my cellar yet. Is it needful to say to farmers that it pays to read the papers? I do not know of a better investment than is the money paid out to keep posted upon, not only the prices of produce, but the amount of produce that will be offered for sale, thereby giving the farmer data to form intelligent calculations.

We have here an excellent farming county; good intelligent people; good schools; plenty of social advantages; good markets; congenial climate; good water, consequently a healthy, satisfied community, with but little land in the market, and that is generally held at war prices. Considerable improvement is going on in buildings, etc., in town and country. E. L. M.

HOWARD LAKE, Minn., NOV. 30.

NOTWITHSTANDING the fair prospects of farmers, during their last harvest, times are still pressingly hard, somewhat owing to the quality of wheat being much poorer than has been common in this State, and therefore bringing, of course, a smaller price. Another reason is, that many left the State the year before, to get work elsewhere, and had not returned, so that labor was so very high during harvest time that some fields of wheat were not cut. Farmers hereabouts depend very much on teaming—drawing ties and wood for the railroad—and last winter being an open one, but little was drawn, on account of bad roads. This causes nearly all of them to be behind with debts at all of the stores, and these kinds of debts are a little the worst misfortunes with which farmers are afflicted, but still they will ask credit, and the merchants will give it, often ruinously to all parties. A.

CUMBERLAND CO., Maine, Nov. 29.

THE present year has been full of encouragement to the "Down-East" farmer. No severe drought during the season afflicted him, nor any considerable injury to crops from any source. The Colorado beetle appeared plentifully in many sections of the State, but where he was fought with determination he was generally conquered. The beetle was not, I think, so injurious to the potato crop as the dry period which commenced in June and lasted several weeks. Yet the potato crop was not a failure, though light. Good Early Rose are worth, in Portland, 85c. to $1; beans, $2; Baldwin apples, barrel included, $1 to $1.50; poultry, 12 to 14 cents. Corn and wheat raised in Maine are not for sale, and therefore are not quoted in our papers. Western corn is about 60 cts. per bushel. Dressed hogs are worth 4½c., though Portland papers quote them 5½ to 6½c.; but that is higher than Boston or New York papers put them. Pears and grapes were very abundant and of fine quality in this State. We now raise nearly all the popular varieties of grapes here in great perfection. Our warm, dry, granitic soils will ripen the Isabella nearly every year, and we produce Rogers's Hybrids No. 3, 4, 9, 15, 19, 22, and possibly others, in great excellence. This is worthy of note, I think, especially as scientific writers have placed Maine mostly north of the northern limit of grape growing. So, we snap our fingers at isothermal lines, and as the phylloxera has not yet put in an appearance in this precinct, we feel quite elated at the prospect for the future. No insect has yet troubled the Grape except the rose-bug in certain localities. Extremely fine crops of corn and wheat have been raised in every part of our State this year—many times as much as were grown a few years since; and the courage of our farmers is getting braced up by the results of their endeavors to free themselves from dependence on other sources of supply. G. F.

BURLINGTON, Kansas, Nov. 26, 1878.

WE are having a very pleasant fall so far, and farmers are taking advantage of the good weather by getting out their corn and fixing up for winter, and most of them are well prepared for cold weather. We have had some hard frosts, but no cold weather or snow yet. To-day has been cold and raw, and it has been trying to snow, but only succeeded once in a while in floating a few small flakes. It has been dry here since the last of July, with only occasional showers, enough to lay the dust, but not enough to wet the soil to any depth. Stock water is getting scarce; for most of the farmers hereabouts who have a good many cattle, depend on the creek to supply water for their stock. The principal business in this section is stock raising—mostly cattle. There are a few flocks of sheep, which are doing very well; they are mostly native coarse-wool sheep.

The crops were very fair, except potatoes, and they were scarce, except with a few who raised a very fair crop for this season. I raised from an acre of Irish potatoes, 150 bushels, and from half an acre of sweet potatoes, 95 bushels, but they were not all salable; for, on account of the dry weather, a good many were small. Corn gave 50 bushels to the acre.

The market prices are as follows: corn, 20c. a bushel; oats, 15c.; potatoes, from 40 to 50c.; wheat, 60c.; butter, 12½c. a lb.; hogs, $2 per 100 lb., with a dull sale at that. E. C. F.

MILL BRIDGE, Rowan Co., N. C., NOV. 24.

WE have had very little cold weather yet, but a good deal of wet weather, although there have been no heavy rains this fall. Fall work is about all done; cotton nearly all picked and a pretty fair crop. I raised 10 bales on 12 acres, which is a good yield for this State. Wheat is nearly all sowed. I don't think there is a large acreage sowed here to this crop. Corn yielded well, but it is not as plentiful as last year. Sweet potatoes were fine. I know one man in this county who had 100 potatoes that weighed 600 lbs. No apples here this year; peaches were abundant and fine.

Wheat is worth $1 per bu.; corn, 30 to 35 cts.; oats, about the same; sweet potatoes, can't be sold; pork, 5 to 6 cts., net; beef, 4 to 5 cts., net; butter, 20 to 25 cts.; green apples, $1 to $1.25 per bu. Sheep do very well here when attended to; they are worth about $1 per head; there are very few improved sheep in this county. The weather is too warm to kill hogs, and very changeable—some days cool and the next almost hot. AN OLD SUBSCRIBER.

AFTON, Union Co., Iowa, Nov. 23, 1878.

THIS is a high rolling prairie country. Timber is scarce here; consequently most of us use coal for fuel. It is shipped to us from neighboring counties, and costs the consumer 16c. per bushel. Crops were fair; corn being heavy.

The fall work is mostly done, except plowing, and this would have been done had it not been too dry in early fall, but if the weather remains as it is now, most of it will be done yet.

Our market prices are: wheat, 45@55c.; rye, 25c.; oats, 8@10c.; barley, 25c.; corn, ear, 13c.; corn, shelled, 15c.; hogs, $2; cattle, fat, $2.50@3.00; cows, $1.15@1.50; butter, 12c.; eggs, 15c.; potatoes, 15c.; chickens, per doz., $1. 20.

W. H. B.

BAILEYVILLE, Ogle Co., Ill., Nov. 27.

TO-MORROW is Thanksgiving and truly the people have "something to be thankful for." The crops in general were good throughout the country, though some sections have suffered losses from various causes. In this locality the farmers have no cause to complain, except that the prices of their products are so low that they afford them little or no profit, after deducting expenses. The small grain crops were good, excepting spring wheat, which was injured by blight, rust, etc. The corn is now nearly all husked, and is of excellent quality; it will average about 45 or 50 bushels per acre, though some fields produced over 60 bu. The weather is highly favorable this fall to the farming interests. W. B. D.

BRYANT, Ia., NOV. 26, 1878.

WE are having one of the most favorable seasons for farming operations we have ever had—no frost sufficient to hinder plowing as yet, and the farm work well ahead. Corn is nearly all husked—the crop was a full average in yield and extra in quality. Many of the young hogs have died from disease, yet pork is very low in price—about 2½c. gross. Wheat sells for 70c.; corn, 25c.; potatoes, 40c.; oats, 16 to 18c.; rye, 35c., and barley, about 70c. per bushel; butter, 16c. per pound, and eggs, 15c. per doz. It can be seen, therefore, that money must be a little scarce among farmers; but the crops have, as a general thing, been very good, and we are hopeful of better times in the near future. D. O.

ARKANSAS CITY, Ks., Nov. 27.

CROPS of all kinds were good here last season. Prices are; wheat, 40 to 50c. per bu.; corn, 15 to 20c.; oats, 20c.; hogs, on foot, 2½ to 3c. per lb.; cattle, on foot, 2 to 2½c. per lb. The fruit crop was good, especially peaches. Apple trees hereabouts are just beginning to bear. I have not failed for four years in succession to have full crops of grapes and blackberries—the Concord grape and Kittatinny berry. Raspberries and gooseberries do well, and all the small fruits except currants. The tree growth here is marvelous. I have had peaches from trees two years old. Most vegetables do well, making a more luxuriant growth than I have seen elsewhere. A. J. B.

NEAR MONTREAL, Dec. 4th, 1878.

THE weather for the past month has been a succession of rain and mist, the gleams of sunshine so rare as to provoke immediate remark if a stray sunbeam gleamed from the murky sky. Yet in the garden we find Pansies blooming; Daisies, too, and sprays of Sweet Alyssum, with a few flowers of hardy Chinese Pinks. Plowing in this locality is well finished up. A good deal of ditching has been done, and general preparation made for the coming winter. So far there has been no snow to stay on the ground and very little frost; but we expect either every day.

A. L. J.

ATLANTA, Ga., Dec. 2.

AFTER a hot, dry summer, we are at last having rains with light frosts. From the middle of May to the first of December the rains that fell were never heavy enough to soak the grounds thoroughly, and consequently the crops in this county were very light; but they were heavy in adjoining counties, especially corn. Wheat, however, yielded fairly with us, and what little fall wheat has been sown is looking well. Corn is worth from 60c. to 70c. per bushel; oats, from 40c. to 50c.; sweet potatoes, 40c., and Irish ditto, $1 per bushel. Farm labor is worth 50c. per day and from $6 to $8 per month.

C. D.

OAKLAND, Douglas Co., Oregon, Nov. 19, 1878.

WE have splendid growing weather now. Grass is growing finely. Stock is doing well. The weather is very warm—thermometer at 62°. Grain sown this fall looks well. We plow and sow here any time in the fall, winter or spring. We have an abundance of fruit of all kinds. Winter apples are worth 25c. per bush.; pears, 75c.; grapes, 10c. per pound; wheat, 75c. per bushel; oats, 35c. sacked; potatoes, 75c; butter, 37½c. per pound; eggs, 38c. per dozen; turkeys, live-weight, 16c, and 18c. per pound. I have young onions, ready for use, growing out in the open ground. H. C. U.

ALICE, Grundy Co., Nov. 30.

OUR wheat crop hereabouts was almost an entire failure in quantity and quality. It yielded only from five to ten bushels per acre and was only worth from 20 to 30 cents a bushel. Corn is selling for 15c per bushel and hogs for from $1.80 to $2.25 per 100 lbs live-weight. Under these circumstances many farmers find it hard to raise taxes and insurance, although they have plenty of horses, cattle and hogs—but then nothing can be got for them. J. M. K.

DELTA, York Co., Pa., Nov. 27.

WE had an unusually good wheat crop hereabouts. Oats were a good growth, but a light yield. Corn was but little over half a crop, owing to dry weather at the earing season. Potatoes were not over one-third of a crop. Hay was very abundant. At this date wheat is worth 99c.—the Fultz variety being chiefly grown hereabouts. Corn sells for 50c. per bushel; oats, 25c.; potatoes, 80c. to $1; butter, 25c. per lb.; eggs, 20c. per doz. at stores. H. O. S.

RIDGEFIELD, Conn., Dec. 5, 1878.

THE winter weather as yet has been mild. Pastures and forests, however, are quite bare. The first snow fell November 6. Farmers are looking cheery. The market gives $5 for pork, and $6 and $7 for beef. A neighbor of mine has recently had butchered, a pair of Chester White Pigs—stock imported from Pa.—weighing 832 pounds. K.

ARCADIA, Wis., Nov. 25.

WE have had a splendid fall. The farmers are well up with their work and ready for winter; which is in no hurry to come, although it announced its approach by a little snow last night; but it is warm this morning. Wheat is a light crop and of poor quality. Calico Dent corn is the best variety we have here: it ripens early, yields well, and husks easily. F. A. B.

WEST JERSEY, Stark Co., Ill., Nov. 28.

THE weather is good; farmers are busy with their corn. We have had but very little rain this fall. I wish to correct an error in my last report: hay is there quoted at $14 per ton; it should have been only $4. The hay crop was very large here, and can hardly be sold at any price. H. E. M'C.

SALEM, Kenosha Co., Wisconsin, Nov. 25th, 1878.

WEATHER warm; no frosts to freeze the ground; fall work well done; times hard; pork less than $2.50; good butter does best of anything, bringing, in Chicago market, from 25 to 30 cents. D. L. B.

WELLINGTON, Ohio, Dec. 2.

WE have had good crops this season. Butter is worth 15c. per lb.; cheese, 6½c.; corn, 20c.; oats, 22c.; wheat, 80c.; hogs, 2½c. live-weight; hay, $8 per ton; potatoes, 70c. We have had very fine weather most of the fall. A. G. F.

CORNWALLIS, Nova Scotia, Nov. 26th.

THE weather here this fall has been delightful. Crops were generally good. Hay and grain heavy. Potatoes a fair crop, price from 50 to 60c. per bushel, with several vessels loading. J. E. E.

WAUKEGAN, Ill., Nov. 29.

THE weather here is very fine—more like October than November. No frost has yet visited us hard enough to prevent plowing. A. R. C.

PINE BLUFF, Ark., Nov. 28.

THE weather here now is simply terrific. The corn crop was good; the cotton crop light and about all of it is picked. J. M.B.

The Querist.

ANSWERS TO CORRESPONDENTS.

Raising Potato Seed in a Greenhouse.

W. W. K., Toronto, Canada, asks whether it would be possible to plant the Beauty of Hebron potato now, in a bed in the greenhouse, so as to have the product for planting in the spring.

ANSWER BY PETER HENDERSON.

If W. W. K. will split the "Beauty of Hebron," or any other potato, lengthwise, so as to expose the most of the eyes possible, then let the pieces dry for a week or two, so as to heal up the cut part, and place them on three or four inches of soil on the bench of his greenhouse, as near the glass as possible, sometime about the 15th of March, not sooner—within two weeks (if the temperature is not less than 60° at night) they will have started shoots two or three inches long. These shoots, or cuttings, can then be taken off and propagated, like Dahlias or any other flowering plants. One should be careful, in taking off the cuttings, to cut so as to leave a bud or eye to start again, for from a single potato, 50 to 200 plants can be made before the middle of May, which is as soon as they can be planted outside. Every plant of these, if properly handled, is equal to a dry "set." When the Early Rose was first sent out, I grew from five pounds of it, in this way, a crop that was perfectly enormous. I published the result of the experiment at the time in one of the agricultural papers; but what

the quantity was I do not now recollect, except to know that it well repaid me for the labor, and the greenhouse space the plants occupied. Of course, the potato cuttings must be grown in small pots (three-inch pots are best) just like any plant under glass in a greenhouse or hot-bed, until the time of setting out, which, in Canada, would not be safe before June 1st.

[We have planted potatoes in boxes of convenient size about Jan. 1st in the greenhouse, and they have been ready to use about May 1st.—EDS.]

Feeding Oil-Meal.

F. S. W., Genesee Co., N. Y., saw a statement in the RURAL, eight or nine months ago, to the effect that cows would give one-third more milk if fed oil-cake meal. He would like to know how often and in what quantities it should be fed.

ANS.—To answer this question in a thorough manner would require us to write a small volume, for it involves the whole subject of cattle feeding. Oil-meal contains the nitrogenous elements of food in a much greater proportion than is needed by animals; it, consequently, can only be fed to advantage with other articles of food which are deficient in such elements; and the amount to be fed daily, therefore, depends entirely upon the nature of the other food. If good clover hay is fed for coarse fodder, the concentrated food may consist of one part of oil meal to three of corn-meal, and this should be fed in quantity to suit the peculiarities of the animal. If a poorer quality of hay or straw is fed for part of the ration, the proportion of oil-meal should be increased. Too large a proportion of the nitrogenous elements in the feed makes a soft, oily butter, which soon becomes rancid, while too small a proportion causes the butter to be hard and tallowy. The proper proportion is one of albuminoids to five and one-half of carbo-hydrates (including the fat multiplied by 2½), the digestible elements alone being considered. In some sections of the country it is cheaper to use bean meal, bran and shorts, than oil-meal.

The following table, taken from the Report of the Connecticut Experiment Station, for 1877, illustrates the method of composing these rations:

RATIONS FOR MILK COWS.

	Dry Organic Matter.	Digestible. Albuminoids.	Carb.-hydrates.	Fat.
12 lbs. Meadow Hay	9.5	0.65	4.92	0.12
6 " Oat Straw	4.9	0.08	2.40	0.04
20 " Mangolds	2.3	0.22	2.00	0.02
25 " Brewers' Grain	5 6	0.98	2.70	0.20
2 " Cotton seed Meal	1.6	0.62	0.36	0.24
	23.8	2.55	12.38	0.62
Standard Ration	24.	2.5	12.5	0.4

The standard ration contains these elements in the right quantities for animals of 1,000 lbs. live weight; and in composing rations to obtain best results, we should endeavor to have the constituents approach as nearly as possible to the standard.

Incomprehensible Growth of Celery.

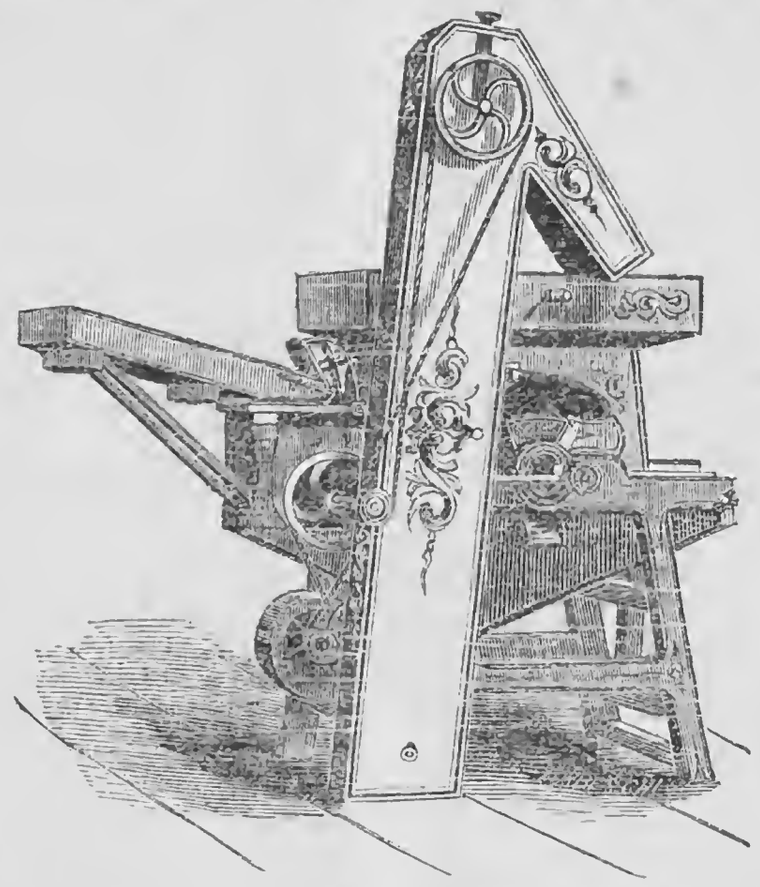
F. A. C. M., Zanesville, Ohio, says that he plants celery every year for family use, that it looks well this year until he digs it, when he finds it all gone to stalk, while the leaf-stems are short and of little account, and he asks for some remedy.

ANS.—From this account we cannot say whether the celery has run to seed or not. If it has it is, of course, useless; but it may be only that it has not been blanched. What is meant by the expression, "it has all gone to stalk," we cannot understand unless it be that it has run up to seed.

Fish for a Stagnant Pond.

E. A. M., Macon City, Mo., has a half-acre pond of stagnant water used for the purpose of getting ice from it. The dam and bottom are of such tenacious clay that no water can filter through them. Cat-fish, he knows, succeed well in such places, but he would like a choicer sort, and asks which kinds would be the most likely to thrive, and whether more than one sort should be introduced.

ANS.—There is some difficulty in stocking a stagnant pond with good kinds of fish. One cannot have the choicest fish without the very best conditions for their culture. Trout require cool spring water, and it should be a flowing stream unless there are abundant springs at the bottom of the pond, springing from gravel beds. Black bass is the next best fish to trout, and may be kept in a pond if there is an ample supply of fresh water and food. The yellow perch comes next, and this will thrive where bass will not; a pond with a muddy bottom, if it is planted with aquatic vegetation, will provide a comfortable home for this variety. Then come sun-fish and cat-fish. In the case in question, it might be well to first put in some cat-fish and let these propagate and increase for a time; then add some yellow perch which would live on the cat-fish and increase as these diminished until they took complete possession of the pond. It would then be necessary to provide some food, if a large stock was desired. Cat-fish can easily be caught with a hook, put into a tub of water and transported to a pond for a long distance. Yellow perch could be procured in the same way. A few dozens of fish would soon stock a pond of half an acre. When the fish are put into the pond, it would be well to transplant some water plants by taking up roots of Water-lilies, &c., making a ball of mud about them and dropping them into the water here and there.



COMBINED MILL AND CORN SHELLER.

Hulless Oats.

G. F., Cascade, Wis., says there are some peddlers going about in that section selling Hulless Oats for ten dollars a bushel (!) and refusing (!) to sell less than six bushels to any person, and then they bind the purchaser not to sell any until after he raises a crop. Remembering to have seen in past years, several references in the RURAL to this kind of oats, he asks whether it is a "humbug."

ANS.—It's now about ten years ago since the RURAL first informed the public of the nature of this variety of oats, and every year since then, it has had occasion to speak with greater emphasis on the matter. This kind of oats is not a "humbug," but the fellows who peddle it about as something new, or something extra good, very decidedly are. The variety, a decade ago, was not new; it has since then been widely introduced into nearly every State in the Union, yet so small are its merits that it is so little known that swindlers every year reap a dishonest, though rich harvest, by selling it as a new and extraordinarily good variety—mostly, however, to farmers who never read an agricultural paper unless it is a borrowed one. On suitable soil the yield of this Hulless oats is about on an average with that of other sorts, but it has absolutely no special merit to justify, or even excuse, the extravagant prices asked for it. The peddlers of it, in placing restrictions upon its sale, and asking high prices for it, are merely following the example of travelers among the savages in central Africa, who, relying on the dense ignorance of the natives, place a preposterous value on glass beads and similar baubles.

Treatment of Various Flowers.

E. R. B. Bucklin, Mo., asks: 1. What can she do to insure the safety of her young Chinese Wistarias this winter? 2. Should newly-planted Tulips, Narcissi, etc., be covered before the ground freezes hard? 3. Must seeds of Yucca and Geranium sanguineum be started in the house, or will they "come to the summit" if sown in the open ground in spring? 4. She would like to learn what has become of "Daily Rural Life."

ANS.—1. Lay them down and cover them with straw or evergreen branches. 2. No, we think it best *after* the first hard freeze. 3. Either way as more convenient. They germinate freely and will thrive with ordinary care. 4. His address is Ridgewood, Bergen Co., New Jersey.

Exterminating an Osage Orange Hedge.

F. J. R., Hecka'oo, Lincoln Co., Ark., asks what is the most effective way of exterminating an Osage Orange hedge, planted in 1860, some of the stems being now six or eight inches in diameter.

ANS.—The stems and suckers of the Osage Orange are not easy to exterminate, but the following method should do it: In fall, winter, or early spring, cut off these stems or suckers below the crown or junction of root and stem, which is generally some two or three inches under ground. Repeat this operation once or twice during the following summer and winter, and the most lively hedge should yield up its life. One operation, however, will be usually sufficient.

Making an Arbor-Vitæ Hedge.

L. G., asks how can he make a front-yard hedge from arbor-vitæ plants.

ANS.—Dig a trench 18 inches wide and deep. Procure young plants from any nursery. Place them in the trench from a foot to three feet apart, as you may choose, and fill in with good soil. In making a hedge, we advise placing the young plants three feet apart at least, and then keeping them cut back until they meet, when the hedge may be permitted to grow in hight as desired. Thus managed, the hedge will remain healthy for many years longer and endure the severities of the climate better than when planted closer together, because the roots have more room and food. We would refer our friend to an experiment made at the RURAL Grounds. A single arbor-vitæ was cut back from season to season so that it was never permitted to attain a hight of more than 18 inches. It is now, after four or five years of such treatment, not less than five feet in diameter. Now, if two plants will fill a space of say eight feet and be the more vigorous for it, what is the use of employing three or more plants to fill the same space?

To Remove a Superfluous Hole in a Cow's Teat.

J. N. W., Brandon, Vt., has a very choice heifer, and, on milking her for the first time, found there was, about half-way up the teat, a small opening which let out a small stream of milk while milking. He asks how this can be remedied.

ANS.—If the epidermis is removed from the sides of the channel, so that raw surfaces are brought in contact, the opening will be obliterated in healing. The method usually adopted by dairymen is, to take a three-cornered file, insert it in the opening, and turn it till the desired effect is produced. Care should be taken not to insert the instrument so far as to injure the main channel of the teat. A stitch through the opening with fine silk sometimes assists, and a milking tube used in that teat during the healing, would be an advantage.

Wintering Various Flowers.

D. L. B. Kenosha Co., Wis., asks: 1, The botanical name of a plant called Malthea thereabouts, a flower and leaf of which she sends. 2. Would plants of the Cactus family winter safely in the cellar? 3. Would it be right to dry off Smilax bulbs in the fall and place them in the cellar for summer use? 4. How can Ivy Geranium be kept during winter?

ANS.—1. Achania malvaviscus. 2. Yes, if frost-proof. 3. Yes. 4. Ivy Geraniums may be kept in the cellar; about 40° is the best temperature for them.

Alfalfa Seed.

W. H. B., Afton, Ia., asks, 1. What would be the charge for binding a yearly volume of the RURAL NEW-YORKER. 2. Can Alfalfa, when once grown, be killed out, and if so, how? 3. Where can the seed be purchased and at what price?

ANS.—1. The charge would, of course, depend on the style of binding. For neatly binding in boards, with leather backs and corners, the cost here would be one dollar. 2. When Alfalfa once gets hold in a suitable soil and climate, it is hard to eradicate it; but this can be done by persistently plowing it under. 3. Of any prominent seedsman in Chicago or New York. 30 cents.

Borrowing Money on Life-Insurance Policies.

H. B. C. asks if one can borrow money on a life-insurance policy, and incloses a form of application sent him by a New-York house which appears to lend money on this class of security.

ANS.—A life-insurance policy is negotiable, and in commercial transactions is often used as collateral. We know nothing regarding the standing of the firm mentioned.

Treatment of Seeds for a Nut Grove.

Frank E. B., Brandon, Vt., wishing to plant a nut grove, asks, 1. Where he can get chestnuts, etc., to plant. 2. Which would be the better plan, to plant them this fall or cover them with sand and leave them until spring.

ANS.—1. Of any grocery or commission house. 2. It would be best to place them in sand in boxes, and bury the boxes in well-drained soil during the winter.

Alfalfa Seeds.

J. K., Union City, Pa., asks, where can Alfalfa seeds be bought, and at what price.

ANS.—Of any prominent seedsmen of Philadelphia. D. Landreth & Son, for instance, or of Thorburn & Co. or W. H. Carson, of this city. Price 30 cents per pound.

Planting Seeds of Free Seed Distribution.

M. H., St. Mary's, Ont., asks whether it will be necessary to plant the above-named seeds in cold-frame or in the window, or will it do to plant them in the open ground in the spring.

ANS.—All of the seeds of the shrubs may be planted in prepared open ground in spring.

Defiance Wheat.

J. M. Stirling, Ky., asks whether the Defiance wheat is a fall or spring variety.

ANS.—Spring.

Miscellaneous.

W. P. M., Kingston, Pa., who is extensively engaged in raising cabbage, sowed a packet of seed on a plot of ground quite as fertile and well cultivated as the remainder of his cabbage patch, and producing plants as fine and healthy; yet of these plants only a few thousand, scattered here and there, matured fine, well-developed heads, while the others, under conditions in every way just as favorable, grew into a large mass of leaves without forming heads. He asks the cause of this difference, and whether the sex of the plants might have had anything to do with it, or if not, to what other cause should it be attributed, aside from club-foot.

ANS.—Our friend may have a variety not suited to his climate; otherwise the failure is owing to poor seeds. The flowers of cabbages are perfect, *i. e.*, both male and female organs are in the same flower.

M. L. G., Frankford, Pa., asks, 1. Where can the beautiful grass, Eulalia Japonica variegata be purchased, and also the Old-Man Cactus. 2. Does the latter ever bloom?

ANS.—1. Of Peter Henderson, this city; Geo. Such, South Amboy, N. J.; John Saul, Washington, D. C.; Hoopes, Bro. & Thomas, West Chester, Pa. 2. Oh! yes. We should like to know of a plant that does not. Ferns and the lower orders of plants have no stamens and pistils, it is true; but they produce spores instead of seeds.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, DECEMBER 7th:

P. H.—H. S.—W. J. R.—P. W. H.—L. S. H.—L. P.—W. H. N.—W. H. B.—S. B.—E. C. F.—J. H. S.—T. H. H.—W. H. M.—S. B. S.—H. C. W.—H. C. S.—L. G.—J. R.—M. B. B.—A. M. V. A.—V. D. C.—E. H. B.—J. R.—S. G. L.—F. D. C.—M. C. M. S.—W. B.—S. E. H.—D. E. S.—M. D. B.—M. M.—A. W. M.—"Ruralist"—W. C. H.—S. B. P.—D. B. R.—A. L. J.—H. F. S.—W. J. F.—J. H. B.—M. L.—C. S. W.—W. S. T.—R. M. L.—S. C. I.—J. M. H.—M. C. W.—

Industrial Implements.

COMBINED MILL AND CORN SHELLER.

A COMBINATION of feed-mill and corn-sheller that will simultaneously grind feed, and shell, clean and sack corn, has its advantages. It is a condensed labor and time-saving implement, and needs only to be well and thoroughly made on correct principles to demonstrate its value.

The Challenge Mill Co., of Batavia, Ill., in conjunction with Mr. Nelson Burr, early turned their attention to iron mills and succeeded in inventing a construction that has stood severe tests satisfactorily. The grinding surface is composed of metallic rings attached to beds, or backing-plates, in such a way that the rings do the grinding, the backing-plates serving to convey the grain to the rings. When the rings become worn they are easily replaced at small cost, when the mill is in complete grinding order again. This principle is embraced in the patents that have just been reissued to the company, and it may be important that our readers should plainly understand the claims.

The illustration is the combined mill and sheller, which may be worked by wind—, water—, steam—, or horse-power. It will grind feed at the rate of 15 to 20 bushels per hour, at the same time shelling, cleaning and sacking corn at from 20 to 40 bushels per hour, when driven by a four-horse power, which indicates large results with great economy in power.

The implement is substantially built; has but one pinion in addition to the necessary machinery required to run a feed-mill or corn-sheller, and is cheaper than if the two distinct machines were purchased separately, occupying no more room than either. Its use as a separate or combined machine, is not the least of its many good features. It weighs—the size illustrated—350 pounds.

TABLE OF CONTENTS.

PRACTICAL DEPARTMENTS:

An Innovation ... 789
Use of Fertilizers in Ohio—M. B. Batcham ... 790
Experience vs. Theory—M. B. Prince ... 790
A Single Experiment vs. a Lifetime's Experience ... 790
Farm Notes from Central Illinois—An Old Subscriber ... 790
Every-day Notes—Samuel Parsons ... 790
Tree Surgery—Gen. W. H. Noble ... 791
Van's Views ... 791
Texas Indian Apple—Wm. Falconer ... 791
Winesap Apple—Illustrated ... 791
Plan for an Ice House—Wm. Robert Brooks—Illustrated ... 791
International Dairy Fair ... 792
Combined Mill and Corn Sheller—Illustrated ... 795
Progressive Features of the Big Exir—Il ... 792
The International Dairy Fair ... 797
Implements, &c., at the Dairy Fair ... 793
List of Awards ... 797

Everywhere:

Notes from N. W. Pa ... 794
Huron Co., Ohio ... 794
Howard Lake, Minn ... 794
Cumberland Co., Me ... 794
Burlington Co., Kan ... 794
Mill Bridge, N. C ... 794
Afton, Iowa ... 794
Baileyville, Ill ... 794
Bryant, Iowa ... 794
Arkansas City, Kan ... 794
Atlanta Ga ... 794
Oakland, Oregon ... 794
Near Montreal, Canada ... 794
Alice, Iowa ... 794
Delta, Pa ... 794
Bridgeport, Ct ... 794
Arcadia, Wis ... 794
West Jersey, Ill ... 794
Salem, Wis ... 794
Wellington, Ohio ... 794
Cornwallis, N. S ... 794
Waukegan, Ill ... 794
Pine Bluff, Ark ... 794

Answers to Correspondents:

Raising Potatoes in a Greenhouse ... 784
Feeding Oil Meal ... 795
Incomprehensible Growth of Celery ... 795
Fish for a Stagnant Pond ... 795
Hulless Oats ... 795
Treatment of Various Flowers ... 795
Making an Arbor-Vitæ Hedge ... 795
To Remove a Superfluous Hole in a Cow's Teat ... 795
Wintering Various Flowers ... 795
Alfalfa Seed ... 795
Borrowing Money on Life Insurance Policies ... 795
Treatment of Seeds for a Nut Grove ... 795
Planting Seeds of Free Seed Distribution ... 795
Defiance Wheat ... 795
Miscellaneous ... 795
Communications Received ... 795

Domestic Economy:

Mop-Handle Papers—May Maple ... 800
Holiday Recipes ... 800
Domestic Recipes ... 800
Questions Answered ... 800

EDITORIAL PAGE:

The International Dairy Fair ... 796
Necessity of a National Veterinary College ... 796
Apropos of Dairymaids ... 796
Value of Peat and Muck ... 796
Labor-Saving Machinery in France ... 796
Brevities ... 796

LITERARY:

Poetry ... 797 799, 802
How Our Bank Was Robbed ... 797
Weaker Than a Woman ... 797
"Standing Treats" ... 788
Facts ... 798
Recent Literature ... 782
Magazines ... 783
Letters from a Country Girl—Margaret B. Harvey ... 799
Our Library—Mrs. L. E. K. Turner ... 799
Have Women a Monopoly of Weak Nerves?—Jicks ... 799
Who Will be Crowned in Heaven ... 799
Note ... 799
Erratum ... 799
Verbena Sachet Powder ... 799

Reading for the Young:

Chemistry of Metals ... 802
Parental Affection in Sparrows ... 802
Puzzler ... 802
News of the Week—Herman ... 800, 802
Markets ... 801
Personals ... 803
Wit and Humor ... 804
Advertisements ... 801, 803, 804

THE
RURAL NEW-YORKER.

PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY DEC. 14, 1878.

OUR readers are particularly requested to read the particulars of our free seed distribution on p. 800, under publisher's notices, before ordering seeds. We thought we had made the postage particulars very plain—but many are sending us too many stamps. A one-cent stamp suffices for all except *three*—the Beauty of Hebron requires a two-cent extra stamp, and the Defiance Wheat and Pearl Millet, *together*, require a two-cent extra stamp.

THE INTERNATIONAL DAIRY FAIR.

The first International Dairy Fair ever held in this country closed last Saturday night in this city. Although we fully realize that from the conception of its name to its close, there were few things connected with it that were not capable of obvious improvement by those with a single eye to the advancement of the dairy interests of the country, still we must confess that we regard the exhibition as a move in the right direction. Through the large number of visitors to the show and still more through the press, the general public has learnt much of the importance of the dairy business in particular and of the agricultural interest in general. Many mistakes and shortcomings in such undertakings have become so glaringly apparent that their avoidance in future has become imperative. The necessity for many changes in the management and conduct of future exhibitions has been so strongly forced on the public that they must inevitably be made.

Our pages this week contain a full account of the Fair from every point of view; while our artist has illustrated (necessarily in a hurried manner) in our first-page engraving the most prominent features of the exhibition. In view of its being the first attempt of the kind ever undertaken, and in order to give a clear description of it so as to lead to improvements in any future undertaking of the same nature, we have devoted to it more space, perhaps, than its actual merits entitle it to; but we trust that our readers will agree with us that our object justifies our liberality.

THE NECESSITY OF A NATIONAL VETERINARY COLLEGE

yearly becomes more urgent; but, like many other agricultural needs, little governmental attention to the matter can be expected until the farming community itself becomes fully alive to the importance of such an institution and agitates for its establishment. Last year $20,000,000 were lost to the farmers and breeders of the country through hog cholera, and a small fraction of this vast sum would have been amply sufficent to endow a veterinary college, together with an associated experimental station, the skill and experience acquired in which would go a long way towards preventing, alleviating, or totally eradicating this and similar scourges. There is no country in the world in which the vast extent of the live-stock interest makes such demands on veterinary science, and no nation in Christendom in which Government pays less attention to these demands. According to the latest census, there were in the United States, three years ago, 11,149, 800 horses and mules; 27,870,700 cattle; 35,935,300 sheep, and 25.726,800 swine. Prussia has a little over one-third of this number of live stock, and Great Britain and Ireland considerably less than one-half, yet while there is not in this country a single veterinary school of national reputation, there are five veterinary colleges in Prussia and four in Great Britain, all of European renown. The former, however, are strictly governmental institutions, while the latter are either personal ventures or maintained by private endowment, and the great superiority of the former was apparent during the late European outbreak of rinder-pest, which was extinguished in Prussia within a week, whereas in England its ravages contined for months.

The great advance made of late years in this country, in the quality of all kinds of live stock, would now vastly enhance the losses to our farmers and breeders, should a plague similar to the rinder-pest or foot-and-month disease break out on this side of the Atlantic. The great extent of the losses from such a disease among thoroughbreds is well illustrated by the testimony of the late T. C. Booth, of Warlaby, before a committee of the House of Commons last year. He swore that his losses within a few years from deaths among his Short-horns by foot-and mouth disease alone, amounted to £30,000 or $150,000.

Our comparative immunity hitherto from such scourges has made us negligent in providing against their possibility or rather probability in the future. It would be folly to await the advent of such a calamity to provide means for combatting it, and, moreover, so great is our annual aggregate of preventable losses from ordinary diseases of live stock, that measures should be promptly taken to relieve the agricultural classes and consequently the people at large, from this persistent drain on their resources.

APROPOS OF DAIRYMAIDS.

"RURAL JR." who writes many sensible things in the Weekly Chicago Tribune and who frequently quotes approvingly from the RURAL NEW-YORKER, objects to some of our recent remarks as to dairymaids. He says:

"We are on the side of the girls. We do not believe it is woman's business to milk the cows. Woman is entirely out of place in the barn-yard, and she should not be called on to go there, except in cases of great necessity. We frequently read of accidents to women while engaged in milking; in fact, we are personally acquainted with several worthy ladies who have been either seriously injured or rendered cripples for life by being kicked or gored while milking."

Let us say that Rural Jr. is altogether wrong here, as may very easily be shown. If it is not woman's business to milk cows because she is entirely out of place in a barn-yard, then let her not go into the barn-yard at all. The yard is no place to milk cows in, and the man who will permit a woman to hunt a cow around a filthy yard, carrying her milk pail and vainly calling "so bossy!" is not the farmer we have reference to, nor is that woman the one we think of as our dairymaid. The fact is, when everything is well arranged about the stable, when it is sweet and clean, when the cows are clean and are comfortably secured in their stalls, then a girl may very aptly go in and do her share of the milking, without offense, and, after washing her hands and doffing her apron, may take her morning music lessons or help her mother in household duties,

Then the talk about filthy yards, kicking and goring, etc., etc. is all out of place, because there would be no such things to fear. Indeed we pity the farmers' wives and daughters who have to submit to the filthy surroundings of many cow-stables, and who daily run the risks of injury from cows that have been rendered vicious by bad management. First make the yard and stable fit for a woman's presence, and then, as everywhere else, her association with these will animate and purify all the surroundings directly and indirectly, and altogether reform most of the evils and all of the abominations of the average dairy farm. It is a gross charge against the business of dairying that it is managed in such a way that a woman is out of place in any part of it. That this is held to be true by some, must be taken as a confession that all the evil spoken of it, is based on facts. We do not admit this, and therefore do not admit the corollary which might accompany it. We will explain our opinion on this matter by saying that while we believe a woman may do good and proper service in a decently managed dairy, yet that she is thoroughly justified in refusing to have anything to do with one that is managed in such a way that decency is outraged and personal safety is risked every day.

VALUE OF PEAT AND MUCK.

CHEMICAL analyses give a varying value to peat and muck deposits, considered as fertilizers; but in nine cases out of ten, we find that these analyses, made by competent chemists, show a percentage of ammonia far in excess of that contained in common yard manure; sometimes four or six times as much. As ammonia is the most costly of all fertilizing materials, and at the same time an absolute essential for all grain and most forage crops, it is plain that there must be great value in muck and peat when rightly prepared and applied. What muck is usually deficient in, compared with yard manure, is potash and phosphoric acid. Therefore, when it is proposed to apply muck to land without first using it as an absorbent in the stables or composting it with dung, it should have added to it wood-ashes and bone-dust. These, when properly mixed and combined, will make a fertilizer that will produce the best results, especially upon our lighter soils. The proportions should be about ten bushels of good, unleached, hard-wood ashes and two bushels of bone-dust to two cords of muck that has been dug long enough to have parted with its surplus water by drainage.

Such a compost, if the muck is of average quality, ought to produce as much effect as an equal quantity of the best stable manure upon crops of grain, potatoes or grass. For the best results, it should lie six months, or a year after mixing, and be shoveled over several times during that period. If peat is used, it should lie long enough to become thoroughly rotten and fine. We should prefer to mix half the ashes with the bone, wet them thoroughly, and let them lie two or three weeks before mixing them with the muck. The rest of the ashes should be added at the same time, and by the union of its potash with the organic acids that hold the ammonia in unsoluble combination, it sets that substance free to be absorbed, in an active state, by the pile. The bone-dust and ashes will cost about five dollars, and the heap, when finished, will give six loads.

Labor-saving Machinery in France.—French farms are usually so very small that the possession of a reaper, mower, or other costly labor-saving implement is out of the question with most individual landowners. Of late years, however, the hiring of such agricultural machines has become a regular business, and so much attention was paid to implements of this kind at the late exhibition, that this branch of industry has received a strong impetus. The importations of American grain which have been greatly increasing of late, have convinced the small farmers that they must avail themselves of the best labor-saving devices to be able, with any chance of success, to hold their own against competiton from this side of the Atlantic.

BREVITIES.

NEVERTHELESS, one Great Dairy Fair per annum is enough.

For a necessarily brief condensation of addresses at the Fair, see "news" column.

WE should like to know what part a patent fire-proof roofing exhibit has to perform in advancing the dairy interests of the country.

IN the Old Country live-stock for the shambles are sold by the cwt. of 112 pounds; here they are generally sold at so much per 100 pounds.

SEC. GARFIELD writes us, (Grand Rapids, Mich. Nov. 30): "Unless we get more light on the 'Yellows,' our Lake Shore men will all have the 'Blues.'"

THE big cheese of the dairy fair, is over four feet in diameter, 21 inches high, weighs 1,700 lbs. and 17,000 pounds of milk were used in its manufacture.

IT would be a good idea for people who are going to act as judges of cattle to study up the pictures of well-known breeds. Then they would know a Jersey from an Ayrshire etc!

It must be a matter of congratulation to a dairy State like New York that an Iowa creamery should have carried off the sweepstake prize at the Fair for the best butter made anywhere.

IT may not occur to most of the visitors to the Dairy Fair that the medical electric belts exhibited are to galvanize the old cheese into life, at least if that is not the object, it is nearly close to it.

PRACTICAL sagacity accumulated by a long experience in the business was shown by a prominent officer of the Dairy Fair when he asked one of the exhibitors if the cheese he was making today could not be *cured so as to be eaten to-morrow or next day!*

THAT city people really appreciate the uses of the churn was plainly shown at the Dairy Fair here, by the remark of a lady who inquired if a certain churn was a *washing machine*. The complaisant exhibitor assured her that it was, and proceeded to demonstrate how to use it!

IT should be remembered that the object of pits, cold-frames or other contrivances for storing cabbages, roots of all sorts, etc., is, on the one hand, to prevent them from freezing and, on the other to prevent them from growing, either of which would be fatal to their keeping well.

A GOOD WAY to teach children to become familiar with the geography of the country would be to supply them with a good, cheap map and get them to find out all the places mentioned in "Everywhere." The different correspondents give, from time to time, a good idea of the nature and products of each place.

THE receiver of an ordinary Christmas present or New Year's gift derives pleasure from the good-will of the donor once only, while the fortunate soul whose friend is thoughtful enough to secure him or her the RURAL for a year, is gratified with its contents and pleasantly reminded of the donor at least fifty-two times a year.

IT is notable that the weeklies always dress up handsomely for the holidays and then "blow their own trumpets" loudly. There is a marked difference between weekly newspapers and young ladies in this regard. Young ladies dress bewitchingly, and then frown and feel insulted when people STARE at them. But the weeklies like to be stared at and talked about.

As regards numbers, the accounts given in the daily papers about the cattle exhibited at the great Dairy Fair would disappoint the visitor. The following is the entire list: One Zebu or "Sacred Cow" and calf; ten Ayrshires, most of them calves or heifers; six Holsteins, two calves and one bull; three Devons; two Norfolk Red Polled; eleven Jersey cows, one bull, and some calves and heifers, and seven natives, young and old.

As a result of careful experiments in feeding stock, it has been found that in moderate weather they require about 2½ pounds of hay per day, or its equivalent in other fodder, for every 100 pounds of their live-weight to sustain the vital functions and prevent them from losing flesh. When animals are exposed to very cold weather, a larger amount of food is needed, as some of it is used to keep up animal heat. All that is gained in the way of milk, flesh, or wool, is derived from the food consumed beyond this amount. In comparisons of the relative yield of milk and butter from various breeds of cows, allowance should be made for the comparative cost of the maintenance of each kind in accordance with this rule—an allowance which a hobby, a prejudice or a desire to make a strong point, often prevents authorities on stock matters from referring to.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

THE INTERNATIONAL DAIRY FAIR.

(Continued from page 793.)

There is a fascination about cheese-making that attracts the learned as well as the unlearned in the art, and the crowds of interested spectators hovering over the large six hundred gallon vat in Jones, Faulkner & Co.'s exhibit attested to this interest. Considering the disadvantages under which the display was made, the firm is entitled to praise for the spirited manner in which the exhibit was arranged to show a cheese-factory in full operation, making cheese every day during the fair.

Although the boiler was not fired up, the engine was put in motion by steam supplied by the annex, and its steady, smooth motion attracted attention to the merits of the boiler. The "Reliance," as it is named, is equipped with all the latest improvements. It has been especially the aim of the makers to secure economy in the use of fuel; the fire-box is very large, extending the whole length of the under surface of the boiler. As the fire-grate surface is over two feet square, in addition to the space back of it, it will admit of the use of wood of any length up to four feet in boilers of that length. The heat and smoke pass from the fire-box to the rear end, and return through the flues in the lower part of the boiler. All parts are accessible for cleaning. Next to the boiler, and attracting even more interest, was a little gem of a force-pump, whose simplicity, compactness and trustworthiness leave little to be desired.

Over in one corner stood Ralph's vat, a vat with which many of our readers are familiar. It is a self-heating vat, the heat extending the whole length, perfectly under control and evenly distributed, warming at the top as well as at the bottom. This very desirable arrangement is effected by an equalizer, which, we believe, no other vat has. One of its great merits, aside from its good work, is that it involves no expense in setting up; has no obstructions at the side; no pipes to fill up with hard water, and needs but little fuel. This vat is specially adapted for dairies and small factories.

Its big brother, the 600-gallon vat, was used in the cheese-making operations. This vat is made of superior materials, and is put together entirely with bolts, rods and screws. The sales this year have mounted into the hundreds, which is a satisfactory test of their popularity.

Frazer's Gang-press was used to press the cheeses made during the fair, and the curd-mill was on hand ready for its part of the work.

The general display was very tasteful. All the articles that a factory or diary could want were displayed on tables, or stood about in odd corners.

As stated elsewhere, the firm took the first premium ($100) for cheese factory apparatus. The cheese factory apparatus was sold during the fair to a St. Lawrence County dairyman.

The Orange County Pail Co., 78 & 80 Murray St., New York, was represented by Mr. H. C. Carter. The Orange County pail is one of the best-known return packages that is sent to New York, and a long experience has enabled the makers to improve it from time to time until, to-day, it is very generally employed by leading creameries as well as farm dairies. A new fastening—invented by Mr. Carter—is a simple and practical device for keeping the cover in place. It is free from springs, strong enough to withstand rough usage, holding the covers securely in place, while at the same time it allows the cover sufficient play to adjust itself to any change in the shape of the pail due to shrinkage or expansion.

In addition to the above there were various kinds of butter packages, including Welsh-tubs made of ash, maple and bass-wood, oak pails with bails, firkins, kegs and lard pails adapted to every demand of the trade. A specialty is made of five and ten-pound non-returnable pails for family use. These pails, as well as the good display of cheese scale boards, and cheese box rims were awarded a diploma by the committee—the highest prize given in the class.

As may be seen by a reference to our first page the display made by Messrs H. K. & F. B. Thurber & Co., of New York City was quite the most striking feature of the entire fair. Aside from its ornamental aspect it was highly instructive and an intelligent and well-directed effort to place before the dairymen of the country a line of samples of cheeses that to-day command the highest prices in the foreign markets which our dairy produce is seeking. These particular kinds were mainly shown on a table that flanked the main exhibit and comprised Stilton, Cheddar, Common Cheshire, Monk's Head, Gouda from South Holland, Edam, Ballini di Gravina from Central Italy, Romatour, Roquefort, Cacia Cavilli and the aromatic Limburg. Many of the above were prize cheeses from the October London Dairy Show and naturally the best of their kind.

The foreign butter also was an interesting collection, consisting of famous Leinster cream butter, packed on the Dorset system. Danish butter—the quality that commands such high prices in London markets—Mild Cured Cork, Keil, Normandy, and Cured Welsh butter that was also the prize package at the London show.

The pyramid was made of cheeses in various sizes, starting off with ten monster nine-hundred pounders, that explained their presence by quoting Samuel 1, xvii: 18, "And carry these *ten* cheeses unto the captain of their thousand, and look how the brethern fare and take their pledge." After such a present it would be superfluous to "look how the brethern fare."

The Messrs. Thurber were awarded the first prize for the best display of cheese, besides a number of other prizes. In connection with their cheese and butter exhibit was a very fine display of the celebrated Higgin's salt which is being very generally brought to the attention of dairymen, and for which a patent has recently been granted by the English government to the Messrs. Higgin for improvements in salt-making. Prizes were additionally awarded by this firm for cheese and butter salted with this salt and many exhibits were shown in which it was used.

It was gratifying to note this interest in the dairy by one of the largest grocery and commission houses in the country, and the address of Mr. F. B. Thurber, on Friday evening, was replete with facts and suggestions that could only have been the result of a careful study of the subject.

Among the many butter colors was one made by Geo. B. Sanders & Co., of Taunton, Mass., which is mixed with salt, giving it a golden tint, from which it derives its name—Golden Butter Color. It is claimed that the color imparted to the butter by its use, not only secures the most approved tint, but that it also enhances the keeping qualities of the butter; that it does not color the buttor-milk, and that it is cheap.

"The way we get our bread and you get your butter," was the unique legend that attracted many to the display of Messrs. Porter Blanchard's Sons, of Concord, N. H.

The Blanchard churn has been so long before the public that it is as familiar as household words; and a striking proof of its excellence is its continued popularity. It has not degenerated into a fossil condition, as may be understood by the fact that it keeps abreast of competition—not only in this country but abroad, Russia having sent several orders very recently. That country is mentioned because it is the latest acquisition of foreign territory by the churn; it would not surprise us to hear of China next.

In addition to the regular exhibit, one of the large factory churns was operated by the steam engine of Whitman & Burrell, and made some of the fifty-cents-per-pound butter that was sold during the fair. A new cylindrical factory-churn, one of the latest patterns brought out by this house, embraces many improvements and advantages; in fact, the Blanchards are constantly making such changes and improvements as are suggested by practical dairymen to meet the wants, and, perhaps, we might say the whims of butter-makers.

We cannot leave this interesting exhibit without referring to something very novel, to wit: a power butter-worker that has great merit. The motion closely resembles hand-working, while the power is greater, consequently a larger mass may be more perfectly and rapidly manipulated.

An appropriate display in connection with the International Dairy Fair, was the collection of highly-finished Howe's Improved Scales made by the Howe Scale Company, and represented by its New York agents, Messrs. Priest, Page & Co. There were shown a four-ton cattle, or hay scale, platform scales in various sizes, butter and grocers' scales, and finally, scales made expressly for dairy use. The importance of accuracy in all operations of the dairy, cannot be too strongly urged, and a scale that is simple in mechanism, strongly made, and always trustworthy, is an article of the first importance in this connection.

The Howe scale, since its introduction, has become one of the standards in this country, and its merits are pushing it into prominence in every civilized land. It has been awarded the gold medal at the recent Paris Exposition; has taken prizes at almost all the industrial and agricultural fairs held in 1878 in this country, and for the past three years has secured the government contracts for supplying the Treasury and Customs departments, and has been adopted by the Indian Commissioners. Five thousand are now used by the government alone.

LIST OF AWARDS.

The following is a list of awards and diplomas.

CLASS A.—CREAMERY BUTTER.

First prize, $50; 2d prize, $35; 3d prize, Diploma.

No. 1—Best made in June, '78: 1, H. C. Hoffman, Horseheads, N. Y.; 2, do.; Dip., A. O. Kingsley & Co, Strawberry Point, Ia.

No. 2—Best made in Sept.: 1, P. Van Dyke, Roxbury, N. Y.; 2, J. S. Murray, Delhi; Dip., W. L. Rutherford, Bovina, N. Y.

No. 3—Best made in Oct.: 1, Chadwick & Stewart, Anamosa, Ia.; 2, J. S. Holbert, Chemung, N. Y.; Dip., Jno. Stewart, Anamosa, Ia.

No. 4—Best made in Nov.: 1, Jno. Stewart; 2, J. S. Holbert; Dip., A. O. Kingsley & Co.

CLASS B.—DAIRY BUTTER.

No. 2—Best made in June: 1, S. B. Van Dusen, Harper's Field, N. Y.; 2, B. G. Morse, Red Falls, N. Y.; Dip., W. L. Rutherford: Honorable mention, B. S. Morse.

No. 3—Best made in Oct.: 1, J. S. Shattuck, Norwich, N. Y.; 2, M. Wood & Bro., W. Martinsburg, N. Y.; 3, A. C. Bigger, Delaware Co.; Hon. mention, G. B. Lyon, Ovid, N. Y.

No. 4—Best made in Nov.: 1, D. B. Prout, Ashland, N. Y.; 2, J. S. Murray; 3, Mrs. M. Decker, Oswego, N. Y.; Hon. mention, S. B. Van Dusen.

CLASS C.—CREAMERY BUTTER.

No. 1—Best made in New York: 1, J. H. Shoemaker, Jamestown; 2, L. P. Baker, Earlville; 3, Avery Wordsworth & Co., Morrisville.

No. 2—Best made in Pennsylvania: 1, H. Canfield, Miller's Station.

No. 3—Best made in New Jersey: 1, C. Bird, Hamburg; 2, J. Northrop, Andover.

No. 4—Best made in New England States: 1, Farmington Creamery Co., Farmington, Ct.; 2, D. Whiting & Sons, Wilton, N. H.

No. 5—Best made in Ohio: 1, H. L. Stewart, Wellington; 2, C. Sage, do.; 3, Hoar, Warner & Co., do.

No. 6—Best made in Michigan: No award.

No. 7—Best made in Indiana: No award.

No. 8—Best made in Illinois: 1, Newman & Thompson, Elgin; 2, Mann, Wood & Co., Elgin; 3, L. C. Ward, St. Charles.

No. 9—Best made in Wisconsin: 1, Geo. Lawrence & Son, Waukesha; 2, N. W. Morley, Baraboo; 3, A. J. W. Pierce, Milwaukee.

No. 10—Best made in Iowa: 1, H. D. Sherman & Co., Monticello; Jno. Stewart; 3, Saml. Allison, Sr. Delhi. Highly commended, B. Hershey, Muscatine.

No. 11—Best made in Missouri; Judges report exhibits unworthy of awards.

No. 12—Best made in Minnesota: No awards.

No. 13—Best made in Canada: 1, C. Turcot, Montreal; 2, Galeo, Woodcock & Co., Montreal; 3, Hettle & Inglis, Teeswater.

CLASS D.—DAIRY BUTTER.

No. 1—Best made in New York: 1, J. S. Murray, Delhi; 2, J. P. Gulliver, Binghampton; 3, B. G. Morse, Red Falls.

Nos. 2 to 7 inclusive for best made in States of Penn., N. J., N. E. States, Ohio, Mich. and Indiana. No entries.

No. 8—Best made in Illinois: 1, T. Bacon, Waucondo.

No. 9—Best made in Wisconsin: 1, R. S. Houston, Kenosha; 2, F. C. Curtis, Rocky Run.

Nos. 10 to 12—Iowa, Missouri, Minn. No entries.

No. 13—Best made in Canada: 1, S. Goodhue, Montreal; 2, Wm. Battle, Montreal.

CLASS E.—FOREIGN BUTTER.

No. 1—Best made in the British Isles: 1, H. K. & F. B. Thurber & Co., N. Y. (representatives); 2, do.

No. 2—Best made on the Continent of Europe: 1, J. Webb, London, Eng.; 2, H. K. & F. B Thurber & Co., N. Y.; 3, Webb & Edmonds, London, Eng.

CLASS F.—SWEEPSTAKES.

For the best butter of any kind made at any time or place: H. D. Sherman & Co., Monticello, Ia.

CLASS H.—CHEESE.

No. 1—Best made in New York: 1, W. A. Johnston, Marshfield: Morton-May, Newport.

No. 2—Best made in Pennsylvania: 1, Wm. Warner, Meadville; 2, Jno. Cole, Venango; 3 P. Crane, Edinboro.

No. 3—Best made in New England States: 1, Geo. S. Burnham, E. Poultny, Vt.; 2, Smith & Underhill (representatives), N. Y.

No. 4—Best made in Ohio: 1, F. H. Snow, Garretsville; 2, F. G. Kingdom, Cortland; 3, W. S. Morton, Nelson.

No. 5—Best made in Mich.: 1, A. D. Power, Laconda; Jno. Varson, Farmington; 3, Jno. Elliott, Iosco.

No. 6—Best made in Indiana: Exhibits had not sufficient merit.

No. 7—Best made in Illino's: 1, C. E. Freeman, Alton; 2, A. Nolting, Elgin; 3, Mann, Wood & Co.

No. 8—Best made in Wisconsin: 1, C. Hazen, Ladoga; 2, M. N. Seward, Ft. Atkinson; 3, J. Mills, Lodi.

No. 9—Best made in Iowa: 1, J. B. Rose, De Witt.

No. 10—Best made in Missouri; 1, S. I. Udell & Co., St. Louis; 2, Fales & Moore, Cameron.

No. 12—Best made in Canada: 1, Hon. T. Ballantyne, Stratford, Ont.; 2, D. Chalmers, Stratford, Ont.

CLASS I.—FOREIGN AND FANCY CHEESE.

No. 1—Best made in the British Isles: 1, Geo. Gibbins, Bath, Eng.; 2, H. K. & F. B. Thurber & Co., N. Y.; J. Stafford, Son & Oswin, Leicester, Eng.

No. 2—Best made on the Continent of Europe: 1, J. Webb, London, England.; 2, H. K. & F. B. Thurber & Co.

No. 3—Best fancy shapes made anywhere: 1, H. K. & F. B. Thurber & Co., N. Y.; 2, J. Webb, London, Eng.; 3, C. P. Root, Gilbertsville, N. Y.

CLASS J.—SWEEPSTAKES.

No. 1—Best cheese made anywhere: 1, Geo. Gibbins, Bath, Eng.

CLASS L.—SPECIAL PREMIUMS.

No. 1—Best lot of Butter, not less than 50 lbs., made in N. Y., Pa., N. J., N. E. States or the Canadas, salted with Ashton's Salt. Prize $125 in gold. 1, G. S. Camp, Owego, N. Y.

No. 2—Same conditions and prize, for Butter from States of Ohio, Mich., Wis., Ind., Ill., Iowa, Kansas, Neb. or Minn.: 1, Brinkhouse & Felter, Strawberry Point, Iowa.

No. 3—For best lot of Cheese, same conditions, States and prizes as Class L, No. 1: 1, H. C. Brookway, Richfield, N. Y.

No. 4—For best lot of Cheese, same conditions and States as Class L, No. 3: 1, Stewart & Skinner, Fort Atkinson, Wis.

No. 5—Sweepstakes Prize of $250, for best lot of Butter salted with Higgin's Salt: 1, H. Smith, Sheboygan, Wis. Note: This is contested by D. E. Wood of Chicago.

No. 6—Best firkin of Dairy or Creamery Butter, made in America. Prize, set of Fairbanks's Scales, value $100. 1, George Lawrence & Son, Waukesha, Wis.

No. 7—Best single box of Cheese, made in America, same prize as No. 6: 1, R. H. Baker, Colosse, N. Y.

CLASS M.—DAIRY IMPLEMENTS, MACHINERY, ETC.

No. 1—For best Creamer or process of raising cream. Prize, Diploma: Whitman & Burrell, Little Falls, N. Y.

No. 2—For the best Churn: Davis's Oscillating Churn, Vt. Farm Machinery Co., Bellows Falls, Vt.

No. 3—Best Cheese Vat: Whitman & Burrell.

No. 5—Best Butter Packages: Orange Co. Pail Co., New York; Optimus Butter Tub, James Gilberds, Jamestown, N. Y.

No. 10—Best display of Dairy Implements in the manufacture of Cheese. Prize $100. Jones, Faulkner & Co., Utica, N. Y.

No. 11—Best display of Dairy Implements in the manufacture of Butter. Prize $100. Whitman & Burrell.

Diplomas have also been recommended for the displays of M. Halstead (glass butter package); D. C. Perrin (butter color); Durand's Cow Milker; and to Dairy Supply Co., for tin churn and a milking pail.

CLASS N.—DAIRY COWS, FULL-BLOODS.

No. 1—Devons, Best Milch Cows: Harvey N. Weed, Stamford, Conn. Diploma to "Gertie," for great excellence.

No. 2—Jerseys: 1, "Josephine 2d," Wm. Crozier, Northport, L. I.; 2, "E. Bashon," Jas. H. Haight, Paterson, N. Y.; 3, Bull, "Duke of Colt," Wm. Crozier.

No. 3—Ayrshires: 1, "Dora," Wm. Crozier; "Mysie," S. M. & D. Wells, Wethersfield, Conn. Diploma. Young bull, "Roht. Mars," Wm. Crozier.

No. 4—Guernseys: Favorable mention, Cow "Flora," Wm. Crozier.

No. 5—Holsteins: Diploma, cows "Iris" and "Dickert," Jas. Nellson, New Brunswick, N. J.

No. 7—Including all crosses of full-bloods. Diploma, for 3 cows, Oscar Duryea.

No. 8—Including all not full-bloods. Diploma, Two native cows, Spencer Springstead, Westchester, N. Y.; Diploma, Sacred cow and calf, Dr. J. Bathgate, Morisania, N. Y.; Norfolk Red polled cow, G. F. Taber, Paterson, N. J.

CLASS O.—MISCELLANEOUS.

No. 1—For best Rennets: Whitman & Burrell, Ch. Hansen, Liquid Rennet.

No. 2—Best coloring-matter: Wells, Richardson & Co., Burlington, Vt.

Literary Miscellany.

WEAKER THAN A WOMAN.

(Continued from page 782.

CHAPTER XV.

Mrs. Haye declared that it was fortunate rain fell two days before the *fete*; it cleared the air, it freshened the grass, it washed the dust from the trees and hedges, it made the whole face of nature so sweet, so fresh and fair, that it was a pleasure to breathe. The air was odorous with the scent of flowers and of green leaves.

Sir Owen appeared to time; his sumptuously-appointed carriage, with the magnificent roans, drove up to the Limes. Nothing could have exceeded his kindness—he was so attentive to Francis Haye, so kind to Mrs. Haye, so deferential to Violet. Again she felt how pleasant it was. She saw deep satisfaction on her father's face, great pride on her mother's. She was young and heedless, and on such an exquisite June day how could she help feeling bright and happy? Moreover, she held something in her hand which gladdened her heart. Just as she was starting, while Sir Owen stood hat in hand waiting for her, a messenger came with a note from Felix—only a few short lines hurriedly written, but which went straight to her heart.

"My darling Violet,—I send a few words to greet you as you are starting, and to wish you a very pleasant, happy visit. You will not forget me, sweet? you will say to yourself over and over again that you are pledged to me? I trust you implicity, You love me, and I am content. I kiss your sweet hands, and leave my heart in them."

How he loved her! She repeated it again and again. How he loved her! The little note pleased her. She drove away, with Sir Owen whispering all kinds of compliments to her; but her lover's face was before her eyes, and his words were in her heart. They drove through the magnificent park with its herds of antlered deer, through the superb grounds, to the grand entrance, and then Violet looked up in wonder.

The afternoon sun fell upon the grand old building, showing the towers and turrets, the deep oriel windows, the Venetian balconies, bringing out the picturesque outlines of the noble edifice. There was a flight of broad marble steps, and the great door opened into an entrance-hall the first glimpse of which bewildered Violet. She hardly knew that such treasures existed—that such splendor could be; unconsciously she crushed her lover's little note in her hand as she beheld the treasures on the walls.

She passed through long broad corridors, where white marble statues gleamed from among pyramids of choice flowers; she gazed on glorious pictures and picturesque fountains; and all the time Sir Owen walked by her side whispering gay, pretty compliments. They came to the drawing-room at last—a large, lofty room with an exquisitely-painted ceiling, and bright with flowers and statues. In the midst of all the magnificence stood Lady Rolfe, with a smile on her face, waiting to receive them.

That was remarkable in itself; but that she should be so gracious and so amiable was more remarkable still. She welcomed them with courtly, kindly words, and in all she said she was seconded by her daughter Lavinia. Sir Owen, she said, had asked her to assist him, and she had for a time undertaken the duties of hostess.

Then she sent them to their various rooms. Before Violet had been many minutes in hers, a pretty Parisian *soubrette* entered, who announced herself as Lady Rolfe's maid.

"Her ladyship," she continued, "thought that, as you had not brought a maid, I might be of some service to you."

For half a moment Violet felt a sensation of shame that she had brought no maid, then of wonder as to what she should do with one. She accepted the proffered help, and the little Parisian, Aimee by name, soon had every thing ready for her.

Violet had never worn a fashionable evening dress before, and she looked in wonder at the marvelous whiteness of her fair neck and arms, and at her round shoulders, that were perfect as a master-piece of sculpture, while the white silk showed off her graceful figure. The train of blue velvet gave her the look of a princess. In her hair Aimee placed a beautiful white camellia, and another lay, like a white star, in the bodice of her dress.

To Aimee it was a labor of love to dress Miss Haye. She did wonders with the shining, golden hair; and when Violet was ready to go down stairs she stood before the great mirror in wonder. Was that exquisitely radiant girl herself? She longed for Felix to see her. There was no pleasure without him. How he would admire her!

What a never-to-be-forgotten evening it was! Her greatest difficulty was in keeping herself from expressing her wonder. She went down to the drawing-room and found two or three other ladies with Lady Rolfe. She had an uneasy consciousness that they were all talking about her as she entered, for they stopped suddenly, and looked at her curiously. But Lady Rolfe introduced her, and they were so startled by her striking beauty that they were more than civil to her. Sir Owen almost followed her into the room. How his eyes brightened as he saw her!

"For a girl like that to marry a country solicitor, to hide such beauty as hers in a place like Lilford, is simple madness," he said to himself. "She will thank me in after years for saving her from such a fate."

Then he went up to her, and scarcely left her all the evening. It was against the laws of etiquette for him to take her down to dinner; but

Lady Rolfe accepted his apology with a smile. That astute lady had explained the motives of her policy to Lavinia.

"I understand Sir Owen," she said. "If any one opposes him he will lose his reason over the girl. Place no obstacle in the way of his admiration, and he will soon tire of her. He cannot marry her, for she is engaged to Felix Lonsdale."

So, with great amiability, Lady Rolfe had accepted Sir Owen's invitation to act as hostess for three or four days. She had determined that she would give him every opportunity of being with Violet, on the principle that the more he saw of her the sooner he would tire of her. Sir Owen took her down to dinner, and sat by her side, Violet was dazed with wonder. She saw the superb gold and silver plate, the magnificent epergnes, the rare flowers, the costly wines, the richly-cut glass. She felt half afraid of the well-trained butler and his noiseless assistants—it was all a scene of splendor and magnificence, that dazed and bewildered her.

Sir Owen gave her little time to think, and everyone took their cue from him—visitors and servants. Violet was queen of the evening. She concealed her trepidation, and carefully watching Lady Rolfe, she imitated her exactly. Then, when the ladies withdrew, she was the center of observation—her exquisite beauty, her dainty dress, the attention paid to her by Sir Owen, made her the most important person present.

Sir Owen did not long delay in entering the drawing-room; and then he selected a luxurious chair, and enthroned her. He found her a footstool; he waited upon her as though she had been a princess and he a page; he never left her; and she, looking at the splendor which surrounded her—looking at the wealth, the magnificence—wondered that she should play a part in such a scene. It was a night of triumph to her; but she did not forget Felix; it would have been perfect had he been by her side.

The guests talked of the morrow's *fete*—they had music and cards. Sir Owen gave Violet a lesson in besique; and when the evening was over she went to her mother.

"Mamma," she said, "how delightful it has all been! I am so sorry that it is over. I wish it would last forever."

Mrs. Haye smiled.

"It is more pleasant, Violet, than the struggle that falls to the lot of people with limited means."

It was pleasant. The dainty, luxury-loving nature found it wonderfully pleasant. Violet smiled to herself as she sat in her room that night. Aimee was brushing the long, shining, golden hair. She was surrounded by every luxury—hangings of silk and lace, Dresden china, Bohemian glass; the room was a marvel in its way. She smiled as she realized how dear luxury was to her already—how she admired soft velvet chairs and thick soft carpets—liked to eat from silver plate and drink from richly-cut glass—liked to be waited on by well-trained servants—to live in this atmosphere of splendor—to wear rich silks and costly lace, precious stones and gold. It was an entrancing life, and the other would never seem quite the same again. After all, there was nothing like money.

She dismissed her maid, and would have slept, but that a ray of moonlight shone in through the window. One part of the rose silk hangings had been left undrawn. She went to arrange it to shut out the moonlight, so that she could sleep, and, when she stood near the window and saw the silver light on the trees and flowers, her thoughts went back to that lovely night when she had stood with him by the lilac-bushes. How he loved her! His face appeared so plainly before her—the love-lit, earnest eyes and winning lips.

After all, love was best; wealth was very pleasant, but it was sweeter to be loved than to be rich. And she fell asleep with her lover's name on her lips.

CHAPTER XVI.

The next morning was bright and warm. There was a hurried breakfast—every one seemed to have so much to do; from early dawn men had been at work in the park. Sir Owen came down-stairs radiant.

"Who will say a word against English weather after this?" he cried; then, when he saw Violet, he bowed low to her. "The queen of the *fete*," he whispered, and she blushed as she heard him.

The post-bag came as they sat at breakfast, and there was a note for her; she saw that it was from Felix, and put it aside until she should be alone. Looking up suddenly she saw Sir Owen watching her intently, and again a hot flush burned her face. He did not leave her—everything was referred to her; her wishes, her tastes were continually consulted.

"My dear Lavinia," said Lady Rolfe, with upraised hands, "it is something incredible—he treats her just as though she were mistress of this house. It is quite enough to turn any girl's brain."

Though he spent his whole time with her, Sir Owen did not forget her parents. Francis Haye declared that he was "in clover;" his wife had never been so happy; they were waited upon and attended to before every one else—they had every luxury, every attention.

The guests arrived early. Everything was a success, but the crowning satisfaction of all was that the weather was so fine. Violet found time to read her lover's note; it said how disappointed he was that he could not come to Garswood, but to attend the *fete* even for one hour was an impossibility for him. His father had had a very serious relapse, and he could not leave the office. She was sorry; yet she could not understand how it was she experienced a certain feeling of relief—her present triumph was so great, and she enjoyed it so thoroughly. It must all have ended when Felix came. It was like a play now; she was playing the part of mistress of a magnificent mansion—of queen that brilliant *fete*. She must have given up this *role* if Felix had come. She must have spent the time with him.

"I shall never in my life have such a triumph again," she said to herself—"never again. I may as well enjoy this while it lasts."

She looked superbly beautiful in the dress that had been sent to her for the *fete*; and she walked through the grounds with Sir Owen by her side, she was the observed of all observers. She felt her triumph keenly—it was no small one—yet she had an uneasy sensation too that it was, after all, a false position. She was the promised wife of another man—she had no right to be queen there, with Sir Owen by her side.

It was a brilliant *fete*—she had seen nothing like it in her life. The *fete* at the Vicarage, which had always seemed to her the very acme of aristocratic gaiety, dwindled into insignificance. The sun had seldom shone on a more brilliant scene; flags and banners waved from the tall trees; there were numerous evergreen arches, marquees, and an infinity of amusements. The music from the bands echoed through the park.

"It is very beautiful," said Violet, as she stood with Sir Owen, watching the various groups.

"If you are pleased, I am well repaid," he said. "Do you not know that I would give all I have to please you? I would do all this over and over again to win one smile from you."

Suddenly, standing there, she remembered her promise to Felix that she would tell Sir Owen she was to be his wife. How was she to do it? She could not turn round to him abruptly and say, "I am going to marry Felix Lonsdale." She was tempted to do so, but it would be too brusque. "I shall find an opportunity during the evening," she thought—"I can easily make one, but not at present. I will enjoy myself now."

Then Sir Owen conducted her through the grounds. It was a veritable triumph. Her exquisite beauty, her superb dress, her radiant face, the evident admiration of this wealthy baronet by her side, were the sole themes of conversation. People bowed to her, who had never seemed to be aware that she existed before; ladies pleaded for an introduction who had passed her with haughty insolence; men crowded round her, and none seemed content until he had won one smile from the sweet lips, one glance from the lovely eyes.

They passed on, Sir Owen talking eagerly to her; but she hardly heard what he was saying, she was so engrossed in the brilliant scene. He led her past the front of the Hall, and through the superb gardens. It seemed to her that they passed acre after acre of glass-houses, then they came to a little hill. At its foot was the river bank, and its summit was crowned with a group of silver larches. A seat had been placed under them, for from the summit of that hill there was to be seen one of the loveliest pictures in England.

"Where are we going?" asked Violet, as they left the Hall and the grounds.

"I want to show you Larch Hill," he replied.

She did not quite like being there alone with him. Felix would not like it, yet how could she resist?

"Every one who comes to Garswood sees Larch Hill," he continued. "It is really the prettiest spot about here."

"But your guests will miss you," she said.

"I am with the queen of the *fete*," he returned, with a low bow; and she saw that he did not care in the least whether he was missed or not.

He led her to the summit of the hill, to the rustic seat under the larches.

"I was thinking all last night," he said, "that I would bring you here to-day. I want you to look well around you. See how the sun shines on Garswood! Look at the Hall first."

It was a magnificent panorama that was spread out before her. Not the least important feature in it was the grand old Hall, with its towers and turrets. He stood by her side.

"From here as far away as your eye can reach," he said, "is mine. North, south, east and west—it is all mine. You see the river like a broad silver line in the distance—the boats and the barges on it are mine. You see the villages nestling amongst the trees, the rich, well-cared-for farms, the quiet, pretty homesteads—they are mine—all mine."

"It is a noble property," she said.

"Yes; there is not a larger or better estate in England, and the beauty of it is that it lies all together. You see the dark mass of woods over to the left; the trees in them are a magnificent fortune in themselves, and they are all mine. You see that broad stretch of meadow-land where the cattle graze—it is all mine!"

She made no reply; his words and his looks confused her.

"I am lord of the soil," he said, "for many miles round. I know no other place so fine as Garswood. Violet Haye, all this is mine; and, if you will speak only one word, it shall all be yours."

She turned to him with a startled glance.

"I do not understand you," she declared. "How could it be mine?"

"It can all be yours if you will marry me, Violet," he whispered.

Her beautiful face grew pale as death.

"I cannot marry you," she replied quickly.

"Why not, Violet? Tell me why."

"Because I am engaged to marry Felix Lonsdale."

"Is that all? What on earth does that matter? He ought to be ashamed of himself to presume to ask such a girl as you to marry him; he must be mad to think you would."

"He loves me!" she said quietly.

"So do I—so do many others. You must not marry him, Violet; he has no money, no influence, no position; his father is under a cloud which must darken the son's future. You cannot marry him—it would be madness!"

"I am engaged to him," she replied.

"As if that matter! Engagements like yours are broken every day; it is the commonest thing in the world—no one thinks anything of it."

She seemed to see her lover's face as he had looked into hers that night by the dew-laden lilac-bushes—she almost heard his voice. She looked up at Sir Owen, her face deathly pale.

"Do you know, Sir Owen," she said, "that if I were false to Felix Lonsdale it would break his heart?"

Sir Owen laughed aloud.

"My dear Miss Haye, lawyers have no heart—what could they do with such a commodity? He might lose his temper; but men never break their hearts—a good cigar will cure the most desperate love-affair. You amuse me."

"I hope you are speaking falsely," she said. "I hope men are better than you paint them."

"They are all very much alike, my dear Violet," he returned. "It is most refreshing to hear that you think any man capable of breaking his heart."

"Ah, but you do not know Felix Lonsdale. You do not know how he loves me."

"I never wish to know Felix Lonsdale," he told her. "I have no partiality for men under a cloud. I know how much I love you, and that is more to the point."

She shrank from him with a pale, scared face. She did not like this discussion of her lover.

"Let me tell you," he continued, "how much I love you. I think you the most beautiful woman I have ever seen in my life. Your beauty gladdens my heart. To win it, and keep it always near me, I would give all that I have in this world. I love you well enough to lay all my wealth at your feet, to worship you all my life. I love you so well that neither your plighted word, the opinion of the world, nor any human power, shall come between us. I would break every tie, every bond, crush every love, to win you and make you mine. I will throw everything to the winds if you will only say the word."

The pale, beautiful girl shrank from him.

"I cannot," she said—"you know that I cannot—I must marry Felix Lonsdale."

"I could kill him!" muttered Sir Owen under his breath, with an oath. Aloud he said, "You shall never marry him."

She shrank still farther from him, and cried aloud; and then he was full of remorse—he tried his best to comfort her.

"Listen to me, Violet," he said; and once more she raised her beautiful face to his. "Forgive me—I am more accustomed to shouting at men than to pleading with ladies. Do not think I am so cruel—why should I kill him? Do not tremble so—I shall never forgive myself."

She tried to conquer the fear that had mastered her; she stilled the trembling of her hands the wild beating of her heart. He spoke more gently to her.

"I am more than half a savage," he said. "I am ashamed of myself. How different I should be if I had a gentle, beautiful girl like you near me! I should grow civilized. Now, Violet, listen to me. You shall not give me your answer now—not yet for many days; but I do pray you to be my wife. Do not look at me and say you cannot—you can if you will. Such promises as yours are broken every day. I will not let you give me an answer until you have thought the matter well over. Look around you once more, Violet—look at this stately home, this broad domain—think of yourself as its mistress—mistress of Garswood Hall and forty thousand a year. As Lady Chevenix—how well the name sounds!—as Lady Chevenix, I say, you would be queen of the whole country, you would be one of the most popular and wealthy women in England. You will have the world at your feet. I will buy you the most magnificent diamonds—indeed everything that women like best. You shall be surrounded by every luxury that the world can give, if you will only say 'yes.'"

"I cannot," she murmured; but her voice was weaker and fainter this time, and he noticed the change.

"I will not accept your answer yet," he returned. "But now look at the other side of the picture. You marry this man who is under a cloud, he takes you to some wretched little home, he works day and night, yet can hardly get money enough for his expenses: you spend the prime of your life, and lose the glory of your beauty, in a helpless struggle to make both ends meet; and you die before your time, your beauty faded and gone, worn out—even in the prime of life. I say that it is a crying shame for such a marriage to take place. You see the difference, Violet?"

"Yes, I see it, Sir Owen; but——"

"Then," he interrupted, "we will not talk about it to-day; you shall think it well over—you will be of my opinion soon. Now, we will go back again—and you will not forget the view from Larch Hill? The first moment I saw you, I meant to win you, Violet. I swore to myself that you should be mine. You have promised me the first dance to-night, remember."

He talked to her on indifferent matters as they descended the hill; then he said—

"Violet—you see that I cannot call you 'Miss Haye'—try to drive that scared look from your face; my guests will think I have been frightening you."

She made a great effort to bring back the smiles and the brightness to her face, but she did not succeed very well; the world was all changed for her since she had gone up Larch Hill, quite changed. There she had been calm, content, with just a shadow of longing for the grandeur around, yet happy in her lover and her love. Now she had been through a scathing temptation—one that had left her heart burning and her brain whirling; there could never be calm content for her again. As her eyes wandered over the various beauties of nature and art surrounding her, she thought to herself—

"All this might be mine—I might be Lady Chevenix and give grand entertainments here—I might be mistress of all.

Sir Owen said no more to her, but he redoubled his attentions, and people began to make pretty free comments about the matter.

"Felix Lonsdale will lose his *fiancee* if he does not mind," remarked Captain Hill; "and I shall be sorry for it."

"I believe, Lavinia," said Lady Rolfe with an air of dismay, "Sir Owen is so infatuated that he will marry the girl after all—he will indeed."

Francis Haye and his wife looked on in seemingly calm unconcern.

Violet found herself the center of attraction to all the men; one wanted her as a partner at croquet, another wanted her for lawn-tenis, a third craved permission to row her across the lake.

"I should like that best," she said, with a smile so sudden and so beautiful that the happy recipient of it lost his presence of mind at once.

Violet wished to be alone; she wanted time to think, to still the thrilling of her nerves; but she was mistaken in imagining that she would find solitude in a boat with a solitary companion However, no man was ever more completely deceived—Violet sat listening to him with a flush on her face and a smile on her lips. He thought that he was making a great impression on her, whereas she was congratulating herself that she was not compelled to hear or to answer his compliments.—[To be continued.

"STANDING TREATS."

No American custom creates more genuine surprise and amusement among traveling foreigners than that which is known in our saloons as "treating"—consisting in the entertainment of two or more with refreshments, for which one volunteers to pay. It is a pure Americanism. All over the Republic it is as common as in Europe it is unknown. There is probably no minute in any day in the year when two or three hundred citizens of Chicago are not guzzling something stronger than water at somebody else's expense.

The casual meeting of two men who have never exchanged a word together is a signal for both to at once exclaim, "Come let's have something," and for both to dive down into the nearest subterranean cavity below the sidewalk. The one who spoke first usually insists upon "paying the shot"—the word "shot" being a metaphorical reference to the deadly character of the contents taken into the stomach. If two old friends meet, the regular thing to say first is, "Let's drink to old times," and the resident must invariably "treat" the stranger. If a man be well acquainted, it is considered the princely thing to seize upon all his acquaintances as often as possible, take them to a saloon, and give them a complicated drink at the bar.

If there is anything more absurd than this habit, we are unable to put our finger on it. Men do not always "treat" one another to car-tickets because they happen to meet on the same seat. We never saw a man take out his pocket-book on encountering an acquaintance and say, "Ah George! Delighted to see you! Do take a few postage stamps, it's my treat!" Do men have a mania for paying each other's board bill? And is drinking together more "social" than eating together or sleeping together?

A traveler may go all over the continent of Europe, of Asia, of Africa, without seeing any man except a Yankee offer to "treat" and the Frenchmen are quite social enough, but when they turn into a cafe to sip their wine or brandied coffee together, each man pays for his own. When two Germans long separated meet, they will be likely to embrace, and then turn into an adjacent beer cellar, sit down and eat pretzels and chat, but when they part again each man settles his own score independently. So in Italy. The Italians are proverbially merry and generous, but each man pays for his own wine, maccaroni and cigars. They never go into each other's pocket-book in the sacred name of friendship. They would as soon think of transferring to each other their washerwoman's bill.

This preposterous fashion of "treating" is largely responsible for the terrible drunkenness in America. It is, take it all in all, the most pestilent custom that ever laid its tyrannical hand on civilized human beings.—[*Chicago Post.*

TACT.

It was once Causeur's good fortune to spend a few days in the modest home of a friend of slender means, a home that was all that its owner could afford to make it, yet lacking many things that would have made it more comfortable and convenient. During Causeur's stay two guests were entertained at tea, both of them men of means and wide acquaintance, accustomed to all the luxury that wealth can give. But they were widely different in their behavior. The first dwelt upon the fact that the house was an in an out-of-the-way spot, and that there were few or no neighbors. At the table he told of the delicious tea he had drank at the house of one friend, of the rich tea service that he had seen upon the table of another, of the rare old china that was used in his own household, and of the dainty meals he had eaten from it. In the cramped little sitting-room, after tea, he sat by the stove and talked of the delights of an open wood-fire, of his enjoyment of rare and costly books and pictures, and of twenty other things that the host of whose hospitality he had partaken, did not and could not possess. When he had gone it was clear, although nothing was said, that his visit had caused pain, that it had made the wife feel her straightened circumstances more keenly than ever, and cast a shadow over her husband's thoughts. The next evening came the other visitor. He brought a good cheer in his very face. The room, he said felt so warm and comfortable after his walk, which, he added was just the thing is to give a man a good appetite for his supper. At table he spoke of every-

thing that was nice, congratulated his host on having such a snug little home, apologized for eating so much, but couldn't help it, because it was "so good" and tasted "so home-like," liked the old black teapot because it was just like the one his mother had when he was a boy, and told his hostess, who was all smiles and as happy as a queen, that she ought to thank her stars that she had no gas or furnace to ruin the flowers that made her room so cheerful. After tea he insisted that the children should not be sent to bed "just yet" said he wanted to tell them a story, as he did; and when he had done, and had kissed them good-night, they trudged off upstairs with beaming faces, under the guidance of a mother who felt that a ray of real sunshine had entered her home, making it better and happier for all time.—*Boston Transcript.*

RECENT LITERATURE.

The Old House Altered. By GEO. C. MASON. New York: G. P. Putnam's Sons. $2.50.

FROM this text a number of letters are given, as if between a brother and sister, relative not only to the architectural improvements of an old roof-tree, but to other things in the same connection. The volume is appropriately dedicated to the ladies of America who have a taste for building, and contains many valuable hints as to house-furnishing, hygiene, ventilation, etc. To illustrate the subject and make it the more readily understood there is given an old domicile, with diagrams showing dimensions, etc., and then plans of its proposed reconstruction. These are discussed and explained, step by step, in language divested of all technical terms. After the imaginary dwelling is so improved, architecturally, as scarcely to be recognizable, the furniture, decorations, the plumbing and every arrangement that can be made to conduce to health and comfort, are discussed in detail, clearly and comprehensively, and the book cannot fail to convey many suggestions of practical value to the simplest minds, whose inclinations may tend to making a comfortable and attractive home.

The Little Good-for-Nothing. By ALPHONSE DAUDET. Boston: Estes & Lauriat.

DAUDET'S reputation for creating and portraying characters is in this book very well sustained. The Little Good-for-Nothing, as his sobriquet implies, is an uninteresting youth whose moral and physical weaknesses lead him through a series of adventures and misfortunes, naturally entailed and skillfully developed by the author. But the incidents, though novel, are not sufficiently interesting to enchain the reader's attention, and a monotony of detail renders it a rather tedious story, notwithstanding its many critically good points.

The White Horse of Wooten. By CHARLES J. FOSTER. Philadelphia: Porter & Coates. $1.50.

THIS is a story of "love, sport and adventure in the Midland counties of England and on the frontier of America"—in which the "sport and adventure" element so largely predominates that those who have a taste for quieter literature are not likely to be interested in it. It is well written, however, and presents a diversity of scenes and characters which is calculated to delight the sporting fraternity and the lovers of adventure.

Fanchon, the Cricket. By GEORGE SAND. Philadelphia: T. B. Peterson & Bros. 50 cts.

THIS is the story of which a dramatic version has been made so popular by Maggie Mitchell, the favorite actress. Its chief beauty is its purity of style. It charmingly depicts the trials and vicissitudes of a poor orphan girl, and is full of pathos and vigor.

MAGAZINE NOTES.

THE POPULAR SCIENCE MONTHLY for December opens with an interesting paper on Edison's Telephonic and Acoustic Inventions (illustrated). Next follows Dr. Oswald's admirable article on Fever-Factories, which ought to be widely read. It contains many valuable and timely suggestions and is alone worth more than the price of the magazine. Prof. Bain continues his instructive articles on Education as a Science. Explosions from Combustible Dust will be of especial interest to millers. Strange Animal Friendships is filled with entertaining anecdotes of horses, dogs, pigs, birds, lions, etc. The Science of Easy-Chairs is a suggestive paper. Biology and Woman's Rights is to the last degree conservative, and many of its statements are absurd. Language and the Emotions, by Dr. Chas. Walstein; Animal Intelligence, by Geo. J. Romanes, and a Sketch of Dr. Peterman conclude the body of the magazine. Popular Miscellany, with Editor's Table, Literary Notices and Notes, conclude the number. Henceforth the magazine is to be enlarged.

APPLETONS' JOURNAL for December is an unusually attractive number. The stories are by Ellen W. Olney, Auerbach, Susan Fenimore Cooper, Mary E. Bradley; the poems by Sara Jewett, Edgar Fawcett and Will W. Harvey; the sketches by Randolph Percy, Edw. Roberts, C. H. Jones, Geo. M. Towle, Chas. Carroll and C. H. Woodman.

The publishers announce that "illustrations will hereafter be excluded from Appletons' Journal, it being the purpose of the proprietors to devote the entire space to papers of a high order of literary excellence, by writers of acknowledged ability. Fiction will still occupy a place in the Journal, but a less prominent one; and while purely descriptive papers will appear, they will largely give place to articles bearing upon literary and art topics, to discussions of social and political progress, to papers addressed distinctly to the intellectual tastes of the public, or devoted to subjects in which the public welfare or public culture is concerned."

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

A WOMAN'S WISH.

MARY TOWNSEND.

WOULD I were lying in a field of clover,
Of clover cool and soft and sweet,
With dusky clouds in deep skies hanging over,
And scented silence at my head and feet.

Just one hour to slip the leash of Worry
In eager haste from Thought's impatient neck,
And watch it coursing—in its heedless hurry
Disdaining Wisdom's whistle—Duty's beck!

Ah! it were sweet, where clover clumps are meeting
And daisies hiding, so to hide and rest;
No sound except my own heart's sturdy beating,
Rocking itself to sleep within my breast.

Just to lie there filled with the deeper breathing
That comes with listening to a free bird's song!
Our souls require at times this full unsheathing—
All swords will rust if scabbard-kept too long.

And I am tired! so tired of rigid duty!
So tired of all my tired hands find to do!
I yearn, I faint, for some of life's free beauty,
Its loose beads with no straight string running through!

Aye, laugh if laugh you will at my crude speech—
But women sometimes die of such a greed;
Die for the small joys held beyond their reach,
And the assurance they have all they need!

[*Transcript.*

LETTERS FROM A COUNTRY GIRL.—No. 9.

MARGARET B. HARVEY.

Crewel-Work and Outline-Embroidery.

To make the best of one's clothes is no small accomplishment, and yet it is not so great a one but that almost any woman of ordinary taste and patience may not acquire it. I do not believe in the woman who is not skilled in the use of the needle. A woman who cannot sew is like a woman who has only her left hand. No matter how good, or how wise she may be, I sincerely believe that with such a woman there is something wrong somewhere. But I do not advocate spending precious hours and days over cambric ruffles, with hair-line hems and infinitesimal stitches, exactly the same distance apart, or patchy, cinnamon-colored dogs, with step-like noses or flaming, cabbage-shaped roses, in cross-stitch. Not but that exquisite cambric ruffles, or mazy arabesques in Berlin wool, are beautiful and of occasional good use in working to give pleasure to our dear ones. My creed as regards needle-work is, first know how to do plain sewing well, and afterwards put any extra time and effort into work which is *really art.*

My auditors are mostly farmers' wives, I know, and as I have frequently said, I'm familiar with every phase of country living. Yet, I do say, I believe it possible for them, in the time they have usually given to patch-work and knick-knacks, to make beautiful adornments in the form of cushions, chair covers, hangings and lambrequins for their rooms, far more handsome than they could procure for money.

All have heard of South-Kensington-work. Many who visited our Exposition have seen some magnificent specimens of it. With taste and perseverance it is no more difficult to excel in this kind of art-embroidery than in many species of fancy-work with which most of our women are familiar. The only difficulty is, that it requires the worker to be able to draw; yet, I believe almost any one who will, can learn to draw, at least enough for ordinary purposes. The fabrics used in South-Kensington, or more properly, crewel-work, may be silk, satin, velvet, cloth; but coarse linen, crash or burlap is just as effective. The flower, often from nature, is drawn by the needlewoman herself, directly upon the material, and is colored and shaded according to her own fancy, bearing in mind, however, that little shading, with a rather flat effect, is desirable. The crewels are soft, fine yarns, of all colors, and only when of the best quality can any satisfaction be gained in their use.

The mode of working is quite simple. The first stitch being taken, the needle is brought out a little above its upper end, at the *left*, and so on—the needle always pointing directly *to* the worker, who works straight *from* her, bringing the pattern gradually *towards* her. When the top is reached the work is turned around, and the same process repeated. It is best not to outline a pattern, but gradually develop it. A blended, moss-like effect is desired in the completed work. Extra stitches, veinings, etc. may be taken afterwards. The extra stitches may be put in almost anywhere; and, in fact, great latitude may be allowed in the disposal of all the stitches, provided the needle comes out at the *left* of the previous one. The veinings may be of silk. Care should be taken that the ground does not show through and that the under side is smooth, as articles in crewel-work are not lined. When finished, the embroidery should be pressed, with its face downwards, on a thick flannel, and a damp cloth upon the back. If soiled, it may be washed in a solution of lukewarm, strained bran-water, without soap.

This kind of embroidery is really an art, for its form and beauty depend entirely on the worker, and no strict rules can be given for it. But what a wide field it opens, what a large scope for the exercise of individual taste and ingenuity! The subjects for design may comprehend the whole floral kingdom, and the completed works may be so beautiful, even though more or less conventional, as almost to rival nature.

Another species of art needle-work now attracting a great deal of attention, is outline embroidery on linen. This, too, depends, for effectiveness, upon the worker, but it is much more simple than crewel-work. If you have a handsome set of table linen, it will add ten-fold to its exquisite beauty to adorn it in this style, which you can do with a very little expenditure of time and trouble, while, to decorate your towels and toilet-mats and white curtains, you will find it no harder than the work usually put on them in the way of borderings, initials, monograms, etc.

The design is sketched directly upon the linen, and worked in soft tinted Japanese silks, pale reds, blues, grays, yellows and so forth. These etchings are scarcely more than outlines, with just a suggestion of shading, their beauty lying entirely in the perfect needle-work which may be in tent or satin-stitch. For instance, in the center of a doily may be drawn a slender, graceful vase. The outline may then be covered all round with three or four silks of different soft shades lapping over each other, or running parallel here and there, with, near the base, a few lines running into the body of the vessel, as a slight shading beneath the fullest part. Or, a scene may be formed by a few long, parallel lines, for water, at one side some rugged lines for land, with some bending rushes, and an old tree, while a flock of birds, formed merely of tiny, converging lines, may soar away in the distance. The outlines, remember, should be firm, but regard to color and shading, may be very slight indeed.

A table-cloth may have in one corner, or near the end, a bunch of wheat, or a bowl of fruit. Napkins, in the corners, shadowy pictures, or unique vases, urns, etc. White curtains may have a running, border-vine. In the center of doilies, almost any household utensils may appear,—as cups and saucers, pitchers, tea-pots, goblets, etc. Here, too, would be an appropriate place for a series of outline pictures illustrating some familiar story. I have read of a set containing scenes from Mother Goose, though I have seen just as beautiful etchings of simple, every-day objects as ever I expect to see.

The advantages of this kind of work are many. The materials are simple, a great deal may be accomplished in a short time, a high degree of excellence may be obtained with very little endeavor, the impression given by the completed work is more than satisfying.—grace resides in such a few lines and the design may easily be traced from a simple picture by one who cannot draw. I have been told, also, that such work will not fade or wear out, with repeated washings, for many years.

I don't want to see any little girl tied down to her tatting and herring-bone stitch, while her brothers are having a good time rowing and skating, or the same little girl, grown a young lady, absorbed in impossible parrots and miraculous peonies of zephyr, while her brothers paint and play chess. But neither do I want to see a young bride going to housekeeping, put fancy paper behind her towel-rack, because she can't work a simple medallion; run a woolen strip down her easy chair, because she cannot embroider even in satin-stitch, to say nothing of crewel-work;—above all, to mark her towels and sheets crooked and upside down, and hang up cotton-lace curtains, because she has neglected to learn the above-described, easy, graceful mode of adorning linen.

OUR LIBRARY.

MRS. LORETTA E. K. TURNER.

I LIVE near a small village which boasts of a flourishing library. A few years since some ladies clubbed together and bought about a dozen books. One of the ladies was installed as librarian; the books were left in her charge, and she was expected to keep a strict account of them. Soon there were others who wished to join the Association, and it was decided to charge one dollar initiation fee for each new member, and a dollar a year for dues.

The names of those who fail to pay their dues are dropped after two years, or upon their owing the Association two dollars. If a book is kept for more than two weeks without reporting it, a fine of ten cents is imposed, and an additional ten cents for each week thereafter.

The funds of the Association increased in a short time so that more books could be purchased. To-day, we have over twenty members, about three hundred books, two nice book-cases, and a little money in the treasury.

The rules of the Association are printed and pasted on the first cover of the book.

The following is an exact copy of them:

RULES REGULATING THE CIRCULATION OF THE BOOKS BELONGING TO THE

LADIES' LIBRARY ASSOCIATION

of North Fairfield, Ohio.

RULE I.—Each member is entitled to draw a book and retain it for a time not exceeding two weeks.

RULE II.—Any one retaining a book for a longer time shall pay a fine of ten cents, and an additional ten cents for each week thereafter.

RULE III.—Any one returning a book damaged, shall pay a fine subject to decision of a committee appointed by the Society.

The officers of our Association are a President, Vice-President, Treasurer, Secretary, Librarian, Book Committee and Finance Committee.

The Treasurer and Librarian of the Association are necessarily the same individual.

Our Library is now so large and valuable that we charge three dollars for the admittance of new members. We have also three-months' memberships for fifty cents, which entitle any one to all the books they can read in that time. Of course, no member can have more than one book at a time. We also rent the books for ten cents each.

We sometimes get up a festival or Lawn Fete, or an Oyster Supper, for the benefit of our Library, and quite a number of our books have been purchased with the proceeds of such entertainments. The ladies in any flourishing village can, with a little enterprise, have a library which will afford them a great deal of instruction and pleasure, and with but small cost. I think it an admirable way to procure reading matter.

HAVE WOMEN A MONOPOLY OF WEAK NERVES?

JICKS.

ONE would suppose so, to read all that male authors have to say of the proneness on the part of women to indulge in hysterics and other inopportune demonstrations when threatened with sudden death, and of the strength and calmness which men display in the face of danger; yet, judging from three occurences which took place during Thanksgiving week, men with unreliable nerves are by no means scarce, and it is possible for a woman to exercise coolness and courage in soul-trying times.

First, there was the case of the Pommerania. It is claimed by the survivors that the officers (except the captain) and crew of the steamship became utterly demoralized, and, owing to lack of discipline, and absolute brutality on the part of those in charge of the vessel, many passengers were lost who could have been saved, had anything like order been preserved. Again, the store of Rogers & Orr, dry-goods merchants in New York, was burned on the eve of Nov. 27. One of the firm, while the fire was in progress, was so overcome that friends were compelled to send him home in a carriage, and within an hour another one of the firm succumbed to fright and anxiety, and he also was taken to his home. At no time was there the least danger of any lives being sacrificed, and the only horror which confronted these gentlemen was seeing their property (which was nearly covered by insurance) destroyed. So much for the self-possession of man! Now for an exhibition of the timidity and nervousness of woman.

Hardly were the opening exercises at Public School No. 39 (New York) concluded, on the morning of the 27th ult., when the janitor discovered the felting around the steam boiler was on fire. He notified the principal, Miss Falvey, who immediately gave the signal for dismissal, and the children joyfully prepared to leave the building, thinking that their early release was due to the following day being Thanksgiving. The principal staid calmly at her post and watched the happy children troop by. When about two-thirds had passed out, the alarm of fire was given and the little ones who were still in the building became panic-stricken. Miss Falvey closed the doors, calmed the children as best she could, and by her admirable management succeeded in getting all of the children out of the school-house unhurt. Here was a woman threatened with a fearful death, who neither deserted her charge, as did the sailors of the Pommerania, nor allowed fright to deprive her of her senses, as was the case with the dry-goods merchants.

WHO WILL BE CROWNED IN HEAVEN.

A FIVE-DOLLAR note would be an extravagant price to pay for her establishment and all it contains, but if heroic womanhood ever found embodiment in human shape, it can be seen nightly upon St. Charles street, just below the Academy of Music. A week ago Grandma Wilson was in Memphis, baffling pestilence by her tireless vigilance. Hailed by a terror-stricken community as their guardian angel, Elizabeth in the zenith of her splendor could not have commanded the adulation which spontaneously went forth to that plain old woman. For thirty-eight days and nights during the frightful harvest of death at Grenada those withered hands were often the only ones to soothe the burning brow or close dying eyes. To her tender care were committed their children by dying parents. Appointed by the divine mandates of gratitude universal executrix and administratrix, in that season of deadly peril and death the confidential friend of the highest, she now sells peanuts on St. Charles Street. She did so before, and were another epidemic to carry desolation into a thousand homes, after another heroic battle with disease, would do so again; but is Cincinnatus, returned to his plow, much more heroic than Mrs. Mary Ann Wilson returned from the devastation of Grenada, Grand Junction and Memphis to her peanut stand? Mrs. Wilson was a faithful nurse here in 1837. During the epidemic of 1853 she was on duty the entire summer. In 1855 she devoted her time to the sufferers of Norfolk. Another year she visited Savannah; and, in short, for forty-one years this noble woman has flown to the aid of the sick and suffering the moment she heard of their needs. There is a seat above for her among the best of God's children.—*New Orleans Times.*

NOTE.

BY THE EDITOR.

YIELDING to the wishes of a number of subscribers, I have decided to defer the publication of the fashion article promised for this number and to give instead a short story, which I hope will be enjoyed by a larger audience than would the postponed article.

ERRATUM.—In Miss Harvey's article on Dress, in RURAL of 16th Nov., she is made to say "name' redingote, when "Hernani" redingote was meant We are sorry that so admirable an article was marred by so serious an error.—ED.

VERBENA SACHET POWDER.

Orris Root, powdered,	2 pounds
Oil of Verbena,	40 drops
" Bose,	25 "
Civet,	20 grains

Domestic Economy.

CONDUCTED BY EMILY MAPLE

MOP-HANDLE PAPERS.—No. 9.

MAY MAPLE.

House-work Contrasted in Two Nice Frontier Cottages.

"How I dread the Saturday's work!" said Mrs. Nice, as the family gathered about the breakfast-table one morning in the early, golden October. The breakfast-room was also kitchen and parlor; for this little home of which I write, was only a log cottage in the "Far West," where were many others just as good but no better, and some that were less comfortable.

When Mrs. Nice first entered the little log cabin ten years previously, it was as a bride. And although the surroundings outside the little cabin home, were wild in the extreme, her new furniture and extreme neatness made the inside of the house look delightfully home-like and inviting. But ten years had brought some changes. Outside might now be seen a large "clearing," cultivated fields, a large barn, a thrifty orchard, a well tilled garden, where grew the finest vegetables and most brilliant-hued flowers, and, last but by no means least, a good shed for farming tools, of which there was no lack. Prosperity and good management were everywhere to be seen.

Indoors, neatness was as much the order of the day as ever. Although there were four children to make work, the delicate-looking mother managed to do it all with her own hands. And Saturday of every week, year in and year out, was her "cleaning" day. The room had been ceiled with well planed boards when the house was built. So all the wall was thoroughly washed with a cloth, instead of a good scrubbing-brush, which would have made the work much easier. The chairs which lost their paint before they had been used two years, from an excess of washing, must now be scoured with soap, sand and plenty of hot water. Benches, boxes, cupboards and bedsteads must all go through the same toilsome process. All day long did the fragile-looking woman labor to make her bird's-nest of a cottage look invitingly clean and sweet. When the weather was fine, every article of furniture that she could handle alone—for she never called her husband from his work to assist her—was carried out-of-doors to be cleansed, and then, while the pieces were drying, she scrubbed the floor with an old broom, and then poured on water to rinse it, till not a particle of dirt dared make its appearance to discolor the clear spring water. And every board was rubbed and wiped with a long-handled, woolen mop, till it was as dry as cloth could make it. Supper was often spread out-of-doors beneath the shady apple tree that stood a few steps from the house. Before the little woman retired, everything was again in the most perfect order. Flowers adorned the tables and window seats and added their fragrance to the fresh, sweet, pine odors. It was amusing to see how exceedingly careful father and children were to keep mamma's "Sunday parlor" clean.

It was a bright morning after one of these toilsome Saturdays, when Mr. Nice said to his wife: "Jessie, I think we can go over to cousin John's to-day. May will want to see how they are prospering before she returns home, and the ride and the sight of fresh fields will do you good after your hard work of yesterday."

In new countries churches are scarce, and ministers capable of interesting an intelligent audience, are few and far between; meetings are therefore held only semi-occasionally. And thus the inhabitants take the day for calling on their far-off friends. Just after dinner, Mr. Nice drove up to the gate with a handsome span of horses and a light spring-wagon, and we all found comfortable seats and were soon speeding over the ground through a delightful part of the country. An hour later and we found ourselves pleasantly seated in Cousin John's snug little cabin. We noticed, before entering the house, that thrift and prosperity were everywhere visible here as well as at the home of Mrs. Nice; and within the four square walls comforts, and even luxuries, comparatively speaking, were not absent. The two families were alike in size, had the same amount of capital to begin life with, and had managed to increase it about equally as far as improvements were concerned. Even the house-furnishings had originally been of the same kind and quantity. So, if the two cabins had been erected in the same neighborhood, they might have been called "The Twin Cottages." But now there was a marked contrast indoors.

"You see," said Mrs. Nice, "that Laura takes her comforts as she goes along through life, and sometimes I think she may be the wiser. But I never could endure the thought of living in a log house year after year. And so I scrimp and save in every way possible, that we may have our new house by the time we have seen the twelfth anniversary of our wedding-day."

"Well, May, you know when we all went to school together, that my motto was to 'make the most of life while I have youth and health; and to keep my health I must economize my strength. Now, I'll leave it to you to decide which is most likely to enjoy the comforts of a new house when she gets it. I have all the machinery I can get to help about my work. Instead of wearing myself out as Jessie does, scouring wood-work and furniture, I give the whole a fresh coat of paint and varnish about once a year; thus keeping my furniture new-looking all the time, at the trifling expense of two dollars. My walls are papered as often as necessary to keep them tidy. My floors above and below are carpeted; so that my work is no harder on Saturday than on any other day. And I very seldom feel over-worked, though I often assist John when help is scarce upon the farm, in doing light work, such as husking corn, picking apples, etc. We have plenty of books and papers wherewith to feast and cultivate the mind, some nice engravings, as you will see, to please the eye; and an organ which is a real comfort to us all. Johnny and Elsie, our two oldest, aged respectively nine and seven, can play a number of Sabbath-school tunes very well. We all have perfect health and are as happy as larks from week's end to week's end. Now, May, what does it matter whether we have a new house in two years or in five?"

And sure enough, what did it matter? Health and happiness!—would a palace bring greater blessings?

HOLIDAY RECIPES.

Wafers.

MELT a quarter of a pound of butter and mix it with half a pint of milk, a teaspoonful of salt, a wine-glass of wine, three beaten eggs and sufficient sifted flour to enable you to roll them out easily. They should be rolled very thin, cut into small circular cakes, and baked in an oven of moderate heat. Frost the whole and sprinkle sugar sand or comfits over it as soon as frosted.

Cocoanut Drops.

Take equal weights of cocoanut grated and white sugar, care must be taken not to grate any of the brown part of the nut. Beat the whites of eggs to a stiff froth—there should be just enough to moisten the sugar and cocoanut, so that they will be quite stiff. Drop the mixture on to buttered plates. Make the drops the size of a cent, and several inches apart, and bake them in a moderate oven.

Flummery.

Lay sponge cake in a deep dish, pour on white wine to moisten it; chop some raisins fine and sprinkle over the cake; then spread over it a layer of jelly and turn over it a custard made with the yolks of eggs. Beat the reserved whites to a froth and spread over the top. Put a dash of red sugar sand here and there over it or tiny drops of jelly. Slices of oranges, cut very thin, make a good garnish for it.

LORETTA E. K. TURNER.

DOMESTIC RECIPES.

Carrots for Dinner.

Wash, scrape, let lie in cold water for an hour or more; then boil until tender; drain, mash, season with a good-sized piece of butter, pepper and salt and serve very hot. E. W.

Ginger Cookies.

One cup of molasses, one cup of sugar, one cup of buttor or lard, three eggs, two teaspoonfuls of saleratus, dissolved in a little hot water, five cups of flour, one tablespoonful of ginger, mixed with the molasses.

Brown Bread.

Two cups of Graham flour, three cups of Indian meal, one half cup of molasses, three cups of milk, one teaspoonful of soda and one of salt. Steam three hours.

White Cake.

Whites of three eggs beaten to a froth, one-half cup of butter, one cup of sugar, two-thirds cup of milk, two cups of flour, two teaspoonfuls of baking powder. MRS. M. ALDRICH.

Vegetable Oysters or Salsify Fritters.

Make a thick batter of two or three eggs, a cup of sweet milk, flour, pepper and salt. Wash, scrape and grate the roots into this batter, grating enough to make the mixture of the same thickness as any other raw fritters, and drop by the spoonful into boiling fat. MARY B.

Apples and Bacon.

Cut some nice sweet bacon into thin slices and fry almost to a crispness. Have prepared some greenings, pared, cored and sliced, and fry in the fat left in the pan from the bacon. The bacon should be kept hot until the apples are ready, when they should be taken and placed upon the slices of meat. MRS. W.

Texas.

Salt-Rheum.

To those who suffer from this worrying complaint, I would recommend rubbing the parts often with raw mutton fat, just warmed enough to spread smoothly on, as you would any other ointment.

Useful Pomade.

Four ounces of lard; one dram of palm oil; one dram essence of bergamot; one ounce of castor oil. Put the ingredients into a jar, and immerse in hot water until dissolved.

Sweet Crackers.

One pound of flour; one-half pound butter well rubbed in; one-half pound powdered sugar; mix with the yelk of one egg, well beaten and a glass of sweet wine; roll out the paste very thin, and cut out in any small shape you please.

MRS. M. RANDALL.

Indigo.

Here is a good recipe for indigo: two oz. oxalic acid; one oz. Prussian blue pulverized, and add one quart of soft water. Mix well and bottle for use. H. O. S.

QUESTIONS ANSWERED.

Celery Soup.

PLEASE give directions for a celery soup?

Livingston Co., N. Y. E. Z.

ANS.—Scrape and cut into small pieces two bunches of celery, using the best parts only; add two quarts of good soup-stock with an onion cut into slices and stew gently until the celery is tender; put through a colander, season with pepper and salt and return to the fire; boil up, add a coffee-cupful of boiling milk thickened with a little corn-starch or flour, and turn at once into the tureen. A trifle of sugar is thought by many an improvement, while a few bits of fried bread put into the tureen before pouring in the soup are a nice addition.

Queen's Toast.

I have heard of queen's toast, but do not know how it is prepared. Will you give me the desired information? HOUSEKEEPER.

Dayton, Ohio.

ANS.—Cut thick slices of baker's bread into rounds or squares and fry to a nice brown in butter or lard. Dip each piece quickly into boiling water, sprinkle with powdered sugar and cinnamon and pile one upon the other. Serve with a sauce made of powdered sugar dissolved in the juice of a lemon and thinned with a glass of wine.

News of the Week.

Monday, Dec. 9th, 1878.

THAT DAIRY FAIR.

The Dairy Fair closed on Saturday last at 10 P. M. and the general verdict seems to be that it was a success. Of the thousands who visited it during the week many must have objected to its being held at a place a trifle remote from the quarter of the city which experience has shown to be the most popular and profitable for theatrical and similar displays, and doubtless not a few who would otherwise have attended it, remained away on this account; but once inside, the visitor must have felt the admirable nature of at least one point connected with it—the fitness for such displays of the building in which it was held. In size and construction it resembled not a little station at some railroad center. Running round the sides was a broad elevated platform, devoted mainly to petty side-shows and commanding a good view of the long rows of pine tables, laden with butter tubs on one side of the central walk and with cheeses of all shapes and sizes on the other. The center of the area was occupied by a fountain, to the north of which towered aloft pyramids of cheese and salt, while on the south rose a railed-in permanent platform graced with an organ at one end and fronted on the other with semi-circular rows of chairs occupied most of the time with visitors listening to the strains of a brass band from the platform, or the peals of the organ, or in the evenings looking at some speaker trying in vain to make his voice heard amid the trampling of feet and the buz of conversation from all other parts of the vast building.

Among these inaudible speakers during the week, the Management contrived to secure a few "stars," most notable of whom was Ben Butler. The bulk or them, however, belonged to the reliable old stock company, most of whom play the same parts on the stage of nearly every prominent meeting of dairymen throughout the country. Such meetings, indeed, would probably be considerably fewer were it not for the labors and influence of these gentlemen, most of whom wish to advertise their wares or themselves under the guise of helping along the dairyman's cause.

Ex-Gov. Seymour, of course, was there, bland, and wise and voluble, as usual. Instead, however, of instructing the dairymen of the Union on matters connected with their business, he enlightened the Gothamites with regard to the vast extent, the rapid increase and the admirable workings of the dairy system. He spoke warmly of the intelligence, the attainments, the close observation, the constant study, the knowledge of business routine and the necessary honesty of those engaged in the business. He explained the system followed at factories, of which there are more than 3,000 in the country, dilated upon the methods of making sales of cheese, the rivalry in the excellence of their products between the different factories, and the vast opportunities for still greater spread of the business here, and of its products both at home and abroad. So highly did he value the dairy interest of the country that he declared that if all the banks in New York failed, their failure would not inflict so great a loss on the nation as the failure of dairying for a single year, and so exalted was his estimate of the intelligence of dairymen, that when he became well acquainted with them, he actually burnt as worthless what must have been, in his opinion, the embodiment of farming wisdom—his own agricultural speeches. He insisted on the necessity of making the value of cheese as a food better known among our own people and consequently more popular, thus supplying the public with a cheap, nutritive and healthy article of diet and the dairy interest with an enlarged home-market. He pointed out that while the wholesale price of good cheese is now about nine cents a pound, it retails for double that sum, as so little of it is sold here that dealers must charge a heavy percentage. If the sales were larger, the price would be much lower. He dwelt on the proud fact that the returning prosperity of the country is due mainly, if not entirely, to the results of agricultural labor, and that the earth, its tillers and its products must ever be the foundation of abundance and prosperity. Gen. Butler made a strong plea for small farms and better cultivation; insisted that our inherited greed for land, and more land, should be checked, that it would be an evil day for this country should the huge estates and the poverty-stricken peasantry of some European lands ever become common here, and that small farms well-cared for, were better both for the individual and the nation at large, as large estates in this country are seldom permanently profitable. Large farms mean usually insufficient tillage, small productiveness, and unprofitable farming. In support of his views he dwelt at length upon the agriculture of France where the cultivated land is so subdivided that out of 5,550,000 distinct properties, only 50,000 averaged 600 acres, 500,000 averaged 60 acres, while five million properties are under six acres, yet in 1876 France exported to England of butter alone $18,672,000 worth; while we exported only $2,965,000 worth of butter, and $12,824,000 of cheese, or an aggregate of $15,789,000. Moreover, although the area of France is considerably less than that of Texas, and its population 10,000,000 less than that of the United States, still she produced in 1868,350 million bushels of wheat against 240 millions produced here and other cereal crops in proportion. The General went at length into statistics of the marvelous results of careful tillage of small farms in that country, but while his reasoning was excellent as to the good results of thorough cultivation, few will see the necessity or desirability on that account of limiting their farms to a cabbage patch of half-a-dozen acres.

Professor Arnold gave a very instructive address in his customary style, Mr. Thurber, of this city, gave an interesting account of the kinds of cheese made and wanted in Europe; so did Mr. John P. Warrington, of Liverpool. Mr. Erastus Brooks gave a lot of statistics cribbed from government reports, Mr. X. A. Willard, spoke pithily and learnedly as he usually does on such occasions. Francis D. Moulton closed the list of orators on Saturday night. He effusively thanked every body connected with the fair for their efforts in contributing to its success. He was sure that good cheese is necessary to the health, happiness and longevity of mankind; and therefore should appear far oftener on American tables. Foreigners, too, must butter their bread much thicker and oftener so as to afford our dairymen a profitable market for many times the amount of butter exported at present. He went largely into statistics for which he had, himself, to refer to paper and which therefore he could hardly have expected the few who could hear him, to remember. He urged that dairymen and farmers generally should see to it, that men were elected to Congress and State legislatures, who would be more attentive to agricultural interests than our present Solons.

HERMAN.

PUBLISHER'S NOTICES.

OUR readers are requested to read the following before making up their orders for seeds:

Any ten of the following require a one-cent postage stamp:—that is ONE *cent* for the ten, not for each.

The Voorhis Water-melon.	Weigela.
Golden Rural Tomato.	Deutzia crenata fl. pl.
Acme Tomato.	Hibiscus militaris.
New Bronze Ricinus.	Eryngium Leavenworthii.
Hibiscus moscheutos.	Geranium sanguineum.
Calliearpa Americana.	Yucca filamentosa.
Chater's Lemon Hollyhock.	Vitis heterophylla.
	Rural hybrid Aquilegia.
	Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance Wheat are included, a two-cent extra stamp.

We request that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense. For particulars, send stamp for RURAL of Nov. 9.

For Bronchial, Asthmatic and Pulmonary complaints, "*Brown's Bronchial Troches*" manifest remarkable curative properties. Like all other meritorious articles, they are frequently imitated, and those purchasing should be sure to obtain the genuine "BRONCHIAL TROCHES."

THE Huron Live Stock Association, at its annual sale, to be held Feb. 12, 1879, in the town of Exeter, Prov. Ontario, Canada, will offer a fine opportunity to breeders to dispose of their surplus thoroughbred and imported stock. Entries may be made as late as Jan. 1, '79. Details relating to terms of payment, etc., may be had by a reference to the advertisement.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Dec. 7, 1878.

BEANS AND PEAS.—Local and other buyers seem to be pretty well stocked with the standard sorts of beans, and with the slack inquiry values are lower. This refers to mediums and marrows. White kidneys quiet with cheaper marrows. Red kidneys firm with their timely activity. Pea beans only saleable when strictly prime. Many lots have the fault of last season, mixture of dead and discolored beans. Black beans fairly active. Green peas in fair supply for

wants of trade, at $1.25@1.30, Canadian field, in bulk and bond, ordinary quality, 70@72c.; choice, 75c.; Southern B. E., two bushel bag, $2.50@2.60; medium beans, prime, $1.60@1.65; fair to good, $1.50@1.55; Marrow, free to ship, $1.70@1.92½; fair to good, $1.50@1.55; pea, $1.60@1.80; white kidney, $1.80@2.00; Red do., $1.90@2.70; Black, $1.90@2.25.

Receipts of beans for week, 12,700 bushels; exports, 1,174 bbls.

BUTTER.—Trade has ruled quiet, but with moderate receipts sellers have been able to obtain full late figures. When State dairies make 20c. they must have a long top of tubs, that will fill out small family orders. This demand is very late this season, owing to easy retail prices. An export demand would obtain life if sellers would meet bids. British shippers offer 18c., their average rate at the beginning of the season when exports were so heavy. Sellers, however, have more independence now as tender quality in warm weather made sales more or less compulsory. There is an abundance of early made butter here that is foolishly limited by country owners to above 11c. Continental buyers have been looking at these grades, and have and will pay 11c. Western butter unchanged. The dairy fair, held here this week, has proved a sensation; it is a favorable omen for the producer when large communities take a special interest in table supplies, and this exhibition of pasture resources has been truly instructive as well as entertaining.

State, full dairies, special, 20c.; other, 16@19c.; firkin dairies, fair to prime, 13@18c.; Welsh dairies, fine full, 18@19c.; choice dairy, pails and half tubs, 22@23c.; fair to prime do., 18@21c.; choice Welsh, 21@22c. fair to prime, 18@17c. Choice creamery 26@27c.; other, 22@24c.; sweet cream, 24@26c. Best Western creamery, 25@26c.; other, 20@24c.; early packed creamery, 17@20c.; poor State 10@12c.; Western dairy, fine fresh, 16@18c.; fair to good, 10@14c.; factory, choice, 13@14c.; other, 6@12c.; rolls, 10@16c.

Receipts for week, 31,342 pkgs. Exports, 6,000 do.

COMPARATIVE RECEIPTS AND EXPORTS.

	Receipts, pkgs.	Exports, firk
June 1, '78, to Dec. 1, '78...	8,909,75	164,150
June 1, '78, to Dec. 1, '77...	780,750	129,300
June 1, '78, to Dec. 1, '76...	746,230	87,804

CHEESE.—There has been a very meagre showing of business this week, the shipments only 28,000 boxes, and a portion of these were through lots from Canada. The little inquiry has been almost entirely for fancy factories; these brought 8½@8¾c. The good and under grades are weak. Quotations are: 8¼@8½c. for fancy, 8c. occasionally; 8@8¼c. for fine lots; 7@8c. for good and prime; 6@7c. for fair to good; 3@5c. for skimmed. State, farm dairy at 8¼@8½c. for good to choice; 7@8c. for good to prime. Wisconsin factory, fine to fancy, 8¼@9c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 8@8¼c.; good and prime, 6@7c.

Receipts past week, 90,615 boxes.

Gold closes at 109¾.

Liverpool cable 47s. 6d.

COMPARATIVE STATEMENT FOR THE LAST THREE YEARS.

	Receipts, boxs.	Exports, lbs.
June 1, '78 to Dec. 1, '78.....2,433,614		98,304,050
June 1, '77 to Dec. 1, '77.....1,797,761		81,630,300
June 1, '76 to Dec. 1, '76.....1,759,900		69,223,500

COTTON.—The depression on the other side weakens values here, and the tendency has been almost steadily downward. Closing prices are: December, 9.01@8.02c.; January, 9.10c.; February, 9.23c. March, 9 31c.; April, 9.46c.; May, 9.58c.; June, 9.68@9.69c.; July, 9.77@9.78c.; August, 9.84@9.85c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade above or below the grade quoted:

	Uplands.	*N. Orleans.*	*Texas.*
Ordinary.....	7¼	7¼	7¼
Strict ordinary.....	7 11-16	7 15-16	7 15-16
Good ordinary.....	8 3-16	8 7-16	8 7-16
Strict good do.....	8 9-16	8 13-16	8 13-16
Low middling.....	8¾	9	9
Strict low middling.....	8 15-16	9 3-16	9 3-16
Middling.....	9¼	9¾	9¾
Good middling.....	9 7-16	9 11-16	9 11-16
Strict good middling.....	9¾	10	10
Middling fair.....	10 ⅛	10 9-16	10 9-16
Fair.....	11 1-16	11 5-16	11 5-16

Stained.

Good ordinary.. 7⅜; Strict good ordinary.. 7¾
Low middling.. 8⅜; Middling..... 8¾

DRIED FRUITS.—There has been but little life to the market. Apples have had a moderate jobbing trade, but export interest is not important. Peeled peaches are firm in price, if choice. Blackberries are easy; other small fruits are scarce and well sustained in price.

Southern plums at 14@14½c.; State plums, 15@15½c.; Blackberries are quoted at 5½c. Peaches—Peeled Georgia, at 6c. for poor; 8@9c. for fair to good; 10@10½c. for prime; choice North Carolina, 11¾@12¼c.; good do., 8@9c.; unpeeled halves, 3@3½c.; quarters, 3@3¾c. Pitted cherries, 2@2¾c. Apples—Old State quarters, 2½@3c. New apples, 2½@3c. for southern quarters in bbls.; 4@5c. for prime sliced, State at 4@5c. for new sliced; and 3½@3¾c. for quarters; western at 3@3½c. for new quarters. Raspberries, 30c.

Exports, past week, 675 bbls. dried apples.

EGGS.—The market is steady with light supplies; the demand, however, does not call for heavy receipts of fresh. Limed will so go into use for pastry purposes. Near points 27@28c.; State and Penn., 25@26c.; Western, fresh, 24¼@25c.; Canadian, 24c.; poor stock, 22@22½c.; Limed State, 17c.; other, 14@16c.

Receipts for the week, 5,789 bbls.; do. last week, 6,214 do;

FLOUR.—There have been very large receipts, the demand from shippers and home trade buyers has been moderate, and prices have eased off a little.

Latest prices are $3.25@3.75 for very inferior to very choice superfine State; $3.85@4.10 for very poor to good extra do., odd lots and lines; $4.10@4.35 for good to very choice do., strictly choice and fancy lots above this; $3.25@3.75 for inferior to very fancy superfine Indiana, Iowa, Michigan, &c.; $3.85@4.10 for poor to good shipping extra do. and $4.10@4.35 for good to very choice extra do.; common to about choice white wheat extras, $4.20@5.10; choice to strictly fancy do. at $5.10@5.85; red and amber winter wheat, very inferior to very choice trade and family $4.10@5.75; round hoop Ohio at $3.90@4.30, and trade and family brands of do. at $4.35@5.75, the latter rate for very choice; St. Louis, $4.15@4.35 for very poor to good extra, and $4.85@5.75 for good to choice; Minnesota clear, very inferior to very choice at $3.85@5.15; few brands going above $4.75; Minnesota "straight," inferior to very choice at $4.65@5.75; and patent fair to strictly fancy at $5.25@8.50, few brands going above $7.50; unsound stock at from $2.00@4.75; city mill extra at $4.90@5.10 for West Indies (the latter rate in new packages); do. for England, $3.85@4.00; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.60 for fair to very choice; No. 2 at $2.50@3.10 for very inferior to very choice.

BROOM CORN.—There are light receipts. The new corn is classed chiefly as hurl this year. Sales at 4½@5c. for medium green to choice hurl; 4c. for inferior.

FRESH FRUITS.—Supplies are becoming less formidable. Arrivals are light, and dealers have removed most of the very low sorts. Market firm, but not quotably higher. Extra red $2@2 25, bbl.; good to prime Greenings and Baldwins, $1.25@1.50; selections of latter, $1.75; Lady apples, $3@4, half bbl.

Exports, apples, past week, 11,432 bbls.

Cranberries have advanced; fancy bbls. (Capes), $9; good to choice, $7@8.50; common, $5@6.; N. J. crates, extra, $2 50; other $1.75@2.12; Catawba grapes are scarce, fancy well kept, 8c.; poor, 2@8c. lb. Fla. oranges are rapidly taking the place they have established as a desirable sort. Standard boxes, $2@$4; poor to choice, bbls., $5@7; crops not so heavy as last season; considerable fruit lost in September gales. California pears, $3.50@4 for varieties last noted. Chestnuts scarce but no higher, $3.50@4. Hickory nuts, shellbarks, $2.50. Black Walnuts and Butternuts, 50c.; Pecans, 12@16c. for new. Peanuts have sold well, but the supply does not allow sellers to advance rates. Va. hand-picked $1.15@1.20; other, 87c.@$1.05; shelled, 4½@5¾c.

FURS AND SKINS.—The following are the opening prices, but there is not assortment enough to call quotations steady:

	No. 1 quality. Nor. & East.	West & N. W.
Otter, ₱ piece.....	$3 00@ 4 00	$2 00@ 2 50
Gray Fox.....	75@ 1 00	60@ 80
Red Fox.....	90@ 1 00	75@ 90
Black Bear.....	5 00@ 6 00	4 00@ 5 00
Brown cubs and yigs.	1 00@ 2 00	1 00@ 2 00
Fisher.....	5 00@ 6 00	4 00@ 5 00
Mink, dark.....	85@ 1 00	50@ 60
pale.....	50@ 60	30@ 40
Muskrat, winter.....	8@ 10	6@ 8
fall.....	6@ 8	4@ 6
Kitts.....	@ 2	@ 2
Beaver, ₱ ₱.....	1 00@ 1 25	60@ 75
Raccoon.....	50@ 60	35@ 50
Opossum.....	4@ 8	4@ 8
Skunk, black.....		70@ 80
striped.....		10@ 20
Wolf, mountain.....		1 50@ 2 00
prairie.....		50@ 60

GRAIN.—Wheat has fluctuated a good deal but by the close is rather weak, with diminished export interest.

Latest sales are of No. 1 red at $1.08½@1.08¾; No. 2 red at $1.07¾@1.08¼; ungraded white at $1.10@1.10½; extra white at $1.10½@1.10¾; white State at $1.09@1.12½; No. 1 white in lots at $1.05¾@1.06¾; No. 1 white, steamer grade, at $1.07¾@1.08; No. 2 white at $1.03¾; No. 3 red at $1.03; ungraded red at 91c.@$1.03; No. 2 amber at $1.05½@1.06; ungraded amber at $1.04@1.08¾; No. 2 Milwaukee spring at $1; ungraded spring at 95c., No. 3 spring (to arrive) at 90c; No. 2 red, December option, at $1.03; do. January option, at $1.03¾@1.04; No. 1 white, last half December, at $1.10; No. 2 amber, December option, at $1.05¾; do. January option, $1 06@1.06½. Rye at 61@62c. for State and 60c. for prime Western. Corn has had, through the week, a freer export demand, and prices have been fairly well sustained; latest sales are of New York No. 2 at 46¾@47c., afloat; New York No. 3 at 41¾@41¾c.; ungraded mixed at 45@47c.; yellow Western at 49c.; white Western at 50c.; steamer white, new at 47c; No. 2, December option, at 47c.; do. January option, 48@48¾c.; steamer mixed, December option, at 45¾@45¾c; do. January option, at 45½c. Oats have a liberal home trade demand and prices are better; sales of New York No. 1 at 31¾c.; New York No. 2 at 30¾@31c; New York No. 2 white at 32½@33c.; New York No. 3 at 29¾@29¾c.; New York No. 3 white at 31@31½c.; white Western at 31@35c.; mixed do. at 29½@31c.; white State at 31@35½c.; mixed do. at 30@31½c.; No. 2 Chicago at 31½c.; New York extra white quoted at 33c.; New York No. 1 white at 33¼@34c. Barley, State, 6-rowed, 90@95c.; 2-rowed, 75@80c.; Canadian, 95c.@$1.25; malt, $1@1.25.

HAY AND STRAW.—There are full supplies and an easy market.

Sales at 35@40c. for shipping, and 65@70c. for retail qualities. Straw quoted at 35@45c. for long rye, and 30@35c. for short rye, and oat at 30@40c.

Exports past week, 2,490 bales.

HOPS.—Emmet Wells, in his circular, says:

"Notwithstanding the shipment to Europe of nearly 1,000 bales again this week, the price on low and medium grades has declined from 1c. to 3c. per lb. This unfavorable turn in the market may be attributed entirely to the continued persistency of the few holders (mostly growers) who are still here pressing the sale of their hops and accepting whatever bids they can get. These men have fallen into a trap made by their own hands, and it is to be hoped that the experience they have gained by trying to market their own produce instead of having it come here through the regular channels, may in the long run prove a blessing to them and a benefit to the trade in general. Choice New York State and Pacific coast hops, from their scarcity, maintain late values."

Quotations are for New Yorks, new crop, choice, 12@15; New Yorks, new crop, good and prime, 11@12; New Yorks, new crop, low to fair, 6@7.; Eastern, 8@12; Western, 8@12; Yearlings, 4@6; Olds, all growths, Pacific coast, 12@15.

HONEY.—Market quiet, but with a hope of holiday sales relieving the monotony of late dribbling business. White clover, 15@16c.; two comb, 13@14c.; Buckwheat, 10@12c.; strained, 8@12c.

LEATHER.—Hemlock sole at 19@20c. for for light; 20@21½c. middle do.; 20@22½c. for heavy and 17@19c. for goop damaged.

POULTRY AND GAME.—Live fowls are in demand, but prices for them or turkeys are not attractive. Chickens low.

Choice fowls and chicks, 9@10c.; other, 7@8c.; roosters, 5@6c.; turkeys, 7@10c.; ducks, best, 75@90c. ₱ pair; poor, 40@50c.; geese, N. J., $1.50 pair; other $1@1.25; pigeons, 30c.

Supplies of dressed are small, but the demand has not warranted orders for free shipments.

Dry-picked turkeys, 14@16c.; choice, scalded, 12@12½c.; other, 9@11c.; dry-picked chickens, 14@15c.; good, 11@13c.; common, 7@9c.; fowls quoted similarly. Ducks, extra, 12@13c.; other, 9@11½c. Geese, Phila., 10c; other, 8@9½c.

Game has arrived freely and prices are generally weak. The weather has been too fickle to allow much buying for show.

Quail, doz., $1.12@1.25; Grouse, trapped, pair, 70@75c.; drawn, 45@55c.; Partridges, State, 75@80c.; other, 45@65c.; canvas-back Ducks, $1.50@2.25, the latter for Havre de Grace; red head, 50c.@$1; Mallard, 50@60c.; Teal, 40@50c.; common, 25@35c.; Hares, 30@40c.; Rabbits, 25@50c.; Venison, short saddles, 12@16c.; long do., 10@11c.; whole deer, 7@8c.; wild Turkeys, 16c.

SEEDS.—Clover is lower; prime quoted at 6¾@6¾c. and choice at 6¾@7c. Timothy at $1.20 for prime. Rough flax at $1.40 bid.

TOBACCO.—Shippers have been buying moderately and the home trade demand has been fair, with prices firm. Quotations are for

KENTUCKY LEAF.

	Light.	Heavy.
Common lugs.....	2½@ 3	3¼@ 3¾
Good lugs.....	3¾@ 4	4 @ 4¾
Low leaf.....	4¼@ 5	5 @ 6¾
Medium leaf.....	5¾@ 6¾	6¾@ 7¾
Good leaf.....	6¾@ 8	8 @ 9
Fine leaf.....	8¾@10	10 @12
Selections.....	—@—	12 @12¾

SEEDLEAF—CROP OF 1877.

New England wrappers, common.....	10	@12
do. do. medium.....	13	@15
do. do. fine.....	18	@23
do. do. selections.....	27½	@35
do. seconds.....	10	@13
do. fillers.....	7	@ 9
Pennsylvania assorted lots, common.....	9¼	@10¾
do. do. fair.....	11¾	@14½
do. do. fine.....	15½	@18
do. wrappers.....	20	@40
do. fillers.....	7¼	@ 8
New York assorted lots, common to medium	8	@10
do. do. do. good,	12	@15
Ohio assorted lots.....	9	@12
Ohio wrappers.....	12	@18
Wisconsin assorted lots.....	7¼	@10

VEGETABLES.—Potato dealers have been busy in finding place for the heavy supplies of Prince Edward's Island schooner cargoes. The supply is generally large, including canal stock, and few buyers day the extremes. Onions firm when fine. Other vegetables show the strength that cooler weather permits.

Nova Scotia E. Rose, bulk, $2.75@2.87 ₱ bbl.; Prolific and Chili red, $2.25@2.50; P. E. I. Jackson whites, $2 37; Mercers, $1.75@2; Eastern E. Rose, with bbl., $2.75@3; State, $2.50; fair to good, $2@2.37; do. Peach Blow, choice, $2.50@2.75; common, $2@2.25; Peerless, choice, $2.37@2.50; poor to good, $2@2.25. Sweet potatoes, Del., $2@2.25; Va., $1.50@1.75, which is higher. Onions steady. White, $1.75@2 25; red and yellow, $1.75@2; Chester, $1.25@1.62. Hubbard and marrow squash, $1.75@2. Cabbage, $3@5 per 100. Cauliflower, bbl., $1.50@3. R. Turnips, 75@87c. Beets, 75c. Carrots, 75c.@$1. Pumpkins, 100, $4@8. Celery, 75@90c. doz.

Exports, potatoes, past week, 8,195 bbls.; of onions 240 do.

OIL-CAKE.—Western is quoted at $23 ₱ ton.

PROVISIONS—Have tended lower on the large hog arrivals.

Mess pork quoted at $7.35@7.40 for ordinary brands; $7.40 for December; $8 75@8.80 for new for January; $8.70@8.75 for new for February. Bacon at 4¾@4½c. for long clear and 4¾c. for short clear. Lard—Western steam at $ @6 62½ for spot; $6.65 for January; $6.12½ for February and $6.20 for March. Stearine at 6¾. for Western. Tallow at 6 11- 6 for prime. Beef Hams at $14.50@15. Beef—Extra India mess $20.50@21.50 for city brands; do. Philadelphia, $19.00@19.50; packet at $11@11.50; new plain mess at $9.50@10; new extra mess at $10.50@11.50.

WOOL.—There has been a fair degree of activity to the market this week and price well sustained. Sales of X and XX Ohio fleeces at 44@35c; Wisconsin fleeces at 32c.; spring California at 19@22½c.

Quotations are for Domestic Fleeces: Ohio, Pennsylvania and West Virginia—XXX and picklock, 37@39c.; XX, 35@—; X, 31@33c.; No. 1, 36@37c.; No. 2, 33@35c; coarse, 30@31c; combing, 39@42c.

New York, Michigan, and Wisconsin, XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 30@35c.; coarse, 27@30c.; combing, 36@40c.

Indiana, Kentucky and Tennessee—XX, 30@34c; X, 30@33c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 33@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 30@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 25@29c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; course unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Dec 7, 1878.

BEEVES.—Receipts for the week, 8,900 head, do. last week, 8,862 do. Light receipts have kept the market firm, and prices hold the advance made on Wednesday last. Extras, 9¾@10c. dress 56 lbs. good 1200@1300 lb.; natives, 8¾@8¾c. dress 56 lbs.; fair stock, 7¾c. Stock, however, generally of good butchering quality.

COWS AND CALVES.—For ordinary to good, $40@60 has been quoted, and $75 is extreme for extra milkers.

VEAL CALVES.—Small stock has sold readily, as beef has been scarce. Choice milk calves, 7c.; heavy, 5¾@6¾c.—these rates for 200@300 lb. calves; good State and N. J., 6@7c.; fed, , 4@5c.; grass, 2¾@3¾c. Hay dressed, 8@10c.

SHEEP AND LAMBS.—Receipts for the week, 20,935 head; do. last week, 19,426 do. Sheep have ruled firm. Western, fair to prime, 4¾@5¾c.; N. J., 4¾@5c.; N. J. ewes, 3¾@4¾c. Lambs, 5¾@6¾c.

SWINE.—Receipts for the week, 44,495 head; do., last week, 46,019 do. Market steady. Ohio late sales, $3.20@3.22 per 100. Nominal rates, $3@3.20 per 100.

N. J. pork, 3¾@4c. heavy; medium, 4¾@4¾c.; light, 4¾@5c.; city dressed, 5¾@5¾c. Pork tenderloins, 6@6¾c.

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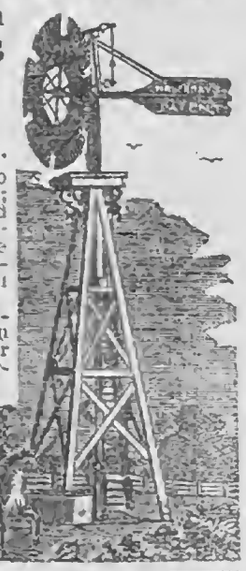

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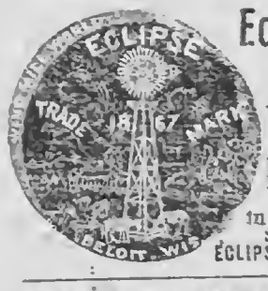

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at Paris Exposition.

Awarded 1st Prize Medal over all others.

We build 17 sizes Wind Mills for Farm Pumps and Power Purposes.

The strongest Wind Mill in the world.

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ELASTIC TRUSS

Has a Pad differing from all others, in cup-shape, with Self-Adjusting Ball in center, adapts itself to all positions of the body, while the BALL in the cup PRESSES BACK the INTESTINES JUST AS A PERSON WOULD WITH THE FINGER. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.

Eggleston Truss Co., Chicago, Ill.,

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HAVE BEEN AWARDED

THE GOLD MEDAL

at the Paris Exposition of this year, based on the greatest superiority of performance during the test made of manufactured of the best material and finished by skilled hand labor beyond peradventure. Messrs. B tion in prices, so as to bring their Great care is taken in the finishing these adjusted for railroad use. Call Improved B. & C. Watches. The relative merits of Swiss Watches, as manufacture. Can a country that *Hundred* years be ignored? Give and they will demonstrate to you you to institute an impartial com-

The Jury of AWards' decision was workmanship and extreme accuracy by the Judges. These watches are and made with improved machinery, thus insuring an accurate time-keep- & C. have made a still further redu- watches within the reach of all of their movements, particularly on your jeweler and ask to see the public is asked to investigate the compared with those of American has made watches for the past *Two* the Borel & Courvoisier fair play, that none can excel them. We ask parison before purchasing.

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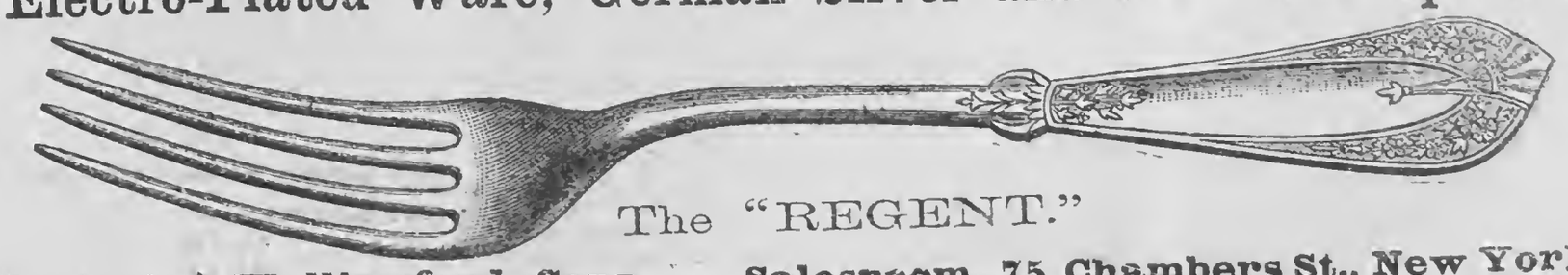
Electro-Plated Ware, German Silver and Britannia Spoons.



The "REGENT."

Factories, Wallingford, Conn. Salesroom, 75 Chambers St., New York.

Reading for the Young.

BILLY-BOY AND BILLY-GOAT.

"Stop, Tommy, you can't catch him that way, and if you fool wid him, Old Bill,
The fus' thing you know, he will butt you clear down the foot of the hill!
You don't unnerstan' it yet, Tommy; jus' wait till I pulls off my coat—
Now gimme the halter—*I'll* show you the way for to bridle a goat!

"You's so young and so little, Old Billy, he don't eben know who you are,
I's goin' on seven years, I is—I's mighty near old as Papa,
A goat's like the show people's lions—needs a fellow to tame him, you see,
Wif a 'ticular kind of a voice and a eye and—a fellow like me!

"I carries the halter jus' this way, and marches up steady, jus' so;
Look *at* him! how quiet he's standin'—he knows who's a talkin', Bill, whoa.
Now watch me, Tom! S-t-e-a-d-y—s-t-e-a-d—WHOAP!" The billy-goat standeth there still,
Gazing calmly on Billy-boy rolling "clear down to the foot of the hill." [*Courier-Journal.*

THE CHEMISTRY OF METALS.

W. H. WALENN.

Copper.

KEEPING in full view the benefit of "leading the mind of the young chemist from what is known to what is unknown," I have selected the metal copper to commence with, as the one most likely to be known by every boy.

Until very recently, copper was employed—in its pure, or "virgin" form. It is much used now in culinary vessels, such as tea-kettles and saucepans, also for certain chemical vessels and apparatus.

Copper is distinguished from all the other metals (except the rare metal called "titanium"), by its red color; bismuth also has a slightly red tint, but it is never likely to be confounded with copper on that account, for it is nearly white.

The weight of a metal in proportion to its volume, or bulk, is a very important item amongst its peculiarities. This relative weight is called its "specific gravity," and is always expressed in proportion to the weight of exactly the same bulk of pure water.

The discovery of the law of loss of weight, equal to that of the bulk of water displaced, by an immersed body, was made by the Syracusan philosopher Archimedes, about 300 years before Christ, who, being intent upon finding the proportion of silver in the so-called "golden" crown of Hiero, king of Syracuse, and entering a bath that was full of water, observed that a quantity of water flowed over; this quantity he rightly estimated as the bulk of his own body, and thence thought of the application of the principle to finding the proportion of silver that was alloyed with the gold in the crown. So delighted was he with the discovery that he jumped out of the water, ran through the streets, naked as he was, crying "Eureka" (I have found it!) To carry out his idea, he obtained a mass of gold and another of silver, each equal in weight to the crown, and observed the quantities of water displaced by each. Alloys are very seldom of the exact specific gravity related to that of their component metals in proportion to the amount of each metal existing in the alloy; but, doubtless, some near approach to the relative weights of silver and gold in the crown was made by Archimedes, when he compared the specific gravities of the gold and silver masses thus obtained with the specific gravity of the crown, obtained by means of a like immersion. If this plan could have given truly the relative proportions of the gold and silver, it would have been remarkable, on account of its being totally independent of the abstraction of metal, however small, from the crown to be tested.

Pure copper is less easily melted than silver and more easily than gold; its point of fusion is said to be 1996° Fahrenheit. It is melted in a "crucible"—a vessel made of some substance, such as fire-clay, which stands the requisite heat—by the aid of a material called a flux. This portion of the subject will be illustrated by means of one of the more fusible metals.

The history attached to this metal is interesting from its being one of the oldest known metals. It was discovered before iron, and in the time of the Pharaohs, Nubia and Ethiopia were its chief sources. The discovery of brass—an alloy of copper and zinc—was clearly subsequent to that of copper and before that of zinc, an ore that contained zinc being formerly used in the smelting of the copper; brass was, most probably, not known more than a few hundred years before the Christian era. Zinc was known to be a separate metal in the sixteenth century. The probability follows that when "brass" is mentioned in Holy Writ, the metal copper is really meant. The earliest mention of "brass" (or copper), according to the chronologists, refers to 3300 years before the birth of our Saviour, and occurs in the twenty-second verse of the fourth chapter of Genesis, in which Tubal Cain is said to be "an instructor of every artificer in brass and iron."

In relation to the Latin name for the metal—the name by which it is known in chemistry, *Cuprum*—it is to be derived from the name of an island in the Mediterranean sea called Cyprus, where the metal was found in great abundance and purity in the time of Pliny (A. D. 100). The ancients—the Egyptians, the Hindoos, Greeks, and Arabians—had a great fancy for establishing relationships, or harmonies, between the various parts of the created universe; this they carried to such an extent, that various kinds of men and women, planets and other astronomical realities and non-realities, animals, plants, minerals, places and things, were supposed to be influenced by them.

According to this harmonic and pleasant—because highly amicable—arrangement, copper (or cuprum) was said to be intimately related to the planet Venus. Some discussion has arisen between philosophical historians as to whether the metals then known were named first and the planets from them, or whether the planets were named first, and then the metals. I am strongly inclined to believe that the metals took their mythological names from the planets, for the planets are visible to many people many times in the year, merely for the trouble of looking for; but the metals are, for the most part, found only by patient industry and hard physical labor, in separating the solid crust of the earth.

It is a singular fact that, in the harmonic arrangement above described, the island of Cyprus, where copper was discovered, or re-discovered by the Greeks, was placed under the guardianship of the goddess Venus, named after the planet Venus by a star-worshipping community, and that those who give the stars a language, place Cyprus, as well as the metal copper, under the influence of the planet Venus. Those who are curious in the matter may trace other coincidences; or, to say the least of it, related peculiarities. The planet Venus is said, by the above ancient people, to preside over everything relating to beauty or form of color, over the polite arts and all things, such as music, painting and poetry, that administer to the outward luxury and enjoyment of life; it is also certain that either copper or its alloys make a very strong appearance in the adjuncts to a refined life; it furnishes reeds, and sometimes strings to musical instruments, its chemical combinations with other substances form magnificent paints of a bluish or greenish tint, and the metal itself renders further assistance to the artist in the shape of copper plates for printing from. Bronze statues and statuettes enable us to realize the beauty of form in all its wondrous details, and the colors displayed by the metal itself, and by its chemical combinations, are of a varied and vivid kind. The particular color which the planet Venus was said to favor most was a glistening or brilliant tint of blue or purple, and it is remarkable that the great majority of the colors of the chemicals formed from copper are of a bluish tint; indeed, the most beautiful purple that chemistry affords—unable to be fixed, we regret to say—produced when ammonia is added to the solution of a salt of copper, is one of the surest means of telling the presence of copper in a solution.

To proceed with the history of the metal. The Grecians and Romans used copper and its alloys with tin for weapons and for their coinage. Since then, its non-liability to rust, its malleability, and its other properties have brought it into use for a great number of purposes.

The metal copper, doubtless—in common with its nobler companions, gold and silver—owes its ancient birth to the fact of its being sometimes found in the metallic form, or "native" in the earth; iron, zinc, and the more recently discovered metals not being found in the pure state, but requiring some chemical knowledge to evolve them from their ores. Its mineralogy is, however, exceedingly interesting; for in form, color and beauty (with few exceptions) its ores all bear out with Venus-like attributes. Native copper occurs in veins, also crystalized in the form of "cubes," or dice, and other forms. The only red copper ore is the "di-oxide" of copper, which is found in beautiful ruby-red cubes. Black oxide of copper is sometimes met with. Copper pyrites contains sulphur and iron as well as copper, and is of a deep-yellow color. The green carbonate of copper (malachite) is the most abundant as well as one of the most beautiful of all the copper ores.

Just as we like to know the character of a man, or of a boy, and, if possible, the kind of company he keeps, before being intimate with him, so the previous description will go to unfold the character and natural tendencies of our first metal that we have taken for examination and temporary companionship. We have found that he is of ancient lineage, and that by himself, as well as in company with less venerable metals, he has done much service to mankind, and continues to be a useful and ornamental member of society. He is of so friendly a nature that he forms acquaintance with many other substances besides those already mentioned. A very energetic class of bodies, called acids, are exceedingly eager to detain him when they get hold of him in the right mood. One, nitric acid, detains him under all circumstances; the others require the spur of warmth, or of an electric shock, to persuade them to establish their power over our metallic friend, Mr. Cuprum Copper. Another set of energetic bodies, known as alkalies, will sometimes, under pressure, enter into combination with our friend—especially Mr. Liquor Ammoniæ; but the general tendency of the caustic gentlemen is to dissolve the union between any acid that may have taken Mr. Cuprum in tow, and reduce him to the necessity of putting up with the bare company of any such airy individuals—we might almost say "light characters"—as Mr. Oxygen. To descend from our poetic pinnacle of personification, we wish to impress our readers strongly with the fact that the business of chemistry in relation to copper is to bring out the properties of the various combinations that we have hinted at above, and to investigate the uses to which they can be applied. Although these substances have one element, copper, in common with all of them, their properties are entirely different, and make them totally independent of each other as workers for the benefit of those who will only diligently search out their secrets. One substance forms a good paint, another furnishes a serviceable dye, a third gives up its copper to iron or zinc by the simple immersion of those metals, and a fourth will only give up its copper upon the application of the current from a galvanic battery.—[Conclusion next week.

PARENTAL AFFECTION IN SPARROWS.

I SAW a touching little incident showing the affection of sparrows for their young on the Kennington Oval cricket-ground last Thursday afternoon, a description of which you may, perhaps, think it worth while to record.

The afternoon was fine and the ground was surrounded by a dense ring of spectators, when a young pale-colored sparrow, under the guidance of both its parents, was trying to acquire the use of its wings. A slight wind was blowing towards the spectators, and the poor little bird, in its weak attempt to fly, was, to the evident consternation of its parents, carried straight into the laps of the inner ring of spectators, one of whom caught it gently in his hand and held it.

When taken hold of, the young bird gave two or three chirps or calls for help, and the old birds flew to within a few feet of the ring of spectators, and, alighting on the grass in front of them all, began to "beg" for the young bird in the most touching and beseeching manner. This they did by lowering their heads and making the peculiar flutter of the wings by which young birds beg for food from the old ones. This singularly touching appeal moved the hearts of many in the crowd, who called out, "Look! look at the old birds!"—"Don't hurt the young bird!"—"Give it back to them," etc. The anxiety and the boldness of the old birds, and their humble beseeching for the young were so evident as to come home to the hearts of these somewhat rough spectators.

My own feeling certainly was that I could not have believed that a pair of sparrows could possibly have "begged" with such touching humility and tenderness for the safety of the young bird. Their manner clearly displayed their sense of their own want of power to help the object of their affection, they therefore prayed for mercy in their own way, and with so much feeling, as to excite the full sympathy of the crowd looking on, and to make them, for the time, forget the game of cricket they had come there to see. C R.

Bristol, August 17.

The Puzzler.

HIDDEN KINDS OF RHYME.

1. BELOW zenith is the nadir, Gerald.
2. Did he flay the horse?
3. At our ball Ada fell ill.
4. 'Tis treason, Gregory.
5. Where's papa, E., and Dick?
6. The pig rammed its foot in the fox trap.
7. Is our equi umbelliferous?
8. E. A. Poe made "The Raven."
9. The Pope ends each day in prayer.
10. The code of honor.
11. He picked a thornless rose.
12. Can't a tape be found?
13. Steparo dyes his hair.
14. The leg Young showed me.
15. Give shy M. nothing.
16. Can't I clean my jewels?
17. What a mad rig Ally wore!
18. The thumb lank Versella has!
19. Pa, Lino denies it.
20. See the dog Gerella pets.
21. Seroun, delay no more.

☞ Answer in two weeks. LITTLE ONE.

CENTRAL PUZZLE.

1. HUMIDITY. 2. An old soldier. 3. Part of a ship's side. 4. Flowing violently. 5. A fortress in or near a city. 6. To whine. 7. Chimerical. 8. A liquor. 9. Thrusting. 10. Brave. 11. A tramp. 12. Importunity. Words of seven letters form the answer, and the centrals form one of the United States.

☞ Answer in two weeks. FLORIDIAN.

FRACTIONAL PUZZLE.

TAKE one-ninth of carbuncle; one-fifth of coral; one-sixth of garnet; one-seventh of diamond; one-seventh of sapphire; one-fifth of agate; one-eighth of sardonyx. Take one from each and form a gem.

☞ Answer in two weeks. DR.

DOUBLE ACROSTIC.

1. LIGHT. 2. A man's name. 3. To hug. 4. To shake. 5. A man's name. 6. Mournful. 7. Extempore. 8. Anything woven. 9. Acid. 10. A mountain of Palestine. 11. An acid. 12. A cosy recess. Primals form a novel by Mrs. Southworth; finals a novel by Mrs. Stephens.

☞ Answer in two weeks. BALTO.

PUZZLER ANSWERS.—Nov. 30.

GRAMMATICAL ENIGMA.—If a gentleman be to study any language, it ought to be that of his own country.

ACROSTIC.—To-day the key of to-morrow.

DIAMOND PUZZLE.—

M
KEN
PADDY
PARISIANS
WAISTCOAT
RESPLENDENT
MEDITERRANEAN
RESPIRATION
LOQUACITY
GRANARY
EVERY
NAU
N

TRIPLE ACROSTIC.—Primals, Sword; centrals, Sabre; finals, Spear.

WORD-SQUARE ENIGMA.—

ROUE
OICU
UCIC
EUCI

Saturday Dec. 7th, 1878.

POLITICAL.

The forty-seventh Congress opened at noon, sharp, last Monday. The President's message read thereat, was the chief matter of public interest, although he had permitted so much of its contents to dribble out before, that the importance of it had been greatly discounted. It deals first with yellow fever, putting the number of deaths at 20,000 and of cases at 100,000, and it is to be hoped his data for the remainder of his statements were a trifle less exaggerated. He very prudently estimates the money loss through it, indefinitely at "millions of dollars." and recommends a national quarantine as a guard against the calamity in future. He next mildly but firmly denounces the manner in which negroes at the South were deprived of the franchise, instancing especially the States of South Carolina and Louisiana; suggests that Congress should investigate the validity of elections held in the bulldozed districts, and declares that, for his part, he will use all the legal powers now vested in him, to prosecute the offenders, and that he will appeal to local Executives, legislatures and courts to prevent a repetition of the outrages, and asks for money to defray the expenses of legal proceedings. He refers to what everybody knows, namely, the great importance to a republic that the right of suffrage should be free and its practice unpolluted, and winds up this part of his address by saying that he is pretty certain that things are improving in the South. One of the best things that can be said in favor of this portion of the message is that it is assailed by republican and democratic "stalwarts" with equal bitterness; the former stigmatizing it as milk-and-watery, and and the latter vilifying it as an attempt to raise once more the "bloody shirt." He delights Frenchmen by approving of the Paris Exposition, and completes the joy of American prize-winners by commending their share in it. He then tells the country the twice-told tale about the Silver Conference lately held at Paris, describes our foreign relations and speaks hopefully about difficulties on the Mexican frontier—which, by the way, have lately entirely vanished. He expresses a hope that no new financial legislation will be attempted, so that the present laws on the matter may have a chance of trial, and he is quite eloquent on Civil Service Reform—by saying absolutely nothing about it.

The Secretary of the Treasury promises a surplus of the national revenue on the 30th of next June, amounting to upwards of $24,000,000, and a contribution of more than $36,000,000 to the fund for paying of the National Debt. He gives a brief statement of his preparations to resume specie payment immediately after next New-Year's Day,—he can't begin that day as it is a legal holiday—advises that the ratio of the relative value of gold and silver should be changed so as to make it 1 to 16 instead of 1 to 15½ as at present; and, to prevent the depreciation of silver coinage, he recommends that no more of it than $50,000,000 should be permitted to remain outstanding at any time. Silver men, however, insist that $300,000,000 of the bright metal would not be a dollar too much for them. He asks for means to pay more liberally those informers who may report frauds upon the revenue, and he, alone of the Cabinet, refers to Civil Service Reform, by urging, in view of the varied and important duties of revenue officers and the skill required to perform them properly, that they should be removable only for cause, like army and navy officers, and that their pay should be increased for long and faithful services.

The Secretary of the Interior gives a glowing account of the labors of his department in behalf of the Indians, taking all the credit for praiseworthy results and throwing on Congress and the Army the responsibility for starvation, discontent, outrage and pillage among the red-skins. If there is one thing for which Mr. Schurz deserves credit, it is his mastery of the English language, and this deftness with words certainly enables him here to make a fair show. He is strongly opposed to the transfer of the Indian Bureau to the War Department, while Sherman, Sheridan, and all the chief officers who feel most heavily the results of Indian mismanagement and consequent hostility, favor the change, and the incompatibility thus engendered between the two branches of the government, crops out in their reports. Proofs of the allegations made by the military with regard to the misconduct of agents, are demanded, and will doubtless be soon forthcoming.

The Secretary of the Navy, of course, claims a great deal of improvement in his department during the past year, and urges the imprudence of a great commercial nation maintaining a weak navy. The Secretary of war, besides advocating the transfer to his Department of the Indian Bureau, and taking glory for the five or six weeks of tranquillity on the Rio Grande, demands the repeal of the *posse comitatus* law enacted by the last Congress, forbidding the army from interfering in civil matters. If the law shall not be repealed, he asks for authority to employ the army in a greater number of cases; and instances, in support of his request, many outrages which the army could have prevented.

MISCELLANEOUS.

In 1872 the bonds of the United States held abroad, were estimated at $9000,000,000. Inquiries relative to the interest to be paid to foreign holders on the first of January, show the very remarkable fact that only about $6,000,000 will go to such holders and that this sum will be paid on about $100,000,000 of principal. This exhibit, if accurate, indicates a more rapid growth in wealth on the part of our own people than has been calculated in any quarter. A great deal of our money, however, goes abroad as interest on foreign capital invested in railroads and other industrial enterprises in this country. The amount of this, however, it is almost impossible to ascertain.

PERSONAL ITEMS.

Colonel Ingersoll will soon cease the Titanic labor of hurling God from on high, and take to practicing law in Washington.

Rochefort is straitened pecuniarily, owing to the failure of his pamphlet publications, which have all fallen still-born since Napoleon III.'s death.

Rumors that Mr. and Mrs. Sartoris (*nee*, Nellie Grant) are not happily married have been traced to Olive Logan, so, of course, it turns out that they were merely sensational lies.

Bismarck, according to Dr. Busch, is very fond of hard-boiled eggs, and ruefully confesses that while in former days he could manage eleven, he now could not eat more than three,

The Rev. Mr. Pentecost of Boston in a sermon against round dancing, said that a very respectable and intelligent young woman had assured him that the hugging was, to her, the pleasantest part of a ball.

Bill Pearce kept a barroom in Bodie, Nev., and was greatly annoyed by men who drank without paying. He resolved to do only a cash business, and posted an announcement thereof. Sam Halsey read the placard, drank a full tumbler of whiskey, and coolly said: "Put it on the slate." Pearce drew a revolver and killed Halsey on the spot.

Herbert H. Harlow was very honest and exact in his business, in East Bridgewater, Mass. He was a conspicuous Baptist, too. Before leaving the place he paid every one of his debts, and arranged his affairs so that they could be easily comprehended by whomever might take charge of them. The only persons who could complain of his unexpected departure were his wife and Edward French, for he eloped with Mrs. French.

Miscellaneous.

60 CHROMO, PERFUMED, SNOWFLAKE & LACE CARDS, with name 10c. Game Authors 15c. Lyman & Co., Clintonville, Ct.

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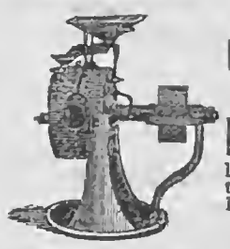

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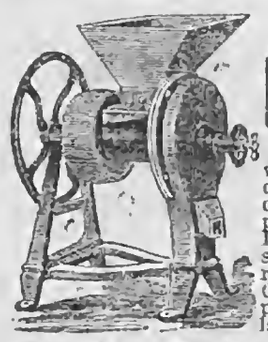

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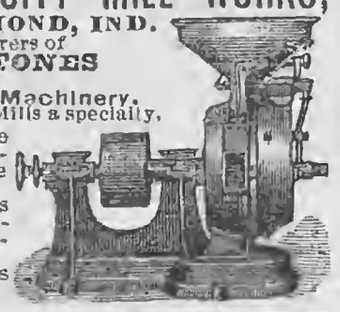

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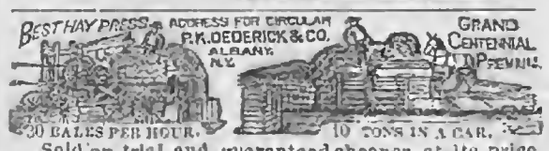

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With improvements recently made is unequaled as a neighborhood mill. It can be run by either steam or water power and is especially adapted to the engines used for threshing.

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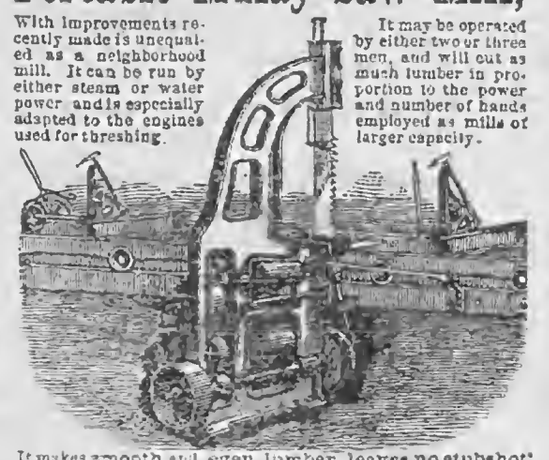

It makes smooth and even lumber, leaves no stubs shot and will cut any sized log up to four feet in diameter. It may be transported from one locality to another and re-erected ready for sawing in from two to three days, and can be made profitable in localities where there is not sufficient timber to justify the erection of a large mill. Send for descriptive circular, prices, etc., to CHANDLER & TAYLOR, Indianapolis, Ind.

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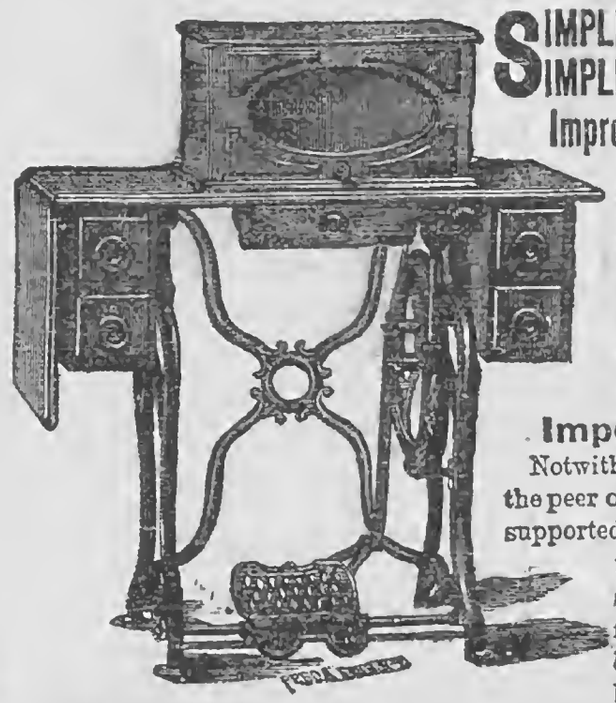

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VIRGINIA F. TOWNSEND so long a favorit will commence a new Serial Story in the Januar number, entitled "**Lenox Dare: the Woma She Was.**" This will be followed by a Story b the author of "*His Dear Little Wife,*" entit "**Tender and True.**"

ROSELLA RICE will contribute a series of a cles on Western Pioneer Life, under the title of "**Fading Footprints; or, the Lowly Lives of Long Ago.**"

PIPSEY POTTS under the title of "**Our Neighborhood,**" is going to give a series of papers in her peculiar vein, which will be spicy and good, of course.

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A WEEKLY PAPER FOR
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For 1878 and 1879.

The Home and Farm is published semi-monthly by B. F. Avery & Sons, at Louisville, Ky. It is an eight-page paper, six columns to the page, giving forty-eight columns of matter in each issue, two issues of which are equal to an eighty-page monthly magazine, and not inferior in quality of matter to the best of the magazines published. The subscription price of Home and Farm is

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For full information and special instructions relative to the premiums offered to club raisers, send to the publishers at Louisville, Ky., for specimen copy of Home and Farm, in every number of which will be found a full list of premiums offered,

New Publications.

It Will PAY YOU to READ This.

The LONG WINTER EVENINGS have Come.

AND NOW IS THE TIME TO SUBSCRIBE FOR THE

WEEKLY CRICKET ON THE HEARTH

The **Largest, Handsomest, Best,** and **Cheapest** Literary and Family Publication in the World. It is published **Every Week,** and is a mammoth **16-page, 64-column** paper, (size of *Harper's Weekly*), every number **Elegantly Illustrated,** and filled with the *Choicest Reading Matter* for **Every Member of the Family.** It contains Serial Stories by Mrs. Ann S. Stephens, Wilkie Collins, Mrs. Henry Wood, Emerson Bennett, Margaret Blount, Esther Serle Kenneth, Clara Augusta, and many other writers. Fascinating short Stories, Beautiful Poems, Complete Agricultural and News Departments, Household Receipts, Stories and Puzzles for the Young, Wit and Humor, Useful Knowledge, Fashion Notes, Answers to Correspondents, etc., etc. **A Complete Family Story, Agricultural, and Newspaper,** and the largest, best, and cheapest published anywhere. Terms, **Only $2.00 per year,** or $1.00 for six months. *The Weekly Cricket on the Hearth* is **as Large, and Equal in Every Respect, to any of the $4.00 Weeklies,** and larger and better than any of the $3.00 papers, and is **the Cheapest Paper of the Kind in the World.**

EXTRA GRAND OFFER! To any one who will send us **One Dollar** (and 10 cents extra for postage), we will send *The Weekly Cricket on the Hearth* for **Six Months** (26 issues), and also our charming new premium, "**An Album of Artistic Gems,**" containing six large and magnificent *Gems of Art*, (including American and Foreign Scenery, pleasing Home Subjects, etc.), the whole beautifully bound in a handsome cover, and forming the most attractive ornament for the parlor or centre-table that could be devised. The engravings contained in this Album are perfect **Gems of Beauty,** and were designed and executed by the Aldine Company, publishers of the great Art Journal, *The Aldine.* Either the paper for Six Months, or the Premium, would alone be cheap at the price asked for both, and we guarantee everybody **Double Value of Money Sent.** Send at once and get the papers containing the opening chapters of **Three** great Stories just commenced, by three celebrated authors. Remember, we send 26 issues of *The Weekly Cricket on the Hearth,* and our magnificent Art Album, all for only **$1.10. Write at once.**

ANOTHER GREAT OFFER! Upon receipt of **Only 15 Cents,** we will send the **Four Brilliantly Illustrated and Charming Holiday Issues** of *The Weekly Cricket on the Hearth* **for the month of December.** The small sum of 15 cents invested in this way will secure to you an amount of entertaining, amusing, and valuable reading for the **Long Winter Evenings** which could not be obtained in any other way for four times that amount. It will also enable you to read the three charming stories, just commenced by three celebrated authors. Don't fail to take advantage of one of the above great offers!

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What 15 Cents will do! What $1.10 will do!

Wit and Humor.

"Do you make any reduction to a minister?" said a young lady in Richmond the other week to a salesman. "Always. Are you a minister's wife?" "Oh no, I am not married," said the lady, blushing. "Daughter, then?" "No." The tradesman looked puzzled. "I am engaged to a theological student," said she. The reduction was made.

A GENTLEMAN in a black coat calls to him his friend, and says: "Come with me while I change my black cravat for a white one for the ball. You will see how it will change me." The change is made. The friend examines his friend with attention: "That's so. Before, one would have sent you on an errand: now one would say, 'Waiter, some coffee!'"

A BOWERY shop-keeper describes himself as "manufacturer of the best imported glover." A photographer's unpunctuated sign reads: "This style 3 pictures finished in fifteen minutes while you wait for twenty-five cents beautifully colored." A cheap restaurant on Fourth Avenue advertises also with an unpunctuated sign: "Oyster pies open all night" and "Coffee and cakes off the griddle."

THE SMALL BOY.—Every day we have evidence that the small boy has no soul. The other day a crowd gathered around a farmer whose wagon-load of butter and eggs was fast in a mud hole, and, while some suggested that he put his horse gee! and others that he put him haw! the ever-present small boy yelled, "It's no use, mister. Yer old hoss ain't stout enough. Take him out, an' hitch in a roll of yer butter."

X. HAD summoned a cab and was well on his way, when the horrible suspicion that he had left his pocket-book at home on the piano became a terrible truth. "Hi, coachee," he exclaimed, as he neared his destination, "hold on—pull up—I've dropped a fifty franc piece in the straw here. Wait till I run over to the shop opposite and get a candle." So saying he sprang out of the vehicle, and was neither surprised nor displeased to see the coachman whip up his horses and disappear round the corner at a 2,13¼ gait.

FARMER BUTTERMAN'S IMPROVED CHURN.
Utilizing a Kicking Cow.

HURON LIVE STOCK ASSOCIATION

ANNUAL SALE.

The Second Annual Sale, under the auspices of the Huron Live Stock Association, for the disposal of

THORO-BRED AND IMPROVED STOCK,

Such as STALLIONS, BREEDING MARES, BULLS, COWS, SHEEP and SWINE, will be held in the

TOWN OF EXETER,

COUNTY OF HURON, ONT., CANADA, ON

WEDNESDAY, FEBRUARY 12, 1879,

Commencing at 12 o'clock, sharp.

If sufficient stock is offered the sale will be continued the second day.

All entries for the sale must be made with the Secretary, not later than January 1st, 1879. Only such entries as are then made will appear in the sale catalogue.

ENTRANCE FEES.—For each Stallion, $2; for each Mare, Bull or Cow, $1; for each Sheep or Pig, 25 cents. The entrance fee in all cases to accompany the entry.

TERMS OF SALE.—Nine months' credit will be given on furnishing security satisfactory to the owner of the animal sold. A discount at the rate of 8 per cent. per annum will be allowed for cash.

All parties entering animals for sale must consider themselves bound by these terms.

One per cent. will be charged by the Association on all animals sold.

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Every Man His Own Printer. THE EXCELSIOR **$3 Press** Prints labels, cards etc. (Self-inker $5) 9 Larger sizes. For business, pleasure, young or old. Catalogue of Presses, Type, Etc., for 2 stamps. KELSEY & Co. Meriden, Conn.

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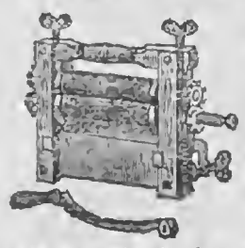
Keystone Wringer



Has Greater Capacity, Is More Durable, and is better finished Than any other wringer now made.

THE ROLLS

Are made of White Rubber clear to the shaft. No twine or wire or fibrous material, or anything else but rubber being used. The rubber is *vulcanized upon the shaft and cannot be taken off except by cutting it off.* They are more elastic than other rolls because there is nothing but rubber on the shaft, and more durable because there is no twine or fibrous material to rot out or wire to cut the rubber. They are greatly superior to any other kind of roll now known.

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TEAS. AHEAD ALL THE TIME. The very best fresh goods direct from the *importers at half* the usual cost. Best plan to Club Agents and large buyers. All express charges paid. Quality guaranteed. New terms free.

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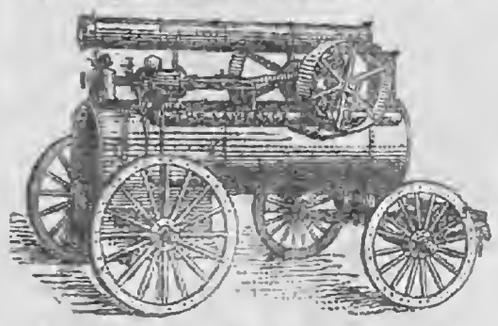

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No Commission to Agents! Bottom Prices to Purchasers!

Engines for all purposes, with and without Wagons. If you need Cheap Power, send for an Illustrated Catalogue.

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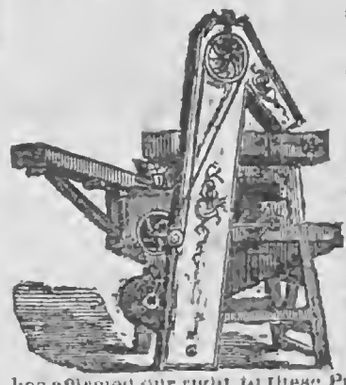
Over 15,000 in use.



They do not Clog or Heat.

Grind 60 bushels per hour. No other mill will do an equal amount of work with the same power.

All Feed Mills of similar construction to the Challenge are infringements on the patents owned by us. A recent decision of the U. S. Court has affirmed our right to these Patents, and we caution all parties against buying Feed Mills that infringe on said Patents.

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Established 1851.
Grist Mills
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FRENCH BUHR STONE
Portable Mills for Farmers, Saw Mill Owners, etc. Prices from $80 up. Complete Mill and Sheller $96. A boy can grind and keep in order. Adapted to any kind of suitable power. Complete Flouring and Corn Mill very cheap.
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TEAS This is a combination of capitalists to supply *consumers only* throughout the *United States* with PURE TEAS on the mutual principle, by getting up clubs. Send for New Price-List.

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An Upright Piano, when strongly built, has many advantages over the ordinary Square, and the tone is preferred by many musicians. The Geo. Woods instruments are believed to be superior to any other for their

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They will commend themselves to all who may desire a very superior instrument, and no one should purchase without examining them.

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IN SOLID GOLD MOUNTINGS.

ONE DOLLAR THE WONDERFUL LEFEVRE TRADE MARK PAT'D DIAMONDS **ONE DOLLAR**

Lefevre Ring, $1. Set of Studs, $1. [The Shah] Stud, $1. Lefevre Ear Drops, $1.

THE ONLY PERFECT FAC-SIMILE OF THE REAL DIAMOND IN THE WORLD.

Pronounced by the Academy of France that *M. Lefevre has really obtained artificially the true diamond.* The basis of these gems are pure crystals found in the Sierra Nevadas, from whence they are exported to the Lefevre Laboratory in Paris, France, where they are submitted to a chemical and voltaic process,

BY WHICH THEIR SURFACES ARE COVERED WITH A COATING OF PURE DIAMONDS, imparting to them all the BRILLIANCY, HARDNESS, and refractive qualities of the natural diamond, and making them as desirable for **Wear, Brilliancy,** and **Beauty,** as the veritable gems themselves. The Ring, Studs, and Ear Drops, as displayed in this announcement, are accurate engravings of SOLID GOLD MOUNTINGS, CONTAINING THE WONDERFUL LEFEVRE DIAMOND, warranted by certificate U. S. Mint assay.

ON RECEIPT OF ONE DOLLAR we will send free by REGISTERED MAIL, to any address in America, either article as above represented. Our "Book on Diamonds," with illustrations of artistic Diamond Jewelry in solid (14 k.) gold, mailed free.

I have seen many imitations of diamonds, but never any that could equal the Lefevre Brilliant.—M. LEROY, Stamford, Conn.

I am in receipt of a pair of the Wonderful Lefevre Ear Drops, for one dollar; to say that I am pleased with them hardly fills the bill, they are simply elegant.—ANDREW MORRIS, Hornellsville, N. Y.

The Wonderful Lefevre Diamond Ring, for one dollar, came to hand this morning. It is really elegant, giving entire satisfaction, and eliciting wonder and admiration from all who see it.—W. H. BEEBY, Martinsburg, W. Va.

The Lefevre Diamonds, mounted in solid gold, are truly marvelous.—B. F. AVERY & SONS, Home and Farm, Louisville, Ky.

The eminently successful experiments of M. Lefevre silences all doubt of the artificial reproduction of the true diamond.—M. DU FRENOY, the great French Scientist.

The Lefevre Diamond most effectually disturbs the slumbers of the possessors of costly gems.—Journal of Science.

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THE RURAL NEW-YORKER

A JOURNAL FOR THE SUBURBAN AND COUNTRY HOME

VOL. XXXVII. No. 51.
WHOLE No. 1508.

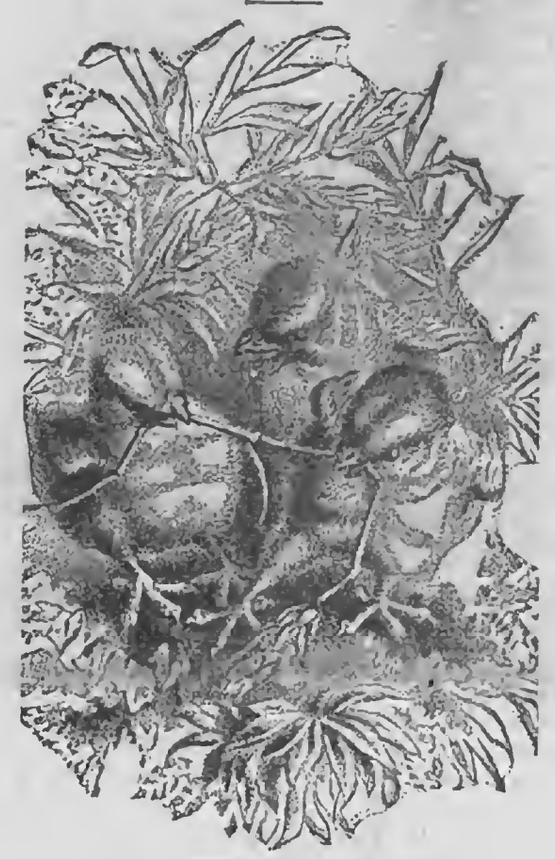
NEW YOK CITY, DEC. 21, 1878.

PRICE FIVE CENTS.
$2.00 PER YEAR.

[Entered according to Act of Congress, in the year 1878, by the Rural Publishing Company, in the office of the Librarian of Congress at Washington.]

The Poultry Yard.

OUR POULTRY NUMBER.



POULTRY FOR DIFFERENT PURPOSES.

HENRY STEWART.

POULTRY VERSUS PIGS.

Pork and poultry enter into close competition with each other in production, if not in use. To a great extent, pigs and fowls are fed upon the waste matters that could not be utilized in other ways. Their flesh and the eggs of the latter enter very largely into domestic consumption, in the aggregate, perhaps to a greater extent than into commerce for general consumption. But it is a fact that the production of pork receives far greater attention than that of poultry. Yet pork is not by any means so healthful a food, nor is it so profitable a product, at ordinary market prices, as poultry. A flock of hens yields an annual dividend of 100 per cent. upon the investment and leaves the stock intact; while a pig simply returns the outlay and often fails to do even that. For family use, in the household, a flock of hens may be made to furnish the major part of the supply of the animal food of the most healthful and agreeable character, in the shape of eggs and flesh, at a less cost than in any other way. Eggs and chickens, young and old, may be presented on the table nearly every day in such an endless variety of shapes that the appetite is not cloyed, and the dish, whatever it may be, is always acceptable to the most delicate and refined taste. But pork is—pork, in fact and always pork—whether it is fresh, salted, dried, smoked or chopped into sausage. It is always greasy, and while, under some circumstances it is an acceptable and nutritious food, such as, for instance, for those who are exposed to constant outdoor labor of a severe kind, and to much cold, there are thousands who are seriously injured by using it too frequently. Besides, the very name of the swine, *sus scrofa*, has too close a relation to the horrible disease scrofula, to make it acceptable to thousands who like to look closely into the nature of the food they consume. Such persons as these may choose poultry and eggs without any qualms of conscience or stomach. On the whole, then, it may be concluded that it would be well if some of the care and attention lavished upon pigs were devoted to poultry; the more especially now that the markets point so significantly to the same view. Just now a dozen fresh eggs will purchase six pounds of pork and one pound of poultry will pay for two, if not for three, pounds of it.

WHAT KINDS OF FOWLS SHALL BE KEPT?

Much of this backwardness of the poultry interest is due to a want of knowledge of the best breeds and their characteristics, so that the right kind is rarely found in the right place. Thus blame is laid where it does not belong and possible profit is missed. Sometimes fowls are chosen for fancied beauty and a few feathers of a certain color are all that one gets for his money and trouble, in place of eggs and chickens. Then, again, a variety that will not thrive in close confinement is chosen for a small place; and, again, fowls that will fly like partridges are sought to be kept outside of a garden fence; or a breed that will sit and brood for weeks and months continuously, is chosen in the expectation of getting eggs.

FOWLS FOR EGGS.

There are some breeds that are known as "non-sitters" and which rarely evince a desire for brooding. These lay on with rare intermissions, and are the most desirable for keeping in town or village yards, or for farms where there is a large range and where eggs are sought more than flesh. The Black Spanish and the Leghorns, White and Brown, are the principal breeds of this character. When well kept, an average of 200 eggs yearly may be expected from each hen; more than this has been credited to these fowls. One breeder of Brown Leghorns has stated that a hen which died in its eleventh year, had produced more than 2,000 eggs. But let no one who expects to keep a garden in good order choose either of these breeds, unless a yard is provided and surrounded with a picket fence at least ten or twelve feet high; nor should any person who has a desire to live at peace with his neighbors, try to maintain such a condition and a flock of these fowls at the same time. They are active foragers, will wander half a mile from home and are wild and suspicious. In shape, they are comely and symmetrical and the Brown Leghorns are handsomely feathered, and not much unlike some of the Games in appearance. Their chief fault is their large combs which are subject to be badly frozen in winter time.

FOWLS FOR EGGS AND CHICKENS—BRAHMAS.

The first fowl for flesh, eggs and chickens, is undoubtedly the Light Brahma. In some respects, it is also an extremely handsome bird. Its fine carriage, large size, pure white and black plumage, together with its tameness and docility, render it very attractive. From its inability to fly or jump, it may be kept within a picket fence three feet high; and if the house and yard are kept clean, and wholesome food is provided, there is no more hardy and healthy fowl than this. It is a winter layer; pullets hatched in March will begin to lay in November, or earlier. Cockerels of eight months may reach the weight of eight to nine pounds, and, when mature, have turned the scales at twelve to sixteen pounds. For market, this is *the* popular fowl, its yellow legs and flesh pleasing the popular eye. As broilers they sell readily at high prices, and no other young fowl is so juicy or well flavored. They may be made ready for market when three months old. The hens are good mothers, are so docile that they may be lifted off or on the nest, and will readily foster strange chickens. The chicks are remarkably hardy, and will thrive well in the cold weather of early spring when any other varieties would perish. The Dark Brahma is not a popular fowl. It is neither productive nor hardy, and is now rarely seen, except in a few farmers' yards.

PLYMOUTH ROCKS.

The most promising new breed for general use is the Plymouth Rock, a cross-bred fowl, originating from the old but not forgotten Dominique, the Brahma, and some other varieties. By careful breeding it has been brought to a high standard, and generally reproduces itself true to color and feather. It is a heavy-bodied, plump fowl, cockerels of eight months weighing as many pounds. The hens lay large eggs, varying in color from white to reddish brown; and are prolific. Early pullets will lay in November. The plumage of this breed is of a bluish tinge, the feathers being crossed with bars of a darker color. For a farmer's fowl this undoubtedly comes next to the Light Brahma, and for small yards where chickens are desired, will equal it.

THE COCHINS.

The white Cochin is similar in shape, except its single comb, to the Light Brahma, but in color it is pure white. It is a hardy fowl, but not so productive as the Light Brahma, and its chief fault is that it is a most persistent brooder. Otherwise it possesses the same good points as the Light Brahma, and is a desirable fowl for those who can furnish clean roosting places and plenty of room upon a grass run. The most beautiful fowls of this class are the Buff and the Partridge Cochins. The former are of a light cinnamon or yellowish-brown as to the hens, and the cocks are of the same general hue, but have a somewhat gayer coat than their mates. The Partridge Cochin hens are beautifully feathered, of a rich brown color with pencilings of a darker shade; the cocks, with their black breasts, red hackle and orange-red saddle feathers, are handsome when young and in full vigor, but when old, have the shabby appearance of a worn-out and seedy dandy. There is a black variety of Cochins, which, however, is seldom seen except in fanciers' yards, and on the whole, none of the race are desirable for profitable keeping. All the Cochins, except a subvariety—the Pea-comb Partridge Cochins—have single and erect combs and feathered legs.

THE GAMES.

The best flavored flesh and the richest eggs are those of the Game fowl, of which there are many varieties. The Black-breasted Red and the Brown Reds are the best for ordinary use; the others, as the Duck-winged varieties, the Piles, Spangled White, Gray, and others, being more desirable to the fancier. This variety approaches nearer to the original Indian jungle fowl than any other of the domestic breeds, and is a direct descendant from it. The hens are good mothers, lay a moderate number of small but richly-flavored eggs, and the cocks are the most courageous and combative of all fowls. The Games cannot be kept in an inclosure without a high fence, and are active foragers.

FRENCH FOWLS.

Houdans and Crevecœurs are highly considered by some fanciers as profitable fowls. They are somewhat grotesque in appearance, as may be seen from the illustrations elsewhere. These are the most popular fowls in France, and with the care given to them by the French women,

WHITE-CRESTED BLACK POLANDS.

produce immense quantities of eggs which supply, not only the native consumption which is very great, but many millions of dozens for exportation. The Houdans have a mixed or mottled plumage of black and white, and possess a fifth toe; the Crevecœurs are black; both are crested and have horn-shaped, or antler-like combs. The former breed deserves more notice for family and farm use than it has yet received.

THE DORKINGS.

The most popular fowl in England is the Dorking, of which there are the colored, the gray, and the white varieties. These fowls have a fifth toe, but scarcely any other peculiarity for which they are more noteworthy than for this. They are too tender for our climate, lay few eggs, are persistent sitters, but are fine table fowls. If kept in the expectation of profit, except for sale by breeders, they will bring only disappointment.

ORNAMENTAL FOWLS.

There are circumstances in which fowls of unusually handsome or odd appearance will be desirable for these qualities as well as for what eggs they may produce. Of these the Hamburgs, Black, Golden-penciled, Golden-spangled, Silver-penciled, Silver-spangled and White; and the Polish, White-crested Black, White-crested White, Golden, Silver, Bearded Golden, Bearded Silver, and Bearded White, may be chosen. The Hamburgs are good layers, have rose combs square in front, flat on the top and covered with small points with a terminal spike inclining a little upwards. They are neat, "natty" fowls, and a well kept flock of them has a beautiful appearance in the yard or upon a grassy lawn. The Polish are the oldest known variety in Europe and with their conspicuous crests, are attractive to some persons. The White-crested Black, and the Black-crested White, are, perhaps, more curious than useful, as they have been bred for the peculiarities which give them their names more than for profit. A young brood of those fowls, well feathered as they are, with full crests or top knots, are quaint and curious enough to make them the delight of the children. Some of the Polish fowls that have not been spoiled in breeding, are reputed to be good layers.

PETS.

There is nothing more encouraging to the natural kindly affections of children, than the possession and the rearing of pets. And there are no more attractive pets than a pair of Bantams with a brood of wee things no larger than a wren or a tomtit. For useful purposes, these small fowls are not worth consideration, but the idea of confining ourselves wholly to what will pay in a money sense, is somewhat degrading to our better natures. It pays to be happy; to enjoy recreation; to cultivate kindly feelings, and especially to provide pleasures and amusement for our children. In the way of poultry, nothing else will please a child so much as the gift of a few Bantams or other attractive fowls, as the Sultans; and there is abundant choice of varieties of these. The Sebright and Game Bantams are beautiful birds, Liliputian in size and very small copies of larger varieties, in many cases. The most unique of all, perhaps, is the Japanese Bantam, a rare variety in this country, with white and black plumage and all the quaint appearance of the usual Japanese productions. The Sultans are also rare fowls, having been brought hither from Constantinople a few years since.

IN CONCLUSION.

For eggs alone, one should choose White Leghorns, if that color is desired; for black fowls, the Black Spanish, and for handsome plumage and eggs, the Brown Leghorns; for eggs and flesh, the light Brahma first, and the Plymouth Rock next. For brood fowls as foster-mothers for non-sitting breeds, the Cochins or Games, are admirable. For a small yard where beauty is the first consideration and a few but sufficient eggs are desired for family use, the Hamburgs of the different varieties, or the French or Polish fowls and Games will be found suitable, while for ornament alone and for young folks' pets, the silky White-crested Sultans, or one of the many varieties of the Bantams may be procured. As to the common, old-fashioned, mixed-up, mongrel, "barn-door fowl," that ought to be consigned to oblivion as an unprofitable nuisance.

AN INCUBATOR HOUSE AND NURSERY.

A. M. HALSTEAD.

The attention of our poultry raisers as well as of farmers throughout the country, is being largely drawn to the subject of artificial incubation, and of incubators.

Of the latter, there are a number which are claimed to be entirely successful in the hands of the average poultry breeder; and the question next comes up, how or where to place the incubator, to obtain the best results. There are but very few incubators—perhaps not more than one or two—which can be depended upon, unless placed in a room or building specially constructed for that purpose; and even those which do well in the sitting-room, or the cellar, or in a spare chamber, will do better if placed in a room specially designed for them.

My experience, embracing a period of more than twelve years, fully corroborates this. I have tested the incubator in a cellar, in a sitting-room, in a spare bed-chamber, in an out-building, and lastly in a room partitioned off one end of said building. My success had been variable until I tried the last-mentioned room since when, the chicks hatched averaged from eighty to eighty-five per cent. of the eggs set. My cellar gave the next best results, but was very uneven in temperature, owing to the heater flues passing through it. The cellar being a small one, under a new part of my house, heated up very quickly whenever the drafts were turned on in the furnace. But even with this disadvantage, the result was from seventy to seventy-five per cent. of chicks from the eggs set.

FIG. 1.

In giving the accompanying plan to the readers of the RURAL, I do not wish them to think that such a building is necessary or essential to the use of an incubator, but simply that it is beneficial as increasing the success, and a source of gratification and pleasure to those who can afford it, and who like special means for special ends. The farmer and small poultry breeder will find himself able to raise his three to five hundred (if he desires so many) chicks, with a small-sized incubator in his cellar or sitting-room, and two or three "Brooders" or "Artificial mothers," to care for the chicks until a few weeks old. But should it be desired to raise early broilers for market, a building of some kind must be constructed or adapted to the purpose.

The design given here can be enlarged and extended to many times its present size, and may be made much more elaborate in finish; or, on the contrary, it can be made to cost not more than two-thirds, or even half the expense of this structure. The building was originally built and used for a hen-and-chicken house; that is, around three sides of it were pens for hens with their chickens, the hens being all under one roof, and the coops or pens opening outward into several different yards. The size was twelve and a half feet square inside; five feet from floor to eaves, and eight feet to the ventilator in the peak.

I moved the building to its present location, elevated it four and a half feet above the ground, placing locust posts, set four feet into the ground, under the corners. Over the old siding was put a covering of tarred paper—on the north and west sides, double—and over that, worked pine boards. The old floor was also covered with tarred paper, double thickness, and a floor of spruce boards laid over that. The inside was then lathed and plastered. The outer door was made to slide on morticed rollers, the track being placed at a very slight angle from the face of the building, so that when closed, it impinged at top, bottom and sides, making an almost perfectly air-tight door. (See "S," fig. 2.) An inner door "I," hung on shifting-butt hinges, opens inward. In warm weather, this door is unhinged and a door of wire netting or gauze, hung in its place. Opposite the door is the window, six feet broad and two and a half high; sash double, one opening outward and the other inward, the former hinged at the top, the latter at the bottom, so as to avoid a direct draft of air. Under the cupola, in the peak, is the ventilator, which can be closed tightly, or opened to full size of flue, which is fourteen inches square.

The arrangement of the room is shown in figure 2. A board partition "P P.," crosses the room four feet from the outer door, and this space is again divided by the partition "O." This leaves the room "E" as a sort of lobby opening into the inner room "R," through the door "D." The dark closet "T," four feet square, is used as a testing room, to tell the fertility of the eggs; entrance by the door "L." "B, B," in the larger room are benches, eight feet long and two and a half feet wide, on which are placed the incubators; each bench will hold two machines of the capacity of two to three hundred eggs each. Under the window is a small, low table, "A," on which to put the egg drawers while turning the eggs. The end of the room "E" may be fitted with shelves for the eggs which are to be used in the machines. A small window may be placed in the door, if desired. This room, constructed in the manner described, will need no heating arrangement other than the incubators themselves, except perhaps, in very severe latitudes; and then a kerosene-oil stove and heating drum will be found sufficient. The entrance of the hatching house faces a little to the south of east, and the only window, a little north of west, so that the room is not affected by the sun at any time of the day.

The nursery, partly under the hatching room, is boarded down to the ground on the north and west sides, a small window for ventilation being placed in the latter. On the south and east sides, as far as the steps leading up to the door of the hatching room, are placed hot-bed sashes—except at the corner, which is fitted with triangular sashes. The lower edge of these sashes is one foot from the ground; under three of them—two on the south and one on the east sides—are narrow doors, six inches wide, and of any desired length, to give egress and ingress to the chicks. This boarding under the sashes and on all sides is extended down into the earth eighteen or more inches.

The sashes are battened above and below; one sash being battened on top, and the next one underneath, thus making very tight joints. They are not attached to the building, but may be lifted out and stowed away when not in use. The entrance to the nursery is through the door seen in the lower right-hand corner of figure 1.

I use no artificial heat except that of the Brooders, several of which can be put between the entrance and the west wall; or, if preferred, one large Brooder with a capacity of five hundred chicks may be used. The floor of the nursery is dry sand, which is frequently turned over. In a nursery of this size, five hundred chicks may be kept until six weeks old, if proper care is paid to ventilation and cleanliness. By extending the glass around the west side and protecting it by a tight board fence, parallel with the north side of the building, and fifteen or twenty feet beyond, half as many more might be housed for a few weeks.

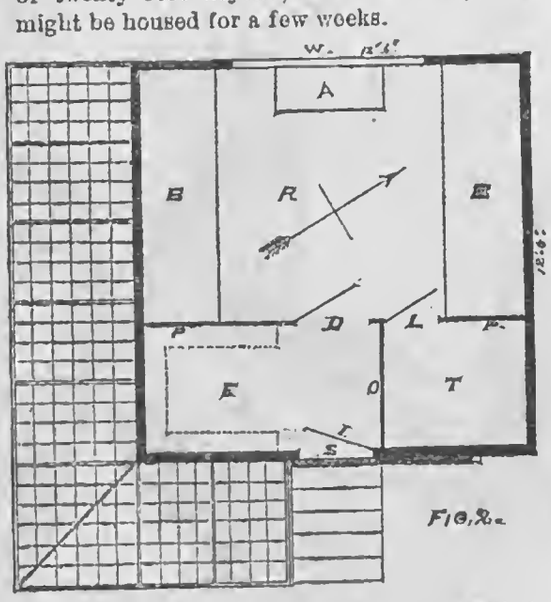


FIG. 2.

The capacity of the hatching room will depend on the number and size of the incubators used. From four machines of two hundred eggs each, fully six hundred chickens should be turned out every three weeks. Another machine might be added by giving up the testing room, and carrying the bench entirely across that side of the room. This, however, is hardly advisable, as this "testing" is a most important matter, when the business is made one of profit and not of pleasure merely.

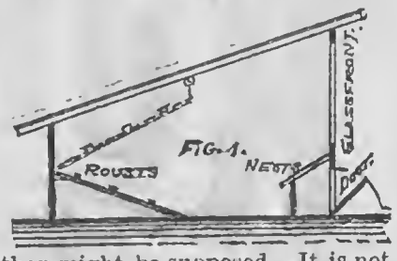
Westchester Co., N. Y.

Crosses, generally, are profitable neither for egg production nor table purposes, and their mongrel appearance is not so pleasing to the eye as that of pure-bred birds.

CONVENIENCES FOR THE POULTRY-HOUSE AND YARD.

NECESSITY OF CLEANLINESS.

Disappointment and disaster will be sure to happen to the poultry-keeper who neglects to maintain perfect cleanliness about his premises and utensils. Cleanliness is a term that includes



more than might be supposed. It is not necessary that the poultry-house should be kept pure and free from the droppings of the fowls, but the air in it must be pure; the water and food should be pure, and the fowls should be kept free from vermin. The house cannot be kept clean unless it is well arranged for that purpose, and to provide pure food and water there must be such troughs and vessels furnished that the fowls cannot foul them, and to avoid vermin, the nests must be of a proper kind.

THE POULTRY-HOUSE.

As to the poultry-house, the plainer and simpler it is made, the better. Gimcracks and fancy "fixings" inside will result disagreeably and harbor lice, which are the greatest pest to the poultry-keeper. Outside, one may please his fancy in any desirable way; but inside, all should be smooth, plain and free from crannies and projections, in and under which vermin may gather. The typical shape of a poultry-house, whether it is for half a dozen hens or a hundred, should be as shown at Fig. 1. When the writer began to keep fowls, as a boyish fancy, nearly thirty years ago, with half a dozen Black Spanish hens, he constructed such a house of very moderate proportions, being about four feet high in front, six feet long and wide, and two feet high in the rear, and with a hot-bed sash, borrowed from the garden, for a light. Since

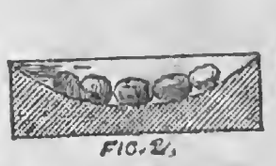


FIG. 2.

FIG. 3.

then, when having several hundred fowls, the houses have all been made on this principle and the largest size ever needed was about fifty feet long, sixteen feet wide, eight feet high in front and four feet at the back. This will accommodate 150 fowls. No more than this should ever be put into one house. If more are kept, other houses should be provided.

THE PERCHES.

High perches are to be avoided. With heavy birds, there is danger of injury from jumping or falling from high roosts. The plan shown in Fig. 1 is the best. It is as follows: A scantling is nailed to the rear wall, or is hung upon strap-

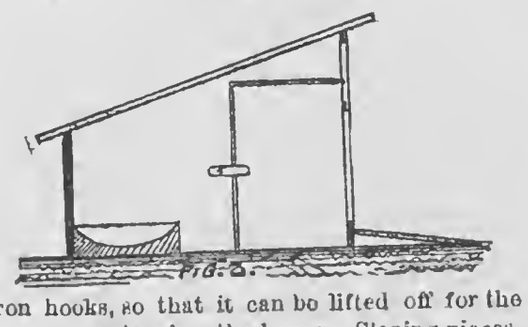


FIG. 4.

iron hooks, so that it can be lifted off for the purpose of cleaning the house. Sloping pieces, two by four, are hinged to this edgewise, about one by six feet apart. Other strips of two by four are nailed on to these about one foot or eighteen inches apart, with the broad side flat and uppermost. The whole forms a frame which rests upon the floor when in use, and which can be raised and hooked to the roof when the house is to be cleaned.

THE NESTS.

Nests should be made so that the hens cannot interfere with each other when laying, and that the interior may be kept clean. For these ends, they should be made small and with narrow entrances and be covered with a steeply sloping top, so that the fowls cannot perch upon them. A conveniently-shaped nest-box is shown in the front of the house and a board may be hinged in the front outside, so that it may be let down when the eggs are to be gathered. This should be done in the evening. The size of the nest-

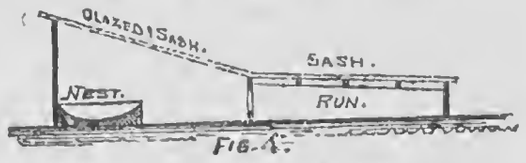


FIG. 5.

box is twelve inches wide by fourteen long, and about ten inches high at the front, with an opening about six inches wide and eight inches high, to admit the hens.

NESTS FOR BROODERS.

Brooding hens should not be kept in the public apartment. They require privacy. The writer's method is to have a small, darkened apartment purposely for them, or to keep the brooders in distant places, in the barn or elsewhere. An excellent plan is to have large coops

made in the shape of the house at Fig. 1, in which the nest-box, with the hen, may be placed, so that when the chicks are hatched, they need not be removed. When thus managed, one hen will care well for twenty chicks. These may be taken from other hens which may be

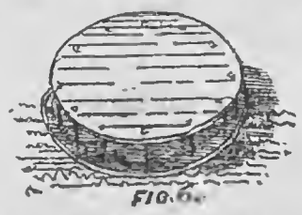


FIG. 6.

turned out to lay again. The nest-box should be low and not too large, so that the hen can step in and out without breaking the eggs, and that the eggs may not be spread too much so as to be uncovered. A well-shaped nest-box is made as shown in Fig. 2. This is ten inches square and three inches deep. These nests can be moved from place to place with the hen, at night, without trouble, and when the chicks are hatched, the first that come can jump in and out at will and are not lost, as with deeper nests. The best material for the nest is soft meadow hay, and if a little kerosene oil is poured on the bottom of the box, before the nest is made, lice will not come near it.

COOPS.

When the young chicks appear, and begin to run around, the hen should be cooped in a place where the young brood can have a clean run. A grass plot is a good place, but the garden is the best. The little things will early learn to hunt insects and will wander off a long distance after them, and stay for hours scratching beneath bushes and in the borders for prey. This

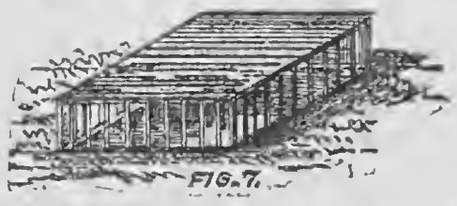


FIG. 7.

does much good and no harm, and should be encouraged. A coop of chicks under a cherry or plum tree, will make a good preventive of curculio. The coops should be roomy and single. When double coops are used, the chicks get mixed and beaten by the strange hens. A convenient coop is shown at Fig. 3. This may be thirty inches square, which will not be too large by any means, and the front should be twenty-four inches high. There is a door at one side, as seen in the engraving; and the nest is shown by the dotted lines. When the chicks are a month old, the nest may be taken away and the floor strewn with sawdust, which is the best litter; sand or dry, sifted ashes are the next best. The front of the coop is lathed up and down, with three-inch spaces. A falling door should be fastened to the front, as shown, and should be closed, unfailingly, at night, when storms are expected or if vermin are feared. Rats are the most to be dreaded.

A WINTER COOP FOR EARLY CHICKENS.

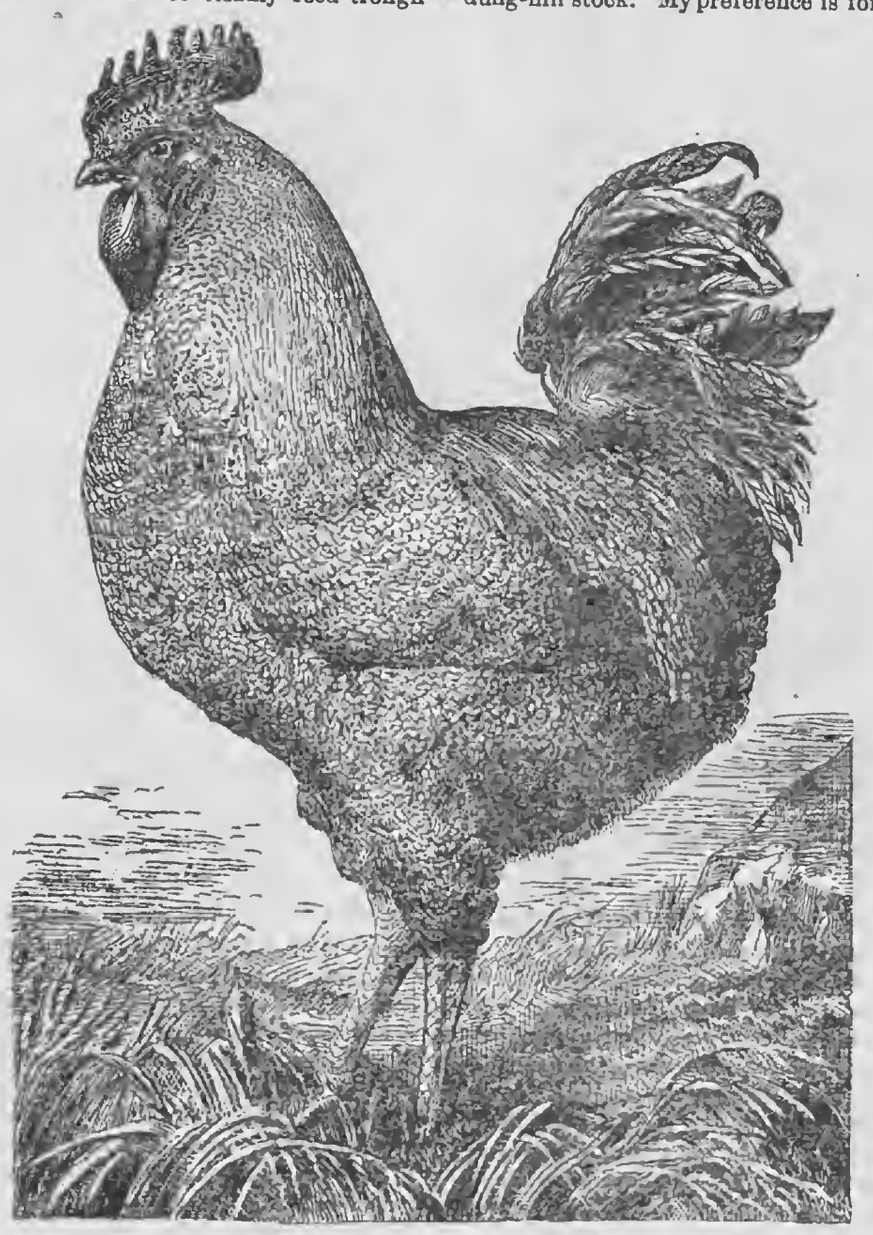
For early chicks a glazed coop and run may be made, as shown at Fig. 4. The hen may be set even at this season in safety, with such a coop. The glazed sash rests upon the sides and ends of the coop, and when ventilation is needed, by reason of too great warmth on bright, sunny days, it may be raised at the upper end by means

FIG. 8.

of small blocks. The run is simply a few short boards nailed together, end to end, to make a sort of box, with light cross-bars an inch square placed across from side to side, upon which a hot-bed or other sash is placed. If this coop or run is used in a house with a glazed front, it will serve effectively for raising chicks through the winter—or for chicks that have been hatched in an "incubator." During last winter, the writer found the temperature in the coop at mid-day nearly always too high, and at night when the sashes were let down, the temperature never fell lower than fifty degrees.

FEED AND WATER TROUGHS.

Young chicks, and old ones, too, are very filthy feeders. They will rather walk upon their food than not, and in this respect are no improvement on pigs. The careful breeder will provide such troughs for food and water, that this may not occur. More than half the diseases prevalent among fowls, and nearly, if not all, the gapes, are caused by filth in the food or water. The best trough is one of cast-iron covered with a wooden frame (Fig. 5), which prevents all waste and fouling of the food and water. After more than a year's experience with this, it has proved effective and has more than paid for itself in the saving of food. For small chicks, a clean water dish may be made of a flower-pot saucer, or a tin, shallow pan, and a wooden cover which is raised from the surface of the water by a few shingle nails, as shown at Fig. 6. Or a common, empty fruit can may be used by removing the top and cutting a few small notches in the edge, filling it with water, covering it with a flower-pot, saucer or a tin dish, and reversing it so as not to spill the water. This makes a so-called fountain which supplies fresh water for several days. When the small chicks are robbed of food by the larger ones, a feeding coop may be made as shown at Fig. 7. The top is made to rise upon hinges or otherwise, and the food is put into the coop, which the large chickens cannot enter. A cleanly feed trough



"BOB."
Plymouth Rock of the Rural Grounds.

for a lot of fowls may be made as shown at Fig. 8. This is in the usual form of a feed trough, but it is protected by cross-bars so placed, that the fowls cannot stand upon them and foul the food. It made be made several feet long, of narrow fence strips, and one may serve fifty fowls.

MANAGEMENT OF POULTRY.

The profits of the poultry yard depend altogether upon the management of it. I assert, without fear of contradiction, that there is no other kind of stock that will pay so large a dividend on the capital invested as will poultry, if rightly managed. The following are a few of the most important points in this line:

The Poultry-House.—First select a dry, healthy location, and on it construct a building that will be warm in cold weather. Arrange it so that it can be thoroughly ventilated at all times, and let it face either the south or east, and let the front be partly glazed.

Choice of Varieties.—Second, procure some variety of pure-blooded fowls; they will be found much more profitable than the common dung-hill stock. My preference is for the Brahmas. During an experience of fifteen years, within which time I have bred nearly every variety, I have found none that would excel the Brahmas. They are splendid layers of large-sized, well-flavored eggs, while for the table, they are the fowls *par excellence*. A Brahma hen, if kept reasonably warm and properly fed, will furnish eggs all winter, when the smaller varieties, as a general thing, will lay but little if any.

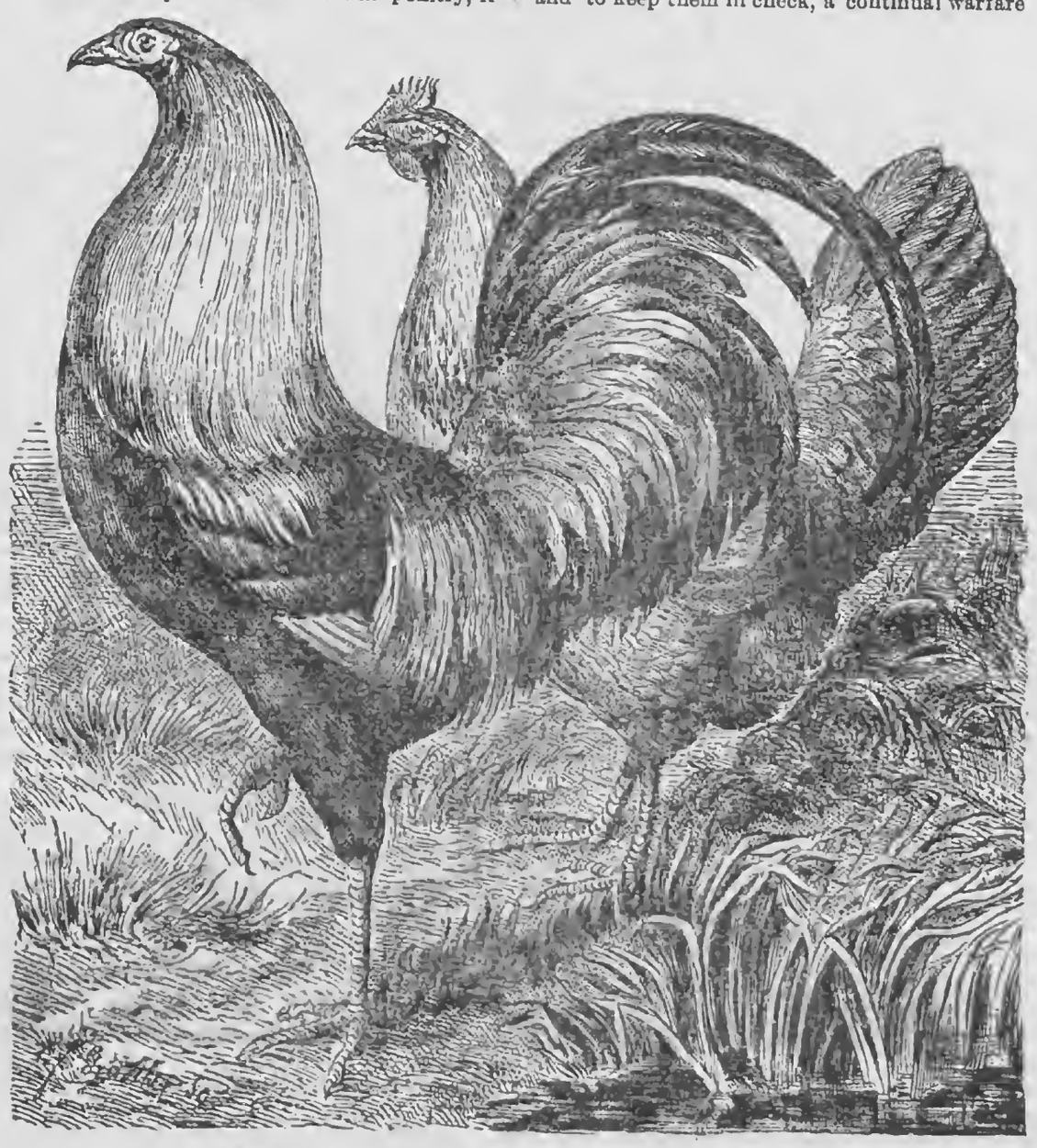
Getting Rid of Vermin.—Third, keep the poultry apartments clean, and see that the fowls are not being eaten up with lice. These are among the greatest pests of the poultry-yard, and to keep them in check, a continual warfare must be waged against them. A good dust-bath, arranged something on the plan of a hot-bed and made of fine sand or road dust mixed with slacked lime and flour of sulphur, will be found to aid materially in exterminating these pests. The perches, too, should be saturated once a week with kerosene oil. This will have a tendency to keep lice in a measure under subjection. I believe that half the cases of chicken cholera are caused by the effects of lice.

Proper Food.—Fourth, good, wholesome food should be fed regularly and at stated times. Neither should they be confined to one particular kind of food, such, for instance, as can be obtained by a free run to the corn crib; but they should be fed all they will eat up clean of food of various kinds, the nature of which will be readily indicated by a study of their wants.

Fifth.—They should always be provided with plenty of clean, pure, fresh water, and an occasional dish of milk, either sweet or sour, will be relished by them.

L. E. Sinsabaugh.

Otoe Co., Nebraska.



BLACK-BREASTED RED GAME.

WINTERING POULTRY IN THE "COLD NORTH."

T. H. Hoskins, M. D.

The originals of our domestic fowls are natives of a warm climate. Yet the old "common stock" has become so well acclimated that in Southern New England and all the country below it, they endure the winter without much protection, often roosting on trees or under open sheds, all through the cold weather. But in Northern New England and Lower Canada, it is quite a problem how to winter fowls, and especially the fancy kinds, in health, and without loss of toes and combs from freezing. Many fanciers have means for warming their poultry houses in severe weather, but ordinary farmers will not go to the trouble and expense needed to construct such conveniences. I will give my notions derived from observation and experience, of the best cheap way of wintering fowls where the thermometer spends much of its time, at that season, among the minus twenties.

Fowls will endure dry cold much better than damp cold. Dampness, indeed, begets fatal disease among poultry very quickly. Now, the problem is how to have the poultry house as warm as possible, and yet not damp. Finding, several years ago, that in an ordinary boarded and battened house, with the whole south side glazed, my fowls suffered badly from freezing during cold nights, I removed them to the cow stable where it never freezes, only to have them die from the dampness generated by the breath of the cattle. Since then I have devised a poultry house that works much better, though still, for fancy breeds, it is sometimes too cold. The walls are made double by boarding up on the inside of the studding and filling in the interspaces with sawdust. Then, instead of a whole glass side on the south, there is a row of large (12 by 15), single-pane windows around the east, south and west sides, two feet from the floor. As the sun runs low in the cold months, it is necessary to have the windows low, so that the sunshine may strike the *floor* instead of the *wall*, where the hens cannot get into it. In such a house as this, ten by eighteen feet, twenty-five fowls can be wintered in tolerable safety and comfort. They must, of course, be well fed, supplied with gravel and cracked bone, and with dusting boxes, and the houses frequently cleansed, white-washed, and the roosts kerosened. They should be allowed to run out as late in the fall and as early in the spring as possible, and whenever the ground is bare in the winter. If they get scaly legs, rub in a mixture of lard and kerosene. Feed corn freely, but not exclusively. Buckwheat, barley and oats make a good variety, and remember that fowls are essentially carnivorous creatures, and will not do well long without some sort of animal food. In our climate we do not expect many eggs in winter, but when fowls are kept as above described, some eggs are laid all through, and pullets begin to lay early in February.

Orleans Co., Vt.

POULTRY NOTES.

When we recall the many new breeds of fowls—each excelling any before introduced—that have been offered for sale within the last dozen years, we might well conclude that perfection has been nearly reached. It would seem that some of the latest breeds must be perfect in all respects, especially if we credit the statements of those having them for sale. One can easily understand that persons who sell eggs and fowls at high prices, must "get a run" upon something new, or else their occupation would be gone.

This is evidently the principal reason why so many new breeds have been introduced. I have kept nearly all of these new kinds, but have failed to find any material excellence that one possesses over others, when all the points are considered. As layers, the Polands are not a whit behind any of the newer breeds. If meat is wanted, the Brahmas have not been excelled. I have said it before, and will now repeat, that there is more in the feed, care, etc., than there is in the breed. Any one of a dozen kinds, if well kept, will prove very satisfactory. Novices in poultry keeping would do well to see what can be done with those they possess, before investing in the new, high-priced breeds.

I do not propose to give, in full, the rules and regulations for making poultry pay, but shall give a few facts that have come under my observation.

If one wishes to make money by keeping hens, he should have them lay in winter when eggs are scarce and dear. This requires pullets hatched in the April or May previous. They must be kept in warm, dry, clean quarters, with plenty of good feed and water. Wheat should be the principal feed. Buckwheat is valuable feed in winter. Corn should be fed occasionally. Meat, green feed, sand, lime and shells, must be provided. Carrots, onions, sweet apples and cabbage are the best for green feed. My hens refuse to lay well when fed on corn exclusively. Hens will barely live if fed on oats, and will starve on rye. Potatoes should not be given them in freezing weather. Give a warm mess each morning, with cayenne pepper added occasionally, but feed dry grain for the balance of the day. Hens should not be chased or frightened in any way, if eggs are desired.

New-fashioned breeds are of small consequence. If you keep hens to "look at," keep pure bloods; if for profit, breed from laying hens, changing cocks each season, and if these are of a different breed, no harm will result. I am not afraid of crosses, and have now the nicest lot of pullets that I ever owned; but they have been crossed until one can hardly find two that look alike, and yet they are laying finely, which is the great object. My rule is, to keep a large flock of young hens through the winter and sell off most of them in May, reserving only enough old hens for breeding purposes. When one raises chickens, of course about one half of them will be cocks, and if these are hatched early and well fed, they can be sold in July, or August, at good prices. Selling chickens early, and eggs in winter, is the only way I can keep hens profitably. NELSON RITTER.

Onondaga Co, N. Y.

POULTRY NONSENSE.

S. RUFUS MASON.

"KILLING by kindness" is a modern invention, which enables one to take life without becoming amenable to the law. Fancy poultry palaces are just about as appropriate as gold earrings on a barefooted negress. High feed and close confinement are only an imitation of "high life above stairs," by which the aristocracy become enfeebled both in body and mind. Medicine given to healthy poultry to induce fertility is an outrage upon nature. Why do we not attempt to increase the human population by the same means we employ to multiply the feathered bipeds? All the weak, infertile, run-down fancy-stock, now so thoroughly spread broadcast over the land, is merely the natural result of doctoring. Hot-bed plants must be kept in a hot-bed to preserve their beauties; poultry so reared, and sold away from their pampering surroundings, are no exception. All the roup, gapes, pip and cholera, now so common and so destructive, are just what one bargains for when he undertakes to circumvent nature.

Farmers and others who wish healthy stock, must see that they get it when they go to buy—and the only way to keep it so is to let the hens have their own way in choice of food, nests, *time* of producing eggs, etc., etc. I do not believe that there is a farmer in the land who profitably raises eggs or poultry for family consumption from any one pure breed of poultry—[! EDS.] The progeny of a judicious cross are healthier, more fertile, less liable to sudden attacks of disease and, if allowed the farm for a run, cannot but be profitable.

The real needs of poultry are few and simple. They are: warm, dry, vermin-proof roosting and laying quarters, clean water, gravel, lime and a variety of grain to choose from. If any hens are found lousy or sickly under such conditions, cut off their toe nails just behind their ears, and the flock will be better for it. Why should we expect to have good poultry and eggs upon our tables, if we dose the poor creatures all the time upon nonsensical nostrums. Poultry do best when made to work, that is, to scratch for their living. Feed them one full feed of mixed grain every morning at sunrise, and let them have ample range the rest of the day. Change the treatment from nonsense to common sense for a mutual benefit.

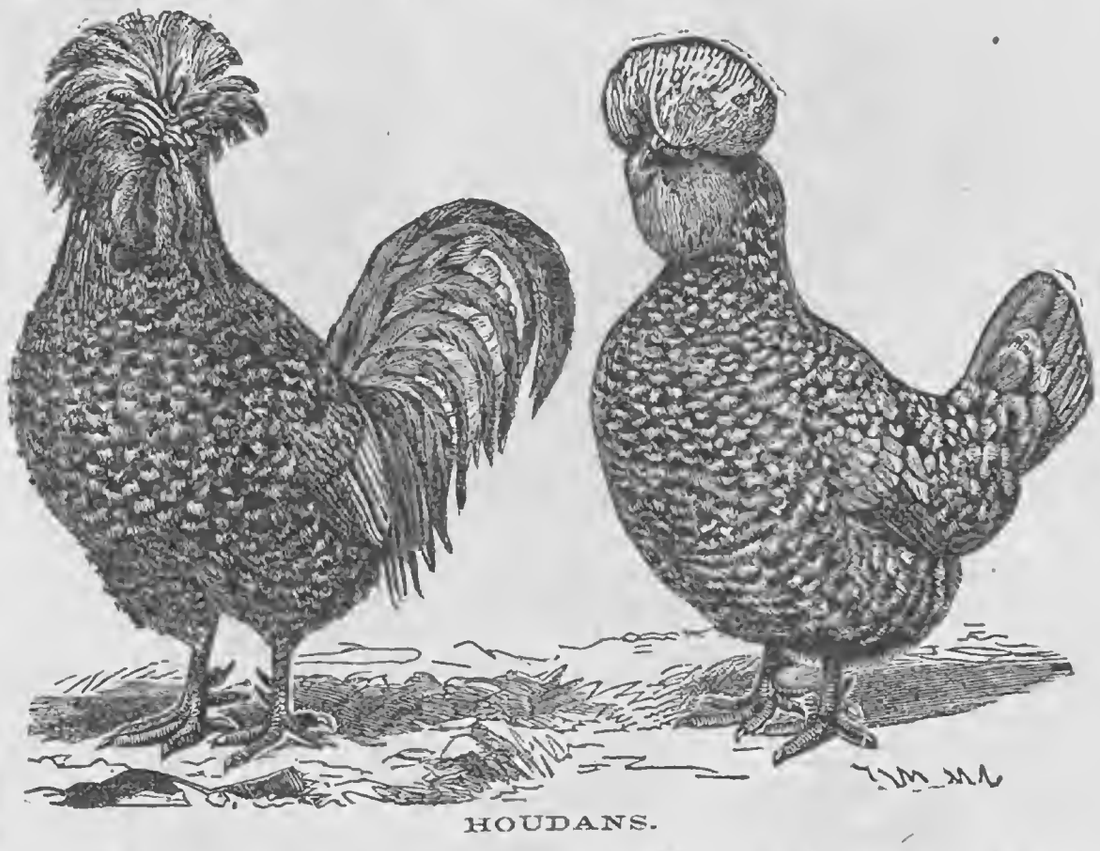
Dodge Co., Neb.

PREPARATIONS AGAINST WINTER FOR POULTRY.

ON account of the higher price obtained for eggs in the winter, it is very desirable that hens should "shell" them out liberally. Now how is this to be done? Certainly not by neglect. Set it down and don't you forget it, that no sloven can succeed with poultry. Farmers and others who keep one or two treefuls of fowls in the winter, must not expect their hens to lay many eggs; but in the balmy month of June, when the voice of the cuckoo is heard through the land, that treeful of fowls may be laying finely. Eggs, however, will then be plentiful in market and low in price.

Now is the time to make provision for the fowl-stock, in anticipation of the colder weather that will shortly be upon us. Their houses should be examined and all cracks and broken places in walls and roof should be made tight. Window sashes, too, should be repaired if broken. The floors, nests and roosts should be thoroughly cleansed, and the perches washed with kerosene. All these things should be attended to *now*. After the house is put in order, the occupants should have a variety of food. By variety I mean both raw and cooked food, meal, vegetables, corn, oats, buckwheat, gravel, pounded bones, etc. The water given fowls to drink should be clean and warm during the winter. In a word, unless good care is taken of the hens during the winter months, and all their wants supplied, when you go out to gather eggs, you may be reminded of the story of the boy who said "that he could not find any eggs, but saw a lot of hens standing around doing nothing." J. H. S.

Knowersville, N. Y.



HOUDANS.

POULTRY FOR PROFIT.

SINCE the "hen fever" has ceased to be epidemic, the breeding of improved kinds of poultry has become a legitimate branch of farming, and every variety has its supporters, who never can agree as to the relative merits of their respective favorites. It is possible, though hardly probable, that we may yet find the best points of all combined in one bird. Having tried several kinds, including Brahmas, Cochins, Black Spanish, Games, Sebright Bantams, Plymouth Rocks, Houdans, etc., etc., I am decidedly of opinion that where poultry and eggs for market are desired, no more profitable investment can be made by the owner of a flock of common barn-yard fowls, than the purchase of a pure-bred cock of any of the above varieties, excepting possibly the Sebrights. The professional breeder, and the amateur whose aim is pleasure not profit, do well in being sticklers for certain distinctive markings in hackle, saddle and wing coverts. There is a worthy class of farmers, however, who take pride in *all* their surroundings, not omitting the poultry yard, but who are constantly changing from one breed to another. Now, if each of these men would select such birds as may strike his fancy in size, plumage, or any other particular, and when such fowls have been secured, if he would endeavor to improve them by reserving the best for breeding, and by care and such attention as he gives his other stock, he would soon have such a flock of poultry that a fancy breeder would be too glad to pay a big price for a selected trio for show.

It is only where poultry are allowed great freedom that any breed can be reared in perfection for several years in succession, unless at great expense of time and food. I have found greater satisfaction in a flock all so nearly alike that I found difficulty in selecting an inferior bird for the table, than when I had some half a dozen sorts in small yards, and moreover, in the former case the profit in dollars and cents was much greater.

In localities where there is a ready market for fresh eggs, I think their production more remunerative than the raising of chickens, and I would, under such circumstances, give preference to some one of the non-sitting breeds. The Houdan is an extra fine fowl for the table, and a good layer of large, white eggs. These eggs, it is true, are not quite so large as those of the Black Spanish, but the flesh of the latter is not fit for the table, and moreover, like the Leghorns, their liability to lose their large combs and wattles in cold weather, unfits them for any but a warm climate. The Hamburgs and Polands are producers of a large number of small eggs; but then the size of the eggs is about proportionate to the amount of food consumed by all the non-sitting breeds.

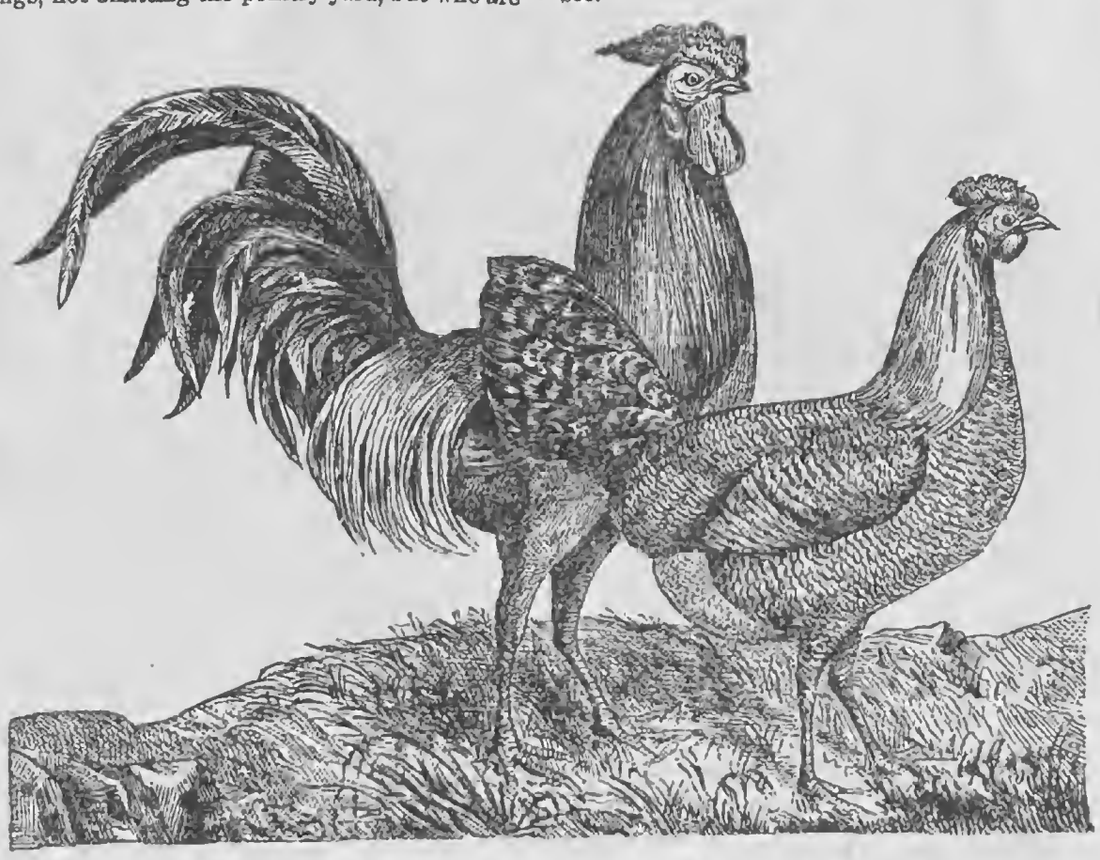
As to the number of birds that can be profitably kept about one set of farm buildings, I have found about one hundred to be the maximum where the climate will permit of foraging nearly the whole year; but where confinement to the houses is imperative during three or four months of winter, a much smaller number will afford more clear profit. CORNPLANTER.

Warren Co., N. C.

WHY SOME POULTRY DOES NOT PAY.

"POULTRY don't pay," exclaimed farmer B., as he threw a recent number of the RURAL upon the table, "my hens don't lay enough eggs to use, to say nothing of any to sell."

Why? Let's visit farmer B.'s poultry, and see.



GOLDEN-PENCILED HAMBURGS.

Behind the barn in an old dilapidated building, the wretched birds are huddled together, exposed to the cold winds of winter, uncared for, having to go without food, or wade through the snow to pick up a scanty livelihood from off the barn floor, and going without water from the time it freezes up in the winter until spring. Thus treated, is it any wonder that this man's hens do not lay? Poor, shivering, starving things! Can you expect a hen to give an egg for such care? Would you expect your cows to give milk without being fed? Feed your poultry with the same care you bestow on your sheep, horses and cows; give them a warm house to shelter them from the storms, and they will reward the care with eggs. M. B. D.

WHAT OTHERS SAY.

EGGS FROM DIFFERENT BREEDS OF POULTRY.—Fanny Field, a lady correspondent of the Ohio Farmer, says that after repeated experiments with the different varieties of fowls, and comparisons with others who have experimented in the same direction, she has concluded that the laying capabilities of the principal varieties are about as follows:

Light Brahmas and Partridge Cochins—eggs, seven to the pound; lay 130 per annum.

Dark Brahmas—eggs, eight to the pound; lay 120 per annum.

Black, White, and Buff Cochins—eggs, eight to the pound; lay 125 per annum.

Plymouth Rocks—eggs, eight to the pound; lay 150 per annum.

Houdans—eggs, eight to the pound; lay 150 per annum.

La Fleche—eggs, seven to the pound; lay 130 per annum.

Black Spanish—eggs, seven to the pound; lay 140 per annum.

Leghorns—eggs, nine to the pound; lay 160 per annum.

Hamburgs—eggs, nine to the pound; lay 150 per annum.

Polish—eggs, nine to the pound; lay 125 per annum.

Bantams—eggs, sixteen to the pound; lay 90 per annum.

She regrets very much that she did not keep account of the cost of food consumed by each variety.

ONE POUND OF MEAT.—Water, 8 oz.; fibrine and albumen, 1 oz. 122 grs.; gelatine, 1 oz. 62 grs.; fat, 4 oz. 340 grs.; mineral, 350 grs. A hen may be calculated to consume one bushel of corn yearly and to lay twelve dozen, or eighteen pounds, of eggs. This is equivalent to saying that 31 pounds of corn will produce, when fed to the hen, one pound of eggs. A pound of pork, on the contrary, requires about five and one-third pounds of corn for its production. When eggs are twenty-four cents a dozen and pork ten cents a pound, we have the bushel of corn fed producing $2.88 worth of eggs and but $1.05 worth of pork. Judging from these facts, eggs must be economical in their production and in their eating, and especially fitted for the laboring man in replacing meat.—[*Scientific Farmer.*

TEN ACRES VS. FORTY.—"My first start," said M. Guillord, of France, "would be, if beginning life anew, to lease or buy about ten acres of land and stock it with pullets. I would build cheap sectional hen-houses which could be moved to any part of the land; would not keep more than ten pullets in each house, and would coax them to eat everything growing on the place. I would bountifully feed them twice a day besides, with cooked and seasoned food, would keep them clean and exercise them well, take advantage of the markets and keep no old stock on hand, and, my word for it, I could make more money than many others with forty acres.

WINTER WORK FOR FOWLS.—In winter, when fowls cannot run out of doors to get their needful exercise, they first mope and then get into mischief, in shape of egg and feather eating. When in winter I see my fowls "killing time" by standing on one leg and sleeping during the day, I set them to work by burying oats or other grain under the sand and straw in the pens. Every fowl will immediately commence business and search the material over and over again, as though their lives depended on getting the last grain. I give them rowen hay, clover, corn husks, &c., &c., of which they are fond. One of the secrets of getting plenty of eggs in winter is *keeping the hens at work.*—Geo. S. Josselyn.

BREEDING PLYMOUTH ROCKS.—The Poultry World says that a medium light cock (not extremely light-colored), with medium dark hens, will average the best combination to give uniformly good-colored chickens. Some of the chicks will be lighter than one might wish; but, generally speaking, this plan is the safest, and the writer says that he has proved the fact to his own satisfaction, that to have a majority of evenly-hued and marked Plymouth Rock chicks, the parents must *not* both be of the darker plumage, however successful such birds may be for matching in the show-pen.

"I AM SURPRISED," says Mr. Joseph Wallace, "when I consider the rapidity of the growth of our country, the general intelligence and inborn skill of our farmers, the hobby, or I might add, the mania of our people to raise fowls, the millions of dollars' worth of poultry and eggs annually consumed, the demand for fancy stock, the cheapness of grain food, and the adaptation of our climate to every known breed, that so few varieties are bred among us, as compared to some smaller countries in Europe.

BANTAMS.—The Bulletin says that one desirable feature in regard to Bantams is that they are eminently useful pets; for they are invariably good layers of large eggs, no matter what the breed, and their small, plump bodies are most delicious eating. The surplus stock, each year, can always be disposed of at a fair price, if one has any hesitancy in serving them up on the table, and thus they prove themselves more than self-sustaining. This is more than can be said of most other pets.

PLYMOUTH ROCKS.—Without wishing to say a word in derogation of any breed, Mr. Dickie predicts in the Poultry Bulletin that in ten years more, or at the end of its second decade, the Plymouth Rock will be one of the leading, if not *the* leading, fowl with the average poultry keeper of our country.

POULTRY HOUSES—A warm, light, clean and dry house in which the birds may roost and lay their eggs and take shelter in cold or windy weather, is indispensable to success in poultry-keeping.—Bacon's Guide.

FATTENING must be completed in ten days, for after that period they begin to lose weight. The best age for table birds is when they are from four to six months old.—Poultry Book for the Many.

ACORNS, baked in an oven and ground into flour, are recommended by a German paper as a valuable food for poultry.

Industrial Societies.

THE INTERNATIONAL DAIRY FAIR.

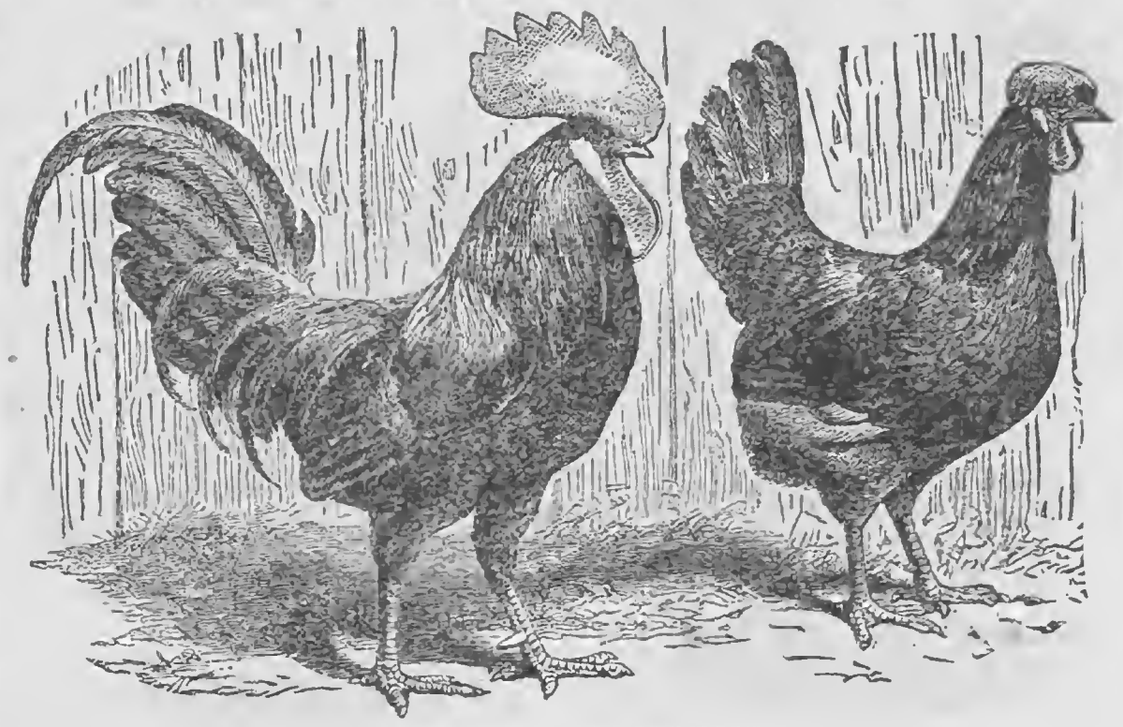
FREE LANCE.

A MOUNTAIN of effort has produced a mouse of effect in the greatly advertised and puffed, so-called International Dairy Fair, held last week in New York. "For what purpose was all this waste of time and money?" After spending some hours in considering the question, in walking up and down amongst the tables loaded with cheese and tubs of butter, and observing the experts mixing tastes and looking remarkably wise over the samples of cheese, the conclusion forced itself upon me, that it was "much ado about nothing." No one who went to see the show came away one whit the wiser for it, nor am I able to see that one useful purpose was effected, beyond the advertising of a few prominent produce-commission men. There was nothing new shown to any dairyman, or anything of interest to one not versed in the business. To see a pile of some hundreds of bags of salt upon one side, and a few ordinary cows with a few *bulls*, (are these dairy animals?) upon the other, and a pyramid of foreign cheese, as the most conspicuous part of the exhibition, was productive of regret that the time taken to see all this was as good as thrown away. And yet there was a lesson to be learned from it.

Every one who knows anything of dairy matters and things in general, knows that the American people are not consumers of cheese; and that the greater bulk of our product is sent abroad. He also knows that the chief reason that we are not a cheese-eating people, is that it is difficult, if not impossible, to procure a piece of cheese at any retailing establishment in city, town or village, that is fit to be eaten; further, that the cheese offered for home consumption is the same thing everywhere, without any more variety than goodness, with one notable exception. This is: that occasionally a rare quality or shape of cheese is discovered by accident in a fancy grocery store, but it is offered as a foreign article. And this brings to my recollection the fact that the most interesting thing to me in the whole display was a sample of cheese which seemed to be of foreign make, and which was the only specimen of anything which was different from the common (indeed too common) bulky cheese of our home dairies. Small, thin cheeses they were, of such a small size as to attract a would-be purchaser for this convenient character, and of such quality as to keep for even years. These were of the kind that are sold in the stores as English dairy cheese, and yet they were the product of a New York, (Otsego County) dairyman. But there was no place for them in the whole exhibition, except as foreign cheese; and among the foreign cheese they were exhibited, as well as classed.

Truly "a prophet is not without honor save in his own country and among his own people;" and so an enterprising and skillful American dairyman who makes a fancy cheese, such as the English Gloucester, or Stilton, or the French Brie cheese, must sell his product as a foreign article, or find no custom for it. Why cannot our dairymen make as good cheese as foreigners? We have learned to compete favorably with the English people in the common quality which suits a gross taste, and can be eaten in large slices by a hungry laborer with his coarse bread, but the delicately flavored cheese is all imported, or if made at home is sold as imported. This is the fault of the dealers who encourage this prejudice in favor of foreign articles and against our home-made products. While this continues, there can be no hope that Americans will become consumers of cheese. We desire variety as well as excellence in our viands, and the prevalent idea that we cannot appreciate goodness for itself alone, is a false one.

It is a matter for regret that those who have usurped the lead and control of the American dairy interest, I mean the produce-commission men, seem to have no idea that the home market is worth caring for, but that their main efforts seem to run in the way of getting all the consignments they can and shipping them abroad for a market. And out of this idea seems to have grown the great International Dairy Fair, which I presume has not been so successful as to tempt a repetition. It is not to the credit of our leading dairymen that they should be led by the nose by a few dealers in dairy salt and commission men; or should permit such persons to run their conventions. These men are well and useful in their way, and may be able to give acceptable advice as to markets, but a good dairyman should know the "ins and outs" of his own business.



BROWN LEGHORNS.

Dairy Husbandry.

WHICH BREED FOR THE DAIRY.—NO. 2.

L. S. HARDIN.

SHORT-HORNS.

THE first in order for discussion is the Short-horn. Her friends, on both sides of the water, are clamorous to have us consider her a dairy cow. If I had my way, I would no more consider the Short-horn a dairy cow than I would the Hereford, Polled Angus or Texas cow. To be sure, every cow that gives milk has a right to go in the dairy, if anyone is foolish enough to put her there. Men who keep cows in the dairy, that give no more milk than a good-sized goat would. This is a free country—for the majority. The sight of the table given in my article in a late issue of the RURAL, has given grave offence to Harris Lewis.

The advocates of the Short-horn for the dairy base their claims, not upon what she is going to do, nor upon what she can do, but, remarkable as it may appear, solely upon what her ancestors have done. This reminds one of that imbecile vanity that we too often see in our own fair Kentucky—men, in drink, acting the beast and claiming to be gentlemen because their honored ancestors were gentlemen. We have no time in this country to rely upon the honors won by our remote ancestors; we must do the deed ourselves if we expect the reward. In this State where Short-horn breeding is at the hight of its glory, the Short-horn cow has been weeded from the dairy. Her tendency, when fed rich food, to fatten and dry up rapidly, coupled with the waste of food in carrying several hundred pounds of useless flesh, has caused her most enthusiastic friends to desert her. The fact that she has been in this country longer than any other breed of thoroughbreds, and has not now what one would call a standing in the dairy, is pretty conclusive evidence that, in some way, the dairyman has arrived at the conclusion that she is not the cow for him.

The authorities of this country differ very much on the subject of this cow's dairy qualities; but the richest piece of breeding philosophy I have seen on this subject, is from the pen of Prof. Arnold. He says: "In crossing with natives the modern Short-horns in which the capacity for milk has run low, the later acquisitions give way and drop out, and the progeny takes back, and the original form of the early Short-horns and their tendency to milk revive." Let us see about that. He acknowledges that the milk has been bred out of the Short-horn. The bull's parents have been bred for beef until the milk is gone. One, and I think I may say the prime point in thoroughbreds, is their power of stamping their likeness upon their offsprings. This beef-bred bull when put to a Short-horn cow, produces a strictly beef animal; but when put to a scrub cow, he does not produce the same beef animal for which he has been bred, but, presto! he changes his whole nature, abandons the beef characteristics of his breeding and goes in another direction! Ah! Prof. Arnold, you are a mighty authority among those who sit with open mouths and swallow your *dicta*, but with those who reason for themselves, the admiration for you is passing away.—(? EDS.)

I do not feel at liberty, nor is it necessary, to restate the arguments against this cow for the dairy, that I have so often made through the press. The fact that Harris Lewis has the only herd of thoroughbreds that I have been able to hear of, that were kept for butter making, shows to what a limited extent the Short-horn cow has made her way with the American dairyman. At the same time it will not do to entirely pass over that ever-recurring argument for the Short-horn in the dairy, to the effect that when her milk gives out she can be turned to a profitable beef animal. Having had some pretty rough experience in handling beef cattle, I am satisfied that no man on earth can make money fattening old dairy cows, if the food he gives them has any reasonable market value. Does not every grazier know that, in order to save himself any margin for profit in fattening beeves, he must use great care in selecting, not old cows, but *young steers?* and they must be good ones at that, with the least possible tendency to offal and the greatest possible tendency to take on flesh kindly. There is no room for foolishness here if one expects to come out even in the fall. In fattening cattle, deliver me from old pot-bellied cows, no matter what their blood.

BLACK SPANISH.

Miscellaneous.

CATALOGUES, &c., RECEIVED.

"JUST TO PLEASE THE BOYS," A new serio-comic song, published by F. W. Helmick, 136 W. Fourth St., Cincinnati, Ohio.

CIRCULAR OF COLLEGE OF AGRICULTURE OF THE UNIVERSITY OF MINN. All information anent studies, etc. will be supplied by C. Y. Lacy, College of Agriculture, Minneapolis, Minn.

VICK'S Illustrated Monthly for December—handsome, bright and full of good things, as usual. The present number contains, as a frontispiece, a very fine colored plate of the new Amaranth, Sunrise. Published by James Vick, Rochester, N. Y.

THE Dairy Interests Abroad, a paper read by Mr. F. B. Thurber at the late International Dairy Fair. It describes recent English and French Fairs together with methods of manufacture pursued abroad and details considerations affecting the foreign market for American Dairy products.

THIRD REPORT of the Montreal Horticultural Society and Fruit Growers' Association of the Province of Quebec for the year 1877-8. This is a well-edited pamphlet of 123 pages containing a very interesting report of the discussions of various members of the Society on horticultural matters. Henry S. Evans is the Secretary.

Mr. Vick sends a bound volume of his magazine for 1878. He says that he thinks it "pretty good and quite handsome" but that, not being an impartial judge of his own work, he would like our opinion.

The volume is, of course, the size of the Monthly. It comprises 376 pages and a carefully arranged index, hundreds of well-executed woodcuts and about twenty colored plates of well-known flowers. Now, to tell in a few words what might be strung out to a column—it is the most interesting popular treatise upon flowers and their culture that we have hitherto seen.

CIRCULAR OF THE UNIVERSITY OF NORTH CAROLINA, containing a list of the Faculty, the course of studies, and other interesting particulars. We are glad to learn that this institution is fast advancing towards its *ante-bellum* prosperity, having, in its first session of 1878-9, reached 175 matriculates, with a promise of an increase to 200 in the second session. Full particulars of everything, the studies, etc., at the University, will be furnished by President R. P. Battle, Chapel Hill, N. C.

The Native Flowers and Ferns of the United States by Thomas Meehan, published by L. Prang & Co., Boston, Mass. Again we have to acknowledge the receipt of parts (14, 15, 16 and 17) of this ever welcome work. Mr. Meehan's heart is evidently in this work, and the text is no less interesting and instructive than the colored plates are true to life and beautiful. We need only repeat our advice to all interested in our native flowers to subscribe for the work. L. Prang & Co will answer all inquiries respecting details which the RURAL placed before its readers when the work was first offered to the public.

The Vineyard.

THE LADY GRAPE IN EUROPE.

A large grape grower near Berlin, Prussia, who has fruited the Lady Grape the present season, writes very enthusiastically in its praise. He says it is very early and perfectly healthy in that country, also one of the very finest flavor (*"Ottervor trefflichsten Gesehmack!"*) He adds that of about 350 sorts of Grapes which he cultivates, he finds the "Lady the best of them all." As this Grape is also one of the most perfect Phylloxera-resisting of the American natives, it will doubtless be largely planted in Europe as well as in this country.

Floricultural.

FLORICULTURE NEAR THE BAY OF SAN FRANCISCO.

CHARES H. SHINN.

Our average climate, within a radius of fifty miles of San Francisco, is delightfully mild and equable, tempered by breezes which are never gales, and moist from the nearness of the ocean. Of course, the soil varies extremely in such an extent of country. For instance, this section in which I write is a sandy loam near the streams which cross the valley, a black loam along the foot hills, adobe, or very tenacious clay, on some slopes, peaty soil around the fresh-water lagoons, and alkaline clay loam near the sloughs of the Bay. The rich loam near our streams is mainly given up to fruit-growing, and the heavier soil of the middle of the valley, to wheat, corn and potatoes.

Owing to its nearness to San Francisco, easy communication and rapid growth, this section is filling up with small homes, and the ornamental grounds and gardens are daily increasing. The counties of Sonoma, Alameda and Santa Clara are making marked advances in this direction. If, as I am inclined to think, fine stock, abundance of small fruits, and flower gardens everywhere are evidences of a civilized community, then these three counties would rank high in any State.

Our gardens are beginning to mingle the old-fashioned beauties, dear to the hearts of our quaint grandmothers, with the rarer, but no more beautiful exotics. Each year a greater variety is attempted, and the business of nurserymen and florists increases. A neighbor of mine had, this year, in one small bed a Clianthus puniceus, trained as a shrub eight feet high; a magnificent clump of Dicentra spectabilis, Pansies, Balsams, Cocks-combs, Asters, Myosotis and a Bouvardia, all flourishing as a horticultural "Happy Family."

All the hardy annuals and most of the half-hardy ones get along without any special care, or sowing of seed. A bed of Portulaca, scarlet Flax, Whitlavia, Mimulus, China Pink, Abronia, or Lobelia, once planted, is a safe thing, the only care needed being to thin out the seedlings which spring up after the first rains. Indeed, after gardening experiences extending over a series of years, I have failed to find any plant which will not occasionally spring up from self-sown seed. Lantanas, Zonale Geraniums, Blue Lobelias and Canterbury Bells have often been, by reason of their abundance, most troublesome weeds, and I have even known Double Fuchsias to self-sow on rare occasions, also Smilax, Maurandias and a Begonia.

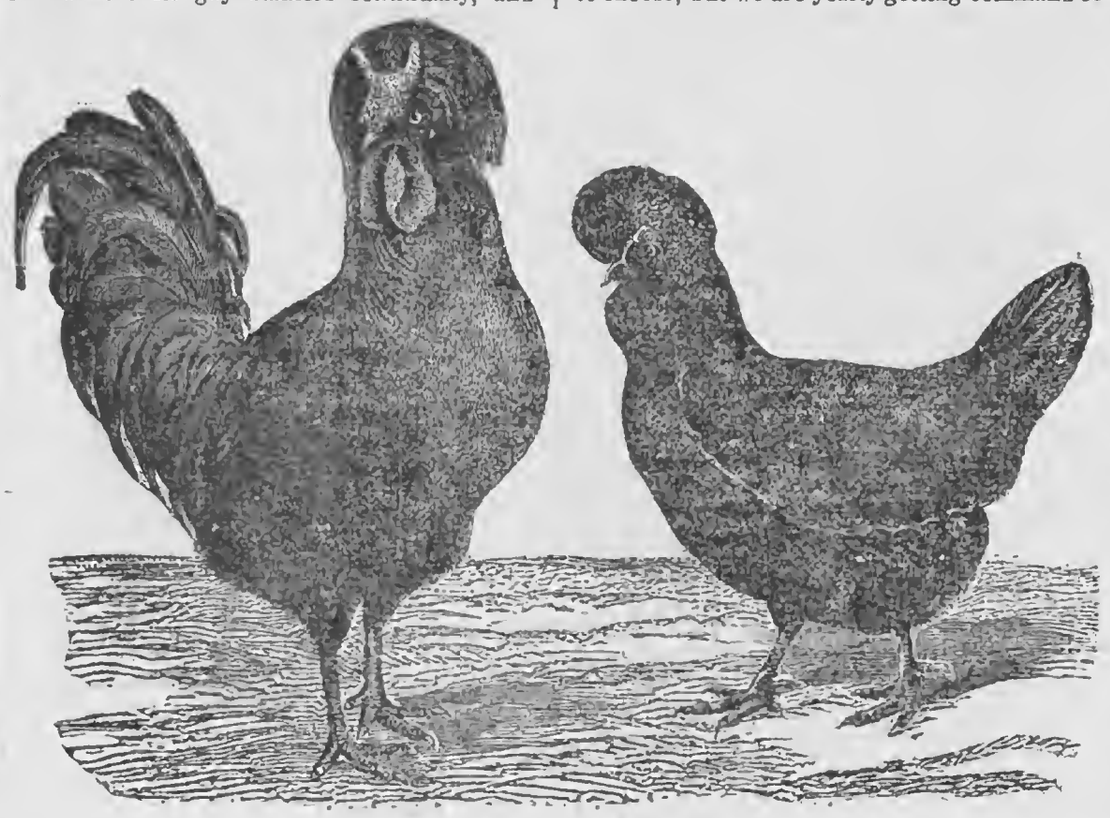
Fuchsias are, with us, the most delightful of beddors. We select a bed having an eastern or northeastern exposure, and put out small plants in January. By June they are noble specimens and bloom for months. I often cut back half of them, so as to keep a succession of winter-bloomers. Roderick Dhu, Sir Colin Campbell, Vaniquer De Puebla, Maximum, Wave of Life, Princess Alice, Arabella and all the improved sorts succeed in this manner.

Our best flowers to line carriage-ways, and to be grouped in shrubberies, are the double Geraniums. Our treatment of them is simply to put in cuttings where they are to stand before the early rains, and by March we have blooming plants. In December these are cut close to the ground, so as to make a new growth and to keep them within bounds. No irrigation is required at any time.

Dahlias, Double Hollyhocks, Pampas Grass, Ricinus, Phormium tenax, and the best striped Japanese Bamboos are also used for groups on the lawn. For single specimens, the Joehroma tubulosa, a new plant with hairy, dark leaves, firm outlines, massive growth and clusters of dark-blue, tubular flowers, and also the Brugmansia Knightii with immense double white fragrant flowers, are deservedly favorites.

The Japan Lilies, especially L. auratum and speciosum roseum, are often seen. Others are being introduced; nor are our native species, L. Humboldtii and Washingtonii neglected, although these are not so fine here as in their native Sierras.

Most of the other bulbs succeed. Crocuses are apt to dwindle after the first year, even with the best of treatment, and new bulbs must be imported. Anemones and Ranunculuses take possession, and grow and bloom for months. We cannot complain of Tulips, Hyacinths, Jonquils or Daffodils. The Crown Imperial is a failure of the complete sort in this section. We have tried dozens, in all contrivable situations, without ever obtaining a flower. Gladioli flaunt their gay banners continually, and



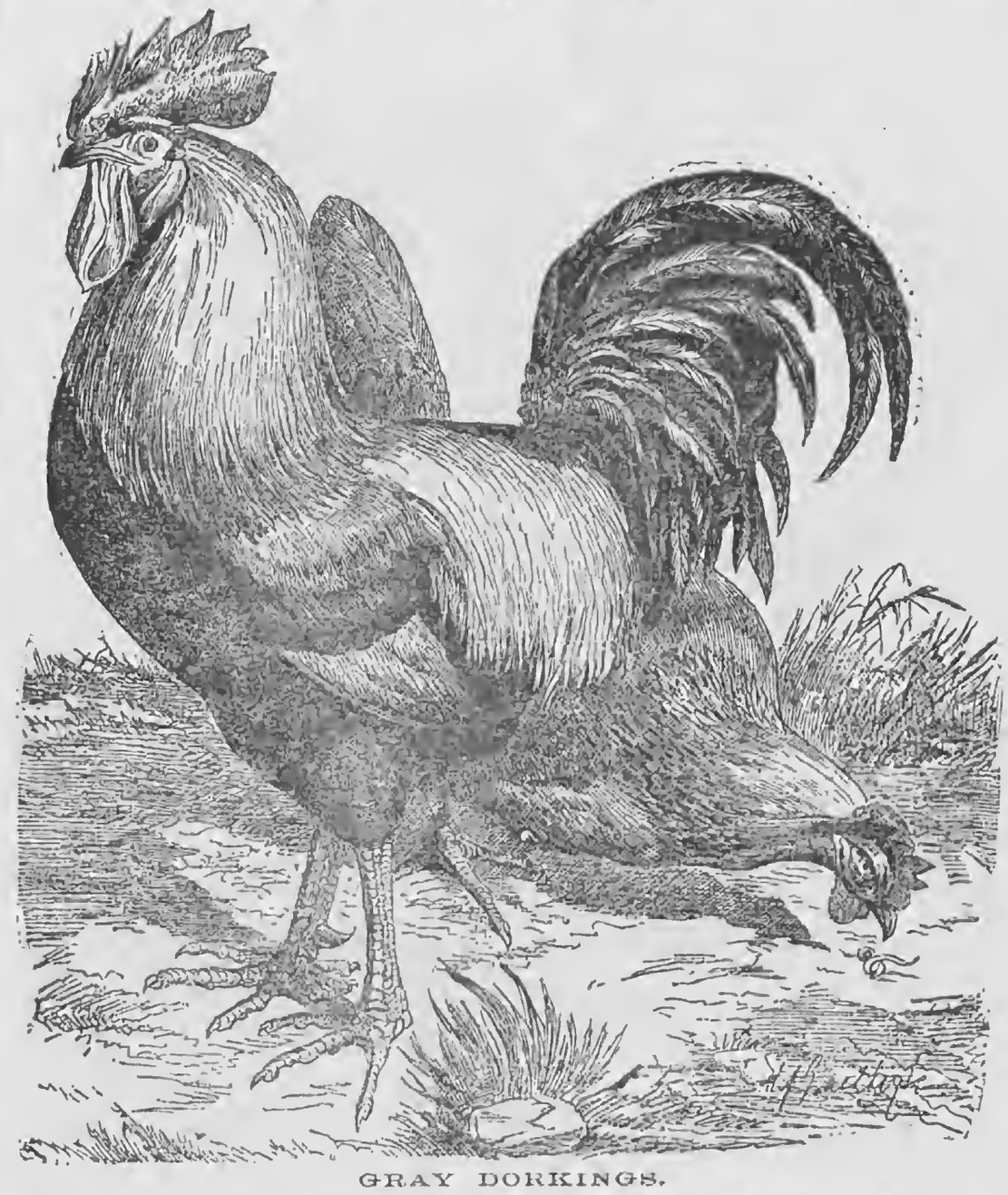
CREVECŒURS.

may be had in bloom every month. We tried an Arum Dracunculus last year, and it grew extravagantly, till it became a neighborhood marvel; but the immense, spotted flower had a vile, unbearable odor, as those who have seen it know.

Roses give us hardly any trouble. We trim them heavily in the fall, to give them a rest. Occasionally, in a foggy summer, a few kinds mildew, and, at rare intervals, the green lice appear, but a little care remedies these evils. Marechal Niel is at the very front for color and growth, Safrano, Bergensitea, Isabella Sprunt, Niphetos and Ben Silene are also widely used. The Lady Banksia Roses are immense growers—indeed the best running Roses we have.

Among vines, the Akebia quinata, from Japan, is very valuable. Mine, now three years old, is up to the second story window, a mass of beautifully interlaced, evergreen foliage. The cup-like clusters of chocolate-colored flowers are fragrant, and long in bloom through the winter and spring months.

Choice shrubs are becoming the rage. Our sun spots Camellias, if planted out-of-doors, and Rhododendrons do well, with care. Azaleas are difficult to manage. Tea plants and Magnelia grandiflora succeed admirably. The Crape Myrtle blooms late here, but stands our winter.



GRAY DORKINGS.

In Stockton and through the Sacramento Valley, it makes almost a tree. Oleanders are popular and handsome. They are a little difficult to start, but soon grow fast. Kennedyas are fine garden shrubs here and make magnificent bloomers. Clianthus and Erythrina are often seen either as shrubs or trained to a wall.

It will, by these brief notes, be observed that we have a wide range of plants from which to choose, and that our gardening ought to be unique. We have had almost too much from which to choose, but we are yearly getting command of our materials, and better things may be hoped for in the near future.

Washington Township, Alameda Co., Cal.

Everywhere.

RURAL SPECIAL REPORTS.

Pike County, Missouri, Dec. 9th.—We have had an unusually fine fall for prosecuting farm work. The standing corn is about all gathered, and cattle are having a good feast in the stalk-fields, the ground at this date being covered lightly with snow and sleet. This is the second snow we have had this winter, the first falling on the first day of the month, a strong point in our favor, as compared with October 28th, for the locality of Attica, N. Y. Owing to the drought in October, the sowing of wheat was considerably delayed. The growing crop, however, where well drilled in, on properly-prepared land, is doing fairly well, and there is at present a reasonable prospect for a remunerative yield. About the usual acreage has been sown. Corn is fully an average crop where planted in time and well cultivated, while very many have to console themselves with small profits on light crops, where cultivation was insufficient. Our apple crop, which is usually one of much importance, both as to quantity, quality, and income, has not this season been up to anything like an average, save in quality; for if there be any noticeable difference from former years, the present crops are of better size, color, and flavor than usual. Peaches and small fruits were abundant. Hogs bring 2¾c. per lb. gross; fat cows for the butcher, about the same price.

H.

Mount Vernon, Ohio, Dec. 10.—Weather very wet here now; prospects of cold soon; have had a remarkably fine fall for all work. A large apple crop hereabouts, of course made prices low, 20c. per bushel for best. A great many thousand bushels have been shipped from this point. We have a very prosperous little city of some 8,000 population. Good farms readily sell for $65 to $100 per acre. City property, however, is very low, not selling for two-thirds of what it is worth. Wheat, 90c. to 95c.; oats, 25c.; corn, 25c. to 30c.; potatoes, 40c. to 50c.; apples, 20c. to 25c.; hay, $6 per ton; butter, 12c. to 14c.; eggs, about the same; chickens, 6c. to 8c.; turkeys, 8c. to 10c., dressed; pork $2.30 alive; $3 to $3 25, dressed. Wages low, but good hands can command 75c. a day and board. A great deal of ice will be put up if the weather is cold enough to form it. We are looking for those good times that have been promised since the *good times* of 1873. M. W.

Burlington, N. J., Dec. 10th, 1878.—The weather for the past three months has been all the farmer could desire, all the storms clearing up warm, which is something unusual. The farmers hereabouts have their corn husked, and, as a general thing, are up with their work. Winter wheat and rye are looking fine. The prices for farm produce are as follows: wheat, 98c. to $1.10 per bushel; corn, 55c.; oats, 35c.; potatoes, 60c. to 75c.; eggs, per dozen, 28c. to 33c.; butter, 20c. to 28c. lb.; pork, 3c. to 4c. Wheat yielded well the past season, ranging from 15 to 45 bushels per acre. Rye was a failure. White potatoes are not very numerous; but sweet potatoes are so abundant that there is no sale for them. Farmers have nearly all done well this season. I. W.

Fayette, Seneca Co., N. Y., Dec. 3, 1878.—This fall, until about the 25th of October, was so warm that farmers in some sections found it quite impossible to plow; consequently, the acreage of winter wheat is not so large as it would have been had we had rain in season. Through November, however, we had an abundance of rain. Wheat is looking well, considering the peculiar season. Clawson wheat did the best with us last season, and is worth now in our market 95c.: barley, 70c.; oats, 27c.; corn, 45c.; potatoes, 70c.; butter, 20c.; eggs, 19c.; apples, 30c. I might here state that this county, as a whole, stands second to none in the State for wheat, corn, oats, barley, and potatoes.

W. B.

Brooks, Waldo Co., Me.—The spring opened early and the fall has held off late. Potatoes were dug in good condition November 30th, and teams were plowing. It has been a fruitful year. Corn has done unusually well. Apples were in the greatest abundance, and grass was very good. Wheat was about an average—other grains the same; but potatoes were only half a crop. Beef, pork and hogs are low. There is hardly any sale for apples, while potatoes bring a good price. It has been an extra fall for work, and much permanent farm improvements have been made. Better farming prevails than five years ago, and improvements are progressing in many agricultural matters. J. W. L.

Le Cygne, Kansas, Dec. 9.—The crops of Kansas, generally, are very fair, with the exception of some localities where the long dry weather damaged our corn crops to some extent. The fruit crops were abundant in everything except apples, which were only about half a crop. This, I think, was principally caused by the overbearing of trees last year, they of course being young. I believe this is one of the best fruit States in the Union, everything considered. All fruit does well here with the exception of pears. These blight to some extent. All small fruits do exceedingly well.

J. A. M.

El Dorado Co., Cal., Dec. 1.—We have had several quite hard frosts during the past week, which cause Nature to take on a wintery look. The apple crop is now all in, and was an exceptionally fine one. Apples are keeping much better than last season, very few withering or showing any signs of decay. Apples are selling at 75c. a box of forty to fifty pounds each. The grape crop is all gathered; grapes sold at $10 per ton here, the producer picking and delivering them at the station, some five miles away. Pansies are in bloom, also Violets. These will be with us all winter. W. O. L. D.

Risdon, St. Clair Co., Ill., Dec. 1, 1878.—The recent mild, pleasant weather has helped wheat greatly, and it now looks first-rate. We hear some complaint of weevel in corn, but the evil is not very bad. Wheat is worth 70c. a bushel; corn, 35c.; potatoes, 50c.; oats, 30c.; cattle, $2 and $2.50 per 100 lbs. gross, and pork about the same. N. J. S.

Bowling Green, Ky., Dec. 9.—Farmers hereabouts have about finished gathering corn, and are now preparing for winter. Wheat is looking well, considering the dry weather we had in September and October, which delayed our sowing. Corn is now worth from 32 to 35c.; wheat, $1; oats, 35c.; hay, 50c. per 100 lbs. J. D. S.

OWENSBORO, Ky., Dec. 1.—Corn is about all gathered in these parts, and is worth 30c. to 35c. per bushel. Hogs are very abundant, bringing only 2¼c. to 2½c. gross for good animals, and many have been sold to grocers to retail at 2½c. to 2¾c. net. Potatoes are selling at 40c. per bushel for the best. J. W. S.

CORNWALLIS, Nova Scotia, Nov. 26th.—The weather here this fall has been delightful. Crops were generally good. Hay and grain heavy. Potatoes only a fair crop; price from 50c. to 60c. per bushel, with several vessels loading for New York. J. E. E.

OXFORD, Oakland Co., Mich.—Wheat, 85c.; corn, 34c.; oats, 20c.; pork, $3 per cwt.; interest on money from 10 to 12 per cent. on first-rate security to those not lucky enough to have a bank account. L. L. T.

BETHEL, Clermont Co., Ohio, Dec. 3.—The largest of my peachblow potatoes was thirty-three ounces, and quite a large number weighed a pound. E. G. G.

The Querist.

ANSWERS TO CORRESPONDENTS.

Hog Cholera.

R. S. Dunnville, Essex Co., Va., says: "We have a disease hereabouts among our hogs. The symptoms appear to be loss of appetite, affections of the bowels and kidneys. Their feet seem to be all drawn together. Sometimes fat hogs die of it in forty-eight hours. Can the RURAL suggest a remedy?"

ANS.—In reply to this question, D. E. Salmon, D. V M., one of the commissioners lately appointed by the government to investigate hog cholera, writes us: "This imperfect enumeration of symptoms indicates the disease to be the contagious fever of swine, known as hog cholera. Unfortunately, up to this time, neither the medical nor veterinary professions have been able to discover a medicine or form of treatment that has any appreciable effect on the course of the contagious fevers; and this is as true of hog cholera as of small-pox or yellow fever. Of course, I would not be understood to say that medical advice is useless in such cases, for this would not be true; there are often, indeed, I may say generally, with those fevers local troubles—inflammations of internal organs, and functional derangements which need watching and special treatment; and of more importance than this is the proper regulation of the surroundings and food. The small value of hogs, and the difficulty of administering medicines, put it out of the question to give them medical treatment. The most that can be done is to keep them in a clean place, where they will not be exposed to draughts of air, and to give them cooling and easily-digested food. The latter is necessary because of the considerable congestion and inflammation of the digestive organs, which are always present in this disease. This food may consist of milk, meat, or well-boiled oatmeal (made from oats ground and the bran removed with a sieve), or other articles of like character.

This disease has now extended over nearly the whole country, and nothing but governmental interference can abate it. If our farmers desire to be relieved from the terrible losses it is now causing, they should see to it that Congress takes proper action on it before another spring. It is the most important subject that will be before the next Congress, and the country cannot afford to have action delayed another year.

Asparagus Culture.

W. B. Y., Norwich Ont., asks how should Asparagus be cultivated; what is the proper time for planting it, and should one sow seed or get roots.

ANS.—Prepare the soil in which to plant Asparagus, as soon as spring opens, by giving it a heavy dressing of well rotted manure, and a deep thorough pulverizing either by the use of the plow or the spade. If grown on a small scale, it is best to trench the land from two to three feet deep. Plant one-year-old plants in rows, one foot apart, and nine inches between the plants in the rows. By omitting every fourth row, a walk is formed between the beds on which to pass while weeding and performing other operations, thus avoiding stepping on the plants.

If grown for marketing on an extensive scale, the plants may be set in rows three feet apart, and nine inches from plant to plant in the rows. Set the plants about three inches deep and be careful to spread the roots well, like the spokes of a wheel. By using vigorous plants, on rich land and giving them careful treatment, a small crop may be gathered the second year after planting. In the above locality it will be well to cover the beds during the winter with a layer of manure containing a good deal of straw. A well kept bed, on rich land, may be productive for twenty years.

Bone-Dust in the Orchard.

A Rural Reader asks whether bone-dust would be beneficial to apple trees, and, if so, how to apply it.

ANS.—Yes.—Apply it to the orchard in such quantities as you can afford, after putting the surface soil into a thorough state of pulverization. Owing to the high price of the article, however, and to its decidedly beneficial effects when applied to many field and other garden crops, the application of bone-dust in the orchard is rarely made. Barn-yard manure which acts as a mulch as well as a fertilizer, is the usual kind employed about fruit trees, and no experience is extant to warrant the substitution of bone-dust instead of it. In a recent discussion, by the Pomological Society of Michigan, on orchard fertilizers, water was placed first, secured near the surface by thorough pulverization; barn-yard manure, second, where it could be secured at ordinary prices, and ashes, third, as a most important sort of manure for that purpose; but not a word was said about bone-dust.

Salt for Wheat.

A subscriber, La Porte, Ind. (?) asks the effects of salt upon wheat, and when and how it should be applied.

ANS.—It is the strong belief of many farmers, at a distance from the seashore especially, that salt is a valuable fertilizer for wheat. It appears to decidely stiffen the straw and increase the yield. The quantity applied is from two to six bushels to the acre. The latter quantity will do no harm, but two or three bushels are enough. Fine salt should be used, and care must be taken to sow it evenly. It must be understood that salt will in no wise take the place of a proper preparation of the land, suitable fertilization, or good seed well put in. But *with* these it is a considerable help. It may be applied to winter wheat early in the spring, and is sown upon spring wheat after it is harrowed in and rolled. Under fair conditions, the average estimated gain in the crop from a dressing of salt, is from four to six bushels per acre.

Reproductive Knarls on Apple Trees.

A. J. C., Newry Station, Perth Co., Ont., during a visit to England, saw a half-grown apple tree of dwarf habit, well laden with fruit, on the branches of which knobs, or swellings, occurred, and if cuttings, made just below the knobs, are set out, they will take root and grow rapidly, and a desire is expressed to learn the name of that variety of apple-tree.

ANS.—As a matter of scientific interest, the propagation by embryo buds or knarls, has occupied the attention of horticulturists, but not as a thing of practical importance. These knarls are formed in the bark of various trees, and in many sorts of apples there is a tendency to produce them in numbers. The variety mentioned is unknown to us. Evidently the peculiar tendency of the variety gives more life to the knarls than we find in the ones upon our own apple trees, for rarely will those, under the most favorable circumstances, throw out a stem. It would be interesting to know more of this variety.

Alfalfa Seed, Again.

M. J. McM., Tallahassee, Fla., says that Alfalfa seed is not sold by seed dealers there, and inquires where it can be purchased, as it is much needed thereabouts as a forage crop.

ANS.—Local seed dealers should be readily able to procure it for a customer. All the large seed dealers in the principal towns in the South generally have it on hand, such as J. B. West & Co. and Folger & Co., of New Orleans.

Cultivating Fruits under Glass.

M. B. P., Warren Co., N. C., says, "Please give us what information you can on the cultivation of fruits under glass."

Remarks.—The question is too general. Different fruits require different treatment, and to give specific treatment for all fruits cultivated under glass, would require too much space for this department.

A Thrice-told Tale.

E. G. G., Bethel, Ohio, asks where he can find out how to caponize poultry.

ANS.—Articles giving full descriptions of different methods of performing this operation can be found in the RURAL for April 20, November 23, and December 21st.

To Farmers' Clubs.

T. C. Loughry, Indiana, Pa., wants the addresses of different farmers' clubs, with a view to correspondence, as a club is about to be organized in his neighborhood. We trust the members of some clubs will write to him at the above address.

COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, DECEMBER 14th:

R. H. C.—W. W. K.—F. K M.—N. J. S.—P. M. M.—E. L. M.—C. F. A.—C. W. G.—A. R. M.—M. A. B.—P. H. M.—A. W.—L. J. T.—W. C. L. D. thanks.—T. H. H.—E. B. mislaid.—S. C. B.—I. W. —A. E. B.—J. P. R.—J. W. S.—P. H.—

(The rapid accumulation of articles and the matter required for our special editions make it necessary that we should ask the indulgence of our contributors for a few weeks.)

M. B. P.—J. D. S.—S. L.—S. B.—M. W.—L. A. G. —T. D.—N. R., yes you are entitled.—C. G. H.—L. L. C.—E. H. B. thank you—but we cannot tell which ear is yours.—M. B. D.—W. T. H.—S. T.—L. S. H. yes.—E. L. T.—M. G. R.—A communication ("Indoor Work") from Flemingsburgh Va., needs a signature.—J. K.—H. T. J.—F. D. C.—L. S. H.—F. H. D. yes.

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No progressive Farmer, Fruit-Grower or Gardener can afford to do without the RURAL for 1879.

THE following are among a few of the recent notices of the press of the United States.

THE RURAL NEW-YORKER has been enlarged and improved, if that be possible. It stands at the head of the strictly agricultural and horticultural periodicals of the country.—*Philadelphia Germantown Telegraph.*

THE RURAL NEW-YORKER, so long and favorably known, seems determined to give its readers the benefit of whatever increased prosperity it secures. It has now, the best list of contributors of any weekly agricultural paper in the country, and is doing a noble work—*Boston Scientific Farmer.*

The editors of the RURAL NEW-YORKER now use a portion of their farm for experimental purposes in raising seeds for their subscribers. Their farm, which by the way is one of the best on the Island, is admirably adapted for such experiments. The RURAL is one of the best of agricultural papers.—*S. S. Observer, Long Island.*

THE RURAL NEW-YORKER.—We are glad to note by an increase of size in the RURAL NEW-YORKER, substantial signs of prosperity. The Agricultural Press of the country has severely suffered by the general depression of the last few years, and it is pleasant to note this first step in prosperity, especially as the Rural New-Yorker deserves all the success it seems to gain.—*Gardener's Monthly.*

THE trouble is that if you take it one year you will like it so well that you will take it every year.—*North Missourian.*

WE regard the Rural New-Yorker as the champion weekly paper of America, for the farm and family circle. While it is especially intended for Rural Homes, there is no fireside that will not be greatly benefited by the Rural New-Yorker's weekly visits. It gives you more for your money than any agricultural publication of which we have knowledge.—*Democrat, Coshocton, Ohio.*

WE are glad to receive assurances from headquarters that this excellent paper was never in such a promising condition as it is now, either financially or editorially, since its removal from Rochester. "It does not owe a dollar, and has half a million at its back." Good enough! but not better than it deserves.—*Buffalo Weekly Express.*

OF our agricultural exchanges none presents such a clear, crisp appearance, typographically, as the RURAL NEW-YORKER. Speaking of its contents, we are led to use the most emphatic language. It is edited with a precision unusual in agricultural journals, and a glance over its interesting "Questions and Answers" columns discloses with what painstaking it responds to requests for practical information. It is more comprehensive than papers of its class, also, embracing a literary department that is again subdivided into minor departments, which furnish excellent short and continued stories, fashions and cut paper patterns for the ladies. Religious intelligence, the news of the week, and a cozy nook for the young people.

Its practical departments embrace articles by the foremost writers on agriculture, horticulture and kindred sciences, accompanied by illustrations that increase the interest of the text. In short, the Rural is just such a paper as our people should subscribe to. It is broad and national in its treatment of topics, and more than any other journal, serves the farming and fruit growing interests of the whole country.—*Dispatch, Live Oak, Florida.*

THE RURAL NEW-YORKER.—This old and well-established weekly is one of our best agricultural and horticultural exchanges.—*Phrenological Journal.*

THE RURAL NEW-YORKER.—One of the oldest, most reliable, and most welcome of farm and household journals published in America has been enlarged and otherwise improved. Its name has become a household word throughout the land, and we have yet to learn where the Rural is not welcomed by the family to whom it is sent.—*Journal, Flint, Mich.*

THE RURAL NEW-YORKER is the best and most prominent agricultural and home journal in the country.—*Democrat, Davenport, Iowa.*

On receiving The Rural New-Yorker, we scarcely recognized it, so greatly has it been changed, for the better.—*Observer, Bowmanville, Ont.*

THE RURAL NEW-YORKER has been enlarged to the size of Harper's Weekly, and otherwise greatly improved. It is one of the oldest and best agricultural weeklies in the country. Terms, $2.00 a year.—*Record, Yorkville, Ills.*

THE RURAL NEW-YORKER, one of the best family and agricultural papers in the land, has recently been enlarged, and its publishers claim that it has also been improved; but we can't see it, for the reason, we suppose, that our vision is clouded with the long and fixed notion that there was no chance for bettering it.—*Home and Farm, Louisville (Ky.)*

THE RURAL NEW-YORKER, once published at Rochester, but latterly at New York, has been the most widely circulated of the agricultural papers.—*Times, Hartford, Ct.*

RURAL NEW-YORKER.—That old reliable agricultural journal, The Rural New-Yorker, renews its youth every year, and steadily improves with age.—*Western Homestead, Kansas.*

THE RURAL NEW-YORKER has no peer as a family and farm paper.—*Commercial, Mitchell, Ind.*

THE RURAL NEW-YORKER has been enlarged and improved, and is now the best agricultural paper issued in the U. S. We cordially recommend it to our farmers.—*Times, Port Hope, Ont.*

THE RURAL NEW-YORKER, so long and favorably known as a guide and representative of the agricultural interests of the country, has been much improved in its typographical "get up." It would be hard to improve it otherwise. The Rural New-Yorker is a mine of information for farmers, wherever located, and amply repays perusal.—*Am. Mail and Express Journal.*

THE RURAL NEW-YORKER, published at 78 Duane street, New York, is now the best agricultural weekly we have any knowledge of.—*Spectator, Ohio.*

THE RURAL NEW-YORKER.—This popular agricultural journal has recently been enlarged and typographically improved, all of which will commend it still more, if such a thing were possible, to its vast army of readers in all the walks of life. The Rural New-Yorker is the most popular agricultural paper published, and we commend it as the best to all wanting a paper devoted to that department.—*Insurance Herald.*

THE RURAL NEW-YORKER has made another enlargement, which makes the Rural the largest agricultural weekly published in this country.—*Western Agriculturist.*

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY DEC. 21, 1878.

We will be pleased to send one or more copies of the RURAL NEW-YORKER *free to any of our subscribers sufficiently interested in its welfare to be willing to hand them to their neighbors for inspection. An intimation by postal card will suffice.*

PARTICULAR NOTICE.

Applicants for seeds will please observe that the postage on ANY POSSIBLE *selection of* TEN *sorts of seeds,* IS NEVER *more than* FIVE *cents.*

A ONE-CENT *stamp suffices for any selection of ten varieties* EXCLUSIVE *of the Beauty of Hebron potato, Pearl Millet and Defiance wheat. If the first of these three is included in the list, then a* TWO *cent* EXTRA *stamp is needed, and if the second and third are included, an extra two-cent stamp is also required.*

OUR readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

OUR readers are particularly requested to read the particulars of our free seed distribution on p. 817, under publisher's notices, before ordering seeds.

MERRY CHRISTMAS.

The early settlers of Virginia were adherents of the Church of England with all its forms and ceremonies, its fasts and its feasts. Those of Maryland were Catholics. In both States Christmas was observed as in England and on the Continent—with religious services, decorations, illuminations, fasting, merry-making and the exchange of gifts. Here as there,

"On Christmas Eve the bells were rung,
On Christmas Eve the mass was sung."

On the other hand, we find the early settlers of New England so averse to following the customs of the Church that, not only were Church festivals ignored, but they strove to make their customs in all ways as dissimilar as possible. As proof of this, instance the fact that prayers at funerals were not made until many years after the first settlement of Plymouth Colony.

But the breaking down of sectarian landmarks and the smoothing of the most angular of Puritanic notions once commenced have never ceased. Year after year, fresh inroads were made, and now there is scarcely a village in New England where some of the inhabitants do not, to a greater or less extent, remember the return of Christmas Day and enjoy its social and religious observances.

It is the liberal-minded people of any community, that break away from old associations and make for themselves homes in new sections. The early settlers of our Great West, were, for the most part, New-Englanders—but of that class who could not be bound by the strict discipline of their fathers. They would not reject that which was good, simply because it was received by others; hence we see the celebration of Christmas almost universal in our Western States.

But why do we commend the observance of Christmas?

First for its religious character, on which account we would make its observance universal. From every house of worship of every sect, we would have sung, "For unto you is born a Saviour who is Christ the Lord." On this day we would not stop to split hairs of theological differences. Christ was born; than him no one has ever lived more worthy to be called Lord or Master, and all are ready to sing Christ as a Saviour. One may believe he saves in one way, and the next in another—one by example, another by precept and a third by vicarious suffering on the cross. Let each be fully satisfied in his own mind as to the method, while agreeing that the final result is the same.

The social character of Christmas-tide observance is also worthy of commendation. Americans have too few holidays, and should not fail to properly improve all they have. Christmas should be a holiday and more, in that it gathers together families who by social intercourse on this annual meeting, keep the feeling of kinship bright and active. Let care be gone and mirth and merriness prevail. Let the old be young again, and the young feel their companionship and pleasure, while all unite in best endeavor to make it truly a Merry Christmas.

When or where the custom of making Christmas Gifts was introduced, it may be difficult to determine. We read that the wise men who journeyed from the East, following the star that finally stood over Bethlehem, brought gifts of gold and frankincense and myrrh. It is a happy conceit that this was the institution of Christmas gifts, although it may not bear strict examination. Wherever it originated, the practice is one worthy of approval, although, like many other good customs, it can be abused. It is not the expensiveness of the gift that gives it its chief value. Unless love goes with it, the richest present is best unbestowed, but love gives to the meanest thing a quality above valuation. Remember this in your choosing and you will not choose unwisely.

Even good wishes are not, we trust, without effect in adding to the amount of happiness in the world, and with this end in view, we most sincerely wish our readers, each and all—A Merry Christmas.

TO OUR READERS.

THE RURAL NEW-YORKER is now generally conceded to have reached, under its present management, a degree of excellence never before attained by any other agricultural or horticultural journal and to have secured for its columns the most powerful combination of writers in the world. Its record for the past year is, perhaps, the best guarantee for the next year. Among our present contributors, we may mention the following names, taking for illustration all that our space will permit:

Charles Downing,	Professor W. J. Beal,
J. B. Lawes (Rothamsted),	Prof. Levi Stockbridge,
Rev. A. W. Mangum,	Pres. T. T. Lyon,
Gen. Wm. H. Noble,	Sec'y C. W. Garfield,
Prof. G. C. Caldwell,	Hon. B. Pickman Mann,
William Falconer,	Thomas Meehan,
Professor I. P. Roberts,	Sam'l B. Parsons,
Ex-Gov. R. W. Furnas,	Samuel Parsons,
Professor E. M. Shelton,	Col. M. C. Weld,
Rev. E. P. Roe,	Dr. T. H. Hoskins,
Henry Stewart,	Professor L. B. Arnold,
Col. F. D. Curtis,	Hon. X. A. Willard,
M. B. Batcham,	Dr. F. M. Hexamer,
Prof. R. C. Carpenter,	Nelson Ritter,
S. Rufus Mason,	"Hector Bertram,"
Lester A. Roberts,	Professor E. W. Stewart,
J. J. Meehi (Tiptree-Hall Farm, England),	B. S. Williams (London, England),
D. E. Salmon, D. V. M.	Professor A. J. Cook,
Professor G. E. Morrow,	George Such,
James Taplin,	A. M. Halstead,
L. S. Hardin,	J. B. Armstrong,
E. R. Billings,	W. I. Chamberlin,
L. J. Templin,	Jonathan Talcott,
Prof. Cyrus Thomas,	S. B. Peck,
Mary Wager-Fisher,	Professor J. P. Sheldon, (Cirencester, England.)
W. C. L. Drew,	J. Stauffer,
Annie L. Jack,	J. B. Olcott,
Lorenzo Rouse,	M. Oakey,
Rev. R. H. Crane,	Professor S. M. Tracy,
Professor Elbridge Gale,	M. B. Prince,
G. Marti,	A. M. Van Auken,
W. H. White,	Jane Gray Swisshelm.

Let us now say to our readers that we have many new projects for another year. We shall try, as hitherto, to please them in every way, and would respectfully ask for their influence in the RURAL'S behalf. Such assistance would enable us the better to please them. Nevertheless—in spite of all words—the RURAL NEW-YORKER MUST SPEAK FOR ITSELF. We ask no aid based upon what it is *going* to be, but what it is to-day. Examine it and examine other periodicals before subscribing for another year, and if the comparison be not favorable to us—how can we consistently ask for your support! We do ask, and that only, that you will take the pains to examine it impartially and then—for the benefit of agriculture and horticulture—for the benefit of the country home—SUBSCRIBE FOR THE BEST.

A QUESTION OR SO.

"Disreputable or untrustworthy advertisements: ought conscientious publishers to admit them to their journals? We say no." Thus we expressed ourselves in this office in a conversation upon this topic with a well-known Eastern publisher, a few days ago. "But," said he, "a majority of our most influential journals, both religious and secular" (and he named some of them), "do admit them. To do so is repugnant to every good man. But we alone cannot afford to reject them!"

That wealthy, influential journalists should accept—yes, even solicit—such advertisements is a disgrace to their journals, to themselves, and to the community that support them. The publishers themselves would resent it as an unpardonable insult were they personally accused of lying, of stealing or of swindling—and yet that is just what they indirectly do when they knowingly lend their columns to the encouragement of such frauds—especially as the friends who support their journals are the very people to be defrauded. "Readers have eyes and experience and judgment," says the publisher. "They can judge for themselves." But the fact that these advertisements *pay* the advertisers and that thousands of well-meaning people are swindled out of their money every year, is proof that many *do* not judge for themselves, and it is as much the mission of the press to guard the public against *such* well-to-do swindlers as against those who have not the means to pay for advertising in "respectable journals." In fact, a publisher by knowingly admitting fraudulent advertisements to his columns, enters into a partnership with the swindler, inasmuch as the money paid him for the advertisement is in reality his share of the plunder out of which the confederates have cheated their dupes.

It has been said that it is impossible to determine in all cases whether or not the advertisement is what it professes to be. This is true. It is not, however, the less a publisher's duty to make a reasonable amount of inquiry, just as he would to determine the responsibility of those who ask for credit. With all due diligence, we are aware that the publisher cannot always acquaint himself with the business or intentions of the advertiser. It is against a class of disreputable advertising, so glaring that he who runs may read, that we are speaking, and the publication of which is proof conclusive that the publisher cares not one whit for the well-being of the readers he professes to serve and to enlighten.

"But see here," remarks a friend; "you advertise that you will distribute twenty-five thousand dollars' worth of rare seeds among your subscribers who apply. *That* is *your* advertisement. Is it honest?" We reply—Yes, it is. We have a right to presume that twenty thousand of our readers will apply for our seeds before the distribution is discontinued. We promise to send from twenty varieties a choice of any ten. That would make more than two hundred thousand packets, for we do not know which of the twenty will be selected. Now we *know* that the seeds we offer, if they could be obtained at all, would cost an average of twenty-five cents per packet at retail. They do not cost *us* that, and there is no pretence made that they do, even if we make an extravagant account of our labor for several years past in raising the plants, as well as of the seeds we are obliged to purchase. But two hundred thousand packets at twenty-five cents each would amount to fifty thousand dollars, which is twice the amount which we announce. This "free seed distribution" is offered to *all* of our subscribers the same as the distribution of the cuttings of Pelargoniums and of the beautiful willow, Salix pentandra, which we have made during the year. Even the postage upon these has been divided with our friends, or not charged at all, so that it could not be said by over-shrewd people that this was made a partial source of compensation. So it is with our present seed distribution. The postage costs us (as those receiving the seeds may see) more than we ask. For instance, we charge *two* cents' postage on the Beauty of Hebron. *Every envelope* will be found to have a *three* cent stamp upon it. We charge but *one* cent for the choice of ten varieties of seeds excluding Pearl Millet and Defiance Wheat, while we are obliged to pay *two* cents' postage. The postage on the Defiance Wheat and Pearl Millet costs us the same as we charge. viz., a two-cent stamp. The entire collection of seeds which we are now preparing for the mail would well fill a room twenty-five feet square, while we have already received from the manufacturers fifty thousand envelopes, and the work is probably not one-quarter done. It is work of this kind—work, too, in which we delight—that verifies the words of the Scientific Farmer that "the RURAL NEW-YORKER is establishing a new era in agriculture, and bringing farming out of the rut of the commonplace." We want our readers to place confidence in the RURAL, and we mean to be worthy of it. Doing more than we promise to do and excluding all advertisements which are calculated to do harm are among the methods which we have adopted, and which, if life be spared, we propose to continue. When our acts and our professions are not in reasonable accord, we hope our best friends will give us up. We have only now to add that this business of admitting fraudulent advertisements to family journals which are supposed to hold a high place in the public esteem, is becoming a dread source of evil. "They all do it," conveys the vilest excuse that ever was uttered by a well-disposed person, and we call upon our rural people at this time, when they are about to subscribe or to resubscribe for their papers, to reject all those whose advertising columns show that they need this demoralizing apology.

An Objection Answered.—"I'd certainly like to take an agricultural paper with such a reputation as the RURAL deservedly has, but really just now times are so hard that I cannot spare the money," is a remark repeated to us by a correspondent, as coming from a neighbor whom he has solicited to become a subscriber. On the other hand, an old friend of the paper writes to us by the same mail, "Times just now are so hard hereabouts that we cannot do without the RURAL; for, besides the pleasure and instruction it affords the whole family and frequent visitors, the hints and detailed information it furnishes every week save us many a dollar during the year, almost without our being aware of it; and, moreover, it enables us in a hundred ways, to make a little more money than we should without it, on account of the improvements it is constantly suggesting in the use of fertilizers and the method of doing every kind of farm and household work. If times were a little easier, we might be able to dispense with it; but as we are very hard pushed, please continue to send it for another year.

BREVITIES.

FOWLS want sunshine.

VARY the food of fowls.

A FEW good hens well cared for will egg on the owner to keep more.

FIFTY fowls kept well are more profitable than one hundred that take care of themselves.

THERE is no advice which poultry writers repeat oftener than "Provide pure water daily."

PREVENTION OF ROUP.—Don't compel fifty birds to roost where there is room for only twenty-five.

THE engravings which we present to our readers in the present number, are taken, for the most part, as will be seen, from life.

DR. KENDRICK, of Washington, D. C., lately sold his two-year-old Jersey bull "Elmwood," No. 2322, to Major Decamp, of Liverpool for $2000.

IN two weeks we hope to present the RURAL in a new dress. We do not need it at present, but the New Year is a good time to turn over new leaves.

FLOUR of sulphur for the nests; whitewash for the houses; kerosene for the perches; variety of food and clean runs for confined poultry, are the secrets of successful management.

THERE is no interest that better or more uniformly holds its own than the poultry interest, and there is none on the farm more slighted. That neglected as it is, it should still pay, is good proof that it deserves more attention.

WE have heard it stated that fifteen well-bred fowls well taken care of, will put more money into the farmer's pocket than a good cow. We cannot support the statement by our own experience, though our birds are well bred and well taken care of.

No doubt if the truth were known, success in poultry keeping is due more to good management than to particular breeds of fowls. Many who give first-rate care to their birds attribute to the breed what is due to their care. There is no breed so valuable that it will "do wonders" under bad treatment.

CONTRIBUTIONS, always welcome to our "EVERYWHERE" department, have so multiplied of late months, that by taking out dividing spaces and rules, we shall be able to give the same amount of matter in a smaller space. We invite our friends to incorporate any valuable items of their experience and to make the department, more than ever before, a medium of exchanging views.

"GOING against Nature," with a big N—is there not just a little more than a trifle of cant about this expression? Isn't culture of the earth and its inhabitants, stock as well as men, really "going against Nature?" There is a lot of cant phrases of this stripe, glibly used to convey a very loose indefinite meaning. Is the doctrine of "total depravity" altogether false, and if there is still some truth in it, isn't it man's duty to "go against Nature?

MANY of our subscribers write us: "If I am entitled to any of the seeds, please send &c." All of our subscribers are entitled to a choice of any ten, and highly welcome to that choice. We hope that these seeds will give great satisfaction. Many of them have never been offered before, and, indeed, it has not been generally known that several of the hardy shrubs mentioned, could be raised from seeds at all by inexperienced culturists, or, perhaps, by others.

IN the last issue of Wallace's Monthly, is an article under the caption, "Why Horses Go Blind," credited to "The Farmer," but which originally appeared in the RURAL NEW-YORKER of September 21. As there are half-a-dozen different "Farmers" with various cognomens, and as the article was extensively copied, it is impossible to determine which of them appropriated it as an original contribution to its columns and thus stole the credit due to this journal. Thefts of the same kind, however, happen so often that we call attention to this one merely to point out that through such dishonesty even so excellent a periodical as the Monthly may unintentionally be led into an injustice.

Literary Miscellany.

MERRY CHRISTMAS!

HEAP on more wood!—the wind is chill;
But let it whistle as it will,
We'll keep our Christmas merry still.
—[*Scott.*

Then Christ was born of Mary free,
In Bethlehem, in that fair citie,
And angels sang with mirth and glee,
In Excelsis Gloria!
—[*Carol in Harleian MSS.*

Bring holly leaves of polished green,
The Christmas feast is bravely set;
And over all the earth, I ween,
The countless Christmas guests are met.

All glory to God,
Who laid by his rod,
To smile on the world through his Son,
And peace be on earth,
For this wonderful birth
Most wonderful conquests has won.
—[*Worcestershire Carol.*

Adeste fideles,
Læti, triumphantes,
Venite, venite, in Bethlehem;
Natum videte
Regem angelorum;
Venite adoremus,
Venite adoremus Dominum.
—[*Old Hymn.*

Carol, carol, Christians,
Carol joyfully;
Carol for the coming
Of Christ's nativity,
And pray a gladsome Christmas
For all good Christian men,
Carol, carol, Christians,
For Christmas come again.
—[*Arthur Cleveland Coxe.*

A CHRISTMAS EPISODE.

T. S. G.

ONE bright morning, a few years ago, great excitement prevailed in the office of the Philadelphia City Bank. Yet the bank had just declared a fat dividend of fifteen per cent. for the half year. Shareholders were contented, and god Mammon seemed to cast a favorable eye on the welfare of the old and thriving corporation. However, a mutinous feeling of discontent was plainly visible upon the faces of the thirty odd employes, who swarmed like bees into the hive every week-day morning for the purpose of manufacturing the golden produce that delighteth the souls of distributing directors and radiant proprietors. The shoe pinched somewhere! Where was it?

The following notice, circulated for the perusal of each clerk, contained the secret of the unwonted gloom:

"Every gentleman will be required to remain at the banking-house two Sundays in the year, to assist in guarding the premises. By order,

"J. SPOFFORTH, Secretary."

Here was a revolution—a *coup d'etat* indeed! Six days we should labor, but the seventh did not belong to the City Bank. The gilding of a little extra pay might have made the pill easier to swallow, but on this point the notice was discreetly reticent. In the end, after a few days of conjecture and excitement, every one quietly resigned himself to his fate, as black and white slaves are bound to do all the world over.

I had been ten years in the Bank, and received a salary which, though not magnificent, was sufficient to support in comfort a young wife; and very happy we were in our snug retreat at Wood Green. Of course we both thought it extremely hard to be separated even for two Sundays in the year, still we soon saw there was nothing for it but submission.

Now, though I, in common with others, rebelled against the forcible seizure of the Sunday's rest, yet it must be owned there was some reason for the extraordinary innovation. The strong-rooms of two neighboring establishments had been attempted within a fortnight, and a boy carrying bonds in Broad Street had been decoyed away and the securities stolen. But, worst of all, some pilfering had been going on for months in our own bank. Stamps had disappeared to an alarming extent. Clerks had missed money from their coats, and now and then the garments themselves were spirited away. Traps had been carefully laid, and a detective spoken with; but as yet the rogue was not discovered, and an uneasy feeling was rife among us all.

The bank boasted of four porters or messengers, one of whom (the chief) lived rent free in premises that nearly adjoined the building. He was a long lean man named Bennett, with a parchment face and a goatee beard. He was quiet, well up to his work, and high in favor with the authorities. Of the remaining three one had been a grocer's boy, and the other was a farmer's son, both honest creatures, but of no importance in this narrative. The fourth was an ex-policeman named Lance, a blunt, pleasant man, much given to relating queer stories of his former life, and not averse to a pot of beer for his trouble.

Eight weeks had passed since the official notification, and as Christmas approached I was notified that I should have to keep guard that day, and a most unpleasant prospect it was. During the week preceding, the mystery had become still more intensified by the unaccountable disappearance of a one hundred-dollar note, and matters began to assume a very grave aspect.

On arriving at the bank, the door was opened by the night watchman, who remained in the building all night, and vanished with the early morning on the arrival of the porters to open the doors. A few minutes afterwards Bennett walked in, accompanied, to my joy, by honest old Lance, whose wonderful stories I fondly hoped would help to relieve the tedium of a long, dull day; then, without more ado, I proceeded to make my first round. Preceded by Bennett with a lighted taper, I marched up-stairs, through every room and office, across perilous planks and up dangerous ladders, till we gained the trap-door which opened on to the roof; then down again to the lowest abysses of coal-cellar and strong-room, looking in vain for some concealed burglar, who however was conspicuous by his absence. Very minutely did I examine and try the drawer, which had already been tampered with, as I knew it contained, besides stamps, a large sum in gold and notes. No—it seemed firm and safe, and would take "a deal of work," as Bennett remarked, holding his taper close to the lock. Lance, too, had a good long look at it, and expressed the same sagacious opinion as his colleague.

Our first visit ended—and I was expected to patrol at least three times in the day—the two portors went down to breakfast, and I adjourned to the manager's room, leaving the door partly open, so as to be able to see all round the bank. I lit a cigar, and, ensconcing myself comfortably in a managerial arm-chair, prepared to stay the two hours which intervened between the cessation of the church bells and luncheon-time. Suddenly old Lance appeared again at the half-opened door, and spoke in this wise:

"'Scuse me, sir, but I've been a pleaceman, and I don't think that lock's all right."

"What lock, Lance?" said I.

"That there drawer with the stamps, sir."

"Well, let us look again."

So saying, we both went to the counter which contained the drawer, and Lance pointed out some small scratches on the lock, and a slight indentation in the woodwork surrounding it.

"That's a chisel if I die for it!" said the ex-policeman.

"Oh, thunder! You don't mean it?"

"Sure of it, sir."

"Well, let's have Bennett up-stairs and hear what he thinks of it."

Angry at being disturbed at his breakfast, the head-porter came grumbling to the place where I stood, and, bending down to the lock, impatiently inquired if it was not a deal more likely the cashier had scratched it in the course of business. After a few minutes' further inspection, he looked up with a knowing smile.

"I believe Lance is right now; it looks so fresh, I shouldn't wonder if the watchman knew something about this."

"Perhaps so," said I; "what do you think, Lance?"

"Well, he looks honest enough—but looks ain't always a guide," said the man quietly.

"Then I'll stop in the bank to-night, and see if I can trap my gentleman," exclaimed Bennett, "if you'll leave me the key."

"I can't do that," I replied, "but I shall report the fact to the manager the first thing in the morning."

"As you like, sir," he assented reluctantly; and they both returned to their long-neglected meal.

Again I retreated into my den, this time with the proud consciousness of having something important to relate when the next morning should see the stream of busy workers once more settling with books and papers and filthy lucre generally. One—nay, two cigars—did I consume down to the last half inch, read Byles on Bills nearly through, in default of more cheerful literature, and I am afraid a tiny doze must have ensued, as I was awakened by Bennett's voice close to me asking what I would take for luncheon. Mechanically I fixed upon the hackneyed chop, and with it a pint of ale, to be fetched from a neighboring eating-house that deigned to open for a couple of hours. While he was gone I took the opportunity of making my second round, and found nothing but peace everywhere, with the slight exception of being startled by the sudden appearance of the bank cat from the cavernous depths of the enormous coal-cellar. Eventually I returned to my room, and found a succulent chop smoking upon the table, flanked by a pewter pot of foaming ale, which, on tasting, I found unusually soft and creamy—indeed I fancied I could detect a peculiar aroma in the grateful beverage which seemed to make it more than ordinarily palatable; anyhow I thoroughly enjoyed the repast, and when an intensely slumberous sensation crept through all my veins, my strongest effort of will proved insufficient to keep me awake. While I was still struggling against the impulse, Lance came in to inform me that he was going out to dine at his home close by, while Bennett was left on guard below. As he closed the door behind him, my eyes shut, and I fell asleep, but only, in a few moments, to be reawakened by his voice again addressing me.

"I don't think I'll go out to dinner, sir," said he, gazing at me with a strange expression.

"Why not!" quoth I drowsily.

"Well, sir, I don't feel very bright to-day, and I'd rather stop indoors; and if you'd be so kind as not to mention to Bennett as I've come back. But you don't look very well yourself, sir, just now?"

"Lance, that ale has made me most confoundedly sleepy!"

"Well, have a bit of a nap, sir. I'll see the place is all right—only I don't want Bennett to know I'm here."

"All right, all right," I replied, rather shortly, for I wanted to be left to myself; yet I was somewhat surprised at his wish for concealment in so trivial a matter.

Again I saw the man pass out and partly close the door, and once more I drifted into a heavy but pleasant slumber. Soon I was a denizen of dreamland, and a sharer in its grotesque and fantastic imaginings. I thought I was clinging to the telegraph-wires that stretch like webs over the town, and performing thereon athletic feats in impossible positions; then I flew through the air towards my home at Wood Green, spinning, as I went, a thread of wire by which to return—a useless precaution, as I was at once transported to the desert of Sahara, where I found myself on a camel's back careering across the burning plain. But in my dreams the face of the camel was the face of the ex-policeman Lance, and ever and anon strange grating noises seemed to be borne past us on the wind. The pace began to slacken and, as I spurred on my steed to fresh exertions, I seemed to feel the prick of the rowel in my own flesh. It became sharper and more painful; and gradually camel, desert, chase, faded from my vision, and the bank once again dawned on my awakening senses. But, though my aerial steed and his surroundings had all disappeared, the spur unaccountably enough remained, as my nether limbs were painfully reminding me.

It was no dream this time—I was wide awake. Quickly glancing round, I discovered Lance crouching down beside my chair, and vigorously applying a pin to the calf of my leg. To this proceeding I was about to enter an indignant protest, when a significant gesture warned me to remain mute. His face was white with unwonted excitement, as he rose noiselessly to his feet, and beckoning me to the small aperture in the wall used for the transmission of books and papers between manager and clerks, bade me look upon a spectacle that made each individual hair upon my head to stand erect. The drawer containing the stamps and gold was being tampered with before my very eyes in broad daylight. Stooping down with his back towards us was a man softly but swiftly forcing the lock with a chisel. But the man—the thief—who was he? I knew at a glance that long lean form. It was Bennett. We both shrank back.

"Take off your boots, sir," he whispered in a low voice. I noticed that his own feet were shoeless. "Creep round outside the counter, and wait till I give the word—then over and help me."

I nodded assent; and then I saw Lance crawl out upon hands and knees into the office, behind the shelter of a long high desk, at the end of which he would be within a few feet of Bennett; I crept away to the other entrance of the manager's room, which led into the large space appropriated to the public, and, gliding noiselessly along, I arrived where I knew I must be opposite the thief at his work. Click, click, went the chisel against the brass lock. It was apparently a work of time and difficulty, though the sound of crushing woodwork betokened the near accomplishment of the deed. How long the time seemed! Had Lance been able to get close to him undiscovered? I judged so, as the chisel still continued its grating work. Sometimes it stopped for a moment, and then I knew that the man was watching the door of the manager's room, to see that I was safe under the influence of the narcotic administered in my pint of ale. Click, click, crunch! and the whole lock appeared to come away, the drawer being at the same time drawn softly open. "Now," thought I, "here goes."

Not yet! I could hear the mellow chink of the small bags of gold as they were hurriedly transferred to the man's pockets; then the stiff rustle of many sheets of stamps told of a like destination. I listened breathlessly. Suddenly there was a yell of mingled fright and rage, and, vaulting at one bound across the counter, I saw Bennett falling backwards, his throat clutched by the practised hands of the ex-policeman, who held on with a will, having sprung on him silently from behind. The half-strangled man struggled like a fiend, dealing me several ugly kicks with his long legs as I attacked him from the front. But the odds were too many, and furthermore he had been taken by surprise; in a few moments he was overpowered, and his hands and feet were securely fastened. Not a word had been uttered since the commencement of the conflict, but now Lance looked up and said in a stern voice:

"Got the scoundrel at last—next thing's a pleaceman. Will you go, sir, or shall I?" Here there was a fierce attempt to free himself by the prostrate thief. "Perhaps I'd better stop with him," continued Lance; "you'll get an officer in a minute at the station in Seventh Street."

Seizing my hat I was off in a twinkling, and returned in double-quick time to the bank, accompanied by a stalwart member of the city police. A few moments saw the policeman, myself and our chapfallen prisoner marching quietly to the station, where I made the charge and left him to the solitude of a cell until the next morning. On my return to the bank the night-watchman had arrived, and I prepared to go home.

"Why, Lance, you must have suspected the beggar before this?" I exclaimed.

"I've thought of it sometimes, sir," he laughed. "Knew I should cop him some day." Then, with a frown—"mean, sneaking skunk! I believe he meant to try to put it on me or the watchman here."

"Well, all's well that ends well, Lance, and it was a clever catch of yours. We have a nice story for Mr. Spofforth to-morrow. Good night."

"Good night, sir."

When I walked into the bank next morning, I found the story was already known. Little knots of men were eagerly discussing the event, and I as well as Lance soon became the center of an animated crowd. At eleven o'clock I was summoned to the board-room, to the Committee of Directors, who complimented me upon the capture, as if I, and not Lance, had been the hero of the day. In the morning newspapers there was a graphic account of the "Great Bank Robbery," concocted by some ubiquitous penny-a-liner, which my wife read and re-read with mingled pleasure and alarm. Bennett was eventually sentenced to eighteen months' imprisonment, which we all considered far too lenient a judgment. The ex-policeman came in for the head-messenger's berth, with a house rent free and a present of two hundred and fifty dollars. In addition to much very unmerited praise, I received a bonus of five hundred dollars, which contributed in no small degree to making the Christmas time at Wood Green a "merry one," after all.

WEAKER THAN A WOMAN.

CHAPTER XVI.

(Continued from page 798.

She tried to think, but she could not; the only thing she could remember was that she might be Lady Chevenix and mistress of all she saw, if she liked. What would people say? They had spoken of Sir Owen almost as though he were an inhabitant of a brighter sphere. She had heard his probable marriage discussed almost as an arrangement of State; no one under the rank of Lady Rolfe's daughter had ever been thought of for him—and now he had asked her. She had heard the future of his wife, when he should have one, discussed many times—how she would go to Court, and be one of the high ones of the earth because of her husband's great wealth; and now this honor had fallen on her. How wonderful it seemed! Of course she must not talk about it; but before she finally refused him she would like certain people to know what a brilliant offer had been made to her—people who had not always treated her as their equal.

The boat was touching the shore, and a dozen hands were stretched out to assist her. It seemed to her only a few moments since they had started, yet they had been all around the lake. She looked up with a bewildered smile at her companion as he spoke a few polite words; he seemed to know by instinct then that this girl had chosen the boat as a kind of refuge. Then Sir Owen came and claimed her—she must have some refreshment—and he remained by her side until the round red sun set and the *fete* was over. She watched it sink behind Larch Hill, and she felt that she would never see its crimson light again in the sky without remembering what had been said there.

There was an hour for rest before the dressing for the ball began.

"If you are wise," said Lavinia Rolfe, "you will try to sleep for an hour, and then have some tea—that will restore you after the fatigue of the day."

Violet followed her advice; she lay down to rest; but how could she sleep? Through her heart swept unceasingly the same refrain—"I could be Lady Chevenix, mistress of all around, if I choose but I hold my lover's life in my hands."

Would it be a great sin, a grievous wrong, to break such a promise? Then she reproached herself for even entertaining the thought. Of course she would keep her promise to Felix; but in the meantime there could be no harm in thinking of what had happened and how wonderful it all was.

She looked exquisitely lovely when she was dressed for the ball. Admiring eyes followed her every movement. It was agreed that the beautiful girl in white and silver, with a crown of silver leaves, was certainly the belle *par excellence*. To Violet the ball always remained more of a dream than a reality. She remembered her wonder at her own loveliness, the homage paid to her, the half-subdued murmur of wonder when Sir Owen opened the ball with her, and then the significant glances that said plainly, "We can all see what this means." She longed to say, "There is nothing in it—I am going to marry Felix Lonsdale. I am only queen of the *fete*, and my reign ends with it." But she could not, so she played her part gracefully; it was all to end so soon, and then it would speedily be forgotten. She might just as well enjoy herself while she was there

She was so brilliant, so gay, so enchanting, that Sir Owen grew every moment more hopelessly in love with her. People could think what they liked about Violet, but there was no mistake as to him—not the least in the world; he was quite lost; he saw and thought of nothing but Violet. Every one agreed that the ball was worthy of the *fete*. To Violet it was a long dream of homage—the most eligible men in the room surrounded her—she was besieged by would-be partners.

Sir Owen took Violet down to supper—the grand supper served by Gunter, which was in itself a wonder; and then they danced until the sun rose in the eastern sky. Sir Owen went to Mr. Haye.

"I will do myself the pleasure of driving you home this afternoon," he said, "if you will not spend another night here. I have something to say to you before you go."

CHAPTER XVII.

"If I had been Mephistopheles himself I could not have managed better," thought Sir Owen, as he watched the three visitors who were of such vital consequence to him. "Seeing I have had just what I wanted all my life, it is not likely I shall begin to go without it now. After all, what is a promise of marriage? What does it mean? People break them every day, and every day they are broken for them—loss of fortune, loss of health, a hundred common-place reasons—loss of fancy—all make a promise of marriage null and void. Such a man as this Lonsdale had no right to ask a girl like Violet Haye to sacrifice herself to him. It is a privilege of a rich man to win for himself such beauty as hers. So far from doing a bad action, I am doing a good one in rescuing this beautiful girl from poverty and obscurity. What is a broken promise? She has said she will marry him—she finds that she has made a mistake, and alters her mind. If any one sees wrong in that, I do not know what wrong is."

These reflections were caused by a simple remark made by Captain Hill. He had said—

"Has any one told you, Sir Owen, that Violet Haye is engaged to marry Felix Lonsdale?" And the Baronet's answer had been a muttered curse.

He had believed himself in such a lofty position that he could do as he liked without comment, but he found it was not so. The girl whom he was so madly pursuing, whom he had sworn to win, come what might, was engaged to another man, and people would make their own comments about the matter. So he reasoned and argued with himself—and to himself his ideas seemed excellent—that honor was simply a dead letter—it did not exist; it was a virtue to be subordinated to convenience—a promise was mere empty words, with no meaning, and he consoled himself by trying to believe that he was doing good rather than harm. That Violet would ultimately refuse him he did not for one moment believe. No woman, he argued, could be proof against such temptations as he offered.

This was the day on which he had promised to take Violet and her parents back to the Limes. He was very unwilling to let them go. "They will have that handsome young lawyer about the place again, and all the good I have done will be undone," he said.

But Mrs. Haye was even more worldly-wise than himself—she declined to spend another evening there. He had ordered a dainty luncheon to be prepared for them in a charming little anteroom known as the Star Room—it bore that name because it was one blaze of light, through the number of its mirrors, girandoles and lusters. When the sun came through the eastern window, and lighted it, the effect was something magnificent. If he had hoped to dazzle them with a fresh exhibition of his wealth, he had most certainly chosen the right way.

The luncheon was laid on the table, elaborately spread with handsome plate, rare wine, costly fruit—every luxury that could gladden the heart of man. When Sir Owen sat down with them, Mr. Haye expressed his regret at leaving so magnificent and hospitable a house. His host looked up with a slight laugh—a keen observer would have seen that he was agitated.

"I am glad you like the place," he said. "I have been asking your daughter to remain here."

A warning touch from his wife told Francis Haye that he was to remain silent. She looked at and addressed Sir Owen.

"I do not understand you; how could Violet remain here without us?"

"As my wife, Mrs. Haye; if she will only consent, Garswood and its master, with all that it contains, shall be hers."

Mrs. Haye rose slowly and drew her shawl round her shoulders.

"You are very kind, Sir Owen," she said dryly, "and I am sure that Violet must be quite flattered by your generous offer; but—she has promised, I believe, to marry Felix Lonsdale."

"That promise should not bind her," he cried eagerly; "it was won from her under false pretenses. It will be a crying shame if you allow her to keep it."

"So I think," said Mrs. Haye, as she drew on her gloves; "but I am quite powerless in the matter." Nor would she hear another word.

She hastened their departure, and Sir Owen left his other guests to drive them home.

In this case as in others Mrs. Haye showed herself to be a woman of more than ordinary intelligence. An average woman would instantly have taken Sir Owen's part—would have done her utmost to induce her daughter to break her promise—would have railed against Felix. Mrs. Haye was far too wise—to take that course would be to confirm Violet in keeping her word. She understood women—she knew that, if she opposed her, Violet would take refuge in making hers it an interesting martyr; whereas, if she and her husband remained passive, and allowed her to see just what she might have and what she might lose, Mrs. Haye had no doubt of the result.

Sir Owen remained at the Limes with them an hour or two, and it was Mrs. Haye who reminded him that his guests were waiting.

"I do not care for my guests," he said—"I care only for you. If you will not go back with me you must let me stop here;" and she had great difficulty in persuading him to go.

Not one word about Sir Owen was said to Violet after his departure.

"Leave it all to me, Francis," said Mrs. Haye to her husband; "if you interfere you will mar all. Leave it to me, and do not utter a single word."

He obeyed, well pleased to have no responsibility in the matter—he did not like the idea of a broken promise.

Violet had expected expostulations, reproaches, persuasion. She could hardly realize the silence; then she came to the conclusion that her parents must have thought that Sir Owen was joking, and her dignity was somewhat wounded at the notion.

Later on in the evening Felix came, and she saw that he looked anxious, worn and haggard. Mrs. Haye had never received him more kindly. Mr. Haye was tired, and had gone to his own room. Mrs. Haye made Felix sit down with them, and began to talk to him about his father, his family, the business, and his prospects.

The simple, noble-hearted young fellow opened his whole heart to her; he told her all his sorrow and distress about his father—how he had been cut, and had met some one who had spoken to him harshly in respect of the will case, and the consequence had been a severe relapse.

"The fact is," said Felix, "that my father is breaking his honest heart, Mrs. Haye."

"It is very sad," she returned—"very sad and very hopeless."

"Yes—it is almost hopeless," agreed Felix; "it seems as though the very spring of his life were gone. I know what would be the only thing to cure him. It would be if all his fellow townsmen—all his old friends—met together and did something to prove that they had confidence in him; something of that kind, proving to him that he is respected and esteemed, would be the only way to cure him."

"And that will never happen, of course," said Mrs. Haye.

"I am afraid not; but it is the only thing to save him. Dear Mrs. Haye, you are very good to listen to me—I ought not to bring my troubles here."

Mrs. Haye looked kindly at him.

"Of course," she said, "if he gets no better, the maintenance of the whole family will fall upon you, Felix?"

"Yes," he replied, "it will fall upon me; I cannot desert them—I must work for my mother and the little ones."

"In that case, my poor boy," she asked, "what will you do with a wife?"

He knelt down by Violet's side, and took her hand in his; he kissed it with a passion that could not be told.

"What shall I do with a wife?" he cried. "Ask me rather what I shall do without one. My wife will be my haven, my rest, my hope, my refuge—will give me courage and hope and fortitude; she will give strength to my mind, my heart, my brain; my wife will be the whole world to me."

"Yes," agreed Mrs. Haye gently; "but, Felix, how are you to keep her? How is she to live? You could not take a wife home to Vale House, to an invalid father, a step-mother, and all those children."

"No; I should make a home of my own," he replied. "Ah, you do not know how I love Violet—how I should work—how I should toil day and night for her! I must keep both homes." Then he looked up into Violet's face. "You would help me, my darling, would you not? You would dispense with luxuries for a time—only for a time? You would be the nerve of my arm, the strength of my soul. You love me enough to help me over a few troublesome years, and then fortune will smile on me. You love me enough for that, sweet heart?"

"Yes, I love you," she whispered.

Mrs. Haye rose from her seat and said she must go to her husband. She left Felix kneeling at her daughter's feet; when she was gone he buried his face in the silken folds of Violet's dress; he kissed her hands, he called her by every endearing name.

"It has seemed to me like an eternity," he said. "Oh, Violet, sweet, you must never go away from me for three days again! Every hour has seemed a year long. Let me look into your eyes, and see if you love me as you did when you went."

"Yes, just as much," she said.

"And all the luxury, the pleasure, the admiration, have not robbed me of one beat of your heart?"

"No, not one," she replied.

"Oh, true heart—oh, dearest love, how Heaven has blessed me in giving you to me! How selfish it seems of me to have brought my troubles here to you, just as you have come from such a bright world!"

"I have a right to bear your troubles," she said; but her eyes dropped half sadly before his. She said to herself, "Dear Heaven, how will it end?"

"You are all the world to me!" he cried, passionately. "I have but you, Violet. It seems to me all a blank where you are not. I work for others, and I love them; but you, my wife that is to be, are my hope and my refuge; you are the sun of my life—without you——

She laid her hand gently on his lips.

"We will not talk of that," she said; and once more, with all the deep passion of his heart, he kissed the silken folds of her dress—the sweet hands—the tresses of golden hair.

"My love is a garment that enfolds you, sweet," he said. "The ground on which you stand is sacred to me; the breeze that kisses your face is sacred too. I would make my love a shield and a buckler for you. Oh, Violet, it is almost a terrible thing for a man to love a woman as I love you! Will you tell me now about the *fete?* Did not every one envy me? And tell me, my darling, did you keep me in your memory?"

Then came to her the memory of Larch Hill and the fiery temptation she had battled with there; but she answered him——

"Yes, I remembered you the whole time;" and he clasped her in his arms.—[To be continued.

THE UPAS TREE.

W. FALCONER.

Most people have read of the deadly Upas tree of the Indian Archipelago, and the story that neither animal nor vegetable can live in its awful presence. But that is a false statement. The Upas tree is indigenous to the forests of the Philippines, Java, and neighboring islands, where it attains a hight of from 70 to 110 feet. It is shaped somewhat like a lanky umbrella—with a tall, naked and rather slender trunk, surmounted by a thick crown of horizontally disposed branches, that are densely furnished with laurel-shaped leaves, which, together with the young shoots, are covered with rusty hairs. Birds and other animals get into its branches with apparent impunity, and its proximity to the dwellings of man has no evil effect whatever. Nevertheless the tree is virulently poisonous. The tree when pierced exudes a milky juice, which, mixed with certain other ingredients, is used by the Malays as arrow-poison, and most fatal it is to any animal it strikes.

The Upas tree belongs to the same group of plants as do the Bread Fruits, which are so highly prized for their fruit and timber, and so extensively cultivated both in the East and West Indies.

The following fabulous story in connection with the Upas tree is told: Some 90 years ago, Dr. Foersch, a Dutch (Holland) surgeon, living in Java, described the tree as growing in a desert with no other plant near it for a dozen miles, because the exhalations it emitted so contaminated the atmosphere that neither plant nor animal could approach nearer to the Upas without suffering the penalty of immediate death. He also speaks of criminals condemned to die, being given the alternative of being executed or of going to the Upas tree to collect some poison, when, if they returned alive, they were pardoned. Though furnished with every precaution, only an average of one in ten returned. On account of civil dissentions some 1,600 people were compelled to reside within fourteen miles of the Upas trees, and in less than two months only 200 remained alive "There are no fish in the waters, nor has any rat, mouse or any other vermin been seen there; and when any birds fly so near this tree that the effluvia reaches them they fall a sacrifice to the effects of the poison." These and many other ridiculous stories, as false as they are novel, have been circulated at the expense of the Upas tree. In the face of all these absurd stories not only is the poison sought after and used, but even the fiber of the bark of the tree is made into cloth by the natives. And it is asserted, that the flesh of animals killed by Upas poison may be eaten with perfect safety.

The foundation for many of these fables, however, consists in the existence in Java of certain low valleys connected with the many volcanoes of the island, whose atmosphere is so charged with carbonic acid gas emitted from crevices in the ground, as to destroy animal and vegetable life. And the Upas tree can no more exist in such places than can other trees.

When I was engaged in the Royal Botanic Gardens at Kew, one of the foremen was relating to us the ridiculous stories of the Upas. Before that time, however, the Upas and I had been old acquaintances; consequently, I told him that such stories were glaring falsehoods, and in proof of my assertion I bared my breast, plucked a leaf off of the Upas tree beside us and kept it for several minutes close to my skin, and I am living still! Had I been sweating copiously at the time I would not have done it, and I was careful not to let the milky juice touch my breast; but I took no precautions against my hands.

There is a Upas tree in most botanic gardens, and they are handled, cleaned, watered, moved about and repotted with seeming indifference. We have one here (Cambridge, Mass.,) and on its account I often wish Americans were as superstitious as Malays—but they are not. No sooner do their eyes catch the name of the Upas tree than they stop to examine, ask a few preliminary questions, and then "Could you not spare me just one leaf?" And not till it is carefully rolled up in paper or handkerchief do they ask: "Do you think it will *poison me?*" I sometimes wish they would ask that question before the leaf is plucked, but they never do.

A TRIUMPH OF ART.

On the Peacock Island in Potsdam we find among the white marble statues an image of Rachel, the celebrated French tragedienne, placed there in memory of her triumph over a monarch who had been by no means friendly disposed towards her. We mean Nicholas, emperor of Russia, whose dislike to her had been caused by her republican sympathies and turbulent sentiments, which he abhored, and on account of which he had prohibited her entrance into Russia; he is even known to have said that he wished never to have set eyes on her. This inclement verdict of the powerful monarch was no small stumbling block in the great tragedienne's way, for Russia is a mine of gold; foreign artists and many a Rachel and Patti of our days might relate wonderful, almost fabulous tales of costly gems raining down upon them on the stage amid the enthusiastic cheers of an enchanted audience.

Therefore, Mlle. Rachel was highly pleased when in the summer of 1852 she received an invitation to act before the court at Potsdam, where the Emperor Nicholas was just then staying as the king of Prussia's guest. The famous actress had been desired to recite several scenes from French plays, but neither in costume nor in company of other actors. She, therefore, arrived attired in black, the most costly lace covering her beautiful arms and shoulders; but the gentleman who, by the king's orders, was at the station to receive her, expressed his doubts whether the royal and imperial party would not object to so melancholy and mournful an apparel; and on reaching the palace the artiste was kindly invited by the late Princess Charles (sister to the Empress Augusta and wife of the emperor's brother) to wear a few gayer-looking things of her own. Such an offer could not be refused, and Mlle. Rachel appeared in the garden adorned with roses. On inquiring for the stage, she was told that there was none erected, and that she was expected to stand on a grass plot in front of the seats of her noble audience. This demand roused her quick temper, so that she was on the point of returning to Berlin, when her official attendant, the above-mentioned gentleman, pacified her by remarking that she would be on the same level with the audience; that her art would prove the greater for the want of any stage apparatus and (last, but not least) he reminded her of how much was at stake—an enormous honorarium and perhaps the repeal of that fatal interdiction. After a moment's hesitation and a struggle with herself, Mlle. Rachel took her cicerone's arm and suffered him to lead her to the spot destined for her performance.

The evening was lovely; the moon, half hidden behind a group of poplars, threw her silvery light on the pond and the gently murmuring fountain. A few torches and lights illuminated the face of the artiste, while the court sat in the shadow. Deep silence ensued upon her appearance—one could hear the crickets chirp—and then she began her orations. The listeners seemed spellbound, that was not human speech, it was music dropping from her lips. She was determined to be irresistible; and she succeeded so well that even the hitherto unfriendly emperor himself, won by her art, rose from his seat when she had ended, and meeting her half way, kissed her hand in presence of the assembled court, assuring her that henceforth she would be welcome in Russia.

What were the praises, flatteries and congratulations of the others who were crowding round the happy artiste, compared to the homage rendered to her by the mighty ruler of Europe's vastest country—the monarch from whom a sign ordered thousands of his subjects to be or not to be?

Thus was one of the greatest autocrats in Europe won over by the acting and elocution of—a woman.—[*Chamber's Journal.*

PAUPERISM AND EXTRAVAGANCE.—The case, *prima facie*, is always against a pauper. The accidents of life sometimes cast a man or a woman high and dry upon the sands of a helpless poverty; but usually pauperism comes through a lack of the prudential virtues. It is not always that a pauper wastes his revenues in drink, or other immoralities; but somewhere in his career, forty-nine times in fifty, it will be found that he has been extravagant; that he has not exercised self-denial under temptation; that he has lived up to or beyond his means, or has ventured upon risks that the lowest grade of business prudence would condemn. Now who is to bear the penalty of these sins and mistakes? How are they to be prevented in future, if those who commit them, regardless of consequences, are to be coddled and taken care of by those who have denied themselves and laid up a little wealth?—*Scribner's.*

MAGAZINES.

SCRIBNER FOR JANUARY.—The paper on Old Maryland Manners, by F. B. Mayer of Annapolis, is an interesting reproduction of the quaint and stately times of the Maryland Gazette, and of the Tuesday Club, to the whims and oddities of which considerable space is devoted. The Tile Club at Work, by W. F. Laffan, describes the methods of an association of artists and others, whose work speaks for itself in the illustrations, which include drawings by E. A. Abbey (a tiled mantelpiece), W. M. Chase, Hopkinson Smith, Winslow Homer, Alden Weir, Reinhart, Quartley, Wimbridge, Laffan and Paris, and a tile in relief by O'Donovan, the sculptor. A companion paper, The Tile Club at Play, is to appear in the Midwinter number, with a large variety of illustrations.

The serious side of the holiday season is touched upon by the longest contribution in the number, a paper on Leonardo da Vinci, by Clarence Cook, who considers his subject as both painter and mechanical inventor. Among the cuts are two important blocks by Cole: the well-known Last Supper, and the Head of Christ, supposed to be a study for its central figure. The Mona Lisa, by Henry Marsh, is considered to be one of the finest blocks. There is also a Christmas ballad, Biorn the Bold, by Constantina E. Brooks, with a large drawing by Mrs. Mary Hallock Foote, which opens the number. Other illustrated papers are The Mountain Lakes of California, by John Muir, author of The Wild Storm, Douglas Squirrel, etc., with drawings by Thomas Moran; and At the Old Bull's Head, by C. C. Buel, a picturesque description of the famous cattle and horse market of New York, with sketches by Kelly and Muhrman. Haworth's contains a humorous scene from the Brierley family and the plot is rapidly carried on.

Of the unillustrated matter there are two stories: Century Plants, by Miss Isabella T. Hopkins, light and fanciful; and Nion, by Miss Annie Porter, a pathetic story of New Orleans. The sixth installment of Boyesen's Falconberg; papers on College Hazing, by C. F. Thwing: and The Amendment to the Patent Law, by the Secretary of the Western R. R. Association; and Mr. Bayard Taylor's Epicedium, on the death of Bryant,—are also given. Other poetry is by R. R. Bowker, Amanda T. Jones, the late Richard Realf, and R. W. Gilder.

In his department, Dr. Holland discusses Religion in these Days, Art as a Steady Diet, and Popular Despotisms, Mrs. Oakey's Hints to Young Housekeepers are continued in Home and Society, the special topics being the engagement, treatment and duties of servants. Culture and Progress contains, besides the reviews, a paper on the Second Loan Exhibition, with suggestions of interest to those who may wish to organize similar projects in smaller cities. The World's Work department is especially interesting, and among the appliances described are a wonderful Machine for Measuring Plane Surfaces, a New Electric Lamp (others to be described hereafter), Hydraulic Fire-Escapes, New Insulated Telegraph Wire, etc., etc. Bric-a-Brac is fanciful, humorous and satirical.

DEMOREST'S MAGAZINE for January 1879 appears in a new dress, and wonderfully pretty and appropriate it is too. A full-page illustration in oil, entitled Something for Ou ornaments the first page; this is followed by a fac simile of an etching by P. P. Rubens. First steps (a full-page cut) and illustrations of fashions in costumes, jewelry and fancy caps, complete the pictorial part of the number. There are two serial stories and seven short ones. Then there are some interesting sketches about Higher Education and New Year in Japan. The Editorium has a word to say about Church Fairs, Etching, Making Home Pleasant, Country Kettledrums, A Few Words About Toys, Decorative Novelties, Afternoon Teas, New Year's Receptions, Winter Readings What Women are Doing. Then there are the Kitchen, under which head now and palatable recipes are given—and Domestic Science, where one may learn how to treat the various ailments which fall to the lot of mortals. All this is exclusive of the fashion intelligence which takes up over nine pages. The Women's Club and the Correspondents' Class afford the subscribers ample opportunity to exchange views and information.

SONG OF THE CAKES.

With features heated and red,
With head that throbs and aches,
A woman stands in passionate dread,
Turning buckwheat cakes.
Bake! bake! bake!
In autumn, winter and spring,
And still with a voice of tremulous quake,
She but of the cake doth sing.

Beat! beat! beat!
While the batter is foaming high,
And bake, bake, bake,
Till it seems our men must die!
It's oh! to eat the most
Along with the glutton and knave,
That woman may fizzle and toast,
And never a cake to save!

Bake, bake, bake,
Till the brain doth seem on fire:
Bake, bake, bake,
Till arm and nerve both tire!
Spread and turn and lift,
Lift and turn and spread,
Till over the whole as I work so deft
I seem to be dreaming or dead!

Oh, men with sisters dear!
Oh, men with mothers and wives!
It is not the cakes that disappear
As honey—minus hives!
Bake, bake, bake,
In kitchen furnace, and glow,
And still, in a voice of trembling quake,
We sing while spreading the dough.

[*Norristown Herald.*

GLEANINGS.

Scientific Reliance on Soap.—Dr. Richardson lectured recently in this city on the germ theory of disease. He acknowledged his obligation to Tyndall for his microscopic investigation on air, dust, spores, and other comforting and salutary topics. It is worth while for common people to learn that 50,000 typhus germs will thrive in the circumference of a pin head or a visible globule. It is worth while for them to note that these germs may be dessicated and be borne like thistle seeds, everywhere, and, like demoniacal possessions, may jump noiselessly down any throat. But there are certain things spores cannot stand, according to the latest ascertained results of science. A water temperature of 120° boils them to death, and soap chemically poisons them. Here sanitary and microscopic science come together. Spores thrive in low ground and under low conditions of life. For redemption, fly to hot water and soap, ye who live in danger of malarial poisoning. Hot water is sanitary. Soap is more sanitary. Fight typhus, small-pox, yellow fever with soap. Soap is a board of health.—*The Philadelphia Press.*

New York's Costly Buildings.—New York can boast of some buildings, bridges and other things that cost very handsome sums. The following are the most noted examples: The new Postoffice, designed by Mullett and built of Dix Island granite, cost about $7,000,000. The Brooklyn Bridge has cost a little over $9,000,000 up to date. When completed the total bill will be about $14,000,000, according to present estimates. The City Hall, with its marble front and brown-stone back, cost $500,000 at the beginning of the century, when labor was cheap and jobbery rare. Vanderbilt's Grand Central depot cost $2,250,000, but the approach to the depot, through the Fourth avenue viaduct and tunnels, cost six or seven millions, half paid by the Vanderbilts and half by the city. The Tribune tall tower is nine stories high, has a gin shop and a clock, cost about $600,000 and is mortgaged for $300,000, which is just about its present value. The Croton Water Works have cost between $25,000,000 and $30,000,000. The house that Mrs. A. T. Stewart lives in cost $2,000,000. The Custom House cost $1,800,000. The New York Life Insurance Company's building cost a round million. The Western Union Telegraph's building cost $2,300,000. The County Court House was originally estimated at $800,000, but owing to unforeseen circumstances, the expense was between twelve and fourteen millions, nearly six millions of which went for furniture, and three millions for plastering and painting.—*Boston Post.*

George Henry Lewes, the English author whose death is now noted, was without doubt chiefly known in this country as the husband of "George Eliot," but he had won a considerable reputation in literature before he had met that great woman. He was known as an essayist and biographer, and especially as a subtle philosopher of the positivist school; he had, besides, tried his hand at a tragedy, "The Noble Heart," and had twice published a novel, the results being "Ranthorpe" and "Rose, Blanche and Violet," the latter of which was before the public 30 years ago. His name as a student, and in some measure as a teacher, of philosophy is more than a respectable one; his "History of Philosphy from Thales to Comte," and his life of Goethe are sure of readers for years to come. He had also recently made some remarkable studies in physiology, and had published the first two volumes of "Problems of Life and Mind," designed to be a system of philosophy. He was founder of the Fortnightly Review, besides having been contributor to nearly every English review and several of the magazines. The relations of Mr. Lewes with Miss Marian Evans long attracted much attention and criticism. The facts are that his first wife proved unfaithful to him, and yet on her profession of penitence he had condoned her fault, when she again dishonored and deserted him. The condonation debarred him from procuring a divorce, but when his acquaintance with Miss Evans grew into mutual attachment, neither of them recognized any moral wrong in assuming the relations of husband and wife, and they accordingly did so. We believe they were married upon the death of the unworthy Mrs. Lewes. The companionship of the two has been helpful, but we believe they have suffered the severity of British social ostracism on account of it—*Springfield Republican.*

For Women.

CONDUCTED BY MISS FAITH RIPLEY.

CHRISTMAS.

Glory to God in the highest, and on earth, peace, good will toward men.

Wake! Wake! Wake! Do you hear them—
Bells pealing out on the wintry air?
Bells catching echoes from bells, and flinging
New echoes forth till the world is ringing,—
Ringing and echoing everywhere.

"Joy, joy, joy!" they are calling,
Lives shall respond to the vibrant chord,
Hearts catching echoes from hearts, repeating
Still through the world the angel greeting,
Welcome and welcome, new "year of our Lord."

—[*Anon.*

But while joy's echo falls
In gay and plenteous halls,
Let the poor and lowly share
The warmth, the sports, the fare:
For the one of humble lot
Must not shiver in his cot,
But claim a bounteous meed from wealth and pride.
Shed kindly blessings 'round
Till no aching heart be found,
Then all hail to merry Christmas tide!

—[*Eliza Cook.*

TALKS ON TIMELY TOPICS.—No. 9.

FEATHER TRIMMINGS AND MOLE-SKIN DECORATIONS.

ROSE GERANIUM.

If you covet feather trimmings and cannot have them upon any other terms, up and make them for yourselves!

A certain little matron I know has more than once been accused of extravagance. The truth, as she has confided it to me, goes far in evidence of her superior economy. Of course her little Dotty always is daintily dressed, but if mamma works it all out of her own brain and fingers, without affecting the tax-bills, need Mrs. Grundy be too severe?

Dotty's pretty, black straw walking hat fell under the last-named personage's observation a short time since.

"Just behold!" she exclaimed. "Mattie Dorris is the wife of a man struggling with a heavy mortgage upon his farm, and yonder goes Dotty with a dollar and a half's worth of feather-band around her hat. It looks in elegant taste, to be sure, but Dorris can't afford it!"

Mrs. Grundy was not at all in the secret; but the Black-Spanish, crowing patriarchs of the Dorris' fowl-yard know all about it, having been party several to deftly performed "clippings." A strip of foundation muslin, two inches wide, and a needle and thread, flying to the time of Mattie's happy humming, did the rest.

More than this,—a few yards of the same trimming, made possible by a judiciously-timed slaughter of market-birds, found grace in the eyes of the town milliner. The result was several dollars set down to the credit of the little home manufacturer.

An excellent pretense at marabout bordering, to hedge about your hoods and cloaks, may be devised from the soft black feathers of your turkeys.

"Black?"

Certainly! First bleach them white!

To accomplish this, wash them thoroughly in very strong, hot soap-suds, to remove all the oil they may contain. Next, place them in a bath of bi-chromate of potash and water, to which has been added a few drops of nitric acid. They will rapidly bleach and should be removed as soon as the process is finished and rinsed in clear water.

They are now ready to be dyed any delicate shade. Ten cents' worth of rose or slate dyes will color sufficient feathers to array your entire household.

Cut away the stiff portion of the quill and sew into bands with an inch-wide tape for foundation.

Appropriate feathers from your chickens may be shaped into perfect imitations of those jaunty little bird's wings which are so popular. If you manufacture them from these innocent resources you not only practice economy, but preserve for yourself "a conscience void of offense" against our much persecuted and harmless minstrels of the air!

Moles for Decorative Purposes.

I believe we are all agreed that it is but right and proper to kill moles. They are meddlesome; they are stealthy and dishonorable in the prosecution of their business, and they employ their capital in direct violation of that sentiment of the common law which directs that "no man"—nor mole—"shall use his property in such manner as to injure his neighbors."

Therefore, be it resolved, that moles shall be exterminated! As they will have no possible need of their skins afterward, you may as well use them. Likely as not they have been grown upon your hyacinth bulbs and apple tree roots. So don't spoil them! Get some dexterous mole-skinner to remove them for you. Stretch and tan them. I would here interlard a formula, but you will certainly find a score in the Rural New-Yorker, if you will but glance over the index.

When prepared, cut cross-wise, in bands adapted to your taste, purpose and the depot of supplies. Fasten the lengths together with delicate, overcast stitches. In applying to an article, sew the upper edge with heavy thread and a plain seam. Then turn over, stroke down and catch the lower edge with a few stitches underneath.

Around the collar and cuffs of your velvet jacket or your good, substantial winter suit these bands will look very lovely and soft. And, in addition, you will feel yourself to have done something practical in favor of agriculture! How very nice!

FOR WHOM THE BOOT FITS.

If you are one of the men who are always in the habit, about Christmas time, of making slurring remarks concerning women "taking their husbands' money to buy their Christmas presents," lest you may plead it don't fit you, and so not put it on, I will state explicitly, in the beginning, that it does; 'twas made for you specially, though, perhaps, not "to order." I tell you thus expressly, because I wish to "let no guilty man escape," and more men are guilty than would care to be found so "by a jury of their peers"—though it does not trouble them a particle that their wives know it, and suffer for it.

I happen to know all about the money that buys your Christmas present, sir, (which allow me to tell you, you don't deserve). I happen to know all about the little petty economies your estimable wife has practiced for the past year, with a view to purchasing it. I happen to know how she saved a penny here, and squeezed out two pence there, where you would never have dreamed of doing it. I happen to know the days when she even did her own washing (more fool she! say I), that she might have that dollar, or half dollar toward it. I happen to know how she walked, many a time, to save toward it the half dime, you probably wouldn't begrudge the railway company. I happen to know how she turned, and twisted, and contrived to make old do as well as new, that she might put that with the increasing amount of sacrifices. I happen to know how she laid awake nights, thinking, and planning where she could save the last needed dollar for the purchase. And, then, when the sum of all these self-denials, money that she should have spent for herself is lovingly expended in a Christmas present for you and proudly and trustingly brought for your acceptance, that you, who boast yourself a man, should ungratefully, meanly, taunt her of buying your presents with your money! I tell you, sir, that money is no more yours than if you never laid eyes or finger on it. It is just as much hers as if she had earned it by hard work—which she did—harder work than you ever think of doing. I'd like to see you pinch and scrimp to get your wife a Christmas present, or any other present the way she does to get your presents. I'd like to see you even give up your cigars, your occasional glass of—whatever you are in the habit of calling for—your games of billiards, and your lodges, to get your wife a present.

She has not one of these indulgences, and denies herself even necessaries for you sake, and then you sneer and accuse her of getting your present with "your money," and, worst of all, never dream but that you are a full-fledged man.

But, what if your wife did or should get you a present with money that you give her, out and out? though what would ever bring you to that astonishing state of generosity I don't believe she will ever know, from experience. So long as she gets you something you need, what if you do give her the money, I say? If you are so magnanimous would it hurt your mighty lordship, in your most vital part, your pocket, to allow her to delude herself and others with the belief that it really was her gift to you? It would be a pleasant delusion—one that she at least, would enjoy; but you can't let her cherish it. You must needs remind her, smilingly, that "you might just as well have got it yourself; she got it with your money!"

And, now, I want to ask you, sir, even granting for a moment that it is "your money," I want to ask you, sir, "Whose money should it be?"

Do you want your wife to buy your present with some other man's money? or, do you expect her, or want her to go to work and earn money from outsiders for it?

I tell you, my dear sir, there are more wives, to-day, who wish they could do that than you dream of in your shameful indifference. There are more women, to-day, wives of well-to-do men who envy the women who earn, independently, their livelihood, than would like to be found out. There are more women, to-day, who would gladly imitate the lawyer's wife—was it not?—who desperate for money that should have been freely given hung out the sign, "Washing and Ironing done here," with satisfactory results from her husband than would be brave enough to do it. There are more wives, to-day, who long, with intensest longing, for a single dollar they can call their own—a dollar in which their husbands, sir, want not "part or parcel," than there should be for the credit of husbands! Wives who work for their husbands and the children they have borne them, as only devoted wives can; and, many of them, women who knew what it was before marriage, to have money to spend as they pleased, to whom it comes all the harder to be told, "You bought it with my money."

The man who will say "my money" to his wife and mother of his children, who does for him and them as most wives and mothers do, is too contemptible to live; but if he must live, he'd never get a Christmas present, nor any other present, if he was my husband.

Gale Forest.

There! I happened to hear that as I was shutting the door, and just step back to inform you, that you needn't, "thank heaven you're not"—for I can beat you at that every time!—*Cincinnati Times.*

THE KINDLING WOOD.

J. E. M'C.

Almost every newspaper we take up has some sad story of a poor girl who lost her life trying to light a fire by the help of coal-oil. And most people who read the account exclaim against such stupidity in the face of so many warnings. But alas! the warnings come to you and me, and not to the poor girls who try the experiment. They know nothing of the news of the day, and probably could not read it if it was placed before them. It is a good plan for housekeepers to read such accounts in their kitchens, for the warning may be badly needed there, little as the housewife may suspect it. It is not the lamp-light alone that is responsible for the rapid lowering of the oil in our cans.

But these "accidents" call up quite a different line of thought in my mind. What straits the poor girls were doubtless reduced to for kindlings before they adopted this expedient! The fire must be had by fair means or foul. There are no paper or shavings provided, and coarse kindlings will not light with a match. But breakfast must be on the table in time or there will be trouble enough in the kitchen. What can a girl do but expedite the business by any method she can devise? The blame may lie farther back than is commonly supposed.

A few years ago, the papers contained the harrowing story of a domestic who took a handful of leaves from one book after another in her employer's library to light her kitchen fire from time to time. She supposed she was doing little harm, as "she seldom went twice to the same book." Everybody was suitably indignant and sympathized with the master; but does anyone suppose a girl would have taken that trouble if she had been provided with anything suitable for fire-building?

It is not city folks alone who are careless about these things. In the country where wood is cheap and abundant, the women-folks are often put to great trouble for nice, dry kindlings, cut sufficiently fine for this purpose. The wood is split coarse under the impression that it will last longer, with no shadow of regard to a housewife's convenience. If to hurry up the belated dinner a few kindlings are added, there is a great outcry from the boy who splits them. There ought to be a reform in some places on these matters. There should be at least equal parts of fine and coarse wood always in the wood-box, and never a stick of green split up to aggravate a good housekeeper's feelings, and put her work back for hours every day. A little forethought would save a great deal of wear and tear of mind, as well as of body.

MARRIED WOMEN'S RIGHTS IN THE MIDDLE STATES.

In New York a married woman has absolute control of her separate estate, and is entitled to demand a conveyance of any property held in trust for her, provided she has a fee simple estate in the same. She has a right to deposit money in a bank in her own name and draw out the same by check.

A will requires but two attesting witnesses.

In New Jersey, the separate property of the wife is not liable for the debts of her husband.

Wills must be signed in presence of two subscribing witnesses.

In Pennsylvania the separate property of any married woman, owned by her before marriage or which she has become the owner of after marriage, is free from any liability, except for her own debts, and then not until the creditor fails to obtain the amount of debt from the husband's estate. If, however, judgment is obtained against the husband for the wrongful act of the wife the creditor must first exhaust the wife's separate property before he can levy on the husband's.

Wills must be in writing and signed by the testator, or by some one at her request, and must be proved by two competent witnesses.

In Delaware the wife's property is liable for the debts of the husband, unless certain legal proceedings are taken to prevent such liability.

Wills must be in writing, signed either by the testator or by some one at her request, and must be proven by two subscribing witnesses.

Shall I not be forgiven for repeating good Fuller's words, even though they may jar a little upon some wedded ears? "Deceive not thyself by ever expecting happiness in the married state. Look not therein for contentment greater than God will give, or creature in this world can receive—viz., to be free from all inconveniences. Marriage is not like the hill Olympus, wholly clear, without clouds. Remember the nightingales, which sing only some months in the spring, but commonly are silent when they have hatched their eggs, as if their mirth were turned into a care for their young ones."

ENGLISH LAVENDER WATER.

Alcohol,	40 ounces
Essence of Millefleurs,	1 "
" Violet,	10 drachms
" Jasmine,	1 ounce
Extract of Musk,	1 "
Oil of Bergamot,	2 drachms
" Clove,	10 drops
" Rose,	20 "
" Lavender,	1 ounce

The widow of millionaire Ralston, the Californian who suicided a bankrupt, evidently has been turning money into time pretty fast since the death of her husband. A. J. Ralston, her brother-in-law, made application for the guardianship of the widow on the fifth of last August, and the 6th inst. had been fixed upon by the Court as the day upon which the case should be heard. Mrs. Ralston has received $176,000 since the millionaire's death, in August, 1875, and this sum has been cast out of her reach shekel by shekel. She has traveled in the most luxurious manner, and now resides at the Palace Hotel in San Francisco

A Cheap and Good Prepared Glue.—Dissolve common glue in cider vinegar as thick as may be wanted; as it becomes thick from time to time add vinegar.

Domestic Economy.

CONDUCTED BY EMILY MAPLE.

PEN THOUGHTS FROM EVERY-DAY HOUSE.

BY ANNIE L. JACK.

DAY AND EVENING WORK IN THE FALL.

THE head gardener is tired. He says there is no end to the work in the fall, if the ground keeps open. So he has been busy plowing the pear orchard, cutting down dead trees, which are handed over to the wood choppers to be prepared for firewood, as they usually contain a great number of borers. He has also been busy the past few days, with grape-vines, making countless cuttings which are tied in bunches, labeled and then buried a few inches below the ground. After frost comes, a little coarse straw and a board are considered safer protection than too much earth. Then there is the bed of spring-flowering bulbs. I hope none of my readers who love flowers—and who does not?—allows the spring to return without having, in autumn, made preparation for the first flowers that bloom. The richly perfumed Hyacinth succeeds the pale Snowdrops and the Yellow Crocus, while the jaunty Tulip flames upon the world in sudden beauty when we seem most in need of flowers. So we plant the beauties in in the autumn with faith in the future, and if they are given a slight protection, to prevent their being frost-thrown during a thaw, they will amply repay the trouble. In a garden there is always work to be done, and one is kept busy in spring preparation. So in life, were it not for hope in the future, the world would be dreary indeed.

In the household the work goes on as usual. Breakfast, however, is later as the mornings grow darker, and the evening chores are done and the lamps lighted before five o'clock, so that the greater part of our leisure is in the long evening. And in this, how much can be done for improvement! I do not believe in spending all the pleasant hours in a steady round of sewing and fancy-work to ruin bright eyes permanently, though part of the time may be employed in this way, but I would advise the young people of every household to take up some study and pursue it thoroughly. If there are several members with different tastes, let each take up his special pursuit in turn. If art is first, read Gilbert Hammerton's books, and enjoy them, if geology, let the student of that science read The Old Red Sand-stone of Hugh Miller or some of the recent publications, among which stand first in my mind those of our eminent Canadian geologist, Dr. Dawson. His works, "Nature and the Bible," "The Story of the Earth and Man," and "The Dawn of Life," all read like a continuous geological poem, though strictly practical in their honest convictions. Of works on botany, Professor Gray's stand first, and after one has mastered "How Plants Grow;"—there is a pretty little book called "How Plants Behave"—that is very charming. If while sitting by the evening lamp, our young people wish to learn a little of the history of many nations, let them read Collier's "Great Events of History," each reading a turn while the rest take notes, or ask questions at the close. In this and many other ways, the winter evenings will pass pleasantly and be eagerly looked forward to through the short stormy days. For "is not the life more than meat and the body than raiment?" and even in the domestic department of every-day life one loves to read, discuss and remember the sayings of the good and the great who have spent their lives in efforts to enlighten and improve mankind.

DOMESTIC RECIPES.

Broiled Chicken.

Split down the back, put into a steamer and steam one-half hour; wipe off the moisture, rub well with butter, dip into broad crumbs and broil over a clean fire until of a delicate brown on both sides. Season with pepper and salt.

MARY B.

Chicken Pudding.

Cut up a pair of young chickens, put them into a stewing-pan with enough water to cover, adding two tablespoonfuls of butter; pepper and salt to suit the taste; let stew gently until about half-cooked; then take out the chickens and let cool, pouring the gravy into a separate dish. Prepare a batter of a quart of milk, six well beaten eggs, a tablespoonful of baking powder, a little salt and sifted flour to mix to the proper thickness. Put a layer of chicken at the bottom of the pudding dish and pour over some of the batter, then another layer of chicken and more batter, and so on, having batter on top. Bake for one-half hour, or even longer, in a hot oven. Beat an egg into the gravy reserved, let it boil up and send to the table to be served with the pudding.

Chicken Cutlets.

Take the meat of cold roast chickens chopped very fine, a cup of gravy, four beaten eggs, two-thirds of a cup of bread-crumbs, pepper and salt to the taste. Put the gravy into a pan to heat and when hot add the meat and bread crumbs, then the eggs and seasoning; let thicken for two or three minutes, stirring constantly, pour out into a flat dish to cool. When stiff cut into little cakes and fry in lard to a delicate brown.

E. M. L.

Grilled Fowls.

Cut the remains of cold fowls into nice pieces; season with pepper and salt; squeeze over them the juice of a small lemon; let stand half an hour; dip the pieces into melted butter, and then into bread-crumbs. Put them on a gridiron and broil over a clear fire.

To Use up Cold Fowl.

Take the remains of a cold fowl chopped fine; cover the bottom of a pudding-dish with fine bread-crumbs; put in the chicken, seasoned with pepper and salt, pour over a half-teacupful of gravy, cover quite thickly with bread-crumbs, and then strew over bits of butter; cover and place in the oven for ten or fifteen minutes; take off the lid and break in enough eggs to cover the top; sprinkle pepper and salt over and bake until the eggs are well cooked.

AUNT KATY.

Omelet.

Allow two tablespoonfuls of milk to each egg; beat the yelks and whites separately; add a little salt; pour into a hot skillet, in which a piece of butter, the size of a walnut, has been melted. The skillet should be as hot as it can be without scorching the butter. As the omelet bubbles and rises, run a thin broad-bladed knife under every now and then that it may not burn; cook two or three minutes, or until the eggs set; fold over, shake the skillet, turn on to a hot plattor, and serve at once.

Custard.

Beat six yelks and four whites until very light; add a quart and a scant pint of rich milk; flavor and sweeten to taste; bake for one hour. Beat the reserved whites to a froth; add two tablespoonfuls of sugar, flavor, spread over the top of the custard and return to the oven to brown.

Pickled Eggs.

Boil the eggs until very hard; take off the shells; have prepared some nice spiced vinegar and pour hot over the eggs. The spice should be tied in a little muslin bag.

MRS. M. H.

Cayuga Co.

POULTRY NOTES.

STEAMING is preferable to boiling for tough fowls.

Remove the *threads* before sending roast fowls to the table.

In winter kill poultry three days to a week before cooking.

Poultry and game are less nutritious, but more digestible than other meats.

Singe with alcohol instead of paper—a teaspoonful is sufficient for either a turkey or chicken.

Remember, much of the skill of roasting poultry in the best manner depends upon basting faithfully.

To give roast birds a frothy appearance, dredge, just before they are done, with flour and baste liberally with melted butter.

When onions are added to stuffing, chop them so fine that in eating the mixture one does not detect their presence by biting into a piece.

Ladies doing their own marketing will do well to remember that young poultry may be told by the tip of the breast-bone being soft, and easily bent between the fingers, and when fresh by its bright full eye, pliant feet and soft moist skin.

To boil eggs properly, place them in a dish having a close cover; pour over *boiling* water; cover and set away from the fire for ten to fifteen minutes. Eggs cooked in this way are more delicate and digestible than when allowed to boil in the old way. The heat of the water cooks them slowly to a jelly-like consistency leaving the yelk harder than the white.

Poultry requires skillful carving. The requisites are grace of manner, ease in the performance, a sharp knife of medium size, a perfect knowledge of the position of joints and the most complete mode of dissecting. Etiquette teaches us that the carver retains his seat while carving, managing his hands and elbows artistically etc, etc. Common sense teaches that the carver has far better control over the platter while standing, is more at ease, the knife is less liable to slip, and with the majority of carvers the table-cloth is likely to escape with fewer soiled spots.

To bone a turkey or fowl: Cut through the skin down the center of the back; raise the flesh carefully on either side until the sockets of the wings and thighs are reached; next disjoint and bone, after which the whole of the body may be easily separated from the flesh and taken out entire, only the neck bones and merry-thought remaining. The fowl may be restored to its original form with a dressing of bread or forcemeat, or the legs and wings may be drawn inside of the body and the fowl, first flattened on a table, covered with forcemeat, rolled tight and bound with a tape. If necessary steam before roasting. To be served cold.

News of the Week.

Monday, Dec. 16th, 1878.

POLITICAL.

In Congress the event of the week has been Blaine's speech in support of an investigation into alleged Southern outrages against negro suffrage. It was well advertised in advance as designed to strike the key note of the Republican presidential champaign for 1880, and as a bold bid on the part of the orator for the position of their standard-bearer then. It was temperate, forcible and short. It referred to negro wrongs only indirectly, but dwelt mainly on the injustice done to the white voter of the North by the white voter of the South by depriving the colored man of his vote and thus doubling the value of his own. While 31 additional members of Congress had been assigned to the 11 ex-Confederate States on account of their 4,500,000 colored population enfranchised by the 14th and 15th amendments, he insisted that owing to frauds, these four and a half millions had as little to do with determining the elections as their remote kindred on the Gold Coast. Accordingly he advocated that so long as the South deprived some of its citizens of suffrage, the number of representatives from that quarter should be proportionately reduced; for otherwise in determining every national question the vote of the ex-Confederate soldier South, who fought to destroy the Union, would be twice as influential as the vote of the Union soldier North who fought to protect it. He entered largely into statistics, arranging the figures so as to convey forcibly the points he wished to make, and said well in 20 minutes what a less dexterous speaker would have said ill in six hours. Senator Thurman offered an amendment extending the inquiry to ballidozing in the North also, as well as the use of money in elections. This was agreed to and, after remarks by several other senators, the debate closed to be continued at intervals throughout the session.

Among the host of measures hitherto introduced into Congress, the most important or intesting are: resolutions passed by both Houses looking to the appointment of a joint Congressional Committee to consider the best means for preventing the spread of yellow fever. A bill to correct that probably fraudulent omission from an Appropriation Bill, just at the close of last session, of a clause providing for the Hot Springs reservation. Several measures to make silver dollars bankable, and redeemable at the Treasury in greenbacks, and also to redeem and suppress the trade dollar. The bill for the latter purpose secured a majority of 154 to 91; but as a majority of two-thirds would be required to pass it, it failed. A bill threatening to withdraw its circulation from any bank that should refuse to receive the legal-tender silver dollar on a par with gold and paper, received a majority of 150 against 80; but this also fell through owing to a lack of the requisite two-third majority. A bill was introduced by Mr. Page, of California, to reduce the Congressional representatives of South Carolina to two members, on account of "a large number of male citizens belonging to one party" having been by fraud and terrorism deprived of the rights secured to them under the Constitution. Of course, it was not expected that this would pass, but it gives an opportunity for ventilating the subject in the House, as Blaine's resolution does in the Senate. A much needed bill has also been introduced forbidding railroads from making unjust and arbitrary discriminations against "way" and in favor of "through" freight.

When Kellogg was admitted to the Senate, Eaton, of Connecticut, gave notice that on the 4th of March, 1879, he would move to declare Kellogg's seat vacant. "A prominent democratic senator" is now quoted as saying that "Kellogg will not remain a minute longer, after March 4, than it will take to turn him out." Senator Conkling, it is said, will insist upon an adverse report from his committee on the New York nominations and ask the Senate to reject them on precisely the same grounds as he urged last session. These friends also represent the senator as confident that he will be able to secure prompt action in accordance with his wishes.

MISCELLANEOUS.

Storms of extreme severity during the week have done an incalculable amount of damage in the Eastern and Middle States, and unfortunately farmers have been the greatest sufferers. Wade Hampton of S. C., who was injured by a fall from his mule some weeks since has been in a very precarious condition during the last few days. His leg was amputated, last week, about the time he was elected U. S. Senator almost unanimously, and since then his life has been in danger. This morning's telegram, however, says that though still exteremely feeble, all indications are of a favorable nature.

During the past week there has been no little excitement among the grain operators of Chicago due to the arrival among them or Jim Keene, the redoubtable stock manipulator of California and New York. His avowed object is to put wheat up from 85c. to $1 a bushel and he has started to do so by buying in one or two million dollars' worth for cash, and he has at least three million more dollars to invest in the same way. He says that wheat is worth fully a dollar a bushel in the Western metropolis, that he has a lot of spare change, is backed up heavily by New York friends and that he is resolved to put all his disposable cash into wheat, being fully confident that the price must go up in spring. Some say he intends to attempt a corner in wheat, others say he is acting in the interest of the Erie railroad, over which he will ship all his purchases at a low rate, after navigation opens in spring. There seems to be too much grain in the market for one man to handle; but inasmuch as his speculations tend to raise the price of wheat, farmers will not be sorry.

FOREIGN.

In England business of all kind is extremely dull. Wheat and flour are both low and sinking in price; and although this is a disadvantage to the farmer there and here, still it gives cheap bread to the working classes generally, who, with a hard winter, scanty employment and poor pay, find their lot at best a hard one. In the agricultural districts, the farmers are attempting to cut down the wages of the laborers to about the same starvation prices paid a few years ago, before the agitation begun by Arch and others led to an advance. Strikes are therefore threatened in many counties, and it is believed that not a few of the men will seek a better chance in other lands. The number of agricultural laborers is now hardly enough, and is fast diminishing by emigration mainly to Australia and New Zealand, but also to Canada, this country and South Africa—the Cape of Good Hope, Natal, etc. The general distress has been increased by another great bank failure—that of the West of England and South Wales Bank, together with its forty-two branches. The debts of the institution are over $17,500,000; its assets are reported to be amply able to cover its liabilities, but as they could not be promply collected, the bank had to suspend. Great hardship and consternation have thus been caused throughout South Wales, and not a little distrust and dread everywhere. The shareholders number 2,000 and their personal liability to pay the debts of the institution is unlimited.

Meanwhile party bitterness is constantly being aggravated. Gladstone and his followers are inveighing so violently against the Administration that many of the Liberals decline to indorse them. Most of the accounts of public sentiment sent to this country by correspondents are naturally tinged by republican proclivities, and therefore unduly favorable to the Liberals, but the temporary unpopularity of most of these in the country is shown by the fact that the Times and many more of their own organs have "gone back" on them, while the motion of censure against the Ministry they introduced into Parliament last week, has been defeated by a vote of 328 against 227. So strong does Beaconsfield feel himself in public favor that it is considered probable he will dissolve the present House of Commons so as to cause a fresh election of members, in the expectation of thus securing a still larger number of adherents. The course of events of late seems to be decidedly in favor of his policy. Some months ago it was thought highly probable that the treaty of Berlin would be a failure, and that war would be resumed in the spring. Now, however, all indications point to its observance by all parties. A new Ministry favorable to a strict compliance with its terms, has just been inaugurated at Constantinople. A definite treaty, supplementary to those of San Stefano and Berlin, is said to be in a fair way of satisfactory completion between the Czar and the Sultan. Austria has occupied and quieted Bosnia and Herzegovina, and the movement has just been indorsed by the formerly discontented Hungarian Parliament which has just voted 20,000 roubles towards paying the cost of the expedition. The other disturbances which lately threatened a renewal of the conflict in the war-harrassed country, are gradually abating, either on the approach of winter to be renewed in spring, or because they were merely the result of the turmoil that always remains for some time after a storm. A peace here would be greatly to the credit of Beatonsfield's policy. Out in Afghanistan, too, success after success has hitherto attended the British arms.

The three divisions of the army have each been hitherto successful in advancing through the gorges in the mountain range dividing India from Afghanistan, and on the approach of spring, if not sooner, will take possession of the country. The Ameer is already reported to have fled to Turkistan, many of his turbulent tribes have already joined the British, others are reported to be in rebellion, and a protracted war is deemed impossible. England's real difficulties there, so say the wiseacres, will begin when she attempts to dispose of the country when the war is over. There is a probably groundless report that she will divide it with Russia. Emperor William of Germany has returned to Berlin and resumed the reins of government, temporarily confided to the Crown Prince. Much popular rejoicing and probably some royal apprehension. Severe measures against socialists and all that class, are being vigorously enforced throughout Germany. Great numbers of known adherents of such political creeds are banished, and not a few imprisoned. A mysterious conspiracy of European extent is said to have been discovered, the members of which are styled King-killers—a name indicative of the object they have in view as the first step towards the millenium. Alexander of Russia, either as a first step towards inaugurating a constitutional government in his vast dominions, or to lessen his own responsibilities, is said to be about to appoint a Ministry whose members shall be collectively responsible for the administration of the government. Italy is agitated by the necessity for another change of Cabinet, a very frequent necessity in that unstable country. The Princess Alice, third child of Queen Victoria, and grand duchess of Hessedramsdt, died of diptheria at 7 o'clock on Saturday morning at Dramsdt in Germany.

The first shipment of American horses for the use of the French army arrived at Havre upwards of a week ago, and gave great satisfaction to the military inspectors. Very heavy importations of American wheat are also being made into France this year—an unusual circumstance, as France generally is an exporter of that cereal. Corn, too, is finding a good market there, and the exports of it to other European countries, also, are much larger this season than heretofore.

HERMAN.

PUBLISHER'S NOTICES.

OUR readers are requested to read the following before making up their orders for seeds:

Any ten of the following require a one-cent postage stamp:—that is ONE *cent* for the ten, not for each.

The Voorhis Water-melon.
Acme Tomato.
New Bronze Ricinus.
Hibiscus moschentos.
Callicarpa Americana.
Hibiscus Syriacus (mostly from double-flowering seedlings), "Rose of Sharon."
Welgela.
Chater's Lemon Hollyhock.
Deutzia crenata fl. pl.
Hibiscus militaris.
Eryngium Leavenworthii.
Geranium sanguineum.
Yucca filamentosa.
Vitis heterophylla.
Rural hybrid Aquilegia.
Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance Wheat are included, a two-cent extra stamp.

We request that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense. For particulars, send stamp for RURAL of Nov. 9.

WE are constantly hearing of some new and wonderful invention or discovery, such as the Telephone, Phonograph, Electric Light, &c., which tends to revolutionize all the old-fashioned ideas of what is what. The principal drawback to the use of these new appliances has been the considerable outlay necessary for their introduction; but this difficulty as regards the Telephone has been satisfactorily overcome. A Boston firm has succeeded in producing an instrument that works one mile, which they are able to sell for $3 complete. A description of the invention will be found in our advertising columns.

Coughs and Colds are often overlooked. A continuance for any length of time causes irritation of the Lungs or some chronic Throat Disease. "*Brown's Bronchial Troches*" are an effctual COUGH REMEDY.

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Dec. 14, 1878.

BEANS AND PEAS.—Medium and marrow beans are weak in the absence of steady business. The few sales are restricted to choice qualities of those two grades, and prices are 2½@c. off. Pea beans have no decided outlet; many former eastern buyers are receiving stock direct from growing districts. White kidney not in heavy supply, prices steady. Red kidney hold all of their recent firmness and extra even, deep-colored new quoted $2.20. Black beans in fair demand. Green peas steady at $1.25@1.30; Canadian field, in bulk and bond, 70@75c.; medium to choice: Southern B. E. peas held higher after recent fair sales; $2.75@2.80 per 2-bushel bag. Medium beans, prime, $1.60; fair to good, $1.45@1.50; Marrow, free to ship, $1.65@1.70; fair to good, $1.50@1.55; pea, $1.50@1.75; white kidney, $1.80@2.00; Red do., $1.90@2.20; Black, $1.90@2.25.

Receipts of beans for week, 15,632 bushels; exports, 1,459 bbls.

BUTTER.—This as well as a good many items has had a poor show for business during the past week. A severe rain-storm Monday and Tuesday kept buyers away, and very little sharp trade can be noted. Western creamery begins to show its superior winter body compared with State, and is quoted highest. English shippers are opening some trade, but want easy rates, and they should have full play in the stored surplus that will never do any better than now. We note a continental inquiry for wholesale parcels of fine butter. State dairies quoted as before; 20c. asked and 19c. accepted. Choice half tubs, Welsh tubs and perfect Western dairy are not overplenty—in fact, there is a noticeable disparity in the yield of fine fall compared with former seasons—and prices are firm. Rolls have still a low range: the trade neglects them when quality is unattractive. Special care should be taken to avoid mixing old with fresh. Cloth-wrapped half-bbls. meet most favor latterly.

State, full dairies, special, 20c.; other, 16@19c.; firkin dairies, fair to prime, 13@18c.; Welsh dairies, fine full, 18@19c.; choice dairy, pails and half tubs, 22@23c.; fair to prime do., 19@21c.; choice Welsh, 21@22c. fair to prime, 13@17c. Choice creamery 23@26c.; other, 22@24c.; sweet cream, 24@26c. Best Western creamery, 26@27c.; other, 20@24c.; early packed creamery, 17@20c.; poor State 10@12c.; Western dairy, fine fresh, 18@18c.; fair to good, 10@14c.; factory, choice, 13@14c.; other, 6@12c.; rolls, 10@15c.

Receipts for week, 24,892 pkgs. Exports, 4,089 do.

CHEESE.—Exporters are drawing steadily upon the stock of strictly fancy, which is getting rather scarce, and is easily made; the newer grade is about 8½c., and fine stock can be had at 8@8¼c Outside of the call for special lots there is a meagre showing of business and prices tending easier.

Quotations are: 8¼@8c. for fancy; 8@8¼c. for fine lots; 7@8c. for good and prime; 6@7c. for fair to good; 4@5c. for skimmed. Slate, farm dairy at 8¼@8½c. for good to choice; 7@8c. for good to prime. Wisconsin factory, fine to fancy, 8¼@8½c.; do. good to prime, 7@8¼c.; do. fair to good, 6@7c. Western factory, fine and fancy, 7¾@8¼c.; good and prime, 6@7c.

Gold closes at 100¾.

Liverpool cable 458.; lower.

DRIED FRUITS.—There has been a moderate export movement in Ohio quarters, but other quartered lots are neglected, the better grades of sliced have a fair inquiry. Peeled peaches of choice quality are in demand, and hold well up in price. Blackberries are easy; other small fruits favor sellers.

Southern plums at 13¼@14c.; State plums, 15@15½c.; Blackberries are quoted at 5½c. Peaches—Peeled Georgia, at 6@7c. for poor; 8@c. for fair to good; 10@10½c. for prime; choice North Carolina, 11½@12½c.; good do., 8@10c.; unpeeled halves, 3@3½c.; quarters, 3@3½c. Pitted cherries, 22@23c. Apples—Old State quarters, 2¼@3c. New apples, 2¼@3c. for southern quarters in bbls.; 4@5c. for prime sliced, State at 4@5c. for new sliced; and 3@3¼c. for quarters; western at 2¾@3½c. for new quarters. Raspberries, 30c.

Exports, past week, 1,327 bbls. dried apples.

EGGS.—Supplies are not pressing, and quatations are firm for all fresh and good lined. Near points 27@28c.; State and Penn., 25@25½c.; Western, 25c.; Southern, 24@25c.; Canadian, 22@23c.; off quality, fresh, 20c. Limed, choice, 16@17c.; good, 14@15c.; other, 12@13c.

Receipts for the week, 4,487 bbls.; do. last week, 5,789 do.

FRESH FRUITS.—Apples are off 12@25c. per bbl. for the high grades, but dealers are benefited by a more active local trade. Stocks abroad are up, usually large, but shippers are still adding to them, feeling it to be a safe way of relieving the home market. Choice red, $2, prime retailing $1.50; common to good winter including Greenings, $1.12@1.37; Newtown pippins $3@3.50; Lady apples, half bbl., $2@4. Florida oranges active at late prices, the market is full of foreign. Standard boxes, 12x12x27 inches, $2.50@4; bbls., $6@7. Cranberries hold the late advance with a good general call. Fancy bbls. (Capes), $8; good to choice, $7@8.50; other, $5@6; N. J. crates, extra, $2.50; other, $1.75@2. Catawba grapes not in quotable supply. Chestnuts slow; quality now poor; prime, $4@3.50. Hickory nuts, shellbarks, $2.50; B. Walnuts and Butternuts, 50c. bush. Peanuts sell freely at old ruling prices. Hand-picked Va., $1.15@1.20; other, 85c.@1.05; shelled, 4¾@5¾c.; Pecans, 12@16c.

Exports, past week, 8,926 bbls.

FLOUR.—Most of the week buyers have had the advantage on a declining wheat market and full supplies, but towards the close more activity prevails and there is more confidence as to prices.

Latest prices are: $3.15@3.65 for inferior to fancy superfine State; $3.70@4.00 for very poor to very good extra do., odd lots and lines; $4.00@4.25 for good to very choice do., and fancy lots above this; $3.15@3.65 for inferior to fancy superfine Indiana, Iowa, Michigan, &c.; $3.60@4.00 for very poor to very good shipping extra do. and $4.00@4.25 for good to very choice extra do.; common to about choice white wheat extras, $4.20@5.10; choice to strictly fancy do. at $5.10@5.85; red and amber winter wheat, very inferior to very choice trade and family $4.10@5.75; round hoop Ohio at $3.90@4.25, and trade and family brands of do. at $4.35@5.75, the latter rate for very choice; St. Louis, $4.15@4.85 for very poor to good extra, and $4.85@5.75 for good to choice; Minnesota clear, very inferior to very choice at $3.85@5.15; few brands going above $4.75; Minnesota "straight," inferior to very choice at $4.65@5.75; and patent fair to strictly fancy at $5.25@8.25, few brands going above $7.50; unsound stock at from $3.00@4.75; city mill extra at $4.90@5.10 for West Indies (the latter rate in new packages); do. for England, $3.75@3.90; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@6.60 for fair to very choice; No. 2 at $2.30@3.00 for very inferior to very choice.

CORN MEAL.—Sales are at $2.15@2.65 for yellow Western and $2.85 for Brandywine.

HAY AND STRAW.—There are lighter receipts, and the demand having improved prices are steadier.

Sales at 35@40c. for shipping, and 65@70c. for retail qualities. Straw quoted at 35@45c. for long rye, and 25@30c. for short rye, and oat at 35@40c.

Exports past week, 1,419 bales.

GRIAN.—Wheat has been lower on account of declining English markets and a sluggish export demand, but towards the close there is a slight reaction and an improved outward movement. Corn is in freer export demand and prices closed a trifle better. Rye is easier and in freer demand.

Latest sales of wheat are of No. 2 amber at $1.05@1.05½; No. 1 amber at $1.08; ungraded red at 97½c.@1.07½; No. 3 red at $1.02½@1.03; No. 2 red at $1.07½@1.08; No. 1 red at $1.08@1.08½; ungraded spring at 83½@92c.; white Canada, in bond, at $1.04@1.08½; ungraded white at $1.06@1.10½; No. 2 white, steamer grade, at $1.03½; No. 1 white at $1.08@1.09½; white State at $1.00@1.10½; extra white at $1.10½@1.11; New York No. 2 spring, January option, at 97c.; No. 2 amber, December option, at $1.05½@1.05½; do. January option, $1.06½@1.06½; No. 2 red, December option, at $1.07½@1.08; do. January option, at $1.09; do. February option, at $1.11; extra white, delivery January 20 to 27, at $1.12. Rye at 58@59c. for No. 2 Western and 60c. for State. Corn at 45@45½c. for steamer mixed; New York No. 2 at 47½@47c.; New York No. 3 at 42½@43½c.; ungraded mixed at 45@47½c.; yellow Western at 47c. for new; yellow Southern at 45c. for track lots or new; yellow white at 47c.; yellow Jersey new at 45@45½c.; New York No. 2 white at 47c.; steamer white at 45c., and round yellow at 46@47c. for new; No. 2, December option, at 47½c.; do. January option, at 47¾c.; steamer mixed, December option, at 45½c.; do. January option, at 45¾c.; do. February option, at 45½c. Oats at 31c. for New York No. 1; New York No. 2 at 30@30½c.; New York No. 2 white at 33½c.; New York No. 3 at 29½c.; New York No. 3 white at 32c.; white Western at 31@35c.; mixed do. at 30@31c.; white State at 32½@36½c.; mixed do. at 31c.; No. 2 Chicago quoted at 31c.; New York extra white quoted 39c.; New York No. 1 white at 34@34½c. Barley. State, 6-rowed, 90@$1; 2-rowed, 75@80c.; Canadian, 65c.@$1.25; malt, $1@1.25.

POULTRY AND GAME.—Live has only a chance sale at easy prices. An order for 5,000 head for Cuba is being filled. Turkeys, fowls and chickens rate 8@9c.; roosters, 4@5c.; ducks, choice, 65@80c.; other, 45@55c.; N. J. Geese, $125@1.50; Western, $1.12@1.25.

Dressed poultry has almost lost a week, the weather has been bad and purchases very light. There is, however, no material surplus, and the weather at the close allows fresh receipts to turn out in good condition. Prices are low and cannot improve much while open weather prevails. If indeed they work above the quotations that have been made this season. Supplies at the moment are somewhat mixed in quality, hence the very low figures.

Dry picked turkeys, 12@13c.; prime scalded, 11@12c.; fair, 9@10c.; common, 7@8c. Chickens and fowls, dry picked, 13c.; common to good scalded, 8@10c. Ducks, choice, 12@13c.; other, 9@12c. Geese range, 7@10½c.

Game is in good demand at reasonable prices for the bulk of items. Extra canvas-backs are high. An odd lot of Missouri flight pigeons sold at 40c. doz., not wanted.

Quail, doz., $1.12@1.37; Grouse, trapped, pair 75@80c.; drawn, 50c.; Partridges, State, 80@85c.; other, 50@70c.; canvas-back Ducks, Havre de Grace, $2.25@2.50 pair; Western, $1.50@2; red head, 75c.@$1.25; Mallard, 60c.; Teal, 40@45c.; common, 25@35c.; Hares, 30@40c.; Rabbits, 25@30c.; Venison, short saddles, 11@13c.; long do., 10@11c.; whole deer, 7@8c.

PROVISIONS.—Hog products generally have been at easy prices and taken to a fair extent by exporters.

Mess pork quoted at $7.25@7.75 for job lots, as to quality; $7.25 for December; $8.70 for new for January; $8.70 for February and $8.75@8.80 for March. Bacon at 4½c. for long clear and 4¾c. for short clear. Stearine at 6¾. for Western. Tallow at $6¾@6 11-16 for prime. Lard—Western steam at $5 90@5.97½ for spot lots; $5.92½@5.95 for December; 5.95@5.97½ for January; $6.05 bid for February, and $6.12½ bid for March. Beef Hams at $14.50@15. Beef—Extra Inoia mess, $20.50@21.50 for city brands; do. Philadelphia, $19@19.50; packet at $11@11.50; plain mess at $9.50@10; extra mess at $10.50@11.50.

SEED.—Clover is in moderate demand; quoted at 6¼@6¾c. for prime to 6¾@7c. for choice. Timothy at $1.25 for prime. Flax seed at $1.40.

TOBACCO.—There is a fair local trade demand, but export movement moderate; prices are steadily held.

VEGETABLES.—Potatoes drag and there is a general disposition to shade prices for all stock. Onions easier. Pumpkins scarce and higher; other truck as before.

Nova Scotia E. Rose, bulk, $2.62@2.75 ₱ bbl.; Prolific and Chili red, $2.25@2.50; P. E. I. Jackson whites, $2; Mercers, $1.75@2; Eastern E. Rose, with bbl., $2.25@2.37; State, $2.50; fair to good, $2@2.37; do. Peach Blow, choice, $2.50@2.75; common, $2@2.25; Peerless, choice, $2.37@2.50; poor to good, $2@2.25. Sweet potatoes, Del., $2@2.50; Va., $1.50@1.75, which is higher. Onions steady. White, $1.50@2; red and yellow, $1.75; Chester, $1.25@1.62. Hubbard and marrow squash, $1.75@2. Cabbage, $4@6 per 100. Cauliflower, bbl., $1.50@3. R. Turnips, 75@87c. Beets, 75c. Carrots, 75c.@$1. Pumpkins, 100, $6@10 Celery, 75@90c. doz.

Exports, potatoes, past week, 4,710 bbls.; onions, 320.

WOOL.—Trade has been more moderate this week on account of the approach to the close of the year, when there is always a disinclination among manufacturers to carry material supplies. Prices have not varied, and they are generally steadily held.

Quotations are for Domestic Fleeces: Ohio, Pennsylvania and West Virginia—XXX and picklock, 37@38c.; XX, —@35; X, 34@35c.; No. 1, 33@37c.; No. 2, 32@35c; coarse, 28@31c; combing, 36@40c.

New York, Michigan, and Wisconsin, XX, 31@33c.; X, 30@33c.; No. 1, 32@35c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 3?@40c.

Indiana, Kentucky and Tennessee—XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 31@33c.; course, 27@30c.; combing, 38@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 30@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@30c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS

Saturday, Dec 14, 1878.

BEEVES.—Receipts for the week, 9,477 head; do. last week, 8,900 do. No essential change can be noted at J. C. since Wednesday. Supply not excessive. At 60th street quotations were ½c. lower in the bulk of transactions compared with Wednesday last. Poor cattle 7@7½c. dress 54 lbs.; fair to prime, 7½@9½c.; tips, 9¾@10c., bulk of sales 8@9c. dress 56 lbs.

COWS AND CALVES.—The market is running in its ordinary tame winter limits. Slow sales at $40@60 per head. Selections $75. Receipts large.

VEAL CALVES.—Live milch have ruled steady and firm, 7c. for both State and N. J. choice, Fair to good, 5½@6c., including heavy weight; fed calves, 4@5c.; grassers, 2¾@3¾c. Hay dressed, 8@10c.

SHEEP AND LAMBS.—Receipts for the week, 23,709 head; do. last week, 20,336 do. The demand is good, quality of sheep improved. Canada is sending some extra heavy aboard in bond. Two car loads of extra wethers held at 6c., average 200 lbs. Market sheep quoted 4¾@5¾c. Lambs 4¾@5¾c.

SWINE.—Receipts for the week, 50,138 head; do., last week, 44,446 do. Market dull. Weather has been bad for handling dressed: closing rates $2.90@3.15 per 100 lbs., mid. to good corn, Country pork, light, 4¾@4¾c.; medium 4@4¼c.; heavy 3¾@3¾c, city dressed 3¾@4c.

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SPECIAL NOTICES.

A SUCCESSFUL PAPER.—The YOUTH'S COMPANION of Boston is one of the most entertaining sheets in the coutry. It has twice the circulation of any similar publication, and unquestionably merits its success.

Electric Belts, &c., are manufactured by the PULVERMACHER GALVANIC CO., Cincinnati, O.

New Advertisements.

HURON LIVE STOCK ASSOCIATION
ANNUAL SALE.

The Second Annual Sale, under the auspices of the Huron Live Stock Association, for the disposal of

THORO-BRED AND IMPROVED STOCK,

Such as STALLIONS, BREEDING MARES, BULLS, COWS, SHEEP and SWINE, will be held in the

TOWN OF EXETER,

COUNTY OF HURON, ONT., CANADA, ON

WEDNESDAY, FEBRUARY 12, 1879,

Commencing at 12 o'clock, sharp.

If sufficient stock is offered the sale will be continued the second day.

All entries for the sale must be made with the Secretary, not later than January 1st, 1879. Only such entries as are then made will appear in the sale catalogue.

ENTRANCE FEES.—For each Stallion, $2; for each Mare, Bull or Cow, $1; for each Sheep or Pig, 25 cents. The entrance fee in all cases to accompany the entry.

TERMS OF SALE.—Nine months' credit will be given on furnishing security satisfactory to the owner of the animal sold. A discount at the rate of 8 per cent. per annum will be allowed for cash.

All parties entering animals for sale must consider themselves bound by these terms.

One per cent. will be charged by the Association on all animals sold.

M. Y. McLEAN, Seaforth Ont., Secretary.
W. HODGSON, Exeter, Ont., President.

Send 10 Cents for a Sample Copy of the

American Bee Journal,

The Oldest, Largest and Best Bee Paper.

THOMAS G. NEWMAN & SON, CHICAGO.

HIGH-CLASS POULTRY.

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GEO. S. JOSSELYN, Fredonia, N. Y.

Portable Farm Engines

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LIGHT BREAD,

Biscuit, Rolls, Cake and Pastry.

It is Better and Healthier than ordinary Baking Powder, Cream Tartar or Yeast.

The cost of raising Bread, Biscuit, &c., with it is only about half as much as by ordinary Baking Powder, and the result is much better.

It restores the nutritious elements which are taken from the flour in bolting. No ordinary Baking Powder or anything else used for raising bread does this.

Universally used and recommended by prominent Physicians.

If you cannot get it of your Grocer send a three-cent stamp to the manufacturers for a sample.

Manufactured according to the directions of Prof. E. N. Horsford, by the Rumford Chemical Works, Providence, R. I.

A GREAT OFFER FOR

HOLIDAYS!!!

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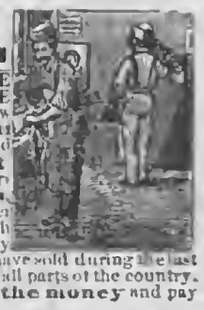

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Reading for the Young.

THE CHEMISTRY OF METALS.—Continued.

W. H. WALENN.

As we approach to the purely chemical experiments, it is necessary to sound a short prelude, especially as in the proposed method of treating the subject it is not intended to sacrifice important and interesting experiments to a fancied difficulty or danger in trying them. The way to surmount difficulties is not to avoid them, and this is quite as true in experimental chemistry as in any other department of learning. The true way to surmount a difficulty is to encounter it, and by a careful study of its peculiarities as they arise, to strip it of its ugly and intractable appearance, thence, by perseverance, to overcome it and to produce a perfect success. It is weakness to be satisfied with a partial success—the true inventor is always the most difficult to please; the test of devotion to a cause is the perfection of the result obtained. Be careful also to fully understand the subject before engaging practically in it. In trying each experiment, the whole of the account of the experiment herein detailed (and of its and peculiarities, whether set forth before or after the experiment itself), should be thoroughly read and understood, and the apparatus and materials collected before beginning to work; strict adherence should be given to the instructions. No chemical experiment, however simple, should be tried in the drawing-room (if the integrity of the carpet is to be preserved), except by a practiced hand; and he sometimes meets with a mishap. If it is required to produce some "show experiments" to friends, they should be well rehearsed in private with the same apparatus and assistance that are to be ultimately used. In any case it is well to have assistance, and a senior friend is to be preferred. An uncarpeted floor and a clean wooden table, together with cloths, plenty of water, and clean apparatus are very helpful accessories. When a spirit-lamp is used, it must be filled, at a distance from any light or fire, with spirits or wine or with wood naptha. Poisons should be marked with the word Poison in large letters; and every bottle or other receptacle, should be properly labeled. Stoppered bottles should be used for highly acid or alkaline substances, and for volatile bodies. The complete adoption of attention to direction, cleanliness of materials, and apparatus, and of activity of handling, will insure success.

The two following experiments show the tarnishing, or "oxidation," of copper—that is to say, its union with oxygen when exposed to circumstances favorable for that result to take place:—

EXPERIMENT 1. — Copper does not rust, as iron does, when exposed to the action of the weather. It slowly tarnishes. If, however, a penny (of earlier date than 1859), or other piece of pure copper be held in a flame by a pair of pincers, the films that successively form upon its surface appear of various and beautiful colors, which change with the thickness of the film, and the heat of the coin. The best flame for this purpose is the flame of a spirit lamp, as it burns without depositing soot or carbon upon anything held in it.

The air is chiefly composed of two gases, one—oxygen—that will unite with metals. All chemical union is promoted by heat; when the coin is held in the flame, the oxygen of air unites itself in various but definite proportions with the copper, and forms "oxides" of copper of various tints; this it could not do at the ordinary temperature.

EPPERIMENT 2.—If the polished coin (cleansed from grease by boiling in a solution of common washing soda) be boiled in a little water (about a wineglassful), to which four or five drops of nitric acid have been added, its surface will be covered with a brown "oxide" upon its being taken out of the water and allowed to dry in the air. This process is sometimes employed to give the metal a bronze-like appearance.

In this case the oxygen comes from the liquid. The following experiments show how the metal can be dissolved, or obtained in solution:—

EXPERIMENT 3.—At the bottom of a test tube, or a tall, narrow glass, like a champagne glass, place some clean turnings of copper, and pour a small quantity of strong nitric acid upon them. Powerful action will immediately take place, and the tube will soon be filled with a red gas, evolved from the nitric acid during the solution of the copper. In a few minutes the action will cease, the copper will have disappeared, and the liquid will be of a fine green tint. "Nitrate of copper," or "cupric nitrate" is in solution; if the tube be allowed to remain quiet in a cold place for a few days, blue crystals of cupric nitrate will be deposited.

The red gas is very poisonous, and care should be taken not to breathe it. The gas will cause a lighted taper to burn brilliantly, if it is immersed therein. Nitric acid is the most powerful acid known, therefore great care must be taken, when pouring it, not to let any of it drop upon the skin or clothes. It corrodes the skin, turning it of a yellow color, and dyes the clothes (especially if black) a bright red. It is well to wash the stoppered mouth of the bottle thoroughly with water after having poured out any acid. In adding nitric acid to the copper turnings, the face should be kept away from the red fumes, so as to avoid breathing them; a small cup inverted over the tall, narrow glass, as soon as the acid is added to the copper, confines the gas, so that its color may most distinctly be observed, and affords the means and opportunity of safely taking the apparatus to the chimney or the window-sill, so as not to fill the apartment with the gaseous fumes.

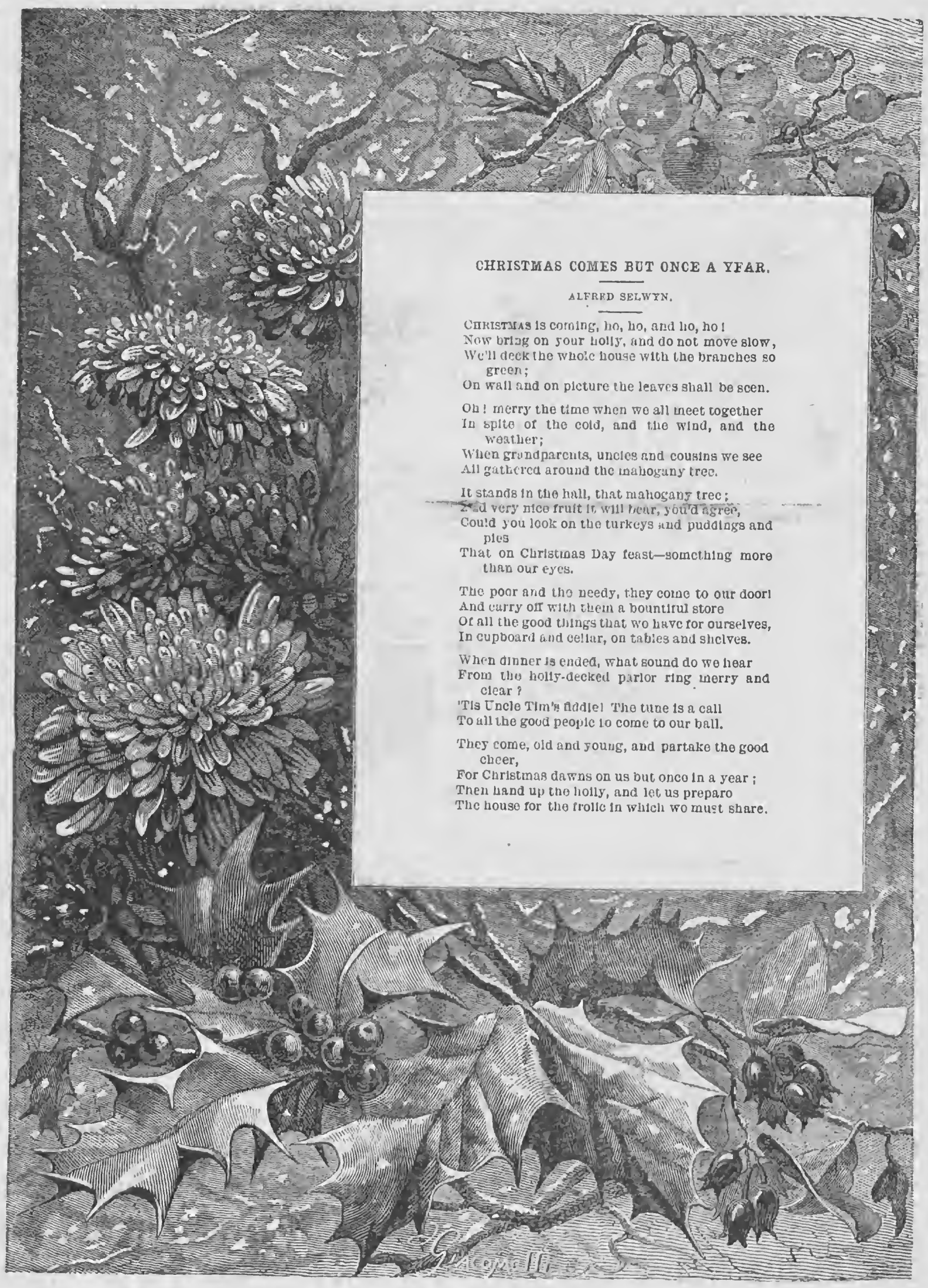
EXPERIMENT 4.—Place in a small saucer, or evaporating dish that will bear heat, some copper filings or turnings, and pour thereon a mixture of three parts (by measure) of water, with one part of oil of vitriol, so that a comparatively large surface of the liquid is necessarily exposed to the air; then heat the contents of the dish (by means of a spirit lamp) to nearly the boiling point, adding water from time to time as the liquid evaporates. The metal will gradually dissolve. If the dish be loosely covered over, and stood in a quiet place for some days, beautiful blue crystals of "sulphate of copper," will form,

"FARMING UNDER THE SEA."

THE fact is not generally known, that within three hours' ride of Boston a large and profitable business has been carried on ever since 1848, along the sea-shore, and which is nothing more or less then "farming under the sea." Everywhere upon the coast of New England may be found, about ten feet below the water-mark, the lichen known as carrageen,—the "Irish Moss" of commerce. It may be torn from the sunken rocks anywhere, and yet the little port of Scituate is almost the only place in the country where it is gathered and cured. This village is the great center of the moss business in the country, and the entire Union draws its supplies from those beaches. Long rakes are used in tilling this marine farm, and it does not take long to fill the many dories that await the lichen, torn from its salty, rocky bed. The husbands and fathers gather the moss from the sea, and the wives and daughters prepare it for market. Soak it in water and it will melt away to a jelly. Boil it with milk and a delicious white and creamy blanc-mange is the result. The annual product is from ten to fifteen thousand barrels, and it brings $50,000 into the town, which sum is shared by some one hundred and fifty families. Its consumption in the manufacture of lager beer is very large, and the entire beer interest in the country draws its supplies from the Scituate beaches, as the importation from Ireland has almost ceased. It is generally known that the moss, as an article of food, is called "Sea Moss Farine."

THE pretty Christmas poem "Christmas Comes But Once A Year" pictures a scene of mirth and good-cheer that we hope will find a counterpart in many a RURAL household. It originally appeared in The Nursery.

THE juvenile literature of the period is getting a pretty vigorous handling by our college professors, our monthly magazines and the public press. Parents should scrutinize every line of every issue of the flash literature which, under so many alluring disguises, is poisoning the minds and corrupting the morals of the rising generation.



CHRISTMAS COMES BUT ONCE A YFAR.

ALFRED SELWYN.

CHRISTMAS is coming, ho, ho, and ho, ho!
Now bring on your holly, and do not move slow,
We'll deck the whole house with the branches so green;
On wall and on picture the leaves shall be seen.

Oh! merry the time when we all meet together
In spite of the cold, and the wind, and the weather;
When grandparents, uncles and cousins we see
All gathered around the mahogany tree.

It stands in the hall, that mahogany tree;
And very nice fruit it will bear, you'd agree,
Could you look on the turkeys and puddings and pies
That on Christmas Day feast—something more than our eyes.

The poor and the needy, they come to our door!
And carry off with them a bountiful store
Of all the good things that we have for ourselves,
In cupboard and cellar, on tables and shelves.

When dinner is ended, what sound do we hear
From the holly-decked parlor ring merry and clear?
'Tis Uncle Tim's fiddle! The tune is a call
To all the good people to come to our ball.

They come, old and young, and partake the good cheer,
For Christmas dawns on us but once in a year;
Then hand up the holly, and let us prepare
The house for the frolic in which we must share.

Sabbath Reading.

THE HOLY NIGHT.

SILENT night, holiest night!
All asleep—lonely light!
Where adoring watch the pair,
Watch, as is his Father's care,
Sleeps the infant Christ—
Sleeps the infant Christ.

Silent night, holiest night!
Shepherds saw angels bright,
Heard from heaven the white-robed throng,
Bearing down to earth the song:
Christ the Saviour's come!
Christ the Saviour's come!

Silent night, holiest night!
Son of God! oh, how bright
Beams the ray of heavenly grace
In the infant Saviour's face—
Saviour born for us!
Saviour born for us! *[Tyrolese Carol.*

BUNYAN'S IDEA OF THE DOCTRINE OF PERSEVERANCE.

THE doctrine of perseverance is also a cross to the flesh; which is not only to begin, but to hold out, not only to bid fair, and to say, "Would I had heaven, but so to know Christ, put on Christ, and walk with Christ so as to come to heaven." Indeed it is no great matter to begin to look for heaven, to begin to seek the Lord, to begin to shun sin; O but it is a very great matter to continue with God's approbation: "My servant Caleb," saith God, "is a man of another spirit, he hath followed me (followed me always, he hath continually followed me) fully, he shall possess the land." Almost all the many thousands of the children of Israel in their generation, fell short of perseverance when they walked from Egypt towards the land of Canaan. Indeed they went to work at first pretty willingly, but they were very short-winded, they were quickly out of breath, and in their hearts they turned back again into Egypt.

It is an easy matter for a man to run hard for a spurt, for a furlong, for a mile or two: O, but to hold out for a hundred, for a thousand, for ten thousand miles, that man that doth this, he must look to meet with cross, pain, and wearisomeness to the flesh, especially if as he goeth he meeteth with briars and quagmires, and other encumbrances, that make his journey so much the more painful.

Nay, do you not see with your eyes daily, that perseverence is a very great part of the cross? why else do men so soon grow weary? I could point out many, who, after they have followed the ways of God about a twelvemonth, others it may be two three, or four (some more, and some less) years, have been beaten out of wind, have taken up their lodging and rest before they have got half-way to heaven, some in this, some in that sin; and have secretly, nay, sometimes openly said, that the way is too strait, the race too long, the religion too holy, and I cannot hold out, I can go no farther.

THE LITTLE GARDENER.

"THE weeds grow faster than the flowers," said a boy, as with a sigh he pointed to the patch of ground his father had given him for a garden.

"But the flowers and shrubs are worth cultivation," answered his father; "and it only requires care and attention to destroy the weeds one by one when they appear above the soil. Nothing useful is done without trouble. Will you, my son, give your garden the care it needs?"

"Yes, father," said the boy, "I will try."

"And if you try, you will succeed."

He tried, and after a time he was successful; but not at once. Many an idle habit had to be overcome, and much self-denial exercised; and what troubled him more than all was that the garden seemed as if it produced weeds of itself in the night whilst he was sleeping, and the insects came and ate the leaves and buds of the flowering plants when there was no one near to destroy them. But when the summer and autumn came, he was well repaid for his labor. His garden was filled with blossoms, amid which the bees hovered with a drowsy murmur, and around which the sunshine seemed to rest with a softened splendor.

PERSONAL ITEMS.

Thomas Carlyle celebrated his 83rd birthday last Wednesday.

Senator Gordon left college before he graduated, in order to get married. He preferred a wife to a diploma.

General Fremont is making himself popular in Arizona. He is a non-partisan Governor, and attends to business.

Mrs. General Sherman continues to reside in Baltimore, while her husband and daughters reside in Washington.

Senator Anthony, as is his pleasing custom, sent each of the New-England Senators a Rhode Island turkey for Thanksgiving.

Dickens's real name was Charles John Hoffam Dickens, but the novelist had the good sense to tone it down to simple Charles Dickens.

Senator Chaffee, of Colorado, is the fortunate owner of half of a newly developed silver mine which is yielding $9,000 worth of silver daily.

William Sackville Gordon, employed as a letter carrier in Australia, died there recently. He was a son of the late Lord Henry Gordon, and a cousin of the Marquis of Huntley.

General Robert Patterson of Philadelphia, now more than eighty years of age, is said to have entertained at his table every President of the United States since Madison's time.

Orson Hyde, one of the Mormon "Twelve Apostles," and for many years among the ablest and most active in behalf of the Latter-Day Saints, died in Utah on Thanksgiving Day.

Congressman-elect Murch, the Greenbacker who defeated Eugene Hale in Maine, proposes to spend this winter in Washington and try to consolidate all the opposition to the Republican party.

Horace W. Tabor is a lucky man. In 1864 he was a stone-cutter in Augusta, Me. In 1859 he went to Colorado and engaged in mining. He is now worth two millions, and has been elected Lieutenant-Governor of the State.

Lord Beaconsfield is described as having a face waxen and habitually ashen pale, on which suffering or pleasure, or, indeed, emotion of any kind, is never allowed to appear. As to his walk, it is "a curious, panther-like stride."

Mr. Smith of New Orleans was agreeably surprised to find a plump turkey served up for his dinner, and inquired of his servant how it was obtained. "Why, sir," replied Sambo, "dat turkey has been roosting on our fence three nights. So dis morning I seize him for de rent of de fence."

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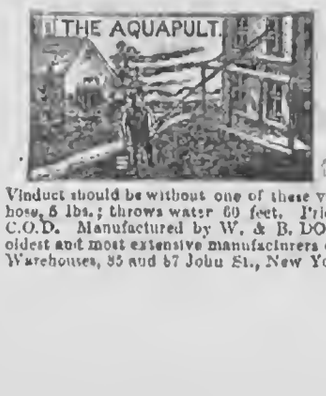

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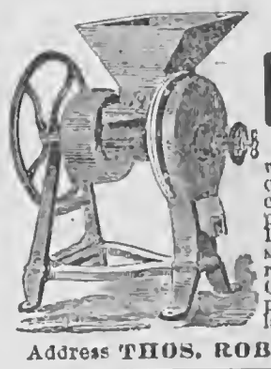

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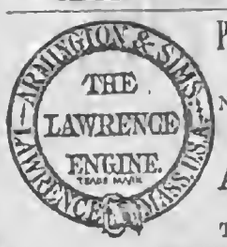

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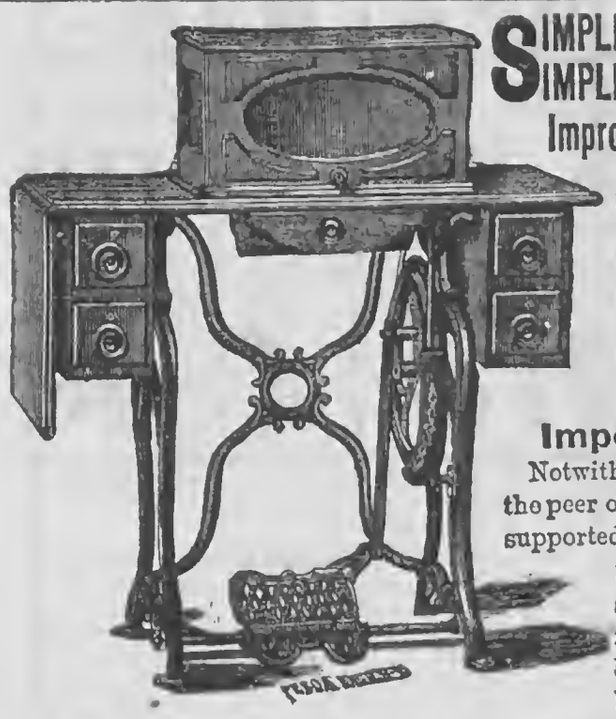

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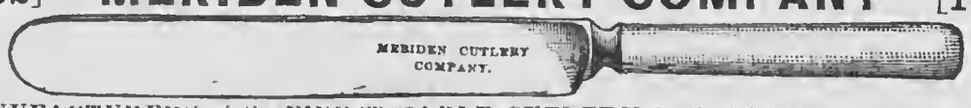

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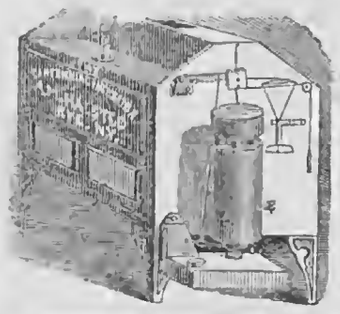

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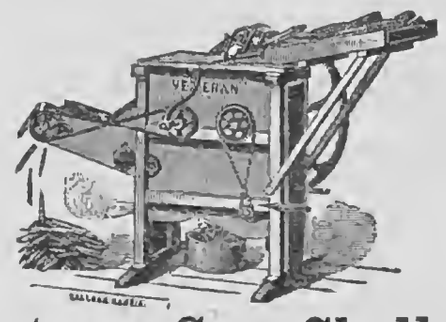

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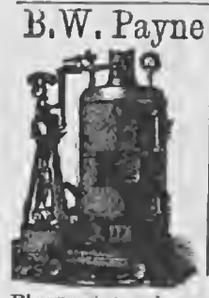

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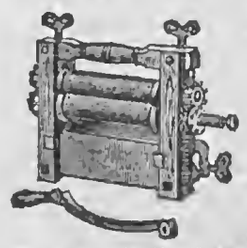

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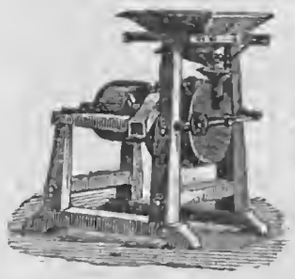

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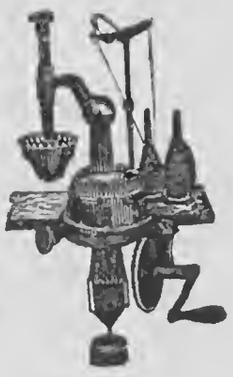

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VOL. XXXVII. No. 52.
WHOLE No. 1509.

NEW YORK CITY, DEC. 28, 1878.

PRICE FIVE CENTS.
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Biographical.

J. B. LAWES.

For nearly forty years the name of J. B. Lawes has been synonymous with progress in agricultural science and practico, the civilized world over, generally conpled with that of his able assistant Dr. J. H. Gilbert. During this time many laborious students have given to the agricultural world much scientific information with regard to its own apocial avocations; but the correctness of this information has been best tested and its value most accnrately determined by the renowned exporiments at Rothamsted. During this timo, too, many practical agriculturists have contributed to the general fund of knowledge belonging to their class a multitude of lossons from their own experience, but most of these lessons, also, have been either bonoficially corrected or elncidated by the samo serios of experiments. It is doubtful whether within the last quartor of a century, a single standard work relating to agriculture has been published anywhere, in which referonces are not specifically made to these experiments; and it is certain that in that time not only has no valuable work of the kind been published, but that no valuable numbor of an agricultural periodical has been issued which did not derivo a fair share of its information either directly or indirectly from tnat source. While local peculiarities of soil and climato must always greatly influence the methods and results of intelligont agriculture, there are certain general principlos the judicious practice of which will at all timos go far towards deciding the measure of success that rewards the farmer's labors. What these important principles are, and how they can best be reduced to practice, no one, in any ago, has done more towards discovering with the certainty of a demonstration than the gifted owner of Rothamsted.

This now famous placo is a fine entailed estate of over a thousand acres of very excellent land situated twenty-five miles from London, on the Midland Railway, near Harpenden Station in Hertfordshire. The house is approached through an extensive park ornamented with single specimens, clumps, and vistas of noble oaks, chestnuts and beeches. It is an old English battlemented mansion built of brick, in the Tudor style of architecture. The oldest part of it dates away back more than fonr hundred years to the troublous times of Edward IV. and Warwick, the King-maker; but extensive additions in the same style were made in the peaceful reign of James I, and still more have been built in modern days. Beautiful lawns, fine conservatories, ancestral paintings; in a word, all its surroundings and accessories, internal and oxternal, bespeak the excellent taste and ample fortune of its owner.

Mr. Lawes inherited it in 1834, and although then only a trifle beyond his majority, ho commenced at once to experiment with different fertilizing materials, at first, however, merely in a small way with plants in pots. But it was not long before his interest in his investigations and his far-sighted perception of the beneficial results that might be obtained from them if systematically conducted, led him to enlarge his operations and to transfer them from the greenhonse to the field. The first conception of the system which has since proved so productive of good results, must have been original with him; for not only had nothing of the kind been previously practiced, but it could not have been suggested by the toachings of others, for it was begun before Liobig had promulgated the results of his studies in agricultural chemistry, and when, aside from the early labors of Davy, there were scarcely any researches in that line, except those of De Saussure. Neither were the operations undertaken with even a distant eye to profit, for the experimenter was already rich in material goods and youthful enthusiasm. It was pure love of research and of mankind that prompted him thus early to devote his keen intellect and abundant means to the beneficent project in the execution of which the same motive has elicited in the intervening years such marvelous foresight, judgment and persistence, despite the occasional discouragement inseparable from all somi-philanthropic undertakings.

The problem he presented to himself at the outset, and to the solution of which he has devoted a useful lifetime and an ample fortune, was to determine the actual relations of various crops with the soil in which thoy are grown and with the fertilizers used to promote that growth, and to do this on so extensive a scale, both as regards area and time, as to settle upon a definite basis the fundamental principlos of agricultural practice. To elaborate the plan that would conduce best to this end was not the work of a day or a year; it required the labor and experience of nearly a decade before it assumed the systematic shape which it has since snbstantially retained. The nature of this, and the care with which all conceivable sources of error are eliminated from it, as far as human ingenuity can do so, have been already set forth in the Rurals of October 13, 1877 and July 27, 1878, and more briefly referred to in several other issues. It can hardly be said to date further back than 1843, when Dr. Gilbert, a well-known member of the leading scientific societies of the United Kingdom, was fortunately engaged by Mr. Lawes to take the direction of the laboratory department of his experimental station, and so closely have the two been since associated that the name of one has almost become a complement to that of the other. Down to 1855 laboratory work was done in a large barn fitted up for the purpose; but during the winter of '54–'5 a fine new laboratory was built by public subscriptions among the farming community, and presented to Mr. Lawes as a grateful recognition of the great benefit his researches had conferred upon agriculture. Nor have the labors at Rothamsted been confined exclusively to the soil and its immediate products; for they also embrace a long series of experiments on stock management, condncted with the precision and completeness that distinguish all the tests made there.

Althongh but a small part of the results of these innumerable experiments has hitherto been pnblished, yet that small part wonld make a good-sized library of entertaining and instructive reading, for both Messrs. Lawes and Gilbert, recognizing the fact that the world will be benefited by their labors jnst in proportion to the publicity given to the method of those labors and their results, in addition to giving to the public several standard works on the snbject, have been generous in their contributions to agricultural periodicals, eloquent in numerous addresses at public meetings, and always courteous to the many visitors seeking information by inspecting the grounds to which their labors have given a world-wide celebrity. Moroover, after all these years of devotion to his cherished object, Mr. Lawes, feeling that he has only commenced a work which it will require many lives to complete, has lately set aside $500,000 and a certain area of land, to insure the continnance of these investigations when an honored memory of him alone and the lasting results of his labors shall remain among the living.

The use of superphosphate of lime found favor at Rothamsted early after Liebig's suggestion with regard to its manufacture and advantages, and a little later, when tho discovery of vast deposits of mineral phosphates opened to the agriculturist a prospect of undreamt of sources of wealth, Mr. Lawes was among the first to utilize the discovery. In order to insure the purity on his own land of what are now known as commercial fertilizers, and to demonstrate their utility, he began their manufacture many years ago and snccessfnlly prosecuted the industry on a very large scale nntil the present year, when he sold out the business to a company with a capital of about $3,000,000. At all times he has been a zealous, out-spoken advocate for the amelioration of the condition of tenant farmers and of agricultural laborers, and has set an example to other landlords by his considerate treatment of his own tenants and by his effectnal efforts to improve the lot and dispel the ignorance of his hired hands.

J. B. LAWES. (From a photograph.)

It may well canse surprise that in a country in which titles are nominally bestowed as rewards for signal merit, this man, whose long labors have done so much for the individnal and national prosperity, not only of his own countrymen bnt also of the dwellers in all civilized lands, shonld still remain untitled; but satisfaction will snceeed surprise on reflecting that in bygone days British titles crowned vice as often as they honored virtue or meritorious services, and that even to-day they are reserved almost exclnsively to requite the soldier's murderous skill or chance good fortune, the lawyer's crafty pleadings, the politician's plansible trickery or the civil functionary's accidental prominence.

The accompanying likeness of Mr. Lawes is taken from a photograph which at our solicitation he lately sent to ns. Without consulting his wishes in the matter, wo have ventured to thus use his gift in order to please our readers with the portrait of one whom, having done so mnch for agriculturo, all agriculturits should delight to honor. So far as our remembrance and inquiries go, it is the first likeness of him ever placed before the American public, and will be specially interesting to our readers who have already made his acquaintance through his valnable contribntions to these columns.

Farm-Topics.

IMPROVED FARMING.

Hon. Thomas P. Janes, Commissioner of Agriculture for the State of Georgia, speaks in his Fifth Annnal Report, as follows: "Successful agriculture secures a liberal annual profit upon the capital invested in land, appliances and labor, and at the same time increases the fertility, or producing capacity, of the soil." Admitting the correctness of this proposition, and jndging from the condition of many farms in the past, the presnmption would be that our forefathers were not all snccessful agricultnrists, for the reason that in many instances there is an evidence of deterioration of the soil, which, in some cases, has amounted almost to barrenness. This Mr. Janes describes as follows: "Wasteful agriculture, such as was practiced in the early history of every country, may secure annual profits, but is often accompanied by a diminution in the fertility of the soil, and hence a reduction in the value of the capital invested." Here is where many farmers commit an error; because they are, for the time being, reaping a profit from the cultivation of the soil, they do not consider that the course which they are pursuing is working a secret injury to the soil, which more than balances the temporary profits obtained.

It therefore becomes necessary to resort to a system described as "Recuperative Agriculture, which, under the influence of science and skill, builds up the waste of the previous system, and results in successful agriculture."

Wasteful agriculture may result from different causes; cropping a soil without returning to it fertilizing materials to replace those taken from it, causes waste; so, too, cropping a greater surface than the amount of fertilizing substances applied will snpply with what has been taken by the crop, will produce a like result, only less in extent. It is a damaging system of agriculture that draws from the soil a greater amount of fertility than is supplied to it, and it is all the more dangerous because its evil results are so gradual in their appearance that they are hardly noticeable as the years go by until the land is impoverished; and yet this is just what has been going on all over the country, and in a multitude of cases is still being done. But fortunately for the future prosperity of agriculture, farmers are becoming better educated, and the practice of many of them is so changed as to make it worthy of being classed as "recuperative agriculture." This is being effected in two ways: first, the acreage brought under cultivation is so reduced as to make it

absolutely certain that the manures, or other fertilizers employed, are amply sufficient to supply the demand of the growing crop; second, some of the rougher portions of the farms are being abandoned to nature and her recuperative action.

Still another auxiliary condition is the abandonment of close fall feeding of meadow or mowing lands that are not from their location self-supporting. The farmer who supposes that he can feed his mowing lands closely, thus leaving them unprotected during the winter, is deceiving himself in a manner that will sooner or later work injury to his interests. This has been illustrated in the case of a farm which, under good management, easily filled a large barn with hay. It changed ownership, and the newcomer had no fears of browsing too closely; but in a very few years the whole amount of hay cut would not fill the mows up to the main beam.

It is a sure evidence of improved farming to see an increase of crops, and at the same time this is certain evidence that the permanent value of the land is not being impaired. Heavy manuring, thorough tillage, and the exercise of good, sound judgment in all other operations of the farm, are sure to bring their reward, and that these are being more generally practiced than in the past is an encouraging feature of American agriculture. WM. H. YEOMANS.

Tolland Co., Conn.

JOTTINGS AT KIRBY HOMESTEAD.

COL. F. D. CURTIS.

In answer to the inquiry of Mr. Hendrick, which appeared some weeks ago in the RURAL, we will state that the potatoes raised on sod under straw, turned out the best of any crop in the neighborhood. The yield was three times as great as it was in the field with ordinary hill culture on the same amount of ground. The potatoes were smooth and clean, and grew in bunches or little piles, which make it easy to gather them. All we had to do was to rake off the straw which was matted down and pretty well rotted, and then pick up the potatoes. No digging was necessary. The grass was all dead and the sod rotted, leaving the ground clean. Next year we intend to devote this piece of ground to Hubbard squashes and plant the quince orchard with potatoes under straw. We will do this to subdue the grass and weeds which are very rank, and at the same time to mulch the young quince trees, and give them a good start. We will cover the nut grove with straw also, for the benefit of the trees and the squashes, if we have the straw left over.

We begin to think we cannot keep house without Hubbard or Butman squashes. They are the best substitute for potatoes, and when baked and served up with plenty of butter, one can make a good meal out of them. They come the nearest to sweet potatoes of any vegetable, and combine in themselves the most palatable nutriment of any single vegetable, excepting the sweet Carolinas. By covering the surface with straw, any stubborn patch of ground may be devoted to squashes, and a good crop raised with little labor. The essential point is to make a rich hill for a seed bed.

We have a near neighbor who has one redeeming quality; every morning, the year round, he feeds his chickens. He sells eggs.

Farmers are a queer sort of folks. As soon as they hear that pork is going down in market, into town they rush and try to engage theirs before it gets down any lower, and so they help to make the market duller by over-stocking it, whereas if they would stay home, it would not be long before butchers would be coming to them and bidding up the price. In Schenectady, our market-town, the farmers have "heared" the pork market to such an extent that the price has gone down, within two weeks, from five dollars per hundred to less than four dollars. This suits the butchers who help to growl and run the price down, while they expect to double their money invested. There is no reason why pork should be so low in price, except the panicy pressure made by the farmers themselves.

The bumble-footed rooster is well, but is minus two toes. We feel quite elated over this surgical operation and the result, as this is the only fowl with these ulcers, which ever lived.

We have dropped the old practice of saving seed corn with the husks on and then braiding it up. The main thing is to select bright and perfect ears, and then put them where they will get dry and can be kept so. Corn selected out of a crib will often grow better than when united and hung up. We spread our seed corn either by the fire or in the sunshine for a few days, and then put it in a barrel where the mice and rats cannot get at it. Old seed corn is just as good as new, and hence it is a good idea to save plenty when the crop is good and have it on hand. Sometimes there may be an unfavorable season and and the extra supply will be valuable. Two years we have known farmers to be put to a great deal of trouble on this account. This year is a grand time to lay by a big stock of seed corn, as corn is unusually bright; we have not seen a soft ear. Japanese corn, a striped, ornamental variety, had a hard time to ripen, but finally by the middle of October it become glazed.

Seventy-eight hills of Chufas produced a half bushel of nuts. Boiling is no improvement, but injures the flavor. They taste as nearly like chestnuts as anything. They are quite like artichokes but of better flavor and more tender. In a warm climate no doubt they will pay as a crop to leave in the ground for the pigs to root out and eat, but in our frozen latitude where they must be dug up and housed, they are not desirable, unless a few are raised for the children, to take the place of chestnuts, for which they are a tolerable substitute. They have to be washed—which is not a hard matter—before they can be eaten. After drying a little, they are sweeter.

NOTES FROM MAPLEWOOD FARM.

HECTOR BERTRAM.

TREATMENT OF ORCHARDS.

We have an orchard of some fifty trees that are old and rough-barked, bearing small fruit, in small quantities. The trees were set years ago on the side-hill, and are of large size, making it next to impossible to plow among them. We shall draw manure and spread it thickly, say a half a load to the tree, about the roots, immediately. In the spring the stems shall be subjected to a thorough scraping and the old, rough, dead bark removed entirely. They shall then be washed with weak lye. This, together with severe pruning, will, I think, insure a great change for the better in their appearance and bearing.

We do not like the practice of white-washing trees. Even if not injurious to the trees, it makes them unpleasant to the eye. [Add sufficient quantities of lamp-black and red mineral paint to the lime. In this way the color of the bark may be closely imitated.—Eds.] On the other hand, a washing with lye every spring, I consider very beneficial for old or young trees. The effects are soon apparent: bark lice and other insects are exterminated; the bark changes from brown, to a dark healthy green, and becomes perfectly smooth; the growth of new wood is much greater than in trees which had not been so treated. There is no wash for trees the good effects of which are more marked. I have an idea that the lime in white-wash, would cause the bark to crack, although in this I may be mistaken.

I shall turn the sheep into the orchard next spring. They will not injure the trees as long as there is plenty of grass. Besides, they will consume all the wind-falls, the diseased and wormy fruit, and the benefits of this will be apparent in succeeding crops. When these apples are left lying under the trees, fine, smooth fruit, free from insects cannot be expected. Noxious insects will be propagated in readiness to work mischief in the next season's crop, whereas, if the eggs are destroyed, the danger from insect depredations will be greatly lessened. We do not, as a general thing, draw sufficient manure on land set with trees. When one considers the immense drain made upon the soil by an orchard of thrifty trees, one is apt to realize his error. The land must be fed, and well fed, if one would obtain large yields. Fall I think the best time to apply manure to trees. The rains and snows assist in carrying its fertilizing properties down within nourishing distance of the tiny rootlets. Coarse stable manure is probably the best; for if applied thickly, it forms an excellent mulch, destroying the grass and loosening the soil.

SHINGLES.

A dozen years ago, the buildings at Maplewood Farm were roofed with chestnut shingles, and although shingles of this kind were highly recommended by many, they have proved a poor investment. The buildings will require new roofing in the spring, if not sooner. The advantage claimed for them, was their durability. So far was this claim from being well founded, that hemlock shingles remained undecayed longer. Chestnut shingles make an excellent barometer. During dry weather, they warp and curl up badly, causing the roof to present an unsightly appearance; but on the approach of rain, they become flat again. This peculiarity loosens the nails and injures the roof. That, on this account, they will not retain moisture as long as others, is true; but they are not durable, do not make a nice roof, and I shall use no more of them. Good white-pine shingles are, in my opinion, the cheapest, everything considered. A neighbor was telling me that he had tried the experiment of dipping shingles in white-wash, before laying them, with the best of results. Their lasting qualities were very much improved, nearly doubled. It is a simple process, yet of much benefit, if the result stated can be obtained. I have, however, seen buildings roofed with shaved pine shingles, which remained good for thirty years. A good coat of paint applied every two or three years, would prove a profitable investment, yet many people think they cannot afford it.

MAKING GATES IN WINTER.

We are getting ready a supply of four and six-inch fence boards, against the stormy days of winter. I shall use them in making gates for all fields not so supplied. Much time is wasted during the year by opening and shutting bars, "stake and ridered" fences, and the like. To the farmer, more than others, time is money; and plenty of light, durable gates, well hung, will save a good deal of time and add not a little to his cash account.

Entomological.

THE WOOLY, APPLE-TREE LOUSE.
(Eriosoma lanigera)

Edward Parker, King's Co., Nova Scotia, asks the name of an insect pest that infests his fruit trees and whether there is any preventive or remedy for it. The insects have the appearance of a bunch of cotton and when rubbed with the hand look like a mass of blood. He has applied pickle, soap and various other washes against them to no effect. They are especially destructive to his young trees in the nursery. He says that he has been told that they are called "Downy Lice"

ANSWER BY B. PICKMAN MANN.

FIRST APPEARANCE OF THE PESTS.

Mr Parker is rightly informed that the insects which trouble his orchard are called "Downy Lice." They go also under other names, the fullest of which is placed at the head of this article. His description of their appearance leaves nothing to be desired on the score of their recognition. Harris, in his treatise on Insects Injurious to Vegetation, says that the young lice appear in the spring of the year, like little specks of mold on the trees. As the season advances, the downy coat of the insect becomes more distinct, and the presence of the pest, to quote the words of Asa Fitch, is revealed by small patches of white down, or cotton-like wool, covering a cluster of minute pale lice. These patches are usually situated near the root, particularly around the base of twigs and suckers growing from the trunk, and where any wound in the bark is healing. In autumn these patches are common also in the axils or crotches of the leaf-stalks, towards the ends of the twigs Under each small patch of down are commonly one large louse and many of her young.

THEIR HISTORY.

The lice are generally believed to have been imported from Europe into North America, but authorities differ in regard to the native home of the species. The present scientific name was first given to them in the year 1801, by Hausmann, who described them in the first volume of Illiger's Magazine fur Insektenkunde, p. 440, in Germany. They seem to have been noticed first in France, long previous to the year 1787, when they first attracted attention in England, but subsequently to 1787, they received in England the name of "American blight," on the supposition that they had been imported from North America. Riley, in his fourth and in his sixth report on the insects of Missouri, states that such is the case. Walsh, however, had previously gone so far as to doubt whether the American species is the same as the European, and to imagine that the European species was naturally a trunk-inhabiting species, while the American lived especially upon the roots. In European countries the insects multiply, occasionally, to such an extent as to cover the whole under sides of the limbs, and also the trunk, the tree appearing as though it were whitewashed.

THEIR HARDINESS IN COLD WEATHER.

Verrill says that these insects have a remarkable power of enduring the cold of winter and severe storms of rain and snow with comparative impunity. As late as Dec. 11, he found a small tree, in New Haven, Conn., covered along the under sides of all the branches with healthy and active lice of all sizes, busily engaged in sucking its sap, although two snow storms and many cold rains and freezing nights had occurred previously. Doubtless many of these insects thus survive the winter, especially when they are lodged in crevices where they delight to establish themselves. The downy or cottony substance that usually covers them abundantly may serve to protect them, in some degree from cold as well as from the summer heat.

THE YOUNG AND THEIR COVERING.

The eggs from which the first brood are hatched in the spring, are so small that they cannot be distinguished without a microscope. The young, when first hatched, are covered with a very short and fine down, but at a later period they become entirely imbedded in this secretion, as described above. This down is in fact a kind of wax, and dissolves completely in alcohol, as well as in some other liquids. It adheres to the fingers when it is touched, and is very easily removed from the insects, out of all the pores of the skin of the hinder part of the body of which it seems to issue. The adult insects emit, from time to time, drops of a sticky fluid from the hinder extremity of the body.

MODE OF GENERATION.

In common with the other members of the plant-louse, or Aphis family of insects, this louse has an unusual method of generation. The individuals which hatch out of eggs in the spring of the year are not of different sexes, or wholly of either sex, not being capable of producing or laying eggs, but go under the name of "neuters" or of "nurses," or under other names. They are without wings and, when fully grown, are 2.5 mm. in length, according to Harris, 1.5 mm long according to Fitch, egg-shaped, with honey-yellow or dull, reddish-brown body, and with blackish or dusky head and appendages. The body does not bear any honey-tubes, such as characterize so well many of the plant-lice. These individuals bear living young in great abundance, and their progeny become like them in appearance and nature, for several generations throughout the summer.

Late in the fall, however, as cold weather approaches and food becomes scanty, other individuals are produced in this same manner from this same stock, which do acquire wings, and are of the two sexes, capable of producing fertile eggs.

These sexual individuals have nearly black and rather plump bodies, but their distinguishing characteristic is their large wings. The fore wings are broad and have three delicate stiffening ribs traversing their central field, the third rib forked near the middle, and scarcely visible near its base before forking. On the front edge of the fore-wings is the usual colored spot, called the stigma, which is about three times as long as it is broad, and is acute at each end. The hind wings are about half as long as the fore wings and are quite narrow. They have two simple delicate ribs traversing them. Prof. A. E. Verrill, of Yale College, New Haven, Conn., discovered these winged individuals, which had not previously been known to exist, about the middle of October, in New Haven.

MANNER OF DEPOSITING THE EGGS.

The females fly from tree to tree, later in the year, depositing their eggs in the crotches of the branches and in the chinks of the bark, at or near the surface of the ground, especially if there are suckers springing up from the same place. As these females fly through the air, bearing with them the masses of down which they have secreted, they look like snow-flakes. They are not known to infest any other kind of trees than apple trees, and Fitch says that they prefer the trees whose fruit is sweetest. The young derive their nourishment from the sap of the bark and of the young wood immediately under the bark, inserting their beaks into the bark for the purpose. Harris says that the numerous punctures of these lice produce on the tender shoots a cellular appearance, and that whenever a colony of them is established, warts, or excrescences arise on the bark; the limbs thus attacked become sickly, the leaves turn yellow and drop off; and as the infection spreads from limb to limb, the whole tree becomes diseased, and eventually perishes.

REMEDIES.

As with other plant-lice, a persistent attack upon these results in a victory. The presence of insects is marked so conspicuously that there can be no difficulty in finding them. Wherever found, they should be destroyed, and as they can spread so easily in the fall of the year or in the winter, from tree to tree, they must be looked for upon apple trees which are not deemed worthy of care, but are allowed to stand as nurseries for all manner of pests, as well as upon the choice trees. Any oily substances or liquor that is destructive to insects, applied directly to them, will serve the purpose. A mixture of equal weight of fish-oil and melted resin, applied with a brush while warm, spirits of tar, spirits of turpentine, oil, urine, soft soap; a kilogram of potash in seven litres of water, have all been recommended.

The rough bark of the trees should be removed, so that the insects may find less opportunity to conceal themselves. Harris says also that the sods and earth around the bottom of the trunk of infested trees should be carried away, and their place supplied with fresh loam; at the same time any insects which are found underground should be killed, and all cracks and wounds should be filled with grafting cement or clay or mortar. Small limbs and extremities of branches, if infested, and beyond the reach of the applications, should be cut off and burned. He recommends the scrubbing of the bark, in the spring of the year, after it has been scraped smooth, with a stiff brush wet with the potash solution described above. Even scalding-hot water, applied with a mop-rag to the infested spots, will destroy the lice. Perhaps the most practicable remedy, and a sufficient one, would be the application of kerosene, benzine, or turpentine directly upon the insects.

A NEW INSECT DESTROYER.

A FRIEND of ours, an experienced gardener, tells us of a new and effectual way of exterminating insect pests both in and out-of-doors. Take a barrel and half fill it with coal tar. Then fill the barrel with water. After standing awhile the water may be sprinkled upon the leaves and stems by means of a whisk-broom or flowering

pot. According to the positive statement of our friend, it will at once kill all the insects with which it comes in contact, without in the least harming the plant. We cannot test it for ourselves at present, as we are not troubled with insects of any kind; but it may be worthy of a trial on the part of our readers, since it can do no harm in any event.

It has also been frequently noticed that worms which happened to be under newly-laid gas-tar walks, would, soon after the walks had been made, appear lifeless along the edges.

Dairy Husbandry.

PERFECT CHEESE.

T. H. HOSKINS, M. D.

TIME INJURES BUTTER, BUT IMPROVES WELL MADE CHEESE.

BUTTER is never better than when the manufacture of it is finished. Every day that it is kept, though the fact may not be apparent to the senses at first, deterioration is at work, and the money value declines. But this is far from being the case with cheese. When taken from the press, indeed, bandaged and annointed, the first process only is complete. The chemical changes which, in butter, work to lessen value, will in cheese, when properly conducted by art, develop value. But this can occur only when the cheese has been properly manufactured from pure, fresh and uncontaminated milk. Nor can it occur in the best made cheese from the best materials, unless the necessary conditions are understood and the proper facilities are at hand to secure such conditions in their perfection. The curing, no less than the manufacture of cheese, is a high art, and must have for its basis a thorough science.

NECESSITY OF MORE STUDY AND PRECAUTIONS.

These facts are only gradually becoming known. The studies in practical operations, as in organic chemistry, which have brought forth knowledge upon this matter, have only lately reached up to positive conclusions, and even yet, upon many minor details, the genius of our Edisons of the dairy has work to do. With the best of care in the dairy and factory, cheese is not always the same when it comes from the press. To recognize these differences, and give to each its right treatment, whereby the highest value is developed, require skill and knowledge of a high order. And besides these unavoidable variations, it is well known that by different methods of making up and curing, very different ulterior products are obtained, each of which has its peculiarities of taste, smell and appearance, and each commending itself to a particular market, and bearing a special value as a commercial product.

The recent triumphant success of our exhibits of cheese in England may be regarded as the first fruits of the improved methods recently introduced among us, especially in curing; and, although the English papers excuse their defeat on the ground that their own cheese as exhibited was not up to the highest mark of their manufacture, yet they concede that the American cheese was very fine, and well deserving of the premiums accorded it.

NEED OF BETTER CURING ROOMS AND PURER MILK.

These results are most encouraging, and should lead to the rapid investment of a large amount of capital in curing vaults, where the temperature, moisture, and other accessories can be kept under that perfect control which alone insures a perfect product. It is said that quite satisfactory results in this direction have been attained by the use of Wilkinson's subearth ducts for modifying and controlling the temperature of the air admitted into butter dairies. It would not be strange if this ingenious method should find its most profitable application in connection with the curing of cheese. It is certainly worthy of thorough trial. But it cannot be too earnestly impressed upon the minds of cheese makers that such an investment of capital as I refer to, can never be justified by a profitable success unless the makers of cheese, by requiring of the dairies the utmost care in feeding, in milking and in handling the milk on its way from the udder to the vat, secure for themselves a raw material of the first quality. A man once, in the market-house of a western city, asked of an egg-dealer if his were good eggs. The reply was, "Well, middling good." "This is the first time," exclaimed the would-be purchaser, "I ever heard of a middling good egg." And just as there is no such thing as a middling good egg, so it is more true that there is no such thing as middling good milk, when either butter or cheese making is in question. The rigid exclusion from a cheese factory of every dairy in which every possible care is not given to the making of good milk and its delivery unimpaired to the cheese maker, is essential to the manufacture of a good cheese, and especially of a cheese capable of being profitably cured for exportation. This point needs to be impressed upon the minds of our cow-keepers by line upon line and precept upon precept, until no cavil or doubt remains possible.

The Poultry Yard.

CAPONIZING.

HAVING seen in the RURAL an article on making capons, I here give my method of performing the operation. I learnt it, when a child, from my mother as I held the birds while she operated on them. Sitting on a chair or stool, with his hands resting on his knees, the person in charge of the bird holds it upside-down, pressing its feet against his thighs with his thumbs, while his hands are placed over the wings and around the body. Then the operator, supplied with a sharp penknife and a long, slender needle threaded with common cotton sewing thread, plucks out feathers enough to lay the skin bare midway between the end of the breast bone and the anus. Then with the left hand he pinches up the bare skin, and with the penknife makes a gash large enough to admit easily the fore-finger of the right hand. Then, holding the needle in his left hand, he catches the membrane covering the bowels and cuts it, and straightway slides the fore-finger of the right hand between the bowels and the walls that inclose them down to the spine and then forward until the testicles are distinctly visible. Then bend the right fore-finger until the tip of it rises in front of the testicle, which can be readily removed by drawing the finger backwards and bringing out the testicle in the hook formed by the bent finger. Afterwards operate on the other organ in the same way, in both cases holding the back of the bird against the palm of the left hand to facilitate the manipulations. Then grease the wound with a little fresh lard or butter, together with just enough carbolic acid to make its odor perceptible, and sew it up.

If the person who may wish to operate, will first examine some chickens that are being dressed for the table, he will readily understand this description of the operation, and a few trials will make him proficient enough to do the thing in less time than it would take to tell how it was done, and with no more danger to the bird than usually attends the castration of other animals.

J. G.

South Family Shakers.

Floricultural.

THE USES OF THE CLEMATIS.

W. O. L. DREW.

OF all the beautiful climbing and trailing plants in cultivation, none are more worthy or deservedly popular than the many varied and beautiful varieties of Clematis. I speak of these plants as climbers, but let not the enterprising amateur be confined to the old-fashioned notion that these beautiful vines are only to be trained over the veranda, or summer arbor—though for this purpose the Clematis stands unequaled—,inasmuch as the uses to which this plant may be applied, and to which it is in every way adapted, are almost innumerable. It is to some of these uses I would now call the reader's attention. As

CLIMBERS

few plants will give more satisfaction for covering trellis-work arbors, etc., than the various sorts of Clematis, but for this purpose it is well to combine with them some pretty and contrasting vine. I have found the Passion vine, [Not hardy here.—EDS.] or Chinese Honeysuckle, to give good satisfaction when so blended. But of the uses of the Clematis as a climber I will speak no further, as nearly all amateurs know their value. For

PILLAR PLANTS.

I have yet seen nothing so well adapted as the beautiful, large-flowered varieties of the Clematis; yet I have seldom seen them used in this way whether from a lack of knowledge as to their desirability for the purpose, or from not knowing how to grow them as pillar plants, I cannot say. The pillar arrangement is extremely simple, and easily managed by any enterprising amateur. Plant a neat pole with five or six short arms attached, where you desire the plant to grow—it will be well to tar the end of the pole in the ground, to prevent decay—then plant strong, healthy Clematis, of some large, showy-flowered variety, of the Jackmanni type if to hand; if not, any variety will do. Train the plant to the pole and if it shows any tendency to become lanky or bare of new shoots at the base, it should be pruned down to about three feet, which will force new growth below. The usual hight to which it is desirable to train the vines in this way, is about five feet.

Another purpose to which they are admirably adapted, strange as it may seem to some, is as

BEDDING PLANTS.

To grow them successfully in this way is a little more difficult. The bed in which they are to grow should be made convex; that is, raised in the center; for only in this way can the blossoms be displayed to the best advantage. Having made the soil rich with a liberal dressing of decayed manure, set the plants, but not too thickly. As they begin to grow and send out shoots, they should receive attention. They must be looked after weekly, and trained and pegged down as recommended for Verbenas and Nasturtiums taking pains to train them where most required to cover the surface. As the plants do not throw up blossoms from the lower portion of the stems, that is, within a foot or so of the roots, the points of one series of plants should be trained so that they will over-lap and cover those portions of the other series which would otherwise remain bare and detract, therefore, from the beauty of the bed. Pegging should be attended to early and often, as they cling so closely together by their clasping leaf stalks, that the young shoots might be injured if they became untied and an attempt were made to separate them in order to train them aright.

If these directions be properly attended to, the bed will soon become brilliant with blooms, and will be a constant source of pleasure until frost. As soon as frost stops their blooming, they should be closely cut back. Here, in California, they require no covering, but in the East no doubt a slight protection will be required. If the season be warm and dry, like our summers, the bed should be well soaked several times during the season. Another way in which they show to great advantage, but which is only adapted to large grounds, is to let them grow in their own sweet way, scrambling and climbing over rock-work, etc; then the regal beauty of the Clematis is given full sway, and the gorgeous blooms show remarkably well.

El Dorado, Cal.

Horticultural.

THE BEARING YEAR OF APPLE TREES.

There is a good deal said and written about changing the bearing year of apple trees. After a number of years of observation, I believe that it is best to take the fruit when we can get it. There may be some philosophic reasons for trying to change the bearing year of young orchards, and good results may follow the attempt, but when an orchard gets of considerable size, the labor and the uncertainty of the results of such an undertaking place the matter in an unfavorable light. We have an old orchard of about fifty trees, all of which used to bear the same year, until there came a frost or cold wind that killed all the blossoms except those on a few trees that were sheltered by the building. Ever since, some trees in the orchard have borne on the odd years and the remainder on the even years. This year, however, the fruit crop was a general failure.

I also notice that trees of certain varieties among those whose bearing year has been altered, from some unaccountable cause have a tendency to get back to the year on which they originally bore fruit. Baldwins have been noted as bearers on even years for a long time; the Smith's Cider has had the same tendency to bear on the odd year, and taking into consideration the great range of country where this apple comes to perfection, I think that the question of bearing years will soon be settled by the orchardists selecting varieties whose natural habit is to bear on the even or odd year, as may be desired. Bucks Co., Pennsylvania, the home of the Cider Apple, was well supplied with apples last year; whereas, this year there are very few. I think that seventy five per cent. of all the trees set in Pennsylvania and New Jersey are of this variety, and for years it has been scarce in the nurseries. Out of 1,500 trees in our orchard, 800 are of this sort. I know orchards in which 90 out of every 100 trees are of this single variety. I believe that the Cider Apple could not be treated so as to bear permanently on even years; nor, in my opinion, can the bearing year of any other variety be permanently changed from the year on which it was originally accustomed to bear. Last year hundreds of barrels of apples were shipped from this section to England; this year Trenton is supplied from New York and Philadelphia.

I. J BLACKWELL.

Mercer Co., N. J.

PROFESSOR BEAL'S REPORT.

THE Michigan State Agricultural College unquestionably has earned the reputation of being one of the best institutions of its kind in the country. We have before us Prof. Beal's Report of the Horticultural Department for the present year, and notice particularly the good work the institution is doing in the line of experiments. For the elucidation of a few of these we quote from the Report: "We are trying by selection and cultivation to improve one variety of Indian corn, two of onions, one of beans, one of tomatoes, and one of wheat." ——We have planted about seventy-five varieties of corn, over twenty of onions, and about 250 named varieties of potatoes, besides about as many more unnamed seedlings which have originated at the College.——We have pruned some limbs from two apple trees on the twenty-fifth day of each month in the year, to see which will thrive the best.——For experiment we have planted pits of peaches diseased with the yellows.——We have small samples of hedges of Honey Locust, Osage Orange, Pepperidge, wild Crab-apple, wild Plum, Hawthorn, Prickly Ash; also of Arbor-Vitæ; Siberian Arbor-Vitæ; Austrian Pine, Norway Spruce, Lilac, Spiræa, etc. ——We are testing ten or more of the best varieties of tomatoes, and have crossed the Conqueror (best of all last year), with a smooth, early sort.——We have crossed the flowers of Clawson Wheat with Diehl, and have root-pruned these also.——We have crossed flowers of two varieties of Gooseberries; also Black-Cap Raspberries with red Raspberries.——We have saved seeds of some old plants of red clover to try to establish a perennial variety.——We have crossed Duke and Morello Cherries.——We are testing forty varieties of new and promising named varieties of Strawberries; we also have a fine lot of seedling Strawberries, some of which have borne this year; also some seedling Gooseberries, a few of which have borne this year for the first time.——Many other experiments too numerous to mention are given in the Report. People who are unacquainted with the character of, and the difficulties attending experiments, are apt to be in too great a hurry for the results. *Reliable* conclusions can be drawn only after a protracted series of experiments under varied circumstances. Under the careful management of Prof. Beal, conclusions will no doubt be reached that will be of lasting benefit to all cultivators of the soil. We hope the institution will continue its good work.

Miscellaneous.

IMPROVING BACKWARDS.

THERE are many grand improvements now before the public intended to enable lazy, shiftless people to farm better than their more sensible and industrious neighbors. Patent cow-milkers are an abomination; they unnaturally distend the natural orifice of the teat, finally permanently ruining the cow by rendering her unable to hold her milk at all. Patent egg-food is another, forcing hens to lay out of season, and finally preventing them from laying in season. Any tool, instrument or treatment which violates nature must rapidly lessen the real value of the animal upon which it is used, far beyond any temporary advantage from its employment.

Good health among stock is the best security that the animals will yield well; and sensible people who own good animals cannot be wheedled into the use of any quack nostrum or quack machine. On the other hand, those folks who own poor stock, and expect to suddenly make it valuable by the use of these foolish devices, show how little they know of their business.

S. R. M.

DEFIANCE WHEAT.—A correspondent from Providence, R. I., had the same experience with this variety of wheat during the past season, that we, ourselves, had, as detailed some time back. With aching back he deposited 14,000 kernels separately four by twelve inches apart, used 100 pounds of Darling's animal fertilizer, and kept the ground absolutely free from weeds. The straw was five feet long, and the heads from 4½ to 6 inches. The leaves, however, were destroyed by rust and the yield was only 69 pounds of light wheat. He is not disposed to consider this test decisive as to its merits, however, but intends to plant another pound or so next April.

WHAT OTHERS SAY.

AMSDEN.—Mr. John Powell (Dayton, O.,) says that this peach ripened the 4th of July; that it does not rot; and that it is large and handsome.

THERE would not have been any milk in the cocoanut if some of our dairymen had had the construction of it, says the Cincinnati Saturday Night.

TOO BAD.—The Germantown Telegraph says that in the next law against vile weeds, for which fine and imprisonment are the penalties, the Jerusalem Artichoke should be inserted by all means. It knows of a grass-field, the past summer, in which the vile thing has nearly half the ground through some former owner, perhaps fifty years ago, having been seduced to give it a place.

TEMPERATURE OF SLEEPING ROOMS.—The rule should be everywhere, during the part of the year when fires are kept burning, to avoid hoisting outside windows. It is safer and better to leave the chamber door open, as also the fireplace; then there is a draft up the chimney, while the room is not so likely to become cold. If there is some fire in the room all night, the window may be opened an inch. Hall's Journal says that it is safer to sleep in a bad air all night with a temperature over fifty, than in a pure air with a temperature under forty. The bad air may sicken you but cannot kill you; the cold air can and does kill very often.

A COMPARISON OF BREEDS OF SHEEP, with regard to weight of fleece and carcass, percentage

of lambs and average hardiness, has been pithily compiled in the form of the following table, by the National Live Stock Journal, from answers to inquiries on the subject sent out to a number of prominent breeders in various parts of the country. The table possesses interest as setting forth the average opinions of gentlemen representing all parts of the country, and engaged in breeding the stock of which they speak:

BREED,	Av. weight when fully grown.	Av. weight of fleece.	Av. No. of lambs at birth in decimals.	Av. hardiness, 100 the maximum.
Cotswold	200	13	1.6	90
Leicester	195	10	1.6	80
Shropshire Down	175	9	1.5	80
South Down	155	7	1.4	100
American Merino	103	12	1.1	100

THE ANGORA GOAT, according to Mr. Hayes, Secretary of the National Association of Wool Manufacturers, is the most valuable wool-bearing animal, not even excepting the cashmere goat, which produces only two or three ounces of the *pushm* used for making Indian shawls. Mohair, the fleece of the Angora, is worth, on an average, 75 cents a pound—more than double the price of the best Lincoln wool. It is used for making Utrect velvets, or "furniture plush," the piles of imitation seal-skin, the best carriage and lap-robes, braids for binding, black dress goods, laces, and for many other purposes, the number of which is only limited by the limited supply—the entire production of the world being only about 4,750,000 pounds. The English have obtained the highest success in spinning mohair, and owing to the stiffness of the fiber it is rarely woven alone, either the warp or woof being usually of cotton, silk or wool. A pure mohair fabric is considered nearly indestructible.

THE BEST BREED OF COWS under all conditions, has no existence, as so much depends upon the adaptation of the peculiar qualities of each breed to surrounding circumstances. The National Live Stock Journal says, however, that if the production of milk for towns is the leading object, then selected Ayrshires, Holsteins or Short-horns will give satisfaction. If they are intended for butter making, then the Jersey, Short-horn and Ayrshire would be the best, taken in this order; if for cheese making, then the Holstein, Ayrshire and Short-horn. It does not, however, approve of pure breeds for dairy purposes, but advises a cross of a Jersey bull on a deep-milking Ayrshire cow, as the delicate Jersey will be much improved by crossing on the hardy Ayrshire, while the grade will yield more milk than the former and of a richer quality than that of the latter. A square cross of a Jersey bull upon selected common cows also generally produces an excellent dairy grade.

A CHEAP ICE-HOUSE.—A correspondent while approving of Mr. Brooks's plan of an ice-house, in RURAL for December 14, thinks some may object to it on the score of expense; and tells how he makes a cheap, yet sufficiently effective one, in the form of a rail pen. He lays down some rails for the bottom, on which he places a fifteen-inch layer of sawdust. He then packs his ice, leaving around the outside a space of fifteen inches, to be packed with sawdust. Straw or boards can be used to prevent the sawdust from escaping through the cracks between the rails. Two or three feet of sawdust should be placed on the top of the ice; and, finally, four posts or forks should be set up, one at each corner, to support some planks for a covering. It would be well to place the whole under a good shade tree, and with such a device one may have ice throughout summer.

BOOKS RECEIVED.

ADDRESS of F. D. Moulton at the late International Dairy Fair, containing 15 pages.

PREMIUM List of the Fourth Annual Florida State Fair to be held at Gainsville in that State, Feb. 20 to 25, 1879. C. Covington Pres; D. S. Place Sec.

PRIZE List and Rules of the Second Annual Exhibition and Fair of the Parker City Poultry Association, to be held at the Opera House, Parker City, Pa., from Dec. 20 to 25. J. M. Laming, Parker City, Pa., Sec.

REGULATIONS and Premium list for the Second Annual Exhibition of the N. J. Poultry Association, to be held at Institute Hall, Newark. Jan. 14–17, 1879. Specimens must be delivered at the hall before noon on the 14th. Howard Valentine, Woodbridge, Cor. Sec.

PRIZE Essays on Cooked and Cooking Food for Domestic Animals on the farm with useful information for stock feeders, farmers and others. Published by Dr. R. Prindle, East Bethany, New York, and by Barrows, Savery & Co., Philadelphia, Pa. Price 20c. This pamphlet of 64 pages is mainly taken up with three prize essays on the subject of cooking food for stock. The authors of the Essays are E. W. Stewart, W. H. White, and John Wilkinson, all three of whom are thoroughly practical men, well skilled in every phase of the subject they here handle, as well as on many other subjects of interest to the farming community, as our readers already know, since all three of them are contribnters to the columns of this paper. As winter in its full severity will soon be upon us, the subject here treated of is a timely one, and we can strongly recommend this publication to all whom it may concern.

THE Sugar Industry of the United States and the Tariff. Feeling that the existing duties on imported sugars and the methods by which the same are assessed and collected by the general government are faulty, unsatisfactory, and that while they give rise to injurious suspicions against honest importers, they afford to unscrupulous men, an opportunity for cheating the revenue, some of the chief importers and dealers in sugar, on July 8, commissioned D. A. Wells, the well known statistician to institute a careful examination and inquiry into the entire subject of the assessment and collection of duties on imported sugars and to report at an early day the result of his investigations. In the present pamphlet of 179 pages he treats the entire subject exhaustively, and presents many powerful reasons for the speedy alteration of our present laws regarding the importation of sugar.

TRANSACTIONS OF THE INDIANA HORTICULTURAL SOCIETY for the years 1876 and 1877. The first of these well edited, handsome, cloth-bound volumes contains 114, and the second 145 pages. Besides much other interesting information, each gives a full account of the proceedings of the Society at the annual sessions held in December each year, together with reports from local societies, and essays, addresses and discussions on various subjects connected with practical and scientific horticulture. The great benefits derivable from Societies of this kind are yearly becoming more apparent, and among the most influential means of spreading these benefits abroad are such works as those here referred to, containing, as they do, in a pithy, attractive form, the opinions and experiences of the best horticultural talent in the State. Indeed, the reputation of some of the members of this Society are not confined to State limits, but are broadly national, and their well considered teachings, as here set forth, are excellent aids to improvement in the refinement of agriculture, as horticulture has been justly termed.

The Querist.

ANSWERS TO CORRESPONDENTS.

Black-leg in Cattle.

A. M. K., McGaheysville, Va., having lost several calves by what he supposes to have been black-leg, asks for the symptoms of that malady and some remedy for it.

ANS.—Black-leg is a common form of Anthrax, other phases of which are known by the names of *quarter-ail, black quarter, black-tongue, puck, etc.*, according to the nature of the symptoms manifested or part of the animal's body most severely attacked. In all cases, however, the disease is essentially the same and the symptoms substantially alike. To the veterinarian the principal of these is the condition of the blood, which has a black, tarry, viscious aspect, coagulates not at all or only imperfectly, leaves a dark stain on tissues it comes in contact with, or, passing through the walls of the vessels, causes large, black patches of flesh. Moreover, it contains small microscopic bodies known as bacteria, which some consider the result and others the cause of the disease. To the farmer, however, among the most obvious symptoms are: a sudden depression of the whole animal frame; swellings on the legs, shoulders, under the belly, or on some part of the back. These swellings are caused by an accumulation of gases in the tissues, which produces a crackling sound when handled. A still worse symptom is the sudden appearance of hard, dry, scruffy patches of what seems to be dead skin. The mouth is almost invariably ulcerated and the tongue blistered. Costiveness is always present, frequently attended with bloody stools; the urine is deficient and highly colored; the eyes protruding and the mouth hot. The second stage is marked by lameness, chiefly in the hind-quarters; the head and neck are protruded; the eyes blood-shot; the appetite lost; thirst severe; the animal stands gloomy and dazed, away from the rest of the herd. All the symptoms aggravate rapidly and continuously; the animal soon lies or drops down; gets up almost immediately; but is soon down again, where it lies on one side with outstretched neck; stomach painfully distended with gas; tongue protruded; eyeballs retracted and covered with the haw. The ears, horns and extremeties grow cold, and insensibility and death speedily follow from twelve to forty-eight hours from the commencement of the attack.

The *post-mortem* appearances are: accumulations of air in all available spaces throughout the body; black exudations of blood, forming extensive patches, often confined to one limb or quarter; the blood dark and fluid; the lungs congested, especially the lower one; frothy mucus almost chokes up the bronchial tubes; the heart is soft, flabby, and filled with black, semi-fluid blood. The spleen, liver, and lymphatic glands are greatly enlarged, and the mucous membranes are often of a dark-red color. The body is only slightly rigid, most so immediately after death, and rapid decomposition sets in at once, often commencing indeed before the animal has breathed its last.

The disease is most common among young stock and in the fall and spring of the year. It is very liable to develop on certain farms, while the neighboring ones are free from it. Low wet lands, without drainage, are most conducive to it. As cures of afflicted animals are rare, prevention should be mainly looked to. To this end wet lands should be drained and healthy animals should be promptly removed from pastures where the malady has made its appearance, and always kept at a distance from diseased ones. Animals dying from the ailment should be at once buried deeply together with their litter and manure; the place where they have been should be thoroughly disinfected; care should be taken that dogs and pigs do not get to the bodies, otherwise they will spread the disease. As it is contagious to man as well as to animals, all raw sores, however small, on the hands and faces of those who attend infected animals, should be promptly cauterized with lunar caustic, and both before and after handling such animals one should wash well with soap and water in which a small quantity of carbolic acid has been dissolved.

Generally the disease acts so rapidly that there is little time for the use of remedies. In slower cases, the bowels should be acted upon with Glauber salts and afterwards mineral acids, antiseptics, tonics and stimulants should be used. A remedy strongly recommended is the following: For cattle, give morning and night a drench composed of sixty drops nitro-muriatric acid, three grains bichromate of potassa and two drachms chlorate of potassa dissolved in two quarts of water; and at noon give a drench composed of thirty grains of sulphate of quinine, one drachm of iodide of potassium and two drachms of bisulphate of soda in a pint of water. If one of these cannot be obtained, give the others, as directed. In case the animal shows signs of weakness and sinks rapidly, give every hour a solution of camphor in sweet spirits of niter, made by dissolving an ounce of gum camphor in eight ounces of niter and dividing into four doses. Each dose should be mixed with about a pint of water before it is given.

Poultry Queries.

M. W. Mt., Vernon Ohio, asks, 1. Where can he get a stock of pure eggs for setting the coming spring. 2. The name of a good, practical work on poultry-keeping, 3. A number of other questions on poultry matters.

ANS.—1. From any of the wide-awake poultry-keepers who advertise in the RURAL; see last week's issue. 2. Lewis's practical poultry book $1.50. Wright's practical poultry-keeper $2.—to be had through this office. 3. All these questions were substantially answered in our pontry number, last week.

Cisterns for Vinegar.

S. E. W. Milton, Ind, asks whether cisterns made with hydraulic cement are suitable receptacles for vinegar.

ANS.—We see no reason why they would not; except that the acetic acid in the vinegar might combine with some of the ingredients of the cement and form acetate of lime. But as we have had no personal experience in the matter, we shall be happy to publish information from any one who may have used such a device.

The Potato-digger of the Future.

A subscriber, Milton, Ky., asks whether there is a potato digger that takes up an entire row, sifts, separates and empties the potatoes into sacks, throwing the dirt and refuse matter to the ground.

ANS.—There is no such machine as yet in existence. A potato digger is made by a Canada manufacturer which digs, sifts and deposits the potatoes free from earth in a row. This is as far as we have got; the bagging of them is not yet accomplished.

Miscellaneous.

L. R. Briggs, Toledo, Benton Co., Oregon, asks where can he get half a pound of Persimmon seed.

ANS.—Write to Chas. H. Shinn, Niles, Alameda Co., Cal.

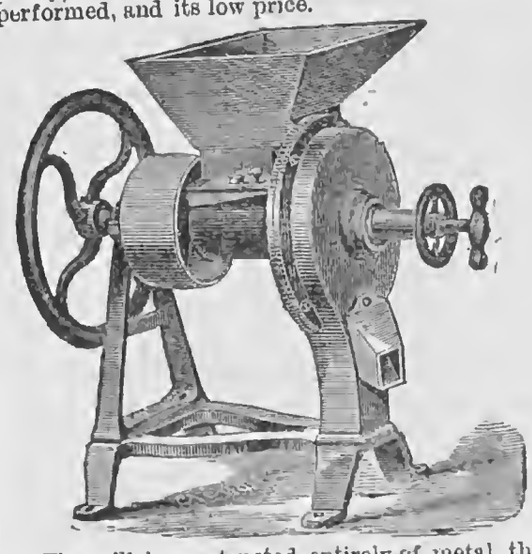
COMMUNICATIONS RECEIVED FOR THE WEEK ENDING SATURDAY, DECEMBER 21st.

"Farmer's Daughter"—T. N. W.—J. W. B.—J A. G.—I. A.—W. M. K.—A. L. J.—G. W. R.—H. T. H.—D. E. S., mail—T. P. R.—G. F. T.—A. S.—X.—H. L. K.—G. G. D.—H. H., too late for poultry number—W. O. R.—E. H. O.—N. R.—J. H. (Bermingham, England)—"May Maple" will send by mail the book referred to—M. G. R.—J. G. McG.—C. F.—G. E. M.—L. E. J., thanks for Pea seeds—T. A. M.—A. L. J.—O. N. R., thanks—Dr. E. L. S.—S. B. P.—B. H.—H, I.—A. B.—W. D.—K. W. G.—M. W. F.—L. M.—A. B. Culver, we have lost your address—M. F. R.—A. C. W.—W. I. G.—M. O. many thanks for suggestions—H. S.

Industrial Implements.

THE VICTORY MILL.

HEREWITH is given an illustration of the Victory Feed-Mill, made by Thomas Roberts, of Springfield, Ohio. Its leading features are simplicity, strength, quality and quantity of work performed, and its low price.



The mill is constructed entirely of metal, the grinding-plates being chilled to an extraordinary hardness. The cob and corn are crushed before going to the buhr by means of a heavy screw, revolving in a cast-iron chamber. By the operation of this screw the mass is fed continuously to the buhrs where it is ground coarse or fine by simply turning the feed-screw shown in front of the mill. Shelled corn may be ground fine enough for family use. By reversing the motion of the mill the plates become self-sharpening, and will thus remain serviceable until worn out. An extra crusher sent with the mill effects this change when it is used. If the corn is dry the capacity runs up to twenty bushels per hour, at a speed of from 500 to 700 revolutions. An extra perforated plate for grinding apples for cider is sent with the mill at a small additional expense, if desired.

Power of any kind capable of employing a belt may be used to operate the mill. A four-horse power will answer unless it is desired to grind up to the full capacity, when an eight-horse is sufficient. The firm makes a horse-power that is light, strong and durable at a very low price. Saw mill owners have found it profitable to employ their surplus power in grinding feed, and the Victory Mill has won golden opinions from some of these gentlemen.

Circulars will be sent to any of our readers interested in the subject.

THE ALEXIS REVOLVER.—Tramps are mainly responsible for an active movement in the fire arms market, and we venture to say that the Peace Commission would feel quite aggrieved if it could be made aware of the numbers of right-thinking people whose thoughts are not on murder intent, but whose homes have become magazines of death-dealing weapons. While it is by no means certain that this large home-guard army could, in cases of emergency, use their garnered destruction effectively, still, the possession of a revolver is a great moral support, and we think any country home is unprotected in the present state of affairs without one. It is easy to learn how to use fire arms with safety, and a little knowledge of this kind imparted to the ladies of the household would enable them to hold the fort in the face of an army of tramps. Intimidation, to be effective, must be exercised in a way that foreshadows experience. Few are willing or can afford to pay ten or twelve dollars for protection of this kind. We have recently seen a revolver that is well-made, effective and finished in an ornamental manner, that sells at from $2 50 to $4 50, according to the ornamentation. A number were made on a large foreign contract, which was cancelled, and Messrs. G. W. Turner & Ross have bought the entire lot at a price much below cost, and are selling them as represented. The offer is a bargain, as may be seen by a reference to the announcement in another column.

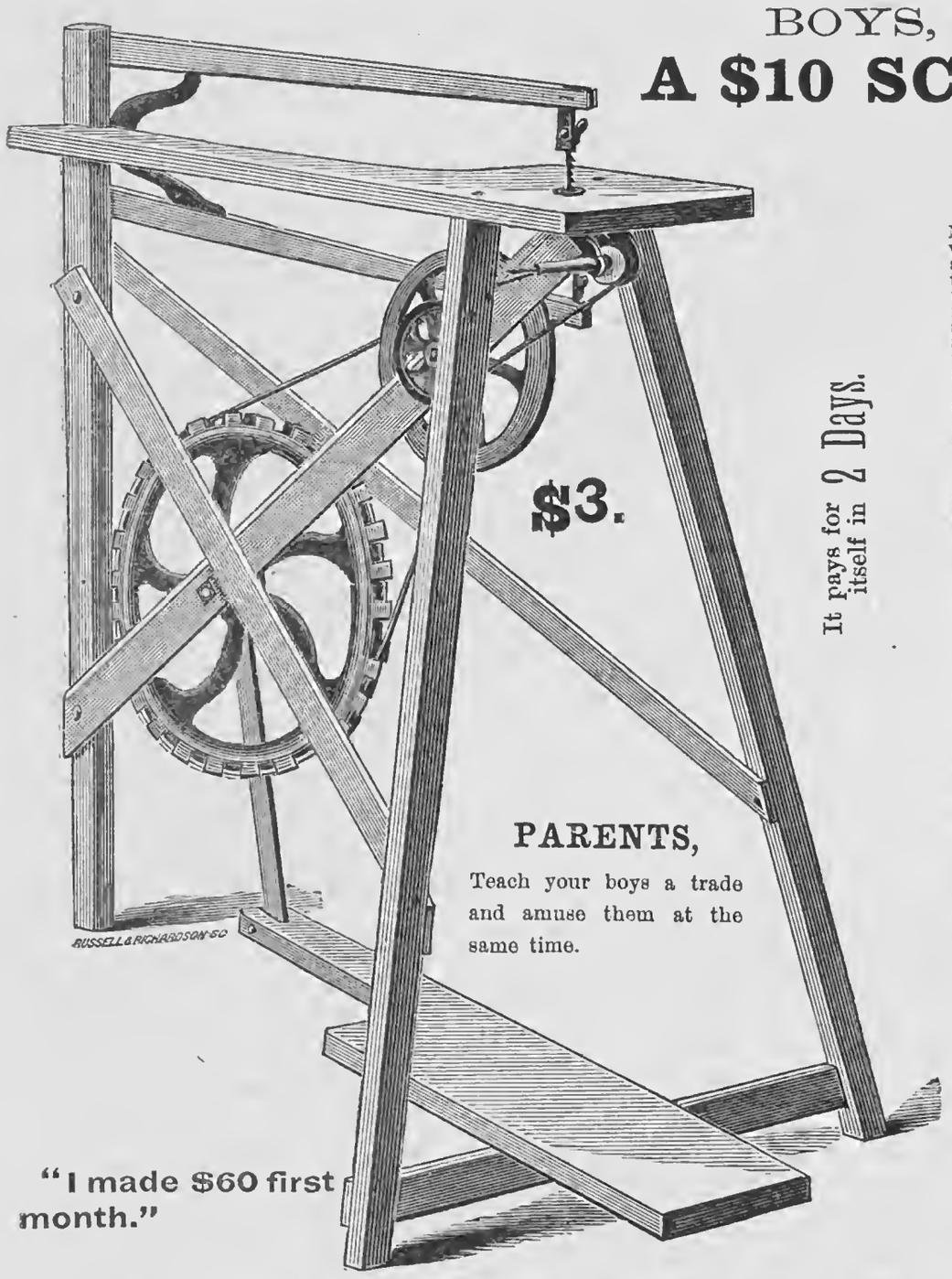
THE MENDELSSHON PIANO, is a neat adaptation of the xylophone to the piano by which it can be played upon through the medium of the keys. The notes are sounded on steel bars that are correctly pitched to produce the notes in sequence just as in a piano. The instrument is a piano in appearance and would make a seasonable present. For purpose of practicing or learning how to play. The Mendelsshon is just the thing. Its tones are clear and musical, and powerful enough to fill an ordinary room, and it does not require tuning. Messrs. Chas. H. Spaulding & Co., sell the piano for $5. which makes it the cheapest piano in the world. The announcement on another page sets forth its merits clearly.

SCROLL AND JIG SAWS have become very popular, and perhaps nothing so useful and profitable in machinery has ever been sold at such low prices, but we have just had our attention called to "My Companion" saw made by the Turner Mfg., Co., of Boston, and sold for only $3. One made to order, could not cost less than ten or fifteen dollars. Its mechanism is simple, it runs with perfect steadiness and rigidity, with great speed, and will cut inch board if necessary. These machines have been very popular, and no more fitting present could be made at this season. The saw is fully illustrated and described in another part of the issue. It is offered with a very powerful lathe for $5, and is the only saw and lathe in the market sold at that price.

THE SWAMP FOX is the peculiar name given a new breech-loading single-barrel shot gun made by G. W. Turner & Ross, the large Boston fire-arms dealers. It is made of good material throughout, especial attention being given to the barrel to secure long range, extreme penetration and even shooting. It has two triggers, the forward one being used to produce the tip-up breach action. Any center-fine brass, or paper-shell cartridges may be used. It is well balanced and altogether an exceedingly serviceable gun sold at an extremely small price.

BOYS, HERE'S A FORTUNE FOR YOU.

A $10 SCROLL AND JIG SAW FOR $3.



It pays for itself in 2 Days.

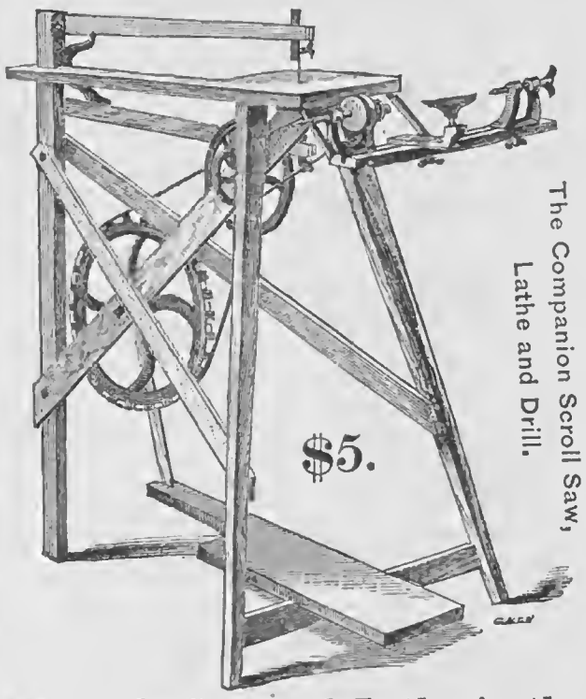
PARENTS,

Teach your boys a trade and amuse them at the same time.

"I made $60 first month."

REDUCED PRICES.

It is less than a year since we offered our New Improved My Companion Jig Saw for sale. The overwhelming success we have met with has induced us to improve in manufacture and reduce in price. The My Companion Saw, as it stands to-day, is the finest piece of mechanism in the world for less than $20, and it has that most important desideratum often missing in high-priced machines and never before found in a low-priced one, *perfect steadiness and rigidity when in motion.* It is a fact that our Saw will do as fine and perfect work as a $100 steam-power jig-saw, and will saw with lightning speed through heavy inch thick board, thus doing what few $20 machines will do, enabling the finest fret-sawing and heavy fancy carpenter work to be done with the same machine. Over 1,000 of our Saws are in use by carpenter and cabinet-makers in New England alone. **TO THE BOYS** of the United States we offer a prize never equaled. You can make $5 a week working evenings alone, and learn a trade which, if necessary, will always give one good wages. **Remember** this is not a toy, it is a **practical machine.** It runs as easily and lightly as a sewing-machine, and girls as well as boys can put the long winter evenings to good use, making useful articles and beautiful presents. A competent carpenter says: "*I cannot make this saw for $10; I should not get paid for my time alone.*" We make them by the 10,000: make each part with special and expensive machinery, which cuts out and finishes with great rapidity, each part fitting exactly where it belongs, and there is no waste of material or time. A SINGLE MACHINE COULD NOT BE MADE FOR $15. The frames are of best oak and ash, with iron wheels, blocks, braces and connections, and steel bearings. Each one **warranted for ten years;** every one adjusted and tried before sold. Directions sent for putting together which can be done in ten minutes. (They are shipped packed in a neat crate only 36 inches by 13 inches by 4 inches, weighing about 25 pounds.) Every boy is delighted with bracket-sawing; it pays them good wages, and their work commands a ready sale. Our saw completely fills the long-felt want for a foot-power saw that will do the **best work,** AND BE WITHIN THE REACH OF THE POOREST BOY. We make but very little on a single saw, but we mean that every boy in America shall have one. Both the press and mechanics flatteringly indorse our saw. IT IS AN UNPRECEDENTED BARGAIN. **DESCRIPTION:** *Length of Arms, 21 inches; Length of Arm for work, 18 inches; Hight of Table, 31 inches; Diameter of Balance Wheel; 6¼; Diameter of Drive Wheel, 12 inches; Length of Stroke, 1¼; Number of Strokes of Saw per minute, from 800 to 1,000; Speed of Lathe, 5,000 revolutions per minute; Length of wood that can be put in Lathe, 13 inches; Diameter of wood that can be turned in Lathe, 3¼ inches.* **PRICES.**—No. 1 Saw and powerful Drilling Attachment, with full set of Drills for boring in wood or iron, **$3.** (No. 1 is represented by large cut above, and our price has always been $3.50.) No. 2 Saw and Drill complete (represented in small cut above), with powerful Circular or Buzz Saw, with bed and gauge, and a fine Turning Lathe, with full set of turning tools, **$5.** This is a complete workshop, with full sets of tools which could not be bought elsewhere *equally as good* for **$25.** With each saw we **give** over fifty original Designs and Patterns, four Saw Blades, and four Illustrated Lessons for Beginners. When the cash accompanies the order we give **free** extra saws and our 50-cent Prize Sheet of Designs. If it is not all we claim in every particular, **we will refund your money.**



The Companion Scroll Saw, Lathe and Drill.

The only Saw and Lathe in the world for $5, or anywhere near it.

Address all orders for the

NEW IMPROVED MY COMPANION SCROLL SAW

to the

TURNER MANUFACTURING COMPANY,

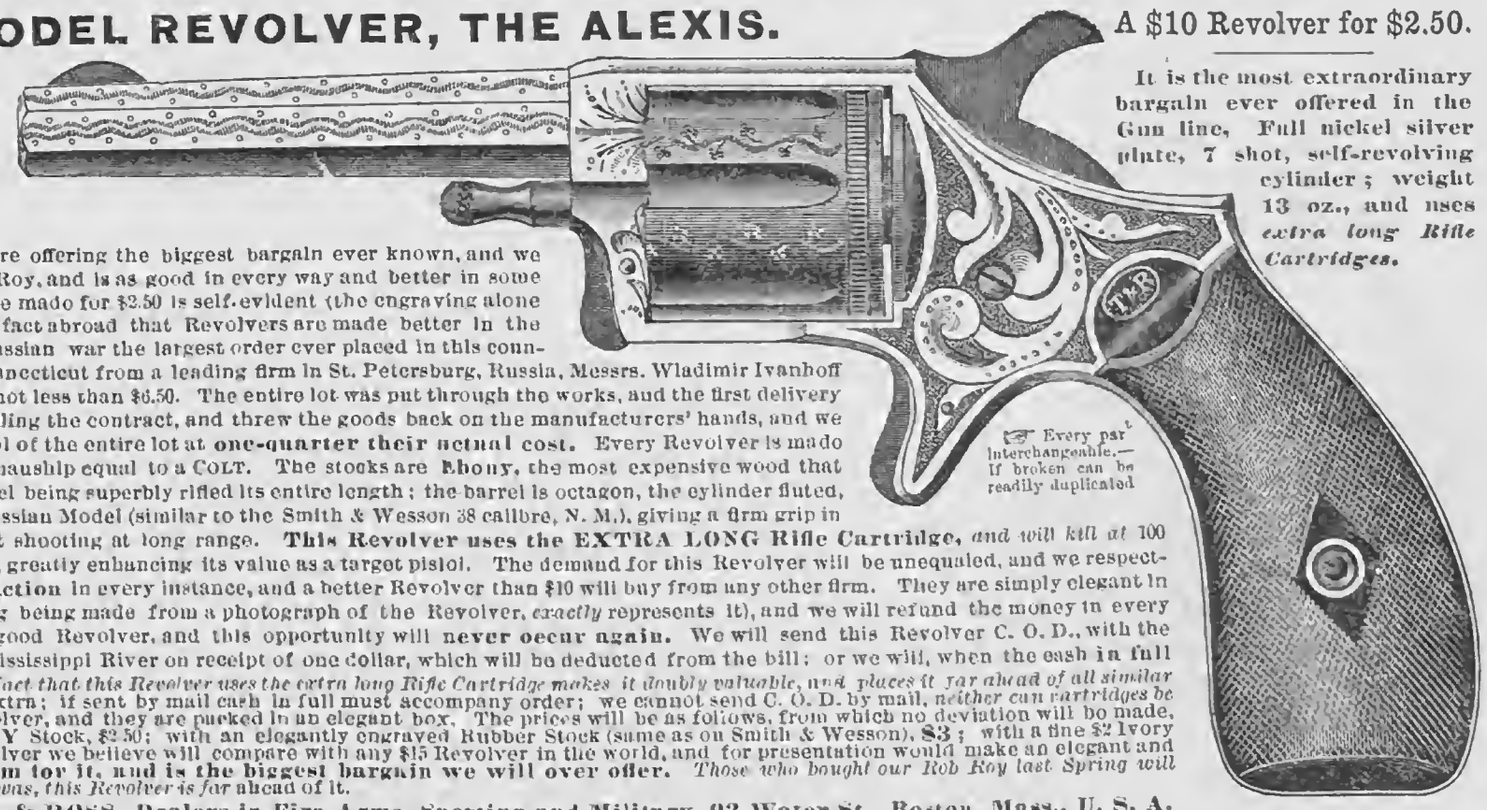
93 Water St., Boston, Mass., U. S. A.

THE GREATEST BARGAIN EVER OFFERED IN THIS COUNTRY IN REVOLVERS.

THE NEW RUSSIAN MODEL REVOLVER, THE ALEXIS.

A $10 Revolver for $2.50.

☞ The most elegantly proportioned and beautiful Pistol in the world. *This engraving is made from a* **photograph,** *and exactly represents this most superb Revolver in every particular,*—**size, shape and finish.**



It is the most extraordinary bargain ever offered in the Gun line. Full nickel silver plate, 7 shot, self-revolving cylinder; weight 13 oz., and uses *extra long Rifle Cartridges.*

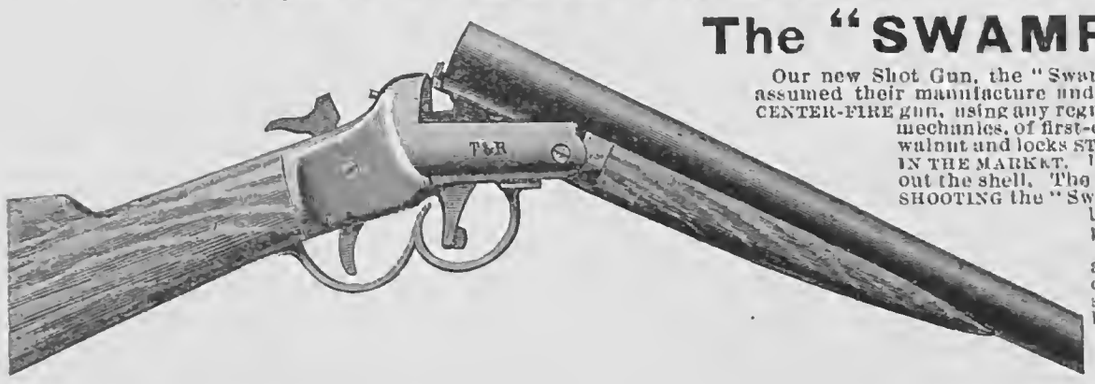
☞ Every part interchangeable.—If broken can be readily duplicated

When we offered our new Rob Roy at $2.50 we considered that we were offering the biggest bargain ever known, and we were; but the Alexis is a *better* weapon in *every particular* than the Rob Roy, and is as good in every way and better in some than a Smith & Wesson or Colt. The fact that this Revolver could not be made for $2.50 is self-evident (the engraving alone cost $2); we will explain our ability to furnish them. It is a well-known fact abroad that Revolvers are made better in the United States than elsewhere, and cheaper; just before the late Turco-Russian war the largest order ever placed in this country for Revolvers was received by one of the largest manufacturers in Connecticut from a leading firm in St. Petersburg, Russia, Messrs. Wladimir Ivanhoff & Co., for 30,000 of the above Revolvers, the *actual cost* of which was to be not less than $6.50. The entire lot was put through the works, and the first delivery and payment thereon made; the war prevented the above firm from fulfilling the contract, and threw the goods back on the manufacturers' hands, and we have just completed negotiations which gives us sole and exclusive control of the entire lot at **one-quarter their actual cost.** Every Revolver is made *on honor,* the engraving is the finest ever seen in this country, the workmanship equal to a COLT. The stocks are **Ebony,** the most expensive wood that could be used for this purpose. The metal is finest English steel, the barrel being superbly rifled its entire length; the barrel is octagon, the cylinder fluted, as shown in cut. The shape of this Revolver is what is called the New Russian Model (similar to the Smith & Wesson 38 calibre, N. M.), giving a firm grip in the hand, preventing the Revolver's throwing up, and producing elegant shooting at long range. **This Revolver uses the EXTRA LONG Rifle Cartridge,** *and will kill at 100 yards.* It weighs **13 ounces,** having an extra heavy and very long barrel, greatly enhancing its value as a target pistol. The demand for this Revolver will be unequaled, and we respectfully suggest an immediate order. **We guarantee more than satisfaction** in every instance, and a better Revolver than $10 will buy from any other firm. They are simply elegant in design and finish, as the above beautiful engraving shows (the engraving being made from a photograph of the Revolver, *exactly* represents it), and we will refund the money in every instance where our representation is at fault. Every one should own a good Revolver, and this opportunity will **never occur again.** We will send this Revolver C. O. D., with the privilege of examination at the express office, to any point east of the Mississippi River on receipt of one dollar, which will be deducted from the bill; or we will, when the cash in full comes with order, **give free** a box of extra long target Cartridges. (*The fact that this Revolver uses the extra long Rifle Cartridge makes it doubly valuable, and places it far ahead of all similar ones in the market.*) We will send it by mail to any address for 20 cents extra; if sent by mail cash in full must accompany order; we cannot send C. O. D. by mail, *neither can cartridges be sent by mail.* A full and complete set of cleaning tools go with each Revolver, and they are packed in an elegant box. The prices will be as follows, from which no deviation will be made, except in dozen lots:—Alexis Revolver, as described above, with **EBONY** Stock, $2.50; with an elegantly engraved Rubber Stock (same as on Smith & Wesson), **$3;** with a fine $2 Ivory Stock, **$3.75;** or with an elegant $3 Pearl Stock **$4.50.** The last Revolver we believe will compare with any $15 Revolver in the world, and for presentation would make an elegant and beautiful gift. **We know that this Revolver is all that we claim for it, and is the biggest bargain we will ever offer.** *Those who bought our Rob Roy last Spring will have no hesitation in purchasing the Alexis, for big a bargain as the Rob Roy was, this Revolver is far* ahead of it.

Address **G. W. TURNER & ROSS, Dealers in Fire-Arms, Sporting and Military, 93 Water St., Boston, Mass., U. S. A.**

A $16 BREECH-LOADING CENTER-FIRE SHOT GUN FOR $10.

The "SWAMP FOX." THE BEST SINGLE BARREL BREECH-LOADING SHOT GUN IN THE WORLD!



Our new Shot Gun, the "Swamp Fox," is exactly what we state it to be above—**A $16 GUN**—that having been the regular price until we assumed their manufacture and sale; and it is the finest single barrel breech-loader in the market. The "Swamp Fox" is a breech-loading CENTER-FIRE gun, using any regular paper or brass shell center-fire shell. It is elegantly proportioned, and thoroughly well-made by the best mechanics, of first-class—A No. 1—material. It is well balanced and comes to the shoulder splendidly. The stock is selected black walnut and locks STEEL. THE FRAMES ARE HEAVILY NICKEL-PLATED, and the barrels finely blued, making it the HANDSOMEST GUN IN THE MARKET. It has an improved and very strong tip-up action, simply pressing the forward trigger tips up the barrel and throws out the shell. The Barrels are bored on the most approved principles, and for LONG RANGE, EXTREME PENETRATION AND EVEN SHOOTING the "Swamp Fox" *can't be beat.* A common double A B C muzzle-loader cannot be bought for less than $14, and a single barrel BREECH-LOADER is in *every way* better than a double muzzle loader. We are selling this gun at a smaller profit than is made on any gun in the market, and at the regular price of this gun ($16) it was cheap and a bargain. REMEMBER, they are warranted in every way; our name and brand being stamped on every barrel. Prices, 16 and 14 bores, **$10**; 12 bore, **$10.50.** Sent to any address on receipt of price. Parties living at a distance and desiring the gun taken apart and boxed will send 50 cents extra for boxing. Every gun WARRANTED, and perfect satisfaction guaranteed. Any boy can now own a *good breech-loading shot gun,* and the "Swamp Fox" is indorsed by Sportsmen wherever shown. Address the manufacturers,

G. W. TURNER & ROSS, 93 Water St., Boston, Mass., U. S. A.

THE CULMINATING TRIUMPH OF MECHANICAL SKILL.

THE MENDELSSOHN PIANO, PRICE $5.00.

The latest addition to the many testimonials of the mechanical ability of the age.

☞ **THE ONLY PERFECT MINIATURE PIANO IN THE WORLD** ☜

The Mendelssohn Piano is the invention of an eminent and well-known Swiss musical instrument maker, and embodies new and valuable improvements not to be found elsewhere. It has black and white keys (sharps and flats), same size and proportion as in a regular Piano. The action is exactly the same as in a regular Piano, and any one who can play the Piano can play on the Mendelssohn; for beginners it is exactly as good as a $150 Piano. In short, the keys and strikers are on the same principle as a regular Piano. The notes or music pruncers are **insulated steel bars,** which give the same tones as a tuning-fork, the most correct notes known; and being of metal **never get out of order, and never require tuning;** and the music produced is very melodious and pleasing. Every one is surprised at the remarkable sweetness and purity of tone and the beautiful action which the Mendelssohn possesses. It is powerful enough to be heard throughout any room, and is an admirable substitute for a Grand Piano. The above engraving represents this beautiful Piano, and it will give satisfaction in every instance. The high price of Pianos has precluded their general use; but there is now no reason why every one, and especially the children who are musically inclined, should not own a real Piano, and the "Mendelssohn" will answer every purpose. It is elegantly proportioned, finely finished, and in perfect tune. It is made and operated the same as the ordinary Pianos; it cannot get out of order, and it is an ornament to any room. Any little girl owning one will be the envy of the whole town. It will give her a thorough knowledge of the Piano, which she may possess in after years; afford her months of pleasure, and lay the basis of a perfect musical education; for **remember** the Mendelssohn is played *just like a Grand Piano;* and the most beautiful music is produced in clear, melodious, crystal like tones. The top of the Piano lifts up, and a beautiful musical scroll supports the music. The Mendelssohn has received the warmest praise from fathers, mothers, and children, and also from the leading musicians in Boston. **The sales during the first 30 days of its introduction amounted to over 7,000,** and we, as its introducers, feel just pride in its success.

Every instrument is carefully tested by an expert at the factory before shipping, and every note is surely perfect, and **once right it is always right.** They will be sent to any address, by either freight or express, on receipt of $5. Make your child a sensible present; one which will delight both her and and the whole household. N. B.—When the buyer lives at a *great* distance from us, or is reached partly by stage or similar conveyance, it might be well to have the Piano packed in an extra strong manner; the charge for extra boxing will be 75 cents, which is the cost of the material used alone.

CHAS. H. SPAULDING & CO., Sole Agents,
95 WATER STREET, BOSTON, MASS.

Finely finished imitation Rosewood Case, handsomely designed Legs.

Elegantly proportioned, thoroughly made, and in perfect tune.

THE
RURAL NEW-YORKER.
PUBLISHED EVERY SATURDAY.

Address
RURAL PUBLISHING CO.,
78 Duane Street, New York City.

SATURDAY DEC. 28, 1878.

We will be pleased to send one or more copies of the RURAL NEW-YORKER *free to any of our subscribers sufficiently interested in its welfare to be willing to hand them to their neighbors for inspection. An intimation by postal card will suffice.*

PARTICULAR NOTICE.

Applicants for seeds will please observe that the postage on ANY POSSIBLE *selection of* TEN *sorts of seeds,* IS NEVER *more than* FIVE *cents.*

A ONE-CENT *stamp suffices for any selection of ten varieties* EXCLUSIVE *of the Beauty of Hebron potato, Pearl Millet and Defiance wheat. If the first of these three is included in the list, then a* TWO *cent* EXTRA *stamp is needed, and if the second and third are included, an extra two cent stamp is also required.*

OUR readers who apply will have the Beauty of Hebron potato sent to them separately, because to send this with seeds makes an awkward package, and also, because the seeds may be forwarded at any time regardless of the weather, while the potatoes may be injured by frost. We mention this for the reason that our friends receiving the potato only, may think the rest of their selection has been overlooked.

We earnestly request that all letters containing money, or any communication intended for the BUSINESS DEPARTMENT *of the paper, be addressed to the Editor, the Publisher, or* THE RURAL NEW-YORKER, *and not to any individual. We cannot otherwise guarantee the prompt entry of names upon our books, or the acknowledgment of money.*

OUR readers are particularly requested to read the particulars of our free seed distribution on p 829, under publisher's notices, before ordering seeds.

WE offered, some time ago, to sell the cuts used in this Journal for ten cents the square inch. Many have requested us to send proofs of our cuts. As we have upwards of ten thousand, we could not undertake to do so. Persons wishing to purchase, must select from files of the RURAL NEW-YORKER.

THE NEW YEAR.

WHEN the sun appeared to have reached the southern limit of his journey, and gave promise of retracing his course, the ancients held high festival, and said a New Year was born. Among the old Romans, the day on which he apparently began his return northward, was considered the commencement of a New Year and consecrated to the god Janus, who, having a double face, it was supposed could look back at the old as well as forward to the New Year.

Beside the fact that the division of time into months and years, gives a basis for chronological calculations, it is useful for purposes of reflection and consideration. The careful navigator never fails to make, when possible, daily observations whereby to ascertain his true position, and is in consequence often enabled to avoid rocks and shoals that are dangers in his way. So, we should, in life's journey, have set times on which to look about us and see our position, and what time more fitting than the beginning of a new year! Let us, then, for a few moments, take a retrospective view, and see what has been done during the year that is just closing.

As it has been every year, there have been wars and rumors of wars, useless and expensive. They have cost many lives and much money, and what has been gained? Has a new truth been established, or an old one set firmer on its foundation? Has a sound principle been sustained, or has the whole expense been incurred merely to gratify national pride or personal ambition? Would that we could look forward and see the time when nations should make war no more!

In our own country the year has been one of national prosperity. True, the cry of hard times has come to us from many quarters, but the "hardness" has, in most instances, been more imaginary than real. Many individuals have suffered pecuniarily; many mills and manufactures have been idle to the loss of the owners, but the people at large have not suffered therefrom. The earth has produced bountifully; economy has prevailed and our country is richer than a year ago. Prices for land and some commodities may be less; but of real intrinsic value, when measured by life-sustaining capacity, there is more.

Politicians have quarreled, but more for control of office than over any particular difference in political principles. The credit of the Government is steadily gaining, and its promise to pay is now as good as, or better than, the pay itself. Gold is at par, as it has not been before within the memory of many who will read this. There have been difficulties with the Indians in the West, as there always will be until there is more honesty among the traders and Government agents. There have been difficulties with the Chinese in California, and with the colored population of the Southern States, and there always will be until the problem is solved how two races differing in mental caliber, can live together harmoniously in a condition of equality—a problem that has defied all nations in all times—or until some plan can be devised by which the one shall be master and the other servant, that shall work no injustice to either, and be a benefit to all!

In discoveries in the arts and sciences, the past year has been fertile. Not to speak of minor improvements, witness the telephone, by use of which those miles apart can converse as readily as if in the same room; the phonograph that records and stores away conversations, speeches or songs, to be reproduced years afterward in the same tone and manner in which they were originally delivered; the electric light which bids fair to displace gas for lighting streets and public buildings, to be, perhaps, displaced in its turn by gas made from water at still less expense, and many others which have been from time to time noticed in the columns of the RURAL.

But, passing from the public to the individual, will it not be well for each one of us, on this day, to calmly and seriously turn over the pages of our lives, that during the past year have been printed in the book of memory, and, reading there where we have been astray, determine that the next year shall be one in which we will do better and be better for ourselves and for those about us. Is there one of us who would not, if possible, change many things we have done in the past year? We cannot live perfect lives if we would, but there is none of us who does as well as he knows how; who lives up to his own standard of excellence; who does not allow his appetites and his passions to exert more influence over his actions than his reason commends. With these facts patent before us, how can we excuse ourselves if we commence another year without a determination to do better. Such a determination, once made, can be kept, if we will. If it is not, the blame as well as the penalty will fall on our own heads.

DEPARTMENT OF AGRICULTURE.

WHEN we take into consideration that Agriculture furnishes more than three-fourths of our exports, and that those exports have turned the balance of trade $200,000,000 in our favor, it might be thought strange that this greatest interest should have no direct voice in the Government; that its chief Commissioner should be accorded a mere clerk's salary; that in the appointment of Commissioner, heretofore, no discriminating attention has been given to the real wants of Agriculture, and that his capacity for the duties of the important trust has often been scarcely that of a first-class clerk, yet we suppose, that the capacity even of such a Commissioner might correspond with his salary. In fact, so far as a clear understanding of Agriculture and the proper duties of the office, the Statistician has been, under most administrations, superior to his chief. But this want of proper consideration on the part of the Government is perhaps excusable on the ground that the great mass of farmers are quite indifferent to any organization of their interest.

This Department ought to be the inspiring head of all the State Agricultural Colleges, organized under the Act of 1862—judicious and wise in recommending a a proper course of experiments to be carried out on the experimental farms attached to these Colleges. Its head should be thoroughly acquainted with the agricultural needs of all the States, so that he may assist in devising methods of improving and increasing their productions. He should be a man of sufficient capacity to take in the whole field—to make a careful study of the agricultural situation in all parts of the country, assist in turning attention to the production of crops needed for local consumption, where the soil is propitious—teaching the great lesson of self-support by diversity of crops, and of independence through home production. And as the relation of demand and supply is the key to all commerce, the statistics of production and consumption should be so accurate that any intelligent farmer or trader may be able to come to a safe conclusion as the basis of market values. He should be able to command our agents abroad, and gain accurate information as to imports and consumption in the respective countries, of those articles produced here in excess of home demand.

If this Department were thoroughly equipped by Congress for carrying out this programme, it would swell our exports to the utmost limit of our surplus production. The best interests of the whole country require that it should be treated with a wise liberality and furnished with a defined policy. If it has not been all we might wish in the past, let us hope for great future improvement under the fostering care of a Congress that appreciates the reasons for its establishment. France, Germany and Austria have Ministers of Agriculture, and yet agriculture in none of these countries reaches such colossal proportions as in ours.

We believe this Department, properly conducted, would promote the welfare of the whole people in an eminent degree. And entertaining these views we were a little surprised that one of our cotemporaries, lately, in reviewing the Report of the Department, should argue that an appropriation to agriculture was an anomoly under our system, saying: "If we mistake not, agriculture is the only business that receives a special appropriation." What, then, is an appropriation for a break-water, for dredging a river—the large gift to the Pacific Railroad Company, etc.? Is not navigation a business? and the carrying trade of a railroad a business? "But these benefit the public," our cotemporary may say. "Certainly; but do not the objects promoted by a well-conducted Agricultural Department benefit a still wider public? Our cotemporary admits that, "If the influence and labors of the Department tend to improve the agriculture of the country at large, all are benefited, both consumers and producers." Well, if it does not "tend to benefit the agriculture of the country at large," then it is the fault of the conduct of the Department. Had we not better strive to reform and enlarge the conduct of the Department rather than pour cold water on it, and discourage efforts to build it up?

INDEX TO THE RURAL NEW-YORKER FOR 1878.

THE most valuable and highly appreciated improvement in scientific and practical works published of late, is acknowledged on all hands to be the excellent indexes that accompany the best of them. The systematic compilation of these, so as to enable the inquirer to refer readily to any desired subject treated of in the volume, requires a clear, methodical, analytic mind and no small amount of pains-taking labor. The successful result, however, amply repays the skill and toil expended on its achievement. Without it, any particular item of information contained in the work, can be referred to only after a search so lengthy and vexatious that few have the time or patience to go through with it, and if the same subject is treated of in various aspects in different parts of the volume, the chances are multiplied that some of its bearings will be overlooked or slighted, and it may well happen that these may be precisely the points that demand careful attention. By means of a good index, on the other hand, every topic discussed in the work is placed before the inquirer's eyes so plainly and systematically that he can promptly turn to every page of the volume, on which the matter is handled in any of its bearings. It is with justice, therefore, that a good index, especially to works of a practical nature, is considered by all a highly important addition to the value of the text, and the worth of it is vastly enhanced in connection with periodicals devoted to practical subjects; for in these the same questions are repeatedly discussed from different points of view at long intervals apart, while the aggregate bulk of the various numbers would generally render unaided search for all that may have been here and there said on any particular topic, a tedious, if not a hopeless, task.

These considerations have led us to bestow special attention this year upon the arrangement of the index to the volume of the RURAL for the whole of the year 1878. The improvement upon former years in this respect certainly keeps pace with the advance made in other parts of the paper. Practical topics alone find place in the new index; for however interesting or instructive the contents of the literary departments, they cannot, of course, have for the farmer the permanent value possessed by the teachings of agricultural science and experience recorded every week in the practical departments. The subject discussed in each article, and not its title in the paper, has been our guide in classifying it in the index, and whenever ease of reference is thereby promoted or ambiguity avoided, the same topic has been indexed under more than one heading.

Within the compass of the fifty-two numbers of the RURAL issued every year, there will be few questions relating to any branch of agricultural economy, on which valuable information cannot be found, while all important topics in that connection will during each year be fully discussed. In whatever part of the accumulated yearly volume any item of practical information may occur, the present and future arrangement of the index will enable the reader to refer to it even more accurately than the short index on the editorial page of each issue now guides him to the contents of a single number; for, in the latter case, merely the title of the article is given; whereas, in the former, each article will be analyzed and its subject-matter recorded. In view of the valuable fund of useful information in this way placed at all times within easy reach of our readers, would it not be well for many more of them than now do so, to save the weekly RURALS, bind them into yearly volumes, and thus in course of time accumulate a handsome library rich in information on the pursuit the best instruction on which is essential to their own prosperity and that of many of their children?

BREVITIES.

UPON our first page next week, we shall present an original engraving which we think will provoke study and merit commendation.

REV. E. P. ROE brings several apples of his Seedling Highland Beauty. Further than to say that they are of excellent flavor and possess fine keeping qualities we will not at present speak, since we shall give an engraving of a specimen later with all that can be said of this apple.

PEARL MILLET has been raised this year by a correspondent of ours living in Orleans Co., Nebraska; and he says that for cattle it is the best forage plant he ever saw. His horses, however, did not seem to like it. It matures seeds well in that section, and stands droughts excellently.

WE are glad to receive new subscriptions and renewals as fast as possible—but our friends need not hurry on account of our seed distribution. Due notice will be given of any additions, subtractions or changes. The Beauty of Hebron potato is sent whenever the weather warrants. The seed distribution will not be begun in less than a month. Of its commencement notice will be given also.

IN conversation with the proprietor of one of our largest agricultural newspaper agencies, we learn that two subscriptions are being received this season where one was received last year. This is highly encouraging and we trust as a straw will show which way the wind blows. We say Happy New Year to the Agricultural and Horticultural Press. May it have great success for 1879, and may it well deserve it.

THIS number ends a very prosperous year with the RURAL NEW-YORKER. We feel like thanking every one of our friends for their support and appreciative words. The RURAL has never been more praised and, we would fain hope, has never been more worthy of praise than during the year about to close. We wish our readers knew how stirring is our *determination* to make benevolence the one ever active sentiment in our labors for the future. Let us see how well our acts and our professions may be found to harmonize.

THERE is a fierce agitation against Green's Driven-well Exactions out in Minnesota and Wisconsin. On the 29th ult., a large meeting of harrassed well owners took place at St. Paul, Minn., and a State organization was formed to resist Green's exorbitant claims and test the validity of the patent. Numerous affidavits have been secured going to prove the antiquity of the device. In the issue of the RURAL for Nov. 30, 1876, the completest history that has yet appeared was given of this invention and of the litigation to that date concerning it.

SOWING GRASS IN THE FALL.—A correspondent from Rowan county, N. C., who, last year, gave our readers his experience on this subject, writes us again this year, still more strongly favoring the fall sowing of grass for meadow or permanent pasture. He sowed a mixture of two bushels of Orchard-grass, one quart of Timothy, two quarts of Red Clover, one pound of Herd's-grass and two pounds of Blue-grass to the acre for the purpose of making a permanent pasture, and where it was sown in the fall, the stand is splendid, while the Red Clover alone is good, where it was sown in spring.

THE insertion in this issue of our Complete Index for the yearly volume of the RURAL necessitates a curtailment of the space usually given to practical and literary subjects. Even a brief examination of the index will show the vast number of topics interesting to farmers which have been discussed in our columns during the past year, and it should be remembered that the list refers exclusively to the practical departments, omitting altogether the various branches of the literary departments, as well as news, market reports, etc., etc. We would urge upon our readers to retain this index, and still more strongly press upon them the desirability of saving all the numbers of the RURAL for the year 1879, which we intend to be even more instructive and interesting than its predecessor.

THE LONG AGO.

BAYARD TAYLOR.

Oh! a wonderful stream is the river of time,
As it runs through the realm of tears,
With a faultless rythm, and a musical rhyme,
And a broader sweep, and a surge sublime,
And blends with the ocean of years.

How the winters are drifting like flakes of snow,
And the summers like buds between,
And the years in the sheaf as they come and they go,
On the river's breast, with its ebb and its flow,
As it glides in the shadow and sheen.

There's a magical isle in the river of time,
Where the softest of airs are playing,
There's a cloudless sky, and a tropical clime,
And a song as sweet as a vesper chime,
And the Junes with the roses are staying.

And the name of the isle is Long Ago,
And we bury our treasures there—
There are brows of beauty, and bosoms of snow,
There are heaps of dust—but we loved them so!
There are trinkets and tresses of hair.

There are fragments of song that nobody sings,
And a part of an infant's prayer:
There's a lute unswept, and a harp without stringe,
There are broken vows and pieces of rings,
And the garments she used to wear.

There are hands that are waved when the fairy shore
By the mirage is lifted in air,
And we sometimes hear thro' the turbulent roar,
Sweet voices heard in the days gone before,
When the wind down the river is fair.

Oh! remembered for aye be that blessed isle,
All the day of life till night:
When the evening comes with its beautiful smile,
And our eyes are closing in slumber awhile,
May that greenwood of soul be in sight.

WEAKER THAN A WOMAN.

CHAPTER XVIII.

(Continued from page 814.)

"A dreary future," said Mrs. Haye, "a dreary future! I cannot tell you how sorry I am for Felix, Violet."

For Mrs. Haye was true to her tactics. She never named Sir Owen at all—she left him quite out of the question; but she talked incessantly of Felix, and always in the most kind and pitying manner. She deplored his fate; she declared it was the saddest she had ever known. To think that a man so young and so gifted should be burdened with the maintenance of so large a family! She feared he would not have the strength to manage it.

They were arranging a wardrobe one day, and the beautiful dresses so mysteriously sent for the *fete* lay within it.

"Violet," said Mrs. Haye solemnly, "if I were you I would put those dresses away out of sight; you will never want them again; you will never have an opportunity of wearing them."

"Mamma, do you think I am going to live in a cloister?" she asked.

"No, my dear, certainly not; but I know where and how you are going to live. It will be in a small house on very limited means."

"I shall go out at times," said Violet.

"Yes, but you will not be invited to such places as Garswood—it is out of the question: poo Felix could neither visit nor receive such people. And now that we are speaking of it, Violet, I think it would be just as well if you would try to learn a little of domestic work. You have been foolishly brought up, I am afraid."

"Why should I learn to work, mamma?" she asked, looking at her hands, so white, so delicate. "I am sure Felix will never like to see me working."

"He will not be able to help it, poor fellow!" Mrs. Haye said pityingly. "But you must look your future in the face, Violet; you cannot spend all your life in waiting for him—waiting until your hair grows gray, and your youth only a dream; and, if you marry him, it must be to help him."

"So I will help him, mamma," she replied.

"That is quite right," said Mrs. Haye serenely. "I am glad to hear you say so. I should like you to understand what helping in this case means. Felix will have to keep up Vale House and maintain all his step-mother's family. He will not, of course, have much to spare for himself; hence he will want all the care and economy possible in his household. You should learn to cook, to sew, to iron, to manage a house; for you will not be able to keep more than one servant, if you manage to do that."

"Mamma!" cried Violet in dismay, and she raised her pretty white hands with the pink tapering fingers deprecatingly.

"I am sure of it, Violet. I know what money is, and how far it goes. With every man's hand against him Felix will have a hard struggle; and the only way in which you can help him will be by spending as little money as you can."

Then wise Mrs. Haye left the words to work their effect.

In the meantime Sir Owen devoted himself unceasingly to Violet. Every day brought some lavish gift or other to the Limes—great hampers of game and fruit, of rare foreign wines, of flowers—and Violet said nothing of them before Felix, because she saw he was hurt that he could not do the same—and during that period the girl's mind was tortured and harassed by doubts and fears.

It was such a chance to miss. She might be Lady Chevenix of Garswood; she might be the wealthiest woman in all the county; and yet she had elected to be nothing all her life but a mere domestic drudge. When Sir Owen came over and insisted upon driving her out, she would say to herself that luxury was a necessity for her, that she could not live without it, that she must have it. Then Eve Lester would spend a day with her, and would talk to her with such noble simplicity, such simple grandeur, of the life before her, that she felt she loved Felix more than ever. At Vale House however, the cloud deepened, and honest Darcy Lonsdale wore his great heart away in sorrowful repining.

One evening—how well Violet remembered it!—it was the beginning of July, and the western sky was crimson with the setting of the sun, Sir Owen rode up to the door. He came into the dining-room, where the family had just partaken of tea, and it struck all of them that he was ill at ease. He spoke chiefly to Mrs. Haye, and looked but seldom at Violet.

"I went to London yesterday," he said, "and something tempted me into a jeweller's shop. I bought some very fine diamonds, and I have brought them here for you to see."

He took some heavy morocco cases from his pocket, and Violet looked up with a new light in her eyes and a low cry of delight. Few women, thought Sir Owen, can resist the temptation of diamonds.

He opened the cases and laid them before her. There was a beautiful diamond star, a superb necklace, brooch, earrings, bracelet and rings, all with stones of the first water, full of fire, clear, brilliant and beautiful. The crimson light of the setting sun shone in them and made them so dazzlingly bright that it was almost impossible to look at them.

"What do you think of them?" he asked Violet.

"I cannot tell you. I did not know there was anything in the world so beautiful!" she cried.

"How much are they worth?" asked Mrs. Haye.

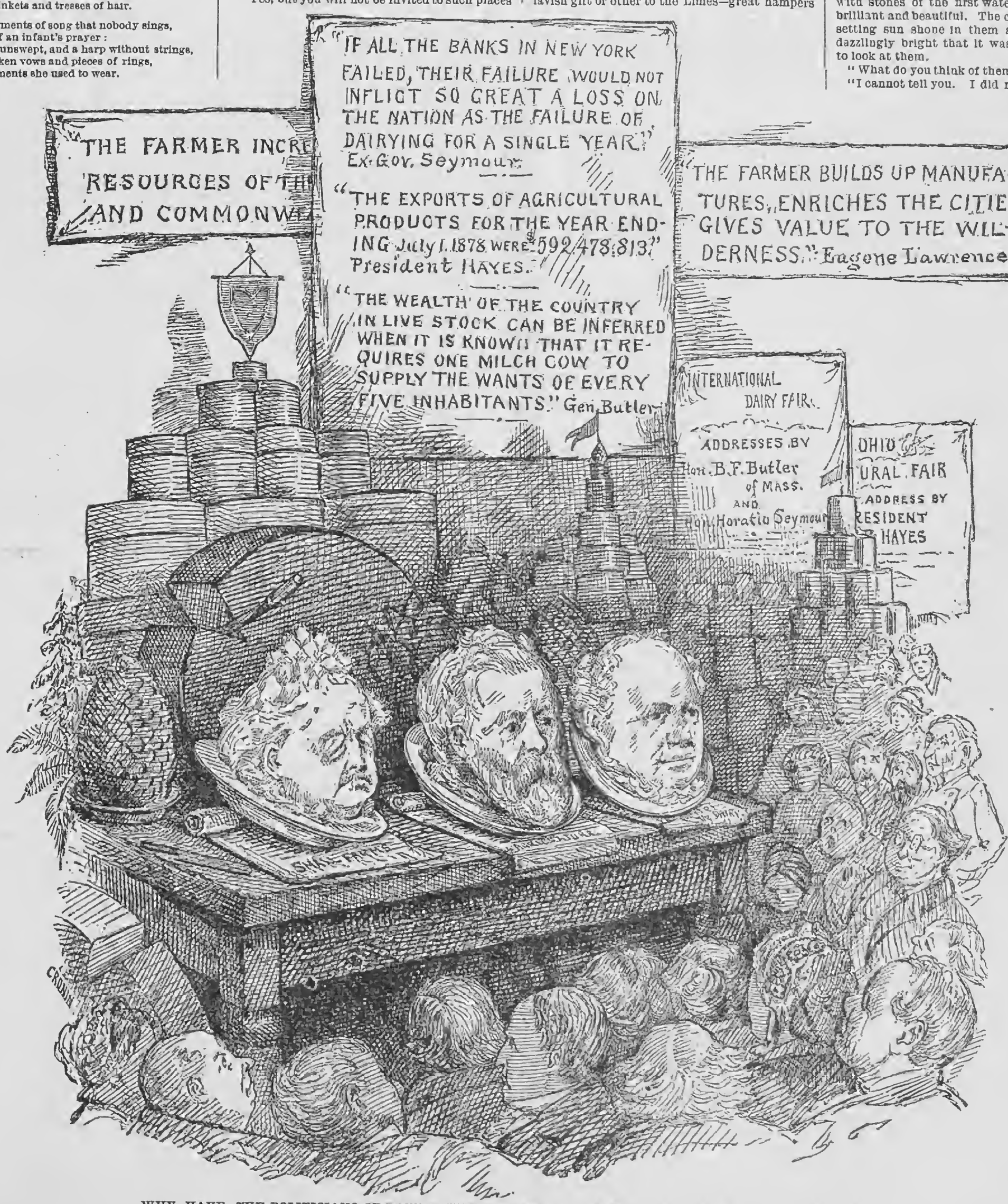
"I have paid more thousands for them than I should like to tell you," Sir Owen replied, laughing; "and I would pay as many more to please the same person for whom they are intended. Miss Haye, will you try them on? I should like to see the effect."

But Violet's hands trembled as she tried to raise the glittering gems from their velvet beds.

"Let me help you," he said.

The next moment he was standing by her side. He placed the brilliant star in her golden hair, and she felt that he lingered far longer than he need have done over it.

"What wonderful hair you have!" he said. "How beautiful it is! The diamonds are not good enough for it."



WHY HAVE THE POLITICIANS OF LATE TAKEN TO PRAISING FARMERS AND FARMING SO FRANTICALLY?

Then he clasped the necklace round the white graceful neck; Violet fastened the brooch herself, and he clasped the bracelet on her lovely arm. She would rather that he had not done so—Felix would not have liked it, she was sure; but then the temptation to see herself so decked just for once was irresistible. She had never worn a diamond—and these were so gorgeous.

Very soon he placed her before the great gilt mirror, and the crimson sunlight fell full upon her, on the sheen of her golden hair, on the brilliant gems, on the face more beautiful than any gem. Such a marvelous picture as she made in those glittering diamonds Sir Owen told himself had never been seen. Mr. Haye cried out in admiration.

"She is like the Queen of Sheba," he said.

"She is fairer than any queen," laughed Sir Owen. "You ought to wear diamonds, Miss Haye. You were born to wear them. Knowing that, and feeling sure how well they would become you, I have ventured to buy these for you; will you honor me by accepting them?"

But Violet drew back from the mirror with a pale, scared face, and a movement so sudden that the light in the diamonds was like gleams of fire scattered over her.

"You bought them for me?" she said.

"Yes; and I hope you will honor me by accepting them," he replied with a low bow.

"I cannot," she said quietly; "they are too valuable. I should never wear them."

"You shall wear them at Court," he told her—"and no royal Duchess has finer."

"Felix Lonsdale would not be willing," she said calmly; "I cannot take them."

An angry flush burned his face, a lurid light leaped into his eyes; but a sign from Mrs. Haye controlled him.

"My daughter is quite right, Sir Owen. She cannot take these diamonds from you while she is the promised wife of Felix Lonsdale. I will help you, Violet,"

The diamonds were taken off and restored to their cases. Mrs. Haye had never acted more wisely. Violet would have resented it had they been pressed upon her; woman-like, when they were so quietly taken back, she longed for them. There was no word spoken as Sir Owen replaced the case in his pocket and rose to take his leave.

"I trust I have not offended you, Miss Haye," he said, "by offering you the best tribute I could think of to prove my admiration!"

"Why should I be offended, Sir Owen? You were kind to think of me, but I—you see, I cannot take them."

"I will not offend again," he replied.

He shook hands with Francis Haye and his wife; he parted from Violet with a bow.

When the door had closed behind him, Francis Haye looked at his daughter.

"You have refused quite twenty thousand pounds," he said.

Mrs Haye held up her hand with a warning gesture.

"She has done quite right, Francis. It would be absurd for the wife of a poor struggling lawyer to wear twenty thousand pounds' worth of jewels—more than absurd. Who would make puddings and mend socks clad in such diamonds as these? Let Violet be consistent. She prefers linsey-woolsey to satin, poverty to riches. It is her own choice—we must not interfere."

Violet kissed her mother; but Mrs. Haye felt with keen delight that there was little rapture in the kiss; and all the rest of the evening the fair face was clouded.

Another thing happened which annoyed Violet. She was walking one day through Ordfield Lane, when she met Lady Rolfe and her daughter Lavinia. With great cordiality her ladyship stopped to talk to her.

"Will you mind walking on with me, Miss Haye?" she said. "I have often thought that I should like to chat with you."

"I shall be very pleased," answered Violet, little dreaming of the mortification in store for her.

"I wished to speak to you when we were at Garswood," said Lady Rolfe, "but I found no opportunity. I think it only my duty, Miss Haye, to utter a few words of warning to you about Sir Owen."

Violet looked up proudly.

"I do not think that there is the least need for such words, Lady Rolfe," she replied.

"I am very glad to hear you say so. Sir Owen Chevenix is a wealthy man. I do not wish to say one unjust word against him, but I am quite correct in stating that he does not bear one of the best reputations; he drinks and—well, he has other faults which I must not name to you."

"I do not see how this concerns me," said Violet.

"But I do, Miss Haye. Pray listen to me. You have a pretty face, and Sir Owen is always attracted by such. Yours is not the first by any means he has admired."

"I never supposed that it was," said the girl proudly.

"That is right. If you understand the character of the man, all is well; but, having a friendly interest in you, I was afraid that his flattery might mislead you."

"If she only knew the truth!" thought Violet. "If she could only guess that I have refused to be Lady Chevenix!"

"I am not alone in my ideas," continued Lady Rolfe. "I heard many ladies at Garswood say what a pity it was that no one warned you. This is what I want to say to you, Miss Haye—and, believe me, real kindness dictates the words. You are engaged to marry a very honorable gentleman. Even though he be unfortunate, do not lose the substance for the shadow; do not give him up under the mistaken impression that Sir Owen will marry you. The difference in your rank and position is too great. He is simply amusing himself with the prettiest face near him. Be warned in time—he will flirt with you, but he will never dream of marrying you."

"That is your ladyship's opinion," said Violet.

"And the opinion of every one else who knows Sir Owen and who knows you," added Lady Rolfe. "I assure you that many ladies have spoken to me about it, and have expressed a great hope that you would not be misled by Sir Owen's flattery and love of flirtation."

"If she knew all," thought Violet—"if she did but know!" And her beautiful face wore such a witching smile as she bade Lady Rolfe good morning that the keen, worldly woman felt alarmed.

"She would never look like that, Lavinia," she cried, "unless in some way or other she had the best of the matter. Surely it can never be that he has asked her to marry him."

"My dear mother, Sir Owen may marry just whom he pleases. The only fact which interests me is that he has not asked me to marry him. As for Miss Haye, I am not interested in her, and do not care to talk about her."

Miss Rolfe dismissed the matter very quickly from her mind, but Lady Rolfe pondered it deeply. Surely she must be mistaken—the best match in the county, the most eligible man for many miles round, could never be so absurd as to throw himself away on a mere nobody like Violet Haye, even though she had the face of an angel and the grace of a queen.

CHAPTER XIX.

So the decision as to her own future was left entirely in Violet's hands. Neither father nor mother spoke one word which could influence her, and Felix was so engrossed in his business that he was but seldom able to see her. Sir Owen, on the contrary, always kept himself present to her mind. Every day brought hampers, parcels of books, everything that could be thought of, from the Hall. Every day brought a little note begging that she would accept flowers, fruit, or whatever accompanied it. He rode over very often himself; he seemed to bring an atmosphere of the fashionable world with him; he was always full of spirits, with wonderful news to tell.

Violet had been very much annoyed by Lady Rolfe's warning—it had turned the balance the wrong way.

"I understand," she said to herself—"they think I am so far beneath Sir Owen that he will never deign to marry me. How mistaken they are, and how little they know of the real truth! How I could surprise them if I wished to do so! What a triumph and a victory I could win over them all! How they would wonder to see me Lady Chevenix! If ever I do become Lady Chevenix, that woman Lady Rolfe shall come no more to Garswood."

That was the first time she had ever admitted to herself that there was an "if" in the matter—the first time she had thought of the possibility that she might eventually be Lady Chevenix. The temptation was great and subtle; it was some time in forcing an entrance into her heart—but, once admitted, it would not leave her. There were many excuses for her—there was much that pleaded for her—her youth, her love of luxury, her dread of poverty, her longing for the bright side of life. The constant dropping of water wears away a stone. Such was Violet's case. The constant talk of poverty with which her mother plied her morning, noon and night—the constant praise of Sir Owen, the blank, cool toleration of Felix—the wonder at the riches of the one, the pity for the poverty of the other, all influenced her, until at length a day came when her heart opened to the worship of Mammon, when love dwindled into insignificance by the side of wealth. The day came when, wearied of everything, she went out into the cool green depths of the summer woods and her life, as it were, in her hands.

She tried to think of her case as though it were that of a stranger—as though she herself had no vital concern in it. On the one side she had to suppose that she would prove true to her promise, true to her word—that she would marry the man whom she really loved—Felix Lonsdale. "Let me look at that picture quite calmly first," she said to herself. She would have to wait at least two or three years longer, and by then the brightness of her beauty would have waned—the spring of her youth would have left her. They would be years of sorry discomfort too. Her mother and father would lose all patience; they would be years of constant unpleasantness; Felix too would doubtless be always in trouble—and she, like most of the young, gay, and beautiful, dreaded trouble. Taking the marriage at its best, it was a poor one. When she was first engaged to Felix Lonsdale, things were quite different. No cloud of disgrace hung over his family; he did fair to become a rich man; he had every hope of making a beautiful home for her. Even then it was not such a marriage as she with her queenly dower of beauty and grace had a right to expect. Were she to marry him with his present prospects, what a fate would lie before her! Such limited means—such genteel poverty! She shuddered as she saw the years stretch themselves out before her. She foresaw hard work—the work she disliked most of all, domestic drudgery; hard fare; no balls, no parties, but little dress, nothing but the care of a house—a bare, plain existence from which she shrank—no visiting. How people would laugh at her! It would be like going out of the world at once. But then—and her heart grew warm at the thought—she would have Felix—Felix who loved her so dearly—Felix to whom the ground she trod on was sacred! She would be with him, and she would have the happy consciousness of having done what was right; she would have done her duty, and she might be happy after all.

Then came the other side of the picture—and the girl's brain whirled as she tried to understand it, tried to realize it. If she married Sir Owen, she would be mistress of all his grandeur, of the superb grounds, the gorgeous pictures, the wonders of silver and gold; they would be hers to use when she liked and how she liked. She would be Lady Chevenix, patroness of balls, queen of the county; she would be able to patronize Lady Rolfe in her turn, to punish those who had dared to think she required warning; she could have dresses such as she had not dreamed of; she would be great, wealthy and powerful. But there would be no Felix with all this; she would have to give him up, and she would live the remainder of her life with a sense of having acted unfairly—of having betrayed such love and faith as were given to few women.

These were the two paths that lay so clearly and so distinctly mapped out before her. In her heart she loved Felix—and she knew it; but that same heart longed for wealth and luxuries such as Felix could never give her—that same heart recoiled from the poverty, the struggles, the hard work, the economy, the daily cares that must attend her as the wife of Felix Lonsdale. She disliked all such; she remembered how even when things looked brightest, she had stood in the house that had belonged to the Hendersons, wondering what her life would be like there, and recalled the curious sensation that had come over her of there not being enough there to fill her life. Then she laughed a little bitter laugh as she flung away the wild-flowers that she was holding.

"I have a desire to be rich," she said, "but none to be noble. I am not noble. I see the right and honorable path, but I have not the strength to follow it. I hate myself for being what I am, but I cannot change."

She made no false excuses to herself; she gave no high-flown name to the sin she was about to commit. Mammon tempted her, and she fell; the spirit of the world, the pride of life, the love of riches had all entered her soul, and taken possession of it. She did not disguise from herself what she was doing when she deliberately resolved to break her plighted word—to give up her lover and marry Sir Owen.

Her temptations had been many and great—they had been continual, they had been hard to resist; but that was no excuse. She knew that she was committing a double sin; she was proving false to the one man whom she really loved to marry one whom she did not love at all.

"It is a double sin," she said to herself, "but I cannot help it—I could not go through a life of drudgery and poverty. Felix will hate me, but in after years he will know that my decision was wise."

So she thought and mused, dreaming in the sweet shade of the summer woods of the gorgeous future that would be hers if she married Sir Owen. Presently her mood changed and her eyes filled with passionate tears as she thought of Felix.

"I love Felix," she cried. "Why can he not have Garswood? Why must he be poor and obscure while Owen Chevenix revels in wealth? It is not fair."

She had love and wealth both before her, yet she had deliberately given up love and had chosen wealth. She made no effort to justify herself in her own eyes.

"Those diamonds were too much for me," she said. "I cannot help it if I am not noble by nature."

Yet, when she had left the woods, and walked home through the meadows, something was gone from the sunlight, something from the song of the birds, which was never to be there again for her. She walked as one over whom a shadow lies. She had joined hands with sin—and sin is never a cheerful companion. The flowers and the trees, the color of the grass, had lost their charms for her—there was a dark shade over everything.

"Will it always be like this?" she thought. "If it is, I shall not find my future very bright."

Then the girl's heart misgave her. As she looked round, everything reminded her of Felix. She had walked with him down those groves, she had lingered with him by that stile and under those trees; he had been so much part of her life that she could not picture life without him.

"How shall I live without him?" she said. "How shall I spend the days, the years without him?" Then she tried to harden her heart. "People cannot live on love and poetry," she told herself; "if they could, all would be well."

That same evening she said to Mrs. Haye—

"Mamma, I have been thinking it will be better for Felix and myself to part. I am afraid he has enough on his shoulders."

"I have thought so for some time, my dear," was the quiet reply. "Your engagement is folly, your marriage would be madness."

Then Violet went up to her mother, and put one arm round her neck.

"Mamma," she said, "you will save me all trouble?"

"Yes;" replied Mrs. Haye, "you may safely leave it all to me."

And so wealth won a soul not noble enough to live for love.—To be continued.

A MORE abundant supply of Sea Island cotton has long been a great desideratum with the spinners of counts of yarn running from 250's to 300's. It is well known that the long silky fiber which grows on the slopes of Georgia and Florida, and which is so highly valued by English manufacturers, has, in fact, for years fallen short of the required quantity. It appears, however, that some time ago a parcel of the Sea Island seed was sent to Fiji, and, after having been sown in a chosen district, the experiment has proved so successful that a material almost equal to the famed Georgian is produced, which commands a ready sale in England. A London journal states, in this connection, that not long ago a Belfast manufacturer, largely engaged in the make of very fine muslins, purchased in Manchester several lots of high-class yarns that had been spun from the Fiji cotton, and had a portion of the lot woven through an 1800 reed. The result was that the web thus produced appeared, in beauty and texture, very little inferior to those gossamer-like fabrics which are woven in such perfection in Hindostan.

CHRISTIAN MODERATE DRINKERS.—If Christians would be honest to the dictates of their own consciences, we should not have so much controversy upon the prevailing evils of our own times, and Christians would be more willing to give up that which is the cause of so much evil—viz., drink—for the sake of others, realizing that "With such sacrifices God is well pleased.—*L. Herbert.*

News of the Week.

POLITICAL.

Monday, Dec. 23d, 1878.

BLAINE'S Committee for investigating alleged southern election outrages, turns out to be hardly Blaine's after all. The custom is to call the Committee by the name of the man who asks for its appointment, who is by usage placed at its head as Chairman. Blaine, however, declined that position on the Committee he had demanded, Conkling would have nothing to do with it, and indeed, it was no easy matter to get a prominent republican on it. Blaine, the newest of senators, of his own motion, without consulting the republican fathers of the Senate or waiting for a caucus, had dared to sound what was heralded as the key note of the next campaign, and the older senators didn't care to carry him and his bantling on their shoulders. It is generally conceded that the democratic members of the Committee are a trifle too much for their republican colleagues. They will sit with open doors, and are now bothering Blaine and Hayes for a statement of the causes which led the former to ask for the Committee and the latter to denounce the supposed outrages, in his message.

MISCELLANEOUS.

The most notable incident of the week has been the return of business to a specie basis, the first time in sixteen years. On Tuesday last it was found in the gold room here that greenbacks were at par with gold and they have remained so since. This vast appreciation of legal tenders, from the neighborhood of 3 to 1 to an equality with gold, has been hard on the debtor class, who contracted the debts when the purchasing power of greenbacks was much less than that of gold, and besides having paid heavy interest meanwhile, will now substantially have to pay in gold what they borrowed in depreciated greenbacks. But a single general benefit always implies a thousand individual hardships, and the return to specie payment amongst us is no exception to this rule. It will be very hard on the farmers, who as a class are more widely in debt than any other; but the country at large will immediately be the gainer, owing to the greater steadiness in business, and those of the farmers who are not broken by the pressure will also be ultimately benefited, because owing to their position and the nature of their products, there is no class so liable as they to be injured by the fluctuations in prices and speculative uncertainty promoted by the existence of two standards of value—greenbacks and gold.

IT will be within the memory of our readers that a number of months ago, there was a quarrel between Judge Hilton, the representative of A. T. Stewart's estate and the Jews throughout the country. The former objected to admit some Jews into his hotel at Saratoga and the latter felt justly indignant at the insult thus offered to their co-religionists. Since then the Hebrews throughout the States have refused to do any business with Hilton, and the old firm of A. T. Stewart & Co., has lost heavily on this account. Lately Mrs. Stewart made donations to several charitable institutions in this city and among others to three Jewish charities, and these were advised that they could get the money by calling on Judge Hilton. They have all refused to touch a dollar of it on account of that proviso, and are supported by Jews everywhere. Hilton seems to have exhausted his supply of tact in toadying to Stewart and his wife until a cool million was left him by the former, for which the latter transferred to him nearly $20,000,000 worth of property. Since then he has gained a wider unpopularity than any man ever won in the United States within so short a time.

FOREIGN.

From across the Atlantic comes word that the Afghan war is virtually ended. Russia has withdrawn her Embassy from Cabul—the presence of which there, was the chief cause of the war. The Ameer with his family and treasures is flying with the retiring Embassy to Balk; complete anarchy prevails in the country, and no serious opposition to the movements of the British is at present expected. The Princess Alice of Hesse-Darmstadt has been buried, and her cousin, the Duke of Cumberland, son of the late King of Hanover, was married on Saturday morning to the Princess Thyra of Denmark, sister of the Princess of Wales. Bayard Taylor, our Minister at Berlin, died suddenly in that city last Wednesday and the body was yesterday placed in the receiving vault of Jerusalem Church, preparatory to its transfer to the dead author's home at Cedarcroft near Philadelphia. Despite the large sums he made by literature, his generosity is said to have been so great that his family are left unprovided for—his wife getting only the $10,000 for which his life was insured.

At no time within the memory of the present generation has the distress among the lower orders in England and Scotland been so grievous or so widespread as at present. Cotton and woolen

mills are either altogether idle or runing on reduced time; iron works of all kinds are in somewhat the same condition; farming is an improfitable business at present rentals, and prices; public works are unusually few and unimportant; financial distrust is general owing to late bank rascalities and the fears that others will soon be disclosed; tens of thousands of men women and children, necessarily idle, are on the brink of starvation; capital, as usual, is greedily taking advantage of the public agony and reducing wages to starvation rates; because thousands of famine-pinched wretches are expected to be forced by hunger to work for even a pittance; a strike of 100,000 colliers is imminent on account of a threatened reduction of their present small wages. Public and private charities of all kinds are taxed to the utmost, and were times a little better on this side of the Atlantic, there would be a rush of immigration to this country unexampled since that during the Irish famine of '48.

The political prosecutions in Germany are fast becoming persecutions, and there is great danger according to some, great hope, according to others, that there will be avery large influx of Teutonic revolutionists to this country. Already the tide of immigration from the Fatherland has set in at this port and so soon as the weather grows milder, many expect it to come with a rush like that of the ocean up the Bay of Fundy.

Georgia women make good political helpmates; Senator Gordon's wife advises her husband what to do in many important matters of state; Governor Colquitt's wife conducts much of his business for him; Congressman Felton's lady ought really to be the Congressman and Senator Ben Hill looks to his better-half for clear-headed logic.

Charles Francis Adams appears to be slippiag from the grip of Massachusetts. He bought $40,000 worth of Kansas City lots lately, and will build a cotton mill, with cottages for the operatives.

Wilkie Collins is small, short, stout, timid and gouty.

PUBLISHER'S NOTICES.

OUR readers are requested to read the following before making up their orders for seeds:

Any ten of the following require a one-cent postage stamp:—that is ONE *cent* for the ten, not for each.

The Voorhis Water-melon.	Chater's Lemon Hollyhock.
Acme Tomato.	Deutzia crenata fl. pl.
New Bronze Ricinus.	Hibiscus militaris.
Hibiscus moscheutos.	Eryngium Leavenworthii.
Callicarpa Americana.	Geranium sanguineum.
Hibiscus Syriacus (mostly from double-flowering seedlings), "Rose of Sharon."	Yucca filamentosa.
	Vitis heterophylla.
	Rural hybrid Aquilegia.
Weigela.	Grindelia squarrosa.

When the Beauty of Hebron Potato is included, a two-cent extra stamp.

When both Pearl Millet and Defiance Wheat are included, a two-cent extra stamp.

We request that our subscribers will write their addresses IN FULL and PLAINLY, and not *stick the stamps to their letters*. By so doing they will save us a deal of trouble and expense. For particulars, send stamp for RURAL of Nov. 9.

A Favorite Cough Remedy.—For Colds, Sore Throat, Asthma, Catarrh, and other diseases of the bronchial tubes, no more useful article can be found than the well-known "*Brown's Bronchial Troches.*" **25c. a box.**

THE MARKETS.

PRODUCE AND PROVISIONS.

NEW YORK, Saturday, Dec. 21, 1878.

BEANS AND PEAS.—The market is weak, under a free offering of mediums and light prospective business in marrows. Exporters do not state when their orders will resume, but a further decline may stimulate business. Pea beans dull, quality against sales. White kidneys hold old rates, as supplies are moderate. Red kidneys firm and again higher. Black beans steady, without large business. Green peas, $1.30@1.35: Southern B. E. peas, $2.05@2.70 per 2-bushel bag.; a loss from recent rates. Canadian peas, in bulk and bond, 72@74c.; Medium beans, prime, $1.55@1.57½; fair to good, $1.35@1.45; Marrow, free on ship, $1.65; fair to good, $1.45@1.50; pea, $1.50@1.75; white kidney, $1.80@2.00; Red do., $1.90@2.25; Black, $1.90@2.25.

Receipts of beans for week, 13,500 bushels; exports, 415 bbls.

BEESWAX.—A little call from exporters at steady prices. Sales at 26@27c. for Western and Southern.

BUCKWHEAT FLOUR.—Sales at $1.65@2; the latter for choice.

BUTTER.—Merely an ordinary grocery demand has attended the market, and sellers will have to be favored with a brisk late winter business if the uneven and average dull fall and December demand is to be atoned for. One feature is encouraging: the quality of late State receipts is high and of good keeping grade. Of common stored lots there is little to say further than they will depend on a chance market. As usual, in dull times, when western has quality merit, and late supplies run well in this way market buyers and fair styles of grocers avail themselves of the favorable difference in price between western dairy tubs and useful table grades of State. Line dairies, firkins and hf. tubs are not active, holders quote them as before; but a wholesale call would obtain a concession. Welsh lower.

State, full dairies, special, 2?c.; other, 16@19c.; firkin dairies, fair to prime, 13@18c.; Welsh dairies, fine full, 16½@17½c.; choice dairy, pails and half tubs, 22@23c.; fair to prime do., 15@21c.; choice Welsh, 19@20c. Imitation prime, 13@17c. Choice creamery 25@26c.; other, 22@24c.; sweet cream, 24@26c. Best Western creamery, 27@29c.; other, 20@25c.; early packed creamery, 17@20c.; poor State 10@12c.; Western dairy, fine fresh, 16@18c.; fair to good, 10@14c.; factory, choice, 13@14c.; other, 6@12c.; rolls, 10@14c.

Receipts for week, 30,240 pkgs. Exports, 4,188 do.

BROOM CORN.—There are fair supplies of most grades. Jobbing rates are 4½@5½c. for medium green to choice hurl, with inferior at 4c. Car lots do not exceed 4½c. for very best and off grades sold below 4c.

CHEESE.—There have been exported this week 24,500 boxes; most of this business has been in strictly fancy factories, and as these are getting scarce, for special lots extreme prices have been made, 9 to 9½c. being quoted and for a named factory of 3,500 boxes as high as 10½c was paid. The under grades are slow, in ample stock and weak. Quotations are: 8½@9c. for fancy, special lots to 9½c.; 8@8¼c. for fine lots; 7@7¼c. for good; 4@5c. for skimmed. State, farm dairy at 8@8¼c. for fine; 7@7½c. for good to prime. Wisconsin factory, fine to fancy, 8¼@8½c.; do. good to prime, 7@8c. Western factory, fine and fancy, 7½@8½c.; good and prime, 6@7c.; do. full skimmed, 2@5c.

Receipts for week, 53,790 boxes.

Liverpool cable 45s.

Gold, par.

COTTON has shown sharp fluctuation and has been active, closing strong at, for December, 9.15@9.17c.; January, 9.27@9.28c.; February, 9.46@9.47c.; March, 9.61@9.62c.; April, 9.74@9.75c.; May, 9.88c.; June, 9.99@10c.; July, 10.08@10.10c.; August, 10.15@10.18c.

Quotations for spot cotton are based on American standard of classification, and on cotton in store running in quality not more than half a grade bove or below the grade quoted:

	Uplands.	*N. Orleans.*	*Texas.*
Ordinary	7¾	7¼	7¼
Strict ordinary	7 9-16	7 11-16	7 11-16
Good ordinary	8 1-16	8 3-16	8 3-16
Strict good do	8⅜	8⅜	8⅜
Low middling	8⅝	8⅝	8⅝
Strict low middling	13-16	8 15-16	8 15-16
Middling	9	9¼	9¼
Good middling	9⅜	9⅜	9⅜
Strict good middling	9⅝	9⅝	9⅝
Middling fair	10 7-16	10 9-16	10 9-16
Fair	11¼	11⅜	11⅜

Stained.

Good ordinary.....7¼; Strict good ordinary. 7¾
Low middling.....8¼; Middling 8⅜

DRIED FRUITS.—Trade is slack, as usual at this period approaching the holidays, but prices generally steady.

Southern plums at 13½@14c.; State plums, 15@15½c.; Blackberries are quoted at 5@5½c. Peaches—Peeled Georgia, at 6½?c. for poor; 8@9c. for fair to good; 10@10½c. for prime; choice North Carolina, 11½@12½c.; good do., 8@10c.; unpeeled halves, 3@3¼c.; quarters, 3@3¼c. Pitted cherries, 22c. Apples—Old State quarters, 2½@3c. New apples, 2¾@3c. for southern quarters in bbls.; 4@4½c. for prime sliced; do., fair, at 3@3½c. State at 4@4½c. for new sliced; and 3@3¼c. for quarters; western at 2¾@3½c. for new quarters. Raspberries, 30c.

Exports, past week, 751 bbls. dried apples.

EGGS.—There has been a fairly active market; holiday purposes increasing the call. Main demand for prime fresh, but limed and good held are selling fairly for mixing use. Near points, 27@28c.; State and Penn., 25½@26½c.; Western, 25¼@26c.; Southern, 25@25½c.; Canadian, 23½@24c.; off quality, fresh, 21@22c. Limed, choice, 16@17c.; good, 14@15c.; other, 12@13c.

Receipts for the week, 6,800 bbls.; do. last week, 4,487 do.

ESSENTIAL OILS.—First hand prices in N. Y. as follows: Peppermint in tin, $1.60; in glass, $2.30; sassafras, 44c.; wintergreen, $2.15; tansey, $3; wormwood, $3; pennyroyal, $1.20.

FEATHERS.—New white geese primo. 40@45c.

FLOUR.—Large receipts and insufficient export and home trade demand have weakened prices. A decline quite general of 10 to 20c. per bbl.

Latest prices are: $3.15@3.60 for inferior to fancy superfine State; $3.60@3.90 for very poor to very good extra do., odd lots and lines; $3.90@4.25 for good to very choice do., and fancy lots above this; $3.15@3.65 for inferior to fancy superfine Indiana, Iowa, Michigan, &c.; $3.50@3.90 for very poor to very good shipping extra do. and $3.90@4.25 for good to very choice extra do.; common to about choice white wheat extras, $4.30@5.00; choice to strictly fancy do. at $5.00@5.75; red and amber winter wheat, very inferior to very choice trade and family $3.30@5.00 round hoop Ohio at $3.80@4.25, and trade and family brands of do. at $4.25@5.60, the latter rate for very choice; St. Louis, $4.00@4.75 for very poor to good extra, and $4.75@5.60 for good to choice; Minnesota clear, very inferior to very choice at $3.50@5.00; few brands going above $4.50; Minnesota "straight," inferior to very choice at $4.40@5.65; and patent fair to strictly fancy at $5.25@8.25, few brands going above $7.50; unsound stock at from $2.00@4.75; city mill extra at $4.65@5.00 for West Indies (the latter rate for fancy in new packages); do. for England, $3.65@3.85; do. trade and family extras, $5.10@6.00; do. for South America, $5.00@5.60 for fair to very choice; No. 2 at $2.25@3.00 for very inferior to strictly fancy.

CORN MEAL.—Sales at $2.15@2.50 for yellow Western and $2.85 for Brandywine.

FRESH FRUITS.—There is a fair demand for apples but prices are no better. At this season domestic fruits and nuts have divided a good deal of trade with foreign items. Spitzenburg apples, bbl., $1.75@2 choice; fair, $1.25@1.50; Baldwins, $1.25@1.50; fancy, $1.75; Greenings and other good winter fruit, $1.25@1.50; very common, 75c.@$1; Lady apples, selected, $5@7; poor, 2@4; Cranberries firm with good sale. Fancy Cape Cod, bbl., $9; fair to prime, $7@8.50; poor, $5@6.50; N. J., crates, fancy, $2.50@2.75; other, $1.75@2.25. Catawba grapes, nominally, 6@8½c. Florida oranges do not advance even with the special call. Half-barrel boxes, $3@4 best; other, $2@2.62; barrel, 6@8. Pecans, Texas, scarce, 12@14c. lb. Chestnuts out of date. Hickory nuts, shellbarks, $2.50@2.75; Va. hand-picked peanuts $1.10; other grades, 3@3½c.; shelled, 4@5c.; demand good.

Export of apples for week, 5,424 bbls.

GRAIN.—Wheat has shown diminished export demand and easier prices, closing weak.

Latest sales are of No. 3 spring at 88@91c.; amber ungraded at $1@1.03; No. 2 amber at $1.01½@1.05; ungraded red at 97c.@1.03½; No. 3 red at $1@1.02½; extra white at $1.10½; white State at $1.09½; No. 1 white at $1.03@1.03½; No. 2 white at $1.05½@1.06; ungraded white at $1.05@1.08½; No. 1 red at $1.03½; No. 2 red at $1.07½@1.08½; New York No. 2 spring, January option, at 97c.; No. 2 amber, December option, at $1.01½; do. January option, at $1.03; No. 2 red, December option, at $1.03½; do. January option, at $1.03½@1.03; do. February option, at $1.03½@1.10. Rye at 58@59c. for No. 2 Western and 59@60c. for State. Corn is easier and more active; sales of steamer mixed at 46@46½c.; New York No. 2 at 47½@48c., afloat; New York No. 3 at 41½@46c.; ungraded mixed at 45½@47c.; yellow Southern at 46c. on dock; No. 2, December option, at 47½c.; do. January option, at 47½c.; new No. 2, January option, at 46½c.; steamer mixed, December option, at 46¼c.; do. January option, at 45½c.; do. February option, at 45½c. Oats are active and about steady in price; New York No. 1 quoted at 30½@31c.; New York No. 3 at 30@30½c.; New York No. 2 white at 33½c.; New York No. 3 at 29½c.; New York No. 3 white at 32@32½c.; white Western at 32½@34½c.; mixed do. at 29@31c.; white State at 32@35c.; mixed do. at 30½@31c.; No. 2 Chicago at 30½c.; New York extra white quoted at 38@39½c.; New York No. 1 white at 34@34½c.; No. 2 Milwaukee at 31c. Barley unchanged; State, 6-rowed, 90@$1; 2-rowed, 75@80c.; Canadian, 95c.@$1.25; malt, $1@1.35.

HAY AND STRAW.—Demands have been good and prices held steady.

Sales at 35@40c. for shipping, and 65@75c. for retail qualities. Straw quoted at 35@45c. for long rye, and 25@30c. for short rye, and oat at 40@45c.

Exports past week, 312 bales.

HONEY.—The supply begins to be oppressive; clover unusually low; single comb, 13@14c., two do., 11@12c.; buckwheat, 8@10c.; strained, 6@11c.

POULTRY AND GAME.—Live poultry has had a bad week; prices unprofitably low at the close. Chickens, 6@8c., lb.; fowls, 7@9c.; roosters, 4@5c.; turkeys, 8@9c.; ducks, choice, pair, $65@$1; other, 50@60c.; N. J. geese, $1.75@$2; other, $1@$1.50; pigeons, 30@35c.

Good weather has kept dressed moving, but prices are quoted full even at the moderate rates. Western has had a better share of trade this week; chief demand is for turkeys. Western shippers should use the telegraph while the market is so tender.

Dry picked turkeys, 13@14c.; prime scalded, 12½@13c.; fair, 9@10c. Chickens and fowls, dry picked, 12@13c.; common to good scalded, 8@10c. Very poor ducks, 6c.; choice, 12@13.; other, 9@12c. Geese range, 7@11c.

very poor, 6c.

Supplies of game are large and sellers have to adopt easy figures. Grouse, for an exception are scarce; many going to England this season. The export trade in fine American game promises to be a feature. Christmas brings a good deal of local trade, especially for wild ducks.

Quail, doz., $1@1.12; Grouse, trapped, pair, 75@80c.; drawn, 60@70c.; Partridges, State, 85@90c.; other, 55@75c.; canvas-back Ducks, Havre de Grace, $2.50@2.75 pair; Western, $2@2.25; red head, 75c.@$1.25; Mallard, 50c.; Teal, 35@40c.; common, 25@35c.; Hares, 30@40c.; Rabbits, 25@30c.; Venison, short saddles, 12@13c.; long do., 10@11c.; whole deer, 8@9c.

FURS AND SKINS.—There has been a more liberal business and some kinds show an improvement. Receipts show a greater willingness on the part of trappers and collectors to accept the prices offered.

	No. 1 quality. Nor. & East.	West & N. W
Otter, ₩ piece	$4 00@5 00	$2 50@3 00
Gray Fox	90@1 15	90@1 15
Red Fox	1 00@1 30	90@1 20
Black Bear	5 00@6 00	4 00@5 00
Brown cubs and yigs.	1 00@2 00	1 00@2 00
Fisher	5 00@7 00	4 00@6 00
Mink, dark	1 00@1 50	50@ 75
pale	50@ 60	30@ 40
Muskrat, winter	10@ 12	9@ 11
— fall	8@ 9	6@ 8
— Kitts	@ 2	@ 2
Beaver, ₩ lb	1 00@1 25	80@1 00
Raccoon	50@ 60	35@ 50
Opossum	4@ 8	4@ 8
Skunk, black		1 00@1 15
striped		10@ 60
Wolf, mountain		1 50@2 00
prairie		50@ 60

Southern furs usually sell 15 to 20 per cent. below western.

HOPS.—Export movement has been fair in choice stock, and some parcels held above quotations. Good and under grades are plenty and freely offered.

Quotations are for New Yorks, new crop, choice, 12@15; New Yorks, new crop, good and prime, 8@10; New Yorks, new crop, low to fair, 5@7; Eastern, 8@12; Western, 8@12; Yearlings, 4@6; Olds, all growths, 1@3; Pacific coast, 12@15.

OIL-CAKE.—Western is offered at $23 ₩ ton.

PROVISIONS—Have tended easier, and have been fairly active.

Old mess pork on spot quoted at $7.20@7.25; new do. at $8.60@9, $7.05 bid and $7.15 asked for old for December; $7.05 for January; $8.55 bid and $8.70 asked for new for January; $6.15 bid and $7.25 asked for old for February; $8.56 bid and $8.65 asked for new for February; $7.25 bid and $7.35 asked for old for March, and $8.65 bid and $8.70 asked for new for March. Bacon at 4¾c. for long clear and 4¾c. for short clear. Lard at $5 87½ for spot lots of Western steam for December and January; $5.95 for February; $6.02 for March. Stearine at 6¾c. for prime. Tallow at $6¾@6 11-16 for prime. Beef Hams $14.50@15. Beef—Extra India mess, $20.50@21.50 for city brands; do. Philadelphia, $19@19.50; packet at $11@11.50; plain mess at $9.50@10; extra mess at $10.50@11.50.

SEEDS.—Grass are steady; clover at 6¼@6¾c. for prime to 7c. for choice; timothy at $1.25. Flax seed quoted $1.42½.

TOBACCO.—Export demand has been slack this week and general trade moderate, but prices steady and essentially as quoted last week.

SEEDLEAF—CROP OF 1877.

New England wrappers,	common	10	@12
do. do.	medium	13	@15
do. do.	fine	18½	@25
do. do.	selections	27½	@35
do. seconds		10	@13
do. fillers		7	@ 9
Pennsylvania assorted lots,	common	9½	@10½
do. do.	fair	11½	@14¼
do. do.	fine	15¾	@18
do. wrappers		20	@40
do. fillers		7½	@ 8
New York assorted lots,	common to medium	8	@10
do. do.	do. good,	12	@15
Ohio assorted lots		9	@12
Ohio wrappers		12	@18
Wisconsin assorted lots		7½	@10

VEGETABLES.—Potatoes are dull with a large offering; few holders of domestic quote above $2.75 for choice. Nova Scotia and P. E. I. lots pressed for sale. These are rated 175 lbs. to bbl. from schooners. Other stuff in fair demand: marrow squash firm; will soon have to take the place of pumpkins.

Nova Scotia E. Rose, bulk, $2.62½@2.75 ₩ bbl.; Prolific and Chili red, $2.25@2.50; P. E. I. Jackson whites, $2; Mercers, $1.75@2; Eastern E. Rose, with bbl., $2.25@2.37; State, $2.50; fair to good, $2@2.37; do. Peach Blow, choice, $2.50@2.75; common, $2@2.25; Peerless, choice, $2.37@2.50; poor to good, $2@2.25. Sweet potatoes, Del., $2@2.50; Onions steady. White, $1.50@2; red and yellow, $1.25; Chester, $1.25@1.62. Hubbard and marrow squash, $1.75@2. Cabbage, $4@5 per 100. Cauliflower, bbl., $1.50@2. R. Turnips, 75@87c. Beets, 75c. Carrots 75c.@$1. Pumpkins, 100, $8@10. Celery, 60@75c. doz. Extras; Fin. green peas, $1.50 small crate; hot-house Radishes, $3 ₩ 100 bunches; Cucumbers, $2.50@3 do.; Mushrooms, 40@50c. ₩.

Exports, potatoes, past week, 2,300 bbls.; onions, 185.

WOOL.—There has been but little life to the market this week, and not much change in the situation is expected until the turn of the year. Prices meanwhile are steady; X and XX Ohio fleeces have sold at 34@35.

Quotations are for Domestic Fleeces: Ohio, Pennsylvania and West Virginia—XXX and picklock, 37@38c.; XX, —@35; X, 34@35c.; No. 1, 36@37c.; No. 2, 32@35c; coarse, 28@31c; combing, 36@40c.

New York, Michigan, and Wisconsin, XX, 31@33c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 30@33c.; coarse, 27@30c.; combing, 36@40c.

Indiana, Kentucky and Tennessee—XX, 30@34c.; X, 30@33c.; No. 1, 33@35c.; No. 2, 31@33c.; coarse, 27@30c.; combing, 38@42c.; unwashed combing, 28@33c.

Illinois, Iowa and Minnesota—XX, 30@33c.; X, 32@34c.; No. 1, 32@34c.; No. 2, 28@30c.; coarse, 25@27c.

Georgia, Alabama, Mississippi and Louisiana—Fine unwashed, 23@28c.; medium unwashed, 26@29c.; coarse unwashed, 18@21c.; burry, 11@16c.

LIVE STOCK MARKETS.

Saturday, Dec 21, 1878.

BEEVES.—Receipts for the week, 11,330 head; do. last week, 9,477 do. The market has ruled active and firm during the week, closing strong. Christmas or fancy stock sold up to 11¾c. one car-load to dress 59 lbs.; other fancy, 10¾@11c. dress 57@58 lbs. Common to prime steers, 7½@10½c. dress 55@57 lbs.; dry cows, 7c.

COWS AND CALVES—Quiet and unchanged. Nominal rates, fair to good milkers, $40@60; extras, $75; though a cow that will bring $75 here is quite as valuable at home.

VEAL CALVES.—Supplies of choice moderate, market firm; but State and N. J., other including heavy weights, 5½@6c.; fed calves, 4@5c.; grass, 2½@2¾c. Hay dressed in large supply, few bring the outside; quoted 8@10c.

SHEEP AND LAMBS.—Receipts for the week, 22,716 head; do. last week, 23,700 do. There has been a good display of fat sheep. Good to prime butchering sheep, 5½@5¾c.; other, 3@4½c.; Lambs, 5¼@5¾c.

SWINE.—Receipts for the week, 43,939 head; do., last week, 50,138 do. Demand quiet; Ohio corn nominally $3@3.15 per 100 lbs. N. J. pork light, 4¾c.; heavy to medium, 3½@4¼c.; city, 3½@4¼c. Sales in dressed light.

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MOP-HANDLE PAPERS.—No. 10.

MAY MAPLE.

A Chat in the Kitchen.

It is not often one spends a happier week in the golden autumn than I did at the snug little farm house of Cousin Jennie Gordon. This same fair cousin is a really practical house-wife, never seeming to be in the least hurried or troubled about anything. Her work moves along like clock-work. It is said that there are born poets; then why may there not be born housewives as well? I believe there is one now and then, and that this fair relative of mine is such a one. If their comforting mantles could only spread far and wide over the sisterhood of farmers' wives, there would be less complaiuing and fewer drudges.

One morning I followed her into the kitchen, for we could not afford to "stop our chatter" while she performed her usual morning duties; for she only kept a hired girl during the summer months. Her own daughters, aged twelve and ten, usually assisted her in the labors of love about the household; but they were visiting in a distant town.

"Now, Cousin May," said Jennie, at the close of an animated discussion of a favorite author, "if you'll excuse, I'll go on with a piece of work that I put down in the programme for one of the odd jobs to be done to-day. You see I have certain parts of my work for certain days. Monday morning, before I leave the breakfast table, I write out in a little book kept for the purpose, my plans for each day of the week. And although my rule is not as unalterable as the laws of the Medes and Persians, yet it helps me wonderfully towards the accomplishment of various tasks that might be otherwise neglected for a time, and then cause my work to be done in haste. To-day the tin-ware is to be cleaned. I'll be very quiet about it and we can go on with our reviews and criticisms of fictions, poems and authors just as well as though we were sitting in the parlor making cats and dogs on Java canvas."

I found that by cleaning the tin she did not mean *scouring* it, but giving it a thorough washing with plenty of soap and water, using a brush instead of a cloth. She said that during the hurrying season the girls were not always as particular as they ought to be about washing the seams and hems of the pans, bread and pie tins, dish-pans and tea-kettle. In putting the pans about the stove to dry, they frequently became so heated as to melt the resin, and this caused the seams to be dark and gummy, an appearance not at all pleasant to the eye of a tidy housekeeper. She used a brush for this work, because a brush would do it more thoroughly than a cloth; and in very obstinate cases a small, sharp stick would do good service in removing impurities.

After the dishes were all nicely cleaned and put away in poetical order, that is, in long lines and short ones, in clusters and groups, Jennie took a large basket and went to the cellar, soon returning with the basket heaped full of Irish potatoes.

"Now don't think I am going to cook all these for dinner;" said she. "I am only going to wash their faces and have them ready to use when I want them, for several days to come. You shall see how quickly I wash them; the basket holds half a bushel."

She put them all into a tub that stood near the pump. Then after pouring plenty of water upon them, she took an old broom and scrubbed them till they were as bright and shining as apples. When rinsed, they were put into a basket to drain, and the labor had occupied scarcely five minutes. "There!" said Jennie, as she wiped her hands as fair as in her girlhood, "if it be necessary to get a meal quickly, the potatoes can be boiled with their jackets on; otherwise, I can take a few in a dish, and sit with you in the parlor to pare them, if I choose, and there will be no danger of soiling hands or clothes. I'll tell you, May, if you ever go to housekeeping, hang a brush in every corner of your kitchen and pantry, and you will find it a labor-saving machine in a hundred ways."

[NOTE.—Owing to the fact that it was found necessary to present our Poultry Number somewhat earlier than was at first intended, the following article by Mrs. Jack and several others, were received too late for that issue.—EDS.]

OUR DUCKS.

ANNIE L. JACK.

"WHO would have thought it!" said the family epicure, as the delicious, dark meat of one of our much prized ducks fell in rich slices beneath the carver's knife. "There is as much meat on one of those immense fellows as on a turkey," said another critic, and so, of course, for the benefit of visitors we had to state the cause of these remarks.

The much prized ducks are called "Muskoka," and are certainly very large and fine in shape. When dressed, their weight is about an average of nine pounds, and the flavor and color are those of the wild black duck, while they are very heavily feathered and handsome in the rich color of their plumage. Much given to hiding their nests, they make them deep and soft with the fine down which they pluck from their breasts for a lining, and which might be taken for eider-down. They roost like the chickens, flying up to a perch at nightfall, and have to be kept with one wing clipped while young to prevent their flying away. Many a chase the children have had along the timber after the old drake or some of the ducks, when their wings had grown again. But one of their peculiarities is that they do not seem to *need* the usual puddle, the necessity for which makes the common duck such a very disagreeable character. While fond of a bath, and of plunging into clean water after a shower, they will not seek the river in a dry time, but are content to share with the chickens a small pan of water. The young are very subject to the attack of the "fly," which is only to be guarded against by not allowing them to return to their nest after hatching out, but placing them in clean quarters, when they grow with wonderful rapidity. In the matter of cooking, they can be used in all the ways in which tame ducks are prepared, but if preferred, they make up very well as a

Salmi of Wild Duck.

First—Partly roast the duck; cut it into joints and slices; put refuse bits of fat or skin into a saucepan with a cup of gravy; two onions fried in butter; pepper and salt to taste, a pinch of cloves and nutmeg, parsley, marjoram and sage chopped fine. Boil one hour, skim when cool, and return to the saucepan with a piece of butter the size of a walnut; thicken with browned flour; let it boil a few minutes; put in the pieces of duck, after which it must not boil, but the saucepan should be placed in a dish of boiling water. Fry bread in some of the gravy; cut it into squares; lay them on a hot dish; place the pieces of duck neatly in the center and pour the gravy over all.

MINCE PIE.

One pound of finely-chopped, boiled beef—that from the neck is best; one-half pound of grated sour apple, a pound of raisins, stoned and cut fine, a pound of currants, one-fourth of a pound of suet, and the same of citron, both chopped. One teacup each of jelly, sugar and molasses, the juice and grated rind of a lemon, one grated nutmeg, a teaspoonful each of salt, ground cinnamon, mace and cloves; two quarts of cider boiled or not. Mix thoroughly, put in a porcelain kettle and set in the back of the stove. Let the mixture simmer for one hour, stirring it often. Pack in a stone jar and keep in a cold place.

Most cooks weaken their mince pies with too many apples. Pies made according to this receipt will be found very rich and fine, and the the fewer eaten, the better. M. G. R.

Iowa.

QUESTIONS ANSWERED.

Pop-Corn Balls.

Geo. G. Doctor wishes directions for making pop-corn balls.

ANS.—Pop the corn, rejecting that which did not open nicely, and put into a large pan or on a clean table—there should be a scant half bushel. Add a little water to a pound of granulated sugar and boil until the mixture, when tried in cold water, is waxy; stir in five tablespoonfuls of gum-arabic solution, of about the thickness of molasses—made by dissolving the gum in boiling water—and pour over the corn. With a spoon or stick stir until all of the kernels are coated with the mixture. When cool, flour the hands and press into balls. Flavor the sugar mixture with whatever you choose.

Dried Citron.

M. H. H., New Lebanon, N. Y., asks how to to dry citron and have it look like that in market.

ANS.—Boil the citron in water until clear and tender; make a sirup in the proportion of one-half pint of water to a pound of sugar; put in the pieces and boil until the sirup has penetrated them; take out, spread on plates and dry slowly, turning often and sprinkling with powdered sugar each time. Pack in jars with sugar between the layers.

Skins from Peaches.

Mrs. J. W. L., asks for some speedy way of removing skins from peaches. She has heard of lye being used for that purpose, but does not know of the process and asks for enlightenment.

ANS.—Yes, lye is used, but we do not know as to its strength. If peaches are placed in a wire basket and plunged first into boiling water for a moment and then into cold, it will enable you to rub off the skins with ease. Any of our friends who has had experience with the lye solution, we will be pleased to hear from.

Alonzo Wolf, Pa., says, please give directions for a good vinegar and also for a secret ink.

ANS.—1. Our correspondent does not state whether he wishes directions for cider vinegar or for a "made" vinegar. If for the former, the process will be hastened by adding mother of vinegar, as it is called, to the cider. Sometimes the cider is too strong, remaining in a state too sour for cider and not sour enough for vinegar. In such a case add of warm water one-fourth as much as there is cider, and of molasses, two quarts to the barrel. A cheap vinegar is made by filling up the vinegar barrel, before it is quite empty, with a gallon of molasses to every eleven gallons of soft water. A quicker vinegar can be made by allowing a quart of molasses and a pint of yeast to every three gallons of warm rain-water. In making any vinegar, bear in mind that the process is accelerated by keeping it where there is a moderate degree of heat and in filling the cask or barrel only half full, thereby allowing a free access of external air.

2. Lemon juice, onion juice or a weak solution of oil of vitriol, common salt or saltpeter will turn brown or yellow when exposed to the fire. A dilute solution of chloride of copper becomes yellow at a moderate heat and disappears on cooling, while a weak solution of chloride of cobalt and chloride of nickel is turned a bright-green. Use these liquids the same as ink, only the pen must be clean.

W. S. T. wishes to know how to keep cider sweet for a long time with but little expense.

ANS.—It is desirable to make the cider late in the season. The barrel must be perfectly sweet and clean. To a barrel allow seven pounds of white sugar. Let it ferment until it is safe to drive in the bung. Draw off in February or March into a clean cask; dissolve one-third pound of gelatine in a quart or more of warm cider; when dissolved and cold, add to the other cider, mixing thoroughly; bung tightly, and bottle in April or May. Or, when it comes from the press, rack once a week for four weeks, put in bottles, cork tightly and place the bottles on their sides in sawdust. Another method recommended is, to add *sulphite*, not sulphate, of lime. When the cider is in lively fermentation, add one-fourth pound of white sugar to each gallon; let the fermentation proceed until it has the taste to suit; then add one-fourth ounce of sulphite of lime to each gallon. Dissolve the sulphite in a little cider before pouring into the barrel. Agitate briskly for a few minutes and after a day or two when the cider has become clear, draw off and bottle or remove the sediment and return to the same cask. If kept in the barrel it will retain its taste as a still cider, and if bottled carefully it will become sparkling.

Cream Crackers.

E. S. G. wishes a recipe for cream crackers.

ANS.—One pint of sweet cream; six eggs; a little salt and flour enough to make a stiff dough; beat the eggs separately, and pound the dough for fifteen or twenty minutes. Roll thin; cut into any shape you please and bake in a moderate oven.

Reading for the Young.

FOLLOW THOU ME.

HAVE ye looked for My sheep in the desert,
For those who have missed their way?
Have ye been in the wild, waste places
Where the lost and the wandering stray?
Have ye trodden the lonely highway,
The foul and darksome street?
It may be ye'd see in the gloaming,
The print of Christ's wounded feet.

Have you folded close to your bosom
The trembling, neglected lamb,
And taught to the little lost one
The sound of the Shepherd's name?
Have ye searched for the poor and needy
With no clothing, no home, no bread?
The Son of man was among them,
He had nowhere to lay his head?

Have ye carried the living water
To the parched and thirsty soul?
Have ye said to the sick and wounded,
"Christ Jesus makes thee whole?"
Have ye told my fainting children
Of the strength of the father's hand?
Have ye guided the tottering footsteps
To the shores of the "golden land?"

Have ye stood by the sad and weary,
To smooth the pillow of death,
To comfort the sorrow-stricken,
And strengthen the feeble faith?
And have ye felt, when the glory
Has streamed through the open door,
And flitted across the shadows,
That I had been there before?

Have ye wept with the broken-hearted,
In their agony of woe?
Ye might hear me whispering beside you,
'Tis a path I often go.
My disciples, my brethren, my friends,
Can ye dare to follow me?
Then wherever the master dwelleth,
There shall the servant be.

JACK AND JILL.

An Authentic Account of the Adventures of These Nursery Favorites.

JACK and Jill went up a hill
To get a pail of water;
Jack fell down and cracked his crown
And Jill came tumbling after.

NOW Jack was the son of a nobleman who lived in a strong castle far across the sea. He once had a little sister, but she went to live with the angels when she was only three years old. Jack, as you ma uppose, was very lonely after that, for he was the only child in this great house, and his heart was so sad that he would creep away by himself and cry aloud to his sister Effie to come back and play with him once more. Then his papa bought for him a beautiful white pony, and calling his gray-haired steward, told him to teach Jack how to ride, and always to keep his own hand upon the bridle until he could keep his seat properly. Now Jack was not a very obedient boy, for since his sister's death no one had ever crossed his wishes, and his will had grown to be altogether too big for such a small body. He thought it looked very silly for him to be on the pony's back with the steward holding the bridle, walking round and round the yard; yet while his father stood near, he dared not disobey his order. By and by papa mounted his own horse and rode down the steep mountain side, and was soon out of sight. Then Jack told the steward to let go his hold upon the bridle, and because he would not obey him, he raised his whip to strike the old man a blow, but missed his aim, hitting the pony instead, who gave a great spring, thus clearing himself from the steward, then dashing through the open gates, ran down the mountain at full speed. Little Jack was nearly thrown, but by grasping hold of the pony's thick mane he managed somehow to keep his seat. The pony kept going faster and faster, till it seemed to the poor boy as if he was flying. He began to scream for his papa and mamma, and at last faint through fear and so much weeping, became dizzy—his eyes closed, his numb little fingers let go their hold upon the pony's mane, and with a hard thump he fell to the ground, while the pony, with no longer a burden upon his back, sped on like the wind.

In a few moments a poor old woman chanced to come that way, and seeing a little boy lying by the roadside, drew near, thinking it might be a fairy prince—for fairies were quite common on this mountain. But she soon saw it was no fairy boy lying there so still and pale. She went to a spring near by and got some water in Jack's cap and sprinkled it in his face. In a few moments he opened his eyes, but his head was so much hurt that he did not know what had happened to him or how he chanced to be there. After a while the old woman asked him if he thought he could walk, and he said he would try; so he stood up, and, with a good deal of help and many times sitting down to rest, they at last came to a low, brown hut, where the old woman lived with her little grand-daughter Jill. Jill's blue eyes were full of wonder when she saw Jack, though she made him very welcome, giving to him her own little stool by the one window in the hut.

Jack grew well fast, but he could not remember his name or the place where he came from. He thought that Jill was his own dear little sister Effie, and so crazy was his poor head that he really believed this mean, low hut was the home of the angels. He would sit and look in Jill's blue eyes and call her Effie, and tell her how much he had missed her, and how glad he was to be with her again. Both the old woman and Jill grew to be very fond of him as the days and weeks went on, until the mountain was white with snow and the cold winter winds made dismal music round the low, brown hut. They were very comfortable inside; the fire was always bright upon the hearth and there was plenty of oatmeal from which to make gruel, with a goat to give them fresh milk. To be sure, it was not like the dainty fare Jack used to have in his father's castle, but he had forgotten all that and was very happy and contented with what he had.

One cold morning, when the rain the night before had turned the snow into ice, little Jill took her pail to go to the spring for water to make the gruel for breakfast, and Jack insisted upon going also.

They had to climb quite a steep hill to reach the spring, and when they were nearly there Jack fell down, and his head struck the ice so hard that his crown was cracked—indeed there is one old lady who insists to this day that it was broken—but she is mistaken. Then he slid down to the bottom of the hill, and having hold of Jill's hand, of course she kept on with him also. When they stopped Jack's eyes were round as saucers.

"Who are you," he cried to Jill, "and how came I here?"

(You see, that just as a thump had driven away Jack's wits, a harder crack had brought them back again.)

Then Jill told him how that many months before her grandmother had found him by the road-side, and that he could never tell them his name, or where he used to live.

"But I can now," he cried. "My home is a big grand castle; my papa the splendidest man, and my mamma!—oh, so lovely—but how can I get word to them where I am?"

"I don't know," said Jill, "let's go and ask grandma."

Then they went both to the hut, and Jack told the old women who his father was.

"Indeed, I knew him well once," she cried, "for I was many years a servant in his father's house, and I will soon let him know where you are."

You may be sure Jack was very glad to think he should soon see his dear parents, and waited with great impatience for them to come for him. And it was not long before he was clasped in their arms, with kisses and tears of joy. Nor did they forget those who had given their little son love and tender care when he so much needed both—for they took the old woman and her granddaughter back with them to always live at the castle, and after one year they loved blue-eyed Jill so much they concluded to adopt her as their own little daughter, which made Jack very happy. He promised never again to disobey—yet I cannot say whether or not he did. Let us hope, however, that he kept his promise, and also that he begged the old steward's pardon for trying to strike him. Be that as it may, I am sure that neither he nor Jill ever forgot the time when:

Jack fell down and cracked his crown.
And Jill came tumbling after.

Springfield Republic.

PUZZLER ANSWERS.—Dec. 14.

HIDDEN KINDS OF RHYME.—1, Dirge; 2, Lay; 3, Ballad; 4, Song; 5, Pæan; 6, Epigram; 7, Requiem; 8, Poem; 9, Epopee; 10, Ode; 11, Epic; 12, Cantata; 13, Parody; 14, Elegy; 15, Hymn; 16, Canticle; 17, Madrigal; 18, Blank verse; 19, Pallnode; 20, Doggerel; 21, Roundelay.

CENTRAL PUZZLE.—New Hampshire.

FRACTIONAL PUZZLE.—Cornelian.

DOUBLE ACROSTIC.—Initials, "The Widow's Son;" finals, "The Gold Brick."

PERSONAL ITEMS.

Charles Lamb wondered why people made such a fuss about children, "they were so common."

The Baltimore Gazette says Mr. Stephen now weighs 92 pounds, a Democratic gain of two pounds.

Senator Jones, of Nevada, sold 5,800 shares of Sierra Nevada stock, during the recent rise, at $208 a share, or a total of $1,106,400.

If George P. Marsh holds out until next March, he will have served the country as Minister to Italy seventeen years, and will have drawn for his services $204,000.

Victor Hugo is in Paris with his two grandchildren, George and Jane. His location at the Avenue d'Eylau is the rendezvous of literati and men of the future.

Ex-Senator Ramsey, of Minnesota, has given his private library to the Historical Society of that State. It contains many valuable historical and documentary works.

Dr. Halley says that the total evaporation caused by the rays of the sun on the surface of the Mediterranean sea amounts to 52,800,000 tons of water in one summer day.

Marcus R. Robinson, ex-president of the American Anti-Slavery Society of the West, who passed an unusually adventurous career just before and during the war, died at Salem, Ohio, on Tuesday.

Mrs. Myra Clark Gaines, the famous litigant, had a claim to eighty-five thousand acres of land under an old Spanish grant. This claim has been considered by the House committee on private lands and refused.

Lord Falmouth, during the English racing season of 1878, won $193,500. He was unlucky at the beginning of his turf career, but his luck changed in 1869, when Kingcraft won several two-year old victories. Since then Lord Falmouth's horses have won him about $300,000.

A lady left several thousand pounds as a personal bequest to Charles Spurgeon. He inquired into the circumstances of the relatives of the donor, and, finding that they were needy, and that nothing had been bequeathed to them, divided the legacy among them.

Gladstone, according to all accounts, is just in the prime of his oratorical powers. He must be ranked among the few men who know how to make a statement so clear that none can mistake his meaning, however abstruse the subject. It is said that he can state a case better than any man in England.

Lord Chelmsford, who lately died, left less money than any Chancellor in the past century. It is sad, for the credit of the sex, to have to state that it was the remarkable extravagance of Lady Chelmsford which kept His Lordship poor. So his real estate was but small, and his personal was sworn under $240,000.

Widow Marie Jeanette Bell is still living at Kankakee, Illinois. She is one hundred and nine years of age. She was born in 1769, the year of Napoleon's birth. She saw Napoleon, as the "Little Corporal," knew Robespierre, was surged in the crowd that witnessed the execution of the Sixteenth Louis, and remembered when Marie Antoinette's blood was split. Old Mother Bell measures five inches less in hight than she did twenty years ago.

The death of Captain Whyte Melville, the novelist, is announced in a London dispatch dated the 5th inst. He was born near St. Andrews, Scotland, in 1821, received a liberal education and entered the army in 1839. He became Captain in the Coldstream Guards in 1846 and retired in 1849. At the breaking out of the Crimean war, however, he entered the Turkish cavalry and served throughout the war, rendering distinguished service. He has contributed quite largely to the fictitious literature of the day, his works having met with very large acceptance in Great Britain and the United States.

Senator McDonald, of Indiana, has recently donned a new cloak, which gives him the appearance of a Roman Senator. It is a toga, and he wears it as a Roman must have worn his. In the back it reaches below the knees, and as he wraps it about him, throwing a corner over his left shoulder, it adds greatly to his always fine appearance. A lady who has seen him with it remarked the other day, that "it is so very becoming, other gentlemen of his splendid physique ought to go and do likewise." The senator has always been a temperate man in everything, hence his good health.

Good, rugged, grand old Thomas Carlyle! It is refreshing to read amid the mawkish sentimentality of this latter day, such a healthy utterance as this from his sturdy pen: "Let wastefulness, idleness and improvidence take the fate which God has appointed them, that their opposites may also have a chance for their fate." As it is, our philanthropists try to make us believe that the special business of a thrifty man is not in any way to enjoy the fruit of his prudence and enterprise, but to shield the shiftless people around him from the results of their own imprudence and improvidence.—*J. G. Holland, in Scribner.*

Implements and Machinery.

"THE AQUAPULT," a new and greatly improved Fire-Extinguisher, Garden Engine, Window and Carriage Washer, Tree, Vine, and Shrub Protector from Insects, etc., for starting Aqueducts, and various uses which readily suggest themselves. No Dwelling, Factory, Railroad Station or Wooden Railroad Bridge or Viaduct should be without one of these valuable articles. Weight, with hose, 5 lbs.; throws water 60 feet. Price, $3.00 each, sent by express, C.O.D. Manufactured by W. & B. DOUGLAS, Middletown, Ct., the oldest and most extensive manufacturers of Pumps in the world. Branch Warehouses, 85 and 87 John St., New York; 197 Lake St., Chicago, Ill.

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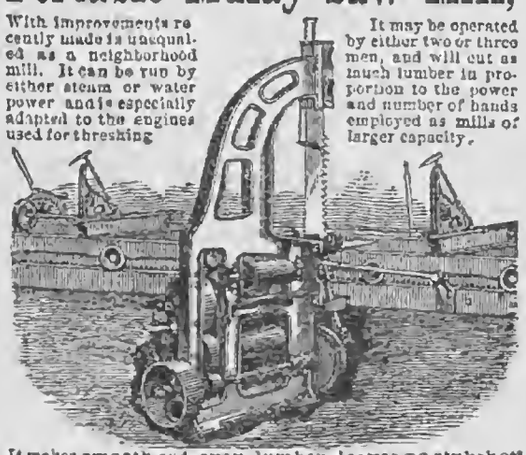
It may be operated by either two or three men, and will cut as much lumber in proportion to the power and number of hands employed as mills of larger capacity.



It makes smooth and even lumber, leaves no stub shot and will cut any sized log up to four feet in diameter. It may be transported from one locality to another and re-erected ready for sawing in from two to three days, and can be made profitable in localities where there is not sufficient timber to justify the erection of a large mill. Send for descriptive circular, price, etc., to CHANDLER & TAYLOR, Indianapolis, Ind.

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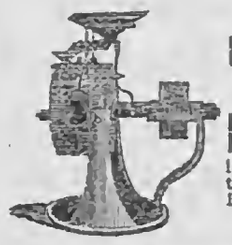

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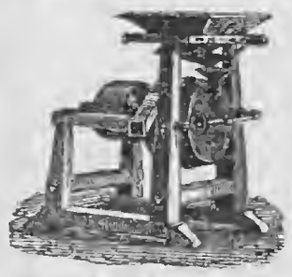

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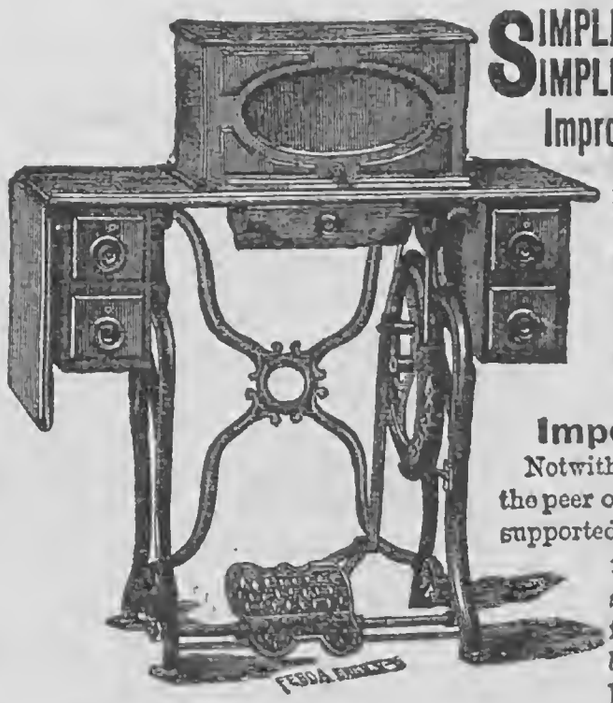

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"Oh, beam of my life, my awl to me!"
He cried, his flame addressing—
"If I'adze such a love as yours,
I'd ask no other blessing!"
"I am rejoist to hear you speak,"
The maiden said with laughter—
"For tho' I hammer guileless girl,
It's plane what you are rafter;
Now, if file love you just a bit,
What further will you ax me?
Can—will you be content with that,
Or will you further tacks me?"
He looked handsaw her words were square—
"No rival can displace me—
Yes, one more favor I implore,
And that is, dear Em, brace me!"

THE SEQUEL.

She came full chisel to his arms;
It really made him stair
To have her make a bolt for him
Before he could prepare.
He tried to screw his courage up,
And did his level best
To nail the matter then and there.
While clasped unto her breast,
Says he: "It augers well for me,
All seems to hinge on this;
And what is mortise plane to see,
The porch child wants a kiss."
He kissed her lip, he kissed her cheek,
And called her his adoored—
He dons his claw-hammer next week.
And she will share his board.

ALBERT Smith once wrote hisinitials in a hotel register. A wag wrote just underneath, "Two-thirds of the truth."

COCKROACHES dipped in marine iuk, and set at iberty on tinted paper make very reliable Afghanistan war maps.

AMERICANS are not much given to titles, but there is a universal demand for an "honest count" on election day.

COLONEL Ingersoll thinks women should be exclusively employed on the Mississippi river flatboats. He don't believe in a he-rafter.

We have known many a man to sit around waiting for something to turn up, until that something was his toes.—*Whitehall Times.*

WHAT IS LOVE?—At a friendly gathering at Holland House the conversation turned on love. Tom Moore compared it to a potato, because "it shoots from the eyes." "Or rather," exclaimed Byron, "because it becomes less by paring."

A WIDOW, whose husband's artistic perceptions had caused his house to be elegantly furnished, married his brother. When her visitors, after the second marriage, complimented her upon the beauty of her house-furnishing, she answered, "Oh, yes, my dear brother-in-law had such exquisite taste."

A LITTLE boy in a Sunday-school put a poser to his teacher. The lady was telling her class how God punished the Egyptians by causing the first-born of each household to be slain. The little boy listened attentively. At the proper interval he mildly inquired: "What would God have done if there had been twins?"—*Independent.*

"That young lady tried her best to catch your husband before you married him," remarked one lady to another, as a mass of curls and braids, flounces and overskirt passed the window at which they were sitting. "I wish to Heaven she'd got him!" was the quick reply, and then a dead silence fell upon the two, and wonders in crochet-work were accomplished in the next half hour.

HER ANSWER.—"What," the young man asked the young woman who was waiting for him to ask for his hat, "what do I put you in mind of?" "A French clock," she said softly. And pretty soon he arose and went his way. The next morning he called upon an eminent horologist and asked him what was the distinguishing trait of a French clock. The horologist said, "Why, it never goes." And the young man was sorely cast down, and he grieved and told no man of his hurt.

ONE night last week, at a party in Toronto, a young man was frightening some of the young ladies by his daring exhibition of a revolver, when the weapon was accidentally discharged, the bullet entering the young man's side, inflicting a serious wound. We have said a great many harsh things about these young men whose revolvers contain more than their heads, but we retract everything now. At last a revolver has been found that knows which man to shoot.—*Burlington Hawkeye.*

CHILDREN are very apt to think a great deal more of an illustration than of the truth it was intended to illustrate. A teacher once endeavored to illustrate faith thus; "Children, if I should tell you that one day I saw a monkey climbing a liberty pole, would you believe me?" "Yes, sir," unanimously. "Well, that is faith; you believe me because I say it, and you feel that I would not tell an untruth." The next day the question was asked of the same children. "What is faith?" "A monkey climbing a liberty pole," answered a quick little boy.

UNCLE SAM, (satorically). "Farmers to the rescue!" (?)

Something for the New Year.

The would-renowned success of Hostetter's Bitters, and their continued popularity for a quarter of a century as a stomachic, is scarcely more wonderful than the welcome that greets the annual appearance of Hostetter's Almanac. This valuable medical treatise is published by Hostetter & Smith, Pittsburgh, Pa., under their own immediate supervision, employing 80 hands in that department. Ten cylinder printing presses, eight folding machines, five job presses, &c., are running about eleven months in the year on this work, and the issue of same for 1879 will not be less than ten millions, printed in the English, German, French, Welsh, Norwegian, Swedish, Holland, Bohemian and Spanish languages. Refer to a copy of it for valuable and interesting reading concerning health, and numerous testimonials as to the efficacy of Hostetter's Bitters, amusement, varied information, astronomical calculations and chronological items, &c., which can be depended on for correctness. The Almanac for 1879 can be obtained free of cost, from druggists and general country dealers in all parts of the country.

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Report June 1st, 1878, Bulletin No. 14, **Connecticut Agricultural Experiment Station**, Prof. S. W. Johnson, Director, on "**Muriate of Potash** (80 per cent.) guaranteed 50 per cent. actual potash, sampled in Conn., and sold by the **Mapes Formula and Peruvian Guano Co.** of New York.

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CATARRH

"IT IS REALLY A LUXURY TO USE IT."
95 CHAMBERS ST., N. Y., AUG. 15, 1878.

MR. N. B. PHELPS.—Dear Sir: Last winter, while suffering severely from Catarrh, which almost unfitted me for business, I happened to notice a circular of your NORWEGIAN BALM. I thought I would try it, although I had used every Catarrh remedy I had heard of without receiving much, if any, benefit; and I am pleased to say that I received immediate relief from the use of your BALM. All obstructions were soon removed, which immediately relieved me of the headache; the soreness gradually passed away, and the discharges grew less, until now I am seemingly perfectly well. I still continue to use the BALM, it is so soothing and cleansing.

It is really a luxury to use it, especially when the head feels dry and feverish.

Respectfully, R. W. BYRON,
Book-keeper for E. S. Dodge Printing Co.

"LEAVES THE HEAD AS CLEAR AS A BELL."
198 COLUMBIA HEIGHTS, BROOKLYN, N. Y., MARCH 23, 1878.

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Respectfully, DANIEL R. PRATT.

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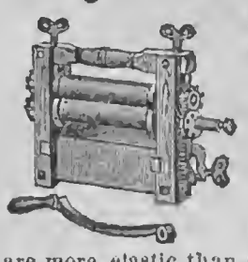

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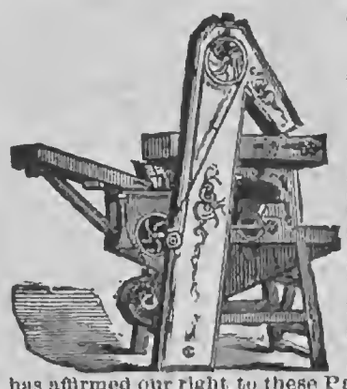

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